Strategic Policy, Planning and Performance Report



Public Health Intelligence

Subject: Life expectancy 2021-2023 and Healthy life expectancy 2022/2023

Date of report: 24 October 2024

Introduction to Life Expectancy and Healthy Life Expectancy

This report has two components, Life Expectancy (LE) and Healthy Life Expectancy (HLE). In previous years, these two reports were published separately. This is the first instance that the two reports have been combined to form a single publication.

What is life expectancy and healthy life expectancy?

Life expectancy (LE) is the average number of years a person would continue to live if they experienced Jersey's current age-specific mortality rates throughout the rest of their entire life. Life expectancy can be calculated for any age, to give the further number of years a person can expect to live on average, given the age they have attained. Life expectancy typically increases with age, given each year a person lives means they have survived multiple potential causes of death.

In comparison, *Healthy life expectancy* (HLE) is an extension of life expectancy, that combines mortality data with general health status data, to produce estimates of the span of life that a person can expect to live in 'very good' or 'good' health. *Healthy life expectancy* can be calculated for any age, to give the further number of years a person can expect to live in good health on average, given the age they have already attained.

Life expectancy is calculated by constructing a life table. A life table incorporates data on age-specific death rates for the population in question, which requires data on the number of people in the population, and the number of deaths at each age for that population.

Healthy life expectancy is calculated by using local age-specific mortality rates, along with data on self-reported health status to calculate healthy life expectancy in this report. The estimates are made using a Sullivan life table, following methodology set out by the ONS.

Differences in Life Expectancy (2021-2023) and Health Life Expectancy (2022/2023) for males and females at birth

and at age 65

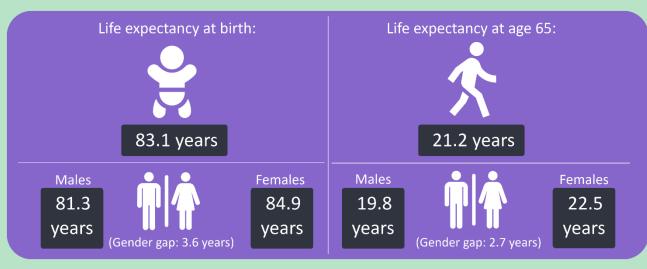


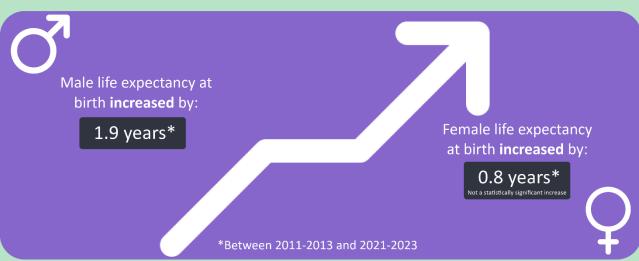
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Jersey Life Expectancy

2021-2023







Life Expectancy 2021-2023

How do we measure life expectancy?

Period life expectancy is the average number of additional years a person can be expected to live for if he or she experiences the age-specific mortality rates of the given area and time period for the rest of his or her life.

Jersey's age-specific mortality rates (ASMRs) are applied to estimates of Jersey's population by age and gender using an abridged life table methodology. Abridged life tables (based on five-year age groups) were constructed using standard methods. Separate tables were constructed for males and females using numbers of deaths registered in calendar years and annual mid-year population estimates.

The figures presented here are three-year rolling averages. Due to Jersey's small population data from three years (2021, 2022 and 2023) are aggregated to calculate life expectancies. For information on the population estimates used in this report, see "data sources" at the end of this report.

Life expectancy at birth

The average life expectancy at birth in Jersey for 2021-2023 was 83.1 years. Females could expect to live on average 3.6 years longer than males, with life expectancy at birth for females at 84.9 years and 81.3 years for males. Life expectancy of females compared to males can be seen in Figures 1 and 2.

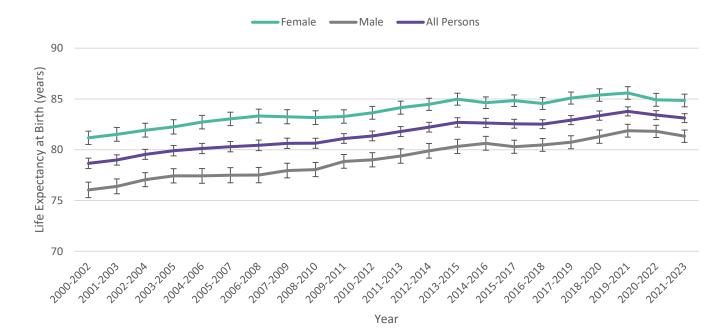


Figure 1: Life expectancy at birth in Jersey, 3-yearly averages (2000-2002 to 2021-2023)

Source: Population from Statistics Jersey, Deaths from Superintendent Registrar

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¹ Guide to calculating national life tables

Over the last decade there was a slight increase in life expectancy at birth for males and no statistically significant change for females (Figure 2). The increase for males over time was greater than that of females. Male life expectancy increased by 1.9 years, and female life expectancy increased by 0.8 years between 2011-2013 and 2021-2023 but is not considered a statistically significant increase.

The gender gap between males and females became smaller, decreasing by 1.1 years since 2011-2013.

Figure 2: Life expectancy at birth in 2011-2013 compared to 2016-2018 and 2021-2023, 3-year averages



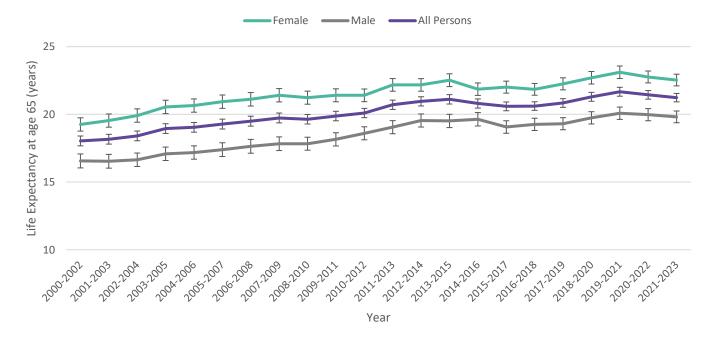
Source: Population from Statistics Jersey, Deaths from Superintendent Registrar

Life expectancy at age 65

The average life expectancy at age 65 in Jersey for 2021-2023 was 21.2 years. Females in Jersey could expect to live on average, an additional 22.5 years, while males could expect to live for an additional 19.8 years.

Jersey's life expectancy at age 65 for 2021-2023 in females was around 2.7 years higher than that of males.

Figure 3: Life expectancy at age 65, 3-yearly averages (2000-2002 to 2021-2023)

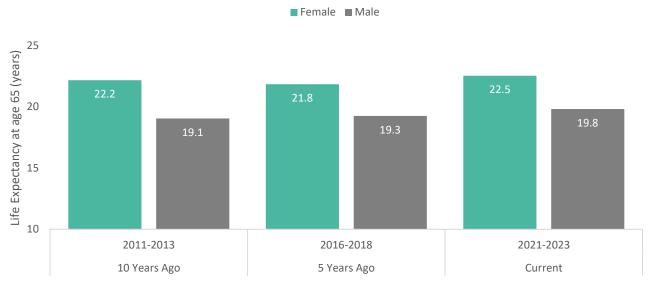


Source: Population from Statistics Jersey, Deaths from Superintendent Registrar

Over the last decade there was a slight increase in life expectancy at age 65 for both females and males. This rise was greater for males at 0.7 years when compared with 0.3 years for females between 2011-2013 and 2021-2023.

The gender gap between female and male life expectancy decreased from 3.1 years in 2011-2013 to 2.7 years in 2021-2023.

Figure 4: Life expectancy at age 65 in 2011-2013 compared to 2016-2018 and 2021-2023, 3-year averages



Source: Population from Statistics Jersey, Deaths from Superintendent Registrar

Life expectancy at all ages

Life expectancy can be calculated for any age, to give the further number of years a person can expect to live on average, given the age they have attained. Life expectancy typically increases with age, given each year a person lives means they have survived multiple potential causes of death.

Table 1 compares life expectancy at a given age between 2011-2013 and 2021-2023. It shows that life expectancy across all ages increased over the decade.

Males showed the biggest increases in life expectancy over the decade, with around 2 years of life being added to male life expectancy at birth and around 1.3 years of life added, up to the age of 40 (Table 1).

Table 1: Life expectancy at 5-year age groups, 2011-2013 compared to 2021-2023

		Female		Male
Age Group	2011-2013	2021-2023	Growth	2011-2013 2021-2023 Growth
<1	84.1	84.9	+ 0.7	79.4 81.3 + 1.9
1-4	83.3	83.9	+ 0.7	78.8 80.5 + 1.6
5-9	79.3	80.0	+ 0.8	74.9 76.5 + 1.5
10-14	79.4	75.1	+ 0.7	70.0 71.5 + 1.4
15 -19	69.4	70.2	+ 0.8	65.0 66.5 + 1.5
20-24	64.5	65.3	+ 0.8	60.2 61.6 + 1.4
25-29	59.6	60.4	+ 0.8	55.4 56.7 + 1.3
30-34	54.7	55.4	+ 0.7	50.4 51.8 + 1.4
35-39	49.9	50.6	+ 0.8	45.5 47.0 + 1.5
40 -44	44.9	45.7	+ 0.8	40.9 42.2 + 1.3
45-49	40.0	40.9	+ 0.9	36.1 37.4 + 1.3
50-54	35.4	36.1	+ 0.7	31.5 32.8 + 1.3
55-59	30.9	31.4	+ 0.5	27.1 28.3 + 1.2
60 -64	26.4	26.9	+ 0.5	22.9 23.9 + 1.0
65-69	22.2	22.5	+ 0.4	19.1 19.8 + 0.8
70-74	18.1	18.3	+ 0.2	15.3 16.0 + 0.7
75-79	14.0	14.5	+ 0.4	11.7 12.3 + 0.7
80-84	10.4	11.0	+ 0.5	8.6 9.0 + 0.4
85-89	7.3	7.8	+ 0.5	6.0 6.2 + 0.2
90+	4.9	5.1	+ 0.2	4.2 4.3 + 0.1

Figures presented in this table have been rounded to the next decimal point

Jersey's life expectancy compared to other jurisdictions

When comparing Jersey to other jurisdictions', Jersey's life expectancy at birth for females and males was similar to Guernsey's (Table 2)². Life expectancy at birth in Jersey was around 2 years higher than in England³.

Jersey had the smallest gender gap for life expectancy at birth when compared to Guernsey, Isle of Man⁴, and the devolved nations of the UK (Table 2). However, when looking at life expectancy at age 65, Northern Ireland had the smallest gender gap (Table 3).

² Guernsey Facts and Figures 2024, available from www.gov.gg

³ National life tables – life expectancy in the UK 2020 to 2022, available from www.ons.gov.uk

⁴ <u>Isle of Man | Mortality Report 2021</u>, available from www.gov.im

It is important to note that comparisons between jurisdictions are based on the latest available data, which are not all from the same time period. Comparisons are made between data collected in Jersey (2021-2023), Guernsey (2021-2023), Scotland (2020-2022), Isle of Man (2018-2020), Northern Ireland (2020-2022), Wales (2020-2022), and England (2020-2022) (Tables 2 and 3, Figures 5 and 6)

Table 2: Life expectancy at birth in Jersey and Guernsey (2021-2023), Isle of Man (2018-2020), Scotland, Wales, Northern Ireland, and England (2020-2022)

At Birth	Female	Male	Gender Gap
Jersey (2021-2023)	84.9	81.3	3.6
Guernsey (2021-2023)	85.6	81.3	4.3
England	82.8	78.8	4.0
Northern Ireland	82.3	78.4	3.9
Scotland⁵	80.7	76.5	4.2
Wales	81.8	77.9	3.9
Isle of Man (2018-2020)	83.7	79.7	4.0

Figures presented in this table have been rounded to the next decimal point

Table 3: Life expectancy at age 65 in Jersey and Guernsey (2021-2023), Scotland, Isle of Man (2018-2020), Wales, Northern Ireland, and England (2020-2022)

At age 65	Female	Male	Gender Gap
Jersey (2021-2023)	22.5	19.8	2.7
Guernsey (2021-2023)	22.1	19.2	2.9
England	20.9	18.4	2.5
Northern Ireland	20.5	18.3	2.2
Scotland	19.6	17.3	2.3
Wales	20.3	18.0	2.3
Isle of Man	21.7	19.0	2.7

Figures presented in this table have been rounded to the next decimal point

Jersey was similar to Guernsey in life expectancy at birth and also at 65 for both females and males. When compared with other regions⁶, Jersey's life expectancy was higher than all other English regions (Figure 5 and Figure 6).

Life expectancy at birth in Jersey was higher than in all regions of England, and Northern Ireland.

When comparing Jersey's life expectancy to other regions, the largest difference was between Jersey and North East England, with life expectancy at birth in Jersey being higher by around 4 years, and life expectancy at age 65 in Jersey being higher by around 3 years.

Please note: More recent data has been published for England and Wales prior to the release of this report. Due to the process involved in the publishing of this report we are not able to include this data at this time.

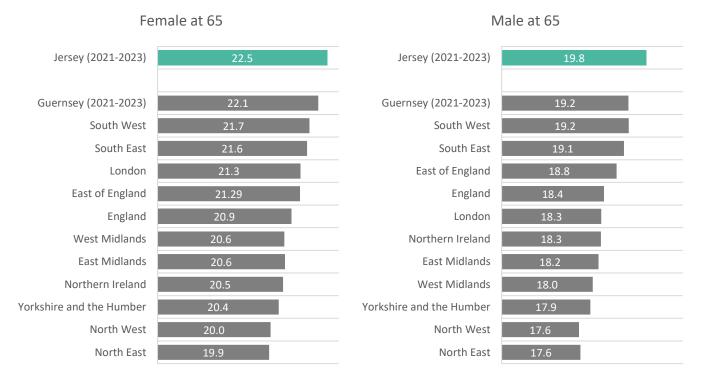
⁵ <u>Life Expectancy in Scotland 2020-2022 Provisional Figures | National Records of Scotland (nrscotland.gov.uk)</u>, available from www.nrscotland.gov.uk

⁶ <u>Life expectancy for local areas in England, Northern Ireland and Wales: between 2001 to 2003 and 2020 to 2022</u>, available from www.ons.gov.uk

Figure 5: Life expectancy at birth for females and males, comparing Jersey (2021-2023) with Guernsey (2021-2023) and the English regions (2020-2022)

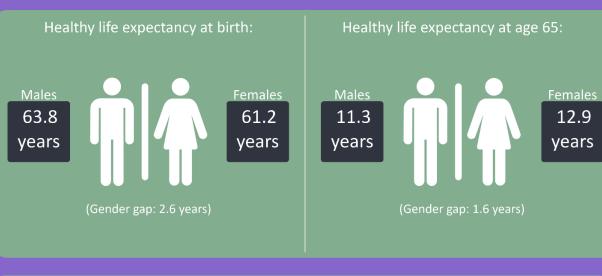


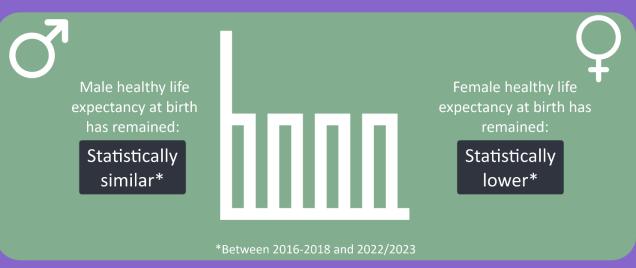
Figure 6: Life expectancy at age 65 for females and males, comparing Jersey (2021-2023) with Guernsey (2021-2023), Isle of Man and the English regions (2020-2022)



Jersey Healthy Life Expectancy

2022/2023







Healthy Life Expectancy 2022/2023

What data is used to calculate healthy life expectancy?

Local age-specific mortality rates are used, along with data on self-reported health status to calculate healthy life expectancy in this report. The estimates are made using a Sullivan life table, following methodology set out by the ONS⁷ (UK).

Asking individuals to rate their own health as part of a survey gives a good insight into the general health status at the population level. A self-reported health status question is included in the Jersey Opinions and Lifestyle Survey⁸ (JOLS), which is conducted each year with a sample of the population. Between 3,000 to 5,000 residential homes are selected at random to complete the survey in June and July each year. Responses to the survey are weighted according to demographic factors, and more information can be found in the JOLS reports⁸.

In 2021, due to the Census also taking place in the same year, a JOLS survey was not conducted by the Statistics Jersey team. Data used to calculate healthy life expectancy in this report is taken from the JOLS self-perceived health responses only, and as such, there is no 2021 data included. This means that in the report, periods '2019/2020', '2020/2022' and '2022/2023' are two yearly averages as opposed to three yearly averages.

Please see the notes section for more information about data for Census year (2021).

Please note, there is a reasonable amount of uncertainty in the calculation of healthy life expectancy. This is because the calculation uses a self-reported health status from a sample of the population. This could lead to over-estimation or under-estimation of the true population health status overall. Confidence intervals have been used throughout this report to demonstrate this uncertainty.

⁷ www.ons.gov.uk - Healthy State Life Expectancy

⁸ Jersey Opinions and Lifestyle Survey (JOLS) (gov.je)

Healthy life expectancy at birth

Healthy life expectancy at birth for females is 61.2 years (Figure 7) and 63.8 years for males (Figure 8), although the difference between the genders was not statistically significant.

In the 2022/2023 period, healthy life expectancy for females at birth was statistically lower than it was in the 2016-2018 period (Figure 7), whilst healthy life expectancy at birth in males has remained statistically similar since the 2016-2018 period (Figure 8).

Female Healthy life expectancy at birth (years) 69.7 66.4 63.6 61.5 61.2 61.2 60 2016-2018 2017-2019 2018-2020 2019/2020 2020/2022 2022/2023 Year

Figure 7. Female healthy life expectancy at birth, 3-yearly average (2016-2018 to 2022/2023)

Source: Population from Statistics Jersey, Deaths from Superintendent Registrar

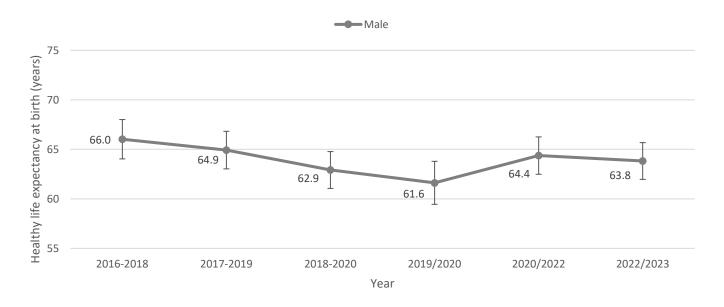


Figure 8. Male healthy life expectancy at birth, 3-yearly average (2016-2018 to 2022/2023)

Source: Population from Statistics Jersey, Deaths from Superintendent Registrar

Healthy life expectancy at age 65

The average healthy life expectancy at age 65 in Jersey for the 2022/2023 period is 12.2 years. Females in Jersey can expect to live on average, an additional 12.9 years in good or very good health (Figure 9), while males can expect to live for an additional 11.3 years in good or very good health (Figure 10).

For both genders, healthy life expectancy at age 65 has remained statistically similar since the 2016-2018 period.

Female 16 Healthy life expectancy at age 65 (years) 13.9 13.1 12.9 12.8 12.6 12 10 8 2016-2018 2017-2019 2018-2020 2019/2020 2020/2022 2022/2023 Year

Figure 9. Female healthy life expectancy at age 65, 3-yearly average (2016-2018 to 2022/2023)

Source: Population from Statistics Jersey, Deaths from Superintendent Registrar

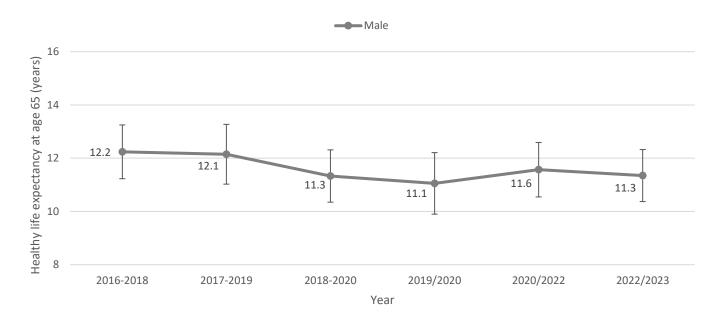


Figure 10. Male healthy life expectancy at age 65, 3-yearly average (2016-2018 to 2022/2023)

Source: Population from Statistics Jersey, Deaths from Superintendent Registrar

Healthy life expectancy at all ages

Healthy life expectancy can be calculated for any age, to give the further number of years a person can expect to live in good or very good health on average, given the age they have attained.

Table 4. compares healthy life expectancy at a given age between the 2016-2018 and 2022/2023 periods.

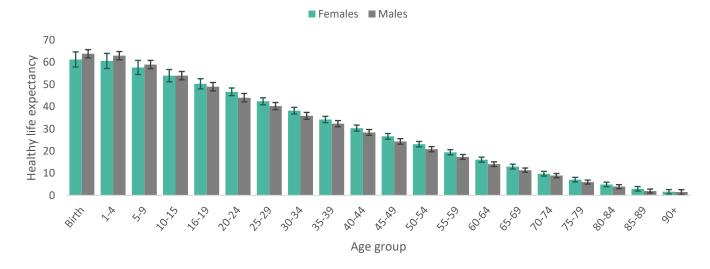
Table 4. Healthy life expectancy at 5-year age groups (2016-2018 compared to 2022/2023)

		Female			Male	
Age Group	2016-2018	2022/2023	Change	2016-2018	2022/2023	Change
Birth	69.7	61.2	-8.5	66.0	63.8	-2.2
1-4	68.9	60.6	-8.4	65.2	63.0	-2.2
5-9	65.1	57.6	-7.5	61.4	58.9	-2.4
10-15	60.4	53.9	-6.4	56.6	53.9	-2.7
16-19	55.6	50.3	-5.3	51.9	49.0	-2.9
20-24	50.8	46.7	-4.1	47.2	44.0	-3.2
25-29	46.2	42.4	-3.8	42.9	40.2	-2.7
30-34	41.6	38.2	-3.5	38.8	35.8	-3.0
35-39	37.4	34.2	-3.2	34.4	32.3	-2.1
40-44	33.2	30.3	-2.8	30.2	28.3	-1.9
45-49	29.2	26.6	-2.6	26.2	24.3	-1.9
50-54	25.3	23.1	-2.3	22.5	20.8	-1.7
55-59	21.4	19.4	-2.0	18.7	17.3	-1.4
60-64	17.7	16.1	-1.6	15.2	14.1	-1.2
65-69	14.1	12.9	-1.1	12.2	11.3	-0.9
70-74	10.7	9.7	-1.0	9.2	8.9	-0.3
<i>75-79</i>	7.6	7.1	-0.5	6.6	6.0	-0.7
80-84	5.5	4.9	-0.6	4.7	3.9	-0.8
85-89	3.1	3.0	-0.2	2.7	2.0	-0.7
90+	1.9	1.6	-0.3	1.5	1.5	0.0

Source: Population from Statistics Jersey, Deaths from Superintendent Registrar

For healthy life expectancy across all age groups, there was no statistically significant difference between the genders, in the 2022/2023 period.

Figure 11. Healthy life expectancy at 5-year age groups for female and males (2022/2023)



Jersey's healthy life expectancy compared to other jurisdictions⁹

Jersey's healthy life expectancy at birth for females is statically similar when compared to the devolved nations of the UK (Table 5). Male healthy life expectancy in Jersey at birth is slightly higher than in Northern Ireland, Scotland and Wales, but similar to England.

Jersey's healthy life expectancy at age 65 for females and males is slightly higher when compared to the devolved nations of the UK (Table 6).

Table 5: Healthy life expectancy at birth in Jersey (2022/2023), England, Northern Ireland and Wales (2020-2022), and Scotland (2019-2021)

At	Bi	rt	h

Year	Countries	Female HLE	95% CI LL	95% CI UL	Male HLE	95% CI LL	95% CI UI
2022/2023	Jersey	61.2	57.8	64.6	63.8	62.0	65.7
	England	62.7	62.5	62.9	62.4	62.2	62.6
2020-2022	Northern Ireland	61.5	60.7	62.3	61.6	60.9	62.3
	Wales	60.3	59.6	60.9	61.1	60.5	61.7
	Scotland	61.1	60.5	61.7	60.4	59.9	60.9
2019-2021	Guernsey*	63.2	-	-	64.5	-	-

Source: Population from Statistics Jersey, Deaths from Superintendent Registrar, UK: ONS, Public Health Guernsey

Table 6: Healthy life expectancy at age 65 in Jersey (2022/2023), England, Northern Ireland and Wales (2020-2022), and Scotland (2019-2021)

At Age 65

Year	Countries	Female HLE	95% CI LL	95% CI UL
2022/2023	Jersey	12.9	11.9	14.0
	England	11.3	11.2	11.5
2020-2022	Northern Ireland	10.3	9.8	10.8
	Wales	10.8	10.5	11.2
2019-2021	Scotland	11.0	10.7	11.3

Source: Population from Statistics Jersey, Deaths from Superintendent Registrar, UK: ONS

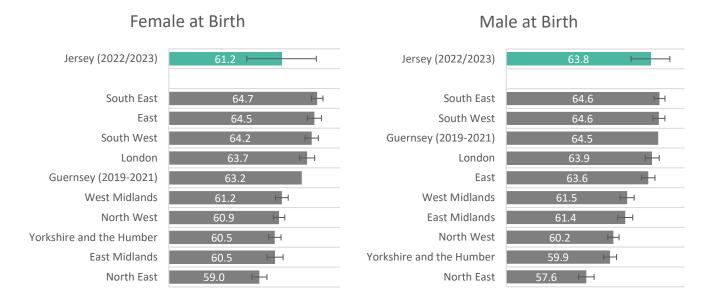
Healthy life expectancy at birth for females in Jersey are statistically similar to all English regions. Healthy life expectancy at birth for males in Jersey is statistically similar when compared to most regions in England, but is higher than in the North West, Yorkshire and the Humber, and the North East (Figure 12).

Jersey ranks highest in female healthy life expectancy at age 65, when compared to the majority of the regions of England. Jersey also ranks higher in male life expectancy at age 65 when compared to some English regions (North West, East Midlands, Yorkshire and the Humber and, North East) (Figure 13)

*Please note, that at the time of publishing, only limited data for Guernsey's healthy life expectancy was available to compare.

⁹ Health state life expectancy, all ages, UK - Office for National Statistics (ons.gov.uk)

Figure 12. Healthy life expectancy at birth for female and male, comparing Jersey (2022/2023), Guernsey (2019-2021) and the English regions (2020-2022)



Source: Population from Statistics Jersey, Deaths from Superintendent Registrar, UK: ONS, Public Health Guernsey

Figure 13. Healthy life expectancy at age 65 for female and male, comparing Jersey (2022/2023) and the English regions (2020-2022)



Source: Population from Statistics Jersey, Deaths from Superintendent Registrar, UK: ONS

Notes

Data Sources

Population Estimates

Population estimates recently published by Statistics Jersey (June 2023) are used to calculate rates in this report. As such, rates presented in this report may differ slightly to those presented in previous publications, which will have used older population estimates.

Mortality Data

Deaths data used in this report include those deaths that were registered in Jersey, plus deaths that occurred abroad to Jersey residents where the body was repatriated to Jersey.

Confidence intervals and statistical significance

Confidence intervals have been used in this report to compare Jersey rates and numbers over time, and with those of Guernsey, UK and IOM. Confidence intervals are a measure of the statistical precision of an estimate and show the range of uncertainty around the estimated figure. The confidence interval indicates the range within which the true value for the population as a whole can be expected to lie, taking natural random variation into account.

Confidence intervals are often expressed as a % whereby a population mean lies between an upper and lower interval. The 95% confidence interval is a range of values that one can be 95% confident contains the true mean of the population.

Comparisons between rates or over time have been tested to determine whether differences are likely to be statistically significant or the result of natural random variation. Only those differences deemed as statistically significant have been described in this report using terms such as 'increase', 'decrease', 'higher' or 'lower'.

Jersey Opinions and Lifestyle survey (JOLS)

Information on people's health status is obtained through the Jersey Opinions and Lifestyle survey¹⁰, which samples a random, representative group of Jersey's population each year, the data is a self-completion questionnaire. This could lead to over-estimation of 'good' or better health, as those in poorer health may be less likely to complete a survey.

The Jersey Opinions and Lifestyle survey only captures persons living in private households, and excludes communal establishments such as care homes, which may give rise to an over-estimation of health life expectancy in years and as a proportion of remaining life, as is also the case for England's method of collection.

Due to small numbers underlying both the age standardised mortality rates and data on health status by age, data from two or three years are aggregated to calculate life expectancies and healthy life expectancies.

¹⁰ Jersey Opinions and Lifestyle Survey (JOLS) (gov.je)

Census 2021

A Jersey Census was run in 2021, and included a self-perceived health question.

Responding to the Census was mandatory and involved the whole population of Jersey, whilst the JOLS survey is non-mandatory and based on a sample of the population, the findings from each survey are, naturally, different.

A comparison of the findings for the proportion of the population in "good" or "very good" health is shown in Figure 14 below. You can see that the estimated proportion of the population in good or very good health is higher in the Census 2021 data, when compared with JOLS social survey data in the shouldering years.

As different methods were used to collect the data between the JOLS survey and the Census survey, we would not expect the outcomes to be the same. Considering this, we have judged it to be most appropriate to exclude Census 2021 data from the healthy life expectancy calculations in this report and use the comparable JOLS survey data only.

Additionally, using local sample survey data (as opposed to whole population census data) aids appropriate comparability with the UK data referenced in this survey, which uses self-reported health from a sample survey.

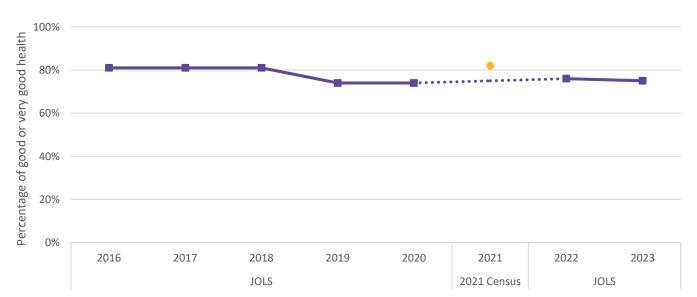


Figure 14. Self-perceived health reported to be good or very good (2016 to 2022)

Limitations

There are limitations associated with the calculations of healthy life expectancy:

- the self-reported health data uses a relatively small sample size, leading to potential volatility in estimates and wide confidence intervals. This volatility is likely to be exacerbated compared to other larger jurisdictions, as Jersey's population is small
- survey data are not routinely collected for those aged under 16 years, and only sparsely for those aged 85 years and over, requiring imputation of prevalence from census data for these age groups
- the measures of health status are subjective self-reports

Feedback

If you would like to provide feedback, then please contact us on the following address or email us at: healthintelligence@gov.je

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