

Infant Mortality

Introduction

Infant mortality is defined as infant deaths under 1 year of age. Infant mortality is an important indicator as it is a general indicator of the health of the whole population. There are many linkages between infant mortality and the upstream determinants of health including socioeconomic factors and environmental conditions. Neonatal mortality (deaths occurring in the first 28 days after birth) are also a useful indicator of the health and care of mother and baby.

Social factors are a major factor in infant deaths and tackling the socioeconomic factors is key. There is a social gradient in infant mortality. Socially graded inequalities are present prenatally and these increase throughout childhood. Interventions that can reduce the impact of poverty on mothers both before and during pregnancy will have an impact on infant mortality and stillbirth.

Factors that increase the risk of infant mortality include:

Smoking during pregnancy

Teenage pregnancy

Low birth rate

Parental obesity

Deprivation

Not being breastfed

Ensuring that we maximise the health of mother and child during pre-conception, pregnancy and following birth is vital. This includes smoking cessation programmes and support, promoting the uptake of breastfeeding and ensuring that we promote the importance of a healthy weight for women of childbearing age. Other sections of the JSNA outline needs and progress in some of these areas.

National data from the Office for National Statistics shows:

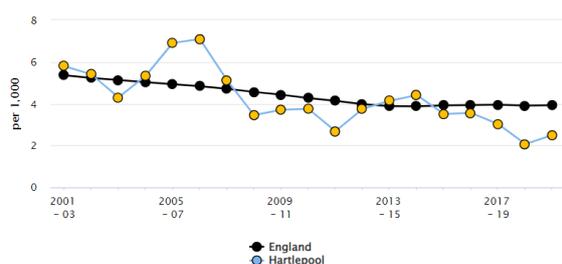
- There were 2,636 infant deaths in England and Wales in 2017. (A decrease of 0.6% compared with 2,651 in 2016).
- Fewer live births in England and Wales in 2017 meant the infant mortality rate increased to 3.9 deaths per 1,000 live births compared with 3.8 in 2016.
- The infant mortality rate decreased from 12.0 deaths per 1,000 live births in 1980 to a low of 3.6 deaths per 1,000 live births in 2014; it has since increased to 3.9 deaths per 1,000 live births in 2017.
- The infant mortality rate was highest in the most deprived areas of England at 5.2 deaths per 1,000 live births and lowest in the least deprived areas at 2.7 deaths per 1,000 live births

Main Issues

Hartlepool's infant mortality rate, which looks at deaths under 1 year of age, has remained statistically similar to the England average throughout the 19 year reporting period. After peaking at 7.1 per 1,000 in 2006/08 Hartlepool's rate has generally fallen, the 2019/21 rate is 64.8% lower than the 2006/08 rate. Hartlepool's 2019/21 rate is the third lowest rate in the north east region and the 13th lowest rate in England.

Infant mortality rate

Crude rate - per 1,000



Recent trend: Could not be calculated

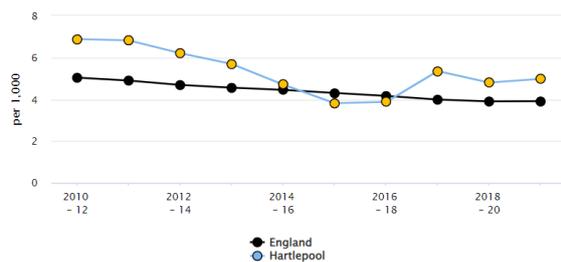
Period	Count	Value	Hartlepool		North East	England
			95% Lower CI	95% Upper CI		
2001 - 03	18	5.8	3.4	9.2	5.1	5.4
2002 - 04	17	5.4	3.1	8.6	4.8	5.2
2003 - 05	14	4.3	2.4	7.2	4.7	5.1
2004 - 06	18	5.3	3.2	8.4	4.9	5.0
2005 - 07	24	6.9	4.4	10.3	4.9	4.9
2006 - 08	25	7.1	4.6	10.5	4.8	4.8
2007 - 09	18	5.1	3.0	8.1	4.2	4.7
2008 - 10	12	3.5	1.8	6.0	4.0	4.6
2009 - 11	13	3.7	2.0	6.3	3.7	4.4
2010 - 12	13	3.8	2.0	6.4	3.7	4.3
2011 - 13	9	2.7	1.2	5.1	3.5	4.1
2012 - 14	12	3.7	1.9	6.5	3.6	4.0
2013 - 15	13	4.1	2.2	7.1	3.6	3.9
2014 - 16	14	4.4	2.4	7.4	3.7	3.9
2015 - 17	11	3.5	1.7	6.3	3.3	3.9
2016 - 18	11	3.6	1.8	6.4	3.3	3.9
2017 - 19	9	3.0	1.4	5.7	3.4	3.9
2018 - 20	6	2.1	0.8	4.5	3.5	3.9
2019 - 21	7	2.5	1.0	5.1	3.5	3.9

Source: Office for National Statistics (ONS)

If the focus is broken down to stillbirths, neonatal mortality, which is deaths under 28 days, and post-neonatal mortality, which is deaths between 28 days and 1 year, while all three have remained at least statistically similar to the England rate they have each followed a different track throughout the period.

Stillbirth rate

Crude rate - per 1,000



Recent trend: Could not be calculated

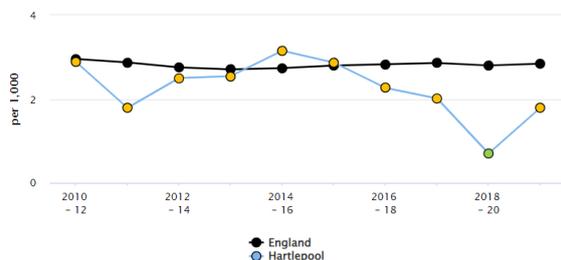
Period	Count	Hartlepool			North East	England
		Value	95% Lower CI	95% Upper CI		
2010 - 12	24	6.9	4.4	10.2	4.8	5.0
2011 - 13	23	6.8	4.3	10.2	4.9	4.9
2012 - 14	20	6.2	3.8	9.6	4.4	4.7
2013 - 15	18	5.7	3.4	9.0	4.3	4.6
2014 - 16	15	4.7	2.6	7.8	3.9	4.5
2015 - 17	12	3.8	2.0	6.7	3.7	4.3
2016 - 18	12	3.9	2.0	6.8	3.9	4.2
2017 - 19	16	5.3	3.1	8.7	4.0	4.0
2018 - 20	14	4.8	2.6	8.1	3.9	3.9
2019 - 21	14	5.0	2.7	8.3	3.9	3.9

Source: Office for Health Improvement and Disparities (OHID) based on Office for National Statistics births and deaths data

For stillbirth rates, Hartlepool's 2019/21 rate was the third highest in the north east and the 13th highest in England. Across the reporting period, 2010/12 to 2019/21 the Hartlepool rate has fallen by 26.5%, from 6.9 per 1,000 in 2010/12 to 5.0 per 1,000 in 2019/21, and has remained largely stable for the last three years.

Neonatal mortality rate

Crude rate - per 1,000

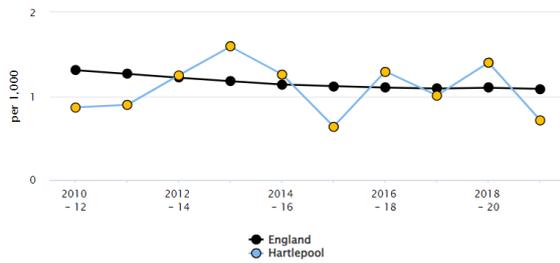


Recent trend: Could not be calculated

Period	Count	Hartlepool			North East	England
		Value	95% Lower CI	95% Upper CI		
2010 - 12	10	2.9	1.4	5.3	2.6	3.0
2011 - 13	6	1.8	0.7	3.9	2.3	2.9
2012 - 14	8	2.5	1.1	4.9	2.4	2.8
2013 - 15	8	2.5	1.1	5.0	2.3	2.7
2014 - 16	10	3.2	1.5	5.8	2.4	2.7
2015 - 17	9	2.9	1.3	5.4	2.2	2.8
2016 - 18	7	2.3	0.9	4.7	2.3	2.8
2017 - 19	6	2.0	0.7	4.4	2.3	2.9
2018 - 20	2	0.7	0.1	2.5	2.4	2.8
2019 - 21	5	1.8	0.6	4.2	2.5	2.8

Source: Office for Health Improvement and Disparities (OHID) based on Office for National Statistics births and deaths data

Hartlepool's neonatal mortality rate had declined from four consecutive years from 3.2 per 1,000 in 2014/16 to 0.7 per 1,000 in 2018/20, a decline of 78.1% and moved to a position of statistical superiority to the England rate. Whilst the 2019/21 rate has more than doubled the previous rate, Hartlepool's position is similar to the England rate.



Recent trend: Could not be calculated

Period	Count	Value	Hartlepool		North East	England
			95% Lower CI	95% Upper CI		
2010 - 12	3	0.9	0.2	2.5	1.1	1.3
2011 - 13	3	0.9	0.2	2.6	1.1	1.3
2012 - 14	4	1.2	0.3	3.2	1.2	1.2
2013 - 15	5	1.6	0.5	3.7	1.3	1.2
2014 - 16	4	1.3	0.3	3.2	1.3	1.1
2015 - 17	2	0.6	0.1	2.3	1.1	1.1
2016 - 18	4	1.3	0.4	3.3	1.1	1.1
2017 - 19	3	1.0	0.2	2.9	1.0	1.1
2018 - 20	4	1.4	0.4	3.5	1.0	1.1
2019 - 21	2	0.7	0.1	2.6	1.0	1.1

Source: Office for Health Improvement and Disparities (OHID) based on Office for National Statistics births and deaths data

Hartlepool’s post-neonatal mortality rate has been more volatile than both still births and neonatal mortality over the recent reporting period. The post-neonatal rate has neither declined nor increased for more than two consecutive years across the period. Hartlepool’s rate in 2019/21 is the lowest since 2015/17, and is 6th lowest in the north east.

Current Services

The current Joint Health and Wellbeing Strategy for Hartlepool has five priorities – the relevant priority for this section is:

Starting Well – All children and Young People living in Hartlepool have the best start in life.

The Children’s Strategic Partnership focuses on three obsessions:

Life Chances (Health, Wellbeing, Education and Stability)

Being and Feeling Safe

Relationships and Resilience

This is delivered through the Hartlepool Children and Young People Plan 2018 – 2021.

The key areas relevant to infant mortality are:

Building a better future for our children and young people

Goal: Children and young people will be and will feel safe

Goal: Children and young people will have improved life chances

The 0-19 Children's Public Health Service delivers an integrated prevention and early help service through locality teams. They work with a range of partner organisations in each locality to deliver at the 4 levels of intervention recommended by existing national guidance i.e. community, universal services, universal plus and universal partnership plus. The first three reviews outlined in the Healthy Child Programme contribute to achieving the goal of reducing infant mortality.

Future Intentions

The Children's Strategic Partnership is in the process of reviewing their priorities and action plan. The outcome of this will guide the strategic approach to all children's and young people's activities including Early Help

Health Visitors and Midwives have reviewed the antenatal offer and will be delivering the Pregnancy Birth and Beyond course in partnership with new parents.