

Milton Keynes Joint Strategic Needs Assessment (JSNA)

Chapter 2 - Children and Young People (CYP)

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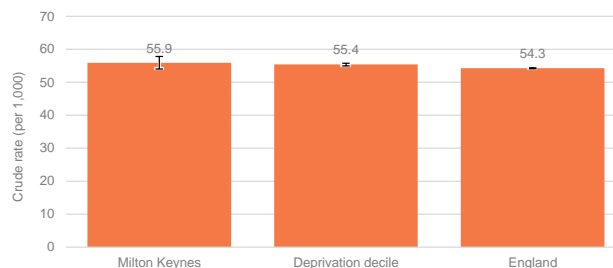
Appendix

Key Points

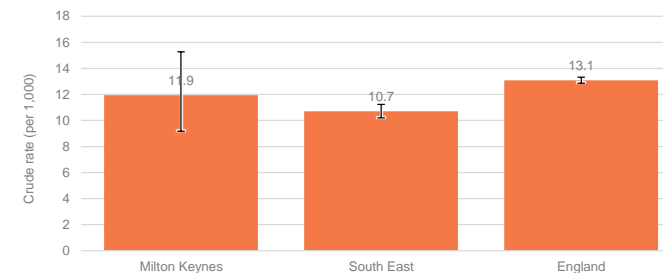
General fertility rate

The general fertility rate for an area can be used as an indicator of population growth and helps with service planning. This measure is the number of births as a rate per 1,000 female residents aged 15-44 years. Within Milton Keynes the fertility rate was 55.9 per 1,000 in 2021, compared with England at 54.3 and the deprivation decile rate of 55.4. These differences were not significant. Previous figures show a reducing trend. Ward level detail over a five-year period between 2016 and 2020 shows the lowest fertility rate in Loughton & Shenley ward at 48.0 and the highest in Bletchley East ward with 86.1 per 1,000.

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

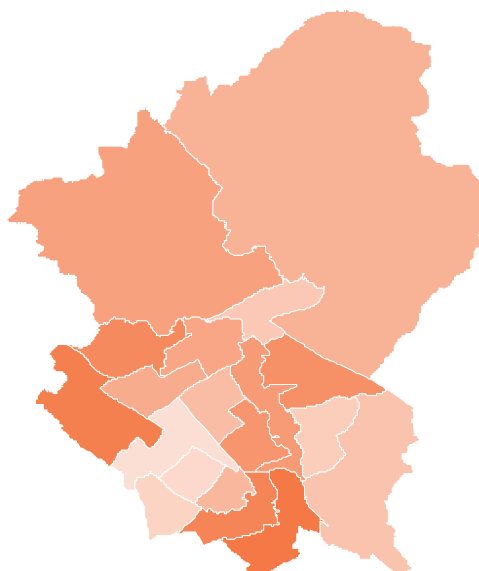


Under 18 yrs conception rate per 1,000 births, 2021



General fertility rate per 1,000 females aged 15 to 44 years 5yr pooled, 2016 - 20

Ward Name	5 year average		General fertility rate per 1,000 population
	Births	Population	
Loughton & Shenley	156	3,245	48.0
Shenley Brook End	142	2,888	49.1
Tattenhoe	101	2,025	49.9
Monkston	166	2,901	57.4
Danesborough & Walton	143	2,443	58.4
Newport Pagnell South	105	1,801	58.4
Central Milton Keynes	217	3,682	59.0
Bletchley West	166	2,779	59.7
Oiney	101	1,655	60.8
Bradwell	152	2,417	62.8
Stantonbury	160	2,503	64.0
Newport Pagnell North & Hanslope	148	2,288	64.6
Campbell Park & Old Woughton	195	2,986	65.3
Woughton & Fishermead	254	3,835	66.3
Broughton	282	3,910	72.2
Wolverton	254	3,510	72.3
Bletchley Park	182	2,439	74.4
Stony Stratford	204	2,447	83.5
Bletchley East	291	3,378	86.1
Total	3,419	53,131	64.3

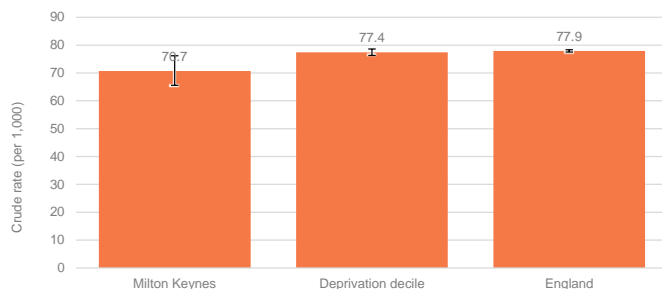


Key Points

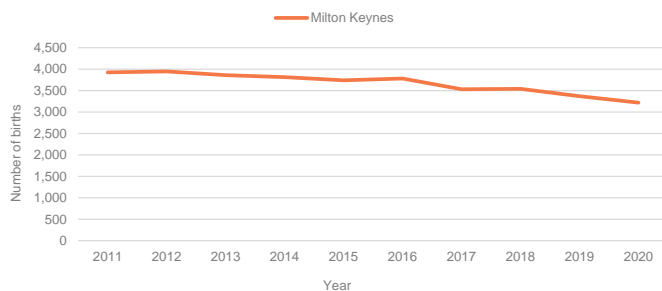
Under 18 conceptions

Research evidence, particularly from longitudinal studies, shows 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. In 2021, the under 18 conception rate for Milton Keynes was 11.9 per 1,000 female residents aged 15-17. The rate for England was 13.1 and for the South East region, the rate was 10.7. These differences were not significant. Under 18 conception rates have been decreasing over the last decade in Milton Keynes, England and other similar local authorities based on deprivation. However, the 2021 figures were the first to be calculated using up-to-date population data based on the 2021 Census. As a result, figures for 2021 are not directly comparable to previous years and therefore it is not possible to include trend data. We hope to include trends in a future dashboard as the data are recalculated.

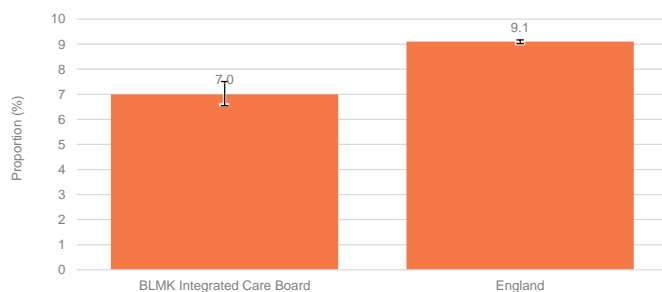
Premature births, 2019 - 21



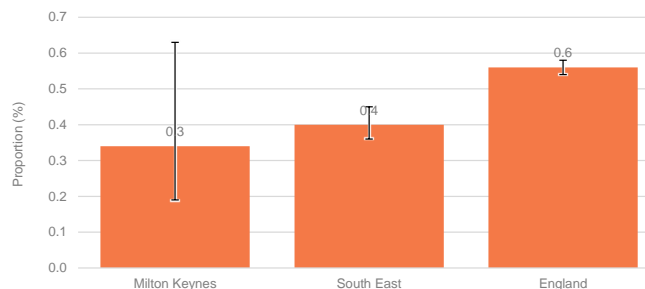
Trend: Number of births



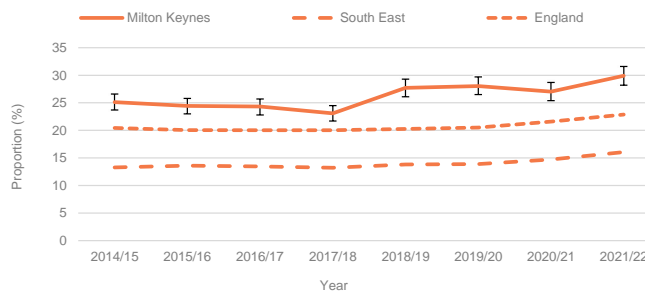
Smoking at time of delivery, 2021/22



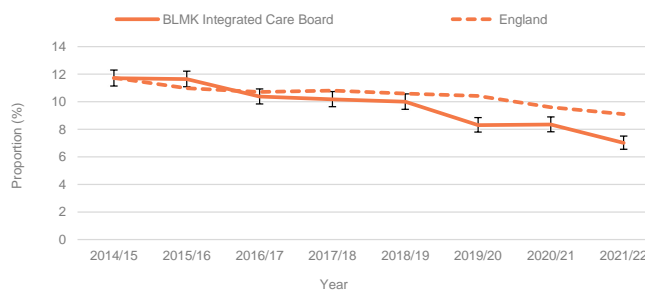
Percentage of births to teenage mothers 12-17 Years, 2021/22



Trend: Births to mothers from black and minority ethnic groups



Trend: Smoking at time of delivery



Key Points

Premature births

Premature births are births that occur less than 37 weeks into the pregnancy. In Milton Keynes there were 70.7 premature births for every 1,000 births between 2019 and 2021, significantly better than both the rate for England at 77.9 and the rate for similar local authorities based on deprivation, which was 77.4 per 1,000.

Teenage mothers

Children born to teenage mothers have 60% higher rates of infant mortality and are at increased risk of low birth weight, which impacts on the child's long-term health. In Milton Keynes 0.3% of births were recorded from mothers between the age of 12-17 years in 2021/22. The proportion in the South East region was 0.4% and for England overall was 0.6%. These differences were not significant.

Number of births per year

Between 2015 and 2020 the number of births in Milton Keynes declined from 3,740 to 3,219. For more on births, see the Population and Place Dashboard <https://bmksna.org/milton-keynes/jsna/population-place/>

Births to mothers from black and minority ethnic groups

29.9% of births were to mothers from a black and minority ethnic background in Milton Keynes in 2021/22. This was higher than the South East region with 16.1%. The proportion in England was 22.9% overall.

Smoking at time of delivery

Smoking in pregnancy has well known detrimental effects for the growth and development of the baby and health of the mother. These include an increased risk of: miscarriage; premature birth; stillbirth; low birth weight; sudden unexpected death in infancy; and children developing asthma. On average, smokers have more complications during pregnancy and labour, including bleeding during pregnancy, placental abruption and premature rupture of membranes. Across the area covered by the Bedfordshire, Luton & Milton Keynes (BLMK) Integrated Care Board (ICB), 7.0% of births in 2021/22 were from mothers reported to be smokers at the time of delivery in 2021/22, significantly lower compared to England with 9.1% overall. Historical data by deprivation decile is not available.

Key Points

Low birth weight

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 births with a recorded weight under 2.5kg as a proportion of all live births.

In 2021, Milton Keynes had a low birth weight percentage of 6.9%, significantly higher than similar local authorities based on deprivation (5.9%) but not significantly different from England overall, which had a percentage of 6.8%.

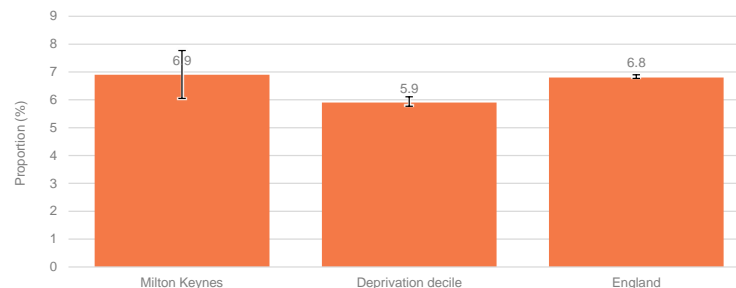
Low birth weight and deprivation

There is a moderate correlation between Milton Keynes wards with low birth weight and those wards that are more deprived. In general, more deprived wards tend to have a higher proportion of low-birth-weight babies.

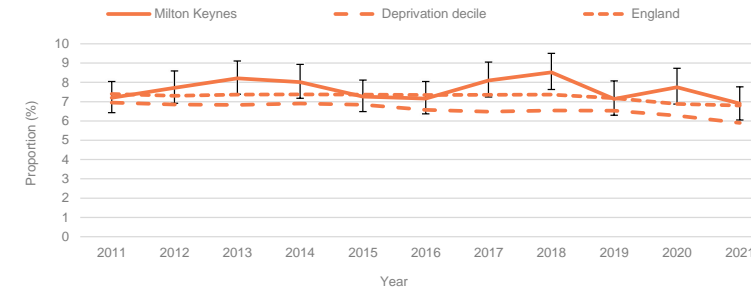
Low birth weight by ward

The highest percentage of low birth weight the five-year period between 2016 and 2020 was 9.0% in Bradwell ward, compared to the lowest in Tattenhoe ward, which was 4.4%. The percentage for Milton Keynes overall was 7.4% and for England it was 6.8% over the same five-year period.

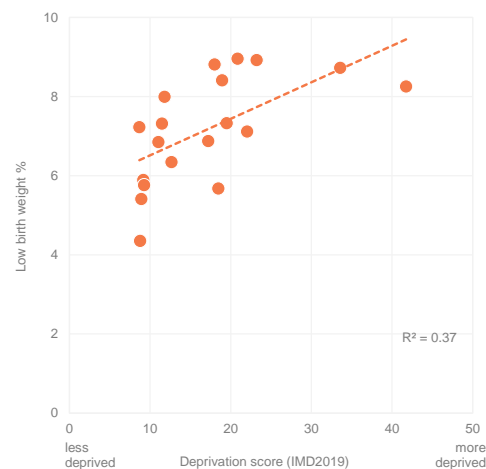
Percentage of babies with low birth weight, 2021



Trend: Percentage of babies with low birth weight



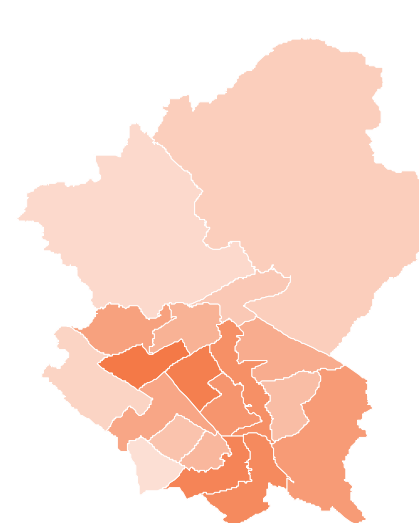
Low birth weight vs deprivation by ward, 2016 - 20



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

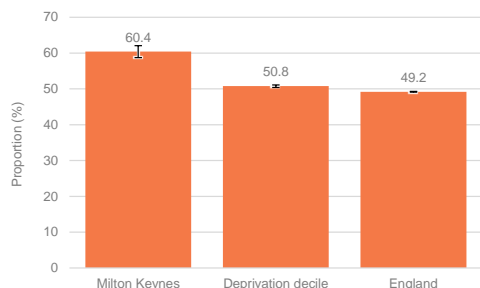
Y axis (vertical axis) = Percentage of low births per electoral ward.

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

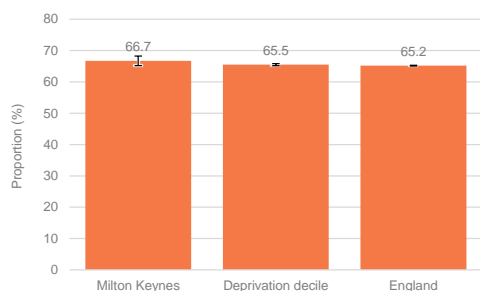


Bradwell	9.0%
Central Milton Keynes	8.9%
Bletchley Park	8.8%
Bletchley East	8.7%
Campbell Park & Old Woughton	8.4%
Woughton & Fishermead	8.3%
Danesborough & Walton	8.0%
Wolverton	7.3%
Loughton & Shenley	7.3%
Broughton	7.2%
Stantonbury	7.1%
Bletchley West	6.9%
Monkston	6.9%
Shenley Brook End	6.3%
Newport Pagnell South	5.9%
Olney	5.8%
Stony Stratford	5.7%
Newport Pagnell North &...	5.4%
Tattenhoe	4.4%
Milton Keynes	7.4%
England	6.8%

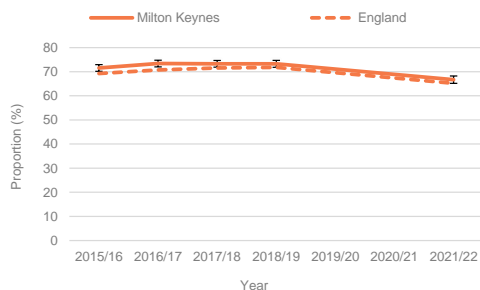
Breastfeeding 6 - 8 weeks, 2021/22



Early Years development, 2021/22



Trend: Early Years development



Key Points

Breastfeeding 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 gastrointestinal and respiratory infection. Observational studies have shown that breastfeeding is associated with lower levels of child obesity.

In Milton Keynes 60.4% of babies were breastfed at 6 to 8 weeks in 2021/22, significantly higher than the average for similar local authorities based on deprivation (50.8%). The proportion for England overall was 49.2%.

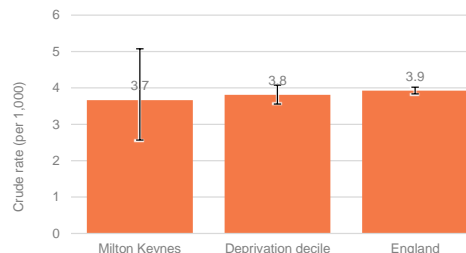
Early years development

The proportion of all children who have reached a good level of development by the end of the Early Years Foundation Stage 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.

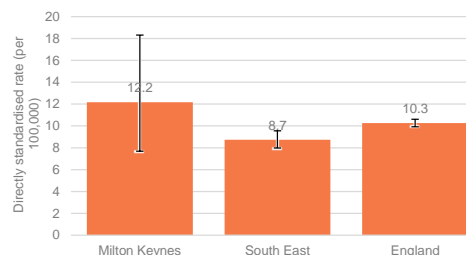
Due to a new curriculum and withdrawal of the moderation procedures, 2021/22 figures are not directly comparable to 2018/19. Furthermore, assessments for the dates in-between were cancelled due to COVID-19 and so were at lower starting points in 2021/22 due to the pandemic.

66.7% of children in Milton Keynes reached a good level of development in 2021/22. The proportion was not significantly different from England overall, which was 65.2%. The proportion for similar local authorities based on deprivation was 65.5%. However, there was a gap of 16.2 percentage points between the proportion of children with free school meal status achieving a good level of development (50.5%) and their counterparts.

Infant mortality under 1 year, 2019 - 21



Child mortality rate 1-17 years, 2018 - 20



Key Points

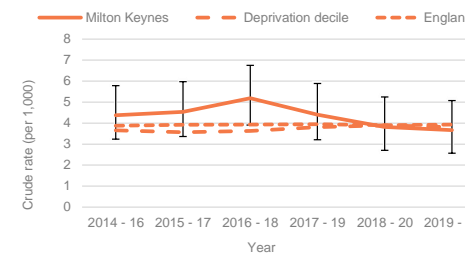
Infant mortality

Infant mortality (under 1 year) reflects wider health concerns 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. In Milton Keynes, the infant mortality rate was 3.7 per 1,000 live births between 2019 and 2021. The rate in similar local authorities based on deprivation was 3.8 and for England was 3.9 (not significantly different).

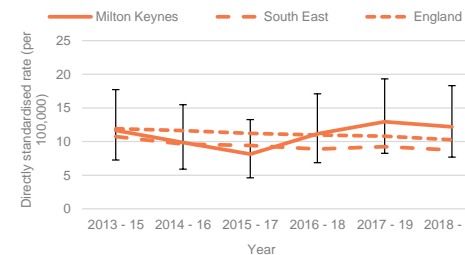
Child mortality

Death in childhood represents a tragedy for that child's family. After the age of one year, the most common cause of death in young people is injuries and many are potentially avoidable. The need to provide adequate support with life-limiting or life-threatening conditions is also recognised. For 2018-20, the child mortality rate for Milton Keynes was 12.2 per 100,000 residents aged 1-17; for the South East region it was 8.7 and for England it was 10.3. These differences were not significant.

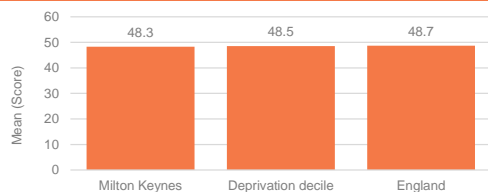
Trend: Infant mortality under 1 year



Trend: Child mortality rate 1-17 years

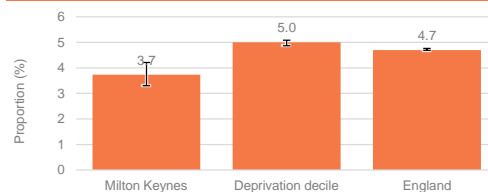


Attainment 8 score, 2021/22



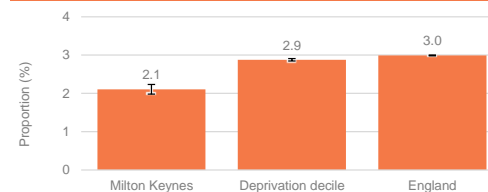
Educational attainment is influenced by both the quality of education children receive and their family socio-economic circumstances. The level of educational qualifications is a significant predictor of wellbeing in adult life. School exams were cancelled due to COVID-19 in 2019/20 and 2020/21 and alternative ways were found to assess pupils. Therefore, the final grades for this period may partly reflect these changes rather than improvements in student performance. In 2021/22, the Attainment 8 score in Milton Keynes was 48.3. Similar local authorities scored 48.5 and the score for England was 48.7. In Milton Keynes, the Attainment 8 score for children with free school meal status was 37.6 in 2020/21, which, although not the same year, does indicate a large gap exists.

16-17 yr olds not in education/employment, 2021



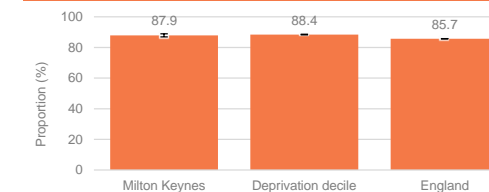
Young people who are not in education, employment or training are at greater risk of a range of negative outcomes, including poor health, depression and early parenthood. This measure can be improved when local services work together to support young people, particularly the most vulnerable, to engage in education, training and work. The proportion of young people not in education, employment or training in Milton Keynes was 3.7% in 2021, significantly lower than the proportions for similar local authorities based on deprivation (5.0%) and England, which was 4.7%.

School-age mental health, 2021/22



This indicator records the number of school children with Special Education Needs (SEN) whose primary type of need is identified as social, emotional and mental health, expressed as a percentage of all school pupils. However, many school-age children with emotional and mental health needs will not have a Special Education Needs and Disabilities (SEND) status, so this is an underestimate of the overall proportion of need. In Milton Keynes the proportion was 2.1%, significantly lower than similar local authorities based on deprivation (2.9%) and England, which was 3.0%. Milton Keynes's results may not mean there are lower mental or emotional health needs if there are delays to SEND assessments or other complicating factors.

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

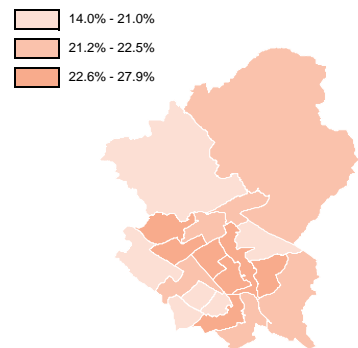


MMR is the combined vaccine that protects against measles, mumps and rubella. These are highly infectious, common conditions that can have serious complications, including swelling of the brain or its lining (encephalitis or meningitis) and deafness. They can also lead to complications in pregnancy that affect the unborn baby and can lead to miscarriage. Milton Keynes's MMR uptake level among five-year old children was 87.9% in 2021/22, which was below the target benchmark of 95%. The level for England was 85.7% and for similar local authorities based on deprivation, it was 88.4%.

National Child Measurement Programme: Reception Excess Weight, 2021/22

Reception excess weight prevalence

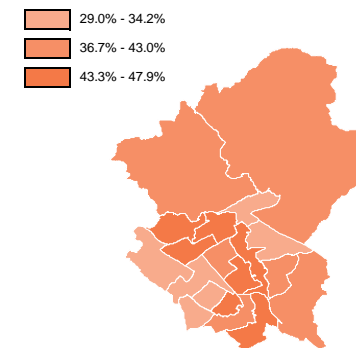
There is concern about the rise in childhood obesity and the implications of such obesity persisting into adulthood. The risk of obesity and related ill health in adulthood are greater as children get older. Studies tracking child obesity into adulthood have found that the probability of overweight and obese children becoming overweight or obese adults increases with age. The darker colours in the map show a greater level of excess weight in year R (children aged 4-5) compared to those wards shown with a lighter colour. Tattenhoe ward had the lowest level of excess weight with 14.0% in 2021/22, compared to Campbell Parke & Old Woughton ward with the highest at 27.9%. Milton Keynes's year R children excess weight prevalence overall was 21.1%.



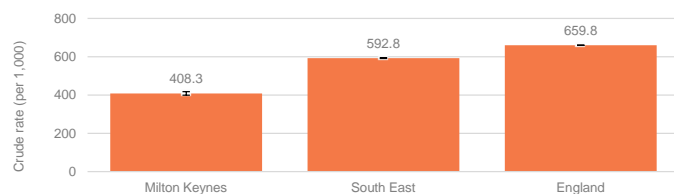
National Child Measurement Programme: Year 6 Excess Weight, 2021/22

Year 6 excess weight prevalence

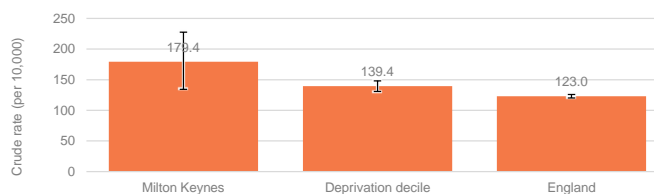
The health consequences of childhood obesity include: increased blood lipids; glucose intolerance; Type 2 diabetes; hypertension; increases in liver enzymes associated with fatty liver; exacerbation of conditions such as asthma; and psychological problems such as social isolation, low self-esteem, teasing and bullying. The darker colours in the map show a greater level of excess weight in year 6 (children aged 10-11) compared to those wards shown with a lighter colour. Tattenhoe ward had the lowest level of excess weight in 2021/22 with 29.0%, compared to Campbell Park & Old Woughton ward with the highest at 47.9%. The prevalence of excess weight in Year 6 children was 39.5% in Milton Keynes overall.



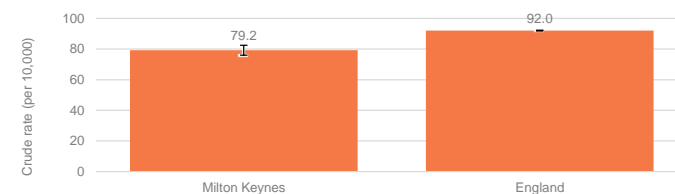
A&E attendances 0-4 years, 2019/20



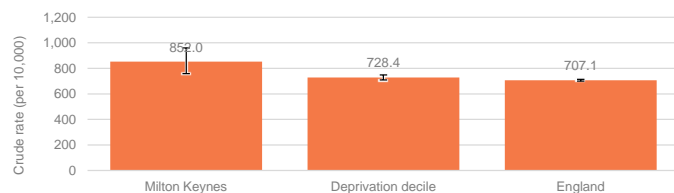
Admissions for gastroenteritis in infants aged under 1 year, 2021/22



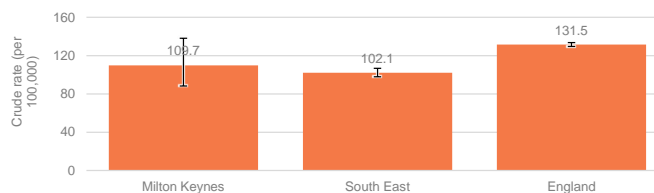
Emergency hospital admissions for injuries in under 15, 2016/17 - 20/21



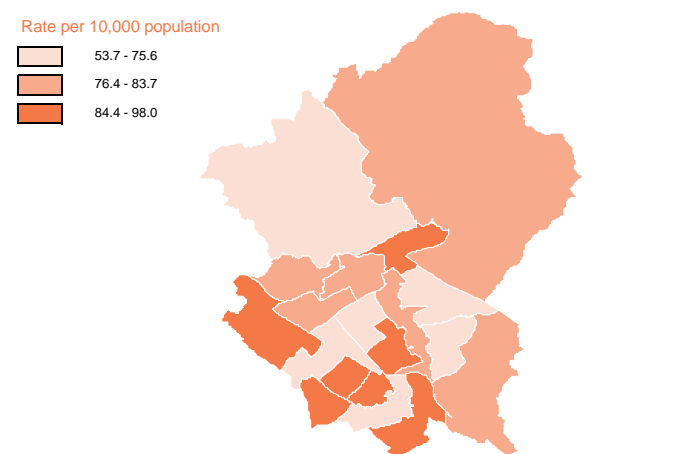
Admissions for lower respiratory tract infections aged under 1, 2021/22



Hospital admissions for asthma under 19 years, 2021/22



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



Key Points

Only the most recent point has been quantified for each of the bar charts due to the recalculation needed after the 2021 Census. We hope to include the trend in a future dashboard when the rates are released.

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 that could have been treated in primary care. Milton Keynes had an A&E attendance rate of 408 per 1,000 residents aged 0 to 4 in 2019/20, which was significantly lower than England (660) and the rate in the South East region, which was 593.

Admissions for lower respiratory tract infections aged under 1

Milton Keynes had a rate of 852 emergency admissions for lower respiratory tract infections in infants per 10,000 residents aged under one year in 2021/22. This was significantly higher than the rate for similar local authorities based on deprivation (728) and for England, which had a rate of 707 per 10,000 children.

Admissions for gastroenteritis in infants aged under 1 year

Milton Keynes had a rate of 179 admissions for gastroenteritis 10,000 residents aged under one year in 2021/22, not significantly different to similar local authorities based on deprivation (139) but significantly higher than England overall, which had a rate of 123 per 10,000.

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. In 2021/22, Milton Keynes had an admissions rate for asthma in under 19-year-olds of 110 per 100,000 residents aged 0-18 years. The rate for England was 132 and for the South East region the rate was 102 per 100,000. These differences were not significant.

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 conditions, including mental health issues related to the injury experience. In Milton Keynes, no ward had a rate of emergency hospital admissions that was significantly different from England. However, Milton Keynes overall had a rate of 79 per 10,000 residents aged 0-14 for the five-year period from 2016/17 to 2020/2, significantly lower than the England rate (92).

Key Points

Hospital admissions for mental health conditions U18

One in ten children aged 5-16 years have 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. In 2021/22, Milton Keynes had a hospital admissions rate for mental health conditions of 65 per 100,000 residents aged 0-17, significantly lower than both England (100) and the South East region (116).

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

Hospital admissions for self-harm in young people have increased in recent years, with admissions for young females much higher than for young males. Milton Keynes had an admissions rate of 226 per 100,000 residents aged 10 to 24. This was significantly lower than the rates for both England (427) and the South East region (550).

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

In 2021/22, the rate of hospital admissions caused by unintentional and deliberate injuries in Milton Keynes was 64 per 10,000 residents aged 0 to 14. This was significantly lower than similar local authorities based on deprivation (80) and the rate for England, which was 84 per 10,000.

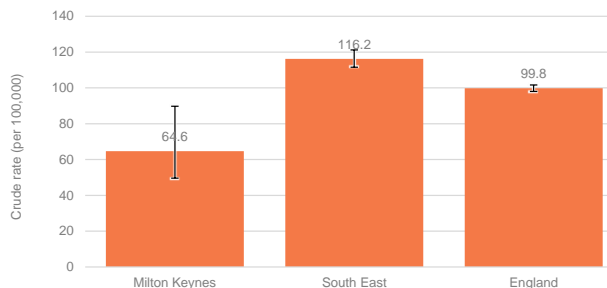
Hospital admissions due to substance misuse 15-24 yrs

There is evidence to suggest that young people who use recreational drugs run the risk of damage to mental health including depression and disruptive behaviour disorders, as well as increased risk of suicide. Regular use of cannabis or other drugs may also lead to dependence. The rate of hospital admissions due to substance misuse in Milton Keynes was 49 per 100,000 residents aged 15 to 24 for 2018/19-20/21, significantly lower than England (81) and the South East region rate, which was 76 per 100,000.

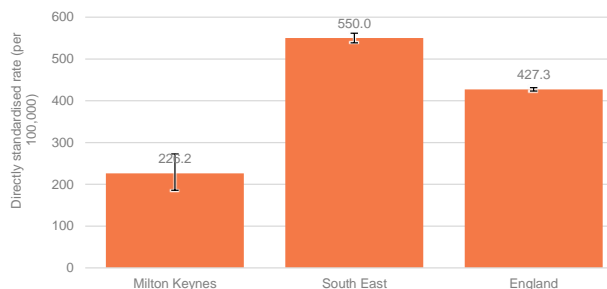
Admission episodes for alcohol-specific conditions - Under 18s

Alcohol consumption is a contributing factor to hospital admissions and deaths from a range of conditions including liver disease, cancers and cardiovascular disease. Alcohol misuse is estimated to cost the NHS about £3.5 billion per year and society as a whole £21 billion annually. For the period 2018/19-20/21, the rate of hospital admissions for alcohol-specific conditions among under 18s in Milton Keynes was 19 per 100,000 residents aged 0-17, significantly lower than similar local authorities based on deprivation (33) and the rate for England, which was 29 per 100,000.

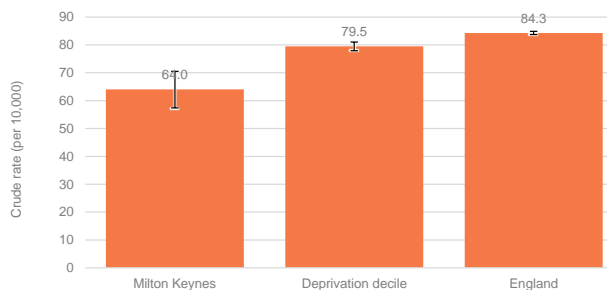
U18 Hospital admissions for mental health conditions, 2021/22



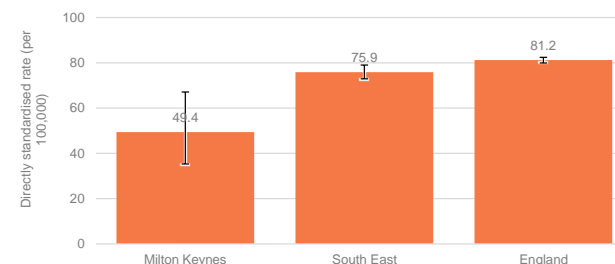
Hospital admissions as a result of self-harm 10-24 yrs, 2021/22



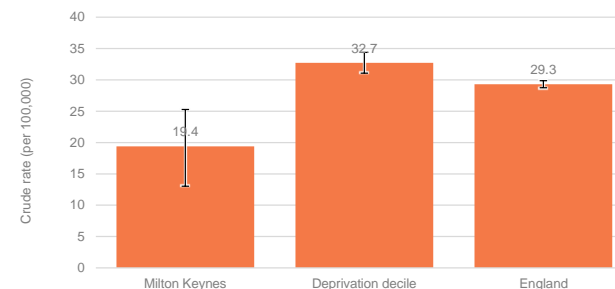
Hospital admissions caused by unintentional and deliberate injuries in children (aged 0-14 years), 2021/22



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

Children and young people 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>

Reference

Quigley et al, 2007. Breastfeeding and Hospitalization for Diarrheal and Respiratory Infection in the United Kingdom Millennium Cohort Study. Pediatrics (2007) 119, (4): e837-e842

Contact

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Statistical significance

The terms significant or significantly are used throughout this Dashboard. They are only used in relation to statistical significance. This means that if a difference or change is identified as significant, the probability of it occurring by chance is less than 5%.

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