National Population Health Survey 2023

(Household Interview)

MINISTRY OF HEALTH
SINGAPORE

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NATIONAL POPULATION HEALTH SURVEY 2023

(Household Interview)

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Foreword

The National Population Health Survey (NPHS) is a cross-sectional population health survey series to track the health and risk factors, as well as lifestyle practices of Singapore residents. This survey replaces the three population health surveys (i.e., National Health Survey (NHS), National Health Surveillance Survey (NHSS) and Health Behaviour Surveillance of Singapore (HBSS)) previously conducted by the Ministry of Health and Health Promotion Board respectively.

The NPHS is conducted annually to provide timely and regular information on the prevalence of non-communicable diseases such as diabetes mellitus, hypertension and hyperlipidaemia, and related risk factors like smoking, alcohol consumption and physical inactivity from a representative sample of the resident population. The NPHS also captures information on practice of chronic disease and cancer screenings, mental health as well as influenza and pneumococcal vaccinations among Singapore residents.

As we live with COVID-19 as an endemic disease, many of the health indicators have continued to show improvements in 2023. There were more residents who participated in chronic disease and cancer screening; and had sufficient total physical activity compared to 2022. The proportion of residents who reported having received vaccinations against influenza and pneumococcal; and showed willingness to seek help from healthcare professionals (when unable to cope with stress) continued to increase in 2023. Though there was a sustained decline in the prevalence of smoking, the prevalence of binge-drinking increased slightly in 2023. The findings from the survey will help the Ministry of Health and Health Promotion Board develop and evaluate health policies and programmes and improve the health of Singapore residents.

I would like to gratefully acknowledge and thank all who have, in one way or another, contributed to the successful completion of the survey. In particular, I would like to thank all respondents who have given their time to take part in the survey, and whose support makes this report possible.

PROFESSOR KENNETH MAK
Director-General of Health
August 2024

Executive Summary

The National Population Health Survey (NPHS) is a cross-sectional population health survey, conducted annually by the Ministry of Health and Health Promotion Board, to track the health and risk factors, as well as lifestyle practices of Singapore residents. This survey replaces the three population health surveys (i.e., National Health Survey (NHS), National Health Surveillance Survey (NHSS) and Health Behaviour Surveillance of Singapore (HBSS)) that were conducted in the earlier years.

The NPHS monitors behavioural risk factors such as smoking and alcohol consumption; chronic diseases such as diabetes mellitus, hypertension and hyperlipidaemia as well as preventive health behaviour such as the practice of health screening. The survey findings will be used by the Ministry of Health and Health Promotion Board to track progress towards national heath targets and for planning and evaluation of health policies, programmes, and health care services.

The NPHS consists of two components[1]: (i) Household Interview and (ii) Health Examination. This report presents the survey findings from the Household Interview of Singapore residents aged 18 to 74 years. The Health Examination, which comprises mainly measured indicators such as obesity and chronic disease prevalence, is conducted on a two-year survey cycle to ensure that there is enough data for a detailed analysis[2]. The findings from the Health Examination (NPHS 2023 – 2024) will be reported in 2025. The reporting coverage in terms of age differs from previous national health surveys reflecting the growing size of the older population. While the survey results in the earlier publications of the national health surveys were based on Chinese, Malay and Indian residents aged 18 to 69 years, the NPHS report is based on all Singapore residents aged 18 to 74 years. Time-series data for the extended reporting coverage are available from 2007 onwards[3].

[1] More details on the survey design, method and fieldwork are covered in “Chapter 13: Survey Methodology”.

[2] Data collection for the “Health Examination” component requires a longer time duration for completion. This is because it requires respondents to attend a health examination/screening at designated locations and hence there are relatively fewer respondents as compared to the “Household Interview” component.

[3] Data from the earlier national health surveys are presented for trend analysis over a longer time period. However, there are differences in the survey design across the health surveys and examination of differences across the survey series should take this into consideration.

Trend analysis is presented when there are sufficient data (inclusive of NHS, NHSS and NPHS) to gauge the directional change of an indicator. A comparison of survey results between 2019 and 2023 is also carried out to highlight changes in the health behaviours and health practices among Singapore residents, possibly due to COVID-19 pandemic[4].

Alcohol consumption

- In 2023, 2.1% of Singapore residents aged 18 to 74 years consumed alcohol regularly, with 3.2% of males and 1.0% of females being regular drinkers.
- Regular alcohol consumption was most common among males in the 50 to 59 years age group (4.7%).
- The crude and age-standardised prevalence of regular alcohol consumption increased significantly from 2007 to 2023 (crude: 1.2% in 2007, 2.1% in 2023; age-standardised: 1.2% in 2007, 2.1% in 2023).
- However, the prevalence of regular drinking remained the same between 2019 and 2023 (crude: 2.1% in 2019, 2.1% in 2023; age-standardised: 2.1% in 2019, 2.1% in 2023).
- The prevalence of binge drinking was 10.3% in 2023, and it was more common among males (13.7%) than females (7.1%).
- Males aged 30 to 39 years and females aged 18 to 29 years had the highest proportion of binge drinkers at 17.5% and 13.7% respectively.
- The rise in both the crude and age-standardised prevalence of binge drinking was significant between 2007 and 2023 (crude: 4.3% in 2007, 10.3% in 2023; age-standardised: 3.9% in 2007, 10.4% in 2023).
- The overall prevalence of binge drinking remained the same between 2019 and 2023 period (crude: 10.2% in 2019, 10.3% in 2023; age-standardised: 10.2% in 2019, 10.4% in 2023).

[4] NPHS 2020, 2021, 2022 and 2023 results are compared with NPHS 2019 results to highlight changes in the health behaviours and health practices among Singapore residents possibly due to COVID-19. Fieldwork for NPHS 2019 was conducted from August 2018 to July 2019 where COVID-19 pandemic had not started yet (pre-COVID-19). Fieldwork for NPHS 2020 was affected by COVID-19 as data were collected for only three-quarter of the survey year (July 2019 to March 2020) and fieldwork from April to June 2020 was cancelled due to the Circuit Breaker from 7 April to 1 June 2020 (inclusive). Fieldwork for NPHS 2021 to NPHS 2023 was typically carried out from preceding July to June of the reporting year, unless stated otherwise (e.g. for NPHS 2021, the fieldwork was carried from July 2020 to June 2021).

Cigarette Smoking

- The crude prevalence of daily smoking has decreased further from 9.2% in 2022 to 8.8% in 2023, continuing the declining trend of smoking rates over the past decade.
- The prevalence of daily smoking was higher among males (15.7%) than females (2.3%) in 2023.
- Daily smoking was most prevalent in adults aged 50 to 59 years (11.5%) and least prevalent among younger adults aged 18 to 29 years (5.0%) in 2023.
- Male daily smokers smoked an average of 12 cigarettes a day while female daily smokers smoked an average of 8 cigarettes a day.
- About half (46.5%) of the daily smokers in 2023 had intention to quit smoking. However, only 18.2% of them planned to quit smoking within the next 12 months or less.
- The crude and age-standardised prevalence of daily smoking decreased significantly between 2007 and 2023 (crude: 13.3% in 2007, 8.8% in 2023; age-standardised: 13.0% in 2007; 8.9% in 2023).
- Between 2019 and 2023, the overall crude and age-standardised prevalence of daily smoking also showed a significant decrease over the last five years (crude: 10.6% in 2019, 8.8% in 2023; age-standardised: 10.6% in 2019, 8.9% in 2023).

Physical Activity

- With COVID-19 being an endemic disease, the proportion of residents with sufficient total physical activity increased significantly from 74.9% in 2022 to 78.5% in 2023 after several years of declining participation, likely primarily due to COVID-19.
- In 2023, more males (80.0%) compared with females (76.9%) were able to meet the recommended total physical activity level.
- Young adults in the 18 to 29 years age group (85.5%) had the highest level of sufficient total physical activity while the older adults aged 60 to 74 years had the lowest proportion at 74.2%.
- The largest contributor to total physical activity per week was commuting (45.6%), followed by leisure-time physical activity (29.1%) and work-related physical activity (25.3%).

- About one in three (33.7%) Singapore residents aged 18 to 74 years reported having sufficient muscle-strengthening activities in 2023.
- This was more common among younger adults aged 18 to 29 years (42.4%) while the proportion with sufficient muscle-strengthening activities dropped to around one-third or less for those aged 30 to 74 years.
- There was a higher proportion of males (40.4%) with sufficient muscle-strengthening activities compared with females (27.3%).
- Comparing the longer-term trend between 2007 and 2023, the decreasing trend in the proportion of residents with sufficient total physical activity was not significant (crude: 85.4% in 2007, 78.5% in 2023; age-standardised: 85.3% in 2007, 78.5% in 2023).
- Likewise, the drop in proportion of residents with sufficient total physical activity was also not significant between 2019 and 2023 (crude: 84.6% in 2019, 78.5% in 2023; age-standardised 84.6% in 2019, 78.5% in 2023).

Self-reported Diabetes Mellitus (or High Blood Sugar)

- 7.3% of Singapore residents aged 18 to 74 years reported that they had diabetes mellitus and were currently prescribed medication in 2023.
- A higher proportion of males (8.1%) reported having diabetes compared to females (6.6%).
- The prevalence of self-reported diabetes mellitus (i.e. residents who reported they had diabetes mellitus and were currently prescribed medication) increased with age, from 1.0% in young adults aged 30 to 39 years to 22.3% among those aged 70 to 74 years.
- Both the crude and age-standardised prevalence of self-reported diabetes among Singapore residents aged 18 to 74 years showed a significant increasing trend between 2007 to 2023 (crude: 4.9% in 2007, 7.3% in 2023; age-standardised: 6.4% in 2007, 7.2% in 2023).
- Between 2019 to 2023, the crude and age-standardised prevalence of self-reported diabetes remained stable and hovered around 7% (crude: 6.9% in 2019, 7.3% in 2023; age-standardised: 7.0% in 2019, 7.2% in 2023)

Self-reported Hypertension (or High Blood Pressure)

- In 2023, 15.0% of Singapore residents aged 18 to 74 years reported that they had hypertension (or high blood pressure) and were currently prescribed medication.
- A higher proportion of males (15.9%) reported having hypertension than females (14.2%).
- The prevalence of self-reported hypertension (i.e. residents who reported they had hypertension and were currently prescribed medication) increased with age, from 2.4% in young adults aged 30 to 39 years to 47.7% among those aged 70 to 74 years.
- The crude prevalence of self-reported hypertension among Singapore residents aged 18 to 74 years showed a significant upward trend from 2007 to 2023 but the age-standardised prevalence did not show a significant increase (crude: 12.7% in 2007, 15.0% in 2023; age-standardised: 16.9% in 2007, 14.7% in 2023).
- Between 2019 to 2023, the crude and age-standardised prevalence of self-reported hypertension remained stable around 15% to 16% (crude: 15.6% in 2019, 15.0% in 2023; age-standardised: 15.9% in 2019, 14.7% in 2023).

Self-reported Hyperlipidaemia (or High Blood Cholesterol)

- 15.3% of Singapore residents aged 18 to 74 years reported that they had hyperlipidaemia (or high blood cholesterol) and were currently prescribed medication in 2023.
- More males (16.9%) reported having high blood cholesterol than females (13.7%).
- The prevalence of self-reported high blood cholesterol (i.e. residents who reported they had hyperlipidaemia and were currently prescribed medication) increased with age, from 1.7% in young adults aged 30 to 39 years to 50.9% among those aged 70 to 74 years.
- The overall crude prevalence of self-reported hyperlipidaemia among Singapore residents aged 18 to 74 years showed an increasing trend from 2007 to 2023 but the age-standardised prevalence did not show significant upward trend over the same period (crude: 8.2% in 2007, 15.3% in 2023; age-standardised: 10.8% in 2007, 15.0% in 2023).
- From 2019 to 2023, the crude and age-standardised prevalence of self-reported hyperlipidaemia remained stable at around 14% to 15% (crude: 13.6% in 2019, 15.3% in 2023; age-standardised: 13.8% in 2019, 15.0% in 2023).

Chronic Disease Screening

- The crude proportion of Singapore residents aged 40 to 74 years with no previous diagnosed chronic diseases (i.e., diabetes mellitus, high blood pressure, and high blood cholesterol ("DHL")) and were screened for these three conditions within the recommended screening frequencies (i.e. the chronic disease screening participation) increased from 60.3% in 2022 to 62.6% in 2023.
- Looking at a longer-term trend between 2007 and 2023, the chronic disease screening participation showed no significant upward trend during this period (crude: 58.1% in 2007, 62.6% in 2023; age-standardised: 62.0% in 2007, 62.6% in 2023).
- Although chronic disease screening participation for residents with no previous diagnosis of DHL fell between 2019 and 2023, the decrease was not significant (crude: 66.3% in 2019, 62.6% in 2023; age-standardised: 68.2% in 2019, 62.6% in 2023).
- Looking at individual chronic disease alone regardless of the co-morbidity with the other two chronic diseases, the crude proportion of residents who had diabetes and hypertension screening increased significantly from 2007 to 2023 while the proportion screening for hyperlipidaemia did not show significant upward trend over the same period (diabetes: 72.4% in 2007, 76.7% in 2023; hypertension: 77.7% in 2007, 82.7% in 2023; hyperlipidaemia: 78.1% in 2007, 74.7% in 2023).
- Between 2019 and 2023, the individual crude screening participation for all three chronic diseases fell but the decreases were not significant (diabetes: 81.0% in 2019, 76.7% in 2023; hypertension: 86.0% in 2019, 82.7% in 2023; hyperlipidaemia: 77.9% in 2019, 74.7% in 2023).

Cancer Screening

- The crude screening participation for cervical and colorectal cancers increased from 43.1% in 2022 to 45.4% in 2023, and from 38.1% in 2022 to 41.7% in 2023 respectively. However, the crude screening participation for breast cancer decreased from 37.6% in 2022 to 34.7% in 2023.
- The crude and age-standardised screening participation for breast and cervical cancer showed a decreasing trend between 2007 and 2023. The decline was significant for cervical cancer (crude: 57.9% in 2007, 45.4% in 2023; age-standardised: 54.1% in 2007, 44.9% in 2023) but not for breast cancer (crude: 41.0% in 2007, 34.7 in 2023; age-standardised: 40.2% in 2007, 34.7% in 2023).

- The crude and age-standardised screening participation for colorectal cancer rose significantly between 2007 and 2023 (crude: 14.6% in 2007, 41.7% in 2023; age-standardised: 15.0% in 2007, 41.7% in 2023).

Breast Cancer Screening:

- In 2023, slightly more than one-third (34.7%) of Singapore female residents in the 50 to 69 years age group reported that they had gone for mammography in the last two years.

Cervical Cancer Screening

- In 2023, more than two in five (45.4%) Singapore female residents aged 25 to 74 years reported that they had gone for cervical cancer screening (had done Pap test in the past three years or HPV test in the past five years).
- Women aged 30 to 59 years (more than 50%) were most likely to have undergone cervical cancer screening.

Colorectal Cancer Screening

- In 2023, 41.7% of Singapore residents aged 50 to 74 years had undergone colorectal screening within the recommended screening frequency.
- Approximately one in four of these residents reported having undergone a Faecal Immunochemical Test (FIT) at least once in the past one year (24.1%) or had undergone colonoscopy in the past 10 years (27.7%).
- The practice of taking a FIT or a colonoscopy was more prevalent among males (43.8%) than females (39.6%).

Self-reported Vaccination Uptake

- The crude self-reported influenza vaccination uptake among Singapore residents aged 18 to 74 years increased significantly from 18.0% in 2022 to 21.7% in 2023.
- The self-reported influenza vaccination uptake was similar among males (22.1%) and females (21.4%) in 2023.

- The crude and age-standardised self-reported influenza vaccination uptake (flu injection in the past 12 months) among Singapore residents aged 18 to 74 years showed a significant increasing trend between 2017 and 2023 (crude: 13.1% in 2007, 21.7% in 2023; age-standardised: 13.0% in 2007, 21.5% in 2023).
- The crude self-reported pneumococcal vaccination uptake among Singapore residents aged 65 to 74 years increased significantly from 26.5% in 2022 to 35.0% in 2023.
- The proportion of residents who reported having received the pneumococcal vaccination was similar among males (35.0%) and females (34.9%) in 2023.
- There was a significant increase in the self-reported pneumococcal vaccination uptake among Singapore residents aged 65 to 74 years over the period from 2017(11.9%) to 2023 (35.0%).

Mental Health

- The crude prevalence of poor mental health, as measured by the 12-item General Health Questionnaire (GHQ-12), among Singapore residents aged 18 to 74 years has decreased from 17.0% in 2022 to 15.0% in 2023.
- More females (17.6%) reported poor mental health compared to males (12.2%) in 2023.
- Younger adults aged 18 to 29 years had the highest proportion (26.0%) with poor mental health while the prevalence for other age groups were much lower, ranging from 8.2% for those in the 60 to 74 years age group to 17.2% in the 30 to 39 years age group.
- Comparing between 2017 and 2023, the crude and age-standardised prevalence of poor mental health among Singapore residents aged 18 to 74 years have increased, though these increases were not significant (crude: 12.5% in 2017, 15.0% in 2023; age-standardised: 12.4% in 2017, 15.0% in 2023).
- The proportion of Singapore residents who were willing to seek help from healthcare professionals has increased significantly to 62.8% in 2023, compared to 56.6% in 2022, while 78.4% of Singapore residents were willing to seek help from informal support networks in 2023, compared to 79.7% in 2022.

- In 2023, females were more willing to seek help from healthcare professionals and informal support networks compared to males (females: 63.3% and 81.6% respectively; males: 62.3% and 75.1% respectively).
- Among the age groups, Singapore residents in the oldest age band (60 to 74 years) (51.2%) were the least willing to seek help from healthcare professionals while those aged 30 to 39 years (71.9%) were the most willing to seek help from healthcare professionals in 2023.
- Similarly, the proportion of Singapore residents aged 18 to 74 years who indicated that they were willing to seek help from informal support networks decreased with age -- it was the highest among younger adults aged 18 to 39 years (85.4% for both 18 to 29 years and 30 to 39 years age groups) and the lowest among older adults aged 60 to 74 years (65.6%) in 2023.
- There was no trend in the proportion of residents who indicated that they were willing to seek help from healthcare professionals, which ranged between 47.8% to 62.8%, in the period between 2019 and 2023.
- Similarly, the proportion of residents who were willing to seek help from informal support networks, which ranged between 69.1% to 79.7%, did not display any trend over the same period between 2019 and 2023.

Chapter 1
Alcohol Consumption

Key Points

- 2.1% of Singapore residents aged 18 to 74 years consumed alcohol regularly in 2023, with 3.2% of the males and 1.0% of the females being regular drinkers.
- Regular alcohol consumption was most common among males in the 50 to 59 years age group (4.7%).
- The prevalence of binge drinking was 10.3% in 2023, and it was more common among males (13.7%) than females (7.1%).
- Males aged 30 to 39 years and females aged 18 to 29 years had the highest proportion of binge drinkers at 17.5% and 13.7% respectively.

Introduction

Alcohol is a toxic, carcinogenic and psychoactive substance with dependence producing properties. Alcohol consumption is a major contributor to the global burden of disease. Several diseases such as liver and pancreas disease, neuropsychiatric disease, cardiovascular diseases and certain cancers, are entirely or partially caused by alcohol consumption. Although some studies have shown that light alcohol intake provides a small protective factor for cardiovascular diseases and type 2 diabetes, no study has been able to show that light alcohol intake is beneficial for cardiovascular diseases, type 2 diabetes, and cancer (Anderson et al., 2023). In addition to these chronic disease risks, alcohol consumption can also affect social behaviours and cause immediate harm (e.g., road traffic accidents, physical assault) to both the drinkers and the other people around. A recent meta-analysis reported that low levels of alcohol consumption was not associated with protection against all-cause mortality (Zhao et al., 2023). Due to the short and long term effects of alcohol consumption, there is risk associated with alcohol consumption at every level.

Definition

Alcohol consumption was classified according to the frequency of alcohol intake in Table 1.1.

Table 1.1: Classification of alcohol consumption

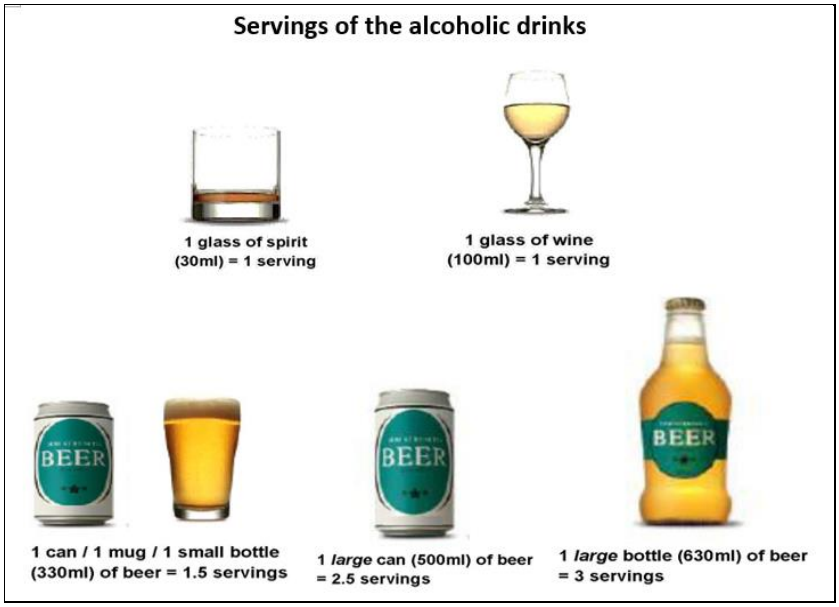
Classification	Frequency of alcohol consumption
Regular drinker	> 4 days a week
Frequent drinker	1 – 4 days a week
Occasional drinker	≤ 3 days a month

Binge drinking was defined as consumption of at least five alcoholic drinks[5] for males or at least four alcoholic drinks for females in any single drinking session during the past month preceding the survey.

Methodology

An interviewer-administered questionnaire was used. Respondents were shown a card with pictures of servings of alcoholic drinks (Diagram 1) and asked questions on alcohol consumption within the past 12 months at the time of the survey.

Diagram 1: Alcohol Card



[5] 1 alcoholic drink refers to 1 glass (~100 mls) of wine or 1 measure (~30 mls) of spirits.1 can/ mug/ small bottle (330ml) of beer represents 1.5 servings of alcoholic drink.

Alcohol Consumption

The survey found that among Singapore residents aged 18 to 74 years, 2.1% consumed alcohol regularly, 9.0% frequently, 35.3% occasionally, while 53.7% were non-drinkers (Table 1.2).

Table 1.2: Alcohol consumption (%) among Singapore residents aged 18 to 74 years by sex, 2023

Alcohol Consumption	Total	Males	Females
Non-drinker	53.7	45.8	61.2
Occasional drinker	35.3	39.6	31.2
Frequent drinker	9.0	11.5	6.6
Regular drinker	2.1	3.2	1.0

Note: Data might not sum to 100% due to rounding.

Prevalence of Regular Alcohol Consumption

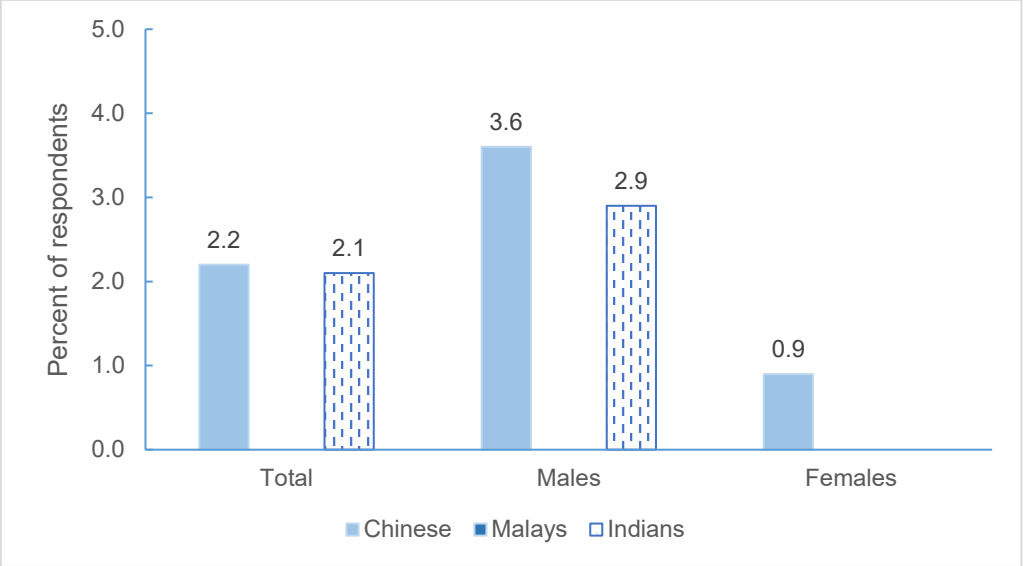
Among Singapore residents aged 18 to 74 years, 3.2% of the males and 1.0% of the females consumed alcohol regularly (Table 1.3). Regular alcohol consumption was most common among males in the 50 to 59 years age group (4.7%). Among the ethnic groups, both Chinese (2.2%) and Indians (2.1%) had similar proportion of regular drinkers at around 2% (Graph 1.1). A slightly higher proportion of residents with primary education (3.4%) and secondary education (2.2%) were regular drinkers, compared to those with post-secondary education (1.8%) (Table 1.4).

Table 1.3: Age-specific prevalence (%) of regular alcohol consumption among Singapore residents aged 18 to 74 years by sex, 2023

Age (years)	Total	Males	Females
18-29	s	s	s
30-39	1.5	2.0	s
40-49	2.8	4.3	1.5
50-59	3.3	4.7	1.8
60-74	2.4	4.5	s
18-74	2.1	3.2	1.0

s: Data have been suppressed due to small counts or high sampling variability.

Graph 1.1: Crude prevalence (%) of regular alcohol consumption among Singapore residents aged 18 to 74 years by sex and ethnicity, 2023



Note: Data for Malays and Indian females have been suppressed due to small counts or high sampling variability.

Trends in Regular Alcohol Consumption

The crude and age-standardised prevalence of regular alcohol consumption increased significantly from 2007 to 2023 (Table 1.4). Likewise, a significant rise in prevalence of regular drinking was also observed among adults aged 40 to 59 years, among males and females, among Chinese and across all education levels in the same period. Comparing between 2019 and 2023, the prevalence of regular drinking remained the same.

Table 1.4: Prevalence (%) of regular alcohol consumption among Singapore residents aged 18 to 74 years by age, sex, education, and ethnicity, 2007 to 2023

	NHSS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2013	2017	2019	2020	2021	2022	2023
Total	1.2	1.2	2.2 (1.6, 2.7)	2.1 (1.6, 2.6)	2.2 (1.7, 2.6)	2.8 (2.1, 3.4)	2.5 (2.1, 2.9)	2.1[b] (1.7, 2.4)
ASR	1.2	1.2	2.2	2.1	2.2	2.8	2.5	2.1[b]
18-29	s	s	s	s	s	s	s	s
30-39	0.9	s	s	1.1 (0.5, 1.8)	1.8 (0.9, 2.8)	1.7 (1.0, 2.5)	1.9 (1.2, 2.7)	1.5 (0.8, 2.2)
40-49	1.2	2.0	2.3 (1.1, 3.4)	2.1 (1.0, 3.1)	2.0 (1.2, 2.8)	2.7 (1.6, 3.9)	3.5 (2.5, 4.5)	2.8[b] (1.8, 3.8)
50-59	1.9	1.5	3.8 (2.1, 5.4)	2.4 (1.3, 3.4)	3.4 (2.2, 4.6)	3.9 (2.7, 5.1)	3.2 (2.0, 4.4)	3.3[b] (2.1, 4.4)
60-74	s	1.4	3.7 (2.0, 5.4)	4.3 (2.7, 5.9)	3.0 (2.1, 3.8)	3.2 (2.3, 4.1)	3.3 (2.3, 4.3)	2.4 (1.6, 3.3)
Males	2.1	2.0	3.7 (2.7, 4.8)	3.6 (2.6, 4.5)	3.4 (2.7, 4.1)	4.6 (3.3, 5.8)	4.0 (3.3, 4.7)	3.2[b] (2.5, 3.8)
Females	s	0.4	s	0.7 (0.3, 1.0)	1.0 (0.6, 1.4)	1.1 (0.7, 1.4)	1.1 (0.7, 1.5)	1.0[b] (0.6, 1.4)
Primary	1.5	1.8	s	3.3 (1.9, 4.6)	3.2 (1.9, 4.4)	2.9 (1.8, 4.0)	3.8 (2.4, 5.3)	3.4[b] (2.1, 4.7)
Secondary	1.3	1.6	2.6 (1.4, 3.7)	2.3 (1.4, 3.1)	1.9 (1.3, 2.5)	2.5 (1.8, 3.3)	2.7 (1.9, 3.4)	2.2[b] (1.5, 2,9)
Post-secondary	1.0	0.8	1.9 (1.1, 2.7)	1.7 (1.1, 2.3)	2.1 (1.5, 2.6)	2.9 (1.9, 3.8)	2.2 (1.7, 2.7)	1.8[b] (1.3, 2.3)
Chinese	1.3	1.3	2.3 (1.6, 2.9)	2.2 (1.6, 2.8)	2.4 (1.9, 2.9)	3.2 (2.3, 4.0)	2.9 (2.4, 3.4)	2.2[b] (1.8, 2.7)
Malays	s	s	s	s	s	s	s	s
Indians	s	1.0	s	s	s	2.3 (1.2, 3.3)	s	2.1 (0.9, 3.2)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) s: Data have been suppressed due to small counts or high sampling variability.

(3) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 resident population.

(4) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(5) [b] Indicate statistically significant linear upward trend between 2007 and 2023 with p-value <0.05.

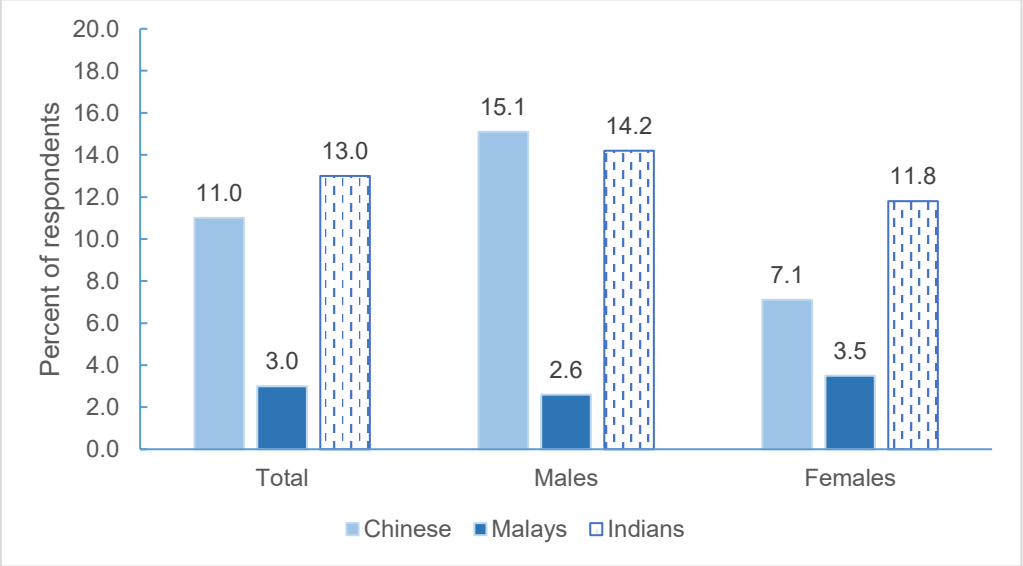
Prevalence of Binge Drinking

Among Singapore residents aged 18 to 74 years, the prevalence of binge drinking was 10.3% (Table 1.5). Binge drinking was more prevalent among males (13.7%) than females (7.1%). The highest proportion of binge drinkers for males was in the 30 to 39 years age group (17.5%) and for females in the 18 to 29 years age group (13.7%). Among the ethnic groups, the prevalence of binge drinking was higher in Indians (13.0%) and Chinese (11.0%) than Malays (3.0%) (Graph 1.2). The proportion of binge drinkers was higher among those with post-secondary education (12.6%), compared to those with lower education levels (primary education and secondary education at 5.2% and 6.7%, respectively) (Table 1.6).

Table 1.5: Age-specific prevalence (%) of binge drinking among Singapore residents aged 18 to 74 years by sex, 2023

Age (years)	Total	Males	Females
18-29	14.4	15.0	13.7
30-39	14.3	17.5	11.3
40-49	11.6	16.2	7.4
50-59	8.2	13.4	3.1
60-74	4.3	7.4	1.4
18-74	10.3	13.7	7.1

Graph 1.2: Crude prevalence (%) of binge drinking among Singapore residents aged 18 to 74 years by sex and ethnicity, 2023



Trends in Binge Drinking

The rise in both the crude and age-standardised prevalence of binge drinking was significant between 2007 and 2023 (Table 1.6). This upward trend was also observed in all age groups except those aged 18 to 29 years and 60 to 74 years, among males and females, among all ethnic groups; and those with primary and post-secondary education over the same period between 2007 and 2023.

Between 2019 and 2023, the prevalence of binge drinking remained the same at the overall and subgroup levels except in the 40 to 49 years age group which showed a significant increase over the last five years.

Table 1.6: Prevalence (%) of binge drinking among Singapore residents aged 18 to 74 years by age, sex, education, and ethnicity, 2007 to 2023

	NHSS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2013	2017	2019	2020	2021	2022	2023
Total	4.3	7.4	8.8 (7.6, 10.0)	10.2 (9.1, 11.3)	10.5 (9.5, 11.5)	9.6 (8.6, 10.6)	9.4 (8.6, 10.2)	10.3[b] (9.5, 11.2)
ASR	3.9	6.9	8.6	10.2	10.5	9.7	9.4	10.4[b]
18-29	8.1	14.6	12.4 (9.2, 15.6)	16.6 (13.5, 19.7)	17.1 (13.8, 20.3)	15.6 (12.0, 19.3)	10.5 (8.5, 12.5)	14.4 (11.8, 16.9)
30-39	4.6	7.7	10.6 (7.5, 13.7)	13.8 (10.9, 16.6)	14.5 (12.0, 17.0)	12.8 (10.7, 14.9)	12.6 (10.7, 14.5)	14.3[b] (12.2, 16.4)
40-49	3.7	5.3	9.3 (6.8, 11.7)	8.8 (6.8, 10.7)	9.6 (7.7, 11.6)	9.7 (7.9, 11.5)	11.2 (9.4, 13.0)	11.6[b,d] (9.8, 13.5)
50-59	2.3	4.9	7.3 (5.0, 9.7)	6.9 (5.0, 8.8)	6.8 (5.1, 8.5)	6.4 (4.9, 7.8)	9.0 (7.1, 10.9)	8.2[b] (6.5, 10.0)
60-74	s	3.2	4.0 (2.4, 5.7)	5.0 (3.4, 6.6)	4.9 (3.5, 6.2)	4.3 (3.2, 5.3)	4.5 (3.4, 5.6)	4.3 (3.2, 5.4)
Males	6.4	10.7	13.1 (11.1, 15.1)	14.9 (13.1, 16.6)	14.6 (13.0, 16.3)	13.8 (12.1, 15.5)	13.1 (11.9, 14.4)	13.7[b] (12.3, 15.0)
Females	2.2	4.2	4.7 (3.4, 6.0)	5.7 (4.6, 6.8)	6.5 (5.3, 7.7)	5.6 (4.5, 6.7)	5.7 (4.9, 6.6)	7.1[b] (6.1, 8.2)
Primary	3.1	2.7	4.2 (2.3, 6.2)	5.4 (3.6, 7.2)	4.4 (2.9, 5.9)	4.8 (3.2, 6.3)	6.6 (4.7, 8.5)	5.2[b] (3.6, 6.8)
Secondary	4.5	5.7	8.4 (6.5, 10.4)	7.3 (5.9, 8.7)	7.5 (6.0, 8.9)	6.6 (5.4, 7.8)	6.6 (5.3, 8.0)	6.7 (5.4, 8.1)
Post-secondary	4.5	9.8	10.3 (8.6, 12.0)	12.5 (10.9, 14.2)	13.0 (11.5, 14.5)	11.7 (10.2, 13.1)	11.0 (9.9, 12.0)	12.6[b] (11.4, 13.7)

Table 1.6: Prevalence (%) of binge drinking among Singapore residents aged 18 to 74 years by age, sex, education, and ethnicity, 2007 to 2023 (continued)

	NHSS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2013	2017	2019	2020	2021	2022	2023
Chinese	4.7	8.6	9.4 (8.0, 10.9)	11.5 (10.1, 12.8)	11.6 (10.3, 12.8)	10.2 (9.0, 11.4)	10.1 (9.2, 11.1)	11.0[b] (10.0, 12.0)
Malays	1.1	1.5	s	2.3 (1.0, 3.6)	1.7 (0.7, 2.7)	2.1 (1.0, 3.2)	1.9 (0.8, 3.0)	3.0[b] (1.5, 4.6)
Indians	4.5	6.6	13.4 (9.2, 17. 6)	10.5 (7.8, 13.1)	11.4 (7.9, 14.8)	10.6 (6.3, 14.8)	9.2 (6.8, 11.7)	13.0[b] (9.8, 16.2)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) s: Data have been suppressed due to small counts or high sampling variability.

(3) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 resident population.

(4) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(5) [b] Indicate statistically significant linear upward trend between 2007 and 2023 with p-value <0.05.

(6) [d] Indicate statistically significant linear upward trend between 2019 and 2023 with p-value <0.05.

Chapter 2
Cigarette Smoking

Key Points

- 8.8% of Singapore residents aged 18 to 74 years smoked cigarettes daily in 2023.
- More males (15.7%) smoked daily than females (2.3%).
- Daily smoking was most prevalent in adults aged 50 to 59 years (11.5%) and least prevalent among younger adults aged 18 to 29 years (5.0%) in 2023.
- Male daily smokers smoked an average of 12 cigarettes a day while female daily smokers smoked an average of 8 cigarettes a day.
- About half (46.5%) of the daily smokers had intention to quit smoking. However, only 18.2% of them planned to quit smoking within the next 12 months or less.

Introduction

Tobacco use is a source of preventable morbidity and mortality. Active smoking increases the risk of several diseases such as respiratory diseases, cardiovascular diseases and certain cancers. In addition to these disease risks that affect the smokers, smoking also implicates the other people around who are exposed to second-hand smoke. Cigarette smoking is the most common form of smoking. The impact of tobacco use is largely determined by the pattern of smoking and number of cigarettes smoked *(US Department of Health and Human Services, 2014)*.

Definition

Smoking status was classified according to the frequency of cigarette smoked as shown in Table 2.1, which followed the World Health Organization (WHO) classification criteria *(WHO, 1998)*.

Table 2.1: Classification of smoking status

Classification	Frequency of cigarette smoking
Daily smoker	Smokes cigarettes at least once a day (including people who smoke every day but have to stop temporarily because of religious fasting or medical reasons)
Occasional smoker	Smokes cigarettes but not every day
Ex-smoker	Formerly a daily smoker, but currently does not smoke at all
Non-smoker	Never smoked before or smoked too little in the past to be regarded as an ex-smoker

Methodology

An interviewer-administered questionnaire was used. The questionnaire was based on WHO's recommended core questions for assessing smoking status *(WHO,1998)*.

Smoking Status

The survey showed that among Singapore residents aged 18 to 74 years, 8.8% were daily smokers, 2.7% were occasional smokers, 8.5% were ex-smokers and 79.9% were non-smokers (Table 2.2).

Table 2.2: Smoking status (%) of Singapore residents aged 18 to 74 years by sex, 2023

Smoking Status	Total	Males	Females
Daily smoker	8.8	15.7	2.3
Occasional smoker	2.7	4.3	1.2
Ex-smoker	8.5	13.8	3.5
Non-Smoker	79.9	66.2	93.0

Note: Data might not sum to 100% due to rounding.

Prevalence of Daily Smoking

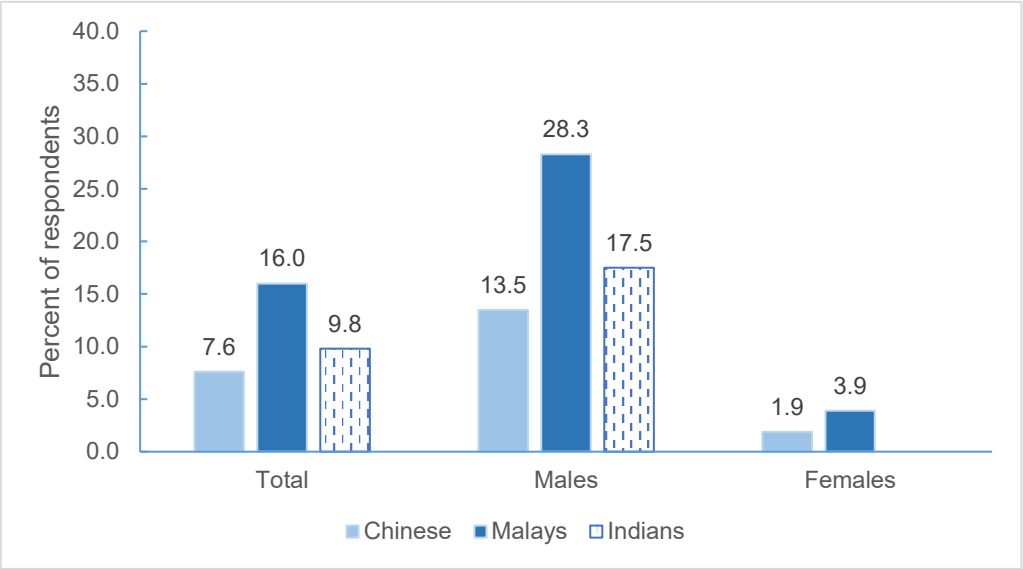
The prevalence of daily smoking among Singapore residents aged 18 to 74 years was 15.7% among males and 2.3% among females (Table 2.3). Daily smoking was most prevalent for males in the 50 to 59 years age group (20.7%) and for females in the 40 to 49 years age group (3.4%). Daily smoking prevalence was higher among Malays (16.0%) than Chinese (7.6%) and Indians (9.8%) (Graph 2.1). The prevalence of daily smoking among residents with primary education (17.6%) was more than three times higher than residents with post-secondary education (5.2%) (Table 2.4).

Table 2.3: Age-specific prevalence (%) of daily smoking among Singapore residents aged 18 to 74 years by sex, 2023

Age (years)	Total	Males	Females
18-29	5.0	8.3	s
30-39	8.5	15.2	2.3
40-49	10.5	18.2	3.4
50-59	11.5	20.7	2.6
60-74	8.7	16.2	1.6
18-74	8.8	15.7	2.3

s: Data have been suppressed due to small counts or high sampling variability.

Graph 2.1: Crude prevalence (%) of daily smoking among Singapore residents aged 18 to 74 years by sex and ethnicity, 2023



Note: Data for Indian females have been suppressed due to small counts or high sampling variability.

Age of Initiation and Onset of Daily Smoking Among Daily Smokers

Among Singapore residents who are daily smokers, the mean age of initiation, or the age at which they first tried smoking, was 17 years old. The mean age at which they established their habit of daily smoking was 19 years old. Among the younger daily smokers aged 18 to 24 years, the mean age of initiation and age at which they established their daily smoking habit was 17 and 18 years old respectively. Such information help to establish more targeted interventions aim at younger adults to prevent or delay their smoking initiation.

Smoking Intensity of Daily Smokers

The mean number of cigarettes smoked per day among the daily smokers was 12 cigarettes. Male daily smokers on average smoked more cigarettes per day (12 cigarettes) than female daily smokers (8 cigarettes). Daily smokers in the 50 to 59 years age group on average smoked the highest number of cigarettes per day (13 cigarettes), compared to the other age groups.

Quit Intention of Daily Smokers

About half (46.5%) of the daily smokers had intention to quit smoking. However, only about one in six (18.2%) daily smokers planned to quit smoking within the next 12 months or less. Around one in four (25.6%) daily smokers did not plan to quit smoking at all but planned to cut down on the number of cigarettes smoked. Over one in four (27.9%) daily smokers did not plan to quit smoking or reduce the number of cigarettes smoked. Daily smokers who had abstained from smoking for a period of at least 24 hours in the past 12 months reported that on average they had tried quitting smoking three times during the past 12 months preceding the survey.

Trends in Daily Smoking

The crude and age-standardised prevalence of daily smoking decreased significantly between 2007 and 2023 (Table 2.4). This downward trend was also significant in adults aged 18 to 49 years, among males and females, among the Chinese and Malays, those with secondary and post-secondary education over the same period.

Between 2019 and 2023, the overall crude and age-standardized prevalence of daily smoking also decreased significantly. There was a significant decrease in daily smoking prevalence among males, among Chinese and Malays and residents with secondary education over the last five years.

Table 2.4: Prevalence (%) of daily smoking among Singapore residents aged 18 to 74 years by age, sex, education, and ethnicity, 2007 to 2023

	NHSS	NHS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2010	2013	2017	2019	2020	2021	2022	2023
Total	13.3	13.9	13.1	11.8 (10.6, 13.0)	10.6 (9.5, 11.7)	10.1 (9.2, 11.0)	10.4 (9.6, 11.2)	9.2 (8.5, 10.0)	8.8[c,e] (8.0, 9.6)
ASR	13.0	13.5	12.7	11.7	10.6	10.2	10.4	9.3	8.9[c,e]
18-29	17.4	16.0	12.6	9.8 (7.1, 12.5)	8.4 (6.5, 10.2)	8.8 (6.8, 10.8)	8.3 (6.2, 10.4)	5.1 (3.8, 6.5)	5.0[c] (2.7, 7.2)
30-39	12.5	16.0	14.7	12.6 (9.5, 15.7)	11.4 (9.3, 13.5)	9.9 (7.9, 11.8)	12.8 (10.9, 14.7)	8.7 (7.1, 10.4)[a]	8.5[c] (6.7, 10.3)
40-49	12.8	14.3	15.4	14.5 (11.6, 17.4)	10.6 (8.7, 12.5)	10.6 (8.5, 12.7)	11.6 (9.5, 13.7)	11.6 (9.9, 13.3)	10.5[c] (8.7, 12.2)
50-59	12.7	11.4	13.3	11.9 (9.2, 14.6)	12.6 (10.0, 15.2)	13.4 (10.8, 16.0)	11.3 (9.4, 13.3)	11.4 (9.5, 13.3)	11.5 (9.6, 13.4)
60-74	9.8	10.1	8.5	10.2 (7.5, 12.8)	10.2 (8.0, 12.4)	8.0 (6.5, 9.5)	8.3 (6.9, 9.6)	9.4 (7.9, 10.8)	8.7 (7.2, 10.2)
Males	23.1	24.0	23.0	20.6 (18.5, 22.8)	18.4 (16.3, 20.5)	17.0 (15.4, 18.6)	17.8 (16.3, 19.3)	16.0 (14.7, 17.3)	15.7[c,e] (14.2, 17.2)
Females	3.8	4.1	3.6	3.3 (2.3, 4.3)	3.2 (2.4, 3.9)	3.4 (2.5, 4.3)	3.3 (2.6, 4.0)	2.7 (2.2, 3.3)	2.3[c] (1.8, 2.8)
Primary	16.3	19.4	15.8	17.2 (13.6, 20.9)	18.3 (15.2, 21.4)	16.5 (13.7, 19.3)	16.5 (13.5, 19.5)	17.5 (14.7, 20.3)	17.6 (14.8, 20.5)
Secondary	18.0	18.1	19.6	17.5 (14.8, 20.2)	16.7 (14.3, 19.0)	16.4 (14.2, 18.6)	15.5 (13.6, 17.3)	14.6 (12.9, 16.4)	14.6[c,e] (12.5, 16.8)
Post-secondary	8.4	9.3	8.3	6.9 (5.6, 8.2)	6.1 (5.1, 7.1)	6.0 (5.0, 6.9)	7.2 (6.3, 8.1)	5.7 (5.0, 6.4)	5.2[c] (4.4, 5.9)
Chinese	12.0	12.6	11.5	9.9 (8.6, 11.2)	8.6 (7.5, 9.7)	8.6 (7.7, 9.5)	8.6 (7.8, 9.5)	7.9 (7.2, 8.7)	7.6[c,e] (6.8, 8.4)
Malays	23.0	26.1	24.9	23.1 (19.0, 27.3)	23.0 (19.4, 26.6)	21.1 (17.3, 24.9)	22.4 (19.1, 25.8)	19.5 (16.6, 22.3)	16.0[c,e] (13.3, 18.7)
Indians	11.1	10.0	10.5	12.6 (8.4, 16.9)	10.9 (8.0, 13.8)	8.9 (6.0, 11.9)	9.2 (6.8, 11.7)	5.9 (4.2, 7.6)	9.8 (5.3, 14.3)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 resident population.

(3) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(4) [c] Indicate statistically significant linear downward trend between 2007 and 2023 with p-value <0.05.

(5) [e] Indicate statistically significant linear downward trend between 2019 and 2023 with p-value <0.05

Chapter 3
Physical Activity

Key Points

- Based on all domains of physical activity (including work-related, transportation-related and leisure-time), 78.5% of Singapore residents had sufficient total physical activity in 2023.
- More males (80.0%) compared with females (76.9%) were able to meet the recommended total physical activity level.
- Young adults in the 18 to 29 years age group (85.5%) had the highest level of sufficient total physical activity while the older adults aged 60 to 74 years had the lowest proportion at 74.2%.
- The largest contributor to total physical activity per week was commuting (45.6%), followed by leisure-time physical activity (29.1%) and work-related physical activity (25.3%).
- About one in three (33.7%) Singapore residents aged 18 to 74 years reported having sufficient muscle-strengthening activities in 2023.
- This was more common among younger adults aged 18 to 29 years (42.3%) while the proportion with sufficient muscle-strengthening activities dropped to around one-third or less for those aged 30 to 74 years.
- There was higher proportion of males (40.4%) with sufficient muscle-strengthening activities compared with females (27.3%).

Introduction

Physical activity is important for maintaining good health for all ages. For adults, it has been shown to reduce the risk of premature death in general and in particular the risk of developing cardiovascular diseases, hypertension and diabetes mellitus. In addition, physical activity improves mental and cognitive health, sleep and prevents unhealthy weight gain. In older adults aged 65 years and above, those who are physically active are less likely to experience falls and falls-related injuries and have better functional capacity and mobility to live longer independently *(US Department of Health and Human Services 2018; WHO 2020; WHO 2010)*.

Methodology

An interviewer-administered questionnaire was used. Respondents were asked about the frequency, duration, and intensity of physical activity in the domain of work, transportation and leisure[6] using the Global Physical Activity Questionnaire (GPAQ) Analysis Guide developed by WHO in 2014. Physical activity participation was assessed and could be achieved in one single session or accumulated in bouts of at least 10 minutes throughout the day.

Total Physical Activity

WHO guidelines recognise that participation in physical activity can be achieved across three domains: work-related activity (paid or unpaid work including household chores), transportation-related activity (e.g. walking or cycling while travelling to and from places) and leisure-time physical activity; and recommend that adults should do at least 150 minutes of moderate-intensity physical activity or at least 75 minutes of vigorous-intensity physical activity or an equivalent combination of moderate- and vigorous-intensity physical activity per week *(WHO 2020; WHO 2010)*. This recommendation is equivalent to achieving a minimum of at least 600 MET[7] minutes per week (i.e., having sufficient total physical activity).

Prevalence of Sufficient Total Physical Activity

In 2023, 78.5% of Singapore residents aged 18 to 74 years had sufficient total physical activity (Table 3.1). More males (80.0%) compared with females (76.9%) were able to meet the recommended total physical activity level. Physical activity participation was observed to decrease with age - young adults in the 18 to 29 years age group (85.5%) had the highest level of sufficient total physical activity while the older adults aged 60 to 74 years had the lowest proportion at 74.2%. A higher proportion of Indians (84.1%) had sufficient total physical activity than the Malays (80.1%) and Chinese (77.2%) (Graph 3.1). Residents with post-secondary education (80.8%) had higher sufficient total physical activity compared with residents with secondary (76.3%) or primary (68.9%) education (Table 3.2). The largest contributor to total physical activity per week was commuting (45.6%), followed by leisure-time physical activity (29.1%) and work-related physical activity (25.3%).

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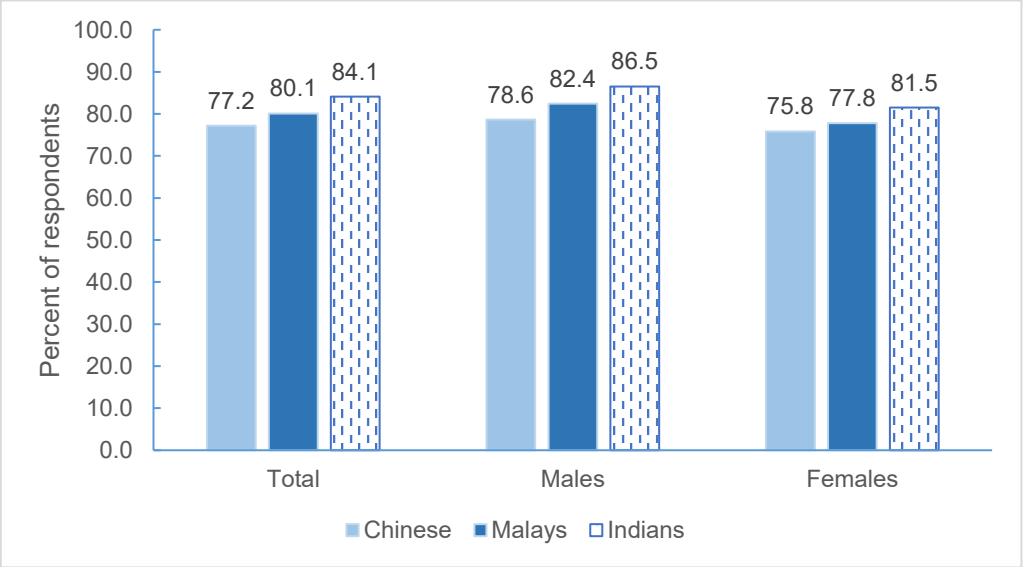
[6] Starting from NPHS 2022, the National Population Health Survey will no longer report the participation on leisure-time physical activity. For information regarding sports and exercise participation among Singapore residents, please refer to the National Sport Participation Survey (NSPS).

[7] MET (Metabolic Equivalents) is the ratio of a person's working metabolic rate relative to the resting metabolic rate. 1MET is defined as the energy cost of sitting quietly and is equivalent to a caloric consumption of 1kcal/kg/hour.

Table 3.1: Age-specific prevalence (%) of sufficient total physical activity among Singapore residents aged 18 to 74 years by sex, 2023

Age (years)	Total	Males	Females
18-29	85.5	89.9	81.0
30-39	79.0	82.5	75.7
40-49	77.4	78.8	76.1
50-59	77.0	76.3	77.8
60-74	74.2	73.6	74.8
18-74	78.5	80.0	76.9

Graph 3.1: Crude prevalence (%) of sufficient total physical activity among Singapore residents aged 18 to 74 years by sex and ethnicity, 2023



Trends in Sufficient Total Physical Activity

The decreasing trend in the proportion of residents with sufficient total physical activity was only significant for primary and secondary educated residents between 2007 and 2023 but not at the overall level or for other subgroups (Table 3.2). Similar declines in sufficient total physical activity were observed in all subgroups in the period 2019 to 2023 but the declines were all not significant.

Table 3.2: Prevalence (%) of sufficient total physical activity among Singapore residents aged 18 to 74 years by age, sex, education, and ethnicity, 2007 to 2023

	NHSS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2013	2017	2019	2020	2021	2022	2023
Total	85.4	79.5	84.0 (82.1, 86.0)	84.6 (83.2, 85.9)	80.6 (79.4, 81.8)[a]	76.0 (74.8, 77.2)[a]	74.9 (73.8, 76.1)	78.5 (77.3, 79.6)[a]
ASR	85.3	78.9	83.9	84.6	80.5	76.1	75.0	78.5
18-29	87.9	86.9	90.4 (87.5, 93.4)	88.2 (85.4, 91.0)	86.4 (84.0, 88.8)	81.9 (79.1, 84.7)	80.2 (77.5, 82.8)	85.5 (82.7, 88.3)
30-39	83.2	78.9	84.6 (81.0, 88.1)	82.7 (79.8, 85.5)	81.4 (78.6, 84.1)	76.6 (73.8, 79.3)	75.5 (73.0, 77.9)	79.0 (76.5, 81.4)
40-49	85.6	78.5	81.6 (78.1, 85.1)	86.1 (83.7, 88.5)	79.5 (76.9, 82.2)[a]	74.9 (72.1, 77.7)	75.7 (73.4, 78.1)	77.4 (75.0, 79.8)
50-59	85.7	78.1	82.5 (79.3, 85.7)	83.2 (80.1, 86.3)	81.3 (78.7, 83.9)	78.0 (75.3, 80.6)	74.3 (71.6, 77.0)	77.0 (74.4, 79.7)
60-74	84.6	73.4	80.5 (76.7, 84.4)	82.7 (80.0, 85.3)	74.7 (71.9, 77.5)[a]	69.6 (67.0, 72.2)	69.9 (67.5, 72.2)	74.2 (71.9, 76.5)
Males	85.2	82.5	84.6 (82.1, 87.0)	85.6 (83.9, 87.3)	80.4 (78.6, 82.2)[a]	78.1 (76.4, 79.7)	76.7 (75.2, 78.3)	80.0 (78.5, 81.6)[a]
Females	85.7	76.6	83.5 (81.1, 85.9)	83.6 (81.8, 85.5)	80.7 (79.1, 82.3)	74.1 (72.3, 75.9)[a]	73.2 (71.6, 74.8)	76.9 (75.3, 78.6)[a]
Primary	87.7	72.9	83.7 (79.9, 87.5)	79.0 (74.9, 83.1)	75.1 (71.8, 78.3)	67.6 (63.8, 71.3)[a]	63.1 (59.6, 66.6)	68.9[c] (65.4, 72.5)
Secondary	87.4	79.8	82.6 (79.6, 85.6)	84.2 (81.9, 86.5)	78.5 (76.2, 80.9)[a]	74.5 (72.1, 76.8)	74.1 (72.0, 76.3)	76.3[c] (74.0, 78.5)
Post-secondary	83.0	81.3	84.9 (82.7, 87.1)	86.0 (84.3, 87.6)	82.5 (81.0, 84.1)[a]	78.1 (76.5, 79.7)[a]	77.3 (75.9, 78.6)	80.8 (79.4, 82.2)[a]
Chinese	84.3	78.7	83.4 (81.2, 85.6)	83.6 (81.9, 85.2)	79.7 (78.2, 81.1)[a]	74.9 (73.4, 76.4)[a]	73.1 (71.8, 74.4)	77.2 (75.8, 78.5)[a]
Malays	87.9	81.7	87.1 (83.6, 90.7)	84.8 (81.5, 88.1)	80.5 (77.1, 83.9)	76.2 (73.0, 79.4)	79.4 (76.6, 82.2)	80.1 (77.2, 83.0)
Indians	89.9	81.6	83.6 (79.3, 88.0)	91.1 (88.7, 93.4)[a]	86.5 (83.4, 89.6)	82.4 (78.9, 85.9)	80.9 (77.6, 84.1)	84.1 (80.6, 87.6)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 resident population.

(3) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(4) Data for NPHS 2017 for 60 to 74 years age group and residents with secondary education have been revised due to a coding error.

(5) [c] Indicate statistically significant linear downward trend between 2007 and 2023 with p-value <0.05.

Muscle-Strengthening Activity

WHO also recommends that adults should do muscle-strengthening activities involving the major muscle groups at least two days or more in a week. Muscle-strengthening activity refers to an activity or exercise that increases skeletal muscle strength, power, endurance and mass (e.g., strength training, resistance training or muscular strength and endurance exercises) and may involves the use of weight machines, exercise bands, hand-held weights or own body weight (e.g., push-ups or sit-ups) (*WHO 2010*; *Bennie et al. 2019)*. The major muscle groups to work on include the legs, back, abdomen, chest, shoulders and arms (*WHO 2010*). It has been shown that muscle-strengthening exercises increase skeletal muscle strength and mass, bone density, ability to perform activities of daily living, improve cardiometabolic heath and reduce symptoms of anxiety and depression (*Bennie et al. 2019*).

Methodology

Information on muscles-strengthening activities were collected since 2020 using an interviewer administered questionnaire. Respondents were asked about the number of days in a typical week that they do physical activities or exercises to strengthen their muscles. Respondents must complete at least one set of exercises involving eight to 12 repetitions to be counted as having done one day of muscle-strengthening activities. Respondents were classified as having sufficient muscle-strengthening activities if the frequency of muscle-strengthening activities are at least two days per week.

Prevalence of Sufficient Muscle-Strengthening Activities

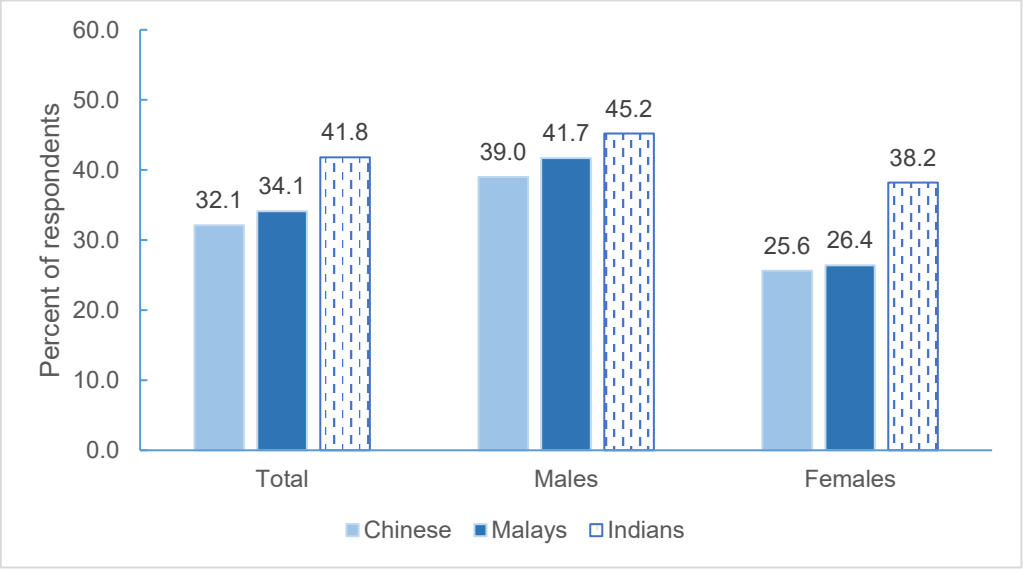
About one in three (33.7%) Singapore residents aged 18 to 74 years reported having sufficient muscle-strengthening activities in 2023 (Table 3.3). This was more common among younger adults aged 18 to 29 years (42.4%) while the proportion with sufficient muscle-strengthening activities dropped to around one-third or less for those aged 30 to 74 years. Males (40.4%) had higher proportion with sufficient muscle-strengthening activities compared with females (27.3%). The proportion of males with sufficient muscle-strengthening activities in the ages 18 to 29 years was almost twice that of females in the same age group and this difference narrowed for older age groups.

Table 3.3: Age-specific prevalence (%) of sufficient muscle-strengthening activities among Singapore residents aged 18 to 74 years by sex, 2023

Age (years)	Total	Males	Females
18-29	42.4	56.0	28.4
30-39	34.1	40.9	27.9
40-49	31.7	36.9	26.8
50-59	31.3	36.3	26.4
60-74	30.0	33.0	27.2
18-74	33.7	40.4	27.3

Among the ethnic groups, Indians had the highest proportion with sufficient muscle-strengthening activities (41.8%) and for both sexes (males 45.2%, females 38.2%) (Graph 3.2). Similar proportion of Malay (34.1%) and Chinese (32.1%) residents reported having sufficient muscle-strengthening activities in 2023. Among the subgroups, Malay (26.4%) and Chinese (25.6%) females had the lowest participation in sufficient muscle-strengthening activities. Residents with post-secondary education (38.0%) had higher proportion with sufficient muscle-strengthening activities compared with residents with secondary (28.4%) or primary (19.3%) education (Table 3.4).

Graph 3.2: Crude prevalence (%) of sufficient muscle-strengthening activities among Singapore residents aged 18 to 74 years by sex and ethnicity, 2023



Trends in Sufficient Muscle-Strengthening Activities

The proportion of Singapore residents aged 18 to 74 years with sufficient muscle-strengthening activities remained stable from 33.7% to 35.5% between 2020 to 2023 (Table 3.4).

Table 3.4: Prevalence (%) of sufficient muscles-strengthening activities among Singapore residents aged 18 to 74 years by age, sex, education and ethnicity, 2020 to 2023

	NPHS	NPHS	NPHS	NPHS
	2020	2021	2022	2023
Total	33.8 (32.3, 35.3)	35.5 (34.0, 37.0)	34.5 (33.3, 35.8)	33.7 (32.4, 35.1)
ASR	33.8	35.6	34.6	33.8
18-29	44.1 (40.2, 48.0)	46.4 (42.4, 50.5)	45.8 (42.4, 49.3)	42.4 (38.4, 46.3)
30-39	30.9 (27.4, 34.4)	37.0 (33.8, 40.2)	33.9 (31.0, 36.7)	34.1 (31.1, 37.2)
40-49	33.5 (30.1, 36.8)	30.8 (27.8, 33.9)	33.5 (30.9, 36.1)	31.7 (29.0, 34.4)
50-59	35.5 (32.0, 39.0)	32.3 (29.0, 35.6)	31.6 (28.7, 34.5)	31.3 (28.4, 34.2)
60-74	25.5 (22.7, 28.3)	31.3 (28.8, 33.9)[a]	28.8 (26.4, 31.3)	30.0 (27.4, 32.5)
Males	40.1 (37.8, 42.4)	40.0 (37.9, 42.1)	40.2 (38.3, 42.0)	40.4 (38.4, 42.5)
Females	27.8 (25.8, 29.8)	31.2 (29.1, 33.2)	29.1 (27.4, 30.9)	27.3 (25.6, 29.1)
Primary	19.6 (16.4, 22.8)	21.0 (17.6, 24.3)	21.7 (18.6, 24.7)	19.3 (16.3, 22.3)
Secondary	27.4 (24.8, 30.0)	30.5 (28.0, 33.1)	29.2 (26.8, 31.6)	28.4 (25.9, 30.9)
Post-secondary	39.4 (37.3, 41.5)	40.1 (38.1, 42.0)	38.9 (37.2, 40.6)	38.0 (36.3, 39.8)
Chinese	32.7 (31.0, 34.5)	34.5 (32.8, 36.2)	33.3 (31.8, 34.8)	32.1 (30.6, 33.6)
Malays	32.7 (28.5, 36.9)	33.7 (29.8, 37.7)	33.9 (30.5, 37.4)	34.1 (30.3, 37.8)
Indians	41.6 (36.1, 47.1)	41.7 (36.8, 46.5)	44.8 (40.7, 49.0)	41.8 (36.7, 46.9)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically from the previous survey year at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 resident population.

(3) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

Chapter 4
Self-reported Diabetes Mellitus

Key Points

- About one in 14 (7.3%) Singapore residents aged 18 to 74 years reported that they had diabetes mellitus and were currently prescribed medication in 2023.
- A higher proportion of males (8.1%) reported having diabetes compared to females (6.6%).
- The prevalence of self-reported diabetes mellitus increased with age, from 1.0% in young adults aged 30 to 39 years to 22.3% among those aged 70 to 74 years.

Introduction

Diabetes mellitus represents a group of metabolic disorders characterised by high blood sugar (hyperglycemia) resulting from defects in insulin secretion, insulin action, or both. Diabetes mellitus can lead to death and disability through long-term complications such as blindness, kidney failure, coronary heart disease and stroke. Type 2 diabetes is the more common form of diabetes, occurring mainly in older adults and is associated with obesity (*WHO, 2019).*

Methodology

An interviewer-administered questionnaire was used to obtain an indication of the prevalence of known diabetes mellitus in the community. Respondents were asked whether they had ever been told by a western-trained doctor that they had diabetes and were currently prescribed medication for diabetes. Respondents who answered “yes” to both questions were classified as having “reported diabetes mellitus”. Diabetes mellitus prevalence estimates based on reported use of medication for diabetes mellitus are likely to be under-estimated as there will be a proportion of undiagnosed diabetics who were not aware of their condition at the time of the survey. Among those with self-reported diabetes, they were also asked on the frequency of doctor’s visit and place of treatment to manage their diabetes.

Prevalence of Self-reported Diabetes Mellitus

The prevalence of self-reported diabetes among Singapore residents aged 18 to 74 years was 7.3% (Table 4.1). A higher proportion of males (8.1%) were reported as diabetic compared to females (6.6%) and this pattern was also observed in all age groups. Self-reported diabetes prevalence increased with age; from 1.0% among those aged 30 to 39 years to 22.3% in those aged 70 to 74 years. Indians (13.5%) had the highest prevalence of self-reported diabetes, compared to Malays (10.7%) and Chinese (6.2%) (Graph 4.1). Residents with post-secondary (3.7%) education had lower self-reported diabetes prevalence compared to residents with secondary (12.1%) or primary education (18.8%) (Table 4.2). Residents with self-reported diabetes visited their doctors for the management of their diabetes about four times on average in the past 12 months, mainly in polyclinics (63.2%), private GP clinics (21.3%) and specialist outpatient clinics in public hospitals (12.6%).

Table 4.1: Age-specific prevalence (%) of self-reported diabetes mellitus among Singapore residents aged 18 to 74 years by sex, 2023

Age (years)	Total	Males	Females
18-29	s	s	s
30-39	1.0	s	s
40-49	2.8	3.9	1.8
50-59	10.5	10.5	10.4
60-69	19.1	22.5	15.8
70-74	22.3	22.8	21.9
18-74	7.3	8.1	6.6

s: Data have been suppressed due to small counts or high sampling variability.

Trends in Prevalence of Self-reported Diabetes Mellitus

The crude and age-standardised prevalence of self-reported diabetes among Singapore residents aged 18 to 74 years showed a significant increasing trend between 2007 and 2023 (Table 4.2). This significant increase was also observed among residents aged 60 to 69 years, and across all sexes, ethnic groups and education levels.

On the other hand, for the most recent five year period, there was a significant decrease in the prevalence of self-reported diabetes for residents aged 40 to 49 years from 2019 (5.0%) to 2023 (2.8%). The prevalence of self-reported diabetes for overall level and other subgroups remained stable during this period.

Graph 4.1: Crude prevalence (%) of self-reported diabetes mellitus among Singapore residents aged 18 to 74 years by sex and ethnicity, 2023

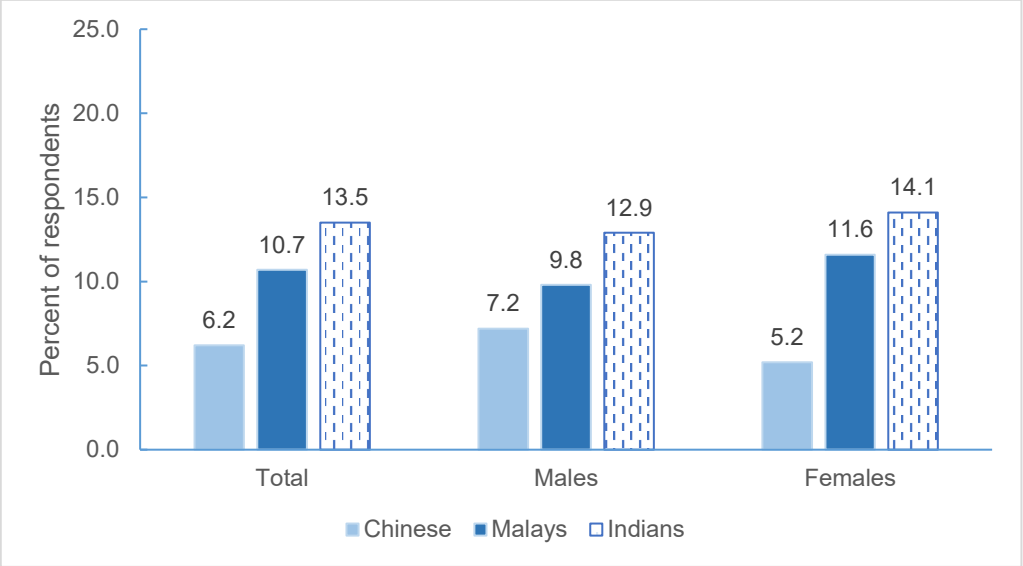


Table 4.2: Prevalence (%) of self-reported diabetes mellitus among Singapore residents aged 18 to 74 years by age, sex, education, and ethnicity, 2007 to 2023

	NHSS	NHS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2010	2013	2017	2019	2020	2021	2022	2023
Total	4.9	5.0	5.4	6.7 (5.7, 7.7)	6.9 (6.1, 7.7)	7.0 (6.3, 7.8)	6.9 (6.2, 7.6)	6.7 (6.0, 7.3)	7.3[b] (6.6, 8.0)
ASR	6.4	6.1	6.6	7.1	7.0	7.1	6.8	6.5	7.2[b]
18-29	s	s	s	s	s	s	s	s	s
30-39	0.7	s	s	s	s	1.7 (0.8, 2.6)	0.9 (0.4, 1.3)	s	1.0 (0.4, 1.5)
40-49	4.3	2.6	4.2	4.3 (2.5, 6.2)	5.0 (3.0, 7.0)	4.3 (3.1, 5.6)	3.5 (2.4, 4.6)	2.8 (1.9, 3.6)	2.8[e] (1.9, 3.7)
50-59	8.2	10.0	8.1	11.7 (8.7, 14.6)	9.8 (7.7, 12.0)	7.9 (6.2, 9.6)	9.3 (7.6, 11.1)	7.7 (6.1, 9.2)	10.5 (8.6, 12.4)
60-69	17.1	14.0	14.8	17.3 (13.6, 21.0)	17.0 (14.1, 20.0)	19.0 (16.1, 22.0)	18.3 (15.7, 20.9)	19.1 (16.5, 21.6)	19.1[b] (16.6, 21.6)
70-74	15.7	16.8	22.2	14.8 (9.9, 19.7)	21.4 (16.7, 26.0)	21.0 (16.6, 25.5)	21.7 (17.5, 26.0)	19.6 (16.1, 23.1)	22.3 (17.5, 27.1)
Males	5.3	5.1	5.8	7.7 (6.1, 9.2)	8.3 (7.0, 9.5)	7.2 (6.0, 8.3)	7.6 (6.6, 8.7)	7.6 (6.6, 8.6)	8.1[b] (7.0, 9.1)
Females	4.5	4.9	5.1	5.7 (4.5, 7.0)	5.6 (4.5, 6.6)	6.9 (6.0, 7.9)	6.2 (5.3, 7.1)	5.8 (4.9, 6.6)	6.6[b] (5.7, 7.6)

Table 4.2: Prevalence (%) of self-reported diabetes mellitus among Singapore residents aged 18 to 74 years by age, sex, education, and ethnicity, 2007 to 2023 (continued)

	NHSS	NHS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2010	2013	2017	2019	2020	2021	2022	2023
Primary	10.7	11.4	14.2	12.3 (9.4, 15.1)	19.5 (15.7, 23.3)[a]	18.9 (15.9, 22.0)	19.7 (16.8, 22.6)	18.1 (15.3, 20.8)	18.8[b] (15.7, 22.0)
Secondary	5.6	6.2	6.8	10.3 (8.1, 12.4)	10.0 (8.1, 11.8)	10.0 (8.4, 11.6)	10.6 (8.9, 12.3)	10.1 (8.5, 11.6)	12.1[b] (10.3, 13.9)
Post-secondary	2.0	1.9	2.0	3.0 (2.1, 4.0)	2.7 (2.1, 3.4)	3.4 (2.7, 4.2)	3.2 (2.6, 3.8)	3.4 (2.8, 4.0)	3.7[b] (3.0, 4.3)
Chinese	4.1	4.1	4.6	5.6 (4.5, 6.7)	6.2 (5.3, 7.1)	6.3 (5.4, 7.1)	5.7 (5.0, 6.5)	5.4 (4.7, 6.1)	6.2[b] (5.4, 6.9)
Malays	6.2	7.5	8.2	8.2 (5.3, 11.1)	8.8 (6.5, 11.1)	8.2 (6.1, 10.3)	10.2 (8.1, 12.4)	10.7 (8.3, 13.0)	10.7[b] (8.6, 12.9)
Indians	10.8	9.7	9.6	14.7 (10.1, 19.3)	11.5 (8.8, 14.3)	12.2 (9.2, 15.2)	13.5 (10.2, 16.8)	12.6 (10.0, 15.2)	13.5[b] (9.8, 17.2)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) s: Data have been suppressed due to small counts or high sampling variability.

(3) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 resident population.

(4) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(5) [b] Indicate statistically significant linear upward trend between 2007 and 2023 with p-value <0.05.

(6) [e] Indicate statistically significant linear downward trend between 2019 and 2023 with p-value <0.05.

Chapter 5
Self-reported Hypertension

Key Points

- In 2023, about one in six (15.0%) Singapore residents aged 18 to 74 years reported that they had hypertension (or high blood pressure) and were currently prescribed medication.
- A higher proportion of males (15.9%) reported having hypertension than females (14.2%).
- The prevalence of self-reported hypertension increased with age, from 2.4% in young adults aged 30 to 39 years to 47.7% among those aged 70 to 74 years.

Introduction

Hypertension or high blood pressure is a condition in which the blood vessels have persistently raised pressure. It is often known as a silent killer as it rarely causes symptoms and many people go undiagnosed. Hypertension is one of the key risk factors for cardiovascular diseases such as heart attack, stroke and heart failure as well as other diseases like kidney failure. Dietary and lifestyle changes can improve blood pressure control and decrease the risk of associated health complications, although drug treatment may be necessary in patients for whom lifestyle changes prove ineffective or insufficient *(WHO, 2013).*

Methodology

An interviewer-administered questionnaire was used to obtain an indication of the prevalence of known hypertension in the community. Respondents were asked whether they had ever been told by a western-trained doctor that they had high blood pressure and were currently prescribed medication for high blood pressure. Respondents who answered “yes” to both questions were classified as having “reported hypertension”. Hypertension prevalence estimates based on reported use of medication for high blood pressure are likely to be under-estimated as there will be a proportion of undiagnosed hypertensives who were not aware of their condition at the time of the survey. Among those with self-reported hypertension, they were also asked on the frequency of doctor’s visit and place of treatment to manage their hypertension.

Prevalence of Self-reported Hypertension

The prevalence of self-reported hypertension among Singapore residents aged 18 to 74 years was 15.0% (Table 5.1). A higher percentage of males (15.9%) were reported as hypertensive compared to females (14.2%) and this trend was observed across most age groups except for those aged 70 to 74 years. Self-reported hypertension prevalence was also found to increase with age, from 2.4% among younger adults aged 30 to 39 years to 47.7% among older adults aged 70 to 74 years. Among the ethnic groups, Malays (18.9%) had the highest prevalence of self-reported hypertension, followed by Chinese (14.9%) and Indians (11.9%) (Graph 5.1). The prevalence of self-reported hypertension was higher among Malay and Indian males compared to females while the pattern was reverse among the Chinese where males had higher prevalence of self-reported hypertension than females.

Residents with post-secondary education had much lower prevalence of self-reported hypertension (8.7%) compared to those with secondary (22.1%) or primary education (38.0%) (Table 5.2). Residents with self-reported hypertension visited their doctors for the management of their high blood pressure about three times on average in the past 12 months, mainly in polyclinics (53.7%), private GP clinics (30.8%) and specialist outpatient clinics in public hospitals (11.8%).

Table 5.1: Age-specific prevalence (%) of self-reported hypertension among Singapore residents aged 18 to 74 years by sex, 2023

Age (years)	Total	Males	Females
18-29	s	s	s
30-39	2.4	3.0	1.8
40-49	7.7	8.8	6.6
50-59	19.3	20.0	18.5
60-69	38.5	41.3	35.6
70-74	47.7	45.7	49.3
18-74	15.0	15.9	14.2

s: Data have been suppressed due to small counts or high sampling variability.

Trends in Prevalence of Self-reported Hypertension

There was a significant increase in the crude prevalence of self-reported hypertension between 2007 to 2023 but the age-standardised prevalence did not show a significant increase over the same period (Table 5.2). This increase was also observed among Chinese, in both sexes, and across all education levels.

Between 2019 and 2023, the prevalence of self-reported hypertension at the overall level and for the other demographics profiles remained stable except for the 40 to 49 years age group where the prevalence trended downward significantly.

Graph 5.1: Crude prevalence (%) of self-reported hypertension among Singapore residents aged 18 to 74 years by sex and ethnicity, 2023

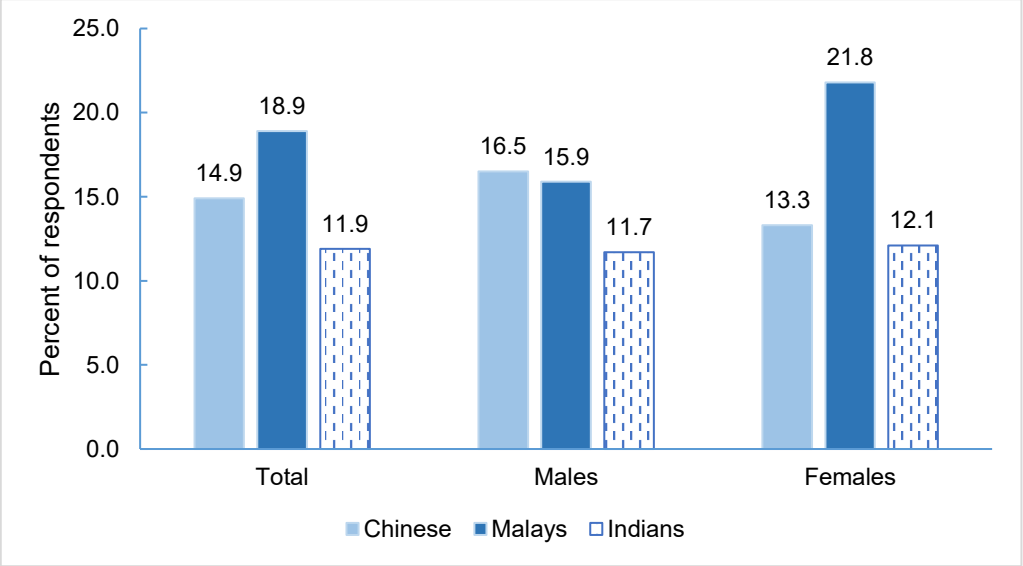


Table 5.2: Prevalence (%) of self-reported hypertension among Singapore residents aged 18 to 74 years by age, sex, education, and ethnicity, 2007 to 2023

	NHSS	NHS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2010	2013	2017	2019	2020	2021	2022	2023
Total	12.7	14.0	12.9	12.7 (11.4, 14.1)	15.6 (14.3, 16.9)[a]	15.1 (14.1, 16.2)	15.7 (14.6, 16.7)	16.0 (15.0, 16.9)	15.0[b] (14.1, 16.0)
ASR	16.9	17.2	15.3	13.8	15.9	15.3	15.5	15.6	14.7
18-29	s	s	s	s	s	s	s	s	s
30-39	2.1	3.7	2.7	s	s	2.1 (1.2, 3.1)	2.0 (1.1, 2.9)	2.3 (1.5, 3.1)	2.4 (1.2, 3.5)
40-49	8.1	9.9	8.4	9.4 (6.7, 12.0)	9.0 (7.0, 11.0)	8.8 (7.0, 10.5)	8.5 (6.6, 10.5)	7.9 (6.5, 9.2)	7.7[e] (6.1, 9.2)
50-59	22.9	24.5	20.2	20.7 (17.1, 24.2)	22.8 (19.6, 25.9)	18.8 (16.1, 21.4)	22.5 (19.5, 25.4)	22.0 (19.4, 24.6)	19.3 (16.9, 21.7)
60-69	47.4	42.4	34.8	31.0 (26.2, 35.8)	37.2 (33.6, 40.8)	39.7 (36.1, 43.2)	37.8 (34.7, 40.9)	38.8 (35.8, 41.9)	38.5 (35.4, 41.6)
70-74	44.2	45.3	58.2	46.8 (39.0, 54.5)	55.8 (49.7, 61.9)	51.1 (45.3, 56.9)	52.7 (47.4, 58.0)	53.0 (48.3, 57.7)	47.7 (42.6, 52.8)
Males	12.9	14.8	13.5	13.8 (11.8, 15.7)	16.8 (14.9, 18.7)	15.9 (14.3, 17.5)	17.2 (15.7, 18.7)	17.7 (16.3, 19.1)	15.9[b] (14.5, 17.3)
Females	12.5	13.2	12.3	11.7 (10.1, 13.4)	14.5 (12.8, 16.1)	14.4 (13.0, 15.7)	14.2 (12.8, 15.7)	14.4 (13.1, 15.6)	14.2[b] (13.0, 15.5)
Primary	26.3	30.1	29.9	25.9 (21.5, 30.3)	38.4 (34.2, 42.6)[a]	37.5 (33.8, 41.2)	39.1 (35.2, 43.0)	39.1 (35.5, 42.6)	38.0[b] (34.2, 41.8)
Secondary	13.9	15.6	15.8	16.6 (14.1, 19.2)	21.2 (18.9, 23.5)	20.2 (18.0, 22.3)	23.0 (20.6, 25.3)	22.6 (20.6, 24.7)	22.1[b] (20.1, 24.2)
Post-secondary	6.3	7.2	6.2	6.9 (5.4, 8.3)	8.1 (6.8, 9.4)	8.6 (7.4, 9.7)	8.6 (7.6, 9.7)	9.4 (8.4, 10.4)	8.7[b] (7.7, 9.7)
Chinese	13.3	14.4	13.4	13.0 (11.4, 14.6)	15.8 (14.3, 17.3)	15.9 (14.6, 17.1)	15.7 (14.5, 16.9)	16.6 (15.5, 17.7)	14.9[b] (13.8, 16.0)
Malays	12.4	14.3	11.5	10.5 (7.9, 13.1)	16.7 (13.5, 20.0)[a]	14.9 (12.1, 17.8)	15.8 (13.1, 18.5)	15.1 (12.6, 17.6)	18.9 (15.9, 21.8)
Indians	10.1	11.7	11.6	14.1 (9.9, 18.3)	12.6 (9.6, 15.7)	11.5 (8.7, 14.3)	15.3 (11.7, 19.0)	13.2 (10.6, 15.8)	11.9 (9.0, 14.8)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) s: Data have been suppressed due to small counts or high sampling variability.

(3) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 resident population.

(4) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(5) [b] Indicate statistically significant linear upward trend between 2007 and 2023 with p-value <0.05.

(6) [e] Indicate statistically significant linear downward trend between 2019 and 2023 with p-value <0.05.

Chapter 6
Self-reported Hyperlipidaemia

Key Points

- About one in six (15.3%) Singapore residents aged 18 to 74 years reported that they had hyperlipidaemia (or high blood cholesterol) and were currently prescribed medication in 2023.
- More males (16.9%) reported having high blood cholesterol than females (13.7%).
- The prevalence of self-reported high blood cholesterol increased with age, from 1.7% in young adults aged 30 to 39 years to 50.9% among those aged 70 to 74 years.

Introduction

Hyperlipidaemia or high blood cholesterol is a major risk factor for coronary heart disease. Elevated blood cholesterol, in particular LDL-cholesterol, causes atherosclerosis and increases the risk for coronary heart disease. HDL-cholesterol has been shown to have a protective effect against coronary heart disease. Low HDL-cholesterol has been shown to be an important independent risk factor for development of coronary heart disease. Population-based (public health) approaches through the adoption of healthier lifestyle behaviours such as reduced dietary intake of saturated fats and cholesterol, being more physically active, and better weight control as well as clinical management of those persons at increased risk are important factors in lowering the cholesterol levels in the population (*JAMA 2001; NIH 2002)*.

Methodology

An interviewer-administered questionnaire was used to obtain an indication of the prevalence of known high blood cholesterol in the community. Respondents were asked whether they had ever been told by a western-trained doctor that they had high blood cholesterol and were currently prescribed medication for high blood cholesterol. Respondents who answered “yes” to both questions were classified as having “reported high blood cholesterol”. High blood cholesterol prevalence estimates based on reported use of medication for high blood cholesterol are likely to be under-estimated as there will be a proportion of residents with undiagnosed high blood cholesterol who were aware of their condition at the time of the survey. Among those with self-reported high blood cholesterol, they were also asked on the frequency of doctor’s visit and place of treatment to manage their high blood cholesterol.

Prevalence of Self-reported Hyperlipidaemia

The prevalence of self-reported high blood cholesterol among Singapore residents aged 18 to 74 years was 15.3% (Table 6.1). Overall, a higher proportion of males (16.9%) reported having hyperlipidaemia compared to females (13.7%). This was observed across all age groups and ethnicities except for older adults aged 70 to 74 years, where a higher proportion of females (54.2%) reported having high blood cholesterol compared to males (47.1%). The prevalence of self-reported high blood cholesterol was also found to increase with age, from 1.7% among younger adults aged 30 to 39 years to 50.9% among those aged 70 to 74 years.

Malays (16.4%) had slightly higher prevalence of self-reported high blood cholesterol among the ethnic groups compared to Indians (15.5%) and Chinese (15.2%) (Graph 6.1). Close to two in five (37.5%) residents with primary education reported having high blood cholesterol, which was higher than those with secondary (22.2%) or post-secondary education (9.1%). Residents with self-reported hyperlipidaemia visited their doctors for the management of their high blood cholesterol about three times on average in the past 12 months, mainly in polyclinics (56.2%), private GP clinics (26.7%) and specialist outpatient clinics in public hospitals (11.5%).

Table 6.1: Age-specific prevalence (%) of self-reported hyperlipidaemia among Singapore residents aged 18 to 74 years by sex, 2023

Age (years)	Total	Males	Females
18-29	s	s	s
30-39	1.7	2.6	s
40-49	7.2	10.7	3.9
50-59	19.3	22.6	16.1
60-69	39.4	42.1	36.7
70-74	50.9	47.1	54.2
18-74	15.3	16.9	13.7

s: Data have been suppressed due to small counts or high sampling variability.

Trends in Prevalence of Self-reported Hyperlipidaemia

The crude prevalence of self-reported hyperlipidaemia increased significantly from 2007 to 2023 (Table 6.2) while the age-standardised prevalence did not show similar trend over the same period. There were significant increases observed among older adults aged 70 to 74 years, in both sexes, across all education levels, and among Chinese and Indians over the same period.

Between 2019 and 2023, significant increases were also seen among females and older adults aged 60 to 74 years while the prevalence for other subgroups remained stable.

Graph 6.1: Crude prevalence (%) of self-reported hyperlipidaemia among Singapore residents aged 18 to 74 years by sex and ethnicity, 2023

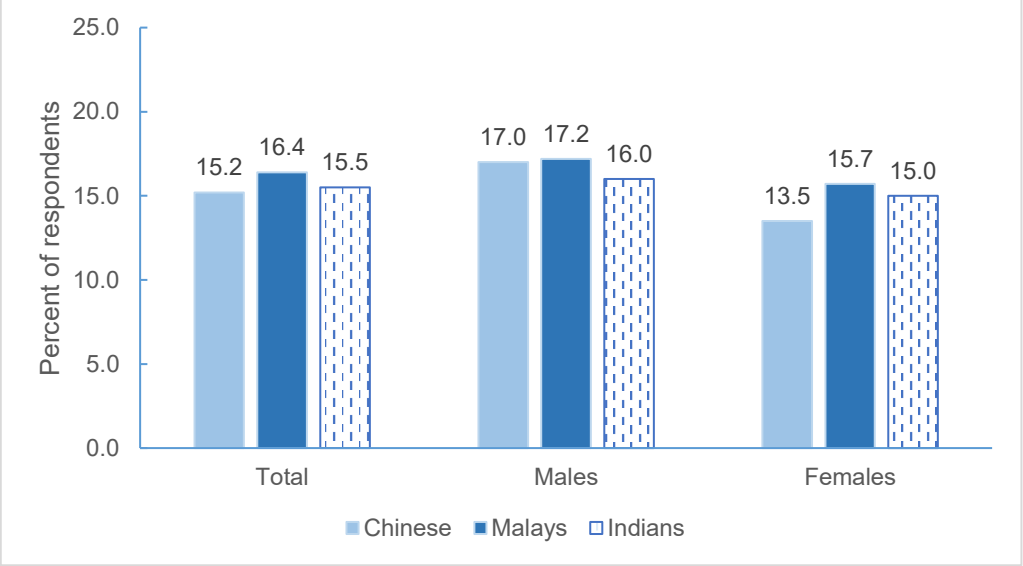


Table 6.2: Prevalence (%) of self-reported hyperlipidaemia among Singapore residents aged 18 to 74 years by age, sex, education, and ethnicity, 2007 to 2023

	NHSS	NHS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2010	2013	2017	2019	2020	2021	2022	2023
Total	8.2	12.3	10.4	11.0 (9.7, 12.3)	13.6 (12.5, 14.6)[a]	13.1 (12.1, 14.1)	13.9 (12.9, 14.9)	14.1 (13.2, 15.0)	15.3[b] (14.3, 16.2)
ASR	10.8	15.6	12.4	11.8	13.8	13.3	13.7	13.8	15.0
18-29	s	s	s	s	s	s	s	s	s
30-39	2.1	2.4	1.3	1.7 (0.7, 2.7)	1.6 (0.7, 2.5)	s	1.1 (0.5, 1.8)	1.7 (1.0, 2.4)	1.7 (1.0, 2.5)
40-49	5.0	7.2	6.7	6.4 (4.3, 8.6)	7.6 (6.0, 9.1)	7.1 (5.5, 8.8)	6.6 (5.1, 8.2)	5.1 (4.0, 6.2)	7.2 (5.7, 8.6)
50-59	15.9	22.9	17.9	19.9 (16.2, 23.6)	22.1 (19.1, 25.1)	18.5 (15.7, 21.2)	20.9 (17.6, 24.1)	20.2 (17.6, 22.8)	19.3 (16.8, 21.8)
60-69	29.0	37.7	28.7	26.3 (22.0, 30.7)	33.5 (30.0, 36.9)	34.3 (30.8, 37.8)	35.8 (32.6, 38.9)	35.9 (32.9, 38.9)	39.4[d] (36.3, 42.5)
70-74	25.3	46.8	40.7	36.5 (29.4, 43.6)	42.4 (35.9, 48.8)	43.4 (37.7, 49.2)	43.4 (38.2, 48.7)	49.1 (44.4, 53.8)	50.9[b,d] (45.8, 56.1)
Males	8.6	12.4	10.7	12.4 (10.6, 14.2)	15.3 (13.6, 16.9)	13.9 (12.4, 15.5)	15.2 (13.7, 16.8)	15.0 (13.7, 16.3)	16.9[b] (15.5, 18.4)
Females	7.9	12.1	10.1	9.6 (8.2, 11.1)	12.0 (10.6, 13.3)	12.3 (11.0, 13.6)	12.6 (11.2, 14.0)	13.3 (12.1, 14.5)	13.7[b,d] (12.4, 15.0)
Primary	17.6	26.0	23.1	22.6 (18.7, 26.5)	34.8 (31.1, 38.5)[a]	33.2 (29.7, 36.8)	29.5 (26.3, 32.8)	37.1 (33.6, 40.7)[a]	37.5[b] (33.8, 41.3)
Secondary	8.1	13.4	13.3	14.6 (12.0, 17.1)	18.5 (16.3, 20.6)	17.0 (14.9, 19.0)	23.5 (21.0, 25.9)[a]	20.8 (18.7, 22.8)	22.2[b] (20.0, 24.4)
Post-secondary	4.6	6.7	4.8	5.8 (4.6, 7.0)	6.7 (5.7, 7.8)	7.7 (6.5, 8.8)	7.2 (6.2, 8.3)	7.6 (6.8, 8.5)	9.1[b] (8.1, 10.1)
Chinese	8.5	12.1	10.3	11.1 (9.7, 12.6)	13.9 (12.6, 15.1)	13.5 (12.3, 14.7)	14.0 (12.8, 15.2)	14.5 (13.4, 15.5)	15.2[b] (14.1, 16.3)
Malays	8.0	12.8	10.4	8.3 (5.2, 11.4)	13.4 (10.6, 16.2)	11.5 (9.0, 13.9)	13.1 (10.8, 15.5)	13.4 (10.9, 15.8)	16.4 (13.8, 19.1)
Indians	7.7	15.0	11.5	14.3 (9.8, 18.7)	12.5 (9.6, 15.4)	15.2 (11.8, 18.7)	15.8 (11.9, 19.6)	14.7 (11.9, 17.5)	15.5[b] (11.7, 19.4)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) s: Data have been suppressed due to small counts or high sampling variability.

(3) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 resident population.

(4) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(5) [b] Indicate statistically significant linear upward trend between 2007 and 2023 with p-value <0.05.

(6) [d] Indicate statistically significant linear upward trend between 2019 and 2023 with p-value <0.05.

Chapter 7
Chronic Disease Screening

Key Points

- Among Singapore residents aged 40 to 74 years with no previous diagnosis of diabetes, high blood pressure, and high blood cholesterol ("DHL"), (i.e. not told by a doctor that they have these diseases), about three-fifths (62.6%) were screened for all three health conditions within the recommended screening guidelines in 2023.
- Among Singapore residents aged 40 to 74 years without known diabetes, 76.7% had their blood glucose tested within the past three years.
- Among Singapore residents aged 40 to 74 years without known high blood pressure, 82.7% did their blood pressure check in the past two years.
- Among Singapore residents aged 40 to 74 years without known high blood cholesterol, 74.7% were screened within the past three years.

Introduction

Health screening is an effective strategy for disease prevention in the population. It is important to go for appropriate and regular health screening as it helps to detect risk factors or diseases early even when there are no symptoms. Early detection of diabetes mellitus, high blood pressure and high blood cholesterol could result in better treatment, fewer complications and increased chances of better outcomes *(HPB, 2019).*

Methodology

An interviewer-administered questionnaire was used. Respondents were asked whether they were ever told by a doctor that they had diabetes, high blood pressure or high blood cholesterol. Respondents who reported that they were not told by a doctor that they have diabetes or high blood cholesterol were asked on the last time they had a blood test to check for these health conditions. Those who were not told by a doctor to have high blood pressure were asked on the last time they had checked their blood pressure. Respondents were also asked where they last had their screening for these chronic diseases. The national "Screen for Life" (SFL) screening programme which takes reference from the Screening Test Review Committee's recommendations, recommended that Singapore residents aged 40 years and above to go for diabetes and hyperlipidaemia screening once every three years and hypertension screening once every two years.

Practice of Health Screening

Health screening practice was relatively common among Singapore residents aged 40 to 74 years who were not told by a doctor to have any chronic diseases (diabetes, high blood pressure and high blood cholesterol (DHL)). 62.6% of them were screened for all three health conditions within the recommended screening guidelines in 2023 (Table 7.1). The majority of them with no known DHL were screened at the private GP clinics at 39.7%, followed by polyclinics (17.1%), specialist outpatient clinics in public hospitals (11.8%) and specialist outpatient clinics in private hospitals (10.3%)

Health screening practice was found to be more prevalent among older adults aged 70 to 74 years, with two-thirds of them (66.0%) having screened for all three health conditions within the recommended screening guidelines. Among the ethnic groups, Indians (78.4%) had a higher screening prevalence for all three chronic diseases, followed by Chinese (61.4%) and Malays (52.6%). Singapore residents with post-education (67.6%) were more likely to have gone for chronic disease screening compared to those with lower education level (primary education: 51.6%, secondary education: 55.6%).

Looking at individual chronic disease alone regardless of the co-morbidity with the other two chronic diseases, 76.7% of adults aged 40 to 74 years without known diabetes were screened for diabetes within the past three years, 82.7% of those without known high blood pressure had their blood pressure checked within the past two years, and 74.7% of them with no previous diagnosis of high blood cholesterol were screened for this health condition within the past three years (Tables 7.3 to 7.5).

Trends in Health Screening

Looking at the trend data over the period from 2007 to 2023, significant increases in the screening participation for residents with no previous diagnosis of DHL were observed among those aged 40 to 49 years and those with post-secondary education (Table 7.2). The overall and age-standardised chronic disease screening participation did not show significant upward trend between 2007 and 2023.

For the individual chronic disease, the crude proportion of residents who had diabetes and hypertension screening increased significantly from 2007 to 2023 while the proportion screening for hyperlipidaemia did not show significant upward trend over the same period (Tables 7.3 to 7.5). For diabetes, the screening participation improved in the age groups of 40 to 49 years and 70 to 74 years; in both sexes, among Chinese and Indians, and those with post-secondary education. For hypertension, the significant improvements were observed for both sexes and those aged 40 to 49 years.

Between 2019 and 2023, the screening participation for residents without known DHL and for the individual chronic disease fell, though the decrease was not significant. Significant decreases in diabetes screening participation were observed among Singapore residents in the age group of 40 to 49 years and among males, Chinese and Indians during this period.

Table 7.1: Health screening practice (%) among Singapore residents who did not have any of the corresponding self-reported chronic diseases aged 40 to 74 years by socio-demographic characteristics, 2023

Characteristic	Screened for all 3 diseases within the recommended intervals	Diabetes screening at least once in the past 3 years	Hypertension screening at least once in the past 2 years	High blood cholesterol screening at least once in the past 3 years
Total	62.6	76.7	82.7	74.7
Age (years)				
40-49	62.8	72.8	82.3	72.4
50-59	63.3	75.9	82.4	74.4
60-69	60.2	79.8	82.8	76.8
70-74	66.0	86.4	86.8	83.1
Sex				
Males	61.9	77.2	81.7	74.9
Females	63.3	76.3	83.6	74.6
Highest Education Attained				
Primary	51.6	71.4	77.9	68.8
Secondary	55.6	73.7	80.8	70.5
Post-secondary	67.6	79.5	84.6	78.0
Ethnic group				
Chinese	61.4	76.5	81.2	74.3
Malays	52.6	71.1	80.8	68.3
Indians	78.4	83.0	94.0	83.9

Note: Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

Table 7.2: Chronic disease screening participation (%) among Singapore residents who did not have any of the self-reported chronic diseases aged 40 to 74 years by age, sex, education, and ethnicity, 2007 to 2023

	NHSS	NHS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2010	2013	2017	2019	2020	2021	2022	2023
Total	58.1	45.2	56.0	66.4 (63.1, 69.6)	66.3 (63.7, 68.9)	63.0 (60.4, 65.6)	59.2 (56.7, 61.8)	60.3 (58.1, 62.4)	62.6 (60.5, 64.8)
ASR	62.0	45.2	56.9	68.3	68.2	63.3	59.4	60.8	62.6
40-49	54.5	44.7	55.0	60.7 (56.2, 65.1)	62.6 (58.6, 66.6)	62.5 (58.5, 66.6)	60.8 (56.8, 64.7)	59.5 (56.4, 62.6)	62.8[b] (59.5, 66.1)
50-59	60.4	47.9	54.8	69.1 (63.6, 74.5)	66.2 (61.5, 70.9)	63.1 (58.6, 67.6)	55.3 (50.5, 60.1)	58.3 (54.3, 62.4)	63.3 (59.4, 67.2)
60-69	68.6	37.4	61.8	71.1 (64.6, 77.5)	72.1 (67.3, 77.0)	62.9 (57.2, 68.5)	58.6 (53.5, 63.6)	64.6 (59.5, 69.7)	60.2 (55.0, 65.5)
70-74	68.9	53.3	56.9	85.2 (77.2, 93.2)	79.0 (71.6, 86.3)	66.7 (54.3, 79.0)	72.6 (64.8, 80.4)	63.2 (53.8, 72.6)	66.0 (57.7, 74.3)
Males	59.9	47.8	55.0	65.9 (61.3, 70.5)	67.5 (63.5, 71.5)	63.9 (60.2, 67.7)	61.3 (57.9, 64.6)	59.2 (56.0, 62.5)	61.9 (58.6, 65.1)
Females	56.4	42.8	56.9	66.8 (62.6, 71.0)	65.2 (61.7, 68.8)	62.2 (58.7, 65.8)	57.5 (53.7, 61.3)	61.1 (58.2, 64.0)	63.3 (60.3, 66.2)
Primary	57.8	32.7	43.7	60.9 (53.3, 68.6)	57.2 (50.7, 63.8)	50.4 (44.3, 56.6)	56.4 (49.9, 62.9)	54.6 (48.7, 60.6)	51.6 (45.1, 58.1)
Secondary	57.6	45.4	53.7	64.4 (59.0, 69.7)	61.1 (56.7, 65.6)	55.9 (51.2, 60.7)	50.1 (45.2, 54.9)	54.1 (49.9, 58.3)	55.6 (51.4, 59.8)
Post-secondary	59.0	54.1	64.5	71.0 (66.7, 75.4)	71.4 (67.8, 75.1)	69.8 (66.3, 73.3)	64.1 (60.8, 67.4)	64.1 (61.3, 66.9)	67.6[b] (64.9, 70.4)
Chinese	57.2	44.6	55.7	65.8 (62.1, 69.5)	64.9 (61.8, 67.9)	63.5 (60.6, 66.5)	59.7 (56.7, 62.7)	58.7 (56.2, 61.2)	61.4 (58.9, 63.9)
Malays	57.2	40.0	48.2	62.2 (53.4, 71.1)	64.4 (56.4, 72.3)	48.4 (39.7, 57.0)	48.3 (40.5, 56.0)	59.0 (52.5, 65.5)	52.6 (45.5, 59.7)
Indians	70.1	59.3	68.9	80.0 (71.9, 88.1)	78.7 (71.7, 85.7)	75.4 (68.3, 82.5)	65.7 (58.7, 72.7)	71.9 (66.0, 77.8)	78.4 (72.9, 83.9)

Table 7.3: Diabetes screening participation (%) among Singapore residents who did not have self-reported diabetes aged 40 to 74 years by age, sex, education, and ethnicity, 2007 to 2023

	NHSS	NHS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2010	2013	2017	2019	2020	2021	2022	2023
Total	72.4	63.9	70.3	77.8 (75.6, 80.0)	81.0 (79.3, 82.8)	78.5 (76.8, 80.3)	76.6 (74.9, 78.2)	77.4 (75.9, 78.8)	76.7[b] (75.2, 78.2)
ASR	74.5	66.4	71.8	78.7	81.5	78.8	76.7	77.6	77.0
40-49	67.3	58.3	65.9	71.4 (67.7, 75.1)	75.4 (72.0, 78.8)	75.2 (72.0, 78.5)	74.2 (71.4, 77.0)	74.1 (71.7, 76.5)	72.8[b,e] (70.2, 75.4)
50-59	74.8	64.4	68.9	80.0 (76.2, 83.7)	81.4 (78.3, 84.5)	79.0 (75.9, 82.1)	73.8 (70.5, 77.1)	75.3 (72.4, 78.1)	75.9 (73.1, 78.6)
60-69	80.0	73.9	78.1	81.7 (77.3, 86.2)	85.7 (83.1, 88.3)	79.8 (76.4, 83.2)	79.2 (76.3, 82.1)	81.8 (79.0, 84.6)	79.8 (77.0, 82.7)
70-74	79.9	71.8	84.2	92.1 (87.7, 96.6)	91.2 (87.9, 94.5)	87.8 (83.1, 92.6)	90.0 (87.1, 93.0)	85.8 (82.1, 89.5)	86.4[b] (83.1, 89.7)
Males	73.1	64.7	70.2	78.9 (75.8, 82.0)	82.6 (80.2, 84.9)	80.8 (78.4, 83.1)	78.6 (76.5, 80.7)	78.0 (75.9, 80.1)	77.2[b,e] (75.0, 79.3)
Females	71.8	63.0	70.5	76.9 (73.8, 80.0)	79.7 (77.1, 82.3)	76.4 (73.8, 79.1)	74.7 (72.2, 77.1)	76.8 (74.8, 78.9)	76.3[b] (74.2, 78.3)
Primary	70.7	58.4	63.9	75.4 (70.6,80.3)	77.8 (74.4, 81.2)	73.8 (69.8, 77.8)	75.2 (71.3, 79.0)	76.3 (72.7, 79.9)	71.4 (67.3, 75.6)
Secondary	72.2	61.7	69.0	75.8 (72.0, 79.6)	79.7 (77.1, 82.3)	74.6 (71.2, 78.0)	72.7 (69.5, 75.9)	74.3 (71.6, 77.0)	73.7 (71.0, 76.5)
Post-secondary	74.4	71.0	76.0	81.3 (78.1, 84.5)	83.0 (80.4, 85.7)	82.2 (79.8, 84.7)	79.2 (77.1, 81.3)	79.3 (77.3, 81.3)	79.5[b] (77.6, 81.4)
Chinese	72.7	64.4	70.0	76.9 (74.4, 79.5)	80.5 (78.5, 82.5)	78.9 (76.9, 80.8)	76.6 (74.7, 78.5)	76.8 (75.1, 78.5)	76.5[b,e] (74.8, 78.2)
Malays	68.4	54.5	65.7	76.5 (69.6, 83.3)	77.7 (71.9, 83.4)	69.8 (63.2, 76.4)	69.1 (63.8, 74.3)	72.8 (67.8, 77.7)	71.1 (66.4, 75.9)
Indians	79.2	74.2	79.9	88.1 (82.3, 94.0)	89.3 (84.8, 93.8)	88.0 (83.0, 93.0)	85.1 (81.0, 89.2)	86.0 (82.3, 89.7)	83.0[b,e] (78.8, 87.2)

Table 7.4: Hypertension screening participation (%) among Singapore residents who did not have self-reported hypertension aged 40 to 74 years by age, sex, education, and ethnicity, 2007 to 2023

	NHSS	NHS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2010	2013	2017	2019	2020	2021	2022	2023
Total	77.7	79.9	77.8	82.9 (80.8, 85.0)	86.0 (84.4, 87.6)	83.3 (81.4, 85.1)	82.4 (80.7, 84.1)	80.7 (79.2, 82.2)	82.7[b] (81.2, 84.2)
ASR	79.6	80.1	78.8	84.0	86.6	83.6	82.6	81.1	82.9
40-49	75.8	78.3	76.4	79.9 (76.1, 83.6)	84.6 (81.6, 87.6)	82.7 (79.6, 85.8)	81.9 (79.2, 84.6)	78.5 (76.0, 80.9)	82.3[b] (79.9, 84.7)
50-59	77.5	82.9	76.2	81.6 (78.1, 85.2)	85.7 (82.9, 88.5)	83.0 (79.8, 86.1)	79.7 (76.3, 83.1)	79.9 (77.0, 82.8)	82.4 (79.7, 85.0)
60-69	85.0	78.5	84.4	88.3 (84.6, 92.1)	88.1 (85.2, 91.1)	84.8 (81.4, 88.3)	85.3 (82.5, 88.2)	85.0 (82.2, 87.8)	82.8 (79.4, 86.2)
70-74	82.2	79.5	79.3	94.1 (89.9, 98.3)	90.8 (86.3, 95.2)	83.6 (75.0, 92.1)	89.7 (85.6, 93.8)	83.2 (77.4, 89.0)	86.8 (81.8, 91.8)
Males	77.1	80.5	77.0	81.3 (77.8, 84.8)	85.5 (83.1, 88.0)	83.2 (80.6, 85.8)	81.8 (79.4, 84.2)	81.0 (78.8, 83.2)	81.7[b] (79.4, 83.9)
Females	78.2	79.4	78.5	84.4 (81.7, 87.0)	86.5 (84.3, 88.6)	83.4 (80.8, 86.0)	82.9 (80.5, 85.3)	80.4 (78.3, 82.5)	83.6[b] (81.6, 85.7)
Primary	76.5	72.9	68.7	80.1 (75.0, 85.2)	78.4 (74.2, 82.6)	78.4 (74.2, 82.6)	80.4 (76.3, 84.6)	78.7 (74.8, 82.6)	77.9 (73.3, 82.6)
Secondary	79.9	80.5	76.7	82.3 (78.7, 86.0)	85.4 (82.9, 87.8)	79.2 (75.6, 82.8)[a]	81.7 (78.4, 85.1)	79.9 (76.9, 82.8)	80.8 (77.9, 83.6)
Post-secondary	75.6	84.6	84.2	85.2 (82.1, 88.4)	88.7 (86.5, 91.0)	86.8 (84.3, 89.2)	83.2 (81.0, 85.3)	81.6 (79.6, 83.6)	84.6 (82.7, 86.5)
Chinese	76.7	79.9	76.9	82.2 (79.8, 84.6)	85.8 (84.0, 87.7)	83.1 (81.0, 85.2)	81.6 (79.6, 83.6)	79.1 (77.3, 80.9)	81.2 (79.4, 83.0)
Malays	79.3	76.6	76.4	82.6 (76.3, 88.8)	81.4 (76.0, 86.8)	74.7 (67.3, 82.0)	83.8 (79.5, 88.0)	83.1 (78.6, 87.6)	80.8 (76.2, 85.4)
Indians	87.6	86.7	86.7	92.8 (88.4, 97.3)	92.5 (88.5, 96.5)	92.4 (89.0, 95.9)	87.2 (82.9, 91.5)	88.9 (85.4, 92.3)	94.0 (91.5, 96.5)

Table 7.5: Hyperlipidaemia screening participation (%) among Singapore residents who did not have self-reported hyperlipidaemia aged 40 to 74 years by age, sex, education, and ethnicity, 2007 to 2023

	NHSS	NHS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2010	2013	2017	2019	2020	2021	2022	2023
Total	78.1	61.1	73.0	78.2 (75.9, 80.5)	77.9 (76.0, 79.9)	76.5 (74.5, 78.6)	72.5 (70.5, 74.5)	75.0 (73.3, 76.7)	74.7 (73.0, 76.4)
ASR	80.8	62.7	74.5	79.4	78.9	77.0	72.8	75.6	75.2
40-49	74.8	59.3	70.8	73.0 (69.2, 76.7)	73.3 (69.7, 76.8)	74.5 (71.1, 78.0)	71.6 (68.3, 74.8)	71.8 (69.2, 74.5)	72.4 (69.6, 75.2)
50-59	79.9	62.9	70.7	78.7 (74.6, 82.9)	76.9 (73.3, 80.5)	75.3 (71.7, 79.0)	68.7 (64.7, 72.7)	74.4 (71.2, 77.5)	74.4 (71.3, 77.4)
60-69	86.2	63.1	79.4	84.1 (80.0, 88.2)	84.0 (80.9, 87.1)	79.0 (75.2, 82.8)	74.4 (70.6, 78.1)	78.6 (75.1, 82.2)	76.8 (73.1, 80.5)
70-74	77.9	61.5	84.8	90.3 (85.0, 95.7)	89.8 (85.2, 94.4)	85.7 (79.3, 92.1)	88.2 (84.2, 92.2)	84.3 (79.2, 89.4)	83.1 (77.8, 88.4)
Males	77.9	62.8	71.8	78.6 (75.2, 82.0)	79.0 (76.0, 82.0)	77.5 (74.7, 80.3)	74.2 (71.7, 76.7)	75.3 (72.8, 77.7)	74.9 (72.3, 77.4)
Females	78.3	59.5	74.1	77.8 (74.8, 80.9)	77.0 (74.5, 79.6)	75.7 (72.8, 78.6)	71.0 (67.9, 74.0)	74.7 (72.4, 77.0)	74.6 (72.2, 76.9)
Primary	73.8	53.7	66.2	74.9 (69.4, 80.4)	74.2 (69.4, 79.0)	68.1 (63.1, 73.1)	75.7 (71.4, 80.0)	70.6 (66.1, 75.1)	68.8 (63.7, 74.0)
Secondary	77.7	61.1	72.1	76.4 (72.2, 80.6)	75.1 (71.9, 78.4)	72.3 (68.5, 76.1)	64.0 (60.0, 68.1)[a]	70.7 (67.6, 73.9)	70.5 (67.3, 73.7)
Post-secondary	82.4	67.1	78.3	81.7 (78.5, 84.9)	80.9 (77.9, 83.9)	81.3 (78.7, 84.0)	76.0 (73.5, 78.5)[a]	78.2 (76.0, 80.4)	78.0 (75.8, 80.2)
Chinese	78.1	61.8	72.5	77.7 (75.1, 80.3)	77.9 (75.6, 80.2)	77.3 (75.1, 79.5)	72.9 (70.6, 75.2)	74.1 (72.1, 76.0)	74.3 (72.3, 76.4)
Malays	74.0	53.8	69.6	77.7 (70.8, 84.6)	75.1 (68.9, 81.4)	63.0 (55.5, 70.6)	62.2 (55.3, 69.0)	71.1 (65.9, 76.3)	68.3 (62.8, 73.7)
Indians	83.1	67.6	82.2	86.3 (80.7, 91.9)	83.6 (77.7, 89.4)	84.8 (79.4, 90.2)	79.8 (74.9, 84.7)	85.9 (82.1, 89.7)	83.9 (79.7, 88.2)

Notes applicable to Table 7.2 to 7.5:

(1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) ASR: Age- standardised rate. The reference population used is Singapore Census 2020 resident population.

(3) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(4) [b] Indicate statistically significant linear upward trend between 2007 and 2023 with p-value <0.05.

(5) [e] Indicate statistically significant linear downward trend between 2019 and 2023 with p-value <0.05

Chapter 8
Breast Cancer Screening

Key Points

- In 2023, slightly more than one-third (34.7%) of Singapore women in the 50 to 69 years age group reported that they had gone for mammography in the last two years.

Introduction

Breast cancer remained the most common cancer among Singapore women in the past 50 years *(NRDO 2024)*. For the latest five-year period from 2018-2022, it accounted for 29.6% cancer diagnoses in females, and the age-standardised incidence rate of breast cancer was 76.2 per 100,000 women. It was the leading cause of cancer death among females in 2018-2022, accounting for 17.1% of cancer deaths among females.

Breast cancer has been linked to a number of risk factors including age, family history of breast cancer, smoking, high-fat diet and obesity. The earlier breast cancer is diagnosed, the better the chances for successful treatment. As early breast cancer usually does not present with any symptoms, screening is therefore important. Mammography for women over 50 years old is widely accepted as appropriate and beneficial. The national “Screen for Life” (SFL) screening programme which takes reference from the Screening Test Review Committee’s recommendations, recommended that women aged 50 to 69 years to go for mammography once every two years.

Methodology

An interviewer-administered questionnaire was used. Female respondents were asked on their practice of mammography as well as where they took their mammography.

Practice of Mammography

In 2023, slightly more than one-third (34.7%) of Singapore women in the 50 to 69 years age group reported that they had gone for a mammography within the last two years, in accordance with the recommended frequency of mammography in this age group (Table 8.1). Ever-married women (35.6%) were more likely to have a mammography within the last two years than never married women (28.4%). A higher proportion of Indian (40.4%) and Chinese (36.6%) women had undergone mammography compared to their Malay counterparts (16.9%) (Table 8.2). Women with post-secondary education (44.6%) were more likely to go for screening than women with secondary education (31.5%) or primary education (20.8%). More than two-fifths (45.3%) of the women had their mammogram taken in the polyclinics, followed by public hospitals (24.0%), private hospitals (14.4%) and private X-ray centres (10.7%).

Table 8.1: Practice of mammography (%) among Singapore female residents aged 50 to 69 years by marital status, 2023

Characteristic	Had a mammography within the last 2 years
Total	34.7
Marital status	
Never married	28.4
Ever-married	35.6

Trends in Breast Cancer Screening

Between 2007 and 2023, the decrease in screening participation for breast cancer was only significant for females with secondary and post-secondary education while the downward trends for overall and other groups were not significant (Table 8.2).

Comparing 2023 with the pre-COVID-19 period in 2019, there was no significant change in the breast cancer screening participation at the overall or any of the subgroup levels.

Table 8.2: Breast cancer screening participation (%) among Singapore female residents aged 50 to 69 years by age, education, and ethnicity, 2007 to 2023

	NHSS	NHS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2010	2013	2017	2019	2020	2021	2022	2023
Total	41.0	39.6	42.7	30.9 (26.9, 34.9)	38.7 (34.8, 42.6)	37.9 (34.7, 41.2)	31.1 (28.0, 34.1)[a]	37.6 (34.5, 40.6)[a]	34.7 (31.7, 37.8)
ASR	40.2	39.3	41.3	30.7	39.0	37.9	31.5	37.7	34.7
50-59	43.6	40.5	44.3	32.7 (27.3, 38.2)	40.2 (34.7, 45.7)	40.9 (36.1, 45.8)	31.6 (27.3, 36.0)[a]	41.1 (36.6, 45.5)[a]	38.4 (34.1, 42.8)
60-69	35.8	37.9	39.9	28.4 (23.0, 33.9)	36.9 (31.4, 42.4)	34.3 (29.7, 38.8)	30.4 (26.1, 34.8)	33.6 (29.3, 37.8)	30.6 (26.5, 34.7)
Primary	29.9	29.3	25.5	24.3 (17.4, 31.2)	28.4 (22.2, 34.6)	22.6 (17.3, 27.8)	24.6 (18.3, 31.0)	27.7 (22.0, 33.4)	20.8 (15.4, 26.2)
Secondary	48.4	40.8	46.2	28.6 (22.8, 34.4)	37.0 (32.3, 41.7)	32.9 (28.0, 37.9)	26.0 (21.6, 30.4)	34.5 (29.5, 39.4)	31.5[c] (27.0, 36.0)
Post-secondary	54.8	60.7	66.0	45.6 (35.7, 55.5)	49.6 (41.2, 58.0)	54.3 (48.0, 60.6)	42.4 (37.0, 47.9)[a]	46.5 (41.3, 51.7)	44.6[c] (39.3, 49.9)
Chinese	41.9	41.7	44.4	32.2 (27.6, 36.8)	40.1 (35.7, 44.6)	41.3 (37.6, 45.0)	31.7 (28.2, 35.2)[a]	39.5 (35.9, 43.0)[a]	36.6 (33.0, 40.1)
Malays	35.0	23.5	28.1	10.4 (4.3, 16.5)	28.9 (20.5, 37.3)[a]	17.6 (10.7, 24.4)	18.7 (11.7, 25.8)	21.5 (14.7, 28.3)	16.9 (11.0, 22.8)
Indians	38.2	41.9	44.8	46.3 (30.2, 62.3)	41.0 (28.5, 53.5)	43.2 (31.3, 55.1)	37.7 (27.0, 48.4)	43.9 (32.9, 54.9)	40.4 (28.2, 52.5)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 female resident population.

(3) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(4) [c] Indicate statistically significant linear downward trend between 2007 and 2023 with p-value <0.05.

Chapter 9
Cervical Cancer Screening

Key Points

- In 2023, more than two in five (45.4%) Singapore female residents aged 25 to 74 years reported that they had gone for cervical cancer screening (had done Pap test in the past three years or HPV test in the past five years).
- Women aged 30 to 59 years (more than 50%) were most likely to have undergone cervical cancer screening.

Introduction

Cervical cancer was the 10th most common cancer among women in Singapore for the latest five-year period from 2018-2022, accounting for 2.5% of cancer diagnoses in females *(NRDO 2024).* During this period, the age-standardised incidence rate of cervical cancer was 6.8 per 100,000 women and it accounted for 2.4% of all cancer deaths among females.

Major risk factors for cervical cancer include having sexual intercourse at an early age, having multiple sexual partners and infection with Human Papillomavirus (HPV) (the cause of genital warts). Long term consumption of combined oral contraceptive pills and cigarette smoking are also the risk factors[8].

Based on the latest recommendations on cervical cancer screening in 2019[9], women aged 25 to 29 years are recommended to undergo a Pap test at a three yearly interval while women aged 30 years and above are recommended to take a HPV test at a five-yearly interval.

[8] American Cancer Society. "Risk Factors for Cervical Cancer". https://www.cancer.org/cancer/types/cervical-cancer/causes-risks-prevention/risk-factors.html (accessed on 2 July 2024)

[9] Based on Ministry of Health Circular No. 08/2019 dated 6 March 2019 on "Release of New Screening Test Review Committee Guidelines, Including Changes to Diabetes Mellitus, Lipid Disorders, And Cervical Cancer Screening".

Methodology

An interviewer-administered questionnaire was used. Female respondents were asked on their practice of cervical cancer screening as well as where they took the test; and which test (Pap test/ HPV test) was taken.

Practice of Cervical Cancer Screening

In 2023, among women aged 25 to 74 years, more than two in five (45.4%) Singapore women aged 25 to 74 years had undergone cervical cancer screening (had done a Pap test in the past three years or HPV test in the past five years) (Table 9.1). The proportion of women who had undergone cervical cancer screening was higher among ever-married women (52.9%) than women who were never married (20.2%). Chinese (46.9%) and Indian (46.2%) women were more likely to have undergone cervical cancer screening compared to Malays (31.4%) women (Table 9.2). Women aged 30 to 59 years were the most likely to have undergone cervical cancer screening. Women with post-secondary education (52.7%) were more likely to have undergone cervical cancer screening compared to those with secondary (34.5%) or primary education (26.7%). The majority of the women had their last cervical cancer screening in private GP clinics (25.1%), followed by specialist outpatient clinics in the public hospitals (23.0%), polyclinics (19.6%) or specialist outpatient clinics in the private hospitals (18.6%).

Table 9.1: Practice of cervical cancer screening (%) among Singapore women aged 25 to 74 years by marital status, 2023

Characteristic	Had a cervical cancer screening
Total	45.4
Marital status	
Never married	20.2
Ever-married	52.9

Trends in Cervical Cancer Screening

The crude and age-standardised screening participation for cervical cancer decreased significantly from 2007 to 2023 (Table 9.2). Significant decreases were also seen in some age groups (25 to 29 years, 30 to 39 years and 70 to 74 years), across all education levels and among Chinese and Malay women.

Between 2019 and 2023, similar decreasing trends in screening participation were also observed at the overall and subgroup levels though most decreases were not significant except in the 70 to 74 years age group.

Table 9.2: Cervical cancer screening participation (%) among Singapore female residents aged 25 to 74 years by age, education, and ethnicity, 2007 to 2023

	NHSS	NHS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2010	2013	2017	2019	2020	2021	2022	2023
Total	57.9	46.8	48.9	46.3 (43.5, 49.1)	48.2 (45.8, 50.7)	45.4 (43.1, 47.6)	41.0 (38.7, 43.3)	43.1 (41.2, 45.1)	45.4[c] (43.3, 47.4)
ASR	54.1	44.3	47.6	45.0	47.8	44.7	41.1	42.9	44.9[c]
25-29	49.5	32.3	29.4	21.5 (14.2, 28.9)	21.0 (15.1, 26.9)	18.8 (12.8, 24.7)	21.4 (15.2, 27.5)	17.6 (12.5, 22.6)	20.3[c] (13.4, 27.3)
30-39	69.5	59.5	53.9	57.5 (51.5, 63.4)	55.9 (51.0, 60.7)	52.2 (47.6, 56.9)	43.6 (39.1, 48.2)	47.1 (43.1, 51.1)	54.6[c] (50.3, 59.0)
40-49	64.6	57.1	54.6	56.8 (51.1, 62.6)	58.8 (54.1, 63.5)	57.6 (52.8, 62.4)	56.1 (50.8, 61.5)	58.2 (54.3, 62.0)	57.8 (53.8, 61.9)
50-59	59.8	43.8	48.4	48.8 (42.6, 54.9)	56.5 (51.5, 61.5)	52.8 (47.7, 57.9)	44.9 (40.0, 49.8)	49.3 (44.7, 53.9)	50.5 (45.9, 55.0)
60-69	33.3	29.0	44.2	33.9 (28.2, 39.5)	37.0 (31.2, 42.8)	33.9 (29.2, 38.6)	32.5 (27.9, 37.0)	34.6 (30.3, 38.9)	34.3 (29.7, 38.9)
70-74	s	s	47.5	18.0 (10.0, 26.1)	25.1 (17.8, 32.4)	20.6 (14.0, 27.3)	20.9 (12.8, 29.1)	15.4 (10.1, 20.6)	17.0[c,e] (11.2, 22.8)
Primary	38.2	31.2	36.3	27.9 (22.5, 33.2)	28.9 (23.7, 34.1)	28.3 (23.4, 33.2)	29.4 (23.5, 35.4)	23.9 (19.4, 28.5)	26.7[c] (21.5, 31.8)
Secondary	62.5	51.0	50.7	42.4 (37.3, 47.5)	49.8 (45.8, 53.9)	40.5 (36.3, 44.6)[a]	35.2 (31.2, 39.2)	37.4 (33.6, 41.2)	34.5[c] (30.7, 38.3)
Post-secondary	66.4	52.5	53.4	55.5 (51.3, 59.8)	52.8 (49.3, 56.4)	51.7 (48.6, 54.8)	45.9 (42.8, 49.0)	49.0 (46.4, 51.6)	52.7[c] (50.0, 55.3)
Chinese	59.4	47.6	50.8	48.5 (45.3, 51.7)	49.9 (46.8, 52.9)	47.2 (44.6, 49.8)	42.2 (39.5, 44.9)	45.3 (43.0, 47.6)	46.9[c] (44.5, 49.3)
Malays	48.9	38.5	38.6	29.1 (22.2, 36.0)	34.8 (28.8, 40.8)	29.8 (23.5, 36.0)	29.2 (23.0, 35.5)	30.3 (25.5, 35.1)	31.4[c] (26.5, 36.4)
Indians	51.8	47.0	42.8	47.4 (39.6, 55.2)	46.1 (39.4, 52.8)	46.3 (38.8, 53.7)	44.4 (38.1, 50.8)	38.6 (32.4, 44.8)	46.2 (38.2, 54.3)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. a Indicates that the results for any two consecutive survey years are significantly different statistically at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) s: Data have been suppressed due to small counts or high sampling variability.

(3) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 female resident population.

(4) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(5) [c] Indicate statistically significant linear downward trend between 2007 and 2023 with p-value <0.05.

(6) [e] Indicate statistically significant linear downward trend between 2019 and 2023 with p-value <0.05

Chapter 10
Colorectal Cancer Screening

Key Points

- In 2023, 41.7% of Singapore residents aged 50 to 74 years had undergone colorectal screening within the recommended screening frequency.
- Approximately one in four of these residents aged 50 to 74 years reported having undergone a Faecal Immunochemical Test (FIT) at least once in the past one year (24.1%) or had undergone colonoscopy in the past 10 years (27.7%).
- The practice of taking a FIT or a colonoscopy was more prevalent among males (43.8%) than females (39.6%).

Introduction

Colorectal cancer was the most common and second most common cancer among Singapore men and women respectively for the latest five-year period from 2018-2022, accounting for 16.2% of cancer diagnoses in males and 12.9% of cancer diagnoses in females (NRDO 2024). During this period, the age-standardised incidence rate of colorectal cancer was 37.9 per 100,000 men and 27.0 per 100,000 women respectively and it accounted for 14.3% of cancer deaths in males and 15.6% of cancer deaths in females.

Factors that have been associated with higher risk of colorectal cancer include specific hereditary conditions, older age, inflammatory bowel diseases, regular high saturated fat/low fiber diet, excessive alcohol intake and sedentary lifestyle[10].

Faecal Immunochemical Test (FIT) and colonoscopy are able to detect colorectal cancer at an early stage. The Screening Test Review Committee recommends annual screening for colorectal cancer using FIT for people aged 50 years and older who are at average risk for colorectal cancer. For a person who is tested positive for FIT, colonoscopy is the confirmatory diagnostic investigations.

[10] CDC. "Colorectal Cancer Risk Factors". https://www.cdc.gov/colorectal-cancer/risk-factors/index.html (accessed on 2 July 2024).

Methodology

An interviewer administered questionnaire was used. Respondents were asked whether they had ever done a FIT or colonoscopy, and where they took the FIT.

Practice of FIT

Based on the survey, 24.1% of Singapore residents aged 50 to 74 years reported to have a FIT in the last one year (Table 10.1). Higher proportion of males (26.0%) than females (22.2%) had undergone a FIT in the last one year. Chinese (25.7%) were more likely to take a FIT compared to Malays (10.5%) and Indians (24.6%). Higher proportion of residents with post-secondary (32.9%) had done a FIT in the last one year compared to residents with secondary (19.0%) or primary (15.3%) education. The majority of Singapore residents had their last FIT in private GP clinics (29.4%), followed by polyclinics (16.4%) and specialist outpatient clinics in the public hospitals (14.9%). More than one in five (22.3%) residents tested using the FIT kit that they had collected from pharmacies, clinics or Singapore Cancer Society.

Practice of Colonoscopy

27.7% of Singapore residents aged 50 to 74 years reported to have undergone a colonoscopy in the last 10 years (Table 10.1). Similar to the practice of FIT, the practice of colonoscopy was more prevalent among males (28.6%) than females (26.8%). Chinese (30.0%) were more likely to have undergone a colonoscopy compared to Malays (17.2%) and Indians (16.6%). By education attainment, more than one-third (34.9%) of residents with post-secondary had a colonoscopy in the last 10 years compared to residents with secondary (26.4%) or primary (15.8%) education.

Table 10.1: Practice of FIT or colonoscopy (%) among Singapore residents aged 50 to 74 years by socio-demographic characteristics, 2023

Characteristic	Had a FIT in last 1 year	Had a colonoscopy in last 10 years
Total	24.1	27.7
Age (years)		
50-59	27.3	25.4
60-69	22.0	29.0
70-74	19.2	31.3
Sex		
Males	26.0	28.6
Females	22.2	26.8
Highest education attained		
Primary	15.3	15.8
Secondary	19.0	26.4
Post-secondary	32.9	34.9
Ethnic group		
Chinese	25.7	30.0
Malays	10.5	17.2
Indians	24.6	16.6

Note: Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

Trends in Colorectal Cancer Screening

Any residents who took a FIT in the last one year or had undergone a colonoscopy in the last 10 years are considered as having been screened for colorectal cancer. In 2023, 41.7% of Singapore residents aged 50 to 74 years had undergone colorectal screening within the recommended screening frequency (Table 10.2). Females (39.6%) had lower screening participation compared to males (43.8%). Malay residents (23.7%) had lower screening participation compared to Chinese (44.6%) and Indian (35.0%) residents. In general, residents with higher education levels were more likely to have screened for colorectal cancer, where more than one in two (52.9%) residents with post-secondary education had done the screening compared to almost two in five (37.9%) residents with secondary education and about one in four (26.0%) residents with primary education.

The crude and age-standardised screening rate for colorectal cancer rose significantly from 2007 to 2023 (Table 10.2). The increase was seen across all ages, sex, education and ethnic groups over this period.

The overall colorectal cancer screening participation in 2023 (41.7%) was similar to that of 2019 (42.0%). No significant changes were observed across all subgroups between the period of 2019 to 2023.

Table 10.2: Colorectal cancer screening participation (%) among Singapore residents aged 50 to 74 years by age, sex, education, and ethnicity, 2007 to 2023

	NHSS	NHS	NHSS	NPHS	NPHS	NPHS	NPHS	NPHS	NPHS
	2007	2010	2013	2017	2019	2020	2021	2022	2023
Total	14.6	19.4	21.2	33.5 (30.5, 36.6)	42.0 (39.1, 44.8)[a]	41.1 (38.9, 43.3)	36.6 (34.4, 38.8)[a]	38.1 (36.2, 40.1)	41.7[b] (39.7, 43.7)
ASR	15.0	19.4	22.1	33.5	42.0	41.2	36.5	38.0	41.7[b]
50-59	13.7	18.6	19.1	32.5 (28.6, 36.4)	39.7 (35.9, 43.5)	39.8 (36.4, 43.2)	33.9 (30.3, 37.4)	36.2 (33.1, 39.2)	41.5[b] (38.4, 44.6)
60-69	16.6	21.3	21.9	35.4 (30.7, 40.2)	44.3 (39.8, 48.7)	43.6 (40.0, 47.2)	38.8 (35.7, 41.9)	39.7 (36.6, 42.8)	42.2[b] (39.1, 45.4)
70-74	13.8	18.5	30.4	31.5 (24.7, 38.4)	43.7 (37.0, 50.3)	38.3 (32.7, 43.9)	39.5 (34.2, 44.7)	39.9 (35.3, 44.5)	40.5[b] (35.6, 45.5)
Males	17.2	21.7	22.2	36.2 (31.7, 40.7)	45.4 (41.5, 49.2)[a]	44.6 (41.2, 47.9)	39.1 (36.0, 42.2)	40.0 (37.2, 42.8)	43.8[b] (40.9, 46.7)
Females	12.1	17.2	20.3	30.9 (27.1, 34.8)	38.7 (35.5, 41.9)[a]	37.7 (34.6, 40.8)	34.2 (31.1, 37.3)	36.3 (33.6, 39.0)	39.6[b] (36.8, 42.4)
Primary	11.4	12.3	14.7	25.9 (21.4, 30.3)	31.9 (28.1, 35.7)	27.9 (24.2, 31.6)	24.0 (20.5, 27.4)	27.4 (24.0, 30.8)	26.0[b] (22.5, 29.6)
Secondary	16.5	19.0	21.6	33.2 (28.5, 37.8)	38.9 (34.9, 42.9)	35.8 (32.3, 39.2)	34.9 (31.3, 38.5)	34.3 (31.2, 37.4)	37.9[b] (34.8, 41.1)
Post-secondary	16.8	32.5	29.5	44.0 (37.8, 50.3)	53.5 (48.4, 58.6)	54.9 (50.8, 59.0)	46.7 (42.9, 50.4)[a]	48.0 (44.5, 51.4)	52.9[b] (49.5, 56.2)
Chinese	15.2	21.3	22.3	34.6 (31.1, 38.0)	43.6 (40.4, 46.8)[a]	44.7 (42.2, 47.3)	38.6 (36.1, 41.1)[a]	41.7 (39.4, 43.9)	44.6[b] (42.3, 46.9)
Malays	10.0	6.9	12.4	20.4 (13.3, 27.5)	31.9 (24.7, 39.2)	17.5 (12.8, 22.1)[a]	25.5 (19.3, 31.8)	19.0 (14.6, 23.5)	23.7[b] (18.8, 28.6)
Indians	14.8	18.7	22.1	36.9 (26.8, 47.0)	37.5 (29.3, 45.7)	40.3 (32.4, 48.1)	29.6 (23.2, 36.0)	28.5 (22.4, 34.7)	35.0[b] (27.8, 42.3)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 resident population.

(3) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(4) [b] Indicate statistically significant linear upward trend between 2007 and 2023 with p-value <0.05.

Chapter 11
Self-reported Vaccination Uptake

Key Points

- In 2023, approximately one in five (21.7%) Singapore residents aged 18 to 74 years reported that they had received influenza vaccination in the past 12 months.
- The self-reported influenza vaccination uptake among males (22.1%) was similar than females (21.4%).
- All the ethnic groups had similar self-reported influenza vaccination uptake (Malays: 23.1%, Indians: 22.3% and Chinese: 21.4%).
- The proportion of elderly aged 65 to 74 years who reported ever having received pneumococcal vaccination was 35.0% in 2023.

Introduction

Seasonal influenza, which is commonly called flu, is a respiratory illness caused by influenza viruses which is highly contagious. For healthy individuals, influenza is usually self-limiting. However, it can sometimes lead to complications and even death. Those who are at risk of serious flu complications such as older persons, young children, adults and children with certain medical conditions and pregnant women should get vaccinated[11]. Annual influenza vaccination is recommended under the National Childhood Immunisation Schedule (NCIS) and National Adult Immunisation Schedule (NAIS) for these groups of persons[12].

[11] Healthhub. "Influenza". https://www.healthhub.sg/a-z/diseases-and-conditions/103/topics_influenza (accessed on 31 March 2023).

[12] Ministry of Health. "Nationally Recommended Vaccines". https://www.moh.gov.sg/resources-statistics/nationally-recommended-vaccines (accessed on 31 March 2023).

Pneumococcal vaccine helps to prevent pneumococcal disease caused by the bacteria *Streptococcus pneumonia*. It can cause a wide spectrum of illnesses and disease burden is greater at the extremes of ages, that is, those less than five years old and those older than 65 years old, as well as those with certain medical conditions. These include infection of the lungs (pneumonia), ear (otitis media), brain (meningitis) and blood (bacteremia)[13]. The NAIS and NCIS recommends all persons aged 65 years or older to be vaccinated against pneumococcal disease, as well as other groups of persons at higher risk of complications from pneumococcal infection[12].

Methodology

An interviewer-administered questionnaire was used to measure the uptake of both vaccinations. Respondents were asked “In the past 12 months, have you had an injection to protect you from getting flu?” and “Have you ever had pneumococcal vaccination?”

Self-reported Influenza Vaccination

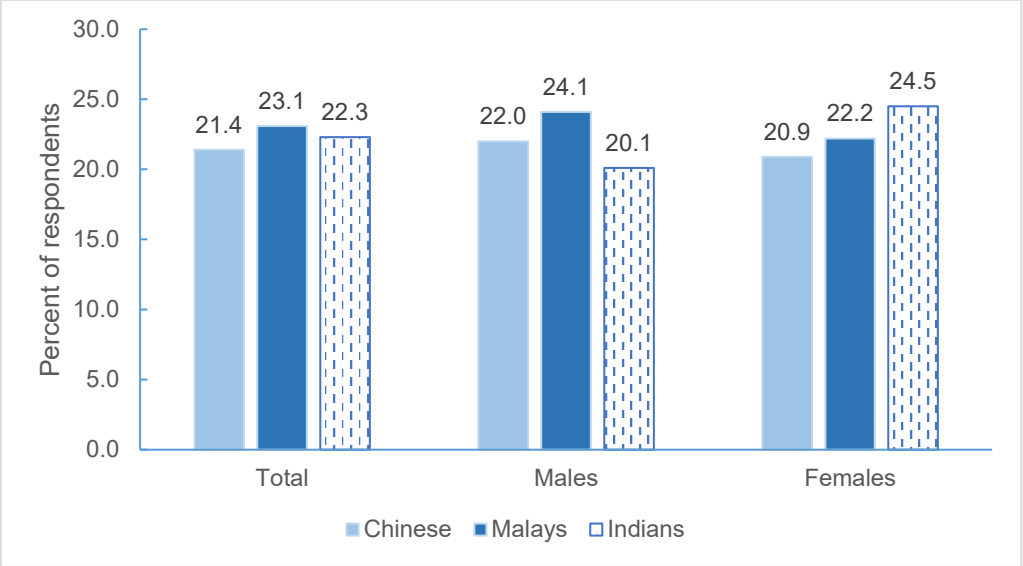
The self-reported influenza vaccination among Singapore residents aged 18 to 74 years was 21.7% in 2023, with the proportion being similar among males (22.1%) and females (21.4%). Singapore residents aged 65 to 74 years had the highest self-reported influenza vaccination at 40.6% and more than double the proportion of residents vaccinated in the other age groups (Table 11.1). All the ethnic groups had similar self-reported influenza vaccination uptake with Malays at 23.1%, Indians at 22.3%, and Chinese at 21.4% (Graph 11.1).

Table 11.1: Age-specific (%) of self-reported influenza vaccination uptake among Singapore residents aged 18 to 74 years by sex, 2023

Age (years)	Total	Males	Females
18-29	19.6	23.9	15.2
30-39	20.9	17.7	23.8
40-49	15.5	18.2	13.0
50-64	18.7	18.0	19.5
65-74	40.6	40.8	40.4
18-74	21.7	22.1	21.4

[13] Healthhub. “Pneumococcal Disease”. https://www.healthhub.sg/a-z/diseases-and-conditions/121/topic_pneumococcal_disease (accessed on 21 March 2022).

Graph 11.1: Self-reported influenza vaccination uptake (%) among Singapore residents aged 18 to 74 years by sex and ethnicity, 2023



Trends in Self-reported Influenza Vaccination Uptake

Among Singapore residents aged 18 to 74 years, the crude and age-standardised self-reported influenza vaccination uptake showed a significant increasing trend between 2017 and 2023 (Table 11.2). Similar increases were observed among some age groups (30 to 39 years, and 65 to 74 years), in both sexes, among Chinese and residents with primary and secondary education during this period.

Between 2019 and 2023 there was a significant improvement in influenza vaccination uptake reported among residents aged 30 to 39 years, among males, and those with primary education.

Self-reported Pneumococcal Vaccination Uptake Among Elderly

The proportion of elderly aged 65 to 74 years who reported ever having received pneumococcal vaccination was 35.0% in 2023, with similar proportion reported among males (35.0%) and females (34.9%) (Table 11.3). Among the ethnic groups, Chinese (36.7%) had higher self-reported pneumococcal vaccination uptake than Malays (29.2%) and Indians (27.8%). In 2023, pneumococcal vaccination uptake increased with education attainment at 28.4%, 33.4%, and 46.4% for residents with primary education, secondary education, and post-secondary education, respectively.

There was a significant upward trend in the pneumococcal vaccination uptake among Singapore residents aged 65 to 74 years from 2017 to 2023. Significant improvement in the pneumococcal vaccination uptake was reported among males and females, across all education levels, and among Chinese over the same period (Table 11.3).

Table 11.2: Self-reported influenza vaccination uptake (%) among Singapore residents aged 18 to 74 years by age, sex, and ethnicity, 2017 to 2023

	NPHS 2017	NPHS 2019	NPHS 2020	NPHS 2021	NPHS 2022	NPHS 2023
Total	13.1 (11.7, 14.5)	17.4 (16.0,18.7)[a]	17.0 (15.8,18.2)	18.7 (17.6, 19.9)	18.0 (16.9, 19.0)	21.7[b] (20.6, 22.9)[a]
ASR	13.0	17.4	17.0	18.6	17.8	21.5[b]
18-29	17.8 (13.8, 21.8)	21.2 (17.7, 24.7)	19.8 (16.5, 23.0)	21.3 (17.8, 24.8)	17.9 (15.2, 20.6)	19.6 (16.5, 22.6)
30-39	14.2 (11.0, 17.3)	16.0 (13.2, 18.8)	17.4 (14.4, 20.4)	16.9 (14.6, 19.1)	19.5 (17.1, 21.9)	20.9[b,d] (18.3, 23.5)
40-49	9.6 (7.0, 12.2)	12.1 (9.9, 14.3)	12.6 (10.3, 14.9)	14.0 (12.0, 16.0)	11.6 (9.9, 13.3)	15.5 (13.4, 17.6)[a]
50-64	11.3 (9.0, 13.6)	16.2 (13.7, 18.6)[a]	15.4 (13.3, 17.6)	14.7 (12.8, 16.6)	15.4 (13.6, 17.2)	18.7 (16.7, 20.7)
65-74	13.5 (9.8, 17.3)	24.2 (20.2, 28.2)[a]	22.5 (19.4, 25.5)	32.4 (29.0, 35.8)[a]	29.7 (26.7, 32.7)	40.6[b] (37.2, 43.9)[a]
Males	14.2 (12.1, 16.4)	16.0 (14.3, 17.7)	18.0 (16.0, 19.9)	18.4 (16.7, 20.0)	18.5 (17.0, 20.0)	22.1[b,d] (20.4, 23.8)[a]
Females	12.0 (10.2, 13.8)	18.7 (16.6, 20.7)[a]	16.1 (14.6, 17.6)	19.1 (17.5, 20.7)	17.5 (16.1, 18.8)	21.4[b] (19.8, 23.0)[a]
Primary	8.4 (6.1, 10.8)	16.4 (12.9, 19.9)[a]	15.3 (12.6, 18.1)	18.3 (15.1, 21.5)	22.6 (19.6, 25.7)	24.6[b,d] (21.3, 27.9)
Secondary	11.6 (9.2, 14.0)	15.3 (13.3, 17.3)	14.1 (12.3, 16.0)	18.9 (16.8, 21.0)[a]	16.9 (15.1, 18.8)	22.6[b] (20.4, 24.8)[a]
Post-secondary	15.1 (13.2, 17.1)	18.5 (16.7, 20.3)	18.7 (16.9, 20.4)	18.8 (17.2, 20.3)	17.6 (16.3, 18.9)	20.9 (19.5, 22.4)[a]
Chinese	12.0 (10.4, 13.6)	16.7 (15.0, 18.3)[a]	17.2 (15.8, 18.6)	18.5 (17.1, 19.8)	17.8 (16.6, 19.0)	21.4[b] (20.1, 22.7)[a]
Malays	18.2 (13.8, 22.6)	19.9 (16.4, 23.4)	15.8 (12.9, 18.7)	20.1 (17.0, 23.3)	20.4 (17.5, 23.3)	23.1 (20.0, 26.3)
Indians	14.5 (10.6, 18.4)	19.8 (15.4, 24.3)	17.4 (12.3, 22.6)	19.4 (14.8, 24.0)	15.8 (12.8, 18.8)	22.3 (18.1, 26.5)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 resident population.

(3) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(4) [b] Indicate statistically significant linear upward trend between 2017 and 2023 with p-value <0.05.

(5) [d] Indicate statistically significant linear upward trend between 2019 and 2023 with p-value <0.05

Table 11.3: Self-reported pneumococcal vaccination uptake (%) among Singapore residents aged 65 to 74 years by sex, education, and ethnicity, 2017 to 2023

	NPHS 2017	NPHS 2019	NPHS 2020	NPHS 2021	NPHS 2022	NPHS 2023
Total	11.9 (7.4, 16.4)	10.3 (7.9, 12.7)	14.4 (11.8, 17.0)	22.4 (19.3, 25.5)[a]	26.5 (23.5, 29.4)	35.0[b,d] (31.8, 38.2)[a]
Males	s	10.4 (7.2, 13.7)	13.8 (10.0, 17.7)	21.9 (17.9, 25.9)[a]	26.9 (22.4, 31.3)	35.0[b,d] (30.3, 39.7)
Females	12.7 (8.0, 17.3)	10.2 (6.8, 13.6)	15.0 (11.5, 18.4)	22.8 (18.1, 27.5)	26.1 (22.3, 30.0)	34.9[b,d] (30.6, 39.2)[a]
Primary	9.6 (4.2, 15.0)	6.5 (4.2, 8.9)	14.4 (10.5,18.2)[a]	20.5 (14.4, 26.7)	24.2 (19.9, 28.6)	28.4[b,d] (23.7, 33.1)
Secondary	13.3 (6.8, 19.9)	11.4 (7.2, 15.6)	13.8 (9.9,17.6)	22.2 (18.0, 26.5)[a]	28.7 (24.0, 33.4)	33.4[b,d] (28.7, 38.2)
Post-secondary	s	16.2 (8.9, 23.5)	15.7 (9.1, 22.2)	25.5 (19.1, 32.0)	26.3 (19.6, 33.0)	46.4[b,d] (39.0, 53.9)[a]
Chinese	9.8 (6.0, 13.6)	9.9 (7.4, 12.3)	15.1 (12.2, 18.0)	21.6 (18.2, 25.0)[a]	27.2 (23.9, 30.4)	36.7[b,d] (33.1, 40.2)[a]
Malays	s	s	s	23.3 (13.8, 32.8)	24.5 (14.8, 34.3)	29.2 (20.6, 37.7)
Indians	s	s	s	32.2 (17.5, 47.0)	22.3 (12.4, 32.2)	27.8 (14.7, 40.8)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) s: Data have been suppressed due to small counts or high sampling variability.

(3) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(4) [b] Indicate statistically significant linear upward trend between 2017 and 2023 with p-value <0.05.

(5) [d] Indicate statistically significant linear upward trend between 2019 and 2023 with p-value <0.05

Chapter 12
Mental Health

Key Points

- The prevalence of poor mental health, as measured by the 12-item General Health Questionnaire (GHQ-12), among Singapore residents aged 18 to 74 years was 15.0% in 2023.
- More females (17.6%) reported poor mental health compared to males (12.2%) in 2023.
- Younger adults aged 18 to 29 years had the highest proportion (26.0%) with poor mental health while the prevalence for other age groups were much lower, ranging from 8.2% for the 60 to 74 years age group to 17.2% for the 30 to 39 years age group.
- In 2023, Singapore residents aged 18 to 74 years indicated that they were more willing to seek help informally from their support network (78.4%) than formally from healthcare professionals (62.8%) if they were constantly unable to cope with stress.
- In 2023, females were more willing to seek help from healthcare professionals and informal support networks compared to males (females: 63.3% and 81.6% respectively; males: 62.3% and 75.1% respectively).
- Among the age groups, Singapore residents in the oldest age band (60 to 74 years) (51.2%) were least willing to seek help from healthcare professionals while those aged 30 to 39 years (71.9%) were the most willing to do so in 2023.
- Similarly, the proportion of Singapore residents who were willing to seek help from informal support networks decreased with age -- it was the highest among younger adults aged 18 to 39 years (85.4% for both 18 to 29 years and 30 to 39 years age groups) and lowest among older adults aged 60 to 74 years (65.6%).

Introduction

The WHO defines mental health as more than the absence of mental disorders. It is also a state of well-being in which the individual realises his or her own abilities, is able to cope with the normal stresses of life, work productively and fruitfully, and contribute to his or her community. A person's mental health may be affected by multiple interrelated social, psychological and biological factors *(WHO 2007)*.

Methodology

The 12-item General Health Questionnaire (GHQ-12) was administered by interviewers and used to measure mental health. Cut-off for poor mental health (having a score of 3 or more) was based on an earlier internal validation study conducted in 2003.

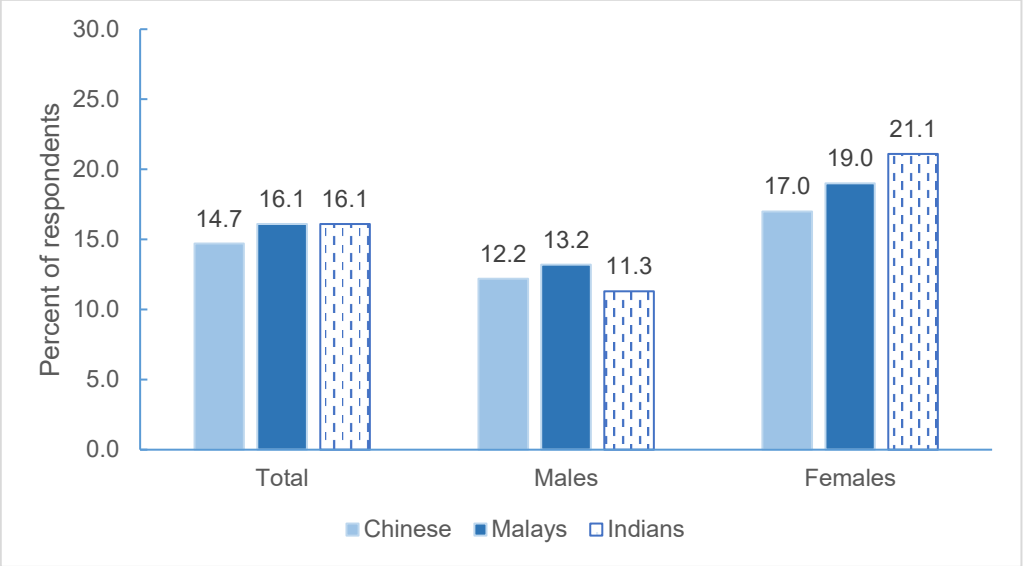
Prevalence of Poor Mental Health

The prevalence of poor mental health as measured by GHQ-12, among Singapore residents aged 18 to 74 years was 15.0% in 2023 (Table 12.1). More females (17.6%) reported poor mental health compared to males (12.2%). Younger adults aged 18 to 29 years (26.0%) had the highest proportion with poor mental health while the prevalence for other age groups were much lower, ranging from 8.2% in the 60 to 74 years age group to 17.2% in the 30 to 39 years age group. Among the ethnic groups, Malays (16.1%) and Indians (16.1%) had higher proportion with poor mental health compared to Chinese (14.7%) (Graph 12.1). The proportion of Indian females (21.1%) with poor mental health was almost doubled that of Indian males (11.3%) while the difference in proportion between males and females among the Chinese and Malays were much narrower. Residents with post-secondary education (16.4%) had higher prevalence of poor mental health compared to residents with primary (9.5%) or secondary education (13.4%) (Table 12.2).

Table 12.1: Age-specific prevalence (%) of poor mental health among Singapore residents aged 18 to 74 years by sex, 2023

Age (years)	Total	Males	Females
18-29	26.0	20.4	31.7
30-39	17.2	14.0	20.2
40-49	13.4	10.5	16.1
50-59	11.2	8.8	13.5
60-74	8.2	7.8	8.7
18-74	15.0	12.2	17.6

Graph 12.1: Crude prevalence (%) of poor mental health among Singapore residents aged 18 to 74 years by sex and ethnicity, 2023



Trends in Prevalence of Poor Mental Health

The crude and age-standardised prevalence of poor mental health among Singapore residents aged 18 to 74 years increased between 2017 and 2023, though these increases were not significant (Table 12.2). The only significant increase in the prevalence of poor mental health was observed among younger residents aged 18 to 29 years between 2017 (16.5%) and 2023 (26.0%).

Table 12.2: Prevalence (%) of poor mental health among Singapore residents aged 18 to 74 years by age, sex, education, and ethnicity, 2017 to 2023

	NPHS 2017	NPHS 2020	NPHS 2022	NPHS 2023
Total	12.5 (10.9, 14.0)	13.4 (12.4, 14.5)	17.0 (15.9, 18.0)[a]	15.0 (13.9, 16.0)
ASR	12.4	13.3	17.0	15.0
18-29	16.5 (12.7, 20.3)	21.5 (18.4, 24.6)	25.3 (22.4, 28.2)	26.0[b] (22.6, 29.4)
30-39	12.8 (9.8, 15.7)	12.6 (10.5, 14.8)	19.4 (17.0, 21.8)[a]	17.2 (14.9, 19.6)
40-49	10.9 (8.1, 13.6)	12.4 (10.2, 14.6)	15.7 (13.7, 17.7)	13.4 (11.4, 15.4)
50-59	10.6 (7.8, 13.5)	11.4 (9.2, 13.7)	15.0 (12.8, 17.2)	11.2 (9.3, 13.1)
60-74	11.4 (8.8, 13.9)	9.4 (7.8, 11.1)	10.5 (8.7, 12.2)	8.2 (6.9, 9.5)
Males	11.4 (9.3, 13.4)	12.0 (10.5, 13.5)	15.2 (13.8, 16.6)[a]	12.2 (10.9, 13.5)[a]
Females	13.5 (11.4, 15.7)	14.8 (13.3, 16.2)	18.6 (17.2, 20.1)[a]	17.6 (16.1, 19.1)
Primary	12.6 (9.6, 15.6)	12.6 (10.0, 15.1)	12.2 (9.8, 14.6)	9.5 (7.4, 11.6)
Secondary	13.5 (10.7, 16.2)	15.4 (13.4, 17.5)	15.7 (13.7, 17.6)	13.4 (11.5, 15.3)
Post-secondary	11.8 (9.8, 13.8)	12.7 (11.3, 14.1)	18.2 (16.9, 19.6)[a]	16.4 (15.1, 17.8)
Chinese	11.7 (10.1, 13.3)	12.6 (11.4, 13.8)	16.4 (15.3, 17.6)[a]	14.7 (13.5, 15.8)
Malays	16.9 (13.2, 20.6)	16.3 (13.2, 19.5)	19.5 (16.6, 22.3)	16.1 (13.2, 19.0)
Indians	12.4 (8.1, 16.7)	15.9 (12.2, 19.6)	15.7 (12.6, 18.8)	16.1 (12.7, 19.5)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey periods (where data are available) are significantly different statistically at 5% significance level as the confidence intervals for these two survey periods did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 resident population.

(3) Analysis based on highest education attained, which served as a proxy for socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(4) [b] Indicate statistically significant linear upward trend between 2017 and 2023 with p-value <0.05.

Definition of Help-seeking Attitudes

Respondents were asked on their willingness to seek help from healthcare professionals or informal support networks if they were constantly unable to cope with stress through the interviewer-administered questionnaire. Healthcare professionals include counsellors, doctors, psychologists or psychiatrists. Informal support networks refer to friends, relatives, colleagues, religious leaders and teachers in school.

Help-seeking Attitudes

In 2023, Singapore residents aged 18 to 74 years were more willing to seek help from informal support networks (78.4%) than from healthcare professionals (62.8%) if they were constantly unable to cope with stress (Tables 12.3 and 12.4). Females were more willing to seek help from healthcare professionals and informal support networks compared to males. Older adults aged 60 to 74 years (51.2%) were the least willing to seek help from healthcare professionals while those aged 30 to 39 years (71.9%) were the most willing to seek help from healthcare professionals. Similarly, the willingness to seek help from informal support decreased with age, it was highest among younger adults aged 18 to 39 years (85.4% for both 18 to 29 years and 30 to 39 years age groups) and the lowest among older adults aged 60 to 74 years (65.6%). Those with higher levels of educational attainment were more willing to seek help from healthcare professionals and informal support networks, it was highest among those with post-secondary education and the lowest among those with primary education.

Trends in Help-seeking Attitudes

There was no trend in the overall proportion of residents who were willing to seek help from healthcare professionals between 2019 and 2023 (Table 12.3). Nonetheless, there was a significant improvement among residents aged 30 to 49 years, among males and females, in Chinese and those with post-secondary education who were more willing to seek professional help in 2023 compared to the previous year in 2022.

Likewise, there was no trend in the overall proportion of residents who were willing to seek help from informal support networks over the years (2019 to 2023) (Table 12.4). But the proportion of Indians who were willing to seek help from informal support networks did increase significantly in the last five years.

Table 12.3: Proportion of Singapore residents aged 18 to 74 years who were willing to seek help from healthcare professionals by age, sex, education, and ethnicity, 2019 to 2023

	NPHS	NPHS	NPHS	NPHS	NPHS
	2019	2020	2021	2022	2023
Total	47.8 (46.0, 49.6)	60.4 (58.9, 61.8)[a]	58.3 (56.8, 59.8)	56.6 (55.3, 57.9)	62.8 (61.5, 64.2)[a]
ASR	47.8	60.4	58.3	56.8	63.0
18-29	54.6 (50.3, 58.8)	63.3 (59.6, 67.0)[a]	62.2 (58.4, 66.0)	60.1 (56.7, 63.4)	64.5 (60.8, 68.3)
30-39	53.5 (49.6, 57.4)	69.4 (66.3, 72.5)[a]	67.7 (64.8, 70.6)	62.0 (59.2, 64.9)	71.9 (69.2, 74.6)[a]
40-49	47.0 (43.2, 50.8)	63.8 (60.6, 67.0)[a]	65.4 (62.2, 68.5)	59.2 (56.5, 61.9)[a]	67.4 (64.8, 70.1)[a]
50-59	42.9 (38.9, 46.8)	58.9 (55.5, 62.2)[a]	51.9 (48.5, 55.4)[a]	55.2 (52.1, 58.3)	61.0 (58.0, 64.0)
60-74	41.2 (37.6, 44.8)	47.8 (44.7, 50.9)	45.8 (43.1, 48.5)	48.1 (45.5, 50.8)	51.2 (48.5, 53.9)
Males	45.4 (43.1, 47.7)	59.0 (56.8, 61.2)[a]	56.8 (54.7, 58.8)	56.3 (54.4, 58.1)	62.3 (60.3, 64.3)[a]
Females	50.1 (47.7, 52.4)	61.6 (59.6, 63.7)[a]	59.8 (57.7, 61.9)	57.0 (55.2, 58.8)	63.3 (61.5, 65.2)[a]
Primary	29.6 (25.8, 33.5)	34.1 (30.5, 37.8)	34.9 (31.0, 38.7)	33.7 (30.3, 37.1)	37.4 (33.6, 41.1)
Secondary	44.0 (41.3, 46.6)	52.5 (49.7, 55.3)[a]	45.8 (43.0, 48.6)[a]	48.0 (45.4, 50.6)	52.9 (50.2, 55.6)
Post-secondary	53.5 (51.1, 55.8)	68.9 (67.0, 70.8)[a]	67.6 (65.8, 69.3)	64.0 (62.4, 65.6)[a]	70.7 (69.0, 72.3)[a]
Chinese	48.2 (46.2, 50.2)	61.5 (59.8, 63.2)[a]	58.6 (56.9, 60.3)	56.4 (54.9, 57.9)	62.4 (60.9, 64.0)[a]
Malays	48.5 (44.6, 52.4)	54.0 (49.6, 58.3)	55.2 (51.2, 59.3)	53.7 (50.1, 57.3)	61.0 (57.2, 64.8)
Indians	44.4 (39.2, 49.7)	59.3 (54.2, 64.3)[a]	57.1 (52.3, 61.9)	60.1 (56.1, 64.2)	65.6 (60.9, 70.3)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 resident population.

(3) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

Table 12.4: Proportion of Singapore residents aged 18 to 74 years who were willing to seek help from informal support networks by age, sex, education, and ethnicity, 2019 to 2023

	NPHS	NPHS	NPHS	NPHS	NPHS
	2019	2020	2021	2022	2023
Total	74.5 (73.0, 76.0)	79.2 (78.0, 80.4)[a]	69.1 (67.7, 70.6)[a]	79.7 (78.6, 80.7)[a]	78.4 (77.3, 79.5)
ASR	74.4	79.1	69.2	79.8	78.6
18-29	86.0 (83.1, 88.9)	88.1 (85.9, 90.4)	84.3 (81.2, 87.4)	88.1 (86.0, 90.3)	85.4 (82.9, 87.9)
30-39	82.8 (80.3, 85.4)	86.3 (84.0, 88.6)	78.6 (75.8, 81.4)[a]	85.5 (83.4, 87.7)[a]	85.4 (83.4, 87.5)
40-49	76.1 (72.9, 79.3)	81.7 (79.3, 84.1)	73.7 (70.0, 77.4)[a]	80.8 (78.6, 83.0)[a]	82.5 (80.4, 84.6)
50-59	69.0 (65.2, 72.8)	78.4 (75.7, 81.0)[a]	61.0 (57.6, 64.4)[a]	77.3 (74.8, 79.9)[a]	75.5 (72.8, 78.2)
60-74	59.3 (55.9, 62.6)	63.1 (60.2, 66.1)	50.3 (47.6, 53.0)[a]	68.4 (66.1, 70.8)[a]	65.6 (63.0, 68.1)
Males	69.3 (67.1, 71.5)	75.1 (73.3, 77.0)[a]	64.3 (62.3, 66.3)[a]	75.7 (74.2, 77.3)[a]	75.1 (73.4, 76.7)
Females	79.5 (77.7, 81.4)	83.1 (81.6, 84.6)[a]	73.7 (71.6, 75.8)[a]	83.5 (82.1, 84.8)[a]	81.6 (80.1, 83.0)
Primary	56.4 (52.2, 60.7)	61.2 (57.6, 64.9)	49.8 (45.9, 53.7)[a]	64.8 (61.3, 68.2)[a]	64.0 (60.3, 67.7)
Secondary	73.1 (70.6, 75.6)	74.3 (72.0, 76.7)	60.3 (57.5, 63.1)[a]	74.6 (72.4, 76.8)[a]	71.7 (69.3, 74.0)
Post-secondary	79.1 (77.1, 81.2)	84.8 (83.4, 86.2)[a]	76.2 (74.3, 78.0)[a]	84.3 (83.0, 85.5)[a]	83.3 (82.0, 84.6)
Chinese	74.4 (72.7, 76.1)	79.9 (78.5, 81.2)[a]	67.9 (66.2, 69.6)[a]	79.2 (78.0, 80.4)[a]	77.9 (76.6, 79.2)
Malays	78.3 (74.8, 81.8)	79.2 (75.9, 82.5)	72.2 (68.4, 76.0)	81.8 (79.1, 84.4)[a]	80.2 (77.2, 83.2)
Indians	68.8 (63.5, 74.0)	74.0 (69.7, 78.2)	72.9 (68.9, 77.0)	79.8 (76.5, 83.0)	78.5[d] (74.8, 82.2)

Notes: (1) Figures in ( ) refer to the 95% confidence intervals. [a] Indicates that the results for any two consecutive survey years are significantly different statistically at 5% significance level as the confidence intervals for these two survey years did not overlap (e.g. NPHS 2022 and NPHS 2023).

(2) ASR: Age-standardised rate. The reference population used is Singapore Census 2020 resident population.

(3) Analysis based on highest education attained served as a proxy to socio-economic factors.
Primary education: No formal qualification/ Primary/ PSLE.
Secondary education: Secondary/ GCE 'O'/ 'N' level.
Post-secondary education: GCE 'A' Level/ Polytechnic & other diploma/ Degree & professional qualification.

(4) [d] Indicate statistically significant linear upward trend between 2019 and 2023 with p-value <0.05.

Chapter 13 Survey Methodology

Study Design and Objectives

The NPHS is a cross-sectional population health survey series jointly managed by the Ministry of Health and Health Promotion Board to track the health and risk factors of the Singapore residents. The main objectives of the survey are to monitor the health of Singapore residents and track progress towards national targets in the areas of:

(i) risk factors such as alcohol consumption, cigarette smoking and physical inactivity;

(ii) diseases such as diabetes mellitus, hypertension and hyperlipidaemia; and

(iii) preventive health behaviours such as chronic disease screening; cervical, breast and colorectal cancer screening; and vaccinations.

The survey results were presented for the 18 to 74 years age group for most chapters except chronic disease screening, cancer screening and vaccinations. For these few chapters, the analyses were confined to relevant age groups recommended for screening and immunisation. Data for the “Others” ethnic group were included in the compilation of the survey results shown under “Total”, but suppressed in ethnic-specific data of all statistical tables due to small counts or high sampling variability.

Ethics Approval

The NPHS methodology, protocol and procedures were approved by National Healthcare Group (NHG) Domain Specific Review Board (Domain F).

Sample Design

A representative sample of residential addresses was obtained from the Singapore Department of Statistics (DOS) who maintains a sampling frame of residential addresses for the selection of samples for household surveys. The sample selection was based on a two-stage design where the primary sampling units comprised of geographical areas and the secondary sampling units were the residential dwelling units.

The NPHS design comprised two components – (1) Household Interview (HI) and (2) Health Examination (HE). In the first component, a household member aged 18 to 79 years old (also known as “reference person”) was identified using KISH tables within each selected address to participate in the household for a face-to-face questionnaire interview (i.e. NPHS HI). Only Singapore citizens and permanent residents were recruited for the survey. All reference persons who completed NPHS HI would be invited to undergo a health examination (i.e. NPHS HE) at a designated clinic. Physical measurements e.g. height, weight, hip and waist circumference, blood pressure levels and bio-specimens such as blood and urine samples of survey respondents were collected. The blood and urine samples were sent to a medical laboratory to test for blood sugar, cholesterol, proteins in urine and other conditions. A full report on the respondent’s health status was mailed to him/ her six to eight weeks after the completion of the health examination.

Questionnaire

An electronic structured questionnaire administrated on a tablet was used in the survey to collect information on the demographic, socio-economic, lifestyle practices relating to the major non-communicable diseases and risk factors, health conditions, knowledge, attitude and practices on health screening as well as the help-seeking attitudes of the respondents. The questionnaire was adopted from that of the National Population Health Survey 2017 and National Health Surveillance Survey 2013; and included elements of the instruments used in the WHO STEP-wise approach to Surveillance of Non-Communicable Diseases (STEPS) Instrument for Non-Communicable Disease Risk Factors and WHO’s Global Physical Activity Questionnaire (GPAQ).

Invitation Letter and Publicity

An invitation letter, in four official languages, was mailed to the selected household addresses one week prior to visitation by the assigned interviewers. The invitation letter provided information on the survey purpose, what the survey comprised and expected survey duration. It also informed that an interviewer from a research company commissioned by the Ministry of Health and Health Promotion Board would be visiting the household to enumerate, select and interview an eligible household member to take part in the survey, and assured the household on the confidentiality of all collected information. A dedicated NPHS webpage was set-up to provide detailed information on the conduct of the NPHS.

Training

All survey interviewers were given an overview of the survey background and briefed extensively on the fieldwork procedures such as procurement of appointments, enumeration of household members, selection of eligible household members using KISH tables and consent taking for survey participation. They were given training slides on survey protocols and questionnaire administration as well as training in administrating the electronic questionnaire on a tablet. Fieldworkers carrying out the health examination were given training on consent taking and the standard operation procedures for the conduct of health examination. These trainings helped to ensure compliance to standards and protocols of the survey, and consistency in data collection for the household interview and health examination.

Household Interview Fieldwork

The survey fieldwork was conducted between 01 July 2022 and 30 June 2023. Survey interviewers from the appointed research company *(National University of Singapore (IPS-Social Lab)),* commissioned by the Ministry of Health and Health Promotion Board visited all the selected household addresses. The interviewers made a minimum of five visit attempts, at different times of the day and on different days of a week to establish contact with the reference person or household member to conduct the survey or obtain a survey appointment if the reference person was unavailable at the point of visit. Informed written consent was obtained from the reference person before the interviewer administered the questionnaire face-to-face. A token of appreciation was given to the reference person who completed the survey interview. All reference persons who completed the household interview were invited to go for a health examination and given a letter of invitation by the interviewer.

Health Examination Fieldwork

The health examination fieldwork for NPHS 2023 was carried out between 18 July 2022 and 28 August 2023 by a healthcare service provider *(Healthway Medical Group)* appointed by the Ministry of Health and Health Promotion Board. Appointment setting officers from the service provider provided a reminder call to reference persons two to three days prior to their appointments and managed any requests for changes to the appointments. At the appointed clinic, informed written consent was obtained by a fieldworker before the conduct of the health examination and a token of appreciation was given to the reference person after the completion of the health examination.

Data Quality Control

Informed consent forms validation

All the informed consent forms from the household interview and health examination were checked for completeness and accuracy of information captured. This included checks for missing information, consistency of information and any data-entry errors in the datasets.

Interview validation

Data quality control was conducted by a separate team of staff who were not involved in the survey interview fieldwork. For each interviewer, 40% of their survey interviews were randomly selected and subjected to quality control checks via telephone validation or audio audit. At least 30% of all quality control checks were conducted through telephone validation where respondents were asked to verify their residential address and responses to nine specific fields with the respondents concerned. The remaining 10% of the checks were audio audits where a quality control staff listened to segments of the interview and checked if the interviewer complied with the stipulated survey protocols in administering the questions.

Data verification and consistency check

The electronic survey questionnaire had built-in features that prompt data entry for fields that required a response or prompt data re-entry if data entered was outside the logical or valid field range. Built-in checks for relational fields were also incorporated to ensure that responses for those fields across different sections of the questionnaire were consistent. The built-in features and checks ensured that missing values, data-entry errors and inconsistent responses were eradicated or kept to the minimum where possible. The database on the questionnaire records with the complete survey responses was subjected to a series of computer-programmed checks for missing values, valid field range and cross-field relational consistency. Missing values were obtained from respondents and data anomalies were clarified through direct verification with the respondents whenever necessary.

The database on the physical measurements and laboratory results were also checked for missing value, valid field range and cross-field relational consistency. Missing values and data anomalies were clarified with fieldworkers and corrected where possible.

Data Confidentiality

Throughout all stages of the survey, strict confidentiality on individual respondent information was maintained. All information, including audio recordings, questionnaire answers, health examination records collected for this survey, would be kept strictly confidential, and stored in a secure, password-protected environment. Any reporting of findings would be done on a grouped basis such that no individual survey respondents can be identified. The identity of the respondents would remain confidential in publications (e.g. in national reports).

Age-Standardisation

Age-standardisation of prevalence rates take into account the changing age distribution of the population over the years and allows for more meaningful trend comparison, especially with an ageing population. Age-standardisation of prevalence was calculated by the direct method, using the 2020 Census Singapore resident population as the standard (reference) population.

Response Rate

From a sample of 10,623 eligible households, 7,624 reference persons aged 18 to 79 years participated in the household interview, forming a response rate of 71.8% in NPHS 2023. 5,832 reference persons (76.5% of all reference persons) initially agreed to participate in the follow-on health examination. However, only 4,498 (77.1%) of those who agreed eventually attended the health examination.

Comparison of Demographic Profile between Survey Respondents and Resident Population

The demographic profiles of survey respondents from household interview were shown in Table 13.1. The survey sample was weighted to the age, ethnic group and sex distribution of the 2022 Singapore resident population to yield a similar population structure as the resident population. This was to ensure that the survey results apply to the general population.

Sample Weights

The sample weights for household interview were the composite of sample weights for the households and the selected household members. For each household, the sample weight (W_{HH}) comprised weight for non-response and unequal probability of selection stratified by planning regions and housing type and benchmarked to the total number of resident households. For each household member, the sample weight (W_{HH_Mem}) comprised weight for unequal probability of selection and weight for post-stratification stratified by age, sex and ethnic groups. The overall sample weight for household interview was the product of W_{HH} and W_{HH_Mem}.

Table 13.1: Percentage distribution (%) of the survey sample (unweighted) for household interview and 2022 Singapore resident population by demographic characteristics

	Household Interview Survey Sample (Unweighted)	Singapore Resident 2022
Total	100.0	100.0
18-29	11.8	18.4
30-39	17.9	18.8
40-49	20.2	18.7
50-59	18.7	18.3
60-69	18.8	16.6
70-79	12.6	9.1
Males	47.2	48.8
Females	52.8	51.2
Chinese	75.1	75.1
Malays	12.3	12.9
Indians	9.1	8.8
Others	3.4	3.2

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Annex A

Survey Questionnaire

NATIONAL POPULATION HEALTH SURVEY 2022/23

QUESTIONNAIRE A [FOR PERSONS AGED 18 YEARS & ABOVE]

全国人口健康调查 2022/23 问卷 A [供 18 岁或以上的人]

Serialhi								
Date of Interview	D	D	M	M	Y	Y	Y	Y

Interviewer's Full Name		KISH Table Used	

Household Information

Number of eligible PERSONS (Singapore citizens/PRs aged 18 to 79 years) in household: _____

住户中合格的人士（18 至 79 岁以下的新加坡公民/永久居民）人数

Number of eligible SENIORS (Singapore citizens/PRs aged 65 years & above) in household: _____

住户中合格的乐龄人士（65 岁或以上的新加坡公民/永久居民）人数

1. REGISTRATION

Interviewer: I would like to inform that your individual information collected for the survey will be kept strictly confidential. Any reporting would be done on a collective basis such that no participants in the survey will be identifiable.

我想告诉您，本调查所收集的个人信息会严格保密。所有调查都会基于整体数据，因此不会泄漏您的任何个人信息。

1000. Year of birth:
出生年份

Y	Y	Y	Y

Age:
年龄

1001. Record gender of participant **[SA]**
请注明受访者的性别

1	Male	男性
2	Female	女性

1002. Ethnic group (as listed in NRIC) **[SA]**
种族（以身份证（NRIC）为准）

READ ONLY IF NECESSARY		
1	Chinese	华族
2	Malay	马来族
3	Indian	印度族
DO NOT READ		
4	Others, please specify: 其它，请注明: _____	
777	Refused	拒绝回答
[Go to Q1003]		

1003. Are you a Singapore Citizen? **[SA]**
您是新加坡公民吗？

READ		
1	Yes, I am a Singapore Citizen	是，我是新加坡公民
2	No, I am a Permanent Resident	否，我是永久居民
DO NOT READ		
777	Refused	拒绝回答
[Go to Q1004]		

1004. May I know your height in metres, centimetres, or feet and inches? **[SA]**
请问您的身高是多少公尺、公分或英尺英寸？

	Height in cm, **OR** (nearest whole number)	公分，**或** （最近的整数）
	Height in metres, **OR** (nearest two decimal places)	公尺，**或** （最接近的两位小数）
	Feet (nearest whole number) **AND**	英尺（最近的整数）**与**
	Inches (nearest whole number)	英寸（最近的整数）
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q1005]		

1005. May I know your weight in kilograms or pounds? **[SA]**
请问您的体重是多少公斤或磅？

	Weight in kg, **OR** (nearest one decimal place)	公斤，**或** （最接近的一位小数）
	Weight in lbs (nearest whole number)	磅 （最近的整数）
DO NOT READ		
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
END OF SECTION 1. GO TO SECTION 2.		

2. DEMOGRAPHICS

2000. What is your current marital status? **[SA]**
请问您目前的婚姻状况是？

USE SHOWCARD		
1	Never married	从未结婚
2	Married	已婚
3	Divorced	离婚
4	Separated	分居
5	Widowed	丧偶
DO NOT READ		
777	Refused	拒绝回答
[Go to Q2001]		

2001. Do you have any children, including adopted and step-children? Please do not include foster children. **[SA]**
请问您是否有孩子, 这包括领养的孩子、继子和继女？ 请不要包括寄养的儿童。

USE SHOWCARD			
1	Yes	有	**[Go to Q2002]**
2	No	没有	**[Go to Q2003]**
DO NOT READ			
777	Refused	拒绝回答	

2002. Are any of your children within the following age range, including adopted and step-children? Please do not include foster children. **[SA]**
您是否有属于以下年龄段的孩子，这包括领养的孩子、继子和继女？请不要包括寄养的儿童。

READ			
a) Aged 6 years and below 6 岁或以下	1) Yes 是	2) No 否	777) Refused 拒绝回答
b) Aged 7 to 12 years 7 岁至 12 岁	1) Yes 是	2) No 否	777) Refused 拒绝回答
c) Older than 12 years 12 岁以上	1) Yes 是	2) No 否	777) Refused 拒绝回答
[Go to Q2003]			

2003. What is the highest level of education* that you have attained? **[SA]**
请问您的最高教育程度*是什么？

USE SHOWCARD AND DO NOT READ		
1	No formal education / Primary	未接受正规教育/小学
2	PSLE or equivalent	小六离校毕业证书或同等学历
3	Secondary	中学
4	'O' / 'N' level or NTC3 cert or its equivalent	'O' / 'N' 水准或全国技工证书第 3 级 (NTC 3)或同等学历
5	'A' level / International Baccalaureate (IB)/ NTC 1-2 or Cert in office/ business skills or its equivalent, WSQ certificates	'A' 水准或/国际高中文凭(IB)/全国技工证书第 1-2 级(NTC 1-2)或办公室/商业技能证书或同等学历,WSQ 证书
6	Polytechnic Diploma	理工学院文凭
7	Other diploma & professional qualification	其它文凭或专职业资格证书
8	University and above	大学及以上学历
9	Others, please specify: 其它，请注明: _____	
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q2004]		

** Refers to the highest level or standard which a person had passed or attained and was awarded a certificate, either through attendance at an institution of learning, through correspondence or self-study.*
最高教育程度指的是一个人通过在教育机构学习、函授或自修并获得证书的最高教育水平或学位。

2004. Which of the following best describes your main work status* over the last 12 months? **[SA]**
下列哪项最符合您在过去 12 个月内的主要工作情况*?

USE SHOWCARD & READ ONLY IF NECESSARY			
1	Working	工作	**[Go to Q2005a]**
2	Full-time Student	全职学生	**[Go to Q2006]**
3	Serving National Service	在服兵役/国民服役	
4	Homemaker or housewife	家庭主妇/夫	
5	Retired	退休	**[Go to Q2005a]**
6	Unemployed	无工作	
DO NOT READ			
777	Refused	拒绝回答	**[Go to Q2006]**
888	Don't know / Not sure	不知道 / 不肯定	

** Refers to what you spent most of the usual working hours on during the last 12 months.*
主要工作情况指的是在过去 12 个月内的平常工作时间，您大部分的时间所做的事。

2005a. Which industry do you work in, or used to work in? **[SA]**
您目前或以前从事哪一个行业的工作？

<write response 写回应>

2005b. What is or was your occupation? **[SA]**
您目前或以前的职业是什么？

<write response 写回应>

DO NOT READ (for internal coding only)		
1	Community, Social and Personal Services (e.g. education, nursing, arts, entertainment, public administration, defence, …)	社区，社会及个人服务业（如教育，护理，艺术，娱乐，公共行政，国防， 等等）
2	Manufacturing	制造业
3	Business Services (e.g. real estate, legal, accounting, architectural, R&D, travel, employment, …)	商业服务业（如房地产，法律，会计，建筑设计，科研开发，旅游，雇员介绍，等等）
4	Wholesale and Retail Trade	批发及零售业
5	Financial and Insurance Activities	金融险业
6	Information and Communications (e.g. publishing, media, telecommunications, information technology, …)	资讯通信业(如出版， 媒体， 电信， 资讯科技 等等)
7	Others (e.g. transport, hotels, restaurants, construction)	其它(如交通， 酒店， 餐馆， 建筑业， 等等)
8	Have **never** worked	从来没有工作过
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q2006]		

2006. Over the last 12 months, what is the average earnings (S$) of your household in one month, before any deductions? Please include all sources of income such as bonuses, rental and investment income, and other sources such as pension and contributions from relatives and friends who are not staying in the same household. **[SA]**
在过去 12 个月内，您全家每月的平均总收入，在任何扣除前，大概是多少新币？请包括红利、租金和投资所得到的收入，也包括退休金和非同住在一起的家人或朋友所给的现金零用钱/资助。

USE SHOWCARD		
1	Below 2,000 per month	每月收入低于 2,000
2	2,000 – 3,999 per month	每月收入在 2,000 – 3,999 之间
3	4,000 – 5,999 per month	每月收入在 4,000 – 5,999 之间
4	6,000 – 9,999 per month	每月收入在 6,000 – 9,999 之间
5	10,000 – 14,999 per month	每月收入在 10,000 – 14,999 之间
6	15,000 & above per month	每月收入 15,000 及以上
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
END OF SECTION 2. GO TO SECTION 3.		

3. PHYSICAL ACTIVITY

Interviewer: The next questions are about the time you spend doing work. Think of work as the things that you **have to do** such as paid or unpaid work, household chores or looking for a job. Activities at work, focus on occupational physical activity. For homemakers, this refers to household chores. For unemployed, this refers to looking for a job. For students, this refers to classes (including Physical Education if relevant).
接着我要询问您关于工作中的体力活动。工作是指您不得不做的事情，如有偿或无偿工作、家务活以及找工作。工作中的活动，主要是指与职业相关的体力活动。对于家庭主妇来说，这指的是家务劳动。对于无业人士来说，这指的是找工作。对于学生来说，这指的是上课（包括相关的体育课）。

In answering the next few questions, 'vigorous-intensity activities' are activities that require hard physical effort and cause large increases in breathing or heart rate, 'moderate-intensity activities' are activities that require moderate physical effort and cause small increases in breathing or heart rate.
在以下的问题，“剧烈活动” 是指需要大量体力并引起呼吸心跳显著增加的活动，“中等强度活动” 是指需引起呼吸心跳轻度增加的活动。

Activity at work （在工作中的活动）

3000. In a typical week, on how many days do you do *vigorous-intensity* activities for at least 10 minutes continuously as part of your work? **[SA]**
您在工作中通常每周有多少天会做持续至少 10 分钟的*剧烈*活动？

USE SHOWCARD FOR EXAMPLES			
	Days a week	每周几天	**[If 0 day, go to Q3001. Else go to Q3000a]**
DO NOT READ			
777	Refused	拒绝回答	**[Go to Q3001]**
888	Don't know / Not sure	不知道 / 不肯定	

3000a. On a typical day on which you do *vigorous-intensity* activities for at least 10 minutes continuously, how much time do you spend doing such activities at work? **[SA]**
在您有做持续至少 10 分钟*剧烈*活动的平常一天里，您通常会花多长时间做此类活动？

	Hours	小时
	Minutes	分钟
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q3001]		

3001. In a typical week, on how many days do you do *moderate-intensity* activities for at least 10 minutes continuously as part of your work? **[SA]**
您在工作中通常每周有多少天会做持续至少 10 分钟的*中等强度*活动？

USE SHOWCARD FOR EXAMPLES			
	Days a week	每周几天	**[If 0 day, go to Q3002. Else go to Q3001a]**
DO NOT READ			
777	Refused	拒绝回答	**[Go to Q3002]**
888	Don't know / Not sure	不知道 / 不肯定	

3001a. On a typical day on which you do *moderate-intensity* activities for at least 10 minutes continuously, how much time do you spend doing such activities at work? **[SA]**
在您有做持续至少 10 分钟*中等强度*活动的平常一天里，您通常会花多长时间做此类活动？

	Hours	小时
	Minutes	分钟
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q3002]		

Interviewer: The next questions **exclude** the physical activities at work that you have previously mentioned. Now, I would like to ask you about the usual way you travel to and from places. For example, going to work, shopping, market, or church, temple or mosque or going out for lunch.
以下的问题**不包括**上述工作时的体力活动。现在我要询问您通常的交通方式。例如，上班、购物、去市场、教堂、寺庙或清真寺，或出门用午餐。

Travel to and from places （出行时）

3002. In a typical week, on how many days do you walk or cycle (pedal cycle) for at least 10 minutes continuously to get to and from places? **[SA]**
您出行时，通常每周有多少天步行或骑脚踏车，持续至少 10 分钟？

	Days a week	每周几天	**[If 0 day, go to Q3003. Else go to Q3002a]**
DO NOT READ			
777	Refused	拒绝回答	**[Go to Q3003]**
888	Don't know / Not sure	不知道 / 不肯定	

3002a. On a typical day when you walk or cycle (pedal cycle) for at least 10 minutes continuously, how much time do you spend walking or cycling? **[SA]**
在您有步行或骑脚踏车持续至少 10 分钟的一天里，您通常会花多长时间做此类活动？

	Hours	小时
	Minutes	分钟
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q3003]		

Recreational activities （娱乐性体力活动）

3003. In a typical week, on how many days do you do *vigorous-intensity* sports, fitness, recreational or leisure activities for at least 10 minutes continuously? **[SA]**
您通常每周有多少天会做持续至少 10 分钟的*剧烈*运动、健身或娱乐性体力活动？

USE SHOWCARD FOR EXAMPLES			
	Days a week	每周几天	**[If 0 day, go to Q3004. Else go to Q3003a]**
DO NOT READ			
777	Refused	拒绝回答	**[Go to Q3004]**
888	Don't know / Not sure	不知道 / 不肯定	

3003a. On a typical day, how much time do you spend doing *vigorous-intensity* sports, fitness, recreational or leisure activities for at least 10 minutes continuously? **[SA]**
在您有做持续至少 10 分钟*剧烈*运动、健身或娱乐性体力活动的平常一天里，您通常会花多长时间做此类活动？

	Hours	小时
	Minutes	分钟
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q3004]		

3004. In a typical week, on how many days do you do *moderate-intensity* sports, fitness, recreational or leisure activities for at least 10 minutes continuously? **[SA]**
您通常每周有多少天会做持续至少 10 分钟的*中等强度*运动、健身或娱乐性体力活动？

USE SHOWCARD FOR EXAMPLES			
	Days a week	每周几天	**[If 0 day, go to Q3006. Else go to Q3004a]**
DO NOT READ			
777	Refused	拒绝回答	**[Go to Q3006]**
888	Don't know / Not sure	不知道 / 不肯定	

3004a. On a typical day, how much time do you spend doing *moderate-intensity* sports, fitness, recreational or leisure activities for at least 10 minutes continuously? **[SA]**
在您有做持续至少 10 分钟*中等强度*运动、健身或娱乐性体力活动的平常一天里，您通常会花多长时间做此类活动？

	Hours	小时
	Minutes	分钟
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q3006]		

3006. In a typical week, on how many days do you do physical activities or exercises to **strengthen your muscles**? Examples of these activities include tai-chi, qi-gong, yoga, sit-ups, push-ups, the use of weight machines, free weights, or elastic bands. Do **not** include aerobic activities like walking, running, or cycling. **[SA]**
您通常每周有多少天会为了**增强肌肉**而做运动或体育锻炼？这些运动包括太极、气功、瑜伽、仰卧起坐或伏地挺身，以及那些使用举重器械、自由力量训练设备或弹力带的运动。请勿包括有氧运动，如健步行走、跑步或骑脚踏车。
***Interviewer note**: Record number of days per month if frequency is less than once a week. Respondents should complete at least 1 set of strength exercises to register as 1 day.*

USE SHOWCARD FOR EXAMPLES & DEFINITION OF 1 SET OF EXERCISE		
	Days per week **OR**	每周几天 **或**
	Days per month	每月几天
DO NOT READ		
666	Never do such activity or exercise	没有做这些运动或体育锻炼
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q3005]		

Interviewer: The next question is about sitting or reclining at work, at home, getting to and from places, or with friends, including time spent sitting at a desk, sitting with friends, travelling in car, bus, train, reading, playing cards or watching television but **DO NOT** include time spent sleeping.
以下的问题是关于工作中、在家里、出行或与朋友相处时的坐卧情况，包括坐在桌前、与朋友坐在一起，乘坐汽车、巴士、地铁，阅读、打牌或看电视的时间，但**不包括**睡眠时间。

3005. On a typical day, how much time do you usually spend sitting or reclining? **[SA]**
您通常每天花多长时间坐着或靠着？

	Hours	小时
	Minutes	分钟
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
END OF SECTION 3. GO TO SECTION 4.		

4. TOBACCO USE

Interviewer: The next questions are on cigarette smoking.
现在，我要问一些有关吸烟的问题。

4000. Have you ever smoked cigarettes? **[SA]**
您曾吸过烟吗？

READ			
1	Yes	有	**[Go to Q4001]**
2	No	没有	**[Go to Q4016 Other Tobacco Products]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

4001. How old were you when you first tried or experimented with smoking cigarettes? **[SA]**
您第一次尝试吸烟时是几岁？

	Age	几岁
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q4002]		

4002. Have you ever smoked at least 100 cigarettes, or about 5 packs in your **whole life**? **[SA]**
您**一生中**曾经吸过的烟总数是否有至少 100 支（约 5 包）？

READ			
1	Yes	有	**[Go to Q4003]**
2	No	没有	**[Go to Q4016 Other Tobacco Products]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

4003. Have you ever smoked cigarettes daily? **[SA]**
您曾经每天吸烟吗？

READ			
1	Yes	有	**[Go to Q4004]**
2	No	没有	**[Go to Q4005]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

4004. At what age did you start smoking cigarettes daily? **[SA]**
您从几岁开始每天吸烟的？

	Age	几岁
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q4005]		

4005. How often do you smoke cigarettes now, is it….? **[SA]**
您目前吸烟的频率，是…？

READ			
1	Daily*	每天*	**[Go to Q4006a]**
2	Occasionally	偶尔	
3	Have stopped smoking completely	已经彻底戒烟	**[If Q4003=1, go to Q4011 Ex-daily Smoker If Q4003=2, 777 or 888, go to Q4015 Ex-smoker]**
DO NOT READ			
777	Refused	拒绝回答	**[Go to Q4016 Other Tobacco Products]**
888	Don't know / Not sure	不知道 / 不肯定	

* ***Interviewer Note:*** *Please include respondents who have stop smoking daily temporarily because of religious fasting or medical reasons.*
请包括受访者因宗教禁食或医疗因素而暂时停止每天吸烟。

[If Q4005 = "Daily" or "Occasionally", ask the following question]

4006a. Can you show me the pack of cigarettes that you are currently smoking so that we can write down the flavour of cigarette? **[SA]**
您是否能让我看您所吸的烟的包装以便我记下其烟的口味？
Interviewer Note*: If respondent does not have a pack or refused to show pack of cigarettes, please ask for the flavour. If there are more than 1 flavour smoked, record the flavour that was most often smoked.*

DO NOT READ [Record flavour as shown for 4006a]		
1	Regular	
2	Menthol	
3	Mint	
4	Clove/ Kretek	
5	Others, please specify: 其它，请注明：_____	
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q4006]		

4006. Based on the pack of cigarettes, please code the theme of the graphic health warning. **[SA]**

DO NOT READ [For internal coding by Interviewers]	
1	Smoking causes blindness
2	Smoking causes cancer
3	Smoking causes heart disease
4	Smoking causes lung disease
5	Smoking increases the risk of miscarriage
6	When you're hooked, your child suffers too
7	Smoking can cause stillbirth
8	Smoking causes oral cancer
9	Smoking causes throat cancer
10	Smoking leads to death from lung cancer
11	Tobacco smoke harms your baby
12	Smoking causes premature ageing
13	Others please specify: _____
666	No graphic warnings
777	Refused to show the pack of cigarette

Note: No translation of graphic warning theme is required.

[If Q4005 = "Daily", go to Q4007. Else, go to Q4016 Other Tobacco Products]

4007. **[Daily Smoker]** On average, how many cigarettes do you smoke per day? **[SA]**
您平均每天吸多少支烟?

	Cigarettes daily	一天几支烟
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q4008]		

4008. **[Daily Smoker]** Do you have any intention to quit smoking? **[SA]**
您是否有戒烟的打算?

READ AND USE SHOWCARD		
1	Yes, I plan to quit smoking within the next month	有,我打算在下个月内戒烟
2	Yes, I plan to quit smoking within the next 6 months	有,我打算在未来 6 个月内戒烟
3	Yes, I plan to quit smoking within the next 12 months	有,我打算在未来 12 个月内戒烟
4	Yes, I plan to quit smoking within the next 5 years	有,我打算在未来 5 年内戒烟
5	Yes, I plan to quit smoking sometime in the future	有,我打算在未来的某个时候戒烟
6	No, I do not plan to quit smoking completely, but plan to cut down on the number of cigarettes smoked	我没有打算完全戒烟,但有打算减少吸烟
7	No, I do not plan to quit smoking or cut down on the number of cigarettes smoked	我没有打算戒烟或减少吸烟
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q4009]		

4009. **[Daily Smoker]** In the last 12 months, have you tried to stop smoking for at least 24 hours? **[SA]**
在过去 12 个月内，您是否有尝试连续至少 24 小时不吸烟?

READ			
1	Yes	有	**[Go to Q4010]**
2	No	没有	**[Go to Q4016 Other Tobacco Products]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

4010. **[Daily Smoker]** How many times did you try to quit smoking during the last 12 months? **[SA]**
在过去 12 个月内，您曾经几次尝试戒烟?

	Number of times in last 12 months	在过去12个月内有几次
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q4016 Other Tobacco Products]		

[If Q4005 = "Have stopped smoking completely" and Q4003=1, go to Q4011. Else if Q4005 = "Have stopped smoking completely" and Q4003=2, 777 or 888, go to Q4015.]

4011. **[Ex-daily Smoker]** How long has it been since you last smoked daily? **[SA]**
您已经有多久停止每日吸烟的习惯？

	Number of years, **OR**	几年，**或**
	Number of months	几月
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q4012]		

4012. **[Ex-daily Smoker]** How long did you smoke daily before you gave up smoking? **[SA]**
在戒烟之前，您曾经有多久每天吸烟？

	Number of years, **OR**	几年，**或**
	Number of months	几月
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q4015]		

4015. **[Ex-smoker]** How many times did you try to quit smoking before you succeeded? **[SA]**
在戒烟成功前，您曾经尝试戒烟过几次？

	Number of times	几次
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q4013]		

4013. **[Ex-smoker]** What was the main reason which made you stop smoking completely? **[SA]**
您彻底戒烟的主要原因是什么？

DO NOT READ		
1	**Experienced** the ill effects of smoking	**身受**吸烟之害
2	Pressure to stop from the environment (e.g. **smoking bans**)	迫于环境（例如**禁烟令**）的压力而戒烟
3	Concerned about the health of those around me (through **passive smoking**)	担心周围人群的健康（通过**二手烟**）
4	**Concerned** about the **harmful effects** of smoking	**关注**吸烟的**害处**
5	Pressure/ advice to stop from **family**/ **friends**/ **colleagues**	出于**家庭/朋友/同事**的压力/建议而戒烟
6	Cigarettes have become too **expensive**	香烟价格**太贵**
7	**Social stigma** associated with smoking	吸烟**不光彩**
8	Advised to stop smoking by my **doctor**	**医生**建议我戒烟
9	Others, please specify: 其它，请注明：_____	
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q4014]		

4014. **[Ex-smoker]** How did you quit smoking? **[MA]**
请问您是怎样戒烟的？

DO NOT READ		
1	Abstained from smoking on own accord	自我克制主动戒烟
2	Attended smoking cessation programme/counselling in public/private hospitals	参加公立/私人医院的戒烟计划/辅导
3	Attended smoking cessation programme/counselling in public (including polyclinics) /private GP clinics	参加公立(包括综合诊疗所)/私人诊所的戒烟计划/辅导
4	Attended smoking cessation programme/counselling in the workplace	参加工作场所的戒烟计划/辅导
5	Attended smoking cessation programme/counselling through a retail pharmacy	通过零售药店参加戒烟计划/辅导
6	Through talking to a quit advisor at Quitline	通过与戒烟热线的戒烟顾问沟通
11	Through participating in I Quit programme (constitutes SMS and Quitline as an option for smokers)	通过参加全国戒烟运动“I Quit”
7	By nicotine replacement therapy (e.g. nicotine patch, inhaler)	通过尼古丁替代治疗（例如尼古丁贴片、尼古丁吸入剂）
8	By herbal remedy	通过草药疗法
9	Used medication (e.g. Bupropion/ Zyban, Varenicline/Champix)	药物治疗（例如耐烟盼牌的安非他酮、戒必适牌的伐尼克兰）
10	Others, please specify: 其它，请注明：_____	
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q4016]		

4016. **[Ask All]** Other than cigarettes, which of the following tobacco products do you currently smoke? **[SA]**
除了香烟，您目前吸的是以下哪种烟草产品？

USE SHOWCARD					
List of other tobacco products **其它烟草产品的列表**	1) Yes, Daily 是, 每天	2) Yes, Occasionally 是, 偶尔	3) No 否	777) Refused 拒绝回答	888) Don't know / Not sure 不知道 / 不肯定
4016a. Cigar 雪茄	☐	☐	☐	☐	☐
4016b. Cigarillos 迷你雪茄	☐	☐	☐	☐	☐
4016c. E-cigarette / E-vapouriser 电子香烟	☐	☐	☐	☐	☐
4016d. Heated Tobacco 加热烟草	☐	☐	☐	☐	☐
4016e. Beedis 比迪烟	☐	☐	☐	☐	☐
4016f. Roll your own tobacco / Ang Hoon (loose tobacco) 卷烟	☐	☐	☐	☐	☐
4016g. Pipe Tobacco 烟丝	☐	☐	☐	☐	☐
4016h. Others 其它 **[Go to Q4016h(i) for "1" or "2"]**	☐	☐	☐	☐	☐
[If Q4016a to Q4016h=1 or 2, go to Q4020] **If Q4016a to Q4016h=3, 777 or 888, go to Section 6]**					

4016h(i) **[**If respondent selected "1" or "2" for Q4016h, please specify below**]**:
其它（请注明）：

[If Q4000 = "Yes" or Q4016a to Q4016h = "Yes, Daily" or "Yes, Occasionally"]

4020. **[Ask All Smokers]** When you first started smoking, which of the following tobacco product did you smoke? **[SA]**
在您刚开始吸烟时，您吸的是以下哪种烟草产品？

USE SHOWCARD		
1	Cigarettes	香烟
2	Cigar	雪茄
3	Cigarillo	迷你雪茄
4	E-cigarette / E-vapouriser	电子香烟
5	Heated Tobacco	加热烟草
6	Beedis	比迪烟
7	Roll your own tobacco / Ang Hoon (loose tobacco)	卷烟
8	Pipe Tobacco	烟丝
9	Others, please specify: 其它，请注明：_____	
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q4021]		

4021. **[Ask All Smokers]** What was the flavour of *(tobacco product mentioned in 4020)* that you smoked when you first started smoking? **[SA]**
在您刚开始吸烟时，您吸的_____是什么口味？

USE SHOWCARD		
1	Regular	普通味
2	Menthol	薄荷醇味
3	Mint	薄荷味
4	Clove/ Kretek	丁香味
5	Others, please specify: 其它，请注明：_____	
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
END OF SECTION 4. GO TO SECTION 6.		

6. ALCOHOL CONSUMPTION

Interviewer: Now I am going to ask you some questions about alcohol consumption.
现在，我要问您一些关于饮酒的问题。

6000. In the past 12 months, how frequent did you have at least one drink? **[SA]**
在过去 12 个月内，您喝至少一杯酒的频率是多少？

READ AND USE SHOWCARD			
1	5 or more days a week	每周 5 天或更多	**[Go to Q6003]**
2	1-4 days per week	每周 1 至 4 天	
3	1-3 days a month	每月 1 至 3 天	
4	Less than once a month	每月少于一天	
5	Did not drink alcohol in the past 12 months	在过去 12 个月内没有喝酒	**[Go to Section 7]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

6003. On the days that you drank alcohol, about how many drinks did you usually have? **[SA]**
每当喝酒时，您通常会在一天内喝几杯含有酒精的饮料？

USE SHOWCARD & EXPLAIN WHAT CONSTITUTES 1 DRINK		
	Number of drinks per day	一天内几杯饮料
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q6002]		

6002. How many times during the past month did you have X **[X = 5 for men, X = 4 for women]** or more drinks in any one drinking session? Please include all types of alcoholic drinks. **[SA]**
在过去一个月内，您曾经有多少次在一次饮酒过程中喝了 X［男性 X = 5，女性 X = 4］杯或更多？请包括所有类型的酒精饮品。

USE SHOWCARD & EXPLAIN WHAT CONSTITUTES 1 DRINK			
	Times in the past month	过去一个月内有几次	**[If >0, go to Q6004]**
DO NOT READ			
666	Did not drink X **[X = 5 for men, X = 4 for women]** or more drinks in any one drinking session	没有在一次饮酒过程中喝超过 X［男性 X = 5，女性 X = 4］杯	**[Go to Section 7]**
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

6004. On those days where you drink X [X = 5 for men, X = 4 for women] or more drinks, where do you usually drink? **[MA]**

在您喝 X [男性 X = 5，女性 X = 4] 杯酒或更多的那些天里, 您通常会在哪里喝？

READ (May choose more than one answer)		
1	At home / relative's/ friend's home (e.g. during parties, celebratory occasions)	在家里/亲戚/朋友家里（聚会、庆祝场合）
2	Pubs/ Bars/ Hotels lounges	酒吧/酒店酒廊
3	Discos/ Nightclubs/ KTVs	歌舞厅/夜店/KTV 练歌房
4	Restaurants/ Coffeeshops/ Hawker Centres	餐馆/咖啡店/小贩中心
5	Others, please specify: 其它，请注明：_____	
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
END OF SECTION 6. GO TO SECTION 7.		

7. DIABETES

Interviewer: Now, I would like to ask you some questions about diabetes. Diabetes occurs when there is excess sugar in the blood. Oral medications and insulin injections may be required if a person with diabetes is unable to adequately control his blood sugar levels despite lifestyle changes.
现在，我要问您一些关于糖尿病的问题。血糖过高会导致糖尿病。若糖尿病患者在改变生活方式之后仍然无法控制血糖，那他/她就或许需要以服用口服降糖药或胰岛素注射来控制病情。

7000. Can you tell me who in your immediate family* has diabetes, excluding diabetes that happens only during pregnancy? **[MA]**
您的直系家庭*中谁患有糖尿病？这不包括只在怀孕期间患上的糖尿病。
***Interviewer note**: Diabetes that happens only during pregnancy refer to diabetes that develop during pregnancy and usually stop at the end of pregnancy (also known as gestational diabetes).*

READ (May choose more than one answer)		
1	Parents	父母
2	Siblings	兄弟姐妹
3	Children	儿女
4	No one in my family has diabetes	没有家人患有糖尿病
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q7013]		

** Exclude spouse and non-blood relatives*
不包括配偶及无血缘关系的亲戚

7013. Can you tell me how often should a person of your age check for diabetes by a doctor/healthcare professional? **[SA]**
您认为与您同龄的人应该多久一次由医生/医疗保健专业人员测量血糖？

Once every _____ year(s)		每几年一次
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q7001]		

7001. Have you ever been told by a western-trained doctor that you have diabetes? **[SA]**
西医是否曾经告诉过您，您患有糖尿病？
[If 'Yes' and respondent is female, ask "*Was this only when you were pregnant?"***]**

READ			
1	Yes	是	**[Go to Q7001a]**
2	Yes, but only during pregnancy	是，不过仅在怀孕时	**[Go to Q7004]**
3	No	否	
4	No, pre-diabetes or borderline diabetes	否，糖尿病前期或临界性糖尿病	**[Go to Q7014]**
DO NOT READ			**[Go to Q7004]**
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

7014. What lifestyle or dietary modifications have you made to prevent or delay the progression to diabetes? **[MA]**
您是通过哪些生活或饮食的改变来预防或延缓糖尿病的进展？

DO NOT READ (May record more than one answer)		
1	Manage / Lose weight	控制体重/减肥
2	Reduce intake of sugar, rice, bread	减少糖、米饭、面包的摄取量
3	Increase intake of wholemeal bread, brown rice, vegetables and high fibre food	增加全麦面包、糙米、蔬菜和高纤维食物的摄取量
4	Reduce fat intake	减少脂肪摄取量
5	Cutting down/ stop smoking	减少/停止吸烟
6	Do more exercise	多做运动
7	Reduce alcohol intake	减少酒精摄取量
8	Avoid sugar-sweetened beverages	避免饮用含糖饮料
9	Go for regular blood sugar test	定期做血糖测试
10	Receive health coaching to improve blood sugar control	接受健康辅导以改善血糖控制
11	Others, please specify: 其它，请注明：_____	
555	Unaware that pre-diabetes can progress to diabetes	不知道糖尿病前期会导致糖尿病
666	No lifestyle changes or dietary modifications	没有改变生活或饮食习惯
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q7002]		

7001a. Does your doctor currently give you treatment for your diabetes such as tablets or injections? **[SA]**
医生目前是否有给您治疗糖尿病的药物或注射？

READ			
1	Yes	有	**[Go to Q7001b]**
2	No	没有	**[Go to 7002]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

7001b. What type of medication are you on? **[SA]**
您正在使用哪种治疗方式？

READ		
1	Insulin injections	胰岛素注射
2	Oral medications for diabetes	口服降糖药
3	Both insulin injections & oral medications for diabetes	同时使用胰岛素注射和口服降糖药
4	Others, please specify: 其它，请注明: _____	
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to 7002]		

7002. How many times in the past 12 months have you seen a doctor for your **X** [X=pre-diabetes when Q7001=4, X=diabetes when Q7001=1]? **[SA]**
在过去 12 个月内，您曾经有几次因为 X [X=糖尿病前期 when Q7001=4,X=糖尿病 when Q7001=1]而看医生？

	Number of times in the past 12 months	在过去 12 个月内有几次
DO NOT READ		
666	Did not see a doctor for **X** [X=pre-diabetes when Q7001=4, X=diabetes when Q7001=1]	没有因为 X [X=糖尿病前期 when Q7001=4, X=糖尿病 when Q7001=1]而看医生
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to 7003]		

7003. Where do you seek treatment for your **X** [X=pre-diabetes when Q7001=4, X=diabetes (when Q7001=1] most of the time? **[SA]**
您大多数是去哪里治疗您的 X[X=糖尿病前期 when Q7001=4,X=糖尿病 when Q7001=1]?

DO NOT READ		
1	Private GP	家庭医生
2	Polyclinic	综合诊疗所
3	Specialist outpatient clinic (public hospital)	专科门诊诊所（公共医院）
4	Specialist outpatient clinic (private hospital)	专科门诊诊所（私人医院）
5	Others, please specify: 其它，请注明: _____	
666	None, do not seek treatment for **X** [X=pre-diabetes when Q7001=4, X=diabetes when Q7001=1]	否， 没有为 X [X=糖尿病前期 when Q7001=4,糖尿病 when Q7001=1]寻求治疗
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Section 8]		

[If Q7001 = "Yes, but only during pregnancy", "No", "No, pre-diabetes or borderline diabetes", "Refused" or "Don't know / Not sure"]

7004. Blood tests can be used to check for diabetes. When was the last time you had a blood test to check for diabetes? Please exclude checks done by yourself. **[SA]**
血糖检验是一种测试糖尿病的方法。您最后一次进行血糖测试是什么时候？请不要包括自己做的检查。

***Interviewer note**: Blood tests can be a fasting plasma glucose test (FPG), random plasma glucose test, oral glucose tolerance test (OGTT) or HbA1c test.*

READ ONLY IF NECESSARY			
1	1 year ago or less	过去 1 年或少于 1 年	**[Go to Q7005]**
2	More than 1 year to 2 years	超过 1 年但在 2 年以内	
3	More than 2 years to 3 years	超过 2 年但在 3 年以内	
4	More than 3 years to 5 years	超过 3 年但在 5 年以内	
5	More than 5 years ago	超过 5 年前	
6	Never been checked	从未检查过	**[Go to Section 8]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

7005. Where did you go for your last blood test for diabetes? **[SA]**
您的最后一次血糖测试是在哪里进行的？

***Interviewer note**: If respondent answers "Private GP", probe to check if they are participating in the Screen for Life programme where they pay $0, $2 or $5 for the test.*

DO NOT READ		
1	Private GP (Screen for Life)	家庭医生（"定期体检， 益您一生"）
2	Private GP (Non-Screen for Life)	家庭医生（非"定期体检， 益您一生"）
3	Polyclinic	综合诊疗所
4	Specialist outpatient clinic (public hospital)	专科门诊诊所（公共医院）
5	Specialist outpatient clinic (private hospital)	专科门诊诊所（私人医院）
6	Workplace	工作场所
7	Community venue	社区场所
8	Overseas clinic/ hospital	国外的诊所或医院
9	Army camp	军队兵营
10	Others, please specify: 其它，请注明：_____	
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
END OF SECTION 7. GO TO SECTION 8.		

8. HYPERTENSION

Interviewer: Next, I would like to ask you some questions about hypertension, also commonly known as high blood pressure.
接下来，我要问您一些关于高血压的问题。

8000. Can you tell me who in your immediate family* has high blood pressure, exclude high blood pressure that only happens during pregnancy? **[MA]**
您的直系家庭*中谁患有高血压？这不包括只在怀孕期间患上的高血压。
***Interviewer note**: High blood pressure that happens only during pregnancy refer to high blood pressure that develop during pregnancy and usually stop at the end of pregnancy.*

READ (May choose more than one answer)		
1	Parents	父母
2	Siblings	兄弟姐妹
3	Children	儿女
4	No one in my family has high blood pressure	没有家人患有高血压
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q8011]		

** Exclude spouse and non-blood relatives*
不包括配偶及无血缘关系的亲戚

8011. Can you tell me how often should a person of your age check for high blood pressure by a doctor/healthcare professional? **[SA]**
您认为与您同龄的人应该多久一次由医生/医疗保健专业人员测量血压？

Once every _____ year(s)		每几年一次
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q8001]		

8001. Have you ever been told by a western-trained doctor that you have high blood pressure? **[SA]**

西医是否曾经告诉过您，您患有高血压？

[If 'Yes' and respondent is female, ask "*Was this only when you were pregnant?"***]**

READ			
1	Yes	是	**[Go to Q8002]**
2	Yes, but only during pregnancy	是，不过仅在怀孕时	**[Go to Q8005]**
3	No	否	
4	No, borderline hypertension	否，临界性高血压	
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

Interviewer Note: *A person with blood pressure ≥140/90mmHg is defined to have high blood pressure or hypertension.*

高血压指血压高于 140/90mmHg.

8002. Does your doctor currently give you medicine (e.g. tablets) for your high blood pressure? **[SA]**

医生目前是否有给您治疗高血压的药物？

READ		
1	Yes	有
2	No	没有
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q8003]		

8003. How many times in the past 12 months have you seen a doctor for your high blood pressure? **[SA]**

在过去 12 个月内，您为了治疗高血压看过几次医生？

	Number of times in the past 12 months	在过去12个月内有几次
DO NOT READ		
666	Did not see a doctor for high blood pressure	没有因为高血压看医生
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q8004]		

8004. Where do you seek treatment for your high blood pressure most of the time? **[SA]**
您大多数是去哪里治疗您的高血压？

DO NOT READ		
1	Private GP	家庭医生
2	Polyclinic	综合诊疗所
3	Specialist outpatient clinic (public hospital)	专科门诊诊所（公共医院）
4	Specialist outpatient clinic (private hospital)	专科门诊诊所（私人医院）
5	Others, please specify: 其它，请注明: _____	
666	None, do not seek treatment for high blood pressure	否， 没有为高血压寻求治疗
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Section 9]		

[If Q8001 = "Yes, but only during pregnancy", "No", "No, borderline hypertension", "Refused" or "Don't know / Not sure"]

8005. When was the last time you had your blood pressure checked? Please exclude checks by yourself. **[SA]**
您最后一次检查血压是什么时候？请不要包括自己做的检查。

READ ONLY IF NECESSARY			
1	1 year ago or less	过去 1 年或少于 1 年	**[Go to Q8006]**
2	More than 1 year to 2 years	超过 1 年但在 2 年以内	
3	More than 2 years to 3 years	超过 2 年但在 3 年以内	
4	More than 3 years to 5 years	超过 3 年但在 5 年以内	
5	More than 5 years ago	超过 5 年前	
6	Never been checked	从未检查过	**[Go to Section 9]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

8006. Where did you go for your last blood pressure check-up? **[SA]**
您最后一次检查血压是在哪里进行的？

***Interviewer note**: If respondent answers "Private GP", probe to check if they are participating in the Screen for Life programme where they pay $0, $2 or $5 for the test.*

DO NOT READ		
1	Private GP (Screen for Life)	家庭医生（"定期体检， 益您一生"）
2	Private GP (Non-Screen for Life)	家庭医生（非"定期体检， 益您一生"）
3	Polyclinic	综合诊疗所
4	Specialist outpatient clinic (public hospital)	专科门诊诊所（公共医院）
5	Specialist outpatient clinic (private hospital)	专科门诊诊所（私人医院）
6	Workplace	工作场所
7	Community venue	社区场所
8	Overseas clinic/ hospital	国外的诊所或医院
9	Army camp	军队兵营
10	Others, please specify: 其它，请注明：_____	
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
END of SECTION 8. GO TO SECTION 9		

9. HIGH BLOOD CHOLESTROL

9008. Can you tell me who in your immediate family* has high blood cholesterol? **[MA]**
您的直系家庭*中谁患有高胆固醇?

READ (May choose more than one answer)		
1	Parents	父母
2	Siblings	兄弟姐妹
3	Children	儿女
4	No one in my family has high blood cholesterol	没有家人患有高胆固醇
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q9009]		

** Exclude spouse and non-blood relatives*
不包括配偶及无血缘关系的亲戚

9009. Can you tell me how often should a person of your age check for high blood cholesterol by a doctor/healthcare professional? **[SA]**
您认为与您同龄的人应该多久一次由医生/医疗保健专业人员测量胆固醇?

Once every _____ year(s)		每几年一次
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q9000]		

9000. Have you ever been told by a western-trained doctor that you have high blood cholesterol? **[SA]**
西医是否曾经告诉过您，您患有高胆固醇?

READ			
1	Yes	是	**[Go to Q9001]**
2	No	否	**[Go to Q9004]**
3	No, borderline high blood cholesterol	否，临界性高胆固醇	
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

9001. How many times in the past 12 months have you seen a doctor for your high blood cholesterol? **[SA]**
在过去 12 个月内，您为了治疗高胆固醇看过几次医生？

	Number of times in the past 12 months	在过去12个月内有几次
DO NOT READ		
666	Did not see a doctor for high blood cholesterol	没有因为高胆固醇看医生
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q9002]		

9002. Does your doctor currently give you medicine (e.g. tablets) for your high blood cholesterol? **[SA]**
医生目前是否有给您治疗高胆固醇的药物？

READ		
1	Yes	有
2	No	没有
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q9003]		

9003. Where do you seek treatment for your high blood cholesterol most of the time? **[SA]**
您大多数是去哪里治疗您的高胆固醇？

DO NOT READ		
1	Private GP	家庭医生
2	Polyclinic	综合诊疗所
3	Specialist outpatient clinic (public hospital)	专科门诊诊所（公共医院）
4	Specialist outpatient clinic (private hospital)	专科门诊诊所（私人医院）
5	Others, please specify: 其它，请注明: _____	
666	None, do not seek treatment for high blood cholesterol	否，没有为高胆固醇寻求治疗
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Section 10]		

[If Q9000 = "No", "No, borderline high blood cholesterol", "Refused" or "Don't know / Not sure"]

9004. When was the last time you had your blood cholesterol checked? **[SA]**
您最后一次检查胆固醇是什么时候？

***Interviewer note**: Blood tests can be a fasting or non-fasting*

READ ONLY IF NECESSARY			
1	1 year ago or less	过去 1 年或少于 1 年	**[Go to Q9005]**
2	More than 1 year to 2 years	超过 1 年但在 2 年以内	
3	More than 2 years to 3 years	超过 2 年但在 3 年以内	
4	More than 3 years to 5 years	超过 3 年但在 5 年以内	
5	More than 5 years ago	超过 5 年前	
6	Never been checked	从未检查过	**[Go to Section 10]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

9005. Where did you go for your last blood test to check for cholesterol? **[SA]**
您最后一次检查胆固醇是在哪里进行的？

***Interviewer note**: If respondent answers "Private GP", probe to check if they are participating in the Screen for Life programme where they pay $0, $2 or $5 for the test.*

DO NOT READ		
1	Private GP (Screen for Life)	家庭医生（"定期体检， 益您一生"）
2	Private GP (Non-Screen for Life)	家庭医生（非"定期体检， 益您一生"）
3	Polyclinic	综合诊疗所
4	Specialist outpatient clinic (public hospital)	专科门诊诊所（公共医院）
5	Specialist outpatient clinic (private hospital)	专科门诊诊所（私人医院）
6	Workplace	工作场所
7	Community venue	社区场所
8	Overseas clinic/ hospital	国外的诊所或医院
9	Army camp	军队兵营
10	Others, please specify: 其它，请注明: _____	
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
END OF SECTION 9. GO TO SECTION 10.		

10. HEALTH CONDITIONS

10040. Have you check your weight at least once in the past 12 months? Please include checks done by yourself or a health professional. **[SA]**
在过去的 12 个月内，您是否至少检查过一次自己的体重?请包括您自己或健康专业人员做的检查。

READ		
1	Yes	是
2	No	否
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q10011]		

10011. Have you been told by a western-trained doctor in the last 12 months that you need to lose weight for health reasons? **[SA]**
在过去 12 个月内，西医是否告诉过您必须为了健康而减轻体重？

READ			
1	Yes	是	**[Go to Q10041]**
2	No	否	**[Go to Q10020]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

10041. Have you try to lose weight after receiving the doctor's advice about weight loss? **[SA]**
在收到医生关于减肥的建议后，您是否有尝试着减肥?

READ		
1	Yes	是
2	No	否
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q10020]		

10020. In the past 30 days, have you had low back pain that lasted a whole day or more? **[SA]**
在过去 30 天内，您是否曾有持续一整天或更长时间的腰背痛？

READ			
1	Yes	是	**[Go to Q10021]**
2	No	否	**[Go to Q10025]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

10021. About how many days in the past 30 days did you experience this pain? **[SA]**
在过去 30 天内，您有几天感受到腰背痛？

	Number of days in the past 30 days	在过去30天内有几天
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q10022]		

10022. Were you limited in your usual activities because of low back pain? **[SA]**
腰背痛是否限制了您的日常活动？

READ		
1	Yes	是
2	No	否
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q10023]		

10023. Do you feel that the pain was caused by work? **[SA]**
您觉得此疼痛是由工作造成的吗？

READ		
1	Yes	是
2	No	否
3	Not applicable	不适用
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q10024]		

10024. In the past 12 months, how many days were you on medical leave or not able to go to work because of low back pain? **[SA]**
在过去 12 个月内，您有多少天因为腰痛而拿病假或无法上班？

	Number of days in the past 12 months	在过去 12 个月内有几天
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q10025]		

10025. In the past 30 days, have you had neck pain that lasted a whole day or more? **[SA]**
在过去 30 天内，您是否曾有持续一整天或更长时间的颈部疼痛？

READ			
1	Yes	是	**[Go to Q10026]**
2	No	否	**[Go to Q10030]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

10026. About how many days in the past 30 days did you experience this pain? **[SA]**
在过去 30 天内，您有几天感受到颈部疼痛？

	Number of days in the past 30 days	在过去30天内有几天
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q10027]		

10027. Were you limited in your usual activities because of neck pain? **[SA]**
颈部疼痛是否限制了您的日常活动？

READ		
1	Yes	是
2	No	否
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q10028]		

10028. Do you feel that the pain was caused by work? **[SA]**
您觉得此疼痛是由工作造成的吗？

READ		
1	Yes	是
2	No	否
3	Not applicable	不适用
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q10029]		

10029. In the past 12 months, how many days were you on medical leave or not able to go to work because of neck pain? **[SA]**
在过去 12 个月内，您有多少天因为颈部疼痛而拿病假或无法上班？

	Number of days in the past 12 months	在过去12个月内有几天
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q10030]		

10030. Do you wear glasses or contact lenses? **[SA]**
您有戴眼镜或隐形眼镜吗？

READ			
1	Yes	是	**[Go to Q10031]**
2	No	否	**[Go to Q10032]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

10031. Why do you need to wear glasses or contact lenses? **[MA]**
您为什么戴眼镜或隐形眼镜？

READ		
1	Short-sighted/ myopia (cannot see far)	近视（看不清远处）
2	Long sighted/ presbyopia (cannot see near)	远视（看不清近处）
3	Astigmatism	散光
4	Others, please specify: 其它，请注明：_____	
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q10032]		

10032. Have you ever been told by a western-trained doctor that you have … ?
西医是否曾告诉过您患有…?

		READ		DO NOT READ	
	Condition	**1** Yes 是	**2** No 否	**777** Refused 拒绝回答	**888** Don't know/ Not sure 不知道 / 不肯定
a.	Cataract **[SA]** 白内障				
b.	Glaucoma **[SA]** 青光眼				
c.	Age-related macular degeneration **[SA]** 年龄相关的黄斑变性				
d.	Diabetic eye disease **[SA]** 糖尿病引起的眼疾				
[Go to Q10033]					

10033. Do you feel you have hearing loss? **[SA]**
您觉得您的听力受损了吗？

READ			
1	Yes	是	**[Go to Q10034]**
2	No	否	**[Go to Q10035]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

10034. Do you feel that the hearing loss was caused by work? **[SA]**
您觉得听力受损是由工作造成的吗？

READ		
1	Yes	是
2	No	否
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q10035]		

10035. Do you have difficulty following conversations in the presence of background noise? (e.g. Noise from a TV or radio; traffic noise in the street; people talking at other tables in a crowded restaurant) **[SA]**
您觉得在嘈杂的环境下是否难以听清谈话？（如电视或收音机的噪音；街上的交通噪音；在拥挤的饭店内人们在其他桌交谈产生的噪音）

READ		
1	Yes	是
2	No	否
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q10036]		

10036. Do you wear a hearing aid? **[SA]**
您有戴助听器吗？

READ		
1	Yes	有
2	No	没有
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
END OF SECTION 10. GO TO SECTION 11.		

11. HEALTH SCREENING PROGRAMMES

IF respondent is male & below 50 years of age, go to Q11023.

IF respondent is male & aged 50 and above, go to Q11016.

IF respondent is female & below 50 years of age, go to Q11000.

IF respondent is female & aged 50 and above, go to Q11002.

11000. **[For women below 50 years of age]** To your knowledge, are you pregnant now? **[SA]**
据您所知，您目前是否怀孕？

READ		
1	Yes	是
2	No	否
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q11002]		

11002. **[For all women only]** When was the last time you had a test to scrap cells from the mouth of the womb to check for cervical cancer? These tests are also known as Pap test or HPV test. **[SA]**
您最后一次接受子宫口细胞检查子宫颈癌时，是多久以前的事？ 这些检查也称为子宫颈抹片检查人或乳头瘤病毒检查(HPV)。

READ ONLY IF NECESSARY			
1	1 year ago or less	过去 1 年或少于 1 年	**[Go to Q11003]**
2	More than 1 year to 2 years	超过 1 年但在 2 年以内	
3	More than 2 years to 3 years	超过 2 年但在 3 年以内	
4	More than 3 years to 4 years	超过 3 年但在 4 年以内	
5	More than 4 years to 5 years	超过 4 年但在 5 年以内	
6	More than 5 years ago	超过 5 年前	
7	Never been checked	从未检查过	**[Go to Q11010 if aged 40 and above.** **Go to Q11023 if aged below 40]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

11003. **[For all women only]** Where did you go for your last test to check for cervical cancer? **[SA]**
您最后一次在哪里进行子宫颈癌检查？

***Interviewer note**: If respondent answers "Private GP", probe to check if they are participating in the Screen for Life programme where they pay $0, $2 or $5 for the test.*

DO NOT READ		
1	Private GP (Screen for Life)	家庭医生（"定期体检， 益您一生"）
2	Private GP (Non-Screen for Life)	家庭医生（非"定期体检， 益您一生"）
3	Polyclinic	综合诊疗所
4	Specialist outpatient clinic (public hospital)	专科门诊诊所（公共医院）
5	Specialist outpatient clinic (private hospital)	专科门诊诊所（私人医院）
10	Specialist outpatient clinic (not in hospital)	专科门诊诊所（不在医院经营）
6	Workplace	工作场所
7	Community venue	社区场所
8	Overseas clinic/ hospital	国外的诊所或医院
9	Others, please specify: 其它，请注明: _____	
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q11025]		

11025. **[For all women only]** Which of the following test have you taken for your last check for cervical cancer**? [SA]**
您在最后一次检查子宫颈癌时接受了以下哪一种子宫口细胞检查？

USE SHOWCARD		
1	Pap test	子宫颈抹片检查
2	Human Papillomavirus (HPV) test	人乳头瘤病毒检查(HPV)
3	Pap test and Human Papillomavirus (HPV) test on the same visit	在同一次进行子宫颈抹片检查和人乳头瘤病毒检查 (HPV)
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Else, go to Q11010 if aged 40 and above.] **[Else, go to Q11023 if aged below 40.]**		

11010. **[Only for Women aged 40 years and older]** A mammogram is an x-ray of each breast to look out for breast cancer. When was the last time you had a mammogram? **[SA]**
乳房 X 光检查是一种利用 X 光检查乳癌的方法。您最后一次接受乳房 X 光检查是多久以前的事？

READ ONLY IF NECESSARY			
1	1 year ago or less	过去 1 年或少于 1 年	**[Go to Q11013]**
2	More than 1 year to 2 years	超过 1 年但在 2 年以内	
3	More than 2 years to 3 years	超过 2 年但在 3 年以内	
4	More than 3 years to 4 years	超过 3 年但在 4 年以内	
5	More than 4 years to 5 years	超过 4 年但在 5 年以内	
6	More than 5 years ago	超过 5 年前	
7	Never been checked	从未检查过	**[Go to Q11026]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don’t know / Not sure	不知道 / 不肯定	

11013. **[Only for Women aged 40 years and older]** Where did you go for your last mammogram? **[SA]**
您最后一次的乳房 X 光检查是在哪里进行的？

DO NOT READ		
1	Polyclinic	综合诊疗所
2	Public hospital	公共医院
3	Private hospital	私人医院
4	Private X-ray centre	私人 X 光检查中心
5	Mammobus	乳房 X 光检查流动巴士
6	Workplace	工作场所
7	Community venue	社区场所
8	Overseas clinic/ hospital	国外的诊所或医院
9	Others, please specify: 其它，请注明: _____	
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
[Go to Q11026]		

11026. **[Only for Women aged 40 years and older]** Have your periods stopped because of menopause? **[SA]**
您的月经是否因为更年期而已停止？

READ			
1	Yes	是	**[Go to Q11027]**
2	No	否	**[Go to Q11016 if aged 50 and above. Go to Q11023 if aged below 50]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

11027. **[Only for Women aged 40 years and older]** At what age did your periods stop? **[SA]**
您的月经在您几岁时停止？

	Age	几岁
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q11016 if aged 50 and above. Go to Q11023 if aged below 50]		

[For Male & Female respondents aged 50 years and above only]

11016. A blood stool test is a test to determine whether the stool contains blood, which can be caused by conditions such as piles or colorectal cancer. When was the last time you had a blood stool test? **[SA]**
便血检查能检测粪便中是否含有血液，这可能是由于痔疮或者结直肠癌等病症引起的。
您最后一次进行便血检查是多久以前的事？
***Interviewer note**: A blood stool test can be also known as a faecal occult blood test (FOBT) or faecal immunochemical blood test (FIT).*

READ ONLY IF NECESSARY			
1	1 year ago or less	过去 1 年或少于 1 年	**[Go to Q11018]**
2	More than 1 year to 2 years	超过 1 年但在 2 年以内	
3	More than 2 years to 3 years	超过 2 年但在 3 年以内	
4	More than 3 years to 5 years	超过 3 年但在 5 年以内	
5	More than 5 years ago	超过 5 年前	
6	Never been checked	从未检查过	**[Go to Q11020]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

11018. Where did you go for your last blood stool test? **[SA]**
您最后一次的便血检查是在哪里进行的？

***Interviewer note**: If respondent answers "Private GP", probe to check if they are participating in the Screen for Life programme where they pay $0, $2 or $5 for the test.*

DO NOT READ		
1	Private GP (Screen for Life)	家庭医生（"定期体检， 益您一生"）
2	Private GP (Non-Screen for Life)	家庭医生（非"定期体检， 益您一生"）
3	Polyclinic	综合诊疗所
4	Specialist outpatient clinic (public hospital)	专科门诊诊所（公共医院）
5	Specialist outpatient clinic (private hospital)	专科门诊诊所（私人医院）
6	Workplace	工作场所
7	Community venue	社区场所
8	Overseas clinic/ hospital	国外的诊所或医院
10	Collection of Faecal Immunochemical Test (FIT) kit (e.g. from pharmacies such as Watson, Guardian, Eu Yan Seng, Unity Family Medicine Clinic, Singapore Cancer Society)	粪便免疫化学测验器 （例如屈臣氏（Watson's)，佳宁药房（Guardian），余仁生，仁益家庭医药诊所，新加坡癌症协会）
9	Others, please specify: 其它，请注明: _____	
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q11020]		

[For Male & Female respondents aged 50 years and above only]

11020. Colonoscopy is a procedure where a flexible tube is inserted through the rectum and into the large intestines. A small camera allows the doctor to examine the intestinal wall for abnormalities such as cancer. When was the last time you had a colonoscopy? **[SA]**
结肠内窥镜检查是一种将软管插入直肠然后进入大肠的检查方法。软管前端会有一个小型摄像头，让医生可以检查肠壁是否有异常，例如癌症。您最后一次接受结肠内窥镜检查是多久以前的事？

***Interviewer note**: Before taking a colonoscopy, patients are required to drink a cleansing liquid and be on a clear liquid diet at least one day before the test so that a clear view of their bowel can be taken.*

READ ONLY IF NECESSARY		
1	1 year ago or less	过去 1 年或少于 1 年
2	More than 1 year to 2 years	超过 1 年但在 2 年以内
3	More than 2 years to 3 years	超过 2 年但在 3 年以内
4	More than 3 years to 5 years	超过 3 年但在 5 年以内
5	More than 5 years to 10 years	超过 5 年但在 10 年以内
6	More than 10 years ago	超过 10 年前
7	Never been checked	从未检查过
DO NOT READ		
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
[Go to Q11023]		

[For all Male & Female respondents]

11023. In the past 12 months, have you had an injection to protect you from getting flu? This injection is also known as influenza vaccination. **[SA]**
在过去 12 个月内，您有没有接受流行性感冒的免疫注射？这也被称为接种流感疫苗注射。

READ		
1	Yes	有
2	No	没有
DO NOT READ		
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
[Go to Q11024]		

11024. Have you ever had pneumococcal vaccination before? This vaccine protects against a bacterial infection that causes pneumonia, blood infection and inflammation of the brain (meningitis). **[SA]**
您是否曾有接种肺炎球菌疫苗？这种疫苗可预防能引起肺炎、血液感染和脑炎(脑膜炎)的细菌感染。

READ		
1	Yes	有
2	No	没有
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
END OF SECTION 11. GO TO SECTION 12.		

12. PRIMARY CARE

12006. Do you have a regular* family doctor (i.e. a General Practitioner (GP) or Polyclinic) whom you consult when you have common illnesses such as diarrhoea or headache? **[SA]**
您在患上腹泻或头痛等普通疾病的时候，您是否会去看固定*的家庭医生，或者前往同一间综合诊疗所看病？

READ ONLY IF NECESSARY			
1	Yes, I have a regular family doctor in a private General Practitioner (GP) clinic whom I consult on common illnesses	有，我有固定的家庭医生看病	**[Go to Q12007]**
2	Yes, I visit the same Polyclinic to consult a doctor on common illnesses	有，我会探访同一所综合诊疗所看病	
3	No, I do not have a regular family doctor whom I consult on common illnesses	没有，我在患上普通疾病的时候我没有固定家庭医生	**[Go to Q12008]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

* *A regular family doctor is defined as a primary care physician who you turn to frequently or habitually for healthcare advice/consultation.*

12007. What are the reasons you choose him/ her as your regular family doctor or visit the same polyclinic for your common illnesses? **[MA]**
您选择他/她作为您固定的家庭医生或者前往同一间综合诊疗所看病的原因是什么？
***Interviewer note**: If respondent answers "convenient location", probe if it is convenient to home or workplace.*

READ ONLY IF NECESSARY		
1	Professionally competent doctor / good doctor	医生的专业水平/医术高
2	Cheaper charges	医疗费用比较便宜
3	Convenient location, nearer to my home	地点方便，靠近住家
4	Convenient location, nearer to my workplace	地点方便，靠近工作地点
5	Have been seeing this doctor since young / for many years	从小就看这位医生/看这位医生很多年了
7	Part of company's panel of doctors	是公司指定的医生团队
6	Others, please specify: 其它，请注明：_____	
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q12008]		

12008. Do you have a regular* family doctor (i.e. a General Practitioner (GP) or Polyclinic) whom you will consult on your chronic conditions^ (e.g diabetes, hypertension, high blood cholesterol, asthma)? **[SA]**
您在患上慢性疾病^（例如:糖尿病、高血压、高胆固醇、哮喘）的时候，您是否会去看固定*的家庭医生，或者前往同一间综合诊疗所看病？

READ ONLY IF NECESSARY			
1	Yes, I have a regular family doctor in a private General Practitioner (GP) clinic whom I consult on my chronic conditions	有，我有固定的家庭医生看病	**[Go to Q12009]**
2	Yes, I visit the same Polyclinic to consult a doctor on my chronic conditions	有，我会探访同一所综合诊疗所看病	
3	No, I do not have a regular family doctor whom I consult on my chronic conditions	没有，我在患上慢性疾病的时候没有固定家庭医生去看病	**[Go to Q12002]**
4	I do not have any chronic conditions	我没有任何慢性疾病	**[Go to Section 13]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

* *A regular family doctor is defined as a primary care physician who you turn to frequently or habitually for healthcare advice/consultation.*
^ *Chronic conditions refer to long-term medical conditions that require regular management (e.g. diabetes, hypertension, high blood cholesterol, asthma)*

12009. What are the reasons you choose him/ her as your regular family doctor or visit the same polyclinic for your chronic conditions? **[MA]**
您选择他/她作为您固定的家庭医生或者前往同一间综合诊疗所看病的原因是什么？
***Interviewer note**: If respondent answers "convenient", probe if it is convenient to home or workplace.*

READ ONLY IF NECESSARY		
1	Professionally competent doctor / good doctor	医生的专业水平/医术高
2	Cheaper charges	医疗费用比较便宜
3	Convenient location, nearer to my home	地点方便，靠近住家
4	Convenient location, nearer to my workplace	地点方便，靠近工作地点
5	Have been seeing this doctor since young / for many years	从小就看这位医生/看这位医生很多年了
7	Part of company's panel of doctors	是公司指定的医生团队
6	Others, please specify: 其它，请注明: _____	
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Section 13]		

[If Q12006="No, I do not have a regular family doctor whom I consult on common illnesses" or Q12008="No, I do not have a regular family doctor whom I consult on my chronic conditions"]

12002. What are the reasons that you do not have a regular family doctor? **[MA]**
您没有固定的家庭医生或综合诊疗所的原因有哪些?

READ ONLY IF NECESSARY		
1	I visit different clinics depending on convenience – whichever clinic near wherever I am	我会为了方便而选择探访不同的诊所 - 哪家诊所靠近就去哪家
3	I visit different clinics because I compare the cost of visiting the different clinics	我探访不同的诊所是为了比较医疗费用
4	I don't see the value / need to have a regular family doctor	我不认为有需要看固定的家庭医生
5	Others, please specify: 其它，请注明: _____	
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
END OF SECTION 12. GO TO SECTION 13.		

13. HEALTH STATE DESCRIPTIONS

Interviewer: Next, I would like to ask you some questions about your sleeping habits.
接下来我想问关于您的睡眠习惯。

13006. How many hours do you usually sleep per day on weekdays? **[SA]**
您通常在周日有几个小时的睡眠？
***Interviewer note**: Please exclude nap time and record number of hours of sleep to the nearest 0.5 hours e.g. 8 hours 30 minutes per weekday is 8.5 hours per weekday.*

	Hours per day on weekdays	每个周日几小时
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q13007]		

13007. How many hours do you usually sleep per day on weekends? **[SA]**
您通常在周末有几个小时的睡眠？
***Interviewer note**: Please exclude nap time and record number of hours of sleep to the nearest 0.5 hours e.g. 8 hours 30 minutes per weekend is 8.5 hours per weekend.*

	Hours per day on weekends	每个周末日几小时
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q13008]		

13008. What do you usually do 30 minutes before bedtime? **[MA]**
您通常在睡前 30 分钟做什么？

DO NOT READ (May record more than one answer)		
1	Watch TV	
2	Play video console games	
3	Use handheld electronic devices (e.g. mobile phone, tablet) for non-school work/ office work (e.g. socialising with friends, doing hobby, etc)	
4	Do school work/ office work	
5	Read a book/ listen to music	
6	Spend time with family members/ friends	
7	Exercise	
8	Others, please specify: 其它，请注明: _____	
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q13009]		

13009. Do you think you are getting adequate sleep? **[SA]**
您认为您的睡眠充足吗?

READ			
1	Yes	是	**[Go to Q13004]**
2	No	否	**[Go to Q13010]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

13010. Why do you think you are not getting adequate sleep? **[MA]**
为什么您认为自己睡眠不足?

DO NOT READ (May record more than one answer)		
1	Stay up late to study/ do homework/ do office work	
2	Stay up late to watch TV/ play games	
3	Stay up late because family members/ friends also sleep late	
4	Due to shift work	
5	Eating/ drinking too late	
6	Due to medical conditions (e.g. asthma)	
7	Due to sleeping disorders (e.g. insomnia, sleep apnea)	
8	Others, please specify: 其它，请注明: _____	
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q13011]		

13011. How often do you feel sleepy in the day while working/ in school? **[SA]**
当您工作/上学的时候，您多经常感到困意?

READ		
1	All the time	一直都有
2	Often	经常
3	Sometimes	有时
4	Rarely	很少
5	Never	从来没有
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q13004]		

Interviewer: Now, I would ask about your health in general over the last 6 weeks. For each question, tell me which answer you think best applies to you in the last 6 weeks. Remember that I want to know about present and recent complaints, not those you had in the past. All answers will be treated as confidential.
我要问您在过去 6 周内的整体健康状况。请您在每一题选择最能够代表您在过去 6 周内的状况。请切记，我想知道您目前以及最近的心理诉状，不包括您以前的诉状。所有答案将完全保密。

13004. Have you recently (in the past 6 weeks) ...? **[SA]**
您最近（过去 6 周内）是否…？

READ AND USE SHOWCARD				
	1)	2)	3)	4)
13004a. Been able to concentrate on whatever you are doing? 能够集中精神做事？	☐ Better than usual 优于往常	☐ Same as usual 与往常一样	☐ Less than usual 比往常稍差	☐ Much less than usual 比往常差很多
13004b. Lost much sleep over worry? 因担忧而严重失眠？	☐ Not at all 根本不	☐ No more than usual 与往常一样	☐ Rather more than usual 比往常稍差	☐ Much more than usual 比往常差很多
13004c. Felt that you are playing a useful part in things? 感觉自己在某些事情中发挥作用？	☐ More than usual 优于往常	☐ Same as usual 与往常一样	☐ Less useful than usual 比往常稍差	☐ Much less useful 比往常差很多
13004d. Felt capable of making decisions about things? 感觉有能力做决定？	☐ More so than usual 优于往常	☐ Same as usual 与往常一样	☐ Less so than usual 比往常稍差	☐ Much less capable 比往常差很多
13004e. Felt constantly under strain? 经常感觉紧张？	☐ Not at all 根本不	☐ No more than usual 与往常一样	☐ Rather more than usual 比往常稍差	☐ Much more than usual 比往常差很多
13004f. Felt you couldn't overcome your difficulties? 感觉自己不能克服困难？	☐ Not at all 根本不	☐ No more than usual 与往常一样	☐ Rather more than usual 比往常稍差	☐ Much more than usual 比往常差很多
13004g. Been able to enjoy your normal day-to-day activities? 能够享受正常的日常活动？	☐ More so than usual 优于往常	☐ Same as usual 与往常一样	☐ Less so than usual 比往常稍差	☐ Much less than usual 比往常差很多
13004h. Been able to face up to your problems? 能够面对自己的问题？	☐ More so than usual 优于往常	☐ Same as usual 与往常一样	☐ Less able than usual 比往常稍差	☐ Much less able 比往常差很多
13004i. Been feeling unhappy and depressed? 一直感觉不开心和抑郁？	☐ Not at all 根本不	☐ No more than usual 与往常一样	☐ Rather more than usual 比往常稍差	☐ Much more than usual 比往常差很多

READ AND USE SHOWCARD				
	1)	2)	3)	4)
13004j. Been losing confidence in yourself? 一直没有自信？	☐ Not at all 根本不	☐ No more than usual 与往常一样	☐ Rather more than usual 比往常稍差	☐ Much more than usual 比往常差很多
13004k. Been thinking of yourself as a worthless person? 一直认为自己没有价值？	☐ Not at all 根本不	☐ No more than usual 与往常一样	☐ Rather more than usual 比往常稍差	☐ Much more than usual 比往常差很多
13004l. Been feeling reasonably happy, all things considered? 整体上一直感觉比较开心？	☐ More so than usual 优于往常	☐ Same as usual 与往常一样	☐ Less so than usual 比往常稍差	☐ Much less than usual 比往常差很多
[Go to Q13002]				

13002. If you feel like you are constantly unable to cope with stress, would you be willing to seek help from a…? **[SA]**
若您觉得经常无法应付/面对压力时，您是否愿意向以下人士求助？

READ			
	1) Yes 是	2) No 否	777) Refused 拒绝回答
a. Healthcare professional, for example a counsellor, doctor, psychologist or psychiatrist? 医疗专业人士例如辅导员、医生、心理学家、精神病医生？	☐	☐	☐
b. Friend, relative, colleague, religious leader or teacher in school? 朋友、亲戚、同事、宗教领袖、学校的老师？	☐	☐	☐
[Go to Q13012]			

13012. Have you sought help or advice from the following groups when you were constantly unable to cope with stress in the **past 6 months**? **[SA]**
在过去 6 个月内，当您经常无法应付压力时，是否曾向以下组织寻求帮助或建议？

READ			
	1) Yes 是	2) No 否	777) Refused 拒绝回答
a. Healthcare professional, for example a counsellor, doctor, psychologist or psychiatrist? 医疗专业人士例如辅导员、医生、心理学家、精神病医生？	☐	☐	☐
b. Friend, relative, colleague, religious leader or teacher in school? 朋友、亲戚、同事、宗教领袖、学校的老师？	☐	☐	☐
[If Q103012a = 1 then go to Q13013. Else, go to Q13014]			

[If Q13012a = "1 Yes"]

13013. Which of the following channels have you used when seeking help in the **past 6 months**? **[MA]**
过去 6 个月内，您曾使用过下列哪一种途径寻求帮助?

READ AND USE SHOWCARD		
1	In-person services (e.g. face-to-face consultation with a counsellor, doctor, psychologist or psychiatrist)	面对面服务(例如与辅导员、医生、心理学家或精神科医生面对面谘询)
2	Mental health support hotlines (e.g. National Care Hotline, SOS or IMH 24-hour helpline)	心理健康支援热线(如全国关爱热线、SOS 或心理卫生学院 24 小时热线服务)
3	Text-based consultation (e.g. via instant messaging with SOS Care Text or e-mails)	简讯咨询(例如，通过 SOS 援人协会关怀简讯或电子邮件即时通讯)
4	Digital or self-help resources (e.g. MindSG, Mindline, NCSS Beyond the Label Website, Youthtopia, AIC.sg)	数码或自助资源(如 MindSG、Mindline、国家福利理事会的"跨越成见，退去标签"网站、Youthtopia、护联中心.sg)
5	Online support groups (e.g. social media community support groups)	线上支援小组(如社交媒体社区支援小组)
6	Others, please specify: 其它，请注明: _____	
DO NOT READ		
666	None of the above	以上都不是
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q13014]		

13014. Which of the following channels would you be willing to use when seeking help? **[MA]**
在寻求帮助时，您愿意使用下列哪一种途径?

READ AND USE SHOWCARD		
1	In-person services (e.g. face-to-face consultation with a counsellor, doctor, psychologist or psychiatrist)	面对面服务(例如与辅导员、医生、心理学家或精神科医生面对面谘询)
2	Mental health support hotlines (e.g. National Care Hotline, SOS or IMH 24-hour helpline)	心理健康支援热线(如全国关爱热线、SOS 或心理卫生学院 24 小时热线服务)
3	Text-based consultation (e.g. via instant messaging with SOS Care Text or e-mails)	简讯咨询(例如，通过 SOS 援人协会关怀简讯或电子邮件即时通讯)
4	Digital or self-help resources (e.g. MindSG, Mindline, NCSS Beyond the Label Website, Youthtopia, AIC.sg)	数码或自助资源(如 MindSG、Mindline、国家福利理事会的"跨越成见，退去标签"网站、Youthtopia、护联中心.sg)
5	Online support groups (e.g. social media community support groups)	线上支援小组(如社交媒体社区支援小组)
6	Others, please specify: 其它，请注明: _____	
DO NOT READ		
666	None of the above	以上都不是
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q13017]		

13017. **Mental wellbeing relates to our thoughts, feelings and our ability to cope with day-to-day life so that we can achieve our goals and contribute to the community**. In the last 2 weeks, did you do anything to improve your mental wellbeing? **[SA]**
心理健康与我们的思想、感情和处理日常生活的能力息息相关，由此我们才可以实现我们的目标，为社区做出贡献。在过去两周内，您有做什么来改善您的心理健康吗?

READ		
1	Yes	是
2	No	否
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q13101]		

Interviewer: Next, I would like to ask how you have been feeling, thinking and behaving over the last 2 weeks.
For each sentence, tell me which number on the scale ranging from 1: Strongly Disagree to 9: Strongly Agree best corresponds to how well each sentence describes you over the last 2 weeks.
接下来，我想问关于您在前两周内的心情、思想及行为。请仔细阅读以下句子。
请您在每个句子旁的比例表（从 1：强烈不同意至 9：强烈同意）选择最代表您在前两周内的心情、思想及行为。

READ AND USE SHOWCARD								
1 Strongly Disagree 强烈不同意	**2**	**3**	**4 Mildly Disagree** 稍微不同意	**5 Neither Agree Nor Disagree** 不同意也不反对	**6 Mildly Agree** 稍微同意	**7**	**8**	**9 Strongly Agree** 强烈同意
								Score [1 to 9]
13101a.	I am optimistic about the future. 我对未来感到乐观。							
13101b.	I am spiritual. 我的心灵感到满足。							
13101c.	I am able to accept myself. 我能够接受自己。							
13101d.	I am able to accept reality. 我能够接受现实。							
13101e.	I am able to cope with life's challenges. 我能够应付生活的挑战。							
13101f.	I am calm. 我感到镇定。							
13101g.	I am not depressed. 我不会感到忧郁。							
13101h.	I am able to make friends. 我能够交朋友。							
13101i.	I have the strong support of my family and friends. 我有朋友与家人的支持及鼓励。							
13101j.	I seek for self-development/growth/cultivation. 我寻求自我提升/成长/修炼。							
13101k.	I am able to offer help to others. 我能够帮助其他人。							
13101l.	I am appreciative of life. 我对生活具有欣赏力。							
13101m.	I appreciate my own self-worth. 我赏识我的自我价值。							
13101n.	I am happy. 我感到开心。							
13101o.	I am able to think clearly. 我能够清楚地思考。							
13101p.	I am able to make good decisions. 我能够做好的决定。							
END OF SECTION 13. GO TO SECTION 14.								

14. DENTAL HEALTH

Interviewer: Now, I would like to ask you some questions about your dental health.
现在，我想问您关于口腔健康的问题。

14000. How often do you visit a dentist? **[SA]**
您多久看一次牙医？

READ ONLY IF NECESSARY			
1	Once every 6 months	每 6 个月一次	**[Go to Q14001]**
2	Once a year	一年一次	
3	Once every 2 years	每两年一次	
4	Only if there is pain or when I have a dental problem	只有在有牙疼或有口腔问题的时侯	
5	Others, please specify: 其它，请注明: _____		
DO NOT READ			
666	Have never been to a dentist	从未看过牙医	**[Go to Section 15]**
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

14001. When was the last time you visited a dentist? **[SA]**
您最后一次看牙医是什么时候？

READ ONLY IF NECESSARY		
1	Less than 6 months ago	过去 6 个月内
2	6-12 months ago	6 到 12 个月内
3	More than a year, but less than 2 years ago	超过 1 年，但少过 2 年内
4	2 years or more, but less than 5 years ago	2 年以上，但少过 5 年内
5	At least 5 years ago	至少 5 年以前
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
END OF SECTION 14. GO TO SECTION 15.		

15. ADDITIONAL DIABETES QUESTIONS

15001. To your knowledge, what are some ways to prevent diabetes? **[MA]**
据您所识， 有哪些方法可以预防糖尿病呢？

<write response 写回应>

DO NOT READ (for internal coding only)		
1	Exercise regularly	经常运动
2	Exercise for at least 150 minutes per week	每周运动至少 150 分钟
3	Go for regular health screening	定期体检
4	Go for blood sugar / blood glucose screening / testing	检查血糖/血糖检验/测试
5	Eat a balanced diet	注意饮食平衡
6	Eat more fruits and/or vegetables	多吃水果和/或蔬菜
7	Eat wholegrains / brown rice	吃全谷物/糙米
8	Eat less sweetened food	少吃甜食
9	Eat less carbohydrate rich food (e.g. rice/ bread/ noodle)	少吃碳水化合物（比如米饭/面包/面条）
10	Eat lower calorie meals / foods	吃低卡路里的食物
11	Limit processed foods	减少工业加工的食品
12	Have “siu dai” / lower sugar beverage	喝少糖的饮品
13	Do not smoke / quit smoking	不吸烟/戒烟
14	Control your blood pressure	控制血压
15	Manage / Lose weight	控制体重/减肥
16	Manage stress	调节压力
17	Others, please specify: 其它，请注明: _____	
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
[Go to Q15004]		

15004. Diabetes can lead to some health conditions. What are some of these conditions? **[MA]**
糖尿病能够引起一些其它病症。下面哪些病症可能由糖尿病引发呢？

READ (May choose more than one answer)		
1	Kidney Disease	肾病
2	Stroke	中风
3	Heart Disease / Heart Attack	心脏病/心脏病发作
4	Foot Amputation	截肢
5	Blindness	眼盲
6	Cancer	癌症
7	Others, please specify: 其它，请注明：_____	
DO NOT READ		
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
END OF SECTION 15. GO TO SECTION 19.		

19 CAREGIVING

Interviewer: Now, I would like to ask you some questions about caregiving (i.e. providing regular care or assistance to a friend or family member who has a health problem, long-term illness, or disability).
现在，我要问一些有关看护的问题（即为有健康问题、长期患病或有残疾的朋友或家庭成员提供经常性的护理或帮助。）

19000. During the past month, did you provide any such care or assistance to a friend or family member? **[SA]**
在过去一个月内，您曾为朋友或家庭成员提供过此类护理或帮助吗？

READ			
1	Yes	有	**[Go to Q19001]**
2	No	没有	**[Go to Section 20]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

19001. How many people do you provide care to? **[SA]**
您看护了多少人？

	Number of people	人数
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q19004]		

[IF Q19001 > "1", please provide the following information based on the person you spend <u>most</u> time caring for.]

19004. Are you the **<u>only</u>** person providing care for this person? **[SA]**
您是此人的**<u>唯一</u>**看护人吗？

READ			
1	Yes	是	**[Go to Q19006]**
2	No	否	**[Go to Q19005]**
DO NOT READ			
777	Refused	拒绝回答	
888	Don't know / Not sure	不知道 / 不肯定	

19005. Who else provides care to this person? **[MA]**
此人的其他看护人是什么身份？

READ (May choose more than one answer)		
1	Other family members	其他家庭成员
2	Live-in helper / Migrant Domestic Worker (MDW)	居住在雇主家的女佣
3	Nurse / other nursing professional	护士/其他专业护理人员
4	Day-care & other institutions	日间护理中心和其他机构
5	Others, please specify: 其它，请注明：_____	
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q19006]		

19006. What is the care recipient's relationship to you? For example, is he/she your (mother/daughter or father/son)? **[SA]**
您看护的人与您是什么关系？例如，他/她是您的（母亲/女儿或父亲/儿子）？

READ		
1	Parent	父母
2	Parent-in-law	岳父母或公婆
3	Child	子女
4	Spouse	配偶
5	Sibling	兄弟姐妹
6	Grandparent	祖父母
7	Grandchild	孙子/孙女
8	Other relatives (e.g niece, nephew, uncle, aunt)	其他亲戚关系(例如侄女，侄儿， 叔叔，阿姨)
9	Non-relative (e.g. friend, neighbour)	无亲戚关系(例如朋友，领居)
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q19007]		

19007. How old is the person to whom you are giving care? **[SA]**
您看护的人年龄有多大？

	Age	岁
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q19008]		

19008. Is this person whom you giving care to male or female? **[SA]**
您看护的人是男性还是女性？

1	Male	男性
2	Female	女性
DO NOT READ		
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
[Go to Q19009]		

19009. How long have you been providing care to this person? **[SA]**
您已经为此人提供了多长时间的看护？

READ ONLY IF NECESSARY		
1	1 year or less	1 年或少于 1 年
2	More than 1 year to 2 years	超过 1 年但在 2 年以内
3	More than 2 years to 5 years	超过 2 年但在 5 年以内
4	More than 5 years to 10 years	超过 5 年但在 10 年以内
5	More than 10 years	超过 10 年
DO NOT READ		
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
[Go to Q19010]		

19010. In an average week, what is the total number of hours of care you provide to this person? **[SA]**
您平均每周为此人提供多少小时的看护？

	Hours per week	每周几小时
DO NOT READ		
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
[Go to Q19011]		

19011. What are the health problems, long-term illnesses, or disabilities that the person you care for has according to the doctor? **[MA]**
根据医生的判断，您所看护的这个人有什么健康问题、长期疾病或残疾？

USE SHOWCARD		
1	Arthritis / Rheumatism/ Joint Pains	关节炎/风湿/关节疼痛
2	Cancer	癌症
3	Diabetes	糖尿病
4	Heart Disease	心脏病
5	Hypertension / High Blood Pressure	高血压
6	Lung Disease / Emphysema / COPD	肺病/肺气肿
7	Osteoporosis	骨质疏松症
8	Parkison's Disease	帕金森病
9	Stroke	中风
10	Eye / Vision Problem (blindness)	眼疾/视力问题（失明）
11	Hearing Problems (deafness)	听力问题（失聪）
12	Kidney disease / Renal failure	肾病/肾功能衰竭
13	Fracture	骨折
14	Alzheimer's Disease / Dementia	阿尔茨海默病或痴呆
15	Cerebral Palsy (CP)	脑性麻痹（CP）
16	Down's Syndrome	唐氏综合征
17	Anxiety / Depression	焦虑/忧郁症
18	Intellectually Disabled	智力残障
19	Others, please specify: 其它，请注明: _____	
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q19012]		

19012. In which of the following areas does the person you care for need your help? **[MA]**
以下哪些方面是您的被看护人需要您帮助的？

USE SHOWCARD		
1	To move from one place to another, e.g. move around within the home or outside of home	从一个地方移动到另一个地方，例如在家中或户外移动
2	To get in and out of bed or onto a chair	移到床上或床下，或移到椅子上
3	To dress and undress themselves	自己穿衣服或脱衣服
4	To shower	冲凉
5	To feed themselves e.g. cutting food	自己进食，例如将食物切成小块
6	To get to and use the toilet	使用厕所
7	To do shopping e.g. buying groceries	购物，例如买菜
8	To prepare meals	煮饭
9	To do house chores e.g. cleaning and doing laundry	做家务，例如打扫房间和洗衣服
10	To move around using public transport or driving	搭乘公共交通或驾车出行
11	To manage money e.g. paying bills	管理钱财，例如支付账单
12	To communicate with others e.g. making a phone call	与他人交流，例如打电话
13	To help with medications needs including injections e.g. taking medications on time	协助药物治疗，包括注射，例如按时服药
14	To do simple procedures e.g. using feeding tubes, changing of dressings	进行简单的医疗护理（例如使用喂食管、更换敷料）
DO NOT READ		
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
[Go to Q19013]		

Care services for care recipients

19013. Has the person you care for used or is currently using any of the following services/ programmes? **[MA]**

您看护的这个人是否用过或者正在使用以下服务/计划？

USE SHOWCARD		
1	Helplines	求助热线
3	Support groups	互助团体
4	Case management & counselling	个案管理与辅导
5	Eldercare Centre Services (i.e. Active Ageing Centre / Active Ageing Care Hub) *(e.g. active ageing programmes, befriending or buddying services, information and referral to care services)*	乐龄综合中心服务(如，活跃乐龄中心)(例如，活跃乐龄活动、友伴服务、护理咨询与转介援助)"
6	Sheltered Workshop	庇护工作坊
7	Residential Homes / Nursing Homes	老人公寓/疗养院
8	Community Rehabilitation Centres *(e.g.occupational therapy, physical rehab)*	社区康复中心（例如职业疗法、物理康复）
9	Day Care Centres/ Senior Care Centres *(e.g. Maintenance Day Care, Dementia Day Care)*	日间护理中心/乐龄护理中心（例如保健日间护理、失智症日间护理）
10	Home Care services *(e.g. Home Medical, Home Nursing, Home Personal Care services)*	居家护理服务（例如居家医疗服务、居家疗养服务、居家个人护理服务）
19	Home, Day and Inpatient Palliative/Hospice Care *(e.g. Medical, nursing and psychosocial care for end-of-life patients)*	慈怀居家、日间和住院护理（例如为临终病人提供医疗，护理和社会心理护理）
11	Escort and transport services *(e.g. to medical appointments or centres)*	护送和交通服务（例如陪送复诊或送往医疗中心）
12	Meal delivery services	膳食派送服务
13	Training programmes *(e.g. Social skills training, Psychosocial skills training, illness management)*	培训课程（例如社会技能培训、社会心理技能培训、疾病管理）
14	Employment-related services *(e.g. skills upgrading, job placement/ support)*	就业相关服务（例如技能提升、就业安排/支持）
15	Assistive Devices *(e.g. walking stick, hearing aid, wheelchair)*	辅助设备（例如拐杖、助听器、轮椅）
16	Spiritual / Religious based support	精神上/宗教上的支持
17	Others, please specify: 其它，请注明: _____	
18	None of the above	以上都不是
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[If ALL Option 1 to Option 17 and Option 19 are selected, go to Q19015. Else go to to Q19014]		

[Show only options not selected in Q19013]

19014. Is the person you care for interested in using any of the following services/ programmes? **[MA]**

您看护的这个人是否有兴趣使用以下服务/计划？

USE SHOWCARD		
1	Helplines	求助热线
3	Support groups	互助团体
4	Case management & counselling	个案管理与辅导
5	Eldercare Centre Services (i.e. Active Ageing Centre / Active Ageing Care Hub) *(e.g. active ageing programmes, befriending or buddying services, information and referral to care services)*	乐龄综合中心服务(如，活跃乐龄中心)(例如，活跃乐龄活动、友伴服务、护理咨询与转介援助)"
6	Sheltered Workshop	庇护工作坊
7	Residential Homes / Nursing Homes	老人公寓/疗养院
8	Community Rehabilitation Centres *(e.g.occupational therapy, physical rehab)*	社区康复中心（例如职业疗法、物理康复）
9	Day Care Centres/ Senior Care Centres *(e.g. Maintenance Day Care, Dementia Day Care)*	日间护理中心/乐龄护理中心（例如保健日间护理、失智症日间护理）
10	Home Care services *(e.g. Home Medical, Home Nursing, Home Personal Care services)*	居家护理服务（例如居家医疗服务、居家疗养服务、居家个人护理服务）
19	Home, Day and Inpatient Palliative/Hospice Care *(e.g. Medical, nursing and psychosocial care for end-of-life patients)*	慈怀居家、日间和住院护理（例如为临终病人提供医疗，护理和社会心理护理）
11	Escort and transport services *(e.g. to medical appointments or centres)*	护送和交通服务（例如陪送复诊或送往医疗中心）
12	Meal delivery services	膳食派送服务
13	Training programmes *(e.g. Social skills training, Psychosocial skills training, illness management)*	培训课程（例如社会技能培训、社会心理技能培训、疾病管理）
14	Employment-related services *(e.g. skills upgrading, job placement/ support)*	就业相关服务（例如技能提升、就业安排/支持）
15	Assistive Devices *(e.g. walking stick, hearing aid, wheelchair)*	辅助设备（例如拐杖、助听器、轮椅）
16	Spiritual / Religious based support	精神上/宗教上的支持
17	None of the above	以上都不是
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q19015]		

19015. Currently, is there any form of help given to you as the caregiver? **[SA]**
您目前有得到作为看护者所需要的帮助吗？

READ		
1	Yes	是
2	No	否
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q19019]		

Care services for caregivers

19019. Have you **heard of** the following services/ programmes? **[MA]**
您是否**听说过**以下服务/计划？

USE SHOWCARD		
1	Helplines	求助热线
2	Befriending services	益友服务
3	Support groups	互助团体
4	Case management & counselling	个案管理与辅导
5	Respite Care *(e.g. Eldersitter, Day Care, Child Care)*	短暂看护（例如长者护理计划、日间护理、儿童托管）
6	Government assistance and subsidies *(e.g. Community Health Assist Scheme (CHAS), Seniors' Mobility and Enabling Fund (SMF), Home Caregiving Grant (HCG))*	政府援助及津贴（例如社保援助计划（CHAS）、乐龄助行基金（SMF）、居家看护津贴（HCG））
7	Employment-related services *(e.g. skills upgrading, job placement/ support)*	就业相关服务 （例如技能提升、就业安排/支持）
8	Caregiving related training programmes *(e.g. information sharing sessions, caregiving training)*	看护相关培训课程（例如资讯分享活动、看护培训）
9	Spiritual / Religious based support	精神上/宗教上的支持
10	Others, please specify: 其它，请注明: _____	
11	None of the above	以上都不是
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[If Option 11 or 777 or 888 is selected, go to Q19017. If any Option 1 to Option 10 is selected, go to Q19016. If any Option 1 to 10 is not selected, go to Q19017]		

[Show only options not selected in Q19019]

19016. Which of the following services/ programmes have you used or are currently using? **[MA]**
您是否用过或者正在使用以下服务/计划?

USE SHOWCARD		
1	Helplines	求助热线
2	Befriending services	益友服务
3	Support groups	互助团体
4	Case management & counselling	个案管理与辅导
5	Respite Care *(e.g. Eldersitter, Day Care, Child Care)*	短暂看护（例如长者护理计划、日间护理、儿童托管）
6	Government assistance and subsidies *(e.g. Community Health Assist Scheme (CHAS), Seniors Mobility and Enabling Fund (SMF), Home Caregiving Grant (HCG))*	政府援助及津贴（例如社保援助计划（CHAS）、乐龄助行基金（SMF）、 居家看护津贴（HCG）
7	Employment-related services *(e.g. skills upgrading, job placement/ support)*	就业相关服务 （例如技能提升、就业安排/支持）
8	Caregiving related training programmes *(e.g. information sharing sessions, caregiving training)*	看护相关培训课程（例如资讯分享活动、看护培训）
9	Spiritual / Religious based support	精神上/宗教上的支持
10	Others, please specify: 其它，请注明: _____	
11	None of the above	以上都不是
DO NOT READ		
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
[Go to Q19018]		

[Show only options not selected in Q19019]

19017. Which of the following services/ programmes are you interested in trying? **[MA]**
您有兴趣尝试以下何种服务/计划？

USE SHOWCARD		
1	Helplines	求助热线
2	Befriending services	益友服务
3	Support groups	互助团体
4	Case management & counselling	个案管理与辅导
5	Respite Care *(e.g. Eldersitter, Day Care, Child Care)*	短暂看护（例如长者护理计划、日间护理、儿童托管）
6	Government assistance and subsidies *(e.g. Community Health Assist Scheme (CHAS), Seniors Mobility and Enabling Fund (SMF) , Home Caregiving Grant (HCG))*	政府援助及津贴（例如社保援助计划（CHAS）、乐龄助行基金（SMF））、居家看护津贴（HCG）
7	Employment-related services *(e.g. skills upgrading, job placement/ support)*	就业相关服务 （例如技能提升、就业安排/支持）
8	Caregiving related training programmes *(e.g. information sharing sessions, caregiving training)*	看护相关培训课程（例如资讯分享活动、看护培训）
9	Spiritual / Religious based support	精神上/宗教上的支持
10	Others, please specify: 其它，请注明: _____	
11	None of the above	以上都不是
DO NOT READ		
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
[Go to Q19018]		

19018. In which of the following areas do you think you (the caregiver) should be given training in order to provide care to others? **[MA]**
您认为您（看护人）应接受以下哪个领域的培训，以便看护他人？

USE SHOWCARD		
1	Helping care recipient to move from one place to another, e.g. move around within the home or outside of home	协助护人从一个地方移动到另一个地方，例如在家中或户外移动
2	Helping care recipient to get in and out of bed or onto a chair	协助护人移到床上或床下，或移到椅子上
3	Helping care recipient to dress or undress themselves	协助护人穿或脱衣服
4	Helping care recipient to shower	协助护人冲凉
5	Helping care recipient to feed themselves e.g. cutting food	协助护人进食，例如将食物切成小块
6	Helping care recipient to get to and use the toilet	协助护人使用厕所
7	Performing simple procedures (e.g. using feeding tubes, changing of dressings)	进行简单的医疗护理（例如使用喂食管、更换敷料）
8	Medication management, including injections	协助药物治疗，包括注射，例如按时服药
9	First aid and management of emergency e.g. CPR training	急救和紧急救护培训，例如 CPR 培训
11	Caring for the emotional or psychological needs of care recipient	照顾护人的情绪或心理需求
12	Information and techniques for your own self-care, e.g. how to cope with caregiver stress	自我照顾的资讯及技巧，例如，如何应付看护人的压力
10	Others, please specify: 其它，请注明：_____	
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
END OF SECTION 19. GO TO SECTION 20.		

20. ELDERLY HEALTH (FOR RESPONDENT AGED 55 AND ABOVE)

IF respondent is <u>below 55 years of age</u>, go to Section 22.

IF respondent is <u>aged 55 and above</u>, go to Q20000.

Interviewer: Now, I would like to ask you some questions about your functional mobility, personal care, eye sight, hearing and communication.
现在，我想问您关于您行动能力、个人护理、视力、听力及沟通能力的问题。

USE SHOWCARD					
	(1) Only with someone to help 需要其他人帮忙	**(2)** With some difficulty 有些困难	**(3)** Without difficulty 完全没有困难	**(777)** Refused 拒绝回答	**(888)** Don't know / Not sure 不知道 / 不肯定
<u>Locomotion 行动能力</u> 20000. Can you walk or move from one place to another independently, including with the use of a walking aid or wheelchair? **[SA]** 您是否能自己步行（包括使用助行器）或自立行驶到达不同的场所（包括使用轮椅）？					
<u>Personal care 个人护理</u> 20001. Can you get in and out of bed or a chair on your own? **[SA]** 您是否能自己上下床或从坐着的椅子上站起来？					
20002. Can you dress and undress yourself on your own? **[SA]** 您是否能自己穿或脱衣服？					
20003. Can you shower on your own? **[SA]** 您是否能自己洗澡？					
20004. Can you feed yourself, including cutting up food? **[SA]** 您是否能自己用餐，包括切割食物？					
20005. Can you get to and use the toilet on your own? **[SA]** 您是否能自己上洗手间？					
[Go to Q20006]					

Seeing 视力

20006. Can you see well enough to recognise a friend at a distance of four meters (across a road)? If no, can you see well enough to recognize a friend at a distance of one meter (at arm's length)? **[SA]**
您能在四公尺外辨认出您的朋友（如马路对面）吗？ 若不行，那在一公尺外（手臂的长度）能辨认出您的朋友吗？

READ		
1	Can recognise a friend at four meters (across a road)	在四公尺外（马路对面）能 辨认出朋友
2	Can recognise a friend at one meter (at arm's length) but not at four meters (across a road)	能在一公尺外（手臂的长度）辨认出朋友却不能 在四公尺外（马路对面
3	Cannot recognise a friend at one meter (at arm's length)	不能在一公尺外（手臂的长度）辨认出朋友
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q20007]		

Hearing 听力

20007. Is your hearing good enough to follow a TV programme at a volume others find acceptable? If not, can you follow a TV programme with the volume turned up? **[SA]**
您是否能在其他人能够接受的音量看电视节目？若不能，您需要调高声量吗?

READ		
1	Can follow a TV programme at normal volume	能接受跟常人一样的声量
2	Can follow a TV programme with volume turned up	需要调高声量
3	Cannot follow a TV programme with volume turned up	调高声量还是听不清楚
DO NOT READ		
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q20008]		

Eldercare Services

20008. Which of the following eldercare services have you heard of … ? **[MA]**
您听说过以下哪种长者看护服务…?

USE SHOWCARD		
11	Eldercare Centre Services (i.e. Active Ageing Centre / Active Ageing Care Hub) *(E.g. active ageing programmes, befriending or buddying services, information and referral to care services)*	乐龄综合中心服务(如，活跃乐龄中心) (例如，活跃乐龄活动、友伴服务、护理咨询与转介援助)”
1	Home Medical, Home Nursing and/or Home Therapy services *(E.g. minor medical procedures, wound dressing, changing of nasogastric tubes provided at home)*	居家医疗、居家护理和/或居家治疗服务 (例如在家中提供的小型医疗程序，伤口敷料，更换鼻胃管)
2	Home Personal Care *(E.g. assistance with showering, housekeeping, medication reminders, mind-stimulating activities and other personal care tasks at home)*	居家个人看护 (例如协助沐浴，家政，药物提醒，精神刺激的活动和家中的其他个人护理任务)
3	Day Care and/or Dementia Day Care *(E.g. Custodial day care for seniors)*	日间护理和/或失智症日间看护 (例如老年人的监护日托)
4	Community Rehabilitation *(E.g. physiotherapy or occupational therapy at a centre)*	社区康复 (例如中心里的物理治疗或职业疗法)
5	Medical Escort and Transport *(E.g. Escort and transportation to medical appointments for seniors unable to attend on their own)*	医疗护送 (例如接送需要帮助的老人去医疗复诊)
6	Meals-on-Wheels *(E.g. Daily meal delivery programme for homebound elderly who are unable to prepare meals)*	送餐服务 (例如每日为无法准备饭菜而无法出门的老人送餐)
7	Nursing Home Respite Care/Centre-based Respite Care *(E.g. Short-term care of a few hours or days at eldercare centres or nursing homes)*	疗养院短暂看护/中心短暂看护 (例如在老人护理中心或疗养院进行短短几小时或几天的护理)
8	Nursing Home *(E.g. Long term residential care service)*	疗养院 (例如长期住宿护理服务)
9	Home, Day and Inpatient Palliative/Hospice Care *(E.g. Medical, nursing and psychosocial care for end-of-life patients)*	慈怀居家、日间和住院护理 (例如为临终病人提供医疗，护理和社会心理护理)
10	None of the above	以上都没有
DO NOT READ		
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
[If Option 1 to Option 9 or Option 11 is selected, go to Q20009. Else go to Section 22. If Option 10 or 777 or 888 is selected, go to Section 22]		

For those eldercare services selected in Q20008, go to Q20009.

20009. Which of the following eldercare services have you used in the past one year? **[MA]**
在过去的一年里，您使用过以下哪项长者护理服务？

USE SHOWCARD		
11	Eldercare Centre Services (i.e. Active Ageing Centre / Active Ageing Care Hub) *(E.g. active ageing programmes, befriending or buddying services, information and referral to care services)*	乐龄综合中心服务(如，活跃乐龄中心) (例如，活跃乐龄活动、友伴服务、护理咨询与转介援助)”
1	Home Medical, Home Nursing and/or Home Therapy services *(E.g. minor medical procedures, wound dressing, changing of nasogastric tubes provided at home)*	居家医疗、居家护理和/或居家治疗服务 (例如在家中提供的小型医疗程序，伤口敷料，更换鼻胃管)
2	Home Personal Care *(E.g. assistance with showering, housekeeping, medication reminders, mind-stimulating activities and other personal care tasks at home)*	居家个人看护 (例如协助沐浴，家政，药物提醒，精神刺激的活动和家中的其他个人护理任务)
3	Day Care and/or Dementia Day Care *(E.g. Custodial day care for seniors)*	日间护理和/或失智症日间看护 (例如老年人的监护日托)
4	Community Rehabilitation *(E.g. physiotherapy or occupational therapy at a centre)*	社区康复 (例如中心里的物理治疗或职业疗法)
5	Medical Escort and Transport *(E.g. Escort and transportation to medical appointments for seniors unable to attend on their own)*	医疗护送 (例如接送需要帮助的老人去医疗复诊)
6	Meals-on-Wheels *(E.g. Daily meal delivery programme for homebound elderly who are unable to prepare meals)*	送餐服务 (例如每日为无法准备饭菜而无法出门的老人送餐)
7	Nursing Home Respite Care/Centre-based Respite Care *(E.g. Short-term care of a few hours or days at eldercare centres or nursing homes)*	疗养院短暂看护/中心短暂看护 (例如在老人护理中心或疗养院进行短短几小时或几天的护理)
8	Nursing Home *(E.g. Long term residential care service)*	疗养院 (例如长期住宿护理服务)
9	Home, Day and Inpatient Palliative/Hospice Care *(E.g. Medical, nursing and psychosocial care for end-of-life patients)*	慈怀居家、日间和住院护理 (例如为临终病人提供医疗，护理和社会心理护理)
10	None of the above	以上都没有
DO NOT READ		
777	Refused	拒绝回答
888	Don’t know / Not sure	不知道 / 不肯定
END OF SECTION 20. GO TO SECTION 22.		

22. HYGIENE PRACTICES AND USE OF ANTIBIOTICS

22000. I am now going to read out some practices that will prevent the spread of infectious diseases like common cold or influenza that are caused by viruses. For the prevention of infectious diseases, do you usually …? **[MA]**

我现在将读出一些防止由病毒所引起的传染病，例如预防普通感冒或流感传播的措施。 为了预防传染病，您通常是否会 …?

USE SHOWCARD (You may choose more than one answer)		
1	wash your hands regularly with soap and water or use a hand sanitiser	定期用肥皂和水洗手或使用消毒洗手液
2	cover your nose and mouth when coughing or sneezing	在咳嗽或打喷嚏时掩住鼻子和嘴巴
3	stay at home if you feel unwell	在感到不适的时候待在家里
4	use a surgical mask when you are unwell ***Interviewer note*: *Exclude reusable mask***	在身体不适的时候使用手术型口罩
5	go see a doctor if you feel unwell	在感到不适的时候去看医生
6	go for yearly flu vaccination ***Interviewer note*: *Flu vaccination refers to an injection to protect you from getting the flu***	接受年度流感疫苗接种
7	Others, please specify: 其它，请注明：_____	
DO NOT READ		
666	No, I do not have these habits	不，我没有这些习惯
777	Refused	拒绝回答
888	Don't know / Not sure	不知道 / 不肯定
[Go to Q22001]		

22001. I am now going to read out some statements on the use of antibiotics. Do you agree that…? **[SA]**
我现在将读出几个有关服用抗生素的句子，请告诉我您觉得每一项的答案是对或错。

USE SHOWCARD				
Statement	1) Yes 对	2) No 错	**DO NOT READ**	
			777) Refused 拒绝回答	888) Don't know / Not sure 不知道 / 不肯定
(a) Antibiotics do not work on flu virus 抗生素对流感病毒无效				
(b) Antibiotics will lose its effectiveness in the long term if one takes antibiotics for common cold and flu, does not complete the full course of antibiotics or take leftover antibiotics 如果因为普通感冒和流感而服用抗生素，或者未完成整个抗生素疗程，或者服用剩余的抗生素，长期以来, 抗生素将失去效力				
(c) You should ask the doctor for antibiotics if not prescribed 如果医生未开抗生素处方，您应该向医生要求抗生素				
(d) You will recover faster when you take antibiotics for your respiratory infections like the flu 如果服用抗生素治疗呼吸道感染如流感等，您将会更快复原				
END OF SECTION 22.				

Annex B

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