



# Life Expectancy in Singapore



## Singapore residents are living longer

Singapore residents can expect to live longer compared to residents in most other countries in the world. Singapore's life expectancy at birth has risen over the past 20 years to reach 82.4 years in 2013<sup>1</sup>.



### What is life expectancy?

Life expectancy refers to the average number of additional years which a person (at birth or at a specific age such as 65 years) could expect to live if he/she were to experience the age-specific mortality rates of the reference period throughout his/her life. Life expectancy is one of the most commonly used measures of population health and reflects the overall mortality level of a population.

## We have one of the highest life expectancies at birth in the world

Overall, Singapore's ranking is now 5<sup>th</sup> in the world, together with Liechtenstein and Spain, up from 16<sup>th</sup> in 2003 and 23<sup>th</sup> in 1990. By gender, Singapore is ranked 6<sup>th</sup> for males, and 9<sup>th</sup> for females.<sup>2</sup>

<sup>1</sup> 2014 data for other countries were not available from the World Development Indicator (WDI) 2015, therefore 2013 data is used for consistency

<sup>2</sup> Comparative data on life expectancy at birth from the World Development Indicator (WDI) 2015 published by the World Bank are used instead of those reported in the World Health Statistics published by World Health Organization (WHO) as the former provides higher precision of life expectancy figures (to 1 decimal place) which reduces the number of tied rankings obtained using WHO data

**Table 1:** Rank of Countries for Life Expectancy at Birth 2013

Rank	Male	Rank	Female	Rank	Total
1	Iceland 81.8	1	Hong Kong <sup>3</sup> 86.7	1	Hong Kong <sup>3</sup> 83.8
2	Hong Kong <sup>3</sup> 81.1	2	Japan 86.6	2	Japan 83.3
3	Switzerland 80.7	3	Spain 85.5	3	Iceland 83.1
4	Israel 80.3	4	France 85.4	4	Switzerland 82.7
5	Japan 80.2	5	Liechtenstein 85.2	5	<b>Singapore 82.4</b>
6	<b>Singapore 80.1</b>	6	Switzerland 84.9	5	Liechtenstein 82.4
6	Australia 80.1	7	Italy 84.8	5	Spain 82.4
8	Italy 79.9	7	Korea, Rep. 84.8	8	Italy 82.3
8	Sweden 79.9	9	<b>Singapore 84.5</b>	9	Australia 82.2
10	Liechtenstein 79.7	9	Bermuda 84.5	10	Israel 82.1
10	Luxembourg 79.7	9	Iceland 84.5		
10	New Zealand 79.7				

**Data Sources:**

Singapore data obtained via <http://www.tablebuilder.singstat.gov.sg/publicfacing/createDataTable.action?refid=3612> (last accessed on 10th Feb 2016) – Department of Statistics. Comparative data on life expectancy at birth for all other countries are obtained via <http://data.worldbank.org/indicator/SP.DYN.LE00.IN> (last accessed on 10th Feb 2016) from the World Development Indicators (WDI) 2015, published by the World Bank<sup>4</sup>

**Our increase in life expectancy has accelerated in the past decade and is higher than most high-income countries**

While most high-income countries saw life expectancy rise over the last decade, it has been doing so at a slower rate compared to the nineties. By contrast, life expectancy in Singapore has increased at a faster pace over the past decade.



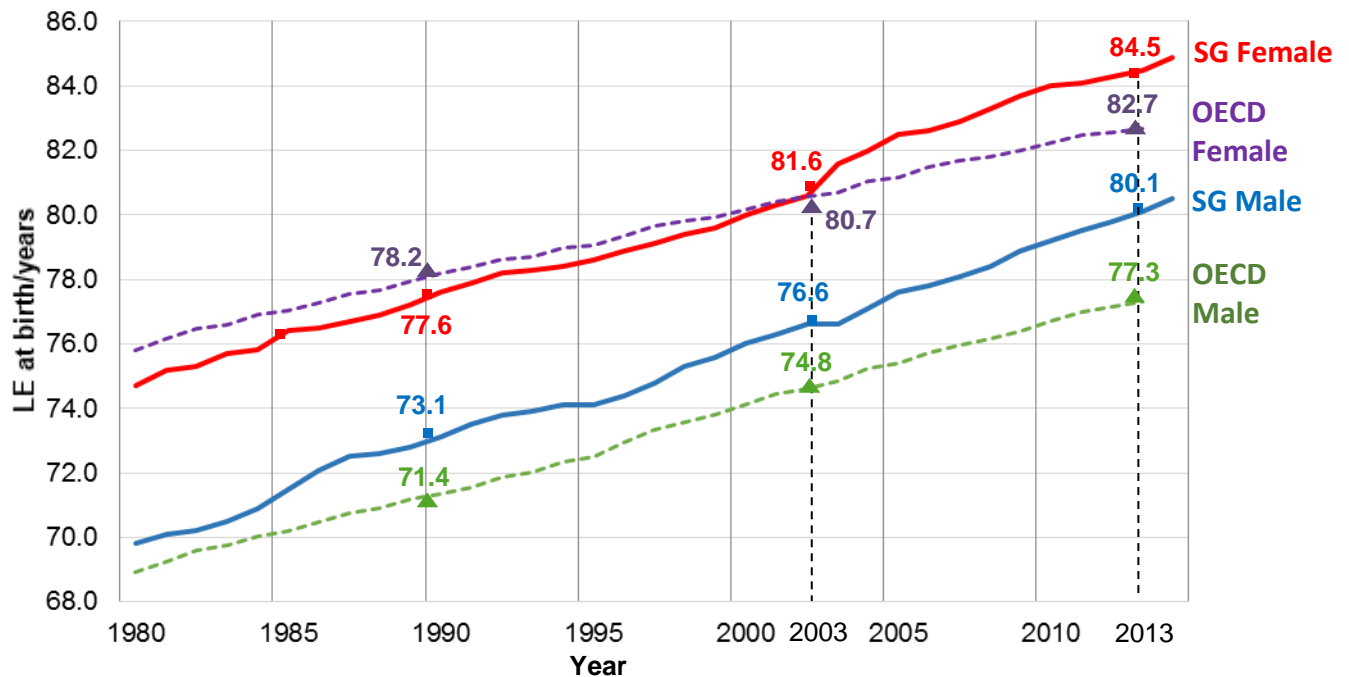
Between 2003 and 2013, our total life expectancy rose by 3.3 years/decade, compared to 2.8 years/decade from 1990 to 2002. In the same period, the increase in life expectancy was 3.5 years for males and 2.9 years for females. This was higher than the average global increase of 2.7 years for both males and females, and the OECD average, at 2.5 years for males and 2.0 years for females.

<sup>3</sup> Refers to the Hong Kong Special Administrative Region of the People's Republic of China

<sup>4</sup> Data for countries reported in the WDI 2015 are derived from sources such as: (1) United Nations Population Division. World Population Prospects, (2) United Nations Statistical Division. Population and Vital Statistics Report (various years), (3) Census reports and other statistical publications from national statistical offices, (4) Eurostat: Demographic Statistics, (5) Secretariat of the Pacific Community: Statistics and Demography Programme and (6) U.S. Census Bureau: International Database. Data reported for Singapore for the years 1980 till 2012 in the WDI 2015 are consistent with that published by the Department of Statistics, while for year 2013, a slight difference of 0.1 years between these 2 sources is observed

The higher increase in male life expectancy in Singapore has led to a narrowing in the gender gap in life expectancy. Female life expectancy was 4.4 years more than male life expectancy in 2013, compared to 5.0 years in 2003. Within the OECD, female life expectancy is on average 5.4 years higher than male life expectancy.

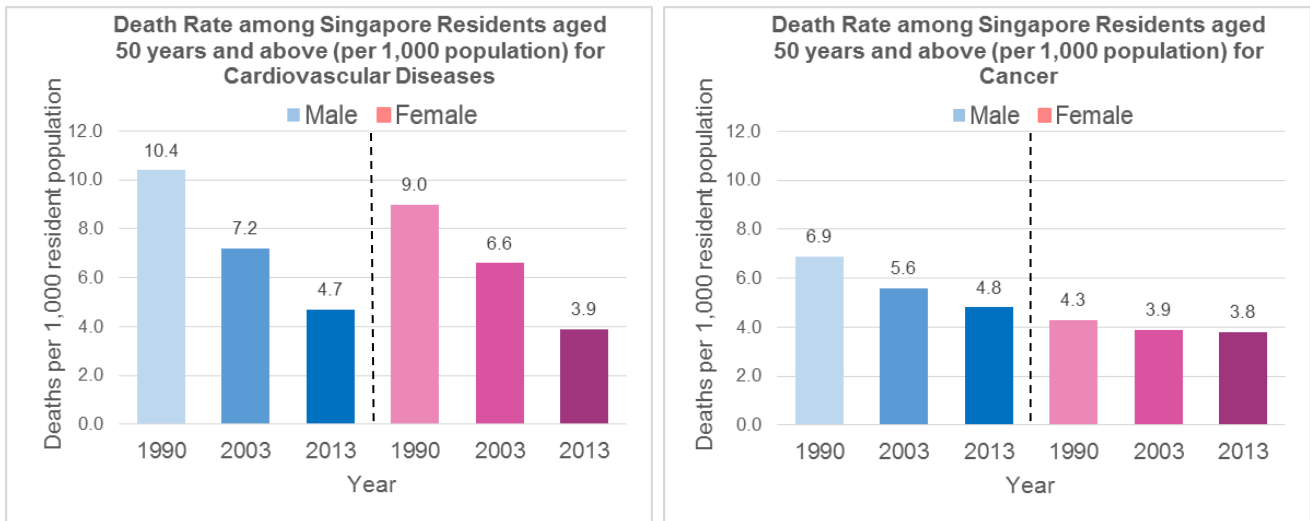
**Figure 1:** Resident Life Expectancy at birth in Singapore by Gender compared to OECD Aggregate



- 1) OECD aggregate are extracted from the World Development Indicators 2015
- 2) Singapore data are from the Department of Statistics, Singapore. Resident population refers to citizens and permanent residents only
- 3) Singapore's data from 2003 onwards are computed based on complete life tables, while data for 2002 and earlier are based on abridged life tables. Singapore's data from 2003 onwards also exclude residents who have been away from Singapore for a continuous period of 12 months or longer as at the reference period

The gain in life expectancy over the last two decades is driven by declining mortality rates, particularly in cardiovascular diseases (e.g. heart attacks and stroke) and cancer among those aged 50 years and above. The mortality rate for cardiovascular diseases among both resident males and females aged 50 years and above has declined by very similar percentages between 1990 and 2013, from 10.4 to 4.7 per 1,000 resident males (-54%) and 9.0 to 3.9 per 1,000 for resident females (-56%). Decline in mortality rate due to cancer for this same population segment was 30% and 12% respectively during the same period.

**Figure 2:** Resident Mortality Rate by Gender for Cardiovascular Diseases and Cancer for those aged 50 years and above




**Our healthy life expectancy is ranked among the highest in the world**

Singapore residents are not just living longer, but are also enjoying more healthy years of life. This was the finding of a 2013 Global Burden of Disease study (GBD)<sup>5</sup> covering 188 countries ranked for Healthy Life Expectancy (HALE).

**What is healthy life expectancy?**

Healthy life expectancy refers to the average number of additional years that a person at a given age can expect to live in good health, taking into account mortality and years lived in less than full health due to disease or injury.

**We are enjoying more years in good health**

<p>Male</p> <p><b>70.8</b> years in 2013</p> <p>up from 65.3 in 1990</p>		<p>Female</p> <p><b>73.4</b> years in 2013</p> <p>up from 68.5 in 1990</p>
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**Healthy Life Expectancy at Birth**

Males in Singapore are expected to spend the equivalent of 70.75 years of their life free of disease and/or injury, or 10.16 years above the global average for males, placing

<sup>5</sup> Global, regional, and national disability-adjusted life years (DALYs) for 306 diseases and injuries and healthy life expectancy (HALE) for 188 countries, 1990–2013: quantifying the epidemiological transition. *The Lancet*. 2015 Aug 27

Singapore second in the world in 2013, just behind Japan. Singapore’s Female HALE at birth, at 73.35 years, is 9.22 years above the world’s average, and ranked third in the world in 2013, behind Japan and Andorra. The 2013 rankings are a significant improvement over the eighth place rankings for both males and females in 1990.

**Table 2:** Rank of Countries for Male/Female Healthy Life Expectancy at birth by GBD 2013

Male					Female				
Rank	Country	1990 HALE	Country	2013 HALE	Rank	Country	1990 HALE	Country	2013 HALE
1	Japan	68.09	Japan	71.11	1	Japan	72.24	Japan	75.56
2	Andorra	66.90	Singapore	70.75	2	Andorra	71.01	Andorra	73.39
3	Iceland	65.94	Andorra	69.92	3	France	69.54	Singapore	73.35
4	Qatar	65.74	Iceland	69.72	4	Cyprus	69.34	France	72.32
5	Costa Rica	65.40	Israel	69.46	5	Spain	68.88	Cyprus	72.22
6	Greece	65.34	Qatar	69.23	6	Canada	68.74	South Korea	72.05
7	Kuwait	65.32	Cyprus	69.16	7	Norway	68.57	Iceland	72.00
8	Singapore	65.26	Canada	69.11	8	Singapore	68.49	Spain	71.83
9	Israel	65.22	Italy*	69.11	9	Iceland	68.47	Israel	71.70
10	Canada	65.13	Brunei	68.80	10	Greece	68.42	Norway	71.66
	High income <sup>6</sup>	63.70	High income	67.72		High income	68.06	High income	70.92
	Global	55.40	Global	60.59		Global	58.51	Global	64.13

Data Source: Global, regional, and national disability-adjusted life years (DALYs) for 306 diseases and injuries and healthy life expectancy (HALE) for 188 countries, 1990–2013: quantifying the epidemiological transition. *The Lancet*. 2015 Aug 27

\*Joint 8<sup>th</sup> Ranking



<sup>6</sup> The High Income countries in the GBD study consists of Andorra, Argentina, Australia, Austria, Belgium, Brunei, Canada, Chile, Cyprus, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, Malta, Netherlands, New Zealand, Norway, Portugal, Singapore, South Korea, Spain, Sweden, Switzerland, England and Wales (UK), Scotland (UK), United States of America, Uruguay



**Singapore is among the best performing countries both in terms of life expectancy at birth and healthy life expectancy at birth**

Singapore has seen higher increases in life expectancy and HALE over the past decade. These results are probably due to several factors, e.g. increased uptake and improvements in medical interventions reducing mid-life mortality, quality and performance of our health care systems, and changes in the health and health-seeking behaviour of Singapore residents.

**Better medical care**



**Improved medical interventions**



**Healthier lifestyles**



Despite these gains in life expectancy and HALE, there is room for improvement. Many of the causes of ill health and death such as cancer, cardiovascular diseases (e.g. heart attacks and stroke), chronic respiratory conditions and diabetes are preventable through modification of lifestyles and prevention. Going ahead, greater emphasis on health promotion, disease prevention can help Singapore residents live longer with more years of healthy life.

