Strategic Policy, Planning and Performance Report

Public Health Intelligence

Subject:	Births and Breastfeeding statistics 2020
Date of report:	16 September 2021

Summary

In 2020:

- there were 869 live births in Jersey[1], corresponding to a crude birth rate (CBR) of 8.0 per 1,000 resident population[2]
- the number of live births was the lowest annual total since 1983 and the crude birth rate was the lowest since at least 1950
- the total fertility rate (TFR) over the three-year period 2018-2020 was 1.27 births per woman[3] and was the lowest recorded since at least 2001-2003
- the 30-34 year age group of women had the highest age-specific fertility rate
- the proportion of mothers aged 35 years and over at delivery has increased from around one in four (24%) in 2001 to over one in three (36%) in 2020
- the proportion of births by caesarean section (37%) was higher than that recorded in each year of the previous two decades and was greater in Jersey than in England (30%)[4]
- 2% of new-born term babies in Jersey were classified as 'low' birthweight[5], similar to England
- three-quarters (75%) of babies were being breastfed at discharge from maternity care; by 6-8 weeks this proportion was 62%
- over the period 2018-2020 infant mortality in Jersey was 2.6 deaths per 1,000 live births in infants under one year of age, a similar rate to that in England

Introduction

This report constitutes the latest collection of births and breastfeeding statistics for Jersey and presents data for the calendar year 2020. The information presented is derived primarily from the hospital computer system TRAK and the child health CAREPLUS database server (see Notes).

[1] Details of births refer to all births in Jersey including babies born off-Island to Jersey resident mothers and who subsequently transfer back. These details will differ slightly to the information collected by the Superintendent Registrar who complies details of all babies registered on-Island.

[2] Throughout this report, all population figures (such as the total resident population and the numbers of females in each age-group) have been estimated using Statistics Jersey's population projections: https://www.gov.je/government/pages/statesreports.aspx?reportid=2370

[3] Total fertility rate (TFR) refers to the total number of children born to a woman in her lifetime.

[4] Public Health England (PHE) Child and Maternal Health May 2021: https://fingertips.phe.org.uk/profile/child-health-profiles

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

The information presented includes:

- number of births
- crude birth rate (CBR) and total fertility rate (TFR)
- age of mother at delivery
- age-specific fertility rates
- rates of caesarean section
- birth weight
- breastfeeding patterns
- infant mortality

What the data is telling us?

In total, there were 869 births in 2020, with around 250 fewer babies born in Jersey in 2020 than in 2012, a decrease of 23% over that period.

Additionally, the general fertility rate, which is a better metric to show national birth trends over time, also dropped 25% over the same period to 44.2 births per 1,000 women ages 15 to 44. The 2020 rate set a record low in Jersey, since at least 2001.

The impact of the COVID-19 pandemic is likely to be seen in birth trends from 2021 onwards. For 2020, apart from November which was lower, the number of births per month was similar to respective months in the previous two years.

Lockdown and home confinement, as a result of the COVID-19 pandemic, does not appear to have led to a significant change in the ratio of exclusive or partial breastfeeding at the 6-8 week check-up; with similar rates seen throughout the year when compared to the preceding two years.

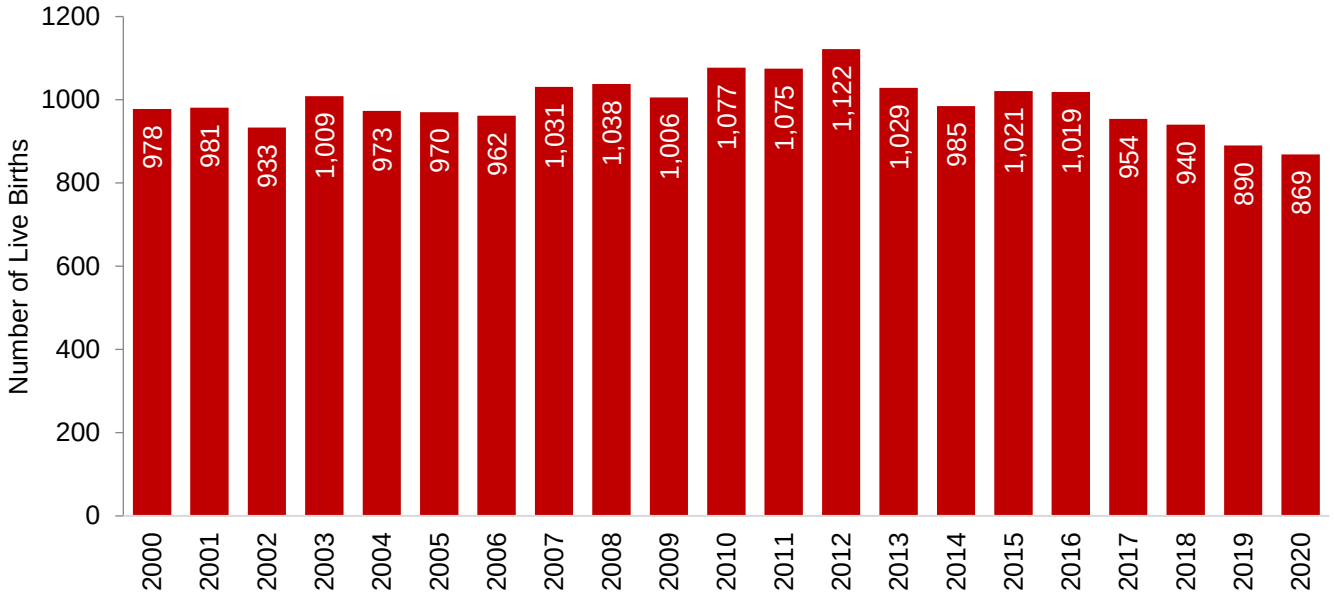
Births

In 2020:

- there were 869 live births in Jersey, representing the lowest annual total since 1983[6]
- the number of live births has declined by around a quarter (23%) since the latest peak seen in 2012

[6] Historical data from the Jersey Medical Officer for Health and the Office of the Chief Economic Adviser.

Figure 1: Number of births per year, 2000-2020



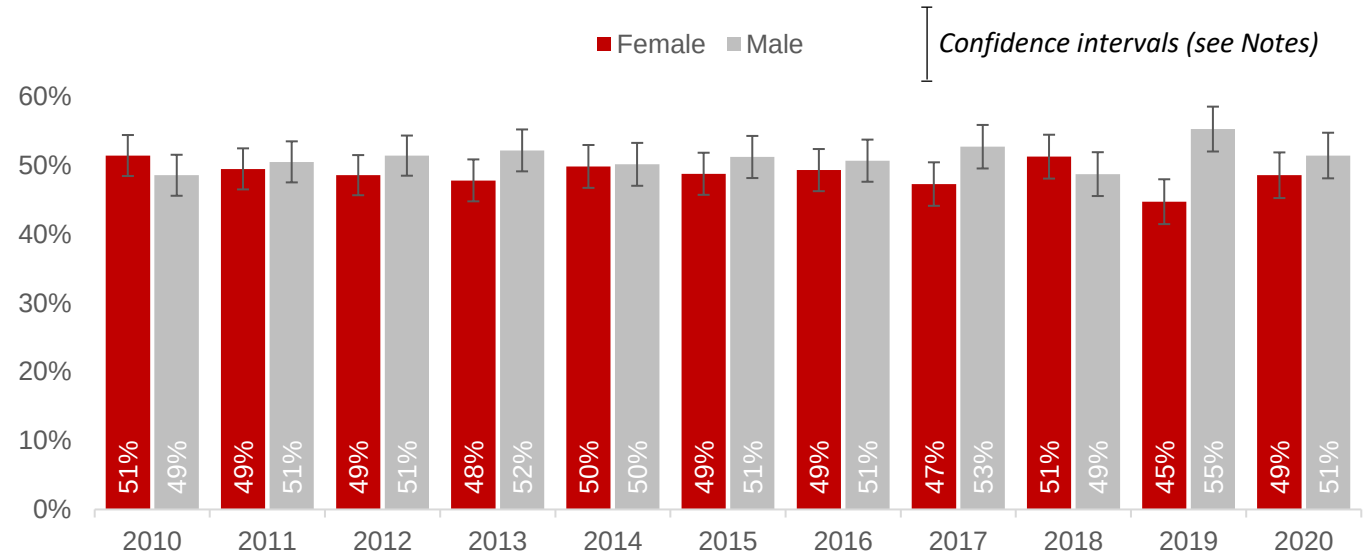
Source: Trak / Careplus 2000-2020

Sex of baby at birth

In 2020:

- there were 447 live births of males and 422 live births of females
- the male to female sex ratio for Jersey was 1,059 males per 1000 females; in England and Wales the sex ratio was 1,057
- the proportion of live male births (51%) was similar to that of females (49%); whilst in 2019 the proportion of male births was higher. Over the preceding decade, whilst there have been fluctuations in the actual numbers of boys and girls born each year, the relative proportions have been statistically similar (Figure 2)

Figure 2: Percentage of annual births by sex, 2010-2020



Source: Trak / Careplus 2010-2020

Crude birth rate

The crude birth rate (CBR) is defined as the number of live births in a year per 1,000 resident population.

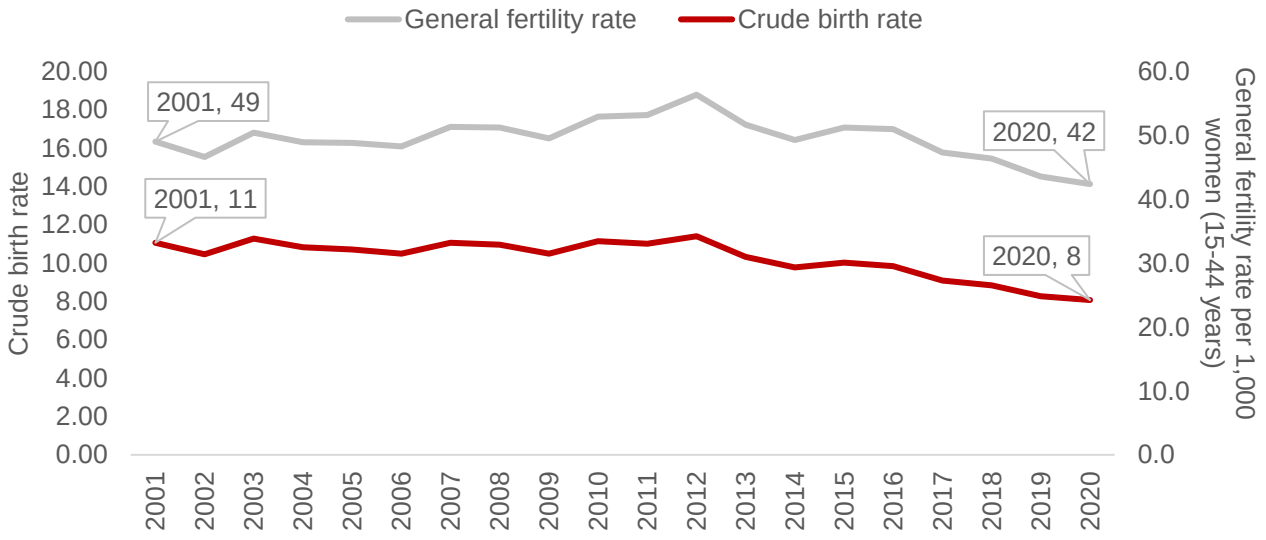
- the crude birth rate in Jersey in 2020 was 8.0 live births per 1,000 residents, representing the lowest CBR recorded in the Island since at least 1950[7]
- over the last two decades, the CBR in Jersey has decreased from 11.1 per 1,000 residents in 2001 to 8.0 per 1,000 in 2020 (Figure 3)
- the crude birth rate in England in 2020 was 10.3 live births per 1,000 total population[8], and was the lowest CBR recorded for England since at least 1938[9]

General fertility rate

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[10]. The GFR is a more considered way to measure fertility than the crude birth rate because the general fertility rate 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 42 births for every 1,000 women of childbearing age in Jersey in 2020
- the GFR for Jersey over the last two decades shows similar behavior to the CBR (see Figure 3)
- for comparison, the GFR in England was 55 per 1,000 women of childbearing age in 2020

Figure 3: General fertility rate and crude birth rate in Jersey, 2001-2020



Source: Trak / Careplus 2001-2020

[7] Historical data from the Jersey Medical Officer for Health and the Office of the Chief Economic Adviser.
[8] UK Office for National Statistics: Provisional Births in England and Wales, 2020
[9] Births in England Wales Summary Tables
[10] For the calculation of GFR on an internationally comparable basis, child-bearing age is defined as 15 to 44 years.

Total fertility rate

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 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 it will also decline 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.

Table 1 shows the details of the calculation of the TFR in Jersey for the three-year period 2018-2020 [11]:

- the TFR in Jersey during the period 2018-20 was 1.27 births per woman, equivalent to 1,270 births per 1,000 women
- the TFR in Jersey in 2018-20 was the lowest since at least 2001-3 (see Figure 4)
- between 2004-2006 and 2010-2012 the total fertility rate (TFR) in Jersey had increased from 1.39 to 1.60 and has since decreased
- in England the TFR has declined from 1.94 in 2012 to 1.65 children per woman in 2019[12]
- in 2019, the total fertility rate in the EU was 1.53 live births per woman[13]

Table 1: Calculation of the total fertility rate (TFR) for Jersey, 2018-2020

Age of women (years)	Estimated number of women in age group	Births to women in age group*	Age specific birth rate = births to women in age group / number of women in age group
15-19	8,697	34	0.00
20-24	8,518	188	0.02
25-29	10,460	538	0.05
30-34	10,616	1,040	0.10
35-39	11,412	710	0.06
40-44	11,092	189	0.02
		Sum	0.25
		TFR = Sum x 5	1.27

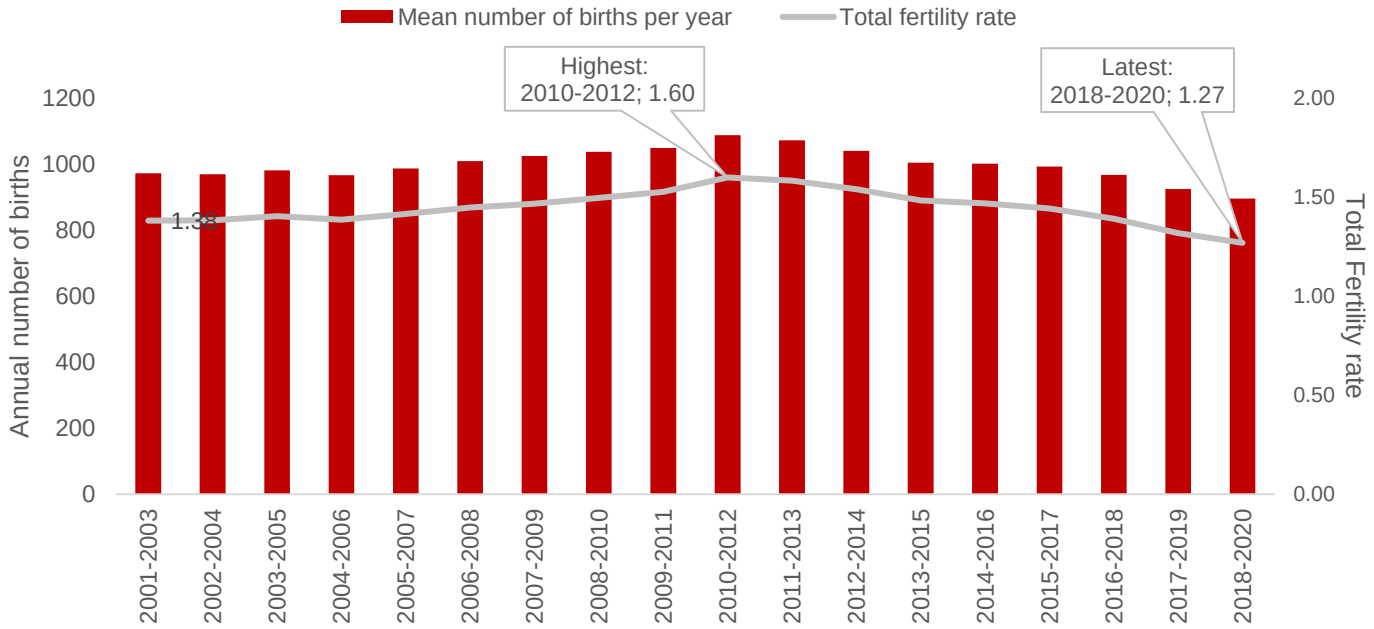
**the small number of births to women aged 45 years and over are included in the number of births to women aged 40-44 years*

[11] Births data for the most recent three-year time period (2018-2020) are aggregated in order to ensure sufficiently large numbers at lower and higher ages of mother.

[12] UK Office for National Statistics: Births in England and Wales, 2019

[13] Eurostat Statistics Explained – Fertility Statistics

Figure 4: Mean number of live births and total fertility rate (TFR) in Jersey, three-year periods; 2001-03 to 2018-2020

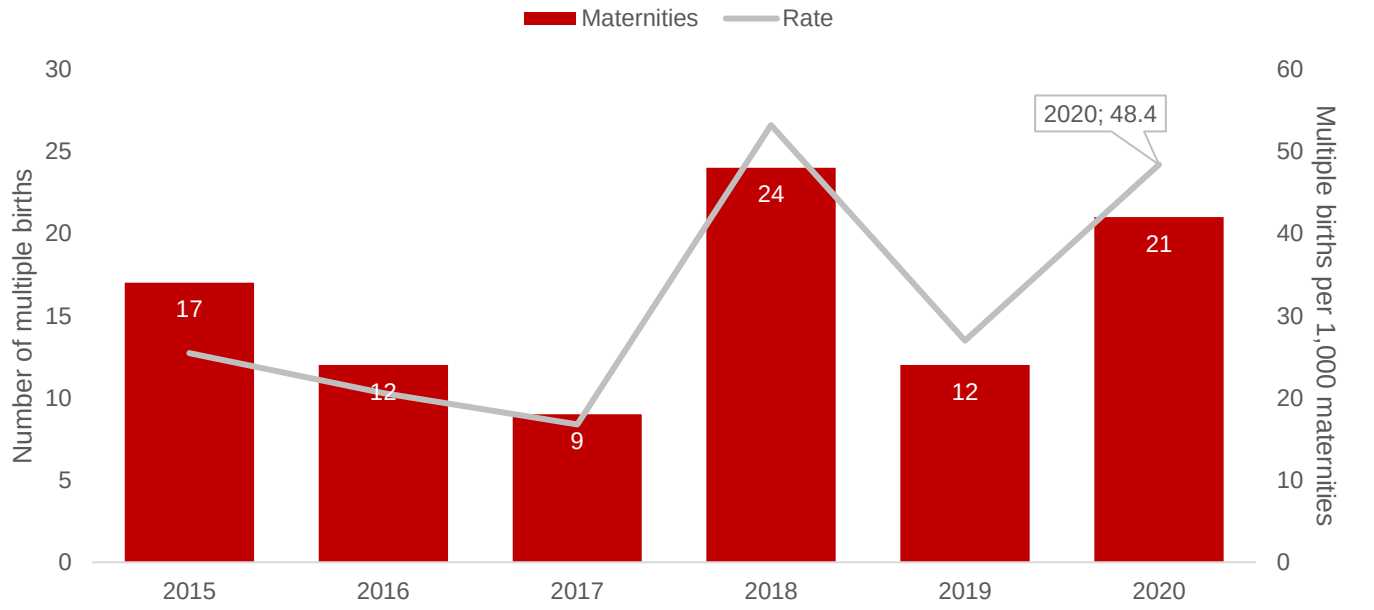


Source: Trak / Careplus 2001-2020

Multiple births

- 21 mothers in Jersey had a multiple birth in 2020 compared to 12 in 2019 (see Figure 5); the latest figure is similar to the number recorded in 2018 (24)
- in 2020, 42 children were born as part of a multiple birth (twins, triplets etc.) in 2020 compared to 24 children in 2019
- the rate of multiple births in Jersey was 48.4 per 1,000 births in 2020

Figure 5: Number of multiple live births and multiple birth rate per 1,000 maternities, 2015-2020



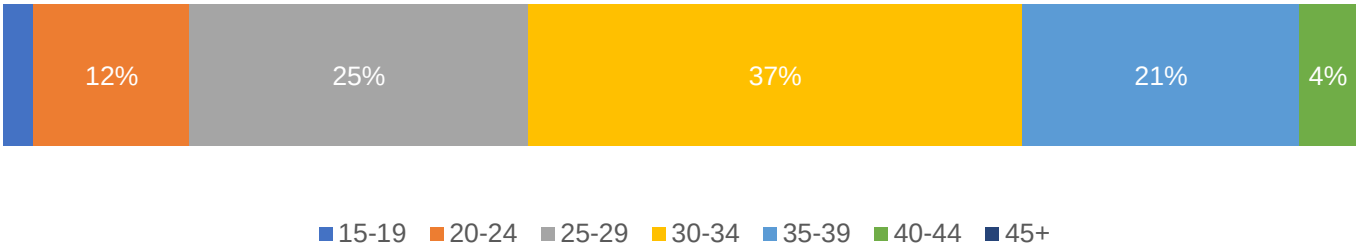
Source: Trak / Careplus 2015-2020

Delivery statistics

In 2020:

- 65 births (7% of all live births) occurred before 37 weeks gestation and were classed as **preterm**
- 47% of all live births were first births; 36% were second births; and 18% were third or later births
- 25% of first live births were to mothers aged 25-29 years; 37% were to mothers aged 30-34 years; and (21%) were to mothers aged 35-39 years (see Figure 6)

Figure 6: Proportion of live first births by age group, 2020



Age of mothers at delivery

- the mean average age of mothers giving birth in Jersey, was 32.6 years in 2020; in England and Wales the mean age of women at childbirth was 30.7 years in 2019[14]
- there has been an increase in the mean average age of women having a first birth in Jersey over the last decade, from 31.2 years in 2011 to 32.6 years in 2020; in England and Wales in 2019 the mean age of first-time mothers was 28.9 years
- in the EU, the mean age of women at the birth of their first child in 2019 was 29.4 years[15]
- the median age of women at childbirth in Jersey in 2020 was 33.1 years, up from 31.0 years during the last decade (2011)
- 1.3% of all births in Jersey during the three-year period 2018-2020 were to women under 20 years of age, a similar proportion to that recorded in 2000-2002
- the proportion of women aged 20 to 29 years giving birth in Jersey has declined from 34% in 2000-2002 to 27% in 2018-2020
- the proportion of women aged 30 years and over giving birth in Jersey has increased from 58% in 2000-2002 to 65% in 2018-2020

Mothers aged 35 years and over

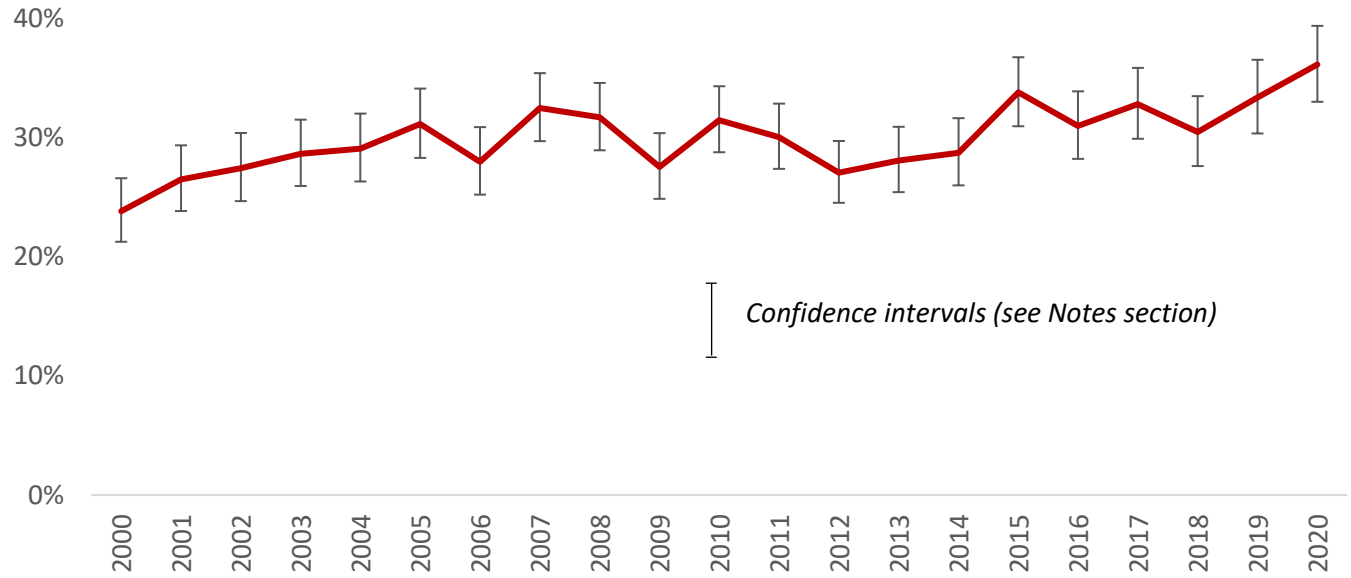
- the proportion of mothers giving birth aged 35 years and over in Jersey has increased from around a quarter (24%) in 2000 to over one in three (36%) in 2020 (see Figure 7)
- the proportion of mothers giving birth aged 35 and over in England (24%) in 2019[16] was lower than in Jersey in 2020 (36%)

[14] Births that occurred in England and Wales in the given calendar year; the figures are compiled from information supplied when births are registered as part of civil registration. See www.ons.gov.uk, Birth characteristics in England and Wales: 2019

[15] Eurostat Statistics Explained – Fertility Statistics

[16] Public Health England (PHE) Child and Maternal Health updated May 2021, available from: https://fingertips.phe.org.uk/profile/child-health-profiles

Figure 7: Proportion of mothers in Jersey aged 35 years and over at the time of birth, 2000-2020



Source: Trak / Careplus 2000-2020

Table 2 shows the proportion of mothers aged 35 years and over at delivery in Jersey, the EU and selected European countries for 2019 (the year for which comparable data is most recently available).

- Jersey had a higher proportion of mothers aged 35 years and over at delivery than the EU average, the UK, Sweden, and Spain; and a lower proportion than Austria, France, Portugal, Bulgaria, Slovakia and Germany

Table 2: Proportion of mothers aged 35 years and over at time of birth European countries and Jersey, 2019

Country	Proportion of mothers aged 35 years and over; %
UK (2018)	26.1
EU (2015-20)	28.0
Sweden	30.2
Spain	33.4
Jersey	**33.4**
Germany	36.2
Slovakia	36.5
Bulgaria	37.9
Portugal	38.0
France	43.4
Austria	43.8

Source: Statistics Jersey and WHO Europe Region[17]

[17] Eurostat Data Explorer, Live births by mother's year of birth (age reached) and birth order, available from: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_fordagec&lang=en

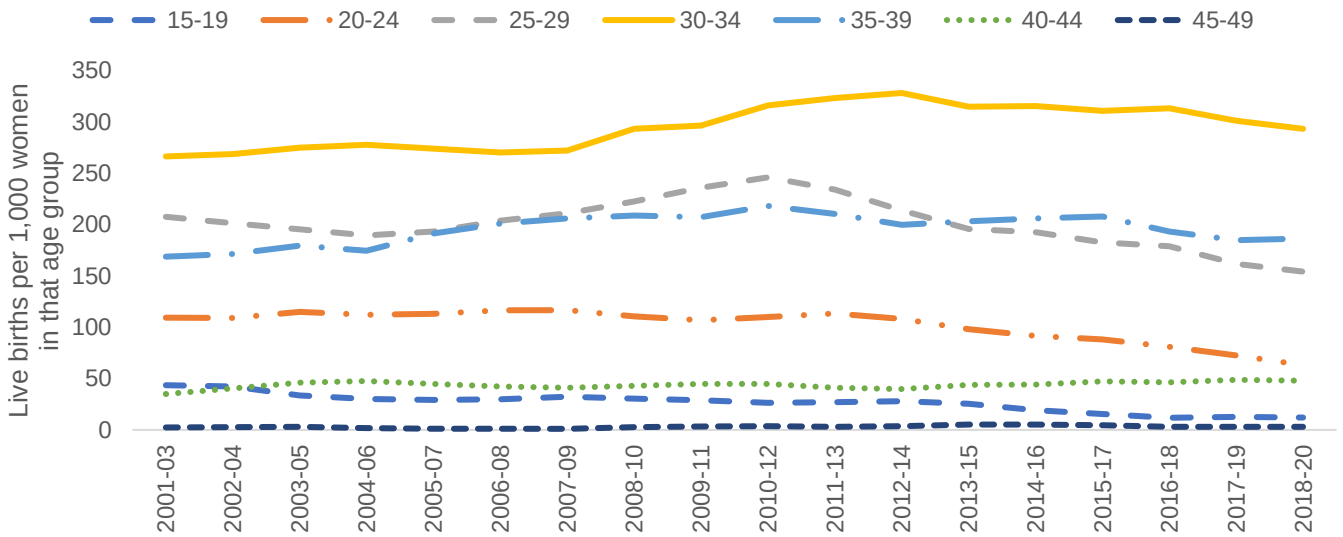
Teenage mothers (aged 17 years and under)

- since 2000 there has been a mean average of 5 births per year in Jersey to mothers aged 17 years and under
- the mean average number of births to mothers aged 17 years and under in Jersey has decreased from 7 per year during the decade 2001-2010 to 4 per year over the period 2011-2020
- during the five-year period 2016-20, 0.2% of births in Jersey were to mothers aged 17 years and under; in England in 2019-20, 0.7% of births were to teenage mothers aged 17 years and under[18]
- during the five-year period 2016-20, there were 3.3 conceptions per 1,000 women aged 17 years and under
- the conception rate for women under 18 years in England decreased for the 11th year in a row, the longest continued decrease since records began (16.7 in 2018)

Age-specific fertility rates[19]

- since 2001-03, the 30-34 years age group has the highest age-specific fertility rate in Jersey
- fertility rates of women aged under 29 years have decreased since 2010-12

Figure 8: Age-specific fertility rates (three-year averages) in Jersey, 2001-03 to 2018-2020



Source: Trak / Careplus 2001-2020

Caesarean sections

- during the three-year period 2018-2020 over a third (37%) of all deliveries in Jersey were by caesarean section[20] (see Figure 9)

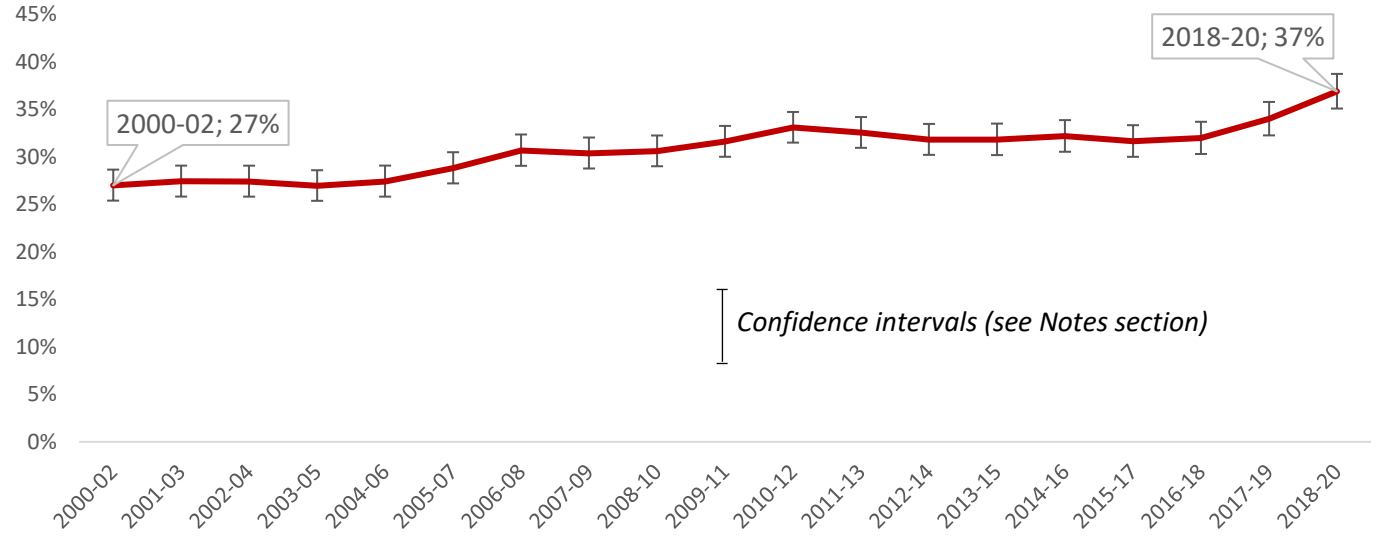
[18] Public Health England (PHE) Child and Maternal Health updated May 2021, available from: https://fingertips.phe.org.uk/profile/child-health-profiles

[19] The age-specific fertility rate (the fertility rate by age of mother) is the number of births to mothers of age *x* expressed as a proportion of the female population of age *x*.

[20] Prior to 2015 and again in 2018, information on caesarean sections was recorded on the child health system. In 2016 and 2017 caesarean information was no longer recorded on the child health system and information was taken from the TRAK system. This data only records numbers of caesarean sections, not numbers of live births. For these two years, the percentage was calculated by dividing the number of Caesarean sections recorded on TRAK by the number of mothers giving birth to live babies

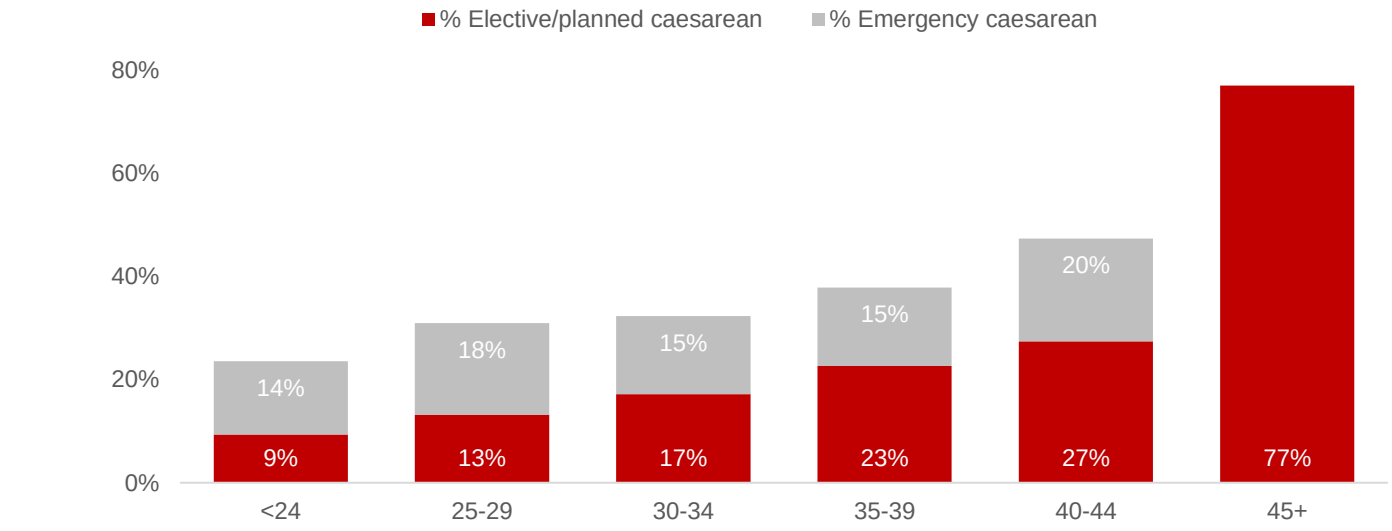
- around a quarter (24%) of first births were delivered by an Emergency or Urgent caesarean[21]; the proportion reduced to one in seven (14%) at a second delivery, and around one in ten (11%) at subsequent deliveries
- around one in ten (12%) of first births were delivered by a scheduled or elective c-section; this increased to one in four (25%) of ensuing deliveries
- the proportion of caesarean births in Jersey has increased over the last two decades, from 27% in 2000-02 to 37% in 2018-2020
- the proportion of caesarean births in Jersey in 2018-20 (37%) was significantly higher than in England (30.1% of births in 2019-2020[22])

Figure 9: Proportion of women giving birth by caesarean section in Jersey, 2000-2002 to 2018-2020



Source: Trak / Careplus 2000-2020

Figure 10: Proportion of women giving birth by caesarean section, by age of mother, in three-year period 2018-2020



Source: Trak / Careplus 2018-2020

[21] A caesarean section is the surgical delivery of a baby through the mother's abdomen. If labour has started and complications begin, an emergency caesarean section may be performed.

[22] Public Health England (PHE) Child and Maternal Health updated May 2021, available from: https://fingertips.phe.org.uk/profile/child-health-profiles

During the latest three-year period:

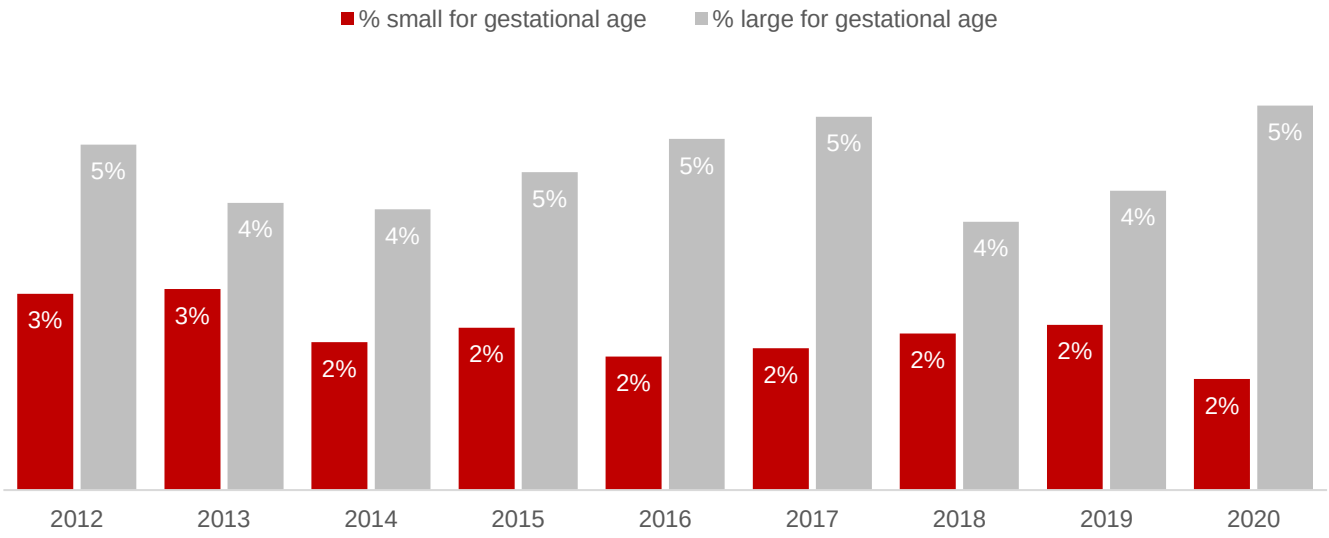
- the proportion of caesarean deliveries in Jersey increased with the age of the mother. Caesarean births accounted for: almost a quarter (24%) of deliveries by women aged 24 years and under; a third (37%) of deliveries by women aged between 25 and 39 years; and a half (51%) of deliveries by women aged 40 years and over – see Figure 10
- around one in eight (13%) mothers in Jersey aged 25-29 years delivered by an elective or planned caesarean, a smaller proportion than for mothers aged 35-39 years (26%) and 40-44 years (28%)

Birth weight

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 2020:

- 2% of all new-borns in Jersey were classified as being small for gestational age (birthweight below the 5th centile for weight[23]) – see Figure 11
- 5% of all new-borns (around 50 babies) were large for gestational age (above the 95th centile for weight)
- 6% of all new-borns (around 50 babies) were classified as being of low birthweight[24]; fewer than 10 of these babies were recorded as being of very low birthweight[25] at the time of delivery
- among babies born at full term, around 10 babies (1%) were classified as low birthweight[26], a lower proportion to that seen in England (3%)

Figure 11: Proportion of all new-borns who were small or large birthweight for gestational age, 2012-2020



Source: Trak / Careplus 2012-2020

[23] Jersey gestation and birth weight data is compared to the gender specific World Health Organisation British 1990 birth cohort
[24] *Low birthweight* is a term used to describe *babies* who are born weighing less than 2500g.
[25] Very l*ow birthweight* is a term used to describe *babies* who are born weighing less than 1500g.
[26] Live births with a recorded birth weight under 2500g and a gestational age of at least 37 complete.

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 Jersey during the period 2018-2020, of the 99% term babies with an Apgar score recorded, around 10 (corresponding to 1.6%) had a score below seven, a similar proportion to England in 2019-2020 (1.4%).

Smoking

- 8% of women were recorded as being a current smoker at their booking appointment[27]

As part of the 6–8-week check of new-borns, the risk of exposure to second-hand smoke is assessed by GPs.[28]

- around one in six (16%) of all babies born in 2020 were living in a household where they were likely to be exposed to tobacco smoke by an adult

Breastfeeding patterns

Breastfeeding at discharge[29]

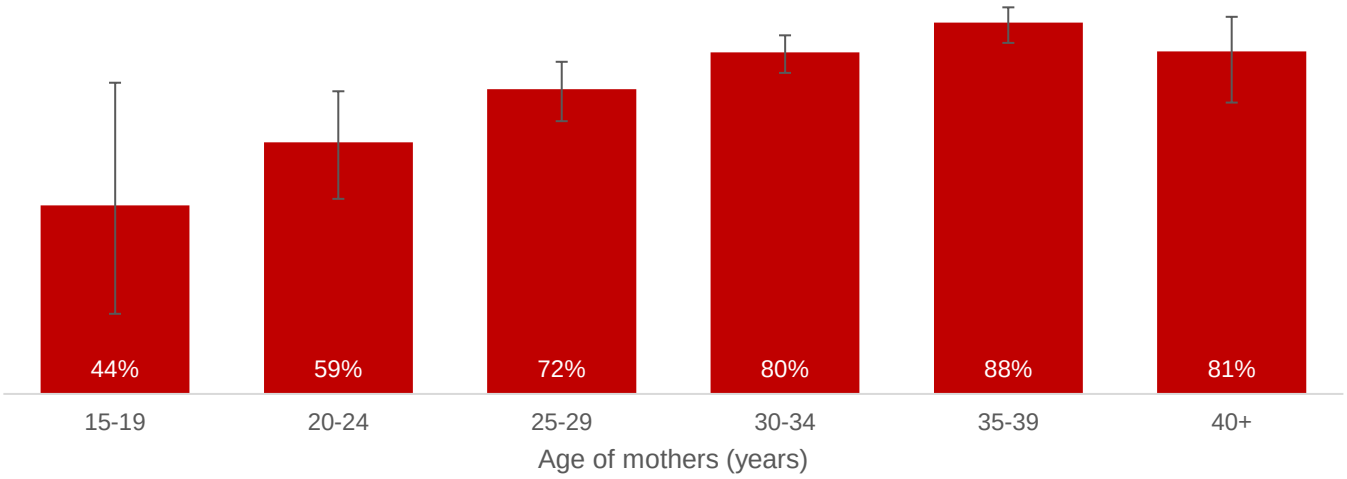
- three-quarters (75%) of babies were being breastfed at discharge from maternity in 2020, a similar proportion to that seen in each year since 2010
- 58% of mothers were exclusively breastfeeding (babies receiving breast milk only) and a further 16% were mixed feeding (babies receiving both breast and formula milk)
- at discharge, breastfeeding rates of mothers aged 15-24 years were significantly lower than those of mothers aged 30 years and over (see Figure 12)
- the proportion of mothers breastfeeding at discharge in Jersey in 2020 was similar to the proportion breastfeeding at initiation in England in 2016-17 (74%)

[27] The booking appointment is the first official antenatal appointment and will usually happen when the mother is between 8 and 12 weeks pregnant.

[28] Source: Careplus 2018-2020

[29] Breastfeeding at birth is the proportion of mothers who give their babies breastmilk soon after delivery, and was the measure used from 2010 to 2014. From October 2015, mothers in Jersey have been assessed on whether they were breastfeeding on discharge, a change from the previous assessment of 'feeding initiated at birth' which was defined as the 48 hours following delivery. In practice, these two definitions of breastfeeding at birth are very similar.

Figure 12: Proportion of mothers in Jersey who were breastfeeding at discharge by age of mother, 2020

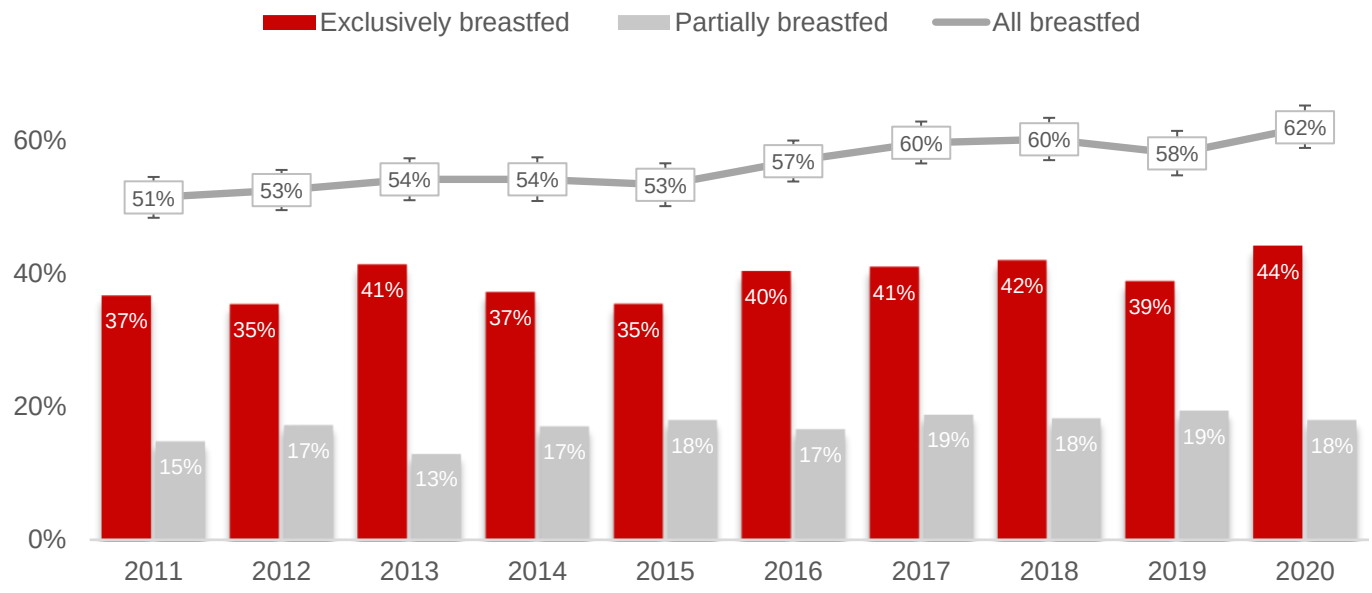


Source: Trak / Careplus 2020

Breastfeeding at 6-8 weeks[30]

- in 2020, the proportion of mothers who were breastfeeding at 6 to 8 weeks after birth was 62%, comprising 44% breastfeeding exclusively and a further 18% partially - see Figure 13
- the proportion of babies receiving mixed breastfeeding at 6 to 8 weeks old has been essentially unchanged since 2016
- Jersey (62%) was higher than in England (48%) in 2019-2020[31]

Figure 13: Proportion of babies who were breastfed at 6-8 weeks after birth, 2011-2020

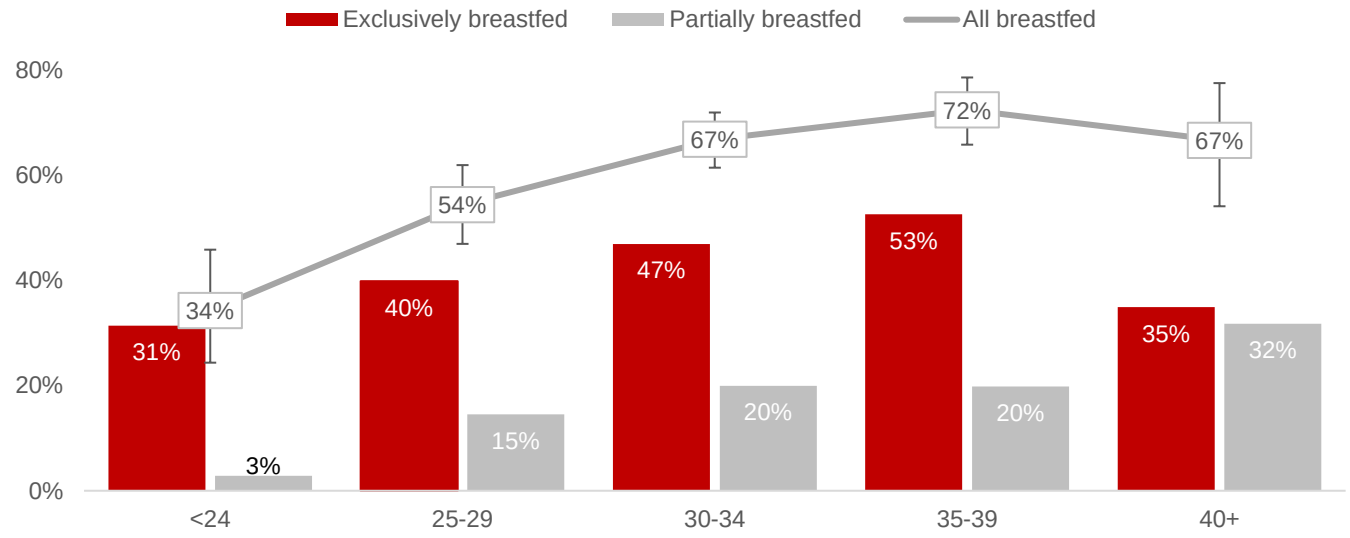


Source: Trak / Careplus 2011-2020

[30] When a baby is six to eight weeks old, the doctor (GP) will examine him/her at the GP surgery. This is known as the six-week check.
[31] Public Health England (PHE) Child and Maternal Health updated May 2021, available from: https://fingertips.phe.org.uk/profile/child-health-profiles

- breastfeeding rates at 6 to 8 weeks were lower among mothers aged 24 years and under (34%) than mothers aged 30 years and over (69%) - Figure 14

Figure 14: Proportion of babies who were breastfed at 6-8 weeks after birth, by age of mother, 2020



Source: Trak / Careplus 2020

Hospital admissions

During 2018-2020:

- around 415 children aged four years and under were admitted each year, on average, to hospital for emergency medical care
- the average number of individual infants (under one year of age) admitted to hospital for emergency medical care was around 130 per year, corresponding to an average of 1.2 visits per child
- 14% of admissions of infants aged under one year of age were primarily due to infections of the respiratory tract, corresponding to a rate of 198 admissions per 10,000 infant population per year; this rate is significantly lower than that for England (717 admissions per 10,000 infant population)
- 2% of admissions for infants under one year of age were primarily due to gastroenteritis; corresponding to an admission rate for gastroenteritis of 24 per 10,000 infant population per year, a significantly lower rate than seen in England (151 per 10,000 population)

Stillbirths[32]

- there were a total of 30 stillbirths in Jersey during the ten-year period 2011-2020

Neonatal deaths[33]

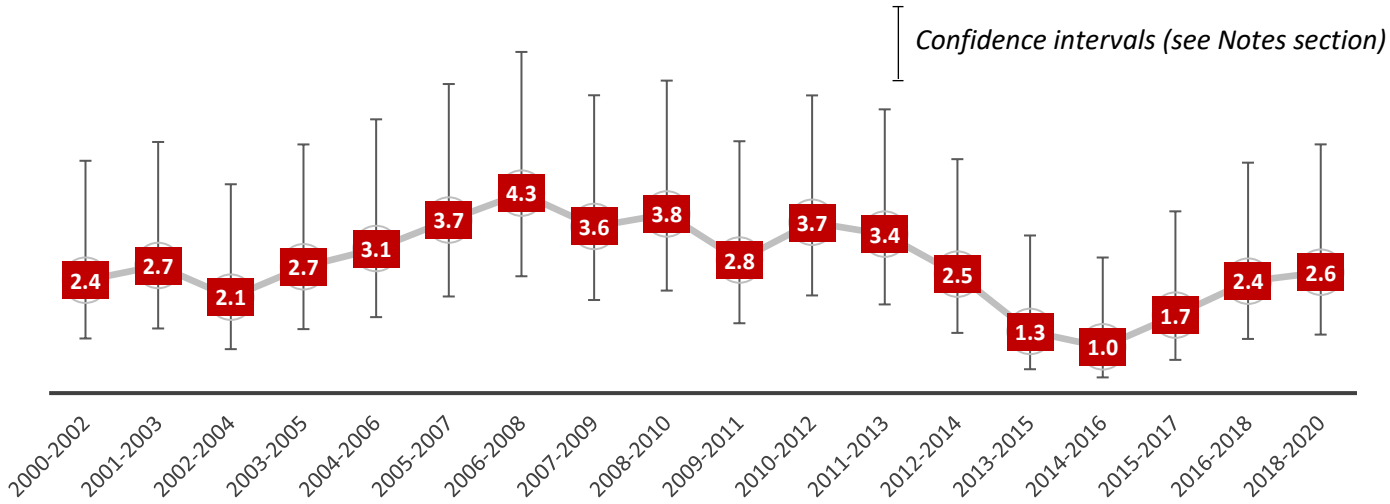
- there was a total of 10 neonatal deaths in Jersey during the ten-year period 2011-2020

[32] Stillbirth is the delivery, after the 20th week of pregnancy, of a baby who has died.
[33] Neonatal deaths are babies who were born after 24 weeks' gestation who died in their first 28 days of life.

Infant mortality[34]

- there were 10 infant deaths (under one year of age) registered in Jersey during the three-year period 2018-2020
- the infant mortality rate in Jersey was 2.6 deaths per 1,000 live births during the three-year period 2018-2020, a similar rate to that seen since 2000 (Figure 15)
- during the decade 2011-2020, 73% of all deaths of children under five years of age occurred within the first year of life
- the infant mortality rate in Jersey is similar to that in England (3.9 per 1,000 live births[35] in 2017-19)

Figure 15: Infant mortality rate in Jersey per 1,000 live births (three-year average), 2000-02 to 2018-2020



Source: Trak / Careplus 2000-2020

Deaths of children under 5 years of age

- there were 10 deaths to children under five years of age in Jersey during the three-year period 2018-2020

[34] 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.
[35] Public Health England (PHE) Child and Maternal Health updated May 2021, available from: https://fingertips.phe.org.uk/profile/child-health-profiles

Notes

Data Sources

- 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 which provide the reasons why the patient was admitted 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.

Confidence intervals and statistical significance

Confidence intervals have been used in this report to compare Jersey mortality rates and hospital admission rates with those of England. 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.

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'.