# Report of Population Health Survey 2014/2015

Surveillance and Epidemiology Branch Centre for Health Protection Department of Health

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# **Executive Summary**

The Department of Health (DH) conducted the Population Health Survey (PHS) 2014/15 to collect data on population health. The PHS 2014/15 is a territory-wide survey organised into three parts, namely household questionnaire survey fieldwork, health examination and data analysis and reporting. The DH commissioned a private research firm and a private healthcare organisation with laboratory service to conduct the fieldworks of household questionnaire survey and health examination, respectively. Data analysis and reporting of the PHS 2014/15 was commissioned to the Department of Family Medicine and Primary Care of the University of Hong Kong. The DH played a co-ordination and management role in the survey and was responsible for monitoring the quality of various parts of the survey. The PHS 2014/15 aimed to strengthen the Government's information base on population health, thereby support evidence-based decision making in health policy, resource allocation and provision of health services and public health programmes.

The fieldwork of the household survey was conducted between December 2014 and October 2015. It covered the land-based non-institutional population aged 15 or above in Hong Kong, excluding foreign domestic helpers and visitors. Systematic replicated sampling was deployed for selecting a sample of replicates of living quarters from the Frame of Quarters maintained by the Census and Statistics Department and domestic households therein for enumeration in the survey. A total of 12 022 persons aged 15 or above from 5 435 domestic households were successfully enumerated, representing an overall response rate of 75.4% at household level. Health examination was conducted between June 2015 and August 2016. A random subsample of respondents aged between 15 and 84, who were successfully enumerated in the household survey and had signed the PHS consent form, were further invited to undergo health examination. A total of 2 347 respondents attended health examination, including 1 976 respondents completed physical measurements, blood tests and 24-hour urine tests, and 371 respondents completed physical measurements and blood tests only. These represented a participation rate of 39.5%. The survey data were adjusted for the differential response rates by type of housing and grossed-up to the control for the age and gender profile of the study population for the second quarter of 2015. After these adjustments, the survey estimates can represent those of the study population during the survey period.

This report presents the key findings of the PHS on: (1) self-rated health status and quality of life, (2) physical health, (3) mental health, (4) health-related behaviours and lifestyle practices, (5) injury

prevention, (6) preventive health practices, (7) use of health services, (8) physical and biochemical measurements, and (9) risk of cardiovascular disease.

# Self-rated Health Status and Quality of Life

# Health-related Quality of Life by the Short Form 12 (SF-12v2) Health Survey

The Chinese (Hong Kong) 12-item Short Form Health Survey (version 2) (SF-12v2 (HK)) was used to measure self-rated health status and health-related quality of life (HRQoL). Overall, 69.3% of persons aged 15 or above rated their general health as "excellent", "very good" or "good"; 26.4% rated their health as "fair" and 4.3% rated as "poor". The proportion of persons rated their health status as "excellent", "very good" or "good" or "good" generally decreased with age and with increasing number of doctor-diagnosed chronic diseases. The SF-12v2 (HK) mental component summary (MCS) and physical component summary (PCS) scores indicate mental HRQoL and physical HRQoL, respectively. The PCS and MCS scores in PHS 2014/15 are norm-based with a population mean of 50 and standard deviation of 10. Overall, 53.8% and 67.9% of persons aged 15 or above had scores higher than or equal to the population mean of 50 for MCS and PCS, respectively. Both MCS and PCS scores decreased with increasing number of doctor-diagnosed chronic diseases.

# Quality of Life by WHOQOL-BREF (HK)

The Hong Kong Chinese version of World Health Organization Quality of Life - Brief Questionnaire (WHOQOL-BREF(HK)) instrument was also used to measure quality of life in four domains including physical health, psychological health, social relationships and environment, each with score ranging from 4 to 20 and a higher score indicates a better quality of life. The population WHOQOL-BREF(HK) mean physical health, psychological health, social relationships and environment domain scores were 15.8, 15.0, 14.7 and 15.0 respectively. The mean scores tended to be higher in younger persons and to decrease with increasing number of doctor-diagnosed chronic diseases.

# **Physical Health Status**

The PHS collected information on a range of acute and chronic health conditions by self-reporting in the household survey. It also enquired about the fitness of vision and hearing.

#### Major Health Conditions

#### Acute Conditions

Overall, 57.0% of persons aged 15 or above reported that they had one or more acute health problems during the 30 days preceding the survey. Females (61.4%) were more likely to have reported such problems than males (52.1%). The five most frequently reported acute health conditions were the common cold / influenza (23.9%), joint pain/swollen joints (22.1%), low back pain (21.5%), persistent cough (11.1%) and neck pain (9.8%).

#### Doctor-diagnosed Chronic Conditions

Overall, 39.6% of persons aged 15 or above reported one or more doctor-diagnosed chronic conditions. Among these persons, 20.1% had one or more chronic conditions diagnosed within the 12 months before the survey. The common self-reported chronic conditions were hypertension (17.8%), high blood cholesterol (14.4%), diabetes mellitus (5.5%), coronary heart disease (2.1%), asthma (1.8%), cancers (1.5%) and stroke (1.4%). The prevalence was generally higher in males than females for all chronic conditions except for cancers, hypertension and diabetes. The prevalence tended to increase with age for all chronic conditions except asthma.

• Hypertension

Overall, 17.8% of persons aged 15 or above reported doctor-diagnosed hypertension. The prevalence increased sharply from 0.5% before the age of 25 to reach the peak of 64.6% in the 75-84 year-old group. Among those who had reported hypertension, 88.3% had taken doctor-prescribed medicine and 11.8% used over-the-counter medications to control their blood pressure.

• High blood cholesterol

Overall, 14.4% of persons aged 15 or above reported doctor-diagnosed high blood cholesterol. The prevalence of high blood cholesterol increased from 0.5% before the age of 25 to reach the peak of 39.0% in the 75-84 year-old group. Among those persons who reported having the diagnosis of high blood cholesterol, 61.7% were taking prescribed drugs and 9.3% were taking over-the-counter medications to lower their blood cholesterol level.

# • Diabetes mellitus (DM)

Overall, 5.5% of persons aged 15 or above reported that they had doctor-diagnosed DM and another 2.0% reported that they had high blood sugar but no DM. The prevalence tended to increase from around 0.3% before the age of 25 to reach the peak of 22.7% in the 75-84 year-old group. Among those who reported doctor-diagnosed DM, 8.9% were on insulin, 76.8% were taking oral anti-diabetic drugs and 11.1% were taking over-the-counter medications to control their DM.

• Coronary heart disease (CHD)

Overall, 2.1% of persons aged 15 or above reported doctor-diagnosed CHD, with a higher prevalence in males (2.6%) than in females (1.6%). The prevalence increased steadily after the age of 54 reaching a peak of 12.0% among persons aged 85 or above.

• Asthma

Overall, 1.8% of persons aged 15 or above reported doctor-diagnosed asthma. The prevalence was higher in males (2.0%) than in females (1.6%). The prevalence of asthma was the highest in the age group 15-24 (2.6%).

• Cancer

Overall, 1.5% of persons aged 15 or above reported that they had doctor-diagnosed cancer. The prevalence was higher in females (1.7%) than males (1.3%). The prevalence of cancer increased steadily with age from 0.1% in the 15-24 year-old group to 4.9% among persons aged 85 or above.

• Stroke

Overall, 1.4% of persons aged 15 or above reported that they had doctor-diagnosed stroke, with a higher prevalence in males (1.7%) than in females (1.1%). The prevalence increased from below 1.0% before the age of 55 to reach a peak of 7.8% among persons aged 75-84.

# Vision

Overall, 56.0% of persons aged 15 or above reported that they had good or excellent eyesight (with the aid of glasses or contact lenses if necessary). The proportion of persons with good or excellent eyesight decreased steadily with age from 72.4% in the 15-24 year-old group to 24.7% among those aged 85 or above. Overall, 8.4% of persons aged 15 or above reported that their vision problems had caused limitations some or most of the time in their work or other daily activities.

Myopia (short-sightedness), astigmatism, and presbyopia were commonly reported by 45.8%, 40.9% and 45.5%, respectively, of all persons aged 15 or above, while hyperopia or hypermetropia (long-sightedness) was reported by 6.0% of persons in this age group. Doctor-diagnosed eye diseases, other than refractive errors, that can impair vision were reported by 8.7% of persons aged 15 or above. The commonest reported eye disease was cataract (6.5%).

#### Hearing

Hearing impairment or loss diagnosed by a doctor or audiologist was reported by 2.2% of persons aged 15 or above (2.1% for females and 2.2% for males). The prevalence of hearing impairment or loss increased generally with age from less than 1.0% below the age 45 to 18.8% among those aged 85 or above. Overall, 3.3% of persons aged 15 or above said that they had limitations at least some of the time in their work or other daily activities as a result of their hearing problems. Among those with diagnosed hearing impairment or loss, 13.9% reported that they often used hearing aid.

# Mental Health

The PHS collected information on different aspects of the population's mental health, including subjective happiness, sleep quality and disturbances, prevalence of doctor-diagnosed mental illnesses, sources of emotional support and suicidal behaviour.

#### Subjective Happiness

Overall, 9.0% of persons (9.4% of females and 8.6% of males) aged 15 or above considered themselves as "a very happy person". The proportion of self-rated "a very happy person" increased from 6.1% among those aged 15-24 to 16.1% among those aged 85 or above.

## Sleep Quality

Overall, 56.7% (59.2% males and 54.4% females) of persons aged 15 or above rated their sleep quality as "Very well" or "Well". During the 30 days preceding the survey, the reported average number of hours of sleep per day was 7.0, with 36.1% (37.6% females and 34.5% males) of persons aged 15 or above sleeping less than seven hours per day. 15.0 % of persons aged 15 or above reported "feeling not getting enough sleep" on at least half of the 30 days preceding the survey. A high proportion of 48.0% (51.9%

females and 43.7% males) persons experienced sleep disturbances in the form of 'difficulty in falling asleep' (33.1%), 'intermittent awakenings' (35.2%) or 'early morning awakening' (29.4%) during the 30 days preceding the survey.

#### Self-reported Doctor-diagnosed Mental Illnesses

• Anxiety disorders

Overall, 0.5% of persons aged 15 or above reported having doctor-diagnosed anxiety disorder. The prevalence was higher among females (0.6%) than males (0.3%). Analyzed by age group, it was most common (1.1%) among those aged 65-74.

• Depression

Overall, 0.8% persons aged 15 or above reported having doctor-diagnosed depression, with a significantly greater proportion in females (1.1%) than in males (0.5%). The prevalence was the highest among people aged 65-74 (1.4%).

• Schizophrenia

Overall, 0.2% of people aged 15 or above reported that they had been diagnosed to have schizophrenia by a doctor. The prevalence of schizophrenia was the same between females and males (both at 0.2%). The highest prevalence was found among persons aged 35-54 (0.4%).

• Dementia

Overall, 0.4% of people aged 15 or above reported that they had been diagnosed with dementia by a doctor. The corresponding proportions reported by females and males were 0.6% and 0.2%, respectively. The prevalence was the highest at 6.8% among persons aged 85 or above.

#### Social Support

Overall, 54.7% (60.1% females and 48.7% males) of persons aged 15 or above felt that they could count on someone for emotional support, while 33.4% believed that they did not need any support. A great majority (90.3%) of persons in this age group reported that they had at least one relative or close friend to whom they could call on for help. The proportions of these persons reporting having no one to call on for help were relatively high in the older age groups of 65-74 (14.9%), 75-84 (19.9%) and 85 or above

(16.9%) making them more vulnerable. Overall, 56.9% of persons aged 15 or above said that they could count on someone for financial support when needed.

#### Suicidal Behaviour

In the PHS, information related to suicidal behaviour was collected from respondents by a selfadministered questionnaire. Overall, 1.0% of all persons aged 15 or above had ever attempted suicide. 1.2% had suicidal thoughts (thought about ending their own life) during the year preceding the survey. The prevalence of suicidal thoughts was the highest at 2.6% in the age group of 15-24, which tended to decrease with age. Persons with lower monthly household income were more likely to have suicidal thoughts. Among those who had suicidal thoughts, 8.9% (9.2% males and 8.6% females) had actually attempted suicide during the year preceding the survey and 4.3% of them had attempted more than once.

#### Health-related Behaviours and Lifestyle Practices

The PHS collected information on major health-related behaviours and lifestyle practices including smoking, use of alcohol, physical activity, diet and nutrition, eating-out and use of certain drugs and health supplements among persons aged 15 or above in Hong Kong.

# **Smoking Habits**

Overall, 27.1% (10.8% of females and 45.0% of males) of persons aged 15 or above reported that they had ever smoked cigarette. Among those aged 15 or above who had ever smoked cigarette, 54.6% currently had the habit of cigarette smoking. Over one-third (35.5%) of ever-smokers started smoking before the age of 18 including 6.8% who started smoking at the age younger than 14 years old.

An intention to quit smoking in the six months after the survey was found in 19.9% of persons who currently had the habit of cigarette smoking, being more common in females (26.5%) than males (18.3%). Among persons who currently had the habit of cigarette smoking and intended to quit, 37.2% said that they were fairly confident in quitting smoking successfully in the future.

# Alcohol Consumption

Overall, 50.4% of the population aged 15 or above (47.1% of females and 54.0% of males) reported drinking alcoholic beverages occasionally (drank in three days or less per month) and 11.1% (5.4% of

females and 17.3% of males) drank regularly (drank at least once per week) in the 12 months preceding the survey. The mean age of starting drinking among the ever drinkers was 20.3 years and 21.4% drinkers said that they started drinking before the age of 18 years old. The average number of units (each unit is equivalent to 10 grams) of alcohol usually consumed by the drinkers was 2.7 (2.2 for females and 3.1 for males) per day on typical drinking days in the 12 months preceding the survey. Among persons aged 15 or above, the prevalence of binge drinking at least once per month during the 12 months preceding the survey was 2.2% (0.5% for females and 4.1% for males). Overall, 3.5% of persons aged 15 or above were found to have been drinking at increased risk (3.1%), to have harmful drinking (0.2%), or to have probable alcohol dependence (0.2%) defined by the Alcohol Use Disorders Identification Test (AUDIT) that screens for harmful drinking during the 12 months preceding the survey.

# Physical Activity

Among persons aged 15 or above, 98.1% performed physical activities for at least 10 minutes continuously in a typical week, including 96.9% had transport-related physical activity (including walking or cycling), 44.6% participated in recreation-related physical activity and 18.5% performed work-related physical activity. Among those who had physical activities in a typical week, the average total time spent on all physical activities was 106.3 minutes per day when such activities were performed. In a typical week, 20.8% and 97.7% of persons had undertaken some vigorous and moderate physical activities, respectively. Among persons aged 18 or above, 87.0% (85.8% for females and 88.4% for males) had achieved physical activities up to or exceeding the WHO recommended level of at least 600 MET-minutes per week.

Overall, the mean duration of sedentary behaviour on a typical day was about 7.0 hours (417.5 minutes for females and 421.0 minutes for males) among persons aged 15 or above; 19.1% reported spending 10 hours or longer sitting or reclining each day.

#### Diet and Nutrition

The PHS collected information on consumption of fruit and vegetables, salty food such as preserved vegetables, processed meat, snacks with high salt content, seaweeds and ready-to-eat seaweeds and use of seasonings such as salt, soy sauce, oyster sauce, ketchup and chili sauce.

# • Consumption of fruit and vegetables

Overall, daily fruit consumption was reported by 62.6% (68.0% of females and 56.6% of males) of persons aged 15 or above. The proportion of persons reported that they ate fruit daily generally increased with age from 49.1% for persons aged 15-24 to 73.1% for persons aged 65-74. Overall, 11.9% (13.3% of females and 10.4% males) of persons aged 15 or above reported that they ate two or more servings of fruit (one serving is equivalent to one piece of medium-sized fruit such as an apple) per day on the days when they ate fruit. The estimated mean number of servings of fruit intake was 1.1 per day for both females and males.

Overall 86.6% (89.2% of females and 83.8% of males) of persons aged 15 or above reported eating vegetables daily. Nearly one-third (31.5%) of persons aged 15 or above reported that they ate two or more servings of vegetables (one serving of vegetables was defined as equivalent to half a bowl of cooked vegetables) per day on the days they ate vegetables. The estimated mean number of servings of vegetables eaten per day was 1.4.

Overall, 5.6% (6.5% for females and 4.6% for males) of persons aged 15 or above reported consuming an average of five or more servings of fruit and vegetables per day. The proportion was the lowest among those in the 85 or above age group (3.1%) and the highest proportion was reported by persons aged 65-74 (7.0%).

• Consumption of salty food

Overall, 20.7%, 46.5% and 21.5% of persons aged 15 or above ate preserved vegetables, processed meat and snacks with high salt content, respectively, on average at least once a week. Majority (59.3% every time and 20.9% often) of persons aged 15 or above used seasonings during cooking. Although only 2.5% of persons aged 15 or above reported that they added seasonings at the table every time when they ate, another 7.0% often added seasonings at the table.

• Consumption of seaweeds and ready-to-eat seaweeds

Overall, 8.3% of persons aged 15 or above reported that they ate seaweeds (including kelp/laver but excluding ready-to-eat seaweeds) on average at least once a week, and 8.1% of persons aged 15 or above said that they eat ready-to-eat seaweeds on average at least once a week.

#### Eating-out Habits

On average, persons aged 15 or above reported eating-out for breakfast, lunch and dinner 8.1, 11.9 and 5.4 times per month, respectively. Overall, 28.6%, 48.9% and 9.9% of persons aged 15 or above reported eating-out five times or more a week during the 30 days preceding the survey for breakfast, lunch and dinner, respectively. In general males were more likely to eat out than females, and those in the age group of 15-34 were more likely to eat out at least five times per week for lunch or dinner. Overall, 84.2% of persons aged 15 or above (88.9% for males and 79.9% for females) reported eating-out (including breakfast, lunch and dinner as a whole) at least once a week during the 30 days preceding the survey.

# Use of Medication for Health

The PHS used self-administered questionnaire to collect information on the usage of certain medications including slimming pills, health supplements, birth control pills and hormones in the month preceding the survey from the respondents. Overall, 0.6% of persons aged 15 or above had taken slimming pills, being more common in females (0.8%) than in males (0.3%) and most common among persons aged 25-44 (0.9%). Overall, 3.4% of females aged 15 to 49 reported that they had taken birth control pills, and 0.8% of females aged 30 or above reported that they had taken hormones for menopausal or aging symptoms in the month preceding the survey. Overall, 16.1% of persons aged 15 or above had taken health supplements such as vitamins and mineral supplements, being more common in females (12.4%), and more common among persons aged 45-54 (19.0%) or aged 65-74 (18.6%).

# **Injury Prevention**

# Unintentional Injuries

Overall, 14.5% of persons (13.9% of females and 15.1% of males) aged 15 or above reported that they had sustained one or more episodes of unintentional injuries in the 12 months preceding the survey. They were more common among persons in the age groups of 15-24 (19.0%) and 85 or above (17.7%). Among those who had sustained unintentional injuries, the average number of episodes was 2.1. The five most common causes of unintentional injuries were sprain (24.0%), falls (19.9%), hit/struck (19.6%), cutting/piercing (15.8%) and sports (12.8%). Analysed by age group, falls was the main cause of the majority (59.1%) of unintentional injuries sustained by people aged 65 or above. The most common places where unintentional injuries occurred were home (28.5%), sports/athletic areas (17.2%) and

transport areas such as public highways, streets or roads (16.7%). The proportion of unintentional injuries that were work-related was 13.2%, being more common in males (18.5%) than in females (7.9%).

#### Preventive Measures

Overall, 80.6% of persons aged 15 or above agreed that unintentional injury could be preventable and 40.4% of these persons reported that they had taken some measures to prevent unintentional injuries at home or in the workplace during the 12 months preceding the survey. Among those persons who reported that they had taken injury prevention measures, "being more careful" was the most frequently cited measure (90.7%), which were followed by "using protective gear" (30.1%) and "took safety training" (8.4%). After excluding those whose injury prevention measure was just "being more careful", the proportion of persons aged 15 or above who had done something proactively or taken proactive precautions to prevent unintentional injuries at home or in the workplace was only 13.7%.

Among those who reported that they had not taken any injury prevention measure in the household or at workplace, 87.9% said that they felt safe enough, 5.1% thought precautionary measure could not prevent injury and 4.4% found it inconvenient to take any precautionary measure. Among people aged 15 or above, 8.9% (9.3% for females and 8.4% for males) reported that they would give up adopting safety measures (e.g. installing window frame or using anti-slip mat) to prevent unintentional injury because of cost.

Regarding specific injury prevention measures, only 4.8% of persons aged 15 or above reported the use of helmet all of the time when they were riding bicycles; 37.9% of those who drove or rode in a vehicle with seatbelt said that they had used seatbelts all of the time; and 64.7% of persons aged 15 or above who had children and stored drugs at home claimed that they had hidden the drugs from children all of the time.

# **Preventive Health Practices**

#### Regular Medical Check-up

Overall, 37.6% (44.1% of females and 30.4% of males) of persons aged 15 or above reported that they had regular medical check-up. The proportion of population having regular medical check-up was the highest among those aged 45-54 (45.9%) and the lowest in those aged 15-24 (18.2%). Among those who reported that they had regular medical check-up, 91.8% had their medical check-up at least once every 24 months (89.7% for females and 95.1% for males) and the mean duration between two check-ups was 15.7 months.

#### Faecal Occult Blood Test (FOBT)

Overall, 17.1% (15.0% had no symptom and 2.1% had symptoms or discomfort prior to the test) of persons aged 15 or above reported that they had ever had FOBT. The majority (70.9%) of those who had FOBT with no prior symptom received the test from private doctors but the majority (60.8%) of those who had FOBT because of symptoms or discomfort received the test from public clinics or hospitals. Among persons who had FOBT as a screening test (when they had no symptom prior to the test), 64.0% had their last tests within 24 months preceding the survey and the mean duration since their last FOBT was 32.6 months. The proportion of persons aged 50-75 who had received FOBT among those with no symptoms or discomfort prior to the test was 19.9% (20.2% for females and 19.6% for males).

# Colonoscopy

Overall, 14.6% of the persons aged 15 or above (14.1% for females and 15.2% for males) had ever received colonoscopy examination, with 11.3% had no symptom or discomfort and 3.3% had symptoms or discomfort prior to the examination. Among those who had colonoscopy as a screening examination (when they had no symptom or discomfort prior to the examination), most of them (64.0%) received the examination from private doctors, 55.3% had their last examinations within 24 months preceding the survey, and the average duration since the last colonoscopy was 39.6 months. The proportion of persons aged 50 to 75 inclusive who had ever had colonoscopy for screening was 17.7% (16.2% for females and 19.2% for males).

# Prostate-specific Antigen (PSA) Test (for males only)

Overall, 9.2% of males aged 15 or above reported that they ever had a PSA test without (7.4%) and with (1.8%) symptoms or discomfort prior to the test. The proportions of males who had PSA test for screening (they had no symptom or discomfort prior to the test) increased with age from 2.6% in males aged below 45 to the peak of 14.7% in males aged 65-74. Among those who had the PSA test for screening, the majority received the test from private doctors (68.3%), 71.7% had their last tests within 24 months preceding the survey and the average duration since the last PSA test at 26.5 months. Nearly half (45.6%) of males who had PSA test for screening had no fixed schedule of regular PSA tests, and 21.0% reported that the recent test was their first PSA test; 19.9% had repeat PSA test generally once a year or more frequently.

#### Digital Rectal Examination (DRE) of the Prostate (for males only)

Overall, 7.9% of males aged 15 or above reported that they had ever had DRE of the prostate - 5.8% had the examination when there were no symptom or discomfort and 2.1% had it because of symptoms or discomfort. Most (61.9%) persons who had DRE without any prior symptom or discomfort received the examination from private doctors, but most (63.7%) of those who had symptoms before the DRE had it in public clinics or hospitals. Among males who had received DRE when there was no symptom or discomfort, 61.1% had their last examinations within 24 months preceding the survey, the average duration since the last DRE was 38.6 months, 53.9% did not have any fixed schedule of repeat examinations and 13.6% had DRE generally once a year or more frequently.

# Cervical Smear (for females aged 25 or above)

Overall, 54.2% of females aged 25 or above reported that they ever had a cervical smear - 51.0% had the test with no symptoms or discomfort prior to the test and 3.2% had it because of symptoms or discomfort. The proportion of women aged 25-64 who had ever had cervical smear when there was no symptom or discomfort was 57.4%. Among those who had a cervical smear when there was no symptom or discomfort, 66.5% had their last cervical smear within 24 months and 20.1% had the test more than 36 months preceding the survey; and 47.6% had regular cervical smear once every one to three years and 1.5% had it more frequently than once a year.

#### Mammogram (for females only)

Overall, 25.4% of females aged 15 or above reported that they ever had a mammogram, with 23.4% having no symptom or discomfort prior to the examination and 2.0% had the examination because of symptoms or discomfort. In general, more women consulted private doctors than public clinic or hospitals for the mammogram examination regardless of whether they had symptoms or discomfort prior to the examination. Among those who had the examination for screening (when there was no symptom or discomfort), 63.0% had their last examinations within 24 months preceding the survey and the average duration since their last mammogram was 38.0 months; 49.3% of them had no fixed schedule for repeat examinations although 31.1% had it once every one to two years.

#### Health Screening for Cardiovascular Risk Factors

Overall, 55.4% of people aged 15 or above had their blood cholesterol measured before. The proportion of people who had cholesterol checked before tended to increase with age from 14.2% in the 15-24 age group to the peak of 82.8% in the 75-84 age group. Among those who reported that they had blood cholesterol checked before, 95.7% had the test done within five years preceding the survey.

Overall, 75.0% of persons aged 15 or above had their blood pressure checked by a doctor or other health professionals in the past five years. The proportion increased from 50.2% among those aged 15-24 to the peak of 93.1% among those aged 75-84.

Overall, 57.7% of persons aged 15 or above ever had their blood sugar checked before the survey with 92.4% of whom reporting that their last blood sugar check was within the last three years. The proportion of persons who had their blood sugar checked increased from 20.0% in the 15-24 age group to 82.4% in the 75-84 age group.

# Use of Health Services

The PHS asked the respondents on whether they had a family doctor, the health care services they had used and how satisfied they were with the health care system in Hong Kong.

# Persons having a Family Doctor

Overall, 43.8% of persons aged 15 or above (45.1% for females and 42.4% for males) reported that they had a family doctor whom they would usually consult first for their health problems. The proportion of persons reported having a family doctor was higher among the age groups between 35 and 64, and in persons with a monthly household income of \$50,000 or above. Majority (96.3%) of persons who reported having a family doctor reported that their family doctors were Western medicine practitioners.

# Persons without a Family Doctor

Among persons who did not report having a family doctor, most (92.3%) would usually consult only Western medicine practitioners, 5.0% who would usually consult only Chinese medicine practitioners when they were ill, while 2.7% would consult both. Across all age groups, persons aged 55-64 had the highest proportion reporting that they would consult Chinese medicine practitioners only (6.3%) when they were ill.

#### Type of Health Service Providers usually Consulted

Among those who would usually consult a Western medicine practitioner or both Western and Chinese medicine practitioners when they were ill, 83.6% reported that they would usually consult doctors in private clinics or hospitals.

#### Health Problems and Treatment Received

In the 30 days preceding the survey, 57.0% (61.4% of females and 52.1% of males) of persons aged 15 or above reported that they had experienced some kinds of health problems. Among those who had experienced health problems, 39.3% received treatment from Western medicine practitioners in private clinics / hospitals, 8.6% received treatment from Western medicine practitioners in public clinics or hospitals, 11.1% consulted Chinese medicine practitioners, 23.7% did nothing and 25.3% consumed over-the-counter Western (20.2%) or Chinese (5.7%) medication.

#### Hospitalisation

Overall, 11.0% (11.7% of females and 10.1% of males) of persons aged 15 or above reported that they had hospital admissions within the 12 months preceding the survey. Among those who reported hospital admissions, 74.2% were admitted to public hospitals under the Hospital Authority (HA), 24.4% were admitted to private hospitals and 1.5% were admitted to both public and private hospitals. The mean number of admissions in the 12 months preceding the survey was 1.3 for those admitted to public hospitals and 1.1 for those admitted to private hospitals. The mean duration of hospital stay during the last episode of admission to public hospitals and private hospitals were 4.7 days and 2.3 days, respectively. While the mean duration of stay at public hospitals was longer for females (4.8 days) than for males (4.5 days), the opposite was true for the mean duration of stay at private hospitals (2.1 days for females vs 2.6 days for males). Overall, 5.3% and 0.7% of the admissions to public hospitals under HA and private hospitals, respectively lasted for more than 14 days.

# Consultations with Mental Health Professionals

Overall, 1.7% of persons aged 15 or above (1.9% in females and 1.5% in males) reported that they had consulted mental health professionals, such as a clinical psychologist, psychiatrist, psychiatric nurse or

medical social worker, for their mental health problems in the 12 months preceding the survey. Persons aged 15-24 recorded the highest proportion (3.1%) of consultation with mental health professionals.

#### Satisfaction with the Health Care System

Respondents were asked to rate public and private sectors of the health care system in Hong Kong on an overall satisfaction scale of 0-100 where 0 represents the lowest and 100 the highest level of satisfaction. The average satisfaction scores given to the public health care sector and private health care sector were 66.9 and 75.3, respectively. The average satisfaction score by age group ranged from 64.6 to 73.8 for the public sector, with an increasing trend with age. The average satisfaction score by age group had a narrower range from 73.9 to 76.1 for the private sector.

#### Physical and Biochemical Measurements

The PHS invited a random subsample of persons aged between 15 and 84 who had been enumerated in the household survey and signed the survey consent form to undergo a follow-up health examination in order to estimate prevalence of cardiovascular disease risk factors. The health examination included anthropometric and blood pressure measurements as well as blood tests for fasting plasma glucose, haemoglobin A1c (HbA1c) and fasting lipid profile, and 24-hour urine test for sodium and potassium.

# Body Mass Index (BMI)

The mean BMI for females and males aged 15-84 were 22.9 kg/m<sup>2</sup> and 23.9 kg/m<sup>2</sup>, respectively. Overall, 29.9% (24.4% of females and 36.0% of males) persons aged 15-84 were obese (i.e. BMI  $\ge$  25.0 kg/m<sup>2</sup>) and another 20.1% (19.3% of females and 20.9% of males) were overweight (i.e. 23.0 kg/m<sup>2</sup>  $\le$  BMI < 25.0 kg/m<sup>2</sup>), according to the classification for Chinese adults adopted by the DH. Obesity was most common among females aged 65-84 (34.3%) and among males aged 45-54 (51.1%).

#### Waist Circumference and Waist-hip Ratio

Among persons aged 15-84, the mean waist circumference (WC) was 77.7 cm for females and 84.4 cm for males; and the mean waist-hip ratio (WHR) was 0.83 for females and 0.88 for males. Overall, 32.9% (37.2% for females and 28.2% for males) of persons aged 15-84 had central obesity defined by WC and

40.1% (38.9% for females and 41.5% for males) of persons aged 15-84 had central obesity defined by WHR.

#### Blood Pressure

The PHS 2014/15 reported the mean of the second and third readings of three blood pressure measurements of respondents with a three minute rest between each measurement. The mean systolic blood pressure (SBP) of persons aged 15-84 was 120.0 mmHg (117.0 mmHg for females and 123.2 mmHg for males). The mean diastolic blood pressure (DBP) of these persons was 77.8 mmHg (75.9 mmHg for females and 79.8 mmHg for males). Apart from 14.6% of persons aged 15-84 with a self-reported doctor-diagnosis of hypertension, 13.2% (11.5% of females and 14.9% of males) of these persons were found to have high blood pressure with SBP  $\geq$ 140 mmHg and/or DBP  $\geq$  90 mmHg. The total prevalence of hypertension combining cases that were self-reported or detected by measurement during health examination was 27.7% (25.5% for females and 30.1% for males) among persons aged 15-84, with 47.5% of them being undiagnosed before the PHS. The total prevalence of hypertension increased steadily with age from 4.5% among those aged 15-24 to 64.8% among those aged 65-84.

# **Diabetes Mellitus**

The mean values of fasting plasma glucose (FPG) for females and males aged 15-84 were 4.9 mmol/L and 5.1 mmol/L, respectively. The mean values of glycated haemoglobin (HbA1c) for females and males aged 15-84 were 5.6% and 5.7%, respectively. Apart from 3.8% (3.2% for females and 4.6% for males) of persons aged 15-84 with self-reported doctor-diagnosed diabetes mellitus (DM), 4.5% (3.2% of females and 6.0% of males) of these persons had DM defined by either a FPG  $\geq$  7.0 mmol/L or HbA1c  $\geq$  6.5%. Combining the self-reported doctor-diagnosed and newly biochemical testing detected cases, the total prevalence of DM among persons aged 15-84 was 8.4% (6.4% in females and 10.5% in males), with 54.1% of them being undiagnosed before the PHS. The prevalence of DM increased with age from 0.2% for persons aged 15-24 to 25.4% for those aged 65-84. In addition, another 1.0% of persons aged 15-84 had impaired fasting glucose (IFG) with FPG between 6.1 and 6.9 mmol/L.

# Hypercholesterolaemia

Among persons aged 15-84, the mean total cholesterol (TC) was 5.1 mmol/L (5.1 mmol/L for females and 5.0 mmol/L for males), mean high-density lipoprotein (HDL) was 1.4 mmol/L (1.5 mmol/L for

females and 1.3 mmol/L for males), mean low-density lipoprotein (LDL) was 3.1 mmol/L (3.1 mmol/L for females and 3.2 mmol/L for males). Overall, 42.2%, 23.7% and 35.0% of persons aged 15-84 had high TC ( $\geq$  5.2 mmol/L), low HDL (< 1.3 mmol/L for females, < 1.0 mmol/L for males) and high LDL ( $\geq$  3.4 mmol/L), respectively. Hypercholesterolaemia is defined by a TC  $\geq$  5.2 mmol/L, which was found in 34.8% of persons aged 15-84 who had not reported to have a doctor-diagnosed hypercholesterolaemia. Adding this prevalence to the 14.8% self-reported doctor-diagnosed hypercholesterolaemia, the overall prevalence of hypercholesterolaemia was 49.5% among persons aged 15-84 (48.8% for females and 50.3% for males) with 70.2% of them being undiagnosed before the PHS. Analysed by age group, the highest prevalence of hypercholesterolaemia was observed in the age group 55-64 (75.0% in females and 68.9% in males).

# Daily Sodium and Potassium Intake

The PHS 2014/15 estimated daily sodium and potassium intake through measurement of sodium and potassium excretion from 24-hour urine collection.

• Sodium intake

24-hour urinary sodium excretion is a reliable proxy measure of dietary salt intake. Among persons aged 15-84, the mean 24-hour urinary sodium excretion was 150.6 mmol (135.6 mmol for females and 167.1 mmol for males), which is equivalent to a daily salt intake of 8.8 g per day (7.9 g per day for females and 9.8 g per day for males). The vast majority (86.3%) of persons aged 15-84 had dietary salt intake above the WHO recommended daily limit of less than 5 g per day, which was more common in males (90.8%) than females (82.2%). The mean daily salt intake increased with the frequency of eating-out from 8.0 g per day among persons eating out less than once per week to 9.3 g per day among persons eating out six times or more per week.

• Potassium intake

The average daily intake of potassium of participants of the PHS was estimated by the multiplication of 24-hour urinary potassium excretion by a factor of 1.3 and converting one mmol of potassium to 0.039 g of potassium. Among the persons aged 15-84, the estimated mean daily potassium intake was 2.3 g (2.2 g for females and 2.3 g for males). Nearly all (91.5%) persons aged 15-84 had insufficient dietary potassium intake below the WHO recommended level of 3.5 g per day. The proportion of persons with sufficient potassium intake (at least 3.5 g per day) was higher (13.1%)

among persons consuming at least five servings of fruit and vegetables per day than that (8.2%) among persons eating less than five servings of fruit and vegetables per day.

#### Risk of Cardiovascular Disease

The PHS adopted a widely-used risk prediction model, namely the Framingham risk model for general cardiovascular disease (CVD) risks to predict the risk of CVD over the next 10 years in the general adult population aged 30-74 of Hong Kong.

# Risk of Cardiovascular Disease over 10 Years Predicted by Framingham Risk Model

The Framingham risk model predicts the total risk of all cardiovascular outcomes including CHD, stroke, peripheral artery disease and heart failure. Among persons aged 30-74, the mean CVD risk over the next 10 years predicted by the Framingham risk model was 10.6% (6.2% for females and 15.5% for males). The mean CVD risk increased with age in both genders from 1.5% among females aged 30-44 to 15.7% among females aged 65-74 and from 4.1% among males aged 30-44 to 33.2% among males aged 65-74. Among persons aged 30-74, 16.4% were classified as high-risk (10-year CVD risk  $\geq$  20%), 18.3% as medium-risk (10-year CVD risk  $\geq$  10% and < 20%) and 65.4% as low-risk (10-year CVD risk < 10%) according to the Framingham risk model. The proportion of high-risk persons was much lower in females (5.1%) than in males (29.1%) and increased sharply with age to peak at 24.0% and 84.9% among females and males aged 65-74, respectively.

# **Chapter 1**

# Survey Method, Representativeness and Characteristics of the Sample

# 1.1 Background

The Population Health Survey (PHS) 2014/15 is the second territory-wide Population Health Survey conducted by the Department of Health (DH). The first PHS was conducted in 2003-04 and a Heart Health Survey was conducted as a follow-up study in 2004-05. The objective of conducting the PHS 2014/15 is to collect pertinent information on the patterns of health status and health-related issues of the general population in Hong Kong. The PHS 2014/15 aims to strengthen the Government's information base on population health, thereby support evidence-based decision making in health policy, resource allocation, provision of health services and public health services.

This Chapter outlines (i) the survey method, and (ii) the degree of sample representativeness, along with (iii) a portrayal of the characteristics of the households and the population under study.

#### 1.2 Survey Method

The Population Health Survey (PHS) 2014/15 comprised two parts, namely (I) household survey; and (II) health examination, including physical and biochemical measurements. The DH commissioned a private research firm and a private healthcare organisation with laboratory service to conduct the fieldworks of household survey and health examination respectively. Data analysis and reporting of the PHS 2014/15 was commissioned to the Department of Family Medicine and Primary Care of the University of Hong Kong. The DH played a co-ordination and management role in the survey and was responsible for monitoring the quality of various parts of the survey. The PHS 2014/15 had been approved by the Ethics Committee of the Department of Health.

# 1.2.1 Target Population Coverage

The household survey covered the land-based non-institutional population aged 15 or above in Hong Kong, excluding foreign domestic helpers and visitors of Hong Kong. The health examination covered persons aged between 15 and 84 (both ages inclusive) who had been enumerated in the household survey.

### 1.2.2 Sampling Frame and Sample Selection

The survey adopted the Frame of Quarters maintained by the Census and Statistics Department (C&SD) as the sampling frame. The Frame of Quarters consists of the Register of Quarters (RQ) and the Register of Segments (RS) which contain records of all addresses of permanent quarters in built-up areas and records of area segments in non-built-up areas respectively. Systematic replicated sampling was deployed for selecting a sample of replicates of living quarters in built-up areas from the RQ and a sample of area segments in non-built-up areas from the RS. Each replicate of living quarters is a representative sample of domestic households in Hong Kong.

#### 1.2.3 Participants of Health Examination

All domestic households in the selected living quarters and all members aged 15 or above who met the target population coverage criteria stated in Section 1.2.1 above in the selected households were enumerated individually. All enumerated persons aged between 15 and 84 were invited to sign a PHS consent form of health examination. For respondents under 18 years of age, their consent forms were signed by parents or guardians. Eligible and consented members of enumerated households in a random subsample of living quarters were invited to undergo a follow-up health examination.

According to the Protocol<sup>1</sup> from the World Health Organization (WHO), respondents meeting any one of the following criteria were excluded from 24-hour urine tests:

- (a) Respondents unable to sign the consent form of health examination;
- (b) Those with known history of heart or kidney failure, stroke or liver disease;
- (c) Those who had recently begun therapy with diuretics (for less than two weeks preceding the survey);
   or
- (d) Those with other conditions that would make 24-hour urine collection difficult, e.g. incontinence.

#### 1.2.4 Data Collection Method

#### Household survey

For the household survey, face-to-face interview was first conducted by the interviewers in Cantonese, Putonghua or English with the respondents. After the interview, the respondents were invited to fill in a self-administered questionnaire. Translation service was planned for ethnic minorities who did not speak the three languages so that they would not be excluded due to language barrier. As for respondents with special needs, such as hearing and speaking difficulties, assistance from their household members to facilitate the conduct of the interviews was allowed.

Intensive publicity and subject recruitment strategy were employed to increase the response rate. Announcements in the Public Interest (API) through radio to encourage respondents' support and participation in the survey were broadcasted, posters and pamphlets were distributed. Invitation letters were sent to all sampled households about a week before the commencement of the fieldwork. A mini theme page was set up in the Centre for Health Protection website to publicise and provide detailed information of the survey. Two hotlines were set up for answering enquiries related to the survey and making appointments for interview. Cash coupons were presented to respondents upon completion of the interview and all parts of health examination respectively as a token of appreciation for their support and participation.

# Health examination

Respondents who consented for health examination, after random selection, were contacted by telephone to make appointment at designated health examination centres. Appointment confirmation letters or SMS, a health examination pamphlet and instructions for blood test were sent to respondents who accepted the invitation. Another hotline was set up for enquiries and making appointments for health examination. Identities of respondents attending health examination were confirmed by checking their partial HKID number, name, gender and age. Physical measurements and blood taking were performed by trained staff supervised by medical practitioner in four designated health examination centres, one each in Central, Causeway Bay, Jordan and Tsuen Wan. If respondents were eligible for performing the 24-hour urine tests, they were given two 24-hour urine collection bottles of 3 litres each and instructions for 24-hour urine collection, and were required to return their urine samples on the same day after the collection.

Procedures of physical measurements and biochemical tests followed the WHO STEPS Surveillance Manual<sup>2</sup> and the Protocol for Population Level Sodium Determination in 24-hour Urine Samples<sup>1</sup> from the World Health Organization. Procedures for handling biochemical specimens followed the Safety Guidelines on Transport of Clinical Specimens and Infectious Substances for Courier Team and the relevant Infection Control Guidelines issued by the Centre for Health Protection of the DH.

# Dissemination of health examination results

All laboratory reports were reviewed by registered Medical Laboratory Technologists before passing to the DH. Medical staff of the DH, including doctors and nurses, further reviewed all laboratory results before sending to the respondents concerned. Health advice was provided to the respondents with results outside reference range.

# 1.2.5 Survey Instrument

Data of the household survey were collected through the use of a structured questionnaire which covered the following areas:

- (a) Self-rated health status and quality of life;
- (b) Physical health status;
- (c) Mental health status;
- (d) Health-related behaviours and lifestyle practices;
- (e) Injury prevention;
- (f) Preventive health practices;
- (g) Use of health services; and
- (h) Demographic information.

There were a few sensitive questions in the questionnaire which might be uneasy or embarrassing for the respondents to answer in a face-to-face interview. In order to minimise the potential reporting error, self-administered questionnaire was deployed to collect respondents' responses to these questions. On average, an interview for individual respondents lasted about 47 minutes and the duration per interview ranged from 32 minutes to 64 minutes.

The health examination includes the following items:

Physical measurements:

- (a) Measurement of blood pressure;
- (b) Measurement of body height and body weight;
- (c) Measurement of hip and waist circumferences; and
- (d) Calculation of body mass index (BMI).

**Biochemical testing:** 

- (a) Fasting lipid profile, including total cholesterol, low density lipoprotein (LDL) (by calculation), high density lipoprotein (HDL) and triglyceride;
- (b) Fasting plasma glucose;
- (c) Glycated haemoglobin (HbA1c); and
- (d) 24-hour urine testing for sodium and potassium.

# 1.2.6 Pilot Survey

#### Household survey

In order to test the survey materials as well as to ensure the smooth execution of the fieldwork, a pilot survey in two phases was conducted from 7 November 2014 to 14 December 2014; and a total of 200 respondents aged 15 or above were successfully interviewed in the pilot survey. All respondents of the pilot survey were not counted in the sample of the main survey.

The questionnaire was fully tested in the pilot survey; and refinements were made to the questionnaire based on the observations obtained from the pilot survey.

# Health examination

Thirty-one out of the 200 respondents of the pilot survey were successfully recruited to participate in the health examination from 25 March 2015 to 19 June 2015. All respondents completed all items of health examination, except one subject who refused to complete 24-hour urine tests.

All aspects of health examination, including appointment making, the protocols for physical and biochemical measurements and results dissemination, were tested thoroughly in the pilot survey.

Standard scripts for appointment making and instructions for 24-hour urine collection were tested and refinements were made after pilot survey.

# 1.2.7 Training for the Interviewers and Health Examination Staff

#### Household survey

To ensure consistency among interviewers on data collection, training sessions and a survey manual were provided prior to fieldwork. Weekly debriefing sessions and further regular training sessions were arranged during the fieldwork period to provide solutions to the difficulties encountered by the interviewers and to strengthen the performance of the interviewers.

#### Health examination

Induction training was provided to all staff undertaking health examination services in all centres before the survey commenced and regularly throughout the fieldwork. All these staff were trained to comply with all procedures stated in the Service Protocols, including procedures of blood pressure measurement, other physical measurements and blood collection as well as instructions for 24-hour urine collection. The Service Protocols were available for all staff involved in the survey in order to ensure consistency in all aspects of health examination.

# 1.2.8 Data Collection and Enumeration Results

# Household survey

The fieldwork of the household survey was conducted between December 2014 and October 2015. A total of 7 205 domestic households were found in the sample of 7 081 living quarters. Among these 7 205 domestic households, 5 435 were successfully enumerated, representing an overall response rate of 75.4% at household level. The response rate was slightly higher than the last survey conducted in 2003/04 (72%) since more intensive publicity strategy and incentives were employed.

As for the response rate for the three types of housing i.e. public rental housing, subsidised sale flats and private housing, the respective response rates are 85.8%, 83.7% and 67.7%. As regards the response rate by District Council district, it varied from the highest of 85.1% recorded for Wong Tai Sin District to the lowest of 65.2% for Islands District.

A total of 12 022 persons aged 15 or above were successfully enumerated from these 5 435 domestic households in the fieldwork.

# Health examination

The fieldwork of health examination was conducted between June 2015 and August 2016. A total of 5 936 respondents out of 8 615 consented respondents were selected and invited to make appointment for health examination. Among these 5 936 invited respondents, 2 347 respondents attended health examination, including 1 976 respondents completed physical measurements, blood tests and 24-hour urine tests, and 371 respondents completed physical measurements and blood tests only. These represented a participation rate of 39.5%. Similarly, the participation rate was higher than that in a past similar survey, the Heart Health Survey, conducted in 2004/05 (27%).

The participation rate in females (40.1%) was slightly higher than that in males (39.0%). As regards the participation rates by age group, they ranged from 32.9% among respondents aged 65-84 to 48.1% among those aged 55-64.

#### 1.2.9 Quality Control

#### Household survey

A series of quality control (QC) measures were adopted to ensure that all data collected from the fieldwork were of satisfactory quality. Such measures included training and periodic on-site supervision on the interviewers. Furthermore, at least 15% of the questionnaires completed by each interviewer and all the questionnaires of respondents who participated in the health examination were checked by an independent team of quality control checkers. Moreover, QC measures on office coding and editing, data input (double data entry), computer data validation (duplication, skipping, range and consistency checks), acceptance tests for various computer data processing systems, audit trails at various stages of computing processing, other measures for detection and prevention of fake data, mechanism for monitoring and auditing the operation of the QC systems were also implemented.

# Health examination

Quality control measures were adopted in various aspects of fieldwork to ensure all data collected from health examination were credible and reliable. All physical measurements and specimen collection were required to strictly follow the procedures stated in the service protocol of health examination which adopted procedures stated in the relevant manuals from the WHO. The laboratory providing laboratory services for the PHS was accredited by the Hong Kong Laboratory Accreditation Scheme in performing all the blood tests and 24-hour urine tests included in the survey. Besides, it conducted daily internal quality control checking and participated in External Quality Assurance Program. In addition, the DH conducted random on-site inspection of physical measurements and blood specimen collection and regular quality checking by telephone calls on randomly selected participants of health examination.

# 1.2.10 Grossing-up Method

The data collected from the survey were adjusted by the differential response rates for the three types of housing (i.e. public rental housing, subsidised sale flats and private housing), and grossed-up to the control for the age and gender profile of the target population for the second quarter (Q2) of 2015. One set of statistical weights each was derived for (i) household survey, (ii) health examination (exclude 24-hour urine tests), and (iii) 24-hour urine tests. After these adjustments, the survey estimates can represent those of the study population during the survey period.

#### 1.2.11 Reliability of the Estimates

The estimates of this survey are subject to sampling error and non-sampling error. These estimates are based on the information obtained from a particular sample, which is one of a large number of possible samples that could be selected using the same sample design. Estimates derived from different samples would differ from each other. Due to these possible variations of results, a zero figure may mean a non-zero figure of a small magnitude. Besides, some estimates are derived from a small number of observations, and they might be subject to large sampling error and should be interpreted with caution.

The coefficient of variation (CV) is used for comparing the precision of the estimates of various variables related to sampling error. The CV is obtained by expressing the standard error (SE) as a percentage of the estimate to which it refers. The smaller the CV, the more precise is the estimate. The CVs of the estimates of selected variables presented in this report are given in Appendix.

Apart from sampling errors, non-sampling errors might also exist. The cross-sectional approach of the survey can only be used to reflect the health status of the non-institutional population at a particular point in time. Therefore, the survey has interviewed only part of the population. Although efforts were made to ensure randomness in selection of participants and representativeness of the results, bias may still exist if those people who could not be reached or refused to participate were having different health status or lifestyles. This survey has assessed respondents' health status, behaviours or practices through self-

reporting and is subjected to recall bias and recall error. Also, the prevalence of the self-reported conditions may not correspond to the true prevalence of that condition in the population. For example, there might be under-recognition, or at least under-reporting, of most chronic conditions and mental health status. Even for the same disease or symptom, a person might regard it as a health problem while another person might not. This was especially so for minor symptoms and for those who had not consulted doctor. Some respondents might not be willing to disclose to interviewers some of their behaviours or lifestyle practices that were regarded as socially undesirable and others might tend to provide socially desirable responses. It should also be noted that estimates contained in this report are subject to error. Some estimates on certain health problems are quite small and may be subject to large error.

# 1.2.12 Confidentiality

All questionnaires filled with data and data files were regarded as confidential documents, and the research team exercised due care in handling the records to avoid the leakage of information. At the beginning of the survey, all relevant staff of the private data collection firm commissioned for the survey were required to sign an undertaking not to disclose any confidential information related to the survey.

In accordance with the Personal Data (Privacy) Ordinance (Cap. 486) and the code of conduct of the research agency, all data collected from the survey were used only for research and statistical purposes. All questionnaires filled with respondents' information would be destroyed within six months after completion of the survey.

# 1.2.13 Notes to Tables and Symbols

In general, estimated population figures presented in this survey report are rounded to the nearest 100 while percentages are rounded to one decimal place and percentages are derived from the corresponding unrounded figures. There may be a slight discrepancy between the sum of individual items and the respective total or sub-total as shown in the tables owing to rounding. "-" denotes a nil figure, "N.A." denotes not applicable and "\$" denotes Hong Kong dollar unless otherwise stated.

# 1.3 Sample Representativeness

The effect size<sup>3</sup> is used for comparing and quantifying the size of the difference between the distributions of unweighted data of the survey respondents and those of the land-based non-institutional population for Q2 of 2015 in Hong Kong. The effect sizes in respect of age, gender and highest education attainment between the two distributions were very small (i.e. 0.0403, 0.0099 and 0.1072 respectively). The very small effect sizes suggested close similarity between the unweighted data and land-based non-institutional population data indicating that the survey sample of this survey was representative of the target population (Table 1.3).

	PHS 2014/15		Effect size $\dagger$
	Distribution (unwo		
	No. of persons	%	
Age (years)			0.0403
15 - 24	1 632	13.6%	
25 - 34	1 805	15.0%	
35 - 44	1 922	16.0%	
45 - 54	2 339	19.5%	
55 - 64	2 127	17.7%	
65 - 74	1 181	9.8%	
75 - 84	753	6.3%	
85 or above	263	2.2%	
Total	12 022	100.0%	
Gender			0.0099
Female	6 357	52.9%	
Male	5 665	47.1%	
Total	12 022	100.0%	
Highest education attainment			0.1072
No schooling / Pre-primary	559	4.6%	
Primary	1 997	16.6%	
Secondary	6 276	52.2%	
Post-secondary or above	3 190	26.5%	
Total	12 022	100.0%	

 Table 1.3: Distribution of unweighted sample data and the effect sizes for its comparison with estimates of land-based non-institutional population for Q2 of 2015

Base: # All 12 022 respondents who had participated in the PHS 2014/15.

Notes: † In this calculation, effect size is the quantitative measure of strength of differences in distribution between unweighted sample data and land-based noninstitutional population. *Cohen's w* is a measure of effect size for comparisons. Levels of effect sizes - 0.0 for 'identical', 0.1 for 'small', 0.3 for 'medium' and 0.5 for 'large'.<sup>3</sup>

Figures may not add up to the total due to rounding.
The PHS data were adjusted by the differential response rates for the three types of housing (i.e. public rental housing, subsidised sale flats and private housing), and grossed-up to the control for the age and gender profile of the target population. After these adjustments, the survey estimates can represent those of the Hong Kong population during the survey period. Weighted percentage distributions of age and gender between the PHS data and the land-based non-institutional population for Q2 of 2015 compiled by the Census and Statistics Department (C&SD) were the same.

## 1.4 Characteristics of the Sampled Domestic Households

Overall, a total of 5 435 domestic households were enumerated in the survey. Using the proper statistical grossing-up method to align with the distribution of domestic households by housing type, this sample of domestic households represented all the 2 463 600 domestic households in Q2 of 2015 in Hong Kong. After grossing-up, about half (53.5%) and one-third (31.2%) of the households lived in private housing and public rental housing respectively. In terms of household size, more than half (53.4%) had either two members (26.9%) or three members (26.5%), about one-fifth (20.6%) had four members, 17.3% of the households were one-person households and 8.7% had five or more members. Analysed by District Council district, the highest proportion of domestic households (9.3%) lived in Kwun Tong District whereas the Islands District had the least proportion of domestic households (1.9%) (Table 1.4).

	No. of domestic households ('000)	%
Type of housing		
Public rental housing	767.5	31.2%
Subsidised sale flats	378.4	15.4%
Private housing	1 317.7	53.5%
Total	2 463.6	100.0%
Number of persons in the household		
1	426.8	17.3%
2	663.3	26.9%
3	652.0	26.5%
4	508.0	20.6%
5	150.1	6.1%
6 or above	63.4	2.6%
Total	2 463.6	100.0%
District Council district		
Western & Central	97.1	3.9%
Wanchai	58.6	2.4%
Eastern	205.0	8.3%
Southern	79.0	3.2%
Sham Shui Po	149.0	6.0%
Kowloon City	122.8	5.0%
Wong Tai Sin	154.6	6.3%
Kwun Tong	227.9	9.3%
Yau Tsim Mong	115.3	4.7%
Kwai Tsing	165.0	6.7%
Tsuen Wan	101.0	4.1%
Tuen Mun	184.6	7.5%
Yuen Long	214.5	8.7%
North District	91.7	3.7%
Tai Po	104.5	4.2%
Shatin	222.0	9.0%
Sai Kung	123.4	5.0%
Islands	47.5	1.9%
Total	2 463.6	100.0%

Base: All domestic households.

## 1.5 Characteristics of the Sampled Respondents

In the survey, a total of 12 022 respondents aged 15 or above were enumerated. Using the proper statistical grossing-up method to align with the age and gender profile of the land-based non-institutional population (i.e. target population), this sample of respondents represented all the 6 080 200 land-based non-institutional population aged 15 or above in Q2 2015, excluding foreign domestic helpers. After grossing-up, 52.4% were females and 47.6% were males. As a whole, the median age was 47 for both females and males. The largest proportion by age group for both females (19.9%) and males (18.9%) were those in the 45-54 years old group (Table 1.5.1).

	Fema	le	Mal	e	Tota	ıl	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
15 - 24	392.3	12.3%	409.3	14.1%	801.6	13.2%	
25 - 34	506.4	15.9%	455.0	15.7%	961.4	15.8%	
35 - 44	561.4	17.6%	459.8	15.9%	1 021.2	16.8%	
45 - 54	634.6	19.9%	548.4	18.9%	1 183.0	19.5%	
55 - 64	537.5	16.9%	528.0	18.2%	1 065.5	17.5%	
65 - 74	280.2	8.8%	283.8	9.8%	564.0	9.3%	
75 - 84	187.9	5.9%	164.8	5.7%	352.7	5.8%	
85 or above	84.7	2.7%	46.1	1.6%	130.8	2.2%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	
Median age	Aedian age 47.0		47.0	)	47.0		

Table 1.5.1: Weighted distribution of sampled respondents by age group and gender

Base: All respondents.

Regarding marital status, majority of the people aged 15 or above (60.0% overall; 57.3% females; 63.0% males) were married. Never married / single accounted for 27.4% and 32.4% among the females and males respectively (Table 1.5.2a).

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Never married / Single	872.2	27.4%	938.2	32.4%	1 810.4	29.8%
Married	1 825.8	57.3%	1 822.6	63.0%	3 648.4	60.0%
Divorced / Separated	185.8	5.8%	70.5	2.4%	256.2	4.2%
Widowed	301.2	9.5%	64.0	2.2%	365.2	6.0%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Table 1.5.2a: Weighted distribution of sampled respondents by marital status and gender

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

In terms of the relation between marital status and age group, majority of individuals aged 35-84 were married; majority of individuals aged below 35 were never married / single; and majority of individuals aged 85 or above were widowed (Table 1.5.2b).

 Table 1.5.2b: Weighted distribution of sampled respondents by marital status and age group

	15-	-24	25-	34	35-	44	45-	-54	55-	-64	65-	-74	75-	·84	85 or :	above	То	tal
	No. of persons ('000)	%																
Never married / Single	784.9	97.9%	570.6	59.3%	204.5	20.0%	151.6	12.8%	69.3	6.5%	20.6	3.6%	6.9	2.0%	2.1	1.6%	1 810.4	29.8%
Married	16.7	2.1%	381.3	39.7%	772.1	75.6%	923.8	78.1%	859.1	80.6%	433.9	76.9%	217.6	61.7%	43.9	33.6%	3 648.4	60.0%
Divorced/ Separated	-	-	8.5	0.9%	42.2	4.1%	90.9	7.7%	77.4	7.3%	24.6	4.4%	10.6	3.0%	2.0	1.6%	256.2	4.2%
Widowed	-	-	1.1	0.1%	2.4	0.2%	16.8	1.4%	59.6	5.6%	85.0	15.1%	117.6	33.3%	82.8	63.3%	365.2	6.0%
Total	801.6	100.0%	6 961.4	100.0%	5 1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

As for birthplace, 57.5% of the females and 66.0% of the males were born in Hong Kong. The remaining persons were mostly born in Guangdong Province (22.9%) and other provinces (10.1%) of Mainland China. Only 4.7% were born in other countries / regions (Table 1.5.3a).

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Hong Kong	1 830.1	57.5%	1 911.4	66.0%	3 741.5	61.5%
Guangdong Province	773.8	24.3%	619.3	21.4%	1 393.1	22.9%
Other provinces of Mainland China	402.3	12.6%	210.0	7.3%	612.4	10.1%
Macao	29.4	0.9%	16.6	0.6%	46.0	0.8%
Other countries / regions	149.3	4.7%	137.9	4.8%	287.2	4.7%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Table 1.5.3a: Weighted distribution of sampled respondents by place of birth and gender

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Regarding the relation between birthplace and age group, younger persons under the age of 65 were more likely to be born in Hong Kong, whereas persons aged 75 or above were more likely to be born in Guangdong Province. Among those aged 15-24, 76.6% were born in Hong Kong, whereas 64.2% of persons aged 85 or above were born in Guangdong Province (Table 1.5.3b).

Table 1.5.3b: Weighted distribution of sampled respondents by place of birth and age group

	15-	-24	25-	-34	35-	44	45	-54	55-	·64	65	-74	75-	84	85 or a	above	То	tal
	No. of persons ('000)	%																
Hong Kong	614.2	76.6%	695.2	72.3%	632.4	61.9%	773.1	65.4%	675.2	63.4%	240.8	42.7%	87.8	24.9%	22.7	17.3%	3 741.5	61.5%
Guangdong Province	113.9	14.2%	135.4	14.1%	166.6	16.3%	238.2	20.1%	270.9	25.4%	205.1	36.4%	179.0	50.8%	84.0	64.2%	1 393.1	22.9%
Other provinces of Mainland China	41.7	5.2%	72.3	7.5%	136.0	13.3%	110.5	9.3%	80.5	7.6%	88.2	15.6%	63.5	18.0%	19.8	15.1%	612.4	10.1%
Macao	2.0	0.3%	4.6	0.5%	5.2	0.5%	6.7	0.6%	13.6	1.3%	6.5	1.1%	5.7	1.6%	1.8	1.3%	46.0	0.8%
Other countries / regions	29.8	3.7%	54.0	5.6%	80.9	7.9%	54.5	4.6%	25.4	2.4%	23.4	4.1%	16.6	4.7%	2.6	2.0%	287.2	4.7%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Among persons aged 15 or above who were not born in Hong Kong, most (63.5% overall; 58.6% females; 70.3% males) had lived in Hong Kong for 20 years or more; 18.9% of the females and 15.0% of the males had resided in Hong Kong for less than 10 years (Table 1.5.4).

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
0 - 9	256.3	18.9%	147.2	15.0%	403.5	17.3%
10 - 19	304.9	22.5%	145.4	14.8%	450.4	19.3%
20 - 29	209.5	15.5%	118.4	12.0%	328.0	14.0%
30 - 39	225.5	16.6%	212.4	21.6%	437.9	18.7%
40 - 49	88.9	6.6%	107.2	10.9%	196.1	8.4%
50 - 59	126.0	9.3%	135.3	13.7%	261.3	11.2%
60 - 69	102.1	7.5%	90.3	9.2%	192.4	8.2%
70 - 79	34.0	2.5%	24.6	2.5%	58.6	2.5%
80 or above	7.7	0.6%	2.9	0.3%	10.6	0.5%
Total	1 354.9	100.0%	983.8	100.0%	2 338.7	100.0%

 Table 1.5.4: Weighted distribution of the non-Hong Kong born persons aged 15 or above by number of years living in Hong Kong and gender

Base: All respondents who reported not born in Hong Kong.

Note: Figures may not add up to the total due to rounding.

In terms of the highest educational attainment, slightly more than half of the females (50.2%) and males (53.8%) aged 15 or above had attained the secondary school level. 26.2% of females and 30.7% of males had attained higher educational level at post-secondary level or above (Table 1.5.5).

Table 1.5.5: Weighted distribution of sampled respondents by highest educational attainment and gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
No schooling / Pre-primary	214.9	6.7%	52.3	1.8%	267.1	4.4%
Primary	538.8	16.9%	398.6	13.8%	937.4	15.4%
Secondary	1 597.4	50.2%	1 556.7	53.8%	3 154.1	51.9%
Post-secondary or above	834.0	26.2%	887.6	30.7%	1 721.5	28.3%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Base: All respondents.

In terms of paid occupation, females were most commonly service and shop sales workers (28.2%) or clerks (26.7%), whereas males were more likely to be craft and related workers (17.2%) or managerial and administrative personnel (16.4%) among persons aged 15 or above who had a full-time or part-time job in the 7 days preceding the survey (Table 1.5.6).

	Female	9	Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Managerial and administrative	157.1	10.0%	323.7	16.4%	480.8	13.5%
Professional	95.4	6.0%	158.1	8.0%	253.5	7.1%
Associate-professional	229.8	14.6%	286.7	14.5%	516.5	14.5%
Clerks	420.5	26.7%	188.1	9.5%	608.6	17.1%
Service and shop sales workers	445.6	28.2%	305.1	15.5%	750.7	21.1%
Skilled agricultural and fishery workers	0.4	<0.05%	0.5	<0.05%	0.9	<0.05%
Craft and related workers	18.1	1.1%	338.8	17.2%	356.8	10.0%
Plant and machine operators and assemblers	3.5	0.2%	157.9	8.0%	161.4	4.5%
Elementary occupations and non-skilled workers	204.1	12.9%	211.8	10.7%	415.9	11.7%
Refusal	3.1	0.2%	4.0	0.2%	7.1	0.2%
Total	1 577.6	100.0%	1 974.6	100.0%	3 552.2	100.0%

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Ladie	1.5.0:	weighted	alstribution	of sample	ea respo	ondents w	no were (	emplo	vea p	v occui	Dation al	na g	ender

Base: All respondents who had a full-time or part-time job in the 7 days preceding the survey.

Among those who were employed (i.e. full-time or part-time job) in the 7 days preceding the survey, the largest proportion of persons (47.1%) earned \$10,000-\$19,999 per month and 35.6% earned \$20,000 or above per month. A higher proportion (70.8%) of the females than the males (59.0%) earned below \$20,000 per month. The reverse gender difference was observed among those earning a monthly income of \$20,000 or above (29.1% in females and 40.8% in males) (Table 1.5.7).

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Below \$5,000	117.4	7.4%	49.9	2.5%	167.4	4.7%
\$5,000 - \$9,999	281.7	17.9%	161.1	8.2%	442.8	12.5%
\$10,000 - \$19,999	717.3	45.5%	954.1	48.3%	1 671.4	47.1%
\$20,000 - \$29,999	231.9	14.7%	404.4	20.5%	636.3	17.9%
\$30,000 - \$39,999	102.6	6.5%	143.8	7.3%	246.4	6.9%
\$40,000 or above	124.0	7.9%	257.0	13.0%	380.9	10.7%
Refusal	2.8	0.2%	4.3	0.2%	7.1	0.2%
Total	1 577.6	100.0%	1 974.6	100.0%	3 552.2	100.0%

Table 1.5.7: Weighted distribution of sampled respondents who were employed by monthly personal income and gender

Base: All respondents who had a full-time or part-time job in the 7 days preceding the survey.

## References

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2. World Health Organization. WHO STEPS Surveillance Manual: The WHO STEPwise approach to chronic disease risk factor surveillance 2005. Geneva, World Health Organization.

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# Chapter 2 Self-rated Health Status and Quality of Life

The survey aimed to assess, among others, the general health and well-being of the local land-based noninstitutional population aged 15 or above. This Chapter reports on the population's self-rated health status and self-rated health-related quality of life as assessed by the 12-item Chinese (Hong Kong) Short Form Health Survey (version 2) (SF-12v2 (HK)), and self-rated quality of life as assessed by the Hong Kong Chinese version of World Health Organization Quality of Life - Brief Questionnaire (WHOQOL-BREF (HK)).

Indicator	Female	Male	Overall
Proportion of population with a self-rated health status of excellent, very good or good	66.5%	72.4%	69.3%
SF-12v2 (HK) component scores - Proportion of population with a score higher than or equal to the population mean of 50			
• Mental component summary score (MCS)	52.4%	55.3%	53.8%
• Physical component summary score (PCS)	64.8%	71.3%	67.9%
WHOQOL-BREF (HK) domain scores - Proportion of population with a score higher than 15 in a scale of 4 - 20			
• Physical health	57.7%	60.8%	59.2%
• Psychological health (culturally adjusted)	43.2%	43.6%	43.4%
Social relationships	44.3%	44.1%	44.2%
• Environment	43.0%	44.3%	43.6%

## Snapshot of Population's Self-rated Health Status and Quality of Life

## 2.1 Health-related Quality of Life by the Short Form 12 (SF-12v2) Health Survey

The Chinese (Hong Kong) SF-12v2<sup>1</sup> was used to measure health-related quality of life (HRQoL) of the respondents in the survey. The SF-12 is a shortened version of the SF-36<sup>2</sup> health survey and the SF-12v2 is the improved version of the SF-12. The improvements included item wording and response option extending<sup>1</sup>. The SF-12v2 is a widely used generic HRQoL instrument, and its Chinese version has been validated and normed in the general Chinese population in Hong Kong<sup>3</sup>. It consists of 12 questions measuring eight domains of health, including physical functioning, role physical, bodily pain, general health, vitality, social functioning, role emotional and mental health. These health domain scores are aggregated into the physical component summary (PCS) score and the mental component summary (MCS) score. Higher component summary scores indicate better health and better HRQoL. The PCS and MCS scores of this survey were calculated by a standard algorithm<sup>4</sup> and their distributions were norm-based with a population mean of 50 and standard deviation of 10.

## 2.1.1 Self-rated Health Status

Self-rated health is a fundamental measure of population health status and is an indicator that reflects both functioning and health problems. Respondents were asked to self-rate their present health condition in general on a five-category scale ("excellent", "very good", "good", "fair" and "poor"). Overall, 69.3% of persons aged 15 or above rated their health positively (i.e. "excellent", "very good" or "good"), while 26.4% considered their present health condition as "fair" and 4.3% "poor" (Table 2.1.1a).

The proportions of females and males aged 15 or above who considered their health condition as "excellent", "very good" or "good" were 66.5% and 72.4% respectively (Table 2.1.1a). Analysed by age group, the proportions of people rated their health status as "excellent", "very good" or "good" generally decreased with age, from 83.5% for those aged 15-24 to 39.0% for those aged 75-84, but increased to 42.3% for those aged 85 or above (Table 2.1.1b).

# Table 2.1.1a: Self-rated health status by gender

	Female		Male	-	Total		
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
Excellent	76.7	2.4%	110.0	3.8%	186.8	3.1%	
Very good	861.6	27.1%	899.3	31.1%	1 760.9	29.0%	
Good	1 180.4	37.1%	1 086.1	37.5%	2 266.5	37.3%	
Fair	904.5	28.4%	698.7	24.1%	1 603.2	26.4%	
Poor	161.8	5.1%	101.1	3.5%	262.9	4.3%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

## Table 2.1.1b: Self-rated health status by age group

	15-	-24	25-	-34	35-	-44	45-	-54	55-	64	65	-74	75-	84	85 or :	above	То	tal
	No. of persons ('000)	%																
Excellent	67.7	8.4%	43.5	4.5%	27.7	2.7%	19.7	1.7%	18.5	1.7%	7.5	1.3%	1.4	0.4%	0.7	0.5%	186.8	3.1%
Very good	334.9	41.8%	379.1	39.4%	344.4	33.7%	337.7	28.5%	239.2	22.5%	78.5	13.9%	32.7	9.3%	14.4	11.0%	1 760.9	29.0%
Good	266.4	33.2%	361.7	37.6%	413.1	40.5%	458.2	38.7%	419.6	39.4%	203.8	36.1%	103.4	29.3%	40.3	30.8%	2 266.5	37.3%
Fair	123.4	15.4%	161.1	16.8%	215.6	21.1%	330.9	28.0%	325.1	30.5%	225.7	40.0%	160.7	45.6%	60.7	46.4%	1 603.2	26.4%
Poor	9.3	1.2%	16.0	1.7%	20.3	2.0%	36.5	3.1%	63.0	5.9%	48.5	8.6%	54.5	15.5%	14.8	11.3%	262.9	4.3%
Total	801.6	100.0%	961.4	100.0%	01 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Analysed by monthly household income, the proportions of people rated their health status as "excellent", "very good" or "good" increased with the level of monthly household income, from 49.0% for those with a monthly household income of less than \$5,000 to 76.9% for those with a monthly household income of \$50,000 or more (Table 2.1.1c).

	Less \$5,0	than 000	\$5,0 \$9,9	00 - 999	\$10,0 \$19,	900 - 999	\$20,( \$29,	)00 - 999	\$30,( \$39,	)00 - ,999	\$40,( \$49,	)00 - 999	\$50, or n	000 10re	То	tal
	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%
Excellent	( <b>'000</b> ) 6.2	1.4%	('000)	2.1%	('000)	2.5%	('000)	2.8%	('000)	3.7%	('000)	3.5%	( <b>'000</b> ) 52.0	4.0%	('000)	3.1%
Very good	72.1	16.4%	65.2	17.5%	289.4	28.2%	373.1	30.1%	310.1	31.1%	199.3	29.1%	451.2	34.5%	1 760.3	29.0%
Good	136.8	31.2%	122.0	32.8%	355.2	34.6%	482.0	38.9%	378.4	38.0%	283.1	41.4%	500.9	38.3%	2 258.5	37.3%
Fair	177.3	40.4%	138.2	37.2%	300.8	29.3%	302.9	24.4%	240.0	24.1%	162.0	23.7%	274.9	21.0%	1 596.2	26.3%
Poor	46.2	10.5%	38.6	10.4%	55.6	5.4%	48.0	3.9%	30.4	3.0%	16.0	2.3%	27.3	2.1%	262.0	4.3%
Total	438.6	100.0%	371.7	100.0%	1 026.2	100.0%	1 240.1	100.0%	995.6	100.0%	684.2	100.0%	1 306.3	100.0%	6 062.7	100.0%

Table 2.1.1c: Self-rated health status by monthly household income

Base: All respondents who had provided information on monthly household income.

Analysed by number of doctor-diagnosed chronic diseases, the proportions of people rated their health status as "excellent", "very good" or "good" decreased with increasing number of doctor-diagnosed chronic diseases, from 81.2% for those without any chronic disease to 30.5% for those with 3 or more chronic diseases as diagnosed by doctor (Table 2.1.1d).

	Ze	ro	Oı	ne	Tv	VO	Three o	r more	To	tal
	No. of		No. of		No. of		No. of		No. of	
	persons ('000)	%								
Excellent	163.7	4.5%	16.7	1.4%	4.2	0.7%	2.1	0.4%	186.8	3.1%
Very good	1 354.7	36.9%	280.5	23.0%	81.6	14.2%	44.0	7.2%	1 760.9	29.0%
Good	1 464.4	39.8%	455.2	37.3%	207.5	36.0%	139.4	22.9%	2 266.5	37.3%
Fair	655.7	17.8%	413.6	33.9%	234.7	40.8%	299.0	49.1%	1 603.2	26.4%
Poor	36.6	1.0%	54.1	4.4%	47.7	8.3%	124.4	20.4%	262.9	4.3%
Total	3 675.1	100.0%	1 220.2	100.0%	575.8	100.0%	609.0	100.0%	6 080.2	100.0%

Table 2.1.1d: Self-rated health status by number of doctor-diagnosed chronic diseases

Base: All respondents.

## 2.1.2 SF-12v2 (HK) Domain Scores

Eight domains of SF-12v2 (HK) are measured on a scale ranging from 0 to 100. A higher domain score indicates a better HRQoL. In general, the mean scores for each of the eight domains of the SF-12v2 (HK) of females aged 15 or above were lower than those of their male counterparts (Table 2.1.2a). In terms of the relationship between domain scores and age group, people aged 85 or above generally recorded the lowest mean scores while people aged 15-24 recorded the highest mean scores (Table 2.1.2b).

SF-12v2 (HK) domain	Female	Male	Total
Dhani al fan dianin a	99.4	01.6	20.0
Physical functioning	88.4	91.0	89.9
Role physical	91.0	92.9	91.9
Bodily pain	86.6	89.3	87.9
General health	54.7	58.7	56.6
Vitality	75.2	77.7	76.4
Social functioning	90.6	92.1	91.3
Role emotion	93.1	94.2	93.6
Mental health	82.2	83.3	82.8

## Table 2.1.2a: SF-12v2 (HK) domain mean scores by gender

Base: All respondents.

## Table 2.1.2b: SF-12v2 (HK) domain mean scores by age group

SF-12v2 (HK) domain	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 or above	Total
Physical functioning	99.0	97.0	95.3	93.4	87.8	79.6	62.4	45.5	89.9
Role physical	97.8	96.4	95.5	94.1	90.6	85.3	74.4	61.1	91.9
Bodily pain	95.8	92.8	91.1	89.0	85.3	81.2	71.8	62.0	87.9
General health	67.7	64.8	60.9	56.2	52.1	44.8	37.3	39.9	56.6
Vitality	83.4	79.2	77.5	77.1	74.6	70.9	66.1	63.4	76.4
Social functioning	95.6	93.5	93.3	92.4	90.2	88.3	82.6	70.8	91.3
Role emotion	96.2	94.8	94.9	94.2	93.5	91.0	87.6	81.8	93.6
Mental health	85.6	83.8	82.8	82.6	82.1	81.3	79.8	78.1	82.8

Base: All respondents.

## 2.1.3 SF-12v2 (HK) Component Summary Scores

The SF-12v2 (HK) mental component summary (MCS) and physical component summary (PCS) scores were derived from the scores of the eight domains. Higher MCS and PCS scores indicate better mental and physical health respectively. Regarding the MCS, 53.8% of people aged 15 or above had a score higher than or equal to the mean MCS score of 50 and the corresponding proportion for PCS was 67.9%. The mean MCS scores were 49.8 for females and 50.2 for males while the mean PCS scores were 49.4 for females and 50.7 for males (Table 2.1.3a).

Regarding the relationship between the summary scores and age group, the mean MCS scores was the highest in those aged 15-24 and was the lowest in those aged 85 or above. There was no obvious age trend in MCS scores among people aged 15 or above. In contrast, the mean PCS scores decreased with age from 53.9 among people aged 15-24 to 34.0 among those aged 85 or above (Table 2.1.3b). Analysed by the number of doctor-diagnosed chronic diseases, both mean MCS and PCS scores decreased with increasing number of chronic diseases. People without any chronic disease had the highest mean MCS (50.5) and PCS (52.4) scores compared to the mean MCS (48.5) and PCS (40.2) scores among people with three or more chronic diseases (Table 2.1.3c).

	Female	-	Male	-	Total	
Score	No. of persons	0/	No. of persons	0/	No. of persons	0/
	('000)	%	('000)	70	('000)	%0
MCS						
< 35.0	146.8	4.6%	111.1	3.8%	257.9	4.2%
35.0 - 39.9	157.9	5.0%	116.9	4.0%	274.8	4.5%
40.0 - 44.9	325.9	10.2%	282.8	9.8%	608.7	10.0%
45.0 - 49.9	884.4	27.8%	783.4	27.1%	1 667.9	27.4%
50.0 - 54.9	767.6	24.1%	739.7	25.5%	1 507.2	24.8%
55.0 - 59.9	821.9	25.8%	807.1	27.9%	1 629.0	26.8%
≥ 60.0	80.5	2.5%	54.2	1.9%	134.7	2.2%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%
Mean	49.8		50.2		50.0	
PCS						
< 35.0	252.1	7.9%	148.9	5.1%	400.9	6.6%
35.0 - 39.9	183.4	5.8%	114.1	3.9%	297.5	4.9%
40.0 - 44.9	237.8	7.5%	188.7	6.5%	426.5	7.0%
45.0 - 49.9	446.7	14.0%	379.8	13.1%	826.5	13.6%
50.0 - 54.9	1 340.9	42.1%	1 286.2	44.4%	2 627.1	43.2%
55.0 - 59.9	680.6	21.4%	738.4	25.5%	1 419.0	23.3%
≥ 60.0	43.6	1.4%	39.1	1.4%	82.7	1.4%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%
Mean	49.4		50.7		50.0	

# Table 2.1.3a: SF-12v2 (HK) component summary scores by gender

Base: All respondents.

	- 15	-24	25	-34	35	-44	- 45	-54	55	-64	65	-74	- 75	-84	85 or	above	To	tal
Score	No. of persons ('000)	; %	No. of persons ('000)	%	No. of persons ('000)	s %	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	; %	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
MCS																		
< 35.0	24.6	3.1%	40.6	4.2%	31.2	3.1%	45.9	3.9%	42.6	4.0%	34.7	6.2%	22.4	6.4%	15.8	12.1%	257.9	4.2%
35.0 - 39.9	27.1	3.4%	41.0	4.3%	46.3	4.5%	55.2	4.7%	48.9	4.6%	28.0	5.0%	19.2	5.4%	9.0	6.9%	274.8	4.5%
40.0 - 44.9	58.9	7.3%	85.5	8.9%	101.6	9.9%	121.0	10.2%	111.0	10.4%	71.2	12.6%	42.8	12.1%	16.7	12.8%	608.7	10.0%
45.0 - 49.9	197.7	24.7%	274.6	28.6%	321.2	31.4%	342.2	28.9%	304.3	28.6%	125.0	22.2%	75.4	21.4%	27.5	21.0%	1 667.9	27.4%
50.0 - 54.9	225.1	28.1%	247.5	25.7%	259.7	25.4%	285.2	24.1%	257.2	24.1%	135.5	24.0%	77.0	21.8%	20.1	15.4%	1 507.2	24.8%
55.0 - 59.9	266.0	33.2%	270.6	28.1%	254.8	25.0%	320.2	27.1%	272.3	25.6%	138.2	24.5%	84.7	24.0%	22.2	17.0%	1 629.0	26.8%
≥ 60.0	2.3	0.3%	1.6	0.2%	6.5	0.6%	13.1	1.1%	29.2	2.7%	31.5	5.6%	31.2	8.8%	19.4	14.8%	134.7	2.2%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Mean	5	1.0	49	).9	49	9.8	49	9.8	49	9.9	49	9.8	50	).0	49	9.1	50	0.0
PCS																		
< 35.0	1.8	0.2%	10.8	1.1%	18.9	1.9%	34.3	2.9%	69.0	6.5%	82.0	14.5%	115.7	32.8%	68.4	52.3%	400.9	6.6%
35.0 - 39.9	7.2	0.9%	12.5	1.3%	24.4	2.4%	45.3	3.8%	75.8	7.1%	61.2	10.8%	53.5	15.2%	17.6	13.5%	297.5	4.9%
40.0 - 44.9	12.9	1.6%	33.7	3.5%	58.8	5.8%	84.2	7.1%	108.1	10.1%	64.5	11.4%	47.8	13.6%	16.4	12.6%	426.5	7.0%
45.0 - 49.9	68.6	8.6%	93.4	9.7%	117.9	11.5%	179.7	15.2%	192.9	18.1%	104.0	18.4%	56.9	16.1%	13.0	9.9%	826.5	13.6%
50.0 - 54.9	384.0	47.9%	475.5	49.5%	490.8	48.1%	556.8	47.1%	449.3	42.2%	194.7	34.5%	63.0	17.9%	13.0	9.9%	2 627.1	43.2%
55.0 - 59.9	306.2	38.2%	313.5	32.6%	294.6	28.8%	270.4	22.9%	162.7	15.3%	53.9	9.5%	15.7	4.5%	2.0	1.5%	1 419.0	23.3%
≥ 60.0	20.9	2.6%	21.9	2.3%	15.8	1.5%	12.2	1.0%	7.8	0.7%	3.8	0.7%	-	-	0.3	0.3%	82.7	1.4%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Mean	53	3.9	53	3.0	52	2.2	51	1.1	48	3.8	4:	5.7	39	9.5	34	4.0	50	0.0

Table 2.1.3b: SF-12v2 (HK) component summary scores by age group

Base: All respondents.

	Ze	ro	O	ne	T	wo	Three o	r above	То	tal
Score	No. of persons ('000)	%	No. of persons ('000)	%						
MCS										
< 35.0	98.8	2.7%	62.0	5.1%	35.4	6.1%	61.7	10.1%	257.9	4.2%
35.0 - 39.9	139.6	3.8%	60.0	4.9%	31.6	5.5%	43.5	7.1%	274.8	4.5%
40.0 - 44.9	323.3	8.8%	136.7	11.2%	71.4	12.4%	77.4	12.7%	608.7	10.0%
45.0 - 49.9	1 054.0	28.7%	347.5	28.5%	145.5	25.3%	120.8	19.8%	1 667.9	27.4%
50.0 - 54.9	984.4	26.8%	268.4	22.0%	123.9	21.5%	130.5	21.4%	1 507.2	24.8%
55.0 - 59.9	1 044.1	28.4%	319.9	26.2%	139.6	24.2%	125.5	20.6%	1 629.0	26.8%
≥ 60.0	30.9	0.8%	25.7	2.1%	28.5	4.9%	49.7	8.2%	134.7	2.2%
Total	3 675.1	100.0%	1 220.2	100.0%	575.8	100.0%	609.0	100.0%	6 080.2	100.0%
Mean	50	0.5	49	9.6	49	0.4	48	.5	50	0.0
PCS										
< 35.0	52.5	1.4%	81.3	6.7%	74.0	12.8%	193.2	31.7%	400.9	6.6%
35.0 - 39.9	94.1	2.6%	75.1	6.2%	55.5	9.6%	72.8	11.9%	297.5	4.9%
40.0 - 44.9	185.2	5.0%	97.1	8.0%	61.7	10.7%	82.5	13.5%	426.5	7.0%
45.0 - 49.9	386.3	10.5%	218.4	17.9%	117.2	20.4%	104.6	17.2%	826.5	13.6%
50.0 - 54.9	1 813.0	49.3%	503.2	41.2%	191.3	33.2%	119.7	19.6%	2 627.1	43.2%
55.0 - 59.9	1 086.6	29.6%	229.4	18.8%	71.8	12.5%	31.3	5.1%	1 419.0	23.3%
≥ 60.0	57.4	1.6%	15.8	1.3%	4.4	0.8%	5.1	0.8%	82.7	1.4%
Total	3 675.1	100.0%	1 220.2	100.0%	575.8	100.0%	609.0	100.0%	6 080.2	100.0%
Mean	52	2.4	49	0.3	46	5.4	40	.2	50	0.0

# Table 2.1.3c: SF-12v2 (HK) component summary scores by number of doctor-diagnosed chronic diseases

Base: All respondents.

## 2.2 Quality of Life by WHOQOL-BREF (HK)

Quality of life refers to a subjective evaluation which is embedded in a cultural, social and environmental context<sup>5</sup>. This section reports on the population's quality of life scores using the Hong Kong Chinese version of World Health Organization Quality of Life - Brief Questionnaire (WHOQOL-BREF(HK)) on their satisfaction with different aspects of life.

In brief, the WHOQOL-BREF is a generic quality of life measure stemmed from the WHOQOL-100 which allows detailed assessment of each individual facet relating to quality of life. The original WHOQOL-BREF contains two overall questions on quality of life and general well-being as well as 24 questions that produce scores for four domains related to quality of life, including physical health, psychological health, social relationships and environment domain. As the psychological health domain has been culturally adjusted with inclusion of two extra questions for local population in Hong Kong, the incorporated Hong Kong Chinese version of World Health Organization Quality of Life - Brief Questionnaire (WHOQOL-BREF (HK)) used in the PHS is composed of a total of 28 questions<sup>6</sup>.

Following the scoring protocol<sup>6</sup>, the summary WHOQOL-BREF (HK) scores for the four domains were calculated. All the four domain scores were transformed to range from 4 to 20 - the higher the scores, the better the quality of life.

## Physical Health Domain

The mean physical health domain scores for females and males aged 15 or above were 15.7 and 15.9 respectively (Table 2.2a). The mean physical health domain scores decreased with age. People aged 15-34 had the highest mean physical health domain score of 16.3 while people aged 85 or above reported the lowest mean physical health domain score of 13.2 (Table 2.2b). Mean physical health domain score decreased steadily from 16.3 for those without any chronic disease to 14.0 for those with at least three chronic diseases (Table 2.2c).

## Psychological Health Domain (Culturally Adjusted)

The mean psychological health domain (culturally adjusted) scores for females and males aged 15 or above were 14.9 and 15.0 respectively (Table 2.2a). The mean psychological health domain scores generally decreased with age. People aged 25-34 had the highest mean psychological health domain score of 15.3 while older people aged 85 or above had the lowest mean psychological health domain score of 13.7 (Table 2.2b). The mean psychological health domain scores decreased with increasing

number of doctor-diagnosed chronic diseases from 15.2 for those without chronic disease to 14.0 for those with three or more chronic diseases (Table 2.2c).

## Social Relationships Domain

The mean social relationships domain scores for females and males aged 15 or above were 14.8 and 14.7 respectively (Table 2.2a). The mean social relationships domain scores decreased with age from 15.2 among those aged 15-24 to 13.5 among those aged 85 or above (Table 2.2b). The mean social relationships domain scores decreased with increasing number of doctor-diagnosed chronic diseases from 15.0 among those without chronic disease to 13.9 among those with at least three chronic diseases (Table 2.2c).

## **Environment Domain**

Both females and males aged 15 or above had the same mean environment domain scores at 15.0 (Table 2.2a). People aged 15-24 had the highest mean environment domain score at 15.4 while people aged 85 or above had the lowest mean environment domain score at 14.0 (Table 2.2b). The mean environment domain score decreased with increasing number of doctor-diagnosed chronic diseases from 15.2 among those without chronic disease to 14.4 among those with at least three chronic diseases (Table 2.2c).

To sum up, the population mean physical health, psychological health, social relationships and environment domain scores measured by WHOQOL-BREF (HK) were 15.8, 15.0, 14.7 and 15.0 respectively. Males and females reported almost the same mean scores in all the four domains. Analysed by age, younger persons tended to have better quality of life than their older counterparts with the highest mean domain scores being reported in younger persons aged 15-24 or 25-34 in all the domains while the lowest mean domain scores in all the domains were reported in those aged 85 or above. In addition, quality of life deteriorated with increasing number of doctor-diagnosed chronic diseases. People without chronic disease reported the highest mean domain scores in all the domains while those with three or more chronic diseases had the lowest mean domain scores in all the domain scores in all the domains.

	Female		Male		Total	
Score	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Physical health doma	ain					
$\leq 10$	63.9	2.0%	40.5	1.4%	104.3	1.7%
> 10 - ≤ 15	1 283.9	40.3%	1 094.8	37.8%	2 378.7	39.1%
> 15	1 837.2	57.7%	1 760.0	60.8%	3 597.2	59.2%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%
Mean	15.7		15.9		15.8	
Psychological health	domain (culturally adjusted	)				
≤ 10	71.5	2.2%	62.8	2.2%	134.4	2.2%
> 10 - ≤ 15	1 737.3	54.5%	1 570.4	54.2%	3 307.7	54.4%
> 15	1 376.2	43.2%	1 262.0	43.6%	2 638.2	43.4%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%
Mean	14.9		15.0		15.0	
Social relationships of	lomain					
≤ 10	55.7	1.7%	51.0	1.8%	106.7	1.8%
> 10 - ≤ 15	1 719.3	54.0%	1 567.3	54.1%	3 286.6	54.1%
> 15	1 410.0	44.3%	1 276.9	44.1%	2 686.9	44.2%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%
Mean	14.8		14.7		14.7	
Environment domain	n					
≤ 10	64.9	2.0%	56.8	2.0%	121.8	2.0%
> 10 - ≤ 15	1 749.5	54.9%	1 556.6	53.8%	3 306.1	54.4%
> 15	1 370.6	43.0%	1 281.8	44.3%	2 652.3	43.6%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%
Mean	15.0		15.0		15.0	

# Table 2.2a: WHOQOL-BREF (HK) domain scores by gender

Base: All respondents.

Table 2.2b:	WHOQOL-BREF	(HK) domain	scores by age group
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	15-	24	25-	-34	35	-44	45-	-54	55	-64	65	-74	75-	-84	85 or	above	То	tal
Score	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	s %	No. of persons ('000)	%	No. of persons ('000)	5 %	No. of persons ('000)	; %	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Physical	health dor	nain	()		()		()		()		()		()		()		()	
$\leq 10$	3.9	0.5%	6.8	0.7%	8.5	0.8%	7.7	0.6%	20.5	1.9%	14.1	2.5%	22.2	6.3%	20.7	15.8%	104.3	1.7%
>10 - ≤15	236.2	29.5%	275.8	28.7%	337.3	33.0%	438.4	37.1%	455.0	42.7%	307.4	54.5%	238.7	67.7%	89.9	68.7%	2 378.7	39.1%
> 15	561.5	70.1%	678.8	70.6%	675.4	66.1%	736.9	62.3%	590.0	55.4%	242.5	43.0%	91.8	26.0%	20.2	15.5%	3 597.2	59.2%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	5 352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Mean	16	.3	16	5.3	16	5.1	16	0.0	15	5.7	15	5.2	14	l.1	13	.2	15	.8
Psycholog	gical healt	h doma	ain (cult	urally a	djusted	)												
$\leq 10$	12.9	1.6%	13.2	1.4%	19.9	1.9%	21.0	1.8%	21.4	2.0%	15.6	2.8%	20.0	5.7%	10.4	8.0%	134.4	2.2%
> 10 - ≤ 15	397.9	49.6%	474.0	49.3%	513.0	50.2%	652.4	55.1%	585.4	54.9%	347.5	61.6%	251.4	71.3%	86.1	65.8%	3 307.7	54.4%
>15	390.8	48.8%	474.3	49.3%	488.3	47.8%	509.6	43.1%	458.6	43.0%	200.9	35.6%	81.3	23.1%	34.3	26.2%	2 638.2	43.4%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	5 352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Mean	15	.2	15	5.3	15	5.1	15	.0	14	1.9	14	1.6	14	.0	13	.7	15	.0
Social rel	lationship	s domai	in															
$\leq 10$	12.3	1.5%	9.7	1.0%	13.5	1.3%	18.0	1.5%	19.0	1.8%	14.5	2.6%	15.1	4.3%	4.6	3.5%	106.7	1.8%
>10 - ≤15	376.8	47.0%	453.5	47.2%	484.5	47.4%	661.3	55.9%	629.1	59.0%	344.1	61.0%	241.2	68.4%	96.1	73.5%	3 286.6	54.1%
>15	412.6	51.5%	498.2	51.8%	523.3	51.2%	503.7	42.6%	417.4	39.2%	205.3	36.4%	96.4	27.3%	30.0	23.0%	2 686.9	44.2%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	5 352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Mean	15	.2	15	5.1	15	5.0	14	.7	14	1.6	14	1.3	13	5.7	13	.5	14	.7
Environn	nent doma	ain																
$\leq 10$	11.8	1.5%	21.3	2.2%	18.4	1.8%	20.9	1.8%	20.0	1.9%	13.4	2.4%	11.5	3.3%	4.5	3.4%	121.8	2.0%
>10 - ≤15	380.6	47.5%	470.0	48.9%	543.9	53.3%	656.4	55.5%	579.1	54.3%	338.8	60.1%	242.3	68.7%	95.0	72.6%	3 306.1	54.4%
> 15	409.2	51.0%	470.1	48.9%	458.8	44.9%	505.7	42.7%	466.5	43.8%	211.9	37.6%	98.8	28.0%	31.3	24.0%	2 652.3	43.6%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	5 352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Mean	15	.4	15	5.2	15	5.0	15	.0	15	5.0	14	1.8	14	.3	14	.0	15	.0

Base: All respondents.

	Zero One		Ту	WO	Three or above		e Total			
-	No. of		No. of		No. of		No. of		No. of	
Score	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)	
Physical health domain	n									
$\leq 10$	12.6	0.3%	19.7	1.6%	19.0	3.3%	53.1	8.7%	104.3	1.7%
> 10 - ≤ 15	1 138.4	31.0%	523.6	42.9%	315.5	54.8%	401.2	65.9%	2 378.7	39.1%
> 15	2 524.1	68.7%	677.0	55.5%	241.3	41.9%	154.8	25.4%	3 597.2	59.2%
Total	3 675.1	100.0%	1 220.2	100.0%	575.8	100.0%	609.0	100.0%	6 080.2	100.0%
Mean	16	5.3	15	5.7	15	5.1	14	.0	15	5.8
Psychological health d	omain (cultu	rally adjuste	d)							
≤ 10	50.3	1.4%	28.3	2.3%	18.0	3.1%	37.8	6.2%	134.4	2.2%
> 10 - ≤ 15	1 840.2	50.1%	707.8	58.0%	354.0	61.5%	405.8	66.6%	3 307.7	54.4%
> 15	1 784.6	48.6%	484.2	39.7%	203.9	35.4%	165.5	27.2%	2 638.2	43.4%
Total	3 675.1	100.0%	1 220.2	100.0%	575.8	100.0%	609.0	100.0%	6 080.2	100.0%
Mean	15	5.2	14	4.8	14	.5	14	.0	15	5.0
Social relationships do	main									
≤ 10	36.8	1.0%	25.8	2.1%	20.0	3.5%	24.1	4.0%	106.7	1.8%
> 10 - ≤ 15	1 876.6	51.1%	668.2	54.8%	345.4	60.0%	396.5	65.1%	3 286.6	54.1%
> 15	1 761.7	47.9%	526.2	43.1%	210.4	36.5%	188.5	30.9%	2 686.9	44.2%
Total	3 675.1	100.0%	1 220.2	100.0%	575.8	100.0%	609.0	100.0%	6 080.2	100.0%
Mean	15	5.0	14	4.6	14	.3	13	.9	14	.7
Environment domain										
≤10	61.6	1.7%	26.0	2.1%	15.0	2.6%	19.1	3.1%	121.8	2.0%
> 10 - ≤ 15	1 866.3	50.8%	692.8	56.8%	347.6	60.4%	399.4	65.6%	3 306.1	54.4%
> 15	1 747.2	47.5%	501.4	41.1%	213.2	37.0%	190.5	31.3%	2 652.3	43.6%
Total	3 675.1	100.0%	1 220.2	100.0%	575.8	100.0%	609.0	100.0%	6 080.2	100.0%
Mean	15	5.2	14	1.9	14	ł.7	14	4	15	5.0

# Table 2.2c: WHOQOL-BREF (HK) domain scores by number of doctor-diagnosed chronic diseases

Base: All respondents.

## References

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# Chapter 3 Physical Health Status

The PHS collected information on a range of acute and chronic health conditions, including common cold, joint pain, high blood cholesterol, hypertension, diabetes mellitus, fitness of vision and hearing of the population of Hong Kong. This Chapter presents the estimated prevalences of a number of selected and important physical health conditions reported by respondents as having been diagnosed by doctors or health professionals, while findings of certain chronic conditions that were identified by the physical and biochemical measurements in this survey are reported in Chapter 9.

Indicator	Female	Male	Overall
Prevalence of five most frequently reported acute health cor	nditions in the	30 days preced	ing the survey
Common cold / Influenza	25.1%	22.6%	23.9%
Joint pain / Swollen joints	25.1%	18.8%	22.1%
• Low back pain	25.4%	17.1%	21.5%
Persistent cough	11.0%	11.2%	11.1%
• Neck pain	11.8%	7.5%	9.8%
Prevalence of self-reported doctor-diagnosed major chronic	health condition	ons	
• Hypertension	17.9%	17.6%	17.8%
• High blood cholesterol	14.0%	14.8%	14.4%
Diabetes mellitus	5.6%	5.4%	5.5%
Coronary heart disease	1.6%	2.6%	2.1%
• Asthma	1.6%	2.0%	1.8%
• Cancer	1.7%	1.3%	1.5%
• Stroke	1.1%	1.7%	1.4%
Chronic obstructive pulmonary disease	0.4%	0.6%	0.5%
Prevalence of self-reported doctor-diagnosed eye diseases (excluding refractive errors)	10.4%	6.8%	8.7%
Prevalence of self-reported doctor- or audiologist- diagnosed hearing impairment / hearing loss	2.1%	2.2%	2.2%

## **Snapshot of Population's Physical Health Status**

## 3.1 Acute Conditions

In the PHS, respondents were asked whether they had 24 selected acute health conditions such as common cold / influenza, persistent cough and asthmatic attack in the 30 days preceding the survey. Overall, 57.0% of people aged 15 or above reported that they had acute health problems during the 30 days preceding the survey. Females (61.4%) were more likely to have such problems than males (52.1%). Common cold / influenza (23.9%), joint pain / swollen joints (22.1%), low back pain (21.5%), persistent cough (11.1%) and neck pain (9.8%) were the five most frequently reported acute health problems encountered by the Hong Kong population during the 30 days preceding the survey. Females were more likely than their male counterparts to have acute health problems, except persistent cough, trouble with teeth or mouth, chest pain and asthmatic attack (Table 3.1a).

Some acute conditions were more common in older age groups or exhibited an increasing trend with age. For example, the proportion of people reported having joint pain / swollen joints increased from 3.5% for those aged 15-24 to 57.7% for those aged 85 or above, low back pain from 5.1% for those aged 15-24 to 52.4% for those aged 85 or above, and numbness or weakness in limbs from 0.5% for those aged 15-24 to 24.9% for those aged 85 or above (Table 3.1b).

Of the people aged 15 or above who had acute health problem during the 30 days preceding the survey, 42.4% visited medical practitioners because of the acute health problem and 46.3% received treatment. Among people working full-time / part-time or being students during the seven days preceding the survey and had acute health problem during the 30 days preceding the survey, 18.0% took sick leave because of the acute health problem (Table 3.1c and Table 3.1d).

	Fema	ile	Mal	e	Tota	l
-	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Common cold / influenza	798.5	25.1%	653.1	22.6%	1 451.6	23.9%
Joint pain / swollen joints	798.5	25.1%	544.0	18.8%	1 342.5	22.1%
Low back pain	808.6	25.4%	496.1	17.1%	1 304.6	21.5%
Persistent cough	350.8	11.0%	324.9	11.2%	675.7	11.1%
Neck pain	376.6	11.8%	216.4	7.5%	593.0	9.8%
Menstrual pain *	241.4	9.2%	-	-	241.4	9.2%
Abdominal pain	234.1	7.4%	169.9	5.9%	404.1	6.6%
Trouble with allergies	197.0	6.2%	127.5	4.4%	324.6	5.3%
Frequent headache	225.6	7.1%	93.5	3.2%	319.1	5.2%
Stomach ache	194.0	6.1%	106.3	3.7%	300.3	4.9%
Diarrhea	158.1	5.0%	135.2	4.7%	293.3	4.8%
Dizziness	192.0	6.0%	82.2	2.8%	274.2	4.5%
Numbness or weakness in limbs	134.9	4.2%	77.6	2.7%	212.5	3.5%
Trouble with teeth or mouth	106.1	3.3%	97.2	3.4%	203.3	3.3%
Trouble with eyes	126.9	4.0%	57.3	2.0%	184.3	3.0%
Constipation	123.3	3.9%	60.2	2.1%	183.4	3.0%
Cramps	103.9	3.3%	71.2	2.5%	175.1	2.9%
Shortness of breath	48.2	1.5%	41.5	1.4%	89.7	1.5%
Trouble with ears	53.0	1.7%	33.5	1.2%	86.5	1.4%
Chest pain	42.7	1.3%	39.9	1.4%	82.5	1.4%
Rapid / irregular heartbeat	45.2	1.4%	31.6	1.1%	76.8	1.3%
Nausea / vomiting	48.6	1.5%	21.8	0.8%	70.4	1.2%
Asthmatic attack	4.8	0.2%	10.2	0.4%	15.0	0.2%
Fainting or loss of consciousness	5.4	0.2%	3.1	0.1%	8.4	0.1%

## Table 3.1a: Presence of an acute health condition in the 30 days preceding the survey by gender

Bases: For all items except menstrual pain - All respondents.

\* For menstrual pain - Female respondents aged 15-64. Female aged 65 or above who reported menstrual pain in the survey were excluded due to physiological incongruity.

Notes: Ranked in descending order of prevalence of acute health conditions.

Multiple answers were allowed.

	15-	24	25-	34	35-	44	45-	-54	55-	64	65-	74	75-	84	85 or a	above	To	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Common cold / influenza	205.9	25.7%	250.3	26.0%	238.1	23.3%	282.9	23.9%	239.1	22.4%	127.3	22.6%	84.5	24.0%	23.6	18.0%	1 451.6	23.9%
Joint pain / swollen joints	28.2	3.5%	73.6	7.7%	138.4	13.6%	286.0	24.2%	344.1	32.3%	224.0	39.7%	172.8	49.0%	75.5	57.7%	1 342.5	22.1%
Low back pain	40.6	5.1%	126.0	13.1%	189.7	18.6%	291.8	24.7%	275.0	25.8%	171.7	30.4%	141.2	40.0%	68.6	52.4%	1 304.6	21.5%
Persistent cough	69.3	8.6%	94.3	9.8%	110.5	10.8%	129.5	10.9%	125.3	11.8%	79.8	14.2%	48.5	13.8%	18.5	14.1%	675.7	11.1%
Neck pain	23.0	2.9%	63.5	6.6%	94.4	9.2%	138.9	11.7%	121.4	11.4%	71.3	12.6%	53.4	15.2%	27.0	20.6%	593.0	9.8%
Menstrual pain*	61.7	15.7%	86.4	17.1%	53.1	9.5%	37.1	5.8%	3.1	0.6%	-	-	-	-	-	-	241.4	9.2%
Abdominal pain	76.2	9.5%	74.8	7.8%	80.4	7.9%	68.8	5.8%	49.3	4.6%	26.6	4.7%	20.2	5.7%	7.8	6.0%	404.1	6.6%
Trouble with allergies	53.7	6.7%	58.8	6.1%	47.3	4.6%	67.6	5.7%	41.2	3.9%	34.8	6.2%	15.6	4.4%	5.5	4.2%	324.6	5.3%
Frequent headache	35.9	4.5%	43.1	4.5%	59.9	5.9%	75.2	6.4%	47.2	4.4%	32.3	5.7%	20.5	5.8%	5.0	3.8%	319.1	5.2%
Stomach ache	37.3	4.7%	51.0	5.3%	50.4	4.9%	63.4	5.4%	43.3	4.1%	31.3	5.5%	18.2	5.2%	5.4	4.1%	300.3	4.9%
Diarrhea	50.3	6.3%	65.7	6.8%	53.2	5.2%	49.8	4.2%	40.7	3.8%	13.8	2.4%	13.6	3.8%	6.1	4.7%	293.3	4.8%
Dizziness	31.9	4.0%	35.5	3.7%	37.8	3.7%	53.8	4.5%	44.0	4.1%	33.2	5.9%	29.1	8.3%	8.9	6.8%	274.2	4.5%
Numbness or weakness in limbs	3.7	0.5%	8.4	0.9%	17.2	1.7%	25.2	2.1%	38.6	3.6%	42.6	7.6%	44.2	12.5%	32.6	24.9%	212.5	3.5%
Trouble with teeth or mouth	13.5	1.7%	16.5	1.7%	27.8	2.7%	42.2	3.6%	39.4	3.7%	36.9	6.5%	19.4	5.5%	7.5	5.8%	203.3	3.3%
Trouble with eyes	8.5	1.1%	12.1	1.3%	17.4	1.7%	29.1	2.5%	35.9	3.4%	37.3	6.6%	26.1	7.4%	17.8	13.6%	184.3	3.0%
Constipation	16.8	2.1%	15.7	1.6%	25.6	2.5%	24.7	2.1%	33.0	3.1%	23.9	4.2%	28.0	7.9%	15.6	12.0%	183.4	3.0%
Cramps	9.1	1.1%	14.3	1.5%	18.2	1.8%	25.9	2.2%	37.9	3.6%	28.9	5.1%	27.5	7.8%	13.4	10.2%	175.1	2.9%
Shortness of breath	2.9	0.4%	7.4	0.8%	10.2	1.0%	13.0	1.1%	19.3	1.8%	19.3	3.4%	13.6	3.8%	4.1	3.1%	89.7	1.5%
Trouble with ears	2.2	0.3%	3.1	0.3%	5.9	0.6%	13.1	1.1%	14.9	1.4%	17.0	3.0%	16.6	4.7%	13.6	10.4%	86.5	1.4%
Chest pain	8.4	1.0%	4.4	0.5%	9.9	1.0%	17.2	1.5%	17.2	1.6%	14.5	2.6%	9.0	2.5%	1.9	1.5%	82.5	1.4%
Rapid / irregular heartbeat	3.9	0.5%	2.1	0.2%	10.5	1.0%	13.1	1.1%	18.7	1.8%	13.0	2.3%	11.5	3.2%	4.0	3.0%	76.8	1.3%
Nausea / vomiting	13.7	1.7%	18.1	1.9%	13.0	1.3%	8.7	0.7%	7.0	0.7%	5.4	1.0%	3.4	1.0%	1.2	0.9%	70.4	1.2%
Asthmatic attack	0.6	0.1%	2.7	0.3%	3.0	0.3%	1.0	0.1%	2.0	0.2%	2.2	0.4%	2.0	0.6%	1.5	1.1%	15.0	0.2%
Fainting or loss of consciousness	0.8	0.1%	-	-	2.6	0.3%	0.4	<0.05%	1.1	0.1%	1.6	0.3%	1.4	0.4%	0.5	0.4%	8.4	0.1%

### Table 3.1b: Presence of an acute health condition in the 30 days preceding the survey by age group

Bases: For all items except menstrual pain - All respondents.

\* For menstrual pain - Female respondents aged 15-64. Female aged 65 or above who reported menstrual pain in the survey were excluded due to physiological incongruity.

Notes: Ranked in descending order of prevalence of acute health conditions.

Multiple answers were allowed.

	Fema	le	Mal	e	Tota	1
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Visited medical practitioners						
Yes	857.7	43.9%	612.9	40.6%	1 470.6	42.4%
No	1 097.7	56.1%	896.0	59.4%	1 993.8	57.6%
Total	1 955.4	100.0%	1 508.9	100.0%	3 464.3	100.0%
Received treatment						
Yes	931.2	47.6%	671.7	44.5%	1 603.0	46.3%
No	1 024.2	52.4%	837.2	55.5%	1 861.4	53.7%
Total	1 955.4	100.0%	1 508.9	100.0%	3 464.3	100.0%
Took sick leave *						
Yes	215.1	20.3%	172.4	15.8%	387.5	18.0%
No	844.8	79.7%	921.4	84.2%	1 766.2	82.0%
Total	1 059.9	100.0%	1 093.8	100.0%	2 153.7	100.0%

# Table 3.1c: Consequences of acute health conditions (visited medical practitioners, received treatment and took sick leave) in the 30 days preceding the survey by gender

Bases: All respondents who had acute health problems in the 30 days preceding the survey.

\* All respondents working full-time / part-time or being students in the seven days preceding the survey who had acute health problems in the 30 days preceding the survey.

	15	-24	25	-34	35	-44	45	-54	55	-64	65	-74	75	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	s %	persons	s %	persons	%	persons	%	persons	· %	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Visited medic	al practi	tioners																
Yes	135.4	36.6%	213.1	43.9%	237.6	45.3%	285.3	40.5%	261.7	40.8%	172.1	45.1%	126.7	49.0%	38.7	39.2%	1 470.6	42.4%
No	234.8	63.4%	272.8	56.1%	287.4	54.7%	418.4	59.5%	379.4	59.2%	209.1	54.9%	131.7	51.0%	60.1	60.8%	1 993.8	57.6%
Total	370.2	100.0%	485.9	100.0%	525.0	100.0%	703.7	100.0%	641.2	100.0%	381.2	100.0%	258.4	100.0%	5 98.9	100.0%	63 464.3	100.0%
Received trea	tment																	
Yes	155.0	41.9%	232.2	47.8%	254.1	48.4%	321.1	45.6%	285.7	44.6%	186.1	48.8%	130.0	50.3%	38.8	39.3%	1 603.0	46.3%
No	215.2	58.1%	253.7	52.2%	271.0	51.6%	382.6	54.4%	355.5	55.4%	195.0	51.2%	128.4	49.7%	60.1	60.7%	1 861.4	53.7%
Total	370.2	100.0%	485.9	100.0%	525.0	100.0%	703.7	100.0%	641.2	100.0%	381.2	100.0%	258.4	100.0%	5 98.9	100.0%	63 464.3	100.0%
Took sick lea	ve *																	
Yes	72.4	20.4%	114.5	27.0%	81.3	19.2%	76.2	14.0%	39.7	11.2%	3.4	7.4%	-	-	-	-	387.5	18.0%
No	282.9	79.6%	309.0	73.0%	343.1	80.8%	467.0	86.0%	314.2	88.8%	43.1	92.6%	7.0	100.0%	, -	-	1 766.2	82.0%
Total	355.4	100.0%	423.4	100.0%	424.3	100.0%	543.2	100.0%	353.9	100.0%	46.5	100.0%	7.0	100.0%	, b –	-	2 153.7	100.0%

### Table 3.1d: Consequences of acute health conditions (visited medical practitioners, received treatment and took sick leave) in the 30 days preceding the survey by age group

All respondents who had acute health problems in the 30 days preceding the survey. Bases:

\* All respondents working full-time / part-time or being students in the seven days preceding the survey who had acute health problems in the 30 days preceding the survey.

## 3.2 Doctor-diagnosed Chronic Conditions

The PHS also collected information on self-reported prevalences of a number of chronic health conditions that were diagnosed by a western medical practitioner and whether the chronic health conditions were diagnosed in the 12 months preceding survey. This section presents the prevalences (i.e. percentages of cases ever-diagnosed) of these chronic conditions, the proportions of cases diagnosed in the 12 months preceding the survey among those who were diagnosed to have such chronic conditions and the associated rates expressed as percentages of all Hong Kong land-based non-institutional population aged 15 or above (excluding foreign domestic helpers) in the respective sex sub-groups as appropriate. Overall, 39.6% of persons aged 15 or above reported one or more doctor-diagnosed chronic conditions. Among these persons, 20.1% had one or more chronic conditions first diagnosed within the 12 months before the survey.

## 3.2.1 Cancer

Cancer is a generic term for a large group of diseases characterised by the growth of abnormal cells beyond their usual boundaries that can then invade adjoining parts of the body and / or spread to other organs. Cancer can affect almost any part of the body <sup>1</sup>. Overall, 1.5% of people aged 15 or above reported that they had been told by a doctor that they had cancer (Table 3.2.1a). Among them, 13.9% were diagnosed in the 12 months preceding the survey, giving a rate of 0.21% among Hong Kong population aged 15 or above (Table 3.2.1b). It is noted that the prevalence of cancer increased with age, from 0.1% for people aged 15-24 to 4.9% for people aged 85 or above (Table 3.2.1c).

#### Table 3.2.1a: Prevalence of cancer by gender

	Fema	ale	Mal	e	Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Yes	53.4	1.7%	37.0	1.3%	90.4	1.5%		
No	3 130.5	98.3%	2 855.2	98.6%	5 985.7	98.4%		
Don't know	1.1	<0.05%	3.0	0.1%	4.1	0.1%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 3.2.1b: Pro	portion of cancer	diagnosed in the	e 12 months	preceding the	survey by gender
					• • •

	Female			Male			Total	
No. of persons ('000)	% among the cases	Rate*	No. of persons ('000)	% among the cases	Rate*	No. of persons ('000)	% among the cases	Rate*
6.7	12.5%	0.21%	5.8	15.8%	0.20%	12.5	13.9%	0.21%

Base: All respondents who ever had doctor-diagnosed cancer.

Notes: \* The rate is expressed as a percentage of all Hong Kong land-based non-institutional population aged 15 or above (excluding foreign domestic helpers) in the respective sex sub-groups.

Figures may not add up to the total due to rounding.

### Table 3.2.1c: Prevalence of cancer by age group

	15	-24	25-	-34	35-	44	45-	-54	55	-64	65	-74	75	-84	85 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%	persons	s %	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes	0.4	0.1%	1.0	0.1%	4.5	0.4%	14.4	1.2%	29.0	2.7%	18.2	3.2%	16.4	4.7%	6.4	4.9%	90.4	1.5%
No	800.7	99.9%	959.8	99.8%	1 016.7	99.6%	1 167.6	98.7%	1 036.0	97.2%	545.3	96.7%	335.2	95.0%	124.4	95.1%	5 985.7	98.4%
Don't know	0.5	0.1%	0.6	0.1%	-	-	1.0	0.1%	0.5	<0.05%	0.5	0.1%	1.1	0.3%	-	-	4.1	0.1%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

## 3.2.2 Stroke

A stroke is caused by the interruption of the blood supply to the brain, usually because a blood vessel bursts or is blocked by a clot. This cuts off the supply of oxygen and nutrients, causing damage to the brain tissue <sup>2</sup>. Overall, the proportion of people aged 15 or above reporting doctor-diagnosed stroke was 1.4% (Table 3.2.2a), of which 17.3% were diagnosed in the 12 months preceding the survey (Table 3.2.2b). The prevalence of stroke increased from 0.2% for people aged 35-44 to 7.8% for people aged 75-84 and 5.7% for people aged 85 or above (Table 3.2.2c).

	Fema	ale	Mal	e	Tota	al
_	No. of persons	0/	No. of persons	9/	No. of persons	0/.
	('000)	/8	('000)	70	('000)	70
Yes	35.0	1.1%	49.8	1.7%	84.8	1.4%
No	3 149.1	98.9%	2 843.3	98.2%	5 992.4	98.6%
Don't know	1.0	<0.05%	2.1	0.1%	3.0	<0.05%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

#### Table 3.2.2a: Prevalence of stroke by gender

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 3.2.2b: Pro	portion of stroke	diagnosed in the	e 12 months	preceding the s	urvey by gender
		0			

	Female		Ν	ſale	Total					
No. of persons ('000)	% among the cases Rate*		No. of persons ('000)	% among the cases	Rate*	No. of persons ('000)	% among the cases	Rate*		
5.2	14.9%	0.16%	9.5	19.0%	0.33%	14.7	17.3%	0.24%		

Base: All respondents who ever had doctor-diagnosed stroke.

Notes: \* The rate is expressed as a percentage of all Hong Kong land-based non-institutional population aged 15 or above (excluding foreign domestic helpers) in the respective sex sub-groups.

Figures may not add up to the total due to rounding.

Table 3.2.2c: Prevalence of stroke by age group

	15-24		15-24 25-34		35-44		45	45-54 55-6		-64	65-74		75-84		85 or above		Total	
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	s %	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes	-	-	-	-	1.9	0.2%	5.8	0.5%	15.9	1.5%	26.0	4.6%	27.7	7.8%	7.4	5.7%	84.8	1.4%
No	801.1	99.9%	960.8	99.9%	1 019.3	99.8%	1 176.6	99.5%	1 049.2	98.5%	537.1	95.2%	325.0	92.2%	123.4	94.3%	5 992.4	98.6%
Don't know	0.5	0.1%	0.6	0.1%	-	-	0.5	<0.05%	0.5	<0.05%	0.9	0.2%	-	-	-	-	3.0	<0.05%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

## 3.2.3 Coronary Heart Disease

Coronary heart disease (CHD) is caused by narrowing or blockage of coronary arteries leading to a reduced blood supply to the heart muscle. Overall, 2.1% of people aged 15 or above had doctor-diagnosed CHD (Table 3.2.3a), of which 7.8% were newly diagnosed in the 12 months preceding the survey (Table 3.2.3b). Its prevalence increased with age, from 0.2% for people aged 35-44 to 12.0% for people aged 85 or above (Table 3.2.3c).

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	Fema	ile	Mal	e	Total		
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
Yes	52.2	1.6%	74.4	2.6%	126.6	2.1%	
No	3 129.0	98.2%	2 818.7	97.4%	5 947.7	97.8%	
Don't know	3.8	0.1%	2.1	0.1%	5.9	0.1%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 3.2.3b: Proportion of coronary heart disease diagnosed in the 12 months preceding the survey by gender

	Female		Ma	ale		Total					
No. of persons ('000)	5 % among the cases Rate*		No. of persons % among the ('000) cases		Rate*	No. of persons ('000)	% among the cases	Rate*			
4.6	8.9%	0.15%	5.3	7.1%	0.18%	9.9	7.8%	0.16%			

Base: All respondents who ever had doctor-diagnosed coronary heart disease.

Notes: \* The rate is expressed as a percentage of all Hong Kong land-based non-institutional population aged 15 or above (excluding foreign domestic helpers) in the respective sex sub-groups.

Figures may not add up to the total due to rounding.

Table 3.2.3c: Prevalence of coronary heart disease by age group

	15-24		15-24 25-3		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of persons ('000)	; %	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	-	-	-	-	2.1	0.2%	11.2	0.9%	31.3	2.9%	31.4	5.6%	35.0	9.9%	15.7	12.0%	126.6	2.1%
No	801.1	99.9%	960.8	99.9%	1 019.1	99.8%	1 171.3	99.0%	1 032.8	96.9%	530.8	94.1%	316.8	89.8%	115.1	88.0%	5 947.7	97.8%
Don't know	0.5	0.1%	0.6	0.1%	-	-	0.5	<0.05%	5 1.4	0.1%	1.8	0.3%	1.0	0.3%	-	-	5.9	0.1%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.
# 3.2.4 Asthma

Asthma is a chronic disease characterised by recurrent attacks of breathlessness and wheezing, which vary in severity and frequency from person to person<sup>3</sup>. The proportion of persons aged 15 or above with doctor-diagnosed asthma was 1.8%. The corresponding proportion was higher in males than in females (2.0% versus 1.6% respectively) (Table 3.2.4a). Among them, 3.3% reported that the asthma was diagnosed in the 12 months preceding the survey (Table 3.2.4b). Analysed by age, the highest prevalence of asthma was recorded for people aged 15-24 (2.6%) and the lowest for people aged 55-64 (0.9%) (Table 3.2.4c).

# Table 3.2.4a: Prevalence of asthma by gender

	Fema	ale	Mal	e	Tota	al
-	No. of persons	%	No. of persons	%	No. of persons	%
Yes	50.5	1.6%	58.7	2.0%	109.2	1.8%
No	3 134.0	98.4%	2 835.3	97.9%	5 969.3	98.2%
Don't know	0.5	<0.05%	1.1	<0.05%	1.7	<0.05%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 3.2.4b: Pro	portion of asthma	diagnosed in the	e 12 months r	preceding th	e survey by gender

	Female		Ma	ale		То	tal	
No. of persons ('000)	% among the cases	Rate*	No. of persons ('000)	% among the cases	Rate*	No. of persons ('000)	% among the cases	Rate*
1.8	3.6%	0.06%	1.8	3.0%	0.06%	3.6	3.3%	0.06%

Base: All respondents who had doctor-diagnosed asthma.

Notes: \* The rate is expressed as a percentage of all Hong Kong land-based non-institutional population aged 15 or above (excluding foreign domestic helpers) in the respective sex sub-groups.

Figures may not add up to the total due to rounding.

#### Table 3.2.4c: Prevalence of asthma by age group

	15	-24	25-	-34	35-	-44	45	-54	55-	-64	65	-74	75	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%																
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes	20.8	2.6%	19.7	2.1%	20.6	2.0%	14.7	1.2%	9.9	0.9%	13.4	2.4%	7.7	2.2%	2.4	1.8%	109.2	1.8%
No	780.2	97.3%	941.1	97.9%	1 000.6	98.0%	1 167.8	98.7%	1 055.6	99.1%	550.6	97.6%	345.0	97.8%	128.4	98.2%	5 969.3	98.2%
Don't know	0.5	0.1%	0.6	0.1%	-	-	0.5	<0.05%	, -	-	-	-	-	-	-	-	1.7	<0.05%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

# 3.2.5 Chronic Obstructive Pulmonary Disease

Chronic Obstructive Pulmonary Disease (COPD) is not one single disease but an umbrella term used to describe chronic lung diseases that cause limitations in lung airflow. The most common symptoms of COPD are breathlessness, or a 'need for air', excessive sputum production, and a chronic cough.<sup>4</sup> Overall, 0.5% of people aged 15 or above reported that they had doctor-diagnosed COPD. More males (0.6%) than females (0.4%) had the disease (Table 3.2.5a). Among them, 18.0% were newly diagnosed in the 12 months preceding the survey (Table 3.2.5b). Across all age groups, the prevalence of COPD was the highest at 1.4% for those aged 75-84 and was the lowest at 0.1% for those aged 25-34 (Table 3.2.5c).

Table 3.2.5a: Prevalence of chronic obstructive pulmonary disease by gender

	Fema	le	Mal	e	Tota	1
	No. of persons	0/	No. of persons	0/	No. of persons	0/
	('000)	%0	('000)	%	('000)	70
Yes	12.4	0.4%	17.5	0.6%	29.9	0.5%
No	3 171.1	99.6%	2 876.0	99.3%	6 047.1	99.5%
Don't know	1.5	<0.05%	1.7	0.1%	3.2	0.1%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

 Table 3.2.5b:
 Proportion of chronic obstructive pulmonary disease diagnosed in the 12 months preceding the survey by gender

	Female		Ma	ale	Total					
No. of persons ('000)	% among the cases	Rate*	No. of persons ('000)	% among the cases	Rate*	No. of persons ('000)	% among the cases	Rate*		
1.6	12.6%	0.05%	3.8	21.7%	0.13%	5.4	18.0%	0.09%		

Base: All respondents who had doctor-diagnosed chronic obstructive pulmonary disease.

Notes: \* The rate is expressed as a percentage of all Hong Kong land-based non-institutional population aged 15 or above (excluding foreign domestic helpers) in the respective sex sub-groups.

Figures may not add up to the total due to rounding.

#### Table 3.2.5c: Prevalence of chronic obstructive pulmonary disease by age group

	15	-24	25	-34	35-	-44	45-	-54	55-	-64	65	-74	75	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%	persons	s %	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes	1.9	0.2%	1.1	0.1%	3.8	0.4%	4.4	0.4%	5.7	0.5%	7.5	1.3%	5.0	1.4%	0.5	0.4%	29.9	0.5%
No	799.2	99.7%	959.7	99.8%	1 017.4	99.6%	1 176.9	99.5%	1 059.8	99.5%	556.5	98.7%	347.3	98.5%	130.3	99.6%	6 047.1	99.5%
Don't know	0.5	0.1%	0.6	0.1%	-	-	1.6	0.1%	-	-	-	-	0.5	0.1%	-	-	3.2	0.1%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

# 3.2.6 High Blood Cholesterol

High blood cholesterol is a major risk factor for cardiovascular disease. Respondents were asked if they had ever been told by a doctor that their blood cholesterol level was high. Overall, 14.4% of people aged 15 or above were diagnosed by a doctor with high blood cholesterol (Table 3.2.6a). 19.8% of those with doctor-diagnosed high blood cholesterol claimed that the condition was diagnosed in the 12 months preceding the survey (Table 3.2.6b). Analysed by age, the prevalence of high blood cholesterol increased from 0.5% for those aged 15-24 and peaked at 39.0% for those aged 75-84, then dropped to 26.5% for those aged 85 or above (Table 3.2.6c). Among all persons who were diagnosed with high blood cholesterol evels (Table 3.2.6d and Table 3.2.6e). For those who took prescribed medicine to control their blood cholesterol levels (Table 3.2.6d and Table 3.2.6e). For those who took prescribed medicine to control their blood cholesterol, nearly all (99.1%) were taking western medicine only, compared with 0.7% who took traditional Chinese medicine only. In addition, 0.2% were taking both western and traditional Chinese medicine (Table 3.2.6f and Table 3.2.6g).

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	445.0	14.0%	428.2	14.8%	873.2	14.4%
No	2 740.0	86.0%	2 467.0	85.2%	5 207.0	85.6%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Table 3.2.6a: Prevalence of high blood cholesterol diagnosed by doctors by gender

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

 Table 3.2.6b: Proportion of high blood cholesterol diagnosed by doctors in the 12 months preceding the survey by gender

	Female			Male			Total	
No. of persons ('000)	% among the cases	Rate*	No. of persons ('000)	% among the cases	Rate*	No. of persons ('000)	% among the cases	Rate*
89.3	20.1%	2.80%	83.6	19.5%	2.89%	172.9	19.8%	2.84%

Base: All respondents who had doctor-diagnosed high blood cholesterol.

Notes: \* The rate is expressed as a percentage of all Hong Kong land-based non-institutional population aged 15 or above (excluding foreign domestic helpers) in the respective sex sub-groups.

Table 3.2.6c: Prevalence of high blood cholesterol diagnosed by doctors by age group

	15	-24	25-	-34	35	-44	45-	-54	55	-64	65	-74	75	-84	85 or	above	То	tal
	No. of	9/	No. of	0/	No. of	0/	No. of	0/	No. of	. 9/.	No. of	0/	No. of	0/	No. of	9/	No. of	9/.
	('000)	<b>5</b> 70	('000)	/0	('000)	o 70	('000)	/0	('000)	5 70	('000)	0 /0	('000)	/0	('000)	70	('000)	70
Yes	4.0	0.5%	20.0	2.1%	69.8	6.8%	150.7	12.7%	266.8	25.0%	189.7	33.6%	137.6	39.0%	34.6	26.5%	873.2	14.4%
No	797.6	99.5%	941.4	97.9%	951.4	93.2%	1 032.3	87.3%	798.7	75.0%	374.3	66.4%	215.1	61.0%	96.2	73.5%	5 207.0	85.6%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	0 1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

# Table 3.2.6d: Blood cholesterol control by gender

	Female		Male		Total		
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
Eating less high fat or high cholesterol food	370.7	83.3%	340.3	79.5%	711.0	81.4%	
Taking prescribed medicine	273.6	61.5%	264.7	61.8%	538.4	61.7%	
Increasing physical activity or exercise	194.9	43.8%	200.7	46.9%	395.6	45.3%	
Controlling or losing weight	116.1	26.1%	119.5	27.9%	235.6	27.0%	
Taking over-the- counter medicine	42.0	9.4%	39.3	9.2%	81.2	9.3%	

Base: All respondents who had doctor-diagnosed high blood cholesterol.

Notes: Ranked in descending order of proportions of method to control blood cholesterol.

Multiple answers were allowed.

Table 3.2.6e: Blood cholesterol control by age group
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	15-	24	25-	-34	35-	-44	45-	-54	55	-64	65-	-74	75-	-84	85 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons ('000)	%	persons ('000)	%	persons ('000)	%	('000)	%	('000)	%	('000)	%	('000)	%	persons ('000)	%	('000)	%
Eating less high fat or high cholesterol food	1.9	48.4%	12.7	63.8%	54.7	78.4%	124.5	82.6%	218.8	82.0%	162.3	85.5%	109.1	79.2%	27.0	77.9%	711.0	81.4%
Taking prescribed medicine	1.0	26.3%	1.0	5.1%	16.0	22.9%	62.8	41.7%	153.2	57.4%	150.8	79.5%	122.9	89.3%	30.6	88.6%	538.4	61.7%
Increasing physical activity or exercise	1.2	30.0%	9.6	48.2%	32.8	47.1%	70.9	47.0%	129.3	48.5%	88.0	46.4%	55.8	40.5%	7.9	22.8%	395.6	45.3%
Controlling or losing weight	1.5	37.2%	6.0	30.1%	20.6	29.5%	44.7	29.7%	75.0	28.1%	49.3	26.0%	31.7	23.0%	6.8	19.6%	235.6	27.0%
Taking over- the-counter medicine	0.6	14.2%	0.4	2.2%	2.7	3.9%	10.9	7.2%	22.3	8.3%	25.4	13.4%	16.7	12.2%	2.2	6.3%	81.2	9.3%

Base: All respondents who had doctor-diagnosed high blood cholesterol.

Notes: Ranked in descending order of proportions of method to control blood cholesterol.

Multiple answers were allowed.

Figures may not add up to the total due to rounding.

	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Western medicine	270.8	99.0%	262.8	99.3%	533.6	99.1%		
Traditional Chinese medicine	2.3	0.9%	1.6	0.6%	3.9	0.7%		
Both	0.5	0.2%	0.4	0.2%	0.9	0.2%		
Total	273.6	100.0%	264.7	100.0%	538.4	100.0%		

# Table 3.2.6f: Type of prescribed medication taken to control or lower blood cholesterol level by gender

Base: All respondents who had doctor-diagnosed high blood cholesterol and were taking prescribed medicine to control or lower their blood cholesterol level.Note: Figures may not add up to the total due to rounding.

Table 3.2.6g: Type of prescribed medication taken to control or lower blood cholesterol level by age group

	15	-24	25	5-34	35	-44	45	-54	55	-64	65	-74	75	-84	85 or	above	То	otal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	person	s %	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	s %	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Western medicine	1.0	100.0%	5 1.0	100.0%	15.4	96.3%	62.3	99.3%	151.2	98.7%	149.6	99.2%	122.4	99.6%	30.6	100.0%	533.6	99.1%
Traditional Chinese medicine	-	-	-	-	0.6	3.7%	0.5	0.7%	1.5	1.0%	0.8	0.6%	0.5	0.4%	-	-	3.9	0.7%
Both	-	-	-	-	-	-	-	-	0.5	0.3%	0.4	0.3%	-	-	-	-	0.9	0.2%
Total	1.0	100.0%	5 1.0	100.0%	16.0	100.0%	62.8	100.0%	5 153.2	100.0%	150.8	100.0%	122.9	100.0%	30.6	100.0%	538.4	100.0%

Base: All respondents who had doctor-diagnosed high blood cholesterol and were taking prescribed medicine to control or lower their blood cholesterol level. Note: Figures may not add up to the total due to rounding.

# 3.2.7 Blood Pressure and Hypertension

Hypertension is a condition in which the blood vessels have persistently raised pressure and a risk factor for chronic diseases such as CHD and stroke<sup>5</sup>. In the PHS, respondents were asked whether they had ever been told by a doctor that they had hypertension. 17.8% of people aged 15 or above were diagnosed by a western medicine practitioner to have hypertension (Table 3.2.7a). 11.1% of those with doctor-diagnosed hypertension were first diagnosed during the 12 months preceding the survey (Table 3.2.7b). There was a positive relationship observed between age and prevalence of hypertension diagnosed by doctors - the prevalence increased with age from 0.5% in the 15-24 age group to 64.6% in the 75-84 age group, and it dropped slightly to 61.2% in the 85 or above age group (Table 3.2.7c).

Table 3.2.7a: Prevalence	e of hypertension	diagnosed by	v doctors by gender
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	Female		Male		Total			
	No. of persons	9/	No. of persons	9/	No. of persons	0/		
	('000)	70	('000)	/0	('000)	70		
Yes	571.3	17.9%	508.1	17.6%	1 079.5	17.8%		
No	2 613.7	82.1%	2 387.1	82.4%	5 000.7	82.2%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 3.2.7b: Proportion	of hypertension	diagnosed by	doctors in the 12 months	preceding	the survey	by gender
				r · · · · c		

	Female		Ma	ale		То	tal	
No. of persons ('000)	% among the cases	Rate*	Rate* No. of persons ('000)		Rate*	No. of persons ('000)	% among the cases	Rate*
53.6	9.4%	1.68%	66.5	13.1%	2.30%	120.1	11.1%	1.97%

Base: All respondents who had doctor-diagnosed hypertension.

Notes: \* The rate is expressed as a percentage of all Hong Kong land-based non-institutional population aged 15 or above (excluding foreign domestic helpers) in the respective sex sub-groups.

Figures may not add up to the total due to rounding.

#### Table 3.2.7c: Prevalence of hypertension diagnosed by doctors by age group

	15	15-24	25	-34	35-	-44	45-	-54	55	-64	65	-74	75	-84	85 or	above	To	otal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%																
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes	4.0	0.5%	9.4	1.0%	47.9	4.7%	154.6	13.1%	297.4	27.9%	258.1	45.8%	227.9	64.6%	80.1	61.2%	1 079.5	17.8%
No	797.6	99.5%	952.0	99.0%	973.3	95.3%	1 028.4	86.9%	768.1	72.1%	305.9	54.2%	124.8	35.4%	50.7	38.8%	5 000.7	82.2%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

For those who had been diagnosed to have hypertension, 88.3% had taken prescribed medicine to control or lower their blood pressure; 11.8% reported to have taken over-the-counter medicine (Table 3.2.7d and Table 3.2.7e).

	Fema	le	Male	2	Total			
-	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Taking prescribed medicine	507.8	88.9%	445.8	87.7%	953.6	88.3%		
Cutting down on salt in diet	437.2	76.5%	373.8	73.6%	811.0	75.1%		
Increasing physical activity or exercise	236.8	41.4%	232.7	45.8%	469.5	43.5%		
Controlling or losing weight	139.2	24.4%	133.4	26.3%	272.6	25.3%		
Cutting down on your alcohol consumption *	69.9	20.8%	94.8	21.6%	164.6	21.2%		
Taking over- the-counter medicine	64.4	11.3%	63.3	12.4%	127.6	11.8%		

Table 3.2.7d: Methods to control or lower blood pressure by gender

Bases: All respondents who had doctor-diagnosed hypertension.

\* Only covered respondents who had doctor-diagnosed hypertension and had ever drunk alcohol.

Notes: Ranked in descending order of proportions of method to control or lower blood pressure.

Multiple answers were allowed.

Table 3.2.7e: Methods to control or lower blood pressure control by age group

	15-	-24	25-	-34	35-	44	45-	-54	55-	-64	65	-74	75-	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%																
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Taking prescribed medicine	1.0	25.0%	4.1	43.5%	27.2	56.8%	124.1	80.3%	263.9	88.7%	241.0	93.4%	216.6	95.0%	75.7	94.6%	953.6	88.3%
Cutting down on salt in diet	2.0	50.2%	5.9	62.7%	31.7	66.2%	115.6	74.8%	226.4	76.1%	201.3	78.0%	173.6	76.2%	54.5	68.1%	811.0	75.1%
Increasing physical activity or exercise	1.6	39.9%	3.6	38.1%	21.8	45.5%	69.8	45.1%	135.3	45.5%	121.8	47.2%	97.2	42.6%	18.5	23.1%	469.5	43.5%
Controlling or losing weight	0.8	20.6%	1.0	10.9%	13.7	28.7%	40.9	26.5%	85.6	28.8%	64.1	24.8%	50.6	22.2%	15.9	19.8%	272.6	25.3%
Cutting down on your alcohol consumption *	-	-	2.9	34.9%	9.8	23.2%	30.2	24.0%	53.0	23.1%	34.9	19.0%	26.9	19.4%	6.9	15.9%	164.6	21.2%
Taking over- the-counter medicine	-	-	-	-	6.6	13.8%	19.6	12.7%	37.4	12.6%	30.0	11.6%	25.3	11.1%	8.7	10.9%	127.6	11.8%

Bases: All respondents who had doctor-diagnosed hypertension.

\* Only covered respondents who had doctor-diagnosed hypertension and had ever drunk alcohol.

Notes: Ranked in descending order of proportions of method to control or lower blood pressure.

Multiple answers were allowed.

For those who were taking prescribed medicine to control or lower their high blood pressure, almost all cases sought western medicine (99.4%) only, as opposed to 0.5% for Chinese medicine only. A further 0.2% reported that they were taking both western and Chinese medicine (Table 3.2.7f and Table 3.2.7g).

	Fema	le	Mal	e	Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Western medicine	504.6	99.4%	443.0	99.4%	947.5	99.4%		
Traditional Chinese medicine	2.7	0.5%	1.9	0.4%	4.6	0.5%		
Both	0.5	0.1%	0.9	0.2%	1.4	0.2%		
Total	507.8	100.0%	445.8	100.0%	953.6	100.0%		

Table 3.2.7f: Type of prescribed medication taken to control or lower blood pressure level by gender

Base: All respondents who had doctor-diagnosed hypertension and were taking prescribed medicine to control or lower their blood pressure.

Note: Figures may not add up to the total due to rounding.

Table 3.2.7g: Type of prescribed medication taken to control or lower blood pressure by age group

	15-24		25-34 35-44 45-54 55-6		-64	65	-74	75	-84	85 or	above	To	otal					
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	s %	person	s %	person	s %	persons	%	persons	%	persons	· %	persons	s %	persons	s %
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Western medicine	1.0	100.0%	6 4.1	100.0%	27.2	100.0%	124.1	100.0%	263.0	99.7%	237.8	98.7%	215.2	99.3%	75.2	99.3%	947.5	99.4%
Traditional Chinese medicine	-	-	-	-	-	-	-	-	0.5	0.2%	3.2	1.3%	1.0	0.4%	-	-	4.6	0.5%
Both	-	-	-	-	-	-	-	-	0.5	0.2%	-	-	0.4	0.2%	0.5	0.7%	1.4	0.2%
Total	1.0	100.0%	6 4.1	100.0%	27.2	100.0%	124.1	100.0%	263.9	100.0%	241.0	100.0%	216.6	100.0%	75.7	100.0%	953.6	100.0%

Base: All respondents who had doctor-diagnosed hypertension and were taking prescribed medicine to control or lower their blood pressure.

## 3.2.8 Diabetes Mellitus

Diabetes mellitus (DM) is a chronic disease, which occurs when the pancreas does not produce enough insulin, or when the body cannot effectively use the insulin it produces. This leads to an increased concentration of glucose in the blood (hyperglycaemia)<sup>6</sup>. Respondents were asked whether they had ever been told by a doctor that they had diabetes. If not, they were further asked whether they had been told to have high blood sugar, but not diabetes. Persons with high blood sugar are at higher than normal risk of having diabetes and cardiovascular disease and need to be followed up by doctor. A total of 5.5% of people aged 15 or above reported that they had doctor-diagnosed DM and another 2.0% had high blood sugar, but no DM (Table 3.2.8a). Among those who had DM, 6.8% reported being diagnosed in the 12 months preceding the survey (Table 3.2.8b). The prevalence tended to increase with age, from 0.3% in the 15-24 age group to 22.7% for those aged 75-84 but dropped to 17.3% for those aged 85 or above (Table 3.2.8c).

	Fema	le	Mal	e	Total			
-	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Have diabetes	177.3	5.6%	155.4	5.4%	332.7	5.5%		
Have high blood sugar but no diabetes	64.7	2.0%	54.1	1.9%	118.8	2.0%		
Have no diabetes or high blood sugar	2 942.9	92.4%	2 685.7	92.8%	5 628.7	92.6%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

<b>Table 3.2.8a:</b>	<b>Prevalence</b> of	diabetes	diagnosed	by	doctors	by	gender
				•		•	0

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 3.2.8b: Pro	portion of diabetes	diagnosed by	y doctors in	the 12 months	preceding the	e survey by gen	de
	•						

	Female		Ma	ale		Total				
No. of persons ('000)	% among the cases	Rate*	No. of persons ('000)	% among the cases	Rate*	No. of persons ('000)	% among the cases	Rate*		
Doctor-diagnose	d high blood suga	r or diabetes <sup>#</sup>								
28.9	11.9%	0.91%	18.7	8.9%	0.64%	47.6	10.5%	0.78%		
Doctor-diagnose	d diabetes <sup>§</sup>									
15.2	8.6%	0.48%	7.5	4.8%	0.26%	22.7	6.8%	0.37%		

Bases: # All respondents who had doctor-diagnosed high blood sugar or diabetes.

§ All respondents who had doctor-diagnosed diabetes.

Notes: \* The rate is expressed as a percentage of all Hong Kong land-based non-institutional population aged 15 or above (excluding foreign domestic helpers) in the respective sex sub-groups.

Table 3.2.8c: Prevalence of diabetes diagnosed by doctors by age group

	15-	-24	25	-34	35	-44	45	-54	55	-64	65	-74	75	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Have diabetes	2.5	0.3%	1.1	0.1%	8.8	0.9%	42.3	3.6%	81.6	7.7%	93.7	16.6%	80.1	22.7%	22.6	17.3%	332.7	5.5%
Have high blood sugar but no diabetes	0.4	0.1%	5.8	0.6%	11.5	1.1%	20.6	1.7%	36.6	3.4%	24.9	4.4%	12.3	3.5%	6.7	5.2%	118.8	2.0%
Have no diabetes or high blood sugar	1 798.7	99.6%	954.5	99.3%	1 000.9	98.0%	1 120.2	94.7%	947.3	88.9%	445.4	79.0%	260.3	73.8%	101.5	77.6%	5 628.7	92.6%
Total	801.6	100.0%	5 961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	6 130.8	100.0%	6 080.2	100.0%
Base: All resp	pondents	8.																

Note: Figures may not add up to the total due to rounding.

Regarding the treatment among the persons who had been told by a doctor that they had diabetes or high blood sugar level, 8.9 % were taking insulin, 76.8% taking oral anti-diabetic drugs and 11.1 % taking over-the-counter medicine (Table 3.2.8d and Table 3.2.8e).

## Table 3.2.8d: Diabetes control by gender

	Fema	le	Male	e	Tota	1
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Eating less food with high sugar content, high fat content or high cholesterol	203.7	84.2%	180.3	86.1%	384.0	85.1%
Taking oral anti-diabetic drugs	182.6	75.4%	164.3	78.4%	346.8	76.8%
Increasing physical activity or exercise	96.0	39.7%	98.6	47.1%	194.6	43.1%
Controlling or losing weight	59.8	24.7%	65.1	31.1%	124.9	27.7%
Taking over-the-counter medicine	22.6	9.3%	27.3	13.1%	49.9	11.1%
Taking insulin	25.1	10.4%	14.9	7.1%	40.0	8.9%

Base: All respondents who had doctor-diagnosed diabetes or high blood sugar.

Notes: Ranked in descending order of percentages of method of diabetes control.

Multiple answers were allowed.

# Table 3.2.8e: Diabetes control by age group

	15-24		15-24 25-34		25-34 35-44		45-	45-54 55-64		65-74		75-84		85 or above		Total		
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Eating less food with high sugar content, high fat content or high cholesterol	2.4	83.9%	4.3	62.3%	13.6	67.0%	56.0	89.1%	99.6	84.2%	103.9	87.6%	78.3	84.8%	25.9	88.4%	384.0	85.1%
Taking oral anti-diabetic drugs	1.0	35.5%	1.1	15.3%	8.3	40.7%	41.1	65.3%	89.6	75.8%	93.7	79.0%	86.7	93.9%	25.3	86.4%	346.8	76.8%
Increasing physical activity or exercise	1.9	64.5%	2.4	35.4%	6.9	33.9%	33.0	52.5%	48.8	41.2%	54.0	45.5%	39.5	42.8%	8.1	27.7%	194.6	43.1%
Controlling or losing weight	1.0	34.5%	1.5	22.2%	6.1	30.0%	21.6	34.4%	30.4	25.7%	31.6	26.7%	26.1	28.2%	6.6	22.4%	124.9	27.7%
Taking over- the-counter medicine	-	-	-	-	2.6	12.7%	8.0	12.8%	13.7	11.6%	12.4	10.5%	10.5	11.4%	2.7	9.3%	49.9	11.1%
Taking insulin	2.0	69.5%	-	-	1.2	5.9%	4.6	7.4%	8.8	7.4%	15.2	12.8%	7.0	7.6%	1.1	3.8%	40.0	8.9%

Base: All respondents who had doctor-diagnosed diabetes or high blood sugar.

Notes: Ranked in descending order of percentages of method of diabetes control.

Multiple answers were allowed.

Over thirty percent (31.1%) of those receiving insulin and nearly forty percent (39.7%) of those taking oral anti-diabetic drugs had taken the corresponding drugs for at least 10 years. The mean numbers of years of treatment with insulin and oral anti-diabetic drugs were 7.1 years and 8.2 years respectively (Table 3.2.8f and Table 3.2.8g).

	Fema	ıle	Ma	le	Tota	ıl
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Insulin *						
0.0 - 1.9	4.9	19.4%	2.5	16.7%	7.4	18.4%
2.0 - 3.9	4.1	16.3%	3.4	22.9%	7.5	18.8%
4.0 - 5.9	3.9	15.6%	2.8	18.7%	6.7	16.8%
6.0 - 7.9	1.9	7.4%	1.1	7.1%	2.9	7.3%
8.0 - 9.9	2.5	9.8%	0.6	3.9%	3.0	7.6%
10.0 or above	7.9	31.4%	4.6	30.7%	12.5	31.1%
Total	25.1	100.0%	14.9	100.0%	40.0	100.0%
Mean <sup>1</sup>	7.0		7.2		7.1	
Oral anti-diabet	ic drugs #					
0.0 - 1.9	26.7	14.6%	19.7	12.0%	46.4	13.4%
2.0 - 3.9	33.6	18.4%	41.0	25.0%	74.6	21.5%
4.0 - 5.9	17.6	9.7%	26.5	16.1%	44.1	12.7%
6.0 - 7.9	17.8	9.7%	12.6	7.7%	30.4	8.8%
8.0 - 9.9	10.2	5.6%	3.6	2.2%	13.8	4.0%
10.0 or above	76.7	42.0%	60.9	37.1%	137.6	39.7%
Total	182.6	100.0%	164.3	100.0%	346.8	100.0%
Mean <sup>2</sup>	8.6		7.8	}	8.2	

Table 3.2.8f: Number of years taking insulin and oral anti-diabetic drugs by gender

Bases: \* All respondents who had doctor-diagnosed diabetes and were taking insulin.

# All respondents who had doctor-diagnosed diabetes and were taking oral anti-diabetic drugs.

<sup>1</sup> All respondents who had doctor-diagnosed diabetes and had taken insulin. Those who had taken insulin for less than one year are assumed to have taken insulin for half a year for compiling summary statistics.

<sup>2</sup>All respondents who had doctor-diagnosed diabetes and had taken oral anti-diabetic drugs. Those who had taken oral anti-diabetic drugs for less than one year are assumed to have taken oral anti-diabetic drugs for half a year for compiling summary statistics.

	15	-24	2:	5-34	35	-44	45	-54	55	-64	65	-74	75	-84	85 or	above	То	otal
	No. of		No. of	?	No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	person	is %	persons	%	persons	s %	persons	s %	persons	s %	person	s %	persons	s %	persons	s %
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Insulin *																		
0.0 - 1.9	-	-	-	-	0.6	50.0%	1.0	21.7%	2.0	22.2%	2.4	16.0%	1.4	19.8%	-	-	7.4	18.4%
2.0 - 3.9	-	-	-	-	-	-	0.5	10.6%	1.9	21.6%	4.2	27.8%	0.9	12.7%	-	-	7.5	18.8%
4.0 - 5.9	-	-	-	-	-	-	1.6	33.9%	0.5	5.1%	2.0	13.3%	2.0	28.3%	0.7	60.7%	6.7	16.8%
6.0 - 7.9	0.5	22.5%	-	-	-	-	0.6	13.4%	0.5	5.9%	0.4	2.9%	0.4	6.3%	0.4	39.3%	2.9	7.3%
8.0 - 9.9	0.6	27.8%	-	-	-	-	-	-	0.6	6.5%	1.9	12.5%	-	-	-	-	3.0	7.6%
10.0 or above	1.0	49.6%	-	-	0.6	50.0%	0.9	20.4%	3.4	38.7%	4.2	27.5%	2.3	32.9%	-	-	12.5	31.1%
Total	2.0	100.0%	ó -	-	1.2	100.0%	4.6	100.0%	8.8	100.0%	15.2	100.0%	7.0	100.0%	5 1.1	100.0%	40.0	100.0%
Mean <sup>1</sup>	10	).0		-	14	4.0	6	.4	6	.4	6	.5	7	7.9	5	.4	7	.1
Oral anti-dia	betic dru	ıgs #																
0.0 - 1.9	-	-	1.1	100.0%	2.4	28.8%	10.0	24.4%	17.5	19.5%	7.6	8.1%	6.9	7.9%	1.1	4.2%	46.4	13.4%
2.0 - 3.9	-	-	-	-	2.1	25.6%	13.3	32.4%	21.8	24.4%	18.1	19.3%	15.0	17.3%	4.2	16.6%	74.6	21.5%
4.0 - 5.9	0.5	45.5%	-	-	2.6	31.2%	6.5	15.8%	13.0	14.5%	11.8	12.6%	7.7	8.9%	2.0	7.8%	44.1	12.7%
6.0 - 7.9	-	-	-	-	0.6	7.2%	1.8	4.4%	9.7	10.9%	10.2	10.9%	6.1	7.1%	1.8	7.3%	30.4	8.8%
8.0 - 9.9	0.6	54.5%	-	-	-	-	1.4	3.3%	3.2	3.6%	4.1	4.3%	4.0	4.7%	0.5	2.1%	13.8	4.0%
10.0 or above	-	-	-	-	0.6	7.2%	8.1	19.6%	24.3	27.1%	42.0	44.8%	46.9	54.1%	15.7	62.0%	137.6	39.7%
Total	1.0	100.0%	ó 1.1	100.0%	8.3	100.0%	41.1	100.0%	89.6	100.0%	93.7	100.0%	86.7	100.0%	5 25.3	100.0%	346.8	100.0%
Mean <sup>2</sup>	6	.6		0.8	3	.3	4	.9	6	.3	8	.9	1	0.4	1	1.9	8	.2

Table 3.2.8g: Number of years taking insulin and oral anti-diabetic drugs by age group

Bases: \* All respondents who had doctor-diagnosed diabetes and were taking insulin.

# All respondents who had doctor-diagnosed diabetes and were taking oral anti-diabetic drugs.

<sup>1</sup> All respondents who had doctor-diagnosed diabetes and had taken insulin. Those who had taken insulin for less than one year are assumed to have taken insulin for half a year for compiling summary statistics.

<sup>2</sup>All respondents who had doctor-diagnosed diabetes and had taken oral anti-diabetic drugs. Those who had taken oral anti-diabetic drugs for less than one year are assumed to have taken oral anti-diabetic drugs for half a year for compiling summary statistics.

# **3.2.9 Other Chronic Conditions**

In addition to the chronic conditions presented in previous subsections, respondents were also asked whether they ever had other chronic health conditions diagnosed by a doctor. If yes, they were further asked whether the conditions were diagnosed in the 12 months preceding the survey. The survey revealed that among the other chronic health conditions, musculoskeletal diseases (3.4%), skin diseases (3.1%), diseases of the ears / nose / throat (2.2%), thyroid disease (2.0%) and liver diseases (1.6%) were the five most frequently reported health problems encountered by the Hong Kong population (Table 3.2.9).

Regarding the proportions of cases diagnosed in the 12 months preceding the survey among the population aged 15 or above, skin diseases (0.5%) was the top among the other chronic conditions, followed by musculoskeletal diseases (0.3%), anaemia (0.2%), thyroid disease (0.2%) and stomach and intestinal diseases (0.2%) (Table 3.2.9).

	Prevale	nce	Proportion of ou conditions diagno months precedir	ther chronic osed in the 12 og the survey
	No. of persons ('000)	% <sup>1</sup>	No. of persons ('000)	⁰∕₀ <sup>2</sup>
Musculoskeletal diseases	206.7	3.4%	18.5	0.3%
Skin diseases	186.5	3.1%	27.5	0.5%
Diseases of the ears / nose / throat	133.2	2.2%	5.2	0.1%
Thyroid disease	124.5	2.0%	14.1	0.2%
Liver diseases	98.2	1.6%	5.6	0.1%
Anaemia	77.0	1.3%	14.9	0.2%
Stomach and intestinal diseases	68.7	1.1%	9.4	0.2%
Kidney diseases	39.3	0.6%	2.5	<0.05%
Congenital blood diseases	31.5	0.5%	1.8	<0.05%
Immune diseases	30.1	0.5%	1.0	<0.05%
Respiratory diseases (other than asthma and COPD mentioned in Sections 3.2.4 and 3.2.5 above)	17.1	0.3%	2.5	<0.05%
Parkinson's disease	7.6	0.1%	-	-
Epilepsy	4.6	0.1%	0.5	<0.05%
Others	95.1	1.6%	8.1	0.1%

Table 3.2.9:	Prevalence of other	chronic condition	is and proportion	n of cases diag	gnosed in the 12	months preceding the
	survey					

All respondents. Notes: Ranked in descending order of prevalence.

Base:

<sup>1</sup> Number of cases ever-diagnosed with the disease divided by the Hong Kong land-based non-institutional population aged 15 or above (excluding foreign domestic helpers).

<sup>2</sup> Number of cases diagnosed with the disease in the 12 months preceding the survey divided by the Hong Kong land-based non-institutional population aged 15 or above (excluding foreign domestic helpers).

Multiple answers were allowed.

## 3.3 Vision

Most people have encountered visual problems at some point in their lives. Some may have problems reading small print; others may not be able to see objects far away. Some visual problems can be corrected, for example by wearing glasses or surgical operation; others cannot. The PHS included a few questions on self-rated fitness of eyesight, refractive errors, eye diseases and the extent of difficulties in doing daily activities because of poor eyesight. Overall, 56.0% of persons aged 15 or above reported that they had good or excellent eyesight, with glasses or contact lenses if they wore them (Table 3.3a). The proportion of people reported having good or excellent eyesight decreased with age, from 72.4% for people aged 15-24 to 24.7% for people aged 85 or above (Table 3.3b).

Table 3.3a:	Fitness	of	evesight	bv	gender
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	Female		Male		Total			
	No. of persons	%	No. of persons	%	No. of persons	%		
	('000)		('000)		('000)			
Excellent	169.9	5.3%	180.8	6.2%	350.8	5.8%		
Good	1 554.1	48.8%	1 498.3	51.7%	3 052.4	50.2%		
Fair	1 245.8	39.1%	1 076.5	37.2%	2 322.3	38.2%		
Poor	205.8	6.5%	131.2	4.5%	337.0	5.5%		
Very poor	9.3	0.3%	8.4	0.3%	17.6	0.3%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

## Table 3.3b: Fitness of eyesight by age group

	15-24		15-24 25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Excellent	87.5	10.9%	95.9	10.0%	96.8	9.5%	40.2	3.4%	12.3	1.2%	11.6	2.1%	4.8	1.3%	1.7	1.3%	350.8	5.8%
Good	492.7	61.5%	596.3	62.0%	598.6	58.6%	558.4	47.2%	486.3	45.6%	196.2	34.8%	93.4	26.5%	30.6	23.4%	3 052.4	50.2%
Fair	207.0	25.8%	255.7	26.6%	303.8	29.7%	523.2	44.2%	497.5	46.7%	293.3	52.0%	180.5	51.2%	61.3	46.9%	2 322.3	38.2%
Poor	14.0	1.7%	12.4	1.3%	22.0	2.2%	59.3	5.0%	65.4	6.1%	59.7	10.6%	70.4	19.9%	33.9	25.9%	337.0	5.5%
Very poor	0.4	0.1%	1.1	0.1%	-	-	1.8	0.2%	4.0	0.4%	3.2	0.6%	3.7	1.1%	3.3	2.5%	17.6	0.3%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	51 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

A total of 45.8% of the people aged 15 or above reported that they had myopia (short-sightedness), 6.0% reported to have hyperopia or hypermetropia (long-sightedness), 40.9% reported to have astigmatism and 45.5% reported to have presbyopia (Table 3.3c). Analysed by age, the prevalence of myopia decreased from 68.2% in persons aged 15-24 to 9.3% in persons aged 85 or above, while the prevalence of hyperopia or hypermetropia was the highest (9.2%) in persons aged 65-74 and the lowest (2.1%) in persons aged 85 or above. Besides, the prevalence of astigmatism generally decreased with age from 51.3% in persons aged 15-24 to 9.0% in those aged 85 or above. As regards presbyopia, the prevalence by age group increased from 0.1% in the 15-24 age group to 85.9% in the 65-74 age group, then dropped to 79.8% in the 75-84 age group and 80.6% in the 85 or above age group (Table 3.3d).

Table 5.5c. Trevalence of refractive error (short-signeculess, long-signeculess, astigmatism and presbyopia) by genuer
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	Female		Male		Total			
-	No. of persons	%	No. of persons	%	No. of persons	%		
Marania (abaat sia)	( 000)		(1000)		( 000)			
Myopia (short-sig	nteaness)							
Yes	1 440.1	45.2%	1 347.4	46.5%	2 787.5	45.8%		
No	1 674.3	52.6%	1 511.4	52.2%	3 185.6	52.4%		
Don't know	70.6	2.2%	36.4	1.3%	107.0	1.8%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		
Hyperopia or hyper	ermetropia (long-sightedno	ess)						
Yes	202.6	6.4%	162.4	5.6%	364.9	6.0%		
No	2 863.3	89.9%	2 658.0	91.8%	5 521.3	90.8%		
Don't know	119.1	3.7%	74.8	2.6%	193.9	3.2%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		
Astigmatism								
Yes	1 302.3	40.9%	1 185.6	41.0%	2 487.9	40.9%		
No	1 780.3	55.9%	1 652.3	57.1%	3 432.6	56.5%		
Don't know	102.4	3.2%	57.3	2.0%	159.7	2.6%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		
Presbyopia								
Yes	1 462.6	45.9%	1 303.5	45.0%	2 766.1	45.5%		
No	1 660.1	52.1%	1 558.8	53.8%	3 218.9	52.9%		
Don't know	62.3	2.0%	32.9	1.1%	95.2	1.6%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Base: All respondents.

	15	-24	25	-34	35	-44	45	-54	55	-64	65	-74	75	-84	85 or	above	To	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	· %	persons	%												
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Myopia (sho	rt-sighte	dness)																
Yes	546.7	68.2%	612.2	63.7%	525.5	51.5%	522.0	44.1%	375.3	35.2%	136.9	24.3%	56.8	16.1%	12.2	9.3%	2 787.5	45.8%
No	252.3	31.5%	345.1	35.9%	491.0	48.1%	643.5	54.4%	672.2	63.1%	408.2	72.4%	267.3	75.8%	106.1	81.1%	3 185.6	52.4%
Don't know	2.6	0.3%	4.1	0.4%	4.7	0.5%	17.6	1.5%	18.0	1.7%	18.9	3.4%	28.6	8.1%	12.5	9.6%	107.0	1.8%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Hyperopia o	r hyperr	netropi	a (long-	sightedr	ness)													
Yes	27.6	3.4%	23.2	2.4%	39.0	3.8%	106.1	9.0%	91.7	8.6%	51.7	9.2%	22.8	6.5%	2.8	2.1%	364.9	6.0%
No	770.6	96.1%	929.1	96.6%	968.3	94.8%	1 040.5	88.0%	932.2	87.5%	475.4	84.3%	290.0	82.2%	115.2	88.1%	5 521.3	90.8%
Don't know	3.4	0.4%	9.1	0.9%	13.8	1.4%	36.4	3.1%	41.6	3.9%	36.9	6.5%	39.8	11.3%	12.8	9.8%	193.9	3.2%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Astigmatism																		
Yes	411.2	51.3%	480.6	50.0%	416.8	40.8%	498.5	42.1%	417.3	39.2%	175.8	31.2%	75.9	21.5%	11.8	9.0%	2 487.9	40.9%
No	385.8	48.1%	474.1	49.3%	594.6	58.2%	655.3	55.4%	622.2	58.4%	357.1	63.3%	239.8	68.0%	103.7	79.3%	3 432.6	56.5%
Don't know	4.6	0.6%	6.7	0.7%	9.8	1.0%	29.2	2.5%	26.0	2.4%	31.1	5.5%	37.0	10.5%	15.3	11.7%	159.7	2.6%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Presbyopia																		
Yes	0.8	0.1%	2.6	0.3%	137.1	13.4%	842.2	71.2%	911.9	85.6%	484.4	85.9%	281.5	79.8%	105.5	80.6%	2 766.1	45.5%
No	799.1	99.7%	955.2	99.4%	865.1	84.7%	319.8	27.0%	137.6	12.9%	71.7	12.7%	53.4	15.1%	16.9	12.9%	3 218.9	52.9%
Don't know	1.6	0.2%	3.5	0.4%	19.0	1.9%	20.9	1.8%	16.0	1.5%	7.9	1.4%	17.8	5.0%	8.4	6.4%	95.2	1.6%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Base: All re	esponder	nts.																

 Table 3.3d:
 Prevalence of refractive error (short-sightedness, long-sightedness, astigmatism and presbyopia) by age group

The prevalence of doctor-diagnosed eye diseases (excluding refractive errors) among persons aged 15 or above was 8.7%. The prevalence was higher in females than in males (10.4% versus 6.8%, respectively). In particular, the prevalence of glaucoma, cataract, amblyopia and blindness was 0.8%, 6.5%, 0.2% and 0.2% respectively (Table 3.3e and Table 3.3f). Among people who had doctor-diagnosed cataract, 58.0% had cataract operation - 56.7% for females and 60.2% for males (Table 3.3g).

	Fema	le	Mal	le	Total			
	No. of persons	0/	No. of persons	0/	No. of persons	0/		
	('000)	70	('000)	70	('000')	78		
Yes	332.6	10.4%	197.1	6.8%	529.7	8.7%		
Glaucoma *	29.1	0.9%	20.7	0.7%	49.8	0.8%		
Cataract *	249.4	7.8%	145.4	5.0%	394.8	6.5%		
Amblyopia *	10.5	0.3%	4.2	0.1%	14.7	0.2%		
Blindness *	5.5	0.2%	5.0	0.2%	10.5	0.2%		
Others *	72.5	2.3%	45.8	1.6%	118.2	1.9%		
No	2 821.6	88.6%	2 674.6	92.4%	5 496.2	90.4%		
Don't know	30.8	1.0%	23.5	0.8%	54.3	0.9%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

### Table 3.3e: Prevalence of doctor-diagnosed eye diseases (excluding refractive errors) by gender

Base: All respondents.

Notes: \* Multiple answers were allowed.

Figures may not add up to the total due to rounding.

#### Table 3.3f: Prevalence of doctor-diagnosed eye diseases (excluding refractive errors) by age group

	15-24		15-24 25-34		35	35-44 45-54		55-64 65-'		65-74 75-84		-84	85 or	above	To	tal		
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes	6.0	0.7%	8.6	0.9%	14.8	1.4%	39.0	3.3%	98.0	9.2%	144.1	25.6%	148.9	42.2%	70.3	53.7%	529.7	8.7%
Glaucoma *	0.5	0.1%	-	-	1.0	0.1%	5.3	0.5%	6.2	0.6%	14.4	2.6%	13.3	3.8%	9.1	7.0%	49.8	0.8%
Cataract *	0.5	0.1%	0.5	<0.05%	1.5	0.1%	12.6	1.1%	59.4	5.6%	116.2	20.6%	138.5	39.3%	65.7	50.2%	394.8	6.5%
Amblyopia *	0.9	0.1%	2.9	0.3%	1.6	0.2%	1.5	0.1%	1.3	0.1%	3.4	0.6%	2.8	0.8%	0.3	0.3%	14.7	0.2%
Blindness *	0.4	0.1%	-	-	0.5	<0.05%	1.4	0.1%	0.9	0.1%	3.0	0.5%	3.2	0.9%	1.0	0.8%	10.5	0.2%
Others *	4.2	0.5%	5.2	0.5%	11.2	1.1%	21.1	1.8%	37.6	3.5%	23.7	4.2%	10.6	3.0%	4.6	3.5%	118.2	1.9%
No	792.4	98.8%	948.2	98.6%	1 001.0	98.0%	1 133.1	95.8%	950.9	89.2%	411.8	73.0%	199.7	56.6%	59.1	45.2%	5 496.2	90.4%
Don't know	3.3	0.4%	4.5	0.5%	5.4	0.5%	10.9	0.9%	16.6	1.6%	8.1	1.4%	4.1	1.2%	1.4	1.1%	54.3	0.9%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	01 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Notes: \* Multiple answers were allowed.

	Fema	le	Mal	e	Total			
	No. of persons	0/	No. of persons	0/	No. of persons	0/		
	('000)	%	('000)	%	('000)	%		
Yes	141.4	56.7%	87.5	60.2%	228.8	58.0%		
No	108.0	43.3%	57.3	39.4%	165.3	41.9%		
Don't know	-	-	0.6	0.4%	0.6	0.2%		
Total	249.4 100.0%		145.4	100.0%	394.8	100.0%		

 

 Table 3.3g:
 Proportion of people who ever had cataract operation among those aged 15 or above who had doctordiagnosed cataract by gender

Base: All respondents who had doctor-diagnosed cataract.

Note: Figures may not add up to the total due to rounding.

Overall, 8.4% of persons aged 15 or above reported that their eyesight problems had caused limitations some of the time or more often in their working or doing other daily activities (Table 3.3h). The corresponding proportions increased with age from 1.6% in persons aged 15-24 to 37.0% in persons aged 85 or above (Table 3.3i).

Table 3.3h: Extent of difficulties in working or doing other daily activities because of eyesight problems by gender

	Fema	le	Mal	e	Total			
	No. of persons	0/	No. of persons	0/	No. of persons	0/		
	('000')	%	('000)	<b>%</b>	('000)	%0		
None of the time	2 046.8	64.3%	1 913.9	66.1%	3 960.7	65.1%		
A little of the time	845.5	26.5%	762.5	26.3%	1 608.0	26.4%		
Some of the time	269.4	8.5%	198.2	6.8%	467.6	7.7%		
Most of the time	20.3	0.6%	17.7	0.6%	37.9	0.6%		
All of the time	3.1	0.1%	2.9	0.1%	6.0	0.1%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 3.3i: Extent	of difficulties ir	n working or do	oing other daily	v activities because of (	evesight problems l	ov age group
Those of the manual states of the states of	01 WILLIGHTON		And Contract Contract			., <b>"</b> , ", ", ", ", ", ", ", ", ", ", ", ", ",

	15	-24	25-	-34	35-	-44	45	-54	55	-64	65-	-74	75	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	s %	persons	s %	persons	%	persons	s %	persons	%	persons	s %	persons	s %	persons	s %	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
None of the time	607.1	75.7%	732.7	76.2%	771.6	75.6%	750.7	63.5%	613.7	57.6%	305.0	54.1%	141.8	40.2%	38.1	29.2%	3 960.7	65.1%
A little of the time	181.6	22.7%	208.7	21.7%	226.8	22.2%	327.0	27.6%	337.8	31.7%	167.6	29.7%	114.3	32.4%	44.3	33.9%	1 608.0	26.4%
Some of the time	12.4	1.5%	19.5	2.0%	19.7	1.9%	101.1	8.5%	106.6	10.0%	83.6	14.8%	84.9	24.1%	39.8	30.5%	467.6	7.7%
Most of the time	0.6	0.1%	0.5	0.1%	2.0	0.2%	3.8	0.3%	6.5	0.6%	7.2	1.3%	9.4	2.7%	8.0	6.1%	37.9	0.6%
All of the time	-	-	-	-	1.1	0.1%	0.4	<0.05%	0.9	0.1%	0.6	0.1%	2.4	0.7%	0.5	0.4%	6.0	0.1%
Total	801.6	100.0%	6 961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

# 3.4 Hearing

A person who is not able to hear as good as someone with normal hearing (Normal hearing: hearing thresholds of 25 dB or better in both ears) is said to have hearing loss. Hearing loss may be inherited or caused by infectious diseases, certain drugs, exposure to excessive noise or ageing. Around half of all deafness and hearing impairment can be prevented if common causes were dealt with at primary health care level<sup>7</sup>. A total of 2.2% of the persons aged 15 or above (2.1% for females and 2.2% for males) reported having hearing impairment / hearing loss as diagnosed by a doctor or audiologist (Table 3.4a). Among them, 11.0% were diagnosed in the 12 months preceding the survey (Table 3.4b). Analysed by age, the prevalence of hearing impairment / hearing loss generally increased with age from 0.5% among those aged 15-24 to 18.8% among those aged 85 or above (Table 3.4c).

Table 3.4a: Prevalence of hearing impairment / hearing loss diagnosed by doctors or audiologists by gender

	Fema	le	Mal	e	Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Yes	66.2	2.1%	64.9	2.2%	131.1	2.2%		
No	3 101.6	97.4%	2 819.1	97.4%	5 920.7	97.4%		
Don't know	17.2	0.5%	11.3	0.4%	28.4	0.5%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

 Table 3.4b:
 Proportion of hearing impairment / hearing loss diagnosed by doctors or audiologists in the 12 months preceding the survey by gender

	Female		Ma	ale		Total					
No. of persons ('000)	% among the cases	Rate*	No. of persons ('000)	% among the cases	Rate*	No. of persons ('000)	% among the cases	Rate*			
6.8	10.3%	0.21%	7.7	11.8%	0.26%	14.5	11.0%	0.24%			

Base: All respondents who had hearing impairment / hearing loss diagnosed by doctors or audiologists.

Notes: \* The rate is expressed as a percentage of all Hong Kong land-based non-institutional population aged 15 or above (excluding foreign domestic helpers) in the respective sex sub-groups.

	15-24	25-34		35-44 45		45	5-54 55-64		-64	65-74		75	-84	85 or	above	То	otal	
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons ('000)	%	persons ('000)	s %	persons ('000)	s %	persons ('000)	%	persons ('000)	%								
Yes	3.7	0.5%	3.9	0.4%	5.7	0.6%	12.8	1.1%	21.7	2.0%	26.1	4.6%	32.7	9.3%	24.6	18.8%	131.1	2.2%
No	796.5	99.4%	955.9	99.4%	1 012.7	99.2%	1 164.6	98.4%	1 038.6	97.5%	531.3	94.2%	316.4	89.7%	104.6	80.0%	5 920.7	97.4%
Don't know	1.4	0.2%	1.6	0.2%	2.8	0.3%	5.6	0.5%	5.2	0.5%	6.6	1.2%	3.6	1.0%	1.6	1.2%	28.4	0.5%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	61 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Table 3.4c: Prevalence of hearing impairment / hearing loss diagnosed by doctors or audiologists by age group

Base: All respondents. Note: Figures may not add up to the total due to rounding.

Among the people who had hearing impairment / hearing loss diagnosed by doctor or audiologist, only 13.9% often used hearing aid - 11.8% in females and 16.0% in males (Table 3.4d and Table 3.4e).

Overall, 3.3% of persons aged 15 or above reported that their hearing problems had caused limitations some of the time or more often in their working or doing other daily activities (Table 3.4f). The corresponding proportions increased from 0.4% in persons aged 15-24 to 36.4% in persons aged 85 or above (Table 3.4g).

	Fema	lle	Mal	e	Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Yes, use it often	7.8	11.8%	10.4	16.0%	18.2	13.9%		
Yes, seldom use it	5.2	7.9%	11.7	18.1%	16.9	12.9%		
No, never use it	53.2	80.3%	42.2	65.1%	95.5	72.8%		
Don't know	-	-	0.5	0.8%	0.5	0.4%		
Total	66.2	100.0%	64.9	100.0%	131.1	100.0%		

Table 3.4d: Frequency of using hearing aid by gender

Base: All respondents who had hearing impairment / hearing loss diagnosed by doctors or audiologists.

Table 3.4e: Frequency of using hearing aid by age group

	15-	24	25	-34	35	-44	45	-54	55	-64	65	-74	75	-84	85 or	above	To	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	s %	persons	%	persons	%										
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes, use it often	-	-	0.6	15.0%	1.0	18.4%	1.5	12.0%	4.1	19.0%	4.5	17.2%	3.4	10.3%	3.1	12.5%	18.2	13.9%
Yes, seldom use it	1.0	28.1%	-	-	0.4	7.9%	1.1	8.6%	2.4	10.9%	2.7	10.5%	6.5	19.8%	2.8	11.3%	16.9	12.9%
No, never use it	2.6	71.9%	3.3	85.0%	4.2	73.7%	10.2	79.4%	15.2	70.1%	18.9	72.3%	22.4	68.4%	18.8	76.2%	95.5	72.8%
Don't know	-	-	-	-	-	-	-	-	-	-	-	-	0.5	1.5%	-	-	0.5	0.4%
Total	3.7	100.0%	5 3.9	100.0%	5.7	100.0%	12.8	100.0%	21.7	100.0%	26.1	100.0%	32.7	100.0%	24.6	100.0%	131.1	100.0%

Base: All respondents who had hearing impairment / hearing loss diagnosed by doctors or audiologists.

Note: Figures may not add up to the total due to rounding.

Table 3.4f: Extent of difficulties in working or doing other daily activities because of hearing problems by gender

	Fema	lle	Mal	e	Total			
	No. of persons	0/	No. of persons	0/	No. of persons	0/		
	('000')	<b>%</b>	('000)	%	('000')	%0		
None of the time	2 857.7	89.7%	2 615.7	90.3%	5 473.4	90.0%		
A little of the time	226.1	7.1%	182.7	6.3%	408.8	6.7%		
Some of the time	77.8	2.4%	74.7	2.6%	152.5	2.5%		
Most of the time	17.3	0.5%	17.7	0.6%	35.1	0.6%		
All of the time	6.0	0.2%	4.4	0.2%	10.4	0.2%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

## Table 3.4g: Extent of difficulties in working or doing other daily activities because of hearing problems by age group

	15-	-24	25	-34	35	-44	45	-54	55	-64	65-	-74	75	-84	85 or	above	To	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
None of the time	776.8	96.9%	922.9	96.0%	967.2	94.7%	1 104.1	93.3%	947.4	88.9%	459.7	81.5%	241.0	68.3%	54.5	41.7%	5 473.4	90.0%
A little of the time	21.9	2.7%	34.5	3.6%	45.7	4.5%	62.4	5.3%	93.8	8.8%	63.9	11.3%	57.9	16.4%	28.8	22.0%	408.8	6.7%
Some of the time	2.8	0.4%	3.4	0.4%	5.6	0.5%	13.5	1.1%	16.1	1.5%	29.7	5.3%	42.9	12.1%	38.4	29.4%	152.5	2.5%
Most of the time	-	-	0.5	0.1%	1.6	0.2%	2.6	0.2%	5.6	0.5%	8.7	1.5%	9.5	2.7%	6.4	4.9%	35.1	0.6%
All of the time	-	-	-	-	1.2	0.1%	0.4	<0.05%	2.7	0.3%	2.0	0.3%	1.5	0.4%	2.7	2.0%	10.4	0.2%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

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# Chapter 4 Mental Health

Besides using SF-12v2 (HK) and WHOQOL-BREF (HK) to assess the population's psychological wellbeing (see Chapter 2) as domains of quality of life, the PHS assessed the population's mental health in the areas of subjective happiness, sleep habits and sources of emotional support. This chapter also explored the magnitude of some mental health problems including suicidal behaviours, doctor-diagnosed anxiety disorder, depression, schizophrenia and dementia.

Indicator	Female	Male	Overall
Proportion of persons who self-rated as "a very happy person" i.e. self-rated as level 7 in a subjective happiness scale ranging from 1 to 7	9.4%	8.6%	9.0%
Proportion of persons who had sleep disturbances in the 30 days preceding the survey	51.9%	43.7%	48.0%
Prevalence of self-reported doctor-diagnosed mental health problems			
• Anxiety disorder	0.6%	0.3%	0.5%
• Depression	1.1%	0.5%	0.8%
• Schizophrenia	0.2%	0.2%	0.2%
• Dementia	0.6%	0.2%	0.4%
Proportion of persons who had thoughts of suicide during the year preceding the survey	1.2%	1.2%	1.2%
Proportion of persons who attempted suicide during the year preceding the survey among those who had thought of it	8.6%	9.2%	8.9%

# **Snapshot of Population's Mental Health**

# 4.1 Subjective Happiness

Happiness is a life experience marked by preponderance of positive emotion. Individuals vary widely in the sources of their personal happiness <sup>1</sup>. Respondents were asked to rate their level of subjective happiness in a scale ranging from 1 to 7, with "1" being "not a very happy person" and "7" being "a very happy person"<sup>1</sup>. Overall, 9.0% of persons (9.4% of females and 8.6% of males) aged 15 or above considered themselves as "a very happy person" (Table 4.1a).

	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
1	7.0	0.2%	7.2	0.2%	14.2	0.2%		
2	22.5	0.7%	16.9	0.6%	39.5	0.6%		
3	102.2	3.2%	108.6	3.8%	210.9	3.5%		
4	520.6	16.3%	542.3	18.7%	1 062.9	17.5%		
5	1 423.6	44.7%	1 255.0	43.3%	2 678.6	44.1%		
6	810.0	25.4%	717.0	24.8%	1 527.0	25.1%		
7	299.1	9.4%	248.1	8.6%	547.2	9.0%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

# Table 4.1a: Level of subjective happiness by gender

Base: All respondents.

Analysed by age group, the proportion of people aged 15 or above who considered themselves as "a very happy person" increased from 6.1% among those aged 15-24 to 16.1% among those aged 85 or above (Table 4.1b).

	15-	-24	25-	-34	35-	-44	45-	-54	55-	64	65-	-74	75	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
1	1.8	0.2%	0.9	0.1%	2.7	0.3%	2.6	0.2%	3.4	0.3%	1.4	0.2%	1.4	0.4%	-	-	14.2	0.2%
2	2.2	0.3%	6.8	0.7%	5.8	0.6%	9.9	0.8%	9.0	0.8%	1.4	0.3%	3.5	1.0%	0.9	0.7%	39.5	0.6%
3	32.6	4.1%	28.7	3.0%	33.7	3.3%	46.7	3.9%	24.7	2.3%	24.1	4.3%	13.1	3.7%	7.1	5.5%	210.9	3.5%
4	122.5	15.3%	158.6	16.5%	173.7	17.0%	215.1	18.2%	185.1	17.4%	103.9	18.4%	73.0	20.7%	31.1	23.8%	1 062.9	17.5%
5	375.6	46.9%	429.9	44.7%	463.5	45.4%	525.8	44.4%	473.3	44.4%	233.0	41.3%	129.2	36.6%	48.2	36.9%	2 678.6	44.1%
6	218.2	27.2%	273.9	28.5%	261.2	25.6%	286.2	24.2%	261.3	24.5%	125.9	22.3%	77.9	22.1%	22.4	17.2%	1 527.0	25.1%
7	48.7	6.1%	62.6	6.5%	80.6	7.9%	96.6	8.2%	108.7	10.2%	74.3	13.2%	54.7	15.5%	21.0	16.1%	547.2	9.0%
Total	801.6	100.0%	961.4	100.0%	5 1 021.2	100.0%	0 1 183.0	100.0%	0 1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Table 4.1b: Level of subjective happiness by age group

Base: All respondents.

Respondents were also asked to compare their level of happiness to most of their peers using the same 7-point scale, with "1" being "less happy" and "7" being "more happy". Overall, 8.6% of persons aged 15 or above considered themselves happier than most of their peers. More females than males (9.2% versus 8.0% respectively) considered themselves happier than their peers (Table 4.1c).

	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
1	10.3	0.3%	13.2	0.5%	23.5	0.4%		
2	24.4	0.8%	25.6	0.9%	50.0	0.8%		
3	114.5	3.6%	114.3	3.9%	228.7	3.8%		
4	718.5	22.6%	695.7	24.0%	1 414.2	23.3%		
5	1 249.1	39.2%	1 156.8	40.0%	2 405.9	39.6%		
6	776.1	24.4%	657.9	22.7%	1 434.0	23.6%		
7	292.2	9.2%	231.6	8.0%	523.8	8.6%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Table 4.1c: Level of subjective happiness compared to most of their peers by gender

Base: All respondents.

Subgroup analysis by age group showed a positive relationship between people's age and subjective happiness compared to most of their peers - the corresponding proportion increased from 6.3% in the 15-24 age group who considered themselves as "happier than their peers" to 14.5% in both the 75-84 and 85 or above age groups (Table 4.1d).

	15-	-24	25	-34	35-	-44	45	-54	55-	-64	65	-74	75-	-84	85 or	above	То	tal
	No. of persons	%	No. of persons	s %	No. of persons	%	No. of persons	s %	No. of persons	%	No. of persons	; %	No. of persons	%	No. of persons	s %	No. of persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
1	4.3	0.5%	0.9	0.1%	4.3	0.4%	4.6	0.4%	5.3	0.5%	2.2	0.4%	1.8	0.5%	-	-	23.5	0.4%
2	2.9	0.4%	6.5	0.7%	11.3	1.1%	9.7	0.8%	10.2	1.0%	5.0	0.9%	3.4	1.0%	0.9	0.7%	50.0	0.8%
3	37.8	4.7%	36.6	3.8%	35.9	3.5%	45.9	3.9%	29.3	2.8%	21.0	3.7%	14.7	4.2%	7.5	5.7%	228.7	3.8%
4	155.7	19.4%	210.9	21.9%	229.8	22.5%	287.8	24.3%	255.2	24.0%	139.8	24.8%	95.9	27.2%	39.1	29.9%	1 414.2	23.3%
5	345.3	43.1%	382.3	39.8%	413.5	40.5%	473.5	40.0%	417.9	39.2%	211.4	37.5%	120.2	34.1%	41.8	32.0%	2 405.9	39.6%
6	204.9	25.6%	256.2	26.7%	251.2	24.6%	271.0	22.9%	247.3	23.2%	115.2	20.4%	65.7	18.6%	22.5	17.2%	1 434.0	23.6%
7	50.7	6.3%	67.9	7.1%	75.2	7.4%	90.5	7.7%	100.4	9.4%	69.2	12.3%	51.0	14.5%	18.9	14.5%	523.8	8.6%
Total	801.6	100.0%	961.4	100.0%	5 1 021.2	100.0%	1 183.0	100.0%	5 1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Table 4.1d: Level of subjective happiness compared to most of their peers by age group

Base: All respondents.

# 4.2 Sleep Quality

Sleep is recognised as a resource to stress management and self-regulation, and both sleep quality and quantity have been linked to physical and psychological health<sup>2</sup>. A good quality sleep is vital for resting, recharging and nourishing the body and the mind. Conversely, inadequate and disturbed sleep can affect daytime functioning and lead to a range of chronic health problems<sup>3</sup>. In this survey, information on sleep habits including self-rated sleep quality, number of hours of sleep on average per day and frequencies of "feeling not getting enough sleep" and sleep disturbances in the 30 days preceding the survey were collected from respondents.

# 4.2.1 Self-rated Sleep Quality

Overall, 56.7% of people aged 15 or above rated their sleep quality as "Very well" or "Well". Analysed by gender, males (59.2%) were more likely than females (54.4%) to consider their sleep quality as "Very well" or "Well" (Table 4.2.1a).

	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Very well	238.1	7.5%	257.7	8.9%	495.9	8.2%		
Well	1 496.0	47.0%	1 457.2	50.3%	2 953.3	48.6%		
Fair	1 081.1	33.9%	968.0	33.4%	2 049.2	33.7%		
Poor	304.7	9.6%	187.4	6.5%	492.1	8.1%		
Very poor	65.0	2.0%	24.8	0.9%	89.8	1.5%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

# Table 4.2.1a: Distribution of self-rated sleep quality by gender

Base: All respondents.

Subgroup analysis by age group showed that the proportion of people who rated their sleep quality as "Very well" or "Well" was the highest in the 15-24 age group (65.5%) and the lowest in the 75-84 age group (48.9%) (Table 4.2.1b).

	15-24		25-34		35-44		45-	45-54		55-64		65-74		75-84		85 or above		tal
	No. of persons ('000)	; %	No. of persons ('000)	s %	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	; %	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Very well	105.5	13.2%	81.8	8.5%	82.3	8.1%	86.0	7.3%	79.1	7.4%	33.9	6.0%	18.6	5.3%	8.6	6.6%	495.9	8.2%
Well	419.2	52.3%	499.1	51.9%	493.1	48.3%	563.1	47.6%	508.9	47.8%	253.2	44.9%	153.8	43.6%	62.9	48.1%	2 953.3	48.6%
Fair	227.7	28.4%	310.6	32.3%	362.6	35.5%	416.8	35.2%	355.2	33.3%	200.6	35.6%	133.1	37.7%	42.7	32.6%	2 049.2	33.7%
Poor	46.3	5.8%	65.9	6.9%	72.4	7.1%	96.4	8.1%	98.4	9.2%	61.6	10.9%	37.6	10.7%	13.5	10.4%	492.1	8.1%
Very poor	3.0	0.4%	4.0	0.4%	10.8	1.1%	20.7	1.8%	23.9	2.2%	14.8	2.6%	9.5	2.7%	3.1	2.4%	89.8	1.5%
Total	801.6	100.0%	6 961.4	100.0%	51 021.2	100.0%	61183.0	100.0%	6 1 065.5	100.0%	564.0	100.0%	5 352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Base: A	ll respond	dents.																

Table 4.2.1b: Distribution of self-rated sleep quality by age group

# 4.2.2 Sleep Quantity

The percentage of females aged 15 or above who slept on average less than seven hours per day in the 30 days preceding the survey was 37.6%, while that of the male counterparts was 34.5%. The average numbers of sleeping hours per day in the 30 days preceding the survey were similar between females and males (6.9 hours versus 7.0 hours respectively) (Table 4.2.2a).

	Female		Male		Total		
Hours	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
< 5.0	115.3	3.6%	48.4	1.7%	163.7	2.7%	
5.0 - 5.9	243.4	7.6%	181.2	6.3%	424.5	7.0%	
6.0 - 6.9	838.7	26.3%	769.0	26.6%	1 607.6	26.4%	
7.0 - 7.9	1 070.7	33.6%	1 013.1	35.0%	2 083.8	34.3%	
8.0 - 8.9	730.4	22.9%	711.8	24.6%	1 442.2	23.7%	
9.0 - 9.9	94.8	3.0%	87.2	3.0%	181.9	3.0%	
≥ 10.0	91.8	2.9%	84.6	2.9%	176.4	2.9%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	
Mean	6.9		7.0		7.0		

Table 4.2.2a: Number of sleeping hours on average per day in the 30 days preceding the survey by gender

Base: All respondents.

The proportion of people sleeping less than seven hours on average per day in the 30 days preceding the survey increased with age, from 28.4% for people aged 15-24 to 46.6% for those in the 75-84 and 85 or above age groups. The average number of sleeping hours per day in the 30 days preceding the survey was the lowest in the 75-84 age group (6.8 hours) and the highest in both the 15-24 age group and the 85 or above age group (7.2 hours) (Table 4.2.2b).

	15-24		25-34		35-44		45-	45-54		55-64		65-74		75-84		85 or above		Total	
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		
Hours	persons	%	persons	%	persons	%	persons	%	persons	%	persons	s %	persons	%	persons	%	persons	%	
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		
< 5.0	13.5	1.7%	11.5	1.2%	15.3	1.5%	25.5	2.2%	32.6	3.1%	31.2	5.5%	25.5	7.2%	8.7	6.6%	163.7	2.7%	
5.0 - 5.9	41.6	5.2%	49.3	5.1%	63.7	6.2%	87.3	7.4%	87.6	8.2%	48.0	8.5%	32.6	9.3%	14.4	11.0%	424.5	7.0%	
6.0 - 6.9	172.4	21.5%	240.4	25.0%	275.1	26.9%	323.1	27.3%	290.1	27.2%	162.5	28.8%	106.3	30.1%	37.9	29.0%	1 607.6	26.4%	
7.0 - 7.9	287.7	35.9%	376.6	39.2%	388.8	38.1%	429.4	36.3%	356.3	33.4%	147.9	26.2%	80.3	22.8%	17.0	13.0%	2 083.8	34.3%	
8.0 - 8.9	231.1	28.8%	233.8	24.3%	235.8	23.1%	269.9	22.8%	252.3	23.7%	124.4	22.1%	70.4	20.0%	24.6	18.8%	1 442.2	23.7%	
9.0 - 9.9	29.8	3.7%	31.6	3.3%	23.5	2.3%	27.2	2.3%	26.1	2.4%	20.8	3.7%	13.8	3.9%	9.0	6.9%	181.9	3.0%	
≥ 10.0	25.5	3.2%	18.3	1.9%	18.9	1.9%	20.7	1.8%	20.6	1.9%	29.2	5.2%	23.8	6.7%	19.3	14.8%	176.4	2.9%	
Total	801.6	100.0%	o 961.4	100.0%	01 021.2	100.0%	51 183.0	100.0%	ó́1 065.5	100.0%	564.0	100.0%	5 352.7	100.0%	130.8	100.0%	6 080.2	100.0%	
Mean	7.	2	7.	.0	7.	0	6.	9	6.	9	6	.9	6.	.8	7.	2	7	2.0	

Table 4.2.2b: Number of sleeping hours on average per day in the 30 days preceding the survey by age group

Base: All respondents.

Overall, there were 8.3% of people aged 15 or above who recorded "feeling not getting enough sleep" for 22 days or more during the 30 days preceding the survey. The corresponding proportion was higher in females (9.3%) than in males (7.2%). The mean number of days of self-reported inadequate sleep during the 30 days preceding the survey was 6.6 days in females and 5.6 days in males (Table 4.2.2c).

	Female		Male		Total		
Days	No. of persons	%	No. of persons	%	No. of persons	%	
	('000)		('000)		('000)		
0	1 160.8	36.4%	1 162.8	40.2%	2 323.6	38.2%	
1 – 7	1 168.9	36.7%	1 074.4	37.1%	2 243.3	36.9%	
8-14	319.8	10.0%	281.3	9.7%	601.1	9.9%	
15-21	240.4	7.5%	167.1	5.8%	407.5	6.7%	
22 or more	295.1	9.3%	209.5	7.2%	504.6	8.3%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	
Mean	6.6		5.6		6.1		

Table 4.2.2c: Number of days felt not getting enough sleep in the 30 days preceding the survey by gender

Base: All respondents.
Across the age groups, the proportion of people reporting inadequate sleep for 22 days or more during the 30 days preceding the survey was the highest in the age group of 25-34 (9.7%) and the lowest in the age group of 85 or above (4.8%). The mean number of days of "feeling not getting enough sleep" in the 30 days preceding the survey generally decreased with age from 7.0 days for people aged 25-34 to 4.2 days for people aged 85 or above (Table 4.2.2d).

	15-	24	25-	34	35-	44	45-	54	55-	64	65-	74	75-	-84	85 or :	above	To	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
Days	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
0	296.1	36.9%	303.8	31.6%	343.6	33.7%	424.9	35.9%	428.2	40.2%	266.6	47.3%	182.1	51.6%	78.2	59.7%	2 323.6	38.2%
1 – 7	307.8	38.4%	381.7	39.7%	394.8	38.7%	453.8	38.4%	405.0	38.0%	173.4	30.7%	99.0	28.1%	27.9	21.3%	2 243.3	36.9%
8-14	84.6	10.6%	109.1	11.3%	110.0	10.8%	116.4	9.8%	87.1	8.2%	50.0	8.9%	32.6	9.2%	11.5	8.8%	601.1	9.9%
15 – 21	58.9	7.3%	73.8	7.7%	78.8	7.7%	79.5	6.7%	65.8	6.2%	30.6	5.4%	13.2	3.7%	6.9	5.3%	407.5	6.7%
22 or more	54.2	6.8%	93.1	9.7%	94.0	9.2%	108.5	9.2%	79.4	7.5%	43.4	7.7%	25.8	7.3%	6.3	4.8%	504.6	8.3%
Total	801.6	100.0%	o 961.4	100.0%	51 021.2	100.0%	51 183.0	100.0%	61 065.5	100.0%	564.0	100.0%	6 352.7	100.0%	5 130.8	100.0%	6 080.2	100.0%
Mean	6.	0	7.	0	6.	7	6.	4	5.	6	5.	.3	4.	9	4.	2	6	.1

Table 4.2.2d: Number of days felt not getting enough sleep in the 30 days preceding the survey by age group

Base: All respondents.

# 4.2.3 Sleep Disturbances

Respondents were asked whether they had experienced any of the three patterns of sleep disturbances, namely 'difficulty in falling asleep' defined as "cannot fall into sleep within 30 minutes", 'intermittent awakenings or difficulty in maintaining sleep during the night' and 'early morning awakening and unable to sleep again' during the 30 days preceding the survey. Overall, 48.0% of population aged 15 or above had experienced at least one of these sleep disturbances during the 30 days preceding the survey. These sleep disturbances were more common in females (51.9%) than in males (43.7%) (Table 4.2.3a).

 Table 4.2.3a: Proportion of population aged 15 or above who had sleep disturbances\* in the 30 days preceding the survey by gender

	Female		Male		Total	
	No. of persons	0/	No. of persons	0/	No. of persons	0/
	('000)	%	('000)	%	('000)	<b>%</b> 0
Yes	1 652.0	51.9%	1 266.1	43.7%	2 918.1	48.0%
No	1 533.0	48.1%	1 629.1	56.3%	3 162.1	52.0%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Base: All respondents.

Notes: \* Sleep disturbances reported in this survey included: (i) difficulty in falling asleep (within 30 minutes); (ii) intermittent awakenings or difficulty in maintaining sleep during the night; and (iii) early morning awakening and unable to sleep again.

Figures may not add up to the total due to rounding.

Analysed by age group, people in the 75-84 age group (64.5%) recorded the highest proportion of experiencing these sleep disturbances while younger persons aged 15-24 recorded the lowest corresponding proportion (35.1%) (Table 4.2.3b).

 Table 4.2.3b: Proportion of population aged 15 or above who had sleep disturbances\* in the 30 days preceding the survey by age group

	15-	-24	25-	-34	35-	-44	45-	-54	55-	64	65-	74	75-	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%																
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes	281.2	35.1%	393.1	40.9%	460.8	45.1%	580.8	49.1%	570.9	53.6%	327.9	58.1%	227.4	64.5%	75.9	58.0%	2 918.1	48.0%
No	520.4	64.9%	568.3	59.1%	560.4	54.9%	602.2	50.9%	494.6	46.4%	236.1	41.9%	125.3	35.5%	54.9	42.0%	3 162.1	52.0%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Notes: \* Sleep disturbances reported in this survey included: (i) difficulty in falling asleep (within 30 minutes); (ii) intermittent awakenings or difficulty in maintaining sleep during the night; and (iii) early morning awakening and unable to sleep again. Figures may not add up to the total due to rounding.

# Difficulty in Falling Asleep

In the survey, respondents were asked how often they had difficulty in falling asleep, i.e. could not fall into sleep within 30 minutes, in the 30 days preceding the survey. Overall, one-third (33.1%) of people aged 15 or above had difficulty falling asleep, i.e. "Less than once a week" or more often, in the 30 days preceding the survey. The corresponding proportion was higher among females than that among males (36.7% versus 29.3% respectively) (Table 4.2.3c).

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Not during the past 30 days	2 016.8	63.3%	2 048.3	70.7%	4 065.1	66.9%
Less than once a week	573.3	18.0%	478.0	16.5%	1 051.3	17.3%
Once or twice a week	325.8	10.2%	225.5	7.8%	551.3	9.1%
Three or more times a week	269.1	8.4%	143.4	5.0%	412.5	6.8%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Table 4.2.3c: Frequency	of difficulty in	n falling asleep in t	the 30 days prec	eding the survey by gender
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Base: All respondents.

Analysed by age group, the proportion of people having difficulty falling asleep in the 30 days preceding the survey generally increased with age, from 26.3% for those aged 15-24 to a peak of 45.0% for those aged 75-84, then dropped to 39.4% for those aged 85 or above (Table 4.2.3d).

	15-	24	25-	34	35-	44	45-	-54	55-	64	65-	-74	75-	84	85 or	above	То	tal
	No. of persons ('000)	%	No. of persons ('000)	: %	No. of persons ('000)	%	No. of persons ('000)	s %	No. of persons ('000)	%								
Not during the past 30 days	591.0	73.7%	694.1	72.2%	709.5	69.5%	777.3	65.7%	677.0	63.5%	343.2	60.9%	193.8	55.0%	79.2	60.6%	4 065.1	66.9%
Less than once a week	106.2	13.3%	159.4	16.6%	179.0	17.5%	213.2	18.0%	189.0	17.7%	102.5	18.2%	77.3	21.9%	24.7	18.9%	1 051.3	17.3%
Once or twice a week	66.3	8.3%	71.9	7.5%	87.3	8.5%	110.3	9.3%	111.9	10.5%	56.8	10.1%	35.5	10.1%	11.3	8.7%	551.3	9.1%
Three or more times a week	38.1	4.7%	36.0	3.7%	45.4	4.4%	82.2	7.0%	87.6	8.2%	61.5	10.9%	46.1	13.1%	15.6	11.9%	412.5	6.8%
Total	801.6	100.0%	6 961.4	100.0%	51 021.2	100.0%	51 183.0	100.0%	51 065.5	100.0%	564.0	100.0%	6 352.7	100.0%	5 130.8	100.0%	6 080.2	100.0%

Table 4.2.3d: Frequency of difficulty in falling asleep in the 30 days preceding the survey by age group

Base: All respondents.

# Intermittent Awakenings or Difficulty in Maintaining Sleep

More than one-third (35.2%) of people aged 15 or above had intermittent awakening or difficulty in maintaining sleep during the night, i.e. "Less than once a week" or more often, in the 30 days preceding the survey. 39.2% of females and 30.8% of males recorded such sleep disturbance in the 30 days preceding the survey (Table 4.2.3e).

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Not during the past 30 days	1 937.9	60.8%	2 003.4	69.2%	3 941.3	64.8%
Less than once a week	608.0	19.1%	457.2	15.8%	1 065.3	17.5%
Once or twice a week	348.2	10.9%	281.4	9.7%	629.6	10.4%
Three or more times a week	290.9	9.1%	153.2	5.3%	444.1	7.3%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

 Table 4.2.3e: Frequency of intermittent awakenings or difficulty maintaining sleep during the night in the 30 days preceding the survey by gender

Base: All respondents.

The proportion of people with intermittent awakenings or difficulty in maintaining sleep during the night in the 30 days preceding the survey increased generally with age, from 20.1% for people aged 15-24 to a peak of 51.7% for those aged 75-84, then dropped slightly to 49.1% for those aged 85 or above (Table 4.2.3f).

	15-	24	25-	-34	35-	44	45-	54	55-	64	65	-74	75-	84	85 or :	above	Tot	tal
	No. of persons ('000)	%	No. of persons ('000)	; %	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	· %	No. of persons ('000)	%
Not during the past 30 days	640.2	79.9%	688.5	71.6%	681.1	66.7%	762.0	64.4%	628.9	59.0%	303.7	53.8%	170.4	48.3%	66.5	50.9%	3 941.3	64.8%
Less than once a week	85.4	10.7%	150.9	15.7%	186.0	18.2%	214.0	18.1%	216.0	20.3%	113.2	20.1%	75.1	21.3%	24.7	18.8%	1 065.3	17.5%
Once or twice a week	54.4	6.8%	72.2	7.5%	108.2	10.6%	127.8	10.8%	129.8	12.2%	71.5	12.7%	48.1	13.6%	17.6	13.5%	629.6	10.4%
Three or more times a week	21.7	2.7%	49.8	5.2%	45.9	4.5%	79.2	6.7%	90.9	8.5%	75.6	13.4%	59.0	16.7%	22.0	16.8%	444.1	7.3%
Total	801.6	100.0%	6 961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	5 130.8	100.0%	6 080.2	100.0%

 Table 4.2.3f: Frequency of intermittent awakenings or difficulty maintaining sleep during the night in the 30 days preceding the survey by age group

Base: All respondents.

# Early Morning Awakening and Unable to Sleep Again

Nearly three-tenths (29.4%) of people aged 15 or above reported experiencing early morning awakening and were unable to sleep again, i.e. "Less than once a week" or more often, during the 30 days preceding the survey. The corresponding proportion among females was higher at 32.8% than that (25.6%) for males (Table 4.2.3g).

	Female		Male		Total	
-	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Not during the past 30 days	2 140.2	67.2%	2 153.0	74.4%	4 293.2	70.6%
Less than once a week	518.8	16.3%	422.9	14.6%	941.7	15.5%
Once or twice a week	283.4	8.9%	199.6	6.9%	482.9	7.9%
Three or more times a week	242.6	7.6%	119.7	4.1%	362.3	6.0%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

 Table 4.2.3g: Frequency of early morning awakening and unable to sleep again in the 30 days preceding the survey by gender

Base: All respondents.

Analysed by age, the proportion of people who had early morning awakening and unable to sleep again in the 30 days preceding the survey increased from 15.7% for those aged 15-24 to 46.8% for those aged 75-84, then dropped slightly to 44.7% for those aged 85 or above (Table 4.2.3h).

 Table 4.2.3h: Frequency of early morning awakening and unable to sleep again in the 30 days preceding the survey by age group

	15-	-24	25	-34	35-	-44	45-	-54	55-	-64	65-	-74	75	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	s %	persons	s %	persons	s %	persons	s %	persons	s %	persons	s %	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Not during the past 30 days	675.9	84.3%	753.1	78.3%	741.2	72.6%	835.4	70.6%	688.3	64.6%	339.4	60.2%	187.6	53.2%	72.3	55.3%	4 293.2	70.6%
Less than once a week	71.3	8.9%	125.6	13.1%	169.4	16.6%	180.3	15.2%	195.3	18.3%	100.3	17.8%	74.4	21.1%	25.2	19.2%	941.7	15.5%
Once or twice a week	39.3	4.9%	55.7	5.8%	69.7	6.8%	100.5	8.5%	101.3	9.5%	60.0	10.6%	40.3	11.4%	16.2	12.4%	482.9	7.9%
Three or more times a week	15.2	1.9%	27.1	2.8%	40.9	4.0%	66.8	5.6%	80.6	7.6%	64.3	11.4%	50.4	14.3%	17.1	13.1%	362.3	6.0%
Total	801.6	100.0%	6 961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	6 564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Base: All re	esponden	ts.																•

# 4.3 Self-reported Doctor-diagnosed Mental Illnesses

Respondents were asked whether they had ever been told by a Western medicine practitioner that they had depression, anxiety disorder, schizophrenia or dementia and, if yes to anyone of these, whether the condition was diagnosed within the 12 months preceding the survey.

# 4.3.1 Anxiety Disorder

Anxiety disorder is a type of mental illness which fills people's lives with overwhelming anxiety and fear. Unlike the relatively mild, brief anxiety caused by a stressful event, anxiety disorders are chronic, relentless, and can grow progressively worse if not treated <sup>4</sup>.

Prevalence of self-reported doctor-diagnosed anxiety disorder in people aged 15 or above was 0.5%. Higher prevalence was found among females (0.6%) than in males (0.3%) (Table 4.3.1a).

	Female		Male		Total	
-	No. of persons	<b>A</b> /	No. of persons	<b>A</b> /	No. of persons	0/
	('000)	%	('000)	%	('000)	%
Yes	20.1	0.6%	8.5	0.3%	28.6	0.5%
Yes, in the past 12 months	2.2	0.1%	1.1	<0.05%	3.3	0.1%
Yes, before the last 12 months	17.9	0.6%	7.4	0.3%	25.3	0.4%
Yes, but don't know when it was diagnosed	-	-	-	-	-	-
No	3 160.3	99.2%	2 884.8	99.6%	6 045.1	99.4%
Don't know	4.6	0.1%	2.0	0.1%	6.5	0.1%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Table 4.3.1a: Prevalence of self-reported doctor-diagnosed anxiety disorder by gender

Base: All respondents.

Analysed by age, the prevalence of self-reported doctor-diagnosed anxiety disorder was the highest among people aged 65-74 (1.1%) (Table 4.3.1b).

	15-	-24	25-	34	35-	44	45-	54	55-	64	65-	-74	75-	-84	85 or :	above	То	tal
	No. of persons ('000)	: %	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	; %	No. of persons ('000)	s %	No. of persons ('000)	%	No. of persons ('000)	%
Yes	4.1	0.5%	3.5	0.4%	3.8	0.4%	6.5	0.6%	3.3	0.3%	5.9	1.1%	0.9	0.3%	0.3	0.3%	28.6	0.5%
Yes, in the past 12 months	1.0	0.1%	0.9	0.1%	0.9	0.1%	-	-	-	-	0.4	0.1%	-	-	-	-	3.3	0.1%
Yes, before the past 12 months	3.0	0.4%	2.6	0.3%	2.9	0.3%	6.5	0.6%	3.3	0.3%	5.5	1.0%	0.9	0.3%	0.3	0.3%	25.3	0.4%
Yes, but don't know when it was diagnosed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No	797.1	99.4%	956.1	99.4%	1 017.4	99.6%	1 175.9	99.4%	1 060.2	99.5%	557.6	98.9%	350.9	99.5%	129.9	99.3%	6 045.1	99.4%
Don't know	0.5	0.1%	1.8	0.2%	-	-	0.5	<0.05%	1.9	0.2%	0.4	0.1%	0.9	0.3%	0.5	0.4%	6.5	0.1%
Total	801.6	100.0%	6 961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	5 1 065.5	100.0%	564.0	100.0%	352.7	100.0%	b 130.8	100.0%	6 080.2	100.0%

Table 4.3.1b: Prevalence of self-reported doctor-diagnosed anxiety disorder by age group

Base: All respondents.

### 4.3.2 Depression

Depression is a common mental disorder characterised by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, tiredness, and poor concentration. Sufferers may also have multiple physical complaints with no apparent physical cause. Depression can be long-lasting or recurrent, substantially impairing people's ability to function at work or school and to cope with daily life. At its most severe, depression can lead to suicide <sup>5</sup>.

Among people aged 15 or above, 0.8% reported having depression as told by doctor. A significantly greater proportion of females (1.1%) than males (0.5%) reported that they had doctor-diagnosed depression (Table 4.3.2a).

	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	º/o		
Yes	35.3	1.1%	13.8	0.5%	49.1	0.8%		
Yes, in the past 12 months	1.1	<0.05%	1.6	0.1%	2.7	<0.05%		
Yes, before the past 12 months	33.7	1.1%	11.7	0.4%	45.5	0.7%		
Yes, but don't know when it was diagnosed	0.5	<0.05%	0.4	<0.05%	0.9	<0.05%		
No	3 145.4	98.8%	2 879.7	99.5%	6 025.1	99.1%		
Don't know	4.3	0.1%	1.7	0.1%	6.0	0.1%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Table 4.3.2a: Prevalence of self-reported doctor-diagnosed depression by gender

Base: All respondents.

The prevalence of self-reported doctor-diagnosed depression was the highest among people aged 65-74 (1.4%) and the lowest in the age group of 15-24 (0.3%) (Table 4.3.2b).

	15-	24	25-	-34	35-	44	45-	54	55-	64	65-	-74	75-	84	85 or :	above	То	tal
	No. of persons ('000)	%	No. of persons ('000)	<sup>0</sup> /0														
Yes	2.5	0.3%	4.7	0.5%	6.6	0.6%	13.2	1.1%	11.0	1.0%	8.0	1.4%	2.4	0.7%	0.7	0.5%	49.1	0.8%
Yes, in the past 12 months	-	-	1.0	0.1%	-	-	0.6	<0.05%	1.1	0.1%	-	-	-	-	-	-	2.7	<0.05%
Yes, before the past 12 months	2.5	0.3%	3.7	0.4%	6.6	0.6%	12.2	1.0%	9.8	0.9%	8.0	1.4%	1.9	0.5%	0.7	0.5%	45.5	0.7%
Yes, but don't know when it was diagnosed	-	-	-	-	-	-	0.5	<0.05%	-	-	-	-	0.4	0.1%	-	-	0.9	<0.05%
No	798.6	99.6%	954.3	99.3%	0 1 013.4	99.2%	1 169.3	98.8%	1 054.5	99.0%	555.1	98.4%	350.3	99.3%	129.6	99.1%	6 025.1	99.1%
Don't know	0.5	0.1%	2.4	0.2%	1.2	0.1%	0.5	<0.05%	-	-	0.9	0.2%	-	-	0.5	0.4%	6.0	0.1%
Total	801.6	100.0%	961.4	100.0%	61021.2	100.0%	51 183.0	100.0%	1 065.5	100.0%	6 564.0	100.0%	5 352.7	100.0%	130.8	100.0%	6 080.2	100.0%

 Table 4.3.2b: Prevalence of self-reported doctor-diagnosed depression by age group

Base: All respondents.

## 4.3.3 Schizophrenia

Schizophrenia is a severe mental disorder characterised by distortions in thinking, perception, emotions, language, sense of self and behaviour. Common experiences of people with schizophrenia include hallucinations (hearing, seeing or feeling things that are not there) and delusions (fixed false beliefs or suspicions that are firmly held even when there is evidence to the contrary). The disorder can make it difficult for people affected to work or study normally<sup>5</sup>.

Overall, 0.2% of people aged 15 or above self-reported that they had been diagnosed to have schizophrenia by a doctor. There was no difference in the prevalence of schizophrenia between females and males (both at 0.2%) (Table 4.3.3a).

	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Yes	7.1	0.2%	6.0	0.2%	13.1	0.2%		
Yes, in the past 12 months	-	-	-	-	-	-		
Yes, before the past 12 months	7.1	0.2%	6.0	0.2%	13.1	0.2%		
Yes, but don't know when it was diagnosed	-	-	-	-	-	-		
No	3 175.4	99.7%	2 888.1	99.8%	6 063.5	99.7%		
Don't know	2.5	0.1%	1.0	<0.05%	3.6	0.1%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Table 4.3.3a: Prevalence of self-reported doctor-diagnosed schizophrenia by gender

Base: All respondents.

The prevalence of self-reported doctor-diagnosed schizophrenia ranged from 0.0% to 0.4% among various age groups and was the highest among people aged 35-54 (0.4%) (Table 4.3.3b).

	15	-24	25-	-34	35-	44	45	5-54	55-	-64	65-	-74	75-	-84	85 or :	above	To	tal
	No. of persons	s %	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	; %	No. of persons	s %	No. of persons	%	No. of persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes	-	-	0.5	<0.05%	3.8	0.4%	4.9	0.4%	1.8	0.2%	1.7	0.3%	0.4	0.1%	-	-	13.1	0.2%
Yes, in the past 12 months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yes, before the past 12 months	-	-	0.5	<0.05%	5 <i>3</i> .8	0.4%	4.9	0.4%	1.8	0.2%	1.7	0.3%	0.4	0.1%	-	-	13.1	0.2%
Yes, but don't know when it was diagnosed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No	801.1	99.9%	959.3	99.8%	1 017.4	99.6%	1 177.5	99.5%	1 063.7	99.8%	561.8	99.6%	352.3	99.9%	130.3	99.6%	6 063.5	99.7%
Don't know	0.5	0.1%	1.6	0.2%	-	-	0.5	<0.05%	-	-	0.4	0.1%	-	-	0.5	0.4%	3.6	0.1%
Total	801.6	100.0%	o 961.4	100.0%	61 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Table 4.3.3b: Prevalence of self-reported doctor-diagnosed schizophrenia by age group

Base: All respondents.

## 4.3.4 Dementia

Dementia is a syndrome of a chronic and progressive nature. There is decline in cognitive function (i.e. the ability to process thought) beyond what might be expected from normal ageing. It affects memory, thinking, orientation, comprehension, calculation, learning capacity, language and judgment. Consciousness is not affected. The impairment in cognitive function is commonly accompanied by deterioration in emotional control, social behaviour or motivation <sup>6</sup>. Overall, 0.4% of people aged 15 or above self-reported that they had been diagnosed with dementia by a doctor. The corresponding proportions recorded for females and males were 0.6% and 0.2% respectively (Table 4.3.4a).

	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Yes	18.1	0.6%	5.6	0.2%	23.7	0.4%		
Yes, in the past 12 months	-	-	-	-		-		
Yes, before the past 12 months	17.5	0.5%	5.2	0.2%	22.7	0.4%		
Yes, but don't know when it was diagnosed	0.5	<0.05%	0.4	<0.05%	1.0	<0.05%		
No	3 164.5	99.4%	2 888.1	99.8%	6 052.6	99.5%		
Don't know	2.5	0.1%	1.5	0.1%	4.0	0.1%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Table 4.3.4a: Prevalence of self-reported doctor-diagnosed dementia by gender

Base: All respondents.

The prevalence of self-reported doctor-diagnosed dementia ranged from 0.0% to 6.8% among various age groups. The prevalence tended to increase generally with age for those aged 55 or above, from 0.1% for people in the 55-64 age group to 6.8% for people aged 85 or above (Table 4.3.4b).

	15-	24	25	-34	35	5-44	45	-54	55-	·64	65	-74	75-	-84	85 or :	above	То	tal
	No. of persons ('000)	%	No. of persons ('000)	s %	No. of person ('000)	s %	No. of persons ('000)	<b>s %</b> j	No. of persons ('000)	%	No. of persons ('000)	s %	No. of persons ('000)	s %	No. of persons ('000)	s %	No. of persons ('000)	%
Yes	0.4	0.1%	-	-	-	-	-	-	0.8	0.1%	5.2	0.9%	8.3	2.3%	9.0	6.8%	23.7	0.4%
Yes, in the past 12 months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yes, before the past 12 months	0.4	0.1%	-	-	-	-	-	-	0.8	0.1%	4.7	0.8%	7.8	2.2%	9.0	6.8%	22.7	0.4%
Yes, but don't know when it was diagnosed	-	-	-	-	-	-	-	-	-	-	0.5	0.1%	0.4	0.1%	-	-	1.0	<0.05%
No	800.7	99.9%	960.2	99.9%	1 020.2	7 100.0%	1 182.5	100.0%	1 064.7	99.9%	557.9	98.9%	344.0	97.5%	121.8	93.2%	6 052.6	99.5%
Don't know	0.5	0.1%	1.2	0.1%	0.5	<0.05%	0.5	<0.05%	-	-	0.8	0.1%	0.5	0.1%	-	-	4.0	0.1%
Total	801.6	100.0%	961.4	100.0%	51 021.2	2 100.0%	1 183.0	100.0%	1 065.5	100.0%	6 564.0	100.0%	352.7	100.0%	5 130.8	100.0%	6 080.2	100.0%

Table 4.3.4b: Prevalence of self-reported doctor-diagnosed dementia by age group

Base: All respondents.

# 4.4 Social Support

Social support from others can be protective for health<sup>7</sup>. Support can be conceptualised in terms of the structural components (e.g. social networking) and the functional components (e.g. different types of transactions between individuals, such as emotional support). A person's social network can help her / him cope with the problems of daily life. The support that one gets from others may include emotional aid, material assistance, information or companionship. In the survey, respondents were asked about the availability and sources of social support including emotional and financial support.

## 4.4.1 Emotional Support

Respondents were asked "when needed, can you count on anyone to provide you with emotional support such as hear you out and help you make difficult decision?" and "in the past 12 months, who was the most helpful in providing you with emotional support?".

Among people aged 15 or above, more than half (54.7%) felt that they could count on someone for emotional support, while one-third (33.4%) believed that they did not need support. More females (60.1%) than males (48.7%) reported that they could count on someone to provide emotional support (Table 4.4.1a).

	Female		Male		Total			
	No. of persons	07	No. of persons	07	No. of persons	0/		
	('000)	70	('000)	70	('000)	70		
Yes	1 915.1	60.1%	1 410.2	48.7%	3 325.3	54.7%		
No	309.9	9.7%	363.8	12.6%	673.6	11.1%		
Don't need support	930.8	29.2%	1 099.7	38.0%	2 030.5	33.4%		
Don't know	29.3	0.9%	21.5	0.7%	50.8	0.8%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Table 4.4.1a: Availability of emotional support when needed by gender

Base: All respondents.

Analysed by age, the proportion of people who reported being able to count on someone for emotional support decreased significantly with age, from 65.3% in 15-24 age group to 37.6% in the 75-84 age group, then slightly increased to 40.7% among those aged 85 or above (Table 4.4.1b).

	15-2	24	25-	-34	35-	-44	45-	-54	55-	64	65-	74	75-	-84	85 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes	523.6	65.3%	620.6	64.6%	620.9	60.8%	619.2	52.3%	512.3	48.1%	242.7	43.0%	132.7	37.6%	53.2	40.7%	3 325.3	54.7%
No	57.5	7.2%	69.5	7.2%	94.2	9.2%	141.9	12.0%	135.3	12.7%	89.1	15.8%	62.0	17.6%	24.2	18.5%	673.6	11.1%
Don't need support	216.2	27.0%	267.6	27.8%	302.0	29.6%	412.2	34.8%	411.0	38.6%	226.7	40.2%	147.4	41.8%	47.5	36.3%	2 030.5	33.4%
Don't know	4.3	0.5%	3.7	0.4%	4.1	0.4%	9.7	0.8%	7.0	0.7%	5.5	1.0%	10.6	3.0%	6.0	4.6%	50.8	0.8%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	61 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	5 130.8	100.0%	6 080.2	100.0%

Table 4.4.1b: Availability of emotional support when needed by age group

Base: All respondents.

Majority of people aged 15 or above considered that their friends (67.7%) or their spouse (48.2%) were the most helpful sources in providing emotional support in the 12 months preceding the survey (Table 4.4.1c).

	Female		Male		Total			
	No. of persons	%	No. of persons	%	No. of persons	%		
	('000)	,.	('000)	,.	('000)	, 0		
Friend	1 287.8	67.2%	963.9	68.4%	2 251.7	67.7%		
Spouse	844.7	44.1%	756.9	53.7%	1 601.7	48.2%		
Mother	308.2	16.1%	221.7	15.7%	529.9	15.9%		
Son	294.8	15.4%	177.5	12.6%	472.3	14.2%		
Daughter	303.1	15.8%	154.4	11.0%	457.6	13.8%		
Father	175.8	9.2%	150.0	10.6%	325.7	9.8%		
Colleague	146.3	7.6%	139.4	9.9%	285.7	8.6%		
Sister	196.9	10.3%	43.5	3.1%	240.5	7.2%		
Other relative	117.2	6.1%	72.4	5.1%	189.6	5.7%		
Brother	64.5	3.4%	69.0	4.9%	133.5	4.0%		
Professionals	31.2	1.6%	23.3	1.7%	54.6	1.6%		
Church member	36.9	1.9%	12.6	0.9%	49.6	1.5%		
Neighbour	26.0	1.4%	12.1	0.9%	38.1	1.1%		
Club member	5.8	0.3%	3.7	0.3%	9.6	0.3%		
Schoolmate	5.4	0.3%	3.0	0.2%	8.4	0.3%		
Domestic helper	1.0	0.1%	0.4	<0.05%	1.3	<0.05%		

Table 4.4.1c: Sources of emotional support in the 12 months preceding the survey by gender

Base: The respondents who could count on someone for emotional support.

Notes: Ranked in descending order of percentages of source of emotional control.

Multiple answers were allowed.

Overall, 90.3% of people aged 15 or above reported that they had at least one relative or close friend to whom they could talk about private matter and call on for help. The proportion was higher in females (92.5%) than their male counterparts (87.9%). On average, people aged 15 or above had three relatives or close friends for such social support (Table 4.4.1d).

	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
0	239.5	7.5%	349.6	12.1%	589.1	9.7%		
1	423.1	13.3%	456.0	15.8%	879.1	14.5%		
2	833.4	26.2%	711.5	24.6%	1 544.9	25.4%		
3	702.9	22.1%	582.3	20.1%	1 285.2	21.1%		
4	326.4	10.2%	226.2	7.8%	552.6	9.1%		
5	329.3	10.3%	253.8	8.8%	583.1	9.6%		
6 or more	330.5	10.4%	315.8	10.9%	646.3	10.6%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		
Mean	3.1				3.0			

 Table 4.4.1d: Number of relatives and close friends to whom they can talk about private matter and call on for help by gender

Base: All respondents.

Analysed by age, the proportion of people who had at least one relative or close friend to whom they can talk about private matter and call on for help decreased from 95.9% in 15-24 age group and 95.8% in 25-34 age group to 80.1% in the 75-84 age group, and slightly increased to 83.1% in the age group 85 or above. On the other hand, the proportions of these persons reporting having no one to call on for help were relatively high in the older age groups of 65-74 (14.9%), 75-84 (19.9%) and 85 or above (16.9%) making them more vulnerable. The average number of relatives or close friends to whom they could talk about private matter and call on for help decreased from 3.7 for those aged 15-24 to 2.0 for those aged 85 or above (Table 4.4.1e).

 Table 4.4.1e: Number of relatives and close friends to whom they can talk about private matter and call on for help by age group

	15	-24	25-	-34	35-	-44	45-	-54	55-	64	65-	-74	75-	84	85 or a	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
0	32.7	4.1%	40.3	4.2%	65.8	6.4%	132.1	11.2%	142.1	13.3%	83.8	14.9%	70.1	19.9%	22.2	16.9%	589.1	9.7%
1	49.9	6.2%	102.9	10.7%	153.0	15.0%	182.2	15.4%	164.5	15.4%	118.9	21.1%	75.0	21.3%	32.7	25.0%	879.1	14.5%
2	194.5	24.3%	224.7	23.4%	265.1	26.0%	302.2	25.5%	279.6	26.2%	155.4	27.6%	83.6	23.7%	39.7	30.3%	1 544.9	25.4%
3	181.3	22.6%	240.1	25.0%	222.1	21.8%	238.3	20.1%	215.5	20.2%	107.5	19.1%	63.2	17.9%	17.2	13.1%	1 285.2	21.1%
4	103.7	12.9%	100.3	10.4%	86.5	8.5%	112.0	9.5%	84.1	7.9%	36.0	6.4%	20.6	5.8%	9.5	7.3%	552.6	9.1%
5	117.1	14.6%	113.3	11.8%	109.4	10.7%	98.8	8.3%	84.1	7.9%	30.5	5.4%	24.3	6.9%	5.6	4.3%	583.1	9.6%
6 or more	122.4	15.3%	139.7	14.5%	119.3	11.7%	117.4	9.9%	95.6	9.0%	31.8	5.6%	15.9	4.5%	4.1	3.1%	646.3	10.6%
Total	801.6	100.0%	6 961.4	100.0%	51 021.2	100.0%	6 1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	o 352.7	100.0%	5 130.8	100.0%	6 080.2	100.0%
Mean	3.	.7	3.	.6	3.	2	2.	.9	2.	7	2.	.3	2.	2	2.	0	3.	0

Base: All respondents.

# 4.4.2 Financial Support

In terms of financial support, respondents were asked "if you need some extra help financially, for example, paying bills, rent, mortgage or hospital charges, could you count on anyone to help you?".

Overall, more than half (56.9%) of persons aged 15 or above considered that they could count on someone for financial support when extra help is needed, while 31.7% responded that they did not need help. Females (60.0%) and people in the 15-24 age group (70.5%) were more likely than their counterparts to give a positive response (Table 4.4.2a and Table 4.4.2b).

	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Yes	1 910.3	60.0%	1 549.8	53.5%	3 460.0	56.9%		
No	261.9	8.2%	315.9	10.9%	577.8	9.5%		
Don't need help	946.4	29.7%	983.1	34.0%	1 929.5	31.7%		
Don't know	66.4	2.1%	46.5	1.6%	112.9	1.9%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

## Table 4.4.2a: Availability of financial support when needed by gender

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

#### Table 4.4.2b: Availability of financial support when needed by age group

	15-	24	25-	-34	35-	-44	45-	-54	55-	64	65-	74	75-	84	85 or a	above	To	al
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes	565.1	70.5%	598.9	62.3%	576.8	56.5%	617.9	52.2%	569.0	53.4%	290.1	51.4%	172.9	49.0%	69.4	53.1%	3 460.0	56.9%
No	44.4	5.5%	64.5	6.7%	91.7	9.0%	136.9	11.6%	118.8	11.1%	62.3	11.0%	46.0	13.0%	13.1	10.0%	577.8	9.5%
Don't need help	182.7	22.8%	283.1	29.4%	333.9	32.7%	408.5	34.5%	362.2	34.0%	198.6	35.2%	118.8	33.7%	41.8	31.9%	1 929.5	31.7%
Don't know	9.4	1.2%	14.9	1.5%	18.7	1.8%	19.7	1.7%	15.5	1.5%	13.1	2.3%	15.0	4.3%	6.5	5.0%	112.9	1.9%
Total	801.6	100.0%	961.4	100.0%	51 021.2	100.0%	61 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

# 4.5 Suicidal Behaviour

Suicidal behaviour is considered as a manifestation of psychological disorder. Its manifestation ranges in degree from just thinking about ending one's life (suicidal ideation), through developing a plan to commit suicide, obtaining the means to do so and attempting to kill oneself (attempted suicide), to finally carrying out the act with a fatal outcome (completed suicide)<sup>8</sup>.

In the survey, information on suicidal behaviour was obtained from respondents by using a selfadministered questionnaire, including their thoughts of killing themselves and the number of times they had actually attempted suicide during the year preceding the survey and ever.

Overall, 1.2% of people aged 15 or above had thought about ending their own life during the year preceding the survey - the percentages were the same between females and males (both at 1.2%) (Table 4.5a).

	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Yes	39.3	1.2%	34.9	1.2%	74.2	1.2%		
No	3 145.7	98.8%	2 860.3	98.8%	6 006.0	98.8%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

 Table 4.5a: Proportion of population aged 15 or above who had thoughts of suicide during the year preceding the survey by gender

Base: All respondents.

Subgroup analysis by age showed that the percentage of having suicidal ideation during the year preceding the survey generally decreased with age. The prevalence of having had such thought was the highest at 2.6% for people aged 15-24, decreased to 0.6% for people aged 75-84, then slightly increased to 0.9% for those aged 85 or above (Table 4.5b).

 Table 4.5b: Proportion of population aged 15 or above who had thoughts of suicide during the year preceding the survey by age group

	15-	-24	25	-34	35-	-44	45-	54	55-	64	65	-74	75-	-84	85 or	above	To	tal
	No. of	0/2	No. of	0/2	No. of	0/2	No. of	0/2	No. of	9/-	No. of	0/2	No. of	0/_	No. of	0/_	No. of	9/-
	('000)	70	('000)	0 /0	('000)	70	('000)	70	('000)	70	('000)	/0	('000)	/0	('000)	70	('000)	70
Yes	21.0	2.6%	12.4	1.3%	12.8	1.3%	12.6	1.1%	8.0	0.7%	4.3	0.8%	2.0	0.6%	1.1	0.9%	74.2	1.2%
No	780.6	97.4%	949.0	98.7%	1 008.4	98.7%	1 170.4	98.9%	1 057.5	99.3%	559.7	99.2%	350.7	99.4%	129.7	99.1%	6 006.0	98.8%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

People aged 15 or above who had lower monthly household income were more likely to have suicidal ideation in the year preceding the survey than those who had higher monthly household income (Table 4.5c).

 Table 4.5c: Proportion of population aged 15 or above who had thoughts of suicide during the year preceding the survey by monthly household income

	Less \$5,0	than DOO	\$5,0 \$9,9	100- 999	\$10, \$19,	000- 999	\$20, \$29,	000- ,999	\$30, \$39,	000- 999	\$40, \$49,	000- 999	\$50, or n	000 Iore	То	tal
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%						
Yes	8.6	2.0%	6.9	1.9%	15.4	1.5%	15.1	1.2%	10.0	1.0%	8.9	1.3%	8.9	0.7%	73.6	1.2%
No	430.0	98.0%	364.8	98.1%	1 010.9	98.5%	1 225.0	98.8%	985.7	99.0%	675.4	98.7%	1 297.4	99.3%	5 989.1	98.8%
Total	438.6	100.0%	371.7	100.0%	1 026.2	100.0%	1 240.1	100.0%	995.6	100.0%	684.2	100.0%	1 306.3	100.0%	6 062.7	100.0%

Base: All respondents who had provided information on monthly household income.

Of the people aged 15 or above who had thought about ending their own life in the year preceding the survey, 8.9% had actually attempted suicide during this period, and 4.3% attempted more than once. Analysed by gender, more males (9.2%) than females (8.6%) who had suicidal ideation in the year preceding the survey had attempted suicide (Table 4.5d).

	Female		Male		Total			
_	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Yes	3.4	8.6%	3.2	9.2%	6.6	8.9%		
Once	1.9	4.8%	1.5	4.4%	3.4	4.6%		
Twice	1.0	2.5%	1.1	3.1%	2.0	2.8%		
Three times	-	-	-	-	-	-		
Four times or more	0.5	1.3%	0.6	1.7%	1.1	1.5%		
No	35.9	91.4%	31.7	90.8%	67.6	91.1%		
Total	39.3	100.0%	34.9	100.0%	74.2	100.0%		

 Table 4.5d: Proportion of population aged 15 or above who had actually attempted suicide during the year preceding the survey among those who had thought of suicide by gender

Base: All respondents who had thought of suicide in the year preceding the survey.

Note: Figures may not add up to the total due to rounding.

Among people aged 15 or above, 1.0% reported that they had ever attempted suicide before, and 0.4% had such attempt more than once. More females (1.2%) than males (0.8%) had ever attempted suicide before (Table 4.5e).

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	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Yes	39.7	1.2%	23.1	0.8%	62.8	1.0%		
Once	23.2	0.7%	14.4	0.5%	37.6	0.6%		
Twice	7.1	0.2%	6.6	0.2%	13.6	0.2%		
Three times	5.0	0.2%	0.4	<0.05%	5.4	0.1%		
Four times or more	4.4	0.1%	1.7	0.1%	6.1	0.1%		
No	3 145.3	98.8%	2 872.1	99.2%	6 017.4	99.0%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Base: All respondents.

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# Chapter 5

# Health-related Behaviours and Lifestyle Practices

Many diseases, especially chronic non-communicable diseases (NCDs), are attributable to various healthrelated behaviours and lifestyle practices. Many of these diseases share common behavioural risk factors, including smoking and harmful use of alcohol, physical inactivity and low fruit and vegetables intake. Apart from these behavioural risk factors, eating-out, which is common among Hong Kong people, may impose risks on individuals for developing nutritional-related chronic diseases. The burden of premature death, disease and disability due to NCD can be significantly reduced through positive changes in lifestyle practices. On the other hand, healthy lifestyle practices promote individual well-being, and substantially reduce healthcare burden of the community through risk reduction of cardiovascular diseases<sup>1</sup> and cancers<sup>2</sup>. This Chapter presents the findings on health-related behaviours and lifestyle practices including smoking habits, harmful use of alcohol, physical activities, diet and nutrition, the frequency of eating-out and use of certain drugs and health supplements in Hong Kong.

Indicator	Female	Male	Overall
Proportion of population who had ever smoked cigarette	10.8%	45.0%	27.1%
Proportion of daily alcohol drinkers	1.0%	5.2%	3.0%
Proportion of population who had binge drinking in the 12 months preceding the survey	3.9%	14.2%	9.6%
Proportion of population who were drinking at increased risk, harmful drinking or probable alcohol dependent (i.e. AUDIT total score $\geq 8$ ) in the 12 months preceding the survey	1.0%	6.2%	3.5%
Proportion of adults aged 18 or above who had insufficient physical activity according to WHO's definition	14.2%	11.6%	13.0%

# **Snapshot of Population's Health-related Behaviours and Lifestyle Practices**

Indicator	Female	Male	Overall
Proportion of population with inadequate daily intake of fruit and vegetables (less than 5 servings on average per day)	93.5%	95.4%	94.4%
Proportion of population consuming processed meat and associated products at least once per week	42.2%	51.3%	46.5%
Proportion of population using seasonings containing salt every time eating at table	2.3%	2.7%	2.5%
Proportion of domestic households using iodised salt	N.A.	N.A.	22.3%
Proportion of population eating-out for breakfast, lunch or dinner at least once a week	79.9%	88.9%	84.2%
Proportion of population taking health supplements in the month preceding the survey	19.4%	12.4%	16.1%

Note: 'N.A.' denotes 'Not applicable'.

## 5.1 Smoking Habits

Cigarette smoking causes a wide range of diseases, including various cancers, such as lung cancer, colorectal cancer and liver cancer. Smoking is a cause of cardiovascular diseases, including coronary heart disease, peripheral arterial disease and stroke. In addition to lung cancer, use of tobacco damages the breathing system and lung tissues, causing respiratory diseases such as chronic bronchitis, emphysema and chronic obstructive pulmonary disease<sup>3</sup>. Together with exposure to second-hand smoke, smoking causes six million deaths worldwide each year<sup>4</sup>. The following sections present survey findings on the pattern of smoking, intention and level of confidence to quit smoking.

## 5.1.1 Pattern of Smoking

Over a quarter (27.1%) of persons aged 15 or above reported that they had ever smoked cigarette (10.8% for females and 45.0% for males) (Table 5.1.1a). Analysed by age group, the proportion of persons who had ever smoked cigarette was the highest at 32.9% among persons aged 75-84 (Table 5.1.1b).

	Fem	nale	Ma	lle	Total		
Whether had ever smoked cigarette	No. of persons	%	No. of persons	%	No. of persons	%	
	('000)		('000)		('000)		
Yes	344.6	10.8%	1 303.8	45.0%	1 648.4	27.1%	
No	2 840.4	89.2%	1 591.4	55.0%	4 431.8	72.9%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	

Table 5.1.1a: Distribution of population aged 15 or above by whether had ever smoked cigarette and gender

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 5.1.1b	Distribution	of population	on aged 15	or above l	by whether <b>l</b>	had ever smol	ked cigarette and	l age group
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Whether	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
had ever smoked cigarette	No. of persons ('000)	5 %	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	s %	No. of persons ('000)	s %	No. of persons ('000)	s %	No. of persons ('000)	5 %	No. of persons ('000)	%
Yes	84.2	10.5%	256.1	26.6%	314.9	30.8%	351.5	29.7%	315.6	29.6%	176.0	31.2%	115.9	32.9%	34.2	26.1%	1 648.4	27.1%
No	717.4	89.5%	705.3	73.4%	706.3	69.2%	831.5	70.3%	749.9	70.4%	388.0	68.8%	236.8	67.1%	96.6	73.9%	4 431.8	72.9%
Total	801.6	100.0%	6 961.4	100.0%	1 021.2	100.0%	51 183.0	100.0%	51 065.5	100.0%	6 564.0	100.0%	352.7	100.0%	6 130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Analysed by age started smoking, 28.9% of persons who had ever smoked cigarette started smoking at age 20-24 and another 24.3% started smoking at age 18-19. Over one-third (35.5%) of persons who had ever smoked cigarette started smoking at age below 18 years old, including 6.8% started smoking at age younger than 14 years old (Table 5.1.1c).

	Fem	ale	M	ale	Total			
	No. of		No. of		No. of			
Age (years)	persons	%	persons	%	persons	%		
	('000)		('000)		('000)			
Below 14	19.2	5.6%	92.7	7.1%	111.8	6.8%		
14 - 15	39.1	11.3%	164.8	12.6%	204.0	12.4%		
16 - 17	57.1	16.6%	211.6	16.2%	268.7	16.3%		
18 - 19	83.1	24.1%	316.9	24.3%	400.0	24.3%		
20 - 24	97.1	28.2%	379.6	29.1%	476.7	28.9%		
25 or above	49.1	14.2%	137.6	10.6%	186.6	11.3%		
Refusal	-	-	0.6	<0.05%	0.6	<0.05%		
Total	344.6	100.0%	1 303.8	100.0%	1 648.4	100.0%		
Mean	19	.5	19	0.2	19	.3		

Table 5.1.1c: Age (years) of persons who had ever smoked cigarette when started smoking by gender

Base: The respondents who had ever smoked cigarette.

## 5.1.2 Persons who currently had habit of cigarette smoking

Among persons aged 15 or above who had ever smoked cigarette, 54.6% reported that they currently had habit of cigarette smoking at the time of survey (49.3% for females and 56.0% for males) (Table 5.1.2a). Analysed by age group, the proportion of persons who currently had habit of cigarette smoking among those who had ever smoked cigarette was the highest at 66.9% for those aged 35-44 and was the lowest at 13.8% for those aged 85 or above (Table 5.1.2b).

	Fem	ale	Ma	ıle	Total		
	No. of		No. of		No. of		
whether currently had habit of cigarette smoking	persons	%	persons	%	persons	%	
	('000)		('000)		('000)		
Yes	169.9	49.3%	730.4	56.0%	900.3	54.6%	
No	174.7	50.7%	573.4	44.0%	748.1	45.4%	
Total	344.6	100.0%	1 303.8	100.0%	1 648.4	100.0%	

# Table 5.1.2a: Distribution of population aged 15 or above who had ever smoked cigarette by whether currently had habit of cigarette smoking and gender

Base: All respondents who had ever smoked cigarette.

Note: Figures may not add up to the total due to rounding.

# Table 5.1.2b: Distribution of population aged 15 or above who had ever smoked cigarette by whether currently had smoking habit and age group

	15-24		4 25-34		35-44		45	45-54		55-64		65-74		75-84		85 or above		Total	
Whether currently	No. of		No. of																
of cigarette smoking	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	s %	persons	5 %	persons	%	persons	%	
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		
Yes	54.8	65.0%	163.2	63.7%	210.6	66.9%	211.5	60.2%	163.2	51.7%	67.2	38.2%	25.2	21.8%	4.7	13.8%	900.3	54.6%	
No	29.5	35.0%	92.9	36.3%	104.4	33.1%	140.0	39.8%	152.5	48.3%	108.8	61.8%	90.6	78.2%	29.5	86.2%	748.1	45.4%	
Total	84.2	100.0%	6 256.1	100.0%	314.9	100.0%	351.5	100.0%	315.6	100.0%	6 176.0	100.0%	5 115.9	100.0%	ó 34.2	100.0%	648.4	100.0%	

Base: All respondents who had ever smoked cigarette.

In the survey, persons aged 15 or above who currently had a habit of cigarette smoking were asked about their intention to quit smoking and their level of confidence in quitting smoking. Among persons who currently had habit of cigarette smoking, 21.1% had stopped smoking for one day or longer during the 12 months preceding the survey because of their intention to quit smoking (23.4% for females and 20.6% for males) (Table 5.1.2c).

	Fem	ale	Ma	le	Total		
Whether had stopped smoking for one day or longer during the 12 months	No. of		No. of		No. of		
preceding the survey	persons ('000)	%	persons ('000)	%	persons ('000)	%	
	(000)	22.40/	150.4	20 (0/	100.1	21.10/	
res	39.7	23.4%	150.4	20.6%	190.1	21.1%	
No	130.2	76.6%	580.0	79.4%	710.2	78.9%	
Total	169.9	100.0%	730.4	100.0%	900.3	100.0%	

 Table 5.1.2c: Proportion of persons who currently had habit of cigarette smoking by whether had stopped smoking for one day or longer during the 12 months preceding the survey and gender

Base: All respondents who currently had habit of cigarette smoking at the time of survey.

Note: Figures may not add up to the total due to rounding.

As regards their plan for quitting smoking, 11.6% of persons who currently had habit of cigarette smoking had seriously planned to quit smoking in the one month following this survey, another 8.3% had seriously planned to quit smoking in the two to six months after the survey, while 80.1% had no plan to quit smoking at all. Analysed by gender, females who currently had habit of cigarette smoking were more likely than their male counterparts to have seriously planned to quit smoking. While 26.5% of females who currently had habit of cigarette smoking had planned to quit smoking in the six months after the survey, only 18.3% of their male counterparts had planned to do so (Table 5.1.2d).

 Table 5.1.2d: Proportion of persons who currently had habit of cigarette smoking by whether had seriously planned to quit smoking in six months after the survey and gender

	Fen	nale	Ma	ale	Total		
Whether had seriously planned to quit	No. of		No. of		No. of		
smoking in six months after the survey	persons	%	persons	%	persons	%	
	('000)		('000)		('000)		
Yes	45.1	26.5%	133.9	18.3%	178.9	19.9%	
In one month after the survey	26.6	15.6%	77.6	10.6%	104.2	11.6%	
In two to six months after the survey	18.5	10.9%	56.2	7.7%	74.7	8.3%	
No	124.8	73.5%	596.5	81.7%	721.4	80.1%	
Total	169.9	100.0%	730.4	100.0%	900.3	100.0%	

Base: All respondents who currently had habit of cigarette smoking at the time of survey.

Persons who currently had habit of cigarette smoking and had seriously considered quitting smoking were asked to indicate their confidence in quitting smoking successfully in the future using a scale from 0 to 10, where 0 indicated the least confident and 10 represented the most confident. Among these smokers, over one-third (37.2%) reported that they were fairly confident (score 7 or above) in quitting smoking successfully in the future, while 3.4% were not confident at all in doing so. While more females among these smokers (39.0%) considered themselves fairly confident in quitting smoking successfully in the future than their male counterparts (36.5%), at the same time these female smokers (5.5%) were more likely to report that they had no confidence at all in quitting smoking than male smokers (2.6%). Analysed by age group, among these smokers, those aged 25-34 (45.7%) had the highest proportion of being fairly confident in quitting smoking successfully in the future, while the proportion among those aged 35-44 (31.0%) was the lowest (Table 5.1.2e and Table 5.1.2f).

	Fem	ale	Ma	le	Tot	tal
	No. of		No. of		No. of	
	persons	%	persons	%	persons	%
	('000)		('000)		('000)	
0	2.5	5.5%	3.5	2.6%	6.0	3.4%
1 - 2	1.5	3.4%	2.2	1.7%	3.8	2.1%
3 - 4	4.4	9.7%	14.3	10.7%	18.6	10.4%
5 - 6	18.6	41.2%	60.4	45.1%	79.0	44.2%
7 - 8	11.4	25.2%	33.0	24.7%	44.4	24.8%
9 - 10	6.2	13.8%	15.9	11.9%	22.1	12.4%
Don't know	0.5	1.1%	4.5	3.4%	5.0	2.8%
Total	45.1	100.0%	133.9	100.0%	178.9	100.0%
Mean*	5.	8	6.	0	5.	9

Table 5.1.2e: Level of confidence in quitting smoking successfully in the future by gender

Bases: Respondents who currently had habit of cigarette smoking and had seriously planned to quit smoking in the six months after the survey.

\* Respondents who currently had habit of cigarette smoking and had seriously planned to quit smoking in the six months after the survey with valid answer on the level of confidence on quitting smoking successfully in the future.

Notes: The level of confidence on quitting smoking increases from 0 (the least confident) to 10 (the most confident). Figures may not add up to the total due to rounding.

Table	5.1	.2f:	Level	of	confidence	in	auitting	smoking	successfull	v ir	ı the	future	bv	age g	roup
- and			10.01		comfactice	***	quitting	SHICHNE	buccobbian	, <u> </u>		Lavare	~ .		- oup

	15-24		25	-34	35.	-44	45-	-54	55	-64	65-	-74	75	-84	85 or	above	To	otal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	s %	person	s %	persons	s %	person	s %	persons	5 %								
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
0	-	-	2.1	5.2%	1.5	3.2%	0.5	1.3%	1.9	7.8%	-	-	-	-	-	-	6.0	3.4%
1 - 2	0.4	3.5%	-	-	1.2	2.5%	1.6	3.9%	0.6	2.5%	-	-	-	-	-	-	3.8	2.1%
3 - 4	1.1	8.4%	3.3	8.2%	4.7	9.8%	3.7	9.1%	4.0	16.5%	1.6	14.2%	-	-	0.3	100.0%	18.6	10.4%
5 - 6	6.6	52.2%	14.8	37.1%	25.4	53.5%	18.3	45.0%	7.2	29.5%	5.7	52.0%	0.9	38.8%	, -	-	79.0	44.2%
7 - 8	3.0	23.9%	11.6	29.1%	9.3	19.7%	8.9	21.9%	7.8	32.2%	3.1	28.5%	0.5	20.2%	) -	-	44.4	24.8%
9 - 10	1.5	11.9%	6.6	16.6%	5.4	11.4%	6.2	15.2%	1.4	5.7%	0.6	5.4%	0.4	18.1%	) -	-	22.1	12.4%
Don't know	-	-	1.5	3.8%	-	-	1.5	3.7%	1.5	6.0%	-	-	0.6	22.9%	, -	-	5.0	2.8%
Total	12.6	100.0%	39.8	100.0%	6 47.6	100.0%	6 40.7	100.0%	ó 24.4	100.0%	6 11.0	100.0%	ó 2.4	100.0%	6 0.3	100.0%	178.9	100.0%
Mean*	6	.0	6	5.2	5	.7	6.	.1	5	.6	5	.8	6	.7	i	#	5	.9

Bases:

Respondents who currently had habit of cigarette smoking and had seriously planned to quit smoking in the six months after the survey. \* Respondents who currently had habit of cigarette smoking and had seriously planned to quit smoking in the six months after the survey with valid answer on the level of confidence on quitting smoking successfully in the future. Notes: The level of confidence on quitting smoking increases from 0 (the least confident) to 10 (the most confident).

# The summary statistics are not shown due to statistical consideration.

# 5.1.3 Ex-smokers

Ex-smokers are respondents who had habit of cigarette smoking previously but already quit at the time of survey. Among ex-smokers aged 15 or above, the main reasons for quitting smoking were "for own personal health" (88.1%), "for family members' health" (32.3%), "advised by family members or friends" (6.8%), "advised by health care professionals" (4.6%), and "cigarettes or other tobacco products are expensive" (4.1%) (Table 5.1.3).

	Female		Male		Total		
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
For own personal health	151.5	86.7%	507.8	88.6%	659.3	88.1%	
For family members' health	50.9	29.1%	190.7	33.3%	241.6	32.3%	
Advised by family members or friends	10.4	5.9%	40.7	7.1%	51.1	6.8%	
Advised by health care professionals	3.5	2.0%	30.6	5.3%	34.1	4.6%	
Cigarettes or other tobacco products are expensive	7.4	4.2%	23.5	4.1%	30.9	4.1%	
Providing a good example to children	6.7	3.8%	5.4	0.9%	12.1	1.6%	
Smoking is a socially undesirable habit	-	-	6.9	1.2%	6.9	0.9%	
Do not want to smoke, no particular reason	1.1	0.6%	4.7	0.8%	5.8	0.8%	
Smoking is banned in many public places	1.8	1.0%	3.2	0.6%	5.0	0.7%	
Only social smoking, already quit	-	-	1.2	0.2%	1.2	0.2%	
Smoking in office or workplace is prohibited	-	-	1.0	0.2%	1.0	0.1%	
Mood has improved or no need to smoke to reduce stress	0.6	0.3%	-	-	0.6	0.1%	
For religious reason	0.5	0.3%	-	-	0.5	0.1%	

## Table 5.1.3: Reasons for quitting smoking by gender

Base: Respondents who had habit of cigarette smoking previously but already quit at the time of survey.

Notes: Ranked in descending order of the percentages of the reasons for quitting smoking reported by the respondents.

Multiple answers were allowed.

# 5.2 Alcohol Consumption

The harmful use of alcohol is a causal factor in more than 200 diseases and injury conditions. Consuming too much alcohol, either on a single episode or on a regular basis over a period of time, is associated with increased risk of cardiovascular diseases, liver cirrhosis, some cancers, injuries and mental disorders in a dose dependent manner <sup>5</sup>. Binge drinking, defined as the consumption of five or more portions of alcohol drinks (i.e. drinking at least 5 cans of beer, 5 glasses of table wines or 5 pegs of spirits) on one occasion, is particularly hazardous. Apart from physical health problems that could be caused by drinking alcohol, harmful use of alcohol is associated with a risk of developing behavioural health problems including alcohol dependence. The PHS assessed the pattern of alcohol consumption, the frequency of binge drinking or heavy episodic drinking and the risk of drinking problems among persons aged 15 or above in Hong Kong.

# 5.2.1 Pattern of Alcohol Consumption

Overall, around half (50.4%) of the population aged 15 or above drank alcoholic beverages occasionally (i.e. drank in three days or less a month) and 11.1% drank regularly (i.e. drank at least once a week) in the 12 months preceding the survey. On the other hand, 21.8% of persons aged 15 or above had never consumed alcohol and 16.7% had not consumed alcohol in the 12 months preceding the survey. Analysed by gender, more females (28.7%) than males (14.3%) aged 15 or above reported to have never been a drinker. In contrast, significantly more males (17.3%) than females (5.4%) reported to be regular drinkers (Table 5.2.1a).
	Fen	nale	Ma	ale	Total		
	No. of		No. of		No. of		
	persons	%	persons	%	persons	%	
	('000)		('000)		('000)		
Never	913.1	28.7%	414.6	14.3%	1 327.7	21.8%	
Not in the past year	598.8	18.8%	418.0	14.4%	1 016.8	16.7%	
Drink alcohol occasionally	1 501.5	47.1%	1 562.2	54.0%	3 063.8	50.4%	
Drink less than once a month	1 212.6	38.1%	1 065.5	36.8%	2 278.1	37.5%	
Drink 1 day a month	182.6	5.7%	284.3	9.8%	466.9	7.7%	
Drink 2 - 3 days a month	106.3	3.3%	212.4	7.3%	318.7	5.2%	
Drink alcohol regularly	171.6	5.4%	500.3	17.3%	671.9	11.1%	
Drink 1 day a week	81.6	2.6%	179.9	6.2%	261.6	4.3%	
Drink 2 - 3 days a week	50.8	1.6%	131.7	4.5%	182.5	3.0%	
Drink 4 - 6 days a week	8.3	0.3%	38.6	1.3%	46.9	0.8%	
Drink everyday	30.8	1.0%	150.1	5.2%	180.9	3.0%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	

## Table 5.2.1a: Pattern of alcohol consumption in the 12 months preceding the survey by gender

Base:

All respondents. Figures may not add up to the total due to rounding. Note:

The proportion of persons who had never drunk alcoholic beverages were the lowest at 12.8% among those in the 25-34 age group and increased steadily with age to the highest at 47.2% among elder persons aged 85 or above. The proportions of regular drinkers were relatively lower at 4.4% among the young (i.e. aged 15-24) and at 3.9% among the old (i.e. aged 85 or above), and was the highest at 13.6% among the middle age group 45-54 (Table 5.2.1b).

15-24 25-34 35-44 45-54 55-64 65-74 75-84 85 or above Total No. of persons % ('000) ('000) ('000) ('000) ('000) ('000) ('000) ('000) ('000) Never 252.1 31.5% 122.9 12.8% 151.9 14.9% 210.3 17.8% 240.4 22.6% 153.6 27.2% 134.6 38.2% 61.8 47.2% 1 327.7 21.8% Not in the 81.8 10.2% 125.1 13.0% 165.5 16.2% 202.5 17.1% 186.0 17.5% 128.9 22.9% 87.5 24.8% 39.6 30.2% 1 016.8 16.7% past year Drink alcohol 432.1 53.9% 598.4 62.2% 573.0 56.1% 609.2 51.5% 504.5 47.3% 221.8 39.3% 100.4 28.5% 24.318.6% 3 063.8 50.4% occasionally Drink less 452.5 38.2% 395.8 37.1% 318.2 39.7% 410 3 42.7% 407.1 39.9% 183.6 32.6% 88.5 25.1% 22.1 16.9% 2.278 1 37.5% than once a month Drink 1 day 2.1% 0.9 70.6 8.8% 109.9 11.4% 100.7 9.9% 5.5% 3.9% 0.7% 7.7% 96.48.1% 591 22.17.3 466.9 a month Drink 2 - 3 days a 433 5.4% 78.2 8.1% 65.2 6.4% 60.4 5.1% 49.7 4.7% 16.1 2.9% 4.51.3% 1.3 1.0% 318.7 5.2% month Drink alcohol 35.5 115.0 12.0% 130.8 12.8% 161.0 13.6% 134.6 12.6% 10.6% 30.2 8.6% 3.9% 671.9 11.1% 4.4% 59.7 5.1 regularly Drink 1 day 19.1 2.4% 64.6 6.7% 56.6 5.5% 57.9 4.9% 41.6 3.9% 15.7 2.8% 3.7 1.0% 2.41.9% 261.6 4.3% a week Drink 2 - 3 10.6 1.3% 33.4 3.5% 43.1 4.2% 45.2 3.8% 29.6 2.8% 12.8 2.3% 7.0 2.0% 0.7 0.5% 182.5 3.0% davs a week Drink 4 - 6 2.1 0.3% 7.9 0.8% 7.6 0.7% 13.8 1.2% 10.3 1.0% 3.7 0.7% 1.6 0.4%46.9 0.8% days a week Drink 3.7 0.5% 9.1 0.9% 23.5 2.3% 44.1 3.7% 53.1 5.0% 27.5 4.9% 17.9 5.1% 2.01.5% 180.9 3.0% everyda<u>y</u> Total 801.6 100.0% 961.4 100.0% 1 021.2 100.0% 1 183.0 100.0% 1 065.5 100.0% 564.0 100.0% 352.7 100.0% 130.8 100.0% 6 080.2 100.0% Base: All respondents.

Table 5.2.1b: Pattern of alcohol consumption in the 12 months preceding the survey by age group

Among persons aged 15 or above who had ever drunk alcoholic beverages and provided information on their age when started drinking, the mean age when they started drinking was 20.3 years and 21.4% started drinking at age before 18 years old. Males tended to start drinking at an earlier age (mean 19.3 years) than females (mean 21.4 years). Analysed by age group, the mean starting age generally increased with age from 16.8 for drinkers aged 15-24 to 23.8 for those aged 75-84 and then decreased slightly to 22.0 for drinkers aged 85 or above (Table 5.2.1c and Table 5.2.1d).

	Fen	nale	Ma	ale	Total		
	No. of		No. of		No. of		
Age started drinking (years)	persons	%	persons	%	persons	%	
	('000)		('000)		('000)		
Below 16	187.8	8.3%	293.5	11.8%	481.3	10.1%	
16 - 17	193.0	8.5%	342.1	13.8%	535.1	11.3%	
18 - 19	631.8	27.8%	842.3	34.0%	1 474.1	31.0%	
20 - 21	634.4	28.0%	608.6	24.5%	1 243.0	26.2%	
22 - 24	143.4	6.3%	119.9	4.8%	263.3	5.5%	
25 or above	478.9	21.1%	273.6	11.0%	752.5	15.8%	
Total	2 269.2	100.0%	2 480.0	100.0%	4 749.3	100.0%	
Mean	21	.4	19	.3	20	.3	

Table 5.2.1c: Age (years) when started drinking by gender

Base: The respondents who had ever drunk alcohol and had provided information on their age when started drinking.

Note: Figures may not add up to the total due to rounding.

Т٤	able	5.2	.1d:	Age	(vears)	when	started	drinking	bv	age	group	)
					()							

	15	15-24		25-34		35-44		45-54		55-64		-74	75-	84	85 or :	above	То	tal
Age started	No. of		No. of															
drinking (vears)	persons	s %	persons	· %	persons	%	persons	%	persons	s %	persons	%	persons	%	persons	%	persons	%
( <b>j eu</b> 15)	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Below 16	138.5	25.2%	77.8	9.3%	59.0	6.8%	76.1	7.8%	73.5	8.9%	29.7	7.2%	18.9	8.7%	7.8	11.3%	481.3	10.1%
16 - 17	145.8	26.5%	115.1	13.7%	89.4	10.3%	75.6	7.8%	53.8	6.5%	34.1	8.3%	15.4	7.1%	5.9	8.6%	535.1	11.3%
18 - 19	207.0	37.7%	333.5	39.8%	293.1	33.7%	274.1	28.2%	221.0	26.8%	86.3	21.1%	49.1	22.5%	10.0	14.6%	1 474.1	31.0%
20 - 21	53.8	9.8%	205.0	24.5%	260.6	30.0%	278.7	28.7%	229.4	27.8%	132.3	32.3%	59.7	27.4%	23.5	34.0%	1 243.0	26.2%
22 - 24	4.3	0.8%	60.0	7.2%	47.2	5.4%	71.0	7.3%	43.6	5.3%	24.7	6.0%	7.8	3.6%	4.6	6.6%	263.3	5.5%
25 or above	-	-	46.6	5.6%	119.4	13.7%	196.2	20.2%	203.7	24.7%	102.2	25.0%	67.3	30.8%	17.1	24.8%	752.5	15.8%
Total	549.5	100.0%	6 837.9	100.0%	6 868.7	100.0%	971.7	100.0%	825.1	100.0%	6 409.3	100.0%	218.1	100.0%	69.0	100.0%	6 4 749.3	100.0%
Mean	16	5.8	18	8.7	19	9.8	21	.0	22	2.0	22	.4	23	.8	22	.0	20	0.3

Base: The respondents who had ever drunk alcohol and had provided information on their age when started drinking.

Regarding the type of alcohol consumed, among persons who had drunk alcoholic beverages in the 12 months preceding the survey, most persons drank beer (71.1%), followed by table wines (55.2%). Analysed by gender, significantly more male drinkers (81.6%) had drunk beer in the 12 months preceding the survey than their female counterparts (58.3%). In contrast, more female drinkers (60.3%) had drunk table wines than male drinkers (51.0%) (Table 5.2.1e). While beer was the most popular choice among drinkers in all age groups, the proportion of drinkers who had drunk beer in the 12 months preceding the survey decreased with age from 79.5% for those aged 15-24 to 48.8% for those aged 75-84, and then bounced back to 60.7% for persons aged 85 or above. Table wines was the second most popular choice of alcoholic beverages and was relatively more popular among drinkers in the middle age groups 25-64 when compared to drinkers in other age groups (Table 5.2.1f).

Table 5.2.1e: Type of alcoho	l consumed in the 12 months	preceding the survey	by gender
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	Fema	ale	Ma	le	Total		
	No. of		No. of		No. of		
	persons	%	persons	%	persons	%	
	('000)		('000)		('000)		
Beer, table wines, spirits or Chinese rice wines	1 570.4	93.9%	2 015.2	97.7%	3 585.7	96.0%	
Beer	975.5	58.3%	1 682.3	81.6%	2 657.8	71.1%	
Table wines	1 009.3	60.3%	1 051.6	51.0%	2 060.9	55.2%	
Spirits	133.6	8.0%	322.3	15.6%	455.9	12.2%	
Chinese rice wines	139.7	8.4%	151.6	7.4%	291.3	7.8%	
Others*	102.7	6.1%	47.3	2.3%	150.0	4.0%	

Base: The respondents who had drunk alcohol in the 12 months preceding the survey.

Notes: \* The respondents who had drunk alcohol in the 12 months preceding the survey but had not drunk the four types of alcoholic beverages mentioned above. Multiple answers were allowed.

Figures may not add up to the total due to rounding.

### Table 5.2.1f: Type of alcohol consumed in the 12 months preceding the survey by age group

	15-24		25-	25-34		35-44		45-54		55-64		65-74		84	85 or above		ve Total	
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	s %	persons	s %	persons	s %	persons	%	persons	s %	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Beer, table wines, spirits or Chinese rice wines	428.9	91.7%	693.5	97.2%	687.4	97.7%	5 744.4	96.7%	621.0	97.2%	6 264.6	94.0%	5 121.1	92.7%	24.7	84.0%	3 585.7	96.0%
Beer	371.7	79.5%	550.8	77.2%	509.0	72.3%	538.4	69.9%	<i>434</i> .8	68.0%	6 171.6	61.0%	63.7	48.8%	5 17.9	60.7%	2 657.8	71.1%
Table wines	160.7	34.4%	6 426.4	59.8%	424.7	60.3%	6 462.1	60.0%	5 371.1	58.1%	6 149.2	53.0%	60.2	46.1%	6.4	21.9%	2 060.9	55.2%
Spirits	81.9	17.5%	6 114.3	16.0%	76.6	10.9%	5 73.2	9.5%	59.2	9.3%	30.8	10.9%	6 16.0	12.3%	<i>3.8</i>	13.0%	455.9	12.2%
Chinese rice wines	26.4	5.6%	65.8	9.2%	59.4	8.4%	56.8	7.4%	40.6	6.4%	26.5	9.4%	14.7	11.3%	5 1.0	3.5%	291.3	7.8%
Others*	38.8	8.3%	19.9	2.8%	16.4	2.3%	25.7	3.3%	18.1	2.8%	16.9	6.0%	9.5	7.3%	4.7	16.0%	150.0	4.0%

Base: The respondents who had drunk alcohol in the 12 months preceding the survey.

Notes: \* The respondents who had drunk alcohol in the 12 months preceding the survey but had not drunk the four types of alcoholic beverages mentioned above. Multiple answers were allowed.

The average amount of alcohol consumed by the drinkers in a typical drinking day in the 12 months preceding the survey was 1.9 alcohol units (each unit is equivalent to 10 grams) for beer, 1.6 alcohol units for table wines, 2.1 alcohol units for spirits, 2.4 alcohol units for Chinese rice wines and 2.7 alcohol units for all four types of alcoholic beverages combined. Among persons who had drunk these four types of alcoholic beverages in the 12 months preceding the survey, male drinkers had drunk significantly larger amount in terms of units of alcohol in a typical drinking day than female drinkers. The average amount drank in one day by male drinkers was 3.1 alcohol units, higher than the average of 2.2 alcohol units recorded for female drinkers (Table 5.2.1g). Analysed by age group, the average amount of alcohol units for the four types of alcoholic beverages as a whole drunk in one day decreased with age from 3.2 alcohol units for drinkers aged 25-34 to 1.8 alcohol units for drinkers aged 75 or above (Table 5.2.1h).

 Table 5.2.1g: Average amount of alcohol (number of units of alcohol) usually consumed in one day on typical drinking days in the 12 months preceding the survey by gender

	Female	Male	Total
Beer *	1.5	2.1	1.9
Table wines <sup>#</sup>	1.4	1.7	1.6
Spirits	2.0	2.1	2.1
Chinese rice wines $^{\dagger}$	2.3	2.6	2.4
Total <sup>‡</sup>	2.2	3.1	2.7

Bases: \* The respondents who had drunk beer in the 12 months preceding the survey.

# The respondents who had drunk table wines in the 12 months preceding the survey.

^ The respondents who had drunk spirits in the 12 months preceding the survey.

<sup>†</sup> The respondents who had drunk Chinese rice wines in the 12 months preceding the survey.

The respondents who had drunk beer, table wines, spirits or Chinese rice wines in the 12 months preceding the survey.

 Table 5.2.1h: Average amount of alcohol (number of units of alcohol) usually consumed in one day on typical drinking days in the 12 months preceding the survey by age group

										_
	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 or above	Total	
Beer *	2.1	2.0	1.9	1.9	1.7	1.6	1.5	1.6	1.9	
Table wines #	1.7	1.6	1.6	1.5	1.4	1.4	1.3	1.2	1.6	
Spirits ^	2.8	2.2	2.2	1.9	1.5	1.2	1.2	1.1	2.1	
Chinese rice wines $^{\dagger}$	2.0	2.4	2.9	2.8	2.0	1.7	2.0	2.7	2.4	
Total ‡	3.1	3.2	2.9	2.7	2.3	2.1	1.8	1.8	2.7	

Bases: \* The respondents who had drunk beer in the 12 months preceding the survey.

# The respondents who had drunk table wines in the 12 months preceding the survey.

^ The respondents who had drunk spirits in the 12 months preceding the survey.

\* The respondents who had drunk Chinese rice wines in the 12 months preceding the survey.

The respondents who had drunk beer, table wines, spirits or Chinese rice wines in the 12 months preceding the survey.

### 5.2.2 Binge Drinking / Heavy Episodic Drinking

Binge drinking, which is also called heavy episodic drinking, is one of the most important indicators for acute consequences of alcohol use, such as injuries. In this survey, binge drinking was defined as drinking at least 5 cans of beer, 5 glasses of table wines or 5 pegs of spirits on a single occasion. Respondents were asked how often they had such experience in the 12 months preceding the survey.

Among persons aged 15 or above who had a drink containing alcohol in the 12 months preceding the survey, 9.6% had binge drinking during this period. The corresponding proportion was significantly higher among males (14.2%) than among females (3.9%). The prevalence of binge drinking at least monthly among persons aged 15 or above was 2.2% (0.5% for females and 4.1% for males). Analysed by age group, the proportions of binge drinkers in the 12 months preceding the survey decreased with increasing age from 12.9% among drinkers aged 15-34 to 1.7% for those aged 75-84, and then increased slightly to 2.7% for those aged 85 or above (Table 5.2.2a and Table 5.2.2b).

	Fem	ale	Ma	ıle	Total			
	No. of		No. of		No. of			
	persons	%	persons	%	persons	%		
	('000)		('000)		('000)			
Ever in 12 months preceding the survey	65.0	3.9%	292.5	14.2%	357.5	9.6%		
Less than monthly	48.0	2.9%	174.8	8.5%	222.9	6.0%		
Monthly	8.6	0.5%	66.4	3.2%	75.0	2.0%		
Weekly	4.9	0.3%	38.8	1.9%	43.7	1.2%		
Daily or almost daily	3.5	0.2%	12.5	0.6%	16.0	0.4%		
Prevalence of binge drinking at least monthly*	N.A.	0.5%	N.A.	4.1%	N.A.	2.2%		
Never in the 12 months preceding the survey	1 608.1	96.1%	1 770.0	85.8%	3 378.1	90.4%		
Total	1 673.1	100.0%	2 062.6	100.0%	3 735.7	100.0%		

Table 5.2.2a: Frequency of binge drinking<sup>#</sup> in the 12 months preceding the survey by gender

Base: All respondents who had a drink containing alcohol in the past 12 months preceding the survey.

Notes: # Binge drinking: Drinking at least 5 cans of beer, 5 glasses of table wines or 5 pegs of spirits on one occasion.

\* Prevalence of binge drinking at least monthly was calculated by dividing the number of persons who had binge drinking at least once a month by the estimate of population aged 15 or above of respective age / gender subgroup and expressed as a percentage.

'N.A.' denotes 'Not applicable'.

	15	-24	25-	-34	35	-44	45	-54	55	-64	65	-74	75-	-84	85 or	above	То	tal
	No. of	5 %	No. of	%	No. of persons	5 %	No. of persons	5 %	No. of persons	5 %	No. of persons	5 %	No. of persons	%	No. of persons	s %	No. of persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Ever in past 12 months	60.1	12.9%	92.1	12.9%	74.7	10.6%	71.2	9.3%	41.2	6.5%	15.1	5.4%	2.2	1.7%	0.8	2.7%	357.5	9.6%
Less than monthly	46.1	9.9%	64.5	9.0%	44.8	6.4%	34.7	4.5%	21.2	3.3%	9.4	3.3%	1.8	1.4%	0.3	1.2%	222.9	6.0%
Monthly	10.1	2.2%	18.5	2.6%	20.1	2.9%	16.0	2.1%	8.5	1.3%	1.4	0.5%	-	-	0.4	1.5%	75.0	2.0%
Weekly	2.9	0.6%	8.5	1.2%	7.9	1.1%	13.3	1.7%	7.2	1.1%	3.9	1.4%	-	-	-	-	43.7	1.2%
Daily or almost daily	1.0	0.2%	0.7	0.1%	1.9	0.3%	7.2	0.9%	4.3	0.7%	0.4	0.1%	0.4	0.3%	-	-	16.0	0.4%
Prevalence of binge drinking at least monthly*	N.A.	1.7%	N.A.	2.9%	N.A.	2.9%	N.A.	3.1%	N.A.	1.9%	N.A.	1.0%	N.A.	0.1%	N.A.	0.3%	N.A.	2.2%
Never in past 12 months	407.5	87.1%	621.3	87.1%	629.1	89.4%	698.9	90.7%	597.8	93.5%	266.4	94.6%	128.4	98.3%	28.7	97.3%	3 378.1	90.4%
Total	467.7	100.0%	5 713.4	100.0%	703.8	100.0%	770.2	100.0%	639.1	100.0%	281.5	100.0%	5 130.6	100.0%	5 29.4	100.0%	3 735.7	100.0%

Table 5.2.2b: Frequency of binge drinking<sup>#</sup> in the 12 months preceding the survey by age group

Base:

Notes:

All respondents who had a drink containing alcohol in the past 12 months preceding the survey. # Binge drinking: Drinking at least 5 cans of beer, 5 glasses of table wines or 5 pegs of spirits on one occasion. \* Prevalence of binge drinking at least monthly was calculated by dividing the number of persons who had binge drinking at least once a month by the estimate of population aged 15 or above of respective age / gender subgroup and expressed as a percentage.

'N.A.' denotes 'Not applicable'. Figures may not add up to the total due to rounding.

### 5.2.3 Risk for Drinking Problems

The Alcohol Use Disorders Identification Test (AUDIT) was developed as a simple tool of screening for excessive drinking and to assist in brief intervention in primary care setting <sup>6</sup>. The instrument consists of ten questions in which the first three are related to drinking behaviour and the remaining questions identify alcohol dependence and some specific consequences of harmful drinking. In some studies, the first three questions on drinking behaviour were proposed as a pre-screening test for harmful use of alcohol that calls AUDIT-C. The item score of each question ranges from 0 to 4. The AUDIT score that is the sum of all ten item scores ranges from 0 to 40, with a higher score indicating a higher risk of harmful drinking. An AUDIT score of 0-7 indicates no or low-risk drinking, 8-15 indicates increasing risk, 16-19 indicates harmful drinking and 20 or higher indicates probable alcohol dependence.

In the survey, the AUDIT was used to collect respondents' drinking behaviour and related problems during the 12 months preceding the survey to screen for those at risk of harmful drinking. Apart from the AUDIT score, the pre-screening AUDIT-C score that is the sum of the first three item scores was also reported in this survey. The AUDIT-C score ranges from 0 to 12. In primary care setting, drinkers with an AUDIT-C score of 3 or higher are recommended to continue to complete the remaining questions of the AUDIT in order to identify their risk levels and provide appropriate interventions with follow-up.

Overall, 16.8% of persons aged 15 or above had a pre-screening AUDIT-C score of 3 or above (8.2% for females and 26.2% for males). Analysed by age group, the proportion of persons with AUDIT-C score of 3 or above generally decreased with increasing age from 23.7% for those aged 25-34 to 2.4% for those aged 85 or above (Table 5.2.3a and Table 5.2.3b).

### Table 5.2.3a: Distribution of AUDIT-C score by gender

	Fem	nale	Ma	le	Total		
	No. of		No. of		No. of		
Score	persons ('000)	%	persons ('000)	%	persons ('000)	%	
0 - 2*	2 924.6	91.8%	2 135.8	73.8%	5 060.4	83.2%	
3 or above	260.4	8.2%	759.4	26.2%	1 019.8	16.8%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	

Base: All respondents.

Notes: \* Respondents who had not consumed any alcoholic beverages in the 12 months preceding the survey were assigned a score of 0 in AUDIT-C score. Figures may not add up to the total due to rounding.

Table 5.2.3b: Distri	bution of A	AUDIT-C	score b	y age	group
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	15	-24	25-	-34	35-	-44	45-	-54	55-	64	65	-74	75-	84	85 or	above	То	tal
0	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
Score	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
0 - 2*	685.2	85.5%	733.1	76.3%	822.3	80.5%	974.1	82.3%	895.4	84.0%	498.8	88.4%	323.8	91.8%	127.7	97.6%	5 060.4	83.2%
3 or above	116.4	14.5%	228.3	23.7%	198.9	19.5%	208.9	17.7%	170.1	16.0%	65.2	11.6%	28.9	8.2%	3.1	2.4%	1 019.8	16.8%
Total	801.6	100.0%	6 961.4	100.0%	021.2	100.0%	. 1 183.0	100.0%	5 1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Notes: \* Respondents who had not consumed any alcoholic beverages in the 12 months preceding the survey were assigned a score 0 in AUDIT-C score.

As regards the AUDIT score, 3.5% of persons aged 15 or above had an AUDIT score of 8 or above, indicating drinking at increased risk, harmful drinking or probable alcohol dependence, while 96.5% had an AUDIT score below 8, indicating that they were either not drinking or were drinking at lower-risk, in the 12 months preceding the survey. More male drinkers (6.2%) were at increased risk of harmful drinking or had more severe drinking problems than their female counterparts (1.0%) (Table 5.2.3c). Analysed by age group, more persons aged 45-54 (4.4%) were drinking at increased risk with an AUDIT score of 8 or above than those in other age groups (Table 5.2.3d).

	Fen	nale	Ma	ale	То	tal
Score	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
0 - 7*	3 151.9	99.0%	2 715.8	93.8%	5 867.7	96.5%
8 - 15	29.5	0.9%	157.3	5.4%	186.8	3.1%
16 - 19	1.4	<0.05%	12.8	0.4%	14.2	0.2%
20 - 40	2.2	0.1%	9.3	0.3%	11.5	0.2%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

### Table 5.2.3c: Distribution of AUDIT score by gender

Base: All respondents.

Notes: Interpretation of AUDIT score:

0 - 7: No or low-risk drinking; 8 - 15: Drinking at increased risk; 16 - 19: Harmful drinking; and 20 - 40: Probable alcohol dependence \* Respondents who had not consumed any alcoholic beverages in the 12 months preceding the survey were assigned a score of 0 in AUDIT total score. Figures may not add up to the total due to rounding.

#### Table 5.2.3d: Distribution of AUDIT score by age group

	15	-24	25-	-34	35-	-44	45-	54	55-	64	65-	-74	75-	-84	85 or :	above	To	tal
Score	No. of																	
Score	persons	%																
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
0 - 7*	773.2	96.5%	926.3	96.3%	979.5	95.9%	1 130.7	95.6%	1 027.2	96.4%	551.5	97.8%	349.3	99.0%	130.1	99.5%	5 867.7	96.5%
8 - 15	25.0	3.1%	31.0	3.2%	38.2	3.7%	45.3	3.8%	31.5	3.0%	11.7	2.1%	3.4	1.0%	0.7	0.5%	186.8	3.1%
16 - 19	0.9	0.1%	2.0	0.2%	2.0	0.2%	4.4	0.4%	4.1	0.4%	0.8	0.1%	-	-	-	-	14.2	0.2%
20 - 40	2.5	0.3%	2.2	0.2%	1.5	0.1%	2.6	0.2%	2.7	0.3%	-	-	-	-	-	-	11.5	0.2%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Notes:

Interpretation of AUDIT score:

0-7: No or low-risk drinking; 8-15: Drinking at increased risk; 16-19: Harmful drinking; and 20-40: Probable alcohol dependence

\* Respondents who had not consumed any alcoholic beverages in the 12 months preceding the survey were assigned a score of 0 in AUDIT total score. Figures may not add up to the total due to rounding.

### 5.3 Physical Activity

Sufficient amounts of physical activity can promote physical fitness and mental well-being, as well as lower one's risk of developing chronic diseases such as cardiovascular diseases, diabetes, osteoporosis and cancers. The World Health Organization (WHO) recommended that adults aged 18 or above should perform at least 150 minutes of moderate-intensity aerobic physical activity, 75 minutes of vigorous-intensity aerobic physical activity achieving at least 600 metabolic equivalent (MET)-minutes per week for health maintenance. The WHO defined vigorous-intensity physical activities as activities that take hard physical effort and cause large increases in breathing or heart rates and moderate-intensity physical activities as activities that take moderate physical effort and cause small increases in breathing or heart rates. MET refers to metabolic equivalent and one MET is the rate of energy consumption while sitting at rest. It is taken by convention as an oxygen uptake of 3.5 millilitres per kilogram of body weight per minute. Physical activities frequently are classified by their intensity, using the MET as a reference unit. It is estimated that, compared to sitting quietly, a person's energy consumption is four times as high when being moderately active, and eight times as high when being vigorously active <sup>7, 8</sup>.

In the PHS, the extent of the population's physical activity level was assessed using the Global Physical Activity Questionnaire (GPAQ) developed by the WHO for physical activity surveillance. The instrument collects information on the population's physical activity participation in three settings including activities at work, travel to and from places and recreational activities, as well as their total physical activity, in a typical week when these activities were performed<sup>8</sup>.

### 5.3.1 Setting-specific and Total Physical Activities

In this survey, setting-specific physical activity was defined as physical activity that lasted for at least 10 minutes continuously, while total physical activity refers to all physical activities that lasted for at least 10 minutes continuously in the three settings as a whole. Physical activities in the three settings at different levels of intensity were self-reported by respondents. For activities at work and recreational activities, respondents were asked to report the frequencies and length of time spent on vigorous-intensity and moderate-intensity activities that lasted for at least 10 minutes continuously in a typical week when such activities were performed. For travelling to and from places, respondents were asked to report the frequency and length of time spent on walking or using a bicycle for at least 10 minutes continuously, which are classified as moderate-intensity physical activities.

Among persons aged 15 or above, almost all (98.1%) performed physical activities for at least 10 minutes continuously in one of the three settings mentioned above in a typical week, including 18.5% performed work-related physical activity, 96.9% had transport-related physical activity (including walking or cycling) and 44.6% participated in recreation-related physical activity. On the contrary, 1.9% of persons aged 15 or above reported that they did not engage in any of these physical activities at all. Among persons aged 15 or above who had performed setting-specific physical activities in a typical week, the average time spent on total physical activity, including physical activities in all the three settings, was 106.3 minutes per day when such activities were performed. Analysed by sex, the proportion of males (98.3%) participating in total physical activity was similar to that of females (98.0%), but males (118.8 minutes per day) tended to spend more time on average on total physical activity than females (94.8 minutes per day) (Table 5.3.1a).

Among various age groups, persons in the age group 15-24 (99.6%) had the highest proportion of total physical activity participation compared to persons in other age groups, while those in age group 45-54 (117.1 minutes on average per day) spent more time on total physical activity on average than persons in other age groups (Table 5.3.1b).

	Female		Male		Total	
-	No. of persons	%	No. of persons	%	No. of persons	%
	('000)		('000)		('000)	
Setting-specific physical activities <sup>§</sup> performed in a typical wee	k					
Work-related physical activity	461.9	14.5%	661.7	22.9%	1 123.7	18.5%
Transport-related physical activity	3 087.4	96.9%	2 804.9	96.9%	5 892.3	96.9%
Recreation-related physical activity	1 340.2	42.1%	1 371.2	47.4%	2 711.4	44.6%
Total physical activity	3 120.1	98.0%	2 846.1	98.3%	5 966.2	98.1%
Average time spent on work-related physical activity per day (minutes) #	108.9		150.5		133.4	
Average time spent on transport-related physical activity per day (minutes) $^{\wedge}$	68.1		70.5		69.2	
Average time spent on recreation-related physical activity per day (minutes) †	26.2		29.9		28.1	
Average time spent on total physical activity per day (minutes)*	94.8		118.8		106.3	

 Table 5.3.1a:
 Time spent on work-related, transport-related, recreation-related and total physical activity, on average per day in a typical week when the respective physical activity was performed by gender

Bases: All respondents.

# The respondents who had performed work-related physical activity in a typical week.

^ The respondents who had performed transport-related physical activity, including walking or cycling, in a typical week.

† The respondents who had performed recreational-related physical activity in a typical week.

\* The respondents who had performed physical activity, covering those in any one of the three settings, in a typical week.

Notes: § In this survey, setting-specific physical activities include activity at work, travel to and from place and recreational activity that last for at least 10 minutes continuously and total physical activity refers to all physical activities that lasted for at least 10 minutes continuously in the three settings as a whole. Multiple answers were allowed.

	15-	-24	25-	34	35-	44	45-	54	55-	64	65-	74	75-	84	85 or a	bove	Tot	al
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Setting-specific pl	hysical a	nctiviti	es <sup>§</sup> perfo	rmed	in a typi	cal wee	k											
Work-related	125.7	15.7%	b 175.0	18.2%	237.2	23.2%	300.6	25.4%	225.8	21.2%	45.2	8.0%	12.3	3.5%	1.9	1.4%	1 123.7	18.5%
Transport-related	787.3	98.2%	5 938.4	97.6%	994.0	97.3%	1 152.3	97.4%	5 1 030.7	96.7%	548.6	97.3%	332.4	94.3%	5 108.6	83.0%	5 892.3	96.9%
Recreation-related	466.1	58.1%	6 443.1	46.1%	420.3	41.2%	475.2	40.2%	6 443.4	41.6%	6 271.4	48.1%	5 150.8	42.8%	6 41.3	31.6%	2 711.4	44.6%
Total physical activity	798.4	99.6%	o 948.2	98.6%	1 005.4	98.5%	1 166.8	98.6%	5 1 046.0	98.2%	550.8	97.7%	337.0	95.5%	6 113.7	86.9%	5 966.2	98.1%
Average time spent on work- related physical activity per day (minutes) #	95	.4	131	1.3	136	5.4	149	9.3	145	5.2	93.	.6	44	.4	32.	8	133	.4
Average time spent on transport- related physical activity per day (minutes) ^	70	.7	72	.8	73	.4	69	.6	71.	.2	62	.6	55	.7	42.	6	69.	.2
Average time spent on recreation-related physical activity per day (minutes)	32	.5	23	.3	21	.6	24	.3	29	.0	36	.7	39	.4	31.	4	28.	.1
Average time spent on total physical activity per day (minutes)*	103	3.7	107	7.2	113	3.8	117	7.1	113	5.8	88	.1	74	.2	52.	7	106	5.3

 Table 5.3.1b:
 Time spent on work-related, transport-related, recreation-related and total physical activity, on average per day in a typical week when the respective physical activity was performed by age group

Bases: All respondents.

# The respondents who had performed work-related physical activity in a typical week.

^ The respondents who had performed transport-related physical activity, including walking or cycling, in a typical week.

† The respondents who had performed recreational-related physical activity in a typical week.

\* The respondents who had performed physical activity, covering those in any one of the three settings, in a typical week.

Notes: § In this survey, setting-specific physical activities include activity at work, travel to and from place and recreational activity that last for at least 10 minutes continuously and total physical activity refers to all physical activities that lasted for at least 10 minutes continuously in the three settings as a whole. Multiple answers were allowed.

### 5.3.2 Vigorous Physical Activities

In this survey, vigorous-intensity physical activities refer to physical activities, either work-related or recreational, that cause large increases in breathing rate or heart rate for at least 10 minutes continuously. In a typical week, 20.8% of persons aged 15 or above had performed vigorous physical activities. More males (29.0%) engaged in vigorous physical activities than females (13.4%). In terms of age, the proportion of vigorous physical activity participation was the highest among younger persons aged 15-24, and decreased steadily with increasing age (Tables 5.3.2a and Table 5.3.2b).

 Table 5.3.2a: Proportion of population aged 15 or above who had performed vigorous physical activity\* in a typical week by gender

	Female		Male		Total	
	No. of persons	%	No. of persons	%	No. of persons	%
	(1000)		( 000)		(1000)	
Yes	426.1	13.4%	839.3	29.0%	1 265.5	20.8%
No	2 758.9	86.6%	2 055.9	71.0%	4 814.7	79.2%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Base: All respondents.

Notes: \* In this survey, vigorous physical activity includes activity at work and recreational activity that causes large increases in breathing or heart rate for at least 10 minutes continuously.

Figures may not add up to the total due to rounding.

 Table 5.3.2b: Proportion of population aged 15 or above who had performed vigorous physical activity\* in a typical week by age group

	15-	-24	25-	-34	35-	44	45-	-54	55-	-64	65	-74	75	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons ('000)	%	persons ('000)	s %	persons ('000)	s %	persons ('000)	%	persons ('000)	%								
Yes	318.3	39.7%	275.0	28.6%	229.9	22.5%	228.9	19.4%	163.2	15.3%	44.4	7.9%	5.4	1.5%	0.3	0.3%	1 265.5	20.8%
No	483.3	60.3%	686.4	71.4%	791.3	77.5%	954.1	80.6%	902.3	84.7%	519.6	92.1%	347.3	98.5%	130.5	99.7%	4 814.7	79.2%
Total	801.6	100.0%	6 961.4	100.0%	021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Notes: \* In this survey, vigorous physical activity includes activity at work and recreational activity that causes large increases in breathing or heart rate for at least 10 minutes continuously.

Among those who had performed vigorous work-related physical activity, the mean number of days of performing such activity in a typical week was 4.7 days (4.6 days for females and 4.7 days for males); the mean duration of vigorous activity on a typical day was 226.0 minutes (182.8 minutes in females and 237.4 minutes in males). Among those who had performed vigorous recreational physical activity, the mean number of days of performing such activity were 2.4 days in a typical week for both females and males; the mean duration of vigorous recreational activity on a typical day was 79.7 minutes (67.2 minutes in females and 87.0 minutes in males) (Table 5.3.2c).

	Fem	nale	Ma	ale	Tot	al
	No. of		No. of		No. of	
	persons	%	persons	%	persons	%
	('000)		('000')		('000)	
Vigorous work-related activity *						
Number of days in a typical week performing the a	activity					
Below 4	19.4	28.2%	61.3	23.4%	80.7	24.4%
4 or above	49.5	71.8%	200.8	76.6%	250.2	75.6%
Total	68.9	100.0%	262.1	100.0%	331.0	100.0%
Mean	4.	6	4.	7	4.1	7
Number of minutes on a typical day performing th	e activity					
Below 60	9.6	13.9%	28.0	10.7%	37.6	11.4%
60 - <120	16.3	23.7%	35.8	13.7%	52.1	15.7%
120 - <180	10.7	15.6%	30.2	11.5%	40.9	12.4%
180 or above	32.2	46.8%	168.1	64.2%	200.4	60.5%
Total	68.9	100.0%	262.1	100.0%	331.0	100.0%
Mean	182	2.8	237	7.4	226	0.0
Vigorous recreational activity #						
Number of days in a typical week performing the a	activity					
Below 4	298.3	81.6%	511.3	82.5%	809.5	82.1%
4 or above	67.5	18.4%	108.4	17.5%	175.9	17.9%
Total	365.7	100.0%	619.7	100.0%	985.5	100.0%
Mean	2.	4	2.	4	2.4	4
Number of minutes on a typical day performing th	e activity					
Below 60	118.6	32.4%	145.6	23.5%	264.1	26.8%
60 - <120	182.0	49.8%	253.0	40.8%	435.0	44.1%
120 - <180	47.0	12.8%	157.1	25.4%	204.1	20.7%
180 or above	18.1	5.0%	64.1	10.3%	82.2	8.3%
Total	365.7	100.0%	619.7	100.0%	985.5	100.0%
Mean	67	.2	87	.0	79.	.7

Table 5.3.2c: Number of days in a typical week and duration of vigorous physical activity<sup>§</sup> on a typical day when performing the activity by gender

Bases: \* The respondents who had performed work-related vigorous physical activities in a typical week.

# The respondents who had performed recreational-related vigorous physical activities in a typical week.

Notes: § In this survey, vigorous physical activity includes activity at work and recreational activity that causes large increases in breathing or heart rate for at least 10 minutes continuously.

Among those who had performed vigorous work-related physical activity, the mean number of days of performing such activity in a typical week was the highest among those aged 65-74 (5.1 days on average per week); the mean duration of vigorous activity on a typical day was the highest among those aged 45-54 (243.4 minutes on average per day). Among those who had performed vigorous recreational physical activity, the mean number of days of performing such activity in a typical week generally increased with age from 2.0 days for those aged 25-34 to 6.0 days for those aged 75-84, while the mean duration of this kind of vigorous activity on a typical day generally decreased with age from 95.6 minutes for those aged 15-24 to 60.2 minutes for those aged 75-84 (Table 5.3.2d).

	15-2	24	25-	34	35-	-44	45	-54	55	-64	65	5-74	75	5-84	85 or	above	Tot	tal
	No. of persons ('000)	s %	No. of persons ('000)	; %	No. of persons ('000)	s %	No. of persons ('000)	s %	No. of persons ('000)	5 %o	No. of persons ('000)	s %	No. of persons ('000)	%	No. of persons ('000)	s %	No. of persons ('000)	; %
Vigorous wo	rk-relate	ed activ	ity *															
Number of d	ays in a	typical	week pe	erformiı	ng the a	ctivity												
Below 4	20.7	50.2%	10.5	21.3%	16.2	24.1%	15.9	17.3%	15.9	22.2%	1.5	19.2%	-	-	-	-	80.7	24.4%
4 or above	20.6	49.8%	38.8	78.7%	51.0	75.9%	75.8	82.7%	55.9	77.8%	6.5	80.8%	1.7	100.0%		-	250.2	75.6%
Total	41.3	100.0%	6 49.3	100.0%	67.2	100.0%	91.7	100.0%	71.9	100.0%	8.0	100.0%	5 1.7	100.0%	, -	-	331.0	100.0%
Mean	3	.5	4	.8	4	l.7	5	5.0	4	.8	5	5.1	4	.7		-	4	.7
Number of m	ninutes o	on a typ	ical day	perform	ning th	e activit	у											
Below 60	4.9	11.8%	6.3	12.7%	8.3	12.4%	11.2	12.2%	6.4	8.9%	0.5	6.0%	-	-	-	-	37.6	11.4%
60 - <120	12.3	29.8%	7.6	15.4%	8.5	12.6%	10.4	11.3%	9.9	13.8%	2.3	28.9%	1.1	66.6%	-	-	52.1	15.7%
120 - <180	7.9	19.2%	6.8	13.7%	8.1	12.1%	10.3	11.2%	6.2	8.7%	1.5	19.3%	-	-	-	-	40.9	12.4%
180 or above	16.2	39.2%	28.6	58.1%	42.2	62.9%	59.8	65.2%	49.3	68.6%	3.7	45.7%	0.6	33.4%	-	-	200.4	60.5%
Total	41.3	100.0%	6 49.3	100.0%	67.2	100.0%	91.7	100.0%	71.9	100.0%	8.0	100.0%	5 1.7	100.0%	, -	-	331.0	100.0%
Mean	18	30.2	21	2.2	23	34.0	24	3.4	23	7.5	20	)5.9	10	0.1		-	22	6.0
Vigorous rec	reationa	ıl activi	<u>ty</u> #															
Number of d	ays in a	typical	week pe	erformin	ng the a	ctivity												
Below 4	252.4	86.1%	208.2	88.8%	147.3	84.2%	114.2	77.7%	69.6	73.4%	17.6	47.0%	0.5	12.1%	-	-	809.5	82.1%
4 or above	40.6	13.9%	26.4	11.2%	27.6	15.8%	32.7	22.3%	25.2	26.6%	19.8	53.0%	3.3	87.9%	0.3	100.0%	175.9	17.9%
Total	293.0	100.0%	234.5	100.0%	174.9	100.0%	146.9	100.0%	94.8	100.0%	37.3	100.0%	3.8	100.0%	0.3	100.0%	985.5	100.0%
Mean	2	2.2	2	.0	2	2.2	2	2.6	2	2.8	4	4.3	6	0.0		^	2	.4
Number of m	ninutes o	on a typ	ical day	perform	ning th	e activit	у											
Below 60	53.8	18.4%	55.1	23.5%	52.7	30.2%	48.5	33.0%	37.3	39.3%	14.1	37.8%	2.2	59.5%	0.3	100.0%	264.1	26.8%
60 - <120	112.9	38.6%	108.4	46.2%	86.0	49.2%	67.9	46.2%	40.9	43.2%	17.8	47.6%	1.1	29.9%	-	-	435.0	44.1%
120 - <180	85.4	29.2%	51.0	21.7%	28.6	16.4%	23.2	15.8%	12.1	12.7%	3.8	10.1%	-	-	-	-	204.1	20.7%
180 or above	40.7	13.9%	20.1	8.6%	7.6	4.3%	7.3	4.9%	4.5	4.7%	1.7	4.5%	0.4	10.6%	-	-	82.2	8.3%
Total	293.0	100.0%	5 234.5	100.0%	174.9	100.0%	146.9	100.0%	94.8	100.0%	37.3	100.0%	3.8	100.0%	0.3	100.0%	985.5	100.0%
Mean	9	5.6	8	0.4	7	0.7	7	0.5	6	6.2	6	5.1	6	0.2		^	79	9.7

# Table 5.3.2d: Number of days in a typical week and duration of vigorous physical activity<sup>§</sup> on a typical day when performing the activity by age group

Bases: \* The respondents who had performed work-related vigorous physical activities in a typical week.

# The respondents who had performed recreational-related vigorous physical activities in a typical week.

Notes: § In this survey, vigorous physical activity includes activity at work and recreational activity that causes large increases in breathing or heart rate for at least 10 minutes continuously.

^ The summary statistics are not shown due to statistical consideration.

### 5.3.3 Moderate Physical Activities

In this survey, moderate physical activity refers to work-related physical activities, recreational activities and walking or using bicycle to get to or from places that cause small increase in breathing or heart rate for at least 10 minutes continuously. In a typical week, 97.7% of persons aged 15 or above had undertaken some moderate physical activities. The corresponding proportions recorded for females and males were almost the same. In terms of age, the proportion of persons engaged in moderate physical activity was the highest at 98.8% among persons aged 15-24 and was the lowest at 86.9% among persons aged 85 or above (Table 5.3.3a and Table 5.3.3b).

 Table 5.3.3a: Proportion of population aged 15 or above who had performed moderate physical activity\* in a typical week by gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	3 109.9	97.6%	2 828.5	97.7%	5 938.4	97.7%
No	75.1	2.4%	66.7	2.3%	141.8	2.3%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Base: All respondents.

Notes: \* In this survey, moderate physical activity includes activity at work, walking or using bicycle to get to or from places and recreational activity that causes small increases in breathing or heart rate for at least 10 minutes continuously.

Figures may not add up to the total due to rounding.

 Table 5.3.3b: Proportion of population aged 15 or above who had performed moderate physical activity\* in a typical week by age group

	15-	-24	25-	-34	35-	44	45-	54	55-	64	65-	-74	75	-84	85 or	above	То	tal
	No. of persons ('000)	%																
Yes	792.0	98.8%	943.5	98.1%	999.7	97.9%	1 161.2	98.2%	1 041.4	97.7%	549.9	97.5%	337.0	95.5%	113.7	86.9%	5 938.4	97.7%
No	9.6	1.2%	17.9	1.9%	21.5	2.1%	21.8	1.8%	24.1	2.3%	14.1	2.5%	15.7	4.5%	17.1	13.1%	141.8	2.3%
Total	801.6	100.0%	961.4	100.0%	0 1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Notes: \* In this survey, moderate physical activity includes activity at work, walking or using bicycle to get to or from places and recreational activity that causes small increases in breathing or heart rate for at least 10 minutes continuously. Figures may not add up to the total due to rounding. Among those persons who engaged in moderate work-related physical activity, the mean number of days in performing such activity in a typical week was 4.6 days (4.7 days for females and 4.5 days for males). The mean duration of such activities was 144.4 minutes on a typical day when performing the activities (137.6 minutes in females and 150.0 minutes in males). Comparing with other age groups, persons aged 85 or above had the highest mean number of days (5.2 days) of moderate work-related physical activity in a typical week and those aged 55-64 had the highest mean duration (154.3 minutes) of such activities on a typical day when performing the activities on a typical day when performing the activities (Table 5.3.3c and Table 5.3.3d).

Among those who had undertaken moderate transport-related physical activity (i.e. walking or cycling to and from places), the mean numbers of days of performing such activity in a typical week were 6.7 days for both females and males. The mean duration was 71.7 minutes on a typical day (70.7 minutes in females and 72.8 minutes in males). Comparing with other age groups, persons aged 55-64 had relatively higher mean number of days (6.8 days) of moderate transport-related physical activity in a typical week. The mean duration of such activity on a typical day when performing the activity generally decreased with age from the highest of 76.1 minutes for those aged 35-44 to the lowest of 44.8 minutes for those aged 85 or above (Table 5.3.3c and Table 5.3.3d).

Among the persons who had participated in moderate recreational physical activity, the mean number of days in a typical week and the mean duration on a typical day of performing such activity were 3.3 days (3.5 days for females and 3.1 days for males) and 58.7 minutes (54.5 minutes for females and 63.7 minutes for males) respectively. Analysed by age group, the mean number of days of performing such activity in a typical week increased steadily from 2.2 days for those aged 25-34 to 5.6 days for those aged 85 or above and the mean duration of the activity on a typical day when performing such activity was the highest among those aged 15-24 (74.0 minutes) and the lowest among those aged 85 or above (43.1 minutes) (Table 5.3.3c and Table 5.3.3d).

	Fem	Ma	ale	Total		
	No. of		No. of		No. of	
	persons	%	persons	%	persons	%
	('000')		('000)		('000)	
Moderate work-related activity *						
Number of days in a typical week performing the a	ctivity					
Below 4	115.9	27.9%	144.8	28.0%	260.6	28.0%
4 or above	299.3	72.1%	371.4	72.0%	670.6	72.0%
Total	415.2	100.0%	516.1	100.0%	931.3	100.0%
Mean	4.	7	4.	5	4.	6
Number of minutes on a typical day performing the	e activity					
Below 60	105.9	25.5%	104.4	20.2%	210.2	22.6%
60 - <120	103.2	24.9%	110.4	21.4%	213.6	22.9%
120 - <180	73.2	17.6%	106.8	20.7%	180.0	19.3%
180 or above	132.9	32.0%	194.5	37.7%	327.4	35.2%
Total	415.2	100.0%	516.1	100.0%	931.3	100.0%
Mean	13	7.6	150	).0	14-	4.4
Moderate transport-related activity #						
Number of days in a typical week performing the a	ctivity					
Below 4	91.1	3.0%	63.9	2.3%	155.0	2.6%
4 or above	2 996.3	97.0%	2 741.0	97.7%	5 737.3	97.4%
Total	3 087.4	100.0%	2 804.9	100.0%	5 892.3	100.0%
Mean	6.	7	6.	7	6.	7
Number of minutes on a typical day performing the	e activity					
Below 60	1 381.6	44.8%	1 271.1	45.3%	2 652.8	45.0%
60 - <120	1 056.3	34.2%	880.3	31.4%	1 936.6	32.9%
120 - <180	356.0	11.5%	349.6	12.5%	705.7	12.0%
180 or above	293.4	9.5%	303.8	10.8%	597.2	10.1%
Total	3 087.4	100.0%	2 804.9	100.0%	5 892.3	100.0%
Mean	70	.7	72	.8	71	.7

# Table 5.3.3c: Number of days in a typical week and duration of moderate physical activity<sup>§</sup> on a typical day when performing the activity by gender

(To be continued)

	Fem	nale	Ma	lle	Total			
-	No. of		No. of		No. of			
	persons	%	persons	%	persons	%		
	('000)		('000)		('000')			
Moderate recreational activity ^								
Number of days in a typical week performing the activity								
Below 4	654.1	60.9%	625.8	68.0%	1 280.0	64.2%		
4 or above	419.3	39.1%	294.6	32.0%	713.9	35.8%		
Total	1 073.4	100.0%	920.5	100.0%	1 993.9	100.0%		
Mean	3.	.5	3.	1	3.	3		
Number of minutes on a typical day performing the activity	7							
Below 60	532.1	49.6%	401.6	43.6%	933.7	46.8%		
60 - <120	417.7	38.9%	357.7	38.9%	775.4	38.9%		
120 - <180	95.9	8.9%	107.2	11.6%	203.1	10.2%		
180 or above	27.7	2.6%	54.0	5.9%	81.7	4.1%		
Total	1 073.4	100.0%	920.5	100.0%	1 993.9	100.0%		
Mean	54	4.5	63	.7	58	.7		

# Table 5.3.3c: Number of days in a typical week and duration of moderate physical activity<sup>§</sup> on a typical day when performing the activity by gender (continued)

Bases: \* The respondents who had performed work-related moderate physical activities in a typical week.

# The respondents who had performed transport-related moderate physical activities in a typical week.

<sup>^</sup> The respondents who had performed recreational-related moderate physical activities in a typical week.

Notes: § In this survey, moderate physical activity includes activity at work, walking or using bicycle to get to or from places and recreational activity that causes small increases in breathing or heart rate for at least 10 minutes continuously.

	15	-24	25	-34	35	-44	45	-54	55	-64	65	-74	75	-84	85 or	above	Total	
-	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons ('000)	%	persons	%	persons ('000)	%	persons ('000)	%	persons	%	persons	%	persons	%	persons ('000)	%	persons	%
Moderate w	ork-rel	ated acti	vity *				. ,		. ,		. ,				. ,		. ,	
Number of o	days in	a typical	week p	erformi	ng the a	activity												
Below 4	49.5	50.0%	45.7	30.1%	52.3	25.9%	54.4	22.2%	42.4	23.5%	11.2	28.3%	4.7	42.1%	0.3	18.2%	260.6	28.0%
4 or above	49.6	50.0%	106.3	69.9%	149.6	74.1%	190.8	77.8%	138.0	76.5%	28.4	71.7%	6.5	57.9%	1.5	81.8%	670.6	72.0%
Total	99.2	100.0%	152.0	100.0%	201.9	100.0%	245.1	100.0%	180.4	100.0%	39.6	100.0%	11.2	100.0%	1.9	100.0%	931.3	100.0%
Mean	3	8.5	4	1.5	4	1.6	4	.9	4	.8	4	.8	4	.4	5	.2	4	.6
Number of 1	minutes	s on a typ	oical da	y perform	ming th	ne activit	y											
Below 60	24.8	25.0%	36.9	24.3%	43.1	21.4%	46.6	19.0%	39.6	21.9%	13.1	33.1%	4.9	44.0%	1.2	64.4%	210.2	22.6%
60 - <120	25.3	25.5%	34.4	22.6%	50.2	24.8%	54.1	22.1%	32.3	17.9%	12.0	30.3%	4.8	43.0%	0.7	35.6%	213.6	22.9%
120 - <180	18.7	18.9%	25.0	16.4%	39.3	19.5%	54.0	22.0%	35.8	19.9%	6.1	15.5%	1.0	9.0%	-	-	180.0	19.3%
180 or above	30.4	30.7%	55.7	36.6%	69.3	34.3%	90.5	36.9%	72.7	40.3%	8.4	21.1%	0.4	4.0%	-	-	327.4	35.2%
Total	99.2	100.0%	152.0	100.0%	201.9	100.0%	245.1	100.0%	180.4	100.0%	39.6	100.0%	11.2	100.0%	1.9	100.0%	931.3	100.0%
Mean	12	.9.8	14	1.9	14	6.1	15	54.1	15	4.3	10	5.2	65	5.0	38	3.9	14	4.4
Moderate tr	anspor	t-related	activit	<u>v</u> #														
Number of o	days in	a typical	week p	erformi	ng the a	activity												
Below 4	20.6	2.6%	23.0	2.5%	25.5	2.6%	26.1	2.3%	22.0	2.1%	21.0	3.8%	11.9	3.6%	5.0	4.6%	155.0	2.6%
4 or above	766.7	97.4%	915.4	97.5%	968.5	97.4%	1 126.2	97.7%	1 008.7	97.9%	527.6	96.2%	320.5	96.4%	103.6	95.4%	5 737.3	97.4%
Total	787.3	100.0%	938.4	100.0%	994.0	100.0%	1 152.3	100.0%	1 030.7	100.0%	548.6	100.0%	332.4	100.0%	108.6	100.0%	5 892.3	100.0%
Mean	e	5.7	e	5.7	6	5.7	6	5.7	6	.8	e	5.7	6	.7	6	.6	6	.7
Number of 1	minutes	s on a typ	oical da	y perfor	ming th	ne activit	y											
Below 60	349.2	44.4%	411.5	43.8%	439.8	44.3%	520.8	45.2%	447.8	43.5%	249.2	45.4%	171.6	51.6%	62.7	57.8%	2 652.8	45.0%
60 - <120	258.8	32.9%	300.2	32.0%	323.1	32.5%	374.4	32.5%	336.0	32.6%	200.5	36.6%	106.2	31.9%	37.3	34.3%	1 936.6	32.9%
120 - <180	85.7	10.9%	110.6	11.8%	116.5	11.7%	146.0	12.7%	139.6	13.5%	59.6	10.9%	40.1	12.1%	7.4	6.9%	705.7	12.0%
180 or above	93.6	11.9%	116.2	12.4%	114.5	11.5%	111.0	9.6%	107.1	10.4%	39.2	7.2%	14.5	4.4%	1.1	1.0%	597.2	10.1%
Total	787.3	100.0%	938.4	100.0%	994.0	100.0%	1 152.3	100.0%	1 030.7	100.0%	548.6	100.0%	332.4	100.0%	108.6	100.0%	5 892.3	100.0%
Mean	7	3.4	7.	5.8	7	6.1	7	1.8	7.	3.0	6	5.1	58	8.1	44	4.8	71	.7
																(To l	be cont	inued)

Table 5.3.3d: Number of days in a ty	pical week and dura	tion of moderate pl	hysical activity <sup>§</sup> on a	ı typical day w	hen
performing the activity	oy age group				

	15	-24	25	5-34	35	-44	45	5-54	55	-64	65	-74	75	-84	85 or	above	To	otal
	No. of persons ('000)	%	No. of person ('000)	s %	No. of persons ('000)	%	No. of person ('000)	s %	No. of persons ('000)	s %	No. of persons ('000)	s %	No. of persons ('000)	%	No. of persons ('000)	s %	No. of persons ('000)	%
Moderate r	ecreatio	onal activ	<u>vity</u> ^															
Number of	days in	a typical	l week j	performi	ing the a	activity												
Below 4	218.4	85.0%	229.7	84.8%	225.6	77.3%	255.8	70.7%	208.3	55.6%	95.0	38.1%	37.6	25.4%	9.6	23.4%	1 280.0	64.2%
4 or above	38.5	15.0%	41.0	15.2%	66.2	22.7%	106.0	29.3%	166.0	44.4%	154.5	61.9%	110.4	74.6%	31.4	76.6%	713.9	35.8%
Total	256.9	100.0%	270.7	100.0%	291.8	100.0%	361.8	100.0%	374.4	100.0%	249.4	100.0%	148.0	100.0%	40.9	100.0%	1 993.9	100.0%
Mean	2	2.3	2	2.2	2	.6	3	3.0	3	.8	4	1.8	5	.5	5	5.6	3	.3
Number of	minutes	s on a tyj	pical da	y perfor	ming th	e activi	ty											
Below 60	82.0	31.9%	106.5	39.3%	148.3	50.8%	178.4	49.3%	182.9	48.8%	125.5	50.3%	85.2	57.5%	24.9	60.9%	933.7	46.8%
60 - <120	110.8	43.1%	118.8	43.9%	109.0	37.3%	135.5	37.5%	139.3	37.2%	99.7	40.0%	48.8	33.0%	13.6	33.1%	775.4	38.9%
120 - <180	45.0	17.5%	32.2	11.9%	25.7	8.8%	31.7	8.8%	37.1	9.9%	18.5	7.4%	11.3	7.6%	1.7	4.0%	203.1	10.2%
180 or above	19.1	7.4%	13.2	4.9%	8.7	3.0%	16.1	4.5%	15.2	4.0%	5.7	2.3%	2.8	1.9%	0.8	1.9%	81.7	4.1%
Total	256.9	100.0%	270.7	100.0%	291.8	100.0%	361.8	100.0%	374.4	100.0%	249.4	100.0%	148.0	100.0%	40.9	100.0%	1 993.9	100.0%
Mean	7	4.0	6	2.6	54	.8	5	8.1	5	7.8	53	3.7	49	9.9	43	3.1	5	8.7

Table 5.3.3d: Number of days in a typical week and duration of moderate physical activity<sup>§</sup> on a typical day when performing the activity by age group (continued)

Bases: \* The respondents who had performed work-related moderate physical activities in a typical week.

# The respondents who had performed transport-related moderate physical activities in a typical week.

^ The respondents who had performed recreational-related moderate physical activities in a typical week.

Notes: § In this survey, moderate physical activity includes activity at work, walking or using bicycle to get to or from places and recreational activity that causes small increases in breathing or heart rate for at least 10 minutes continuously.

### 5.3.4 Sedentary behaviour

Sedentary behaviour refers to sitting or reclining at work, at home, with friends, or getting to and from places in a car, bus or train, but does not include sleeping. Overall, the mean duration of sedentary behaviour on a typical day were 419.2 minutes or about 7.0 hours (417.5 minutes for females and 421.0 minutes for males) among persons aged 15 or above. Analysed by age, the longest mean duration spent on sitting or reclining was 522.5 minutes for persons aged 85 or above, while the shortest was 393.9 minutes for persons aged 65-74. 19.1% of persons aged 15 or above recorded that they spent 10 hours or longer on average per day on sitting or reclining, while only 1.0% of them spent less than two hours on average per day on sitting or reclining (Table 5.3.4a and Table 5.3.4b).

Table 5.3.4a: Time (in minutes) spent on sitting or reclining\* on a typical day by gender

	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Below 120	37.2	1.2%	24.7	0.9%	61.9	1.0%		
120 or above	3 147.8	98.8%	2 870.5	99.1%	6 018.3	99.0%		
120 - <240	290.0	9.1%	241.7	8.3%	531.8	8.7%		
240 - <360	568.1	17.8%	529.3	18.3%	1 097.4	18.0%		
360 - <480	902.2	28.3%	865.8	29.9%	1 768.1	29.1%		
480 - <600	783.5	24.6%	676.5	23.4%	1 460.0	24.0%		
600 or above	603.9	19.0%	557.2	19.2%	1 161.1	19.1%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		
Mean	417.5		421.0		419.2			

Base: All respondents.

Notes: \* Time spent on sitting or reclining does not include time spent on sleeping.

Figures may not add up to the total due to rounding.

Table 5.3.4b: Time (in minutes	s) spent on sitting or reclin	uing* on a typical day by age group
--------------------------------	-------------------------------	-------------------------------------

	15-	-24	25-	-34	35-	44	45-	54	55-	·64	65	-74	75-	84	85 or a	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	s %	persons	%	persons	%	persons	%
	(000)		(000)	0.00/	(000)	/	(000)		(000)		(000)		(000)		(000)		(000)	4 00/
Below 120	2.6	0.3%	7.2	0.8%	8.2	0.8%	19.1	1.6%	12.3	1.2%	7.5	1.3%	4.7	1.3%	0.3	0.3%	61.9	1.0%
120 or above	799.0	99.7%	954.2	99.2%	1 013.0	99.2%	1 163.9	98.4%	1 053.2	98.8%	556.5	98.7%	348.0	98.7%	130.5	99.7%	6 018.3	99.0%
120 - <240	35.3	4.4%	64.8	6.7%	100.5	9.8%	126.0	10.6%	114.5	10.7%	56.0	9.9%	28.1	8.0%	6.7	5.1%	531.8	8.7%
240 - <360	109.9	13.7%	141.2	14.7%	190.5	18.7%	238.2	20.1%	223.8	21.0%	119.0	21.1%	62.3	17.7%	12.5	9.6%	1 097.4	18.0%
360 - <480	220.3	27.5%	275.0	28.6%	305.9	30.0%	332.6	28.1%	320.2	30.0%	184.7	32.7%	102.7	29.1%	26.8	20.5%	1 768.1	29.1%
480 - <600	245.5	30.6%	267.0	27.8%	226.4	22.2%	258.1	21.8%	240.7	22.6%	124.5	22.1%	69.8	19.8%	28.0	21.4%	1 460.0	24.0%
600 or above	188.0	23.4%	206.2	21.4%	189.8	18.6%	209.1	17.7%	154.1	14.5%	72.3	12.8%	85.1	24.1%	56.5	43.2%	1 161.1	19.1%
Total	801.6	100.0%	6 961.4	100.0%	61 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	6 564.0	100.0%	352.7	100.0%	5 130.8	100.0%	6 080.2	100.0%
Mean	452	2.1	44	0.0	412	2.2	40.	3.9	39	5.7	39	3.9	43	1.6	52	2.5	41	9.2

Base: All respondents.

Notes: \* Time spent on sitting or reclining does not include time spent on sleeping.

### 5.3.5 Level of Physical Activity

The WHO recommended that adults aged 18 or above should perform at least 150 minutes of moderateintensity aerobic physical activity, 75 minutes of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity physical activity achieving at least 600 METminutes in a week through activity at work, during transport or leisure time for health maintenance <sup>7</sup>. For persons aged 65 or above who cannot do the recommended amounts of physical activity due to health conditions, the WHO further recommended that they should be as physical active as their abilities and health conditions allow.

Among persons aged 18 or above, 87.0% (85.8% for females and 88.4% for males) had performed sufficient physical activities (i.e. meeting the WHO recommendation) (Table 5.3.5a). Analysed by age, the highest proportion of having met the WHO recommendation was 89.8% in persons aged 18-24, while the lowest proportion was 63.9% among persons aged 85 or above (Table 5.3.5b).

genuer								
	Female		Male		Total			
	No. of persons	%	No. of persons	%	No. of persons	%		
	('000)	70	('000)	/0	('000)	70		
Yes	2 641.4	85.8%	2 457.7	88.4%	5 099.0	87.0%		
No	438.9	14.2%	322.2	11.6%	761.1	13.0%		
Total	3 080.3	100.0%	2 779.9	100.0%	5 860.2	100.0%		

Table 5.3.5a: Proportion of population aged 18 or above meeting WHO recommendations of physical activity level by gender

Base: Respondents aged 18 or above.

Notes: WHO recommendation of physical activity level

150 minutes of moderate-intensity physical activity per week, or

75 minutes of vigorous-intensity physical activity per week, or

An equivalent combination of moderate- and vigorous-intensity physical activity accumulating at least 600 MET-minutes per week

Figures may not add up to the total due to rounding.

Caution must be taken when interpreting the figures relating to population aged 18 or above meeting WHO recommendations of sufficient physical activity reported in the report. The figures were estimated purely based on the level of physical activity reported by the respondents.

	18-	-24	25-	-34	35-	-44	45-	54	55-	64	65	-74	75-	84	85 or :	above	To	tal
	No. of persons	%	No. of persons	. %	No. of persons	%	No. of persons	%	No. of persons	%								
	('000)	70	('000)	,.	('000)	70	('000)	70	('000)	,0	('000)	,,,	('000)	70	('000)	70	('000)	70
Yes	522.0	89.8%	846.4	88.0%	887.5	86.9%	1 044.5	88.3%	928.3	87.1%	499.9	88.6%	286.9	81.3%	83.5	63.9%	5 099.0	87.0%
No	59.5	10.2%	115.0	12.0%	133.7	13.1%	138.5	11.7%	137.2	12.9%	64.1	11.4%	65.8	18.7%	47.3	36.1%	761.1	13.0%
Total	581.6	100.0%	6 961.4	100.0%	1 021.2	100.0%	5 1 183.0	100.0%	6 1 065.5	100.0%	564.0	100.0%	352.7	100.0%	5 130.8	100.0%	5 860.2	100.0%

Table 5.3.5b: Proportion of population aged 18 or above meeting WHO recommendations of physical activity level by age group

Base: Respondents aged 18 or above.

WHO recommendation of physical activity level Notes:

150 minutes of moderate-intensity physical activity per week, or

75 minutes of vigorous-intensity physical activity per week, or An equivalent combination of moderate- and vigorous-intensity physical activity accumulating at least 600 MET-minutes per week

Figures may not add up to the total due to rounding.

Caution must be taken when interpreting the figures relating to population aged 18 or above meeting WHO recommendations of sufficient physical activity reported in the report. The figures were estimated purely based on the level of physical activity reported by the respondents.

### 5.4 Diet and Nutrition

Consuming a healthy diet throughout the life course helps prevent a range of non-communicable diseases and conditions linked to obesity<sup>9</sup>. Specific recommendations for a healthy diet include: eating more fruit, vegetables, legumes, nuts and grains, and cutting down on consumption of salt, sugar and fats<sup>10, 11</sup>. The PHS incorporated questions on people's eating habits, including their usual consumption of fruit and vegetables, preserved vegetables, processed meat and associated products, snacks with high salt content, seaweeds and ready-to-eat seaweeds. In addition, the survey also collected information on the population's usage of salt.

### 5.4.1 Consumption of Fruit

Overall, daily fruit consumption was reported by 62.6% of persons aged 15 or above. The corresponding proportion for females and males were 68.0% and 56.6% respectively (Table 5.4.1a). The proportion of persons reported that they ate fruit at least once a day increased with age in general, from 49.1% for persons aged 15-24 to 73.1% for persons aged 65-74 but dropped slightly to 71.2% and 69.4% for those aged 75-84 and those aged 85 or above respectively (Table 5.4.1b).

	Fema	le	Mal	e	Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
None / Less than once a week	70.9	2.2%	122.8	4.2%	193.7	3.2%		
Less than once a day	946.3	29.7%	1 132.0	39.1%	2 078.3	34.2%		
Once a week	127.7	4.0%	175.0	6.0%	302.7	5.0%		
2 - 4 times a week	500.6	15.7%	622.0	21.5%	1 122.6	18.5%		
5 - 6 times a week	318.0	10.0%	335.1	11.6%	653.1	10.7%		
At least once a day	2 166.9	68.0%	1 638.5	56.6%	3 805.4	62.6%		
Once a day	1 845.8	58.0%	1 462.1	50.5%	3 307.9	54.4%		
Twice a day	293.5	9.2%	161.5	5.6%	455.0	7.5%		
3 or more times a day	27.6	0.9%	14.9	0.5%	42.5	0.7%		
Don't know	0.9	<0.05%	1.9	0.1%	2.8	<0.05%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Base: All respondents.

<b>Table 5.4.1b:</b>	Frequency	of eating	fruit by	age group
		· · · · · · ·		

	15-	-24	25-	-34	35-	44	45-	54	55-	64	65-	-74	75-	84	85 or a	above	То	tal
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
None / Less than once a week	33.7	4.2%	35.1	3.7%	35.2	3.4%	30.3	2.6%	30.9	2.9%	11.7	2.1%	10.9	3.1%	5.9	4.5%	193.7	3.2%
Less than once a day	373.6	46.6%	403.0	41.9%	351.3	34.4%	390.4	33.0%	295.7	27.8%	140.0	24.8%	90.2	25.6%	34.2	26.1%	2 078.3	34.2%
Once a week	61.6	7.7%	57.9	6.0%	52.6	5.1%	58.3	4.9%	34.3	3.2%	16.3	2.9%	15.8	4.5%	5.9	4.5%	302.7	5.0%
2 - 4 times a week	210.9	26.3%	5 227.5	23.7%	187.0	18.3%	210.9	17.8%	154.5	14.5%	72.1	12.8%	42.4	12.0%	17.3	13.2%	1 122.6	18.5%
5 - 6 times a week	101.1	12.6%	5 117.6	12.2%	111.7	10.9%	121.1	10.2%	107.0	10.0%	51.6	9.2%	32.0	9.1%	11.0	8.4%	653.1	10.7%
At least once a day	393.8	49.1%	522.3	54.3%	634.3	62.1%	762.3	64.4%	738.5	69.3%	412.3	73.1%	251.1	71.2%	90.7	69.4%	3 805.4	62.6%
Once a day	355.4	44.3%	6 467.1	48.6%	559.1	54.8%	675.5	57.1%	626.3	58.8%	339.1	60.1%	208.2	59.0%	77.1	59.0%	3 307.9	54.4%
Twice a day	<i>33</i> .8	4.2%	48.0	5.0%	69.9	6.8%	79.5	6.7%	104.9	9.8%	65.7	11.6%	41.4	11.7%	12.0	9.1%	455.0	7.5%
3 or more times a day	4.6	0.6%	7.3	0.8%	5.3	0.5%	7.3	0.6%	7.3	0.7%	7.6	1.3%	1.4	0.4%	1.6	1.3%	42.5	0.7%
Don't know	0.5	0.1%	1.0	0.1%	0.5	<0.05%	, -	-	0.5	<0.05%	) -	-	0.4	0.1%	-	-	2.8	<0.05%

Base: All respondents.

Total

Note: Figures may not add up to the total due to rounding.

801.6 100.0% 961.4 100.0% 1 021.2 100.0% 1 183.0 100.0% 1 065.5 100.0% 564.0 100.0% 352.7 100.0% 130.8 100.0% 6 080.2 100.0%

Respondents were further asked how many servings of fruit they ate a day on the days when they ate fruit. In the PHS, one serving of fruit was defined as equivalent to half piece of large sized fruit (e.g. banana) or one piece of medium-sized fruit (e.g. apple, orange and pear). Overall, 11.9% of persons aged 15 or above reported that they ate two or more servings of fruit per day on the days when they ate fruit. While the estimated mean numbers of servings of fruit eaten per day were 1.1 for both females and males, more females (13.3%) ate two or more servings of fruit per day than males (10.4%) (Table 5.4.1c). Analysed by age group, the highest proportion of persons who reported eating two or more servings of fruit per day on the lowest was among the 15-24 age group (8.9%) (Table 5.4.1d).

Table 5.4.1c: Number of servings of fruit eaten per day on the days when persons ate fruit by gender

Number of serving of fruit per day*	Fema	le	Mal	e	Tota	Total		
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Less than 1	265.0	8.3%	252.4	8.7%	517.4	8.5%		
1 to less than 2	2 494.1	78.3%	2 340.3	80.8%	4 834.5	79.5%		
2 or more	423.8	13.3%	301.5	10.4%	725.4	11.9%		
Unknown / Missing	2.0	0.1%	1.0	<0.05%	3.0	<0.05%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		
Mean †	1.1		1.1		1.1			

Bases: \* All respondents.

<sup>†</sup> All respondents with valid response on the number of servings of fruit eaten per day.

Note: Figures may not add up to the total due to rounding.

Table 5.4.1d: Number of	f servings of fruit eaten	per day on the days wh	en persons ate fruit by age group
	0		

Number	15-24		25-34		35-44		45-	45-54		55-64		65-74		75-84		85 or above		Total	
of servings	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		
of fruit	person	s %	persons	%	persons	s %	persons	%	persons	s %	persons	%	persons	%	persons	%	persons	%	
per day*	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		
Less than 1	88.1	11.0%	72.5	7.5%	74.0	7.2%	92.2	7.8%	80.5	7.6%	46.6	8.3%	39.4	11.2%	24.1	18.5%	517.4	8.5%	
1 to less than 2	642.1	80.1%	785.5	81.7%	833.3	81.6%	940.8	79.5%	844.4	79.3%	427.5	75.8%	270.5	76.7%	90.4	69.1%	4 834.5	79.5%	
2 or more	71.5	8.9%	102.9	10.7%	113.9	11.2%	150.0	12.7%	140.1	13.1%	88.9	15.8%	42.4	12.0%	15.7	12.0%	725.4	11.9%	
Unknown / Missing	-	-	0.5	0.1%	-	-	-	-	0.5	<0.05%	ó 1.0	0.2%	0.4	0.1%	0.5	0.4%	3.0	<0.05%	
Total	801.6	100.0%	6 961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	6 352.7	100.0%	b 130.8	100.0%	6 080.2	100.0%	
Mean †	1	.1	1.	.1	1	.1	1.	.1	1	.1	1.	.2	1.	1	1.	.1	1	.1	

Bases: \* All respondents.

† All respondents with valid response on the number of servings of fruit eaten per day.

## 5.4.2 Consumption of Vegetables

Daily vegetables consumption (at least once per day) was reported by 89.2% of females and 83.8% of males aged 15 or above, giving an overall proportion of 86.6% (Table 5.4.2a). The proportion of persons aged 15 or above reported that they ate vegetables at least once a day was the highest at 91.8% for persons aged 75-84, followed by persons aged 65-74 (91.7%) and the lowest at 81.0% for those aged 25-34 (Table 5.4.2b).

	Fema	le	Mal	e	Total		
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
None / Less than once a week	20.0	0.6%	18.0	0.6%	38.0	0.6%	
Less than once a day	323.5	10.2%	451.3	15.6%	774.8	12.7%	
Once a week	14.8	0.5%	28.9	1.0%	43.6	0.7%	
2 - 4 times a week	122.5	3.8%	181.5	6.3%	304.0	5.0%	
5 - 6 times a week	186.2	5.8%	240.9	8.3%	427.2	7.0%	
At least once a day	2 841.5	89.2%	2 425.5	83.8%	5 267.0	86.6%	
Once a day	1 701.6	53.4%	1 594.8	55.1%	3 296.5	54.2%	
Twice a day	1 066.3	33.5%	792.2	27.4%	1 858.4	30.6%	
3 or more times a day	73.6	2.3%	38.5	1.3%	112.1	1.8%	
Don't know	-	-	0.4	<0.05%	0.4	<0.05%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	

### Table 5.4.2a: Frequency of eating vegetables by gender

Base: All respondents.

	15	-24	25	-34	35-	-44	45-	-54	55-	·64	65-	-74	75-	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	s %	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
None / Less than once a week	8.8	1.1%	7.8	0.8%	3.7	0.4%	6.4	0.5%	3.9	0.4%	3.1	0.6%	1.3	0.4%	2.9	2.2%	38.0	0.6%
Less than once a day	139.5	17.4%	174.1	18.1%	131.0	12.8%	134.9	11.4%	108.9	10.2%	43.7	7.8%	27.7	7.9%	15.0	11.5%	774.8	12.7%
Once a week	7.6	0.9%	10.9	1.1%	5.0	0.5%	7.6	0.6%	5.3	0.5%	3.3	0.6%	2.4	0.7%	1.6	1.2%	43.6	0.7%
2 - 4 times a week	55.1	6.9%	68.4	7.1%	58.5	5.7%	53.8	4.6%	37.7	3.5%	16.2	2.9%	9.0	2.6%	5.1	3.9%	304.0	5.0%
5 - 6 times a week	76.8	9.6%	94.8	9.9%	67.4	6.6%	73.5	6.2%	65.8	6.2%	24.2	4.3%	16.2	4.6%	8.4	6.4%	427.2	7.0%
At least once a day	653.3	81.5%	779.0	81.0%	886.5	86.8%	1 041.7	88.1%	952.7	89.4%	517.1	91.7%	323.7	91.8%	112.9	86.3%	5 267.0	86.6%
Once a day	442.3	55.2%	509.5	53.0%	563.5	55.2%	655.9	55.4%	582.3	54.7%	300.9	53.3%	183.4	52.0%	58.7	44.9%	3 296.5	54.2%
Twice a day	198.4	24.7%	250.9	26.1%	306.4	30.0%	365.3	30.9%	345.8	32.5%	204.6	36.3%	135.9	38.5%	51.3	39.2%	1 858.4	30.6%
3 or more times a day	12.6	1.6%	18.7	1.9%	16.7	1.6%	20.5	1.7%	24.6	2.3%	11.7	2.1%	4.4	1.2%	3.0	2.3%	112.1	1.8%
Don't know	-	-	0.4	<0.05%	) -	-	-	-	-	-	-	-	-	-	-	-	0.4	<0.05%
Total	801.6	100.0%	6 961.4	100.0%	5 1 021.2	100.0%	6 1 183.0	100.0%	6 1 065.5	100.0%	564.0	100.0%	ó 352.7	100.0%	ó 130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Respondents were asked how many servings of vegetables they ate a day on the days when they ate vegetables. In the PHS, one serving of vegetables was defined as equivalent to a bowl of raw leafy vegetables or half a bowl of cooked vegetables. Nearly one-third (31.5%) of persons aged 15 or above reported that they ate two or more servings of vegetables per day on the days they ate vegetables (33.5% for females and 29.4% for males). The estimated mean number of servings of vegetables eaten per day was similar between females (1.5) and males (1.4) (Table 5.4.2c). Analysed by age group, the highest proportion of persons who had reported eating two or more servings of vegetables per day on the days they ate vegetables was found in the 65-74 age group (34.6%), and followed by those in the 45-54 age group (34.3%) (Table 5.4.2d).

Table 5.4.2c: Number of servings of vegetables eaten per day on the days when persons ate vegetables by gender

	Fema	le	Mal	e	Total		
Number of servings of vegetables per day*	No. of persons ('000)		No. of persons ('000)	%	No. of persons ('000)	%	
Less than 1	148.6	4.7%	143.5	5.0%	292.1	4.8%	
1 to less than 2	1 967.8	61.8%	1 900.3	65.6%	3 868.1	63.6%	
2 or more	1 067.5	33.5%	850.4	29.4%	1 917.9	31.5%	
Unknown / Missing	1.1	<0.05%	1.0	<0.05%	2.1	<0.05%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	
Mean †	1.5		1.4		1.4		

Bases: \* All respondents.

† All respondents with valid response on the number of servings of vegetables eaten per day.

Note: Figures may not add up to the total due to rounding.

Table 5.4.2d: Number of servings (	f vegetables eaten p	per day on the days when	persons ate vegetables by age group
····· · · · · · · · · · · · · · · · ·			

	15-24		15-24 25-34		34 35-44		45-	45-54		55-64		65-74		75-84		85 or above		Total	
Number of servings of	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		
vegetables per day*	persons	<b>%</b>	persons	%	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		
Less than 1	53.9	6.7%	39.2	4.1%	46.6	4.6%	52.9	4.5%	46.7	4.4%	19.8	3.5%	20.6	5.8%	12.5	9.5%	292.1	4.8%	
1 to less than 2	536.9	67.0%	636.6	66.2%	661.2	64.8%	724.5	61.2%	661.7	62.1%	348.4	61.8%	213.5	60.5%	85.3	65.2%	3 868.1	63.6%	
2 or more	210.3	26.2%	285.1	29.7%	313.4	30.7%	405.5	34.3%	357.1	33.5%	195.3	34.6%	118.6	33.6%	32.5	24.8%	1 917.9	31.5%	
Unknown / Missing	0.5	0.1%	0.5	0.1%	-	-	-	-	-	-	0.5	0.1%	-	-	0.5	0.4%	2.1	<0.05%	
Total	801.6	100.0%	6 961.4	100.0%	1 021.2	100.0%	5 1 183.0	100.0%	6 1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%	
Mean †	1	.4	1	.4	1	.5	1.	5	1	.5	1	.5	1	.5	1	.3	1	.4	

Bases: \* All respondents.

† All respondents with valid response on the number of servings of vegetables eaten per day.

### 5.4.3 Consumption of Fruit and Vegetables

Diets rich in fruit and vegetables are associated with reduction in major non-communicable diseases, including coronary heart disease, type 2 diabetes and some cancers<sup>12</sup>. The WHO recommends consuming a minimum of five servings (about 80 grams (g) each) of fruit and vegetables a day, or a daily intake of at least 400g of fruit and vegetables, to achieve optimal health benefits<sup>10</sup>. In the PHS, the number of servings of fruit and vegetables eaten as a whole on average per day was calculated by summing the average daily servings of fruit eaten and that of vegetables. Overall, 5.6% of persons aged 15 or above reported consuming an average of five or more servings of fruit and vegetables per day - 6.5% for females and 4.6% for males (Table 5.4.3a). Analysed by age group, the corresponding proportion was the lowest among those in the 85 or above age group (3.1%) and the highest proportion was observed among persons aged 65-74 (7.0%) (Table 5.4.3b).

Table 5.4.3a: Number of servings of fruit and vegetables eaten on average per day by gender

	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Less than 5 servings a day	2 976.9	93.5%	2 762.6	95.4%	5 739.5	94.4%		
5 or more servings a day	207.0	6.5%	132.2	4.6%	339.2	5.6%		
Unknown / Missing	1.1	<0.05%	0.4	<0.05%	1.5	<0.05%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Tuble et nebet i tullber et ber i ligs et i fulle und vegetubles euten en uverage per day by age gr	Table 5	.4.3b: Number	<sup>,</sup> of servings o	of fruit and	vegetables eaten on	i average per d	lay by	y age	grou
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	15-24		5-24 25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	s %	persons	s %	persons	%	persons	%	persons	%	persons	s %	persons	%	persons	%	persons	s %
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Less than 5 servings a day	758.9	94.7%	924.1	96.1%	969.0	94.9%	1 110.0	93.8%	996.3	93.5%	523.8	92.9%	331.2	93.9%	126.2	96.5%	5 739.5	94.4%
5 or more servings a day	42.7	5.3%	36.9	3.8%	52.2	5.1%	73.0	6.2%	69.2	6.5%	39.6	7.0%	21.5	6.1%	4.1	3.1%	339.2	5.6%
Unknown Missing	/	-	0.4	<0.05%	-	-	-	-	-	-	0.5	0.1%	-	-	0.5	0.4%	1.5	<0.05%
Total	801.6	100.0%	6 961.4	100.0%	1 021.2	100.0%	0 1 183.0	100.0%	5 1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

### 5.4.4 Consumption of Preserved Vegetables

Overall, 20.7% of persons aged 15 or above ate preserved vegetables such as Chinese preserved vegetables, pickled cucumber and olive on average at least once a week. The corresponding proportion was slightly higher in females (21.2%) than in males (20.1%) (Table 5.4.4a). Analysed by age group, the highest proportion of persons who had consumed preserved vegetables at least once a week was among those aged 25-34 (22.4%) (Table 5.4.4b).

	Fema	le	Mal	e	Tota	Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%			
None / Less than once a week	2 507.1	78.7%	2 308.8	79.7%	4 815.9	79.2%			
Less than once a day	659.8	20.7%	564.0	19.5%	1 223.8	20.1%			
Once a week	495.2	15.5%	408.4	14.1%	903.6	14.9%			
2 - 4 times a week	139.3	4.4%	131.8	4.6%	271.1	4.5%			
5 - 6 times a week	25.3	0.8%	23.8	0.8%	49.1	0.8%			
At least once a day	14.8	0.5%	19.1	0.7%	33.9	0.6%			
Once a day	11.9	0.4%	14.0	0.5%	26.0	0.4%			
Twice a day	2.9	0.1%	3.0	0.1%	5.9	0.1%			
3 or more times a day	-	-	2.1	0.1%	2.1	<0.05%			
Don't know	3.4	0.1%	3.3	0.1%	6.6	0.1%			
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%			

### Table 5.4.4a: Frequency of consumption of preserved vegetables by gender

Base: All respondents.

	15-24		25-34		35-44		45-54		55-64		65-74		75-84		85 or above		Total	
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
None / Less than once a week	647.6	80.8%	744.1	77.4%	801.9	78.5%	922.8	78.0%	845.1	79.3%	465.2	82.5%	280.9	79.6%	108.4	82.9%	4 815.9	79.2%
Less than once a day	148.5	18.5%	209.5	21.8%	211.3	20.7%	254.8	21.5%	214.8	20.2%	94.1	16.7%	68.6	19.5%	22.1	16.9%	1 223.8	20.1%
Once a week	: 102.9	12.8%	154.7	16.1%	146.9	14.4%	194.0	16.4%	170.5	16.0%	73.1	13.0%	46.0	13.0%	15.6	11.9%	903.6	14.9%
2 - 4 times a week	37.0	4.6%	47.8	5.0%	55.0	5.4%	54.4	4.6%	38.1	3.6%	16.0	2.8%	19.3	5.5%	3.6	2.7%	271.1	4.5%
5 - 6 times a week	8.6	1.1%	7.0	0.7%	9.5	0.9%	6.4	0.5%	6.3	0.6%	5.0	0.9%	3.4	1.0%	2.9	2.2%	49.1	0.8%
At least once a day	2.5	0.3%	5.6	0.6%	7.5	0.7%	4.4	0.4%	5.5	0.5%	4.7	0.8%	3.2	0.9%	0.3	0.3%	33.9	0.6%
Once a day	1.5	0.2%	4.2	0.4%	5.4	0.5%	2.7	0.2%	4.6	0.4%	4.7	0.8%	2.4	0.7%	0.3	0.3%	26.0	0.4%
Twice a day	0.4	0.1%	0.5	0.1%	1.5	0.1%	1.7	0.1%	0.9	0.1%	-	-	0.9	0.2%	-	-	5.9	0.1%
3 or more times a day	0.5	0.1%	0.9	0.1%	0.6	0.1%	-	-	-	-	-	-	-	-	-	-	2.1	<0.05%
Don't know	3.0	0.4%	2.1	0.2%	0.5	<0.05%	b 1.0	0.1%	-	-	-	-	-	-	-	-	6.6	0.1%
Total	801.6	100.0%	961.4	100.0%	51 021.2	100.0%	61 183.0	100.0%	61 065.5	100.0%	564.0	100.0%	352.7	100.0%	6 130.8	100.0%	6 080.2	100.0%

Table 5.4.4b: Frequency of consumption of preserved vegetables by age group

Base: All respondents.

### 5.4.5 Consumption of Processed Meat and Associated Products

Overall, 46.5% of persons aged 15 or above ate processed meat and associated products such as canned meat, ham and sausages on average at least once a week. Relatively more males (51.3%) reported such consumption frequency than females (42.2%) (Table 5.4.5a).

	Fema	ale	Mal	le	Tota	1
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
None / Less than once a week	1 839.0	57.7%	1 407.4	48.6%	3 246.4	53.4%
Less than once a day	1 203.5	37.8%	1 290.1	44.6%	2 493.6	41.0%
Once a week	626.4	19.7%	632.0	21.8%	1 258.3	20.7%
2 - 4 times a week	426.0	13.4%	477.0	16.5%	903.0	14.9%
5 - 6 times a week	151.2	4.7%	181.1	6.3%	332.2	5.5%
At least once a day	140.1	4.4%	195.8	6.8%	335.8	5.5%
Once a day	92.1	2.9%	118.0	4.1%	210.1	3.5%
Twice a day	37.6	1.2%	59.7	2.1%	97.4	1.6%
3 or more times a day	10.4	0.3%	18.0	0.6%	28.4	0.5%
Don't know	2.4	0.1%	1.9	0.1%	4.3	0.1%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

### Table 5.4.5a: Frequency of consumption of processed meat and associated products by gender

Base: All respondents.
Analysed by age group, the proportions consuming processed meat and associated products on average at least once a week decreased with age from 60.1% among persons aged 15-24 to 19.4% among persons aged 85 or above (Table 5.4.5b).

	15-	-24	25	-34	35-	-44	45	-54	55	-64	65-	-74	75-	-84	85 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	s %	persons	s %	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
None / Less than once a week	318.5	39.7%	396.9	41.3%	489.3	47.9%	621.1	52.5%	631.1	59.2%	406.3	72.0%	277.8	78.8%	105.4	80.6%	3 246.4	53.4%
Less than once a day	423.5	52.8%	491.9	51.2%	465.0	45.5%	486.1	41.1%	387.4	36.4%	144.1	25.5%	70.4	20.0%	25.0	19.1%	2 493.6	41.0%
Once a week	204.1	25.5%	231.0	24.0%	5 246.4	24.1%	237.0	20.0%	204.5	19.2%	84.8	15.0%	36.8	10.4%	13.8	10.6%	1 258.3	20.7%
2 - 4 times a week	166.1	20.7%	182.7	19.0%	5 155.9	15.3%	184.5	15.6%	139.4	13.1%	42.5	7.5%	23.5	6.7%	8.4	6.4%	903.0	14.9%
5 - 6 times a week	53.4	6.7%	78.2	8.1%	62.7	6.1%	64.6	5.5%	43.5	4.1%	16.7	3.0%	10.1	2.9%	2.9	2.2%	332.2	5.5%
At least once a day	58.3	7.3%	70.9	7.4%	66.4	6.5%	75.2	6.4%	46.5	4.4%	13.5	2.4%	4.5	1.3%	0.3	0.3%	335.8	5.5%
Once a day	33.2	4.1%	38.3	4.0%	43.1	4.2%	51.2	4.3%	30.1	2.8%	10.3	1.8%	3.5	1.0%	0.3	0.3%	210.1	3.5%
Twice a day	18.9	2.4%	21.4	2.2%	18.9	1.9%	21.1	1.8%	14.3	1.3%	1.9	0.3%	1.0	0.3%	-	-	97.4	1.6%
3 or more times a day	6.2	0.8%	11.2	1.2%	4.4	0.4%	3.0	0.3%	2.1	0.2%	1.4	0.3%	-	-	-	-	28.4	0.5%
Don't know	1.2	0.2%	1.6	0.2%	0.5	<0.05%	6 0.6	<0.05%	ó 0.5	<0.05%	) -	-	-	-	-	-	4.3	0.1%
Total	801.6	100.0%	6 961.4	100.0%	61 021.2	100.0%	6 1 183.0	100.0%	6 1 065.5	100.0%	564.0	100.0%	5 352.7	100.0%	5 130.8	100.0%	6 080.2	100.0%

Table 5.4.5b: Frequency of consumption of processed meat and associated products by age group

Base: All respondents.

# 5.4.6 Consumption of Snacks with High Salt Content

Overall, 21.5% of persons aged 15 or above ate snacks with high salt content such as potato crisps, prawn crackers, squid floss and dried pork on average at least once a week. The corresponding proportion (21.5%) was the same for both females and males (Table 5.4.6a).

	Fema	ale	Mal	e	Tota	ı
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
None / Less than once a week	2 498.6	78.5%	2 270.0	78.4%	4 768.6	78.4%
Less than once a day	652.7	20.5%	606.7	21.0%	1 259.4	20.7%
Once a week	375.8	11.8%	360.3	12.4%	736.2	12.1%
2 - 4 times a week	221.0	6.9%	193.5	6.7%	414.5	6.8%
5 - 6 times a week	55.9	1.8%	52.8	1.8%	108.7	1.8%
At least once a day	33.2	1.0%	17.0	0.6%	50.3	0.8%
Once a day	30.4	1.0%	13.0	0.5%	43.5	0.7%
Twice a day	2.2	0.1%	1.7	0.1%	3.8	0.1%
3 or more times a day	0.7	<0.05%	2.3	0.1%	3.0	<0.05%
Don't know	0.4	<0.05%	1.5	0.1%	2.0	<0.05%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Table 5.4.6a: Frequency of consumption of snacks with high salt content by gender

Base: All respondents.

Analysis by age group showed that younger persons aged 15-24 reported a much higher proportion (41.4%) of consuming snacks with high salt content at least once a week and the corresponding proportion decreased sharply with age to 2.4% among persons aged 85 or above (Table 5.4.6b).

	15-	-24	25-	-34	35-	-44	45-	-54	55-	64	65-	-74	75-	-84	85 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	· %	persons	s %	persons	%	persons	%	persons	%	persons	s %	persons	s %	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
None / Less than once a week	469.4	58.6%	615.8	64.0%	762.8	74.7%	968.2	81.8%	951.2	89.3%	536.2	95.1%	337.3	95.6%	127.7	97.6%	4 768.6	78.4%
Less than once a day	319.0	39.8%	329.4	34.3%	251.6	24.6%	206.9	17.5%	110.3	10.4%	25.2	4.5%	13.9	3.9%	3.1	2.4%	1 259.4	20.7%
Once a week	168.3	21.0%	176.0	18.3%	151.2	14.8%	132.8	11.2%	76.6	7.2%	19.3	3.4%	9.6	2.7%	2.4	1.9%	736.2	12.1%
2 - 4 times a week	111.4	13.9%	114.6	11.9%	81.3	8.0%	68. <i>3</i>	5.8%	28.6	2.7%	5.4	1.0%	4.3	1.2%	0.7	0.5%	414.5	6.8%
5 - 6 times a week	39.4	4.9%	38.8	4.0%	19.1	1.9%	5.8	0.5%	5.1	0.5%	0.5	0.1%	-	-	-	-	108.7	1.8%
At least once a day	12.7	1.6%	14.7	1.5%	6.8	0.7%	7.9	0.7%	4.0	0.4%	2.6	0.5%	1.5	0.4%	-	-	50.3	0.8%
Once a day	9.9	1.2%	12.5	1.3%	6.2	0.6%	7.9	0.7%	4.0	0.4%	1.4	0.3%	1.5	0.4%	-	-	43.5	0.7%
Twice a day	1.7	0.2%	1.6	0.2%	-	-	-	-	-	-	0.5	0.1%	-	-	-	-	3.8	0.1%
3 or more times a day	1.1	0.1%	0.7	0.1%	0.6	0.1%	-	-	-	-	0.6	0.1%	-	-	-	-	3.0	<0.05%
Don't know	0.4	0.1%	1.5	0.2%	-	-	-	-	-	-	-	-	-	-	-	-	2.0	<0.05%
Total	801.6	100.0%	961.4	100.0%	51 021.2	100.0%	61 183.0	100.0%	61 065.5	100.0%	6 564.0	100.0%	5 352.7	100.0%	5 130.8	100.0%	6 080.2	100.0%

Table 5.4.6b: Frequency of consumption of snacks with high salt content by age group

Base: All respondents.

### 5.4.7 Consumption of Seaweeds and Ready-to-eat Seaweeds

Seaweeds are rich in iodine and other bioactive compounds that could potentially be exploited as functional ingredients for human health applications. The compounds contained in seaweeds are found to have anti-tumor, anti-viral, anti-coagulant, anti-oxidant, anti-allergic and anti-diabetic properties<sup>13</sup>. Overall, 8.3% of persons aged 15 or above ate seaweeds (including kelp / laver but excluding ready-to-eat seaweeds) on average at least once a week, and it was more common among females (8.9%) than in males (7.7%). Among persons aged 15 or above with intake of seaweeds, the estimated average quantities of seaweeds consumed per day were 1.6g and 1.5g for females and males respectively (Table 5.4.7a).

	Fema	ale	Mal	le	Tota	վ
Frequency *	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
None / Less than once a week	2 900.7	91.1%	2 668.1	92.2%	5 568.8	91.6%
Less than once a day	271.1	8.5%	217.3	7.5%	488.4	8.0%
Once a week	202.9	6.4%	162.8	5.6%	365.7	6.0%
2 - 4 times a week	55.2	1.7%	43.2	1.5%	98.5	1.6%
5 - 6 times a week	13.0	0.4%	11.3	0.4%	24.2	0.4%
At least once a day	11.7	0.4%	6.8	0.2%	18.4	0.3%
Once a day	11.2	0.4%	5.0	0.2%	16.2	0.3%
Twice a day	-	-	1.2	<0.05%	1.2	<0.05%
3 or more times a day	0.5	<0.05%	0.6	<0.05%	1.1	<0.05%
Don't know	1.5	<0.05%	3.1	0.1%	4.6	0.1%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%
Mean (g per day)†	1.6	5	1.5	i	1.6	

Table 5.4.7a: Frequency of consumption of seaweeds including kelp / laver (excluding ready-to-eat seaweed snacks) by gender

Bases: \* All respondents.

† All respondents with valid response on the quantity of seaweeds eaten per day.

Across all age groups, the corresponding proportions decreased with age from 11.8% among younger persons aged 15-24 to 1.0% among the oldest persons aged 85 or above. Compared with other age groups, persons aged 15-44 reported that they ate more seaweeds (1.7g) than others (Table 5.4.7b).

	15-	-24	25-	34	35-	44	45-	54	55-	64	65-	74	75-	84	85 or :	above	То	tal
Frequency *	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
1 1	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
None / Less than once a week	706.0	88.1%	854.1	88.8%	925.6	90.6%	1 093.5	92.4%	987.2	92.7%	533.7	94.6%	339.2	96.2%	129.5	99.0%	5 568.8	91.6%
Less than once a day	90.9	11.3%	103.4	10.8%	91.6	9.0%	86.4	7.3%	73.1	6.9%	28.6	5.1%	13.0	3.7%	1.3	1.0%	488.4	8.0%
Once a week	72.3	9.0%	77.1	8.0%	68.0	6.7%	68.2	5.8%	54.1	5.1%	17.7	3.1%	7.5	2.1%	0.9	0.7%	365.7	6.0%
2 - 4 times a week	16.1	2.0%	22.4	2.3%	18.6	1.8%	15.7	1.3%	14.2	1.3%	7.0	1.2%	4.0	1.1%	0.4	0.3%	98.5	1.6%
5 - 6 times a week	2.5	0.3%	4.0	0.4%	5.0	0.5%	2.5	0.2%	4.9	0.5%	3.9	0.7%	1.5	0.4%	-	-	24.2	0.4%
At least once a day	3.8	0.5%	2.3	0.2%	4.0	0.4%	2.5	0.2%	3.7	0.3%	1.7	0.3%	0.5	0.1%	-	-	18.4	0.3%
Once a day	2.7	0.3%	2.3	0.2%	2.8	0.3%	2.5	0.2%	3.7	0.3%	1.7	0.3%	0.5	0.1%	-	-	16.2	0.3%
Twice a day	-	-	-	-	1.2	0.1%	-	-	-	-	-	-	-	-	-	-	1.2	<0.05%
3 or more times a day	1.1	0.1%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	<0.05%
Don't know	0.9	0.1%	1.7	0.2%	-	-	0.6	0.1%	1.5	0.1%	-	-	-	-	-	-	4.6	0.1%
Total	801.6	100.0%	6 961.4	100.0%	61 021.2	100.0%	61 183.0	100.0%	61 065.5	100.0%	6 564.0	100.0%	5 352.7	100.0%	6 130.8	100.0%	6 080.2	100.0%
Mean (g per day) †	1.	7	1.	7	1.	7	1.	4	1.	5	1.	6	1.	3	0.	8	1.	6

Table 5.4.7b: Frequency of consumption of seaweeds including kelp / laver (excluding ready-to-eat seaweed snacks) by age group

Bases: \* All respondents.

† All respondents with valid response on the quantity of seaweeds eaten per day.

Overall, 8.1% of persons aged 15 or above ate ready-to-eat seaweeds including pre-packed snacks and ready-to-eat seaweed snacks on average at least once a week. Similar to the consumption of seaweeds, the corresponding proportion was also slightly higher among females (8.4%) than in males (7.8%). Among persons aged 15 or above who had reported the intake of ready-to-eat seaweeds, the estimated mean quantity of ready-to-eat seaweeds consumed per day was 0.1g for both females and males (Table 5.4.7c).

	Fema	ale	Mal	e	Tota	ıl
Frequency *	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
None / Less than once a week	2 917.3	91.6%	2 668.6	92.2%	5 585.9	91.9%
Less than once a day	252.5	7.9%	212.2	7.3%	464.8	7.6%
Once a week	181.5	5.7%	145.3	5.0%	326.8	5.4%
2 - 4 times a week	58.1	1.8%	57.9	2.0%	116.0	1.9%
5 - 6 times a week	12.9	0.4%	9.0	0.3%	22.0	0.4%
At least once a day	14.2	0.4%	12.8	0.4%	26.9	0.4%
Once a day	13.7	0.4%	10.7	0.4%	24.4	0.4%
Twice a day	0.4	<0.05%	2.1	0.1%	2.5	<0.05%
3 or more times a day	-	-	-	-	-	-
Don't know	1.0	<0.05%	1.6	0.1%	2.6	<0.05%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%
Mean (g per day) †	0.1		0.1		0.1	

Table 5.4.7c: Frequency of consumption of ready-to-eat seaweeds (including pre-packed snack / nori sheet) by gender

Bases: \* All respondents.

† All respondents with valid response on the quantity of ready-to-eat seaweeds eaten per day.

Analysed by age group, a higher proportion of persons aged 15-24 (15.3%) reported that they ate readyto-eat seaweeds on average at least once a week. The corresponding proportion decreased sharply with age to 1.9% among persons in the oldest age group of 85 or above. Compared with other age groups, persons aged 15-24 and aged 25-34 reported the consumption of a slightly higher mean daily quantity of ready-to-eat seaweeds taken (both at 0.2g) than others (Table 5.4.7d).

	15-	-24	25-	34	35-	44	45-	54	55-	64	65-	74	75-	84	85 or a	above	То	tal
Frequency *	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
1	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	<b>%</b>
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
None / Less than once a week	678.1	84.6%	834.6	86.8%	926.0	90.7%	1 116.7	94.4%	1 016.8	95.4%	544.4	96.5%	340.9	96.7%	128.4	98.1%	5 585.9	91.9%
Less than once a day	118.8	14.8%	119.9	12.5%	88.9	8.7%	62.8	5.3%	45.6	4.3%	16.9	3.0%	10.5	3.0%	1.4	1.1%	464.8	7.6%
Once a week	86.6	10.8%	77.6	8.1%	63.7	6.2%	44.6	3.8%	32.5	3.1%	12.7	2.3%	7.6	2.1%	1.4	1.1%	326.8	5.4%
2 - 4 times a week	26.8	3.3%	37.2	3.9%	20.7	2.0%	15.6	1.3%	11.1	1.0%	2.7	0.5%	1.8	0.5%	-	-	116.0	1.9%
5 - 6 times a week	5.4	0.7%	5.1	0.5%	4.5	0.4%	2.5	0.2%	1.9	0.2%	1.4	0.3%	1.1	0.3%	-	-	22.0	0.4%
At least once a day	3.9	0.5%	5.7	0.6%	6.3	0.6%	2.9	0.2%	3.1	0.3%	2.7	0.5%	1.3	0.4%	1.0	0.8%	26.9	0.4%
Once a day	2.7	0.3%	5.7	0.6%	6.3	0.6%	2.9	0.2%	2.7	0.3%	2.3	0.4%	0.9	0.3%	1.0	0.8%	24.4	0.4%
Twice a day	1.2	0.1%	-	-	-	-	-	-	0.5	<0.05%	6 0.4	0.1%	0.4	0.1%	-	-	2.5	<0.05%
3 or more times a day	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Don't know	0.8	0.1%	1.2	0.1%	-	-	0.6	0.1%	-	-	-	-	-	-	-	-	2.6	<0.05%
Total	801.6	100.0%	961.4	100.0%	51 021.2	100.0%	51 183.0	100.0%	61 065.5	100.0%	6 564.0	100.0%	352.7	100.0%	6 130.8	100.0%	6 080.2	100.0%
Mean (g per day) †	0	.2	0	.2	0.	1	0	.1	0	.1	0	.1	0	.1	0.	.1	0	.1

Table 5.4.7d: Frequency of consumption of ready-to-eat seaweeds (including pre-packed snack / nori sheet) by age group

Bases: \* All respondents.

† All respondents with valid response on the quantity of ready-to-eat seaweeds eaten per day.

## 5.4.8 Usage of Salt

Overall, 59.3% of persons aged 15 or above used seasonings such as salt, soy sauce, oyster sauce, ketchup and chili sauce during cooking every time. The usage was slightly more common among females (59.4%) than in males (59.1%). Another 20.9% often used such seasonings during cooking (Table 5.4.8a). Compared with other age groups, a higher proportion of persons aged 15-24 (61.6%) reported that they used seasonings containing salt during cooking every time (Table 5.4.8b).

	Fema	le	Mal	e	Tota	1
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Never	23.6	0.7%	21.7	0.7%	45.4	0.7%
Rarely	196.7	6.2%	173.4	6.0%	370.1	6.1%
Sometimes	380.5	11.9%	339.3	11.7%	719.8	11.8%
Often	668.0	21.0%	600.2	20.7%	1 268.2	20.9%
Every time	1 891.5	59.4%	1 711.5	59.1%	3 603.0	59.3%
Do not cook at home	24.7	0.8%	49.1	1.7%	73.8	1.2%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Table 5.4.8a: Frequency of using seasonings containing salt during cooking by gender

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

#### Table 5.4.8b: Frequency of using seasonings containing salt during cooking by age group

	15	-24	25-	-34	35-	-44	45	-54	55-	·64	65	-74	75-	84	85 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Never	7.9	1.0%	4.6	0.5%	5.2	0.5%	10.4	0.9%	8.8	0.8%	4.4	0.8%	2.7	0.8%	1.5	1.1%	45.4	0.7%
Rarely	37.2	4.6%	45.8	4.8%	52.3	5.1%	64.5	5.5%	76.5	7.2%	44.5	7.9%	30.2	8.6%	19.0	14.5%	370.1	6.1%
Sometimes	98.5	12.3%	108.0	11.2%	123.7	12.1%	139.9	11.8%	122.0	11.5%	62.4	11.1%	46.4	13.2%	18.8	14.4%	719.8	11.8%
Often	155.0	19.3%	204.3	21.2%	204.1	20.0%	255.1	21.6%	209.8	19.7%	134.5	23.8%	76.2	21.6%	29.3	22.4%	1 268.2	20.9%
Every time	494.0	61.6%	586.8	61.0%	610.2	59.7%	701.7	59.3%	640.2	60.1%	315.5	55.9%	194.5	55.1%	60.1	46.0%	3 603.0	59.3%
Do not cook at home	9.0	1.1%	11.9	1.2%	25.8	2.5%	11.4	1.0%	8.1	0.8%	2.7	0.5%	2.7	0.8%	2.1	1.6%	73.8	1.2%
Total	801.6	100.0%	961.4	100.0%	5 1 021.2	100.0%	1 183.0	100.0%	0 1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Overall, 2.5% of persons aged 15 or above reported that they added seasonings such as salt, soy sauce, ketchup and chili sauce at the table every time when they ate, which was slightly more common among males (2.7%) than in females (2.3%). Another 7.0% often added such seasonings at the table (Table 5.4.8c). Compared with other age groups, a higher proportion of persons aged 25-34 (3.5%) reported that they added seasonings containing salt at the table every time when they ate (Table 5.4.8d).

	Fema	le	Mal	e	Tota	1
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Never	767.3	24.1%	637.4	22.0%	1 404.7	23.1%
Rarely	1 200.7	37.7%	1 029.3	35.6%	2 230.0	36.7%
Sometimes	943.1	29.6%	924.4	31.9%	1 867.5	30.7%
Often	201.8	6.3%	225.1	7.8%	426.8	7.0%
Every time	72.1	2.3%	79.1	2.7%	151.2	2.5%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Table 5.4.8c: Frequency of adding seasonings containing salt at the table by gender

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 5.4.8d: Frequency of	of adding seasonings	containing salt	at the table by	age group
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	15	-24	25-	-34	35-	-44	45-	-54	55-	-64	65	-74	75-	84	85 or :	above	To	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons ('000)	s %	persons ('000)	%	persons ('000)	%	persons ('000)	%	persons ('000)	%	persons ('000)	%	persons ('000)	%	persons ('000)	%	persons ('000)	%
Never	167.5	20.9%	185.1	19.3%	199.4	19.5%	273.8	23.1%	274.6	25.8%	153.9	27.3%	109.8	31.1%	40.5	31.0%	1 404.7	23.1%
Rarely	261.3	32.6%	327.3	34.0%	368.4	36.1%	424.6	35.9%	395.8	37.2%	243.9	43.2%	147.3	41.8%	61.4	46.9%	2 230.0	36.7%
Sometimes	277.6	34.6%	339.8	35.3%	347.0	34.0%	368.1	31.1%	303.8	28.5%	130.8	23.2%	75.5	21.4%	25.0	19.1%	1 867.5	30.7%
Often	70.1	8.7%	75.5	7.9%	77.5	7.6%	87.0	7.4%	73.6	6.9%	27.8	4.9%	12.0	3.4%	3.3	2.6%	426.8	7.0%
Every time	25.1	3.1%	33.6	3.5%	28.9	2.8%	29.5	2.5%	17.7	1.7%	7.6	1.3%	8.2	2.3%	0.5	0.4%	151.2	2.5%
Total	801.6	100.0%	6 961.4	100.0%	51021.2	100.0%	1 183.0	100.0%	6 1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Respondents were asked whether they used iodised salt at home. In terms of domestic households, 22.3% of the domestic households had at least one member reporting that they used iodised salt at home and 11.0% said otherwise including those who used non-iodised salt only and those who did not used any salt at home. However, in two-thirds (66.7%) of the domestic households, all members aged 15 or above reported that they did not know whether the salt they used was iodised or not (Table 5.4.8e). Analysed by monthly household income, in general relatively more domestic households with higher monthly household income used iodised salt at home (Table 5.4.8f).

	Domestic	e households
-	No. ('000)	%
Yes	549.4	22.3%
No	271.9	11.0%
Don't know	1 642.3	66.7%
Total	2 463.6	100.0%

### Table 5.4.8e: Proportion of domestic households that used iodised salt

Base: All domestic households.

Note: Figures may not add up to the total due to rounding.

Table 5.4.8f: Proportion of domestic households that used iodised salt by monthly household inco	)me
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	Less \$5,	than 000	\$5,( \$9,	)00 - ,999	\$10, \$19	000 - ,999	\$20, \$29	000 - ,999	\$30, \$39	000 - ,999	\$40, \$49	000 - ,999	\$50 or r	,000 nore	То	tal
	No. of house- holds ('000)	%	No. of house- holds ('000)	%	No. of house- holds ('000)	%	No. of house- holds ('000)	%	No. of house- holds ('000)	%	No. of house- holds ('000)	%	No. of house- holds ('000)	%	No. of house- holds ('000)	%
Yes	31.8	10.9%	28.3	13.8%	89.2	18.7%	114.8	23.6%	99.8	29.2%	64.9	29.1%	118.5	27.5%	547.2	22.3%
No	31.1	10.7%	26.6	13.0%	54.1	11.3%	54.2	11.1%	29.8	8.7%	31.1	13.9%	43.7	10.1%	270.6	11.0%
Don't know	228.7	78.4%	150.3	73.2%	334.0	70.0%	317.8	65.3%	211.5	62.0%	127.0	57.0%	269.4	62.4%	1 638.6	66.7%
Total	291.6	100.0%	205.1	100.0%	477.2	100.0%	486.8	100.0%	341.2	100.0%	223.0	100.0%	431.5	100.0%	2 456.4	100.0%

Base: All domestic households provided information on monthly household income.

# 5.5 Eating-out Habits

In PHS, eating-out habits in respect of the frequency of eating-out for breakfast, lunch and dinner in the 30 days preceding the survey were collected from the respondents. "Eating-out" refers to a meal that is not made at home, and "eating-out for breakfast" excludes the bread that is bought from a bakery.

It was estimated that the average number of times of eating-out for breakfast per month was 8.1 for persons aged 15 or above. Analysed by gender, the corresponding number was 6.9 times for females and 9.3 times for males. Overall, 28.6% of persons aged 15 or above reported eating-out for breakfast 5 times or more a week during the 30 days preceding the survey, which was more frequent in males (34.8%) than in females (23.0%) (Table 5.5a). Compared with other age groups, a higher proportion of persons aged 25-34 (35.4%) reported that they ate out for breakfast 5 times or more a week (Table 5.5b).

As regards the average number of times of eating-out for lunch per month, it was estimated to be 11.9 for persons aged 15 or above (10.1 times for females and 13.8 times for males). Overall, 48.9% of persons aged 15 or above reported eating-out for lunch 5 times or more a week during the 30 days preceding the survey. The corresponding proportion was much higher in males (60.2%) than in females (38.7%) (Table 5.5a). Analysed by age, a higher proportion of persons aged 15-34 (65.2%) reported that they ate out for lunch 5 times or more a week (Table 5.5b).

Regarding dinner, the estimated average number of times of eating-out per month was 5.4 for persons aged 15 or above (4.8 times for females and 6.0 times for males). Overall, 9.9% of persons aged 15 or above reported eating-out for dinner 5 times or more a week during the 30 days preceding the survey. Males recorded a higher corresponding proportion (12.3%) than that of females (7.8%) (Table 5.5a). Among various age groups, a higher proportion of persons aged 25-34 (15.5%) reported that they ate out for dinner 5 times or more a week (Table 5.5b).

	Fen	nale	М	ale	Total			
	No. of		No. of		No. of			
	persons	%	persons	%	persons	%		
Drealtfact	('000)		('000)		('000)			
5 times or more a week	733 4	23.0%	1 007 2	34.8%	1 740 5	28.6%		
2 - 4 times a week	407.2	12.8%	392.1	13.5%	799.3	13.1%		
Once a week	457.4	14.4%	368 7	12.7%	826.1	13.6%		
2 - 3 times per month	227.2	7.1%	195.5	6.8%	422.7	7.0%		
Once per month	120.0	3.8%	94 3	3 3%	214.3	3.5%		
Did not eat out for breakfast	1 148.6	36.1%	738.4	25.5%	1 887.0	31.0%		
Skipped breakfast	91.2	2.9%	99.0	3.4%	190.2	3.1%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		
Mean (Times per month)	6	9	9	.3	8	1		
Lunch								
5 times or more a week	1 231.8	38.7%	1 744.2	60.2%	2 975.9	48.9%		
2 - 4 times a week	473.8	14.9%	328.0	11.3%	801.8	13.2%		
Once a week	297.0	9.3%	159.5	5.5%	456.5	7.5%		
2 - 3 times per month	245.1	7.7%	145.5	5.0%	390.6	6.4%		
Once per month	80.7	2.5%	67.3	2.3%	148.0	2.4%		
Did not eat out for lunch	832.8	26.1%	420.2	14.5%	1 253.0	20.6%		
Skipped lunch	23.9	0.8%	30.5	1.1%	54.4	0.9%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		
Mean (Times per month)	10	).1	13	3.8	11	.9		
Dinner								
5 times or more a week	247.6	7.8%	357.2	12.3%	604.9	9.9%		
2 - 4 times a week	551.8	17.3%	578.1	20.0%	1 129.9	18.6%		
Once a week	600.2	18.8%	552.3	19.1%	1 152.5	19.0%		
2 - 3 times per month	476.7	15.0%	409.1	14.1%	885.8	14.6%		
Once per month	200.4	6.3%	154.3	5.3%	354.7	5.8%		
Did not eat out for dinner	1 103.0	34.6%	839.5	29.0%	1 942.5	31.9%		
Skipped dinner	5.4	0.2%	4.6	0.2%	10.0	0.2%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		
Mean (Times per month)	4	.8	6	.0	5.	4		

# Table 5.5a: Frequency of eating-out for breakfast, lunch or dinner in the 30 days preceding the survey by gender

Base: All respondents.

Table 5.5b: Frequency of eating-out for breakfast, lunch or dinner in the 30 days preceding the survey by age group

	15	-24	25	-34	35-	-44	45-	54	55	-64	65	-74	75	-84	85 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	s %	persons	s %	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Breakfast																		
5 times or more a week	221.6	27.6%	340.0	35.4%	333.5	32.7%	376.9	31.9%	266.8	25.0%	111.1	19.7%	69.8	19.8%	20.7	15.9%	1 740.5	28.6%
2-4 times a week	119.8	14.9%	152.1	15.8%	172.6	16.9%	143.5	12.1%	118.2	11.1%	56.8	10.1%	31.7	9.0%	4.5	3.4%	799.3	13.1%
Once a week	104.9	13.1%	142.1	14.8%	137.9	13.5%	174.2	14.7%	162.2	15.2%	66.7	11.8%	29.9	8.5%	8.2	6.3%	826.1	13.6%
2-3 times per month	51.6	6.4%	53.4	5.6%	71.2	7.0%	85.7	7.2%	77.4	7.3%	46.3	8.2%	26.6	7.5%	10.5	8.0%	422.7	7.0%
Once per month	28.1	3.5%	28.8	3.0%	34.2	3.3%	36.6	3.1%	44.8	4.2%	23.3	4.1%	14.4	4.1%	4.0	3.1%	214.3	3.5%
Did not eat out for breakfast	230.4	28.7%	196.5	20.4%	242.8	23.8%	337.6	28.5%	371.3	34.9%	249.6	44.3%	176.0	49.9%	82.9	63.3%	1 887.0	31.0%
Skipped breakfast	45.1	5.6%	48.3	5.0%	29.1	2.8%	28.5	2.4%	24.8	2.3%	10.1	1.8%	4.3	1.2%	-	-	190.2	3.1%
Total	801.6	100.0%	6 961.4	100.0%	01 021.2	100.0%	1 183.0	100.0%	6 1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Mean*	8	.0	9	.7	9	.3	8.	.6	7	.2	5	.9	5	.6	4.	.1	8	.1
Lunch																		
more a week	522.5	65.2%	626.6	65.2%	622.2	60.9%	651.2	55.0%	417.8	39.2%	95.6	16.9%	28.8	8.2%	11.4	8.7%	2 975.9	48.9%
2-4 times a week	137.5	17.2%	138.1	14.4%	134.9	13.2%	153.8	13.0%	145.3	13.6%	62.2	11.0%	25.7	7.3%	4.2	3.2%	801.8	13.2%
Once a week	42.5	5.3%	58.0	6.0%	69.2	6.8%	90.3	7.6%	101.6	9.5%	61.7	10.9%	27.2	7.7%	6.0	4.6%	456.5	7.5%
2-3 times per month	24.7	3.1%	46.5	4.8%	56.6	5.5%	77.7	6.6%	85.6	8.0%	57.4	10.2%	32.4	9.2%	9.7	7.4%	390.6	6.4%
Once per month	7.4	0.9%	12.4	1.3%	13.7	1.3%	25.9	2.2%	35.0	3.3%	28.0	5.0%	19.4	5.5%	6.1	4.7%	148.0	2.4%
Did not eat out for lunch	63.5	7.9%	76.7	8.0%	118.8	11.6%	178.3	15.1%	261.3	24.5%	249.8	44.3%	212.2	60.2%	92.5	70.7%	1 253.0	20.6%
Skipped lunch	3.6	0.4%	3.1	0.3%	5.8	0.6%	5.7	0.5%	18.8	1.8%	9.4	1.7%	7.1	2.0%	0.9	0.7%	54.4	0.9%
Total	801.6	100.0%	6 961.4	100.0%	01 021.2	100.0%	1 183.0	100.0%	6 1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Mean*	15	5.4	15	5.1	14	.2	13	.1	10	).1	5	.5	3	.1	2.	.5	11	.9
Dinner																		
5 times or more a week	99.5	12.4%	148.6	15.5%	118.2	11.6%	130.1	11.0%	75.3	7.1%	16.5	2.9%	10.1	2.9%	6.3	4.8%	604.9	9.9%
2-4 times a week	193.2	24.1%	284.3	29.6%	235.7	23.1%	222.8	18.8%	141.7	13.3%	35.4	6.3%	15.1	4.3%	1.8	1.4%	1 129.9	18.6%
Once a week	169.0	21.1%	206.6	21.5%	236.9	23.2%	235.3	19.9%	191.7	18.0%	73.8	13.1%	29.1	8.2%	10.1	7.7%	1 152.5	19.0%
2-3 times per month	114.6	14.3%	132.4	13.8%	134.1	13.1%	182.5	15.4%	179.2	16.8%	86.6	15.4%	44.0	12.5%	12.3	9.4%	885.8	14.6%
Once per month	34.9	4.4%	37.6	3.9%	56.0	5.5%	73.6	6.2%	72.2	6.8%	47.2	8.4%	26.3	7.5%	6.8	5.2%	354.7	5.8%
out for dinner	189.9	23.7%	149.0	15.5%	239.8	23.5%	337.4	28.5%	402.0	37.7%	303.3	53.8%	227.6	64.5%	93.5	71.5%	1 942.5	31.9%
Skipped dinner	0.4	0.1%	2.9	0.3%	0.5	<0.05%	1.3	0.1%	3.4	0.3%	1.0	0.2%	0.4	0.1%	-	-	10.0	0.2%
Total	801.6	100.0%	6 961.4	100.0%	01 021.2	100.0%	1 183.0	100.0%	6 1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Mean*	6	.6	7	.9	6	.4	5.	7	4	.2	2	.3	1	.8	1.	.7	5.	.4

Base: All respondents.

Notes: \* The summary statistics refer to the number of times of eating-out for breakfast, lunch or dinner in the 30 days preceding the survey. Figures may not add up to the total due to rounding. Overall, 84.2% of persons aged 15 or above reported eating-out (including breakfast, lunch and dinner as a whole) at least once a week during the 30 days preceding the survey. A higher proportion was recorded among males (88.9%) than in females (79.9%) (Table 5.5c). Analysed by age group, persons aged 25-34 recorded the highest proportion of 94.8%, followed by persons aged 15-24 (94.1%) and persons aged 85 or above recorded the lowest proportion of 39.1% of eating-out at least once a week (Table 5.5d).

 Table 5.5c: Proportion of population aged 15 or above who reported eating-out for breakfast, lunch or dinner at least once a week by gender

	Female	Male	Total
Proportion of population eating-out for breakfast, lunch or dinner at least once a week	79.9%	88.9%	84.2%

Base: All respondents.

 Table 5.5d: Proportion of population aged 15 or above who reported eating-out for breakfast, lunch or dinner at least once a week by age group

	15-24	25-34	25-44	45-54	55-64	65-74	75-84	85 or above	Total
Proportion of population eating-out for breakfast, lunch or dinner at least once a week	94.1%	94.8%	91.3%	88.3%	81.3%	64.8%	54.3%	39.1%	84.2%

Base: All respondents.

## 5.6 Use of Medication for Health

People may use medications for different reasons: for staying healthy, improving general health, or controlling a health condition. The PHS used self-administered questionnaire to collect information on the usage of certain medications including slimming pills, health supplements, birth control pills and hormones in the month preceding the survey from the respondents.

Overall, 0.6% of persons aged 15 or above took slimming pills in the month preceding the survey. The usage was more common in females (0.8%) than in males (0.3%) (Table 5.6a). Compared with other age groups, a higher proportion of persons aged 25-34 and 35-44 (both at 0.9%) reported taking slimming pills in the month preceding the survey (Table 5.6b).

Overall, 16.1% of persons aged 15 or above took health supplements such as vitamin and mineral supplements in the month preceding the survey. The corresponding proportion was higher among females (19.4%) than in males (12.4%) (Table 5.6a). Analysed by age, a higher proportion of persons aged 45-54 (19.0%) reported having used health supplements in the month preceding the survey and it was followed by persons aged 65-74 (18.6%) (Table 5.6b).

	Fen	nale	Μ	ale	То	Total	
	No. of		No. of		No. of		
	persons	%	persons	%	persons	%	
	('000)		('000)		('000)		
Slimming pills							
Yes	24.8	0.8%	8.9	0.3%	33.7	0.6%	
No	3 156.3	99.1%	2 881.1	99.5%	6 037.4	99.3%	
Don't know	4.0	0.1%	5.2	0.2%	9.2	0.2%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	
Health supplements such as vitamin and	mineral suppleme	ents					
Yes	618.9	19.4%	360.3	12.4%	979.2	16.1%	
No	2 552.7	80.1%	2 514.8	86.9%	5 067.5	83.3%	
Don't know	13.4	0.4%	20.1	0.7%	33.5	0.6%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	

 Table 5.6a: Proportion of persons aged 15 or above who had taken slimming pills or health supplements in the month preceding the survey by gender

Base: All respondents.

	15	-24	25-	-34	35-	44	45-	54	55-	·64	65-	74	75-	-84	85 or	above	То	tal
	No. of persons ('000)	5 %	No. of persons ('000)	s %	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	s %	No. of persons ('000)	s %	No. of persons ('000)	s %	No. of persons ('000)	s %	No. of persons ('000)	s %
Slimming pill	s																	
Yes	4.5	0.6%	8.3	0.9%	9.5	0.9%	6.7	0.6%	3.4	0.3%	0.4	0.1%	0.9	0.3%	-	-	33.7	0.6%
No	795.2	99.2%	951.0	98.9%	1 011.3	99.0%	1 174.1	99.2%	1 060.6	99.5%	562.5	99.7%	351.8	99.7%	130.8	100.0%	6 037.4	99.3%
Don't know	1.9	0.2%	2.1	0.2%	0.4	<0.05%	5 2.2	0.2%	1.5	0.1%	1.1	0.2%	-	-	-	-	9.2	0.2%
Total	801.6	100.0%	6 961.4	100.0%	61 021.2	100.0%	51 183.0	100.0%	51 065.5	100.0%	564.0	100.0%	352.7	100.0%	b 130.8	100.0%	6 080.2	100.0%
Health supple	ments s	uch as v	itamin	and mi	neral suj	ppleme	nts											
Yes	87.1	10.9%	144.5	15.0%	172.5	16.9%	224.9	19.0%	171.5	16.1%	105.1	18.6%	53.0	15.0%	20.6	15.8%	979.2	16.1%
No	704.4	87.9%	812.0	84.5%	844.6	82.7%	951.9	80.5%	889.5	83.5%	455.8	80.8%	299.3	84.9%	110.2	84.2%	5 067.5	83.3%
Don't know	10.1	1.3%	5.0	0.5%	4.1	0.4%	6.2	0.5%	4.5	0.4%	3.1	0.6%	0.4	0.1%	-	-	33.5	0.6%
Total	801.6	100.0%	5 961.4	100.0%	61 021.2	100.0%	51 183.0	100.0%	51 065.5	100.0%	564.0	100.0%	352.7	100.0%	ó 130.8	100.0%	6 080.2	100.0%

Table 5.6b: Proportion of persons aged 15 or abov	e who had taken slim	ming pills or health supp	lements in the month
preceding the survey by age group			

All respondents. C.

A total of 3.4% of females aged 15 to 49 reported that they had taken birth control pills in the month preceding the survey. Analysed by age group, females aged 25-34 recorded the highest proportion (4.9%) of using birth control pills in this period (Table 5.6c).

The PHS asked females aged 30 or above whether they took hormones for menopause or aging symptoms in the month preceding the survey. Overall, 0.8% of females aged 30 or above reported that they had taken hormones for these purposes. Compared with other age groups, a higher proportion of females aged 45-54 (1.4%) reported having use of hormones in the month preceding the survey. The mean age started taking hormones among females aged 30 or above was estimated to be 43.9 years old (Table 5.6d).

 Table 5.6c: Proportion of females aged 15 to 49 who had taken birth control pills in the month preceding the survey by age group

	15-	24	25-	34	35-	-44	45-	-49	Total		
	No. of persons ('000)	%									
Yes	5.8	1.5%	24.8	4.9%	21.6	3.8%	6.9	2.3%	59.0	3.4%	
No	386.5	98.5%	481.6	95.1%	539.8	96.2%	290.7	97.7%	1 698.7	96.6%	
Total	392.3	100.0%	506.4	100.0%	561.4	100.0%	297.6	100.0%	1 757.7	100.0%	

Base: Female respondents aged 15 to 49.

Note: Figures may not add up to the total due to rounding.

 Table 5.6d: Proportion of females aged 30 or above who had taken hormones for menopause or aging symptoms in the month preceding the survey by age group

	30	-34	35	-44	45	-54	55	-64	65	-74	75	-84	85 or	above	То	tal
	No. of	0/0	No. of	. %	No. of	0/0	No. of	. %	No. of	. 0/0	No. of	0/0	No. of	. %	No. of	0/2
	('000)	/0	('000)	/0	('000)		('000)		('000)		('000)		('000)	/0	('000)	
Yes	1.0	0.4%	4.2	0.7%	9.0	1.4%	4.6	0.9%	1.4	0.5%	0.5	0.3%	-	-	20.8	0.8%
No	266.2	99.6%	557.2	99.3%	625.6	98.6%	532.9	99.1%	278.8	99.5%	187.4	99.7%	84.7	100.0%	2 532.7	99.2%
Total	267.2	100.0%	561.4	100.0%	634.6	100.0%	537.5	100.0%	280.2	100.0%	187.9	100.0%	84.7	100.0%	2 553.5	100.0%
Mean age (in years) when started taking hormones†	22	2.3	35	5.8	44	1.4	52	2.0	54	4.7	49	9.0		-	43	.9

Bases: Female respondents aged 30 or above.

† All female respondents aged 30 or above who had taken hormones before.

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# Chapter 6 Injury Prevention

Injury is one of the leading causes of global morbidity, mortality and premature death, and an important public health issue worldwide<sup>1</sup>. Meanwhile, safety practices are effective in preventing unintentional injuries. This Chapter reports the characteristics of unintentional injuries and preventive measures adopted for injury prevention in the population in Hong Kong.

Indicator	Female	Male	Overall
Proportion of population who had sustained unintentional injury episode(s) in the 12 months preceding the survey	13.9%	15.1%	14.5%
Proportion of population who had done something or taken precautions to prevent unintentional injury in household or workplace in the 12 months preceding the survey	39.3%	41.6%	40.4%
Proportion of population who agreed that unintentional injury was preventable	81.4%	79.8%	80.6%

# **Snapshot of Population's Injury Prevention**

## **6.1** Unintentional Injuries

In this survey, "Unintentional injuries" are injuries that are not deliberately inflicted by oneself or by someone else, and are severe enough to limit daily activities of a person.

Overall, 14.5% of persons (15.1% of males and 13.9% of females) aged 15 or above reported that they had sustained unintentional injury episode(s) in the 12 months preceding the survey (Table 6.1a). People aged 15-24 (19.0%) and 85 or above (17.7%) were more likely to report having sustained unintentional injury episode(s) than those in other age groups (Table 6.1b).

 Table 6.1a:
 Proportion of population aged 15 or above sustained unintentional injury episode(s) in the 12 months preceding the survey by gender

	Fema	le	Mal	e	Tota	ı
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	441.8	13.9%	437.7	15.1%	879.6	14.5%
No	2 743.2	86.1%	2 457.5	84.9%	5 200.6	85.5%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

 Table 6.1b:
 Proportion of population aged 15 or above sustained unintentional injury episode(s) in the 12 months preceding the survey by age group

	15-	24	25-	-34	35-	-44	45-	-54	55-	·64	65	-74	75	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons ('000)	%	persons ('000)	5 %	('000)	5 %	persons ('000)	%	('000)	%	persons ('000)	5 %	persons ('000)	5 %	('000)	s %	('000)	%
Yes	152.0	19.0%	143.4	14.9%	137.5	13.5%	166.4	14.1%	143.8	13.5%	66.4	11.8%	46.9	13.3%	23.2	17.7%	879.6	14.5%
No	649.6	81.0%	818.0	85.1%	883.7	86.5%	1 016.6	85.9%	921.7	86.5%	497.6	88.2%	305.8	86.7%	107.6	82.3%	5 200.6	85.5%
Total	801.6	100.0%	961.4	100.0%	01 021.2	100.0%	1 183.0	100.0%	61 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Among those who had sustained unintentional injury episode(s) in the 12 months preceding the survey, the average number of unintentional injury episodes sustained was 2.1. The results were comparable between females and males (2.1 times versus 2.2 times respectively) (Table 6.1c). Subgroup analyses by age group showed that people in the younger age groups, i.e. 15-24 and 25-34, recorded the highest average number of unintentional injury episodes of 2.5 times during this period, while that among people in the oldest age group (85 or above) was the lowest at 1.3 times (Table 6.1d).

	Fema	le	Mal	e	Tota	al
	No. of persons	0/	No. of persons	<b>A</b> /	No. of persons	<b>.</b>
	('000)	%	('000)	%	('000)	%
1	291.7	66.0%	255.2	58.3%	546.9	62.2%
2	69.0	15.6%	82.3	18.8%	151.3	17.2%
3	37.4	8.5%	43.7	10.0%	81.1	9.2%
4	10.2	2.3%	11.1	2.5%	21.3	2.4%
5	7.8	1.8%	18.8	4.3%	26.6	3.0%
6 or above	25.7	5.8%	26.7	6.1%	52.4	6.0%
Total	441.8	100.0%	437.7	100.0%	879.6	100.0%
Mean	2.1	2.2	,	2.1		

Table 6.1c: Number of unintentional injury episode(s) sustained by injured persons in the 12 months preceding the survey by gender

Base: All respondents who sustained unintentional injury in the 12 months preceding the survey.

Note: Figures may not add up to the total due to rounding.

Table 6.1d: Number of unintentional injury episode(s) sustained by injured persons in the 12 months preceding the survey by age group

	15-	-24	25-	-34	35-	-44	45-	-54	55	-64	65-	-74	75-	84	85 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	s %	persons	%	persons	%	persons	%	persons	s %
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
1	81.0	53.3%	85.0	59.3%	79.5	57.8%	100.6	60.5%	98.1	68.2%	45.5	68.5%	37.9	80.8%	19.3	83.2%	546.9	62.2%
2	26.4	17.4%	18.2	12.7%	25.9	18.8%	36.5	21.9%	25.0	17.4%	11.7	17.6%	6.2	13.1%	1.6	6.7%	151.3	17.2%
3	20.3	13.4%	18.9	13.2%	12.5	9.1%	11.1	6.7%	11.0	7.7%	5.1	7.7%	0.4	0.9%	1.7	7.2%	81.1	9.2%
4	6.3	4.2%	3.9	2.7%	3.3	2.4%	2.4	1.5%	3.5	2.4%	1.4	2.1%	0.4	0.9%	-	-	21.3	2.4%
5	4.3	2.8%	5.7	4.0%	6.1	4.5%	7.8	4.7%	1.2	0.8%	-	-	0.9	1.9%	0.7	2.9%	26.6	3.0%
6 or above	13.7	9.0%	11.7	8.2%	10.2	7.4%	7.9	4.8%	5.0	3.5%	2.7	4.1%	1.1	2.3%	-	-	52.4	6.0%
Total	152.0	100.0%	143.4	100.0%	137.5	100.0%	166.4	100.0%	143.8	100.0%	66.4	100.0%	46.9	100.0%	23.2	100.0%	879.6	100.0%
Mean	2	.5	2.	.5	2.	3	2.	.1	1	.8	1.	.9	1.	5	1.	3	2	.1

Base: All respondents who sustained unintentional injury in the 12 months preceding the survey.

Respondents aged 15 or above who had sustained unintentional injury episode(s) in the 12 month preceding the survey were asked to report the main cause for each of the three most severe injury episodes which they sustained during the aforementioned period. Among these injury episodes reported, the five most common main causes were sprain (24.0%), falls (19.9%), hit / struck (19.6%), cutting / piercing (15.8%) and sports (12.8%). Analysed by gender, a higher proportion of unintentional injury episodes in females resulted from falls (26.6%), sprain (23.8%) and hit / struck (19.8%), while a higher proportion of unintentional injury episodes in males resulted from sprain (24.2%), hit / struck (19.3%) and sports (18.8%) (Table 6.1e). Analysed by age group, falls (59.1%) was the most common main cause of unintentional injury episodes among persons in the 25-34, 35-44 and 55-64 age groups (Table 6.1f).

	Fema	ile	Mal	e	Tota	1
	No. of episodes ('000)	%	No. of episodes ('000)	%	No. of episodes ('000)	%
Sprain	160.1	23.8%	174.6	24.2%	334.8	24.0%
Falls	179.0	26.6%	98.6	13.7%	277.7	19.9%
Hit / struck	133.4	19.8%	139.0	19.3%	272.5	19.6%
Cutting / piercing	102.7	15.3%	117.2	16.3%	219.9	15.8%
Sports	43.3	6.4%	135.4	18.8%	178.7	12.8%
Burns / scald	33.4	5.0%	24.5	3.4%	57.9	4.2%
Pinch / crush	9.3	1.4%	16.0	2.2%	25.3	1.8%
Animal bite	6.7	1.0%	4.0	0.6%	10.7	0.8%
Traffic	2.2	0.3%	8.5	1.2%	10.7	0.8%
Abrasion	2.8	0.4%	1.4	0.2%	4.3	0.3%
Others	-	-	1.1	0.2%	1.1	0.1%
Total	673.0	100.0%	720.5	100.0%	1 393.5	100.0%

Table 6.1e: Main causes of unintentional injury episode(s) sustained in the 12 months preceding the survey by gender

Base: Unintentional injury episodes (up to three most serious ones) sustained by the respondents in the 12 months preceding the survey.

Notes: Ranked in descending order of the percentages of the main causes of the three most severe unintentional injury episodes sustained by the respondents. "Others" covered unintentional injury episodes due to unknown causes and did not include drowning / near-drowning, poisoning and electric shock. Figures may not add up to the total due to rounding.

	15-	-24	25-	34	35-	44	45-	54	55-	64	65-	74	75-	84	85 or a	above	Tot	al
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	episodes	s %	episodes	s %	episodes	s %	episodes	%	episodes	s %	episodes	s %	episodes	%	episodes	%	episodes	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Sprain	62.1	23.2%	57.7	23.8%	75.7	33.3%	63.7	24.4%	58.6	27.9%	10.3	10.6%	6.6	11.3%	-	-	334.8	24.0%
Falls	36.0	13.5%	23.8	9.8%	26.7	11.7%	38.0	14.5%	43.8	20.8%	49.7	51.4%	36.2	61.6%	23.4	79.5%	277.7	19.9%
Hit / struck	50.5	18.9%	40.1	16.6%	36.1	15.9%	66.5	25.5%	48.8	23.2%	16.8	17.4%	8.7	14.8%	4.8	16.4%	272.5	19.6%
Cutting / piercing	32.6	12.2%	50.6	20.9%	42.9	18.8%	43.4	16.6%	36.4	17.3%	9.6	9.9%	3.9	6.6%	0.5	1.8%	219.9	15.8%
Sports	65.6	24.5%	44.9	18.6%	31.3	13.8%	25.8	9.9%	8.3	4.0%	2.2	2.3%	0.5	0.8%	-	-	178.7	12.8%
Burns / scald	6.9	2.6%	11.4	4.7%	8.0	3.5%	13.4	5.1%	11.3	5.4%	5.6	5.8%	1.3	2.2%	-	-	57.9	4.2%
Pinch / crush	4.6	1.7%	6.2	2.6%	4.7	2.1%	4.7	1.8%	2.5	1.2%	1.5	1.6%	0.5	0.8%	0.7	2.3%	25.3	1.8%
Animal bite	3.7	1.4%	2.7	1.1%	1.6	0.7%	2.1	0.8%	-	-	-	-	0.6	1.0%	-	-	10.7	0.8%
Traffic	1.1	0.4%	4.0	1.6%	0.5	0.2%	3.2	1.2%	0.5	0.2%	0.9	0.9%	0.6	1.0%	-	-	10.7	0.8%
Abrasion	3.7	1.4%	-	-	-	-	0.5	0.2%	-	-	-	-	-	-	-	-	4.3	0.3%
Others	0.6	0.2%	0.5	0.2%	-	-	-	-	-	-	-	-	-	-	-	-	1.1	0.1%
Total	267.6	100.0%	6 242.0	100.0%	5 227.5	100.0%	6 261.5	100.0%	210.2	100.0%	<b>96.6</b>	100.0%	58.8	100.0%	5 29.4	100.0%	5 1 393.5	100.0%

Table 6.1f: Main causes of unintentional injury episode(s) sustained in the 12 months preceding the survey by age group

Base: Unintentional injury episodes (up to three most serious ones) sustained by the respondents in the 12 months preceding the survey.

Notes: Ranked in descending order of the percentages of the main causes of the three most severe unintentional injury episodes sustained by the respondents. "Others" covered unintentional injury episodes due to unknown causes and did not include drowning / near-drowning, poisoning and electric shock. Figures may not add up to the total due to rounding. Among the most severe unintentional injury episodes reported by the respondents during the 12 months preceding the survey, the most common main cause of injury was sprain (26.8%). While sprain (26.4%) was the most common main cause of injury among males, falls (30.1%) was the most common main cause among females (Table 6.1g). Analysed by age group, sprain was the most common main cause of injury among persons aged 15-64, while falls was the most common main cause among those aged 65 or above (Table 6.1h).

	Fema	ale	Mal	e	Tota	1
	No. of episodes ('000)	%	No. of episodes ('000)	%	No. of episodes ('000)	%
Sprain	120.5	27.3%	115.5	26.4%	236.0	26.8%
Falls	133.1	30.1%	75.8	17.3%	208.9	23.8%
Hit / struck	73.6	16.7%	78.5	17.9%	152.1	17.3%
Cutting / piercing	55.4	12.5%	57.3	13.1%	112.6	12.8%
Sports	26.3	6.0%	77.7	17.7%	104.0	11.8%
Burns / scald	21.4	4.8%	13.6	3.1%	34.9	4.0%
Pinch / crush	6.0	1.3%	8.9	2.0%	14.9	1.7%
Traffic	1.6	0.4%	7.9	1.8%	9.4	1.1%
Animal bite	2.7	0.6%	1.0	0.2%	3.7	0.4%
Abrasion	1.5	0.3%	0.5	0.1%	1.9	0.2%
Others	-	-	1.1	0.3%	1.1	0.1%
Total	441.8	100.0%	437.7	100.0%	879.6	100.0%

Table 6.1g: Main causes of the most severe unintentional injury episode(s) sustained in the 12 months preceding the survey by gender

Base: The most severe unintentional injury episodes sustained by the respondents in the 12 months preceding the survey.

Notes: Ranked in descending order of the percentages of the main causes of the most severe unintentional injury episodes sustained by the respondents. "Others" covered unintentional injury episodes due to unknown causes and did not include drowning / near-drowning, poisoning and electric shock. Figures may not add up to the total due to rounding.

	15-	-24	25	-34	35-	-44	45	-54	55-	-64	65-	-74	75-	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	episodes	s %	episodes	s %	episodes	%	episodes	s %	episodes	s %	episodes	s %	episodes	s %	episodes	%	episodes	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Sprain	39.9	26.3%	6 44.9	31.3%	50.0	36.4%	45.8	27.5%	42.2	29.4%	7.4	11.2%	5.7	12.1%	- -	-	236.0	26.8%
Falls	22.8	15.0%	6 16.2	11.3%	19.5	14.2%	30.5	18.3%	33.5	23.3%	37.9	57.1%	30.0	63.8%	5 18.5	79.9%	208.9	23.8%
Hit / struck	26.7	17.6%	<b>20.3</b>	14.1%	18.3	13.3%	37.6	22.6%	32.1	22.3%	8.8	13.2%	o 4.9	10.4%	3.5	14.9%	152.1	17.3%
Cutting / piercing	14.7	9.7%	24.4	17.0%	22.0	16.0%	20.6	12.4%	21.2	14.7%	5.6	8.5%	3.5	7.5%	0.5	2.3%	112.6	12.8%
Sports	37.6	24.8%	b 24.0	16.7%	18.2	13.3%	17.2	10.3%	5.6	3.9%	0.9	1.4%	0.5	1.0%	-	-	104.0	11.8%
Burns / scald	4.6	3.0%	6.3	4.4%	4.8	3.5%	8.0	4.8%	7.1	5.0%	3.3	5.0%	0.8	1.8%	-	-	34.9	4.0%
Pinch / crush	2.0	1.3%	2.5	1.7%	3.0	2.2%	3.1	1.8%	1.5	1.1%	1.5	2.3%	0.5	1.0%	0.7	2.9%	14.9	1.7%
Traffic	1.1	0.7%	3.3	2.3%	0.5	0.4%	2.6	1.6%	0.5	0.3%	0.9	1.4%	0.6	1.2%	-	-	9.4	1.1%
Animal bite	0.5	0.3%	0.9	0.6%	1.2	0.8%	0.5	0.3%	-	-	-	-	0.6	1.2%	-	-	3.7	0.4%
Abrasion	1.4	0.9%	-	-	-	-	0.5	0.3%	-	-	-	-	-	-	-	-	1.9	0.2%
Others	0.6	0.4%	0.5	0.4%	-	-	-	-	-	-	-	-	-	-	-	-	1.1	0.1%
Total	152.0	100.0%	6 143.4	100.0%	6 137.5	100.0%	5 166.4	100.0%	6 143.8	100.0%	66.4	100.0%	6 46.9	100.0%	6 23.2	100.0%	879.6	100.0%

Table 6.1h: Main causes of the most severe unintentional injury episode(s) sustained in the 12 months preceding the survey by age group

Base: The most severe unintentional injury episodes sustained by the respondents in the 12 months preceding the survey.

Notes: Ranked in descending order of the percentages of the main causes of the most severe unintentional injury episodes sustained by the respondents.

"Others" covered unintentional injury episodes due to unknown causes and did not include drowning / near-drowning, poisoning and electric shock. Figures may not add up to the total due to rounding. Respondents were further asked to list the part(s) of their body which was / were injured during the most severe unintentional injury episodes reported. Among the most severe unintentional injury episodes recorded, 49.0% caused harm to the lower limbs of the injured persons, including 24.0% of injuries caused harm to ankle, foot or toe and 24.0% to knee or lower leg. Following the lower limbs, 40.5% of the injury episodes caused injury to the upper limbs of the injured persons; 14.6% and 7.2% of the episodes caused harm to their trunk and head respectively (Table 6.1i and Table 6.1j).

	Fema	le	Mal	e	Tota	ıl
	No. of episodes ('000)	%	No. of episodes ('000)	%	No. of episodes ('000)	%
Lower limbs	222.0	50.2%	208.8	47.7%	430.9	49.0%
Ankle, foot or toe	100.6	22.8%	110.9	25.3%	211.5	24.0%
Knee or lower leg	112.5	25.5%	98.8	22.6%	211.3	24.0%
Hip or thigh	21.1	4.8%	17.6	4.0%	38.7	4.4%
Upper limbs	163.2	36.9%	193.3	44.1%	356.4	40.5%
Wrist, hand or finger	119.6	27.1%	132.3	30.2%	251.9	28.6%
Elbow or lower arm	37.5	8.5%	46.8	10.7%	84.3	9.6%
Shoulder or upper arm	19.2	4.3%	32.8	7.5%	52.0	5.9%
Trunk	71.8	16.2%	56.6	12.9%	128.4	14.6%
Lower back or lower spine	48.5	11.0%	36.6	8.4%	85.1	9.7%
Chest, abdomen or pelvis	10.7	2.4%	10.9	2.5%	21.7	2.5%
Neck	9.2	2.1%	6.6	1.5%	15.9	1.8%
Upper back or upper spine	5.2	1.2%	3.5	0.8%	8.7	1.0%
Head	30.4	6.9%	33.1	7.6%	63.5	7.2%
Head	18.7	4.2%	22.9	5.2%	41.6	4.7%
Face, including nose	4.8	1.1%	5.5	1.3%	10.2	1.2%
Eye	6.5	1.5%	3.4	0.8%	9.9	1.1%
Tooth	1.5	0.3%	1.9	0.4%	3.4	0.4%
Other body parts	-	-	0.6	0.1%	0.6	0.1%

Table 6.1i:	Body	part(s)	injured	in th	ne most	severe	unintentional	injury	episode(s)	sustained	in	the	12	months
	preced	ling the	survey b	y gen	der									

Base: The most severe unintentional injury episode sustained by the respondents in the 12 months preceding the survey.

Notes: Multiple answers were allowed.

	15-	-24	25-	34	35-	44	45-	54	55-	64	65-	-74	75-	-84	85 or a	above	To	tal
	No. of		No. of		No. of		No. of		No. of		No. of	,	No. of		No. of		No. of	
	episode	s %	episodes	5 %	episodes	s %	episode	s %	episode	s %	episode	es %	episode	s %	episode	s %	episode	s %
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Lower limbs	92.9	61.1%	69.6	48.6%	64.3	46.7%	71.7	43.1%	66.4	46.2%	31.3	47.1%	23.1	49.1%	<b>5 11.6</b>	50.3%	<b>430.9</b>	49.0%
Ankle, foot or toe	49.3	32.5%	5 34.8	24.3%	5 37.9	27.6%	36.9	22.2%	30.9	21.5%	5 11.0	16.5%	8.1	17.3%	5 2.6	11.0%	211.5	24.0%
Knee or lower leg	46.4	30.5%	5 37.9	26.4%	25.6	18.6%	34.0	20.4%	32.2	22.4%	5 17.8	26.7%	11.7	25.0%	5.8	25.2%	211.3	24.0%
Hip or thigh	6.6	4.4%	2.9	2.0%	6.2	4.5%	4.2	2.5%	6.2	4.3%	4.4	6.7%	5.0	10.6%	3.2	14.0%	38.7	4.4%
Upper limbs	56.9	37.4%	62.2	43.4%	59.6	43.4%	81.0	48.7%	56.5	39.3%	22.9	34.5%	12.2	26.0%	5.0	21.7%	356.4	40.5%
Wrist, hand or finger	40.0	26.3%	6 47.5	33.1%	42.6	31.0%	54.7	32.9%	42.4	29.5%	5 14.0	21.0%	7.1	15.1%	3.6	15.6%	251.9	28.6%
Elbow or lower arm	16.7	11.0%	5 12.4	8.6%	15.1	11.0%	19.9	11.9%	6 10.2	7.1%	7.9	11.9%	1.8	3.8%	0.5	2.3%	84.3	9.6%
Shoulder or upper arm	6.0	3.9%	8.5	5.9%	7.7	5.6%	12.3	7.4%	8.1	5.6%	4.2	6.4%	4.3	9.1%	0.9	3.8%	52.0	5.9%
Trunk	12.7	8.4%	21.2	14.8%	<b>5</b> 24.0	17.5%	25.3	15.2%	5 20.2	14.0%	5 11.4	17.2%	8.4	17.8%	5.1	22.0%	<b>128.4</b>	14.6%
Lower back or lower spine	7.1	4.6%	11.9	8.3%	16.1	11.7%	17.0	10.2%	5 15.6	10.8%	5 8.4	12.7%	4.8	10.2%	6 4.2	18.2%	85.1	9.7%
Chest, abdomen or pelvis	2.9	1.9%	3.0	2.1%	3.9	2.8%	4.1	2.5%	2.1	1.4%	2.2	3.3%	2.7	5.7%	0.9	3.8%	21.7	2.5%
Neck	0.9	0.6%	6.4	4.4%	2.5	1.8%	4.1	2.5%	1.1	0.7%	0.5	0.7%	0.4	0.9%	-	-	15.9	1.8%
Upper back or upper spine	2.5	1.6%	0.4	0.3%	1.5	1.1%	0.6	0.3%	1.5	1.1%	1.7	2.6%	0.5	1.0%	-	-	8.7	1.0%
Head	7.2	4.7%	10.1	7.0%	5.0	3.7%	6.3	3.8%	10.4	7.2%	10.3	15.5%	7.7	16.5%	6.5	28.0%	63.5	7.2%
Head	5.7	3.7%	4.2	2.9%	3.4	2.5%	4.4	2.7%	6.3	4.4%	7.9	11.8%	4.2	8.9%	5.6	24.1%	41.6	4.7%
Face, including nose	0.4	0.3%	2.1	1.5%	-	-	0.4	0.3%	3.6	2.5%	1.4	2.1%	1.4	2.9%	0.9	3.8%	10.2	1.2%
Eye	1.1	0.7%	3.3	2.3%	1.2	0.8%	1.4	0.9%	0.5	0.3%	1.0	1.6%	1.3	2.8%	-	-	9.9	1.1%
Tooth	-	-	0.5	0.3%	0.5	0.4%	-	-	0.6	0.4%	0.5	0.8%	1.4	3.0%	-	-	3.4	0.4%
Other body parts	-	-	-	-	0.6	0.4%	-	-	-	-	-	-	-	-	-	-	0.6	0.1%

Table 6.1j:	Body	part(s)	injured	in	the	most	severe	unintentional	injury	episode(s)	sustained	in	the	12	months
	prece	ding the	survey b	y ag	ge gi	roup									

Base: The most severe unintentional injury episode sustained by the respondents in the 12 months preceding the survey.

Notes: Multiple answers were allowed.

In terms of the locations where the most severe unintentional injury episodes occurred, over one-quarter (28.5%) of the injury episodes took place at home, followed by sports or athletic area (17.2%) and transport area - public highway, street or road (16.7%). Analysed by gender, females were more likely to have sustained the most severe injury episode at home (40.1%), in transport area - public highway, street or road (17.9%) and commercial area (9.7%), while males were more likely to have sustained the most severe injury episode at equation (16.8%) and in transport area - public highway, street or road (15.6%) (Table 6.1k). Analysed by age group, persons aged 15-34 were more likely to have sustained the most severe injury episode in sports or athletic area, while persons aged 35 or above were more likely to have sustained such injury episode at home (Table 6.1l).

	Fema	le	Mal	e	Tota	1
	No. of episodes ('000)	%	No. of episodes ('000)	%	No. of episodes ('000)	%
Home	177.2	40.1%	73.7	16.8%	250.8	28.5%
Sports or athletic area	38.8	8.8%	112.4	25.7%	151.2	17.2%
Transport area: public highway, street or road	79.0	17.9%	68.2	15.6%	147.2	16.7%
Commercial area (non-recreational, e.g. offices)	43.0	9.7%	52.1	11.9%	95.2	10.8%
Recreational area, cultural area or public building	41.4	9.4%	28.3	6.5%	69.7	7.9%
Industrial or construction area	3.6	0.8%	49.1	11.2%	52.6	6.0%
School, educational area	16.4	3.7%	14.8	3.4%	31.2	3.5%
Countryside	13.5	3.1%	14.2	3.3%	27.8	3.2%
Transport area: others (e.g. bus terminal, MTR station, car park)	12.4	2.8%	8.7	2.0%	21.1	2.4%
Medical service area	4.9	1.1%	1.0	0.2%	5.9	0.7%
Residential institution	0.9	0.2%	0.5	0.1%	1.4	0.2%
Farm or other place of primary production	0.5	0.1%	-	-	0.5	0.1%
Unspecified place of occurrence	10.3	2.3%	14.7	3.4%	24.9	2.8%
Total	441.8	100.0%	437.7	100.0%	879.6	100.0%

 Table 6.1k: Place of occurrence of the most severe unintentional injury episode(s) sustained in the 12 months preceding the survey by gender

Base: The most severe unintentional injury episode sustained by the respondents in the 12 months preceding the survey.

	15	-24	25	-34	35-	-44	45	-54	55	-64	65	-74	75	-84	85 or	above	То	otal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	episodes	%	episodes	s %	episodes	%	episodes	%										
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Home	24.2	15.9%	31.2	21.8%	30.5	22.2%	44.3	26.6%	51.8	36.0%	29.5	44.4%	25.5	54.4%	13.8	59.7%	250.8	28.5%
Sports or athletic area	55.9	36.8%	37.6	26.3%	25.2	18.4%	20.7	12.4%	9.3	6.5%	1.9	2.9%	0.5	1.0%	-	-	151.2	17.2%
Transport area: public highway, street or road	15.0	9.9%	23.0	16.1%	24.3	17.7%	25.2	15.1%	23.9	16.6%	17.5	26.4%	12.2	26.0%	6.0	26.1%	147.2	16.7%
Commercial area (non- recreational, e.g. offices)	11.3	7.5%	19.9	13.9%	19.9	14.5%	26.5	15.9%	13.0	9.0%	4.0	6.1%	0.5	1.1%	-	-	95.2	10.8%
Recreational area, cultural area or public building	10.4	6.8%	10.6	7.4%	8.6	6.3%	12.9	7.7%	14.2	9.9%	6.9	10.4%	3.3	7.0%	2.8	11.9%	69.7	7.9%
Industrial or construction area	4.2	2.7%	7.9	5.5%	12.2	8.9%	18.6	11.2%	9.3	6.5%	0.5	0.7%	-	-	-	-	52.6	6.0%
School, educational area	21.6	14.2%	2.8	2.0%	3.4	2.5%	1.6	1.0%	1.9	1.3%	-	-	-	-	-	-	31.2	3.5%
Countryside	4.4	2.9%	2.6	1.8%	3.8	2.8%	6.1	3.6%	6.7	4.6%	1.9	2.8%	2.4	5.1%	-	-	27.8	3.2%
Transport area: others (e.g. bus terminal, MTR station, car park)	1.5	1.0%	2.8	1.9%	3.2	2.3%	5.3	3.2%	5.0	3.5%	1.8	2.7%	1.6	3.3%	-	-	21.1	2.4%
Medical service area	1.0	0.6%	1.0	0.7%	0.9	0.7%	2.0	1.2%	1.0	0.7%	-	-	-	-	-	-	5.9	0.7%
Residential institution	-	-	-	-	-	-	-	-	1.0	0.7%	0.4	0.7%	-	-	-	-	1.4	0.2%
Farm or other place of primary production	-	-	-	-	-	-	-	-	0.5	0.4%	-	-	-	-	-	-	0.5	0.1%
Unspecified place of occurrence	2.6	1.7%	3.8	2.6%	5.5	4.0%	3.5	2.1%	6.2	4.3%	1.9	2.9%	0.9	2.0%	0.5	2.3%	24.9	2.8%
Total	152.0	100.0%	143.4	100.0%	137.5	100.0%	166.4	100.0%	143.8	100.0%	66.4	100.0%	46.9	100.0%	23.2	100.0%	879.6	100.0%

# Table 6.11: Place of occurrence of the most severe unintentional injury episode(s) sustained in the 12 months preceding the survey by age group

Base: The most severe unintentional injury episode sustained by the respondents in the 12 months preceding the survey.

Among the most serious unintentional injury episodes sustained in the 12 months preceding the survey, 13.2% were reported to be work-related. The proportion was higher in males (18.5%) than that of females (7.9%) (Table 6.1m). Analysed by age group, the proportion of work-related injury episodes was the highest (19.8%) in the 35-44 age group (Table 6.1n).

 Table 6.1m: Proportion of work-related injury episodes among the most severe unintentional injury episode(s) sustained in the 12 months preceding the survey by gender

	Fema	le	Mal	e	Total	1
	No. of episodes ('000)	%	No. of episodes ('000)	%	No. of episodes ('000)	%
Yes	35.0	7.9%	81.0	18.5%	116.1	13.2%
No	406.8	92.1%	356.7	81.5%	763.5	86.8%
Total	441.8	100.0%	437.7	100.0%	879.6	100.0%

Base: The most severe unintentional injury episode sustained in the 12 months preceding the survey.

Note: Figures may not add up to the total due to rounding.

 Table 6.1n:
 Proportion of work-related injury episodes among the most severe unintentional injury episode(s) sustained in the 12 months preceding the survey by age group

	15-	-24	25-	-34	35-	-44	45	-54	55	-64	65	-74	75-	84	85 or :	above	To	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	episodes	s %	episodes	s %	episode	s %	episodes	s %	episode	s %	episode	s %	episodes	%	episodes	s %	episodes	· %
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes	14.6	9.6%	19.8	13.8%	27.3	19.8%	30.1	18.1%	22.9	15.9%	1.0	1.5%	0.4	0.9%	-	-	116.1	13.2%
No	137.4	90.4%	123.6	86.2%	110.2	80.2%	136.3	81.9%	120.9	84.1%	65.4	98.5%	46.5	99.1%	23.2	100.0%	763.5	86.8%
Total	152.0	100.0%	143.4	100.0%	137.5	100.0%	166.4	100.0%	143.8	100.0%	66.4	100.0%	6 46.9	100.0%	23.2	100.0%	879.6	100.0%

Base: The most severe unintentional injury episode sustained in the 12 months preceding the survey.

### **6.2** Preventive Measures

Overall, 40.4% of people aged 15 or above reported that they had taken precautions to prevent unintentional injury in household or workplace during the 12 months preceding the survey, and the proportion was comparable between males (41.6%) and females (39.3%) (Table 6.2a). People aged between 15-24 recorded the lowest proportion (32.9%) among all age groups to have done something or taken precautions to prevent unintentional injury in household or workplace, while people aged 85 or above had the highest proportion (51.1%) to have done so (Table 6.2b).

Male Female Total No. of persons No. of persons No. of persons % % % ('000) ('000) ('000) Yes 1 250.3 39.3% 1 203.7 41.6% 2 4 5 4.0 40.4% No 1 934.7 60.7% 1 691.5 58.4% 3 626.2 59.6% Total 3 185.0 100.0% 2 895.2 100.0% 6 080.2 100.0%

 Table 6.2a:
 Proportion of population aged 15 or above who had done something or taken precautions to prevent unintentional injury in household or workplace in the 12 months preceding the survey by gender

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

 Table 6.2b:
 Proportion of population aged 15 or above who had done something or taken precautions to prevent unintentional injury in household or workplace in the 12 months preceding the survey by age group

	15-	-24	25	-34	35-	-44	45-	54	55-	-64	65	-74	75-	-84	85 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%																
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes	263.6	32.9%	385.2	40.1%	409.1	40.1%	514.0	43.4%	440.6	41.3%	225.3	39.9%	149.5	42.4%	66.8	51.1%	2 454.0	40.4%
No	538.0	67.1%	576.2	59.9%	612.1	59.9%	669.0	56.6%	624.9	58.7%	338.7	60.1%	203.2	57.6%	64.0	48.9%	3 626.2	59.6%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

 Base:
 All respondents.

 Note:
 Figures may not add up to the total due to rounding.

Among those persons who reported that they had done something or taken precautions to prevent unintentional injury in household or workplace in the 12 months preceding the survey, "being more careful" was the most frequently reported precautionary measure (90.7%), followed by "using protective gear" (30.1%) and "took safety training" (8.4%) across all age groups (Table 6.2c and Table 6.2d). Further analysis of these precautionary measures reported by the respondents revealed that 13.7% of people aged 15 or above reported that they had done something proactively or taken proactive precautions to prevent unintentional injury in household or workplace in the 12 months preceding the survey, after excluding the reported measure of just "being more careful".

#### Table 6.2c: Precautionary measures taken in the 12 months preceding the survey by gender

	Fema	le	Mal	e	Tota	ıl
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Being more careful	1 148.3	91.8%	1 076.8	89.5%	2 225.1	90.7%
Using protective gear	305.0	24.4%	433.3	36.0%	738.3	30.1%
Took safety training	39.6	3.2%	167.4	13.9%	207.0	8.4%
Install personal emergency (PE) link	25.2	2.0%	9.8	0.8%	35.0	1.4%
Do warm-up / stretching exercises	2.8	0.2%	8.1	0.7%	10.9	0.4%
Others	2.0	0.2%	0.6	<0.05%	2.6	0.1%

Base: The respondents who had done something or taken precautions to prevent unintentional injury in household or workplace in the 12 months preceding the survey.

Notes: Multiple answers were allowed.

Figures may not add up to the total due to rounding.

#### Table 6.2d: Precautionary measures taken in the 12 months preceding the survey by age group

	15-	24	25-	34	35-	44	45-	54	55-	64	65-'	74	75-	84	85 or a	bove	Tot	al
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	s %	persons	%	persons	s %	persons	%	persons	%								
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Being more careful	243.3	92.3%	345.5	89.7%	364.8	89.2%	455.5	88.6%	406.9	92.4%	209.6	93.0%	6 137.6	92.1%	61.7	92.4%	2 225.1	90.7%
Using protective gear	58.8	22.3%	117.8	30.6%	148.9	36.4%	179.9	35.0%	131.5	29.8%	55.1	24.5%	30.4	20.3%	15.9	23.8%	738.3	30.1%
Took safety training	19.9	7.5%	37.5	9.7%	45.1	11.0%	60.4	11.8%	41.0	9.3%	3.1	1.4%	-	-	-	-	207.0	8.4%
Install personal emergency (PE) link	-	-	-	-	0.6	0.1%	0.6	0.1%	1.9	0.4%	3.8	1.7%	17.1	11.4%	6 11.0	16.5%	35.0	1.4%
Do warm-up / stretching exercises	1.9	0.7%	3.9	1.0%	2.3	0.6%	1.8	0.3%	0.6	0.1%	0.4	0.2%	-	-	-	-	10.9	0.4%
Others	0.6	0.2%	-	-	-	-	0.4	0.1%	1.1	0.2%	-	-	0.5	0.3%	-	-	2.6	0.1%

Base: The respondents who had done something or taken precautions to prevent unintentional injury in household or workplace in the 12 months preceding the survey.

Notes: Multiple answers were allowed.

Among people who reported that they had not done anything or taken precautions to prevent unintentional injury in household or workplace in the 12 months preceding the survey, 87.9% reported that they felt safe enough, 5.1% considered that precautionary measure could not prevent injury and 4.4% thought that it was inconvenient to take precautionary measures (Table 6.2e and Table 6.2f).

	Fema	ıle	Mal	e	Tota	1
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
I feel safe enough	1 689.7	87.3%	1 497.8	88.5%	3 187.5	87.9%
Preventive measure cannot prevent injury	101.0	5.2%	85.2	5.0%	186.3	5.1%
It is inconvenient to take preventive measures	91.7	4.7%	66.1	3.9%	157.8	4.4%
Do not violate the law even if I don't take any preventive measures	20.1	1.0%	15.7	0.9%	35.8	1.0%
Preventive measures are costly	15.2	0.8%	14.2	0.8%	29.4	0.8%
Perceived no need for precautions	11.0	0.6%	7.5	0.4%	18.5	0.5%
Not aware of taking precautions	4.0	0.2%	3.6	0.2%	7.6	0.2%
Others	1.9	0.1%	1.5	0.1%	3.4	0.1%
Total	1 934.7	100.0%	1 691.5	100.0%	3 626.2	100.0%

 Table 6.2e:
 Reasons of neither done anything nor taken precautions to prevent unintentional injury in household or workplace in the 12 months preceding the survey by gender

Base: The respondents who had not done anything or taken any precautions to prevent unintentional injury in household or workplace in the 12 months preceding the survey.

Notes: Ranked in descending order of the percentages of the reasons of neither done anything nor taken precautions to prevent unintentional injury by the respondents.

	15-	24	25-	34	35-	44	45-	-54	55-	64	65-	74	75-	84	85 or a	bove	Tot	al
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	s %	persons	%	persons	s %	persons	%	persons	s %	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
I feel safe enough	479.6	89.2%	521.2	90.5%	537.8	87.9%	588.6	88.0%	548.1	87.7%	293.6	86.7%	171.5	84.4%	46.9	73.4%	3 187.5	87.9%
Preventive measure cannot prevent injury	23.4	4.3%	21.8	3.8%	31.3	5.1%	37.0	5.5%	32.0	5.1%	18.6	5.5%	13.9	6.8%	8.3	12.9%	186.3	5.1%
It is inconvenient to take preventive measures	23.6	4.4%	21.0	3.6%	27.3	4.5%	27.4	4.1%	27.1	4.3%	12.0	3.6%	13.1	6.5%	6.3	9.9%	157.8	4.4%
Do not violate the law even if I don't take any preventive measures	4.7	0.9%	6.7	1.2%	7.1	1.2%	7.3	1.1%	4.8	0.8%	3.6	1.1%	1.0	0.5%	0.7	1.1%	35.8	1.0%
Preventive measures are costly	1.4	0.3%	0.5	0.1%	4.3	0.7%	3.7	0.6%	7.4	1.2%	7.7	2.3%	2.6	1.3%	1.8	2.7%	29.4	0.8%
Perceived no need for precautions	3.0	0.6%	3.5	0.6%	3.8	0.6%	4.0	0.6%	2.0	0.3%	2.1	0.6%	-	-	-	-	18.5	0.5%
Not aware of taking precautions	1.9	0.3%	1.5	0.3%	-	-	0.6	0.1%	2.6	0.4%	1.0	0.3%	-	-	-	-	7.6	0.2%
Others	0.4	0.1%	-	-	0.6	0.1%	0.4	0.1%	0.9	0.1%	-	-	1.1	0.5%	-	-	3.4	0.1%
Total	538.0	100.0%	576.2	100.0%	612.1	100.0%	669.0	100.0%	624.9	100.0%	338.7	100.0%	203.2	100.0%	64.0	100.0%	63 626.2	100.0%

Table 6.2f:Reasons of neither done anything nor taken precautions to prevent unintentional injury in household or<br/>workplace in the 12 months preceding the survey by age group

Base: The respondents who had not done anything or taken any precautions to prevent unintentional injury in household or workplace in the 12 months preceding the survey.

Notes: Ranked in descending order of the percentages of the reasons of neither done anything nor taken precautions to prevent unintentional injury by the respondents.

Among people aged 15 or above, 8.9% (9.3% for females and 8.4% for males) reported that they would give up adopting safety measures (e.g. installing window frame or using anti-slip mat) to prevent unintentional injury because of cost (Table 6.2g). Across all age groups, the proportion of people who would give up adopting safety measure because of cost was the lowest in those aged 35-44 (6.3%) and the highest in those aged 85 or above (16.6%) (Table 6.2h).

	Fema	le	Mal	e	Tota	1
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	297.1	9.3%	243.3	8.4%	540.4	8.9%
No	2 887.9	90.7%	2 651.9	91.6%	5 539.8	91.1%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

 Table 6.2g:
 Proportion of population aged 15 or above who would give up adopting a safety measure to prevent unintentional injury because of cost by gender

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

 Table 6.2h:
 Proportion of population aged 15 or above who would give up adopting a safety measure to prevent unintentional injury because of cost by age group

	15-	-24	25	-34	35-	-44	45-	-54	55	-64	65-	-74	75	-84	85 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%																
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes	101.6	12.7%	64.3	6.7%	64.2	6.3%	80.8	6.8%	77.8	7.3%	73.4	13.0%	56.6	16.0%	21.7	16.6%	540.4	8.9%
No	700.0	87.3%	897.1	93.3%	957.0	93.7%	1 102.2	93.2%	987.7	92.7%	490.6	87.0%	296.1	84.0%	109.1	83.4%	5 539.8	91.1%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Regarding the frequencies of adopting different preventive measures to prevent unintentional injury in the 12 months preceding the survey, among people aged 15 or above who had ridden a bicycle in the 12 months preceding the survey, only 4.8% used helmet all of the time when riding bicycle (3.5% for females and 5.8% for males). 86.9% did not use helmet at all (Table 6.2i and Table 6.2j).

Among people aged 15 or above who drove or rode in a vehicle with seatbelts in the 12 months preceding the survey, 37.9% reported having used seatbelts all of the time (36.2% for females and 39.6% for males). On the other hand, the proportion of people who reported never using seatbelts in such circumstances was 6.5% (Table 6.2i and Table 6.2j).

About two-thirds (64.7%) of people aged 15 or above who had children and stored drugs at home reported that they had hidden the drugs from children all of the time in the 12 months preceding the survey (Table 6.2i and Table 6.2j).
	Fema	ale	Mal	e	Tot	al
	No. of persons	9/.	No. of persons	0/	No. of persons	0/.
	('000)	/0	('000)	70	('000)	70
Use helmet when rid	ling bicycle *					
All of the time	20.0	3.5%	41.2	5.8%	61.3	4.8%
Most of the time	10.4	1.8%	13.0	1.8%	23.4	1.8%
Some of the time	7.3	1.3%	20.3	2.8%	27.5	2.1%
A little of the time	21.3	3.7%	34.3	4.8%	55.6	4.3%
None of the time	511.7	89.7%	605.2	84.8%	1 116.8	86.9%
Total	570.6	100.0%	714.0	100.0%	1 284.6	100.0%
Use seatbelts when d	lriving or riding in a ve	hicle with seatbelts	5 †			
All of the time	1 140.4	36.2%	1 139.9	39.6%	2 280.3	37.9%
Most of the time	865.0	27.5%	736.8	25.6%	1 601.8	26.6%
Some of the time	701.4	22.3%	594.9	20.7%	1 296.3	21.5%
A little of the time	237.3	7.5%	215.1	7.5%	452.4	7.5%
None of the time	203.8	6.5%	188.3	6.6%	392.1	6.5%
Total	3 147.8	100.0%	2 875.1	100.0%	6 022.8	100.0%
Hiding drug from ch	nildren #					
All of the time	488.7	64.7%	421.9	64.6%	910.6	64.7%
Most of the time	119.3	15.8%	105.6	16.2%	225.0	16.0%
Some of the time	59.9	7.9%	48.7	7.5%	108.6	7.7%
A little of the time	21.6	2.9%	22.4	3.4%	44.0	3.1%
None of the time	65.4	8.7%	54.4	8.3%	119.9	8.5%
Total	754.9	100.0%	653.1	100.0%	1 408.0	100.0%

 Table 6.2i:
 Frequency of adopting safety measures to prevent unintentional injury in the 12 months preceding the survey by gender

Bases: \* All respondents who rode bicycle in the 12 months preceding the survey.

† All respondents who drove or rode in a vehicle with seatbelts in the 12 months preceding the survey.

# All respondents who had children and drug in households in the 12 months preceding the survey.

	15-	-24	25	-34	35	-44	45-	-54	55	-64	65	-74	75	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	s %	persons	s %	persons	· %	persons	s %	persons	s %	person	5 %	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Use helmet wh	en ridin	g bicycl	e *															
All of the time	10.5	2.5%	12.4	3.6%	13.1	5.7%	15.2	8.5%	8.5	8.9%	1.6	8.5%	-	-	-	-	61.3	4.8%
Most of the time	4.5	1.1%	5.6	1.6%	5.0	2.2%	5.0	2.8%	2.1	2.2%	1.2	6.4%	-	-	-	-	23.4	1.8%
Some of the time	4.6	1.1%	8.0	2.3%	5.1	2.3%	6.2	3.4%	2.7	2.8%	0.4	2.3%	0.4	9.6%	-	-	27.5	2.1%
A little of the time	17.8	4.3%	14.7	4.3%	10.4	4.6%	7.5	4.2%	3.4	3.6%	1.7	9.3%	-	-	-	-	55.6	4.3%
None of the time	378.4	91.0%	302.4	88.1%	193.8	85.2%	145.7	81.1%	78.8	82.5%	13.7	73.5%	3.7	90.4%	0.4	100.0%	1 116.8	86.9%
Total	415.8	100.0%	343.1	100.0%	227.4	100.0%	5 179.6	100.0%	95.6	100.0%	18.6	100.0%	4.0	100.0%	6 0.4	100.0%	1 284.6	100.0%
Use seatbelts v	vhen driv	ving or	riding i	n a vehi	icle with	ı seatbe	lts †											
All of the time	220.3	27.7%	359.7	37.6%	431.0	42.4%	507.7	43.1%	427.9	40.5%	189.2	34.0%	107.8	31.3%	36.7	30.6%	2 280.3	37.9%
Most of the time	210.0	26.4%	273.3	28.5%	288.7	28.4%	304.7	25.9%	272.6	25.8%	148.5	26.7%	77.8	22.6%	26.1	21.8%	1 601.8	26.6%
Some of the time	197.8	24.9%	218.8	22.9%	193.6	19.1%	236.9	20.1%	219.7	20.8%	124.4	22.4%	80.2	23.3%	24.9	20.7%	1 296.3	21.5%
A little of the time	68.8	8.7%	53.5	5.6%	61.4	6.0%	73.6	6.2%	82.2	7.8%	51.9	9.3%	43.9	12.8%	17.2	14.4%	452.4	7.5%
None of the time	97.9	12.3%	51.9	5.4%	40.8	4.0%	54.6	4.6%	55.2	5.2%	42.5	7.6%	34.4	10.0%	14.9	12.5%	392.1	6.5%
Total	794.7	100.0%	957.1	100.0%	1 015.5	100.0%	51 177.4	100.0%	1 057.5	100.0%	556.5	100.0%	344.2	100.0%	5 119.8	100.0%	6 022.8	100.0%
Hiding drug fr	om child	lren #																
All of the time	48.2	45.9%	195.5	69.9%	350.8	67.9%	156.5	60.0%	88.2	67.0%	47.5	63.1%	19.0	57.2%	4.9	84.7%	910.6	64.7%
Most of the time	17.4	16.6%	40.5	14.5%	78.3	15.2%	46.1	17.7%	21.5	16.4%	12.1	16.1%	8.5	25.6%	0.5	9.3%	225.0	16.0%
Some of the time	12.9	12.3%	18.6	6.6%	36.3	7.0%	24.0	9.2%	9.8	7.4%	5.3	7.0%	1.4	4.3%	0.3	6.0%	108.6	7.7%
A little of the time	7.7	7.4%	6.1	2.2%	16.0	3.1%	6.9	2.7%	3.4	2.5%	2.3	3.0%	1.6	4.7%	-	-	44.0	3.1%
None of the time	18.8	17.9%	19.2	6.9%	35.3	6.8%	27.1	10.4%	8.7	6.6%	8.1	10.7%	2.7	8.1%	-	-	119.9	8.5%
Total	105.0	100.0%	279.8	100.0%	516.7	100.0%	6 260.6	100.0%	131.7	100.0%	75.2	100.0%	33.2	100.0%	5.7	100.0%	1 408.0	100.0%

# Table 6.2j: Frequency of adopting safety measures to prevent unintentional injury in the 12 months preceding the survey by age group

Bases: \* All respondents who rode bicycle in the 12 months preceding the survey.

† All respondents who drove or rode in a vehicle with seatbelts in the 12 months preceding the survey.

# All respondents who had children and drug in households in the 12 months preceding the survey.

Overall, 80.6% of people aged 15 or above agreed that unintentional injury was preventable. Analysed by gender, 81.4% of females and 79.8% of males shared the same view (Table 6.2k). Analysed by age, the proportion of people who considered unintentional injury was preventable was the highest in the age group of 25-34 (83.2%) and the lowest for people aged 85 or above (73.1%) (Table 6.2l).

	Fema	le	Mal	e	Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Agree	2 591.1	81.4%	2 310.6	79.8%	4 901.7	80.6%		
Disagree	593.9	18.6%	584.6	20.2%	1 178.5	19.4%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Table 6.2k: Proportion of population aged 15 or above who agreed that unintentional injury was preventable by gender

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 6.21: Proportion of population aged 15 or above who agreed that unintentional injury was preventable by age group

	15	-24	25	-34	35-	-44	45-	54	55	-64	65-	-74	75-	-84	85 or :	above	Tof	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	s %	persons	s %	persons	%	persons	%	persons	<b>%</b>	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Agree	645.8	80.6%	799.8	83.2%	837.0	82.0%	954.3	80.7%	852.1	80.0%	443.7	78.7%	273.4	77.5%	95.6	73.1%	4 901.7	80.6%
Disagree	155.8	19.4%	161.6	16.8%	184.2	18.0%	228.7	19.3%	213.4	20.0%	120.3	21.3%	79.3	22.5%	35.2	26.9%	1 178.5	19.4%
Total	801.6	100.0%	6 961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%
-	4.11																	

Base: All respondents.

## Reference

1. Peden, M. M., McGee, K., & Krug, E. (Eds.). (2002). Injury: a leading cause of the global burden of disease, 2000. World Health Organization.

## Chapter 7 Preventive Health Practices

Some preventive practices, which may include specific types of screening or physical and biochemical examinations and being vigilant about health, have played an important role in reducing morbidity and premature mortality of many chronic diseases and acute health conditions. This Chapter reports on some of the population's preventive practices, including regular medical check-up, screening for specific cancers and cardiovascular risk factors such as blood cholesterol, blood pressure and blood sugar levels.

Snapshot of	of Popul	lation's	Preventive	Practices
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Indicator	Female	Male	Overall
Proportion of population who had regular medical check-up	44.1%	30.4%	37.6%
Proportion of population who ever had faecal occult blood test	17.2%	17.0%	17.1%
Proportion of population who ever had colonoscopy	14.1%	15.2%	14.6%
Proportion of males who ever had prostate specific antigen test	N.A.	9.2%	N.A.
Proportion of males who ever had digital rectal examination	N.A.	7.9%	N.A.
Proportion of females aged 25 or above who ever had cervical smear	54.2%	N.A.	N.A.
Proportion of females who ever had mammogram	25.4%	N.A.	N.A.
Proportion of population who had screening for cardiovascular risk factors:			
• Ever had blood cholesterol checked	57.2%	53.5%	55.4%
• Had blood pressure checked in the 5 years preceding the survey	77.1%	72.6%	75.0%
• Ever had blood sugar checked	60.2%	55.1%	57.7%

Note: 'N.A.' denotes 'Not applicable'.

## 7.1 Regular Medical Check-up

Regular medical check-up may help detect early stages of chronic diseases before symptoms occur and allow timely intervention to prevent disease progression. In the survey, respondents were asked whether they had regular medical check-up and, if yes, their frequencies of doing so.

As a whole, 37.6% of persons aged 15 or above reported that they had regular medical check-up. More females (44.1%) than males (30.4%) reported to have done so (Table 7.1a). The proportion of population having regular medical check-up was the highest among those aged 45-54 (45.9%) and the lowest in those aged 15-24 (18.2%) (Table 7.1b).

Table 7.1a: Proportion of population aged 15 or above who had regular medical check-up by gender

	Female		Male		Total		
	No. of persons	0/	No. of persons	97	No. of persons	0/	
	('000)	70	('000)	70	('000)	70	
Yes	1 403.8	44.1%	880.4	30.4%	2 284.2	37.6%	
No	1 781.2	55.9%	2 014.8	69.6%	3 796.0	62.4%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 7.1b: Prop	portion of popu	lation aged 15	or above who had	regular medical	check-up by	v age groun
14010 / 110. 110	portion of popt	nation ageu 15	or above who had	i i cgulai meulea	check-up b	y age group

	15-	-24	25-	-34	35-	-44	45	-54	55.	64	65-	74	75-	84	85 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons ('000)	%																
Yes	146.2	18.2%	277.4	28.9%	442.9	43.4%	543.2	45.9%	444.9	41.8%	232.6	41.2%	155.2	44.0%	41.9	32.0%	2 284.2	37.6%
No	655.4	81.8%	684.0	71.1%	578.3	56.6%	639.8	54.1%	620.6	58.2%	331.4	58.8%	197.5	56.0%	88.9	68.0%	3 796.0	62.4%
Total	801.6	100.0%	5 961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Among persons aged 15 or above who had reported that they had regular medical check-up, 91.8% had their medical check-up at least once every 24 months (89.7% for females and 95.1% for males), with an overall mean duration of 15.7 months between each regular medical check-up. The average duration in terms of number of months between each regular medical check-up was longer in females (16.5 months) than in males (14.3 months) (Table 7.1c). Across all age groups, persons aged 85 or above had the most frequent regular medical check-up with an average duration of once every 9.9 months and those aged 35-44 had the least frequent regular medical check-up with an average duration of once every 17.8 months (Table 7.1d).

Table 7.1c: Duration (in number of months) between regular medical check-up by gender

Junction	Female	1	Male		Total		
Duration (months)	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
Less than 13	952.8	67.9%	682.9	77.6%	1 635.8	71.6%	
13 - 24	306.3	21.8%	154.1	17.5%	460.5	20.2%	
More than 24	144.6	10.3%	43.4	4.9%	188.0	8.2%	
Total	1 403.8	100.0%	880.4	100.0%	2 284.2	100.0%	
Mean	16.5		14.3		15.7		

Base: The respondents who had regular medical check-up.

Note: Figures may not add up to the total due to rounding.

#### Table 7.1d: Duration (in number of months) between regular medical check-up by age group

	15	-24	25-	-34	35-	-44	45	-54	55-	-64	65-	-74	75-	-84	85 or :	above	То	tal
Duration	No. of																	
(months)	persons ('000)	s %	persons ('000)	°⁄0	persons ('000)	°⁄0	persons ('000)	°⁄0	persons ('000)	5 %o	persons ('000)	%	persons ('000)	%	persons ('000)	%	persons ('000)	s %
Less than 13	136.2	93.2%	187.1	67.5%	275.5	62.2%	342.3	63.0%	329.0	73.9%	187.2	80.5%	140.2	90.4%	38.3	91.3%	1 635.8	71.6%
13 - 24	8.5	5.8%	72.1	26.0%	121.1	27.3%	135.4	24.9%	74.6	16.8%	34.3	14.7%	11.5	7.4%	3.0	7.1%	460.5	20.2%
More than 24	1.4	1.0%	18.2	6.5%	46.3	10.5%	65.5	12.1%	41.3	9.3%	11.1	4.8%	3.4	2.2%	0.7	1.6%	188.0	8.2%
Total	146.2	100.0%	õ 277.4	100.0%	5 442.9	100.0%	543.2	100.0%	444.9	100.0%	5 232.6	100.0%	5 155.2	100.0%	5 41.9	100.0%	52 284.2	100.0%
Mean	12	2.4	16	5.4	17	7.8	17	7.6	15	5.3	13	3.3	10	).6	9	.9	1:	5.7

Base: The respondents who had regular medical check-up.

## 7.2 Faecal Occult Blood Test

A faecal occult blood test (FOBT) is a test to determine whether the stool contains blood. Common FOBTs include guaiac-based faecal occult blood test (gFOBT) and faecal immunochemical test (FIT). In the survey, respondents were asked whether they ever had a FOBT and if yes, further information were collected including whether they had any symptoms or discomfort prior to the test, when was their last test, type of organisations / doctors from whom they consulted for the test and how often they had the test.

Overall, 17.1% of persons aged 15 or above (17.2% for females and 17.0% for males) reported that they had ever received a FOBT. Analysed by whether they had symptoms prior to the test, 15.0% had a FOBT with no symptoms or discomfort prior to the test and 2.1% had the test because of symptoms or discomfort (Table 7.2a). Analysed by age group, the proportions of people ever had a FOBT with no symptoms or discomfort prior to the test were within 19.0% to 20.0% for persons in age groups 40-79 (Table 7.2b).

Table 7.2a: Proportion of	<sup>•</sup> population aged 15	or above who ever	had a FOBT by gender
Tuble / Hau I reportion of	population aged to		mad a r OD r Sj genaer

	Female		Male		Total		
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
Yes	546.4	17.2%	490.8	17.0%	1 037.2	17.1%	
With no symptoms or discomfort prior to test	478.7	15.0%	433.2	15.0%	911.9	15.0%	
Had test because of symptoms or discomfort	67.7	2.1%	57.6	2.0%	125.3	2.1%	
No	2 638.6	82.8%	2 404.4	83.0%	5 043.0	82.9%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 7.20. Troportion of population ages 13 of above who ever has a FODT by age gro	who ever had a FOBT by age group	or above who	aged 15	population	portion of	2b: Pro	e 7.2	Гab
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	Belo	w 40	40-	-49	50	-59	60-	-69	70	-79	80 or :	above	50-	75	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	s %	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Yes	205.6	9.1%	226.6	21.1%	279.6	22.6%	183.4	22.3%	95.3	23.4%	46.7	16.4%	524.2	22.6%	1 037.2	17.1%
With no symptoms or discomfort prior to test	189.4	8.4%	203.9	19.0%	247.5	20.0%	158.5	19.3%	79.5	19.5%	33.0	11.6%	460.3	19.9%	911.9	15.0%
Had test because of symptoms or discomfort	16.2	0.7%	22.7	2.1%	32.1	2.6%	24.8	3.0%	15.8	3.9%	13.7	4.8%	63.9	2.8%	125.3	2.1%
No	2 046.9	90.9%	848.0	78.9%	959.5	77.4%	638.3	77.7%	312.1	76.6%	238.2	83.6%	1 791.6	77.4%	5 043.0	82.9%
Total	2 252.5	100.0%	1 074.6	100.0%	1 239.1	100.0%	821.7	100.0%	407.4	100.0%	284.9	100.0%	2 315.8	100.0%	6 080.2	100.0%

Base: All respondents.

Regarding the type of organisations / doctors consulted for FOBT, among those who had received the test when there were no symptoms or discomfort, more persons consulted private doctors (70.9%) than public clinics or hospitals (25.3%) in general. On the contrary, among those who had received the test because of symptoms or discomfort at that time, more people consulted doctors in public clinics or hospitals (60.8%) than private doctors (37.2%) (Table 7.2c).

	Female	9	Male		Total		
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
With no symptoms or discomfort prior to test <sup>1</sup>							
Private clinics or hospitals	337.9	70.6%	308.4	71.2%	646.3	70.9%	
Public clinics or hospitals (including Hospital Authority and Department of Health)	118.2	24.7%	112.2	25.9%	230.4	25.3%	
Non-profit organisations or universities	18.2	3.8%	9.7	2.2%	27.8	3.1%	
Hospitals or clinics in Mainland China	2.3	0.5%	1.4	0.3%	3.8	0.4%	
Hospitals or clinics in other countries	-	-	0.5	0.1%	0.5	0.1%	
Laboratories	2.0	0.4%	1.1	0.2%	3.1	0.3%	
Total	478.7	100.0%	433.2	100.0%	911.9	100.0%	
Because of symptoms or discomfort <sup>2</sup>							
Private clinics or hospitals	23.7	35.0%	22.9	39.7%	46.6	37.2%	
Public clinics or hospitals (including Hospital Authority and Department of Health)	42.1	62.1%	34.1	59.3%	76.2	60.8%	
Non-profit organisations or universities	0.9	1.4%	-	-	0.9	0.8%	
Hospitals or clinics in Mainland China	0.6	0.8%	0.6	1.0%	1.2	0.9%	
Hospitals or clinics in other countries	0.5	0.7%	-	-	0.5	0.4%	
Laboratories	-	-	-	-	-	-	
Total	67.7	100.0%	57.6	100.0%	125.3	100.0%	

### Table 7.2c: Type of organisations consulted for FOBT by gender

Bases: 1. The respondents who had received the faecal occult blood test and with no symptoms or discomfort prior to the test.

2. The respondents who had received the faecal occult blood test because of symptoms or discomfort.

Analysed by age group, a higher proportion of persons aged 70 or above had received the test in public clinics or hospitals regardless of whether they had symptoms or discomfort before the test or not (Table 7.2d).

	Belo	ow 40	40-	-49	50-	-59	60-	60-69 70-79 80 or above Tot		80 or above		tal		
	No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)	
With no symptoms or discomfort pr	rior to te	est <sup>1</sup>												
Private clinics or hospitals	160.6	84.8%	167.9	82.3%	191.6	77.4%	90.7	57.2%	25.7	32.4%	9.8	29.6%	646.3	70.9%
Public clinics or hospitals (including Hospital Authority and Department of Health)	22.9	12.1%	28.4	13.9%	48.4	19.6%	58.3	36.8%	49.1	61.7%	23.2	70.4%	230.4	25.3%
Non-profit organisations or universities	3.2	1.7%	7.1	3.5%	5.4	2.2%	8.0	5.1%	4.2	5.2%	-	-	27.8	3.1%
Hospitals or clinics in Mainland China	2.3	1.2%	-	-	0.5	0.2%	0.5	0.3%	0.5	0.6%	-	-	3.8	0.4%
Hospitals or clinics in other countries	-	-	-	-	-	-	0.5	0.3%	-	-	-	-	0.5	0.1%
Laboratories	0.5	0.2%	0.5	0.2%	1.6	0.6%	0.6	0.4%	-	-	-	-	3.1	0.3%
Total	189.4	100.0%	203.9	100.0%	247.5	100.0%	158.5	100.0%	5 79.5	100.0%	33.0	100.0%	911.9	100.0%
Because of symptoms or discomfort	2													
Private clinics or hospitals	8.3	51.2%	11.1	48.7%	13.8	43.0%	8.3	33.3%	2.4	15.4%	2.7	19.9%	46.6	37.2%
Public clinics or hospitals (including Hospital Authority and Department of Health)	7.9	48.8%	10.5	46.2%	17.4	54.1%	16.6	66.7%	12.9	81.8%	11.0	80.1%	76.2	60.8%
Non-profit organisations or universities	-	-	-	-	0.9	2.9%	-	-	-	-	-	-	0.9	0.8%
Hospitals or clinics in Mainland China	-	-	1.2	5.1%	-	-	-	-	-	-	-	-	1.2	0.9%
Hospitals or clinics in other countries	-	-	-	-	-	-	-	-	0.5	2.9%	-	-	0.5	0.4%
Laboratories	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	16.2	100.0%	22.7	100.0%	32.1	100.0%	24.8	100.0%	15.8	100.0%	13.7	100.0%	125.3	100.0%

Table 7.2d: Type of organisations consulted for FOBT by age group

Bases: 1. The respondents who had received the faecal occult blood test and with no symptoms or discomfort prior to the test.

2. The respondents who had received the faecal occult blood test because of symptoms or discomfort.

Among persons who had received FOBT when there were no symptoms or discomfort, about two-thirds (64.0%) had their last tests within 24 months preceding the survey, while one-third (32.3%) had their last tests more than 24 months preceding the survey. The mean duration since their last FOBT was 32.6 months (33.3 months for females and 31.8 months for males) among those with no symptoms or discomfort prior to the test. Among persons who had received FOBT because of symptoms or discomfort, the average duration since the last test was 51.0 months (49.0 months for females and 53.4 months for males) (Table 7.2e and Table 7.2f).

	Fema	le	Male	e	Total		
Duration (months)	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
With no symptoms or discomfort prior to test <sup>1</sup>							
Less than 13	209.0	43.7%	192.3	44.4%	401.3	44.0%	
13 - 24	91.8	19.2%	90.6	20.9%	182.4	20.0%	
More than 24	156.9	32.8%	137.3	31.7%	294.2	32.3%	
Unknown / missing	21.0	4.4%	12.9	3.0%	33.9	3.7%	
Total	478.7	100.0%	433.2	100.0%	911.9	100.0%	
Mean <sup>2</sup>	33.3		31.8		32.6		
Because of symptoms or discomfort <sup>3</sup>							
Less than 13	21.8	32.1%	17.2	29.9%	39.0	31.1%	
13 - 24	9.2	13.6%	10.0	17.3%	19.1	15.3%	
More than 24	33.5	49.5%	26.6	46.2%	60.1	48.0%	
Unknown / missing	3.2	4.8%	3.8	6.6%	7.0	5.6%	
Total	67.7	100.0%	57.6	100.0%	125.3	100.0%	
Mean <sup>4</sup>	49.0	)	53.4		51.0		

#### Table 7.2e: Number of months since the last FOBT by gender

Bases: 1. The respondents who had received the faecal occult blood test and with no symptoms or discomfort prior to the test.

2. The respondents who had received the faecal occult blood test and with no symptoms or discomfort prior to the test and had valid answer on how long ago since the last test.

3. The respondents who had received the faecal occult blood test because of symptoms or discomfort prior to the test.

4. The respondents who had received the faecal occult blood test because of symptoms or discomfort prior to the test and had valid answer on how long ago since the last test.

	Belo	ow 40	40	-49	50	-59	60	-69	70	-79	80 or	above	То	tal
Duration (months)	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%	No. of persons	%
With no sym	('000)	discomfor	('000)	tost 1	('000)		('000)		('000)		('000)		('000)	
with no sym	ptoms or o	uisconnoi		lest										
Less than 13	89.1	47.0%	83.3	40.9%	111.9	45.2%	64.2	40.5%	38.9	48.9%	13.9	42.2%	401.3	44.0%
13 - 24	41.9	22.1%	46.9	23.0%	53.9	21.8%	29.0	18.3%	8.2	10.3%	2.5	7.6%	182.4	20.0%
More than 24	52.9	27.9%	70.0	34.3%	72.7	29.4%	59.1	37.3%	24.8	31.2%	14.8	44.7%	294.2	32.3%
Unknown / missing	5.5	2.9%	3.7	1.8%	9.0	3.6%	6.3	4.0%	7.6	9.6%	1.8	5.4%	33.9	3.7%
Total	189.4	100.0%	203.9	100.0%	247.5	100.0%	158.5	100.0%	79.5	100.0%	33.0	100.0%	911.9	100.0%
Mean <sup>2</sup>	27	7.8	32	2.6	31	1.5	30	5.5	33	5.3	48	3.5	32	2.6
Because of sy	mptoms o	or discom	fort <sup>3</sup>											
Less than 13	7.6	47.1%	5.9	26.2%	6.8	21.3%	6.4	25.6%	7.0	44.7%	5.2	37.8%	39.0	31.1%
13 - 24	2.4	14.7%	2.4	10.7%	6.6	20.7%	4.6	18.6%	1.4	8.8%	1.7	12.4%	19.1	15.3%
More than 24	5.2	32.0%	12.6	55.3%	18.2	56.7%	11.8	47.6%	6.5	41.1%	5.9	43.1%	60.1	48.0%
Unknown / missing	1.0	6.2%	1.8	7.9%	0.4	1.3%	2.0	8.2%	0.9	5.4%	0.9	6.8%	7.0	5.6%
Total	16.2	100.0%	22.7	100.0%	32.1	100.0%	24.8	100.0%	15.8	100.0%	13.7	100.0%	125.3	100.0%
Mean <sup>4</sup>	32	2.4	60	5.0	5	6.4	43	3.2	4	5.8	5:	5.5	5	1.0

## Table 7.2f: Number of months since the last FOBT by age group

Bases: 1. The respondents who had received the faecal occult blood test and with no symptoms or discomfort prior to the test.

2. The respondents who had received the faecal occult blood test and with no symptoms or discomfort prior to the test and had valid answer on how long ago since the last test.

3. The respondents who had received the faecal occult blood test because of symptoms or discomfort prior to the test.

4. The respondents who had received the faecal occult blood test because of symptoms or discomfort prior to the test and had valid answer on how long ago since the last test.

Among persons who received FOBT with no symptoms or discomfort prior to the test, about half (51.4%) of them had no regular schedule of repeat tests and one-fifth (20.7%) reported that the most recent test taken was their first FOBT. 1.0% had FOBT more frequent than once per year, 15.7% generally received the test once a year, 8.3% had the test once every two years and 2.8% took the test less frequently. Among those who had FOBT because of symptoms or discomfort, 47.3% of them had no regular schedule of repeat tests and 44.2% reported that the most recent test taken was their first test. 0.8% of them had FOBT more than once per year generally, 4.3% had the test once a year or every two years and 2.9% had the test once every three years or less frequently (Table 7.2g and Table 7.2h).

	Female	1	Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
With no symptoms or discomfort prior to test <sup>1</sup>						
More than once per year generally	4.5	0.9%	4.5	1.0%	9.1	1.0%
Once a year generally	74.1	15.5%	69.2	16.0%	143.3	15.7%
Once every 2 years generally	37.8	7.9%	38.0	8.8%	75.8	8.3%
Once every 3 years generally	10.5	2.2%	6.1	1.4%	16.5	1.8%
Once every 4 years or more generally	2.5	0.5%	6.7	1.6%	9.2	1.0%
The most recent one was the first FOBT	98.8	20.6%	90.3	20.8%	189.0	20.7%
No fixed schedule for taking FOBT	250.5	52.3%	218.5	50.4%	469.0	51.4%
Refusal	-	-	-	-	-	-
Total	478.7	100.0%	433.2	100.0%	911.9	100.0%
Because of symptoms or discomfort <sup>2</sup>						
More than once per year generally	0.4	0.6%	0.6	1.0%	1.0	0.8%
Once a year generally	1.9	2.8%	1.0	1.7%	2.9	2.3%
Once every 2 years generally	0.5	0.7%	2.1	3.6%	2.5	2.0%
Once every 3 years generally	1.6	2.3%	1.6	2.8%	3.2	2.5%
Once every 4 years or more generally	-	-	0.5	0.8%	0.5	0.4%
The most recent one was the first FOBT	31.3	46.2%	24.1	41.9%	55.4	44.2%
No fixed schedule for taking FOBT	32.1	47.3%	27.3	47.3%	59.3	47.3%
Refusal	-	-	0.5	0.9%	0.5	0.4%
Total	67.7	100.0%	57.6	100.0%	125.3	100.0%

Table / Egilledaeney of regular 1 0 2 1 8, genaer	Table 7.2g:	Frequency	of regular	FOBT	by gender
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Bases: 1. The respondents who had received the faecal occult blood test and with no symptoms or discomfort prior to the test.

2. The respondents who had received the faecal occult blood test because of symptoms or discomfort.

## Table 7.2h: Frequency of regular FOBT by age group

	Belo	w 40	40-	-49	50-	-59	60-	-69	<b>70</b> -	-79	80 or above		Total	
	No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	s %	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)	
With no symptoms or discomfort prior	to test 1													
More than once per year generally	1.7	0.9%	1.7	0.8%	4.2	1.7%	0.5	0.3%	1.0	1.3%	-	-	9.1	1.0%
Once a year generally	31.7	16.7%	34.1	16.7%	40.6	16.4%	20.9	13.2%	11.5	14.5%	4.5	13.7%	143.3	15.7%
Once every 2 years generally	13.6	7.2%	24.8	12.2%	22.6	9.1%	11.6	7.3%	2.2	2.8%	0.9	2.8%	75.8	8.3%
Once every 3 years generally	2.5	1.3%	4.4	2.2%	4.2	1.7%	4.9	3.1%	0.4	0.6%	-	-	16.5	1.8%
Once every 4 years or more generally	0.6	0.3%	1.6	0.8%	2.8	1.1%	2.1	1.3%	2.1	2.7%	-	-	9.2	1.0%
The most recent one was the first FOBT	53.5	28.2%	39.7	19.5%	41.1	16.6%	30.5	19.2%	16.3	20.5%	7.9	24.0%	189.0	20.7%
No fixed schedule for taking FOBT	85.9	45.3%	97.6	47.9%	132.0	53.3%	88.0	55.5%	45.9	57.7%	19.6	59.5%	469.0	51.4%
Refusal	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	189.4	100.0%	203.9	100.0%	247.5	100.0%	158.5	100.0%	5 79.5	100.0%	33.0	100.0%	911.9	100.0%
Because of symptoms or discomfort <sup>2</sup>														
More than once per year generally	-	-	0.6	2.6%	-	-	-	-	-	-	0.4	3.0%	1.0	0.8%
Once a year generally	-	-	0.6	2.7%	1.0	3.1%	0.4	1.7%	-	-	0.9	6.4%	2.9	2.3%
Once every 2 years generally	-	-	-	-	1.0	3.2%	1.1	4.3%	0.4	2.8%	-	-	2.5	2.0%
Once every 3 years generally	-	-	-	-	1.2	3.6%	2.0	8.2%	-	-	-	-	3.2	2.5%
Once every 4 years or more generally	-	-	-	-	0.5	1.4%	-	-	-	-	-	-	0.5	0.4%
The most recent one was the first FOBT	9.7	59.8%	10.6	46.5%	12.1	37.7%	9.1	36.8%	8.4	53.0%	5.6	40.8%	55.4	44.2%
No fixed schedule for taking FOBT	6.5	40.2%	10.9	48.1%	16.4	51.0%	12.2	49.1%	7.0	44.2%	6.3	46.2%	59.3	47.3%
Refusal	-	-	-	-	-	-	-	-	-	-	0.5	3.6%	0.5	0.4%
Total	16.2	100.0%	22.7	100.0%	32.1	100.0%	24.8	100.0%	5 15.8	100.0%	13.7	100.0%	125.3	100.0%

Bases: 1. The respondents who had received the faecal occult blood test and with no symptoms or discomfort prior to the test.

2. The respondents who had received the faecal occult blood test because of symptoms or discomfort.

The Cancer Expert Working Group on Cancer Prevention and Screening in Hong Kong recommended individuals aged 50 to 75 at average risk to discuss with their doctor and consider screening for colorectal cancer by receiving FOBT once every one to two years <sup>1</sup>. In the PHS, the proportion of persons aged 50 to 75 inclusive who had received FOBT among those with no symptoms or discomfort prior to the test was 19.9% (20.2% for females and 19.6% for males). Among these persons who had FOBT, the proportion of those who had the test generally once a year or every two years was 22.7% (21.2% for females and 24.3% for males) (Table 7.2b).

## 7.3 Colonoscopy

Colonoscopy is an examination in which an endoscope is inserted into the colon to view the bowel for signs of cancer or other health problems. In the survey, respondents were asked whether they ever had the examination and if yes, further information was collected including whether they had any symptoms or discomfort prior to the examination, when was their last examination, type of organisations / doctors from whom they had consulted for the examination, and how often they had the examination.

Overall, 14.6% of the persons aged 15 or above (14.1% for females and 15.2% for males) had received colonoscopy examination, with 11.3% had no symptoms or discomfort prior to the examination (10.6% for females and 12.0% for males), and 3.3% had their colonoscopies because of symptoms or discomfort (Table 7.3a). Analysed by age group, the proportions of people ever had colonoscopy when there was no symptoms or discomfort increased from 4.0% in those below 40 years of age to 19.4% in those aged 60-69 and then decreased to 12.2% for people aged 80 or above (Table 7.3b).

Table	7.3a:	Proportion	of populat	ion aged 15	or above who	ever had	colonoscopy	by gender
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	Female		Male		Total		
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
Yes	449.3	14.1%	440.2	15.2%	889.5	14.6%	
With no symptoms or discomfort prior to examination	337.8	10.6%	348.7	12.0%	686.5	11.3%	
Had examination because of symptoms or discomfort	111.5	3.5%	91.5	3.2%	203.0	3.3%	
No	2 735.7	85.9%	2 455.0	84.8%	5 190.7	85.4%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 7.3b: Proportion of population aged 15 or above who ever had colonoscopy	by	age g	group
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	Belov	w 40	40-	49	50-	59	60-	-69	70-	-79	80 or :	above	50-	75	To	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%														
	(000)		(000)		(000)		(000)		( 000)		(000)		(000)		(000)	
Yes	118.3	5.3%	160.6	14.9%	260.1	21.0%	210.0	25.6%	89.0	21.9%	51.4	18.1%	526.6	22.7%	889.5	14.6%
With no symptoms or discomfort prior to examination	90.3	4.0%	129.7	12.1%	207.4	16.7%	159.2	19.4%	65.4	16.0%	34.6	12.2%	408.8	17.7%	686.5	11.3%
Had examination because of symptoms or discomfort	28.0	1.2%	30.9	2.9%	52.7	4.3%	50.8	6.2%	23.7	5.8%	16.8	5.9%	117.9	5.1%	203.0	3.3%
No	2 134.2	94.7%	914.0	85.1%	979.0	79.0%	611.7	74.4%	318.4	78.1%	233.5	81.9%	1 789.2	77.3%	5 190.7	85.4%
Total	2 252.5	100.0%	1 074.6	100.0%	1 239.1	100.0%	821.7	100.0%	6 407.4	100.0%	284.9	100.0%	2 315.8	100.0%	6 080.2	100.0%

Base: All respondents.

Regarding the type of organisations / doctors consulted for the colonoscopy among those who had received the examination when there were no symptoms or discomfort, more people consulted private doctors (64.0%) than public clinics or hospitals (34.4%). On the contrary, among those who had received the examination because of symptoms or discomfort, more people consulted doctors in public clinics or hospitals (53.7%) than private doctors (44.2%) (Table 7.3c).

	Female	Male		Total		
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
With no symptoms or discomfort prior to examination <sup>1</sup>						
Private clinics or hospitals	216.0	64.0%	223.1	64.0%	439.2	64.0%
Public clinics or hospitals (including Hospital Authority and Department of Health)	115.3	34.1%	120.9	34.7%	236.2	34.4%
Non-profit organisations or universities	3.5	1.0%	1.6	0.5%	5.1	0.7%
Hospitals or clinics in Mainland China	2.4	0.7%	2.6	0.7%	5.0	0.7%
Hospitals or clinics in other countries	0.5	0.2%	0.5	0.1%	1.0	0.1%
Total	337.8	100.0%	348.7	100.0%	686.5	100.0%
Because of symptoms or discomfort <sup>2</sup>						
Private clinics or hospitals	54.4	48.8%	35.3	38.6%	89.6	44.2%
Public clinics or hospitals (including Hospital Authority and Department of Health)	53.8	48.2%	55.2	60.3%	109.0	53.7%
Non-profit organisations or universities	1.4	1.2%	0.4	0.4%	1.8	0.9%
Hospitals or clinics in Mainland China	0.6	0.5%	0.6	0.6%	1.2	0.6%
Hospitals or clinics in other countries	1.4	1.3%	-	-	1.4	0.7%
Total	111.5	100.0%	91.5	100.0%	203.0	100.0%

### Table 7.3c: Type of organisations consulted for colonoscopy by gender

Bases: 1. The respondents who had received the colonoscopy and with no symptoms or discomfort prior to the examination.

2. The respondents who had received the colonoscopy because of symptoms or discomfort.

Analysed by age group, a higher proportion of persons aged 70 or above had received the examination in public clinics or hospitals regardless of whether they had symptoms or discomfort before the examination or not (Table 7.3d).

	Belo	w 40	40-	-49	50-	.59	60-	-69	70-	79	80 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	; %	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)	
With no symptoms or discomfort prio	r to exam	ination	1											
Private clinics or hospitals	71.7	79.4%	103.5	79.8%	142.6	68.8%	89.0	55.9%	23.6	36.1%	8.7	25.2%	439.2	64.0%
Public clinics or hospitals (including Hospital Authority and Department of Health)	16.5	18.2%	24.0	18.5%	61.9	29.8%	67.1	42.2%	40.8	62.5%	25.9	74.8%	236.2	34.4%
Non-profit organisations or universities	0.4	0.5%	1.1	0.9%	1.1	0.5%	1.5	0.9%	0.9	1.4%	-	-	5.1	0.7%
Hospitals or clinics in Mainland China	1.6	1.8%	1.0	0.8%	1.8	0.9%	0.6	0.4%	-	-	-	-	5.0	0.7%
Hospitals or clinics in other countries	-	-	-	-	-	-	1.0	0.6%	-	-	-	-	1.0	0.1%
Total	90.3	100.0%	129.7	100.0%	207.4	100.0%	5 159.2	100.0%	65.4	100.0%	34.6	100.0%	686.5	100.0%
Because of symptoms or discomfort <sup>2</sup>														
Private clinics or hospitals	19.4	69.2%	18.6	60.1%	25.7	48.7%	18.3	36.1%	5.2	21.9%	2.4	14.5%	89.6	44.2%
Public clinics or hospitals (including Hospital Authority and Department of Health)	8.2	29.3%	11.8	38.1%	26.0	49.4%	31.0	60.9%	17.6	74.5%	14.4	85.5%	109.0	53.7%
Non-profit organisations or universities	0.4	1.5%	-	-	-	-	0.9	1.9%	0.4	1.7%	-	-	1.8	0.9%
Hospitals or clinics in Mainland China	-	-	0.6	1.8%	-	-	0.6	1.2%	-	-	-	-	1.2	0.6%
Hospitals or clinics in other countries	-	-	-	-	1.0	1.9%	-	-	0.5	1.9%	-	-	1.4	0.7%
Total	28.0	100.0%	30.9	100.0%	52.7	100.0%	50.8	100.0%	23.7	100.0%	16.8	100.0%	203.0	100.0%

Table 7.3d: Type of organisations consulted for colonoscopy by age group

Bases: 1. The respondents who had received the colonoscopy and with no symptoms or discomfort prior to the examination.

2. The respondents who had received the colonoscopy because of symptoms or discomfort.

Among persons who had received colonoscopy when there were no symptoms or discomfort, 55.3% had their last examinations within 24 months preceding the survey, 25.0% and 13.0% received the examination 25-60 months and 61-120 months preceding the survey respectively. The average duration since the last colonoscopy was 39.6 months (39.6 months for females and 39.7 months for males) among those with no symptoms or discomfort prior to the examination. Among those who had received the examination because of symptoms or discomfort, the average duration since the last examination was 49.8 months (51.4 months for females and 48.0 months for males) (Table 7.3e and Table 7.3f).

	Femal	e	Male	1	Total		
Duration (months)	No. of persons	0/	No. of persons	0/	No. of persons	0/	
	('000)	%	('000)	%	('000)	%0	
With no symptoms or discomfort prior to examina	tion <sup>1</sup>						
Less than 13	121.8	36.0%	115.9	33.2%	237.7	34.6%	
13 - 24	68.9	20.4%	73.0	20.9%	141.8	20.7%	
More than 24	135.9	40.2%	144.6	41.5%	280.5	40.9%	
25 - 60	80.9	23.9%	91.0	26.1%	171.9	25.0%	
61 - 120	45.6	13.5%	43.4	12.4%	89.0	13.0%	
More than 120	9.4	2.8%	10.2	2.9%	19.7	2.9%	
Unknown / missing	11.3	3.3%	15.2	4.4%	26.5	3.9%	
Total	337.8	100.0%	348.7	100.0%	686.5	100.0%	
Mean <sup>2</sup>	39.6		39.7		39.6		
Because of symptoms or discomfort <sup>3</sup>							
Less than 13	31.7	28.4%	29.3	32.0%	61.0	30.0%	
13 - 24	14.7	13.2%	16.9	18.5%	31.6	15.6%	
More than 24	62.2	55.8%	42.3	46.2%	104.5	51.5%	
25 - 60	35.6	31.9%	26.7	29.2%	62.4	30.7%	
61 - 120	18.4	16.5%	10.2	11.2%	28.6	14.1%	
More than 120	8.2	7.4%	5.4	5.9%	13.6	6.7%	
Unknown / missing	2.9	2.6%	3.0	3.3%	5.9	2.9%	
Total	111.5	100.0%	91.5	100.0%	203.0	100.0%	
Mean <sup>4</sup>	51.4		48.0		49.8		

Table 7.3e: Number of months since the last colonoscopy by gender

Bases: 1. The respondents who had received the colonoscopy and with no symptoms or discomfort prior to the examination.

2. The respondents who had received the colonoscopy and with no symptoms or discomfort prior to the examination and had valid answer on how long ago since the last examination.

3. The respondents who had received the colonoscopy because of symptoms or discomfort prior to the examination.

4. The respondents who had received the colonoscopy because of symptoms or discomfort and had valid answer on how long ago since the last examination.

	Belo	ow 40	4(	0-49	50	)-59	60	)-69	70	)-79	80 or	above	To	otal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of	
Duration (months)	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)	
With no symptoms	or disco	omfort pri	ior to exa	mination	1									
Less than 13	34.6	38.4%	48.1	37.1%	71.9	34.7%	47.6	29.9%	25.1	38.5%	10.3	29.7%	237.7	34.6%
13 - 24	25.3	28.1%	26.7	20.6%	44.0	21.2%	32.0	20.1%	9.3	14.2%	4.6	13.2%	141.8	20.7%
More than 24	28.3	31.3%	52.1	40.2%	84.3	40.7%	73.5	46.2%	23.8	36.5%	18.4	53.1%	280.5	40.9%
25 - 60	16.4	18.1%	33.9	26.2%	56.7	27.3%	43.5	27.3%	13.5	20.7%	7.9	22.9%	171.9	25.0%
61 - 120	9.8	10.9%	15.0	11.6%	22.8	11.0%	25.0	15.7%	8.8	13.4%	7.6	21.8%	89.0	13.0%
More than 120	2.1	2.3%	3.2	2.4%	4.8	2.3%	5.1	3.2%	1.6	2.4%	2.9	8.4%	19.7	2.9%
Unknown / missing	2.0	2.2%	2.7	2.1%	7.2	3.5%	6.1	3.8%	7.1	10.9%	1.4	4.0%	26.5	3.9%
Total	90.3	100.0%	129.7	100.0%	207.4	100.0%	159.2	100.0%	65.4	100.0%	34.6	100.0%	686.5	100.0%
Mean <sup>2</sup>	3	4.0	3	35.9	3	37.2	4	3.7	3	8.9	6	5.7	3	9.6
Because of sympto	ms or dis	scomfort <sup>:</sup>	3											
Less than 13	8.1	29.0%	10.8	35.0%	16.2	30.7%	15.0	29.6%	6.4	26.9%	4.5	26.5%	61.0	30.0%
13 - 24	6.8	24.1%	4.0	12.9%	8.6	16.2%	6.7	13.3%	3.9	16.3%	1.7	9.9%	31.6	15.6%
More than 24	12.6	44.8%	16.1	52.1%	27.1	51.4%	26.5	52.2%	13.0	55.0%	9.2	54.9%	104.5	51.5%
25 - 60	6.6	23.5%	11.1	35.8%	16.7	31.7%	13.6	26.7%	8.9	37.6%	5.5	32.7%	62.4	30.7%
61 - 120	5.5	19.6%	4.5	14.5%	7.2	13.6%	7.7	15.0%	2.2	9.4%	1.6	9.3%	28.6	14.1%
More than 120	0.5	1.7%	0.6	1.8%	3.2	6.1%	5.3	10.5%	1.9	7.9%	2.2	12.9%	13.6	6.7%
Unknown / missing	0.6	2.1%	-	-	0.9	1.7%	2.5	5.0%	0.4	1.9%	1.5	8.7%	5.9	2.9%
Total	28.0	100.0%	30.9	100.0%	52.7	100.0%	50.8	100.0%	23.7	100.0%	16.8	100.0%	203.0	100.0%
Mean <sup>4</sup>	4	4.5	3	8.9	4	8.1	5	6.4	5	0.3	6	5.8	49	9.8

Table 7.3f: Number of months since the last colonoscopy by age group

Bases: 1. The respondents who had received the colonoscopy and with no symptoms or discomfort prior to the examination.

2. The respondents who had received the colonoscopy and with no symptoms or discomfort prior to the examination and had valid answer on how long ago since the last examination.

3. The respondents who had received the colonoscopy because of symptoms or discomfort prior to the examination.

4. The respondents who had received the colonoscopy because of symptoms or discomfort and had valid answer on how long ago since the last examination.

Regarding frequency of having regular colonoscopy, 57.2% of people who had no symptoms or discomfort prior to the examination had no fixed schedule for repeat examinations, 26.4% reported that their most recent examination was the first colonoscopy ever received. 11.8% had regular colonoscopy once every one to two years or more frequently and 4.6% had regular colonoscopy less frequently. Among those who had colonoscopy because of symptoms or discomfort, 44.6% had no fixed schedule, 46.8% had their most recent one as their first colonoscopy, while only 8.3% had colonoscopy regularly (Table 7.3g and Table 7.3h).

	Female	Male		Total		
	No. of persons	9/	No. of persons	0/	No. of persons	0/
	('000)	70	('000)	/0	('000)	70
With no symptoms or discomfort prior to examination <sup>1</sup>						
More than once per year generally	0.9	0.3%	1.1	0.3%	2.1	0.3%
Once a year generally	22.7	6.7%	22.8	6.5%	45.6	6.6%
Once every 2 years generally	12.0	3.6%	21.5	6.2%	33.6	4.9%
Once every 3 years generally	4.9	1.5%	6.1	1.7%	11.0	1.6%
Once every 4 years or more generally	8.2	2.4%	12.2	3.5%	20.4	3.0%
Once every 4 - 5 years generally	6.8	2.0%	11.1	3.2%	17.9	2.6%
Once every 6 - 9 years generally	-	-	0.6	0.2%	0.6	0.1%
Once every 10 years or more generally	1.4	0.4%	0.5	0.1%	1.9	0.3%
The most recent one was the first colonoscopy	89.3	26.4%	92.0	26.4%	181.3	26.4%
No fixed schedule of colonoscopies	199.7	59.1%	192.9	55.3%	392.5	57.2%
Refusal	-	-	-	-	-	-
Total	337.8	100.0%	348.7	100.0%	686.5	100.0%
Because of symptoms or discomfort <sup>2</sup>						
More than once per year generally	0.4	0.4%	0.6	0.7%	1.0	0.5%
Once a year generally	0.5	0.5%	0.9	1.0%	1.4	0.7%
Once every 2 years generally	2.0	1.8%	3.7	4.0%	5.7	2.8%
Once every 3 years generally	2.1	1.9%	2.6	2.8%	4.7	2.3%
Once every 4 years or more generally	2.0	1.8%	2.1	2.3%	4.1	2.0%
Once every 4 - 5 years generally	2.0	1.8%	2.1	2.3%	4.1	2.0%
Once every 6 - 9 years generally	-	-	-	-	-	-
Once every 10 years or more generally	-	-	-	-	-	-
The most recent one was the first colonoscopy	55.5	49.8%	39.5	43.1%	94.9	46.8%
No fixed schedule of colonoscopies	48.9	43.9%	41.7	45.5%	90.6	44.6%
Refusal	-	-	0.5	0.5%	0.5	0.2%
Total	111.5	100.0%	91.5	100.0%	203.0	100.0%

#### Table 7.3g: Frequency of regular colonoscopies by gender

Bases: 1. The respondents who had received the colonoscopy and with no symptoms or discomfort prior to the examination.

2. The respondents who had received the colonoscopy because of symptoms or discomfort.

#### Table 7.3h: Frequency of regular colonoscopies by age group

	Belo	w 40	40	-49	50	-59	60	-69	70-	-79	80 or	above	To	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	s %	persons	%	persons	s %	persons	s %	persons	%	persons	s %	persons	%
	('000)	•	('000)		('000)		('000)		('000)		('000)		('000)	
With no symptoms or discomfort pri-	or to exar	nination	1											
More than once per year generally	-	-	0.6	0.5%	0.5	0.3%	0.4	0.3%	0.5	0.8%	-	-	2.1	0.3%
Once a year generally	7.4	8.2%	9.4	7.3%	13.6	6.6%	8.2	5.1%	5.4	8.3%	1.5	4.4%	45.6	6.6%
Once every 2 years generally	4.5	4.9%	8.8	6.8%	9.8	4.7%	6.9	4.3%	2.7	4.1%	0.9	2.5%	33.6	4.9%
Once every 3 years generally	0.6	0.6%	2.4	1.8%	3.2	1.5%	4.3	2.7%	0.5	0.8%	-	-	11.0	1.6%
Once every 4 years or more generally	1.8	2.0%	3.3	2.5%	8.4	4.0%	4.5	2.8%	2.1	3.3%	0.3	1.0%	20.4	3.0%
Once every 4 - 5 years generally	1.8	2.0%	1.7	1.3%	7.8	3.8%	4.1	2.6%	2.1	3.3%	0.3	1.0%	17.9	2.6%
Once every 6 - 9 years generally	-	-	0.6	0.5%	-	-	-	-	-	-	-	-	0.6	0.1%
Once every 10 years or more generally	-	-	0.9	0.7%	0.6	0.3%	0.4	0.3%	-	-	-	-	1.9	0.3%
The most recent one was the first colonoscopy	23.9	26.5%	36.9	28.5%	54.7	26.4%	40.4	25.4%	15.7	24.1%	9.6	27.8%	181.3	26.4%
No fixed schedule of colonoscopies	52.2	57.8%	68.2	52.6%	117.1	56.5%	94.4	59.3%	38.3	58.6%	22.3	64.3%	392.5	57.2%
Refusal	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	90.3	100.0%	129.7	100.0%	207.4	100.0%	159.2	100.0%	65.4	100.0%	34.6	100.0%	686.5	100.0%
Because of symptoms or discomfort <sup>2</sup>														
More than once per year generally	-	-	0.6	2.0%	-	-	-	-	-	-	0.4	2.5%	1.0	0.5%
Once a year generally	-	-	-	-	0.5	0.9%	-	-	0.4	1.7%	0.5	3.2%	1.4	0.7%
Once every 2 years generally	-	-	0.5	1.5%	2.8	5.2%	1.5	2.9%	1.0	4.1%	-	-	5.7	2.8%
Once every 3 years generally	-	-	-	-	1.2	2.2%	2.1	4.2%	1.4	6.0%	-	-	4.7	2.3%
Once every 4 years or more generally	-	-	1.1	3.4%	0.9	1.7%	2.1	4.2%	-	-	-	-	4.1	2.0%
Once every 4 - 5 years generally	-	-	1.1	3.4%	0.9	1.7%	2.1	4.2%	-	-	-	-	4.1	2.0%
Once every 6 - 9 years generally	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Once every 10 years or more generally	-	-	-	-	-	-	-	-	-	-	-	-	-	-
The most recent one was the first colonoscopy	13.7	48.8%	12.4	40.1%	25.9	49.2%	21.7	42.7%	9.8	41.2%	11.5	68.3%	94.9	46.8%
No fixed schedule of colonoscopies	14.4	51.2%	16.4	53.0%	21.5	40.7%	23.4	46.0%	11.1	47.0%	3.9	23.1%	90.6	44.6%
Refusal	-	-	-	-	-	-	-	-	-	-	0.5	2.9%	0.5	0.2%
Total	28.0	100.0%	30.9	100.0%	52.7	100.0%	50.8	100.0%	23.7	100.0%	16.8	100.0%	203.0	100.0%

Bases: 1. The respondents who had received the colonoscopy and with no symptoms or discomfort prior to the examination.

2. The respondents who had received the colonoscopy because of symptoms or discomfort.

Note: Figures may not add up to the total due to rounding.

The Cancer Expert Working Group on Cancer Prevention and Screening in Hong Kong recommended individuals aged 50 to 75 at average risk to discuss with their doctor and consider screening for colorectal cancer by having colonoscopy once every ten years, as an alternative to FOBT screening<sup>1</sup>. In the PHS, the proportion of persons aged 50 to 75 inclusive who had received a colonoscopy when there was no symptoms or discomfort was 17.7% (16.2% for females and 19.2% for males) (Table 7.3b).

## 7.4 Prostate-specific Antigen Test (for males only)

The prostate-specific antigen (PSA) test is a blood test used to screen for prostate cancer in males. In the survey, male respondents were asked whether they had the test before and if yes, whether there was any symptoms or discomfort prior to the test. They were further asked when they had the last test, type of organisations / doctors from whom they had consulted for the test, and how often they had the test.

Overall, 9.2% of males aged 15 or above reported that they ever had a PSA test without (7.4%) and with (1.8%) symptoms or discomfort prior to the test. Among those who had the test with no symptoms or discomfort at that time, the proportions increased from 2.6% in males aged below 45 to 14.7% in males aged 65-74, and slightly decreased to 12.7% in males aged 75 or above. Among those who had the test because of symptoms or discomfort, the proportions increased sharply from 0.1% among males aged below 45 to 10.1% among males aged 75 or above (Table 7.4a).

	Belo	w 45	45	-54	55-	-64	65-	-74	75 or :	above	To	tal
	No. of persons ('000)	%										
Yes	35.9	2.7%	54.5	9.9%	69.7	13.2%	57.3	20.2%	48.1	22.8%	265.5	9.2%
With no symptoms or discomfort prior to test	34.7	2.6%	51.3	9.4%	59.7	11.3%	41.8	14.7%	26.9	12.7%	214.4	7.4%
Had test because of symptoms or discomfort	1.2	0.1%	3.2	0.6%	10.0	1.9%	15.5	5.5%	21.2	10.1%	51.2	1.8%
No	1 288.2	97.3%	493.9	90.1%	458.3	86.8%	226.5	79.8%	162.8	77.2%	2 629.7	90.8%
Total	1 324.1	100.0%	548.4	100.0%	528.0	100.0%	283.8	100.0%	210.9	100.0%	2 895.2	100.0%

Table 7.4a: Proportion of males aged 15 or above who ever had PSA test by age group

Base: All male respondents.

Regarding the type of organisations / doctors consulted for the PSA test, among those who had received the test when there were no symptoms or discomfort, overall speaking more people consulted private doctors (68.3%) than public clinics or hospitals (30.8%). On the contrary, among those who had the test because of symptoms or discomfort, in general more people consulted doctors in public clinics or hospitals (76.4%) than private doctors (22.8%) (Table 7.4b).

	Belo	w 45	45-	54	55-	-64	65-	74	75 or a	above	To	tal
	No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%										
	('000)		('000)		('000)		('000)		('000)		('000)	
With no symptoms or discomfort prior to test	1											
Private clinics or hospitals	29.8	86.0%	45.6	88.8%	41.5	69.6%	22.7	54.2%	6.9	25.5%	146.5	68.3%
Public clinics or hospitals (including Hospital Authority and Department of Health)	4.3	12.3%	5.7	11.2%	17.0	28.5%	19.1	45.8%	20.0	74.5%	66.1	30.8%
Non-profit organisations or universities	0.6	1.7%	-	-	0.6	1.0%	-	-	-	-	1.2	0.5%
Hospitals or clinics in Mainland China	-	-	-	-	0.6	1.0%	-	-	-	-	0.6	0.3%
Total	34.7	100.0%	51.3	100.0%	59.7	100.0%	41.8	100.0%	26.9	100.0%	214.4	100.0%
Because of symptoms or discomfort <sup>2</sup>												
Private clinics or hospitals	1.2	100.0%	1.6	50.8%	3.2	31.6%	1.0	6.3%	4.7	22.2%	11.7	22.8%
Public clinics or hospitals (including Hospital Authority and Department of Health)	-	-	1.6	49.2%	6.9	68.4%	14.2	91.1%	16.5	77.8%	39.1	76.4%
Non-profit organisations or universities	-	-	-	-	-	-	0.4	2.6%	-	-	0.4	0.8%
Hospitals or clinics in Mainland China	-	-	-	-	-	-	-	-	-	-	-	-
Total	1.2	100.0%	3.2	100.0%	10.0	100.0%	15.5	100.0%	21.2	100.0%	51.2	100.0%

## Table 7.4b: Type of organisations consulted for PSA test by age group

Bases: 1. The male respondents who had received the PSA test and with no symptoms or discomfort prior to the test.

2. The male respondents who had received the PSA test because of symptoms or discomfort.

Among males who had received PSA test when there were no symptoms or discomfort, 71.7% had their last tests within 24 months preceding the survey while 25.7% had the test more than 24 months preceding the survey. The average duration since the last PSA test was 26.5 months among those with no symptoms or discomfort prior to the test. Among persons who had received PSA test because of symptoms or discomfort, the average duration since the last test was 37.2 months (Table 7.4c).

	Bel	ow 45	45	5-54	55	5-64	6	5-74	75 or	above	Т	otal
Duration (months)	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
With no symptoms or disco	omfort prior to	test <sup>1</sup>										
Less than 13	18.7	53.8%	25.5	49.7%	31.5	52.7%	22.3	53.4%	9.9	36.9%	107.9	50.3%
13 - 24	8.8	25.5%	14.5	28.3%	14.1	23.6%	4.4	10.6%	3.9	14.6%	45.8	21.4%
More than 24	7.2	20.8%	10.2	19.8%	14.1	23.7%	12.0	28.8%	11.6	43.1%	55.1	25.7%
Unknown / missing	-	-	1.1	2.2%	-	-	3.0	7.3%	1.4	5.4%	5.6	2.6%
Total	34.7	100.0%	51.3	100.0%	59.7	100.0%	41.8	100.0%	26.9	100.0%	214.4	100.0%
Mean <sup>2</sup>	1	9.9	1	9.7	2	1.8	3	4.1	4	8.2	2	6.5
Because of symptoms or dis	scomfort <sup>3</sup>											
Less than 13	-	-	0.6	17.7%	3.5	34.9%	9.7	62.6%	7.2	33.9%	21.0	41.0%
13 - 24	-	-	1.1	33.5%	3.6	36.2%	1.9	12.2%	3.4	15.9%	9.9	19.5%
More than 24	0.6	49.9%	0.9	29.3%	2.4	24.4%	3.9	25.2%	9.5	44.5%	17.3	33.9%
Unknown / missing	0.6	50.1%	0.6	19.5%	0.5	4.5%	-	-	1.2	5.8%	2.9	5.7%
Total	1.2	100.0%	3.2	100.0%	10.0	100.0%	15.5	100.0%	21.2	100.0%	51.2	100.0%
Mean <sup>4</sup>		#	5	2.1	3	0.3	2	8.7	4	4.1	3	7.2

Table 7.4c: Number of months since the last PSA test by age group

Bases: 1. The male respondents who had received the PSA test, with no symptoms or discomfort prior to the test.

2. The male respondents who had received the PSA test, with no symptoms or discomfort prior to the test and had valid answer on how long ago since the last test.

3. The male respondents who had received the PSA test because of symptoms or discomfort prior to the test.

4. The male respondents who had received the PSA test because of symptoms or discomfort and had valid answer on how long ago since the last test.

Notes: # The summary statistics are not shown for the age subgroup "Below 45" due to statistical consideration.

Nearly half (45.6%) of persons who received a PSA test with no symptoms or discomfort prior to the test had no fixed schedule of regular PSA tests, and 21.0% reported that the recent test was their first PSA test; 19.9% had PSA test generally once a year or more frequently, 10.8% had the test once every two years and 2.7% had the test once every three years or at a longer interval. Among people who had a PSA test because of symptoms or discomfort, 39.1% had no fixed schedule recent tests, 39.5% reported that the most recent test was their first test, while 10.6% had PSA test more than once a year and 10.8% had regular PSA tests once every one to two years (Table 7.4d).

	Belo	w 45	45-	-54	55-	-64	65-	-74	75 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)	
With no symptoms or discomfort prior to test	t <sup>1</sup>											
More than once per year generally	-	-	0.6	1.2%	1.6	2.7%	2.9	6.9%	-	-	5.1	2.4%
Once a year generally	5.6	16.1%	10.7	20.8%	9.5	16.0%	8.0	19.0%	3.7	13.8%	37.5	17.5%
Once every 2 years generally	4.5	13.1%	7.0	13.7%	6.8	11.3%	3.8	9.1%	1.0	3.7%	23.1	10.8%
Once every 3 years generally	0.6	1.7%	0.6	1.1%	1.8	3.0%	-	-	-	-	2.9	1.4%
Once every 4 years or more generally	0.6	1.7%	1.7	3.3%	0.6	1.0%	-	-	-	-	2.9	1.3%
The most recent one was the first PSA test	8.9	25.7%	9.2	18.0%	12.7	21.3%	8.4	20.2%	5.8	21.5%	45.1	21.0%
No fixed schedule of PSA tests	14.5	41.8%	21.5	41.9%	26.7	44.8%	18.7	44.8%	16.4	61.0%	97.8	45.6%
Total	34.7	100.0%	51.3	100.0%	59.7	100.0%	41.8	100.0%	26.9	100.0%	214.4	100.0%
Because of symptoms or discomfort <sup>2</sup>												
More than once per year generally	-	-	0.6	17.7%	1.5	15.0%	2.0	12.7%	1.4	6.5%	5.4	10.6%
Once a year generally	-	-	-	-	1.2	11.7%	2.4	15.3%	0.6	2.6%	4.1	8.1%
Once every 2 years generally	-	-	0.6	17.7%	-	-	0.5	3.1%	0.3	1.6%	1.4	2.7%
Once every 3 years generally	-	-	-	-	-	-	-	-	-	-	-	-
Once every 4 years or more generally	-	-	-	-	-	-	-	-	-	-	-	-
The most recent one was the first PSA test	0.6	49.9%	-	-	2.4	24.3%	6.9	44.2%	10.3	48.5%	20.2	39.5%
No fixed schedule of PSA tests	0.6	50.1%	2.0	64.6%	4.9	49.0%	3.8	24.6%	8.6	40.7%	20.0	39.1%
Total	1.2	100.0%	3.2	100.0%	10.0	100.0%	15.5	100.0%	21.2	100.0%	51.2	100.0%

#### Table 7.4d: Frequency of regular PSA tests by age group

Bases: 1. The male respondents who had received the PSA test and with no symptoms or discomfort prior to the test. 2. The male respondents who had received the PSA test because of symptoms or discomfort.

## 7.5 Digital Rectal Examination (for males only)

Digital rectal examination (DRE) of the prostate is an examination in which the doctor places a gloved finger into the rectum to feel the size, shape, and hardness of the prostate gland in males. In the PHS, male respondents were asked whether they ever had DRE and if yes, whether there were any symptoms or discomfort prior to the examination and they were further asked when they had the last examination, type of organisations / doctors whom they had consulted for the examination, and how often they had the examination.

Overall, 7.9% of males aged 15 or above reported that they had ever had DRE of the prostate - 5.8% had the examination when there were no apparent symptoms or discomfort and 2.1% had it because of symptoms or discomfort. The proportions ever having the examination increased steadily with age, from 2.4% for those below 45 years of age to 11.5% for those aged 75 or above for those who had received the DRE when there were no symptoms or discomfort (Table 7.5a).

	Below 45		45-54		55-	•64	65-74		75 or above		Total	
	No. of persons ('000)	%										
Yes	38.1	2.9%	44.5	8.1%	62.6	11.9%	44.8	15.8%	39.1	18.6%	229.3	7.9%
With no symptoms or discomfort prior to examination	31.5	2.4%	35.8	6.5%	45.3	8.6%	31.5	11.1%	24.3	11.5%	168.4	5.8%
Had examination because of symptoms or discomfort	6.6	0.5%	8.8	1.6%	17.3	3.3%	13.4	4.7%	14.9	7.1%	60.9	2.1%
No	1 286.0	97.1%	503.9	91.9%	465.4	88.1%	239.0	84.2%	171.8	81.4%	2 665.9	92.1%
Total	1 324.1	100.0%	548.4	100.0%	528.0	100.0%	283.8	100.0%	210.9	100.0%	2 895.2	100.0%

Table 7.5a: Proportion of males aged 15 or above who ever had a digital rectal examination by age group

Base: All male respondents.

Regarding the type of organisations / doctors consulted for the DRE among those who had received the examination when there were no symptoms or discomfort, overall speaking more people consulted private doctors (61.9%) than public clinics or hospitals (34.7%). However, the opposite was found among those who had received the examination because of symptoms or discomfort with 63.7% consulted doctors in public clinics or hospitals and 34.4% consulted private doctors (Table 7.5b).

	Below 45		45-54		55-	64	65-74		75 or a	above	To	tal
	No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)	
With no symptoms or discomfort prior to exa	amination	1										
Private clinics or hospitals	22.6	71.6%	29.5	82.4%	32.1	70.8%	16.7	53.0%	3.4	14.0%	104.2	61.9%
Public clinics or hospitals (including Hospital Authority and Department of Health)	5.9	18.6%	5.2	14.7%	12.1	26.6%	14.8	47.0%	20.4	84.2%	58.4	34.7%
Non-profit organisations or universities	0.9	2.9%	1.1	3.0%	1.2	2.6%	-	-	0.5	1.9%	3.6	2.1%
Hospitals or clinics in Mainland China	2.2	6.9%	-	-	-	-	-	-	-	-	2.2	1.3%
Total	31.5	100.0%	35.8	100.0%	45.3	100.0%	31.5	100.0%	24.3	100.0%	168.4	100.0%
Because of symptoms or discomfort <sup>2</sup>												
Private clinics or hospitals	3.3	50.5%	4.5	51.1%	8.0	46.1%	2.3	16.8%	2.9	19.4%	20.9	34.4%
Public clinics or hospitals (including Hospital Authority and Department of Health)	2.8	42.4%	4.3	48.9%	9.3	53.9%	11.1	83.2%	11.2	75.6%	38.8	63.7%
Non-profit organisations or universities	-	-	-	-	-	-	-	-	-	-	-	-
Hospitals or clinics in Mainland China	0.5	7.1%	-	-	-	-	-	-	0.7	4.9%	1.2	2.0%
Total	6.6	100.0%	8.8	100.0%	17.3	100.0%	13.4	100.0%	14.9	100.0%	60.9	100.0%

Table 7.5b: Type of organisations consulted for digital rectal examination by age group

Bases: 1. The male respondents who had received digital rectal examination of the prostate and with no symptoms or discomfort prior to the examination. 2. The male respondents who had received digital rectal examination of the prostate because of symptoms or discomfort.

Among males who had received DRE when there were no symptoms or discomfort, 61.1% had their last examinations within 24 months preceding the survey, while 33.1% had the examination more than 24 months preceding the survey. The average duration since the last DRE was 38.6 months among those with no symptoms or discomfort prior to the examination. Among persons who had received the examination because of symptoms or discomfort, the average duration since last examination was 60.9 months (Table 7.5c).

	Bel	low 45	45-54		5:	5-64	6	5-74	75 ог	r above	Т	otal
Duration (months)	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
With no symptoms	or discon	nfort prior	to examina	tion <sup>1</sup>								
Less than 13	18.0	57.2%	16.0	44.6%	18.8	41.4%	14.8	47.1%	8.9	36.7%	76.5	45.4%
13 - 24	5.6	17.8%	8.7	24.2%	6.6	14.5%	3.9	12.5%	1.6	6.7%	26.4	15.7%
More than 24	6.8	21.7%	9.5	26.6%	18.8	41.5%	9.3	29.7%	11.2	46.3%	55.8	33.1%
Unknown / missing	1.0	3.3%	1.6	4.5%	1.2	2.5%	3.4	10.7%	2.5	10.3%	9.7	5.7%
Total	31.5	100.0%	35.8	100.0%	45.3	100.0%	31.5	100.0%	24.3	100.0%	168.4	100.0%
Mean <sup>2</sup>	2	29.9	2	.5.7	4	19.9	3	2.5	5	56.1	3	8.6
Because of sympton	ms or disc	comfort <sup>3</sup>										
Less than 13	0.5	7.1%	1.4	16.3%	4.6	26.5%	5.4	40.6%	3.3	22.1%	15.2	24.9%
13 - 24	1.1	16.1%	2.7	30.8%	4.4	25.6%	2.9	21.9%	2.3	15.3%	13.4	22.0%
More than 24	4.5	67.7%	4.0	45.8%	7.8	45.1%	4.6	34.1%	8.3	55.9%	29.1	47.9%
Unknown / missing	0.6	9.0%	0.6	7.1%	0.5	2.8%	0.5	3.5%	1.0	6.8%	3.2	5.2%
Total	6.6	100.0%	8.8	100.0%	17.3	100.0%	13.4	100.0%	14.9	100.0%	60.9	100.0%
Mean <sup>4</sup>	5	52.8	5	7.4	5	57.8	5	53.3	7	7.6	6	0.9

 Table 7.5c: Number of months since the last digital rectal examination by age group

Bases: 1. The male respondents who had received digital rectal examination of the prostate, with no symptoms or discomfort prior to the examination.

2. The male respondents who had received digital rectal examination of the prostate, with no symptoms or discomfort prior to the examination and had valid answer on how long ago since the last examination.

3. The male respondents who had received digital rectal examination of the prostate because of symptoms or discomfort prior to the examination.

4. The male respondents who had received digital rectal examination of the prostate because of symptoms or discomfort and had valid answer on how long ago since the last examination.

More than half (53.9%) of the males who had DRE of the prostate when there were no apparent symptoms or discomfort had no fixed schedule of repeat examinations and 23.5% reported that the most recent examination was their first DRE ever received. 13.6% had the DRE generally once a year or more frequent, 5.7% had it once every two years and 3.3% once every three or more years. Among people who had DRE because of symptoms or discomfort, 37.7% had no fixed schedule, 52.8% reported that the most recent examination was their first ever DRE received, while only 9.5% had regular DRE (Table 7.5d).

	Below 45		45	-54	55	-64	65	-74	75 or	above	e Total	
	No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)	
With no symptoms or discomfort prior examination $^{\rm 1}$	to											
More than once per year generally	-	-	1.2	3.5%	-	-	1.7	5.4%	-	-	2.9	1.7%
Once a year generally	3.9	12.4%	5.7	16.0%	4.9	10.9%	3.9	12.5%	1.6	6.4%	20.1	11.9%
Once every 2 years generally	2.9	9.1%	1.7	4.7%	2.9	6.3%	1.3	4.2%	0.9	3.7%	9.6	5.7%
Once every 3 years generally	1.0	3.3%	0.6	1.7%	0.6	1.3%	-	-	-	-	2.2	1.3%
Once every 4 years or more generally	-	-	2.7	7.5%	0.6	1.3%	-	-	-	-	3.3	2.0%
The most recent one was my first digital rectal examination	8.6	27.1%	6.0	16.9%	11.2	24.7%	8.3	26.3%	5.4	22.4%	39.5	23.5%
No fixed schedule of digital rectal examinations	15.2	48.1%	17.8	49.7%	25.2	55.5%	16.2	51.6%	16.4	67.5%	90.8	53.9%
Total	31.5	100.0%	35.8	100.0%	45.3	100.0%	31.5	100.0%	24.3	100.0%	168.4	100.0%
Because of symptoms or discomfort <sup>2</sup>												
More than once per year generally	-	-	-	-	-	-	1.7	12.4%	-	-	1.7	2.7%
Once a year generally	-	-	-	-	1.2	6.8%	0.5	3.5%	0.9	6.1%	2.5	4.2%
Once every 2 years generally	-	-	0.6	6.4%	-	-	0.6	4.4%	0.4	3.0%	1.6	2.6%
Once every 3 years generally	-	-	-	-	-	-	-	-	-	-	-	-
Once every 4 years or more generally	-	-	-	-	-	-	-	-	-	-	-	-
The most recent one was my first digital rectal examination	4.8	72.9%	3.5	40.1%	8.9	51.7%	5.4	40.7%	9.5	63.6%	32.2	52.8%
No fixed schedule of digital rectal examinations	1.8	27.1%	4.7	53.5%	7.2	41.5%	5.2	39.0%	4.1	27.4%	22.9	37.7%
Total	6.6	100.0%	8.8	100.0%	17.3	100.0%	13.4	100.0%	14.9	100.0%	60.9	100.0%

### Table 7.5d: Frequency of regular digital rectal examinations by age group

Bases: 1. The male respondents who had received digital rectal examination of the prostate and with no symptoms or discomfort prior to the examination. 2. The male respondents who had received digital rectal examination of the prostate because of symptoms or discomfort.

## 7.6 Cervical Smear (for females aged 25 or above)

Cervical smear is a cytology test for cervical cancer. In the PHS, female respondents aged 25 or above were asked whether they ever had such test and if yes, whether there were no symptoms or discomfort prior to the test and they were further asked when they had the last cervical smear, type of organisations / doctors from whom they had consulted for such test, and how often they had the test.

Overall, 54.2% of females aged 25 or above reported that they ever had a cervical smear - 51.0% had the test with no symptoms or discomfort prior to the test and 3.2% had it because of symptoms or discomfort. Except for females aged 25-34 among whom 42.8% ever had the test, the proportion of females aged 35 or above who ever had a cervical smear decreased with age from 68.8% in those aged 35-44 to 15.2% in those aged 75 or above. The overall proportion of women aged 25-64 who had a cervical smear was 60.5% (Table 7.6a).

	25-34		35-44		45-54		55-64		65-74		75 or above		25-64		То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons ('000)	5 %	persons ('000)	%	persons ('000)	%	persons ('000)	%	persons ('000)	%	persons ('000)	%	persons ('000)	%	persons ('000)	%
Yes	216.5	42.8%	386.2	68.8%	425.7	67.1%	326.3	60.7%	116.3	41.5%	41.6	15.2%	1 354.6	60.5%	1 512.5	54.2%
With no symptoms or discomfort prior to test	204.0	40.3%	374.4	66.7%	402.0	63.3%	305.8	56.9%	104.2	37.2%	34.0	12.5%	1 286.2	57.4%	1 424.4	51.0%
Had cervical smear because of symptoms or discomfort	12.5	2.5%	11.8	2.1%	23.7	3.7%	20.4	3.8%	12.1	4.3%	7.6	2.8%	68.4	3.1%	88.1	3.2%
No	289.9	57.2%	175.2	31.2%	208.9	32.9%	211.2	39.3%	163.9	58.5%	231.0	84.8%	885.3	39.5%	1 280.2	45.8%
Total	506.4	100.0%	561.4	100.0%	634.6	100.0%	537.5	100.0%	280.2	100.0%	272.6	100.0%	5 2 239.9	100.0%	2 792.7	100.0%

Table 7.6a: Proportion of females aged 25 or above who ever had a cervical smear by age group

Base: All female respondents aged 25 or above.

Regarding the type of organisations / doctors consulted for cervical smear among those who had the test when there were no symptoms or discomfort, generally more females consulted private doctors (55.0%) than public clinics or hospitals (37.4%). On the other hand, among those who had the test because of symptoms or discomfort, a higher proportion of females consulted doctors in public clinics or hospitals (49.0%) than private doctors (42.9%) (Table 7.6b).

	25-34		35-44		45-54		55-64		65-74		75 or	above	Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
With no symptoms or discomfort pri	ior to tes	st <sup>1</sup>												
Private clinics or hospitals	126.0	61.7%	234.6	62.7%	230.3	57.3%	134.8	44.1%	43.9	42.1%	13.5	39.8%	783.2	55.0%
Public clinics or hospitals (including Hospital Authority and Department of Health)	62.5	30.6%	118.3	31.6%	135.1	33.6%	145.8	47.7%	52.9	50.8%	18.0	53.0%	532.6	37.4%
Non-profit organisations or universities	14.4	7.0%	17.1	4.6%	32.6	8.1%	23.6	7.7%	5.5	5.3%	2.0	5.8%	95.2	6.7%
Hospitals or clinics in Mainland China	1.2	0.6%	3.3	0.9%	3.0	0.7%	0.6	0.2%	1.3	1.2%	-	-	9.4	0.7%
Hospitals or clinics in other countries	-	-	-	-	0.4	0.1%	-	-	0.5	0.5%	0.5	1.3%	1.4	0.1%
Laboratories	-	-	1.0	0.3%	0.6	0.1%	1.0	0.3%	-	-	-	-	2.6	0.2%
Total	204.0	100.0%	374.4	100.0%	402.0	100.0%	305.8	100.0%	104.2	100.0%	34.0	100.0%	1 424.4	100.0%
Because of symptoms or discomfort	2													
Private clinics or hospitals	5.8	46.9%	5.0	42.4%	8.9	37.6%	9.0	44.2%	5.9	48.7%	3.1	41.1%	37.8	42.9%
Public clinics or hospitals (including Hospital Authority and Department of Health)	6.1	48.8%	5.3	45.1%	11.5	48.7%	10.8	53.0%	4.9	40.8%	4.5	58.9%	43.2	49.0%
Non-profit organisations or universities	0.5	4.3%	-	-	1.8	7.8%	-	-	1.3	10.5%	-	-	3.7	4.1%
Hospitals or clinics in Mainland China	-	-	1.0	8.6%	1.4	5.9%	0.6	2.8%	-	-	-	-	3.0	3.4%
Hospitals or clinics in other countries	-	-	0.4	3.8%	-	-	-	-	-	-	-	-	0.4	0.5%
Laboratories	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	12.5	100.0%	11.8	100.0%	23.7	100.0%	20.4	100.0%	12.1	100.0%	7.6	100.0%	88.1	100.0%

## Table 7.6b: Type of organisations consulted for cervical smear by age group

Bases: 1. The female respondents aged 25 or above who had received cervical smear and with no symptoms or discomfort prior to test.

2. The female respondents aged 25 or above who had received cervical smear because of symptoms or discomfort.

Among females aged 25 or above who had a cervical smear when they had no symptoms or discomfort prior to the test, 66.5% had their last cervical smear within 24 months preceding the survey, 10.2% had the test between 25 and 36 months, while 20.1% had the test more than 36 months preceding the survey. The average duration since their last cervical smear was 34.5 months among those with no symptoms or discomfort prior to the test, as compared to 80.0 months for those who had the test because of symptoms or discomfort (Table 7.6c).

	25-34 35-44		45	-54	55-	64	65	-74	75 or	above	To	tal		
Duration (months)	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
With no symp	otoms or di	iscomfort	prior to te	st 1										
Less than 13	121.9	59.7%	198.4	53.0%	196.2	48.8%	111.9	36.6%	26.3	25.3%	5.0	14.7%	659.7	46.3%
13 - 24	48.0	23.5%	79.4	21.2%	88.4	22.0%	55.1	18.0%	14.5	13.9%	2.6	7.6%	288.1	20.2%
More than 24	31.7	15.6%	91.0	24.3%	109.0	27.1%	122.7	40.1%	55.6	53.4%	21.1	62.1%	431.1	30.3%
25 - 36	16.1	7.9%	40.1	10.7%	41.9	10.4%	30.6	10.0%	14.7	14.1%	2.1	6.2%	145.4	10.2%
37 - 60	10.7	5.3%	32.0	8.6%	35.0	8.7%	27.9	9.1%	12.0	11.5%	4.3	12.7%	122.0	8.6%
More than 60	4.9	2.4%	18.9	5.1%	32.1	8.0%	64.2	21.0%	28.9	27.7%	14.7	43.2%	163.8	11.5%
Unknown / missing	2.4	1.2%	5.5	1.5%	8.5	2.1%	16.1	5.2%	7.8	7.4%	5.3	15.7%	45.5	3.2%
Total	204.0	100.0%	374.4	100.0%	402.0	100.0%	305.8	100.0%	104.2	100.0%	34.0	100.0%	1 424.4	100.0%
Mean <sup>2</sup>	19	9.5	23	3.4	28	8.2	48	.2	6	8.6	11	5.6	34	.5
Because of syn	mptoms or	• discomfo	ort <sup>3</sup>											
Less than 13	7.4	59.0%	7.5	63.4%	9.6	40.5%	4.7	22.9%	1.4	11.5%	-	-	30.5	34.6%
13 - 24	2.3	18.5%	1.6	13.5%	4.5	19.1%	2.9	14.0%	-	-	1.0	13.0%	12.3	13.9%
More than 24	2.8	22.5%	2.7	23.1%	8.7	36.9%	11.8	57.8%	10.2	84.2%	4.4	57.4%	40.6	46.1%
25 - 36	1.1	9.0%	0.4	3.8%	2.1	8.7%	0.9	4.6%	-	-	0.6	7.4%	5.1	5.8%
37 - 60	0.6	4.7%	1.4	11.6%	0.4	1.8%	1.4	6.8%	0.5	4.5%	0.6	7.4%	4.9	5.5%
More than 60	1.1	8.8%	0.9	7.7%	6.2	26.4%	9.5	46.5%	9.7	79.7%	3.2	42.6%	30.7	34.8%
Unknown / missing	-	-	-	-	0.8	3.5%	1.1	5.3%	0.5	4.3%	2.2	29.6%	4.7	5.3%
Total	12.5	100.0%	11.8	100.0%	23.7	100.0%	20.4	100.0%	12.1	100.0%	7.6	100.0%	88.1	100.0%
Mean <sup>4</sup>	2	3.1	1	9.4	4	3.0	93	.6	18	89.8	21	6.5	80	0.0

Table 7.6c: Number of months since the last cervical smear by age group

Bases: 1. The female respondents aged 25 or above who had received cervical smear, with no symptoms or discomfort prior to test.

2. The female respondents aged 25 or above who had received cervical smear, with no symptoms or discomfort prior to test and had valid answer on how long ago since the last cervical smear.

3. The female respondents aged 25 or above who had received cervical smear because of symptoms or discomfort prior to test.

4. The female respondents aged 25 or above who had received cervical smear because of symptoms or discomfort and had valid answer on how long ago since the last cervical smear.

Among females aged 25 or above who had cervical smear without any symptoms or discomfort prior to the test, 43.6% had no fixed schedule of repeat test and 6.5% reported that the most recent cervical smear was their first test. 47.6% had regular cervical smear once every one to three years and 1.5% had it more frequently at more than once a year. Among those who had the test because of symptoms or discomfort, 51.2% had no fixed schedule of repeat test, 22.6% reported that the most recent cervical smear was their first test, while 18.8% had the test regularly once every 1-3 years and 5.4% had more frequent tests than once a year (Table 7.6d).

	25-34		35-44		45-54		55-64		65-74		75 or above			tal
	No. of persons ('000)	%												
With no symptoms or discomfort price	or to test	1												
More than once per year generally	5.4	2.6%	5.5	1.5%	5.3	1.3%	4.5	1.5%	-	-	-	-	20.7	1.5%
Once a year generally	49.1	24.1%	101.8	27.2%	103.5	25.7%	50.5	16.5%	11.3	10.8%	3.0	8.8%	319.1	22.4%
Once every 2 years generally	26.8	13.2%	64.9	17.3%	64.8	16.1%	41.2	13.5%	8.1	7.8%	1.7	5.0%	207.6	14.6%
Once every 3 years generally	16.1	7.9%	39.1	10.5%	53.3	13.3%	36.0	11.8%	5.8	5.6%	0.4	1.3%	150.7	10.6%
Once every 4 years or more generally	0.5	0.2%	2.0	0.5%	5.0	1.3%	2.9	0.9%	0.5	0.5%	0.6	1.7%	11.6	0.8%
The most recent one was my first cervical smear	25.8	12.6%	22.8	6.1%	16.8	4.2%	15.6	5.1%	6.0	5.7%	6.3	18.5%	93.3	6.5%
No fixed schedule of cervical smear	80.4	39.4%	138.3	36.9%	153.2	38.1%	154.5	50.5%	72.5	69.6%	22.0	64.8%	620.9	43.6%
Refusal	-	-	-	-	-	-	0.6	0.2%	-	-	-	-	0.6	<0.05%
Total	204.0	100.0%	374.4	100.0%	402.0	100.0%	305.8	100.0%	104.2	100.0%	34.0	100.0%	1 424.4	100.0%
Because of symptoms or discomfort <sup>2</sup>														
More than once per year generally	0.6	4.7%	1.0	8.6%	2.2	9.2%	1.0	4.7%	-	-	-	-	4.7	5.4%
Once a year generally	2.3	18.8%	1.5	12.5%	3.2	13.4%	0.6	2.8%	0.5	4.5%	-	-	8.1	9.2%
Once every 2 years generally	0.6	4.7%	1.0	8.7%	1.9	8.2%	1.0	4.8%	-	-	-	-	4.5	5.2%
Once every 3 years generally	0.6	4.7%	0.9	7.6%	-	-	1.9	9.5%	-	-	0.4	5.8%	3.9	4.4%
Once every 4 years or more generally	1.1	9.1%	-	-	-	-	-	-	-	-	-	-	1.1	1.3%
The most recent one was my first cervical smear	3.7	29.9%	1.0	8.6%	5.6	23.5%	3.0	14.6%	4.8	39.3%	1.8	23.8%	19.9	22.6%
No fixed schedule of cervical smear	3.5	28.3%	6.4	53.9%	10.8	45.6%	13.0	63.5%	6.8	56.2%	4.7	61.4%	45.1	51.2%
Refusal	-	-	-	-	-	-	-	-	-	-	0.7	8.9%	0.7	0.8%
Total	12.5	100.0%	11.8	100.0%	23.7	100.0%	20.4	100.0%	12.1	100.0%	7.6	100.0%	88.1	100.0%

#### Table 7.6d: Frequency of regular cervical smear by age group

Bases: 1. The female respondents aged 25 or above who had received cervical smear and with no symptoms or discomfort prior to test.

2. The female respondents aged 25 or above who had received cervical smear because of symptoms or discomfort.

The Cancer Expert Working Group on Cancer Prevention and Screening in Hong Kong recommended women aged 25 to 64 years old who ever had sexual experience to have regular cervical cancer screening by cervical smears every three years after two consecutive normal annual smears <sup>2</sup>. In the PHS, the proportion of women aged 25 to 64 who had ever had cervical smear when there was no symptoms or discomfort was 57.4% (Table 7.6a).

## 7.7 Mammogram (for females only)

Mammogram is an examination of the breast using special X-ray machine. To establish the proportion of females who ever had mammogram, the PHS asked females aged 15 or above whether they ever had such an examination and if yes, whether there were any symptoms or discomfort prior to the examination and they were further asked when they had the last examination, type of organisations / doctors from whom they had consulted for such examination, and how often they had the examination.

Overall, 25.4% of females aged 15 or above reported that they had a mammogram before with 23.4% had no symptoms or discomfort prior to the examination and 2.0% had the examination because of symptoms or discomfort. Among those who had the examination when there was no symptoms or discomfort, more women in the age groups of 45-54 (35.5%) and 55-64 (34.7%) had a mammogram examination than those in the other age groups (Table 7.7a).

	Below 45		45-54		55-64		65-74		75 or above		Total	
	No. of persons ('000)	%										
Yes	247.2	16.9%	245.1	38.6%	202.7	37.7%	85.8	30.6%	29.4	10.8%	810.1	25.4%
With no symptoms or discomfort prior to examination	229.8	15.7%	225.0	35.5%	186.4	34.7%	80.9	28.9%	24.2	8.9%	746.4	23.4%
Had examination because of symptoms or discomfort	17.4	1.2%	20.1	3.2%	16.2	3.0%	4.8	1.7%	5.1	1.9%	63.7	2.0%
No	1 212.9	83.1%	389.5	61.4%	334.8	62.3%	194.4	69.4%	243.2	89.2%	2 374.9	74.6%
Total	1 460.1	100.0%	634.6	100.0%	537.5	100.0%	280.2	100.0%	272.6	100.0%	3 185.0	100.0%

Table 7.7a: Proportion of females aged 15 or above who ever had a mammogram by age group

Base: All female respondents.
Regarding the type of organisations / doctors consulted for the mammogram examination, overall speaking more women consulted private doctors than public clinics or hospitals regardless of whether they had no symptoms or discomfort prior to the examination (61.6% vs 32.0% respectively) or they had the examination because of symptoms or discomfort (52.2% vs 43.2% respectively) (Table 7.7b).

	Belo	w 45	45-	54	55-	-64	65-	74	75 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)	
With no symptoms or discomfort prior to e	xaminati	on <sup>1</sup>										
Private clinics or hospitals	179.2	78.0%	146.9	65.3%	91.6	49.1%	32.8	40.5%	9.5	39.1%	459.9	61.6%
Public clinics or hospitals (including Hospital Authority and Department of Health)	37.8	16.5%	60.2	26.8%	85.3	45.8%	43.0	53.1%	12.9	53.1%	239.2	32.0%
Non-profit organisations or universities	9.3	4.0%	14.1	6.3%	8.4	4.5%	4.8	5.9%	0.4	1.8%	37.0	5.0%
Hospitals or clinics in Mainland China	3.4	1.5%	3.8	1.7%	1.1	0.6%	0.4	0.5%	0.5	1.9%	9.3	1.2%
Hospitals or clinics in other countries	-	-	-	-	-	-	-	-	1.0	4.2%	1.0	0.1%
Total	229.8	100.0%	225.0	100.0%	186.4	100.0%	80.9	100.0%	24.2	100.0%	746.4	100.0%
Because of symptoms or discomfort <sup>2</sup>												
Private clinics or hospitals	13.6	78.1%	9.0	45.0%	6.9	42.6%	1.9	39.9%	1.8	34.4%	33.3	52.2%
Public clinics or hospitals (including Hospital Authority and Department of Health)	2.7	15.3%	10.1	50.1%	8.5	52.4%	2.9	60.1%	3.4	65.6%	27.5	43.2%
Non-profit organisations or universities	0.6	3.3%	-	-	0.4	2.5%	-	-	-	-	1.0	1.5%
Hospitals or clinics in Mainland China	0.6	3.3%	1.0	4.9%	0.4	2.5%	-	-	-	-	2.0	3.1%
Hospitals or clinics in other countries	-	-	-	-	-	-	-	-	-	-	-	-
Total	17.4	100.0%	20.1	100.0%	16.2	100.0%	4.8	100.0%	5.1	100.0%	63.7	100.0%

Table 7.7b: Type of organisations consulted for mammogram by age group

Bases: 1. The female respondents who had mammogram and with no symptoms or discomfort prior to the mammogram.

2. The female respondents who had mammogram because of symptoms or discomfort.

Among females aged 15 or above who had undergone a mammogram examination when they had no symptoms or discomfort prior to the examination, 63.0% had their last examinations within 24 months preceding the survey and 32.7% had the examination more than 24 months preceding the survey. The average duration since their last mammogram was 38.0 months among those with no symptoms or discomfort prior to the examination, as compared to 53.7 months for those who had the examination because of symptoms or discomfort (Table 7.7c).

	Bel	ow 45	45	5-54	55	5-64	6	5-74	75 o	r above	Т	otal
Duration (months)	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
With no sympt	oms or disc	omfort prio	r to examina	ation <sup>1</sup>								
Less than 13	118.0	51.3%	96.4	42.8%	67.1	36.0%	20.5	25.4%	6.0	24.9%	308.1	41.3%
13 - 24	47.7	20.7%	52.0	23.1%	43.0	23.1%	17.5	21.6%	2.2	9.1%	162.4	21.8%
More than 24	57.0	24.8%	68.9	30.6%	68.6	36.8%	36.7	45.3%	12.5	51.8%	243.8	32.7%
Unknown / missing	7.1	3.1%	7.7	3.4%	7.7	4.1%	6.2	7.7%	3.4	14.2%	32.1	4.3%
Total	229.8	100.0%	225.0	100.0%	186.4	100.0%	80.9	100.0%	24.2	100.0%	746.4	100.0%
Mean <sup>2</sup>	2	26.5	3	1.5	4	5.5	:	59.0	:	88.3	3	8.0
Because of syn	nptoms or di	scomfort <sup>3</sup>										
Less than 13	6.7	38.3%	8.2	40.9%	3.9	23.7%	1.6	33.0%	0.5	8.8%	20.8	32.6%
13 - 24	2.1	12.1%	3.5	17.6%	2.4	14.8%	-	-	-	-	8.1	12.6%
More than 24	8.2	47.2%	7.4	36.8%	10.0	61.5%	3.2	67.0%	4.3	82.8%	33.1	51.9%
Unknown / missing	0.4	2.4%	0.9	4.7%	-	-	-	-	0.4	8.3%	1.8	2.8%
Total	17.4	100.0%	20.1	100.0%	16.2	100.0%	4.8	100.0%	5.1	100.0%	63.7	100.0%
Mean <sup>4</sup>	4	1.1	3	1.6	5	2.5	ç	91.3	1	54.8	5	3.7

 Table 7.7c: Number of months since the last mammogram by age group

Bases: 1. The female respondents who had mammogram with no symptoms or discomfort prior to the mammogram.

2. The female respondents who had mammogram with no symptoms or discomfort prior to mammogram and had valid answer on how long ago since the last mammogram.

3. The female respondents who had mammogram because of symptoms or discomfort prior to mammogram.

4. The female respondents who had mammogram because of symptoms or discomfort and had valid answer on how long ago since the last mammogram.

Among females aged 15 or above who had mammogram with no symptoms or discomfort prior to the examination, nearly half (49.3%) of them reported that they had no fixed schedule for repeat examinations and 14.1% reported that the most recent examination was their first ones. 0.5% had mammogram more than once per year generally, 31.1% had it once every one to two years, while 5.0% took the examinations less frequently. Among those who had the examination because of symptoms or discomfort, 42.6% had no fixed schedule of repeat examinations, 36.1% reported the most recent examination was the first ones, while 17.6% had the examination regularly once every one to two years and 1.5% had more frequent examinations than once a year, 2.3% had longer frequencies of examinations (Table 7.7d).

	Belo	w 45	45	-54	55	-64	65	-74	75 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)	
With no symptoms or discomfort prior to example	nination	1										
More than once per year generally	1.0	0.4%	0.6	0.2%	2.2	1.2%	-	-	-	-	3.8	0.5%
Once a year generally	49.4	21.5%	41.5	18.4%	22.3	12.0%	8.1	10.0%	0.6	2.3%	121.9	16.3%
Once every 2 years generally	31.5	13.7%	34.6	15.4%	33.4	17.9%	9.7	12.0%	1.1	4.6%	110.3	14.8%
Once every 3 years generally	5.1	2.2%	13.7	6.1%	11.4	6.1%	3.3	4.1%	-	-	33.5	4.5%
Once every 4 years or more generally	1.4	0.6%	1.0	0.5%	1.1	0.6%	0.4	0.5%	-	-	4.0	0.5%
The most recent one was my first mammogram	37.7	16.4%	27.0	12.0%	24.2	13.0%	10.7	13.2%	5.7	23.4%	105.2	14.1%
No fixed schedule of mammogram examinations	103.7	45.1%	106.7	47.4%	91.7	49.2%	48.8	60.3%	16.9	69.7%	367.7	49.3%
Total	229.8	100.0%	225.0	100.0%	186.4	100.0%	80.9	100.0%	24.2	100.0%	746.4	100.0%
Because of symptoms or discomfort <sup>2</sup>												
More than once per year generally	-	-	0.4	2.2%	0.5	3.2%	-	-	-	-	1.0	1.5%
Once a year generally	2.3	13.0%	3.0	15.0%	1.0	6.0%	-	-	-	-	6.3	9.8%
Once every 2 years generally	0.6	3.3%	2.6	12.9%	0.8	5.0%	0.5	10.8%	0.4	8.3%	4.9	7.7%
Once every 3 years generally	-	-	-	-	1.0	6.3%	0.4	9.0%	-	-	1.5	2.3%
Once every 4 years or more generally	-	-	-	-	-	-	-	-	-	-	-	-
The most recent one was my first mammogram	9.4	53.8%	6.8	33.9%	3.9	23.9%	1.9	40.0%	1.0	19.2%	23.0	36.1%
No fixed schedule of mammogram examinations	5.2	29.9%	7.2	36.0%	9.0	55.6%	1.9	40.2%	3.7	72.5%	27.1	42.6%
Total	17.4	100.0%	20.1	100.0%	16.2	100.0%	4.8	100.0%	5.1	100.0%	63.7	100.0%

T٤	ıble	7.	7d:	Free	uency	of	regula	ar r	namme	ogram	by	age	grou	p
					•						•/		-	

Bases: 1. The female respondents who had mammogram and with no symptoms or discomfort prior to mammogram.

2. The female respondents who had mammogram because of symptoms or discomfort.

### 7.8 Health Screening for Cardiovascular Risk Factors

High blood cholesterol is a risk factor for CHD and stroke. The PHS included questions on measurement of blood cholesterol. Respondents were asked the following questions: "Have you ever had your blood cholesterol checked? If yes, about how long has it been since you had your last blood cholesterol checked?"

Overall, 55.4% of people aged 15 or above had their blood cholesterol measured before. The proportion of respondents who had their blood cholesterol checked was higher in females (57.2%) than in males (53.5%) (Table 7.8a). The proportion of people who had cholesterol checked before tended to increase with age generally and people in the 75-84 age group recorded the highest proportion (82.8%) of having their blood cholesterol checked (Table 7.8b). Among those persons who reported that they had blood cholesterol checked before, 95.7% had the test done in the last five years (Table 7.8c and Table 7.8d).

The risk of cardiovascular diseases and renal dysfunction increases with elevated blood pressure. The PHS included questions on blood pressure measurement. Respondents were asked whether they ever had blood pressure taken by a doctor or other health professional in the past five years. If an affirmative response was given, they were further asked when they had their last blood pressure checked.

The survey revealed that three-quarters (75.0%) of people had their blood pressure checked by a doctor or other health professionals in the past five years. The proportion was higher in females (77.1%) than in males (72.6%) (Table 7.8a). The proportion increased from 50.2% for those aged 15-24 to 90.8% for those aged 85 or above, with people in the 75-84 age group (93.1%) recording the highest proportion having their blood pressure checked (Table 7.8b). Among those persons who reported that they had their blood pressure checked in the past five years, 92.6% reported that they had their last blood pressure checked within the past two years (Table 7.8c and Table 7.8d).

Blood sugar measurement is performed to detect the presence of diabetes or a predisposition to the development of diabetes. Many people are not aware that they have high blood sugar or diabetes until screened or signs of complications appear. Survey respondents were asked whether they had their blood sugar checked. If an affirmative response was given, they were further asked when they had their last blood sugar checked.

About 57.7% of people aged 15 or above had their blood sugar checked before. The proportion was higher in females (60.2%) than in males (55.1%) (Table 7.8a). The proportion of persons who had their

blood sugar checked increased from 20.0% in the 15-24 age group to 82.4% in the 75-84 age group and 79.7% in the 85 or above age group (Table 7.8b). Around 92.4% of persons who reported that they had their last blood sugar checked within the last three years (Table 7.8c and Table 7.8d).

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Blood cholesterol						
Yes	1 822.7	57.2%	1 547.5	53.5%	3 370.3	55.4%
No	1 361.8	42.8%	1 347.3	46.5%	2 709.1	44.6%
Don't know	0.4	<0.05%	0.4	<0.05%	0.8	<0.05%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%
Blood pressure*						
Yes	2 455.7	77.1%	2 102.0	72.6%	4 557.7	75.0%
No	729.3	22.9%	793.2	27.4%	1 522.5	25.0%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%
Blood sugar						
Yes	1 916.8	60.2%	1 593.9	55.1%	3 510.7	57.7%
No	1 268.2	39.8%	1 301.3	44.9%	2 569.5	42.3%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

Table 7.8a:	Proportion of population aged 15 or above who ever had screening for cardiovascular risk factors (blood
	cholesterol, blood pressure and blood sugar) by gender

Base: All respondents.

Notes: \* The item on blood pressure refers to whether the respondents had their blood pressure checked in the 5 years preceding the survey. Figures may not add up to the total due to rounding.

	15	-24	25-	-34	35-	-44	45	-54	55-	-64	65	-74	75-	-84	85 or	above	Τα	otal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	s %	persons	%	persons	%	persons	s %
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Blood cho	lesterol																	
Yes	113.5	14.2%	365.9	38.1%	531.3	52.0%	747.4	63.2%	780.9	73.3%	442.3	78.4%	292.1	82.8%	97.1	74.2%	3 370.3	55.4%
No	688.1	85.8%	595.5	61.9%	489.9	48.0%	435.6	36.8%	284.6	26.7%	121.3	21.5%	60.2	17.1%	33.7	25.8%	2 709.1	44.6%
Don't know	v -	-	-	-	-	-	-	-	-	-	0.4	0.1%	0.4	0.1%	-	-	0.8	<0.05%
Total	801.6	100.0%	6 961.4	100.0%	6 1 021.2	100.0%	5 1 183.0	100.0%	6 1 065.5	100.0%	564.0	100.0%	5 352.7	100.0%	5 130.8	100.0%	6 080.2	100.0%
Blood pres	ssure*																	
Yes	402.6	50.2%	627.1	65.2%	735.9	72.1%	936.7	79.2%	905.7	85.0%	502.5	89.1%	328.5	93.1%	118.8	90.8%	4 557.7	75.0%
No	399.0	49.8%	334.3	34.8%	285.3	27.9%	246.3	20.8%	159.8	15.0%	61.5	10.9%	24.2	6.9%	12.0	9.2%	1 522.5	25.0%
Total	801.6	100.0%	6 961.4	100.0%	6 1 021.2	100.0%	5 1 183.0	100.0%	6 1 065.5	100.0%	564.0	100.0%	5 352.7	100.0%	5 130.8	100.0%	6 080.2	100.0%
Blood suga	ar																	
Yes	160.3	20.0%	433.5	45.1%	574.8	56.3%	752.7	63.6%	761.9	71.5%	432.5	76.7%	290.7	82.4%	104.2	79.7%	3 510.7	57.7%
No	641.3	80.0%	527.9	54.9%	446.4	43.7%	430.3	36.4%	303.6	28.5%	131.5	23.3%	62.0	17.6%	26.6	20.3%	2 569.5	42.3%
Total	801.6	100.0%	961.4	100.0%	6 1 021.2	100.0%	6 1 183.0	100.0%	6 1 065.5	100.0%	564.0	100.0%	5 352.7	100.0%	5 130.8	100.0%	6 080.2	100.0%
Base: A	ll respon	lents.																

# Table 7.8b: Proportion of population aged 15 or above who ever had screening for cardiovascular risk factors (blood cholesterol, blood pressure and blood sugar) by age group

Notes: \* The item on blood pressure refers to whether the respondents had their blood pressure checked in the 5 years preceding the survey. Figures may not add up to the total due to rounding.

	Fema	le	Mal	e	Tota	ıl
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Blood cholestero	11					
60 and less	1 746.5	95.8%	1 479.4	95.6%	3 225.9	95.7%
Less than 13	1 310.7	71.9%	1 116.6	72.2%	2 427.3	72.0%
13 – 24	238.8	13.1%	187.9	12.1%	426.7	12.7%
25 - 36	104.8	5.7%	96.7	6.2%	201.5	6.0%
37 – 48	42.8	2.3%	37.6	2.4%	80.4	2.4%
49 - 60	49.5	2.7%	40.7	2.6%	90.2	2.7%
More than 60	76.2	4.2%	68.1	4.4%	144.4	4.3%
Total	1 822.7	100.0%	1 547.5	100.0%	3 370.3	100.0%
Mean	17.0	6	18.	0	17.	8
Blood pressure <sup>2</sup>						
24 and less	2 290.9	93.3%	1 928.4	91.7%	4 219.3	92.6%
Less than 13	2 087.2	85.0%	1 737.8	82.7%	3 825.0	83.9%
13 – 24	203.7	8.3%	190.6	9.1%	394.4	8.7%
25 - 36	96.8	3.9%	109.1	5.2%	205.9	4.5%
37 - 48	42.5	1.7%	37.2	1.8%	79.8	1.8%
49 - 60	25.5	1.0%	27.2	1.3%	52.7	1.2%
Total	2 455.7	100.0%	2 102.0	100.0%	4 557.7	100.0%
Mean	9.1		9.9		9.5	
Blood sugar <sup>3</sup>						
36 and less	1 762.9	92.0%	1 479.8	92.8%	3 242.7	92.4%
Less than 13	1 432.1	74.7%	1 198.8	75.2%	2 630.9	74.9%
13 – 24	236.1	12.3%	185.4	11.6%	421.5	12.0%
25 - 36	94.7	4.9%	95.6	6.0%	190.2	5.4%
37 - 48	42.7	2.2%	26.4	1.7%	69.1	2.0%
49 - 60	45.4	2.4%	38.1	2.4%	83.4	2.4%
More than 60	65.9	3.4%	49.7	3.1%	115.6	3.3%
Total	1 916.8	100.0%	1 593.9	100.0%	3 510.7	100.0%
Mean	16.0	)	15.6	5	15.8	3

# Table 7.8c: Number of months since last screening for cardiovascular risk factors (blood cholesterol, blood pressure and blood sugar) by gender

Bases: 1. The respondents who had blood cholesterol checked.

2. The respondents who had blood pressure checked in the 5 years preceding the survey.

3. The respondents who had blood sugar checked.

	15	-24	25	-34	35-	-44	45	-54	55-	-64	65	-74	75	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	s %	persons	s %	persons	%	persons	s %	persons	%	persons	s %	persons	s %	persons	s %	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Blood choles	terol 1																	
60 and less	108.5	95.6%	355.7	97.2%	493.7	92.9%	712.5	95.3%	746.0	95.5%	427.5	96.7%	287.7	98.5%	94.3	97.1%	3 225.9	95.7%
Less than 13	77.3	68.2%	223.2	61.0%	330.5	62.2%	498.7	66.7%	575.8	73.7%	371.5	84.0%	263.2	90.1%	87.0	89.7%	2 427.3	72.0%
13 – 24	17.9	15.8%	76.8	21.0%	80.5	15.1%	109.8	14.7%	93.6	12.0%	30.1	6.8%	13.8	4.7%	4.2	4.3%	426.7	12.7%
25 - 36	8.0	7.1%	28.6	7.8%	43.9	8.3%	56.6	7.6%	41.1	5.3%	15.0	3.4%	6.4	2.2%	1.9	1.9%	201.5	6.0%
37 – 48	4.2	3.7%	12.8	3.5%	17.0	3.2%	24.0	3.2%	16.7	2.1%	3.7	0.8%	1.9	0.7%	-	-	80.4	2.4%
49 - 60	1.0	0.9%	14.3	3.9%	21.8	4.1%	23.3	3.1%	18.8	2.4%	7.2	1.6%	2.5	0.9%	1.2	1.3%	90.2	2.7%
More than 60	5.0	4.4%	10.2	2.8%	37.6	7.1%	34.8	4.7%	34.9	4.5%	14.8	3.3%	4.3	1.5%	2.8	2.9%	144.4	4.3%
Total	113.5	100.0%	6 365.9	100.0%	531.3	100.0%	747.4	100.0%	780.9	100.0%	6 442.3	100.0%	292.1	100.0%	5 97.1	100.0%	b 3 370.3	100.0%
Mean	19	9.4	19	9.7	22	2.9	19	9.9	17	7.4	13	3.6	10	0.0	10	).1	17	7.8
Blood pressu	ire <sup>2</sup>																	
24 and less	359.2	89.2%	563.2	89.8%	662.2	90.0%	864.0	92.2%	848.4	93.7%	482.5	96.0%	322.7	98.2%	117.1	98.6%	4 219.3	92.6%
Less than 13	314.1	78.0%	473.2	75.5%	578.1	78.6%	779.9	83.3%	782.6	86.4%	464.9	92.5%	318.9	97.1%	113.2	95.3%	3 825.0	83.9%
13 – 24	45.1	11.2%	90.0	14.3%	84.1	11.4%	84.2	9.0%	65.8	7.3%	17.6	3.5%	3.7	1.1%	3.9	3.3%	394.4	8.7%
25 - 36	28.3	7.0%	39.7	6.3%	45.5	6.2%	43.3	4.6%	32.6	3.6%	11.7	2.3%	3.8	1.2%	1.0	0.8%	205.9	4.5%
37 - 48	10.0	2.5%	13.8	2.2%	19.0	2.6%	16.1	1.7%	16.3	1.8%	3.0	0.6%	1.6	0.5%	-	-	79.8	1.8%
49 - 60	5.0	1.3%	10.4	1.7%	9.1	1.2%	13.2	1.4%	8.4	0.9%	5.3	1.1%	0.4	0.1%	0.7	0.6%	52.7	1.2%
Total	402.6	100.0%	627.1	100.0%	735.9	100.0%	936.7	100.0%	905.7	100.0%	502.5	100.0%	328.5	100.0%	5 118.8	100.0%	ó4 557.7	100.0%
Mean	12	2.3	12	2.3	11	.5	9	.9	8	.5	6	.0	4	.4	4	.6	9	.5
Blood sugar	3																	
36 and less	148.0	92.4%	393.8	90.8%	504.2	87.7%	685.3	91.0%	707.2	92.8%	416.5	96.3%	286.5	98.5%	101.3	97.1%	3 242.7	92.4%
Less than 13	114.6	71.5%	280.4	64.7%	372.0	64.7%	533.7	70.9%	584.0	76.7%	377.9	87.4%	272.2	93.6%	96.0	92.1%	2 630.9	74.9%
13 – 24	22.8	14.2%	80.7	18.6%	87.9	15.3%	101.9	13.5%	88. <i>3</i>	11.6%	27.9	6.4%	8.3	2.9%	3.7	3.6%	421.5	12.0%
25 - 36	10.6	6.6%	32.7	7.5%	44.3	7.7%	49.7	6.6%	34.8	4.6%	10.7	2.5%	5.9	2.0%	1.5	1.5%	190.2	5.4%
37 – 48	3.9	2.5%	13.6	3.1%	18.6	3.2%	15.4	2.1%	13.3	1.7%	2.7	0.6%	1.1	0.4%	0.3	0.3%	69.1	2.0%
49 - 60	2.3	1.4%	15.5	3.6%	19.2	3.3%	22.5	3.0%	16.2	2.1%	6.3	1.4%	0.9	0.3%	0.5	0.5%	83.4	2.4%
More than 60	6.0	3.7%	10.6	2.4%	32.8	5.7%	29.5	3.9%	25.2	3.3%	7.1	1.6%	2.3	0.8%	2.1	2.0%	115.6	3.3%
Total	160.3	100.0%	6 433.5	100.0%	574.8	100.0%	752.7	100.0%	761.9	100.0%	6 432.5	100.0%	290.7	100.0%	5 104.2	100.0%	63510.7	100.0%
Mean	10	5.9	18	8.2	20	).8	17	7.9	15	5.4	10	).6	7	.7	8	.9	15	5.8

 Table 7.8d:
 Number of months since last screening for cardiovascular risk factors (blood cholesterol, blood pressure and blood sugar) by age group

Bases: 1. The respondents who had blood cholesterol checked.

2. The respondents who had blood pressure checked in the 5 years preceding the survey.

3. The respondents who had blood sugar checked.

## References

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2. Cervical Cancer Prevention and Screening. Centre for Health Protection, Department of Health, Hong Kong. Available at:

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# **Chapter 8**

# **Use of Health Services**

Hong Kong residents have access to different health care services provided by organisations in both public and private sectors. This Chapter reports on the pattern of health care services used, including persons having a family doctor, type of doctor consultation and treatment received when they were ill or encountered health problems, hospitalisation, consultation with mental health professionals and level of satisfaction with the health care system in Hong Kong.

Indicator	Female	Male	Overall
Proportion of population who had a family doctor	45.1%	42.4%	43.8%
Proportion of population who had experienced health problem(s) in the 30 days preceding the survey	61.4%	52.1%	57.0%
Proportion of population with hospital admission in the 12 months preceding the survey	11.7%	10.1%	11.0%
Proportion of population who had consultation with mental health professionals in the 12 months preceding the survey	1.9%	1.5%	1.7%
Overall satisfaction with the health care system (mean score in a scale of 0-100)			
• Public sector	67.3	66.6	66.9
Private sector	75.5	75.1	75.3

### **Snapshot of Population's Use of Health Services**

#### 8.1 Persons Having a Family Doctor

A "family doctor" is a doctor whom a person would consult for different health problems. Family doctor can provide patients with comprehensive and continuing health care.

Overall, 43.8% of persons aged 15 or above (45.1% for females and 42.4% for males) reported that they had a family doctor whom they would usually consult first for their health problems (Table 8.1a). Across all age groups, the highest proportion of persons reported having a family doctor was in the age group of 35-44 (48.2%) whereas the lowest proportion was reported by persons aged 75-84 (38.4%) (Table 8.1b).

Table 8.1a: Proportion of population aged 15 or above who had a family doctor by gender

	Fema	ale	Mal	e	Total			
	No. of persons	%	No. of persons	%	No. of persons	%		
Yes	1 436.4	45.1%	1 227.7	42.4%	2 664.1	43.8%		
No	1 739.2	54.6%	1 657.9	57.3%	3 397.1	55.9%		
Not Sure	9.4	0.3%	9.6	0.3%	19.0	0.3%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

#### Table 8.1b: Proportion of population aged 15 or above who had a family doctor by age group

	15-	-24	25-	-34	35-	-44	45-	54	55-	64	65-	74	75-	·84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons ('000)	%																
Yes	321.3	40.1%	422.2	43.9%	492.2	48.2%	540.8	45.7%	477.1	44.8%	223.6	39.6%	135.3	38.4%	51.7	39.5%	2 664.1	43.8%
No	476.2	59.4%	536.7	55.8%	527.5	51.7%	637.4	53.9%	584.9	54.9%	338.8	60.1%	216.4	61.4%	79.1	60.5%	3 397.1	55.9%
Not Sure	4.1	0.5%	2.5	0.3%	1.5	0.1%	4.8	0.4%	3.5	0.3%	1.6	0.3%	1.0	0.3%	-	-	19.0	0.3%
Total	801.6	100.0%	6 961.4	100.0%	1 021.2	100.0%	0 1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Analysed by household income group, it showed that the lowest proportion (31.0%) of persons reported having a family doctor was in persons with a monthly household income between \$5,000 and \$9,999 and the highest proportion (56.2%) was reported by persons with a monthly household income of \$50,000 or above (Table 8.1c). Majority (96.3%) of persons who reported having a family doctor reported that their family doctors were Western medicine practitioners (Table 8.1d and Table 8.1e).

	Less \$5,	than 000	\$5,0 \$9,	)00 - 999	\$10, \$19	000 - ,999	\$20, \$29	000 - ,999	\$30,0 \$39,	000 - ,999	\$40,0 \$49,	000 - ,999	\$50. or al	,000 bove	То	tal
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	150.1	34.2%	115.3	31.0%	378.4	36.9%	501.6	40.4%	455.0	45.7%	324.5	47.4%	734.6	56.2%	2 659.6	43.9%
No	285.9	65.2%	255.8	68.8%	643.5	62.7%	734.5	59.2%	537.3	54.0%	359.1	52.5%	568.0	43.5%	3 384.2	55.8%
Not Sure	2.6	0.6%	0.6	0.2%	4.3	0.4%	4.0	0.3%	3.3	0.3%	0.6	0.1%	3.7	0.3%	19.0	0.3%
Total	438.6	100.0%	371.7	100.0%	1 026.2	100.0%	1 240.1	100.0%	995.6	100.0%	684.2	100.0%	1 306.3	100.0%	6 062.7	100.0%

Table 8.1c: Proportion of population aged 15 or above who had a family doctor by monthly household income

Base: All respondents who had provided information on monthly household income. Note: Figures may not add up to the total due to rounding.

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#### Table 8.1d: Distribution of population aged 15 or above who had a family doctor by type of family doctors and gender

	Female		Male		Total		
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
Western medicine practitioner	1 367.5	95.2%	1 198.8	97.6%	2 566.2	96.3%	
Chinese medicine practitioner	68.9	4.8%	29.0	2.4%	97.9	3.7%	
Total	1 436.4	100.0%	1 227.7	100.0%	2 664.1	100.0%	

Base: All respondents who had a family doctor.

Note: Figures may not add up to the total due to rounding.

# Table 8.1e: Distribution of population aged 15 or above who had a family doctor by type of family doctors and age group

	15-	-24	25-	-34	35-	-44	45-	-54	55	-64	65	-74	75	-84	85 or	above	То	tal
	No. of persons ('000)	s %	No. of persons ('000)	s %	No. of persons ('000)	; %	No. of persons ('000)	s %	No. of persons ('000)	%	No. of persons ('000)	%						
Western medicine practitioner	313.2	97.5%	406.0	96.1%	469.9	95.5%	520.0	96.2%	462.0	96.8%	216.0	96.6%	129.2	95.5%	49.9	96.5%	2 566.2	96.3%
Chinese medicine practitioner	8.1	2.5%	16.3	3.9%	22.3	4.5%	20.7	3.8%	15.1	3.2%	7.5	3.4%	6.1	4.5%	1.8	3.5%	97.9	3.7%
Total	321.3	100.0%	422.2	100.0%	492.2	100.0%	540.8	100.0%	477.1	100.0%	223.6	100.0%	135.3	100.0%	51.7	100.0%	6 2 664.1	100.0%

Base: All respondents who had a family doctor.

#### 8.2 Persons without a Family Doctor

Among persons aged 15 or above who did not report having a family doctor, most (92.3%) would usually consult only Western medicine practitioners (90.4% for females and 94.2% for males), as compared to 5.0% who would usually consult only Chinese medicine practitioners (6.2% for females and 3.8% for males) when they were ill, and 2.7% (3.4% for females and 2.0% for males) would consult both Chinese and Western medicine practitioners (Table 8.2a). Across all age groups, people aged 55-64 had the highest proportion reporting that they would consult Chinese medicine practitioners only (6.3%) or both types of doctors (3.6%), while people in the age groups of 15-24 (94.7%) and 85 or above (95.1%) were most likely to consult Western medicine practitioner only when they were ill (Table 8.2b).

Table 8.2a:	Type of medicin	e practitioners usually	consulted by gender
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	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Western medicine practitioner	1 580.2	90.4%	1 571.3	94.2%	3 151.5	92.3%		
Chinese medicine practitioner	108.5	6.2%	62.8	3.8%	171.4	5.0%		
Both	59.9	3.4%	33.4	2.0%	93.2	2.7%		
Total	1 748.6	100.0%	1 667.5	100.0%	3 416.1	100.0%		

Base: All respondents who did not have a family doctor.

Note: Figures may not add up to the total due to rounding.

Table 8.2b:	Type of medicine	practitioners usually	consulted by age group
	<b>V</b>		

	15-	-24	25-	-34	35-	-44	45	-54	55	-64	65	-74	75-	·84	85 or :	above	To	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons ('000)	%	persons ('000)	%	persons ('000)	s %	persons ('000)	5 %	persons ('000)	s %	persons ('000)	5 %	persons ('000)	%	persons ('000)	%	persons ('000)	%
Western medicine practitioner	454.8	94.7%	499.8	92.7%	489.5	92.5%	584.3	91.0%	530.2	90.1%	315.3	92.6%	202.3	93.1%	75.3	95.1%	3 151.5	92.3%
Chinese medicine practitioner	15.9	3.3%	22.6	4.2%	27.1	5.1%	37.0	5.8%	37.1	6.3%	18.1	5.3%	10.1	4.6%	3.5	4.4%	171.4	5.0%
Both	9.7	2.0%	16.8	3.1%	12.4	2.3%	20.9	3.3%	21.1	3.6%	7.0	2.1%	5.0	2.3%	0.3	0.4%	93.2	2.7%
Total	480.3	100.0%	539.2	100.0%	529.0	100.0%	642.2	100.0%	588.4	100.0%	340.4	100.0%	217.4	100.0%	5 79.1	100.0%	53 416.1	100.0%

Base: All respondents who did not have a family doctor.

#### 8.3 Type of Health Service Providers usually Consulted

Among persons aged 15 or above who would usually consult a Western medicine practitioner or both Western and Chinese medicine practitioners when they were ill, 83.6% reported that they would usually consult doctors in private clinics or hospitals (Table 8.3a). The proportion of persons who would usually consult public clinics or hospitals under Hospital Authority (HA) and Department of Health (DH) generally increased with age from 7.7% in those aged 25-34 to 43.2% in those aged 85 or above (Table 8.3b).

#### Table 8.3a: Type of healthcare settings usually visited to consult a doctor when they were sick by gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Private clinics or hospitals	2 498.6	83.1%	2 362.0	84.3%	4 860.6	83.6%
Public clinics or hospitals (including HA and DH)	499.9	16.6%	433.1	15.4%	932.9	16.1%
Non-profit organisations or universities	9.0	0.3%	8.4	0.3%	17.4	0.3%
Total	3 007.5	100.0%	2 803.4	100.0%	5 810.9	100.0%

Base: The respondents who would see Western medicine practitioners or both Chinese and Western medicine practitioners.

Note: Figures may not add up to the total due to rounding.

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Table & 3be	Type of booltheore	cottinge neuolly	v vicited to cone	cult a dootor w	hon thay war	a cialz by aga	aroun
1 abic 0.30.	I VDE UI HEAILIILAIE	settings usuan	v visiteu to cons	Sull a ductur w	nen mev wei	C SICK DV age	21 UUD
							<b>-</b> • • •

	15	-24	25	-34	35	-44	45-	-54	55-	-64	65	-74	75-	-84	85 or	above	То	tal
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	9 <b>%</b> 0	No. of persons ('000)	%										
Private clinics or hospitals	699.8	90.0%	849.5	92.1%	888.6	91.4%	990.0	88.0%	802.1	79.2%	363.2	67.5%	196.2	58.3%	71.2	56.8%	4 860.6	83.6%
Public clinics or hospitals (including HA and DH)	73.6	9.5%	70.9	7.7%	82.2	8.5%	133.5	11.9%	208.8	20.6%	170.5	31.7%	139.2	41.4%	54.3	43.2%	932.9	16.1%
Non-profit organisations or universities	4.2	0.5%	2.1	0.2%	1.1	0.1%	1.7	0.2%	2.4	0.2%	4.6	0.9%	1.2	0.4%	-	-	17.4	0.3%
Total	777.7	100.0%	6 922.5	100.0%	971.8	100.0%	1 125.3	100.0%	01 013.3	100.0%	538.3	100.0%	336.5	100.0%	125.5	100.0%	5 810.9	100.0%

Base: The respondents who would see Western medicine practitioners or both Chinese and Western medicine practitioners.

#### 8.4 Health Problems and Treatment Received

In the 30 days preceding the survey, 57.0% of persons aged 15 or above reported that they had experienced some kinds of health problems (e.g. feeling unwell, being sick or injured) and it was more common in females (61.4%) than in males (52.1%) (Table 8.4a). The proportions of people experiencing health problems in the 30 days preceding the survey increased with age, from 46.2% in those aged 15-24 to 75.6% in those aged 85 or above (Table 8.4b).

	Female		Male		Total			
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%		
Yes	1 955.4	61.4%	1 508.9	52.1%	3 464.3	57.0%		
No	1 229.6	38.6%	1 386.3	47.9%	2 615.9	43.0%		
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%		

 Table 8.4a:
 Proportion of population aged 15 or above who had experienced health problem in the 30 days preceding the survey by gender

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

 Table 8.4b:
 Proportion of population aged 15 or above who had experienced health problem in the 30 days preceding the survey by age group

	15-	-24	25	-34	35.	-44	45	-54	55-	·64	65-	-74	75-	·84	85 or :	above	To	tal
	No. of persons ('000)	%	No. of persons ('000)	5 %	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	370.2	46.2%	485.9	50.5%	525.0	51.4%	703.7	59.5%	641.2	60.2%	381.2	67.6%	258.4	73.3%	98.9	75.6%	3 464.3	57.0%
No	431.4	53.8%	475.5	49.5%	496.2	48.6%	479.3	40.5%	424.3	39.8%	182.8	32.4%	94.3	26.7%	31.9	24.4%	2 615.9	43.0%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

Among persons aged 15 or above who had experienced health problems in the 30 days preceding the survey, 39.3% received treatment from Western medicine practitioners in private clinics / hospitals, 8.6% received treatment from Western medicine practitioners in public clinics or hospitals, 11.1% consulted Chinese medicine practitioners, 23.7% did nothing and ignored the health problems and 25.3% consumed over-the-counter medication including Western (20.2%) or Chinese (5.7%) medication (Table 8.4c and Table 8.4d).

	Female	;	Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Treatment by Western medicine practitioners in private clinics / hospitals	781.6	40.0%	580.0	38.4%	1 361.6	39.3%
Did nothing and ignored the health problem	449.1	23.0%	372.8	24.7%	822.0	23.7%
Consumed over-the-counter Western medication	406.6	20.8%	293.2	19.4%	699.8	20.2%
Just took rest and did nothing else	402.5	20.6%	263.9	17.5%	666.4	19.2%
Treatment by Chinese medicine practitioners	232.2	11.9%	153.6	10.2%	385.7	11.1%
Treatment by Western medicine practitioners in public clinics / hospitals (including HA and DH)	160.5	8.2%	137.9	9.1%	298.4	8.6%
Consumed over-the-counter Chinese medication or herbs	111.2	5.7%	86.3	5.7%	197.5	5.7%
Modified dietary habit	113.0	5.8%	75.7	5.0%	188.7	5.4%
Unconventional / non-mainstream treatment such as chiropractic, osteopathy, homeopathy and reflexology	16.7	0.9%	7.6	0.5%	24.3	0.7%
Acupuncture	15.0	0.8%	6.9	0.5%	21.9	0.6%
Occupational, physio- or speech therapy	12.3	0.6%	7.7	0.5%	20.0	0.6%
Bonesetting	8.5	0.4%	9.6	0.6%	18.1	0.5%

#### Table 8.4c: Treatment for health problems experienced in the 30 days preceding the survey by gender

Base: The respondents who had experienced health problems in the 30 days preceding the survey.

Notes: Ranked in descending order of the percentages of the treatment for health problems experienced by the respondents.

Multiple answers were allowed.

Table 8.4d: Treatment for health problems experienced in the 30 days preceding the survey by age group

	15-	-24	25-	34	35-	44	45-	-54	55-	-64	65	-74	75-	84	85 or :	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	s %	persons	s %	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Treatment by Western medicine practitioners in private clinics / hospitals	157.7	42.6%	215.0	44.3%	243.4	46.4%	276.6	39.3%	221.8	34.6%	5 130.0	34.1%	88.6	34.3%	28.4	28.8%	1 361.6	39.3%
Did nothing and ignored the health problem	64.7	17.5%	94.1	19.4%	115.7	22.0%	163.4	23.2%	180.3	28.1%	5 106.7	28.0%	68.6	26.5%	28.5	28.8%	822.0	23.7%
Consumed over-the- counter Western medication	110.9	30.0%	116.4	24.0%	111.5	21.2%	152.5	21.7%	110.3	17.2%	6 49.2	12.9%	37.4	14.5%	11.5	11.6%	699.8	20.2%
Just took rest and did nothing else	56.4	15.2%	95.7	19.7%	84.1	16.0%	127.5	18.1%	132.2	20.6%	6 81.4	21.4%	56.3	21.8%	32.8	33.2%	666.4	19.2%
Treatment by Chinese medicine practitioners	34.0	9.2%	50.9	10.5%	61.6	11.7%	87.0	12.4%	76.9	12.0%	6 44.1	11.6%	21.2	8.2%	10.0	10.1%	385.7	11.1%
Treatment by Western medicine practitioners in public clinics / hospitals (including HA and DH)	13.4	3.6%	22.4	4.6%	25.6	4.9%	46.2	6.6%	63.3	9.9%	59.1	15.5%	51.2	19.8%	17.3	17.5%	298.4	8.6%
Consumed over-the- counter Chinese medication or herbs	14.7	4.0%	24.5	5.0%	29.0	5.5%	44.0	6.3%	37.6	5.9%	30.7	8.1%	11.9	4.6%	5.0	5.1%	197.5	5.7%
Modified dietary habit	31.3	8.5%	43.5	8.9%	31.5	6.0%	39.3	5.6%	25.5	4.0%	9.4	2.5%	6.6	2.6%	1.7	1.7%	188.7	5.4%
Unconventional / non- mainstream treatment such as chiropractic, osteopathy, homeopathy and reflexology	1.1	0.3%	0.9	0.2%	5.7	1.1%	8.2	1.2%	6.1	0.9%	1.9	0.5%	0.6	0.2%	-	-	24.3	0.7%
Acupuncture	-	-	1.1	0.2%	4.2	0.8%	3.4	0.5%	6.9	1.1%	2.4	0.6%	3.8	1.5%	-	-	21.9	0.6%
Occupational, physio- or speech therapy	0.5	0.1%	2.8	0.6%	7.2	1.4%	4.4	0.6%	3.8	0.6%	1.4	0.4%	-	-	-	-	20.0	0.6%
Bonesetting	2.0	0.5%	1.9	0.4%	3.9	0.7%	2.9	0.4%	3.5	0.5%	3.6	0.9%	-	-	0.4	0.4%	18.1	0.5%

Base: The respondents who had experienced health problems in the 30 days preceding the survey.

Notes: Ranked in descending order of the percentages of the treatment for health problems experienced by the respondents. Multiple answers were allowed.

#### 8.5 Hospitalisation

The survey asked the respondents whether they had been admitted to hospital in the 12 months preceding the survey, including all admissions that required registration, no matter staying overnight in the hospital or not. 11.0% of persons aged 15 or above reported that they had been admitted to hospital, the proportion was 11.7% for females and 10.1% for males (Table 8.5a). The proportion of hospitalisation increased with age, with people aged 85 or above had the highest proportion of 30.1% (Table 8.5b).

	E I		Mala		T. (.)	
	Female		Male		1 otal	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Yes	374.2	11.7%	291.6	10.1%	665.8	11.0%
No	2 810.8	88.3%	2 603.6	89.9%	5 414.4	89.0%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%

 Table 8.5a: Proportion of population aged 15 or above who had been hospitalised in Hong Kong in the 12 months preceding the survey by gender

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 8.5b:	Proportion	of population	aged 1	5 or	above	who	had	been	hospitalised	in	Hong	Kong	in t	he	12 ı	months
	preceding th	he survey by a	ge grou	р												

	15-	-24	25-	-34	35-	44	45-	54	55-	-64	65	-74	75	-84	85 or	above	То	tal
	No. of	0/	No. of	0/	No. of	0/	No. of	0/	No. of	0/	No. of	0/	No. of		No. of	0/	No. of	0/
	persons ('000)	%	('000)	%	persons ('000)	%	('000)	%	persons ('000)	%	('000)	%	('000)	5 %o	persons ('000)	5 %o	('000)	%0
Yes	42.5	5.3%	92.4	9.6%	96.3	9.4%	108.0	9.1%	115.5	10.8%	99.7	17.7%	72.0	20.4%	39.3	30.1%	665.8	11.0%
No	759.1	94.7%	869.0	90.4%	924.9	90.6%	1 075.0	90.9%	950.0	89.2%	464.3	82.3%	280.7	79.6%	91.5	69.9%	5 414.4	89.0%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	0 1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%

Base: All respondents.

#### 8.5.1 Type of Hospitals Admitted

Among those who were admitted to hospitals in the 12 months preceding the survey, 74.2% were admitted to public hospitals under HA, 24.4% were admitted to private hospitals and 1.5% had been admitted to both types of hospitals (Table 8.5.1a). The proportions admitted to private hospitals were relatively higher in the age groups 25 to 64 than those of other age groups (Table 8.5.1b).

 Table 8.5.1a: Type of hospitals which persons were admitted to in Hong Kong in the 12 months preceding the survey by gender

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Public hospitals under HA	272.3	72.8%	221.7	76.0%	493.9	74.2%
Private hospitals	97.1	25.9%	65.1	22.3%	162.2	24.4%
Both	4.9	1.3%	4.8	1.6%	9.7	1.5%
Total	374.2	100.0%	291.6	100.0%	665.8	100.0%

Base: The respondents who had been admitted to hospitals in Hong Kong in the 12 months preceding the survey.

Note: Figures may not add up to the total due to rounding.

Table 8.5.1b: Type of hospitals which persons	were admitted to in Hong	Kong in the 12 months p	preceding the survey by
age group			

	15-2	24	25-	-34	35-	-44	45	-54	55-	-64	65-	74	75-	84	85 or a	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	s %	person	5 %	persons	s %	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Public hospitals under HA	33.7	79.3%	64.4	69.7%	52.5	54.5%	70.0	64.7%	84.0	72.7%	84.5	84.8%	66.9	92.9%	38.0	96.7%	493.9	74.2%
Private hospitals	8.4	19.8%	25.4	27.5%	42.2	43.8%	38.1	35.3%	29.4	25.5%	13.6	13.7%	4.1	5.7%	0.9	2.2%	162.2	24.4%
Both	0.4	1.0%	2.5	2.8%	1.6	1.7%	-	-	2.1	1.8%	1.5	1.6%	1.0	1.4%	0.4	1.1%	9.7	1.5%
Total	42.5	100.0%	92.4	100.0%	96.3	100.0%	108.0	100.0%	115.5	100.0%	99.7	100.0%	72.0	100.0%	39.3	100.0%	665.8	100.0%

Base: The respondents who had been admitted to hospitals in Hong Kong in the 12 months preceding the survey.

#### 8.5.2 Frequency of Hospital Admissions

The frequency of hospital admissions was measured by the number of admissions in the 12 months preceding the survey among those who had reported at least one episode of hospitalisation. Of those who had been admitted to public hospitals under HA, 80.0% had one admission in the 12 months preceding the survey; 13.3% twice; and 6.7% three or more times. As regards those who had been admitted to private hospitals, 93.6% had been admitted to hospitals once in the 12 months preceding the survey; 5.2% twice; and 1.1% three or more times (Table 8.5.2a). The proportion of persons who had three or more admissions to public hospitals increased sharply in the age groups 75 or above (Table 8.5.2b).

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Public hospitals under HA <sup>1</sup>						
Once	225.0	81.2%	177.8	78.5%	402.9	80.0%
More than once	52.1	18.8%	48.6	21.5%	100.7	20.0%
Twice	34.0	12.3%	32.8	14.5%	66.8	13.3%
3 - 10 times	18.1	6.5%	15.8	7.0%	33.9	6.7%
Total	277.2	100.0%	226.4	100.0%	503.6	100.0%
Mean	1.3		1.4		1.3	
Private hospitals <sup>2</sup>						
Once	96.4	94.6%	64.5	92.3%	160.9	93.6%
More than once	5.6	5.4%	5.4	7.7%	10.9	6.4%
Twice	4.1	4.0%	4.9	7.0%	9.0	5.2%
3 - 10 times	1.4	1.4%	0.5	0.7%	1.9	1.1%
Total	102.0	100.0%	69.9	100.0%	171.8	100.0%
Mean	1.1		1.1		1.1	

Table 8.5.2a: Number of hospital admissions in the 12 months preceding the survey by gender

Bases: 1. The respondents who had been admitted to public hospitals under HA in the 12 months preceding the survey.

2. The respondents who had been admitted to private hospitals in the 12 months preceding the survey.

	15	-24	25	-34	35-	44	45	-54	55	-64	65	-74	75	-84	85 or	above	То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	s %	persons	s %	persons	%	persons	s %	persons	5 %	persons	5 %	persons	s %	persons	s %	persons	s %
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Public hospital	ls under	HA <sup>1</sup>																
Once	29.4	86.3%	57.0	85.1%	45.1	83.3%	57.2	81.7%	70.8	82.3%	65.4	76.0%	50.0	73.6%	28.0	73.0%	402.9	80.0%
More than once	4.7	13.7%	6 10.0	14.9%	9.1	16.7%	12.8	18.3%	15.3	17.7%	20.7	24.0%	17.9	26.4%	6 10.4	27.0%	100.7	20.0%
Twice	3.2	9.4%	5.9	8.8%	5.9	10.9%	8.8	12.5%	10.2	11.9%	15.4	17.9%	12.0	17.6%	5.5	14.3%	66.8	13.3%
3 - 10 times	1.5	4.3%	4.1	6.1%	3.1	5.8%	4.0	5.8%	5.1	5.9%	5.3	6.2%	5.9	8.7%	4.9	12.7%	33.9	6.7%
Total	34.1	100.0%	66.9	100.0%	54.1	100.0%	5 70.0	100.0%	6 86.1	100.0%	6 86.0	100.0%	67.9	100.0%	6 38.4	100.0%	503.6	100.0%
Mean	1	.2	1	.3	1.	3	1	.3	1	.3	1	.4	1	.4	1	.5	1	.3
Private hospita	als <sup>2</sup>																	
Once	8.2	93.2%	5 25.7	91.9%	41.9	95.5%	35.1	92.3%	29.4	93.2%	14.2	93.3%	5.1	100.0%	6 1.3	100.0%	6 160.9	93.6%
More than once	0.6	6.8%	2.3	8.1%	2.0	4.5%	2.9	7.7%	2.1	6.8%	1.0	6.7%	-	-	-	-	10.9	6.4%
Twice	0.6	6.8%	2.3	8.1%	1.0	2.3%	2.0	5.1%	2.1	6.8%	1.0	6.7%	-	-	-	-	9.0	5.2%
3 - 10 times	-	-	-	-	0.9	2.1%	1.0	2.6%	-	-	-	-	-	-	-	-	1.9	1.1%
Total	8.8	100.0%	6 28.0	100.0%	6 43.8	100.0%	5 38.1	100.0%	6 31.5	100.0%	6 15.2	100.0%	5.1	100.0%	6 1.3	100.0%	6 171.8	100.0%
Mean	1	.1	1	.1	1.	1	1	.2	1	.1	1	.1	1	.0	1	.0	1	.1

Table 8.5.2b: Number of hospital admissions in the 12 months preceding the survey by age group

Bases: 1. The respondents who had been admitted to public hospitals under HA in the 12 months preceding the survey.

2. The respondents who had been admitted to private hospitals in the 12 months preceding the survey.

#### 8.5.3 Length of Hospital Stay

Regarding the length of stay during the last hospital admission among those who had been admitted to public or private hospitals in Hong Kong in the 12 months preceding the survey, three-quarters (74.9%) of those admitted to public hospitals under HA and 89.0% of those admitted to private hospitals stayed less than five days. In contrast, 5.3% of those admitted to public hospitals under HA stayed in hospital for more than 14 days, while only 0.7% of those admitted to private hospitals stayed for such long time. The mean duration of hospital stay during the last episode of admission for those who had been admitted to public hospitals under HA was 4.7 days, which was about double the mean duration of hospital stay for those admitted to public hospitals under HA with mean duration of hospital stay of 4.8 days for females in their last hospital admissions compared to the corresponding mean of 4.5 days for males. However, the opposite was observed for those admitted to private hospitals with mean duration of hospital stay of 2.1 days for females and 2.6 days for males (Table 8.5.3a).

	Female		Male		Total	
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Public hospitals under HA <sup>1</sup>						
Less than 5 days	202.4	74.3%	167.3	75.5%	369.7	74.9%
5 – 14 days	54.0	19.8%	43.8	19.8%	97.9	19.8%
More than 14 days	15.8	5.8%	10.5	4.7%	26.3	5.3%
Total	272.3	100.0%	221.7	100.0%	493.9	100.0%
Mean *	4.8		4.5		4.7	
Private hospitals <sup>2</sup>						
Less than 5 days	88.9	91.6%	55.5	85.2%	144.4	89.0%
5 – 14 days	8.2	8.4%	8.4	13.0%	16.6	10.3%
More than 14 days	-	-	1.2	1.8%	1.2	0.7%
Total	97.1	100.0%	65.1	100.0%	162.2	100.0%
Mean *	2.1		2.6		2.3	

Table 8.5.3a: Duration of hospitalisation during the last hospital admission by gender

Bases: 1. The respondents who had been admitted to public hospitals under HA only in the 12 months preceding the survey.

2. The respondents who had been admitted to private hospitals only in the 12 months preceding the survey.

Notes:\* The duration of hospital stay of the respondents who had been admitted to public hospitals under HA or private hospitals for less than one day were counted as 0.5 day.

Figures may not add up to the total due to rounding.

Caution must be taken in regard to various data limitations when interpreting and making comparison with the statistics on the duration of hospital stay. The limitations include the survey coverage and the possibility of non-contact with those who were admitted to hospitals frequently or stayed in hospitals for a long period of time during the fieldwork period of the survey.

Analysed by age group, elder persons aged 85 or above stayed in hospitals the longest with their mean duration of stay of 7.8 days and 6.5 days for those admitted to public hospitals under HA and private hospitals in their last hospital admissions respectively (Table 8.5.3b).

	15	-24	25	-34	35	-44	45	-54	55	-64	65	-74	75	-84	85 or	above	То	otal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	s %	persons	s %	persons	s %	persons	s %	persons	s %	persons	%	persons	s %	persons	· %
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Public hospita	als under	HA <sup>1</sup>																
Less than 5 days	30.4	90.2%	53.5	83.2%	43.3	82.5%	55.2	78.9%	66.3	79.0%	57.3	67.8%	44.8	67.0%	18.8	49.5%	369.7	74.9%
5 - 14 days	2.7	8.1%	9.8	15.3%	5.7	10.8%	11.9	17.0%	14.4	17.2%	22.8	27.0%	16.2	24.2%	14.3	37.6%	97.9	19.8%
More than 14 days	0.6	1.8%	1.0	1.6%	3.5	6.7%	2.9	4.1%	3.2	3.8%	4.4	5.2%	5.9	8.8%	4.9	12.8%	26.3	5.3%
Total	33.7	100.0%	64.4	100.0%	52.5	100.0%	70.0	100.0%	6 84.0	100.0%	6 84.5	100.0%	66.9	100.0%	6 38.0	100.0%	6 493.9	100.0%
Mean *	2	.2	3	.8	4	.5	4	.7	4	.4	4	.5	5	.4	7	.8	4	.7
Private hospit	tals <sup>2</sup>																	
Less than 5 days	7.9	94.4%	21.5	84.6%	37.7	89.3%	33.7	88.6%	27.4	93.0%	13.0	95.7%	3.1	75.2%	-	-	144.4	89.0%
5 - 14 days	0.5	5.6%	3.9	15.4%	4.5	10.7%	3.2	8.3%	2.1	7.0%	0.6	4.3%	1.0	24.8%	0.9	100.0%	6 16.6	10.3%
More than 14 days	-	-	-	-	-	-	1.2	3.1%	-	-	-	-	-	-	-	-	1.2	0.7%
Total	8.4	100.0%	25.4	100.0%	42.2	100.0%	38.1	100.0%	5 29.4	100.0%	5 13.6	100.0%	4.1	100.0%	6 0.9	100.0%	6 162.2	100.0%
Mean *	1	.9	2	2.4	2	.2	2	.7	2	.1	1	.7	3	.6	6	.5	2	.3

 Table 8.5.3b: Duration of hospitalisation during the last hospital admission by age group

Bases: 1. The respondents who had been admitted to public hospitals under HA only in the 12 months preceding the survey.

2. The respondents who had been admitted to private hospitals only in the 12 months preceding the survey.

Notes: \* The duration of hospital stay of the respondents who had been admitted to public hospitals under HA or private hospitals for less than one day were counted as 0.5 day.

Figures may not add up to the total due to rounding.

Caution must be taken in regard to various data limitations when interpreting and making comparison with the statistics on the duration of hospital stay. The limitations include the survey coverage and the possibility of non-contact with those who were admitted to hospitals frequently or stayed in hospitals for a long period of time during the fieldwork period of the survey.

#### 8.5.4 Operations Performed during Hospitalisation

Among persons aged 15 or above who had been admitted to hospitals in Hong Kong in the 12 months preceding the survey, 32.0% had an operation performed in the operating theatre during their last hospital admission (32.5% in females and 31.2% in males) (Table 8.5.4a). Analysed by age group, the proportions were relatively higher among those aged 25 to 64, with the highest proportion reported by persons aged 35-44 (39.7%) and the lowest proportion reported by persons aged 15-24 and 85 or above (both at 20.2%) (Table 8.5.4b).

	Female		Male		Total		
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
Yes	121.8	32.5%	90.9	31.2%	212.7	32.0%	
No	252.4	67.5%	200.6	68.8%	453.0	68.0%	
Total	374.2	100.0%	291.6	100.0%	665.8	100.0%	

 Table 8.5.4a:
 Proportion of hospitalised persons who had an operation performed in the operating theatre during their last hospital admission in the 12 months preceding the survey by gender

Base: The respondents who had been admitted to hospitals in Hong Kong in the 12 months preceding the survey.

Note: Figures may not add up to the total due to rounding.

Table 8.5.4b:	Proportion of hospitalised persons who had an operation performed in the operating theatre during their
	last hospital admission in the 12 months preceding the survey by age group

	15	-24	25-	-34	35.	-44	45	-54	55	-64	65	-74	75	-84	85 or :	above	То	tal
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	5 %	No. of persons ('000)	5 %	No. of persons ('000)	5 %	No. of persons ('000)	%	No. of persons ('000)	5 %	No. of persons ('000)	%	No. of persons ('000)	%
Yes	8.6	20.2%	29.6	32.1%	38.2	39.7%	36.1	33.4%	42.9	37.1%	30.9	31.0%	18.5	25.7%	7.9	20.2%	212.7	32.0%
No	33.9	79.8%	62.7	67.9%	58.1	60.3%	72.0	66.6%	72.7	62.9%	68.8	69.0%	53.5	74.3%	31.4	79.8%	453.0	68.0%
Total	42.5	100.0%	6 92.4	100.0%	96.3	100.0%	108.0	100.0%	115.5	100.0%	99.7	100.0%	72.0	100.0%	6 39.3	100.0%	665.8	100.0%

Base: The respondents who had been admitted to hospitals in Hong Kong in the 12 months preceding the survey.

#### 8.6 Consultations with Mental Health Professionals

Overall, 1.7% of persons aged 15 or above (1.9% in females and 1.5% in males) reported that they had consulted mental health professionals, such as a clinical psychologist, psychiatrist, psychiatric nurse, or medical social worker, for their mental health problem in the 12 months preceding the survey (Table 8.6a). Analysed by age group, persons aged 15-24 had the highest proportion (3.1%) of consulting a mental health professional, whilst the proportions among other age groups ranged from 1.1% to 2.0% (Table 8.6b).

 Table 8.6a: Proportion of population who had consulted a mental health professional in the 12 months preceding the survey by gender

	Female		Male		Total		
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	
Yes	59.1	1.9%	42.6	1.5%	101.6	1.7%	
No	3 125.9	98.1%	2 852.6	98.5%	5 978.6	98.3%	
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%	

Base: All respondents.

Note: Figures may not add up to the total due to rounding.

Table 8.6b:	Proportion	of population	who had	l consulted a	n mental	health	professional	in the	12 months	preceding the
	survey by a	ge group								

	15	-24	25	-34	35-	44	45-	54	55-	·64	65	-74	75	-84	85 or	above	То	tal
	No. of	9/	No. of	. 0/	No. of	0/_	No. of	0/_	No. of	0/2	No. of	. 0/.	No. of	. 0/.	No. of	9/	No. of	9/-
	('000)	///	('000)	, /0	('000)	70	('000)	70	('000)	70	('000)	, /0	('000)	, ,0	('000)	/0	('000)	70
Yes	25.1	3.1%	11.8	1.2%	13.2	1.3%	23.6	2.0%	14.7	1.4%	7.7	1.4%	4.0	1.1%	1.6	1.3%	101.6	1.7%
No	776.5	96.9%	949.6	98.8%	1 008.0	98.7%	1 159.4	98.0%	1 050.8	98.6%	556.3	98.6%	348.7	98.9%	129.2	98.7%	5 978.6	98.3%
Total	801.6	100.0%	961.4	100.0%	61 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	564.0	100.0%	352.7	100.0%	5 130.8	100.0%	6 080.2	100.0%

Base: All respondents.

## 8.7 Satisfaction with the Health Care System

Respondents were asked to rate public and private sectors of the health care system in Hong Kong on an overall satisfaction scale of 0-100 where 0 represents the lowest and 100 the highest level of satisfaction. The average satisfaction scores given to the public health care sector and private health care sector were 66.9 and 75.3 respectively (Table 8.7a).

	Fer	nale	Male	2	Tota	1
Scores	No. of persor ('000)	1S %	No. of persons ('000)	%	No. of persons ('000)	%
Public sector						
0 - 19	20.7	0.7%	21.5	0.7%	42.2	0.7%
20 - 39	66.7	2.1%	79.4	2.7%	146.1	2.4%
40 - 59	472.2	14.8%	438.0	15.1%	910.2	15.0%
60 - 79	1 469.8	46.1%	1 345.7	46.5%	2 815.5	46.3%
80 - 100	836.0	26.2%	727.5	25.1%	1 563.5	25.7%
Don't know	319.5	10.0%	283.2	9.8%	602.7	9.9%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%
Mean	67	7.3	66.6		66.9	
Private sector						
0 - 19	1.8	0.1%	3.0	0.1%	4.8	0.1%
20 - 39	6.7	0.2%	7.4	0.3%	14.1	0.2%
40 - 59	152.6	4.8%	131.7	4.5%	284.3	4.7%
60 - 79	1 095.7	34.4%	1 042.1	36.0%	2 137.8	35.2%
80 - 100	1 593.6	50.0%	1 405.2	48.5%	2 998.8	49.3%
Don't know	334.5	10.5%	305.9	10.6%	640.4	10.5%
Total	3 185.0	100.0%	2 895.2	100.0%	6 080.2	100.0%
Mean	75	5.5	75.1		75.3	

### Table 8.7a: Overall satisfaction with the health care system by gender

Base: All respondents.

Across the age groups, the range of average satisfaction scores for the public sector was from 64.6 to 73.8 with a general trend of increasing score with age. The average satisfaction scores for the private sector had a narrower range from 73.9 to 76.1 (Table 8.7b).

	15-	-24	25-	-34	35-	-44	45-	-54	55-	64	65-	-74	75-	84	85 or a	above	То	otal
-	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
Scores	persons	%	persons	%	persons	%	persons	%	persons	%	persons	s %	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Public secto	or																	
0 - 19	7.6	0.9%	7.1	0.7%	5.4	0.5%	10.3	0.9%	8.2	0.8%	2.3	0.4%	1.3	0.4%	-	-	42.2	0.7%
20 - 39	18.7	2.3%	29.9	3.1%	26.2	2.6%	36.6	3.1%	22.0	2.1%	6.9	1.2%	5.0	1.4%	0.8	0.6%	146.1	2.4%
40 - 59	131.6	16.4%	169.3	17.6%	180.9	17.7%	181.1	15.3%	143.9	13.5%	64.0	11.3%	31.3	8.9%	8.0	6.1%	910.2	15.0%
60 - 79	371.2	46.3%	477.9	49.7%	503.5	49.3%	572.5	48.4%	494.7	46.4%	231.8	41.1%	120.2	34.1%	43.6	33.4%	2 815.5	46.3%
80 - 100	173.1	21.6%	182.9	19.0%	212.2	20.8%	282.5	23.9%	312.6	29.3%	206.2	36.6%	149.0	42.3%	44.9	34.4%	1 563.5	25.7%
Don't know	99.4	12.4%	94.3	9.8%	92.8	9.1%	100.0	8.5%	84.1	7.9%	52.8	9.4%	45.8	13.0%	33.4	25.5%	602.7	9.9%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	065.5	100.0%	564.0	100.0%	5 352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Mean	65	.3	64	.6	65	5.3	66	0.0	68	.1	70	).9	73	.2	73	.8	60	5.9
Private sec	tor																	
0 - 19	-	-	0.4	<0.05%	0.4	<0.05%	3.1	0.3%	0.5	<0.05%	, -	-	0.4	0.1%	-	-	4.8	0.1%
20 - 39	2.2	0.3%	3.9	0.4%	0.5	<0.05%	2.9	0.2%	2.6	0.2%	0.9	0.2%	1.1	0.3%	-	-	14.1	0.2%
40 - 59	35.2	4.4%	37.3	3.9%	43.9	4.3%	56.1	4.7%	57.3	5.4%	24.1	4.3%	23.3	6.6%	7.2	5.5%	284.3	4.7%
60 - 79	287.7	35.9%	359.5	37.4%	354.3	34.7%	429.2	36.3%	387.0	36.3%	183.7	32.6%	99.5	28.2%	37.0	28.3%	2 137.8	35.2%
80 - 100	391.0	48.8%	500.2	52.0%	558.2	54.7%	598.5	50.6%	517.1	48.5%	256.3	45.4%	139.0	39.4%	38.4	29.3%	2 998.8	49.3%
Don't know	85.4	10.7%	60.2	6.3%	63.9	6.3%	93.2	7.9%	101.1	9.5%	99.0	17.6%	89.3	25.3%	48.2	36.9%	640.4	10.5%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	01 065.5	100.0%	564.0	100.0%	352.7	100.0%	130.8	100.0%	6 080.2	100.0%
Mean	75	.1	75	.5	76	5.0	75	.0	74	.9	76	5.1	74	.8	73.	.9	75	5.3

Table 8.7b: Overall satisfaction with the health care system by age group

Base: All respondents.

# Chapter 9 Physical and Biochemical Measurements

The PHS invited a random subsample of persons aged between 15 and 84 who had been enumerated in the household survey and signed the survey consent form to undergo a follow-up health examination, including physical and biochemical measurements, to estimate prevalence of cardiovascular disease and assess their risk factors. Self-reported prevalences of chronic diseases have been reported in Chapter 3. However, self-reported prevalence estimates have been found to substantially underestimate the true prevalences as they do not include data on undiagnosed cases of the diseases. The PHS aims to collect information on both diagnosed and undiagnosed cases of diabetes, hypertension and other cardiovascular risk factors to provide more accurate prevalence estimates, by performing physical measurements and collecting biochemical samples, namely blood and urine, from survey participants. This chapter presents the results of health examination including anthropometric and blood pressure measurements as well as biochemical testing covering blood tests for fasting plasma glucose, HbA1c and lipid profile, and 24-hour urine tests for sodium and potassium excretion.

Indicator	Female	Male	Overall
Proportion of population who were overweight and obese			
• Overweight (body mass index <sup>#</sup> $\ge$ 23.0 kg/m <sup>2</sup> and $<$ 25 kg/m <sup>2</sup> )	19.3%	20.9%	20.1%
• Obese (body mass index <sup>#</sup> $\geq 25.0 \text{ kg/m}^2$ )	24.4%	36.0%	29.9%
Proportion of population who had central obesity			
• Central obesity defined by waist circumference	37.2%	28.2%	32.9%
• Central obesity defined by waist-hip ratio	38.9%	41.5%	40.1%

### Snapshot of Population's Physical and Biochemical Measurements (for persons aged 15 to 84)

Indicator	Female	Male	Overall
Prevalence of hypertension	25.5%	30.1%	27.7%
• No known history of hypertension	11.5%	14.9%	13.2%
Previously diagnosed hypertension	14.0%	15.2%	14.6%
Prevalence of diabetes mellitus	6.4%	10.5%	8.4%
• No known history of diabetes mellitus	3.2%	6.0%	4.5%
• Previously diagnosed diabetes mellitus	3.2%	4.6%	3.8%
Prevalence of hypercholesterolaemia	48.8%	50.3%	49.5%
• No known history of hypercholesterolaemia	34.7%	34.8%	34.8%
• Previously diagnosed with raised blood cholesterol	7.9%	6.8%	7.4%
• Previously diagnosed with normal blood cholesterol	6.1%	8.7%	7.4%
Mean population intake of salt $(g^*)$ per day	7.9 g	9.8 g	8.8 g
Proportion of population with salt intake $\geq 5 \text{ g}^*$ per day	82.2%	90.8%	86.3%
Proportion of population with potassium intake $< 3.5 \text{ g}^*$ per day	92.5%	90.5%	91.5%

Notes: \* g stands for gram. <sup>#</sup> Body mass index (BMI) is defined as weight (kilogram) divided by the square of height (metre). Its unit of measurement is kilogram/metre<sup>2</sup> (kg/m<sup>2</sup>).

#### 9.1 Anthropometric Measurements and Blood Pressure

Anthropometric and blood pressure measurements were performed in designated health examination centres under standardised procedures with standardised equipment. Measurement of blood pressure was performed in participants of health examination using an electronic sphygmomanometer. The anthropometric measurements in this survey include measurements of individual participant's body weight, height, waist and hip circumferences. These measurements were used for computing body mass index (BMI), waist circumference (WC) and waist-hip ratio (WHR), as measures of central or abdominal obesity which is predisposing factor for cardiovascular disease <sup>1</sup>.

#### 9.1.1 Weight and Height

Body weight and height are measures of body size and can be used to calculate respondents' BMI. Based on the results of the health examination attended by respondents aged 15-84, it is estimated that the mean body weights of females and males aged 15-84 were 56.5 kg and 68.6 kg respectively, and the mean body heights were 157.1 cm and 169.5 cm respectively (Table 9.1.1a).

A go group	Female	Male	Total	Female	Male	Total				
Age group		Weight (kg)			Height (cm)					
15 - 24	53.6	63.7	58.8	159.7	172.3	166.1				
25 - 34	55.2	70.6	62.5	159.8	172.9	166.0				
35 - 44	57.1	71.3	63.5	158.3	171.4	164.2				
45 - 54	58.5	72.6	65.0	157.4	169.9	163.2				
55 - 64	57.1	67.3	62.2	154.7	166.4	160.5				
65 - 84	56.6	65.0	60.7	153.0	164.7	158.7				
15 - 84	56.5	68.6	62.3	157.1	169.5	163.0				

Table 9.1.1a: Mean weight and height among persons aged 15 to 84 by age group and gender

Base: All respondents aged 15 - 84 who had participated in the health examination.

#### 9.1.2 Body Mass Index

The BMI is a simple index of weight-for-height that is commonly used to classify overweight and obesity in adults. It is defined as a person's weight in kilograms divided by the square of her / his height in metres. Raised BMI is a major risk factor for non-communicable diseases such as cardiovascular diseases (mainly heart disease and stroke), diabetes, musculoskeletal disorders and some cancers. The risk for these non-communicable diseases increases with BMI <sup>2</sup>. Based on the body weight and height measurements collected from participants of health examination, the mean BMI for females and males aged 15-84 were 22.9 kg/m<sup>2</sup> and 23.9 kg/m<sup>2</sup> respectively (Table 9.1.2a).

∆ge grown/ -	Fem	ale	Mal	e	Tota	Total		
Age group/ BMI categories	No. of persons	%	No. of persons	%	No. of persons	%		
	('000)		('000')		('000')			
15 - 24								
Underweight	90.4	23.0%	71.9	17.6%	162.3	20.2%		
Normal	215.9	55.0%	230.5	56.3%	446.3	55.7%		
Overweight	37.9	9.7%	51.9	12.7%	89.8	11.2%		
Obese I	32.7	8.3%	47.5	11.6%	80.2	10.0%		
Obese II	15.5	3.9%	7.5	1.8%	23.0	2.9%		
Sub-total	392.3	100.0%	409.3	100.0%	801.6	100.0%		
25 - 34								
Underweight	74.8	14.8%	25.3	5.6%	100.1	10.4%		
Normal	297.7	58.8%	205.2	45.1%	502.9	52.3%		
Overweight	53.3	10.5%	82.6	18.2%	136.0	14.1%		
Obese I	64.9	12.8%	110.0	24.2%	174.9	18.2%		
Obese II	15.6	3.1%	31.9	7.0%	47.5	4.9%		
Sub-total	506.4	100.0%	455.0	100.0%	961.4	100.0%		
35 - 44								
Underweight	46.8	8.3%	9.5	2.1%	56.3	5.5%		
Normal	287.3	51.2%	171.0	37.2%	458.3	44.9%		
Overweight	112.4	20.0%	105.8	23.0%	218.1	21.4%		
Obese I	82.7	14.7%	149.0	32.4%	231.7	22.7%		
Obese II	32.3	5.7%	24.5	5.3%	56.7	5.6%		
Sub-total	561.4	100.0%	459.8	100.0%	1 021.2	100.0%		

Table 9.1.2a: Distribution of body mass index (BMI) categories among persons aged 15 to 84 by age group and gender

(To be continued)

	Female		Mal	e	Tota	Total			
Age group/ BMI categories	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%			
45 - 54									
Underweight	33.4	5.3%	6.0	1.1%	39.4	3.3%			
Normal	266.6	42.0%	141.1	25.7%	407.7	34.5%			
Overweight	160.1	25.2%	120.8	22.0%	280.9	23.7%			
Obese I	132.5	20.9%	238.1	43.4%	370.5	31.3%			
Obese II	42.1	6.6%	42.4	7.7%	84.5	7.1%			
Sub-total	634.6	100.0%	548.4	100.0%	1 183.0	100.0%			
55 - 64									
Underweight	21.3	4.0%	21.0	4.0%	42.3	4.0%			
Normal	238.9	44.5%	171.5	32.5%	410.5	38.5%			
Overweight	101.0	18.8%	131.9	25.0%	232.9	21.9%			
Obese I	137.6	25.6%	178.7	33.8%	316.3	29.7%			
Obese II	38.7	7.2%	24.9	4.7%	63.6	6.0%			
Sub-total	537.5	100.0%	528.0	100.0%	1 065.5	100.0%			
65 - 84									
Underweight	13.4	2.9%	24.9	5.6%	38.3	4.2%			
Normal	161.5	34.5%	148.5	33.1%	310.0	33.8%			
Overweight	132.7	28.4%	103.5	23.1%	236.2	25.8%			
Obese I	135.9	29.0%	156.2	34.8%	292.1	31.9%			
Obese II	24.7	5.3%	15.5	3.4%	40.1	4.4%			
Sub-total	468.1	100.0%	448.6	100.0%	916.7	100.0%			
15 - 84									
Underweight	280.0	9.0%	158.6	5.6%	438.7	7.4%			
Normal	1 467.8	47.3%	1 067.9	37.5%	2 535.7	42.6%			
Overweight	597.4	19.3%	596.5	20.9%	1 193.9	20.1%			
Obese I	586.3	18.9%	879.5	30.9%	1 465.8	24.6%			
Obese II	168.8	5.4%	146.6	5.1%	315.4	5.3%			
Total	3 100.3	100.0%	2 849.1	100.0%	5 949.4	100.0%			
			Mean BMI	(kg/m <sup>2</sup> )					
Gender / Age group	Fema	ale	Mal	le	Tota	ıl			
15 – 24	21.	)	21.4	4	21.2	2			
25 - 34	21.0	6	23.0	6	22.6	5			
35 - 44	22.5	8	24.3	3	23.5	5			
45 - 54	23.	6	25.7	1	24.3	;			
55 - 64	23.5	8	24.3	3	24.1				
65 - 84	24.2	2	23.9	9	24.1				
15 - 84	22.	9	23.9	9	23.4				

Table 9.1.2a: Distribution o	of body mass	index (BMI)	) categories	among	persons	aged 1	5 to 8	84 by	age gr	roup a	nd g	ender
(continued)												

Base: All respondents aged 15 - 84 who had participated in the health examination.

Notes: Underweight: BMI  $< 18.5 \text{ kg/m}^2$ 

Normal: BMI  $\geq$  18.5 and < 23.0 kg/m<sup>2</sup>

 $\label{eq:overweight:BMI} \text{Overweight:} \quad BMI \geq 23.0 \text{ and} < 25.0 \text{ kg/m}^2$ 

 $\label{eq:BMI} \text{Obese I:} \qquad \text{BMI} \geq 25.0 \text{ and } < 30.0 \text{ kg/m}^2$ 

 $Obese \ II: \qquad BMI \geq 30.0 \ kg/m^2$ 

Based on the classification of BMI categories for Chinese adults adopted by the Department of Health<sup>3</sup>, the ranges of BMI values for classification of underweight, normal, overweight and obese are:

BMI category	Range of BMI values
Underweight	$< 18.5 \text{ kg/m}^2$
Normal	$\geq$ 18.5 and < 23.0 kg/m <sup>2</sup>
Overweight	$\geq$ 23.0 and < 25.0 kg/m <sup>2</sup>
Obese	$\geq 25.0 \text{ kg/m}^2$
Obese I	$\geq 25.0 \text{ and } < 30.0 \text{ kg/m}^2$
Obese II	$\geq 30.0 \text{ kg/m}^2$

Among persons aged 15-84 participating in health examination, 29.9% were classified as obese and 20.1% overweight, 42.6% within normal range and 7.4% underweight. Analysed by gender, 24.4% of females and 36.0% of males in this age group were classified as obese and 19.3% of females and 20.9% of males were overweight. Analysed by age group, the proportion of females classified as obese increased with age from 12.3% for those aged 15-24 to 34.3% for those aged 65-84. The proportion of males classified as obese increased from 13.4% among males aged 15-24 to 51.1% for males aged 45-54, then decreased to 38.3% for those aged 65-84 (Table 9.1.2a).

Analysed by household income, in general, the proportion of persons classified as overweight or obese decreased with increasing household income from 58.0% among those with a monthly household income between \$5,000 and \$9,999 to 46.3% among those with a monthly household income of \$50,000 or more (Table 9.1.2b).

	Less than \$5,000		\$5,000 – \$9,999		\$10,000 – \$19,999		\$20,000 – \$29,999		\$30,000 - \$39,999		\$40,000 – \$49,999		\$50,000 or more		То	tal
	No. of		No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)		('000)	
BMI categories																
Underweight	29.5	8.6%	29.2	9.2%	65.7	6.7%	85.6	7.6%	73.8	7.1%	54.1	7.2%	100.7	7.3%	438.7	7.4%
Normal	133.0	38.7%	104.8	32.9%	402.3	41.0%	478.2	42.4%	443.6	42.5%	331.7	44.0%	637.3	46.4%	2 530.9	42.6%
Overweight	74.2	21.6%	95.1	29.8%	209.9	21.4%	235.1	20.9%	180.7	17.3%	148.1	19.7%	248.2	18.1%	1 191.2	20.1%
Obese I	93.0	27.1%	76.7	24.0%	240.9	24.6%	258.2	22.9%	297.0	28.5%	187.5	24.9%	310.4	22.6%	1 463.6	24.6%
Obese II	14.1	4.1%	13.3	4.2%	61.7	6.3%	69.4	6.2%	47.6	4.6%	32.0	4.2%	77.3	5.6%	315.4	5.3%
Total	343.8	100.0%	319.1	100.0%	980.5	100.0%	1 126.4	100.0%	1 042.7	100.0%	753.4	100.0%	1 373.9	100.0%	5 939.8	100.0%

Table 9.1.2b: D	Distribution of BMI	categories among	persons aged 15 t	o 84 by monthly	v household income
			,, ,		/

Base: All respondents aged 15 - 84 who had participated in the health examination and provided information on monthly household income.

Notes: Underweight:  $BMI < 18.5 \text{ kg/m}^2$ 

Normal: BMI  $\geq 18.5$  and < 23.0 kg/m<sup>2</sup>

 $Overweight: \quad BMI \geq 23.0 \text{ and} \leq 25.0 \text{ kg/m}^2$ 

Obese I: BMI  $\geq 25.0$  and < 30.0 kg/m<sup>2</sup>

Obese II:  $BMI \ge 30.0 \text{ kg/m}^2$ 

Weight perception is a correlate of weight control practices. Table 9.1.2c presents perception of own body weight of persons aged 15-84 by their BMI categories. 74.1% of those who were overweight and 40.7% of those classified as obese considered themselves very / a little bit thin or about the right weight. In contrast, 60.3% of those classified as underweight regarded themselves as about the right weight or a little bit fat.

ВМІ	Under	weight	Normal		Overweight		Obese I		Obese II		Total	
category Perception of body weight	No. of persons ('000)	%										
Very thin/underweight	12.2	2.8%	4.8	0.2%	2.7	0.2%	-	-	-	-	19.6	0.3%
A little bit thin/a little bit light	ıt 162.1	37.0%	249.3	9.8%	23.2	1.9%	16.7	1.1%	2.7	0.9%	454.0	7.6%
About the right weight	261.3	59.6%	2 019.4	79.6%	859.2	72.0%	660.5	45.1%	45.7	14.5%	3 846.1	64.6%
A little bit fat/a little bit heav	y 3.0	0.7%	258.9	10.2%	308.8	25.9%	754.4	51.5%	200.0	63.4%	1 525.0	25.6%
Very fat/overweight	-	-	3.4	0.1%	-	-	34.2	2.3%	67.0	21.2%	104.6	1.8%
Total	438.7	100.0%	2 535.7	100.0%	1 193.9	100.0%	1 465.8	100.0%	315.4	100.0%	5 949.4	100.0%

Table 9.1.2c: Perception of body weight among persons aged 15 to 84 by BMI categories

Base: All respondents aged 15 - 84 who had participated in the health examination.

Notes: Underweight: BMI < 18.5 kg/m<sup>2</sup>

Normal: BMI  $\geq 18.5$  and  $\leq 23.0$  kg/m<sup>2</sup>

 $\label{eq:main_state} \begin{aligned} \text{Overweight:} \quad BMI \geq 23.0 \text{ and} < 25.0 \text{ kg/m}^2 \end{aligned}$ 

 $\label{eq:BMI} \mbox{Obese I:} \qquad BMI \geq 25.0 \mbox{ and } < 30.0 \mbox{ kg/m}^2$
#### 9.1.3 Waist Circumference, Hip Circumference and Waist-hip Ratio

Waist circumference (WC) and waist-hip ratio (WHR) are indicators to measure central or abdominal obesity. The WHR is the WC divided by hip circumference (HC). Experts of the World Health Organization (WHO) suggested that the WC and WHR may be superior to BMI in predicting risk of cardiovascular disease and diabetes <sup>1</sup>. In addition, WC alone has been suggested to be a more practical correlate of abdominal fat distribution and associated ill health<sup>4</sup>. According to the International Diabetes Federation classification of the Asian standard, females with WC greater than 80 cm and males with WC greater than 90 cm are classified as centrally obese. According to the WHO, sex-specific cut-off points for WHR at 0.85 or above in females and 0.90 or above in males are used to signify substantially increased risk of metabolic complications associated with obesity<sup>1</sup>.

Among persons aged 15-84, the mean values of WC were 77.7 cm for females and 84.4 cm for males; the mean values of HC were 93.6 cm for females and 95.8 cm for males; and the mean values of WHR were 0.83 for females and 0.88 for males (Table 9.1.3a).

	Female	Male	Total	Female	Male	Total	Female	Male	Total	
Age group		WC (cm)			HC (cm)		WHR			
15 - 24	69.8	75.9	72.9	90.9	92.9	91.9	0.77	0.82	0.79	
25 - 34	73.9	82.4	77.9	92.5	97.0	94.6	0.80	0.85	0.82	
35 - 44	76.5	84.8	80.2	93.6	96.9	95.1	0.82	0.87	0.84	
45 - 54	79.9	87.7	83.5	94.8	97.3	96.0	0.84	0.90	0.87	
55 - 64	81.0	86.6	83.8	94.1	95.4	94.7	0.86	0.91	0.88	
65 - 84	82.9	87.0	84.9	94.7	94.5	94.6	0.87	0.92	0.90	
15 - 84	77.7	84.4	80.9	93.6	95.8	94.6	0.83	0.88	0.85	

Table 9.1.3a: Mean waist circumference (WC), hip circumference (HC) and waist-to-hip ratio (WHR) among persons aged 15 to 84 by age group and gender

Base: All respondents aged 15 - 84 who had participated in the health examination with valid measurements of waist and hip circumferences.

According to the sex-specific cut-off points for WC mentioned above, it was estimated that almost onethird (32.9%) of persons aged 15-84 (37.2% for females and 28.2% for males) had central obesity defined by WC (Table 9.1.3b). According to classification of WHR, 40.1% of persons aged 15-84 (38.9% for females and 41.5% for males) had central obesity (Table 9.1.3c). Analysed by age group, the prevalences of central obesity based on both WC and WHR definitions generally increased with age from 10.5% for those aged 15-24 to 48.3% for 65-84 and from 8.3% for those aged 15-24 to 64.5% for 65-84 respectively (Table 9.1.3b and Table 9.1.3c).

		Wh	nether had central ol	besity as defined by V	VC*		
Gender / Age group Female 15 - 24 25 - 34 35 - 44 45 - 54 55 - 64 65 - 84 Total	Y	es	I	No	Т	otal	
Condon / Ago group	No. of		No. of		No. of		
Genuer / Age group	persons	<b>Rate</b> <sup>#</sup> (%)	persons Rate <sup>#</sup> (%)		persons	<b>Rate</b> <sup>#</sup> (%)	
	('000)		('000)		('000)		
Female							
15 - 24	49.4	12.7%	341.1	87.3%	390.5	100%	
25 - 34	109.0	21.9%	388.6	78.1%	497.7	100%	
35 - 44	172.8	31.1%	382.3	68.9%	555.1	100%	
45 - 54	268.6	43.3%	352.3	56.7%	621.0	100%	
55 - 64	268.9	50.8%	260.2	49.2%	529.1	100%	
65 - 84	271.5	58.0%	196.6	42.0%	468.1	100%	
Total	1 140.3	37.2%	1 921.1	62.8%	3 061.4	100%	
Male							
15 - 24	34.2	8.5%	370.2	91.5%	404.3	100%	
25 - 34	92.7	20.7%	355.8	79.3%	448.5	100%	
35 - 44	117.3	25.9%	335.9	74.1%	453.2	100%	
45 - 54	209.4	38.6%	333.0	61.4%	542.4	100%	
55 - 64	167.7	32.5%	347.7	67.5%	515.4	100%	
65 - 84	170.4	38.2%	275.5	61.8%	446.0	100%	
Total	791.7	28.2%	2 018.0	71.8%	2 809.7	100%	
Both gender							
15 - 24	83.6	10.5%	711.2	89.5%	794.8	100%	
25 - 34	201.8	21.3%	744.4	78.7%	946.2	100%	
35 - 44	290.1	28.8%	718.2	71.2%	1 008.3	100%	
45 - 54	478.1	41.1%	685.3	58.9%	1 163.4	100%	
55 - 64	436.6	41.8%	607.9	58.2%	1 044.5	100%	
65 - 84	441.9	48.3%	472.2	51.7%	914.1	100%	
Total	1 932.0	32.9%	3 939.1	67.1%	5 871.1	100%	

Table 9.1.3b: Proportion of population who had central obesity as defined by WC among persons aged 15 to 84 by age group and gender

Base: All respondents aged 15 - 84 who had participated in the health examination with valid measurement of waist circumference.

\* Normal: WC Male  $\leq$  90 cm, Female  $\leq$  80 cm

Notes:

Central obesity: WC Male > 90 cm, Female > 80 cm

# The rates are expressed as the percentage of its respective age/gender subgroup.

	Whether had central obesity as defined by WHR*											
	Ŋ	les	I	No	T	otal						
Gender / Age group	No. of		No. of		No. of							
F	persons	<b>Rate</b> <sup>#</sup> (%)	persons	<b>Rate</b> <sup>#</sup> (%)	persons	<b>Rate</b> <sup>#</sup> (%)						
	('000)		('000)		('000)							
Female												
15 - 24	26.9	6.9%	363.6	93.1%	390.5	100%						
25 - 34	100.3	20.2%	397.4	79.8%	497.7	100%						
35 - 44	162.9	29.3%	392.2	70.7%	555.1	100%						
45 - 54	284.6	45.8%	336.3	54.2%	621.0	100%						
55 - 64	307.5	58.1%	221.6	41.9%	529.1	100%						
65 - 84	309.8	66.2%	158.3	33.8%	468.1	100%						
Total	1 192.1	38.9%	1 869.3	61.1%	3 061.4	100%						
Male												
15 - 24	38.9	9.6%	365.4	90.4%	404.3	100%						
25 - 34	78.9	17.6%	369.6	82.4%	448.5	100%						
35 - 44	156.3	34.5%	296.9	65.5%	453.2	100%						
45 - 54	296.6	54.7%	245.8	45.3%	542.4	100%						
55 - 64	314.1	60.9%	201.3	39.1%	515.4	100%						
65 - 84	280.2	62.8%	165.8	37.2%	446.0	100%						
Total	1 165.0	41.5%	1 644.8	58.5%	2 809.7	100%						
Both Gender												
15 - 24	65.8	8.3%	729.0	91.7%	794.8	100%						
25 - 34	179.2	18.9%	766.9	81.1%	946.2	100%						
35 - 44	319.2	31.7%	689.1	68.3%	1 008.3	100%						
45 - 54	581.2	50.0%	582.2	50.0%	1 163.4	100%						
55 - 64	621.6	59.5%	422.8	40.5%	1 044.5	100%						
65 - 84	590.0	64.5%	324.1	35.5%	914.1	100%						
Total	2 357.1	40.1%	3 514.0	59.9%	5 871.1	100%						

Table 9.1.3c: Proportion of population	who had central obesity	as defined by WHR	R among persons aged	l 15 to 84 by
age group and gender				

Base: All respondents aged 15 - 84 who had participated in the health examination with valid measurements of WHR.

\* Normal: WHR Male < 0.90, Female < 0.85

Notes:

Central obesity: WHR Male  $\geq 0.90$ , Female  $\geq 0.85$ 

# The rates are expressed as the percentage of its respective age/gender subgroup.

### 9.1.4 Blood Pressure

Blood pressure is measured in millimetres of mercury (mmHg) and is recorded as two numbers. The first or upper number, known as the systolic blood pressure (SBP), represents the pressure on the blood vessels when the heart contracts to pump blood, whereas the second or bottom number, known as the diastolic blood pressure (DBP), represents the pressure when the heart relaxes between beats. Blood pressure changes from minute to minute throughout the day with posture, physical activities, emotions, sleep, etc <sup>5</sup>.

According to the protocol for blood pressure monitoring recommended by the WHO, three blood pressure measurements with at least three minute rest between each of the measurements were taken and the mean of the second and third readings of both SBP and DBP were reported. The mean SBP for females and males aged 15-84 were 117.0 mmHg and 123.2 mmHg respectively, while the mean DBP for females and males were 75.9 mmHg and 79.8 mmHg respectively (Table 9.1.4a).

	Fen	nale	Μ	ale	Total			
	No. of		No. of		No. of			
	persons	%	persons	%	persons	%		
	('000)		('000)		(1000)			
Systolic blood press	ure (mmHg)							
Below 80.0	5.8	0.2%	-	-	5.8	0.1%		
80.0 - 99.9	587.1	18.9%	110.1	3.9%	697.2	11.7%		
100.0 - 119.9	1 437.2	46.4%	1 289.6	45.3%	2 726.8	45.8%		
120.0 - 139.9	586.8	18.9%	984.4	34.6%	1 571.2	26.4%		
140.0 - 159.9	329.0	10.6%	333.6	11.7%	662.6	11.1%		
160.0 - 179.9	127.2	4.1%	114.7	4.0%	241.8	4.1%		
180.0 or above	27.3	0.9%	16.7	0.6%	44.0	0.7%		
Total	3 100.3	100.0%	2 849.1	100.0%	5 949.4	100.0%		
Mean	11	7.0	12	3.2	12	0.0		
Diastolic blood pres	sure (mmHg)							
Below 60.0	123.5	4.0%	50.1	1.8%	173.7	2.9%		
50.0 - 69.9	761.1	24.5%	394.5	13.8%	1 155.6	19.4%		
70.0 - 79.9	1 233.0	39.8%	1 028.8	36.1%	2 261.8	38.0%		
80.0 - 89.9	631.1	20.4%	901.2	31.6%	1 532.3	25.8%		
90.0 - 99.9	271.1	8.7%	366.5	12.9%	637.6	10.7%		
100.0 - 109.9	63.6	2.1%	92.2	3.2%	155.8	2.6%		
110.0 or above	16.9	0.5%	15.8	0.6%	32.7	0.5%		
Total	3 100.3	100.0%	2 849.1	100.0%	5 949.4	100.0%		
Mean	75	5.9	79	0.8	77	7.8		

Table 9.1.4a: Distribution of blood pressure\* among persons aged 15 to 84 by gender

Base: All respondents aged 15 - 84 who had participated in the health examination.

Notes: \* Blood pressure was calculated as the mean of the second and third readings with at least three minutes rest between each measurement. Figures may not add up to the total due to rounding. Both the mean SBP and mean DBP increased generally with age. The mean SBP increased from 107.7 mmHg for the 15-24 age group to 138.6 mmHg for the 65-84 age group. For DBP, its mean increased from 71.8 mmHg for those aged 15-24 to 82.2 mmHg for those in the 55-64 age group and decreased to 78.8 mmHg for those aged 65-84 (Table 9.1.4b).

	15	15-24		-34	35-	-44	45	-54	55	-64	65	-84	Total	
	No. of		No. of		No. of		No. of		No. of		No. of		No. of	
	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)		('000)		('000)		('000)	
Systolic blood p	ressure (m	mHg)												
Below 80.0	3.8	0.5%	2.0	0.2%	-	-	-	-	-	-	-	-	5.8	0.1%
80.0 - 99.9	189.3	23.6%	220.1	22.9%	181.0	17.7%	63.8	5.4%	27.8	2.6%	15.2	1.7%	697.2	11.7%
100.0 - 119.9	492.2	61.4%	585.3	60.9%	591.9	58.0%	585.2	49.5%	337.7	31.7%	134.5	14.7%	2 726.8	45.8%
120.0 - 139.9	104.7	13.1%	147.4	15.3%	195.4	19.1%	365.5	30.9%	398.6	37.4%	359.5	39.2%	1 571.2	26.4%
140.0 - 159.9	11.7	1.5%	6.5	0.7%	48.3	4.7%	134.0	11.3%	206.1	19.3%	255.9	27.9%	662.6	11.1%
160.0 - 179.9	-	-	-	-	4.5	0.4%	28.6	2.4%	78.0	7.3%	130.7	14.3%	241.8	4.1%
180.0 or above	-	-	-	-	-	-	5.9	0.5%	17.2	1.6%	20.9	2.3%	44.0	0.7%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	916.7	100.0%	5 949.4	100.0%
Mean	10	7.7	10	8.5	11	111.9 121.4			12	9.6	13	8.6	12	0.0
Diastolic blood	pressure (1	nmHg)												
Below 60.0	58.6	7.3%	35.5	3.7%	29.1	2.9%	18.9	1.6%	11.1	1.0%	20.5	2.2%	173.7	2.9%
60.0 - 69.9	262.1	32.7%	262.5	27.3%	213.7	20.9%	148.8	12.6%	131.0	12.3%	137.4	15.0%	1 155.6	19.4%
70.0 - 79.9	341.9	42.7%	462.9	48.2%	417.7	40.9%	395.6	33.4%	298.6	28.0%	345.0	37.6%	2 261.8	38.0%
80.0 - 89.9	116.2	14.5%	148.6	15.5%	235.1	23.0%	390.1	33.0%	357.1	33.5%	285.2	31.1%	1 532.3	25.8%
90.0 - 99.9	22.8	2.8%	43.0	4.5%	102.5	10.0%	167.6	14.2%	202.5	19.0%	99.1	10.8%	637.6	10.7%
100.0 - 109.9	-	-	6.8	0.7%	20.9	2.0%	42.2	3.6%	56.4	5.3%	29.4	3.2%	155.8	2.6%
110.0 or above	-	-	2.0	0.2%	2.1	0.2%	19.8	1.7%	8.8	0.8%	-	-	32.7	0.5%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	916.7	100.0%	5 949.4	100.0%
Mean	71.8 73.9		76	5.9	81	.1	82	2.2	78.8		77.8			

Table 9.1.4b: Distribution of blood pressure\* among persons aged 15 to 84 by age group

Base: All respondents aged 15 - 84 who had participated in the health examination.

Notes: \* Blood pressure were calculated as the mean of the second and third readings with at least three minutes rest between each measurement. Figures may not add up to the total due to rounding.

## 9.1.5 Hypertension

Hypertension, also known as high or raised blood pressure, is a chronic disease in which the blood pressure in the arteries is persistently elevated. It is also a risk factor of other serious health problems, including stroke, coronary heart disease, heart failure, and premature mortality and disability. Hypertension rarely causes symptoms in the early stages and many people go undiagnosed <sup>6</sup>.

The PHS collected data of both diagnosed and undiagnosed cases of hypertension through self-reporting of existing diagnosis and measurement of blood pressure respectively. In this survey, respondents were classified as having self-reported doctor-diagnosed hypertension if they answered affirmatively to the question "Have you ever been diagnosed by a doctor that you had hypertension?" Otherwise, they would be classified as having "previously undiagnosed but measured" hypertension if their systolic blood pressure  $\geq$ 140 mmHg and/or diastolic blood pressure  $\geq$  90 mmHg according to the WHO criteria<sup>6</sup>.

Overall, self-reported doctor-diagnosed hypertension was reported by 14.6% of persons aged 15-84. However, measurement of blood pressure revealed another 13.2% of persons in this age group who have hypertension by the WHO criteria, giving an overall prevalence of hypertension of 27.7% (25.5% for females and 30.1% for males). Both the prevalences of self-reported doctor-diagnosed and "previously undiagnosed but measured" hypertension increased steadily with age, with the combined prevalence increasing from 4.5% for people aged 15-24 to 64.8% for people aged 65-84 (Table 9.1.5).

	Fen	nale	Μ	ale	Total		
	No. of		No. of		No. of		
Age group / Whether had hypertension	persons	%	persons	%	persons	%	
	('000)		('000)		('000)		
15 - 24							
Yes	7.7	2.0%	28.1	6.9%	35.7	4.5%	
Self-reported doctor-diagnosed hypertension	5.9	1.5%	2.2	0.5%	8.1	1.0%	
Previously undiagnosed but measured*	1.8	0.5%	25.8	6.3%	27.6	3.4%	
No	384.6	98.0%	381.2	93.1%	765.9	95.5%	
Sub-total	392.3	100.0%	409.3	100.0%	801.6	100.0%	
25 - 34							
Yes	13.2	2.6%	40.7	8.9%	53.9	5.6%	
Self-reported doctor-diagnosed hypertension	-	-	4.2	0.9%	4.2	0.4%	
Previously undiagnosed but measured*	13.2	2.6%	36.5	8.0%	49.6	5.2%	
No	493.2	97.4%	414.3	91.1%	907.5	94.4%	
Sub-total	506.4	100.0%	455.0	100.0%	961.4	100.0%	
35 - 44							
Yes	68.3	12.2%	86.5	18.8%	154.9	15.2%	
Self-reported doctor-diagnosed hypertension	19.4	3.5%	20.3	4.4%	39.8	3.9%	
Previously undiagnosed but measured*	48.9	8.7%	66.2	14.4%	115.1	11.3%	
No	493.1	87.8%	373.3	81.2%	866.3	84.8%	
Sub-total	561.4	100.0%	459.8	100.0%	1 021.2	100.0%	
45 - 54							
Yes	148.5	23.4%	167.4	30.5%	315.9	26.7%	
Self-reported doctor-diagnosed hypertension	56.1	8.8%	68.0	12.4%	124.1	10.5%	
Previously undiagnosed but measured*	92.4	14.6%	99.4	18.1%	191.8	16.2%	
No	486.1	76.6%	381.0	69.5%	867.1	73.3%	
Sub-total	634.6	100.0%	548.4	100.0%	1 183.0	100.0%	
55 - 64							
Yes	237.5	44.2%	257.2	48.7%	494.7	46.4%	
Self-reported doctor-diagnosed hypertension	144.1	26.8%	143.8	27.2%	288.0	27.0%	
Previously undiagnosed but measured*	93.4	17.4%	113.4	21.5%	206.8	19.4%	
No	300.0	55.8%	270.8	51.3%	570.8	53.6%	
Sub-total	537.5	100.0%	528.0	100.0%	1 065.5	100.0%	
65 - 84							
Yes	314.9	67.3%	278.7	62.1%	593.6	64.8%	
Self-reported doctor-diagnosed hypertension	207.5	44.3%	194.2	43.3%	401.7	43.8%	
Previously undiagnosed but measured*	107.5	23.0%	84.4	18.8%	191.9	20.9%	
No	153.2	32.7%	169.9	37.9%	323.1	35.2%	
Sub-total	468.1	100.0%	448.6	100.0%	916.7	100.0%	
15 - 84							
Yes	790.1	25.5%	858.6	30.1%	1 648.7	27.7%	
Self-reported doctor-diagnosed hypertension	433.0	14.0%	432.8	15.2%	865.8	14.6%	
Previously undiagnosed but measured*	357.2	11.5%	425.7	14.9%	782.9	13.2%	
No	2 310.2	74.5%	1 990.5	69.9%	4 300.7	72.3%	
Total	3 100.3	100.0%	2 849.1	100.0%	5 949.4	100.0%	

# Table 9.1.5: Prevalence of hypertension among persons aged 15 to 84 by age group and gender (including self-reported doctor-diagnosed and previously undiagnosed but measured hypertension)

Base: All respondents aged 15 - 84 who had participated in the health examination.

Notes: \* Previously undiagnosed hypertension but measured systolic blood pressure  $\geq 140$  mmHg and/or diastolic blood pressure  $\geq 90$  mmHg. Figures may not add up to the total due to rounding.

#### 9.2 Biochemical Testing for Diabetes Mellitus

The PHS collected biochemical information through testing of fasting blood sample for markers of major chronic diseases, including fasting plasma glucose (FPG) and glycated haemoglobin (HbA1c) for diabetes mellitus (DM), in persons aged 15-84. Fasting blood specimen was analysed by spectrophotometry for plasma glucose, while ethylenediaminetetraacetic acid (EDTA) whole blood was analysed by ion exchange high performance liquid chromatography for HbA1c. The prevalence of DM was estimated based on blood concentration of FPG and HbA1c level, and responses collected from the questionnaire survey. The unit of blood concentration of FPG was mmol/L, while the HbA1c level was denoted in percentage.

### 9.2.1 Fasting Plasma Glucose

The PHS classified a respondent as having DM if her/his level of fasting plasma glucose is 7.0 mmol/L or above. The normal range for fasting plasma glucose is defined as below 6.1 mmol/L. A fasting plasma glucose reading that is below 7.0 mmol/L but greater than or equal to 6.1 mmol/L indicates impaired fasting glucose.

The mean values of FPG for females and males aged 15-84 were 4.9 mmol/L and 5.1 mmol/L respectively. Analysed by age group, the mean values of FPG increased with age from 4.5 mmol/L for females age 15-24 to 5.3 mmol/L for those aged 65-84 and from 4.6 mmol/L for males aged 15-24 to 5.6 mmol/L for those aged 65-84. (Table 9.2.1).

Age group	Female	Male	Total
15 - 24	4.5	4.6	4.5
25 - 34	4.6	4.7	4.6
35 - 44	4.8	5.0	4.9
45 - 54	5.0	5.3	5.1
55 - 64	5.1	5.5	5.3
65 - 84	5.3	5.6	5.4
Total	4.9	5.1	5.0

Table 9.2.1: Mean fasting plasma glucose (mmol/L) among persons aged 15 to 84 by age group and gender

Base: All respondents aged 15 - 84 who had participated in the health examination.

## 9.2.2 Glycated Haemoglobin (HbA1c)

HbA1c level represents the percentage of circulating haemoglobin to which glucose is bound. It provides an indication of the average blood glucose concentration over the three months before the blood test and is not influenced by daily fluctuations in blood glucose concentration. HbA1c is used as an indicator of diabetes management, with higher HbA1c values indicating poorer diabetes control. The American Diabetes Association (ADA) and the WHO have recommended that HbA1c can also be used as a diagnostic test for diabetes and a value of HbA1c  $\geq$  6.5% indicates diabetes <sup>7, 8</sup>. A value of less than 6.5% does not exclude diabetes diagnosed using FPG <sup>8</sup>.

The mean values of HbA1c for females and males aged 15-84 were 5.6% and 5.7% respectively. Analysed by age group, the mean values of HbA1c increased with age in both genders from 5.2% for females and males age 15-24 to 6.1% for those aged 65-84. (Table 9.2.2).

Age group	Female	Male	Total
15 - 24	5.2%	5.2%	5.2%
25 - 34	5.4%	5.4%	5.4%
35 - 44	5.5%	5.6%	5.5%
45 - 54	5.7%	5.8%	5.8%
55 - 64	5.9%	6.0%	5.9%
65 - 84	6.1%	6.1%	6.1%
Total	5.6%	5.7%	5.7%

Table 9.2.2: Mean HbA1c among persons aged 15 to 84 by age group and gender

Base: All respondents aged 15 - 84 who had participated in the health examination with valid HbA1c results.

#### 9.2.3 Diabetes Mellitus

Diabetes mellitus (DM) is a disease characterized by an elevated blood glucose level. It is due to insulin deficiency, insulin resistance or both. DM is the tenth leading cause of deaths in Hong Kong in 2015. In this survey, a respondent was classified as having "previously diagnosed DM" based on self-reported history of doctor-diagnosed DM or having DM with "no known history of DM" if she/he did not report history of doctor-diagnosed DM and had result of FPG being at least 7.0 mmol/L or HbA1c at least 6.5%. The latter case is also classified as having "undiagnosed DM". The overall prevalence of DM among persons aged 15-84 was estimated as the proportion of those having "previously diagnosed DM" or having DM but with "no known history of DM".

Among the persons aged 15-84, 8.4% had DM either because they had previously diagnosed DM or had DM but without known history of the disease. More people were unaware of their DM (4.5%) than those who had previously diagnosed DM (3.8%). In addition, another 1.0% of persons aged 15-84 had impaired fasting glucose (IFG) with FPG between 6.1 and 6.9 mmol/L. Analysed by gender, higher proportion of males (10.5%) than females (6.4%) had DM. The proportions of undiagnosed DM were 3.2% and 6.0% for females and males respectively, while the proportions of previously diagnosed DM were 3.2% and 4.6% for females and males respectively. The corresponding proportions of IFG were 0.8% and 1.3% respectively (Table 9.2.3a).

	Fem	ale	Ma	ale	Total			
	No. of		No. of		No. of			
Whether had DM	persons	%	persons	%	persons	%		
	('000)		('000)		('000)			
DM	197.3	6.4%	299.8	10.5%	497.1	8.4%		
No known history of DM*	99.2	3.2%	169.7	6.0%	268.9	4.5%		
Previously diagnosed DM	98.1	3.2%	130.2	4.6%	228.3	3.8%		
Non-DM	2 903.0	93.6%	2 549.3	89.5%	5 452.3	91.6%		
IFG §	25.3	0.8%	35.8	1.3%	61.1	1.0%		
Non IFG	2 877.7	92.8%	2 513.4	88.2%	5 391.1	90.6%		
Total	3 100.3	100.0%	2 849.1	100.0%	5 949.4	100.0%		

Table 9.2.3a: Prevalence of diabetes mellitus (including those with no known history of DM and previously diagnosed<br/>DM) among persons aged 15 to 84 by gender

Base: All respondents aged 15 - 84 who had participated in the health examination.

Notes: \* No previous history and newly diagnosed DM (fasting glucose  $\geq$  7.0 mmol/L or HbA1c  $\geq$  6.5%)

§ Impaired fasting glucose (IFG): fasting glucose 6.1-6.9 mmol/L

The prevalence of DM increased with age from 0.2% for persons aged 15-24 to 25.4% for those aged 65-84. Among persons aged between 25 and 64 who had DM, more people were not aware of their DM than those with known history of diagnosed DM. However, the opposite were observed in persons aged 15-24 and 65-84 (Table 9.2.3b).

	15-	-24	25-	-34	35-	-44	45-	-54	55.	64	65-84		Total	
Whether had DM	No. of persons ('000)	%												
DM	1.8	0.2%	4.4	0.5%	39.5	3.9%	86.9	7.3%	131.4	12.3%	233.2	25.4%	497.1	8.4%
No known history of DM*	-	-	4.4	0.5%	29.7	2.9%	57.6	4.9%	72.2	6.8%	104.9	11.4%	268.9	4.5%
Previously diagnosed DM	1.8	0.2%	-	-	9.8	1.0%	29.2	2.5%	59.1	5.5%	128.4	14.0%	228.3	3.8%
Non-DM	799.8	99.8%	957.0	99.5%	981.7	96.1%	1 096.1	92.7%	934.1	87.7%	683.5	74.6%	5 452.3	91.6%
IFG §	-	-	-	-	5.5	0.5%	14.6	1.2%	22.9	2.2%	18.1	2.0%	61.1	1.0%
Non IFG	799.8	99.8%	957.0	99.5%	976.2	95.6%	1 081.6	91.4%	911.2	85.5%	665.4	72.6%	5 391.1	90.6%
Total	801.6	100.0%	961.4	100.0%	1 021.2	100.0%	1 183.0	100.0%	1 065.5	100.0%	916.7	100.0%	5 949.4	100.0%

Table 9.2.3b: Prevalence of diabetes mellitus (including those with no known history of DM and previously diagnosedDM) among persons aged 15 to 84 by age group

Base: All respondents aged 15 - 84 who had participated in the health examination.

Notes: \* No known history and newly diagnosed DM (fasting glucose  $\geq$  7.0 mmol/L or HbA1c  $\geq$  6.5%) § Impaired fasting glucose (IFG): fasting glucose 6.1–6.9 mmol/L

#### 9.3 Biochemical Testing for Hypercholesterolaemia

Besides DM, the PHS collected biochemical information on lipid profile, including blood concentrations of total cholesterol, high density lipoprotein (HDL), low density lipoprotein (LDL) and triglyceride. The blood specimens were analysed by spectrophotometry for total cholesterol, HDL and triglyceride. LDL was calculated by using the Friedewald Formula <sup>9</sup>:

$$LDL = Total cholesterol - HDL - (Triglyceride \div 2.2)$$

where all concentrations are given in mmol/L. Since the Friedewald Formula is not applicable when plasma triglyceride concentration exceeds 4.52 mmol/L, LDL results were not calculable for subjects with this level of triglyceride concentration. The prevalence of hypercholesterolaemia was estimated based on the results of measured blood concentration of total cholesterol and responses collected from the questionnaire survey.

### 9.3.1 Lipids and Lipoproteins

Cholesterol is a type of fat which is a major component of cell membrane, bile and various hormones. Since cholesterol is insoluble in blood, it is combined and wrapped around with lipoprotein before it can be transported in the blood vessels to all parts of the body. Excess cholesterol in blood will deposit on the inner walls of the blood vessels leading to partial or complete blockage of the lumen. A person may have coronary heart disease when the coronary artery that supplies blood to the heart muscles is blocked.

Among the persons aged 15-84, the mean concentrations of total cholesterol were 5.1 mmol/L and 5.0 mmol/L for females and males respectively. The mean HDL concentrations were higher in females (1.5 mmol/L) than in males (1.3 mmol/L), while the opposite was observed for the mean triglyceride concentrations (1.1 mmol/L for females and 1.4 mmol/L for males). The mean LDL concentrations were similar between the genders (3.1 mmol/L for females and 3.2 mmol/L for males). Generally, the mean concentrations of total cholesterol, LDL and triglyceride increased with age, while the mean concentrations of HDL were stable across the age groups (Table 9.3.1a).

	Female	Male	Total	Female	Male	Total		Female	Male	Total		Female	Male	Total	
Age group	Total cholesterol* (mmol/L)			HD	HDL* (mmol/L)			LDI	LDL <sup>§,#</sup> (mmol/L)			Triglyceride <sup>+</sup> (mmol/L)			
15 - 24	4.5	4.2	4.4	1.4	1.3	1.4		2.7	2.5	2.6		0.8	0.8	0.8	
25 - 34	4.7	4.9	4.8	1.5	1.3	1.4		2.8	3.1	2.9		0.8	1.2	1.0	
35 - 44	4.9	5.1	5.0	1.4	1.2	1.3		3.0	3.3	3.1		1.0	1.4	1.2	
45 - 54	5.3	5.5	5.4	1.5	1.3	1.4		3.3	3.5	3.4		1.1	1.6	1.4	
55 - 64	5.6	5.4	5.5	1.5	1.3	1.4		3.6	3.4	3.5		1.3	1.5	1.4	
65 - 84	5.3	4.9	5.1	1.4	1.2	1.3		3.2	3.0	3.1		1.4	1.3	1.3	
Total	5.1	5.0	5.1	1.5	1.3	1.4		3.1	3.2	3.1		1.1	1.4	1.2	

Table 9.3.1a: Mean lipid and lipoproteins concentrations among persons aged 15 to 84 by age group and gender

Bases: \* All respondents aged 15 - 84 who had participated in the health examination.

§ All respondents aged 15 - 84 who had participated in the health examination with valid LDL results.

†All respondents aged 15 - 84 who had participated in the health examination with valid triglyceride results.

Note: # LDL was calculated by applying the Friedewald Formula.

## Total Cholesterol

Among the persons aged 15-84, 42.2% had total cholesterol at a borderline high or above level (total cholesterol  $\geq$  5.2 mmol/L). The proportions were similar for both genders. In general, the proportion who had total cholesterol at borderline high or above level increased with age from 15.5% for those aged 15-24 to 60.5% for those aged 55-64 and decreased to 44.0% for those aged 65-84 (Table 9.3.1b).

	Female		Mal	e	Total	
Age group / Total cholesterol level	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
15 - 24						
Borderline high or above *	79.2	20.2%	44.7	10.9%	123.9	15.5%
Normal †	313.1	79.8%	364.6	89.1%	677.7	84.5%
Sub-total	392.3	100.0%	409.3	100.0%	801.6	100.0%
25 - 34						
Borderline high or above *	110.3	21.8%	147.4	32.4%	257.7	26.8%
Normal †	396.1	78.2%	307.6	67.6%	703.7	73.2%
Sub-total	506.4	100.0%	455.0	100.0%	961.4	100.0%
35 - 44						
Borderline high or above *	187.8	33.5%	211.7	46.0%	399.5	39.1%
Normal †	373.6	66.5%	248.1	54.0%	621.7	60.9%
Sub-total	561.4	100.0%	459.8	100.0%	1 021.2	100.0%
45 - 54						
Borderline high or above *	348.7	55.0%	330.6	60.3%	679.3	57.4%
Normal †	285.9	45.0%	217.8	39.7%	503.7	42.6%
Sub-total	634.6	100.0%	548.4	100.0%	1 183.0	100.0%
55 - 64						
Borderline high or above *	352.1	65.5%	292.8	55.5%	645.0	60.5%
Normal †	185.4	34.5%	235.2	44.5%	420.5	39.5%
Sub-total	537.5	100.0%	528.0	100.0%	1 065.5	100.0%
65 - 84						
Borderline high or above *	244.8	52.3%	158.8	35.4%	403.6	44.0%
Normal †	223.3	47.7%	289.8	64.6%	513.1	56.0%
Sub-total	468.1	100.0%	448.6	100.0%	916.7	100.0%
15 - 84						
Borderline high or above *	1 323.0	42.7%	1 186.0	41.6%	2 509.0	42.2%
Normal †	1 777.3	57.3%	1 663.1	58.4%	3 440.4	57.8%
Total	3 100.3	100.0%	2 849.1	100.0%	5 949.4	100.0%

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Base: All respondents aged 15 - 84 who had participated in the health examination.

\* Borderline high or above : Total cholesterol in S.I. unit  $\geq$  5.2 mmol/L

† Normal : Total cholesterol in S.I. unit < 5.2 mmol/L

Figures may not add up to the total due to rounding.

Notes:

## High density lipoprotein (HDL)

Among the persons aged 15-84, 23.7% had low HDL concentration (i.e. HDL < 1.3 mmol/L for females and HDL < 1.0 mmol/L for males), while 30.2% reached the desirable level of HDL (i.e. HDL > 1.5 mmol/L for both genders). Analysed by gender, while more females (30.9%) in this age group had low HDL concentration than males (15.9%), desirable HDL level was also more common in females (42.6%) than in males (16.8%) (Table 9.3.1c).

	Fema	ale	Ma	Male		Total	
Age group / HDL level	No. of persons	0/	No. of persons	0/	No. of persons	0/	
	('000)	%	('000)	%	('000)	<b>%</b> 0	
15 - 24							
Low*	112.0	28.5%	34.0	8.3%	145.9	18.2%	
Normal †	132.3	33.7%	286.7	70.0%	419.0	52.3%	
Desirable ^	148.0	37.7%	88.7	21.7%	236.7	29.5%	
Sub-total	392.3	100.0%	409.3	100.0%	801.6	100.0%	
25 - 34							
Low*	137.2	27.1%	70.4	15.5%	207.6	21.6%	
Normal †	128.9	25.5%	311.7	68.5%	440.6	45.8%	
Desirable ^	240.3	47.4%	72.9	16.0%	313.2	32.6%	
Sub-total	506.4	100.0%	455.0	100.0%	961.4	100.0%	
35 - 44							
Low*	209.2	37.3%	73.9	16.1%	283.2	27.7%	
Normal †	128.7	22.9%	332.1	72.2%	460.8	45.1%	
Desirable ^	223.5	39.8%	53.7	11.7%	277.2	27.1%	
Sub-total	561.4	100.0%	459.8	100.0%	1 021.2	100.0%	
45 - 54							
Low*	172.1	27.1%	95.6	17.4%	267.7	22.6%	
Normal †	160.4	25.3%	364.5	66.5%	524.9	44.4%	
Desirable ^	302.1	47.6%	88.3	16.1%	390.4	33.0%	
Sub-total	634.6	100.0%	548.4	100.0%	1 183.0	100.0%	
55 - 64							
Low*	147.9	27.5%	102.0	19.3%	249.9	23.5%	
Normal †	161.1	30.0%	322.3	61.0%	483.4	45.4%	
Desirable ^	228.5	42.5%	103.8	19.7%	332.2	31.2%	
Sub-total	537.5	100.0%	528.0	100.0%	1 065.5	100.0%	
65 - 84							
Low*	179.5	38.4%	77.6	17.3%	257.1	28.0%	
Normal †	110.7	23.7%	299.8	66.8%	410.5	44.8%	
Desirable ^	177.9	38.0%	71.2	15.9%	249.1	27.2%	
Sub-total	468.1	100.0%	448.6	100.0%	916.7	100.0%	
15 - 84							
Low*	958.0	30.9%	453.5	15.9%	1 411.4	23.7%	
Normal †	822.1	26.5%	1 917.1	67.3%	2 739.2	46.0%	
Desirable ^	1 320.3	42.6%	478.5	16.8%	1 798.8	30.2%	
Total	3 100.3	100.0%	2 849.1	100.0%	5 949.4	100.0%	

Table 9.3.1c: Level of HD	among persons aged 1	5 to 84 by age group	and gender
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Base: All respondents aged 15 - 84 who had participated in the health examination.

Notes: \* Low: HDL in S.I. unit < 1.0 mmol/L (male) or < 1.3 mmol/L (female).

 $\dagger$  Normal: HDL in S.I. unit  $\geq$  1.0 mmol/L and  $\leq$  1.5 mmol/L (male) or  $\geq$  1.3 mmol/L and  $\leq$  1.5 mmol/L (female).

^ Desirable : HDL in S.I. unit > 1.5 mmol/L.

## Low density lipoprotein (LDL)

Among the persons aged 15-84, 35.0% of persons aged 15-84 had LDL at borderline high or above level (i.e.  $LDL \ge 3.4 \text{ mmol/L}$ ). Analysed by gender, 32.5% of females and 37.6% of males were at borderline high or above level of LDL. Analysed by age group, the proportion of LDL at borderline high or above level generally increased with age from 12.7% for those aged 15-24 to 51.5% for those aged 55-64 and then decreased to 36.1% for those aged 65-84 (Table 9.3.1d).

	Female		Male		Total	
Age group / LDL <sup>#</sup> level	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
15 - 24						
Borderline high or above *	54.3	13.9%	47.5	11.6%	101.8	12.7%
Normal †	338.0	86.1%	361.8	88.4%	699.8	87.3%
Not calculable ^	-	-	-	-	-	-
Sub-total	392.3	100.0%	409.3	100.0%	801.6	100.0%
25 - 34						
Borderline high or above *	77.0	15.2%	132.0	29.0%	209.1	21.7%
Normal †	429.4	84.8%	314.1	69.0%	743.4	77.3%
Not calculable ^	-	-	8.9	2.0%	8.9	0.9%
Sub-total	506.4	100.0%	455.0	100.0%	961.4	100.0%
35 - 44						
Borderline high or above *	133.4	23.8%	193.6	42.1%	327.0	32.0%
Normal †	428.0	76.2%	263.8	57.4%	691.8	67.7%
Not calculable ^	-	-	2.3	0.5%	2.3	0.2%
Sub-total	561.4	100.0%	459.8	100.0%	1 021.2	100.0%
45 - 54						
Borderline high or above *	271.8	42.8%	291.4	53.1%	563.2	47.6%
Normal †	362.8	57.2%	239.1	43.6%	601.9	50.9%
Not calculable ^	-	-	17.9	3.3%	17.9	1.5%
Sub-total	634.6	100.0%	548.4	100.0%	1 183.0	100.0%
55 - 64						
Borderline high or above *	287.0	53.4%	261.6	49.5%	548.6	51.5%
Normal †	247.7	46.1%	253.4	48.0%	501.1	47.0%
Not calculable ^	2.8	0.5%	13.0	2.5%	15.8	1.5%
Sub-total	537.5	100.0%	528.0	100.0%	1 065.5	100.0%
65 - 84						
Borderline high or above *	185.4	39.6%	145.2	32.4%	330.6	36.1%
Normal †	282.7	60.4%	303.4	67.6%	586.1	63.9%
Not calculable ^	-	-	-	-	-	-
Sub-total	468.1	100.0%	448.6	100.0%	916.7	100.0%
15 - 84						
Borderline high or above *	1 009.0	32.5%	1 071.3	37.6%	2 080.3	35.0%
Normal †	2 088.5	67.4%	1 735.7	60.9%	3 824.2	64.3%
Not calculable ^	2.8	0.1%	42.1	1.5%	44.9	0.8%
Total	3 100.3	100.0%	2 849.1	100.0%	5 949.4	100.0%

Table 9.3.1d: Level of LD	among persons aged 1	5 to 84 by age group a	nd gender
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Base: All respondents aged 15 - 84 who had participated in the health examination.

# LDL was calculated by applying the Friedewald Formula. Notes:

\* Borderline high or above: Calculated LDL in S.I. unit  $\geq$  3.4 mmol/L.

† Normal :

Calculated LDL in S.I. unit < 3.4 mmol/L. ^ Not calculable : The Friedewald Formula cannot be applied to subjects with plasma triglyceride over 4.52 mmol/L.

## **Triglyceride**

Among the persons aged 15-84, 16.8% had triglyceride concentration at borderline high or above level (i.e. triglyceride  $\geq 1.7 \text{ mmol/L}$ ). Analysed by gender, more males (21.7%) had their triglyceride at borderline high or above level than females (12.4%). Analysed by age group, in general, the proportion of triglyceride at borderline high or above level increased with age from 3.1% for those aged 15-24 to 24.4% for those aged 55-64 and then decreased to 20.7% for those aged 65-84 (Table 9.3.1e).

	Fema	Female		le	Total	
Age group / Triglyceride level	No. of persons	0/	No. of persons	0/	No. of persons	0/
	('000)	%	('000)	%	('000)	<b>%</b> 0
15 - 24						
Borderline high or above *	11.5	2.9%	13.4	3.3%	24.8	3.1%
Normal †	380.8	97.1%	395.9	96.7%	776.8	96.9%
Unknown / missing	-	-	-	-	-	-
Sub-total	392.3	100.0%	409.3	100.0%	801.6	100.0%
25 - 34						
Borderline high or above *	20.9	4.1%	79.3	17.4%	100.2	10.4%
Normal †	485.5	95.9%	375.7	82.6%	861.2	89.6%
Unknown / missing	-	-	-	-	-	-
Sub-total	506.4	100.0%	455.0	100.0%	961.4	100.0%
35 - 44						
Borderline high or above *	49.4	8.8%	119.7	26.0%	169.1	16.6%
Normal †	512.0	91.2%	340.1	74.0%	852.1	83.4%
Unknown / missing	-	-	-	-	-	-
Sub-total	561.4	100.0%	459.8	100.0%	1 021.2	100.0%
45 - 54						
Borderline high or above *	79.3	12.5%	179.0	32.6%	258.3	21.8%
Normal †	555.3	87.5%	369.4	67.4%	924.7	78.2%
Unknown / missing	-	-	-	-	-	-
Sub-total	634.6	100.0%	548.4	100.0%	1 183.0	100.0%
55 - 64						
Borderline high or above *	116.3	21.6%	144.1	27.3%	260.4	24.4%
Normal †	421.2	78.4%	380.7	72.1%	801.9	75.3%
Unknown / missing	-	-	3.2	0.6%	3.2	0.3%
Sub-total	537.5	100.0%	528.0	100.0%	1 065.5	100.0%
65 - 84						
Borderline high or above *	105.6	22.6%	83.9	18.7%	189.4	20.7%
Normal †	362.5	77.4%	364.7	81.3%	727.3	79.3%
Unknown / missing	-	-	-	-	-	-
Sub-total	468.1	100.0%	448.6	100.0%	916.7	100.0%
15 - 84						
Borderline high or above *	382.9	12.4%	619.4	21.7%	1 002.3	16.8%
Normal †	2 717.4	87.6%	2 226.5	78.1%	4 943.9	83.1%
Unknown / missing	-	-	3.2	0.1%	3.2	0.1%
Total	3 100.3	100.0%	2 849.1	100.0%	5 949.4	100.0%

Table 9.3.1e: Level of triglyceride among persons aged 15 to 84 by age group and gender

Base: All respondents aged 15 - 84 who had participated in the health examination.

Notes: \*Borderline high or above : Triglyceride in S.I. unit  $\geq$  1.7 mmol/L.

† Normal : Triglyceride in S.I. unit < 1.7 mmol/L

## 9.3.2 Hypercholesterolaemia

Hypercholesterolaemia refers to the condition in which the level of cholesterol in blood is higher than normal range. Respondents were classified as having previously known history of hypercholesterolaemia if they answered affirmatively to the question "Have you ever been diagnosed by a doctor that your blood cholesterol level was high?" Respondents with known history of raised blood cholesterol were also asked whether they were currently taking prescribed medications to lower their blood cholesterol level. In addition, those without history of hypercholesterolaemia could be classified as having no known history with raised total cholesterol if their total cholesterol  $\geq 5.2$  mmol/L.

Among persons aged 15-84, 49.5% had ever been diagnosed with hypercholesterolaemia. However, 70.2% of those with the condition, i.e. 34.8% of persons aged 15-84, were unaware of their condition. The prevalence of hypercholesterolaemia was higher in males (50.3%) than in females (48.8%) among persons aged 15-84. The proportions of persons who had the condition but being unaware of it were similar between the genders. Analysed by age group, the prevalence of hypercholesterolaemia generally increased with age with the highest prevalence observed in the age group 55-64 in both genders (75.0% in females and 68.9% in males) (Table 9.3.2).

	Fen	nale	Male		Total	
-	No. of		No. of		No. of	
Age Group / Whether had hypercholesterolaemia	persons	%	persons	%	persons	%
	('000)		('000)		('000)	
15 - 24						
Ever had hypercholesterolaemia	81.3	20.7%	44.7	10.9%	125.9	15.7%
No known history with raised total cholesterol $*$	79.2	20.2%	42.4	10.4%	121.7	15.2%
Previously known history without current drug treatment $\dagger$	-	-	2.2	0.5%	2.2	0.3%
Previously known history with current drug treatment $^{\wedge}$	-	-	-	-	-	-
Previously known history with normal cholesterol $\#$	2.0	0.5%	-	-	2.0	0.3%
Never had hypercholesterolaemia	311.0	79.3%	364.6	89.1%	675.7	84.3%
Sub-total	392.3	100.0%	409.3	100.0%	801.6	100.0%
25 - 34						
Ever had hypercholesterolaemia	116.9	23.1%	147.4	32.4%	264.3	27.5%
No known history with raised total cholesterol *	106.3	21.0%	135.4	29.7%	241.6	25.1%
Previously known history without current drug treatment $\dagger$	2.0	0.4%	12.1	2.6%	14.1	1.5%
Previously known history with current drug treatment ^	2.0	0.4%	-	-	2.0	0.2%
Previously known history with normal cholesterol #	6.5	1.3%	-	-	6.5	0.7%
Never had hypercholesterolaemia	389.5	76.9%	307.6	67.6%	697.1	72.5%
Sub-total	506.4	100.0%	455.0	100.0%	961.4	100.0%
35 – 44						
Ever had hypercholesterolaemia	199.8	35.6%	224.4	48.8%	424.2	41.5%
No known history with raised total cholesterol *	166.1	29.6%	170.2	37.0%	336.4	32.9%
Previously known history without current drug treatment $\dag$	21.7	3.9%	39.3	8.5%	61.0	6.0%
Previously known history with current drug treatment ^	-	-	2.1	0.5%	2.1	0.2%
Previously known history with normal cholesterol #	12.0	2.1%	12.8	2.8%	24.8	2.4%
Never had hypercholesterolaemia	361.6	64.4%	235.4	51.2%	597.0	58.5%
Sub-total	561.4	100.0%	459.8	100.0%	1 021.2	100.0%
45 – 54						
Ever had hypercholesterolaemia	364.8	57.5%	370.6	67.6%	735.4	62.2%
No known history with raised total cholesterol *	299.4	47.2%	278.3	50.7%	577.7	48.8%
Previously known history without current drug treatment $\dagger$	44.1	6.9%	40.3	7.4%	84.4	7.1%
Previously known history with current drug treatment ^	5.2	0.8%	12.0	2.2%	17.2	1.5%
Previously known history with normal cholesterol #	16.1	2.5%	40.0	7.3%	56.1	4.7%
Never had hypercholesterolaemia	269.8	42.5%	177.8	32.4%	447.6	37.8%
Sub-total	634.6	100.0%	548.4	100.0%	1 183.0	100.0%
55 - 64						
Ever had hypercholesterolaemia	403.0	75.0%	364.1	68.9%	767.0	72.0%
No known history with raised total cholesterol *	249.7	46.5%	240.5	45.6%	490.2	46.0%
Previously known history without current drug treatment †	76.4	14.2%	36.9	7.0%	113.3	10.6%
Previously known history with current drug treatment ^	26.0	4.8%	15.4	2.9%	41.4	3.9%
Previously known history with normal cholesterol #	50.9	9.5%	71.2	13.5%	122.1	11.5%
Never had hypercholesterolaemia	134.5	25.0%	163.9	31.1%	298.5	28.0%
Sub-total	537.5	100.0%	528.0	100.0%	1 065.5	100.0%

## Table 9.3.2: Prevalence of hypercholesterolaemia among persons aged 15 to 84 by age group and gender

(To be continued)

#### Table 9.3.2: Prevalence of hypercholesterolaemia among persons aged 15 to 84 by age group and gender (continued)

	Fen	nale	M	ale	То	tal
-	No. of		No. of		No. of	
Prevalence of hypercholesterolaemia	persons	%	persons	%	persons	%
	('000)		('000)		('000)	
65 - 84						
Ever had hypercholesterolaemia	347.4	74.2%	282.1	62.9%	629.5	68.7%
No known history with raised total cholesterol *	176.4	37.7%	124.6	27.8%	301.0	32.8%
Previously known history without current drug treatment $\dagger$	30.3	6.5%	24.3	5.4%	54.7	6.0%
Previously known history with current drug treatment $^{$	38.1	8.1%	9.8	2.2%	47.9	5.2%
Previously known history with normal cholesterol #	102.6	21.9%	123.3	27.5%	225.8	24.6%
Never had hypercholesterolaemia	120.7	25.8%	166.5	37.1%	287.2	31.3%
Sub-total	468.1	100.0%	448.6	100.0%	916.7	100.0%
15 - 84						
Ever had hypercholesterolaemia	1 513.1	48.8%	1 433.2	50.3%	2 946.3	49.5%
No known history with raised total cholesterol *	1 077.1	34.7%	991.4	34.8%	2 068.6	34.8%
Previously known history without current drug treatment †	174.5	5.6%	155.2	5.4%	329.7	5.5%
Previously known history with current drug treatment $^{$	71.4	2.3%	39.3	1.4%	110.7	1.9%
Previously known history with normal cholesterol #	190.1	6.1%	247.3	8.7%	437.3	7.4%
Never had hypercholesterolaemia	1 587.2	51.2%	1 415.9	49.7%	3 003.1	50.5%
Total	3 100.3	100.0%	2 849.1	100.0%	5 949.4	100.0%

Base: All respondents aged 15 - 84 who had participated in the health examination.

\*No history of doctor-diagnosed hypercholesterolaemia and total cholesterol  $\geq$  5.2 mmol/L.

† Doctor-diagnosed hypercholesterolaemia, total cholesterol ≥ 5.2 mmol/L and without current doctor-prescribed drug treatment.

^ Doctor-diagnosed hypercholesterolaemia, total cholesterol  $\geq$  5.2 mmol/L and with current doctor-prescribed drug treatment.

# Doctor-diagnosed hypercholesterolaemia and total cholesterol < 5.2 mmol/L.

Figures may not add up to the total due to rounding.

Notes:

#### 9.4 Biochemical Testing for Sodium and Potassium Intake

Sodium and potassium intakes have been associated with high blood pressure and cardiovascular disease. They exist naturally in a variety of foods. Sodium is found naturally in milk, cream and eggs, while potassium-rich foods include beans and peas, nuts, vegetables such as spinach, cabbage and parsley, and fruits such as bananas, papayas and dates <sup>10</sup>. In addition, sodium is part of dietary salt which is commonly added when cooking and at the table, and is also found in processed foods, such as bread, processed meats like bacon, snack foods such as popcorn, as well as in condiments such as soy sauce and stock cube. Processing reduces the amount of potassium in many food products.

#### 9.4.1 Sodium Intake

The WHO recommended a reduction in sodium intake to reduce blood pressure and risk of cardiovascular disease, stroke and coronary heart disease in adults. The recommended level in adults is below 2 grams (g) of sodium or below 5 g of salt (also known as sodium chloride) per day<sup>11</sup>.

In healthy individuals, nearly 100% of ingested sodium is absorbed during digestion, and urinary excretion is the primary mechanism for maintaining sodium balance. Even in hot, humid climates, there are only minimal loses through faeces and sweat<sup>11</sup>. The most reliable method of estimating dietary salt intake is to measure sodium excretion from 24-hour urine collection, a method endorsed by the WHO<sup>12, 13</sup> and adopted in this survey.

Among the persons aged 15-84, the mean 24-hour urinary sodium excretion was 135.6 mmol and 167.1 mmol for females and males respectively. Analysed by age group, the mean 24-hour sodium excretion was the highest at 147.4 mmol for females in the age group 45-54 and at 181.8 mmol for males in the age group 35-44 (Table 9.4.1a).

Age group	Female	Male	Total
15 - 24	134.3	157.7	146.3
25 - 34	136.8	169.1	152.0
35 - 44	145.1	181.8	161.7
45 - 54	147.4	177.1	161.2
55 - 64	128.8	165.2	146.7
65 - 84	115.6	148.1	131.5
Total	135.6	167.1	150.6

Table 9.4.1a: Mean 24-hour urinary sodium excretion (mmol) among persons aged 15 to 84 by age group and gender

Base: All respondents aged 15 - 84 who had participated in the health examination with valid urinary sodium results.

Note: One mmol of sodium (Na) is equivalent to 0.0585 grams of salt (NaCl).

In this survey, the amount of 24-hour urinary sodium excretion in mmol was converted into salt intake in gram by multiplying a factor 0.0585 because one mmol of sodium is equivalent to 0.0585 g of salt in sodium content. That is, approximately 17.1 mmol of sodium is equivalent to 1.0 g of salt in sodium content.

Among the persons aged 15-84, the mean values of dietary salt intake were estimated at 7.9 g per day and 9.8 g per day for females and males respectively. For females, the highest mean daily salt intake was in age group 45-54 (8.6 g per day), while the lowest mean daily salt intake was in age group 65-84 (6.8 g per day). For males, the highest mean daily salt intake was in age group 35-44 (10.6 g per day), while the lowest mean daily salt intake was in age group 35-44 (10.6 g per day), while the lowest mean daily salt intake was in age group 65-84 (8.7 g per day) (Table 9.4.1b).

Age group	Female	Male	Total
15 - 24	7.9	9.2	8.6
25 - 34	8.0	9.9	8.9
35 - 44	8.5	10.6	9.5
45 - 54	8.6	10.4	9.4
55 - 64	7.5	9.7	8.6
65 - 84	6.8	8.7	7.7
Total	7.9	9.8	8.8

Table 9.4.1b: Mean daily salt intake (gram) among persons aged 15 to 84 by age group and gender

Base: All respondents aged 15 - 84 who had participated in the health examination with valid urinary sodium results.

Among the persons aged 15-84, 86.3% had dietary salt intake above the WHO recommended daily limit of less than 5 g per day. Analysed by gender, 82.2% of females and 90.8% of males aged 15-84 had dietary salt intake at 5 g or more per day. Analysed by age group, the proportion of persons who had dietary salt intake at 5 g or more per day was the lowest at 79.2% for age group 65-84 age group and the highest at 90.7% for age group 45-54. (Table 9.4.1c)

	Fen	nale	Male		Total	
	No. of		No. of		No. of	
	persons	%	persons	%	persons	%
Age group / Salt intake level	('000)		('000)		('000)	
15 - 24						
Salt intake $\geq$ 5g per day	323.6	82.5%	362.3	88.5%	685.9	85.6%
Salt intake < 5g per day	68.7	17.5%	47.0	11.5%	115.7	14.4%
Unknown / missing	-	-	-	-	-	-
Sub-total	392.3	100.0%	409.3	100.0%	801.6	100.0%
25 - 34						
Salt intake $\geq$ 5g per day	428.9	84.7%	399.5	87.8%	828.3	86.2%
Salt intake < 5g per day	77.5	15.3%	50.4	11.1%	127.9	13.3%
Unknown / missing	-	-	5.1	1.1%	5.1	0.5%
Sub-total	506.4	100.0%	455.0	100.0%	961.4	100.0%
35 - 44						
Salt intake $\geq$ 5g per day	470.0	83.7%	432.8	94.1%	902.8	88.4%
Salt intake < 5g per day	87.5	15.6%	27.0	5.9%	114.5	11.2%
Unknown / missing	3.9	0.7%	-	-	3.9	0.4%
Sub-total	561.4	100.0%	459.8	100.0%	1 021.2	100.0%
45 - 54						
Salt intake $\geq$ 5g per day	557.3	87.8%	515.2	93.9%	1 072.5	90.7%
Salt intake < 5g per day	77.3	12.2%	33.2	6.1%	110.5	9.3%
Unknown / missing	-	-	-	-	-	-
Sub-total	634.6	100.0%	548.4	100.0%	1 183.0	100.0%
55 - 64						
Salt intake $\geq$ 5g per day	431.9	80.4%	488.4	92.5%	920.3	86.4%
Salt intake < 5g per day	105.6	19.6%	28.6	5.4%	134.2	12.6%
Unknown / missing	-	-	11.0	2.1%	11.0	1.0%
Sub-total	537.5	100.0%	528.0	100.0%	1 065.5	100.0%
65 - 84						
Salt intake $\geq$ 5g per day	336.4	71.9%	389.3	86.8%	725.8	79.2%
Salt intake < 5g per day	125.8	26.9%	53.5	11.9%	179.2	19.6%
Unknown / missing	5.9	1.3%	5.8	1.3%	11.7	1.3%
Sub-total	468.1	100.0%	448.6	100.0%	916.7	100.0%
15 - 84						
Salt intake $\geq$ 5g per day	2 548.2	82.2%	2 587.5	90.8%	5 135.7	86.3%
Salt intake < 5g per day	542.3	17.5%	239.6	8.4%	782.0	13.1%
Unknown / missing	9.8	0.3%	21.9	0.8%	31.7	0.5%
Total	3 100.3	100.0%	2 849.1	100.0%	5 949.4	100.0%

 Table 9.4.1c: Level of salt intake among persons aged 15 to 84 by age group and gender

Base: All respondents aged 15 - 84 who had participated in the health examination with valid urinary sodium results.

Analysed by frequency of eating-out for breakfast, lunch or dinner among persons aged 15-84, the proportion of high salt intake (5 g or more per day) increased with increasing frequency of eating-out from 80.7% for persons eating out less than once per week with mean salt intake of 8.0 g per day to 89.6% for persons eating out six times or more per week with mean salt intake of 9.3 g per day (Table 9.4.1d).

	Eating-ou once pe	Eating-out less than once per week		Eating-out 1-3 times per week		t 4-5 times week	Eating-out more p	6 times or er week	То	tal
	No. of		No. of		No. of		No. of		No. of	
Salt intake level	persons	%	persons	%	persons	%	persons	%	persons	%
	(000)		(000)		(000)		(000)		(000)	
Salt intake $\geq$ 5g per day	726.9	80.7%	882.8	82.2%	799.6	88.9%	2 726.4	89.6%	5 135.7	86.8%
Salt intake < 5g per day	173.4	19.3%	191.5	17.8%	99.7	11.1%	317.4	10.4%	782.0	13.2%
Total	900.3	100.0%	1 074.3	100.0%	899.3	100.0%	3 043.8	100.0%	5 917.7	100.0%
Mean (g per day)	er day) 8.0 8.2 8.6		.6	9.3		8.8				

Table 9.4.1d: Level of salt intake among persons aged 15 to 84 by frequency of eating-out

Base: All respondents aged 15 - 84 who had participated in the health examination with valid urinary sodium results.

Note: Figures may not add up to the total due to rounding.

Analysed by frequency of consuming preserved vegetables, the percentage of persons with high salt intake (5 g or more per day) were relatively higher for persons eating preserved vegetables at least 5 times per week than for persons eating preserved vegetables less than 5 times per week (Table 9.4.1e).

Table 9.4.1e: Level of salt intake among persons aged 15 to 84 by frequency of consuming preserved vegetables

	Less the per v	an once week	1-4 per	times week	5-6 t per v	imes week	7 times per	or more week	Don't	know	To	tal
Salt intake level	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Salt intake $\geq$ 5g per day	4 129.1	86.6%	939.4	87.4%	31.6	100.0%	24.8	89.7%	10.7	67.0%	5 135.7	86.8%
Salt intake < 5g per day	638.4	13.4%	135.4	12.6%	-	-	2.8	10.3%	5.3	33.0%	782.0	13.2%
Total	4 767.6	100.0%	1 074.8	100.0%	31.6	100.0%	27.6	100.0%	16.0	100.0%	5 917.7	100.0%
Mean (g per day)	8	.8	8	.9	10	).7	8	.3	5	.4	8	.8

Base: All respondents aged 15 - 84 who had participated in the health examination with valid urinary sodium results.

#### 9.4.2 Potassium Intake

The WHO recommended an increase in potassium intake from food to reduce blood pressure and risk of cardiovascular disease, stroke and coronary heart disease in adults. The WHO suggested a potassium intake of at least 90 mmol/day (3.5 g/day) for adults <sup>14</sup>.

Normally, most ingested potassium is excreted via the urine. Under conditions of extreme heat and intense physical activity that result in a high sweat production, potassium losses in sweat are increased and appreciable. WHO estimated that urinary potassium excretion was approximately 77% of intake, and therefore a factor of 1.30 was used to convert urinary potassium excretion to potassium intake <sup>14, 15</sup>.

In this survey, the average daily intake of potassium was estimated through measurement of 24-hour urinary potassium excretion using the conversion factor of 1.3 (one mmol of potassium = 0.039 g of potassium and daily potassium intake = 24-hour urinary potassium excretion × 1.3).

Among the persons aged 15-84, the estimated mean daily potassium intake were 2.2 g and 2.3 g for females and males respectively. When compared to other persons in this age group, persons aged 35-64 had relatively higher mean daily potassium intake of 2.4 g (Table 9.4.2a).

Age group	Female	Male	Total
15 - 24	1.9	1.9	1.9
25 - 34	2.1	2.3	2.2
35 - 44	2.4	2.4	2.4
45 - 54	2.4	2.4	2.4
55 - 64	2.4	2.5	2.4
65 - 84	2.1	2.4	2.2
Total	2.2	2.3	2.3

Table 9.4.2a: Mean daily potassium intake (gram) among persons aged 15 to 84 by age group and gender

Base: All respondents aged 15 - 84 who had participated in the health examination with valid urine test.

An overwhelming majority of the population aged 15-84 had average potassium intake below the recommended amount of 3.5 g per day. Among persons in this age group, 91.5% had potassium intake less than 3.5 g per day. Analysed by gender, 92.5% of females and 90.5% of males had potassium intake less than 3.5 g per day. Analysed by age group, the proportion of inadequate potassium intake (i.e. less than 3.5 g per day) was the highest among persons aged 15-24 (97.6%) (Table 9.4.2b).

	Fen	nale	Μ	ale	То	tal
	No. of		No. of		No. of	
Age group/Potassium intake level	persons	%	persons	%	persons	%
	('000)		('000)		('000)	
15 - 24						
Potassium intake < 3.5g per day	382.0	97.4%	400.3	97.8%	782.3	97.6%
Potassium intake $\geq$ 3.5g per day	10.3	2.6%	9.0	2.2%	19.3	2.4%
Sub-total	392.3	100.0%	409.3	100.0%	801.6	100.0%
25 - 34						
Potassium intake < 3.5g per day	471.8	93.2%	397.0	87.2%	868.8	90.4%
Potassium intake $\geq$ 3.5g per day	34.6	6.8%	58.0	12.8%	92.6	9.6%
Sub-total	506.4	100.0%	455.0	100.0%	961.4	100.0%
35 - 44						
Potassium intake < 3.5g per day	505.6	90.1%	410.9	89.4%	916.6	89.8%
Potassium intake $\geq$ 3.5g per day	55.8	9.9%	48.9	10.6%	104.6	10.2%
Sub-total	561.4	100.0%	459.8	100.0%	1 021.2	100.0%
45 - 54						
Potassium intake < 3.5g per day	562.4	88.6%	499.3	91.1%	1 061.7	89.7%
Potassium intake $\geq$ 3.5g per day	72.2	11.4%	49.1	8.9%	121.3	10.3%
Sub-total	634.6	100.0%	548.4	100.0%	1 183.0	100.0%
55 - 64						
Potassium intake < 3.5g per day	496.6	92.4%	471.4	89.3%	968.0	90.8%
Potassium intake $\geq$ 3.5g per day	40.9	7.6%	56.6	10.7%	97.5	9.2%
Sub-total	537.5	100.0%	528.0	100.0%	1 065.5	100.0%
65 - 84						
Potassium intake < 3.5g per day	449.7	96.1%	398.9	88.9%	848.6	92.6%
Potassium intake $\geq$ 3.5g per day	18.4	3.9%	49.7	11.1%	68.1	7.4%
Sub-total	468.1	100.0%	448.6	100.0%	916.7	100.0%
15 - 84						
Potassium intake < 3.5g per day	2 868.0	92.5%	2 577.9	90.5%	5 445.9	91.5%
Potassium intake $\geq$ 3.5g per day	232.3	7.5%	271.2	9.5%	503.5	8.5%
Total	3 100.3	100.0%	2 849.1	100.0%	5 949.4	100.0%

Table 9.4.2b: Level of potassium intake among persons aged 15 to 84 by age group and gender

Base: All respondents aged 15 - 84 who had participated in the health examination with valid urine test.

Analysed by level of average daily fruit and vegetables intake, 91.8% of persons eating less than five servings of fruit and vegetables on average per day had potassium intake of less than 3.5 g per day. In contrast, 86.9% of those consuming at least five servings of fruit and vegetables on average per day had inadequate potassium intake as recommended by the WHO. The corresponding mean values of daily potassium intake were 2.3 g and 2.4 g for those consuming less than and at least five servings of fruit and vegetables on average per day respectively (Table 9.4.2c).

	Less t serving	han 5 s a day	5 ser or mor	vings e a day	Don't	know	То	tal
	No. of		No. of		No. of		No. of	
Potassium intake level	persons	%	persons	%	persons	%	persons	%
	('000)		('000)		('000)		('000)	
Potassium intake < 3.5g per day	5 121.6	91.8%	321.6	86.9%	2.7	100.0%	5 445.9	91.5%
Potassium intake $\geq$ 3.5g per day	455.2	8.2%	48.3	13.1%	-	-	503.5	8.5%
Total	5 576.8	100.0%	369.9	100.0%	2.7	100.0%	5 949.4	100.0%
Mean (g per day)	2.	3	2	.4	0	.9	2.	3

Table 9.4.2c: Level of potassium intake among persons aged 15 to 84 by level of fruit and vegetables intake

Base: All respondents aged 15 - 84 who had participated in the health examination with valid urine test.

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## Chapter 10 Risk of Cardiovascular Disease

Cardiovascular diseases (CVDs) refer to a broad spectrum of diseases that affects the heart and blood vessels. CVDs include coronary heart disease (CHD), such as angina and myocardial infarction (commonly known as heart attack), stroke, heart failure, hypertensive heart disease, rheumatic heart disease, cardiomyopathy, heart arrhythmia, congenital heart disease, valvular heart disease, carditis, aortic aneurysms, peripheral artery disease and venous thrombosis. Heart diseases and cerebrovascular disease are the third and fourth leading causes of death in Hong Kong respectively. Smoking, hypertension, diabetes mellitus and raised blood cholesterol are well-known risk factors for CVD.

Risk prediction models were developed to quantify the risks of CVD over the next 10 years. CVD risk prediction is important for prevention of CVD events because it enables the health professionals in primary health care to identify individuals in the community who are at high-risk of CVD to treat their risk factors early, such as high blood pressure and high blood lipids, increase their health awareness and, if necessary, refer them for appropriate treatment. This approach will improve the efficiency of primary prevention strategies. Up to date, there is no CVD risk prediction model developed specifically for the general population in Hong Kong. In this survey, we adopted the widely used Framingham risk model for general CVD risks<sup>1</sup> to predict the risk of CVD over the next 10 years in the general adult population aged 30-74. However, as with other models, the Framingham risk model has its strengths and limitations and results of predicted risks from this model need to be interpreted with caution.

Snapshot of Population's Risk of Cardiovascular Disease (	CVD)	(for persons	aged 30 to 7	74)
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Indicator	Female	Male	Overall
CVD risk $^{\dagger} \ge 20\%$ over the next 10 years predicted by the Framingham risk model $^*$	5.1%	29.1%	16.4%

Notes: † CVD events include coronary heart diseases (CHD), such as angina and myocardial infarction, stroke, peripheral artery disease and heart failure.

\* All respondents aged 30 - 74 who had participated in the health examination.

### 10.1 Risk of Cardiovascular Disease over 10 Years Predicted by Framingham Risk Model

The Framingham Heart Study developed several risk models to predict the risk of cardiovascular events. The most updated model developed from the Framingham Heart Study Cohort was the Framingham model published in 2008 to predict the CVD risks in general population over the next 10 years for use in primary care <sup>1</sup>. The cardiovascular outcomes included coronary heart disease (CHD), stroke, peripheral artery disease or heart failure and the updated risk model adjusted for patients already on antihypertensive therapy. Sex-specific multivariable risk functions were derived that incorporated age, habit of smoking, total and high-density lipoprotein cholesterol, systolic blood pressure, treatment for hypertension and diabetes status.

The Framingham risk model was developed in a cohort of general population in the United States and Caucasians were dominant in this cohort. Previous risk prediction models developed from the Framingham cohort had been reported to overestimate the CHD risk in Chinese population <sup>2-5</sup>. A recent study using a Hong Kong Chinese cohort concluded that the Framingham CVD risk model can be applied to the Chinese population but requires recalibration in men<sup>6</sup>.

Among persons aged 30-74, the mean CVD risk over the next 10 years predicted by the Framingham risk model was 10.6%. That is, on average, there would be 106 persons who would have CVD covered by the Framingham risk model among every 1 000 persons aged 30 to 74 over the next 10 years. The corresponding mean CVD risks for females and males were 6.2% and 15.5% respectively. The mean CVD risks increased with age from 1.5% among females aged 30-44 to 15.7% among females aged 65-74, and from 4.1% among males aged 30-44 to 33.2% among males aged 65-74 (Table 10.1a).

Age group	Female	Male	Total
30 - 44	1.5%	4.1%	2.7%
45 - 54	4.7%	11.7%	8.0%
55 - 64	8.9%	23.0%	15.9%
65 - 74	15.7%	33.2%	24.0%
30 - 74	6.2%	15.5%	10.6%

 Table 10.1a: Mean Framingham 10-year cardiovascular disease risk among persons aged 30 to 74 by age group and gender

Base: All respondents aged 30 - 74 who had participated in the health examination.

The risk of cardiovascular events over the next 10 years are classified into low-risk (CVD risk  $\leq$  10%), medium-risk (CVD risk  $\geq$  10% and < 20%) and high-risk (CVD risk  $\geq$  20%) groups. Among the persons aged 30-74, 16.4% were classified as high-risk, 18.3% medium-risk and 65.4% low-risk according to the Framingham risk model. Analysed by sex, 5.1% of females and 29.1% of males were classified as high-risk. Analysed by age group, the proportion of persons classified as high-risk increased with age in each sex from 0% among females aged 30-44 to 24.0% among females aged 65-74 and from 0.7% among males aged 30-44 to 84.9% among males aged 65-74 (Table 10.1b).

	Fer	nale	Μ	lale	Te	otal
Age group /	No. of		No. of		No. of	
Risk level	persons	%	persons	%	persons	%
	('000)		('000)		('000)	
30 - 44						
Low risk	821.0	100.0%	652.7	96.0%	1 473.6	98.2%
Medium risk	-	-	23.0	3.4%	23.0	1.5%
High risk	-	-	4.5	0.7%	4.5	0.3%
Sub-total	821.0	100.0%	680.2	100.0%	1 501.1	100.0%
45 - 54						
Low risk	584.3	92.1%	264.1	48.2%	848.4	71.7%
Medium risk	41.9	6.6%	230.1	42.0%	272.0	23.0%
High risk	8.5	1.3%	54.2	9.9%	62.6	5.3%
Sub-total	634.6	100.0%	548.4	100.0%	1 183.0	100.0%
55 - 64						
Low risk	380.4	70.8%	95.9	18.2%	476.3	44.7%
Medium risk	132.1	24.6%	165.2	31.3%	297.3	27.9%
High risk	25.0	4.7%	267.0	50.6%	292.0	27.4%
Sub-total	537.5	100.0%	528.0	100.0%	1 065.5	100.0%
65 - 74						
Low risk	99.5	27.3%	7.6	2.3%	107.2	15.4%
Medium risk	177.0	48.6%	42.6	12.8%	219.5	31.5%
High risk	87.4	24.0%	282.1	84.9%	369.6	53.1%
Sub-total	363.9	100.0%	332.3	100.0%	696.2	100.0%
30 - 74						
Low risk	1 885.1	80.0%	1 020.3	48.8%	2 905.4	65.4%
Medium risk	351.0	14.9%	460.8	22.1%	811.8	18.3%
High risk	120.9	5.1%	607.8	29.1%	728.7	16.4%
Total	2 357.0	100.0%	2 088.9	100.0%	4 445.9	100.0%

Table 10.1b:	Framingham	10-year	cardiovascular	disease	risk	level	among	persons	aged	30 t	o 74	by a	age g	group	and
	gender														

Base: All respondents aged 30 - 74 who had participated in the health examination.

Notes: Definition of cardiovascular disease risk levels over the next 10 years based on the Framingham risk model for CVD risks-

Low risk: CVD risk < 10% over the next 10 years;

Medium risk: CVD risk  $\geq$  10% and < 20% over the next 10 years; and

High risk: CVD risk  $\geq 20\%$  over the next 10 years.

Analysed by household income, 36.4% of those with a monthly household income of less than \$5,000 were classified as high-risk, as compared to the corresponding proportion of 10.0% among those with a monthly household income of \$50,000 or above (Table 10.1c).

	Less \$5,	than 000	\$5,0 \$9,	00 - 999	\$10,0 \$19	000 - ,999	\$20,0 \$29	)00 - ,999	\$30,0 \$39,	)00 - ,999	\$40,0 \$49	000 - ,999	\$50, or al	,000 bove	То	tal
	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%	No. of persons ('000)	%
Risk level																
Low risk	88.4	38.2%	94.1	40.0%	483.2	66.7%	539.2	65.1%	503.8	63.5%	383.5	69.5%	811.0	75.2%	2 903.3	65.3%
Medium risk	58.8	25.4%	40.8	17.4%	124.1	17.1%	162.6	19.6%	160.0	20.2%	105.7	19.2%	159.8	14.8%	811.8	18.3%
High risk	84.4	36.4%	100.2	42.6%	117.3	16.2%	126.5	15.3%	129.7	16.3%	62.7	11.4%	107.9	10.0%	728.7	16.4%
Total	231.6	100.0%	235.2	100.0%	724.6	100.0%	828.3	100.0%	793.5	100.0%	551.9	100.0%	1 078.7	100.0%	4 443.7	100.0%
Mean risk	18.	1%	18.	9%	10.	6%	10.	1%	10.	6%	9.9	9%	8.0	)%	10.	6%

Table 10.1c: Framingham 10-year cardiovascular disease risk level among persons aged 30 to 74 by monthly household income

Base: All respondents aged 30 - 74 who had participated in the health examination and provided the information of monthly household income.

Notes: Definition of cardiovascular disease risk levels over the next 10 years based on the Framingham risk model for CVD risks-

Low risk: CVD risk < 10% over the next 10 years;

Medium risk: CVD risk  $\geq$  10% and < 20% over the next 10 years; and

High risk: CVD risk  $\geq 20\%$  over the next 10 years.

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## Appendix Reliability of the Estimates

The coefficient of variation (CV) is used for comparing the precision of the estimates of various variables. The CV is obtained by expressing the standard error (SE) as a percentage of the estimate to which it refers. In turn, the SE is computed according to a formula which is established on the basis of statistical theory. Generally speaking, the SE is related to the variability of the elements in the population, the size of the sample and the sample design adopted for the survey. The smaller the CV or SE, the more precise is the estimate. For illustration, the estimates and the corresponding CVs of the selected variables presented in this report are given below:

	Variable	Estimate	<u>CV</u>
			(%)
1.	Proportion of population self-rated their health status as excellent, very good or good	69.3%	0.7
2.	Prevalence of self-reported doctor-diagnosed cancer	1.5%	7.4
3.	Prevalence of self-reported doctor-diagnosed chronic obstructive pulmonary disease	0.5%	12.8
4.	Prevalence of self-reported doctor-diagnosed schizophrenia	0.2%	19.4
5.	Average time spent on total physical activity per day in minutes	104.3	1.3
6.	Proportion of population with inadequate daily fruit and vegetables intake	94.4%	0.3
7.	Proportion of population who had sustained unintentional injury episode(s) in the 12 months preceding the survey	14.5%	2.5
8.	Proportion of population aged 15-84 who were overweight or obese	50.0%	2.2
9.	Prevalence of diabetes mellitus among persons aged 15-84	8.4%	7.3
10.	Mean daily salt intake in grams among persons aged 15-84	8.8	1.0