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 [1] 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 [2] and the Protocol for Population Level Sodium Determination in 24-hour Urine Samples [1] 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[3] 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).

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

	PHS 2014/15 Distribution (unweighted)[#]		Effect size[†]
	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%	

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 non-institutional 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'.[3]

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).

Table 1.4: Weighted distributions of the sampled domestic households

	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.

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

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).

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

	Female		Male		Total	
	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	47.0		47.0		47.0	

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

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).

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

	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%

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		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)**	**%**
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%	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.

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).

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

	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%

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

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).

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

	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%

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

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).

Table 1.5.6: Weighted distribution of sampled respondents who were employed by occupation and gender

	Female		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%

Base: All respondents who had a full-time or part-time job in the 7 days preceding the survey.
Note: Figures may not add up to the total due to rounding.

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).

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

	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%

Base: All respondents who had a full-time or part-time job in the 7 days preceding the survey.
Note: Figures may not add up to the total due to rounding.

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