Jersey Births and Breastfeeding Profile 2016

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Description	Annual report on births and breastfeeding patterns in Jersey for 2015. Information on hospital admissions and infant mortality are presented alongside breastfeeding patterns to show the impact of low breastfeeding rates.	
Data Sources	Public Health Directorate Child Health, Deaths Database, Jersey General Hospital	
Date that data are acquired	Data extracted in the first quarter for the previous calendar year. Comparison data takes some 6 months to be published, so to ensure like for like comparisons are presented, temporal data is provided for ease.	
Frequency	Annual	
Relevance and key uses of the statistics	Making information publically available for planning, epidemiology, provision of services and to provide comparative information. To respond to information requests for a variety of customers e.g. researchers, charities, public companies, Freedom of Information requests. To provide information to support answers to Ministerial Questions and support public health interventions.	
Accuracy	Information received by Public Health is clerically checked, with additional validation on data entry. Data is also compared to previous year's figures and data providers are asked to confirm reported figures are correct prior to publication.	
Value Type	Numbers, percentages, and crude rates are presented.	
Amendment history		
Officer	Amendment date and detail	
M Clarke	Data analysed and report compiled between March and May 2016 using data routinely collected by the Child Health team within Public Health.	
K Jervis	Report data checked against source data for errors and report proof checked.	
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Summary

This report presents statistics on the recent trends of births and breastfeeding in Jersey. Alongside this, details of infant hospital admissions and mortality are also presented. Breastfeeding is beneficial to both baby and the mother and an extensive body of scientific evidence supports the consensus that not breastfeeding increases the risk of illness in both mothers and infants. Formula-fed infants are particularly susceptible to diarrhoeal disease and respiratory infection.¹ Work by UNICEF in the UK² demonstrated how increases in breastfeeding rates could prevent diseases and save resources.

Information presented in this report are based on data provided by the Health and Social Services Department, GPs and Family Nursing and Home Care (FNHC), processed by the Public Health Directorate. Detailed information on the nature of sources of data and data handling are given in the background notes section of this report.

Key Findings

This new report found that statistics on births and breastfeeding for Jersey show:

- 1,021 live births occurred in 2015 to Jersey residents, a number similar to the average over the last 15 years;
- The proportion of births by caesarean section is higher than in England and older mothers are more likely to elect to have a caesarean section;
- The proportion of older mothers (aged 35 and over) in Jersey has been increasing from around a quarter (24 per cent) of all live births in 2000 to around a third (34 per cent) in 2015;
- Three-quarters (74 per cent) of mothers breastfed their babies at birth in 2015;
- Over half (54 per cent) of babies were being breastfed at 6-8 weeks of age;
- At 9 months old only one in five babies (17 per cent) who attended a 9 month check with a health visitor were receiving any breastmilk;
- Rates of breastfeeding were higher in rural parishes than in urban and sub-urban parishes;
- Infant mortality in Jersey is low at 1.3 per 1,000 live births, this compares to 4.0 per 1,000 live births in England.

¹ Howie P.W., Forsyth J.S., Ogston S.A. et al, Protective effect of breast feeding against infection, BMJ (clinical research ed.) (1990) 300 (6716); 11-16; Quigley M.A., Kelly Y.J., Sacker A., Breastfeeding and hospitalisation for diarrheal and respiratory infection in the United Kingdom Millennium Cohort Study, Paediatrics (2007) 119(4): e837-e842

² UNICEF UK, Preventing disease and saving resources: the potential contribution of increasing breastfeeding rates in the UK, published October 2012, available from unicef.org.uk/breastfeeding

Introduction

This report is the first report produced by the Public Health Directorate Health Intelligence Unit which presents a range of information on births on the Island and breastfeeding patterns. The report contains both previously published information and new analysis.

Information from this report will be used to inform future policies and will also feed into the work currently being undertaken on the 1,001 critical days agenda, which is a manifesto introduced in Jersey in 2015 highlighting the importance of acting early to give children a positive start in life and the work of the Jersey Breastfeeding Working Group.³

The recommendation of the World Health Organisation (WHO) is that all infants should be exclusively breastfed for the first 6 months of life.⁴ A comprehensive body of evidence exists which supports the benefits of breastfeeding to both mother and baby.

Details of all babies born in Jersey are recorded on the hospital system, TRAK and also on the Child Health System, administered by the Public Health Directorate Child Health Team. All babies born in Jersey are offered a six-week check by a GP, this appointment allows the GP to get to know the baby and check their development. Babies are then seen again by a health visitor at a Child Health Clinic at 9 months to 1 year old for the 1 year review.

Details of screening checks and visits by GPs and the health visitor team at Family Nursing and Home Care are recorded by the Public Health Directorates Child Health Team on the Child Health System. This system tracks a child's development and immunisation history throughout their childhood.

This report looks at births and breastfeeding patterns in Jersey alongside hospital admissions and infant mortality. Comparisons in the report are to Public Health England data, the Organisation of Economic Cooperation and Development (OECD) and the World Health Organisation.

³ The Jersey Breastfeeding Working Group have an Island Breastfeeding Strategy and work to promote and support breastfeeding. Partners include FNHC, Jersey Childcare Trust, HSSD Midwives and the National Childcare Trust Jersey.

⁴ World Health Organisation, The optimal duration of exclusive breastfeeding; a systematic review, 2001, available from www.who.int/nutrition

Births

In 2015, there were 1,021 live births in Jersey. This figure was similar to the average of the last fifteen years, of 1,012. The highest number of births in the Island since the year 2000 was in 2012 when 1,124 babies were born.



FIGURE 1: NUMBER OF LIVE BIRTHS EACH YEAR IN JERSEY

Source: HIU

Around a third (32 per cent) of live births over the three year period 2013-2015 were delivered by caesarean section. This compares to 25.8 per cent of births in England for financial year 2014-2015⁵ (latest period available). The World Health Organisation recommends that the caesarean section rate should not be higher than 10 per cent to 15 per cent.⁶

Considering the proportion of mothers who have a caesarean section by their age shows that older mothers are more likely to have a caesarean, often having an elective caesarean section. Figure 2 shows how around half of births to mothers over 40 were by caesarean section over the period 2013-2015. Older mothers have more of a chance of developing medical disorders that can affect pregnancy and birth and are more likely to be under consultant care⁷. Over half of mothers aged 45 and over in Jersey had an elective caesarean in 2013-2015.

⁵ Public Health England, Children and Young People's Health Benchmarking tool, updated May 2016, available from fingertips.phe.org.uk/profile/cyphof

⁶ World Health Organisation, Appropriate technology for birth. *Lancet* 1985; 2: 436-7.

⁷ Public Health England, ChiMat Data Atlas, accessed May 2016, available from http://atlas.chimat.org

FIGURE 2: PROPORTION OF WOMEN HAVING A CAESAREAN SECTION BY AGE, 2013-2015



Source: HIU

FIGURE 3: PROPORTION OF WOMEN HAVING A CAESAREAN SECTION BY OECD COUNTRY, 2013



Source: HIU and OECD

Figure 3 shows the pattern of caesarean sections across OECD countries. Jersey is similar to the average for the OECD (27.6 per cent, labelled as OECD 32 in Figure 3). A rise in the proportion of women having a caesarean section across the OECD has been documented in the recent Health at a Glance 2015 report.⁸ Reasons for the increase include the rise in first births among older women and in multiple births resulting from assisted reproduction, malpractice liability concerns, scheduling convenience for both physicians and patients and the preferences of some women to have a caesarean section.⁹

This increase documented across OECD countries has also been seen to an extent in Jersey, as shown in Figure 4. Over the period 2000-2002 just over a quarter of all births (27 per cent) were by caesarean section, this increased to a third of all births (32 per cent) over the period 2013-2015.



FIGURE 4: PROPORTION OF WOMAN HAVING CAESAREAN SECTIONS, BY YEAR, 2000-2015

Age of Mothers

The average age of all mothers having children locally in 2015 was 33 years. As mentioned in the previous section, older mothers have more of a chance of developing a medical disorder and are more likely to be under consultant care. The proportion of older mothers in Jersey has increased over the last 15 years, with a

 ⁸ OECD, Health at a Glance 2015, published 04 November 2016, available from www.oecd-library.org
 ⁹ OECD, Health at a Glance 2015, published 04 November 2016, available from www.oecd-library.org

third (34 per cent) of mothers aged 35 and over in 2015 (Figure 5). This is much higher than the average proportion reported for England for financial year 2014-2015 of 20.4 per cent.¹⁰



FIGURE 5: PROPORTION OF MOTHERS IN JERSEY WHO ARE AGED 35 YEARS AND OVER AT THE TIME OF BIRTH

TABLE 1: PROPORTION OF MOTHERS WHO ARE AGED 35 YEARS AND OVER AT THE TIME OF BIRTH, EUROPEAN COUNTRIES AND JERSEY,2013

Country	Percentage of mothers aged 35 and over
EU	22.5
France	17.2
Ireland	31.6
Jersey	28.1
Poland	13.9
Portugal	26.2
UK	20.1

Source: HIU and WHO Europe Region¹¹

¹⁰ Public Health England, Children and Young People's Health Benchmarking tool, updated May 2016, available from fingertips.phe.org.uk/profile/cyphof

¹¹ World Health Organisation Europe Region, European health for all database, updated December 2015, available from http://data.euro.who.int/hfadb/

Table 1 shows the comparative data for selected European countries and the overall average for the EU in 2013; Jersey was found to have a higher proportion of older mothers than the EU overall, although similar to Portugal and less than that for Ireland.

Teenage mothers

Children born to teenage mothers have 60 per cent higher rates of infant mortality and are at increased risk of low birthweight which impacts on the child's long-term health. Teenage mothers are three times more likely to suffer from post-natal depression and experience poor mental health for up to three years after the birth¹². In Jersey the proportion of mothers aged under 18 years is very low; over the last 15 years there was an average of 6 births a year to teenage mothers.

Over the period 2013-2015, 1 per cent of births were to a teenage mother. This is the same as the average in England over the financial year 2014-2015 of 0.9 per cent.¹³

The World Health Organisation define teenage pregnancy as the proportion of births to mothers under 20 years of age. Using this definition and data from the same time period, Table 2 shows the comparative figures for teenage pregnancies across selected European countries. Jersey has a similar proportion to the EU, although lower than Poland, Portugal and the UK.

Country	Percentage of teenage mothers
EU	2.9
France	1.6
Ireland	2.0
Jersey	2.4
Poland	3.9
Portugal	3.4
UK	4.3

TABLE 2: PROPORTION OF TEENAGE MOTHERS (AGED UNDER 20), EUROPEAN COUNTRIES (2013) AND JERSEY (2013-2015)

Note: Jersey data is for three years due to small numbers Source: HIU and WHO Europe Region¹⁴

¹² Public Health England, Children and Young People's Health Benchmarking tool, updated May 2016, available from fingertips.phe.org.uk/profile/cyphof

¹³ Public Health England, Children and Young People's Health Benchmarking tool, updated May 2016, available from fingertips.phe.org.uk/profile/cyphof

¹⁴ World Health Organisation Europe Region, European health for all database, updated December 2015, available from http://data.euro.who.int/hfadb/

Breastfeeding Patterns

Breastfeeding rates in the UK have been amongst the lowest in the world for many decades.

A large body of research supports the benefits of breastfeeding to both mother and baby; whilst also having wider implications for healthcare, the economy and society more generally.

The following section sets out the current breastfeeding rates and patterns in Jersey.

Breastfeeding at birth

Breastfeeding at birth measures the percentage of mothers who give their babies' breast milk in the first 48 hours after delivery. From October 2015, mothers in Jersey will be assessed on whether they are breastfeeding on discharge. This indicator is based on observation and is therefore susceptible to measurement bias.

In Jersey, three-quarters (74 per cent) of mothers breastfeed their babies at birth in 2015, this figure has remained constant over the last five years. Coverage of this indicator is around 95 per cent of all births each year.

Jersey is in line with the overall average for England. For the financial year 2014-2015, breastfeeding initiation in England was 74.3 per cent, ranging from 47.2 per cent to 92.9 per cent in the English regions.¹⁵

Further analysis of this data found that as the age of the mother increases, so too does the likelihood of initiating breastfeeding at birth, as shown in Figure 6.

There was a significant difference in proportions of mothers who breastfeed at birth by the mode of delivery over this period. 71 per cent of mothers having a caesarean section were breastfeeding at birth while 77 per cent of those having a vaginal delivery were recording as giving their babies' breast milk at birth.

However, mothers living in rural parishes were more likely to initiate breastfeeding than mothers living in urban (St Helier) and sub-urban parishes (St Clement, St Saviour and St Lawrence) as shown in Figure 7.

¹⁵ Public Health England, Child Health Profile, published March 2016, available from www.gov.uk/phe or www.chimat.org.uk



Source: HIU

FIGURE 7: PROPORTION OF MOTHERS WHO INITIATE BREASTFEEDING AT BIRTH BY PARISH OF RESIDENCE, 2013-2015



Source: HIU



Figure 8 shows that breastfeeding initiation has remained at the same rate over the last 6 years.

Breast feeding at 6-8 weeks

All babies in Jersey are offered a 6-8 week development assessment by a GP, as part of these assessments breastfeeding status is recorded. Those babies who are being exclusively breastfed, that is they are not receiving any formula milk, any other liquids or food, are recorded as being totally breastfed. Partially breastfed babies are those who are receiving breast milk as well as receiving formula milk, or any other liquids or food. Those babies not receiving any breast milk are recorded as not being breastfed at all.

Overall, around half (54 per cent) of infants born over the period 2013-2015 were breastfed at 6-8 weeks in Jersey; 16 per cent partially and 38 per cent totally.

In England, breastfeeding prevalence was 43.8 per cent on average for 2014-2015 financial year (includes both partial and total breastfeeding), this ranged from 19.1 per cent to 81.5 per cent for English regions.¹⁶

There was a difference in the age of mothers who were breastfeeding at 6-8 weeks, as shown in Figure 9. As well as this, differences were found when breastfeeding prevalence was examined by parish, with a higher prevalence found in rural parishes compared to urban and sub-urban parishes, as shown in Figure 10.

¹⁶ Public Health England, Child Health Profile, published March 2016, available from www.gov.uk/phe or www.chimat.org.uk



FIGURE 9: PROPORTION OF BABIES WHO ARE BREASTFED AT 6-8 WEEKS OLD BY AGE OF THE MOTHER, 2013-2015

Source: HIU

FIGURE 10: PROPORTION OF BABIES WHO ARE BREASTFED AT 6-8 WEEKS OLD BY PARISH OF RESIDENCE, 2013-2015



Source: HIU

Comparing the breastfeeding status at 6-8 weeks by the method of birth reveals that a slightly lower proportion of babies born by caesarean section were being totally breastfed compared to those born by vaginal delivery as shown in Figure 11.



Source: HIU

Since 2011, rates of breastfeeding at 6-8 weeks have remained stable, as shown in Figure 12.



FIGURE 12: PROPORTION OF BABIES WHO ARE BREASTFED AT 6-8 WEEKS, 2011-2015

Source: HIU

Breastfeeding at 9 months

The World Health Organisation recommends exclusive breastfeeding for the first 6 months of life, with continued breastfeeding along with appropriate complementary foods up to two years of age or beyond.¹⁷⁻¹⁸ On average around 70 per cent of those infants born in Jersey attend a 9 month developmental check with a FNHC health visitor. As a result coverage for this indicator is considered low.

Of those babies born in 2014 with a known breastfeeding status, only 7 per cent were totally breastfed at 9 months, whilst another 9 per cent were partially breastfed. This means that less than 1 in 5 (17 per cent) of infants were receiving any breast milk at 9 months of age.

Details for the 2015 birth cohort will be available at the end of 2016, once all the babies born in 2015 have reached 9 months of age.

Hospital Admissions

UNICEFs report looking at preventing disease and saving resources¹⁹ demonstrates that there are large costs to the health service of treating diseases that are associated with not breastfeeding. A large body of evidence shows that breastfeeding reduced morbidity due to infectious illness in infants. Consideration of hospital admissions of infants for certain infectious diseases is an indicator used in the Breastfeeding profile produced by Public Health England.²⁰

In Jersey, over the period 2013-2015, emergency admissions of infants (aged under 1) totalled almost 600. Considering these by the diagnosis codes, for any diagnostic position,²¹ reveals that:

- Around a third (32 per cent) of admissions were for diseases of the respiratory system, mainly respiratory tract infections;
- A quarter (25 per cent) were for certain infections and parasitic diseases including viral infections, rotavirus and gastroenteritis;
- Around a third (32 per cent) were for signs, symptoms and abnormal clinical findings not elsewhere classified;
- Around a fifth (18 per cent) of admissions were due to certain conditions originating in the perinatal period;

Figure 13 shows the total number of admissions over the 3 year period 2013-2015 for conditions where evidence shows a link between breastfeeding and a reduction in admissions.²²

 ¹⁷ World Health Organisation, 10 facts on breastfeeding, updated February 2014, available from www.who.int
 ¹⁸ From Q1 2016, the Red Book contains a field to capture the date last breastfed, which will allow an estimation of the numbers of babies still being breastfed at 6 months as per the WHO recommendations

¹⁹ UNICEF UK, Preventing disease and saving resources: the potential contribution of increasing breastfeeding rates in the UK, published October 2012, available from unicef.org.uk/breastfeeding

²⁰ Public Health England, Breastfeeding benchmarking tool, updated May 2016, available from fingertips.phe.org.uk
²¹ Each admission can have up to 20 diagnostic codes, therefore proportions presented here will not add up to 100 per cent

An average of around 25 admissions occur each year for babies aged under 14 days old, a total of 80 admissions occurred over the years 2013-2015.

Comparisons to England data are not provided because of differences in coding and practices between the two jurisdictions.



FIGURE 13: NUMBER OF EMERGENCY ADMISSIONS TO JERSEY GENERAL HOSPITAL BY AGE OF INFANT, 2013-2015

Source: HIU

Note: Based on all diagnosis code positions not just primary diagnosis

Ankyloglossia, also known as tongue tie, saw an average of 25 admissions each year over the period 2013-2015, this condition has been recognised as having the potential to affect breastfeeding as a result of an inability to suck effectively causing sore nipples and poor infant weight gain.²³

²² Department of Health, Infant Feeding Profiles 2002/3 to 2010-11, published 30 June 2013, available from www.dh.gov.uk

²³ National Institute for Health and Care Excellence, Division of ankyloglossia (tongue-tie) for breastfeeding, published December 2005, available from www.nice.org.uk

Infant Mortality

The Infant mortality rate is often used as an indicator of how well a jurisdictions healthcare infrastructure is working.

Over the three year period 2013-2015, the infant mortality rate for Jersey was 1.3 per 1,000 live births (0.5, 3.4). This compares to 4.0 per 1,000 live births (3.9, 4.1) for England over the period 2012-2014 (latest data available).²⁴



FIGURE 14: INFANT MORTALITY RATE, PER 1,000 LIVE BIRTHS, 2000-2015

Source: HIU

²⁴ Public Health England, Child Health Profile, published March 2016, available from www.gov.uk/phe or www.chimat.org.uk

- 1. The profile provides facts about how Jersey compares with other areas. It does not seek to answer why the figures are as they are or what may need to be done about them, though these will be important questions to consider.
- 2. Comparisons are performed on a like-for-like basis unless otherwise stated.
- 3. Percentages may not add up to 100 per cent due to rounding.
- 4. Data on hospital admissions is taken from the hospital computer system TRAK which was implemented in June 2011. 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. Data for this report was pulled from TRAK in May 2016.
- 5. Comparison of hospital admission data to that for England is not included in this report, due to differences in coding and practices between the two jurisdictions.
- 6. Infant mortality uses information from the Deaths Database administered by the Public Health Intelligence Unit which is provided with data by the parish registrars.
- 7. Breastfeeding data comes from the Child Health system which is administered by the Public Health Child Health Team. This system tracks a child's development and immunisation history throughout their childhood. The Health Intelligence Unit has access to the reporting side of the child health system and is able to pull details of a child's birth and breastfeeding status at different assessment points. Data on breastfeeding is gathered by the Maternity Unit through TRAK, GPs or from Family Nursing and Home Care Health Visitors who visit families in their home or at clinics.
- 8. All babies born in Jersey are offered a six-week check by a GP, this appointment allows the GP to get to know the baby and check their development.
- 9. At 10-14 days old, care for infants passes from HSSD midwives to FNHC health visitors, this coincides with the first visit by a health visitor to the baby's home. Parents are provided with a child health record book, often called the 'red book' which details all the developmental checks due and allows parents to track the health and progress of their child.
- 10. Babies are then seen again by a health visitor at a Child Health Clinic at 9 months to 1 year old for the 1 year review. From quarter 1 2016, the red book includes recording of the date that mothers last breastfed their baby. This will indicate how many babies were still being breastfed at 6 months of age as per the WHO recommendations which will be included in future editions of this profile.

- 11. Data on caesarean sections comes from the Hospital system, TRAK, and the child health system. All caesarean sections carried out in the hospital are recorded. The details of the birth are included in the record for each child in the child health system along with breastfeeding status.
- 12. This is the first edition of this report, the next edition for 2016 data will be published in 2017.
- 13. All enquiries and feedback should be directed to:

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