Non-Communicable Diseases Watch







# Protecting Cardiovascular Health: Don't Miss a Beat

### **Key Messages**

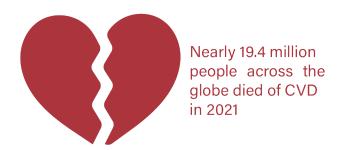
- Heart diseases and stroke are the third and the fourth commonest cause of deaths in Hong Kong, with 6 591 and 2 911 registered deaths in 2024 respectively.
- In Hong Kong, progress has been made in reducing CVD mortality rate and risk levels among the local population. After adjusting the age factor, the age-standardised death rate of CVD declined by more than half over the last twenty years. Population health surveys showed that the age-standardised prevalence of high CVD risk among community-dwelling persons aged 40–74 dropped from 19.8% in 2014-15 to 14.7% in 2020-22.
- Adopting and adhering to a healthy lifestyle from young age can reduce the risk of CVD. Key actions include eating a balanced diet, being physically active, avoiding smoking, refraining from alcohol drinking, and maintaining an optimal body weight and waist circumference. Follow doctor's advice to check blood pressure, blood glucose and blood lipids as well as strive to keep the levels in the optimal ranges.

#### **Cardiovascular Diseases - The World's Number 1 Killer**

Cardiovascular diseases (CVD) refer to a broad spectrum of disorders related to the heart and blood vessels, such as ischaemic heart disease, hypertensive heart disease, heart failure, and stroke<sup>1</sup>. Being the leading cause of mortality and a major contributor of disability worldwide, up to 80% of premature deaths from CVD are preventable<sup>2</sup>; all of the 9 targets in the World Health Organization Global Action Plan for the Prevention and Control of Non-communicable Diseases 2013-2030<sup>3, 4</sup> are related to CVD prevention and control.

In 2021, the Global Burden of Disease (GBD) Study estimated that there were 612 million and 66.8 million prevalent and incident cases of CVD respectively<sup>5</sup>. Though rates of CVD deaths globally have fallen in the last three decades<sup>2</sup>, nearly 19.4 million people died of CVD in 2021<sup>1, 6</sup> and many of which were premature deaths under the age of 70<sup>1, 6</sup>. While ischaemic heart disease was the top leading cause of death across the globe, stroke ranked third after COVID-19<sup>7</sup>. A forecasting analysis for the GBD study reported that ischaemic heart disease and stroke would be the first- and second-leading causes of disease burden in the world in 2050, respectively<sup>8</sup>.

## **Heartbreaking Fact**





By controlling risk factors and adopting a healthy lifestyle, 80% of CVD, including heart disease and stroke, is preventable

## **Heart-settling Truth**

CVD can be caused by a combination of behavioural, metabolic, environmental and socio-economic risk factors<sup>2, 9</sup>. Globally, high blood pressure is the leading modifiable cardiovascular risk factor, followed by unhealthy eating that includes over-consumption of salt, processed meat, red meat, trans-fatty acids, and sugar-sweetened beverages, as well as under-consumption of fruit, vegetables, and whole grains (Figure 1)<sup>9</sup>.

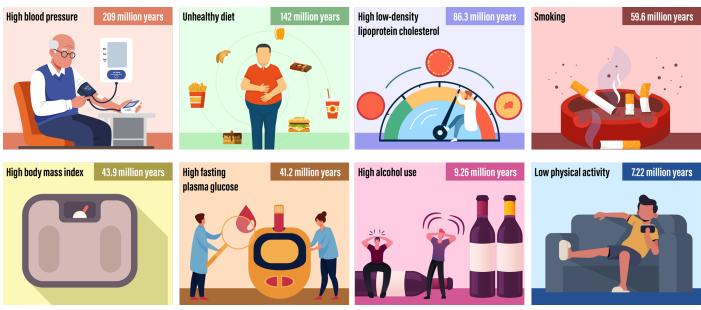


Figure 1: Global number of disability-adjusted life years (DALYs, i.e. the number of years of life lost due to ill-health, disability or early death) due to major cardiovascular risk factors in 2021

#### **CVD as a Public Health Concern in Hong Kong**

According to the Thematic Household Surveys<sup>10</sup> conducted by the Census and Statistics Department, prevalence of heart disease as told by practitioners of Western medicine among community-dwelling persons increased from 2.0% in 2009-10 to 2.4% in 2022-23, while the corresponding prevalence of stroke increased from 0.6% to 0.8%. Regarding mortality, CVD are one of the top killers. In 2024, there were over 10 000 registered deaths attributed to CVD. Among them, heart diseases and stroke ranked as the third

and the fourth commonest cause of deaths with 6 591 and 2 911 registered deaths (provisional figures), respectively<sup>11</sup>. However, progress has been made in reducing CVD mortality rate and risk levels among the local population. After adjusting the age factor, the age-standardised death rate due to CVD substantially reduced from 97.7 per 100 000 standard population in 2004 to 48.1 per 100 000 standard population in 2024 (Figure 2)<sup>11</sup>.

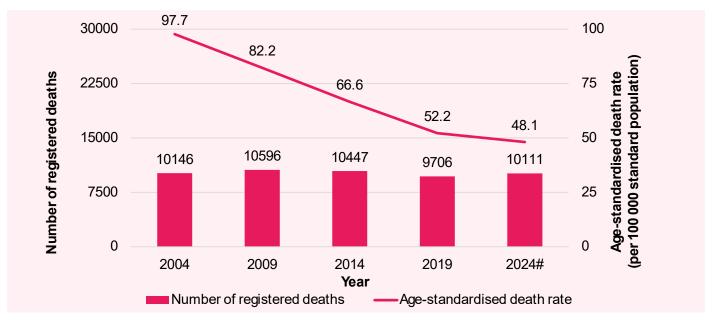


Figure 2: Mortality trend attributed to CVD (#provisional figures)

The Department of Health (DH) conducted population health surveys and adopted the Framingham Risk Model to predict the risk of cardiovascular outcomes including ischaemic heart disease, strokes, peripheral artery diseases and heart failure among the local adult population. The model incorporated different risk factors including age, sex, smoking status, cholesterol level, diabetes status and blood pressure (with adjustment in treated and untreated by antihypertensive). Results showed that the age-standardised prevalence of

community-dwelling persons aged 40 to 74 being classified as high-risk with CVD risk at or above 20% in the next decade reduced from 19.8% in 2014-15<sup>12</sup> to 14.7% in 2020-22<sup>13</sup>. The decline in CVD death rates and proportion of population at high risk can be attributed to enhanced access to healthcare and more effective CVD management<sup>14</sup>, coupled with major public health achievements<sup>15</sup>, particularly the significant reduction in smoking rates.

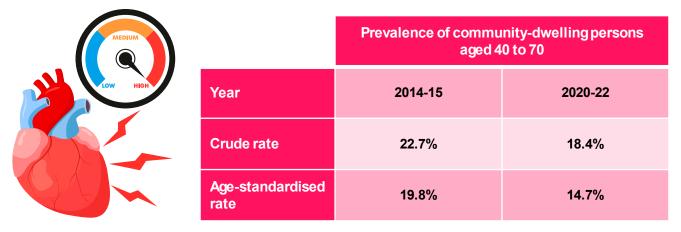


Figure 3: Population prevalence with high CVD risk

# Healthy Living Can Cut the Risk of CVD Mortality by 58%

Individuals can guard against CVD by adopting and adhering to a healthier lifestyle from a young age. Studies showed that individuals with healthy lifestyles had a 58% lower risk of dying from CVD. Adopting healthy lifestyles would also have 55%–71% lower risk of developing stroke, hypertension, ischaemic heart disease, heart failure, atrial fibrillation and peripheral artery disease<sup>16</sup>. To prevent and control CVD, key actions include eating a balanced diet, being physically active, avoiding smoking, refraining from alcohol drinking, and maintaining a healthy weight and waist circumference. Follow doctor's advice to check for blood pressure, blood glucose and blood lipids as well as keep the levels in the optimal ranges.

#### **Detect Early and Prevent Actively**

According to the Population Health Survey 2020-22, 41.0%, 36.5% and 69.7% of local residents aged 15-84 were unaware that they had hypertension, diabetes, and hypercholesterolaemia, respectively<sup>13</sup>. The Government has launched the Chronic Disease Co-Care Pilot Scheme (CDCC Pilot Scheme) to subsidise Hong Kong residents aged 45 and above with no known medical history of hypertension or diabetes to undergo screenings of the 'three highs' (i.e. high blood pressure, high blood glucose and high blood lipids), and to receive consultation services on a co-payment basis in the private healthcare sector through pairing with a family doctor of their choice, with a view to encouraging citizens to gain a better understanding of their own health status as early as possible, thereby achieving the goal of "early prevention, early identification and early treatment". For more details, please visit the dedicated website of the CDCC Pilot Scheme: www. primaryhealthcare.gov.hk/cdcc/en/.



**Eat a balanced diet.** Eat according to the "Healthy Eating Food Pyramid" and limit fats, salt and sugar intake.



Be physically active and reduce sedentary behaviours.

Adults should do at least 30 minutes of moderate-intensity aerobic physical activity per day, or an equivalent amount of aerobic physical activity.

Do not smoke. Smokers should quit. For free smoking cessation tools and services, please call the Quitline 1833 183 or visit the designated website www.livetobaccofree.hk.



Refrain from alcohol drinking.

Non-drinkers should not start drinking. Current drinkers are urged to apprise their drinking habits, realise the potential harms associated with drinking and appreciate the benefits of reducing and stopping alcohol consumption.





Maintain a healthy body weight and waist circumference. Aim for a body mass index between 18.5 and 22.9, and a waist circumference of less than 90 centimeters (cm) for men and less than 80 cm for women.



Screen for hypertension and keep the blood pressure levels in the optimal ranges. Adults aged 18 or above are recommended to have blood pressure checked regularly. More frequent testing is recommended when risk factors of CVD are present<sup>18</sup>.

Screen for type 2 diabetes and keep the blood glucose levels in the optimal ranges. Adults aged 45 or above are recommended to have blood glucose checked regularly. More frequent testing is recommended when risk factors of CVD are present<sup>19</sup>.



#### Screen for hyperlipidaemia

and keep the blood lipid levels in the optimal ranges. Adults aged 50–70 are recommended to screen for hyperlipidaemia regularly. More frequent testing is recommended when risk factors of CVD are present<sup>20</sup>.



To improve cardiovascular health among the local population, more cross-sector collaborations and full co-operation from the public are required. The DH will continue to work in close partnership with relevant government bureaux and departments as well as community partners to foster a healthier Hong Kong, empowering local people to make hearthealthy choices and live in good health.



Together, we can beat CVD and turn the vision of making Hong Kong a heart-healthy city into a reality.

#### References

- Cardiovascular diseases (CVDs) (11 June 2021). Geneva: World Health Organization. Accessed 21 July 2025: https://www.who.int/ news-room/fact-sheets/detail/cardiovascular-diseases-(cvds).
- World Heart Report 2023: Confronting the World's Number One Killer. Geneva: World Heart Federation, 2023.
- Advancing the Global Agenda on Prevention and Control of Noncommunicable Diseases 2000 to 2020: Looking Forward to 2030. Geneva: World Health Organization, 2023.
- 4. Global Action Plan for the Prevention and Control of Non-communicable Diseases 2013-2020. Geneva: World Health Organization.
- Global Health Metrics. Cardiovascular diseases—Level 2 Risk (Last updated 16 May 2024). Seattle: Institute for Health Metrics and Evaluation. Accessed 21 July 2025: https://www.healthdata.org/research-analysis/diseases-injuries-risks/factsheets/2021-cardiovascular-diseases-level-2-disease.
- Hasani WSR, Muhamad NA, Hanis TM, et al. The global estimate of premature cardiovascular mortality: A systematic review and meta-analysis of age-standardized mortality rate. BMC Public Health 2023;23(1):1561.
- Global burden of 288 causes of death and life expectancy decomposition in 204 countries and territories and 811 subnational locations, 1990-2021: A systematic analysis for the Global Burden of Disease Study 2021. Lancet 2024;403(10440):2100-2132.
- Burden of disease scenarios for 204 countries and territories, 2022-2050: A forecasting analysis for the Global Burden of Disease Study 2021. Lancet 2024;403(10440):2204-2256.
- Vaduganathan M, Mensah GA, Turco JV, et al. The global burden of cardiovascular diseases and risk: A compass for future health. Journal of the American College of Cardiology 2022;80(25):2361-2371.

- 10. Thematic Household Surveys-Health Status of Hong Kong Residents. Hong Kong SAR: Census and Statistics Department.
- Mortality Statistics. Hong Kong SAR: Department of Health and Census and Statistics Department.
- 12. Population Health Survey 2014-15. Hong Kong SAR: Department of Health
- 13. Population Health Survey 2020-22. Hong Kong SAR: Department of Health.
- 14. City Heartbeat Index 2024. Finding Report. Economist Impact..
- Towards 2025: Strategy and Action Plan to Prevent and Control Non-communicable Diseases in Hong Kong. Hong Kong SAR: Food and Health Bureau, May 2018.
- Zhang YB, Pan XF, Chen J, et al. Combined lifestyle factors, all-cause mortality and cardiovascular disease: A systematic review and meta-analysis of prospective cohort studies. Journal of Epidemiology and Community Health 2021;75(1):92-99.
- 17. Healthy Eating Food Pyramid in Hong Kong. Hong Kong SAR: Department of Health.
- Hong Kong Reference Framework

  Hypertension Care for Adults in Primary Care Settings (Revised Edition 2021). Hong Kong SAR: Primary Healthcare Commission, Health Bureau.
- Hong Kong Reference Framework—Diabetics Care for Adults in Primary Care Settings (Revised Edition 2023). Hong Kong SAR: Primary Healthcare Commission, Health Bureau.
- Hong Kong Reference Framework—Preventive Care for Older Adults in Primary Care Settings (Revised Edition 2021). Hong Kong SAR: Primary Healthcare Commission, Health Bureau.



# WORLD HEART DAY 29 SEP

World Heart Day is held on September 29 annually. It aims to raise awareness of CVD including heart disease and stroke, and the importance of taking care of the heart.

The theme for World Heart Day 2025 is **Don't Miss a Beat**. Loved ones around the world are missing out on time they should still have to spend together due to early deaths from CVD. This is why, this year's World Heart Day will tell the world: Don't miss a beat and make every heartbeat count.

For more information about World Heart Day, please visit the thematic website at https://world-heart-federation.org/world-heart-day/about-whd/dont-miss-a-beat.



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