

Bedford Joint Strategic Needs Assessment (JSNA)

Chapter 2 - Children and Young People (CYP)

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Appendix

Key Points

General fertility rate

General fertility rate is a measure of fertility rate in an area and can be used as an indicator of population growth and help with service planning. This measure is the number of births as a rate per 1,000 women aged 15-44 years. Figures show that within Bedford fertility was 60.7 per 1,000 women. This was both statistically above England at 54.3 and the local authorities average with 55.4. Recent figures show a reducing trend. Ward level detail over a 5 year period shows the lowest in Oakley ward at 35.0 and the highest in Kempston Rural ward with 93.4 per 1,000 women.

Under 18 conceptions

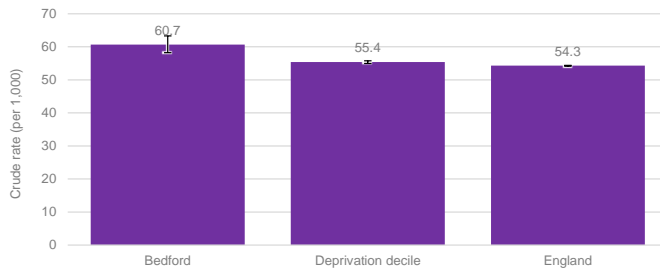
Research evidence, particularly from longitudinal studies, show that teenage pregnancy is associated with poorer outcomes for both young parents and their children. Teenage mothers are less likely to finish their education, are more likely to bring up their child alone and in poverty and have a higher risk of poor mental health than older mothers. Under 18 conception rates have been decreasing over the last decade in Bedford, England and other similar local authorities based on deprivation.. Data shows Bedford with a rate of 14.1, England 13.0 and other similar local authorities with 12.5 per 1,000 women in 2020.

General fertility rate per 1,000 females aged 15 to 44 years 5yr pooled,

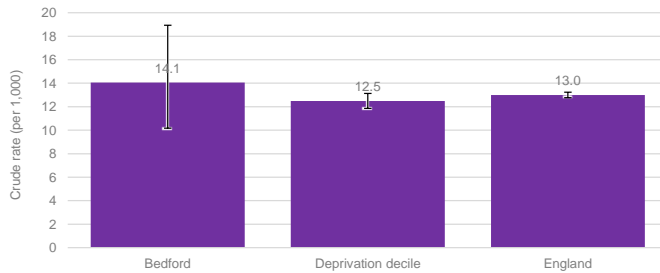
2016 - 20



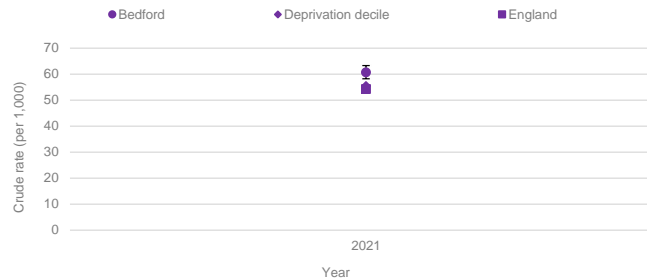
General fertility rate per 1,000 females aged 15 to 44 years, 2021



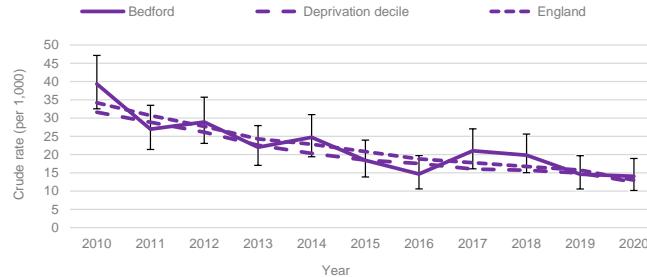
Under 18 yrs conception rate per 1,000 births, 2020



Trend: General fertility rate per 1,000 females aged 15 to 44 years

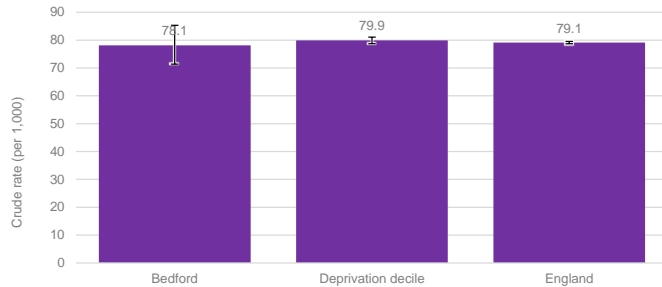


Trend: Under 18 yrs conception rate per 1,000 births

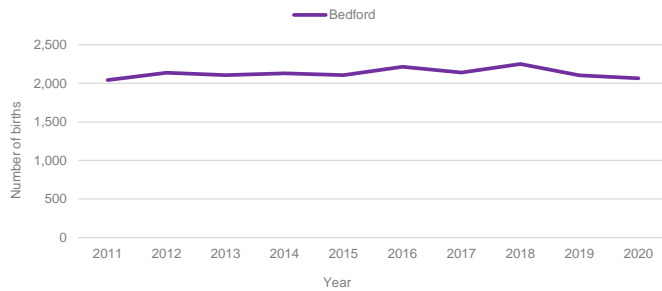


Ward Name	Average over 5 years		General fertility rate per 1,000 population
	Births	Population	
Oakley	13	366	35.0
Wyboston	22	519	43.1
De Parys	55	1,280	43.3
Harrold	33	674	48.3
Riseley	9	191	49.2
Sharnbrook	37	743	49.2
Bromham and Biddenham	42	827	51.3
Clapham	45	871	51.4
Putnoe	47	859	54.7
Newnham	88	1,545	57.2
Goldington	105	1,775	58.9
Great Barford	96	1,552	62.0
Kempston North	44	710	62.3
Brickhill	73	1,151	63.2
Harpur	107	1,688	63.5
Kempston West	54	851	63.7
Cauldwell	173	2,562	67.4
Kingsbrook	146	2,133	68.3
Castle	124	1,727	71.9
Kempston Central and East	81	1,119	72.6
Kempston South	111	1,341	82.9
Queens Park	168	2,010	83.5
Wootton	85	970	87.4
Eastcotts	92	1,028	89.3
Wishamstead	95	1,030	92.1
Elstow and Stewartby	76	817	92.8
Kempston Rural	119	1,279	93.4
Total	2,140	31,619	67.7

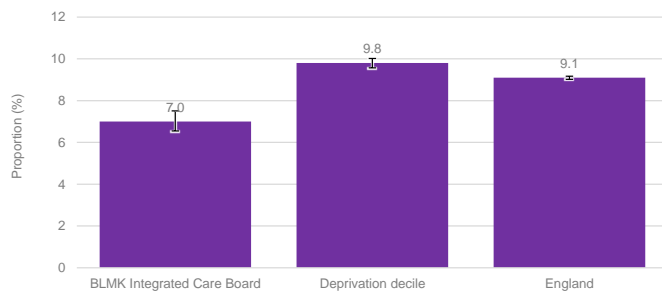
Premature births, 2018 - 20



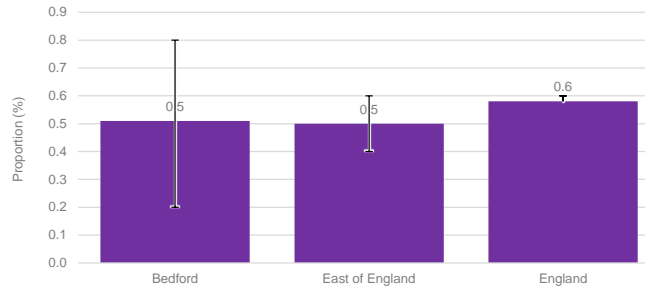
Trend: Number of births



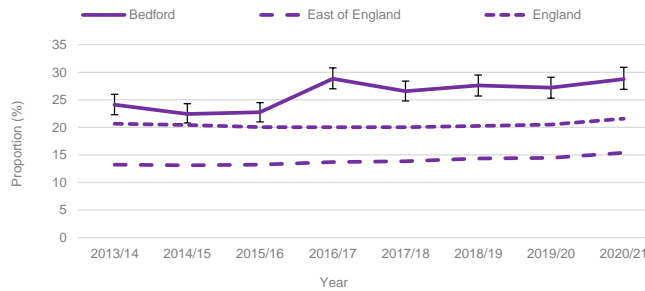
Smoking at time of delivery, 2021/22



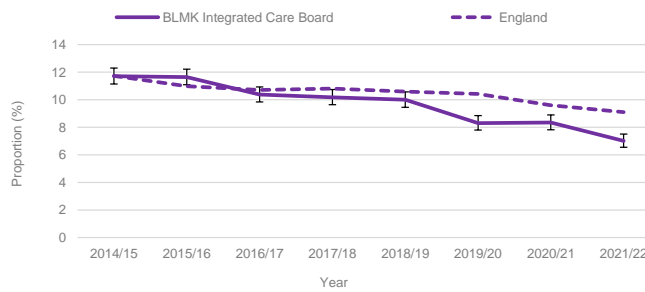
Percentage of births to teenage mothers 12-17 Years, 2020/21



Trend: Births to mothers from black and minority ethnic groups



Trend: Smoking at time of delivery



Key Points

Premature births

Premature births are births which are less than 37 weeks into the pregnancy. In Bedford there are 78.1 premature births for every 1,000 births. The average of similar local authorities based on deprivation with 79.9, and England at 79.1 per 1,000 births, 2018-20.

Teenage mothers

Children born to teenage mothers have 60% higher rates of infant mortality and are at increased risk of low birthweight which impacts on the child's long-term health. In Bedford 0.5% of births are recorded from mothers between the age of 12-17 years, 2020/21. East of England region was 0.5% and England 0.6% overall.

Number of births

Over the past five years the number of births has changed from 2,107 to 2,065, see Chapter 1.1 - Population of the Demographics dashboard

Births to mothers from black and minority ethnic groups

28.8% of births are to mothers from a black and minority ethnic background in Bedford in 2020/21. This was statistically above the East of England region with 15.4% and England with 21.6% overall.

Smoking at time of delivery (SATOD)

Smoking in pregnancy has well known detrimental effects for the growth and development of the baby and health of the mother. On average, smokers have more complications during pregnancy and labour, including bleeding during pregnancy, placental abruption and premature rupture of membranes. Across Bedfordshire, Luton & Milton Keynes (BLMK) Integrated Care Board (ICB) 7.0% of births are reported to be from mothers reported to be smokers at the time of delivery in 2021/22, statistically lower compared with England with 9.1% overall. Historical data by deprivation decile is not available.

Key Points

Low birth weight of all babies

Low birth weight increases the risk of childhood mortality and developmental problems for the child and is associated with poor health later in life. The percentage of low birth weight is measured as all births with a recorded weight under 2.5kg against all live births.

In the most recent, reported, single year, Bedford had a low birth weight of 7.6%, statistically higher to similar local authorities based on deprivation (5.9%), 2021. England was 6.8% overall.

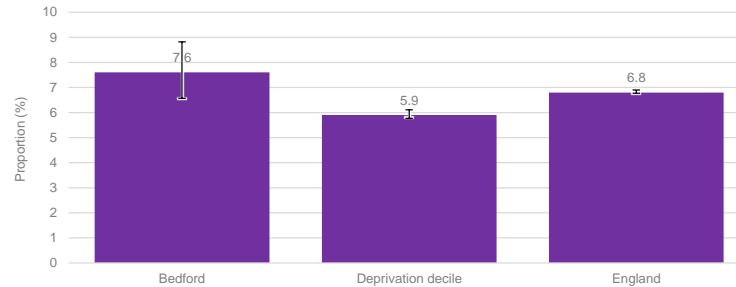
Low birth weight deprivation of all babies

There is a moderate correlation between wards with low birth weight and those wards that are more deprived in that the greater the percentage of low birth weight the more likely to be from a more deprived ward.

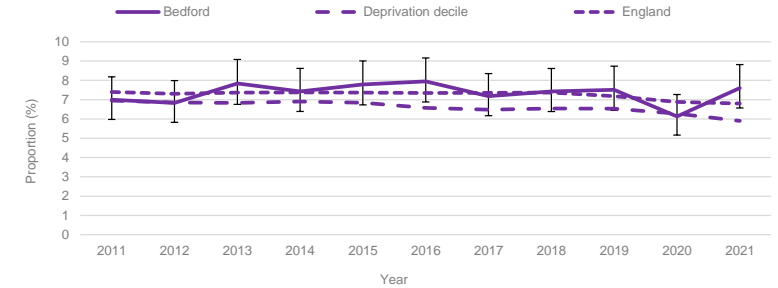
Low birth weight demographics of all babies

The greatest percentage of low birth weight over a five year period was recorded in Elstow and Stewartby ward with 8.7%, compared to the smallest at Harold ward with 3.1% in 2016-20. Riseley and Wyboston wards were reported with zero percentage over this period. On average, Bedford was reported to be 6.7% and England at 6.8% over the same 5 year period.

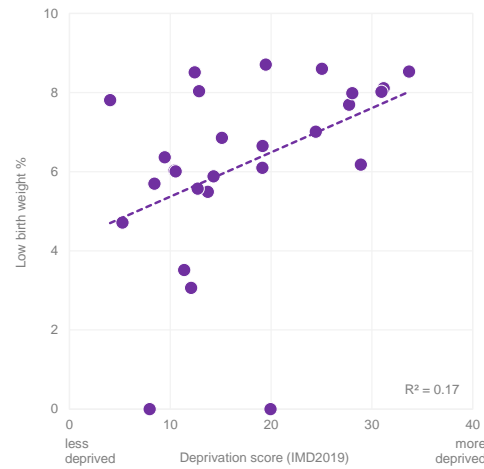
Percentage of low birth weight of all babies, 2021



Trend: Percentage of low birth weight of all babies



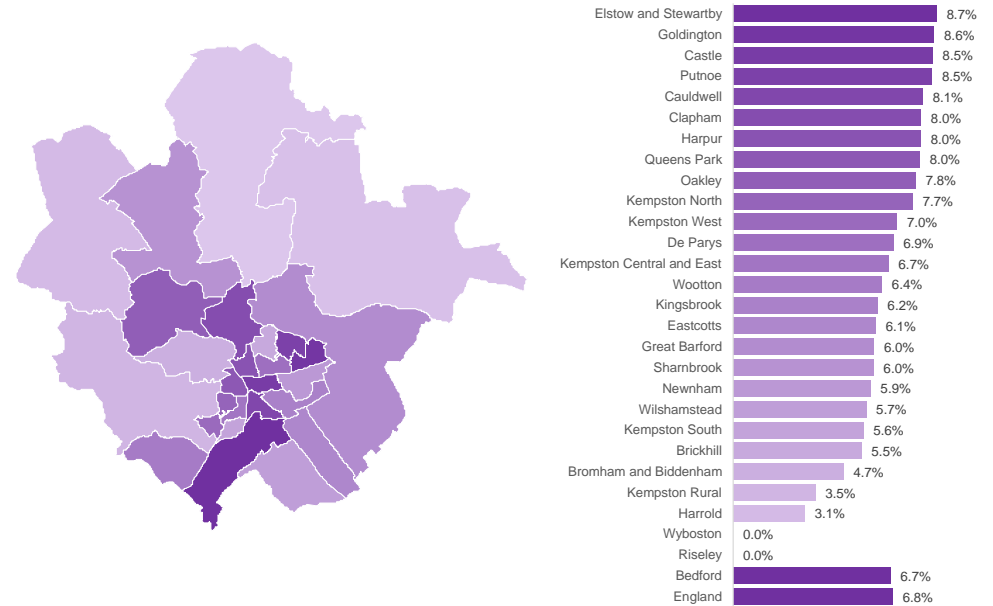
Low birth weight vs deprivation by ward, 2016 - 20



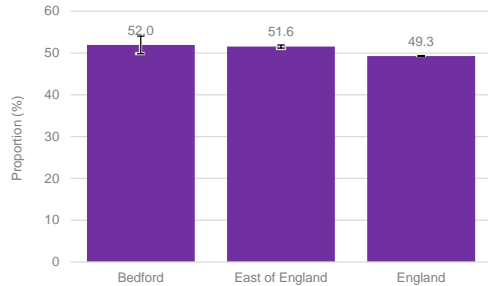
X axis (horizontal axis) = Average IMD2019 deprivation score by ward.

Y axis (vertical axis) = Percentage of low births per electoral ward.

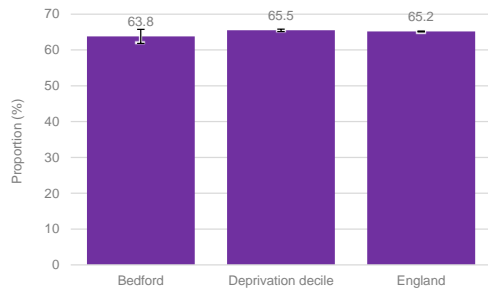
Percentage by ward of low birth weight of all babies over five years, 2016 - 20



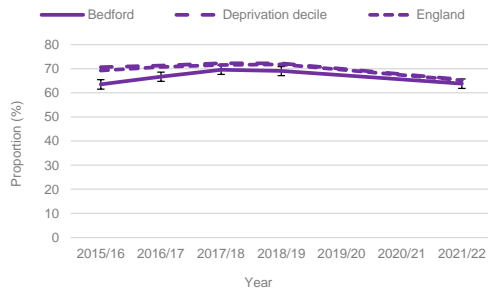
Breast feeding 6 - 8 weeks, 2021/22



Early Years development, 2021/22



Trend: Early Years development



Key Points

Breast feeding 6-8 weeks

Increases in breastfeeding are expected to reduce illness in young children, have health benefits for the infant and the mother and result in cost savings to the NHS through reduced hospital admission for the treatment of infection in infants (Quigley et al 2007). Breast milk provides the ideal nutrition for infants in the first stages of life. There is evidence that babies who are breast fed experience lower levels of gastro-intestinal and respiratory infection. Observational studies have shown that breastfeeding is associated with lower levels of child obesity.

Bedford recorded 52% breastfeeding between 6-8 weeks, statistically higher than England with 49.3% overall, 2021/22. East of England region was 51.6%.

Early years development

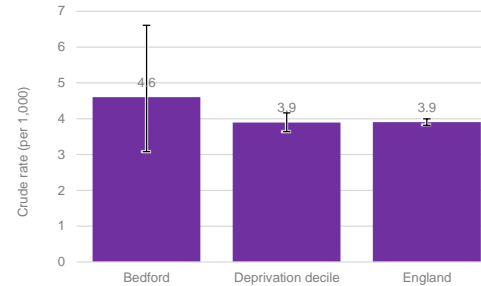
This is a key measure of early years development across a wide range of developmental areas. Children from poorer backgrounds are more at risk of poorer development and the evidence shows that differences by social background emerge early in life.

Due to a new curriculum and withdrawal of the moderation procedures, 2021/22 figures are not directly comparable to 2018/19. The dates in-between were cancelled due to COVID-19 and so were at lower starting points due to the pandemic in the year 2021/22.

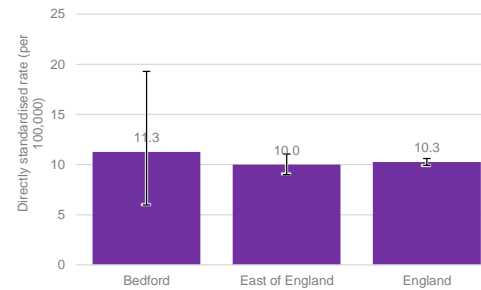
Children defined as having reached a good level of development at the end of the Early Years Foundation Stage (EYFS) as a percentage of all eligible children.

Bedford achieved 63.8%, statistically below the similar local authorities based on deprivation (65.5%), 2021/22. England was 65.2%.

Infant mortality under 1 year, 2018 - 20



Child mortality rate 1-17 years, 2018 - 20



Key Points

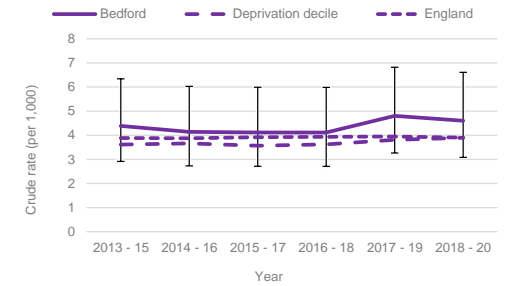
Infant mortality

Infant mortality (under 1 year) is an indicator of the general health of an entire population. It reflects the relationship between causes of infant mortality and upstream determinants of population health such as economic, social and environmental conditions. Deaths occurring during the first 28 days of life (the neonatal period) in particular, are considered to reflect the health and care of both mother and newborn.

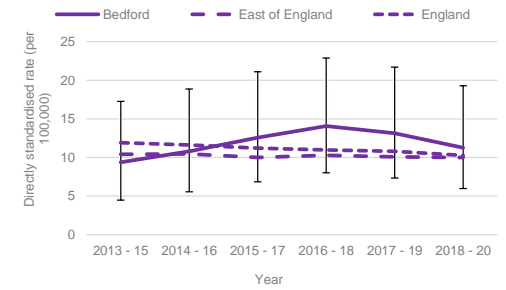
Child mortality

Death in childhood represents not only a tragedy for that child's family but also a loss to wider society in terms of lost years of productive life. After the age of one year, the commonest cause of death in young people is injuries. Many of these injury related deaths are potentially avoidable. The need to provide adequate support to those children and families with life-limiting or life-threatening conditions is also recognised.

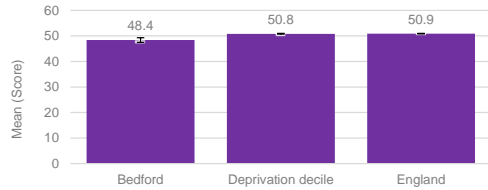
Trend: Infant mortality under 1 year



Trend: Child mortality rate 1-17 years

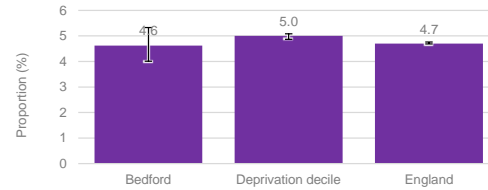


Attainment 8 score, 2020/21



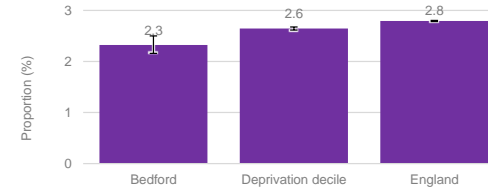
Children with poorer mental health are more likely to have lower educational attainment and the highest level of educational qualifications is a significant predictor of wellbeing in adult life. The exams were cancelled due to COVID-19 in 2019/20 and 2020/21 and alternative ways were found to reward pupils. However, the way grades were awarded may be because of this rather than improvements in student performance. Bedford had a score of 48.4, statistically lower than similar local authorities (50.8), and England had 50.9 in 2020/21.

16-17 yr olds not in Education/Employment, 2021



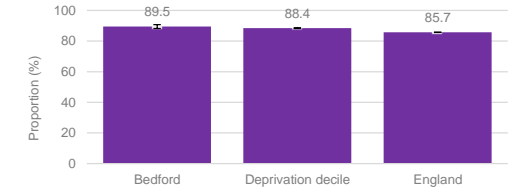
Young people who are not in education, employment or training are at greater risk of a range of negative outcomes, including poor health, depression or early parenthood. The indicator is included to encourage services to work together to support young people, particularly the most vulnerable, to engage in education, training and work. Bedford had 4.6%, England's 4.7% and similar local authorities based on deprivation are reported as 5% in 2021.

School age Mental Health, 2021



The number of school children with Special Education Needs (SEN) who are identified as having social, emotional and mental health as the primary type of need, expressed as a percentage of all school pupils. Bedford had 2.3%, statistically lower to the similar local authorities based on deprivation (2.6%), 2021. England was 2.8%.

MMR Uptake (two doses) 5 year olds, 2021/22

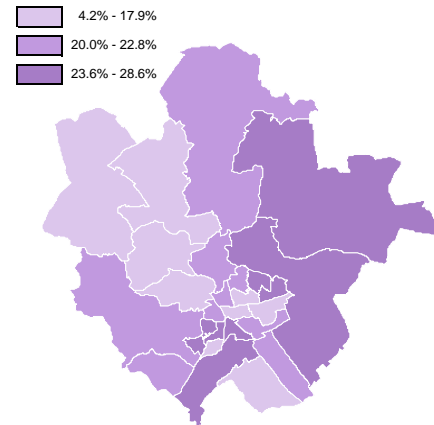


MMR is the combined vaccine that protects against measles, mumps and rubella. Measles, mumps and rubella are highly infectious, common conditions that can have serious complications, including meningitis, swelling of the brain (encephalitis) and deafness. They can also lead to complications in pregnancy that affect the unborn baby and can lead to miscarriage. Bedford's MMR uptake was 89.5% which was below the target benchmark. This is both higher than England overall with 85.7% and similar local authorities based on deprivation at 88.4%, 2021/22.

National Child Measurement Programme: Reception Obesity, 2020/21

Reception overweight prevalence

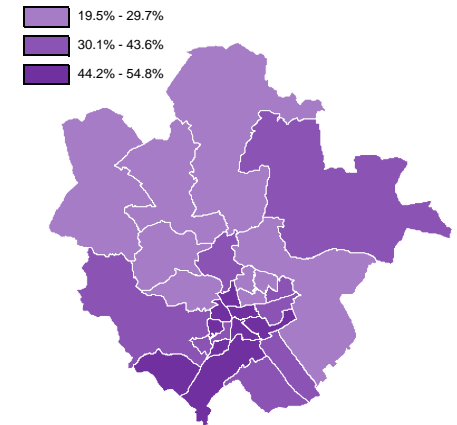
There is concern about the rise of childhood obesity and the implications of such obesity persisting into adulthood. The risk of obesity in adulthood and risk of future obesity-related ill health are greater as children get older. Studies tracking child obesity into adulthood have found that the probability of overweight and obese children becoming overweight or obese adults increases with age. The darker colours in the map show a greater level of obesity in year R (children aged 4-5) compared to those wards shown with a lighter colour. Oakley ward had the lowest level of obesity with 4.2% compared to Wyboston ward with the highest at 28.6%. Bedford year R children overall at 21.5% in 2020/21.



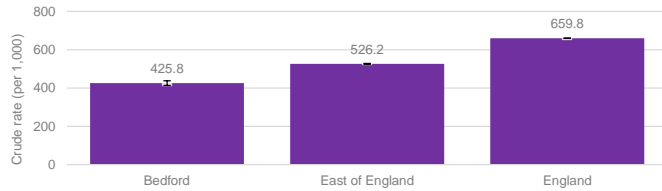
National Child Measurement Programme: Year 6 Obesity, 2020/21

Year 6 overweight prevalence

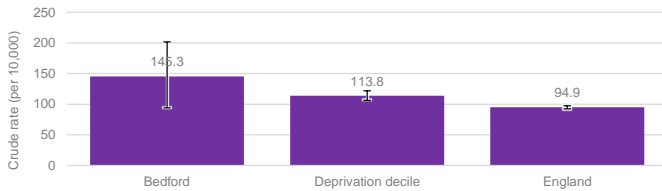
The health consequences of childhood obesity include: increased blood lipids, glucose intolerance, Type 2 diabetes, hypertension, increases in liver enzymes associated with fatty liver, exacerbation of conditions such as asthma and psychological problems such as social isolation, low self-esteem, teasing and bullying. The darker colours in the map show a greater level of obesity in year 6 (children aged 10-11) compared to those wards shown with a lighter colour. Oakley ward had the lowest level of obesity with 19.5% compared to Castle ward with the highest at 54.8% in 2020/21. Bedford year 6 children overall at 39.1%.



A&E attendances 0-4 years, 2019/20



Admissions for lower respiratory tract infections aged under 1, 2020/21



Key Points

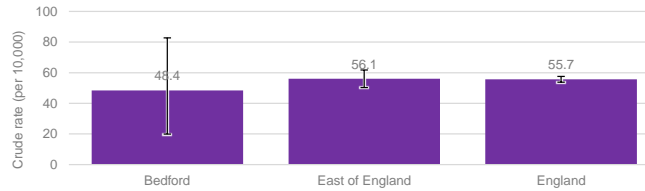
A&E attendances (0-4 years)

A&E attendances in children aged under five years are often preventable, and commonly caused by accidental injury or by minor illnesses which could have been treated in primary care. Bedford had a rate of 426 per 1,000 children aged 0 to 4 which was statistically lower than England. East of England region had 526 and England was 660 per 1,000 children aged 0 to 4 in 2019/20.

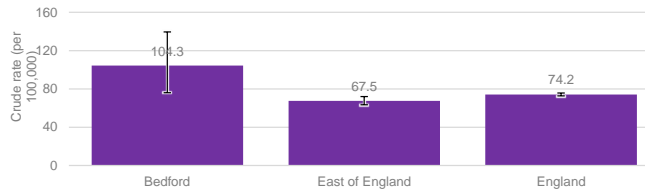
Admissions for lower respiratory tract infections aged under 1

Rate of emergency admissions for lower respiratory tract infections in infants aged under one year. Bedford had a rate of 145, England overall with 95 and similar local authorities based on deprivation with 114 per 10,000.

Admissions for gastroenteritis in infants aged under 1 year, 2020/21



Hospital admissions for asthma under 19 years, 2020/21



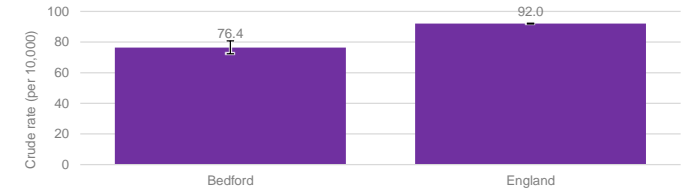
Admissions for gastroenteritis in infants aged under 1 year

Rate of emergency admissions for gastroenteritis in infants aged under one year. Bedford had a rate of 48 per 10,000 children aged under 1, East of England region had 56 and England average at 56 per 10,000 children in 2020/21.

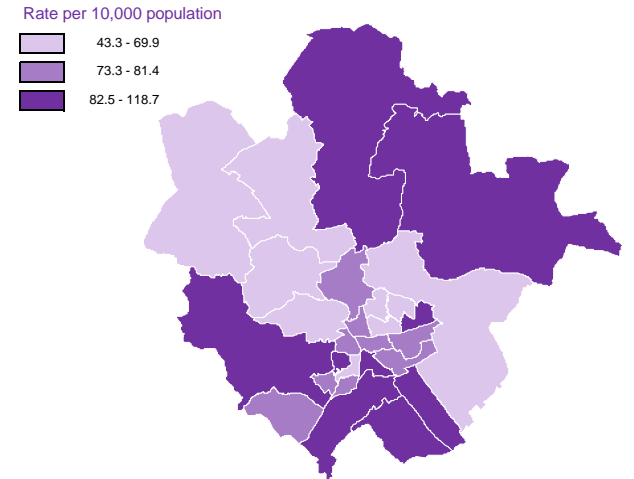
Hospital admissions for asthma (under 19 years)

Understanding local trends of emergency admissions of children and young people with long term conditions, and benchmarking against geographical and statistical neighbours will support service review and redesign. Bedford had a rate of 104 per 100,000, statistically higher than England (74), 2020/21. East of England region had 67.

Emergency hospital admissions for injuries in under 15, 2016/17 - 20/21



Emergency admissions for injuries in under 15 by ward, 2016/17 - 20/21



Emergency hospital admissions for injuries in under 15

Injuries are a leading cause of hospitalisation and represent a major cause of premature mortality for children and young people. They are also a source of long-term health issues, including mental health related to experiences. Oakley ward had the lowest with 43 under 15's per 10,000, Wyboston ward had the greatest with 119 and Bedford overall had a rate of 76, statistically lower than the England rate (92.0) in 2016/17-20/21.

Key Points

Hospital admissions for mental health conditions

One in ten children aged 5-16 years has a clinically diagnosable mental health problem, and of adults with long-term mental health problems, half will have experienced their first symptoms before the age of 14. Bedford had a rate of 73, East of England region had 72 and England 88 per 100,000 aged under 18, 2020/21.

Hospital admissions as a result of self-harm 10-24 yrs

Admissions for self-harm in children have increased in recent years, with admissions for young women being much higher than for young men. With links to other mental health conditions such as depression. Bedford had a rate of 368, East of England region had 375 and England 422 per 100,000 aged 10 to 24 in 2020/21.

Hospital admissions caused by unintentional and deliberate injuries

The rate in Bedford is 72 per 10,000 children aged 0 to 14 in 2020/21. Similar local authorities based on deprivation are reported as 72 and England with 76 per 10,000 children.

Hospital admissions due to substance misuse 15-24 yrs

Evidence to suggest that young people who use recreational drugs run the risk of damage to mental health including suicide, depression and disruptive behaviour disorders. Regular use of cannabis or other drugs may also lead to dependence. The rate in Bedford was 87 per 100,000 aged 15 to 24, 2018/19-20/21. East of England region was 71 and England with 81 per 100,000 overall.

Admission episodes for alcohol-specific conditions - Under 18s

Alcohol consumption is a contributing factor to hospital admissions and deaths from a diverse range of conditions. Alcohol misuse is estimated to cost the NHS about £3.5 billion per year and society as a whole £21 billion annually. The rate in Bedford was 25 per 100,000 under 18's. Similar local authorities based on deprivation are reported as 33 and England with 29 per 100,000 under 18's in 2018/19-20/21.

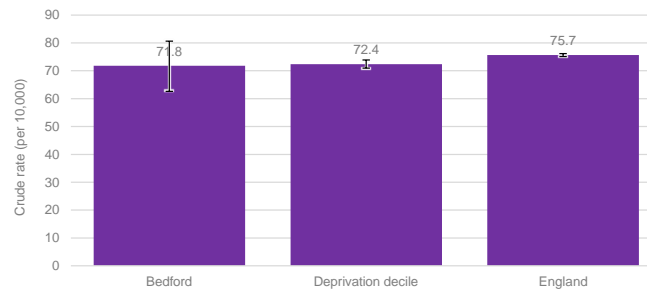
Hospital admissions for mental health conditions, 2020/21



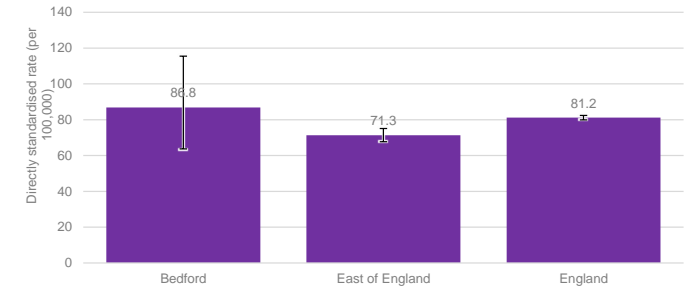
Hospital admissions as a result of self-harm 10-24 yrs, 2020/21



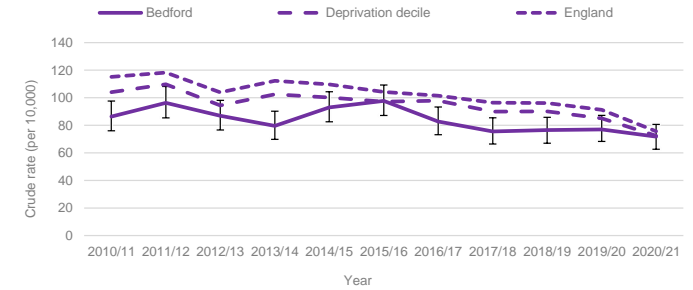
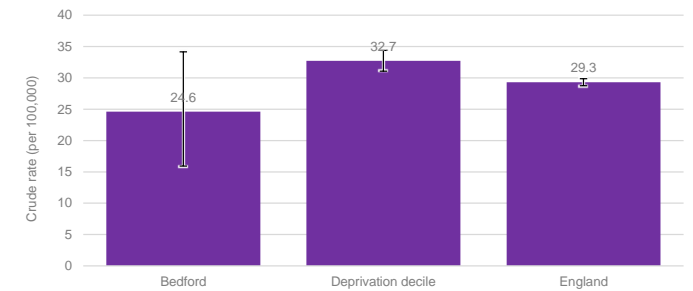
Hospital admissions caused by unintentional and deliberate injuries in children (aged 0-14 years), 2020/21



Hospital admissions due to substance misuse 15-24 yrs, 2018/19 - 20/21



Admission episodes for alcohol-specific conditions U18, 2018/19 - 20/21



Data Sources

CYP data

Office for Health Improvement & Disparities: Fingertips - Public health data
<https://fingertips.phe.org.uk>

Population

Office for National Statistics Mid-Year Population estimates: ONS Mid Year Estimate (2020)
<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates>

Contact

If you have any queries please feel free to contact us via email
askpublichealth@bedford.gov.uk

Maps

Several maps appear throughout this document, to which the following applies:

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Dates

Just a date is the calendar year (January-December) eg 2020

Dates separated with '/' indicates a financial year (April-March) eg 2019/20, 2020/21

Dates separated with '-' is a range, eg 2018-20, are all the cases between 2018 and 2020. Often with trend data the line graph will show overlapping times, rolling-years eg 2018-20, 2019-21, 2020-22