Strategic Policy, Planning and Performance

Report

Public Health Intelligence



Subject: Births and Breastfeeding Profile 2022

Date of report: 23 March 2023

Introduction

This annual report contains the latest births and breastfeeding statistics for Jersey, for the calendar year 2022.

The information presented is derived primarily from the hospital computer system (TRAK) and the child health CAREPLUS database server, with some data from the superintendent registrar.

The report considers trends over time in Jersey and compares Jersey with England where appropriate.

The information presented includes:

- Number of Births
- Birth Rates
 - Crude Birth Rate
 - General Fertility Rate (GFR)
 - Total Fertility Rate (TFR)
 - Age-Specific Fertility Rates
- Birth weight
- C-Sections
- Breastfeeding
- Apgar Score
- Smoking amongst Pregnant Women and Partners
- Hospital Admissions Under 5
- Mortality of Babies

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Births and Breastfeeding 2022

In 2022

840



Births were to Jersey resident mothers



The total fertility rate (TFR) over the period 2020-2022 was

1.32 births per woman



The **30-34 year** age group of women had the highest age-specific fertility rate

35%



of mothers were aged 35 years and over at delivery

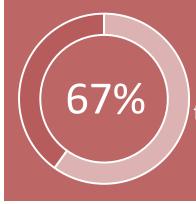
40%



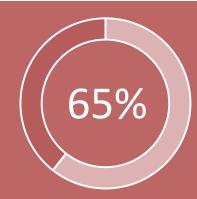
of births were by c-section

2% of new-born term babies

in Jersey were classified as 'low' birthweight



Breastfed at discharge from maternity care



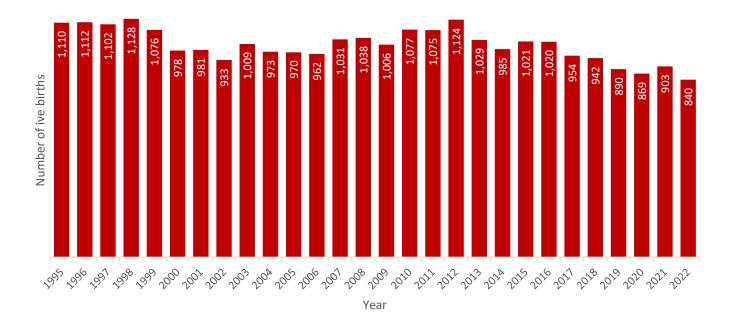
Breastfed at 6-8 week review

Births

In 2022, there were 840 births to Jersey resident mothers. This is the lowest recorded number of births for Jersey between the period of 1995 to 2022.

The number of live births has declined by 25% since the latest peak seen in 2012 (1,124) (Figure 1).

Figure 1. Total number of births per year (Jersey, 1995 to 2022)



Source: Trak/Careplus

Sex of Baby at Birth

In 2022:

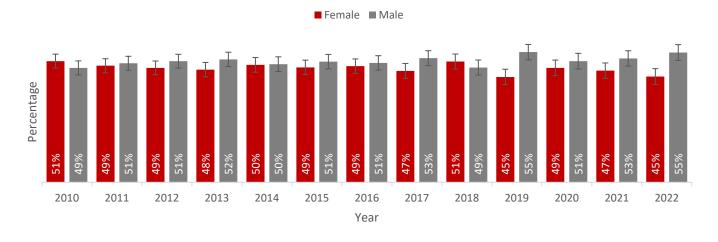
there were 377 live births of females and 463 live births of males

the female to male sex ratio for Jersey was 1,228 males per 1,000 females; in England and Wales¹ the sex ratio was 1,051 in 2021

Over the preceding decade, whilst there have been fluctuations in the actual numbers of boys and girls born each year, the relative proportions (49% female, 51% male) have been statistically similar overall over time (Figure 2).

¹ Births in England and Wales, available from www.ons.gov.uk

Figure 2. Percentage of annual births by sex (Jersey, 2010 to 2022)



Place of Birth

In 2022, 45 babies were born at home, which was 5% of all births.

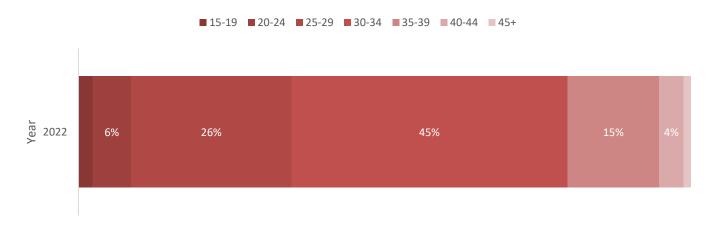
There were less than 10 births to Jersey resident mothers in hospitals in the UK, 1% of all births in 2022; a similar number of births to Jersey mothers have occurred each year outside of Jersey since 2017.

Delivery Statistics

In 2022:

- 57 births (7% of all live births) occurred before 37 weeks gestation, and were classed as preterm
- 41% of all live births were first births; 33% were second births; and 26% were third or later births
- 26% of first live births were to mothers aged 25-29 years; 45% were to mothers aged 30-34 years; and 15% were to mothers aged 35-39 years (Figure 3)

Figure 3. Proportion of live first births by age group (Jersey, 2022)



A baby's weight at birth can be influenced by several factors, including gestational age at which the child is born; the health of the mother, particularly during pregnancy; and genetics.

In 2022:

- 2% of all new-borns in Jersey were classified as being small for gestational age (birth weight below the 5th centile for weight²) (Figure 4)
- 5% of all new-borns (around 40 babies) were large for gestational age (above the 95th centile for weight)

Figure 4. Proportion of all new-borns who were small or large birthweight for gestational age (Jersey, 2012 to 2022)



Source: Trak/Careplus

6% of all new-borns (around 50 babies) were classified as being of low birthweight³; fewer than 10 of these babies were recorded as being of very low birthweight⁴ at the time of delivery

Among babies born at full term, 12 babies (2%) were classified as low birthweight⁵. There has been no statistical change between 2012 and 2022. England also saw a similar proportion of 2.8%⁶

Multiple Births

In 2022, 17 mothers in Jersey had a multiple birth (e.g., twins), a similar number to the previous year (2021) when 18 mothers had multiple births.

34 children were born as part of a multiple birth (e.g., twins) in 2022, compared to 36 children in 2021.

² Jersey gestation and birth weight data is compared to the gender specific World Health Organisation British 1990 birth cohort

³ Low birthweight is a term used to describe babies who are born weighing less than 2500g

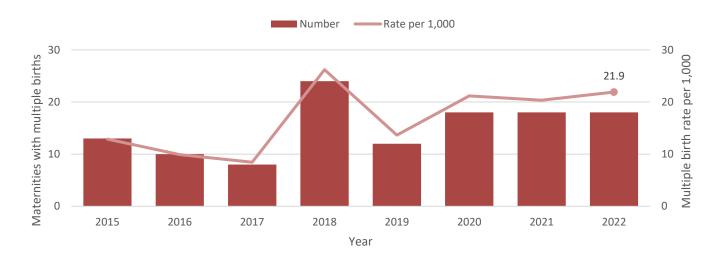
⁴ Very low birthweight is a term used to describe babies who are born weighing less than 1500g

⁵ Live births with a recorded birth weight under 2500g and a gestational age of at least 37 complete

⁶ Low birth weight of term babies, available from www.fingertips.phe.org.uk

The rate of maternities with multiple births in Jersey was 21.9 per 1,000 births in 2022 (Figure 5); for comparison, in England the rate was 13.7 per 1,000 in 2021.⁷

Figure 5. Number of multiple live births and multiple birth rate per 1,000 maternities (Jersey, 2015 to 2022)



Source: Trak/Careplus

Caesarean Sections (C-Sections)

During the three-year period 2020-2022, around 40% of all deliveries in Jersey were by c-section. This is an increase over the last two decades, up from 27% in 2000-2002 (Figure 6).

The proportion of births by c-section in Jersey was higher than in England,⁸ where 33% of births in 2020-2021 were c-section.

C-sections can either be an emergency (urgent) or elective (planned):

Of first births:

- 26% were delivered by an emergency (urgent) c-section
- 15% were delivered by elective (planned) c-section

of second births:

- 16% were delivered by an emergency (urgent) c-section
- 24% were delivered by elective (planned) c-section

Table 1. Percentage of women giving birth by c-section type in Jersey (2020-2022)

	First Births	Second Births	Third or more Births
Emergency (urgent) c-section	26%	16%	11%
Elective (planned) c-section	15%	24%	28%
Total	41%	40%	39%

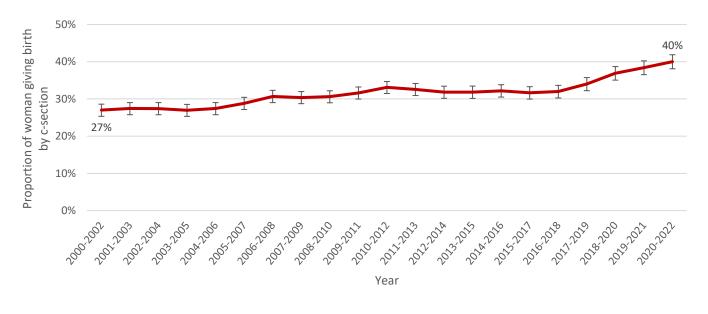
Source: Trak/Careplus

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⁷ Multiple births, available from www.fingertips.phe.org.uk

⁸ C-Section, available from www.fingertips.phe.org.uk

Figure 6. Percentage of women giving birth by c-section in Jersey (2000-2002 to 2020-2022)



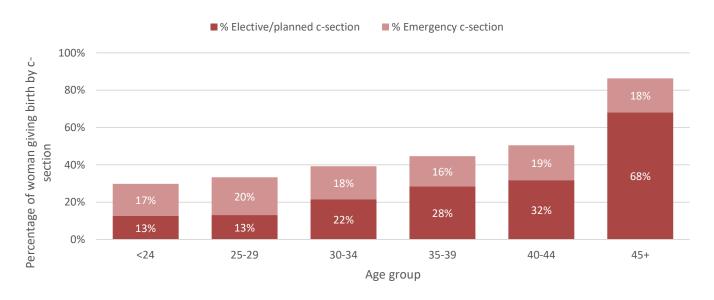
The proportion of c-section deliveries in Jersey increased with the age of the mother (Figure 7).

C-section births accounted for:

- 30% of deliveries by women aged 24 years and under
- 33% of deliveries by women aged between 25 and 29 years
- 39% of deliveries by women aged between 30 and 34 years
- 45% of deliveries by women aged between 35 and 39 years
- 51% of deliveries by women aged between 40 and 44 years
- 86% of deliveries by women aged 45 and over

Around 13% of mothers in Jersey aged 25-29 years delivered by an elective or planned c-section, a smaller proportion than for mothers aged 35-39 years (28%) and 40-44 years (32%).

Figure 7. Proportion of women giving birth by c-section, by age of mother, three-year period (Jersey, 2020-2022)



The average age of mothers giving birth in Jersey, was 33 years in 2022; in England and Wales⁹ the average age of women at childbirth was 31 years in 2021.

There has been a decline in births in younger age groups since 1995-1997:

- women aged under 20 years saw a decline from 4% to 1% in 2020-2022
- women aged 20 to 29 years saw a decline from 42% to 25% in 2020-2022

However, the proportion of births to mothers in the older age groups have increased since 1995-1997:

- women aged 30 to 39 years saw an increase from 51% to 66% in 2020-2022
- those aged 40 and over saw an increase from 2% to 8% in 2020-2022 (Figure 8)

For comparison, in the EU,¹⁰ the average age of mothers at the birth of their first child was 29.7 years in 2021.

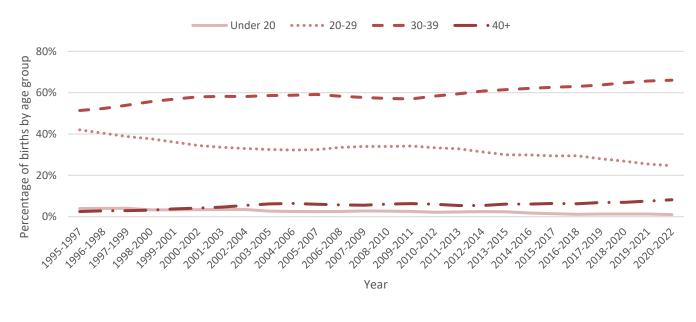


Figure 8. Proportion of births by age-band (Jersey, 1995-1997 to 2020-2022)

Source: Trak/Careplus

Mothers aged 35 and over

The proportion of mothers giving birth aged 35 years and over in Jersey has increased from 17% in 1995 to 35% in 2022. (Figure 9)

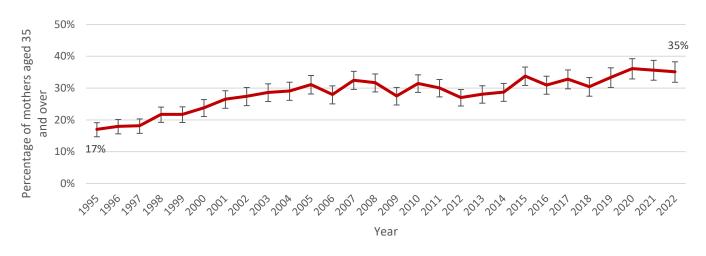
The proportion of mothers giving birth aged 35 and over in England¹¹ (23%) in 2020-2021 was lower than in Jersey.

⁹ Birth characteristics, available from www.ons.gov.uk

¹⁰ Eurostat fertility statistics, available from www.ec.europa.eu

¹¹ Percentage of deliveries to women aged 35 years or above, available from www.fingertips.phe.org.uk

Figure 9. Proportion of mothers in Jersey aged 35 years and over at the time of birth (Jersey, 1995 to 2022)



Teenage Mothers (Under 18)

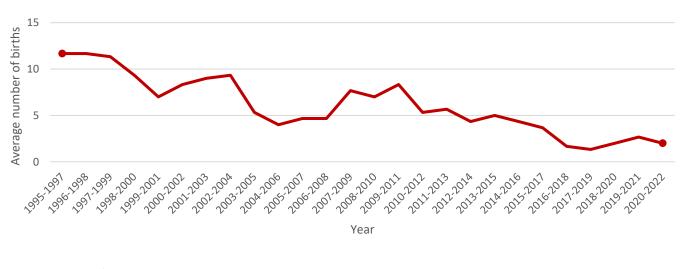
Over the three-year period 2020-2022 there has been an average of less than 5 births per year in Jersey to mothers aged 17 years and under.

The average number of births to mothers aged 17 years and under in Jersey has decreased from 12 per year during the period 1995-1997 (Figure 10).

During the three-year period 2020-2022, 0.1% of births in Jersey were to mothers aged 17 years and under; in England¹², 0.6% of births were to teenage mothers aged 17 years and under in 2021-2022.

There were 7.7 conceptions per 1,000 women aged 17 years and under during the three-year period 2020-2022. The conception rate for England¹³ was 15.1 conceptions per 1,000 woman aged 17 years and under during the three-year period 2018-2020.

Figure 10. Average births per year, over a 3-year period 17 and under (Jersey, 1995-1997 to 2020-2022)



¹² Teenage mothers, available from www.fingertips.phe.org.uk

¹³ Under 18s conception rate/1,000, available from www.fingertips.phe.org.uk

Birth Rates

Crude Birth Rate

The crude birth rate shows the number of births per 1,000 people in the population overall. It corrects the birth rate for crude changes in the population size.

- the crude birth rate in Jersey in 2022 was 8.1 live births per 1,000 population
- there has been a continuing decline since 2012 when the birth rate was 11.4 births per 1,000 population (Figure 11)
- the crude birth rate in England and Wales in was 10.5 live births per 1,000 total population in 2021

The crude birth rate is affected by the population structure, so the general and total fertility rate are more informative measures for understanding births in the population.

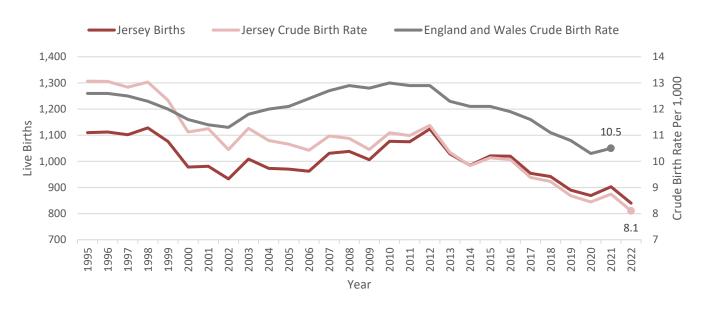


Figure 11. Crude birth rates (Jersey, 1995 to 2022)

Source: Trak/Careplus

General Fertility Rate (GFR)

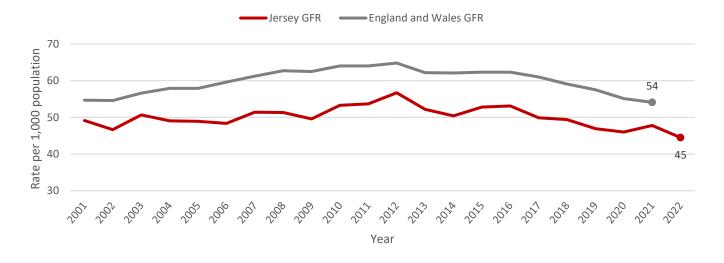
The general fertility rate (GFR) is defined as the number of live births in a year per 1,000 women in the population who are aged 15-44 years.

The GFR is a more considered way to measure fertility than the crude birth rate because the GFR is not affected by changes in the size of sub-groups of the population which generally would not bear children (e.g. pensioners).

There were 45 births for every 1,000 women of childbearing age in Jersey in 2022, for comparison, the GFR in England and Wales¹⁴ was 54 per 1,000 women of childbearing age in 2021 (Figure 12).

¹⁴ General fertility rate, available from www.fingertips.phe.org.uk

Figure 12. General fertility rate (GFR) (Jersey, 2001 to 2022)



Total Fertility Rate (TFR)

The total fertility rate (TFR) refers to the total number of children born to a woman in her lifetime if she were subject to the current rates of age-specific fertility in the population.

- the TFR in Jersey during the period 2020-2022 was 1.32 births per woman (Table 1), equivalent to 1,320 births per 1,000 women, this is lower than England and Wales¹⁵, where the latest total fertility rate was 1.59 births per women (2019-2021)
- the latest TFR for Jersey is the lowest recorded since 2001-2003 (Figure 13)
- between 2001-2003 and 2011-2013 the total fertility rate (TFR) in Jersey had increased from 1.4 to 1.6 and since 2012-2014 has been decreasing (Figure 13).

Table 2 shows the details of the calculation of the TFR in Jersey for the three-year period 2020-2022.

Table 2. Calculation of the total fertility rate (TFR) for Jersey (2020-2022)

Age of woman (years)	Estimated number of women in age group	Births to woman in age groups	Age specific birth rate = births to woman in age group/number of woman in age group
15-19	7,563	26	0.00
20-24	8,169	165	0.02
25-29	8,655	480	0.06
<i>30-34</i>	9,885	1,008	0.10
<i>35-39</i>	11,058	717	0.06
40-44*	11,322	214	0.02
		Sum	0.26
		TFR = Sum x5	1.32

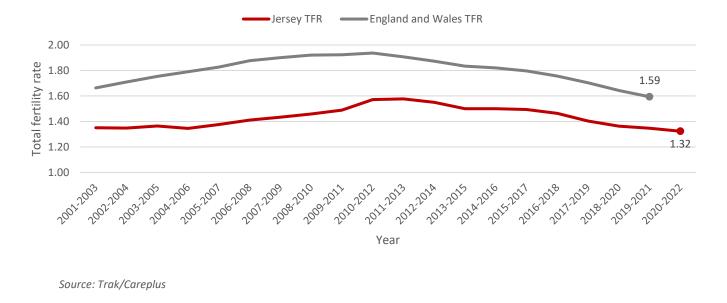
*the small number of births to women aged 45 years and over are included in the number of births to women aged 40-44 years

Source: Trak/Careplus

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¹⁵ Births in England and Wales, available from www.ons.gov.uk

Figure 13. Total fertility rate (TFR) (Jersey, 2001-2003 to 2020-2022)

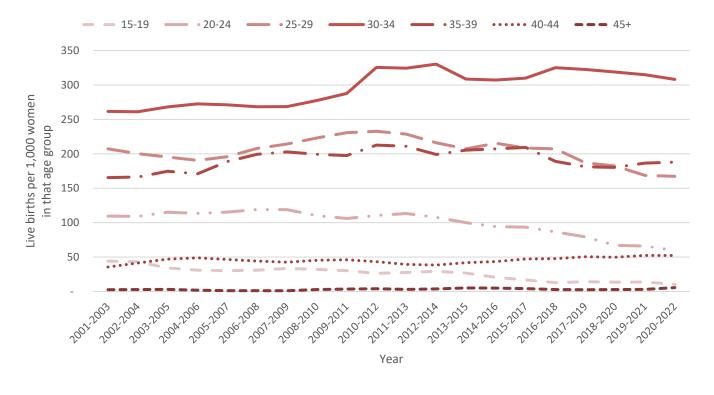


Age-Specific Fertility Rates

Since 2001-2003, the 30-34 years age group has had the highest age-specific fertility rate in Jersey, and 45 and over has had the lowest (Figure 14).

Fertility rates of women aged under 29 years have decreased since 2011-2013.

Figure 14. Age-specific fertility rates (three-year averages) (Jersey, 2001-2003 to 2020-2022)



Breastfeeding

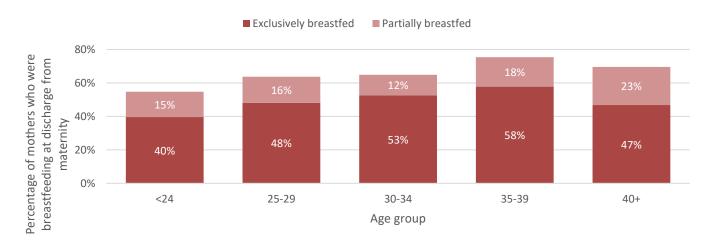
Breastfeeding at Discharge

67% of babies were being breastfed at discharge from maternity in 2022, a similar proportion to that seen in each year since 2011.

52% of mothers were exclusively breastfeeding (babies receiving breast milk only) and a further 15% were mixed feeding (babies receiving both breast and formula milk).

Breastfeeding rates of mothers aged under 24 years had the lowest proportion compared to other age groups (Figure 15).

Figure 15. Percentage of mothers in Jersey who were breastfeeding at discharge from maternity, by age of mother (2022)



Source: Trak/Careplus

Breastfeeding at 6-8 weeks

65% of babies were being breastfed 6-8 weeks after birth in 2022, this is the highest recorded percentage between 2011 and 2022 (Figure 17).

45% of mothers were exclusively breastfeeding and a further 21% were mixed feeding at 6-8 weeks after birth.

The percentage of mothers who continued to exclusively breastfeed at 6-8 weeks after birth was lower across all age groups than at discharge, whilst a higher proportion are partially breastfeeding.

Jersey's proportion of mothers who were breastfeeding at 6 to 8 weeks after birth (65%) was higher than in England¹⁶ (49%) in 2021-2022.

¹⁶ Breastfeeding prevalence at 6-8 weeks after birth, available from www.fingertips.phe.org.uk

Figure 16. Percentage of mothers in Jersey who were breastfeeding at 6-8 weeks after birth, by age of mother (2022)

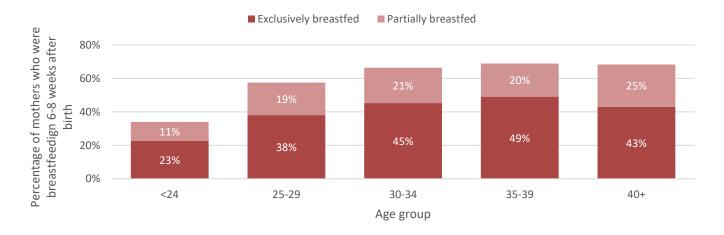
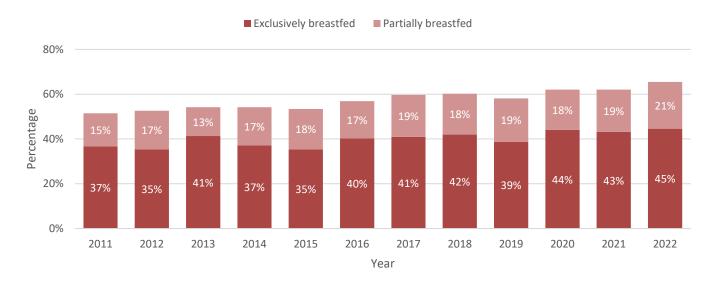


Figure 17. Percentage of babies who were breastfed at 6-8 weeks after birth in Jersey (2011-2022)



Source: Trak/Careplus

Breastfeeding at 12 Month (Developmental Assessment)

- around 739 developmental checks were carried out by Family Nursing and Home Care (FNHC) health visitors in 2022 (at baby's age of between 9 and 15 months)
- 24% were being breastfed at the 12-month developmental assessment
- 17% were exclusively receiving breastmilk, with a further 8% receiving a combination of breast and formula milk

Apgar Score

Medical professionals assess the Apgar score for a baby at five minutes after birth by scoring the baby between zero and two for each of five criteria (Appearance, Pulse, Grimace, Activity and Respiration) and summing to give a score between zero and ten.

A score of seven or above is considered normal, and a score below seven is regarded as low.

• In 2022, of the term babies with an Apgar score recorded, 1.2% (less than 10) had a score below seven, a similar proportion to England in 2021-2022 (1.1%)¹⁷

Smoking

- 7% of women were recorded as being a current smoker at their booking appointment
- 25% of women recorded that their partner was a current smoker

As part of the 6-8 week check of new-borns, the risk of exposure to second-hand smoke is assessed by GPs.

 around 12% of all babies born in 2022 were living in a household where they were likely to be exposed to tobacco smoke by an adult

Hospital Admissions

During the period 2020-2022¹⁸:

- around 405 children aged four years and under were admitted each year, on average, to hospital for emergency medical care
- around 126 individual infants (under the age of one) were admitted each year, on average to hospital for emergency medical care

¹⁷ Apgar Score, available from www.digital.nhs.uk

¹⁸ Clinical coding for reasons for hospital admissions during this period is still due to be finalised, therefore we are unable to provide further details into reasons for admissions.

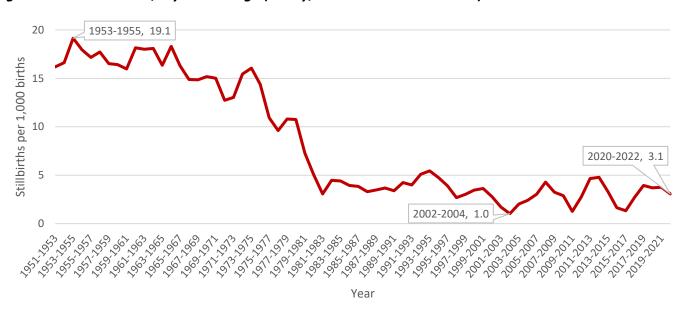
Mortality

Stillbirths¹⁹

The stillbirth rate in Jersey for period 2020-2022 was 3.1 per 1,000 births.

There were 31 stillbirths in the 10 year period of 2013 to 2022.

Figure 18. Stillbirth rate, 3-year average (Jersey, 1951-1953 to 2020-2022)



Source: Superintendent registrar/TRAK

Neonatal Deaths²⁰

there were less than 10 neonatal deaths in Jersey during the ten-year period 2013-2022

Infant Mortality²¹

The infant mortality rate in Jersey was 2.3 deaths per 1,000 live births during the three-year period 2020-2022 (Figure 19).

England²² had an infant mortality rate of 3.9 per 1,000 live births in 2019-2021.

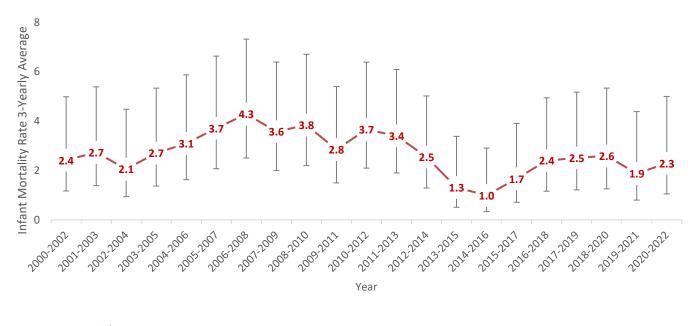
¹⁹ Stillbirth is the delivery, after the 24th week of pregnancy, of a baby who has died.

²⁰ Neonatal deaths are babies who were born after 24 weeks' gestation who died in their first 28 days of life.

²¹ Infant mortality is defined as all deaths occurring within the first year of life. The number of infants who die each year in Jersey is subject to variation from year to year; the data is therefore presented on a three-year rolling average basis.

²² Infant mortality rate, available from www.fingertips.phe.org.uk

Figure 19. Infant mortality rate per 1,000 live births, 3-year average in Jersey (2000-2002 to 2020-2022)



Deaths of Children (Under 5)

There were less than 10 deaths to children under 5 years of age in Jersey during the three-year period 2020-2022, which has remained similar, over the last 10 years.

Sources of Data

- all babies born in Jersey are offered a six-week check by a GP to check the baby's development. Babies are then seen again by a Family Nursing and Health Care (FNHC) health visitor at a child health clinic for a 12-month developmental assessment
- birth and breastfeeding data (up to and including the six-week check) comes from the Child Health
 System, which is administered by the Preventative Programmes, Child Health Team. This system
 monitors a child's development and immunisation history throughout their childhood. Statistics
 Jersey extracts data from this system for statistical purposes. Data on breastfeeding is also gathered
 by the Maternity Unit through TRAK (hospital patient healthcare information system), and/or by
 GPs
- data on caesarean sections comes from the Child Health System, together with data from the
 hospital system TRAK. Information on breast-feeding at the 12-month developmental assessment is
 provided by Family Nursing Home Care (FNHC). FNHC is a Jersey charity who provide nursing and
 home care in the community, they have a team of health visitors and work closely with the States
 of Jersey to provide care for all families in Jersey
- data on hospital admissions is taken from the hospital computer system TRAK. Admissions data are
 classified using the International Classification of Diseases (ICD-10); each admission can have up to
 20 diagnosis fields, but the primary diagnosis field is considered the main reason for admission to
 hospital
- figures on infant mortality uses information from the notifications and registrations reported by Parish Registrars to the Superintendent Registrar, as required by the Marriage and Civil Status (Jersey) Law 2001
- conception rates for teenage mothers (under 18) include data on terminations, and this data is currently provisional for 2022

Methods

Population Estimates

This report uses interim estimates for yearly population figures between 2011 and 2022. These estimates were produced by Public Health Intelligence, in lieu of official estimates being published by Statistics Jersey.

A simple interpolation model was used: briefly, the 2011 census figures are used, individuals are aged one year each year, newly arrived infants are added in, local deaths are subtracted out, and the remaining difference in population between the 2011 and 2021 censuses is attributed to migration and split evenly across the 10-year period.

The model output population change between 2020 and 2021 was extended forward an extra year to provide a population estimate for 2022.

When official population estimates are published by Statistics Jersey for the 2011 to 2021 inter-census period, rates and population adjustments for the metrics presented in this report will be updated accordingly.

Crude Rates

A crude rate refers to the number of events per 1,000 or 100,000 population.

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 England and Wales. 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'.

Total Fertility Rate (TFR)

The TFR is affected both by the number of children women have across their child-bearing years as well as the specific timing. The TFR will decline if women start having fewer children overall and/or if women generally start delaying childbearing to later years.

Similarly, a rise in TFR would result from women having more children and/or women moving towards having children earlier in their life.

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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