# Strategic Policy, Planning and Performance Report



Public Health Intelligence

**Subject:** Healthy life expectancy 2020/2022

Date of report: 13 July 2023

# Introduction

How do we measure 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. *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.

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 ONS<sup>1</sup> (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 Survey<sup>2</sup> (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 reports<sup>1</sup>.

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' and '2020/2022' 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.

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<sup>&</sup>lt;sup>1</sup> www.ons.gov.uk - Healthy State Life Expectancy

<sup>&</sup>lt;sup>2</sup> Jersey Opinions and Lifestyle Survey (JOLS) (gov.je)

# Healthy life expectancy at birth

The average healthy life expectancy at birth in Jersey for 2020/2022 is 63.5 years. Healthy life expectancy at birth for females is 61.2 years (Figure 1) and 64.4 years for males (Figure 2), although the difference between the genders was not statistically significant.

In the 2020/2022 period, healthy life expectancy for females at birth was statistically lower than it was in the 2016-2018 period (Figure 1), whilst healthy life expectancy at birth in males has remained statistically similar since the 2016-2018 period (Figure 2).

Female 75 Healthy life expectancy at birth (years) 66.4 65 61.5 63.6 61.2 2016-2018 2017-2019 2018-2020 2019/2020 2020/2022 Year

Figure 1. Female healthy life expectancy at birth, 3 yearly average (2016-2018 to 2020/2022)

Source: Population from Statistics Jersey, Deaths from Superintendent Registrar

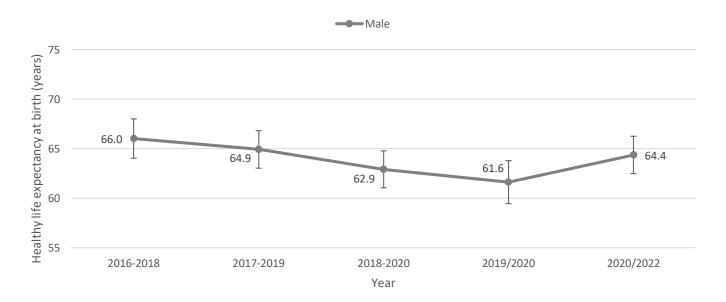


Figure 2. Male healthy life expectancy at birth, 3 yearly average (2016-2018 to 2020/2022)

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 2020/2022 period is 12.3 years. Females in Jersey can expect to live on average, an additional 13.1 years in good or very good health (Figure 3), while males can expect to live for an additional 11.6 years in good or very good health (Figure 4).

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

Figure 3. Female healthy life expectancy at age 65, 3 yearly average (2016-2018 to 2020/2022)

Source: Population from Statistics Jersey, Deaths from Superintendent Registrar

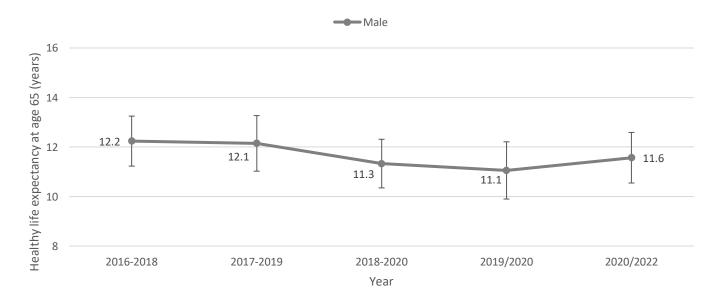


Figure 4. Male healthy life expectancy at age 65, 3 yearly average (2016-2018 to 2020/2022)

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 1. compares healthy life expectancy at a given age between the 2016-2018 and 2020/2022 periods.

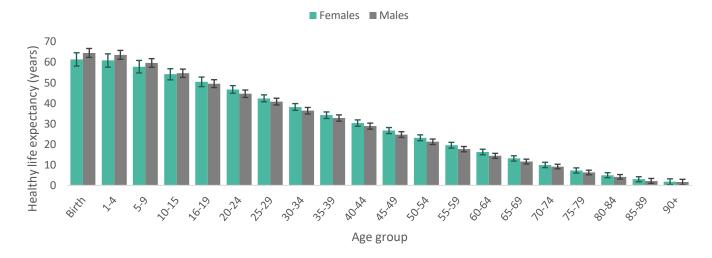
Table 1. Healthy life expectancy at 5-year age groups (2016-2018 compared to 2020/2022)

		Female		Male
Age Group	2016-2018	2020/2022	Change	2016-2018 2020/2022 Change
Birth	69.7	61.2	-8.5	66.0 64.4 -1.7
1-4	68.9	60.7	-8.3	65.2 63.4 -1.8
<i>5-9</i>	65.1	57.7	-7.5	61.4 59.5 -1.9
10-15	60.4	54.0	-6.4	56.6 54.5 -2.2
16-19	55.6	50.3	-5.2	51.9 49.4 -2.4
20-24	50.8	46.6	-4.2	47.2 44.5 -2.7
25-29	46.2	42.3	-3.9	42.9 40.7 -2.2
30-34	41.6	38.1	-3.5	38.8 36.3 -2.5
35-39	37.4	34.1	-3.3	34.4 32.7 -1.7
40-44	33.2	30.3	-2.9	30.2 28.8 -1.5
45-49	29.2	26.6	-2.6	26.2 24.7 -1.5
50-54	25.3	23.1	-2.2	22.5 21.2 -1.3
55-59	21.4	19.5	-1.9	18.7 17.6 -1.1
60-64	17.7	16.2	-1.5	15.2 14.3 -0.9
65-69	14.1	13.1	-1.0	12.2 11.6 -0.7
70-74	10.7	9.9	-0.8	9.2 9.2 -0.1
<i>75-79</i>	7.6	7.2	-0.4	6.6 6.3 -0.4
80-84	5.5	5.0	-0.5	4.7 4.1 -0.6
85-89	3.1	3.0	-0.1	2.7 2.2 -0.5
90+	1.9	1.8	-0.1	1.5 1.6 +0.1

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 2020/2022 period.

Figure 5. Healthy life expectancy at 5-year age groups for female and males (2020/2022)



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# Jersey's healthy life expectancy compared to the devolved nations of the UK<sup>3</sup>

Jersey's healthy life expectancy at birth for females is statically similar when compared to the devolved nations of the UK (Table 2). 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 3).

Table 2: Healthy life expectancy at birth in Jersey (2020/2022), and the devolved nations of the UK (2018-2020)

#### At Birth

Year	Countries	Female HLE	95% CI LL	95% CI UL	Male HLE	95% CI LL	95% CI U
2020/2022	Jersey	61.2	57.8	64.6	64.4	62.5	66.3
2018-2020	England	63.9	63.7	64.1	63.1	62.9	63.3
	Northern Ireland	62.7	61.6	63.7	61.5	60.5	62.5
	Scotland	61.8	61.3	62.3	60.9	60.4	61.4
	Wales	62.4	61.9	62.9	61.5	61.0	61.9

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

Table 3: Healthy life expectancy at age 65 in Jersey (2020/2022), and the devolved nations of the UK (2018-2020)

At Age 65

Year	Countries	Female HLE	95% CI LL	95% CI UL		Male HLE	Male HLE 95% CI LL
2020/2022	Jersey	13.1	12.0	14.2		11.6	11.6 10.5
2018-2020	England	11.3	11.2	11.5		10.5	10.5 10.4
	Northern Ireland	10.5	9.7	11.2		10.0	10.0 9.2
	Scotland	10.8	10.5	11.1		9.6	9.6 9.3
	Wales	10.9	10.6	11.2		10.0	10.0 9.7

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

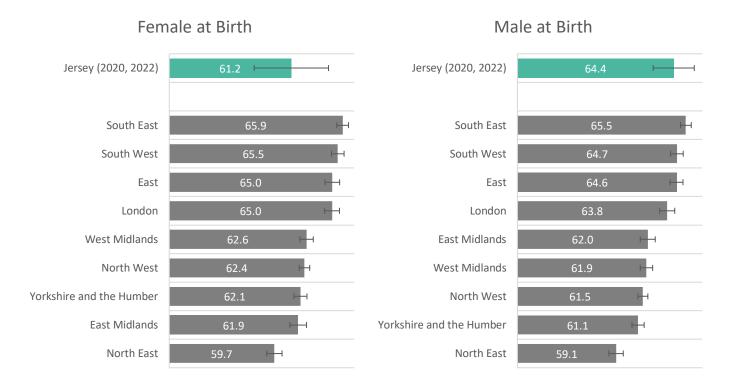
Healthy life expectancy at birth for females in Jersey are statistically similar to nearly every region in England, except lower than in South East and South West. Healthy life expectancy at birth for males in Jersey is statistically similar when compared to most regions in England, but is higher than West Midlands, Northwest, Yorkshire and Humber and North East (Figure 6).

Jersey ranks highest in female and male healthy life expectancy at age 65, when compared to the regions of England (Figure 7).

Please note, that at the time of publishing, Guernsey's healthy life expectancy data was not available to compare.

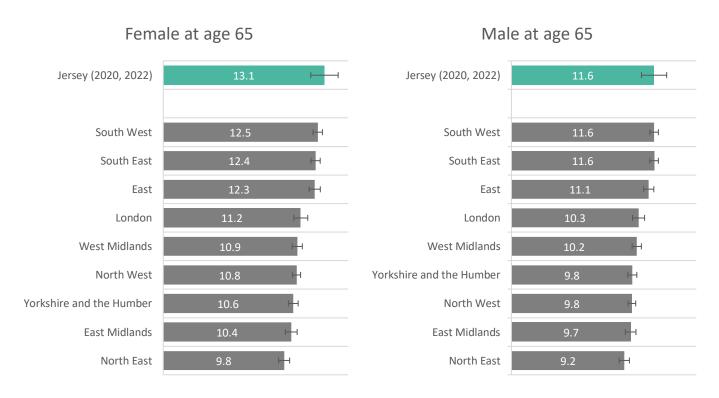
<sup>&</sup>lt;sup>3</sup> Health state life expectancy, all ages, UK - Office for National Statistics (ons.gov.uk)

Figure 6. Healthy life expectancy at birth for female and male, comparing Jersey (2020, 2022) and the English regions (2018-2020)



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

Figure 7. Healthy life expectancy at age 65 for female and male, comparing Jersey (2020, 2022) and the English regions (2018-2020)



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)<sup>4</sup> 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.

## Jersey Opinions and Lifestyle survey (JOLS)

Information on people's health status is obtained through the Jersey Opinions and Lifestyle survey<sup>5</sup>, 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.

#### Census 2021

A Jersey Census was run in 2021<sup>6</sup>, 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 8 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<sup>7</sup>.

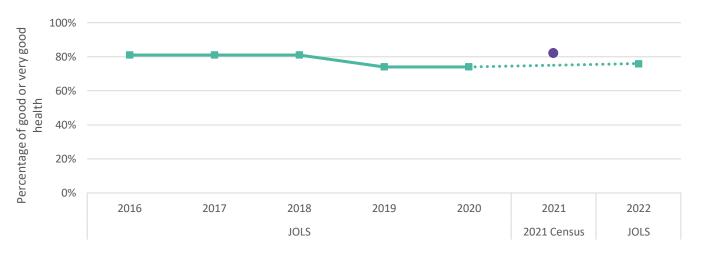
<sup>&</sup>lt;sup>4</sup> Population And Migration Statistics – Statistics Jersey, June 2023

<sup>&</sup>lt;sup>5</sup> Jersey Opinions and Lifestyle Survey (JOLS) (gov.je)

<sup>&</sup>lt;sup>6</sup> 2021 census results (gov.je)

<sup>&</sup>lt;sup>7</sup> Health state life expectancies, UK - Office for National Statistics (ons.gov.uk)

Figure 8. Self-perceived health reported to be good or very good (2016 to 2022)



Source: JOLS and 2021 Census

#### 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

### Confidence intervals and statistical significance

Confidence intervals have been used in this report to compare Jersey rates and numbers over time, and with the UK. 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'.

### 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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