2020 Annual Report on Aging and Long Term Care in Taiwan

Ministry of Health and Welfare

National Health Research Institutes

2020 Annual Report on Aging and Long Term Care in Taiwan

Preface

With the aging of the population and the diversification of care service needs, Taiwan has been promoting Long-Term Care 2.0 since January 2017 to respond to the long-term care needs arising from the increase in the disabled and dementia population, providing a diverse continuum of services that extend from family support to home care, community care and residential care, along with establishing a community-based long-term care service system.

The Ministry of Health and Welfare, in order to integrate and transfer the relevant business and personnel from the Department of Nursing and Health Care and the Social and Family Affairs Administration within the ministry, set up the Preparatory Office of the Department of Long-Term Care on December 1, 2017, to promote the long-term care-related businesses, and formally established the Department of Long-Term Care on September 5, 2018, to be in charge of the planning of the long-term care policy and system, the amendment to the Long-Term Care Services Act, the training of long-term care personnel, and the deployment of home, community and institutional long-term care service resources to respond to and meet the long-term care needs of the super-aged society. The first published "*2020 Annual Report on Aging and Long Term Care in Taiwan*" reflects to a certain extent the effectiveness of the implementation of Long-Term Care 2.0 in the deployment of resources in the entire country and in the counties and cities.

In order to take protective measures of the impact and influence of the super-aged society, the Ministry commissioned the National Health Research Institutes to implement the "National Research Center on Ageing and Long-Term Care" in 2018, which has to consolidate the data related to aging health and long-term care from various related organizations, including six major categories: demographics, economic status, health status, preventive health care and behavior, utilization of health and long-term care, social participation and living arrangement, to establish indicators of aging health and long-term care and to monitor the long-term changes of these indicators. It is hoped that all sectors of the community will understand the current situation of the aging population, and deepen the research on aging health and long-term care through public-private collaboration, so as to perfect the planning of our country's aging health and welfare policies and create a friendly environment for a super-aged society.

Sincerely,
Minister, Ministry of Health and Welfare

Shih-Chung Chen

May 2022

Preface

Our country has become an "aged society" in March 2018, and it is forecasted that we will enter a super-aged society in 2025. The health care needs of the aging population will increase, it is all the more necessary to step up the promotion of related research. The National Health Research Institutes (hereinafter referred to as NHRI), as a think tank of the government, has received policy subsidies from the Ministry of Health and Welfare since 2018 to promote the establishment of the National Center for Geriatrics and Welfare Research at the national level, and one of the long-term tasks of the research center is to publish the *Annual Report on Aging and Long Term Care in Taiwan* on a regular basis, to assist in the implementation results monitoring and the research on important issues of the "National Ten-year Long-term Care Plan 2.0", as a policy reference for responding to the population aging.

NHRI is a mission-oriented research institute that has been focusing on healthy aging research for more than 10 years. This time we focused on the factors affecting aging health as the main axis, and collected data from a combination of individual physiology and behavior, physical environment and social environment, health and long-term care services, and access to health care, coupled with the results of the "National Health Interview Survey" executed by NHRI, and then statistically analyzed the data and made them into understandable charts, assembling them into the "*2020 Annual Report on Aging and Long Term Care in Taiwan*", in the hope of presenting the health and care needs of the country's older population and their current situation in different aspects, and to achieve the dual effects of disseminating knowledge and assisting in research.

We would like to thank the Department of Long-Term Care of Ministry of Health and Welfare for their assistances, as well as the experts of the "National Research Center on Ageing and Long-Term Care (NRCALTC) Strategic and Planning Advisory Committee" for their guidance and valuable opinions, which enabled smooth publication of the annual report. It is believed that it will be of great help in understanding the current situation and trend of the health and long-term care of the aging population in our country, as well as facilitating the promotion of long-term care policy in our country.

Sincerely,
President, National Health Research Institutes

Kung-Yee Liang

May 2022

Introduction

A rapidly aging population is an unprecedentedly dominant global challenge, and Taiwan is of no exception. According to the National Development Council (NDC), Taiwan has become an aged society in 2018, with people older than 65 years old reaching 3.31 million (14.1%). The aging index (the number of older people per 100 persons younger than 15 years old in a population) in Taiwan has also been rapidly increasing, from 28.2 at the end of 1993 to 100.2 in February 2017 (older people exceeded youngers) to 107.5 in March 2018, which depicted the severity of population aging. NDC estimated that Taiwan will become super-aged society in 2025, when people older than 65 years old reaches 20.1% of the total population. Population aging would get even more severe in Taiwan in 2060 when 4 out of 10 people will be over 65 years old, among them, 1 out of 4 will be over 85 years old. This is an issue that requires our utmost attention.

To address this problem and to meet the enormous need for long-term care from aged population, the government has initiated policies and programs for long-term care since 1998. In April 2007, the Executive Yuan launched the National Ten-Year Long-Term Care Plan to establish a complete long-term care system for guaranteed services for older population in need, to promote healthy aging and improve quality of life. In December 2016, the Executive Yuan launched the National Ten-year Long-term Care Plan 2.0 as an expansion, providing a community-based system which is with high-quality, affordable and accessible, multi-functional and integrated for the people of Taiwan. The government also made innovations in medical care for older people to facilitate a healthy, vibrant, happy and friendly aged society.

The government also adapted various policies to meet the needs from aged society, including research on urgent matters, long-term planning and cultivation of the policies, and infrastructure establishment. In 2016, the Executive Yuan adapted policies in developing a family-centered and community-based integrated family support service system, followed by policies in enhancing technology development in health, welfare and big data for healthcare in 2017. In 2018, programs for the implementation of long-term care policies, and for the developments of elderly care and community preventive supporting service models have been launched to reinforce community care service network for dementia and the delay of progression of dementia. In 2016, the Ministry of Health and Welfare (MOHW) announced the "White paper on 2015–2025 Health and Welfare Technology Policy" stating that health promotion and disease prevention are major strategies for healthy aging of older people. In addition, technologies and innovations in caring will be implemented to achieve health promotion and health literacy. It goes without saying that research and statistics reflecting the well-being and health of older people are needed to the evaluation of effectiveness and further improvements of the above-mentioned policies.

Therefore, in 2018, National Health Research Institutes (NHRI) was designated by the MOHW to plan for the establishment of National Research Center on Ageing and Long-Term Care. Over 200 experts nation-wide were invited to join this effort, resulted in NHRI's "The National Research Center on Aging and Long-Term Care Promoting Project" (abbreviated as this project) since 2020. As it is very important to portrait the current status of older populations, one of the missions of this project is to collect data related to the older population to analyze and publish report annually. To efficiently support policy making, resource allocation and evaluating the effectiveness of current policies, this annual report collects and integrates data across government agencies to make them more conveniently accessible, and express the statistics in an easy-to-understand manner.

To carry out this mission, we adapted the theory of the Healthy People Framework for factors that contribute to the health and well-being of older people such as physiological and behavior, physical and societal environment, health and long-term care policies, and medical care accessibility when selecting indexes for statistics. We referenced aging population indexes used in Japan, US, and EU, and summarized the aging and long-term care indexes in this project into 6 categories, i.e., demographics, economic status, health status, preventive health care and behavior, utilization of health and long-term care, and social participation and living arrangement. Data are collected across government agencies according to these indexes and statistics are made into figures and graphs, and then combined to complete the "*2020 Annual Report on Aging and Long Term Care in Taiwan*".

Indexes included in this annual report are as follows:

For demographics indexes, there are population aged 65 years and older in Taiwan, population distribution in townships, marital status, education level, indigenous population aged 55 years and older, and veteran population.

For economic status indexes, we considered potential factors that may cause health inequality and can be a reflection of underprivileged groups among the older population, such as low-income households, mid-to low-income older people who received living allowances, the employed, and average monthly spending.

For health status indexes we included life expectancy, top 10 leading causes of death, top 10 leading cancer causes of death, self-perceived health status, mobility, Activities of Daily Living (ADLs), Instrumental Activities of Daily Living (IADLs), cognitive impairment, depression symptoms, EuroQol instrument. We will add active life expectancy (ALE), chronic diseases and frailty in the future to increase the depth in health status analyses.

For preventive health care and behavior indexes we included mammography, pap smear, body mass index (BMI), dietary diversity score (DDS), weekly recreational physical activity, smoking, alcohol drinking, and betel nut chewing.

For utilization of health and long-term care indexes we included outpatient and inpatient visits under the National Health Insurance (NHI), users of long-term care services, number of individuals who required long-term care services, long-term care service coverage rate, number of long-term care service institutions (such as home services, community services, institutional residential services), number of service users served by long-term care service institutions, and long-term care workforce.

Finally, we included indexes such as older people who live alone and are listed as requiring care, changes in number of residences with only older people, living arrangements, and social participation to observe living arrangement and social engagements of the older population in Taiwan.

Like many countries in the world, Taiwan is facing various challenges from a rapidly aging society. This project provides annual statistics on aspects of health and well-being of older people such as health status, behavior, healthcare, social engagement and environment, to advance the understanding of the features and trends of older people in Taiwan and to support policymakers, the academics and the industry to meet the challenges.

Editorial team of the 2020 Annual Report on Aging and Long Term Care in Taiwan

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Chapter 1

Demographics

Demographics

Demographic characteristic is an important indicator in observing the growth of aging population. The number of Taiwanese populations aged 65 years and above grew from 270,000 in 1960 to 3.79 million in 2020. The growth is rapid. It is expected to reach 4.70 million, about 20.1% of the total population, in 2025, a super aging society. By the year of 2030, the aging population would reach 5.57 million. The aging issue should not be ignored.

In 2020, three counties having the highest aging population were Chia-Yi County, Yun-Lin County and Taipei City.

In terms of marital status, the proportion with partners remained stable from 2014 to 2020. As people grew older, the probability of being widowed increased. In 2020, the proportion of being widowed was 17.0%, and it increased to 39.2% in those aged between 75 and 84, then increased to 62.7% in those aged 85 and above. There were 82.0% and 36.3% of females and males aged 85+ being widowed, respectively.

Overall, the education level increased in the older people. Those with less than elementary education decreased from 64.5% in 2015 to 53.9% in 2020.

The definition of older people in indigenous people was 55 years old. Its proportion increased from 17.8% in 2016 to 20.4% in 2020.

Veterans aged 65 and above decreased. The decreasing rate was apparent in those aged 75-84. They decreased from 126,302 in 2011 to 26,927 in 2020. This unique feature was possible due to those coming from mainland China dying out and replacing by professional military staff.

1. Population aged 65 years and older in Taiwan

In Taiwan, the population aged 65 years and older has grown from 270,000 people in 1960 to 3.79 million people in 2020. According to age stratification, the populations of three age groups (i.e., 65–74, 75–84, and ≥85 years) exhibited an upward trend from 1960 to 2020, and a middle projection method was adopted for population projection from 2030 to 2050 (Figure 1). In addition, gender stratification results indicated that the female population aged 65 years and older increased more than the male population aged 65 years and older (Figure 2).

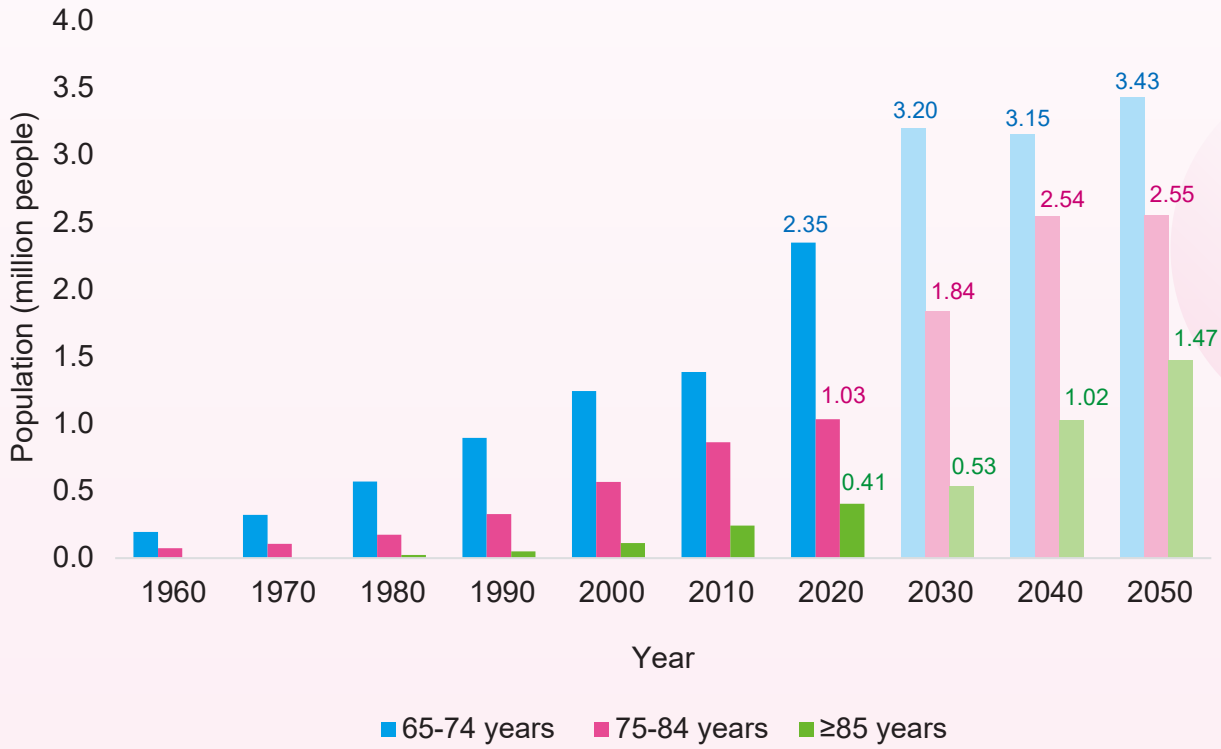


Figure 1 Population aged 65 years and older in Taiwan from 1960 to 2050.

Source: Department of Household Registration, Ministry of the Interior: https://www.ris.gov.tw/app/portal/346
National Development Council: https://pop-proj.ndc.gov.tw/download.aspx?uid=70&pid=70

Note 1: The 1960–2020 end-year population data were retrieved from the Department of Household Registration, Ministry of the Interior.

Note 2: The 2030–2050 estimation data were retrieved from the National Development Council using middle projection. The middle projection estimates were made on the assumption that the decline in total fertility rate will reverse and increase slightly to 1.2 in 2045 through the government's active promotion of various population policies.

Note 3: From 1960 to 1970, only the number of people over the age of 75 was counted. Therefore, the number of people aged 75-84 and those over 85 was combined in this figure.

Note 4: For further details, please refer to Appendix 1.

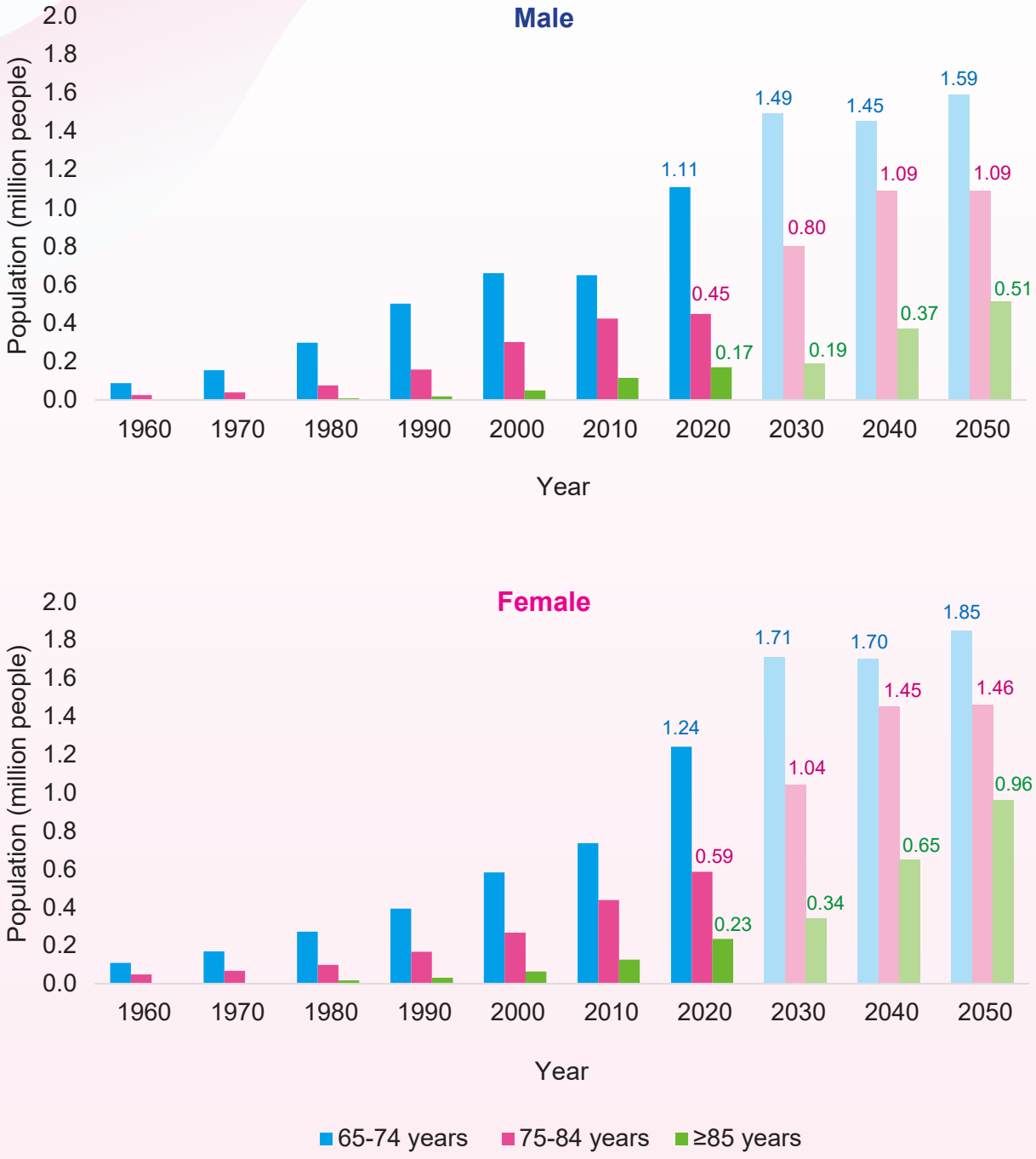


Figure 2 Population of males and females aged 65 years and older in Taiwan from 1960 to 2050.

Source: Department of Household Registration, Ministry of the Interior: https://www.ris.gov.tw/app/portal/346
National Development Council: https://pop-proj.ndc.gov.tw/download.aspx?uid=70&pid=70

Note 1: The 1960–2020 end-year population data were retrieved from the Department of Household Registration, Ministry of the Interior.

Note 2: The 2030–2050 estimation data were retrieved from the National Development Council using middle projection.

Note 3: From 1960 to 1970, only the number of people over the age of 75 was counted. Therefore, the number of people aged 75-84 and those over 85 was combined in this figure.

Note 4: For further details, please refer to Appendix 1.

2. Population distribution in townships

In 2020, the three counties and cities in the western half of Taiwan with the largest populations aged 65 years and older were Chiayi County (20.3%), Yunlin County (19.1%), and Taipei City (19.0%); among the counties and cities in the eastern half of Taiwan, Hualien County (17.5%) had the largest population, followed by Taitung County (17.4%) and Yilan County (17.3%). The ten townships and urban areas with the highest percentage of older population are Pingxi District, New Taipei City (30.8%), Zuozhen District, Tainan City (29.4%), Tianliao District, Kaohsiung City (29.1%), Longqi District, Tainan City (28.8%), Shitan Township, Miaoli County (28.5%), Shuangxi District, New Taipei City (27.9%), Liujiao Township, Chiayi County (26.9%), Lucao Township, Chiayi County (26.8%), Emei Township, Hsinchu County (26.8%) and Yizhu Township, Chiayi County (26.7%) (Figure 3).

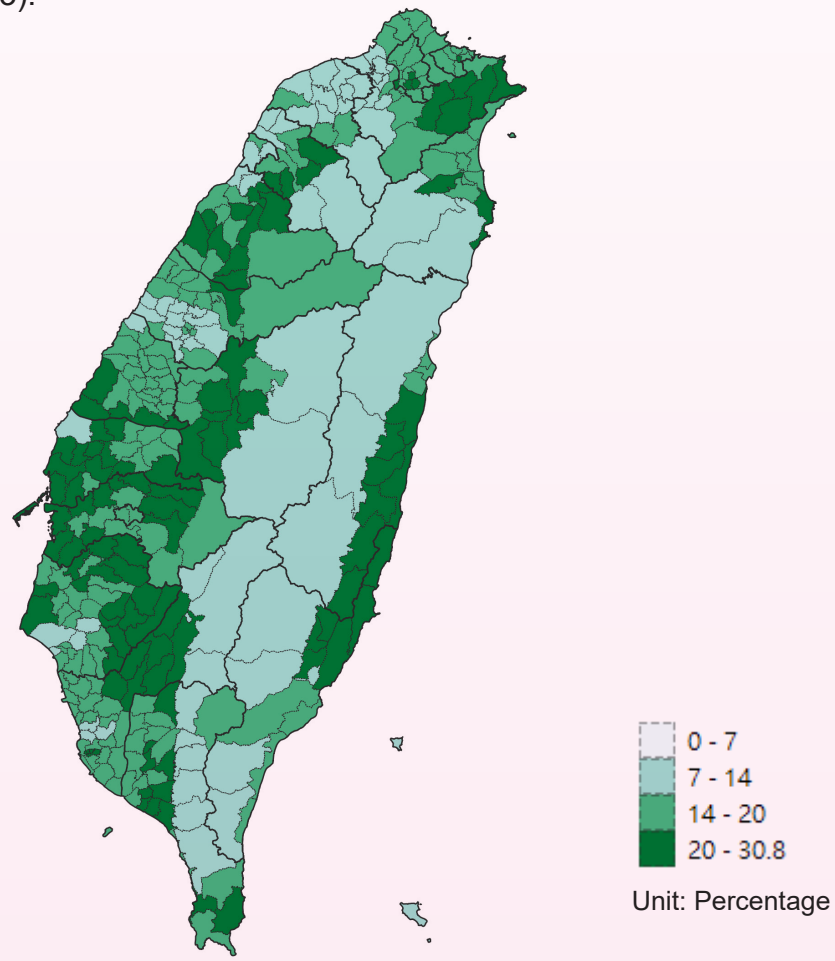


Figure 3 Distribution of population aged 65 years and older by township in 2020.

Source: Socioeconomic Geographic Information System
https://segis.moi.gov.tw/STAT/Web/Platform/QueryInterface/STAT_QueryInterface.aspx?Type=0

Note 1: Percentage = the total population aged 65 years and older in each township / the total population in each township × 100%.

Note 2: For further details, please refer to Appendix 2.

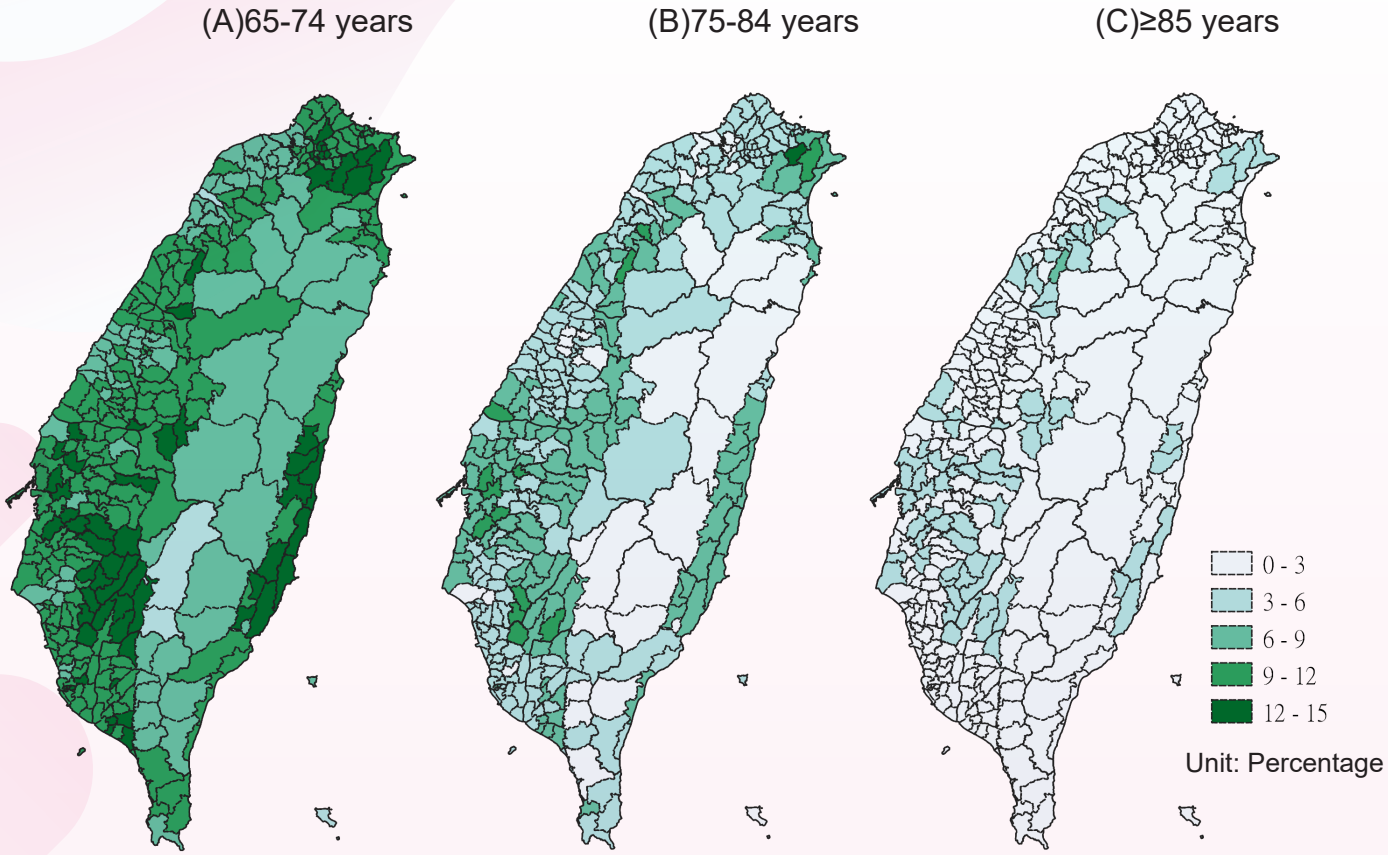


Figure 4 Distribution of population aged 65–74 years (A), 75–84 years (B), and ≥85 years (C) by township in 2020.

Source: Socioeconomic Geographic Information System
https://segis.moi.gov.tw/STAT/Web/Platform/QueryInterface/STAT_QueryInterface.aspx?Type=0

Note 1: Percentage = the total population in a specific age group in each township / the total population in each township × 100%.

Note 2: For further details, please refer to Appendix 2.

3. Marital status

From 2014 to 2020, most of the population aged 65 years and older were married individuals followed by widowed and unmarried individuals (Figure 5).

In descending order according to age stratification and marital status, married individuals accounted for the highest percentage of the 65–74 age group (68.6%) followed by widowed (17.0%) and unmarried (4.5%) individuals. In the 75–84 age group, married individuals accounted for the highest percentage (54.4%) followed by widowed (39.2%) and unmarried (2.3%) individuals. In the ≥85 age group, widowed individuals accounted for the highest percentage (62.7%) followed by married (32.5%) and divorced (2.3%) individuals.

According to gender stratification, married males accounted for the highest percentage of all three age groups (65–74 years, 79.9%; 75–84 years, 76.1%; ≥85 years, 57.5%), whereas unmarried males accounted for lowest percentage of all three age groups (65–74 years, 4.1%; 75–84 years, 2.2%; ≥85 years, 3.0%). Among females, married, and widowed females accounted, respectively, for the highest percentage of the 65–74 (58.4%) and 75–84 (56.3%) age groups, whereas unmarried females accounted for the lowest percentage of the 65–74 (4.9%) and 75–84 (2.3%) age groups. For females aged 85 years and older, widowed, and divorced females accounted, respectively, for the highest (82.0%) and lowest (1.8%) percentages of the age group (Figure 6).

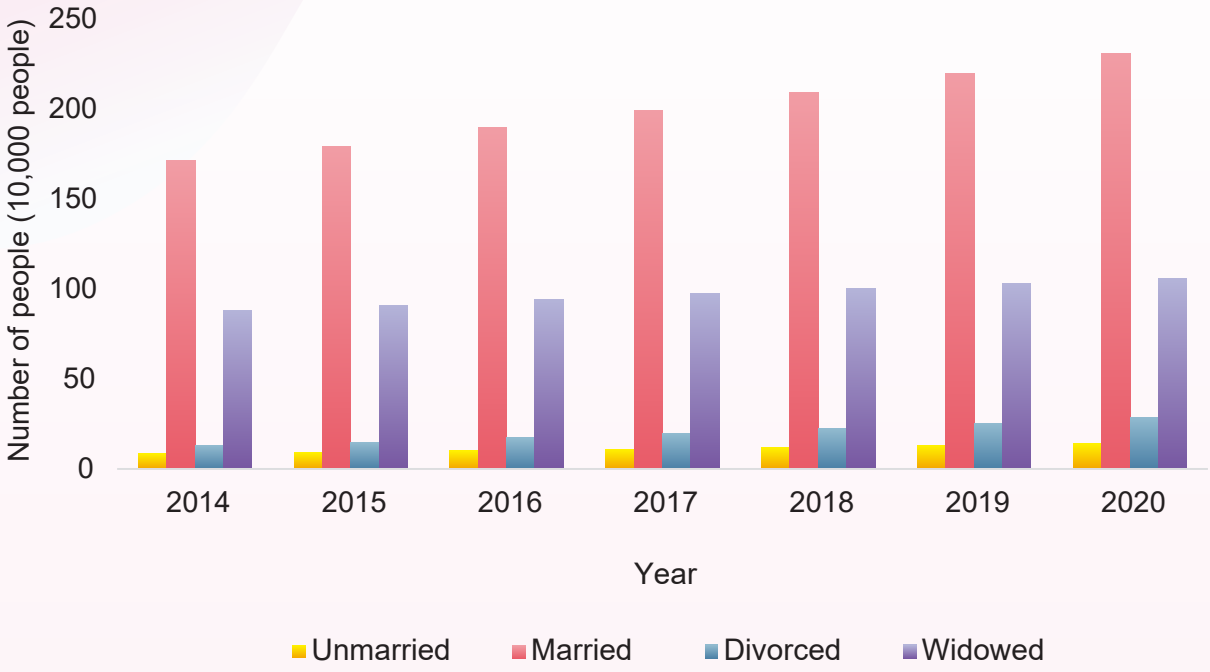


Figure 5 Marital status of population aged 65 years and older from 2014 to 2020.

Source: Department of Household Registration, Ministry of the Interior:
https://www.ris.gov.tw/info-popudata/app/awFastDownload/toMain_panel

Note 1: "Unmarried" refers to individuals who have never been married.
"Married" refers to officially married individuals whose spouses are still alive and divorced or widowed individuals who remarried and have spouses who are still alive.
"Divorced" refers to individuals who legally terminated their marriage and have not remarried.
"Widowed" refers to individuals who have not remarried after their spouses died or were declared dead.

Note 2: For further details, please refer to Appendix 3.

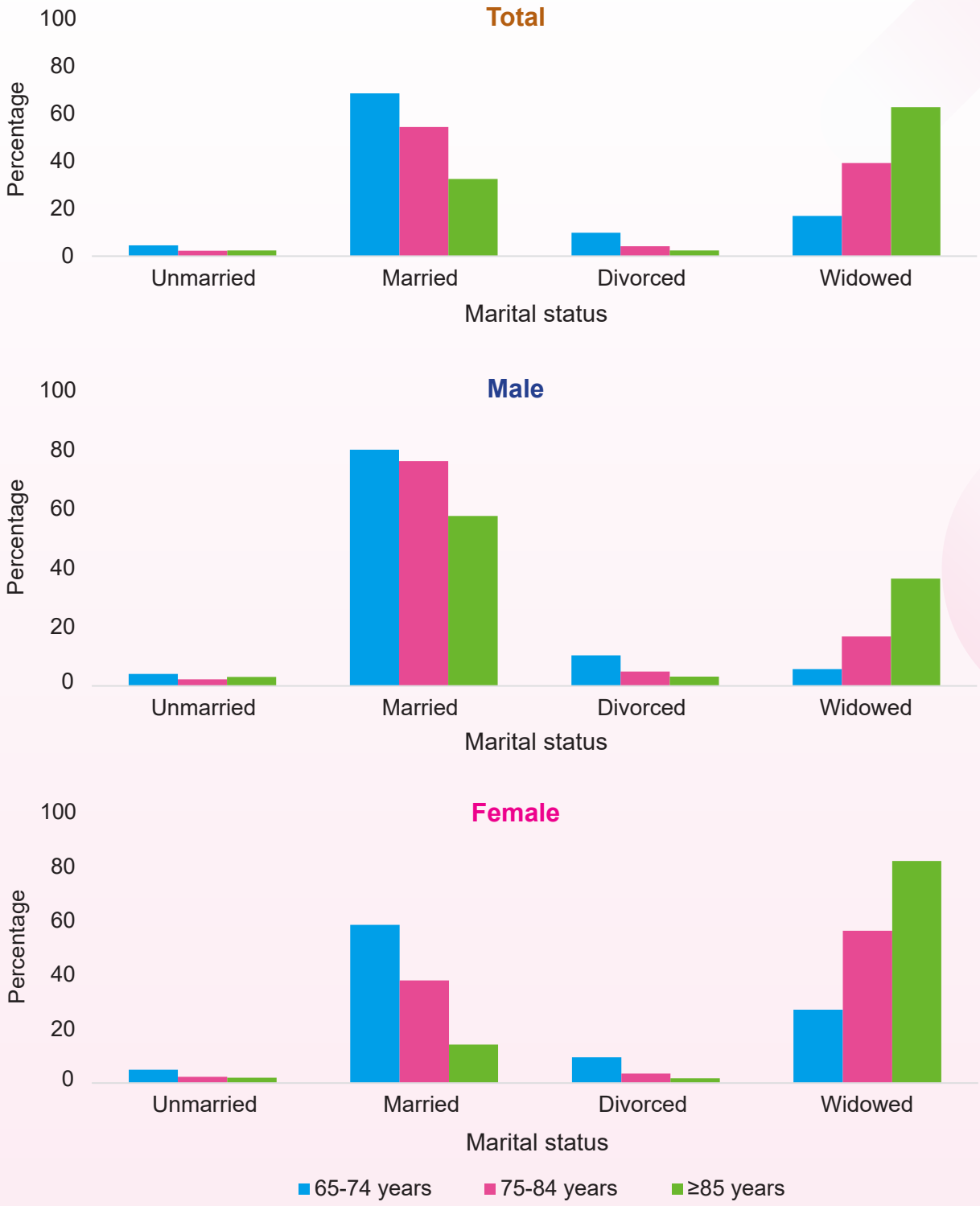


Figure 6 Percent of population aged 65 years and older by marital status and age in 2020.

Source: Department of Household Registration, Ministry of the Interior: https://www.ris.gov.tw/info-popudata/app/awFastDownload/toMain_panel

Note 1: Percentage = a gender- and age-stratified population with a specific marital status / a gender- and age-stratified population at the end of the year × 100%.

Note 2: For further details, please refer to Appendix 4.

4. Education level

From 2015 to 2020, the percentages of the population aged 65 years and older with a high school, a college or above of education increased, whereas the percentage of those with an elementary school or lower level of education was decreasing (Figure 7).

The percentages with an elementary school or lower level of education for both males and females in the 65-74 and 75-84 age groups decreased from 2015 to 2020 (Figure 8).

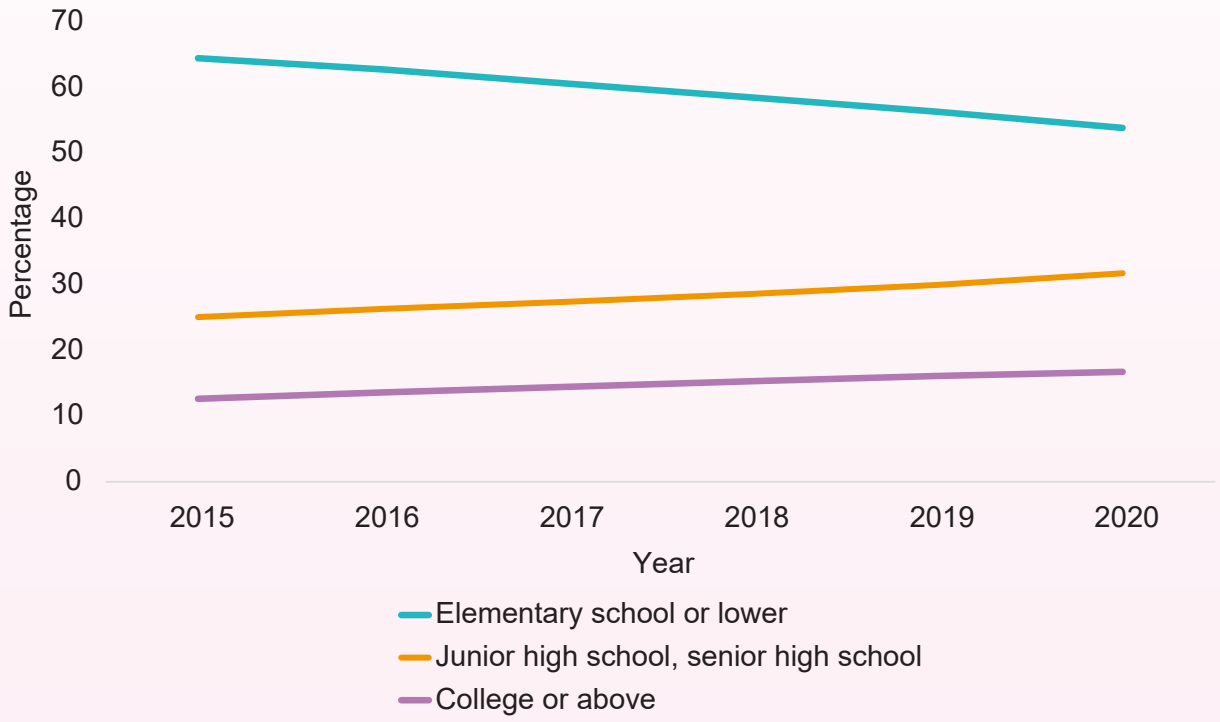


Figure 7 Education level of population aged 65 years and older from 2015 to 2020.

Source: Department of Household Registration, Ministry of the Interior: https://www.ris.gov.tw/info-popudata/app/awFastDownload/toMain_panel

Note 1: Percentage = the number of people with education level in a given year / the mid-year population aged 65 years and older × 100%.

Note 2: For further details, please refer to Appendix 5.

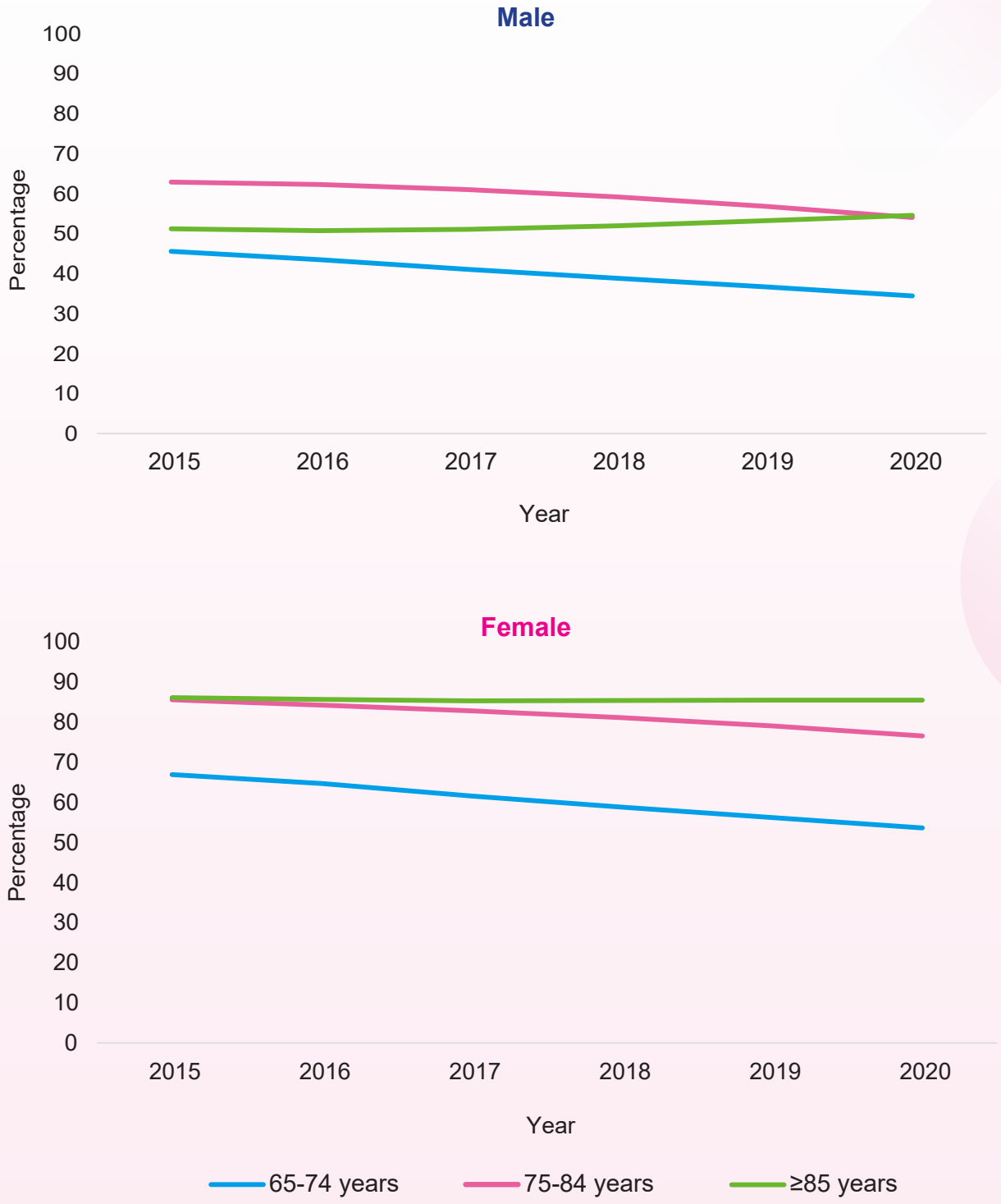


Figure 8 Percentage of population aged 65 years and older with an elementary school or lower level of education from 2015 to 2020.

Source: Department of Household Registration, Ministry of the Interior: https://www.ris.gov.tw/info-popudata/app/awFastDownload/toMain_panel

Note 1: Percentage = the number of people with an elementary school or lower level of education in a given year / the mid-year population aged 65 years and older × 100%.

Note 2: For further details, please refer to Appendix 6.

5. Indigenous population aged 55 years and older

From 2016 to 2020, the percentages of individuals aged 55 years and older increased in both the indigenous population and general population. In the indigenous population, it was 17.8% in 2016 and 20.4% in 2020 (Figure 9).

Among the indigenous ethnic groups, there are 116,985 people aged 55 years and older, of which the Amis are the most (48,287), followed by the Paiwan (21,707) and the Atayal (15,780). The Sakizaya had the highest percentage of individuals aged 55 years and older (34.6%), whereas the Saaroa and Kanakanavu had the lowest percentages of individuals aged 55 years and older (13.4% for both groups) (Figure 10).

No matter which ethnic group, among the population aged 55 years and older, 55-64 age group is the majority, followed by 65-74, then 75-84, and ≥85 age groups is the lowest (Figure 11).

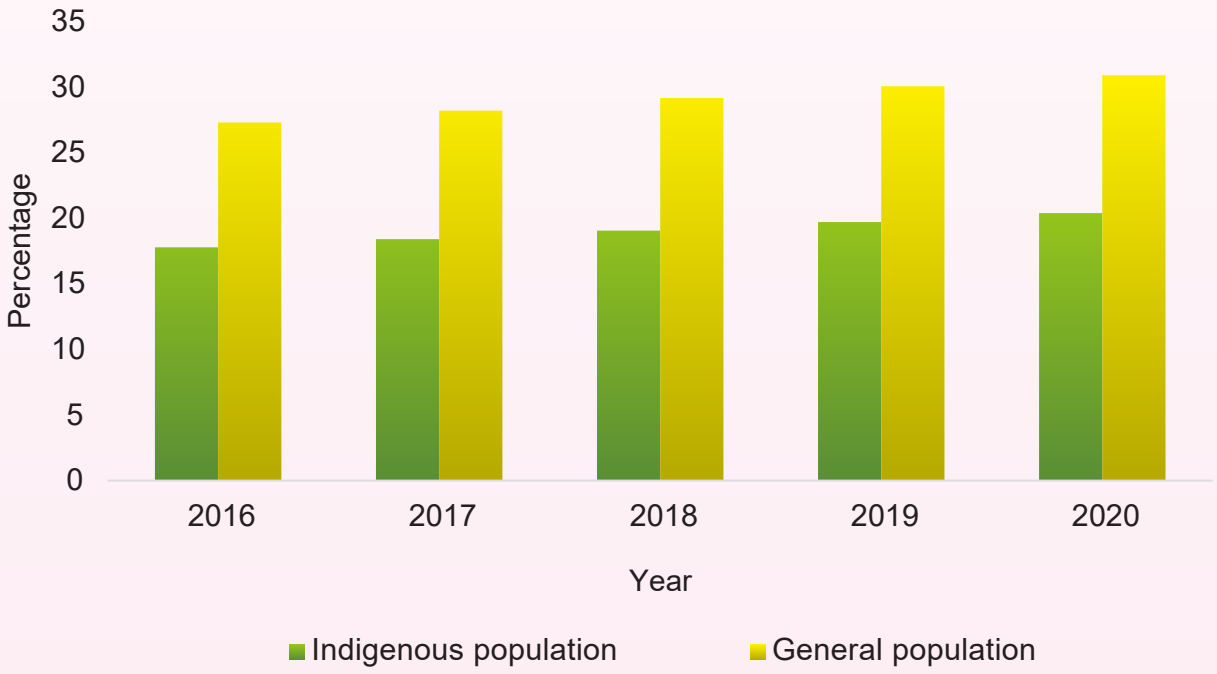


Figure 9 Percentage of indigenous peoples and general population aged 55 years and older from 2016 to 2020.

Source:

1. Council of Indigenous Peoples: https://www.cip.gov.tw/zh-tw/news/data-list/940F9579765AC6A0/index.html?cumid=940F9579765AC6A0
2. Department of Household Registration, Ministry of the Interior: https://www.ris.gov.tw/info-popudata/app/awFastDownload/toMain_panel

Note 1: Percentage = the total indigenous population (general population) aged 55 years and older in a given year / the total mid-year indigenous population (general population) in that given year × 100%.

Note 2: For further details, please refer to Appendix 7.

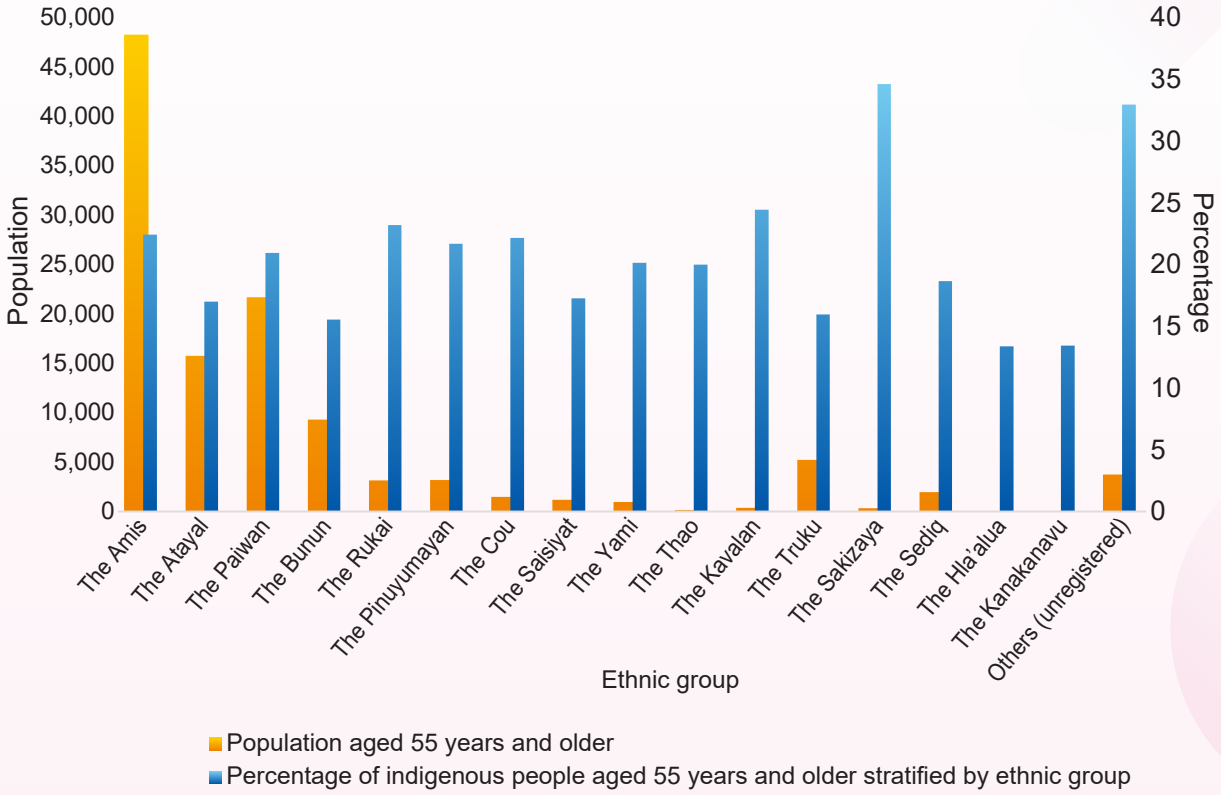


Figure 10 Indigenous population aged 55 years and older by ethnic group in 2020.

Source: Council of Indigenous Peoples:
https://www.cip.gov.tw/zh-tw/news/data-list/940F9579765AC6A0/index.html?cumid=940F9579765AC6A0

Note 1: Percentage = an ethnic population aged 55 years and older / an ethnic population × 100%.

Note 2: For further details, please refer to Appendix 8.

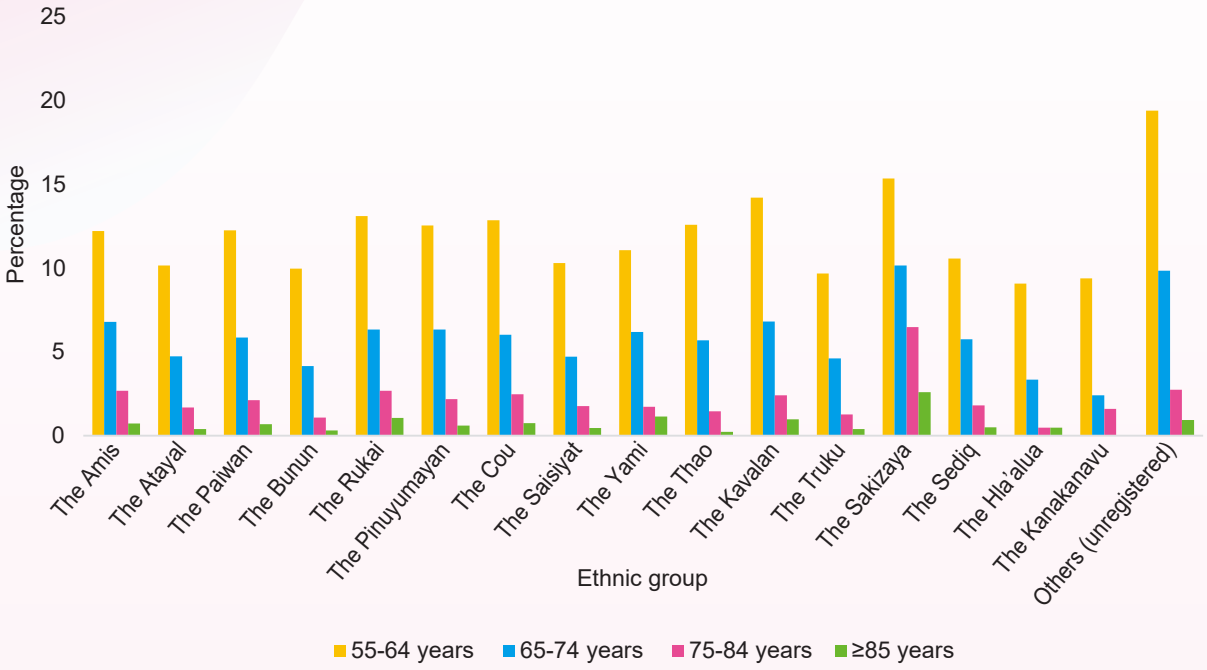


Figure 11 Percentage of individuals aged 55 years and older (stratified by age group) in each ethnic group in 2020.

Source: Council of Indigenous Peoples:
https://www.cip.gov.tw/zh-tw/news/data-list/940F9579765AC6A0/index.html?cumid=940F9579765AC6A0

Note 1: Percentage = an ethnic population in a specific age group / an ethnic population × 100%.

Note 2: For further details, please refer to Appendix 9.

6. Veteran population

From 2011 to 2012, most veterans were in the 75–84 age group followed by the ≥85 and 65–74 age groups. From 2013 to 2015, the number of veterans was the highest in the ≥85 age group followed by the 75–84 and 65–74 age groups. From 2016 to 2020, the number of veterans was the highest in the ≥85 age group followed by the 65–74 and 75–84 age groups (Figure 12). According to gender stratification, the number of male veterans was considerably higher than that of female veterans (Appendix 10).

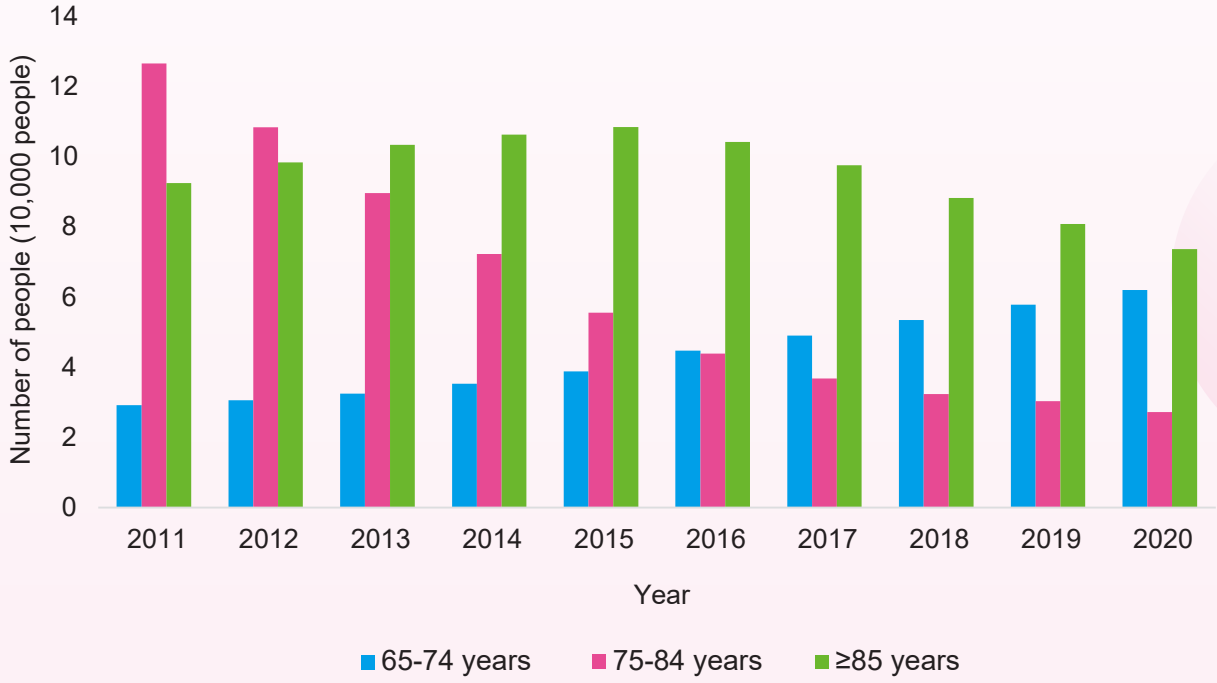


Figure 12 Number of veterans from 2011 to 2020.

Source: Veterans Affairs Council: https://www.vac.gov.tw/cp-2009-2898-1.html
Note: For further details, please refer to Appendix 10.

NOTE

Chapter 2

Economic Status

Economic Status

Economic disadvantage is one of the contributors for health inequality. The economic disadvantages had limited choice of health care. There are two indicators presented in this chapter, the distribution of low or middle-low income and the self-reported monthly allowance.

The number of low-income individual aged 65 years and older increased from 2011 to 2020, even though the magnitude was not huge. The proportion increased from 1.0% to 1.1%, about 0.1% increase. On the other hand, the mid-low-income older people applying for subsistence allowance decreased slightly. The proportion decreased from 4.8% in 2011 to 4.7% in 2020, about 0.1% decrease.

The number of older people employed increased from 197,000 in 2011 to 322,000 in 2020. The proportion of older people employed was 7.9% in 2011 and 8.7% in 2020, about 0.8% increase.

On the other hand, older people reported their average monthly spending was 12,743 NTD in 2017, 13,714 NTD for males and 11,916 NTD for females.

1. Low-income households

The number of individuals aged 65 years and older in low-income households increased year by year from 25,277 in 2011 to 40,891 in 2020 (Figure 13).

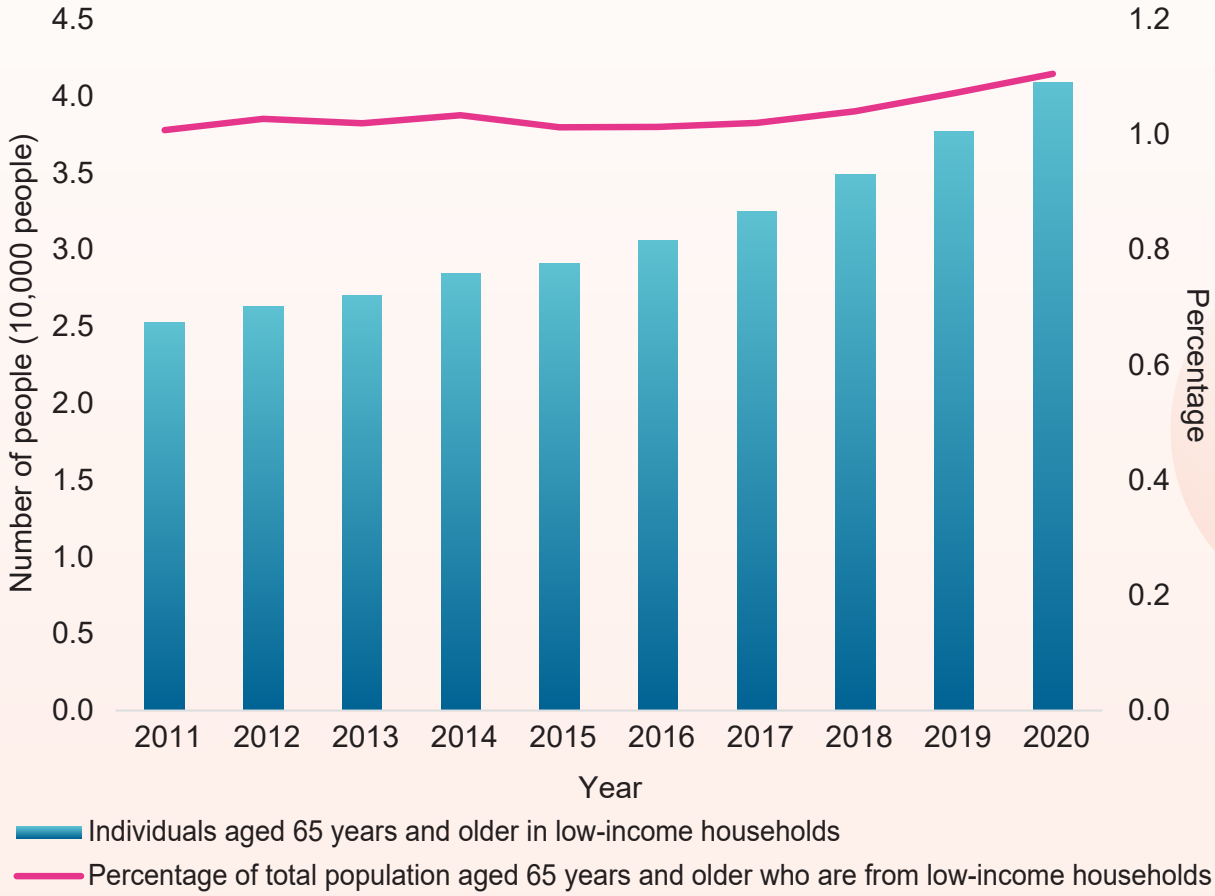


Figure 13 Number and percentage of individuals aged 65 years and older from low-income households from 2011 to 2020.

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/cp-5337-62357-113.html

Note 1: Percentage = the number of individuals aged 65 years and older from low-income households / the mid-year population aged 65 years and older in a given year × 100%.

Note 2: For further details, please refer to Appendix 11.

2. Mid-to low-income older people who received living allowances

In the overall and gender-stratified populations, the number of older people who received living allowances increased year by year from 120,266 in 2011 to 173,011 in 2020 (Figure 14).

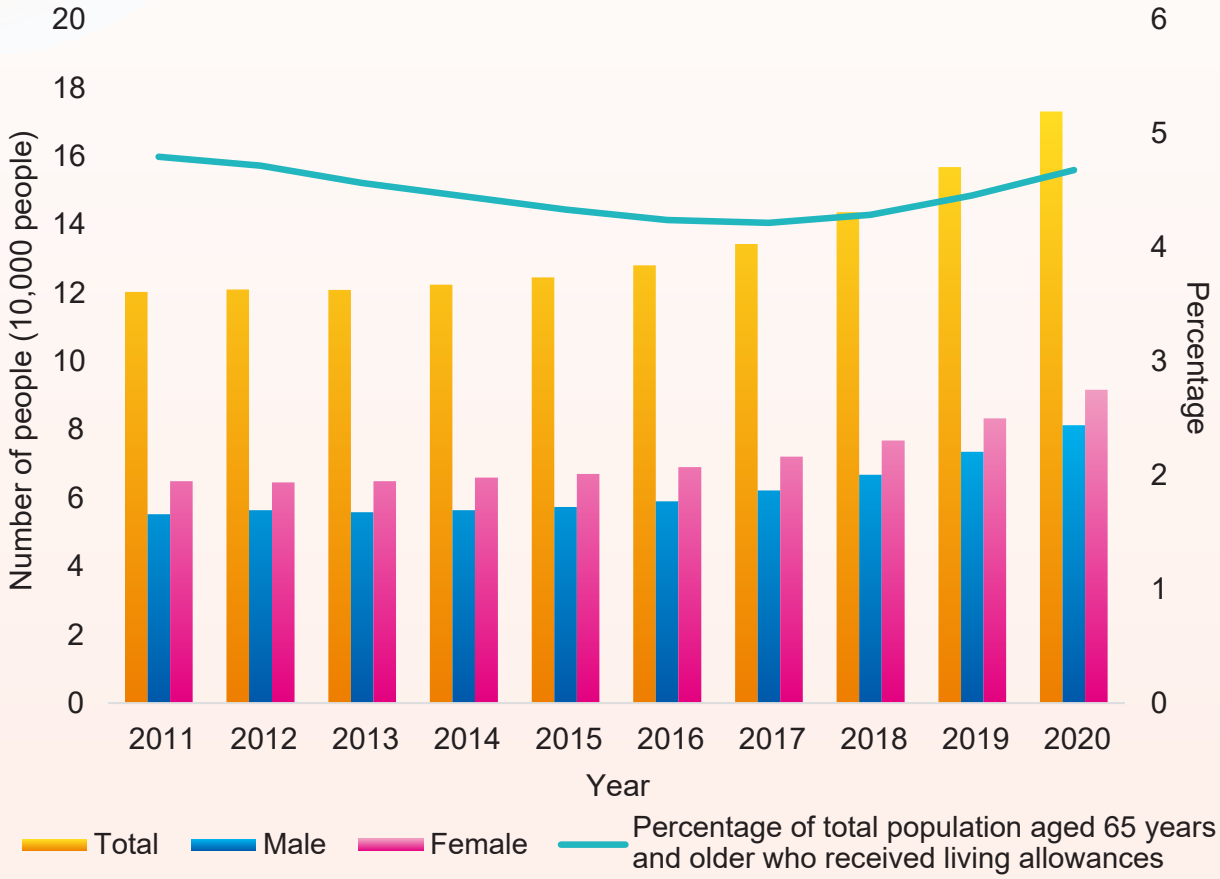


Figure 14 Number and percentage of mid-income and low-income older people who received living allowances from 2011 to 2020.

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/cp-5337-62357-113.html

Note 1: Percentage = the number of people aged 65 years and older who received living allowances / the mid-year population aged 65 years and older in a given year × 100%.

Note 2: For further details, please refer to Appendix 12.

3. The employed

In the overall and gender-stratified populations, the number of employed individuals aged 65 years and older increased year by year from 197,000 in 2011 to 322,000 in 2020 (Figure 15).

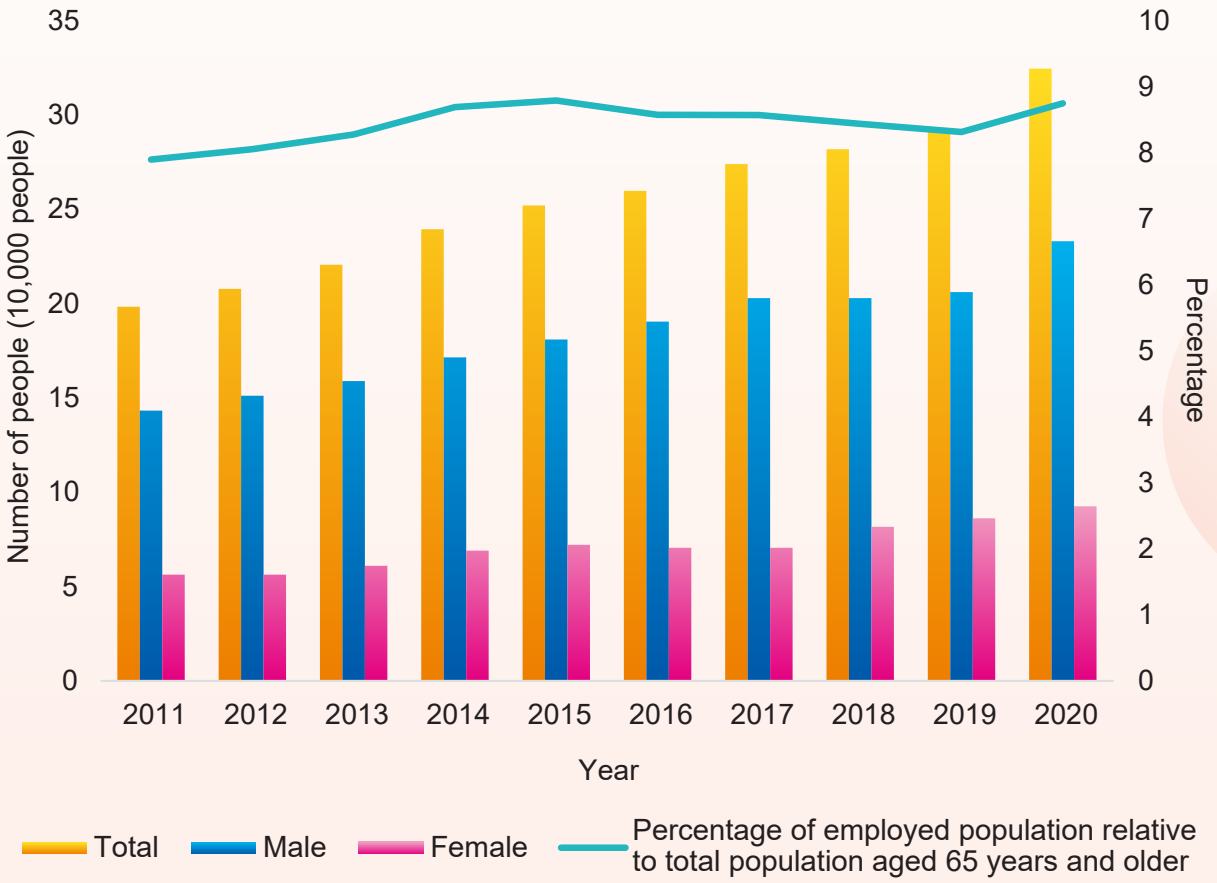


Figure 15 Number and percentage of employed individuals aged 65 years and older from 2011 to 2020.

Source: Yearbook of Manpower Survey Statistics:
https://www.stat.gov.tw/ct.asp?xItem=37200&ctNode=517&mp=4

Note 1: Percentage = the number of employed individuals aged 65 years and older / the mid-year population aged 65 years and older in a given year × 100%.

Note 2: For further details, please refer to Appendix 13.

4. Average monthly spending

In the population aged 65 years and older, those with an average available spending was the highest in 2009 (Total, $13,830; male, $15,407; female, $12,012) and lowest in 2005 (Total, $11,715; male, $13,003; female, $10,160) (Figure 16).

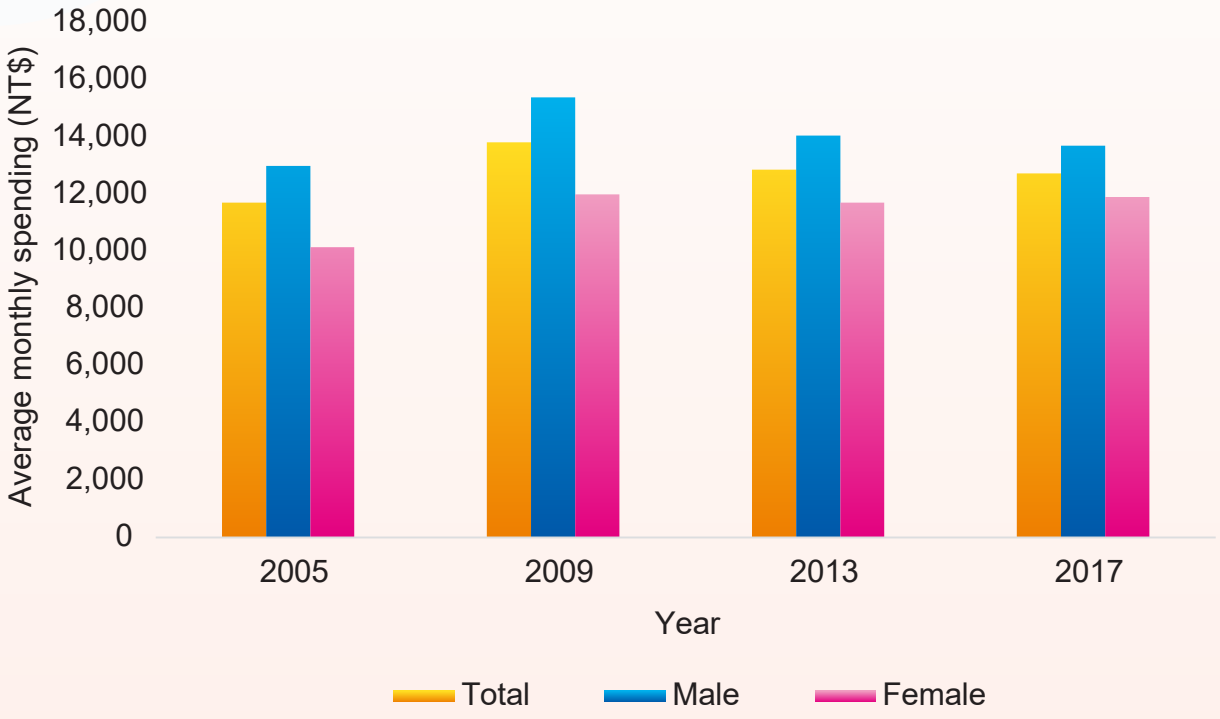


Figure 16 Average monthly spending self-reported by individuals aged 65 years and older from 2005 to 2017.

Source: Senior Citizen Condition Survey: https://dep.mohw.gov.tw/DOS/lp-5095-113.html

Note 1: "Available spending" refers to the amount of money one may spend on food, clothing, housing, transportation, education, and entertainment in a month after deductions for consumer durables and other nonrecurring expenses.

Note 2: For further details, please refer to Appendix 14.

NOTE

NOTE

Chapter 3

Health Status

Health Status

In this chapter, we extracted data from government statistics to extract life expectancy, major causes of death (based on death statistics), and national surveys to estimated mobility, Activities of Daily Living (ADLs), Instrumental Activities of Daily Living (IADLs), depressive symptoms, and self-reported health status.

The overall life expectancy from 0 years was 81.3 years. That was 78.1 and 84.8 years for males and females respectively.

There were 126,881 deaths of those aged 65 and above in 2020. It accounted for 73.3% of total death, a 0.6% increase from previous year. The mortality rate was 3,431.8 per 100,000 population, decreased 5.2% from previous year, and 15.2% from 2016. The ten leading causes of death for the older people were cancer, heart diseases, pneumonia, cerebrovascular diseases, diabetes, hypertension, chronic lower respiratory diseases, nephritis, nephrotic syndrome, and nephropathy, unintentional injuries, and vascular and unspecified dementia. Vascular and unspecified dementia was moving upwards, whereas diabetes and injuries moved to lower position in 2020.

The mobility, ADLs, IADLs, depression symptoms, and self-reported health status were worse in females than males in the same age groups, according to the 2005 to 2017 National Health Interview Survey (NHIS). In 2017, the proportion with mobility problems in those aged 65-74 were 26.3% in males and 42.7% in females. In those aged 75-84, it was 53.1% and 77.1% in males and females, respectively. It reached 82.0% in males and 89.8% in females aged 85 and above. Similar patterns occurred in ADLs and IADLs.

The depressive symptoms were 10.0% in males and 10.2% in females aged 65-74, whereas it was 10.9% in males and 15.2% in females aged 75-84 in 2017. It was 8.8% and 10.6% in males and females aged 85 and above, respectively.

Overall, 43.8% of males and 47.3% of females aged 65 and above reported to have fair self-perceived health. There were 15.8% of males and 19.5% of females reported to have bad self-perceived health. The percentage of having very bad self-perceived health was low, 1.7% and 1.8% in males and females respectively.

1. Life expectancy

The life expectancy at birth of males and females has increased from 2011 to 2020 (Figure 17).

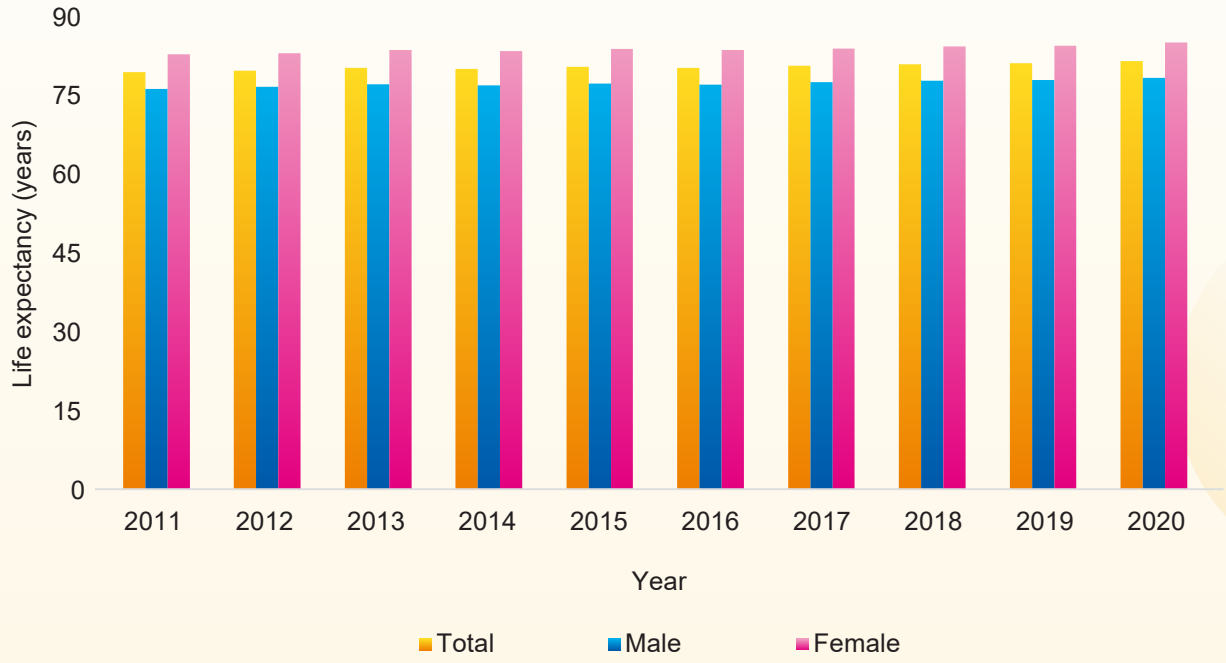


Figure 17 Life expectancy at birth from 2011 to 2020.

Source: Statistical Information Network, Ministry of the Interior: https://statis.moi.gov.tw/micst/stmain.jsp?sys=100

Note 1: Life expectancy at birth refers to the average number of years that an individual is expected to live after reaching age 0.

Note 2: For further details, please refer to Appendix 15.

The life expectancy of males and females at the age of 65 has also been increasing over years from 2011 to 2020 (Figure 18).

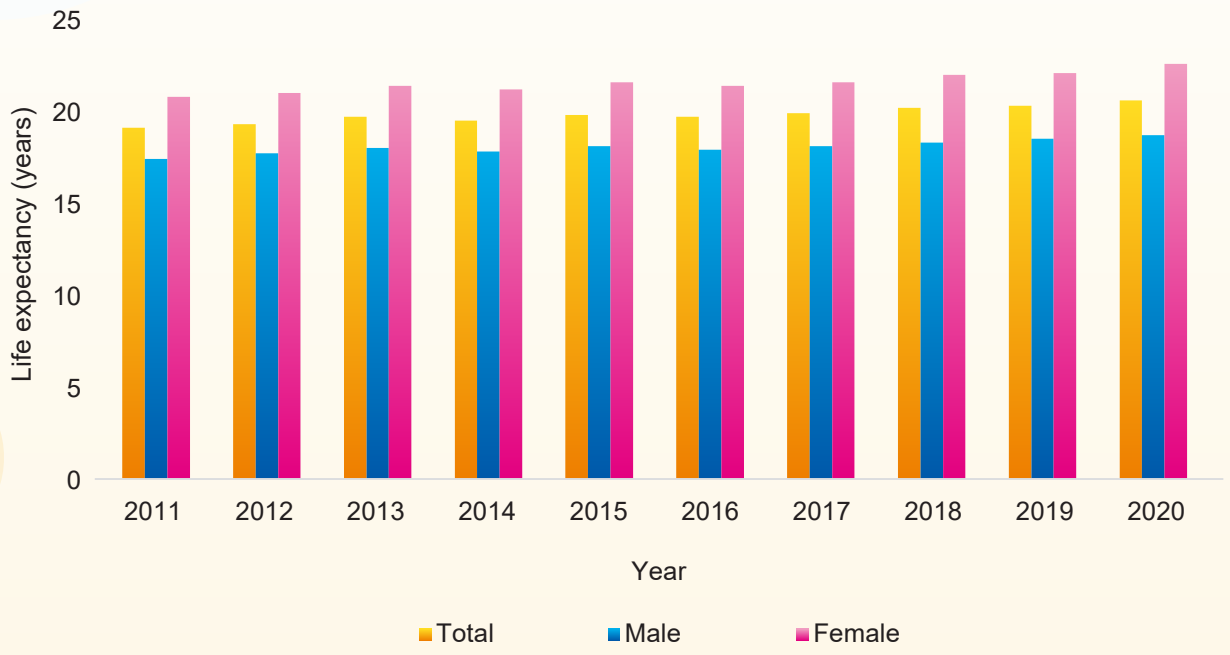


Figure 18 Life expectancy at 65 years from 2011 to 2020.

Source: Statistical Information Network, Ministry of the Interior: https://statis.moi.gov.tw/micst/stmain.jsp?sys=100

Note 1: Life expectancy at age 65 refers to the average number of years that an individual is expected to live after reaching age 65.

Note 2: For further details, please refer to Appendix 16.

2. Top 10 leading causes of death

Table 1 Leading causes of death for population aged 65 years and older from 2016 to 2020.

Unit：Persons

Age	Causes of death	2020	2019	2018	2017	2016
Aged 65 years and older	All causes of death	126,881	127,461	124,768	123,543	122,256
	Cancer	32,388	31,750	30,466	29,790	29,220
	Diseases of heart (except hypertensive diseases)	15,805	15,304	16,737	15,951	15,856
	Pneumonia	12,555	13,936	12,257	11,365	10,997
	Cerebrovascular diseases	9,388	9,702	9,164	9,360	9,422
	Diabetes	8,372	7,997	7,590	7,969	7,917
	Hypertension	5,624	5,260	5,052	5,072	4,892
	Chronic lower respiratory diseases	5,239	5,850	5,721	5,821	6,300
	Nephritis, nephrotic syndrome, and nephropathy	4,359	4,311	4,666	4,588	4,373
	Unintentional injuries	3,269	3,190	3,141	3,145	3,072
	Vascular and unspecified dementia	2,842	2,592	1,492	1,701	1,607
65-74 years	All causes of death	31,514	30,859	29,569	28,841	28,006
	Cancer	12,614	12,032	11,460	10,846	10,593
	Diseases of heart (except hypertensive diseases)	3,346	3,238	3,406	3,314	3,112
	Diabetes	2,108	2,136	1,922	2,097	2,023
	Cerebrovascular diseases	2,030	1,986	1,927	1,860	1,877
	Pneumonia	1,609	1,725	1,415	1,354	1,316
	Unintentional injuries	1,276	1,134	1,111	1,141	1,038
	Hypertension	948	851	714	748	767
	Nephritis, nephrotic syndrome, and nephropathy	892	868	993	985	903
	Chronic lower respiratory diseases	733	820	766	738	813
	Chronic liver disease and cirrhosis	655	699	691	733	739

Continued Table 1 Leading causes of death for population aged 65 years and older from 2016 to 2020.

Unit：Persons

Age	Causes of death	2020	2019	2018	2017	2016
75-84 years	All causes of death	43,358	44,287	44,835	44,922	46,218
	Cancer	11,958	12,178	11,897	11,837	12,013
	Diseases of heart (except hypertensive diseases)	5,008	4,939	5,659	5,519	5,797
	Pneumonia	3,798	4,250	3,780	3,615	3,511
	Cerebrovascular diseases	3,472	3,564	3,432	3,696	3,806
	Diabetes	3,268	3,125	3,075	3,236	3,334
	Chronic lower respiratory diseases	1,807	2,007	2,026	2,015	2,373
	Hypertension	1,670	1,609	1,663	1,629	1,687
	Nephritis, nephrotic syndrome, and nephropathy	1,578	1,548	1,764	1,754	1,738
	Unintentional injuries	1,193	1,241	1,215	1,194	1,270
	Vascular and unspecified dementia	715	654	385	423	422
Aged 85 years and older	All causes of death	52,009	52,315	50,364	49,780	48,032
	Cancer	7,816	7,540	7,109	7,107	6,614
	Diseases of heart (except hypertensive diseases)	7,451	7,127	7,672	7,118	6,947
	Pneumonia	7,148	7,961	7,062	6,396	6,170
	Cerebrovascular diseases	3,886	4,152	3,805	3,804	3,739
	Hypertension	3,006	2,800	2,675	2,695	2,438
	Diabetes	2,996	2,736	2,593	2,636	2,560
	Chronic lower respiratory diseases	2,699	3,023	2,929	3,068	3,114
	Vascular and unspecified dementia	1,957	1,789	1,028	1,199	1,132
	Nephritis, nephrotic syndrome, and nephropathy	1,889	1,895	1,909	1,849	1,732
	Senility	1,827	1,627	1,153	1,201	1,122

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/lp-5069-113.html

Note: The order of the causes of death in this table is based on the ranking of the crude death rate in 2020.

Table 2 Leading causes of death for males aged 65 years and older from 2016 to 2020.

Unit：Persons

Age	Causes of death	2020	2019	2018	2017	2016
Aged 65 years and older	All causes of death	69,173	69,322	68,439	67,755	67,605
	Cancer	19,178	18,776	18,014	17,716	17,345
	Diseases of heart (except hypertensive diseases)	8,135	7,769	8,738	8,343	8,313
	Pneumonia	7,312	7,989	7,123	6,708	6,551
	Cerebrovascular diseases	5,135	5,171	5,041	5,123	5,153
	Diabetes	3,872	3,633	3,429	3,597	3,620
	Chronic lower respiratory diseases	3,768	4,201	4,147	4,143	4,564
	Hypertension	2,533	2,335	2,326	2,326	2,313
	Unintentional injuries	2,070	1,995	1,947	1,944	1,938
	Nephritis, nephrotic syndrome, and nephropathy	2,065	2,082	2,211	2,147	2,075
	Vascular and unspecified dementia	1,236	1,163	663	759	725
65-74 years	All causes of death	20,270	19,735	18,742	18,248	17,623
	Cancer	8,006	7,619	7,198	6,841	6,565
	Diseases of heart (except hypertensive diseases)	2,256	2,176	2,245	2,183	2,028
	Cerebrovascular diseases	1,375	1,321	1,302	1,267	1,260
	Diabetes	1,276	1,255	1,092	1,181	1,139
	Pneumonia	1,124	1,223	972	959	934
	Unintentional injuries	831	743	737	739	681
	Hypertension	614	531	425	456	480
	Chronic lower respiratory diseases	574	640	587	586	640
	Nephritis, nephrotic syndrome, and nephropathy	497	495	533	516	478
	Chronic liver disease and cirrhosis	408	428	407	431	431

Continued Table 2 Leading causes of death for males aged 65 years and older from 2016 to 2020.

Unit：Persons

Age	Causes of death	2020	2019	2018	2017	2016
75-84 years	All causes of death	23,605	23,933	24,397	24,458	25,371
	Cancer	6,829	6,933	6,779	6,813	6,914
	Diseases of heart (except hypertensive diseases)	2,586	2,533	2,904	2,902	3,068
	Pneumonia	2,293	2,497	2,252	2,166	2,112
	Cerebrovascular diseases	1,914	1,900	1,886	1,979	2,106
	Diabetes	1,453	1,337	1,341	1,398	1,452
	Chronic lower respiratory diseases	1,321	1,499	1,520	1,476	1,768
	Unintentional injuries	759	774	738	738	810
	Hypertension	748	716	800	775	786
	Nephritis, nephrotic syndrome, and nephropathy	736	727	819	809	789
	Vascular and unspecified dementia	302	308	180	197	196
Aged 85 years and older	All causes of death	25,298	25,654	25,300	25,049	24,611
	Cancer	4,343	4,224	4,037	4,062	3,866
	Pneumonia	3,895	4,269	3,899	3,583	3,505
	Diseases of heart (except hypertensive diseases)	3,293	3,060	3,589	3,258	3,217
	Chronic lower respiratory diseases	1,873	2,062	2,040	2,081	2,156
	Cerebrovascular diseases	1,846	1,950	1,853	1,877	1,787
	Hypertension	1,171	1,088	1,101	1,095	1,047
	Diabetes	1,143	1,041	996	1,018	1,029
	Vascular and unspecified dementia	843	770	432	513	492
	Nephritis, nephrotic syndrome, and nephropathy	832	860	859	822	808
	Senility	753	689	467	475	472

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/lp-5069-113.html

Note: The order of the causes of death in this table is based on the ranking of the crude death rate in 2020.

Table 3 Leading causes of death for females aged 65 years and older from 2016 to 2020.

Unit：Persons

Age	Causes of death	2020	2019	2018	2017	2016
Aged 65 years and older	All causes of death	57,708	58,139	56,329	55,788	54,651
	Cancer	13,210	12,974	12,452	12,074	11,875
	Diseases of heart (except hypertensive diseases)	7,670	7,535	7,999	7,608	7,543
	Pneumonia	5,243	5,947	5,134	4,657	4,446
	Diabetes	4,500	4,364	4,161	4,372	4,297
	Cerebrovascular diseases	4,253	4,531	4,123	4,237	4,269
	Hypertension	3,091	2,925	2,726	2,746	2,579
	Nephritis, nephrotic syndrome, and nephropathy	2,294	2,229	2,455	2,441	2,298
	Vascular and unspecified dementia	1,606	1,429	829	942	882
	Chronic lower respiratory diseases	1,471	1,649	1,574	1,678	1,736
	Senility	1,317	1,180	850	890	838
65-74 years	All causes of death	11,244	11,124	10,827	10,593	10,383
	Cancer	4,608	4,413	4,262	4,005	4,028
	Diseases of heart (except hypertensive diseases)	1,090	1,062	1,161	1,131	1,084
	Diabetes	832	881	830	916	884
	Cerebrovascular diseases	655	665	625	593	617
	Pneumonia	485	502	443	395	382
	Unintentional injuries	445	391	374	402	357
	Nephritis, nephrotic syndrome, and nephropathy	395	373	460	469	425
	Hypertension	334	320	289	292	287
	Chronic liver disease and cirrhosis	247	271	284	302	308
	Intentional self-harm (suicide)	173	167	169	158	155

Continued Table 3 Leading causes of death for females aged 65 years and older from 2016 to 2020.

Unit：Persons

Age	Causes of death	2020	2019	2018	2017	2016
75-84 years	All causes of death	19,753	20,354	20,438	20,464	20,847
	Cancer	5,129	5,245	5,118	5,024	5,099
	Diseases of heart (except hypertensive diseases)	2,422	2,406	2,755	2,617	2,729
	Diabetes	1,815	1,788	1,734	1,838	1,882
	Cerebrovascular diseases	1,558	1,664	1,546	1,717	1,700
	Pneumonia	1,505	1,753	1,528	1,449	1,399
	Hypertension	922	893	863	854	901
	Nephritis, nephrotic syndrome, and nephropathy	842	821	945	945	949
	Chronic lower respiratory diseases	486	508	506	539	605
	Unintentional injuries	434	467	477	456	460
	Vascular and unspecified dementia	413	346	205	226	226
Aged 85 years and older	All causes of death	26,711	26,661	25,064	24,731	23,421
	Diseases of heart (except hypertensive diseases)	4,158	4,067	4,083	3,860	3,730
	Cancer	3,473	3,316	3,072	3,045	2,748
	Pneumonia	3,253	3,692	3,163	2,813	2,665
	Cerebrovascular diseases	2,040	2,202	1,952	1,927	1,952
	Diabetes	1,853	1,695	1,597	1,618	1,531
	Hypertension	1,835	1,712	1,574	1,600	1,391
	Vascular and unspecified dementia	1,114	1,019	596	686	640
	Senility	1,074	938	686	726	650
	Nephritis, nephrotic syndrome, and nephropathy	1,057	1,035	1,050	1,027	924
	Chronic lower respiratory diseases	826	961	889	987	958

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/lp-5069-113.html
Note: The order of the causes of death in this table is based on the ranking of the crude death rate in 2020.

The top 10 causes of death for population aged 65 years and older in 2020, ranked by the crude death rate, were: cancer (876.0 per 100,000 population), diseases of heart (427.5), pneumonia (339.6), cerebrovascular diseases (253.9), diabetes (226.4), hypertension (152.1), chronic lower respiratory diseases (141.7), nephritis, nephrotic syndrome, and nephropathy (117.9), unintentional injuries (88.4), vascular and unspecified dementia (76.9). The top 3 causes of crude death rate in 5 years for population aged 65 years and older cancer, diseases of heart and pneumonia showed a decrease of 9.4%, 18.5% and 6.7%, respectively from 2016 to 2020 (Table 4).

The top 10 causes of death for males aged 65 years and older in 2020, ranked by the crude death rate, were: cancer (1,136.9 per 100,000 population), diseases of heart (482.3), pneumonia (433.5), cerebrovascular diseases (304.4), diabetes (229.5), chronic lower respiratory diseases (223.4), hypertension (150.2), unintentional injuries (122.7), nephritis, nephrotic syndrome, and nephropathy (122.4), and vascular and unspecified dementia (73.3) (Table 5).

The top 10 causes of death for females aged 65 years and older in 2020, ranked by the crude death rate, were: cancer (657.1 per 100,000 population), diseases of heart (381.5), pneumonia (260.8), diabetes (223.8), cerebrovascular diseases (211.5), hypertension (153.7), nephritis, nephrotic syndrome, and nephropathy (114.1), vascular and unspecified dementia (79.9), chronic lower respiratory diseases (73.2), and senility (65.5) (Table 6).

In 5 years, the changes in crude death rate for the top three causes of death, for population aged 65 years and older remained the same from 2016 to 2020. Cancer, diseases of heart and pneumonia decreased in males (8.4%, 19.0% and 7.6%, respectively) and females (10.0%, 17.8% and 4.6%, respectively) comparing to those in 2016 (Table 4-Table 6).

Table 4 Crude death rates of leading causes of death for population aged 65 years and older from 2016 to 2020.

Unit：Per 100,000 pop.

Age	Causes of death	2020	2019	2018	2017	2016
Aged 65 years and older	All causes of death	3,431.8	3,620.7	3,723.6	3,876.4	4,045.1
	Cancer	876.0	901.9	909.2	934.7	966.8
	Diseases of heart (except hypertensive diseases)	427.5	434.7	499.5	500.5	524.6
	Pneumonia	339.6	395.9	365.8	356.6	363.9
	Cerebrovascular diseases	253.9	275.6	273.5	293.7	311.7
	Diabetes	226.4	227.2	226.5	250.0	261.9
	Hypertension	152.1	149.4	150.8	159.1	161.9
	Chronic lower respiratory diseases	141.7	166.2	170.7	182.6	208.4
	Nephritis, nephrotic syndrome, and nephropathy	117.9	122.5	139.3	144.0	144.7
	Unintentional injuries	88.4	90.6	93.7	98.7	101.6
	Vascular and unspecified dementia	76.9	73.6	44.5	53.4	53.2
65-74 years	All causes of death	1,392.0	1,463.3	1,498.4	1,562.8	1,631.2
	Cancer	557.2	570.5	580.7	587.7	617.0
	Diseases of heart (except hypertensive diseases)	147.8	153.5	172.6	179.6	181.3
	Diabetes	93.1	101.3	97.4	113.6	117.8
	Cerebrovascular diseases	89.7	94.2	97.6	100.8	109.3
	Pneumonia	71.1	81.8	71.7	73.4	76.7
	Unintentional injuries	56.4	53.8	56.3	61.8	60.5
	Hypertension	41.9	40.4	36.2	40.5	44.7
	Nephritis, nephrotic syndrome, and nephropathy	39.4	41.2	50.3	53.4	52.6
	Chronic lower respiratory diseases	32.4	38.9	38.8	40.0	47.4
	Chronic liver disease and cirrhosis	28.9	33.1	35.0	39.7	43.0

Continued Table 4 Crude death rates of leading causes of death for population aged 65 years and older from 2016 to 2020.

Unit：Per 100,000 pop.

Age	Causes of death	2020	2019	2018	2017	2016
75-84 years	All causes of death	4,188.8	4,316.9	4,469.7	4,588.2	4,831.0
	Cancer	1,155.3	1,187.1	1,186.0	1,209.0	1,255.7
	Diseases of heart (except hypertensive diseases)	483.8	481.4	564.2	563.7	605.9
	Pneumonia	366.9	414.3	376.8	369.2	367.0
	Cerebrovascular diseases	335.4	347.4	342.1	377.5	397.8
	Diabetes	315.7	304.6	306.6	330.5	348.5
	Chronic lower respiratory diseases	174.6	195.6	202.0	205.8	248.0
	Hypertension	161.3	156.8	165.8	166.4	176.3
	Nephritis, nephrotic syndrome, and nephropathy	152.5	150.9	175.9	179.2	181.7
	Unintentional injuries	115.3	121.0	121.1	122.0	132.7
	Vascular and unspecified dementia	69.1	63.7	38.4	43.2	44.1
Aged 85 years and older	All causes of death	13,060.9	13,569.9	13,455.4	13,729.7	13,771.6
	Cancer	1,962.8	1,955.8	1,899.3	1,960.2	1,896.3
	Diseases of heart (except hypertensive diseases)	1,871.2	1,848.7	2,049.7	1,963.2	1,991.8
	Pneumonia	1,795.1	2,065.0	1,886.7	1,764.1	1,769.0
	Cerebrovascular diseases	975.9	1,077.0	1,016.6	1,049.2	1,072.0
	Hypertension	754.9	726.3	714.7	743.3	699.0
	Diabetes	752.4	709.7	692.8	727.0	734.0
	Chronic lower respiratory diseases	677.8	784.1	782.5	846.2	892.8
	Vascular and unspecified dementia	491.5	464.0	274.6	330.7	324.6
	Nephritis, nephrotic syndrome, and nephropathy	474.4	491.5	510.0	510.0	496.6
	Senility	458.8	422.0	308.0	331.2	321.7

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/lp-5069-113.html

Note 1: The order of the causes of death in this table is based on the ranking of the crude death rate in 2020.

Note 2: Crude death rate = the number of deaths for each cause of death / the mid-year population × 100,000.

Table 5 Crude death rates of leading causes of death for males aged 65 years and older from 2016 to 2020.

Unit：Per 100,000 pop.

Age	Causes of death	2020	2019	2018	2017	2016
Aged 65 years and older	All causes of death	4,100.8	4,305.8	4,452.1	4,618.4	4,840.1
	Cancer	1,136.9	1,166.2	1,171.9	1,207.6	1,241.8
	Diseases of heart (except hypertensive diseases)	482.3	482.6	568.4	568.7	595.2
	Pneumonia	433.5	496.2	463.4	457.2	469.0
	Cerebrovascular diseases	304.4	321.2	327.9	349.2	368.9
	Diabetes	229.5	225.7	223.1	245.2	259.2
	Chronic lower respiratory diseases	223.4	260.9	269.8	282.4	326.8
	Hypertension	150.2	145.0	151.3	158.5	165.6
	Unintentional injuries	122.7	123.9	126.7	132.5	138.7
	Nephritis, nephrotic syndrome, and nephropathy	122.4	129.3	143.8	146.3	148.6
	Vascular and unspecified dementia	73.3	72.2	43.1	51.7	51.9
65-74 years	All causes of death	1,898.3	1,983.0	2,011.1	2,093.7	2,173.6
	Cancer	749.8	765.6	772.4	784.9	809.7
	Diseases of heart (except hypertensive diseases)	211.3	218.6	240.9	250.5	250.1
	Cerebrovascular diseases	128.8	132.7	139.7	145.4	155.4
	Diabetes	119.5	126.1	117.2	135.5	140.5
	Pneumonia	105.3	122.9	104.3	110.0	115.2
	Unintentional injuries	77.8	74.7	79.1	84.8	84.0
	Hypertension	57.5	53.4	45.6	52.3	59.2
	Chronic lower respiratory diseases	53.8	64.3	63.0	67.2	78.9
	Nephritis, nephrotic syndrome, and nephropathy	46.5	49.7	57.2	59.2	59.0
	Chronic liver disease and cirrhosis	38.2	43.0	43.7	49.5	53.2

Continued Table 5 Crude death rates of leading causes of death for males aged 65 years and older from 2016 to 2020.

Unit：Per 100,000 pop.

Age	Causes of death	2020	2019	2018	2017	2016
75-84 years	All causes of death	5,261.8	5,379.2	5,597.8	5,719.8	6,018.6
	Cancer	1,522.3	1,558.3	1,555.4	1,593.3	1,640.2
	Diseases of heart (except hypertensive diseases)	576.4	569.3	666.3	678.7	727.8
	Pneumonia	511.1	561.2	516.7	506.5	501.0
	Cerebrovascular diseases	426.6	427.0	432.7	462.8	499.6
	Diabetes	323.9	300.5	307.7	326.9	344.5
	Chronic lower respiratory diseases	294.5	336.9	348.8	345.2	419.4
	Unintentional injuries	169.2	174.0	169.3	172.6	192.2
	Hypertension	166.7	160.9	183.6	181.2	186.5
	Nephritis, nephrotic syndrome, and nephropathy	164.1	163.4	187.9	189.2	187.2
	Vascular and unspecified dementia	67.3	69.2	41.3	46.1	46.5
Aged 85 years and older	All causes of death	14,847.2	15,102.8	14,930.5	14,918.9	14,964.3
	Cancer	2,548.9	2,486.7	2,382.4	2,419.3	2,350.7
	Pneumonia	2,285.9	2,513.2	2,301.0	2,134.0	2,131.2
	Diseases of heart (except hypertensive diseases)	1,932.6	1,801.5	2,118.0	1,940.4	1,956.0
	Chronic lower respiratory diseases	1,099.2	1,213.9	1,203.9	1,239.4	1,310.9
	Cerebrovascular diseases	1,083.4	1,148.0	1,093.5	1,117.9	1,086.6
	Hypertension	687.3	640.5	649.7	652.2	636.6
	Diabetes	670.8	612.9	587.8	606.3	625.7
	Vascular and unspecified dementia	494.8	453.3	254.9	305.5	299.2
	Nephritis, nephrotic syndrome, and nephropathy	488.3	506.3	506.9	489.6	491.3
	Senility	441.9	405.6	275.6	282.9	287.0

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/lp-5069-113.html

Note 1: The order of the causes of death in this table is based on the ranking of the crude death rate in 2020.

Note 2: Crude death rate = the number of deaths for each cause of death / the mid-year population × 100,000.

Table 6 Crude death rates of leading causes of death for females aged 65 years and older from 2016 to 2020.

Unit：Per 100,000 pop.

Age	Causes of death	2020	2019	2018	2017	2016
Aged 65 years and older	All causes of death	2,870.4	3,043.4	3,106.0	3,243.5	3,362.0
	Cancer	657.1	679.1	686.6	702.0	730.5
	Diseases of heart (except hypertensive diseases)	381.5	394.4	441.1	442.3	464.0
	Pneumonia	260.8	311.3	283.1	270.8	273.5
	Diabetes	223.8	228.4	229.4	254.2	264.3
	Cerebrovascular diseases	211.5	237.2	227.3	246.3	262.6
	Hypertension	153.7	153.1	150.3	159.7	158.7
	Nephritis, nephrotic syndrome, and nephropathy	114.1	116.7	135.4	141.9	141.4
	Vascular and unspecified dementia	79.9	74.8	45.7	54.8	54.3
	Chronic lower respiratory diseases	73.2	86.3	86.8	97.6	106.8
	Senility	65.5	61.8	46.9	51.7	51.6
65-74 years	All causes of death	940.0	998.8	1,039.6	1,087.7	1,145.9
	Cancer	385.2	396.2	409.2	411.2	444.5
	Diseases of heart (except hypertensive diseases)	91.1	95.4	111.5	116.1	119.6
	Diabetes	69.6	79.1	79.7	94.1	97.6
	Cerebrovascular diseases	54.8	59.7	60.0	60.9	68.1
	Pneumonia	40.5	45.1	42.5	40.6	42.2
	Unintentional injuries	37.2	35.1	35.9	41.3	39.4
	Nephritis, nephrotic syndrome, and nephropathy	33.0	33.5	44.2	48.2	46.9
	Hypertension	27.9	28.7	27.7	30.0	31.7
	Chronic liver disease and cirrhosis	20.6	24.3	27.3	31.0	34.0
	Intentional self-harm (suicide)	14.5	15.0	16.2	16.2	17.1

Continued Table 6 Crude death rates of leading causes of death for females aged 65 years and older from 2016 to 2020.

Unit：Per 100,000 pop.

Age	Causes of death	2020	2019	2018	2017	2016
75-84 years	All causes of death	3,368.1	3,503.4	3,603.0	3,710.9	3,895.4
	Cancer	874.6	902.8	902.2	911.0	952.8
	Diseases of heart (except hypertensive diseases)	413.0	414.1	485.7	474.6	509.9
	Diabetes	309.5	307.8	305.7	333.3	351.7
	Cerebrovascular diseases	265.7	286.4	272.5	311.4	317.7
	Pneumonia	256.6	301.7	269.4	262.8	261.4
	Hypertension	157.2	153.7	152.1	154.9	168.4
	Nephritis, nephrotic syndrome, and nephropathy	143.6	141.3	166.6	171.4	177.3
	Chronic lower respiratory diseases	82.9	87.4	89.2	97.7	113.0
	Unintentional injuries	74.0	80.4	84.1	82.7	86.0
	Vascular and unspecified dementia	70.4	59.6	36.1	41.0	42.2
Aged 85 years and older	All causes of death	11,724.9	12,362.5	12,235.2	12,704.1	12,707.3
	Diseases of heart (except hypertensive diseases)	1,825.2	1,885.8	1,993.2	1,982.8	2,023.7
	Cancer	1,524.5	1,537.6	1,499.6	1,564.2	1,491.0
	Pneumonia	1,427.9	1,712.0	1,544.0	1,445.0	1,445.9
	Cerebrovascular diseases	895.5	1,021.1	952.9	989.9	1,059.1
	Diabetes	813.4	786.0	779.6	831.2	830.7
	Hypertension	805.5	793.8	768.4	821.9	754.7
	Vascular and unspecified dementia	489.0	472.5	290.9	352.4	347.2
	Senility	471.4	434.9	334.9	372.9	352.7
	Nephritis, nephrotic syndrome, and nephropathy	464.0	479.9	512.6	527.6	501.3
	Chronic lower respiratory diseases	362.6	445.6	434.0	507.0	519.8

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/lp-5069-113.html

Note 1: The order of the causes of death in this table is based on the ranking of the crude death rate in 2020.

Note 2: Crude death rate = the number of deaths for each cause of death / the mid-year population × 100,000.

3. Top 10 leading cancer causes of death

Table 7 Leading cancer causes of death for population aged 65 years and older from 2016 to 2020.

Unit：Persons

Age	Cancer causes of death	2020	2019	2018	2017	2016
Aged 65 years and older	All cancer causes of death	32,388	31,750	30,466	29,790	29,220
	Cancers of trachea, bronchus and lung	6,814	6,758	6,561	6,488	6,511
	Cancers of liver and intrahepatic bile ducts	5,280	5,277	5,423	5,409	5,301
	Cancers of colon, rectum and anus	4,540	4,536	4,072	3,963	3,859
	Cancer of prostate	1,625	1,439	1,284	1,295	1,260
	Female breast cancer	1,136	1,073	925	839	790
	Cancer of stomach	1,698	1,681	1,577	1,602	1,577
	Cancer of pancreas	1,669	1,658	1,513	1,375	1,306
	Cancer of oral cavity	1,318	1,274	1,021	970	935
	Non-Hodgkin's lymphoma	975	931	829	812	825
	Cancer of bladder	918	940	851	831	728
65-74 years	All cancer causes of death	12,614	12,032	11,460	10,846	10,593
	Cancers of trachea, bronchus and lung	2,682	2,598	2,441	2,358	2,353
	Cancers of liver and intrahepatic bile ducts	2,141	2,208	2,186	2,201	2,141
	Cancers of colon, rectum and anus	1,482	1,383	1,276	1,164	1,125
	Female breast cancer	564	511	481	410	414
	Cancer of oral cavity	809	738	585	554	521
	Cancer of pancreas	723	683	623	563	550
	Cancer of prostate	310	271	258	279	214
	Cancer of stomach	570	518	474	448	444
	Cancer of esophagus	449	423	387	346	303
	Non-Hodgkin's lymphoma	339	338	274	257	268

Continued Table 7 Leading cancer causes of death for population aged 65 years and older from 2016 to 2020.

Unit：Persons

Age	Cancer causes of death	2020	2019	2018	2017	2016
75-84 years	All cancer causes of death	11,958	12,178	11,897	11,837	12,013
	Cancers of trachea, bronchus and lung	2,620	2,706	2,627	2,693	2,779
	Cancers of liver and intrahepatic bile ducts	2,094	2,080	2,248	2,241	2,246
	Cancers of colon, rectum and anus	1,627	1,748	1,610	1,541	1,630
	Cancer of prostate	631	553	527	507	573
	Female breast cancer	363	392	320	281	276
	Cancer of pancreas	635	646	578	518	506
	Cancer of stomach	583	633	600	638	610
	Non-Hodgkin's lymphoma	394	365	347	355	351
	Cancer of oral cavity	385	378	307	307	308
	Cancer of bladder	359	394	337	343	289
Aged 85 years and older	All cancer causes of death	7,816	7,540	7,109	7,107	6,614
	Cancer of prostate	684	615	499	509	473
	Cancers of trachea, bronchus and lung	1,512	1,454	1,493	1,437	1,379
	Cancers of colon, rectum and anus	1,431	1,405	1,186	1,258	1,104
	Cancers of liver and intrahepatic bile ducts	1,045	989	989	967	914
	Cancer of stomach	545	530	503	516	523
	Female breast cancer	209	170	124	148	100
	Cancer of bladder	313	328	305	301	255
	Cancer of pancreas	311	329	312	294	250
	Non-Hodgkin's lymphoma	242	228	208	200	206
	Leukemia	192	149	148	128	140

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/lp-5069-113.html

Note: The order of the causes of death in this table is based on the ranking of the crude death rate in 2020.

Table 8 Leading cancer causes of death for males aged 65 years and older from 2016 to 2020.

Unit：Persons

Age	Cancer causes of death	2020	2019	2018	2017	2016
Aged 65 years and older	All cancer causes of death	19,178	18,776	18,014	17,716	17,345
	Cancers of trachea, bronchus and lung	4,263	4,264	4,156	4,099	4,175
	Cancers of liver and intrahepatic bile ducts	3,232	3,191	3,249	3,237	3,129
	Cancers of colon, rectum and anus	2,526	2,532	2,309	2,203	2,154
	Cancer of prostate	1,625	1,439	1,284	1,295	1,260
	Cancer of oral cavity	1,154	1,106	875	857	791
	Cancer of stomach	1,053	997	966	1,026	982
	Cancer of pancreas	874	838	734	700	648
	Cancer of esophagus	648	658	586	559	534
	Cancer of bladder	599	602	542	535	472
	Non-Hodgkin's lymphoma	546	519	462	470	475
65-74 years	All cancer causes of death	8,006	7,619	7,198	6,841	6,565
	Cancers of trachea, bronchus and lung	1,757	1,717	1,620	1,534	1,509
	Cancers of liver and intrahepatic bile ducts	1,494	1,525	1,499	1,474	1,409
	Cancers of colon, rectum and anus	941	870	817	710	689
	Cancer of oral cavity	746	674	523	515	478
	Cancer of esophagus	420	392	354	322	282
	Cancer of pancreas	405	378	328	323	299
	Cancer of stomach	389	319	301	299	306
	Cancer of prostate	310	271	258	279	214
	Non-Hodgkin's lymphoma	204	205	168	160	158
	Leukemia	191	157	141	134	128

Continued Table 8 Leading cancer causes of death for males aged 65 years and older from 2016 to 2020.

Unit：Persons

Age	Cancer causes of death	2020	2019	2018	2017	2016
75-84 years	All cancer causes of death	6,829	6,933	6,779	6,813	6,914
	Cancers of trachea, bronchus and lung	1,615	1,660	1,641	1,719	1,803
	Cancers of liver and intrahepatic bile ducts	1,183	1,183	1,231	1,242	1,222
	Cancers of colon, rectum and anus	899	982	888	866	896
	Cancer of prostate	631	553	527	507	573
	Cancer of stomach	338	371	362	402	361
	Cancer of oral cavity	321	317	257	261	239
	Cancer of pancreas	316	303	267	242	234
	Cancer of bladder	217	239	211	194	176
	Non-Hodgkin's lymphoma	214	189	183	185	194
	Cancer of esophagus	159	192	159	164	170
Aged 85 years and older	All cancer causes of death	4,343	4,224	4,037	4,062	3,866
	Cancers of trachea, bronchus and lung	891	887	895	846	863
	Cancers of colon, rectum and anus	686	680	604	627	569
	Cancer of prostate	684	615	499	509	473
	Cancers of liver and intrahepatic bile ducts	555	483	519	521	498
	Cancer of stomach	326	307	303	325	315
	Cancer of bladder	203	220	192	206	170
	Cancer of pancreas	153	157	139	135	115
	Non-Hodgkin's lymphoma	128	125	111	125	123
	Leukemia	121	83	80	73	95
	Cancer of oral cavity	87	115	95	81	74

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/lp-5069-113.html

Note: The order of the causes of death in this table is based on the ranking of the crude death rate in 2020.

Table 9 Leading cancer causes of death for females aged 65 years and older from 2016 to 2020.

Unit：Persons

Age	Cancer causes of death	2020	2019	2018	2017	2016
Aged 65 years and older	All cancer causes of death	13,210	12,974	12,452	12,074	11,875
	Cancers of trachea, bronchus and lung	2,551	2,494	2,405	2,389	2,336
	Cancers of liver and intrahepatic bile ducts	2,048	2,086	2,174	2,172	2,172
	Cancers of colon, rectum and anus	2,014	2,004	1,763	1,760	1,705
	Female breast cancer	1,136	1,073	925	839	790
	Cancer of pancreas	795	820	779	675	658
	Cancer of stomach	645	684	611	576	595
	Non-Hodgkin's lymphoma	429	412	367	342	350
	Cancers of cervix uteri and uterus, part unspecified	354	336	297	337	330
	Cancer of bladder	319	338	309	296	256
	Cancer of ovary	302	269	248	243	259
65-74 years	All cancer causes of death	4,608	4,413	4,262	4,005	4,028
	Cancers of trachea, bronchus and lung	925	881	821	824	844
	Cancers of liver and intrahepatic bile ducts	647	683	687	727	732
	Female breast cancer	564	511	481	410	414
	Cancers of colon, rectum and anus	541	513	459	454	436
	Cancer of pancreas	318	305	295	240	251
	Cancer of stomach	181	199	173	149	138
	Cancer of ovary	158	130	116	127	116
	Non-Hodgkin's lymphoma	135	133	106	97	110
	Cancers of cervix uteri and uterus, part unspecified	131	124	97	108	107
	Leukemia	103	119	100	93	96

Continued Table 9 Leading cancer causes of death for females aged 65 years and older from 2016 to 2020.

Unit：Persons

Age	Cancer causes of death	2020	2019	2018	2017	2016
75-84 years	All cancer causes of death	5,129	5,245	5,118	5,024	5,099
	Cancers of trachea, bronchus and lung	1,005	1,046	986	974	976
	Cancers of liver and intrahepatic bile ducts	911	897	1,017	999	1,024
	Cancers of colon, rectum and anus	728	766	722	675	734
	Female breast cancer	363	392	320	281	276
	Cancer of pancreas	319	343	311	276	272
	Cancer of stomach	245	262	238	236	249
	Non-Hodgkin's lymphoma	180	176	164	170	157
	Cancer of bladder	142	155	126	149	113
	Cancers of cervix uteri and uterus, part unspecified	122	113	122	142	141
	Leukemia	115	127	99	107	119
Aged 85 years and older	All cancer causes of death	3,473	3,316	3,072	3,045	2,748
	Cancers of colon, rectum and anus	745	725	582	631	535
	Cancers of trachea, bronchus and lung	621	567	598	591	516
	Cancers of liver and intrahepatic bile ducts	490	506	470	446	416
	Cancer of stomach	219	223	200	191	208
	Female breast cancer	209	170	124	148	100
	Cancer of pancreas	158	172	173	159	135
	Non-Hodgkin's lymphoma	114	103	97	75	83
	Cancer of bladder	110	108	113	95	85
	Cancers of cervix uteri and uterus, part unspecified	101	99	78	87	82
	Leukemia	71	66	68	55	45

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/lp-5069-113.html

Note: The order of the causes of death in this table is based on the ranking of the crude death rate in 2020.

The top 10 cancer causes of death for population aged 65 years and older in 2020, ranked by the crude death rate, were: cancers of trachea, bronchus and lung (184.3 per 100,000 population), cancers of liver and intrahepatic bile ducts (142.8), cancers of colon, rectum and anus (122.8), cancer of prostate (96.3), female breast cancer (56.5), cancer of stomach (45.9), cancer of pancreas (45.1), cancer of oral cavity (35.6), non-Hodgkin's lymphoma (26.4), cancer of bladder (24.8). Compared with the top 3 cancer causes of crude death rate in 5 years, for population aged 65 years and older the crude death rate of cancers of trachea, bronchus and lung, cancers of liver and intrahepatic bile ducts, and cancers of colon, rectum and anus reduced 14.4%, 18.6% and 3.8%, respectively from 2016 to 2020 (Table 10).

The top 10 cancer causes of death for males aged 65 years and older in 2020, ranked by the crude death rate, were: cancers of trachea, bronchus and lung (252.7 per 100,000 population), cancers of liver and intrahepatic bile ducts (191.6), cancers of colon, rectum and anus (149.8), cancer of prostate (96.3), cancer of oral cavity (68.4), cancer of stomach (62.4), cancer of pancreas (51.8), cancer of esophagus (38.4), cancer of bladder (35.5), and non-Hodgkin's lymphoma (32.4) (Table 11).

The top 10 cancer causes of death for females aged 65 years and older in 2020, ranked by the crude death rate, were: cancers of trachea, bronchus and lung (126.9 per 100,000 population), cancers of liver and intrahepatic bile ducts (101.9), cancers of colon, rectum and anus (100.2), female breast cancer (56.5), cancer of pancreas (39.5), cancer of stomach (32.1), non-Hodgkin's lymphoma (21.3), cancers of cervix uteri and uterus, part unspecified (17.6), cancer of bladder (15.9), and cancer of ovary (15.0) (Table 12).

In 5 years, the changes of top 3 cancer causes of crude death rate, for both males and females aged 65 years and older remained the same. Cancers of trachea, bronchus and lung, cancers of liver and intrahepatic bile ducts, and cancers of colon, rectum and anus showed a decrease of males (15.5%, 14.5% and 2.9%, respectively) and females (11.7%, 23.7% and 4.5%, respectively) from 2016 to 2020 (Table 10-Table 12).

Table 10 Crude death rates of leading cancer causes of death for population aged 65 years and older from 2016 to 2020.

Unit：Per 100,000 pop.

Age	Cancer causes of death	2020	2019	2018	2017	2016
Aged 65 years and older	All cancer causes of death	876.0	901.9	909.2	934.7	966.8
	Cancers of trachea, bronchus and lung	184.3	192.0	195.8	203.6	215.4
	Cancers of liver and intrahepatic bile ducts	142.8	149.9	161.8	169.7	175.4
	Cancers of colon, rectum and anus	122.8	128.9	121.5	124.3	127.7
	Cancer of prostate	96.3	89.4	83.5	88.3	90.2
	Female breast cancer	56.5	56.2	51.0	48.8	48.6
	Cancer of stomach	45.9	47.8	47.1	50.3	52.2
	Cancer of pancreas	45.1	47.1	45.2	43.1	43.2
	Cancer of oral cavity	35.6	36.2	30.5	30.4	30.9
	Non-Hodgkin's lymphoma	26.4	26.4	24.7	25.5	27.3
	Cancer of bladder	24.8	26.7	25.4	26.1	24.1
65-74 years	All cancer causes of death	557.2	570.5	580.7	587.7	617.0
	Cancers of trachea, bronchus and lung	118.5	123.2	123.7	127.8	137.1
	Cancers of liver and intrahepatic bile ducts	94.6	104.7	110.8	119.3	124.7
	Cancers of colon, rectum and anus	65.5	65.6	64.7	63.1	65.5
	Female breast cancer	47.2	45.9	46.2	42.1	45.7
	Cancer of oral cavity	35.7	35.0	29.6	30.0	30.3
	Cancer of pancreas	31.9	32.4	31.6	30.5	32.0
	Cancer of prostate	29.0	27.2	27.7	32.0	26.4
	Cancer of stomach	25.2	24.6	24.0	24.3	25.9
	Cancer of esophagus	19.8	20.1	19.6	18.7	17.6
	Non-Hodgkin's lymphoma	15.0	16.0	13.9	13.9	15.6

Continued Table 10 Crude death rates of leading cancer causes of death for population aged 65 years and older from 2016 to 2020.

Unit：Per 100,000 pop.

Age	Cancer causes of death	2020	2019	2018	2017	2016
75-84 years	All cancer causes of death	1,155.3	1,187.1	1,186.0	1,209.0	1,255.7
	Cancers of trachea, bronchus and lung	253.1	263.8	261.9	275.1	290.5
	Cancers of liver and intrahepatic bile ducts	202.3	202.7	224.1	228.9	234.8
	Cancers of colon, rectum and anus	157.2	170.4	160.5	157.4	170.4
	Cancer of prostate	140.7	124.3	120.9	118.6	135.9
	Female breast cancer	61.9	67.5	56.4	51.0	51.6
	Cancer of pancreas	61.3	63.0	57.6	52.9	52.9
	Cancer of stomach	56.3	61.7	59.8	65.2	63.8
	Non-Hodgkin's lymphoma	38.1	35.6	34.6	36.3	36.7
	Cancer of oral cavity	37.2	36.8	30.6	31.4	32.2
	Cancer of bladder	34.7	38.4	33.6	35.0	30.2
Aged 85 years and older	All cancer causes of death	1,962.8	1,955.8	1,899.3	1,960.2	1,896.3
	Cancer of prostate	401.4	362.1	294.5	303.2	287.6
	Cancers of trachea, bronchus and lung	379.7	377.2	398.9	396.3	395.4
	Cancers of colon, rectum and anus	359.4	364.4	316.9	347.0	316.5
	Cancers of liver and intrahepatic bile ducts	262.4	256.5	264.2	266.7	262.1
	Cancer of stomach	136.9	137.5	134.4	142.3	150.0
	Female breast cancer	91.7	78.8	60.5	76.0	54.3
	Cancer of bladder	78.6	85.1	81.5	83.0	73.1
	Cancer of pancreas	78.1	85.3	83.4	81.1	71.7
	Non-Hodgkin's lymphoma	60.8	59.1	55.6	55.2	59.1
	Leukemia	48.2	38.6	39.5	35.3	40.1

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/lp-5069-113.html

Note 1: The order of the causes of death in this table is based on the ranking of the crude death rate in 2020.

Note 2: Crude death rate = the number of deaths from cancer / the mid-year population × 100,000.

Table 11 Crude death rates of leading cancer causes of death for males aged 65 years and older from 2016 to 2020.

Unit：Per 100,000 pop.

Age	Cancer causes of death	2020	2019	2018	2017	2016
Aged 65 years and older	All cancer causes of death	1,136.9	1,166.2	1,171.9	1,207.6	1,241.8
	Cancers of trachea, bronchus and lung	252.7	264.8	270.4	279.4	298.9
	Cancers of liver and intrahepatic bile ducts	191.6	198.2	211.4	220.6	224.0
	Cancers of colon, rectum and anus	149.8	157.3	150.2	150.2	154.2
	Cancer of prostate	96.3	89.4	83.5	88.3	90.2
	Cancer of oral cavity	68.4	68.7	56.9	58.4	56.6
	Cancer of stomach	62.4	61.9	62.8	69.9	70.3
	Cancer of pancreas	51.8	52.1	47.7	47.7	46.4
	Cancer of esophagus	38.4	40.9	38.1	38.1	38.2
	Cancer of bladder	35.5	37.4	35.3	36.5	33.8
	Non-Hodgkin's lymphoma	32.4	32.2	30.1	32.0	34.0
65-74 years	All cancer causes of death	749.8	765.6	772.4	784.9	809.7
	Cancers of trachea, bronchus and lung	164.5	172.5	173.8	176.0	186.1
	Cancers of liver and intrahepatic bile ducts	139.9	153.2	160.8	169.1	173.8
	Cancers of colon, rectum and anus	88.1	87.4	87.7	81.5	85.0
	Cancer of oral cavity	69.9	67.7	56.1	59.1	59.0
	Cancer of esophagus	39.3	39.4	38.0	36.9	34.8
	Cancer of pancreas	37.9	38.0	35.2	37.1	36.9
	Cancer of stomach	36.4	32.1	32.3	34.3	37.7
	Cancer of prostate	29.0	27.2	27.7	32.0	26.4
	Non-Hodgkin's lymphoma	19.1	20.6	18.0	18.4	19.5
	Leukemia	17.9	15.8	15.1	15.4	15.8

Continued Table 11 Crude death rates of leading cancer causes of death for males aged 65 years and older from 2016 to 2020.

Unit：Per 100,000 pop.

Age	Cancer causes of death	2020	2019	2018	2017	2016
75-84 years	All cancer causes of death	1,522.3	1,558.3	1,555.4	1,593.3	1,640.2
	Cancers of trachea, bronchus and lung	360.0	373.1	376.5	402.0	427.7
	Cancers of liver and intrahepatic bile ducts	263.7	265.9	282.4	290.5	289.9
	Cancers of colon, rectum and anus	200.4	220.7	203.7	202.5	212.6
	Cancer of prostate	140.7	124.3	120.9	118.6	135.9
	Cancer of stomach	75.3	83.4	83.1	94.0	85.6
	Cancer of oral cavity	71.6	71.2	59.0	61.0	56.7
	Cancer of pancreas	70.4	68.1	61.3	56.6	55.5
	Cancer of bladder	48.4	53.7	48.4	45.4	41.8
	Non-Hodgkin's lymphoma	47.7	42.5	42.0	43.3	46.0
	Cancer of esophagus	35.4	43.2	36.5	38.4	40.3
Aged 85 years and older	All cancer causes of death	2,548.9	2,486.7	2,382.4	2,419.3	2,350.7
	Cancers of trachea, bronchus and lung	522.9	522.2	528.2	503.9	524.7
	Cancers of colon, rectum and anus	402.6	400.3	356.4	373.4	346.0
	Cancer of prostate	401.4	362.1	294.5	303.2	287.6
	Cancers of liver and intrahepatic bile ducts	325.7	284.3	306.3	310.3	302.8
	Cancer of stomach	191.3	180.7	178.8	193.6	191.5
	Cancer of bladder	119.1	129.5	113.3	122.7	103.4
	Cancer of pancreas	89.8	92.4	82.0	80.4	69.9
	Non-Hodgkin's lymphoma	75.1	73.6	65.5	74.4	74.8
	Leukemia	71.0	48.9	47.2	43.5	57.8
	Cancer of oral cavity	51.1	67.7	56.1	48.2	45.0

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/lp-5069-113.html

Note 1: The order of the causes of death in this table is based on the ranking of the crude death rate in 2020.

Note 2: Crude death rate = the number of deaths from cancer / the mid-year population × 100,000.

Table 12 Crude death rates of leading cancer causes of death for females aged 65 years and older from 2016 to 2020.

Unit：Per 100,000 pop.

Age	Cancer causes of death	2020	2019	2018	2017	2016
Aged 65 years and older	All cancer causes of death	657.1	679.1	686.6	702.0	730.5
	Cancers of trachea, bronchus and lung	126.9	130.6	132.6	138.9	143.7
	Cancers of liver and intrahepatic bile ducts	101.9	109.2	119.9	126.3	133.6
	Cancers of colon, rectum and anus	100.2	104.9	97.2	102.3	104.9
	Female breast cancer	56.5	56.2	51.0	48.8	48.6
	Cancer of pancreas	39.5	42.9	43.0	39.2	40.5
	Cancer of stomach	32.1	35.8	33.7	33.5	36.6
	Non-Hodgkin's lymphoma	21.3	21.6	20.2	19.9	21.5
	Cancers of cervix uteri and uterus, part unspecified	17.6	17.6	16.4	19.6	20.3
	Cancer of bladder	15.9	17.7	17.0	17.2	15.7
	Cancer of ovary	15.0	14.1	13.7	14.1	15.9
65-74 years	All cancer causes of death	385.2	396.2	409.2	411.2	444.5
	Cancers of trachea, bronchus and lung	77.3	79.1	78.8	84.6	93.1
	Cancers of liver and intrahepatic bile ducts	54.1	61.3	66.0	74.7	80.8
	Female breast cancer	47.2	45.9	46.2	42.1	45.7
	Cancers of colon, rectum and anus	45.2	46.1	44.1	46.6	48.1
	Cancer of pancreas	26.6	27.4	28.3	24.6	27.7
	Cancer of stomach	15.1	17.9	16.6	15.3	15.2
	Cancer of ovary	13.2	11.7	11.1	13.0	12.8
	Non-Hodgkin's lymphoma	11.3	11.9	10.2	10.0	12.1
	Cancers of cervix uteri and uterus, part unspecified	11.0	11.1	9.3	11.1	11.8
	Leukemia	8.6	10.7	9.6	9.5	10.6

Continued Table 12 Crude death rates of leading cancer causes of death for females aged 65 years and older from 2016 to 2020.

Unit：Per 100,000 pop.

Age	Cancer causes of death	2020	2019	2018	2017	2016
75-84 years	All cancer causes of death	874.6	902.8	902.2	911.0	952.8
	Cancers of trachea, bronchus and lung	171.4	180.0	173.8	176.6	182.4
	Cancers of liver and intrahepatic bile ducts	155.3	154.4	179.3	181.2	191.3
	Cancers of colon, rectum and anus	124.1	131.8	127.3	122.4	137.2
	Female breast cancer	61.9	67.5	56.4	51.0	51.6
	Cancer of pancreas	54.4	59.0	54.8	50.0	50.8
	Cancer of stomach	41.8	45.1	42.0	42.8	46.5
	Non-Hodgkin's lymphoma	30.7	30.3	28.9	30.8	29.3
	Cancer of bladder	24.2	26.7	22.2	27.0	21.1
	Cancers of cervix uteri and uterus, part unspecified	20.8	19.5	21.5	25.7	26.3
	Leukemia	19.6	21.9	17.5	19.4	22.2
Aged 85 years and older	All cancer causes of death	1,524.5	1,537.6	1,499.6	1,564.2	1,491.0
	Cancers of colon, rectum and anus	327.0	336.2	284.1	324.1	290.3
	Cancers of trachea, bronchus and lung	272.6	262.9	291.9	303.6	280.0
	Cancers of liver and intrahepatic bile ducts	215.1	234.6	229.4	229.1	225.7
	Cancer of stomach	96.1	103.4	97.6	98.1	112.9
	Female breast cancer	91.7	78.8	60.5	76.0	54.3
	Cancer of pancreas	69.4	79.8	84.5	81.7	73.2
	Non-Hodgkin's lymphoma	50.0	47.8	47.4	38.5	45.0
	Cancer of bladder	48.3	50.1	55.2	48.8	46.1
	Cancers of cervix uteri and uterus, part unspecified	44.3	45.9	38.1	44.7	44.5
	Leukemia	31.2	30.6	33.2	28.3	24.4

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/lp-5069-113.html

Note 1: The order of the causes of death in this table is based on the ranking of the crude death rate in 2020.

Note 2: Crude death rate = the number of deaths from cancer / the mid-year population × 100,000.

4. Self-perceived health status

In 2005 and 2009, most individuals aged 65 years and older perceived their current health status as "Fair" was 41.3% and 42.4%; the percentage of this population with "Excellent" responses was the least in 2005 and 2009 was 2.1%, and 1.2%, respectively. The percentage of this population who responded with "Fair" in 2013 and 2017 was 46.3% and 45.7%, respectively; by contrast, the percentage of this population with "Very bad" responses in 2013 and 2017 was 3.5% and 1.8%, respectively (Figure 19).

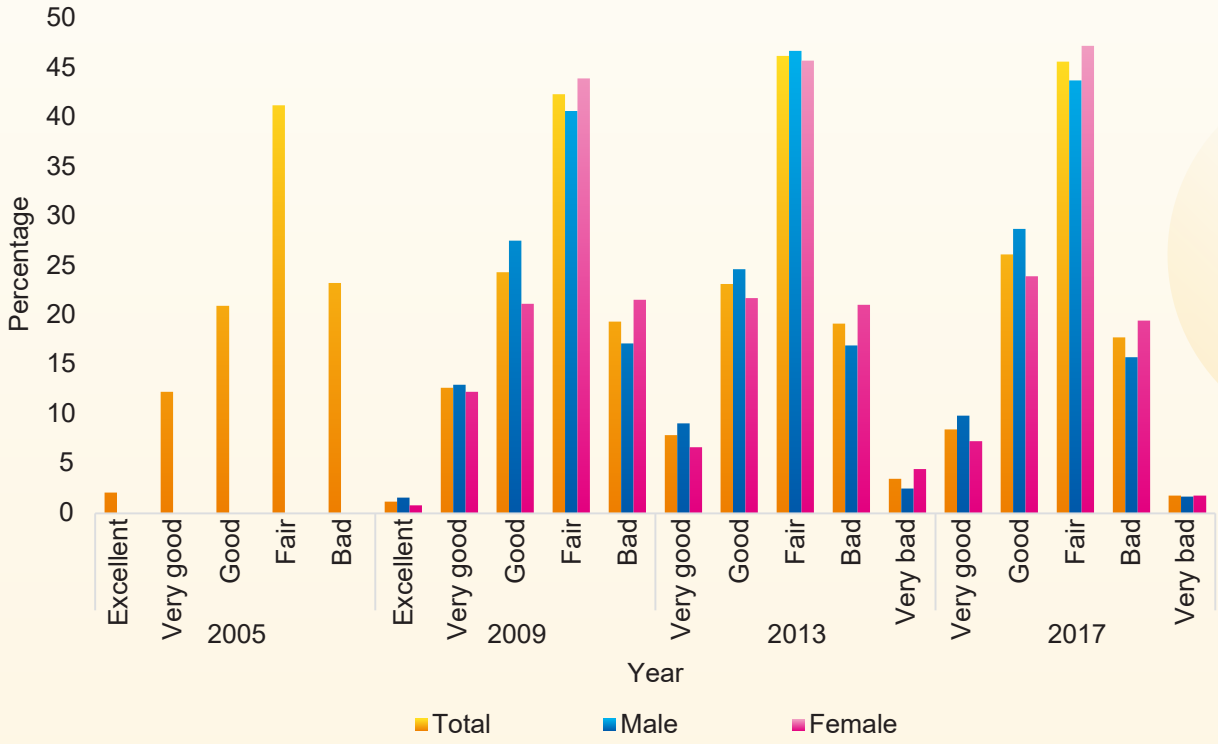


Figure 19 Self-reported perceived health status of individuals aged 65 years and older from 2005 to 2017.

Source: National Health Interview Survey

Note 1: The self-perceived health status is extracted from the face-to-face interview. Individuals can answer on their own behalf. If the individual is unable to respond due to severe illness, physical weakness, or serious mental problem or mental disability, proxies would not answer these questions. The response is treated as missing.

Note 2: The values weighted to represent the whole population.

Note 3: Percentage = the number of people who self-reported perceived health status in a given year / the total population aged 65 years and older in a given year × 100%.

Note 4: For further details, please refer to Appendix 17.

5. Mobility, Activities of Daily Living, and Instrumental Activities of Daily Living

The percentage of individuals with mobility, Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs) disability gradually increased with age from 2005 to 2017. In the three age groups, the percentage of difficulties increased with age whether males or females (Table 13).

Table 13 Mobility, ADLs and IADLs among people aged 65 years and older from 2005 to 2017.

Unit：People, Percentage

	2005		2009	
	Completed samples	Percentage of difficulties	Completed samples	Percentage of difficulties
Mobility				
Total	2,708	56.5	2,893	50.4
Gender				
Male	1,338	44.8	1,246	39.9
Female	1,370	68.3	1,647	60.4
Age				
65-74 years	1,605	46.7	1,599	36.0
75-84 years	941	67.8	1,039	66.4
≥85 years	162	87.9	255	81.2
Gender*Age				
Male				
65-74 years	782	35.6	655	24.1
75-84 years	492	53.9	478	55.9
≥85 years	64	82.2	113	74.2
Female				
65-74 years	823	57.5	944	46.7
75-84 years	449	83.8	561	77.4
≥85 years	98	92.3	142	87.5

Continued Table 13 Mobility, ADLs and IADLs among people aged 65 years and older from 2005 to 2017.

Unit：People, Percentage

	2013		2017	
	Completed samples	Percentage of difficulties	Completed samples	Percentage of difficulties
		Mobility		
Total	3,186	50.2	3,275	50.4
Gender				
Male	1,516	39.5	1,526	40.5
Female	1,670	59.8	1,749	58.9
Age				
65-74 years	1,706	37.8	1,853	35.1
75-84 years	1,153	61.3	1,052	66.3
≥85 years	327	81.3	370	86.3
Gender*Age				
Male				
65-74 years	810	26.1	895	26.3
75-84 years	542	50.1	475	53.1
≥85 years	164	72.5	156	82.0
Female				
65-74 years	896	47.9	958	42.7
75-84 years	611	70.8	577	77.1
≥85 years	163	91.5	214	89.8

Continued Table 13 Mobility, ADLs and IADLs among people aged 65 years and older from 2005 to 2017.

Unit：People, Percentage

	2005		2009	
	Completed samples	Percentage of difficulties	Completed samples	Percentage of difficulties
Activities of daily living (ADLs)				
Total	2,723	14.3	-	-
Gender				
Male	1,346	11.1	-	-
Female	1,377	17.7	-	-
Age				
65-74 years	1,610	7.6	-	-
75-84 years	949	21.0	-	-
≥85 years	164	42.6	-	-
Gender*Age				
Male				
65-74 years	784	6.5	-	-
75-84 years	498	15.8	-	-
≥85 years	64	28.4	-	-
Female				
65-74 years	826	8.6	-	-
75-84 years	451	27.1	-	-
≥85 years	100	53.4	-	-

Continued Table 13 Mobility, ADLs and IADLs among people aged 65 years and older from 2005 to 2017.

Unit：People, Percentage

	2013		2017	
	Completed samples	Percentage of difficulties	Completed samples	Percentage of difficulties
Activities of daily living (ADLs)				
Total	3,200	15.7	3,282	18.9
Gender				
Male	1,523	13.6	1,530	15.4
Female	1,677	17.7	1,752	21.9
Age				
65-74 years	1,710	7.0	1,858	8.2
75-84 years	1,161	21.4	1,054	28.0
≥85 years	329	44.4	370	49.2
Gender*Age				
Male				
65-74 years	813	6.9	898	7.1
75-84 years	545	17.0	476	22.6
≥85 years	165	35.6	156	39.9
Female				
65-74 years	897	7.1	960	9.2
75-84 years	616	25.1	578	32.4
≥85 years	164	54.3	214	56.0

Continued Table 13 Mobility, ADLs and IADLs among people aged 65 years and older from 2005 to 2017.

Unit：People, Percentage

	2005		2009	
	Completed samples	Percentage of difficulties	Completed samples	Percentage of difficulties
Instrumental activities of daily living (IADLs)				
Total	2,713	41.6	-	-
Gender				
Male	1,342	31.3	-	-
Female	1,371	52.0	-	-
Age				
65-74 years	1,606	29.0	-	-
75-84 years	945	55.5	-	-
≥85 years	162	85.3	-	-
Gender*Age				
Male				
65-74 years	782	19.7	-	-
75-84 years	497	42.8	-	-
≥85 years	63	78.3	-	-
Female				
65-74 years	824	37.9	-	-
75-84 years	448	70.3	-	-
≥85 years	99	90.7	-	-

Continued Table 13 Mobility, ADLs and IADLs among people aged 65 years and older from 2005 to 2017.

Unit：People, Percentage

	2013		2017	
	Completed samples	Percentage of difficulties	Completed samples	Percentage of difficulties
Instrumental activities of daily living (IADLs)				
Total	3,183	37.6	3,253	39.8
Gender				
Male	1,514	32.4	1,509	34.5
Female	1,669	42.2	1,744	44.3
Age				
65-74 years	1,700	20.6	1,845	22.6
75-84 years	1,156	53.5	1,044	56.1
≥85 years	327	76.4	364	85.7
Gender*Age				
Male				
65-74 years	806	16.2	887	18.9
75-84 years	544	47.1	469	48.5
≥85 years	164	66.8	153	80.5
Female				
65-74 years	894	24.4	958	25.7
75-84 years	612	58.9	575	62.3
≥85 years	163	87.3	211	90.1

Source: National Health Interview Survey

Note 1: Identification criteria for mobility impairments: When a participant indicates that a mobility item (i.e., bending down, kneeling or squatting, walking from room to room, climbing 10 steps of stairs, walking 400 m, grasping things with fingers, carrying a 4.5-kg item in one hand, raising arms over one's head, and turning a key by hand to perform an unlocking action) is "difficult" (slightly difficult, very difficult, or impossible) to perform, the ability type in question is regarded as "difficult." If a participant indicates that all the abilities of a set of mobility items are "not difficult" to perform, that ability type is regarded as "not difficult."

Note 2: Criteria for ADLs difficulties: When a participant indicates that any ADLs item (i.e., feeding down, bathing, dressing, going to toilet, moving in and out of bed, ambulating) is "difficult" (slightly difficult, very difficult, or impossible) to perform, the ability type in question is regarded as "difficult." If a participant indicates that all the abilities of a set of ADLs items are "not difficult" to perform, that ability type is regarded as "not difficult."

Note 3: Identification criteria for IADLs disability: When a participant indicates that any IADLs item (i.e., preparing meals, shopping, using a telephone, taking medication, housekeeping, doing laundry, managing finances) is "difficult" (slightly difficult, very difficult, or impossible) to perform, the ability type in question is regarded as "difficult." If a participant indicates that all the abilities of a set of IADLs items are "not difficult" to perform, that ability type is regarded as "not difficult."

Note 4: In 2009, the respondent answered was "not difficult" for all the abilities, continue on to financial items of IADLs questionnaire, also ADLs questionnaire. The result could be underestimate of the percentage of ADLs and IADLs, so the difficult parts will not show the results of 2009.

Note 5: Percentage of individuals with mobility impairments = the number of people who have mobility impairments / the number of completed samples aged 65 years and older × 100%.

Note 6: Percentage of individuals with ADLs difficulties = the number of people who have ADLs difficulties / the number of completed samples aged 65 years and older × 100%.

Note 7: Percentage of individuals with IADLs disability = the number of people who have IADLs disability / the number of completed samples aged 65 years and older × 100%.

Note 8: Because the content of the questionnaires from 2005 to 2017 is the same, only the 2005 Questionnaire is presented in the annual report. For the 2005 Questionnaire, please refer to p.135–137.

6. Cognitive impairment

In 2005 to 2017, males achieved higher mean scores than females on the Mini-Mental State Examination (MMSE). The MMSE mean scores decreased with age (Table 14).

Table 14 Mini-Mental State Examination mean scores among people aged 65 years and older from 2005 to 2017.

Unit：People, Mean score (SE)

	2005		2009	
	Completed samples	Mean score (standard error)	Completed samples	Mean score (standard error)
Total	2,415	23.2(0.1)	2,572	23.5(0.1)
Gender				
Male	1,223	24.8(0.1)	1,127	24.8(0.1)
Female	1,192	21.4(0.2)	1,445	22.3(0.1)
Age				
65-74 years	1,514	23.7(0.1)	1,531	24.2(0.1)
75-84 years	804	22.7(0.2)	877	22.8(0.2)
≥85 years	97	19.6(0.7)	164	20.8(0.5)
Gender*Age				
Male				
65-74 years	743	25.2(0.2)	634	25.2(0.2)
75-84 years	433	24.6(0.2)	412	24.4(0.2)
≥85 years	47	21.0(1.0)	81	23.1(0.6)
Female				
65-74 years	771	22.1(0.2)	897	23.2(0.2)
75-84 years	371	20.3(0.3)	465	20.9(0.2)
≥85 years	50	18.0(0.9)	83	18.6(0.7)

Continued Table 14 Mini-Mental State Examination mean scores among people aged 65 years and older from 2005 to 2017.

Unit：People, Mean score (SE)

	2013		2017	
	Completed samples	Mean score (standard error)	Completed samples	Mean score (standard error)
Total	2,786	23.7(0.1)	2,853	25.6(0.1)
Gender				
Male	1,329	25.0(0.1)	1,356	26.6(0.1)
Female	1,457	22.5(0.1)	1,497	24.7(0.1)
Age				
65-74 years	1,599	24.7(0.1)	1,750	26.9(0.1)
75-84 years	984	22.3(0.2)	881	23.7(0.2)
≥85 years	203	21.5(0.4)	222	22.3(0.4)
Gender*Age				
Male				
65-74 years	753	25.8(0.1)	846	27.6(0.1)
75-84 years	469	23.8(0.2)	409	25.1(0.2)
≥85 years	107	23.9(0.4)	101	24.1(0.6)
Female				
65-74 years	846	23.8(0.2)	904	26.2(0.1)
75-84 years	515	21.0(0.2)	472	22.5(0.3)
≥85 years	96	18.0(0.5)	121	20.8(0.5)

Source: National Health Interview Survey

Note: MMSE scoring criteria:

(1) MMSE items comprise the assessment of temporal orientation, spatial orientation, immediate memory, attention and calculation, delayed recall, names, verbal repetition, comprehension, reading, writing, drawing, and awareness.

(2) Attention and calculation ability (ability to count down from 100 by sevens for a total of five times): One point is given for each correct answer. If the interviewer prompts the examinee by providing the correct answer for a count, no points are given.

(3) Names, comprehension, reading, writing, and drawing: Examinees are not scored if they have blindness, have upper limb dysfunction, exhibit illiteracy or the inability to write, or exhibit the inability to see clearly or have low literacy.

For cognitive impairment (which was determined on the basis of the respondents' MMSE results and education level), in the 75–84 age group, the percentage of males with possible cognitive impairment was only greater than the percentage of females with possible cognitive impairment in 2013 (39.9% and 26.0% for males and females, respectively) and 2017 (26.5% and 24.7% for males and females, respectively). For the other the age groups, the percentage of females with cognitive impairment was greater than the percentage of males with cognitive impairment for all measured years. In 2009, the percentage of individuals in the ≥85 age group with possible cognitive impairment was higher (41.1% for males and 52.7% for females) than those observed in the other measured years (Table 15).

Table 15 Possible cognitive impairment among people aged 65 years and older from 2005 to 2017.

Unit：People, Percentage

	2005		2009	
	Completed samples	Percentage of cognitive impairment	Completed samples	Percentage of cognitive impairment
Total	2,415	24.8	1,721	33.2
Gender				
Male	1,223	22.7	961	29.8
Female	1,192	27.0	760	38.4
Age				
65-74 years	1,514	22.4	1,070	29.0
75-84 years	804	27.0	567	39.9
≥85 years	97	42.4	84	45.2
Gender*Age				
Male				
65-74 years	743	20.4	555	26.6
75-84 years	433	24.6	348	33.8
≥85 years	47	40.6	58	41.1
Female				
65-74 years	771	24.5	515	32.2
75-84 years	371	30.1	219	51.0
≥85 years	50	44.4	26	52.7

Continued Table 15 Possible cognitive impairment among people aged 65 years and older from 2005 to 2017.

Unit：People, Percentage

	2013		2017	
	Completed samples	Percentage of cognitive impairment	Completed samples	Percentage of cognitive impairment
Total	2,786	25.5	2,853	19.0
Gender				
Male	1,329	27.4	1,356	17.2
Female	1,457	23.8	1,497	20.7
Age				
65-74 years	1,599	20.8	1,750	14.5
75-84 years	984	32.5	881	25.5
≥85 years	203	31.3	222	31.1
Gender*Age				
Male				
65-74 years	753	19.7	846	11.5
75-84 years	469	39.9	409	26.5
≥85 years	107	30.6	101	28.5
Female				
65-74 years	846	21.8	904	17.2
75-84 years	515	26.0	472	24.7
≥85 years	96	32.3	121	33.4

Source: National Health Interview Survey

Note 1: Judgment criteria for cognitive impairment: According to the report of the Dementia Epidemiological Research Project, which was conducted (from 2011 to 2013) by the Taiwan Alzheimer's Disease Association and commissioned by the Ministry of Health and Welfare, cognitive impairment is defined as follows:

(1) An educated individual having a total MMSE score of less than 25 points.

(2) An uneducated individual having a total MMSE score of less than 14 points.

Note 2: Percentage of individuals with possible cognitive impairment = the number with possible cognitive impairment / the number of completed samples aged 65 years and older × 100%.

7. Depression symptoms

In this annual report, the Center for Epidemiological Studies Depression Scale (CES-D) was used to measure depression symptoms. In all age groups, females generally achieved higher mean scores than males. In different years, only in the ≥85 age group in 2013, the percentage of males (12.6%) with depressive tendencies was higher than females (10.5%), and the percentage of females with depressive tendencies was higher than males in the rest of the groups (Table 16).

Table 16 Center for Epidemiological Studies Depression Scale mean scores and percentage among people aged 65 years and older from 2005 to 2017.

Unit：People, Mean score (SE), Percentage

	The weighted number of completed samples (people)	Mean score (standard error)	Percentage with depressive tendencies
2005			
Total	2,099	5.8(0.1)	18.0
Gender			
Male	1,076	5.3(0.2)	15.4
Female	1,023	6.3(0.2)	20.6
Age			
65-74 years	1,313	5.7(0.2)	18.9
75-84 years	696	5.9(0.2)	17.1
≥85 years	90	6.5(0.7)	13.8
Gender*Age			
Male			
65-74 years	644	5.1(0.2)	14.8
75-84 years	385	5.8(0.3)	16.6
≥85 years	46	5.4(0.9)	13.4
Female			
65-74 years	669	6.3(0.2)	22.9
75-84 years	311	6.1(0.3)	17.6
≥85 years	44	7.7(1.0)	14.1

Continued Table 16 Center for Epidemiological Studies Depression Scale mean scores and percentage among people aged 65 years and older from 2005 to 2017.

Unit：People, Mean score (SE), Percentage

	The weighted number of completed samples (people)	Mean score (standard error)	Percentage with depressive tendencies
2009			
Total	2,405	4.9(0.1)	13.7
Gender			
Male	1,184	4.5(0.2)	11.9
Female	1,221	5.3(0.2)	15.6
Age			
65-74 years	1,457	4.7(0.2)	12.8
75-84 years	804	5.3(0.2)	16.5
≥85 years	144	5.0(0.4)	8.0
Gender*Age			
Male			
65-74 years	689	4.3(0.2)	10.8
75-84 years	422	4.1(0.4)	14.8
≥85 years	74	4.7(0.6)	6.8
Female			
65-74 years	769	5.1(0.2)	14.7
75-84 years	382	5.7(0.3)	18.2
≥85 years	70	5.3(0.6)	9.0

Continued Table 16 Center for Epidemiological Studies Depression Scale mean scores and percentage among people aged 65 years and older from 2005 to 2017.

Unit：People, Mean score (SE), Percentage

	The weighted number of completed samples (people)	Mean score (standard error)	Percentage with depressive tendencies
2013			
Total	2,286	4.2(0.1)	11.2
Gender			
Male	1,073	3.7(0.2)	7.4
Female	1,213	4.8(0.2)	14.6
Age			
65-74 years	1,340	3.8(0.1)	9.1
75-84 years	779	4.9(0.2)	14.5
≥85 years	167	5.6(0.9)	11.7
Gender*Age			
Male			
65-74 years	622	3.3(0.2)	6.9
75-84 years	354	3.8(0.2)	6.6
≥85 years	97	5.3(1.5)	12.6
Female			
65-74 years	718	4.2(0.2)	11.1
75-84 years	425	5.7(0.3)	21.1
≥85 years	70	5.9(0.8)	10.5

Continued Table 16 Center for Epidemiological Studies Depression Scale mean scores and percentage among people aged 65 years and older from 2005 to 2017.

Unit：People, Mean score (SE), Percentage

	The weighted number of completed samples (people)	Mean score (standard error)	Percentage with depressive tendencies
2017			
Total	2,406	4.2(0.1)	11.1
Gender			
Male	1,125	3.9(0.2)	10.1
Female	1,282	4.6(0.2)	11.9
Age			
65-74 years	1,499	3.9(0.1)	10.1
75-84 years	709	4.7(0.2)	13.2
≥85 years	198	5.3(0.4)	9.8
Gender*Age			
Male			
65-74 years	704	3.6(0.2)	10.0
75-84 years	326	4.1(0.3)	10.9
≥85 years	95	4.9(0.7)	8.8
Female			
65-74 years	795	4.1(0.2)	10.2
75-84 years	384	5.2(0.3)	15.2
≥85 years	103	5.7(0.5)	10.6

Source: National Health Interview Survey

Note 1: CES-D scoring criteria:

(1) The scale contains 10 items, and the maximum obtainable score is 30 points.

(2) Unanswered items are excluded from calculations.

Note 2: Individuals with a total score of 10 points or more are defined as having depressive tendencies.

Note 3: Values are all calculated by applying nationally representative weights, the number of samples in this table is weighted calculation. The rounding difference was used.

Note 4: Percentage of individuals with depressive tendencies = the weighted number with depressive tendencies / the weighted number of completed samples × 100%.

Note 5: Because the content of the questionnaires from 2005 to 2017 is the same, only the 2005 Questionnaire is presented in the annual report. For the 2005 Questionnaire, please refer to p.138.

8. EuroQol instrument

In this annual report, the EuroQol instrument (EQ-5D) was used to measure health-related quality of life. The gender stratification results revealed that the mean scores for health-related quality of life were lower among females (0.8) than among males (0.9). In addition, the age stratification results indicated that mean scores for health-related quality of life decreased with age (0.9, 0.8, and 0.7 for the 65–74, 75–84, and ≥85 age groups, respectively; Table 17).

Table 17 Mean scores and standard deviations of quality of life in 2017 (calculated using Taiwan-based norm).

Unit：People, Mean score, SD

Year		2017 (using Taiwan-based norm)		
		Completed samples	Mean score	Standard deviation
Total		2,906	0.9	0.3
Gender	Male	1,374	0.9	0.2
	Female	1,532	0.8	0.3
Age	65-74 years	1,763	0.9	0.2
	75-84 years	906	0.8	0.3
	≥85 years	237	0.7	0.4

Source: National Health Interview Survey

Note: For the 2017 Questionnaire, please refer to p.139–141.

NOTE

Chapter 4

Preventive Health Care and Behavior

Preventive Health Care and Behavior

Cancer screening, body mass index (BMI), dietary diversity score (DDS), leisure time physical activity, smoking, alcohol drinking and betel nut chewing were presented to depict the health promotion and risk behaviors of older people.

Two cancer screenings are important in older female adults, mammogram and pap smear.

Breast cancer is the 4th leading cancer death in females age 65 years and above. The Health Promotion Administration provide one free mammogram to females age 45 to 69 years every other year. There were 44.0%, 41.8%, 48.1%, 47.5%, and 41.4% females aged 65 to 69 years taking mammogram from 2015 to 2019.

Cervical cancer is the 9th leading cause of cancer death. The Health Promotion Administration provide females age 30 and above free pap smear every three years. The screening rate for females aged 65 to 69 years was 59.1%, 59.1%, 56.0%, 54.3%, 53.3% between years 2015 and 2019.

In health behaviors, the average BMI of those older than 65 years remained below 25 kg/m^2. The food diversity score ranged between 4.6 to 4.9 points, slightly lower than the recommendation (5 points). Regarding the leisure time physical activity, it was higher in older males than in females based on the National Health Interview Survey from year 2005 to 2017.

Regarding smoking rates, the prevalence of males currently smoking aged between 65 and 74 years, decreased 14.9% from 33.7% in 2005 to 18.8% in 2017. It decreased 14.1% in males aged 75-84, from 22.9% in 2005 to 8.8% in 2017. For males aged 85 and over, it decreased 14.2% from 20.5% in 2005 to 6.3% in 2017. Comparing to males, females had very low smoking rates. It was also decreasing. In females aged between 65 and 74, the prevalence of smoking decreased 1.0% from 2.8% in 2005 to 1.8% in 2017. It decreased 0.9% from 1.9% in 2005 to 1.0% in 2017 in females aged between 75 and 84. For females aged 85 and over, it decreased 2.8% from 3.6% in 2005 to 0.8% in 2017. In terms of alcohol drinking and betelnut chewing, older men had higher prevalence than females.

1. Mammography

In the 60–64 age groups, the number of individuals who underwent mammography has increased year by year from 2014 to 2019 (Figure 20).

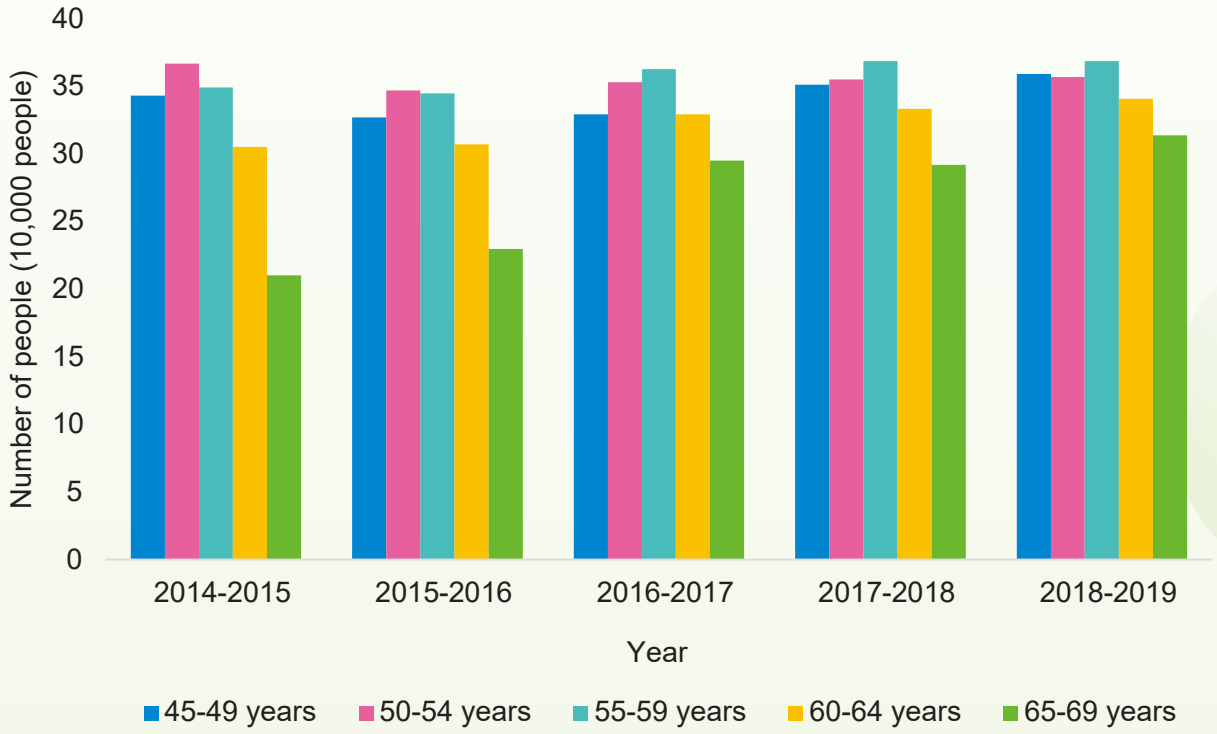


Figure 20 Number of individuals who underwent mammography once every 2 years from 2014 to 2019.

Source: Health Promotion Administration, Ministry of Health and Welfare: Statistics of Health Promotion
Note: For further details, please refer to Appendix 18.

In terms of screening rates for mammography, from 2014 to 2019, the 65–69 age group had the highest screening rate (41.4%-48.1%); during this period, the other age groups had screening rates of between 35.5% and 41.4% (Figure 21).

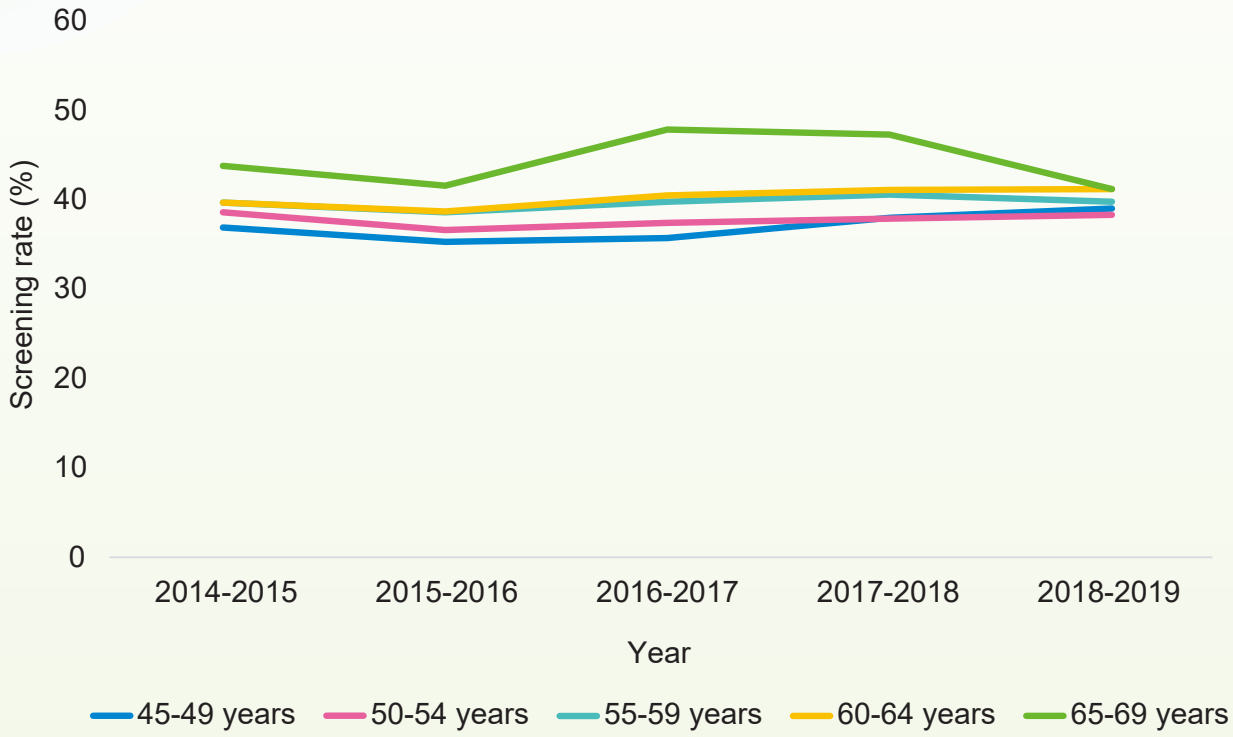


Figure 21 Screening rates of individuals who underwent mammography once every 2 years from 2014 to 2019.

Source: Health Promotion Administration, Ministry of Health and Welfare: Statistics of Health Promotion

Note 1: Screening rate (%) = (the number of individuals aged 45–69 years who have undergone mammography in the past 2 years / the population of females aged 45–69 years at the end of June of the previous year) × 100%.

Note 2: For further details, please refer to Appendix 18.

2. Pap smear

From 2013 to 2019, the screening rates of females who underwent Pap smear screening in the past 3 years decreased in the 60–64 and 65–69 age groups (Figure 22).

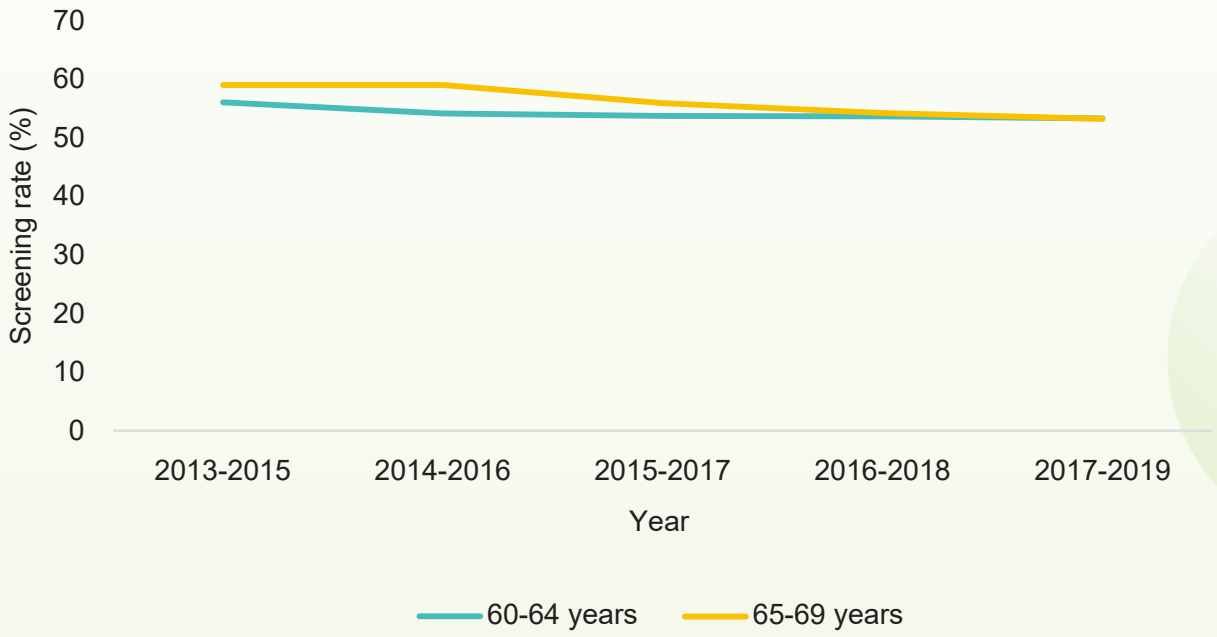


Figure 22 Screening rates of females who underwent Pap smear screening in the past 3 years from 2013 to 2019.

Source: Health Promotion Administration, Ministry of Health and Welfare: Statistics of Health Promotion

Note 1: Females who underwent Pap smear screening in the 3 years preceding 2015 are defined as those who underwent Pap smear screening between 2013 and 2015.

Note 2: Screening rate (%) = (the number of females aged 60-69 years who underwent Pap smear screening in a given year / the number of females aged 60-69 years in that year) × 100%.

Note 3: For further details, please refer to Appendix 19.

3. Body mass index (BMI)

From 2005 to 2008, the body mass index (BMI) values of females were higher than those of males (females, 25.3 ± 0.3; males, 24.0 ± 0.2), but between 2013 and 2016, the BMI values of females were lower than those of males (females, 24.7 ± 0.2; males, 24.8 ± 0.2). According to age stratification, the BMI values decreased with age (Table 18).

Table 18 Body mass index values of individuals aged 65 years and older between 2005 and 2008 and between 2013 and 2016.

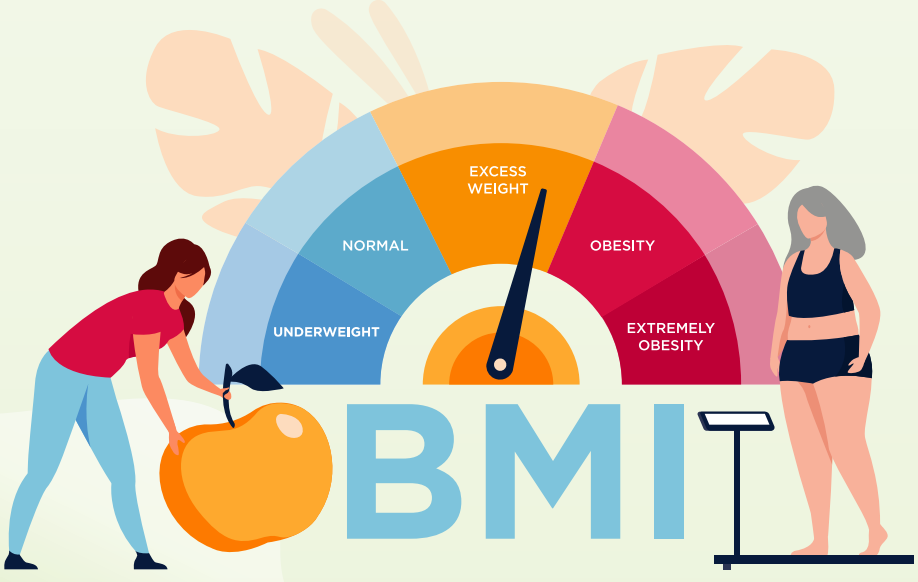
Unit：Mean (SE)

		2005-2008 (N = 937)	2013-2016 (N = 1,033)
Total		24.7(0.2)	24.7(0.1)
Gender	Male	24.0(0.2)	24.8(0.2)
	Female	25.3(0.3)	24.7(0.2)
Age	65-74 years	25.0(0.2)	24.8(0.2)
	75-84 years	24.2(0.3)	24.6(0.3)
	≥85 years	24.4(0.7)	24.1(0.6)

Source of data: Nutrition and Health Survey in Taiwan

Note 1: Values are all calculated by applying nationally representative weights.

Note 2: BMI = weight (kg) / height square (m^2).



4. Dietary diversity score (DDS)

From 2005 to 2008, the dietary diversity mean scores of males were higher than those of females (males, 4.73 ± 0.06; females, 4.64 ± 0.06), indicating a more favorable dietary balance among males relative to females. In addition, the age stratification results (2005–2008) indicated that the mean scores were lower in the older age groups. From 2013 to 2016, the mean scores of males were higher than those of females (males, 4.85 ± 0.04; females, 4.84 ± 0.06), and among the age groups, the oldest age group had the highest mean score (Table 19).

Table 19 Dietary diversity scores of individuals aged 65 years and older between 2005 and 2008 and between 2013 and 2016.

Unit：Mean (SE)

		2005-2008 (N = 937)	2013-2016 (N = 1,033)
Total		4.68(0.04)	4.84(0.03)
Gender	Male	4.73(0.06)	4.85(0.04)
	Female	4.64(0.06)	4.84(0.06)
Age	65-74 years	4.71(0.05)	4.87(0.04)
	75-84 years	4.67(0.07)	4.78(0.08)
	≥85 years	4.28(0.29)	4.94(0.13)

Source of data: Nutrition and Health Survey in Taiwan

Note 1: Values are all calculated by applying nationally representative weights.

Note 2: This scale assesses an individual’ s intake of six categories of foods (i.e., whole grains; legumes, fish, eggs, meat and their products; vegetables; fruits; dairy products; and oils, fats, nuts and seeds), and it is scored between 0 and 6 points. A respondent receives 1 point for consuming at least half a bowl of a food category. A higher score indicates a healthier dietary status.

Note 3: For the six categories of food substitution scales, please refer to Health Promotion Administration https://www.hpa.gov.tw/Pages/Detail.aspx?nodeid=543&pid=8382

Note 4: For more information on DDS, please refer to the following literature:

Kant, A. K., Schatzkin, A., Harris, T. B., Ziegler, R. G., & Block, G. (1993). Dietary diversity and subsequent mortality in the First National Health and Nutrition Examination Survey Epidemiologic Follow-up Study. The American journal of clinical nutrition, 57(3), 434–440. https://doi.org/10.1093/ajcn/57.3.434

5. Weekly recreational physical activity

From 2005 to 2017, the mean weekly recreational physical activity levels of the males in all age groups were higher than those of the females in the corresponding age groups. The mean weekly recreational physical activity level of the 65–74 age group was higher than those of the 75–84 and ≥85 age groups. The mean weekly recreational physical activity level among males in the 65–74 age group was 1,057 in 2005, 1,100 in 2009, 997 in 2013, and 677 in 2017; the mean weekly recreational physical activity level among females in the 65–74 age group was 779 in 2005, 735 in 2009, 731 in 2013, and 478 in 2017 (Figure 23).

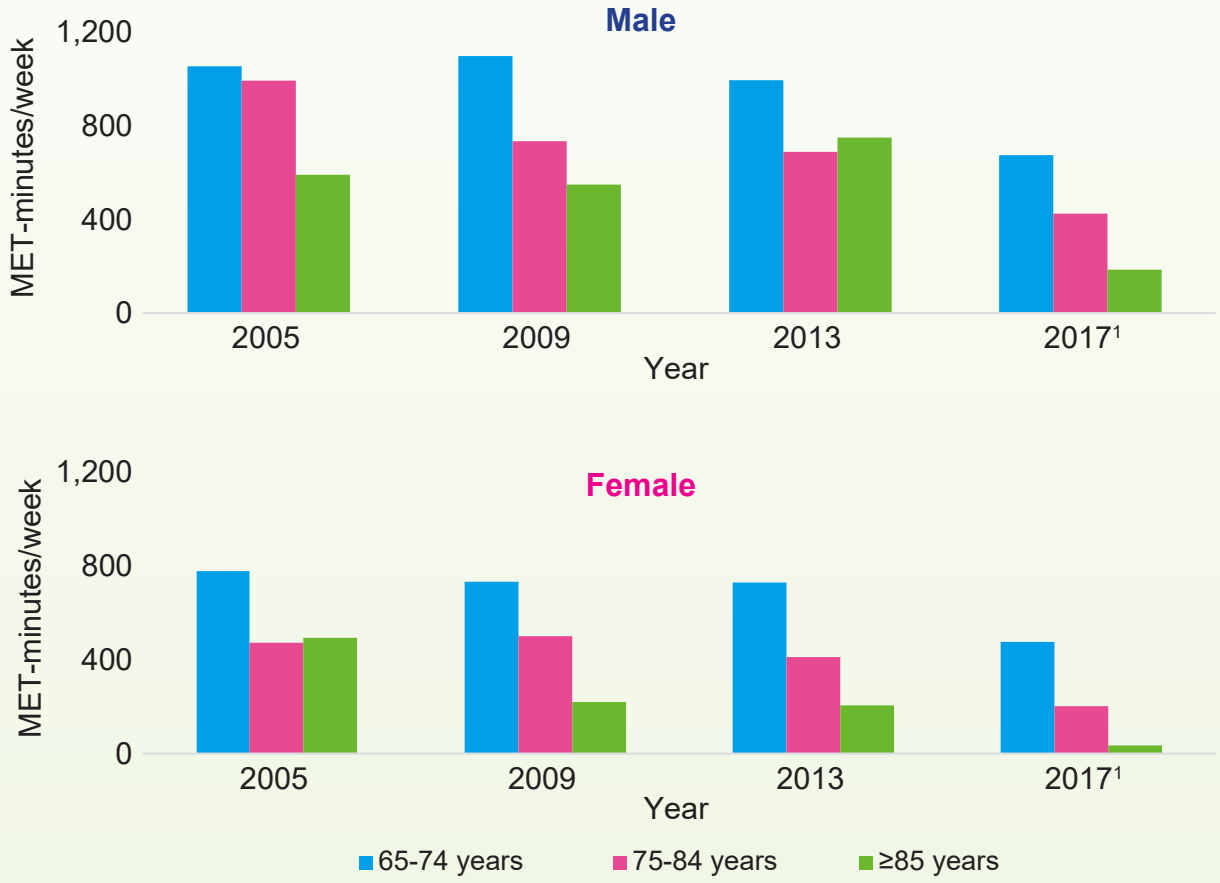


Figure 23 Mean weekly recreational physical activity level of males and females from 2005 to 2017.

Source: National Health Interview Survey

Note 1: (1) Weekly recreational physical activity levels in 2005, 2009, and 2013 = MET of recreational sports × weekly recreational sports (min).

(2) The weekly recreational physical activity level in 2017 is calculated using the following equation: (number of minutes of moderate recreational sports per week × 4) + (number of minutes of vigorous recreational sports per week × 8).

(3) Reference source for the method: WHO. Global Physical Activity Questionnaire (GPAQ) Analysis Guide. https://cdn.who.int/media/docs/default-source/ncds/ncd-surveillance/gpaq-analysis-guide.pdf?sfvrsn=1e83d571_2

Note 2: Values are all calculated by applying nationally representative weights. The rounding difference was used.

Note 3: For the Metabolic Equivalent of Task (MET) of physical activities, please refer to p.134.

Note 4: For further details, please refer to Appendix 20.

6. Smoking

From 2005 to 2017, the smoking rates of males were higher than those of females. Among the males, smoking rates tended to gradually decrease with age. The smoking rates of males in the 65–74, 75–84, and ≥85 age groups were 18.8%–33.7%, 8.8%–22.9%, and 5.4%–20.5%, respectively. The smoking rates of females were generally below 10.0% (Figure 24).

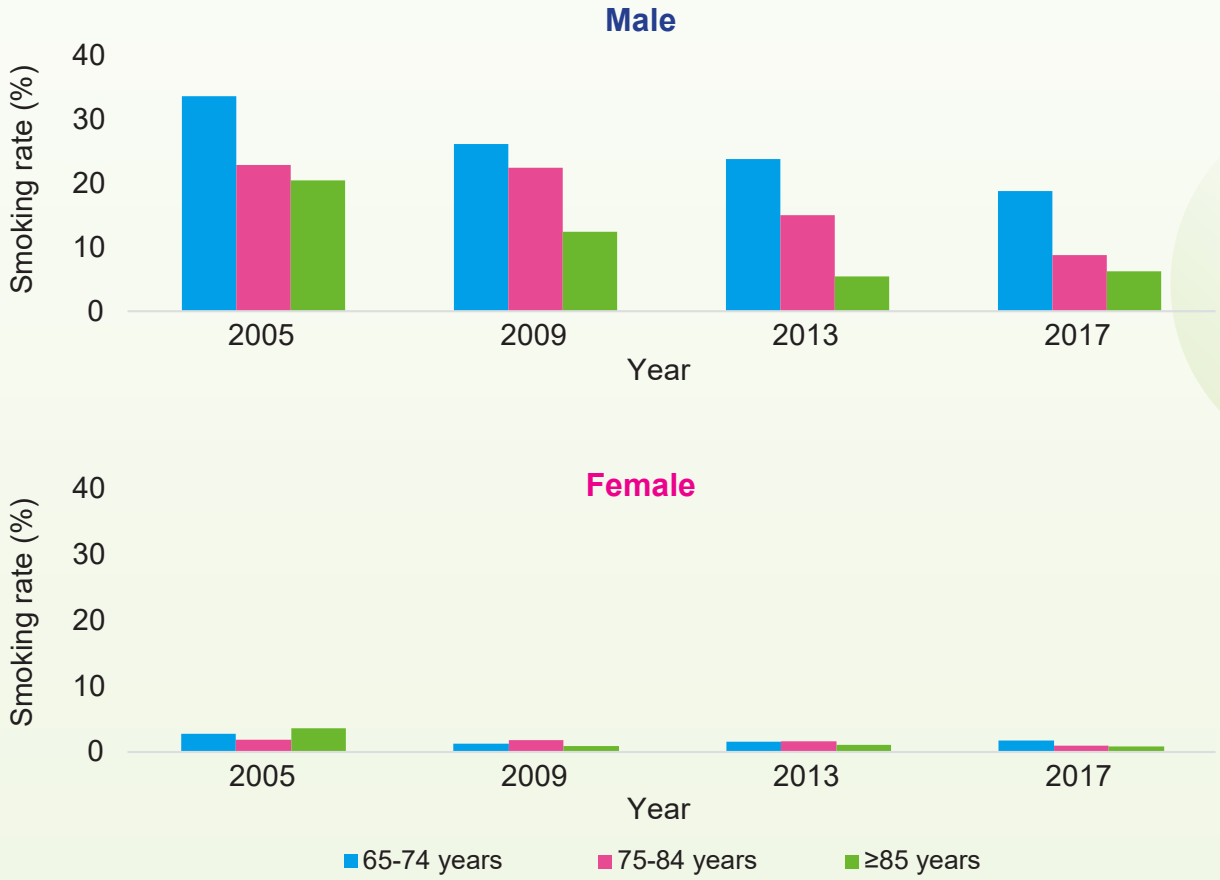


Figure 24 Smoking rates of males and females from 2005 to 2017.

Source: National Health Interview Survey

Note 1: A smoker is defined as an individual who has smoked more than five packs of cigarettes and currently smokes daily or occasionally.

Note 2: Values are all calculated by applying nationally representative weights.

Note 3: Smoking rate = the weighted number of smokers / the weighted number of completed samples × 100%.

Note 4: For further details, please refer to Appendix 21.

From 2005 to 2017, the percentage of males who were ex-smokers was higher than the percentage of females who were ex-smokers. Among the males, the percentage of ex-smokers gradually increased with age. The percentage of males who were ex-smokers was 31.8%–61.1% in the 65–74 age group, 49.6%–80.3% in the 75–84 age group, and 28.7%–86.6% in the ≥85 age group. Among the females, the percentage of ex-smokers was 9.1%–43.8% in the 65–74 age group, 25.1%–59.5% in the 75–84 age group, and 28.1%–78.3% in the ≥85 age group (Figure 25).

Figure 25 Percentage of males and females ex-smokers from 2005 to 2017.

Source: National Health Interview Survey

Note 1: An ex-smoker is defined as an individual who has smoked more than five packs of cigarettes and has quit smoking.

Note 2: Values are all calculated by applying nationally representative weights.

Note 3: Percentage of ex-smokers = the weighted number of people who have smoked / (the weighted number of people who have smoked + the weighted number of current smokers) × 100%.

Note 4: For further details, please refer to Appendix 21.

7. Alcohol drinking

From 2005 to 2017, the percentage of males who drank alcohol was higher than the percentage of females who drank alcohol. Regardless of gender, the percentage of individuals who drank alcohol gradually decreased with age. The percentage of males who drank alcohol was 37.4%–66.5%, 28.7%–57.5%, and 9.0%–53.6% in the 65–74, 75–84, and ≥85 age groups, respectively. In addition, the percentage of females who drank alcohol was 9.0%–25.7%, 4.7%–15.3%, and 4.2%–13.4% in the 65–74, 75–84, and ≥85 age groups, respectively (Figure 26).

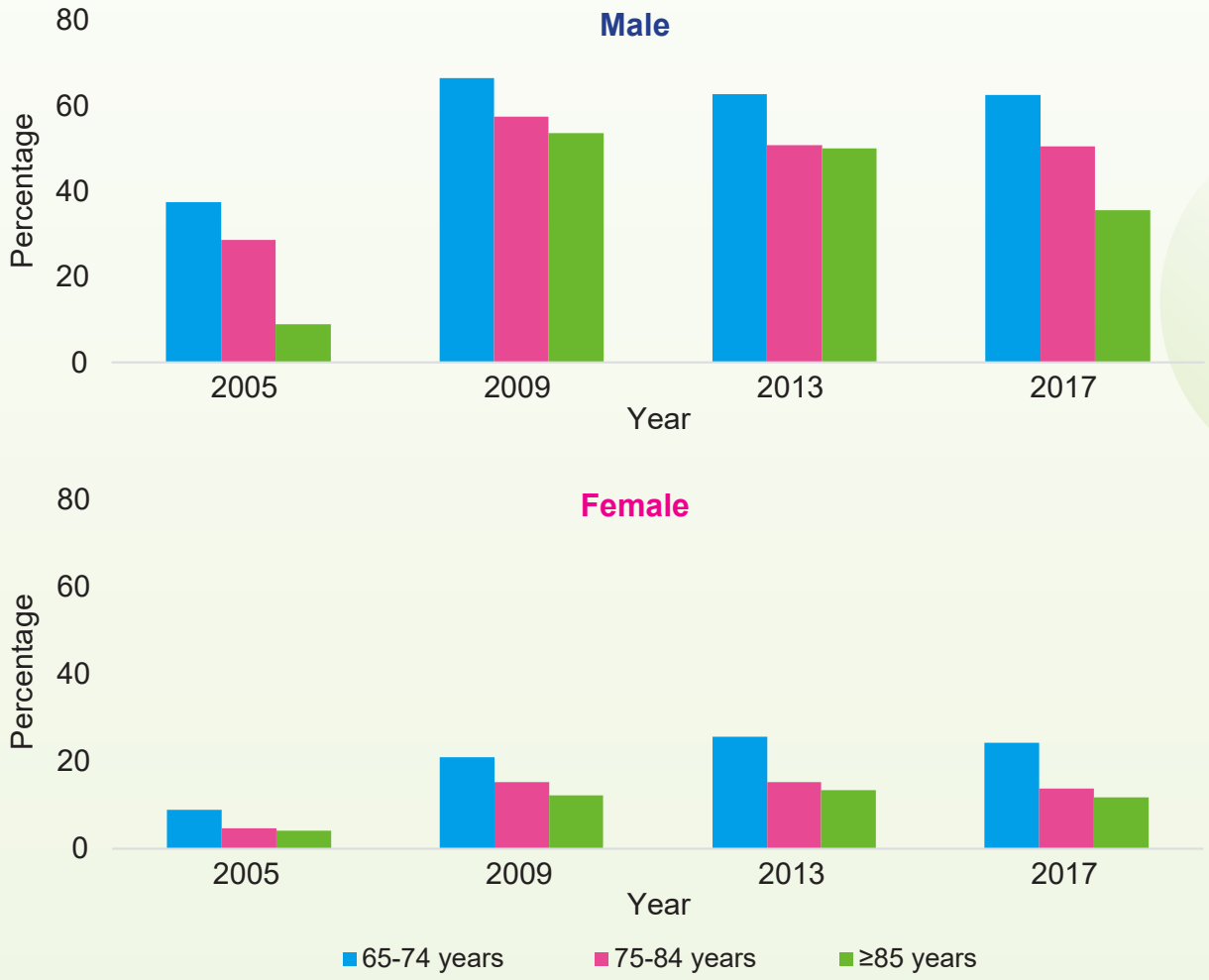


Figure 26 Percentage of males and females who drank alcohol from 2005 to 2017.

Source: National Health Interview Survey

Note 1: An individual who drinks alcohol is defined as an individual who answers "yes" to the question "Do you drink alcohol?" (including occasional or social drinking) in the 2005 questionnaire and "yes" to the question "Have you ever drank alcohol?" (including occasional or social drinking) in the 2009–2017 questionnaires.

Note 2: Values are all calculated by applying nationally representative weights.

Note 3: Percentage of people who drink alcohol = the weighted number of drinkers / the weighted number of completed samples × 100%.

Note 4: For further details, please refer to Appendix 22.

8. Betel nut chewing

From 2005 to 2017, the percentage of males who chewed betel nuts was higher than the percentage of females who chewed betel nuts. Regardless of gender, except for 2009, the percentage of individuals who chewed betel nuts gradually decreased with age. The percentage of males who chewed betel nuts was 4.6%–6.7%, 1.0%–2.1%, and 0.5%–2.2% in the 65–74, 75–84, and ≥85 age groups, respectively; the percentage of females who chewed betel nuts was less than 1.6% (Figure 27).

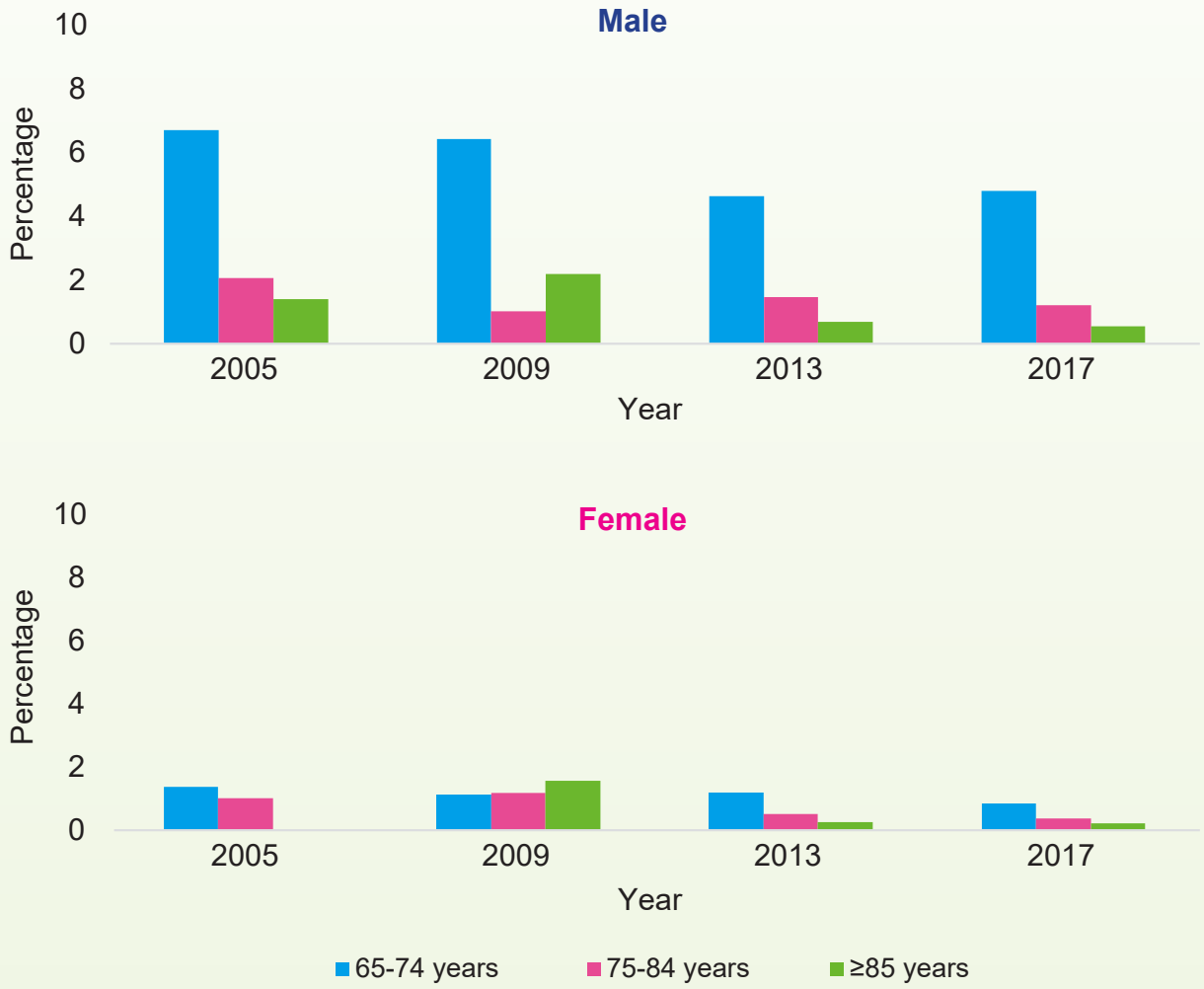


Figure 27 Percentage of males and females who chewed betel nuts from 2005 to 2017.

Source: National Health Interview Survey

Note 1: An individual who chews betel nuts chewing is defined as an individual who has chewed betel nuts in the previous 6 months.

Note 2: Values are all calculated by applying nationally representative weights.

Note 3: Percentage of chew betel nuts = the weighted number of individuals who currently chew betel nuts / the weighted number of completed samples × 100%.

Note 4: For further details, please refer to Appendix 23.

NOTE

NOTE

Chapter 5
Utilization of Health and Long-Term Care

Utilization of Health and Long-Term Care

The utilization of health care was extracted from the officially published statistics by Ministry of Health and Welfare. From 2011 to 2020, the annual outpatient visit rates was above 90,000 per 100,000 people with slightly more females than males. In 2020, the outpatient visits were 99,655 per 100,000 in people aged between 65 and 74, it was 100,578 in people aged between 75 and 84, 110,715 in people aged 85 and above. For hospitalization, it was 14,418 per 100,000 in people aged 65-74, 22,317 in people aged 75-84, 35,639 in people aged 85 and above. It was higher in males than females, and the highest occurred in population aged 85 and above.

Regarding the utilization of long-term care services, the Ministry of Health and Welfare reported the coverage rate in Nantou County was the highest (83.5%), whereas Lienchiang County was the lowest (18.6%) in year 2020. The average was around 50~60%.

The number of long-term care service institutions that provided home services was the highest (923), and the number of those long-term care service institutions established in accordance with Long-Term Care Services Act that provided institutional residential services was the lowest (16). Accommodation-type service institutions included senior citizens' welfare institutions, veterans' homes, accommodation-type institutions with disabilities, general nursing homes, psychiatric nursing homes and institutional residential service institutions (established by Long-Term Care Services Act). Among the counties and cities, New Taipei City had the largest number of senior citizens' welfare institutions, general nursing homes, and psychiatric nursing homes (215, 82, and 9, respectively); Tainan City had the largest number of veterans' homes (3); Taoyuan City had the largest number of accommodation-type institutions with disabilities (26); Pingtung County had the largest number of institutional residential service institutions (3; established by Long-Term Care Services Act). The number of community service institutions that provided day care services was the highest (466), and the number of those community service institutions that provided group home services was the lowest (15).

The number of people used long-term care for home services were 194,053, 12,691 in day care, 1,066 in adult foster care, 7,187 in small-size multi-function, 687 in institutional residential service institutions established in accordance with Long-Term Care Services Act, and 200 in group homes in 2020.

1. Utilization of outpatient visits under the National Health Insurance (NHI)

From 2011 to 2020, the annual outpatient visit rates was above 90,000 per 100,000 population. Between 2016 and 2020, the outpatient visit rate of the ≥85 age group was the highest among the age groups (Figure 28). According to gender stratification, females were slightly higher than males (Appendix 24).

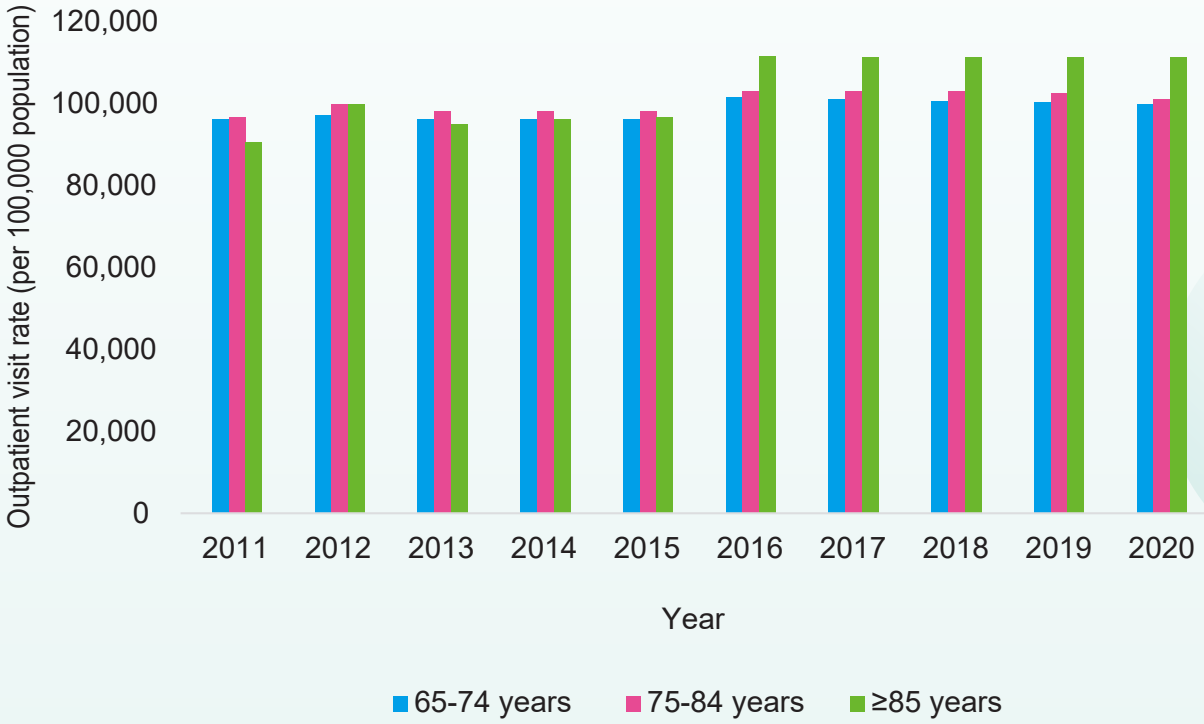


Figure 28 Outpatient health insurance visit rate for individuals aged 65 years and older from 2011 to 2020.

Source: National Health Insurance Annual Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/dos/lp-5103-113.html

Note 1: Outpatient health insurance visit rate = the number of outpatients / the mid-year population × 100,000.

Note 2: For further details, please refer to Appendix 24.

2. Utilization of inpatient visits under the National Health Insurance (NHI)

From 2011 to 2020, among the age groups, the ≥85 age group had the highest inpatient visit rate, followed by 75-84 and 65-74 age groups (Figure 29). According to gender stratification, males were higher than females (Appendix 25).

Figure 29 Inpatient health insurance visit rate for individuals aged 65 years and older from 2011 to 2020.

Source: National Health Insurance Annual Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/dos/lp-5103-113.html

Note 1: Inpatient health insurance visit rate = the number of inpatients / the mid-year population × 100,000.

Note 2: For further details, please refer to Appendix 25.

3. Users of long-term care services

The percentage of long-term care service users in the total population tended to increase with age. Among the age groups, the percentage of long-term care service users was the highest (63.1%) in the ≥75 age group. Overall, the percentage of females who were long-term care service users (57.0%) was higher than the percentage of males who were long-term care service users (43.0%). Among the various levels of long-term care case-mix system (i.e., Levels 2–8), Level 4 (17.9%) and Level 6 (11.4%) accounted, respectively, for the highest and lowest percentage of long-term care service users. Among long-term care service users, a higher percentage were from general households (80.2%), individuals with disability certificates (51.1%), older people living with others (86.6%), and individuals for whom no foreign caregivers were hired (81.2%; Table 20).

Table 20 Demographic characteristics of long-term care service users in 2020.

Unit：People, Percentage

		Number of people	Percentage
Total number of people		357,457	100.0
Age	≤19 years	6,416	2.0
	20–49 years	13,850	4.1
	50–64 years	37,605	10.8
	65–74 years	73,847	20.0
	≥75 years	225,739	63.1
Gender	Male	153,548	43.0
	Female	203,909	57.0
Ethnicity	Non-indigenous peoples	345,149	96.6
	Indigenous peoples	12,308	3.4

Continued Table 20 Demographic characteristics of long-term care service users in 2020.

Unit：People, Percentage

		Number of people	Percentage
Long-term care case-mix system	1, 1a, 1b	454	0.1
	2	46,720	13.1
	3	51,110	14.3
	4	63,850	17.9
	5	56,649	15.8
	6	40,772	11.4
	7	42,097	11.8
	8	55,805	15.6
Economic status	General households	286,696	80.2
	Low- and middle-income households	27,520	7.7
	Low-income households	43,241	12.1
Possession of disability certificate	Yes	182,688	51.1
	No	174,762	48.9
Living alone	Yes	43,823	12.3
	No	309,407	86.6
	Missing	4,227	1.1
Hired foreign caregivers	Yes	67,235	18.8
	No	290,219	81.2

Source: Long-term care management information platform of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html

Note 1: Long-term care service users refer to the number of people who use long-term care services and payment, including the use of caring and professional services, transportation services, assistive devices and home barrier-free environment improvement services, respite care, etc.

Note 2: The long-term care case-mix system is based on the degree of disability, which is divided into 1-8 levels. Among them, the disability level 2-8 can be based on the long-term care services and payment benchmark, and the payment amount of long-term care services is determined according to the degree of disability.

Note 3: The long-term care case-mix system Level 1 is for the non-incapacitated older people, 1a is for the demented and non-incapacitated, and 1b is for the older people with frailty. This table is the result of the assessment by Long-Term Care Management Centers. Therefore, fewer people with Level 1, 1a, and 1b, and does not represent the total number of such people in the country.

Note 4: The missing value is due to the fact the old case has not been re-evaluated.

4. Number of individuals who required long-term care services

In 2020, the number of new applicants and existing long-term care service users was the highest in New Taipei City (new applicants, 28,008; number of existing service users, 46,032) relative to other counties and cities. The number of evaluated applicants was the highest in Taichung City (42,541); Lienchiang County had the lowest number of new applicants (19 individuals), evaluated applicants (48 individuals), and existing service users (46 individuals; Figure 30).

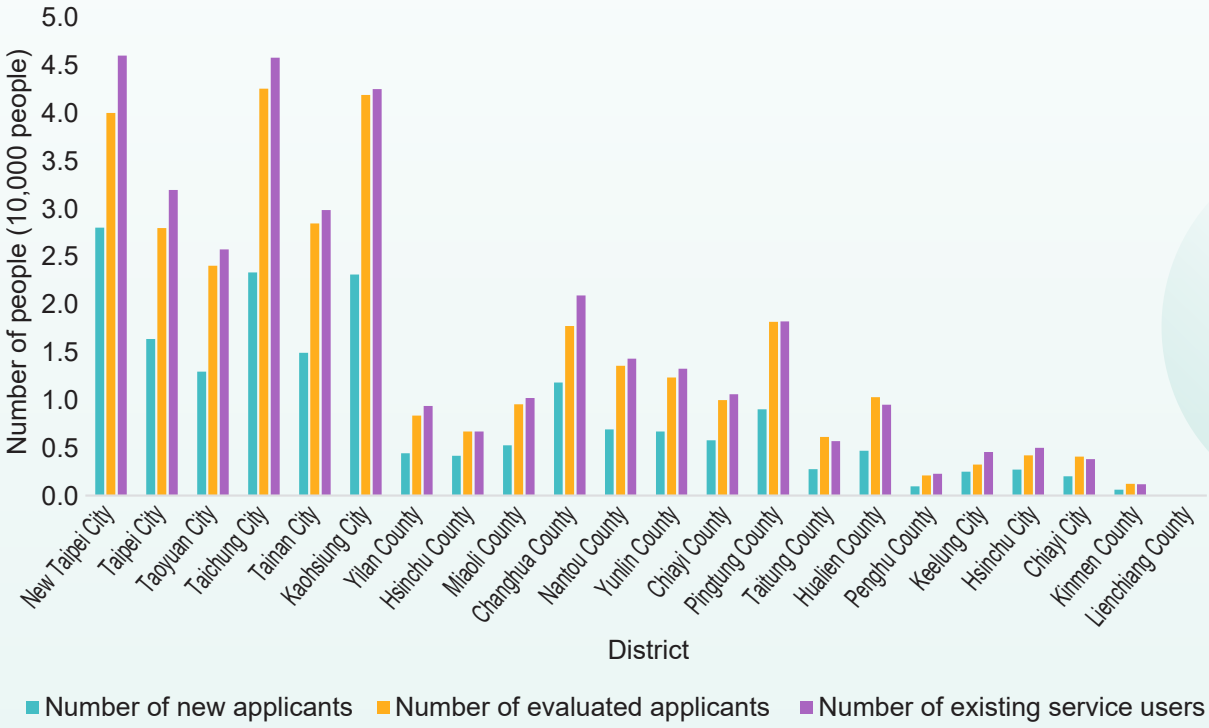


Figure 30 Number of long-term care service users in each county and city in 2020.

Source: Long-term care management information platform of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html

Note 1: Number of new applicants refers to those who fill in the application during the year, and who have not used long-term care services in the previous year.

Note 2: Number of evaluated applicants refers to the number of new evaluation and old case re-evaluation.

Note 3: Number of existing service users refers to the number of people who can be served.

Note 4: For further details, please refer to Appendix 26.

5. Long-term care service coverage rate

In 2020, Nantou County had the highest coverage rate for long-term care services (83.5%) followed by Hualien County (78.4%); Lienchiang County had the lowest coverage rate (18.6%; Figure 31).

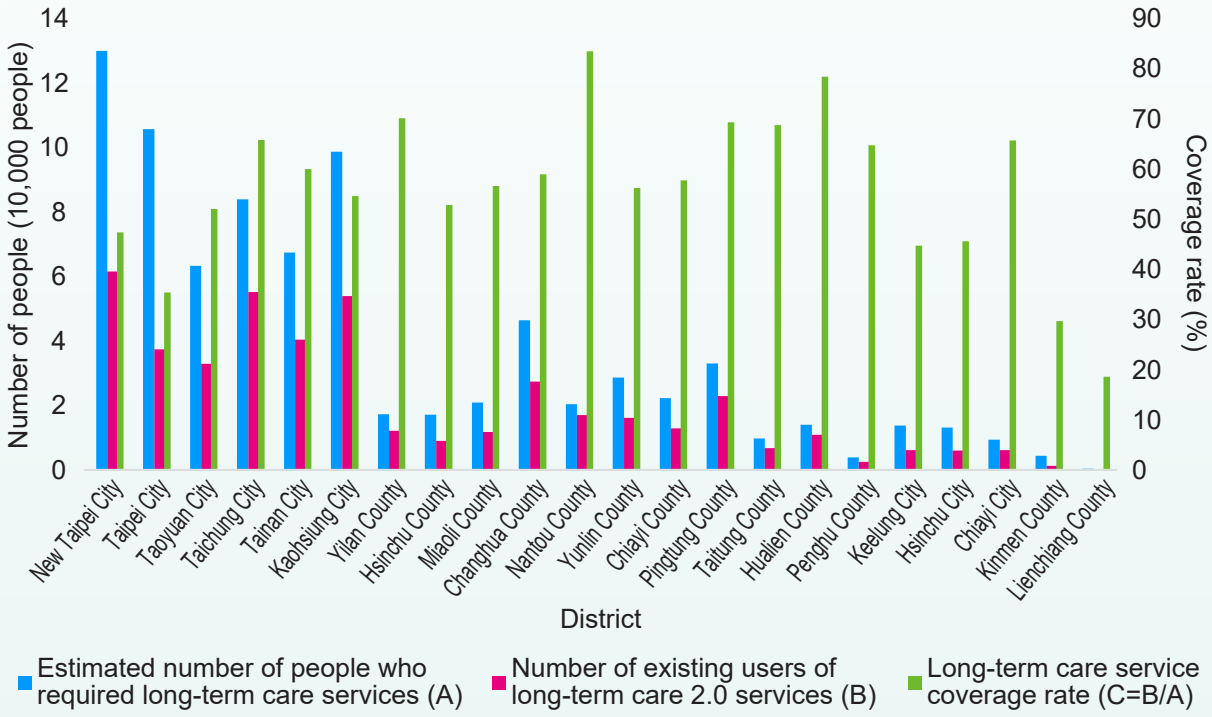


Figure 31 Long-term care service coverage rate in each county and city in 2020.

Source: Long-term care management information platform of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html

Note 1: Individuals who require long-term care services comprise disabled people aged ≥65 years, disabled indigenous peoples aged 55 years and older, individuals with dementia aged 50 years and older, disabled individuals, older people living alone who need assistance in daily life, and older people with frailty.

Note 2: Number of existing users of long-term care 2.0 services is calculated by summing the number of long-term care benefit and payment service users and the number of users of accommodation and community service institutions. The number of day care, adult foster care, and small-size multi-function services are all included in long-term care benefit and payment service users. "Community" refers to the number of people in group homes.

Note 3: Long-term care service coverage rate = number of existing users of long-term care 2.0 services / estimated number of people who required long-term care services × 100%.

Note 4: Long-term care service coverage rate of Lienchiang County (estimated number of people requiring long-term care, 371; number of existing users of long-term care 2.0 services, 69).

Note 5: For further details, please refer to Appendix 27.

6. Number of long-term care service institutions

The long-term care service institutions were established in accordance with Long-Term Care Services Act. The service types of long-term care institutions included home, community, institution, and comprehensive services. In 2020, the number of long-term care service institutions that provided home services was the highest (923), and the number of those long-term care service institutions established in accordance with Long-Term Care Services Act that provided institutional residential services was the lowest (16). Community services comprised day care, adult foster care, group homes, and small-size multi-function (780 in total); the number of institutions that provided day care services was the highest (466), and the number of institutions that provided group home services was the lowest (15) (Figure 32).

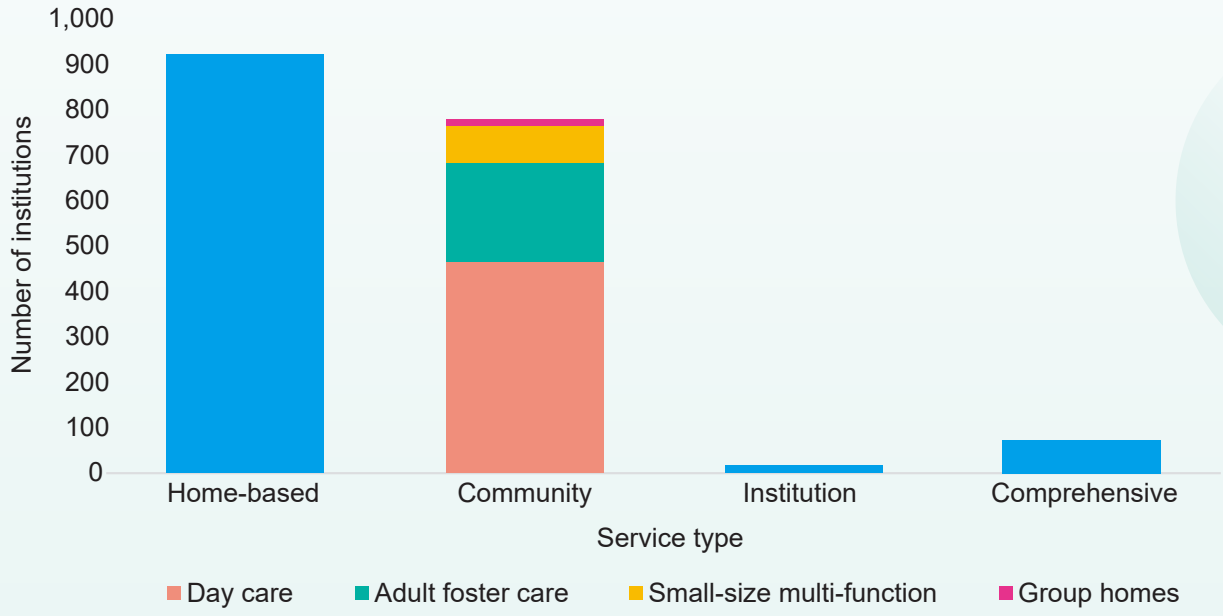


Figure 32 Number of long-term care service institutions in 2020.

Source: Long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare: https://ltcpap.mohw.gov.tw/molc/auth/login?targetUri=%2F

Note 1: Home-based service long-term care institutions are established in accordance with Long-Term Care Services Act. Refers to the older people living at home, and the long-term care personnel will provide long-term care services at the house.

Note 2: Community-based service institutions include the number of day care, the number of adult foster care, the number of small-size multi-function, and the number of group homes. Day care institutions that provide special day care services; adult foster care institutions that provide special adult foster care services; and small-size multi-function institutions that provide special small-size multi-function services. Small-size multi-function institutions can provide home services and day care. To avoid double counting, small-size multi-function institutions that provide home and day care services are not included in the total number of home and day care service institutions.

Note 3: Institutional residential service institutions only count the residential institutions that have been established and licensed in accordance with Long-Term Care Services Act and Institutional Long-Term Care Juridical Entities Act, excluding senior citizens' welfare institutions.

Note 4: Comprehensive services refers to institutions that provide at least two types of long-term care services (i.e., home services, community services, and institutional residential services). To avoid double counting, comprehensive institutions are not included in the total number of home and community service institutions.

Note 5: For further details, please refer to Appendix 28. The number of community long-term care institutions, please refer to Table 21.

7. Number of home-based service long-term care institutions

In 2020, Taichung City had the highest number of home-based service long-term care institutions (198) followed by Kaohsiung City (166); Lienchiang County had the lowest number of home-based service long-term care institutions (1; Figure 33).

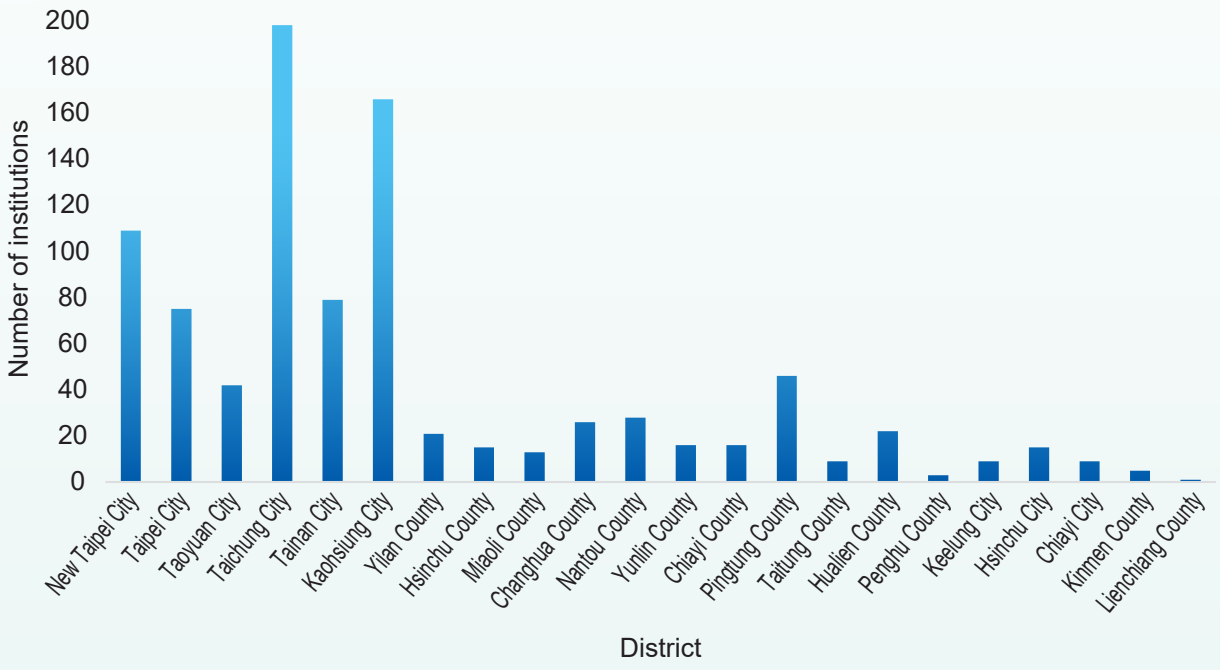


Figure 33 Number of home-based service long-term care institutions in each county and city in 2020.

Source: Long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html

Note 1: Home-based service long-term care institutions are established in accordance with Long-Term Care Services Act. Refers to the older people living at home, and the long-term care personnel will provide long-term care services at the house.

Note 2: For further details, please refer to Appendix 28.

8. Number of community-based service long-term care institutions

In 2020, the community-based service long-term care institutions in each county and city provided day care, adult foster care, group homes, and small-size multi-function services. Among the counties and cities, Taichung City had the largest number of day care institutions (59); Lienchiang County had the lowest number of day care institutions (1). Yunlin County had the largest number of adult foster care institutions (38), New Taipei City, Taichung City, and Kaohsiung City had the highest numbers of group homes with each having two. Taichung City had the highest number of small-size multi-function institutions (13; Table 21).

Table 21 Number of community-based service long-term care institutions in each county and city in 2020.

Unit：Number

	Day care	Adult foster care	Group homes	Small-size multi-function
Total	466	218	15	81
New Taipei City	36	7	2	5
Taipei City	25	7	1	7
Taoyuan City	33	3	0	6
Taichung City	59	23	2	13
Tainan City	54	14	1	10
Kaohsiung City	49	27	2	8
Yilan County	24	1	1	2
Hsinchu County	15	2	1	2
Miaoli County	14	1	0	0
Changhua County	23	10	0	7

Continued Table 21 Number of community-based service long-term care institutions in each county and city in 2020.

Unit：Number

	Day care	Adult foster care	Group homes	Small-size multi-function
Nantou County	14	20	1	1
Yunlin County	24	38	1	1
Chiayi County	15	8	0	1
Pingtung County	36	25	0	2
Taitung County	6	10	0	7
Hualien County	11	16	1	3
Penghu County	7	1	0	1
Keelung City	4	1	1	2
Hsinchu City	3	3	0	1
Chiayi City	9	1	1	2
Kinmen County	4	0	0	0
Lienchiang County	1	0	0	0

Source: Long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html

Note 1: Day care institutions provide special day care services; adult foster care institutions provide special adult foster care services; and small-size multi-function institutions provide special small-size multi-function services.

Note 2: Small-size multi-function institutions can provide home and day care services. To avoid double counting, small-size multi-function institutions are not included in the total number of home and day care institutions.

9. Number of accommodation-type service long-term care institutions

The accommodation-type service long-term care institutions included senior citizens' welfare institutions, veterans' homes, accommodation-type institutions with disabilities, general nursing homes, psychiatric nursing homes and institutional residential service institutions (established by Long-Term Care Services Act). Among the counties and cities, New Taipei City had the largest number of senior citizens' welfare institutions, general nursing homes, and psychiatric nursing homes (215, 82, and 9, respectively); Tainan City had the largest number of veterans' homes (3); Taoyuan City had the largest number of accommodation-type institutions with disabilities (26); Pingtung County had the largest number of institutional residential service institutions (established by Long-Term Care Services Act) (3; Table 22).

Table 22 Number of accommodation-type service long-term care institutions in each county and city in 2020.

Unit：Number

	Total	Senior citizens' welfare institutions	Veterans' homes	Accommodation-type institutions with disabilities	General nursing homes	Psychiatric nursing homes	Institutional residential service institutions (established by Long-Term Care Services Act)
Total	1,882	1,078	16	173	552	47	16
New Taipei City	332	215	2	22	82	9	2
Taipei City	136	99	0	15	20	1	1
Taoyuan City	152	68	2	26	48	6	2
Taichung City	152	66	0	11	70	5	0
Tainan City	219	113	3	21	79	3	0
Kaohsiung City	239	156	2	8	66	6	1
Yilan County	60	40	0	8	8	2	2
Hsinchu County	40	18	0	6	15	1	0

Continued Table 22 Number of accommodation-type service long-term care institutions in each county and city in 2020.

Unit：Number

	Total	Senior citizens' welfare institutions	Veterans' homes	Accommodation-type institutions with disabilities	General nursing homes	Psychiatric nursing homes	Institutional residential service institutions (established by Long-Term Care Services Act)
Miaoli County	36	15	0	8	13	0	0
Changhua County	103	52	2	7	41	1	0
Nantou County	47	19	0	5	18	3	2
Yunlin County	62	42	1	4	13	2	0
Chiayi County	51	28	0	7	14	1	1
Pingtung County	90	56	1	7	22	1	3
Taitung County	22	13	1	4	4	0	0
Hualien County	34	17	1	5	5	5	1
Penghu County	7	4	0	1	2	0	0
Keelung City	39	28	0	2	9	0	0
Hsinchu City	21	9	1	3	8	0	0

Continued Table 22 Number of accommodation-type service long-term care institutions in each county and city in 2020.

Unit：Number

	Total	Senior citizens' welfare institutions	Veterans' homes	Accommodation-type institutions with disabilities	General nursing homes	Psychiatric nursing homes	Institutional residential service institutions (established by Long-Term Care Services Act)
Chiayi City	35	17	0	2	14	1	1
Kinmen County	3	2	0	1	0	0	0
Lienchiang County	2	1	0	0	1	0	0

Source:

1. Social and Family Affairs Administration, Ministry of Health and Welfare:
   https://www.gender.ey.gov.tw/gecdb/Stat_Statistics_DetailData.aspx?sn=X3pWT%2FAgN1wWUGDkYrjS%2Bg%3D%3D
   https://www.sfaa.gov.tw/SFAA/Pages/List.aspx?nodeid=460
2. Ministry of Health and Welfare:
   https://www.gender.ey.gov.tw/gecdb/Stat_Statistics_DetailData.aspx?sn=lrbyglGJimGqzQ22dE7YGA%40%40&d=194q2o4!otzoYO!8OAMYew%40%40
3. Long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare:
   https://1966.gov.tw/LTC/cp-3948-41555-201.html

Note 1: Senior citizens' welfare institutions include long-term care, nursing, caring for dementia senior citizens and domiciliary care institutions. The service recipients of the senior citizens' welfare institutions must be over 65 years old, but if those who are over 60 years old and under 65 years old voluntarily bear the expenses, the senior citizens' welfare institutions may provide long-term care, maintenance or other services depending on the internal facilities.

Note 2: The conditions for living in the veterans' homes: (1) The spouses of retired officers and soldiers must be at least 50 years old, their parents must be at least 60 years old, and they have no fixed occupation. (2) Dependents, bereaved family members and the general public of retired officers and soldiers other than those mentioned in the preceding paragraph shall be at least 65 years old.

Note 3: Accommodation-type institutions with disabilities are places that provide 24-hour living care, training or night care services based on needs assessment. This table only counts institutions that can accommodate people with disabilities over 65 years old. Statistics are up to December 2021.

Note 4: General nursing homes have no age limit for admission, and mainly provide nursing care for severely ill older people who leave the hospital, such as nursing care for cases with nasogastric tube, urinary catheter, tracheotomy tube or other non-severe but still admitted to receive nursing and health care object of demand.

Note 5: There is no age limit for psychiatric nursing homes, mainly for older people with chronic mental illness and dementia.

10. Number of service users served by long-term care service institutions

In 2020, the number of service users served by long-term care service institutions was the highest for home services (194,053 individuals) followed by day care (12,691 individuals); the number of service users served was the lowest for group homes (200 individuals; Figure 34).

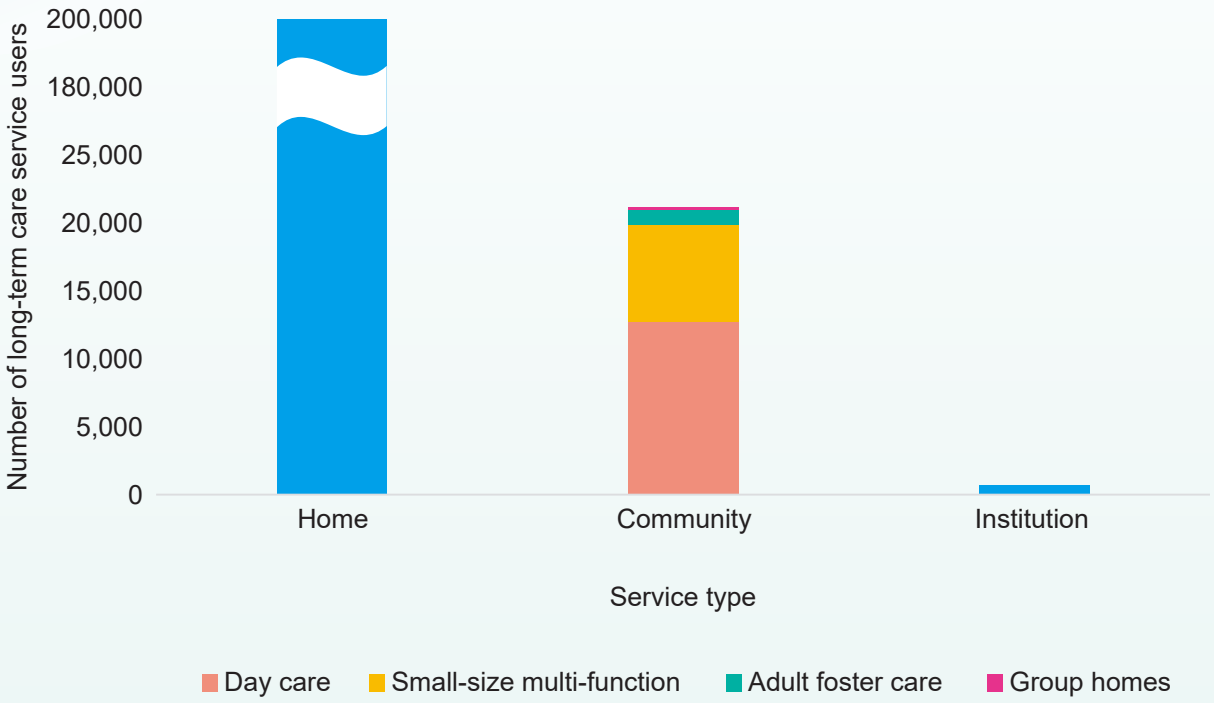


Figure 34 Number of service users served by long-term care service institutions in 2020.

Source: Payment review platform, and long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare:
https://1966.gov.tw/LTC/cp-3948-41555-201.html

Note 1: According to the establishment standards for long-term care service institutions, small-size multi-function institutions can provide various long-term care services such as home services, temporary accommodation, and day care. Therefore, number of small-size multi-function service users refers to the number of people served by such institutions. The total number of service users served by small-size multi-function institutions is not included in the number of service users served by home and day care institutions.

Note 2: The number of services users served by institution only counts the number of residential institutions that have been established and licensed in accordance with Long-Term Care Services Act and Institutional Long-Term Care Juridical Entities Act (Excludes senior citizens' welfare institutions, veterans' homes, nursing homes, and accommodation-type institutions with disabilities).

Note 3: For further details, please refer to Appendix 29.

11. Long-term care workforce

As of the end of December 2020, the long-term care workforce included care worker, home care service supervisor, care manager, and case manager of community integrated service center. The number of care workers was the highest at 73,700 individuals (10,985 males and 62,715 females), and the number of care managers was the lowest at 1,321 people (127 males and 1,194 females; Figure 35).

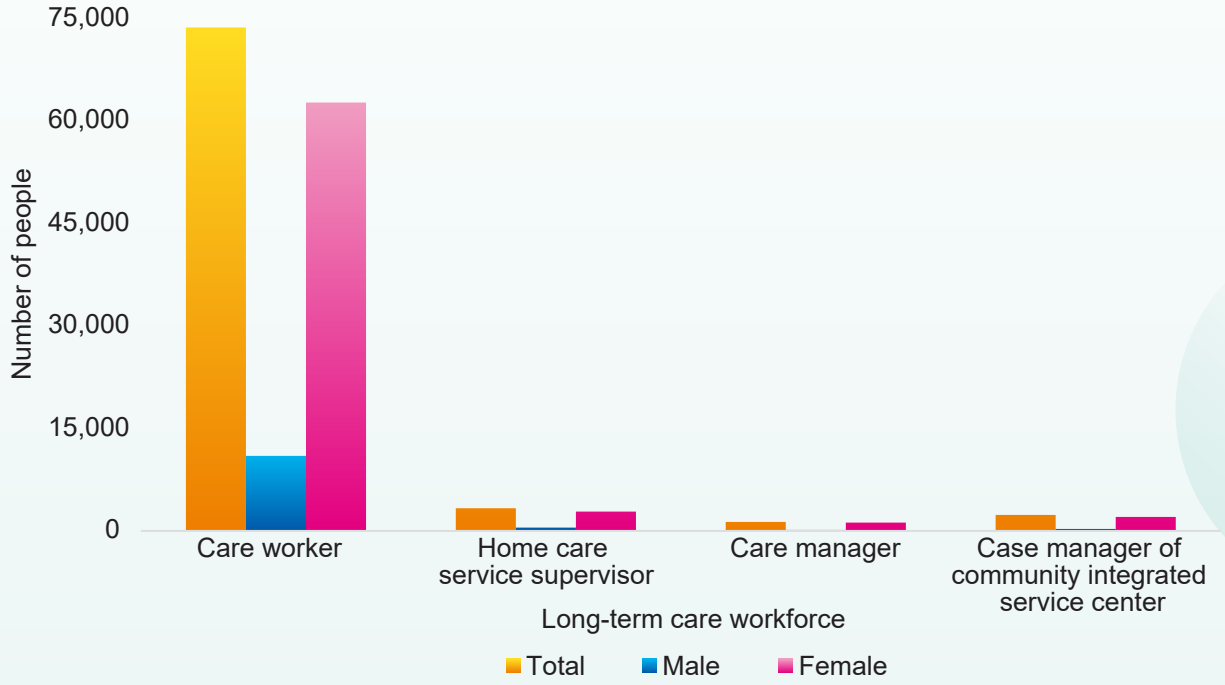


Figure 35 Long-term care workforce in 2020.

Source: Long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html

Note 1: Long-term care personnel refer to personnel who have been trained and certified by the Long-Term Care Services Act and have been certified to provide long-term care services. According to Article 2 of the Long-term Care Service Personnel Training Certification, Continuing Education and Registration Regulations, the 5 categories of long-term care personnel, if they have been trained and certified to obtain long-term care personnel certification documents, shall comply with the provisions of Article 19, Paragraph 1 of the Long-term Care Services Act. Only after registered in or reporting support to a long-term care institution can the service be provided.

Note 2: Long-term care personnel with certified documents can register as long-term care personnel, and duplicated values may exist in the data relating to various job categories. There may be duplication among various categories due to the Long-term Care Services Personnel Training Certification, Continuing Education and Registration Regulations. There is no restriction on long-term care personnel practicing registration is limited to one place. Currently, there is no full-time restriction on the other personnel except for the care specialists who need to be full-time.

Note 3: The four categories of personnel are based on the statistical data registered in the long-term care institutions and management information systems for long-term care personnel.

Note 4: The types of institutions where care workers work in comprise home-based, community-based, institution-based, and comprehensive long-term care institutions established in accordance with the Long-term Care Services Act and senior citizens' welfare institutions, nursing homes, accommodation-type institutions with disabilities, and veterans' homes established in accordance with other laws.

Note 5: Care managers refer to care management specialist and care management supervision.

Note 6: Medical personnel who obtain certification through the above-mentioned methods are eligible for long-term care personnel.

Note 7: For further details, please refer to Appendix 30.

NOTE

Chapter 6 Social Participation and Living Arrangement

Social Participation and Living Arrangement

We used enlistment of older people living alone and requiring care, living arrangements, and social participation as indicators of older people' s levels of social participation and living conditions.

From 2011 to 2020, the percentage of people aged ≥65 years who live alone and are listed as requiring care declined from 1.9% (47,255) in 2011 to 1.1% (41,983) in 2020. From 2012 to 2020, households with a single adult accounted for 71.2%–76.1% of the total households with older people. In addition, from 2005 to 2017, the percentage of people aged ≥65 years living with family was the highest (61.1% in 2005; 68.5% in 2009; 64.2% in 2013, and 66.4% in 2017), whereas the percentage of those living with other relatives or friends was the lowest (0.8% in 2005; 0.8% in 2009; 0.6% in 2013; and 1.0% in 2017).

From 2005 to 2017, the majority of people aged ≥65 years (over 85% of males and over 81% of females) did not serve as volunteers. Regarding religious activities and neighborhood activities, more than 60% and 70% of the older people did not participate in religious activities and neighborhood activities, respectively.

1. Older people who live alone and are listed as requiring care

Between 2011 and 2020, the percentage of people aged ≥65 years who live alone and are listed as requiring care exhibited a downward trend, from 1.9% in 2011 to 1.1% in 2020 (41,983 people) (Figure 36).

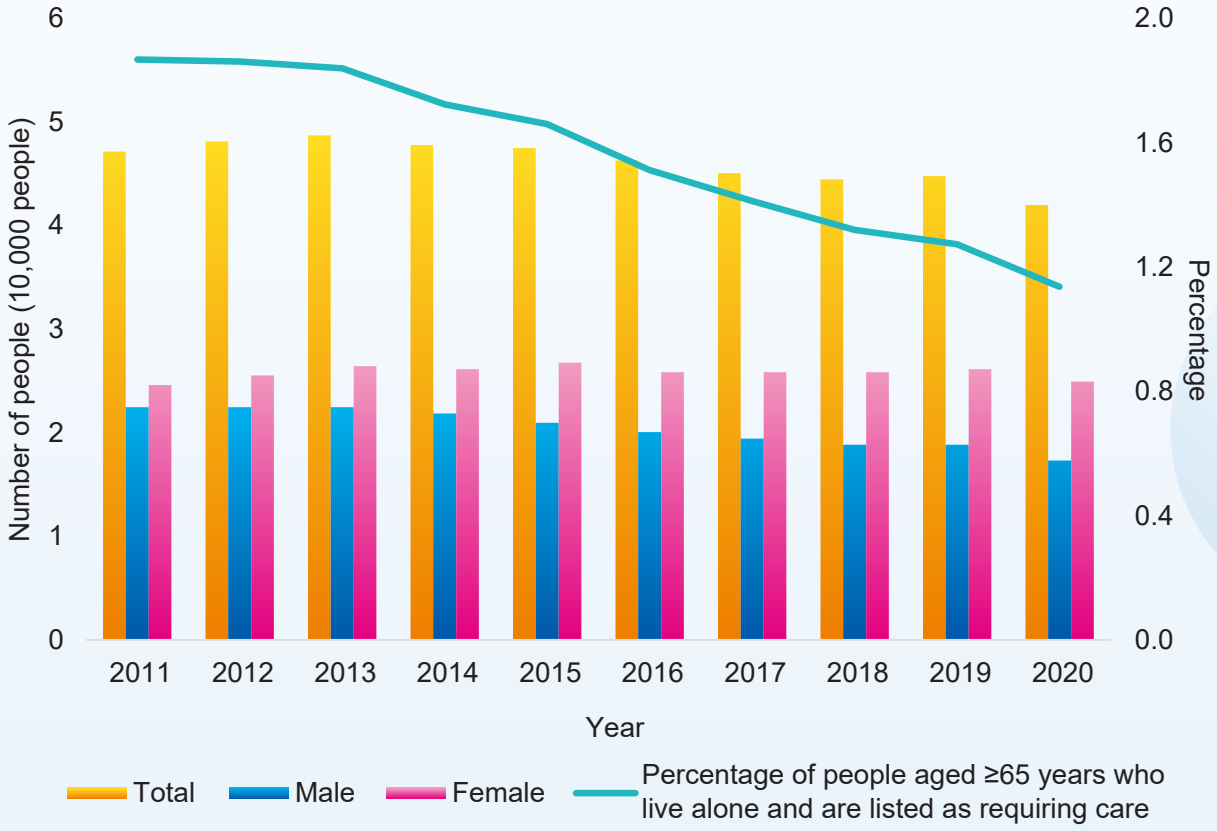


Figure 36 Number and percentage of people aged ≥65 years who live alone and are listed as requiring care from 2011 to 2020.

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/cp-5337-62357-113.html

Note 1: Older people who live alone and require care refers to individuals aged 65 years and older who have no lineal descendants by blood or lineal descendants by blood who do not live in the same county or city. In addition, individuals aged 65 years and older living alone, the co-resident is incapable of caring, couples aged 65 years and older living together, and the county (city) government social bureaus (divisions) send staff to visit and assess older people who need to be listed for care.

Note 2: Percentage = the number of people aged ≥65 years who live alone and are listed as requiring care / the mid-year population aged 65 years and older × 100%.

Note 3: For further details, please refer to Appendix 31.

2. Changes in number of residences with only older people

Between 2012 and 2020, the number of residences with only older people rose from 366,207 to 603,655, and the number of residences with only one older person who lives alone rose from 260,812 to 459,355. Among residences with older people, the percentage of residences with only one older person (i.e., living alone) was between 71.2% and 76.1% (Figure 37).

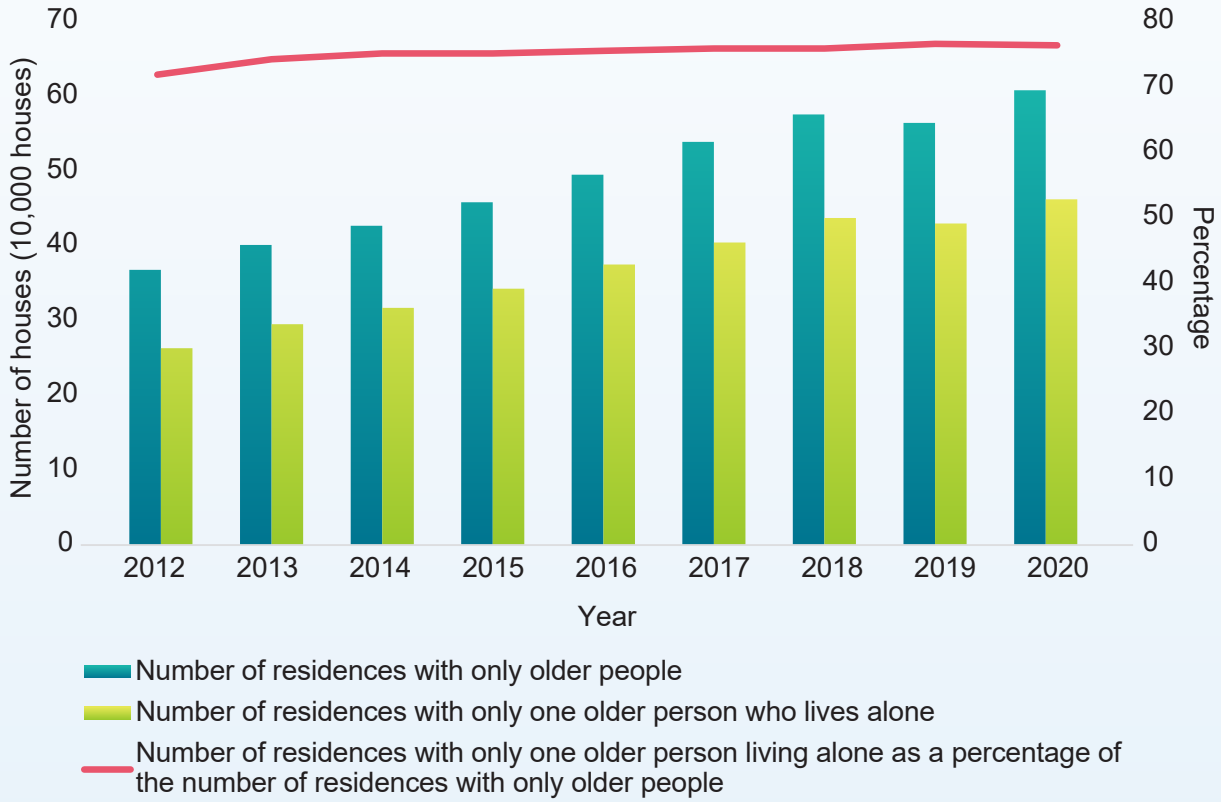


Figure 37 Changes in the number and percentage of residences with only older people from 2012 to 2020.

Source: Real Estate Information Platform, Ministry of the Interior: https://pip.moi.gov.tw/V3/E/SCRE0401.aspx

Note 1: The percentage of residences with only one older person living alone as a proportion of the number of residences with only older people = the number of residences with only one older person living alone / the number of residences with only older people × 100%.

Note 2: For further details, please refer to Appendix 32.

3. Living arrangements

From 2005 to 2017, the primary living arrangement of participants aged 65 years and older was living with family members (61.1% in 2005; 68.5% in 2009; 64.2% in 2013; and 66.4% in 2017), and the percentage of participants living only with other relatives or friends was the lowest (0.8% in 2005; 0.8% in 2009; 0.6% in 2013; and 1.0% in 2017).

Stratified by gender, the percentage of males living with family members was the highest (55.9% in 2005; 62.1% in 2009; 60.6% in 2013; and 63.8% in 2017) and that of those living with other relatives or friends was the lowest (0.8% in 2005; 0.7% in 2009; 0.7% in 2013; and 1.1% in 2017). The family composition of females was similar to that of males. Most females lived with family members (66.3% in 2005; 74.5% in 2009; 67.5% in 2013; and 68.6% in 2017), and the percentage of females living with other relatives or friends was the lowest (0.7% in 2005; 1.0% in 2009; 0.6% in 2013; and 1.0% in 2017; Figure 38).

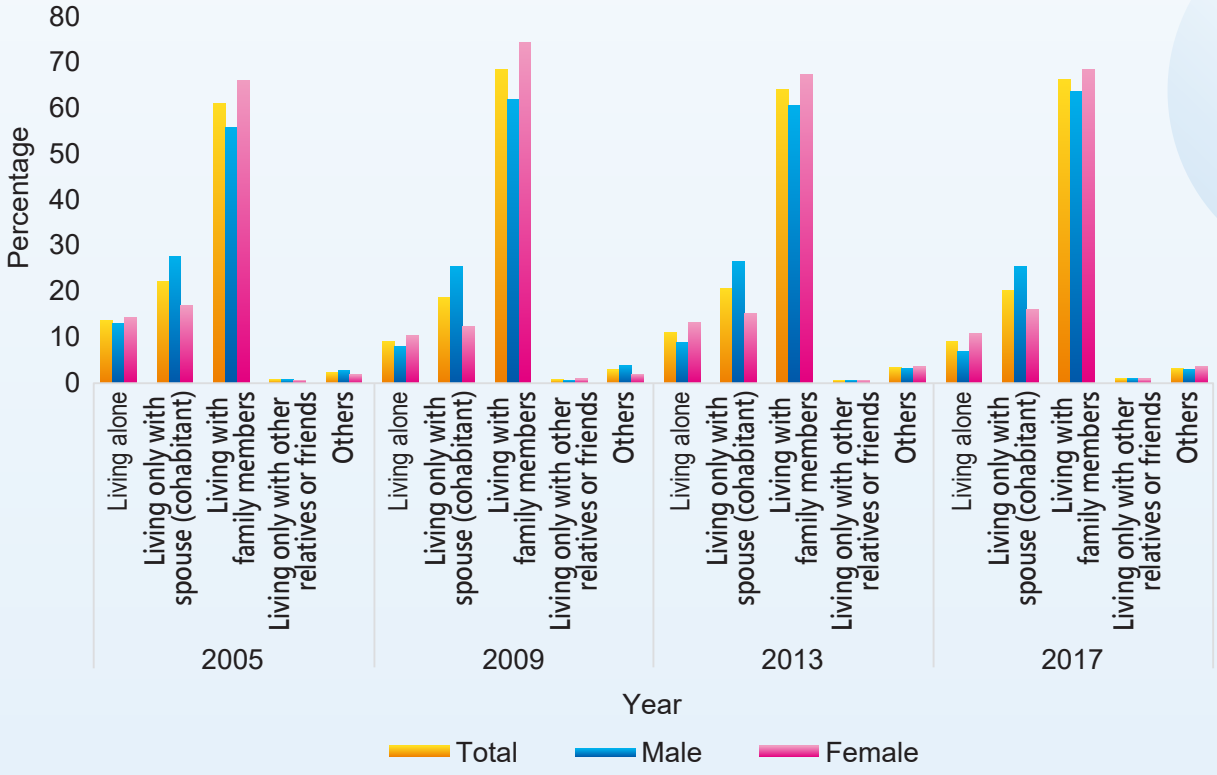


Figure 38 Family composition of individuals aged 65 years and older from 2005 to 2017.

Source: Senior Citizen Condition Survey: https://dep.mohw.gov.tw/DOS/lp-5095-113.html

Note 1: "Living only with spouse (cohabitant)" includes those living with their spouse (cohabitant) and other nondirect relatives.

Note 2: "Living with family members" includes two-generation families or three- or multi-generation families.

Note 3: "Others" includes those living in nursing homes and long-term care institutions or with foreign caregivers.

Note 4: For further details, please refer to Appendix 33.

4. Social participation

From 2005 to 2017, 8.1%–12.3% of adults aged 65 years and older responded that they served as volunteers. Stratified by age, those aged 65–74 years accounted for the highest percentage of volunteers (11.3%–16.8%), and this percentage has been increasing. Stratified by gender, in 2005 and 2009, more males than females served as volunteers; in 2013 and 2017, more females than males served as volunteers. A total of 11.7%–14.3% of males aged 65–74 years reported to be serving as volunteers, with percentages of 4.0%–8.6% and 0.7%–5.4% for males aged 75–84 years and ≥85 years, respectively. A total of 10.8%–18.9% of females aged 65–74 years reported to be serving as volunteers, with percentages of 4.4%–8.3% and 0%–2.8% for females aged 75–84 years and ≥85 years, respectively. The age group of 65–74 years had the highest percentage of participants, both males and females, who responded positively. With an increase in age, the percentage of participants serving as volunteers decreased (Figure 39).

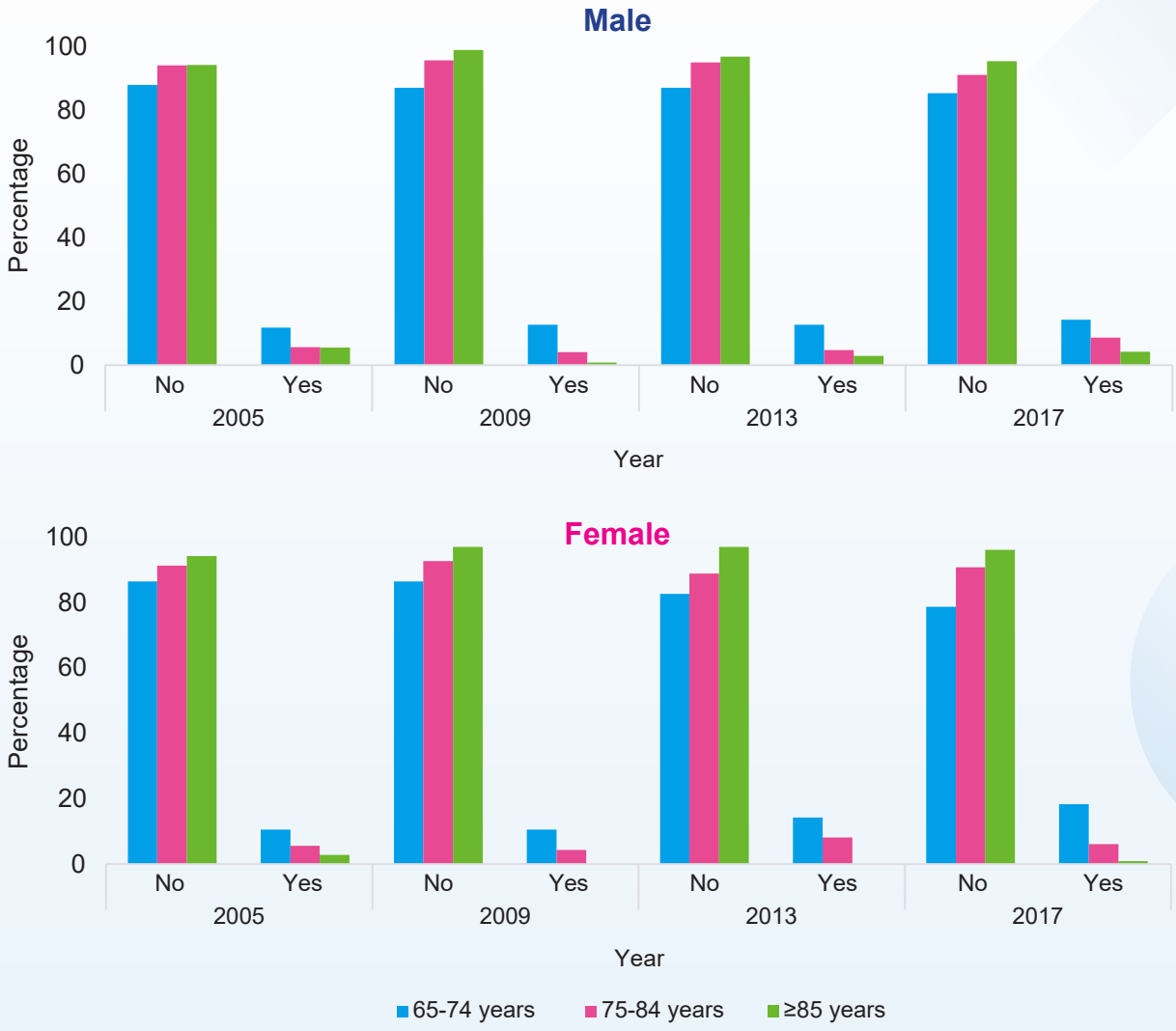


Figure 39 Percentage of males and females who served as volunteers from 2005 to 2017.

Source: National Health Interview Survey

Note 1: Values are all calculated by applying nationally representative weights.

Note 2: Percentage of volunteers = the weighted number of volunteers / the weighted number of completed samples × 100%.

Note 3: Respondents who indicated that they have never served as a volunteer are regarded as non-volunteers, whereas those who indicated that they have rarely, occasionally, or often served as a volunteer are regarded as volunteers.

Note 4: For further details, please refer to Appendix 34.

From 2005 to 2017, the percentage of people aged 65 years and older who responded that they occasionally or regularly participated in religious activities was 15.1%–21.6% and 8.4%–11.9%, respectively. Stratified by age, the highest percentage of occasional participation (17.6%–27.6%) was noted in the age group of 65–74 years. In 2005, the percentage of those who regularly participated in religious activities was higher (9.3%) in the age group of 75–84 years than in the age group of 65–74 years (9.2%). From 2009 to 2017, the percentage was the highest in the age group of 65–74 years (10.3%–14.6%). Stratified by gender, in 2017, more males (15.2%) participated occasionally in religious activities than did females (15.0%); in the remaining years of study, more females than males participated occasionally in religious activities (Female, 22.7% in 2005; 19.8% in 2009; 17.6% in 2013; Male, 20.4% in 2005; 16.4% in 2009; 15.9% in 2013). Regarding regular participation, except in 2013, in which the percentage of males (12.1%) who regularly participated in religious activities was higher than that of females (11.1%), in the remaining study years, more females than males regularly participated in religious activities (Female, 9.9% in 2005; 10.2% in 2009; and 13.0% in 2017; Male, 8.1% in 2005; 6.4% in 2009; and 10.6% in 2017). A total of 17.2%–27.5% of males aged 65–74 years responded as participating occasionally and 8.2%–13.8% of them responded as participating regularly in religious activities. A total of 18.0%–27.6% of females aged 65–74 years responded as participating occasionally and 10.1%–16.8% of them responded as participating regularly in religious activities. The percentage of both males and females participating in religious activities both occasionally and regularly declined with advancing age, except for females in 2005 (Figure 40).

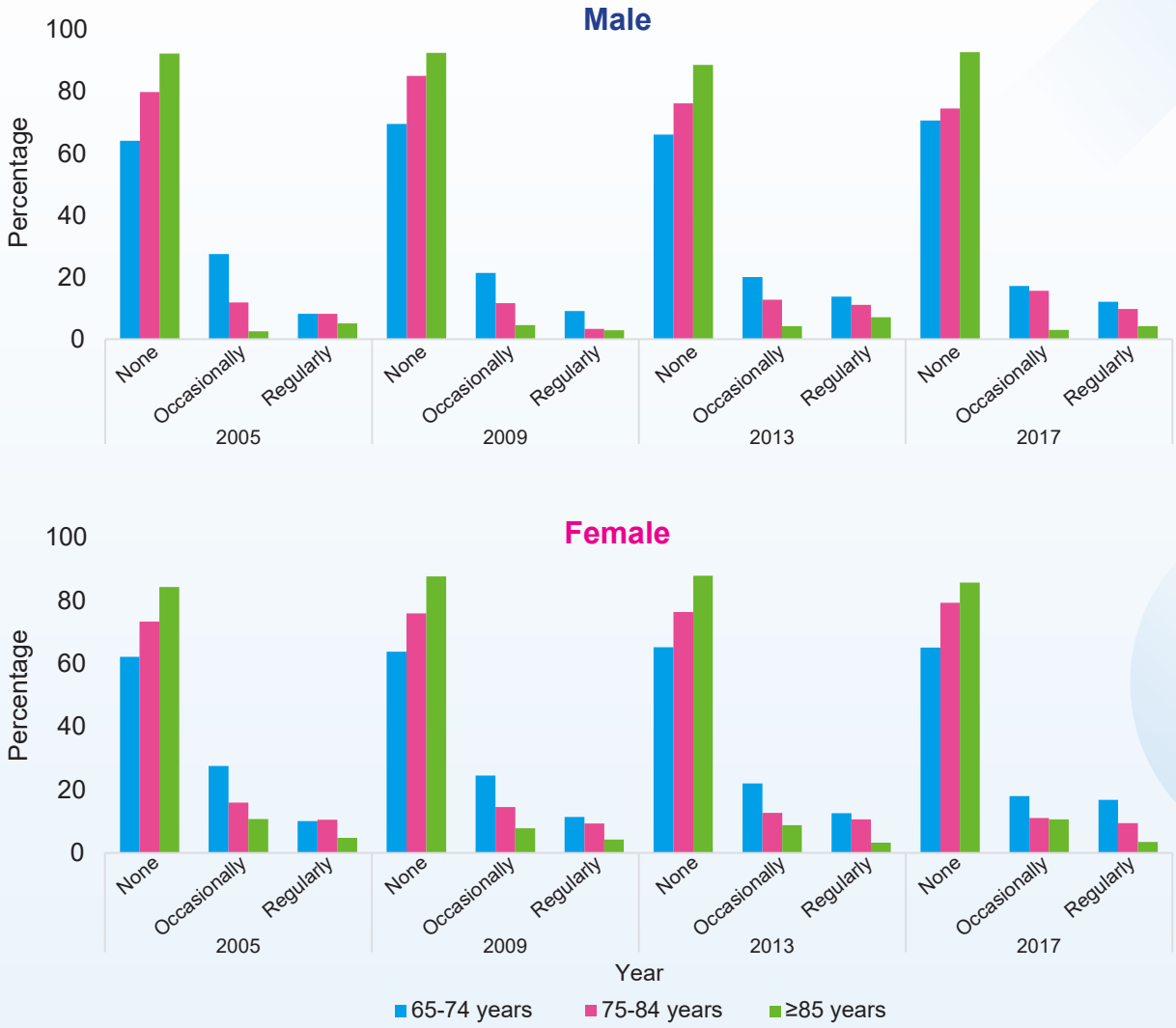


Figure 40 Percentage of males and females who participated in religious activities from 2005 to 2017.

Source: National Health Interview Survey

Note 1: Values are all calculated by applying nationally representative weights.

Note 2: Percentage of religious activity participation = the weighted number of people who participate in religious activities / the weighted number of completed samples × 100%.

Note 3: For further details, please refer to Appendix 35.

From 2005 to 2017, the percentage of people aged 65 years and older who responded as occasionally participating in community or neighborhood group activities was 11.1%–14.5% and that of those who responded as regularly participating was 10.8%–11.7%. Stratified by age, the highest percentages of occasional and regular participation in community or neighborhood group activities were observed in the age group of 65–74 years. Stratified by gender, except in 2017, in which the percentage of females (15.0%) who occasionally participated in community or neighborhood group activities was higher than that of males (13.9%), in the other study years, the percentage was higher among males than among females. Moreover, except in 2009, in which a higher percentage of females (11.9%) regularly participated in community or neighborhood group activities than males (10.9%), in the other study years, the percentage was higher among males than among females. Furthermore, except in 2013, in which the highest percentage of occasional participation was noted in the age group of 75–84 years (15.8%), in the other study years, the percentage was the highest in the age group of 65–74 years, with the percentage declining with advancing age. Except for 2017, in which the highest percentage (15.3%) of regular participation was observed in the age group of 75–84 years, in the other study years, the percentage was the highest in the age group of 65–74 years. Among the three age groups, the 65–74 years age group had the highest percentage of females participating in community or neighborhood group activities occasionally or regularly, with the percentage declining with advancing age (Figure 41).

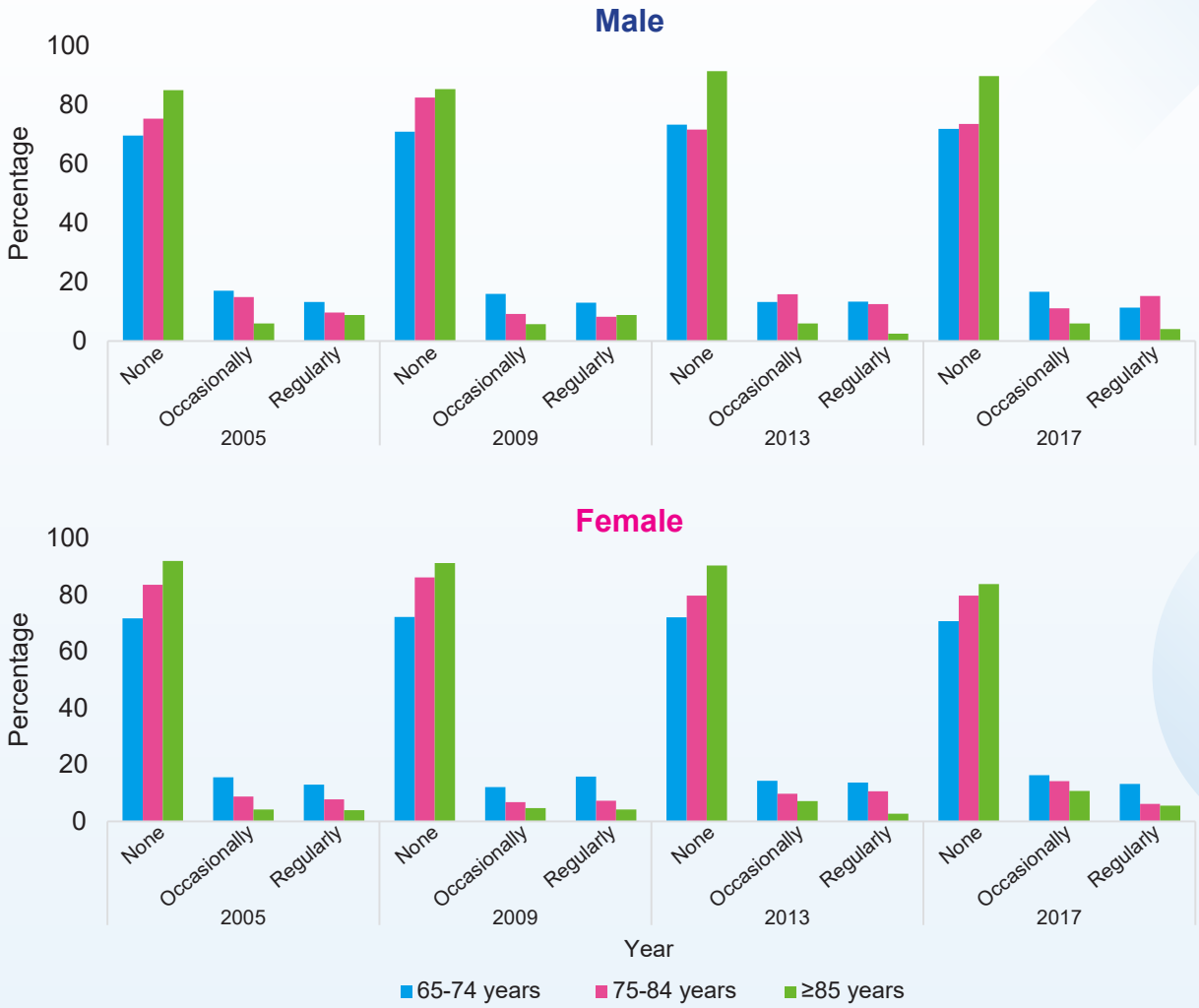


Figure 41 Percentage of males and females who participated in community or neighborhood activities from 2005 to 2017.

Source: National Health Interview Survey

Note 1: Values are all calculated by applying nationally representative weights.

Note 2: Percentage of individuals who participate in community or neighborhood activities = the weighted number of people who participate in community or neighborhood activities / the weighted number of completed samples × 100%.

Note 3: For further details, please refer to Appendix 36.

NOTE

Chapter 7

Definition of Statistical Indicators

Chapter 1 Demographics

I. Population aged 65 years and older in Taiwan

(1) Definition:

1. The 1960–2020 end-year population data were retrieved from the Department of Household Registration, Ministry of the Interior.
2. The 2030–2050 estimation data were retrieved from the National Development Council using middle projection. The middle projection estimates were made on the assumption that the decline in total fertility rate will reverse and increase slightly to 1.2 in 2045 through the government's active promotion of various population policies.
3. The older population are defined as people aged 65 and over.

(2) Source:

1. Department of Household Registration, Ministry of the Interior: https://www.ris.gov.tw/app/portal/346, download date 12/03/2021.
2. National Development Council:

   https://pop-proj.ndc.gov.tw/download.aspx?uid=70&pid=70, download date 12/03/2021.

II. Population distribution in townships

(1) Calculation formula:

Percentage = the total population aged 65 years and older in each township / the total population in each township × 100%.

(2) Source:

Socioeconomic Geographic Information System: https://segis.moi.gov.tw/STAT/Web/Platform/QueryInterface/STAT_QueryInterface.aspx?Type=0, download date 12/03/2021.

III. Marital status

(1) Definition:

1. "Unmarried" refers to individuals who have never been married.
2. "Married" refers to officially married individuals whose spouses are still alive and divorced or widowed individuals who remarried and have spouses who are still alive.
3. "Divorced" refers to individuals who legally terminated their marriage and have not remarried.
4. "Widowed" refers to individuals who have not remarried after their spouses died or were declared dead.

(2) Calculation formula:
Percentage = a gender- and age-stratified population with a specific marital status / a gender- and age-stratified population at the end of the year × 100%.

(3) Source:
Department of Household Registration, Ministry of the Interior:
https://www.ris.gov.tw/info-popudata/app/awFastDownload/toMain_panel, download date 12/03/2021.

IV. Education level

(1) Calculation formula:

1. Percentage = the number of people with education level in a given year / the mid-year population aged 65 years and older × 100%.
2. Percentage = the number of people with an elementary school or lower level of education in a given year / the mid-year population aged 65 years and older × 100%.

(2) Source:
Department of Household Registration, Ministry of the Interior:
https://www.ris.gov.tw/info-popudata/app/awFastDownload/toMain_panel, download date 12/03/2021.

V. Indigenous population aged 55 years and older

(1) Calculation formula:

1. Percentage of indigenous peoples and general population aged 55 years and older = the total indigenous population (general population) aged 55 years and older in a given year / the total mid-year indigenous population (general population) in that given year × 100%.
2. Percentage of aged 55 years and older = an ethnic population aged 55 years and older / an ethnic population × 100%.
3. Percentage of aged 55 years and older in a specific age group = an ethnic population in a specific age group / an ethnic population × 100%.

(2) Source:

1. Council of Indigenous Peoples:
https://www.cip.gov.tw/zh-tw/news/data-list/940F9579765AC6A0/index.html?cumid=940F9579765AC6A0, download date 01/03/2022.
2. Department of Household Registration, Ministry of the Interior:
https://www.ris.gov.tw/info-popudata/app/awFastDownload/toMain_panel, download date 19/03/2021.

VI. Veteran population

(1) Source:
Veterans Affairs Council:
https://www.vac.gov.tw/cp-2009-2898-1.html, download date 15/03/2021.

Chapter 2 Economic Status

I. Low-income households

(1) Calculation formula:

Percentage = the number of individuals aged 65 years and older from low-income households / the mid-year population aged 65 years and older in a given year × 100%.

(2) Source:

Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/cp-5337-62357-113.html, download date 09/11/2021.

II. Mid-to low-income older people who received living allowances

(1) Calculation formula:

Percentage = the number of people aged 65 years and older who received living allowances / the mid-year population aged 65 years and older in a given year × 100%.

(2) Source:

Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/cp-5337-62357-113.html, download date 09/11/2021.

III. The employed

(1) Calculation formula:

Percentage = the number of employed individuals aged 65 years and older / the mid-year population aged 65 years and older in a given year × 100%.

(2) Source:

Yearbook of Manpower Survey Statistics: https://www.stat.gov.tw/ct.asp?xItem=37200&ctNode=517&mp=4, download date 31/03/2022.

IV. Average monthly spending

(1) Definition:

"Available spending" refers to the amount of money one may spend on food, clothing, housing, transportation, education, and entertainment in a month after deductions for consumer durables and other nonrecurring expenses.

(2) Source:

2005, 2009, 2013, 2017 Senior Citizen Condition Survey: https://dep.mohw.gov.tw/DOS/lp-5095-113.html, download date 09/11/2021.

Chapter 3 Health Status

I. Life expectancy

(1) Definition:

1. Life expectancy at birth refers to the average number of years that an individual is expected to live after reaching age 0.
2. Life expectancy at age 65 refers to the average number of years that an individual is expected to live after reaching age 65.

(2) Source:

Statistical Information Network, Ministry of the Interior: https://statis.moi.gov.tw/micst/stmain.jsp?sys=100, download date 15/03/2021.

II. Top 10 leading causes of death

(1) Calculation formula:

Crude death rate = the number of deaths for each cause of death / the mid-year population × 100,000.

(2) Source:

Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/lp-5069-113.html, download date 09/11/2021.

III. Top 10 leading cancer causes of death

(1) Calculation formula:

Crude death rate = the number of deaths from cancer / the mid-year population × 100,000.

(2) Source:

Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/lp-5069-113.html, download date 09/11/2021.

IV. Self-perceived health status

(1) Definition:

1. The self-perceived health status is extracted from the face-to-face interview. Individuals can answer on their own behalf. If the individual is unable to respond due to severe illness, physical weakness, or serious mental problem or mental disability, proxies would not answer these questions. The response is treated as missing.
2. The values weighted to represent the whole population.

(2) Calculation formula:

Percentage = the number of people who self-reported perceived health status in a given year / the total population aged 65 years and older in a given year × 100%.

(3) Source:
2005, 2009, 2013, 2017 National Health Interview Survey.

V. Mobility, Activities of Daily Living, and Instrumental Activities of Daily Living

(1) Definition:

1. Identification criteria for mobility impairments: When a participant indicates that a mobility item (i.e., bending down, kneeling or squatting, walking from room to room, climbing 10 steps of stairs, walking 400 m, grasping things with fingers, carrying a 4.5-kg item in one hand, raising arms over one's head, and turning a key by hand to perform an unlocking action) is "difficult" (slightly difficult, very difficult, or impossible) to perform, the ability type in question is regarded as "difficult." If a participant indicates that all the abilities of a set of mobility items are "not difficult" to perform, that ability type is regarded as "not difficult."
2. Criteria for ADLs difficulties: When a participant indicates that any ADLs item (i.e., feeding down, bathing, dressing, going to toilet, moving in and out of bed, ambulating) is "difficult" (slightly difficult, very difficult, or impossible) to perform, the ability type in question is regarded as "difficult." If a participant indicates that all the abilities of a set of ADLs items are "not difficult" to perform, that ability type is regarded as "not difficult."
3. Identification criteria for IADLs disability: When a participant indicates that any IADLs item (i.e., preparing meals, shopping, using a telephone, taking medication, housekeeping, doing laundry, managing finances) is "difficult" (slightly difficult, very difficult, or impossible) to perform, the ability type in question is regarded as "difficult." If a participant indicates that all the abilities of a set of IADLs items are "not difficult" to perform, that ability type is regarded as "not difficult."

(2) Calculation formula:

1. Percentage of individuals with mobility impairments = the number of people who have mobility impairments / the number of completed samples aged 65 years and older × 100%.
2. Percentage of individuals with ADLs difficulties = the number of people who have ADLs difficulties / the number of completed samples aged 65 years and older × 100%.
3. Percentage of individuals with IADLs disability = the number of people who have IADLs disability / the number of completed samples aged 65 years and older × 100%.

(3) Source:
2005, 2009, 2013, 2017 National Health Interview Survey.

VI. Cognitive impairment

(1) Definition:

1. MMSE scoring criteria:

i. MMSE items comprise the assessment of temporal orientation, spatial orientation, immediate memory, attention and calculation, delayed recall, names, verbal repetition, comprehension, reading, writing, drawing, and awareness.

ii. Attention and calculation ability (ability to count down from 100 by sevens for a total of five times): One point is given for each correct answer. If the interviewer prompts the examinee by providing the correct answer for a count, no points are given.

iii. Names, comprehension, reading, writing, and drawing: Examinees are not scored if they have blindness, have upper limb dysfunction, exhibit illiteracy or the inability to write, or exhibit the inability to see clearly or have low literacy.

2. Judgment criteria for cognitive impairment: According to the report of the Dementia Epidemiological Research Project, which was conducted (from 2011 to 2013) by the Taiwan Alzheimer' s Disease Association and commissioned by the Ministry of Health and Welfare, cognitive impairment is defined as follows:

i. An educated individual having a total MMSE score of less than 25 points.

ii. An uneducated individual having a total MMSE score of less than 14 points.

(2) Calculation formula:

Percentage of individuals with possible cognitive impairment = the number with possible cognitive impairment / the number of completed samples aged 65 years and older × 100%.

(3) Source:

2005, 2009, 2013, 2017 National Health Interview Survey.

VII. Depression symptoms

(1) Definition:

1. CES-D scoring criteria:

i. The scale contains 10 items, and the maximum obtainable score is 30 points.

ii. Unanswered items are excluded from calculations.

2. Individuals with a total score of 10 points or more are defined as having depressive tendencies.

3. Values are all calculated by applying nationally representative weights, the number of samples is weighted calculation. The rounding difference was used.

(2) Calculation formula:

Percentage of individuals with depressive tendencies = the weighted number with depressive tendencies / the weighted number of completed samples × 100%.

(3) Source:
2005, 2009, 2013, 2017 National Health Interview Survey.

VIII. EuroQol instrument
Source:
2017 National Health Interview Survey.

Chapter 4 Preventive Health Care and Behavior

I. Mammography
(1) Definition:
Females aged 45-69 who have undergone preventive care-eligible mammography within the past two years.
(2) Calculation formula:
Screening rate (%) = (the number of individuals aged 45–69 years who have undergone mammography in the past 2 years / the population of females aged 45–69 years at the end of June of the previous year) × 100%.
(3) Source:
Health Promotion Administration, Ministry of Health and Welfare:
Statistics of Health Promotion, download date 09/05/2024.

II. Pap smear
(1) Definition:
Females who underwent Pap smear screening in the 3 years preceding 2015 are defined as those who underwent Pap smear screening between 2013 and 2015.
(2) Calculation formula:
Screening rate (%) = (the number of females aged 60-69 years who underwent Pap smear screening in a given year / the number of females aged 60-69 years in that year) × 100%.
(3) Source:
Health Promotion Administration, Ministry of Health and Welfare:
Statistics of Health Promotion, download date 28/07/2021.

III. Body mass index (BMI)
(1) Definition:
Values are all calculated by applying nationally representative weights.
(2) Calculation formula:
BMI = weight (kg) / height square (m^2).
(3) Source of data:
2005-2008, 2013-2016 Nutrition and Health Survey in Taiwan.

IV. Dietary diversity score (DDS)

(1) Definition:

1. This scale assesses an individual’ s intake of six categories of foods (i.e., whole grains; legumes, fish, eggs, meat and their products; vegetables; fruits; dairy products; and oils, fats, nuts and seeds), and it is scored between 0 and 6 points. A respondent receives 1 point for consuming at least half a bowl of a food category. A higher score indicates a healthier dietary status.
2. Values are all calculated by applying nationally representative weights.
3. For the six categories of food substitution scales, please refer to Health Promotion Administration
   https://www.hpa.gov.tw/Pages/Detail.aspx?nodeid=543&pid=8382

(2) Source of data:
2005-2008, 2013-2016 Nutrition and Health Survey in Taiwan.

V. Weekly recreational physical activity

(1) Definition:

1. Reference source for the method: WHO. Global Physical Activity Questionnaire (GPAQ) Analysis Guide. https://cdn.who.int/media/docs/default-source/ncds/ncd-surveillance/gpaq-analysis-guide.pdf?sfvrsn=1e83d571_2
2. Values are all calculated by applying nationally representative weights. The rounding difference was used.

(2) Calculation formula:

1. Weekly recreational physical activity levels in 2005, 2009, and 2013 = MET of recreational sports × weekly recreational sports (min).
2. The weekly recreational physical activity level in 2017 is calculated using the following equation: (number of minutes of moderate recreational sports per week × 4) + (number of minutes of vigorous recreational sports per week × 8).

(3) Source:
2005, 2009, 2013, 2017 National Health Interview Survey.

VI. Smoking

(1) Definition:

1. A smoker is defined as an individual who has smoked more than five packs of cigarettes and currently smokes daily or occasionally.
2. An ex-smoker is defined as an individual who has smoked more than five packs of cigarettes and has quit smoking.
3. Values are all calculated by applying nationally representative weights.

(2) Calculation formula:

1. Smoking rate = the weighted number of smokers / the weighted number of completed samples × 100%.

2. Percentage of ex-smokers = the weighted number of people who have smoked / (the weighted number of people who have smoked + the weighted number of current smokers) × 100%.

(3) Source:
2005, 2009, 2013, 2017 National Health Interview Survey.

VII. Alcohol drinking

(1) Definition:

1. An individual who drinks alcohol is defined as an individual who answers "yes" to the question "Do you drink alcohol?" (including occasional or social drinking) in the 2005 questionnaire and "yes" to the question "Have you ever drank alcohol?" (including occasional or social drinking) in the 2009–2017 questionnaires.
2. Values are all calculated by applying nationally representative weights.

(2) Calculation formula:
Percentage of people who drink alcohol = the weighted number of drinkers / the weighted number of completed samples × 100%.

(3) Source:
2005, 2009, 2013, 2017 National Health Interview Survey.

VIII. Betel nut chewing

(1) Definition:

1. An individual who chews betel nuts chewing is defined as an individual who has chewed betel nuts in the previous 6 months.
2. Values are all calculated by applying nationally representative weights.

(2) Calculation formula:
Percentage of chew betel nuts = the weighted number of individuals who currently chew betel nuts / the weighted number of completed samples × 100%.

(3) Source:
2005, 2009, 2013, 2017 National Health Interview Survey.

Chapter 5 Utilization of Health and Long-Term Care

I. Utilization of outpatient visits under the National Health Insurance (NHI)

(1) Calculation formula:
Outpatient health insurance visit rate = the number of outpatients / the mid-year population × 100,000.

(2) Source:
National Health Insurance Annual Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/dos/lp-5103-113.html, download date 04/03/2022.

II. Utilization of inpatient visits under the National Health Insurance (NHI)

(1) Calculation formula:
Inpatient health insurance visit rate = the number of inpatients / the mid-year population × 100,000.

(2) Source:
National Health Insurance Annual Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/dos/lp-5103-113.html, download date 04/03/2022.

III. Users of long-term care services

(1) Definition:

1. Long-term care service users refer to the number of people who use long-term care services and payment, including the use of caring and professional services, transportation services, assistive devices and home barrier-free environment improvement services, respite care, etc.
2. The long-term care case-mix system is based on the degree of disability, which is divided into 1-8 levels. Among them, the disability level 2-8 can be based on the long-term care services and payment benchmark, and the payment amount of long-term care services is determined according to the degree of disability.
3. The long-term care case-mix system Level 1 is for the non-incapacitated older people, 1a is for the demented and non-incapacitated, and 1b is for the older people with frailty. This table is the result of the assessment by Long-Term Care Management Centers. Therefore, fewer people with Level 1, 1a, and 1b, and does not represent the total number of such people in the country.
4. The missing value is due to the fact the old case has not been re-evaluated.

(2) Source:
Long-term care management information platform of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html, download date 18/06/2021.

IV. Number of individuals who required long-term care services

(1) Definition:

1. Number of new applicants refers to those who fill in the application during the year, and who have not used long-term care services in the previous year.
2. Number of evaluated applicants refers to the number of new evaluation and old case re-evaluation.
3. Number of existing service users refers to the number of people who can be served.

(2) Source:
Long-term care management information platform of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html, download date 18/06/2021.

V. Long-term care service coverage rate

(1) Definition:

1. Individuals who require long-term care services comprise disabled people aged ≥65 years, disabled indigenous peoples aged 55 years and older, individuals with dementia aged 50 years and older, disabled individuals, older people living alone who need assistance in daily life, and older people with frailty.
2. Number of existing users of long-term care 2.0 services is calculated by summing the number of long-term care benefit and payment service users and the number of users of accommodation and community service institutions. The number of day care, adult foster care, and small-size multi-function services are all included in long-term care benefit and payment service users. "Community" refers to the number of people in group homes.

(2) Calculation formula:

Long-term care service coverage rate = number of existing users of long-term care 2.0 services / estimated number of people who required long-term care services × 100%.

(3) Source:

Long-term care management information platform of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html, download date 18/06/2021.

VI. Number of long-term care service institutions

(1) Definition:

1. Home-based service long-term care institutions are established in accordance with Long-Term Care Services Act. Refers to the older people living at home, and the long-term care personnel will provide long-term care services at the house.
2. Community-based service institutions include the number of day care, the number of adult foster care, the number of small-size multi-function, and the number of group homes. Day care institutions that provide special day care services; adult foster care institutions that provide special adult foster care services; and small-size multi-function institutions that provide special small-size multi-function services. Small-size multi-function institutions can provide home services and day care. To avoid double counting, small-size multi-function institutions that provide home and day care services are not included in the total number of home and day care service institutions.
3. Institutional residential service institutions only count the residential institutions that have been established and licensed in accordance with Long-Term Care Services Act and Institutional Long-Term Care Juridical Entities Act, excluding senior citizens' welfare institutions.

4. Comprehensive service refers to institutions that provide at least two types of long-term care services (i.e., home services, community services, and institutional residential services). To avoid double counting, comprehensive institutions are not included in the total number of home and community service institutions.

(2) Source:

Long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare: https://ltcpap.mohw.gov.tw/molc/auth/login?targetUri=%2F, download date 12/04/2022.

VII. Number of home-based service long-term care institutions

(1) Definition:

Home-based service long-term care institutions are established in accordance with Long-Term Care Services Act. Refers to the older people living at home, and the long-term care personnel will provide long-term care services at the house.

(2) Source:

Long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html, download date 18/06/2021.

VIII. Number of community-based service long-term care institutions

(1) Definition:

1. Day care institutions provide special day care services; adult foster care institutions provide special adult foster care services; and small-size multi-function institutions provide special small-size multi-function services.
2. Small-size multi-function institutions can provide home and day care services. To avoid double counting, small-size multi-function institutions are not included in the total number of home and day care institutions.

(2) Source:

Long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html, download date 18/06/2021.

IX. Number of accommodation-type service long-term care institutions

(1) Definition:

1. Senior citizens' welfare institutions include long-term care, nursing, caring for dementia senior citizens and domiciliary care institutions. The service recipients of the senior citizens' welfare institutions must be over 65 years old, but if those who are over 60 years old and under 65 years old voluntarily bear the expenses, the senior citizens' welfare institutions may provide long-term care, maintenance or other services depending on the internal facilities.

2. The conditions for living in the veterans' homes: (1) The spouses of retired officers and soldiers must be at least 50 years old, their parents must be at least 60 years old, and they have no fixed occupation. (2) Dependents, bereaved family members and the general public of retired officers and soldiers other than those mentioned in the preceding paragraph shall be at least 65 years old.
3. Accommodation-type institutions with disabilities are places that provide 24-hour living care, training or night care services based on needs assessment. This table only counts institutions that can accommodate people with disabilities over 65 years old.
4. General nursing homes have no age limit for admission, and mainly provide nursing care for severely ill older people who leave the hospital, such as nursing care for cases with nasogastric tube, urinary catheter, tracheotomy tube or other non-severe but still admitted to receive nursing and health care object of demand.
5. There is no age limit for psychiatric nursing homes, mainly for older people with chronic mental illness and dementia.

(2) Source:

1. Social and Family Affairs Administration, Ministry of Health and Welfare:
   https://www.gender.ey.gov.tw/gecdb/Stat_Statistics_DetailData.aspx?sn=X3pWT%2FAgN1wWUGDkYrjS%2Bg%3D%3D, download date 23/03/2022.
   https://www.sfaa.gov.tw/SFAA/Pages/List.aspx?nodeid=460, download date 23/03/2022.
2. Ministry of Health and Welfare:
   https://www.gender.ey.gov.tw/gecdb/Stat_Statistics_DetailData.aspx?sn=IrbyglGJimGqzQ22dE7YGA%40%40&d=194q2o4!otzoYO!8OAMYew%40%40, download date 23/03/2022.
3. Long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html, download date 23/03/2022.

X. Number of service users served by long-term care service institutions

(1) Definition:

1. According to the establishment standards for long-term care service institutions, small-size multi-function institutions can provide various long-term care services such as home services, temporary accommodation, and day care. Therefore, number of small-size multi-function service users refers to the number of people served by such institutions. The total number of service users served by small-size multi-function institutions is not included in the number of service users served by home and day care institutions.

2. The number of services users served by institution only counts the number of residential institutions that have been established and licensed in accordance with Long-Term Care Services Act and Institutional Long-Term Care Juridical Entities Act (Excludes senior citizens' welfare institutions, veterans' homes, nursing homes, and accommodation-type institutions with disabilities).

(2) Source:

Payment review platform, and long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html, download date 18/06/2021.

XI. Long-term care workforce

(1) Definition:

1. Long-term care personnel refer to personnel who have been trained and certified by the Long-Term Care Services Act and have been certified to provide long-term care services. According to Article 2 of the Long-term Care Service Personnel Training Certification, Continuing Education and Registration Regulations, the 5 categories of long-term care personnel, if they have been trained and certified to obtain long-term care personnel certification documents, shall comply with the provisions of Article 19, Paragraph 1 of the Long-term Care Services Act. Only after registered in or reporting support to a long-term care institution can the service be provided.
2. Long-term care personnel with certified documents can register as long-term care personnel, and duplicated values may exist in the data relating to various job categories. There may be duplication among various categories due to the Long-term Care Services Personnel Training Certification, Continuing Education and Registration Regulations. There is no restriction on long-term care personnel practicing registration is limited to one place. Currently, there is no full-time restriction on the other personnel except for the care specialists who need to be full-time.
3. The four categories of personnel are based on the statistical data registered in the long-term care institutions and management information systems for long-term care personnel.
4. The types of institutions where care workers work in comprise home-based, community-based, institution-based, and comprehensive long-term care institutions established in accordance with the Long-term Care Services Act and senior citizens' welfare institutions, nursing homes, accommodation-type institutions with disabilities, and veterans' homes established in accordance with other laws.

5. Care managers refer to care management specialist and care management supervision.
6. Medical personnel who obtain certification through the above-mentioned methods are eligible for long-term care personnel.

(2) Source:
Long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html, download date 18/06/2021.

Chapter 6 Social Participation and Living Arrangement

I. Older people who live alone and are listed as requiring care

(1) Definition:
Older people who live alone and require care refers to individuals aged 65 years and older who have no lineal descendants by blood or lineal descendants by blood who do not live in the same county or city. In addition, individuals aged 65 years and older living alone, the co-resident is incapable of caring, couples aged 65 years and older living together, and the county (city) government social bureaus (divisions) send staff to visit and assess older people who need to be listed for care.

(2) Calculation formula:
Percentage = the number of people aged ≥65 years who live alone and are listed as requiring care / the mid-year population aged 65 years and older × 100%.

(3) Source:
Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/cp-5337-62357-113.html, download date 06/04/2022.

II. Changes in number of residences with only older people

(1) Calculation formula:
The percentage of residences with only one older person living alone as a proportion of the number of residences with only older people = the number of residences with only one older person living alone / the number of residences with only older people × 100%.

(2) Source:
Real Estate Information Platform, Ministry of the Interior: https://pip.moi.gov.tw/V3/E/SCRE0401.aspx, download date 31/03/2022.

III. Living arrangements

(1) Definition:

1. “Living only with spouse (cohabitant)” includes those living with their spouse (cohabitant) and other nondirect relatives.

2. "Living with family members" includes two-generation families or three- or multi-generation families.
3. "Others" includes those living in nursing homes and long-term care institutions or with foreign caregivers.

(2) Source:
2005, 2009, 2013, 2017 Senior Citizen Condition Survey: https://dep.mohw.gov.tw/DOS/lp-5095-113.html, download date 13/04/2022.

IV. Social participation

(1) Definition:

1. Respondents who indicated that they have never served as a volunteer are regarded as non-volunteers, whereas those who indicated that they have rarely, occasionally, or often served as a volunteer are regarded as volunteers.
2. Values are all calculated by applying nationally representative weights.

(2) Calculation formula:

1. Percentage of volunteers = the weighted number of volunteers / the weighted number of completed samples × 100%.
2. Percentage of religious activity participation = the weighted number of people who participate in religious activities / the weighted number of completed samples × 100%.
3. Percentage of individuals who participate in community or neighborhood activities = the weighted number of people who participate in community or neighborhood activities / the weighted number of completed samples × 100%.

(3) Source:
2005, 2009, 2013, 2017 National Health Interview Survey.

Metabolic Equivalent of Task (MET) of physical activities

Physical activity	MET	Physical activity	MET
Strolling	3.5	Golf	4.5
Jogging	6	Badminton	4.5
Brisk walking	6	Table tennis	4
Skipping rope	10	Croquet	4
Swimming	6	Tennis	7
Gymnastics	4	Cue sports	2.5
Arm swings	4	Basketball	6
Yoga	4	Other ball games	5.5
Wai Dan Gong	4	Aerobic dance and dance pad	6
Nei Dan Gong	4	Folk and ballroom dance	5.5
Falun Gong	4	Cycling	4
Yuanji dance	4	Hiking	8
Tai chi	4	Weight training	8
Xiang Gong	4	Stair climbing	8
Other forms of qigong	4	Hula hooping	4.5
Soccer	7	Others	3

Source:

1. Ainsworth, B., Haskell, W. L., Herrmann, S. D., Meckes, N., Bassett, D. R., Tudor-Locke, C., Greer, J. L., Vezina, J., Whitt-Glover, M. C., & Leon, A. S. (2011). 2011 compendium of physical activities: A second update of codes and MET values. Medicine and science in sports and exercise, 43(8), 1575-1581.

2. Compendium of Physical Activities
https://sites.google.com/site/compendiumofphysicalactivities/corrected-mets

Note: 1 MET is defined as 1 kcal/kg/h (expenditure of 1 kilocalorie per kilogram of body weight per hour).

Mobility, Activities of Daily Living (ADLs), Instrumental Activities of Daily Living (IADLs) Questionnaire in 2005.

Activity ability ADLs

B19a. Do you have difficulty doing the following activities alone "**without the help of others and without the support of auxiliary tools**"? 【If the answer is **yes**, **continue on to B19b, B19c and B19e**】

B19b. What causes this activity to be difficult?

B19c. Are you using auxiliary tools?【**If the answer is yes, continue on to B19d**】

B19d. What auxiliary tool do you mainly use?

B19e. Do you have assistance?【**If the answer is yes, continue on to B19f**】

B19f. Who provides you with assistance?

	B19a. Do you have difficulty doing the following activities alone **"without the help of others and without the support of auxiliary tools"?**				B19b. What causes this activity to be difficult?		B19c. Are you using auxiliary tools?		B19d. What auxiliary tool do you mainly use?	B19e. Do you have assistance?		B19f. Who provides you with assistance?
	0. No difficulty	1. Some difficulty	2. Extremely difficult	3. Can't do it at all	Write the cause	∗ Cause code	0. No	1. Yes	※ Auxiliary tool code	0. No	1. Yes	◎ Assistance provider code
1. Eating	0	1	2	3			0	1		0	1	
2. Wash yourself	0	1	2	3			0	1		0	1	
3. Put on/take off clothes	0	1	2	3			0	1		0	1	
4. Going to the bathroom	0	1	2	3			0	1		0	1	
5. Getting on/off bed	0	1	2	3			0	1		0	1	
6. Walking around indoors	0	1	2	3			0	1		0	1	

＊Cause code:

01. Chronic disease, such as stroke　02. Accidental injury　03. Old age

04. Physically weakening　05. Congenital malformation or pathological change

06. Amputation　07. Other (Please specify)　98. Don't know why

※Auxiliary tool code:

01. Walking stick　02. Walking aid　03. Wheel chair　04. Electric vehicle

05. Shifting machine　06. Bed handrails　07. Braces　08. Commode chair

09. Urinal, bedpan　10. Shower chair　11. Eating assistance　12. Clothing assistance

13. Writing/reading assistance

◎Assistance provider code:

01. Spouse　02. Son　03. Daughter-in-law　04. Daughter　05. Son-in-law

06. Grandson　07. Granddaughter　08. Parents　09. Brother　10. Sister

11. Grandparents-in-law　12. Parents-in-law　13. Grandfather　14. Grandmother

15. Granddaughter-in-law　16. Grandson-in-law　17. Friend　18. Hired nurse

19. Other relatives　20. Other_____

IADLs and mobility

B20a. Do you have difficulty with the following activities "**without the help of others and without the support of auxiliary tools**" because of old age or health problems? 【This questions asks about **ability, not if the case actually did it.** If the case never did the activity, ask: **If you had to……** 】

	B20a. Do you have difficulty doing the following activities **alone** because of old age or health problems?			
	0. No difficulty	1. Some difficulty	2. Extremely difficult	3. Can't do it at all
1. Cook food	0	1	2	3
2. Go out to buy things	0	1	2	3
3. Use the telephone (can make and receive phone calls)	0	1	2	3
4. Take medicine (can take medicine as told by yourself)	0	1	2	3
5. Easy chores (such as washing dishes, ironing clothes, taking out trash)	0	1	2	3
6. Wash clothes	0	1	2	3
7. Clean your home (heavy chores, including cleaning windows, mopping floors etc.)	0	1	2	3
8. Manage finances (be clear about and able to control your own finances)	0	1	2	3
9. Bend down or kneel down	0	1	2	3
10. Walk from one room to another	0	1	2	3
11. Climb stairs over ten **steps**	0	1	2	3
12. Walk 400 meters (equal to 1 circle around a standard parade ground or 2 circles around the parade ground of an elementary school)	0	1	2	3
13. Grab and hold things with your hands	0	1	2	3
14. Lift an object weighing 4.5 kilograms with one hand	0	1	2	3
15. Raise **both** arms over your head	0	1	2	3
16. Turn a key to open a lock with your hand	0	1	2	3

Center for Epidemiological Studies Depression Scale (CES-D) Questionnaire in 2005.

F. Mental Health (CES-D)

【★F1 ~ F10 are to be answered by the case only, go to section H if the respondent is not the case】

In the past week, did you feel……	0 Never or rarely (less than 1 day)	1 Sometimes (1~2 days)	2 Often (3~4 days)	3 Almost always (5~7 days)
★F1. not hungry, have a bad appetite	0	1	2	3
★F2. in a bad mood, depressed	0	1	2	3
★F3. like things never went well	0	1	2	3
★F4. couldn't sleep (well)	0	1	2	3
★F5. happy	0	1	2	3
★F6. lonely	0	1	2	3
★F7. everyone was not friendly	0	1	2	3
★F8. life was good, enjoyed life	0	1	2	3
★F9. sad, sorrow	0	1	2	3
★F10. couldn't get motivated to do anything	0	1	2	3

EuroQol instrument (EQ-5D) Questionnaire in 2017.

★E. EQ-5D

Preface: I would like to ask you to tell me about your health status today. I will read out several options and ask you to tell me which one best suits your health status today.

【**Attention interviewers:** Please read each of the following sets of options one by one, and ask the respondent to indicate which statement best describes **his/her health status today** and tick the one box.】

【★E1-E6 are to be answered by the case only, go to section G if the respondent is not the case】

★E1. MOBILITY

☐1 I have no problems in walking about

☐2 I have slight problems in walking about

☐3 I have moderate problems in walking about

☐4 I have severe problems in walking about

☐5 I am unable to walk about

★E2. SELF-CARE

☐1 I have no problems washing or dressing myself

☐2 I have slight problems washing or dressing myself

☐3 I have moderate problems washing or dressing myself

☐4 I have severe problems washing or dressing myself

☐5 I am unable to wash or dress myself

★E3. USUAL ACTIVITIES *(e.g. work, study, housework, family or leisure activities)*

☐1 I have no problems doing my usual activities

☐2 I have slight problems doing my usual activities

☐3 I have moderate problems doing my usual activities

☐4 I have severe problems doing my usual activities

☐5 I am unable to do my usual activities

★E4. PAIN / DISCOMFORT

☐1 I have no pain or discomfort

☐2 I have slight pain or discomfort

☐3 I have moderate pain or discomfort

☐4 I have severe pain or discomfort

☐5 I have extreme pain or discomfort

★E5. ANXIETY / DEPRESSION

☐1 I am not anxious or depressed

☐2 I am slightly anxious or depressed

☐3 I am moderately anxious or depressed

☐4 I am severely anxious or depressed

☐5 I am extremely anxious or depressed

★E6. Health status

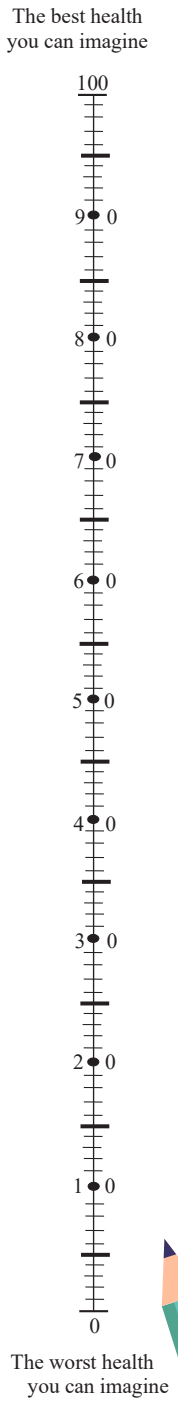
To help people express how good or bad their health is, we have drawn a scale (kind of like a thermometer) where 100 means the best health you can imagine and 0 means the worst health you can imagine.

We'd like you to indicate on this scale how good or bad your health is today. Please draw a line from the box below to the point on the scale that best represents how healthy you are today.

【Please show the health status scale in the chart and ask the respondent to point out the point that best represents his/her health status today. The interviewer will then fill in the score.】

Score：_____

YOUR HEALTH TODAY



Afterword

The *2020 Annual Report on Aging and Long Term Care in Taiwan* is jointly issued by the Ministry of Health and Welfare (MOHW) and the National Health Research Institutes (NHRI). Its purpose is to reflect the health status of Taiwan's older population and the utilization of Long-Term Care 2.0, as well as to continuously monitor factors affecting the health of older people and the effectiveness of Long-Term Care 2.0.

This annual report is edited and produced by the MOHW Department of Long-Term Care and the "National Research Center on Aging and Long-Term Care Promoting Project" team of the NHRI. Throughout the process, we have received guidance from the MOHW's "National Research Center on Ageing and Long-Term Care Strategic and Planning Advisory Committee", as well as assistance in review and correction from the annual report editing team. We extend our deepest gratitude to them. The multifaceted assistance from the Director-General of the Long-Term Care department and her team, as well as the manpower input from the NHRI Forum, Center of Biomedical Resources, and Institute of Population Health Sciences, are important factors in completing this annual report. We are honored to have the Minister of MOHW and the President of the NHRI write preface for the annual report. Sincere thanks are also extended to all units, experts who assisted in compiling this annual report, and colleagues of our "National Research Center on Aging and Long-Term Care Promoting Project" team.

The *2020 Annual Report on Aging and Long Term Care in Taiwan* incorporates a range of government statistical figures, complemented by data from the nationally representative "National Health Interview Survey". For the first time, this annual report has gathered data from various government departments, establishing a cross-departmental platform to encourage ongoing attention and discussion across all sectors aimed at enhancing the health, care, and environment of older people. This initiative supports research endeavors aimed at advancing improvements in both the physical and mental well-being of older people, thereby contributing to the overarching goal of promoting healthy aging.

Although the process of compiling the annual report has been rigorous, there may still be some flaws in the content. If there are any omissions in the figures or text of the annual report, we sincerely ask for readers' feedback, and we will promptly make corrections and amendments in the online version.

Editorial Group, May 2022

Chapter 8

Appendix

Appendix 1 Population aged 65 years and older in Taiwan from 1960 to 2050.

Unit：10,000 people

	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050
Total	27	43	76	127	192	249	379	557	671	745
Gender										
Male	11	19	38	68	101	119	173	248	291	319
Female	16	24	39	59	91	131	206	309	380	427
Age										
65–74 years	20	32	57	89	124	139	235	320	315	343
75–84 years	7	11	17	33	57	86	103	184	254	255
≥85 years			2	5	11	24	41	53	102	147
Gender*Age										
Male										
65–74 years	9	15	30	50	66	65	111	149	145	159
75–84 years	2	4	7	16	30	42	45	80	109	109
≥85 years			1	2	5	12	17	19	37	51
Female										
65–74 years	11	17	27	39	58	74	124	171	170	185
75–84 years	5	7	10	17	27	44	59	104	145	146
≥85 years			2	3	6	13	23	34	65	96

Source: Department of Household Registration, Ministry of the Interior: https://www.ris.gov.tw/app/portal/346
National Development Council: https://pop-proj.ndc.gov.tw/download.aspx?uid=70&pid=70

Note 1: The 1960–2020 end-year population data were retrieved from the Department of Household Registration, Ministry of the Interior.

Note 2: The 2030–2050 estimation data were retrieved from the National Development Council using middle projection. The middle projection estimates were made on the assumption that the decline in total fertility rate will reverse and increase slightly to 1.2 in 2045 through the government' s active promotion of various population policies.

Note 3: From 1960 to 1970, only the number of people over the age of 75 was counted. Therefore, the number of people aged 75-84 and those over 85 was combined in this table.

Note 4: The unit of this table is 10,000 people, and the rounding difference was used.

Appendix 2 Distribution of population aged 65 years and older by county and city in 2020.

Unit：People, Percentage

County and city	Total population	≥65 years	65–74 years	75–84 years	≥85 years
Total	23,556,994	3,783,073	2,348,188	1,033,916	400,969
New Taipei City	4,030,147	617,454	416,034	149,528	51,892
Taipei City	2,601,428	494,649	304,388	132,482	57,779
Taoyuan City	2,268,488	291,740	190,472	72,270	28,998
Taichung City	2,820,464	384,281	248,381	100,002	35,898
Tainan City	1,874,682	309,036	187,379	86,198	35,459
Kaohsiung City	2,765,612	461,073	298,181	122,120	40,772
Yilan County	453,012	78,127	43,573	24,940	9,614
Hsinchu County	570,696	73,860	41,475	23,031	9,354
Miaoli County	542,484	93,005	51,394	29,107	12,504
Changhua County	1,266,484	210,696	120,748	63,733	26,215
Nantou County	490,750	91,461	52,046	27,931	11,484
Yunlin County	676,769	129,147	69,396	42,566	17,185
Chiayi County	499,385	101,511	54,279	32,762	14,470
Pingtung County	812,570	146,265	87,276	43,546	15,443
Taitung County	215,217	37,540	22,160	11,031	4,349
Hualien County	324,297	56,600	34,064	16,063	6,473
Penghu County	105,931	18,085	10,234	5,189	2,662
Keelung City	367,471	64,301	40,692	17,131	6,478
Hsinchu City	451,333	59,033	36,418	16,082	6,533
Chiayi City	265,953	43,269	25,956	12,417	4,896
Kinmen County	140,548	20,270	12,517	5,423	2,330
Lienchiang County	13,273	1,670	1,125	364	181

Continued Appendix 2 Distribution of population aged 65 years and older by county and city in 2020.

Unit：People, Percentage

County and city	Percentage of population aged ≥65 years	Percentage of population aged 65–74 years	Percentage of population aged 75–84 years	Percentage of population aged ≥85 years
Total	16.1	10.0	4.4	1.7
New Taipei City	15.3	10.3	3.7	1.3
Taipei City	19.0	11.7	5.1	2.2
Taoyuan City	12.9	8.4	3.2	1.3
Taichung City	13.6	8.8	3.6	1.3
Tainan City	16.5	10.0	4.6	1.9
Kaohsiung City	16.7	10.8	4.4	1.5
Yilan County	17.3	9.6	5.5	2.1
Hsinchu County	12.9	7.3	4.0	1.6
Miaoli County	17.1	9.5	5.4	2.3
Changhua County	16.6	9.5	5.0	2.1
Nantou County	18.6	10.6	5.7	2.3
Yunlin County	19.1	10.3	6.3	2.5
Chiayi County	20.3	10.9	6.6	2.9
Pingtung County	18.0	10.7	5.4	1.9
Taitung County	17.4	10.3	5.1	2.0
Hualien County	17.5	10.5	5.0	2.0
Penghu County	17.1	9.7	4.9	2.5
Keelung City	17.5	11.1	4.7	1.8
Hsinchu City	13.1	8.1	3.6	1.5
Chiayi City	16.3	9.8	4.7	1.8
Kinmen County	14.4	8.9	3.9	1.7
Lienchiang County	12.6	8.5	2.7	1.4

Source: Socioeconomic Geographic Information System
https://segis.moi.gov.tw/STAT/Web/Platform/QueryInterface/STAT_QueryInterface.aspx?Type=0

Note: Percentage = age-stratified population of a county or city / the total population of the county or city × 100%.

Appendix 3 Marital status of population aged 65 years and older from 2014 to 2020.

Unit：10,000 people

	2014	2015	2016	2017	2018	2019	2020
Total	280.9	293.9	310.6	326.7	343.3	360.7	378.7
Unmarried	8.5	9.1	9.9	10.8	11.8	12.9	14.0
Married	171.3	179.0	189.4	199.1	209.1	219.6	230.5
Divorced	13.0	14.8	17.1	19.6	22.3	25.3	28.4
Widowed	88.1	91.0	94.2	97.2	100.1	102.9	105.8

Source: Department of Household Registration, Ministry of the Interior:
https://www.ris.gov.tw/info-popudata/app/awFastDownload/toMain_panel

Note: "Unmarried" refers to individuals who have never been married.
"Married" refers to officially married individuals whose spouses are still alive and divorced or widowed individuals who remarried and have spouses who are still alive.
"Divorced" refers to individuals who legally terminated their marriage and have not remarried.
"Widowed" refers to individuals who have not remarried after their spouses died or were declared dead.

Appendix 4 Percent of population aged 65 years and older by marital status and age in 2020.

Unit：Percentage

	Unmarried	Married	Divorced	Widowed
Total	3.7	60.9	7.5	27.9
Gender				
Male	3.5	76.7	8.2	11.6
Female	3.8	47.6	7.0	41.6
Age				
65–74 years	4.5	68.6	9.9	17.0
75–84 years	2.3	54.4	4.1	39.2
≥85 years	2.4	32.5	2.3	62.7
Gender*Age				
Male				
65–74 years	4.1	79.9	10.3	5.7
75–84 years	2.2	76.1	4.9	16.8
≥85 years	3.0	57.5	3.1	36.3
Female				
65–74 years	4.9	58.4	9.5	27.1
75–84 years	2.3	37.9	3.5	56.3
≥85 years	2.0	14.2	1.8	82.0

Source: Department of Household Registration, Ministry of the Interior:
https://www.ris.gov.tw/info-popudata/app/awFastDownload/toMain_panel

Note 1: "Unmarried" refers to individuals who have never been married.
"Married" refers to officially married individuals whose spouses are still alive and divorced or widowed individuals who remarried and have spouses who are still alive.
"Divorced" refers to individuals who legally terminated their marriage and have not remarried.
"Widowed" refers to individuals who have not remarried after their spouses died or were declared dead.

Note 2: Percentage = a gender- and age-stratified population with a specific marital status / a gender- and age-stratified population at the end of the year × 100%.

Appendix 5 Education level of population aged 65 years and older from 2015 to 2020.

Unit：Percentage

	2015	2016	2017	2018	2019	2020
Elementary school or lower [a]	64.5	62.8	60.6	58.5	56.3	53.9
Junior high school, senior high school [b]	25.1	26.3	27.4	28.6	30.0	31.7
College or above [c]	12.7	13.6	14.5	15.3	16.1	16.8

Source: Department of Household Registration, Ministry of the Interior:
https://www.ris.gov.tw/info-popudata/app/awFastDownload/toMain_panel

Note 1: [a] Percentage = the number of people with an elementary school or lower level of education in a given year / the mid-year population aged 65 years and older × 100%.

Note 2: [b] Percentage = the number of people with a junior high school or a senior high school level of education in a given year / the mid-year population aged 65 years and older × 100%.

Note 3: [c] Percentage = the number of people with a college or above level of education in a given year / the mid-year population aged 65 years and older × 100%.

Appendix 6 Percentage of population aged 65 years and older with an elementary school or lower level of education from 2015 to 2020.

Unit：Percentage

	2015	2016	2017	2018	2019	2020
Total	64.5	62.8	60.6	58.5	56.3	53.9
Gender						
Male	52.0	50.4	48.4	46.4	44.4	42.0
Female	75.3	73.5	71.0	68.8	66.4	63.9
Gender*Age						
Male						
65–74 years	45.9	43.9	41.4	39.2	37.1	34.8
75–84 years	63.2	62.6	61.4	59.5	57.2	54.4
≥85 years	51.5	51.1	51.4	52.3	53.6	54.9
Female						
65–74 years	66.9	64.7	61.6	58.8	56.2	53.6
75–84 years	85.5	84.2	82.8	81.1	79.0	76.5
≥85 years	86.1	85.6	85.3	85.4	85.4	85.4

Source: Department of Household Registration, Ministry of the Interior:
https://www.ris.gov.tw/info-popudata/app/awFastDownload/toMain_panel

Note: Percentage = the number of people with an elementary school or lower level of education in a given year / the mid-year population aged 65 years and older × 100%.

Appendix 7 Percentage of indigenous peoples and general population aged 55 years and older from 2016 to 2020.

Unit：Percentage

	2016	2017	2018	2019	2020
Indigenous population	17.8	18.4	19.1	19.7	20.4
General population	27.3	28.2	29.1	30.1	30.9

Source: 1. Council of Indigenous Peoples:
https://www.cip.gov.tw/zh-tw/news/data-list/940F9579765AC6A0/index.html?cumid=940F9579765AC6A0
2. Department of Household Registration, Ministry of the Interior:
https://www.ris.gov.tw/info-popudata/app/awFastDownload/toMain_panel

Note: Percentage = the total indigenous population (general population) aged 55 years and older in a given year / the total mid-year indigenous population (general population) in that given year × 100%.

Appendix 8 Indigenous population aged 55 years and older by ethnic group in 2020.

Unit：People, Percentage

	Population aged ≥55 years	Percentage of indigenous population aged ≥55 years by ethnic group
Total	116,985	20.3
The Amis	48,287	22.4
The Atayal	15,780	17.0
The Paiwan	21,707	20.9
The Bunun	9,321	15.5
The Rukai	3,143	23.2
The Pinuyumayan	3,188	21.7
The Cou	1,485	22.2
The Saisiyat	1,173	17.3
The Yami	955	20.2
The Thao	165	20.0
The Kavalan	373	24.5
The Truku	5,235	16.0
The Sakizaya	347	34.6
The Sediq	1,981	18.7
The Hla'alua	56	13.4
The Kanakanavu	50	13.4
Others (unregistered)	3,739	33.0

Source: Council of Indigenous Peoples:
https://www.cip.gov.tw/zh-tw/news/data-list/940F9579765AC6A0/index.html?cumid=940F9579765AC6A0

Note: Percentage = an ethnic population aged 55 years and older / an ethnic population × 100%.

Appendix 9 Percentage of individuals aged 55 years and older (stratified by age group) in each ethnic group in 2020.

Unit：Percentage

	55–64 years	65–74 years	75–84 years	≥85 years
The Amis	12.2	6.8	2.7	0.7
The Atayal	10.2	4.7	1.7	0.4
The Paiwan	12.3	5.9	2.1	0.7
The Bunun	10.0	4.2	1.1	0.3
The Rukai	13.1	6.3	2.7	1.1
The Pinuyumayan	12.6	6.3	2.2	0.6
The Cou	12.9	6.0	2.5	0.8
The Saisiyat	10.3	4.7	1.8	0.5
The Yami	11.1	6.2	1.7	1.1
The Thao	12.6	5.7	1.5	0.2
The Kavalan	14.2	6.8	2.4	1.0
The Truku	9.7	4.6	1.3	0.4
The Sakizaya	15.4	10.2	6.5	2.6
The Sediq	10.6	5.8	1.8	0.5
The Hla'alua	9.1	3.3	0.5	0.5
The Kanakanavu	9.4	2.4	1.6	0.0
Others (unregistered)	19.4	9.9	2.8	0.9

Source: Council of Indigenous Peoples:
https://www.cip.gov.tw/zh-tw/news/data-list/940F9579765AC6A0/index.html?cumid=940F9579765AC6A0

Note: Percentage = an ethnic population in a specific age group / an ethnic population × 100%.

Appendix 10 Number of veterans from 2011 to 2020.

Unit：10,000 people, Percentage

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total		24.8	23.7	22.5	21.1	20.1	19.2	18.2	17.3	16.7	16.0
Gender	Male	23.7	22.5	21.4	20.1	19.0	18.1	17.2	16.4	15.8	15.1
	Female	1.1	1.2	1.1	1.0	1.1	1.1	1.0	0.9	0.9	0.9
Age	65–74 years	2.9	3.0	3.2	3.5	3.8	4.4	4.9	5.3	5.7	6.1
	75–84 years	12.6	10.8	8.9	7.2	5.5	4.3	3.6	3.2	3.0	2.7
	≥85 years	9.2	9.8	10.3	10.6	10.8	10.4	9.7	8.8	8.1	7.3
Gender*Age											
Male											
65–74 years		2.5	2.6	2.9	3.2	3.6	4.2	4.7	5.2	5.6	6.0
75–84 years		12.1	10.3	8.4	6.6	4.9	3.8	3.1	2.7	2.5	2.2
≥85 years		9.1	9.6	10.1	10.3	10.5	10.1	9.4	8.5	7.7	6.9
Percentage of population aged 65–74 years		3.8	4.0	4.2	4.5	4.8	5.2	5.4	5.5	5.6	5.6
Percentage of population aged 75–84 years		28.7	24.6	20.1	15.9	11.8	8.9	7.2	6.1	5.5	5.0
Percentage of population aged ≥85 years		75.3	73.6	71.7	68.8	66.4	61.4	56.1	50.1	45.5	40.8
Female											
65–74 years		0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1
75–84 years		0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4
≥85 years		0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4
Percentage of population aged 65–74 years		0.6	0.5	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1
Percentage of population aged 75–84 years		1.2	1.2	1.2	1.1	1.1	1.0	1.0	0.9	0.9	0.8
Percentage of population aged ≥85 years		1.3	1.4	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.5

Source: Veterans Affairs Council: https://www.vac.gov.tw/cp-2009-2898-1.html

Note 1: Percentage = the number of veterans (stratified by gender and age) / the mid-year population in a given year × 100%.

Note 2: The unit of this table is 10,000 people, and the rounding difference was used.

Appendix 11 Number and percentage of individuals aged 65 years and older from low-income households from 2011 to 2020.

Unit：10,000 people, Percentage

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Population aged ≥65 years	2.5	2.6	2.7	2.8	2.9	3.1	3.3	3.5	3.8	4.1
Percentage of total population aged ≥65 years who are from low-income households	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/cp-5337-62357-113.html

Note: Percentage = the number of individuals aged 65 years and older from low-income households / the mid-year population aged 65 years and older in a given year × 100%.

Appendix 12 Number and percentage of mid-income and low-income older people who received living allowances from 2011 to 2020.

Unit：10,000 people, Percentage

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total		12.0	12.1	12.1	12.2	12.4	12.8	13.4	14.4	15.7	17.3
Gender	Male	5.5	5.6	5.6	5.6	5.7	5.9	6.2	6.7	7.4	8.1
	Female	6.5	6.5	6.5	6.6	6.7	6.9	7.2	7.7	8.3	9.2
Percentage of total population aged ≥65 years who received living allowances		4.8	4.7	4.6	4.4	4.3	4.2	4.2	4.3	4.5	4.7

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/cp-5337-62357-113.html

Note: Percentage = the number of people aged 65 years and older who received living allowances / the mid-year population aged 65 years and older in a given year × 100%.

Appendix 13 Number and percentage of employed individuals aged 65 years and older from 2011 to 2020.

Unit：10,000 people, Percentage

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total		19.7	20.6	21.9	23.8	25.1	25.8	27.2	28.1	29.0	32.2
Gender	Male	14.2	15.0	15.8	17.0	18.0	18.9	20.2	20.1	20.5	23.1
	Female	5.5	5.6	6.1	6.8	7.1	6.9	7.0	8.0	8.5	9.1
Percentage of employed population relative to total population aged ≥65 years		7.9	8.0	8.3	8.7	8.7	8.5	8.5	8.4	8.2	8.7

Source: Yearbook of Manpower Survey Statistics: https://www.stat.gov.tw/ct.asp?xItem=37200&ctNode=517&mp=4

Note: Percentage = the number of employed individuals aged 65 years and older / the mid-year population aged 65 years and older in a given year × 100%.

Appendix 14 Average monthly spending self-reported by individuals aged 65 years and older from 2005 to 2017.

Unit：NT$

		2005	2009	2013	2017
Total		11,715	13,830	12,875	12,743
Gender	Male	13,003	15,407	14,066	13,714
	Female	10,160	12,012	11,716	11,916

Source: Senior Citizen Condition Survey: https://dep.mohw.gov.tw/DOS/lp-5095-113.html

Note: "Available spending" refers to the amount of money one may spend on food, clothing, housing, transportation, education, and entertainment in a month after deductions for consumer durables and other nonrecurring expenses.

Appendix 15 Life expectancy at birth from 2011 to 2020.

Unit：Years

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total		79.2	79.5	80.0	79.8	80.2	80.0	80.4	80.7	80.9	81.3
Gender	Male	76.0	76.4	76.9	76.7	77.0	76.8	77.3	77.6	77.7	78.1
	Female	82.6	82.8	83.4	83.2	83.6	83.4	83.7	84.1	84.2	84.8

Source: Statistical Information Network, Ministry of the Interior: https://statis.moi.gov.tw/micst/stmain.jsp?sys=100

Note: Life expectancy at birth refers to the average number of years that an individual is expected to live after reaching age 0.

Appendix 16 Life expectancy at 65 years from 2011 to 2020.

Unit：Years

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total		19.2	19.4	19.8	19.6	19.9	19.8	20.0	20.3	20.4	20.7
Gender	Male	17.5	17.8	18.1	17.9	18.2	18.0	18.2	18.4	18.6	18.8
	Female	20.9	21.1	21.5	21.3	21.7	21.5	21.7	22.1	22.2	22.7

Source: Statistical Information Network, Ministry of the Interior: https://statis.moi.gov.tw/micst/stmain.jsp?sys=100

Note: Life expectancy at age 65 refers to the average number of years that an individual is expected to live after reaching age 65.

Appendix 17 Self-reported perceived health status of individuals aged 65 years and older from 2005 to 2017.

Unit：The number of completed samples (people), Percentage

	The number of completed samples	Excellent	Very good	Good	Fair	Bad
2005						
Total	2,489	2.1	12.3	21.0	41.3	23.3
Male	-	-	-	-	-	-
Female	-	-	-	-	-	-
2009						
Total	2,636	1.2	12.7	24.4	42.4	19.4
Male	1,148	1.6	13.0	27.6	40.7	17.2
Female	1,488	0.8	12.3	21.2	44.0	21.6
	The number of completed samples	Very good	Good	Fair	Bad	Very bad
2013						
Total	2,893	7.9	23.2	46.3	19.2	3.5
Male	1,378	9.1	24.7	46.8	17.0	2.5
Female	1,515	6.7	21.8	45.8	21.1	4.5
2017						
Total	2,955	8.5	26.2	45.7	17.8	1.8
Male	1,393	9.9	28.8	43.8	15.8	1.7
Female	1,562	7.3	24.0	47.3	19.5	1.8

Source: National Health Interview Survey

Note 1: The self-perceived health status is extracted from the face-to-face interview. Individuals can answer on their own behalf. If the individual is unable to respond due to severe illness, physical weakness, or serious mental problem or mental disability, proxies would not answer these questions. The response is treated as missing.

Note 2: The values weighted to represent the whole population.

Note 3: Percentage = the number of people who self-reported perceived health status in a given year / the total population aged 65 years and older in a given year × 100%.

Appendix 18 Number and screening rates of individuals who underwent mammography once every 2 years from 2014 to 2019.

Unit：10,000 people, Percentage

	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
Number of individuals who underwent mammography					
Total	150.5	155.8	163.0	170.3	174.1
45–49 years	34.3	32.7	33.0	35.2	35.9
50–54 years	36.7	34.8	35.3	35.6	35.7
55–59 years	35.0	34.5	36.3	37.0	37.0
60–64 years	30.6	30.8	32.9	33.4	34.1
65–69 years	21.0	23.0	29.6	29.2	31.4
Screening rate					
Total	39.5	38.0	39.7	39.9	40.0
45–49 years	37.1	35.5	35.9	38.2	39.2
50–54 years	38.8	36.8	37.7	38.1	38.5
55–59 years	39.9	38.8	40.0	40.8	40.0
60–64 years	39.9	38.9	40.7	41.3	41.4
65–69 years	44.0	41.8	48.1	47.5	41.4

Source: Health Promotion Administration, Ministry of Health and Welfare: Statistics of Health Promotion

Note: Screening rate (%) = (the number of individuals aged 45–69 years who have undergone mammography in the past 2 years / the population of females aged 45–69 years at the end of June of the previous year) × 100%.

Appendix 19 Screening rates of females who underwent Pap smear screening in the past 3 years from 2013 to 2019.

Unit：Percentage

	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019
60–64 years	56.1	54.2	53.8	53.7	53.4
65–69 years	59.1	59.1	56.0	54.3	53.3

Source: Health Promotion Administration, Ministry of Health and Welfare: Statistics of Health Promotion

Note 1: Females who underwent Pap smear screening in the 3 years preceding 2015 are defined as those who underwent Pap smear screening between 2013 and 2015.

Note 2: Screening rate (%) = (the number of females aged 60-69 years who underwent Pap smear screening in a given year / the number of females aged 60-69 years in that year) × 100%.

Appendix 20 Mean weekly recreational physical activity level of individuals aged 65 years and older from 2005 to 2017.

Unit：MET-minutes/week

	2005		2009	
	The weighted number of completed samples (people)	Mean score (standard errors)	The weighted number of completed samples (people)	Mean score (standard errors)
Total	2,330	836(30.3)	2,516	772(33.5)
Gender				
Male	1,173	1,009(51.0)	1,231	930(60.2)
Female	1,158	661(32.5)	1,285	621(33.3)
Age				
65–74 years	1,385	915(43.3)	1,476	908(50.8)
75–84 years	803	754(45.0)	855	624(43.3)
≥85 years	143	537(99.9)	186	376(60.2)
Gender*Age				
Male				
65–74 years	679	1,057(74.6)	699	1,100(95.7)
75–84 years	432	995(72.3)	444	736(65.1)
≥85 years	62	592(147.5)	88	550(111.6)
Female				
65–74 years	706	779(45.1)	776	735(45.7)
75–84 years	371	473(45.1)	410	503(56.8)
≥85 years	81	495(134.6)	98	222(49.6)

Continued Appendix 20 Mean weekly recreational physical activity level of individuals aged 65 years and older from 2005 to 2017.

Unit：MET-minutes/week

	2013		2017	
	The weighted number of completed samples (people)	Mean score (standard errors)	The weighted number of completed samples (people)	Mean score (standard errors)
Total	2,453	715(30.1)	2,800	436(26.9)
Gender				
Male	1,147	868(51.7)	1,289	547(46.9)
Female	1,306	581(33.2)	1,511	342(28.4)
Age				
65–74 years	1,396	854(44.9)	1,619	571(38.3)
75–84 years	848	540(37.7)	875	303(43.5)
≥85 years	210	503(94.0)	306	105(45.6)
Gender*Age				
Male				
65–74 years	643	997(78.3)	757	677(64.0)
75–84 years	390	690(63.4)	393	425(82.3)
≥85 years	114	751(157.9)	139	187(98.0)
Female				
65–74 years	753	731(49.0)	862	478(42.9)
75–84 years	458	413(42.6)	481	204(39.1)
≥85 years	96	207(56.3)	167	36(15.8)

Source: National Health Interview Survey

Note 1: (1) Weekly recreational physical activity levels in 2005, 2009, and 2013 = MET of recreational sports × weekly recreational sports (min).

(2) The weekly recreational physical activity level in 2017 is calculated using the following equation: (number of minutes of moderate recreational sports per week × 4) + (number of minutes of vigorous recreational sports per week × 8).

(3) Reference source for the method: WHO. Global Physical Activity Questionnaire (GPAQ) Analysis Guide. https://cdn.who.int/media/docs/default-source/ncds/ncd-surveillance/gpaq-analysis-guide.pdf?sfvrsn=1e83d571_2

Note 2: Values are all calculated by applying nationally representative weights. The rounding difference was used.

Appendix 21 Percentage of smokers and ex-smokers aged 65 years and older from 2005 to 2017.

Unit：Percentage

	2005		2009		2013		2017	
	Smoker	ex-smoker	Smoker	ex-smoker	Smoker	ex-smoker	Smoker	ex-smoker
The weighted number of completed samples (people)	2,330		2,648		2,564		2,729	
Total	15.9	37.3	12.3	60.5	9.7	60.0	7.4	67.6
Gender								
Male	29.0	38.1	23.7	60.8	18.9	61.5	14.4	69.2
Female	2.5	26.6	1.4	54.8	1.6	32.5	1.4	40.1
Age								
65–74 years	17.9	30.8	13.0	56.3	12.0	51.9	9.7	59.4
75–84 years	13.2	49.4	12.4	62.8	7.8	66.6	4.5	78.4
≥85 years	10.9	28.6	6.4	78.3	3.4	85.4	3.3	84.9
Gender*Age								
Male								
65–74 years	33.7	31.8	26.2	56.9	23.9	53.5	18.8	61.1
75–84 years	22.9	49.6	22.5	63.0	15.1	68.3	8.8	80.3
≥85 years	20.5	28.7	12.5	78.3	5.4	86.6	6.3	85.6
Female								
65–74 years	2.8	15.6	1.3	43.8	1.6	9.1	1.8	33.5
75–84 years	1.9	46.0	1.8	59.5	1.6	42.1	1.0	25.1
≥85 years	3.6	28.1	0.9	77.3	1.1	71.6	0.8	78.3

Source: National Health Interview Survey

Note 1: (1) A smoker is defined as an individual who has smoked more than five packs of cigarettes and currently smokes daily or occasionally.

(2) An ex-smoker is defined as an individual who has smoked more than five packs of cigarettes and has quit smoking.

Note 2: Values are all calculated by applying nationally representative weights.

Note 3: Smoking rate = the weighted number of smokers / the weighted number of completed samples × 100%.

Note 4: Percentage of ex-smokers = the weighted number of people who have smoked / (the weighted number of people who have smoked + the weighted number of current smokers) × 100%.

Appendix 22 Percentage of individuals aged 65 years and older who drank alcohol from 2005 to 2017.

Unit：Percentage

	2005	2009	2013	2017
The weighted number of completed samples (people)	2,325	2,641	2,556	2,723
Total	20.0	39.6	38.0	36.2
Gender				
Male	32.7	62.1	57.3	55.9
Female	7.3	18.4	20.9	19.6
Age				
65–74 years	22.9	42.5	42.9	42.0
75–84 years	17.6	36.8	31.6	30.4
≥85 years	6.3	31.8	32.6	22.5
Gender*Age				
Male				
65–74 years	37.4	66.5	62.7	62.5
75–84 years	28.7	57.5	50.8	50.5
≥85 years	9.0	53.6	50.1	35.6
Female				
65–74 years	9.0	21.0	25.7	24.3
75–84 years	4.7	15.3	15.3	13.9
≥85 years	4.2	12.3	13.4	11.8

Source: National Health Interview Survey

Note 1: An individual who drinks alcohol is defined as an individual who answers "yes" to the question "Do you drink alcohol?" (including occasional or social drinking) in the 2005 questionnaire and "yes" to the question "Have you ever drank alcohol?" (including occasional or social drinking) in the 2009–2017 questionnaires.

Note 2: Values are all calculated by applying nationally representative weights.

Note 3: Percentage of people who drink alcohol = the weighted number of drinkers / the weighted number of completed samples × 100%.

Appendix 23 Percentage of individuals aged 65 years and older who chewed betel nuts from 2005 to 2017.

Unit：Percentage

	2005	2009	2013	2017
The weighted number of completed samples (people)	2,330	2,648	2,564	2,729
Total	2.9	2.6	1.9	1.8
Gender				
Male	4.7	4.1	3.1	3.2
Female	1.2	1.2	0.9	0.6
Age				
65–74 years	4.0	3.6	2.8	2.7
75–84 years	1.6	1.1	0.9	0.7
≥85 years	0.6	1.9	0.5	0.4
Gender*Age				
Male				
65–74 years	6.7	6.4	4.6	4.8
75–84 years	2.1	1.0	1.5	1.2
≥85 years	1.4	2.2	0.7	0.5
Female				
65–74 years	1.4	1.1	1.2	0.8
75–84 years	1.0	1.2	0.5	0.4
≥85 years	0.0	1.6	0.3	0.2

Source: National Health Interview Survey

Note 1: An individual who chews betel nuts chewing is defined as an individual who has chewed betel nuts in the previous 6 months.

Note 2: Values are all calculated by applying nationally representative weights.

Note 3: Percentage of betel nut chewing = the weighted number of individuals who currently chew betel nuts / the weighted number of completed samples × 100%.

Appendix 24 Outpatient health insurance visit rate for individuals aged 65 years and older from 2011 to 2020.

Unit：Per 100,000 pop.

	2011	2012	2013	2014	2015
Total	95,529	97,846	96,456	96,517	96,391
Gender					
Male	94,978	97,312	95,889	95,958	95,844
Female	96,029	98,325	96,957	97,006	96,864
Age					
65–74 years	95,894	96,686	95,897	95,795	95,509
75–84 years	96,442	99,248	97,895	97,930	97,945
≥85 years	90,351	99,339	94,831	95,913	96,289
Gender*Age					
Male					
65–74 years	94,949	95,924	95,017	94,946	94,688
75–84 years	96,840	99,213	98,051	98,029	98,036
≥85 years	88,624	98,277	93,752	95,078	95,609
Female					
65–74 years	96,731	97,361	96,679	96,552	96,243
75–84 years	96,066	99,279	97,760	97,848	97,871
≥85 years	91,939	100,325	95,834	96,683	96,909

Continued Appendix 24 Outpatient health insurance visit rate for individuals aged 65 years and older from 2011 to 2020.

Unit：Per 100,000 pop.

	2016	2017	2018	2019	2020
Total	102,688	102,229	102,013	101,812	101,104
Gender					
Male	102,439	101,997	101,787	101,563	100,947
Female	102,901	102,426	102,206	102,021	101,236
Age					
65–74 years	100,825	100,288	100,067	100,015	99,655
75–84 years	102,855	102,692	102,647	102,132	100,578
≥85 years	111,398	110,853	110,576	110,788	110,715
Gender*Age					
Male					
65–74 years	100,475	99,992	99,737	99,659	99,444
75–84 years	102,881	102,830	102,981	102,553	100,984
≥85 years	110,994	110,284	109,990	110,126	110,273
Female					
65–74 years	101,138	100,554	100,363	100,334	99,843
75–84 years	102,835	102,585	102,392	101,809	100,267
≥85 years	111,760	111,343	111,061	111,309	111,045

Source: National Health Insurance Annual Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/dos/lp-5103-113.html

Note: Outpatient health insurance visit rate = the number of outpatients / the mid-year population × 100,000.

Appendix 25 Inpatient health insurance visit rate for individuals aged 65 years and older from 2011 to 2020.

Unit：Per 100,000 pop.

	2011	2012	2013	2014	2015
Total	21,527	21,334	20,866	20,824	20,826
Gender					
Male	23,373	23,102	22,619	22,534	22,544
Female	19,852	19,751	19,316	19,327	19,337
Age					
65–74 years	16,276	15,981	15,665	15,579	15,572
75–84 years	25,830	25,298	24,743	24,590	24,649
≥85 years	35,746	36,340	34,979	35,468	35,546
Gender*Age					
Male					
65–74 years	17,723	17,332	17,011	16,939	16,945
75–84 years	28,176	27,616	27,079	26,864	26,984
≥85 years	37,195	37,962	36,796	37,400	37,703
Female					
65–74 years	14,997	14,785	14,469	14,369	14,346
75–84 years	23,614	23,205	22,719	22,694	22,764
≥85 years	34,412	34,836	33,289	33,684	33,578

Continued Appendix 25 Inpatient health insurance visit rate for individuals aged 65 years and older from 2011 to 2020.

Unit：Per 100,000 pop.

	2016	2017	2018	2019	2020
Total	21,131	20,845	20,668	20,451	18,915
Gender					
Male	22,951	22,616	22,407	22,094	20,570
Female	19,567	19,334	19,193	19,066	17,527
Age					
65–74 years	15,556	15,404	15,324	15,294	14,418
75–84 years	24,543	24,432	24,436	24,255	22,317
≥85 years	39,215	38,851	38,739	38,536	35,639
Gender*Age					
Male					
65–74 years	17,158	17,016	16,917	16,905	16,063
75–84 years	26,809	26,678	26,768	26,396	24,440
≥85 years	41,625	41,343	41,384	41,226	38,622
Female					
65–74 years	14,123	13,961	13,899	13,855	12,950
75–84 years	22,758	22,691	22,645	22,615	20,692
≥85 years	37,066	36,701	36,550	36,417	33,408

Source: National Health Insurance Annual Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/dos/lp-5103-113.html

Note: Inpatient health insurance visit rate = the number of inpatients / the mid-year population × 100,000.

Appendix 26 Number of long-term care service users in each county and city in 2020.

Unit：People

District	Number of new applicants	Number of evaluated applicants	Number of existing service users
Total	188,897	332,485	357,457
New Taipei City	28,008	40,001	46,032
Taipei City	16,367	27,980	31,973
Taoyuan City	12,942	24,051	25,757
Taichung City	23,334	42,541	45,801
Tainan City	14,908	28,473	29,850
Kaohsiung City	23,100	41,903	42,498
Yilan County	4,412	8,347	9,371
Hsinchu County	4,142	6,712	6,702
Miaoli County	5,236	9,526	10,206
Changhua County	11,820	17,711	20,923
Nantou County	6,908	13,562	14,293
Yunlin County	6,678	12,319	13,271
Chiayi County	5,787	9,985	10,608
Pingtung County	9,016	18,156	18,215
Taitung County	2,767	6,114	5,664
Hualien County	4,683	10,275	9,476
Penghu County	959	2,082	2,252
Keelung City	2,469	3,234	4,564
Hsinchu City	2,701	4,181	4,969
Chiayi City	2,020	4,062	3,800
Kinmen County	621	1,222	1,186
Lienchiang County	19	48	46

Source: Long-term care management information platform of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html

Note 1: Number of new applicants refers to those who fill in the application during the year, and who have not used long-term care services in the previous year.

Note 2: Number of evaluated applicants refers to the number of new evaluation and old case re-evaluation.

Note 3: Number of existing service users refers to the number of people who can be served.

Appendix 27 Long-term care service coverage rate in each county and city in 2020.

Unit：10,000 people, Coverage rate

District	Estimated number of people who required long-term care services	Number of existing users of long-term care 2.0 services	Long-term care service coverage rate
Total	82.46	45.08	54.7
New Taipei City	12.99	6.15	47.4
Taipei City	10.57	3.74	35.4
Taoyuan City	6.33	3.29	52.0
Taichung City	8.40	5.52	65.7
Tainan City	6.75	4.05	60.0
Kaohsiung City	9.87	5.39	54.6
Yilan County	1.74	1.22	70.1
Hsinchu County	1.72	0.91	52.9
Miaoli County	2.09	1.18	56.6
Changhua County	4.65	2.74	59.0
Nantou County	2.04	1.70	83.5
Yunlin County	2.87	1.61	56.2
Chiayi County	2.24	1.29	57.8
Pingtung County	3.31	2.29	69.3
Taitung County	0.98	0.67	68.8
Hualien County	1.40	1.10	78.4
Penghu County	0.39	0.25	64.7
Keelung City	1.38	0.62	44.7
Hsinchu City	1.31	0.60	45.6
Chiayi City	0.95	0.62	65.7
Kinmen County	0.44	0.13	29.7
Lienchiang County	0.04	0.01	18.6

Source: Long-term care management information platform of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html

Note 1: Individuals who require long-term care services comprise disabled people aged ≥65 years, disabled indigenous peoples aged 55 years and older, individuals with dementia aged 50 years and older, disabled individuals, older people living alone who need assistance in daily life, and older people with frailty.

Note 2: Number of existing users of long-term care 2.0 services is calculated by summing the number of long-term care benefit and payment service users and the number of users of accommodation and community service institutions. The number of day care, adult foster care, and small-size multi-function services are all included in long-term care benefit and payment service users. "Community" refers to the number of people in group homes.

Note 3: Long-term care service coverage rate = number of existing users of long-term care 2.0 services / estimated number of people who required long-term care services × 100%.

Appendix 28 Number of long-term care service institutions in each county and city in 2020.

Unit：Number

District	Home services	Community services	Institutional residential services	Comprehensive services
Total	923	780	16	73
New Taipei City	109	50	2	1
Taipei City	75	40	1	0
Taoyuan City	42	42	2	8
Taichung City	198	97	0	18
Tainan City	79	79	0	3
Kaohsiung City	166	86	1	6
Yilan County	21	28	2	0
Hsinchu County	15	20	0	2
Miaoli County	13	15	0	1
Changhua County	26	40	0	6
Nantou County	28	36	2	5
Yunlin County	16	64	0	4
Chiayi County	16	24	1	1
Pingtung County	46	63	3	7
Taitung County	9	23	0	4
Hualien County	22	31	1	2
Penghu County	3	9	0	1
Keelung City	9	8	0	1
Hsinchu City	15	7	0	0
Chiayi City	9	13	1	3
Kinmen County	5	4	0	0
Lienchiang County	1	1	0	0

Source: Long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare: https://ltcpap.mohw.gov.tw/molc/auth/login?targetUri=%2F

Note 1: Home-based service long-term care institutions are established in accordance with Long-Term Care Services Act. Refers to the older people living at home, and the long-term care personnel will provide long-term care services at the house.

Note 2: Community-based service institutions include the number of day care, the number of adult foster care, the number of small-size multi-function, and the number of group homes. Day care institutions that provide special day care services; adult foster care institutions that provide special adult foster care services; and small-size multi-function institutions that provide special small-size multi-function services. Small-size multi-function institutions can provide home services and day care. To avoid double counting, small-size multi-function institutions that provide home and day care services are not included in the total number of home and day care service institutions.

Note 3: Institutional residential service institutions only count the residential institutions that have been established and licensed in accordance with Long-Term Care Services Act and Institutional Long-Term Care Juridical Entities Act, excluding senior citizens' welfare institutions.

Note 4: Comprehensive services refer to institutions that provide at least two types of long-term care services (i.e., home services, community services, and institutional residential services). To avoid double counting, comprehensive institutions are not included in the total number of home and community service institutions.

Appendix 29 Number of service users served by long-term care service institutions in 2020.

Unit：People

	Total	Home services	Day care	Adult foster care	Group homes	Small-size multi-function	Institutional residential services
Number of service users	215,884	194,053	12,691	1,066	200	7,187	687

Source: Payment review platform, and long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html

Note 1: According to the establishment standards for long-term care service institutions, small-size multi-function institutions can provide various long-term care services such as home services, temporary accommodation, and day care. Therefore, number of small-size multi-function service users refers to the number of people served by such institutions. The total number of service users served by small-size multi-function institutions is not included in the number of service users served by home and day care institutions.

Note 2: The number of services users served by institution only counts the number of residential institutions that have been established and licensed in accordance with Long-Term Care Services Act and Institutional Long-Term Care Juridical Entities Act (Excludes senior citizens' welfare institutions, veterans' homes, nursing homes, and accommodation-type institutions with disabilities).

Appendix 30 Long-term care workforce in 2020.

Unit：People

	Care worker	Home care service supervisor	Care manager	Case manager of community integrated service center
Total	73,700	3,314	1,321	2,329
Male	10,985	474	127	305
Female	62,715	2,840	1,194	2,024

Source: Long-term care institutions and management information systems for long-term care personnel of the Ministry of Health and Welfare: https://1966.gov.tw/LTC/cp-3948-41555-201.html

Note 1: Long-term care personnel refers to personnel who have been trained and certified by the Long-Term Care Services Act and have been certified to provide long-term care services. According to Article 2 of the Long-term Care Service Personnel Training Certification, Continuing Education and Registration Regulations, the 5 categories of long-term care personnel, if they have been trained and certified to obtain long-term care personnel certification documents, shall comply with the provisions of Article 19, Paragraph 1 of the Long-term Care Services Act. Only after registered in or reporting support to a long-term care institution can the service be provided.

Note 2: Long-term care personnel with certified documents can register as long-term care personnel, and duplicated values may exist in the data relating to various job categories. There may be duplication among various categories due to the Long-term Care Services Personnel Training Certification, Continuing Education and Registration Regulations. There is no restriction on long-term care personnel practicing registration is limited to one place. Currently, there is no full-time restriction on the other personnel except for the care specialists who need to be full-time.

Note 3: The four categories of personnel are based on the statistical data registered in the long-term care institutions and management information systems for long-term care personnel.

Note 4: The types of institutions where care workers work in comprise home-based, community-based, institution-based, and comprehensive long-term care institutions established in accordance with the Long-term Care Services Act and senior citizens' welfare institutions, nursing homes, accommodation-type institutions with disabilities, and veterans' homes established in accordance with other laws.

Note 5: Care managers refer to care management specialist and care management supervision.

Note 6: Medical personnel who obtain certification through the above-mentioned methods are eligible for long-term care personnel.

Appendix 31 Number and percentage of people aged ≥65 years who live alone and are listed as requiring care from 2011 to 2020.

Unit：10,000 people, Percentage

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total		4.73	4.81	4.90	4.80	4.77	4.60	4.52	4.46	4.50	4.20
Gender	Male	2.26	2.25	2.26	2.17	2.10	2.01	1.94	1.88	1.88	1.72
	Female	2.47	2.56	2.64	2.63	2.67	2.59	2.58	2.58	2.62	2.48
Percentage of people aged ≥65 years who live alone and are listed as requiring care		1.9	1.9	1.9	1.7	1.7	1.5	1.4	1.3	1.3	1.1

Source: Department of Statistics, Ministry of Health and Welfare: https://dep.mohw.gov.tw/DOS/cp-5337-62357-113.html

Note 1: Older people who live alone and require care refers to individuals aged 65 years and older who have no lineal descendants by blood or lineal descendants by blood who do not live in the same county or city. In addition, individuals aged 65 years and older living alone, the co-resident is incapable of caring, couples aged 65 years and older living together, and the county (city) government social bureaus (divisions) send staff to visit and assess older people who need to be listed for care.

Note 2: Percentage = the number of people aged ≥65 years who live alone and are listed as requiring care / the mid-year population aged 65 years and older × 100%.

Appendix 32 Changes in the number and percentage of residences with only older people from 2012 to 2020.

Unit：10,000 houses, Percentage

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of residences with only older people	36.62	39.68	42.38	45.50	49.39	53.42	57.26	56.05	60.37
Number of residences with only one older person who lives alone	26.08	29.38	31.59	34.07	37.16	40.27	43.29	42.67	45.94
Number of residences with only one older person living alone as a percentage of the number of residences with only older people	71.2	74.0	74.5	74.9	75.2	75.4	75.6	76.1	76.1

Source: Real Estate Information Platform, Ministry of the Interior: https://pip.moi.gov.tw/V3/E/SCRE0401.aspx

Note: The percentage of residences with only one older person living alone as a proportion of the number of residences with only older people = the number of residences with only one older person living alone / the number of residences with only older people × 100%.

Appendix 33 Family composition of individuals aged 65 years and older from 2005 to 2017.

Unit：Percentage

	Living alone	Living only with spouse (cohabitant)	Living with family members	Living only with other relatives or friends	Others
2005					
Total	13.7	22.2	61.1	0.8	2.3
Male	13.0	27.6	55.9	0.8	2.8
Female	14.3	16.8	66.3	0.7	1.9
2009					
Total	9.2	18.8	68.5	0.8	2.8
Male	7.9	25.6	62.1	0.7	3.7
Female	10.3	12.4	74.5	1.0	1.9
2013					
Total	11.1	20.6	64.2	0.6	3.4
Male	8.8	26.7	60.6	0.7	3.3
Female	13.3	15.2	67.5	0.6	3.5
2017					
Total	9.0	20.4	66.4	1.0	3.3
Male	6.9	25.4	63.8	1.1	2.9
Female	10.8	16.1	68.6	1.0	3.6

Source: Senior Citizen Condition Survey: https://dep.mohw.gov.tw/DOS/lp-5095-113.html

Note 1: "Living only with spouse (cohabitant)" includes those living with their spouse (cohabitant) and other nondirect relatives.

Note 2: "Living with family members" includes two-generation families or three- or multi-generation families.

Note 3: "Others" includes those living in nursing homes and long-term care facilities or with foreign caregivers.

Appendix 34 Percentage of individuals aged 65 years and older who served as volunteers from 2005 to 2017.

Unit：Percentage

	2005		2009		2013		2017	
	No	Yes	No	Yes	No	Yes	No	Yes
The weighted number of completed samples (people)	2,329		2,649		2,564		2,731	
Total	91.0	9.0	91.9	8.1	89.9	10.1	87.7	12.3
Gender								
Male	90.7	9.3	91.5	8.5	91.2	8.8	88.5	11.5
Female	91.3	8.7	92.2	7.8	88.8	11.2	87.0	13.0
Age								
65–74 years	88.7	11.3	88.3	11.7	86.2	13.8	83.2	16.8
75–84 years	94.3	5.7	95.8	4.2	93.4	6.6	92.6	7.4
≥85 years	94.6	5.4	99.7	0.3	98.5	1.5	97.6	2.4
Gender*Age								
Male								
65–74 years	88.3	11.7	87.3	12.7	87.3	12.7	85.7	14.3
75–84 years	94.4	5.6	96.0	4.0	95.4	4.6	91.4	8.6
≥85 years	94.6	5.4	99.3	0.7	97.2	2.8	95.8	4.2
Female								
65–74 years	89.1	10.9	89.2	10.8	85.2	14.8	81.1	18.9
75–84 years	94.2	5.8	95.6	4.4	91.7	8.3	93.6	6.4
≥85 years	97.2	2.8	100.0	0.0	100.0	0.0	99.1	0.9

Source: National Health Interview Survey

Note 1: Values are all calculated by applying nationally representative weights.

Note 2: Percentage of volunteers = the weighted number of volunteers / the weighted number of completed samples × 100%.

Note 3: Respondents who indicated that they have never served as a volunteer are regarded as non-volunteers, whereas those who indicated that they have rarely, occasionally, or often served as a volunteer are regarded as volunteers.

Appendix 35 Percentage of individuals aged 65 years and older who participated in religious activities from 2005 to 2017.

Unit：Percentage

	2005			2009		
	No	Occasionally	Regularly	No	Occasionally	Regularly
The weighted number of completed samples (people)	2,329			2,650		
Total	69.4	21.6	9.0	73.4	18.2	8.4
Gender						
Male	71.5	20.4	8.1	77.1	16.4	6.4
Female	67.4	22.7	9.9	70.0	19.8	10.2
Age						
65–74 years	63.3	27.6	9.2	66.6	23.1	10.3
75–84 years	76.9	13.8	9.3	80.7	13.0	6.3
≥85 years	87.8	7.2	5.0	90.0	6.3	3.7
Gender*Age						
Male						
65–74 years	64.1	27.5	8.2	69.5	21.4	9.1
75–84 years	79.9	11.9	8.2	85.1	11.6	3.3
≥85 years	92.2	2.6	5.1	92.6	4.5	2.9
Female						
65–74 years	62.3	27.6	10.1	63.9	24.6	11.5
75–84 years	73.4	16.0	10.6	76.1	14.5	9.4
≥85 years	84.4	10.8	4.8	87.8	7.9	4.3

Continued Appendix 35 Percentage of individuals aged 65 years and older who participated in religious activities from 2005 to 2017.

Unit：Percentage

	2013			2017		
	No	Occasionally	Regularly	No	Occasionally	Regularly
The weighted number of completed samples (people)	2,565			2,790		
Total	71.6	16.8	11.6	73.0	15.1	11.9
Gender						
Male	72.0	15.9	12.1	74.2	15.2	10.6
Female	71.2	17.6	11.1	72.0	15.0	13.0
Age						
65–74 years	65.6	21.2	13.2	67.7	17.6	14.6
75–84 years	76.3	12.8	10.9	77.2	13.2	9.6
≥85 years	88.3	6.4	5.3	88.9	7.2	3.8
Gender*Age						
Male						
65–74 years	66.1	20.1	13.8	70.7	17.2	12.1
75–84 years	76.2	12.8	11.1	74.5	15.7	9.8
≥85 years	88.7	4.3	7.1	92.7	3.1	4.2
Female						
65–74 years	65.3	22.1	12.6	65.2	18.0	16.8
75–84 years	76.5	12.8	10.7	79.4	11.1	9.5
≥85 years	87.9	8.8	3.2	85.8	10.7	3.5

Source: National Health Interview Survey

Note 1: Values are all calculated by applying nationally representative weights.

Note 2: Percentage of religious activity participation = the weighted number of people who participate in religious activities / the weighted number of completed samples × 100%.

Appendix 36 Percentage of individuals aged 65 years and older who participated in community or neighborhood activities from 2005 to 2017.

Unit：Percentage

	2005			2009		
	No	Occasionally	Regularly	No	Occasionally	Regularly
The weighted number of completed samples (people)	2,329			2,650		
Total	74.7	14.1	11.2	77.5	11.1	11.4
Gender						
Male	72.6	15.7	11.7	76.4	12.7	10.9
Female	76.8	12.6	10.6	78.4	9.6	11.9
Age						
65–74 years	70.7	16.3	13.1	71.6	13.9	14.5
75–84 years	79.2	12.1	8.8	84.3	8.0	7.7
≥85 years	89.0	4.9	6.1	88.5	5.2	6.4
Gender*Age						
Male						
65–74 years	69.7	17.1	13.3	71.0	16.0	13.0
75–84 years	75.5	14.9	9.6	82.6	9.2	8.2
≥85 years	85.1	6.0	8.9	85.5	5.7	8.8
Female						
65–74 years	71.6	15.6	12.9	72.2	12.0	15.8
75–84 years	83.5	8.7	7.7	86.1	6.7	7.2
≥85 years	91.9	4.1	4.0	91.2	4.7	4.2

Continued Appendix 36 Percentage of individuals aged 65 years and older who participated in community or neighborhood activities from 2005 to 2017.

Unit：Percentage

	2013			2017		
	No	Occasionally	Regularly	No	Occasionally	Regularly
The weighted number of completed samples (people)	2,565			2,790		
Total	75.6	12.6	11.7	74.7	14.5	10.8
Gender						
Male	74.8	13.3	11.9	74.4	13.9	11.7
Female	76.3	12.1	11.6	75.0	15.0	10.1
Age						
65–74 years	72.7	13.8	13.5	71.2	16.5	12.3
75–84 years	76.0	12.5	11.5	77.0	12.8	10.2
≥85 years	91.0	6.5	2.5	86.6	8.6	4.9
Gender*Age						
Male						
65–74 years	73.4	13.2	13.4	71.9	16.7	11.3
75–84 years	71.7	15.8	12.5	73.7	11.0	15.3
≥85 years	91.6	6.0	2.4	89.9	6.0	4.1
Female						
65–74 years	72.1	14.3	13.6	70.6	16.3	13.2
75–84 years	79.6	9.7	10.6	79.7	14.2	6.1
≥85 years	90.2	7.1	2.7	83.8	10.7	5.5

Source: National Health Interview Survey

Note 1: Values are all calculated by applying nationally representative weights.

Note 2: Percentage of individuals who participate in community or neighborhood activities = the weighted number of people who participate in community or neighborhood activities / the weighted number of completed samples × 100%.

NOTE

NOTE

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