



Population Health & Healthcare Surveillance

At risk and vulnerable

March 2022 Update

Summary Dashboard

Indicator		Time Period	North East Value	North East Rank	National Average	Direction of Travel
At risk and vulnerable	25a. Police Recorded Crime per 1,000 population	Q1 2021/22	25.4	8	20.1	
	25b. Police Recorded Crime by Crime Group (as a % of all police recorded crime)	2020/21				
	Violence against the person		39.0%*		38.7%*	
	Theft offences		24.0%*		28.6%*	
	Criminal damage and arson		14.3%*		10.1%*	
	Public order offences		12.1%*		10.1%*	
	Sexual offences		3.2%*		3.2%*	
	Drug offences		3.1%*		4.6%*	
	Miscellaneous crimes		3.0%*		2.4%*	
	Possession of weapons offences		0.8%*		0.9%*	
	Robbery		0.5%*		1.3%*	
	26. Digital Exclusion - Percentage of adults (aged 18+) who have Foundation Level Digital Skills	2021	82%		81%	
	27. Digital Exclusion - Percentage of adults (aged 18+) who have Life Essential Digital Skills (EDS)	2021	80%		79%	
	28. Percentage of New Birth Visits (NBVs) completed within 14 days (%)	2020/21	92.9%	2	88.0%	
	29. Percentage of children who received a 2-2½ year review (%)	2020/21	92.1%	1	71.5%	
	30. Households assessed as homeless per 1,000 households	Q2 2021/22	1.4	6	1.5	
	31. Hospital admissions with a primary or secondary diagnosis relating to gambling (Number)	2020/21			220	
	32. Asylum seekers in receipt of section 95 support (Number)	Q2 2021/22	4554		38927	

* Please note these values are based on the North East and North Cumbria rather than just the North East

Compared with England Significantly Better Similar Significantly Worse

North East Rank amongst the 9 Regions 1 - Best 9 - Worst

What do the detailed pages show?

The following pages contain further information for each indicator, including, where available, data comparing each region in England, and trend data over time for England and the North East/ North East and North Cumbria. The latest information at local authority or CCG level for the North East and North Cumbria is also presented. A narrative section explains the key findings from the data and also includes data sources and definitions.

Compared with England

Significantly Better

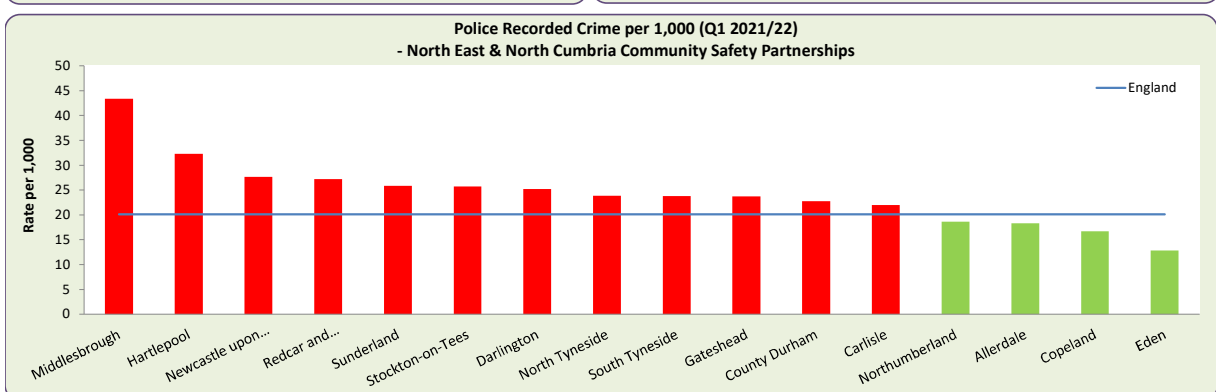
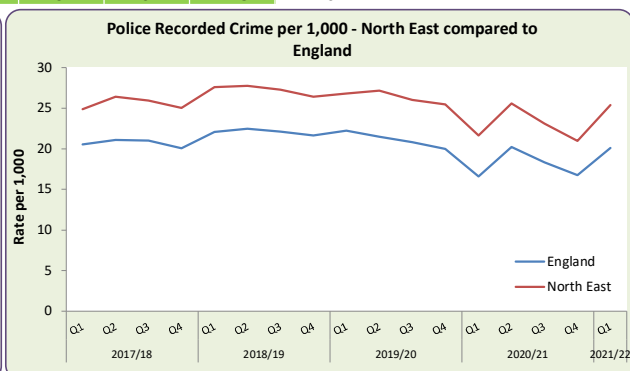
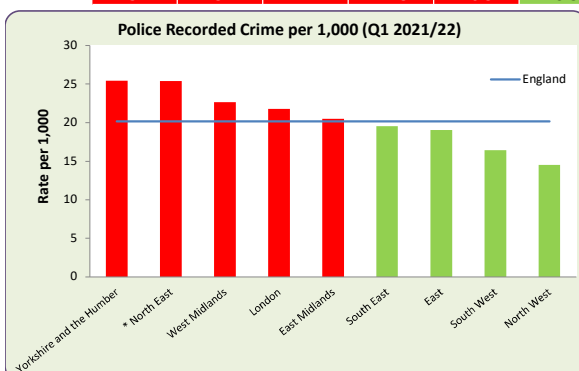
Similar

Significantly Worse

25a. Police Recorded Crime (Q1 2021/22)

Total police recorded crime per 1000 population.

Yorkshire and the Humber	North East	West Midlands	London	East Midlands	South East	East	South West	North West	England
25.4	25.4	22.7	21.8	20.5	19.5	19.1	16.4	14.5	20.1



Data source: Home Office. Police recorded crime and outcomes open data tables. <https://www.gov.uk/government/statistics/police-recorded-crime-open-data-tables> (4th November 2021 update)

Data source: ONS. Estimates of the population for the UK, England and Wales, Scotland and Northern Ireland.

<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesandscotlandandnorthernireland>

Definitions / Notes

Crime can have a detrimental impact on health¹. It can have direct impacts on the victims but also indirect community-level impacts, negatively impacting people's physical and mental health as well as impacting health behaviours such as by reducing the amount of physical exercise people do^{1,2,3}.

The data above uses total police recorded crime by Community Safety Partnership (CSP). CSPs are made up of representatives from the police, local authorities, fire and rescue authorities and health and probation services who work together to protect their local communities from crime and help to make people feel safer. CSPs closely match local authority geographies⁴, as such local authority population estimates have been used by NEQOS to provide the denominators in order to calculate rates for this indicator.

The number of offences for CSPs for some forces may be lower than the separately published force level totals. Some offences may not have an exact location so it may not be possible to allocate an offence to a CSP. Fraud offences are generally not included in this data as reporting of this has been taken over by Action Fraud. The exception would be where the fraud offence has been recorded by the police.

Rates have been calculated using population estimates published by the ONS. As no population estimates have been published for 2021 yet, the rate for quarter 1 of 2021/22 has been calculated using the mid-2020 population estimates.

What is the data telling us?

The crime rate in the North East (25.4 per 1000) is significantly higher than the England rate (20.1 per 1000) and is the second highest out of the English regions. Three quarters of the NENC CSPs have significantly higher rates of crime than the England average with Middlesbrough (43.4 per 1,000) having the highest rate amongst NENC CSPs.

Both the England and North East averages show similar trends over time with notable decreases in crime in both quarter 1 and quarter 4 of 2020/21 coinciding with the time periods of national lockdowns due to the pandemic.

1. Public Health England. (2018). Healthy High Streets. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/699295/26.01.18_Healthy_High_Streets_Full_Report_Final_version_3.pdf

2. Baranyi, G. Di Marco, M. H., Russ, T. C., Dibben, C., & Pearce, J. (2021). The impact of neighbourhood crime on mental health: A systematic review and meta-analysis. *Social Science & Medicine* (1982), 282, 114106–114106. <https://doi.org/10.1016/j.socscimed.2021.114106>

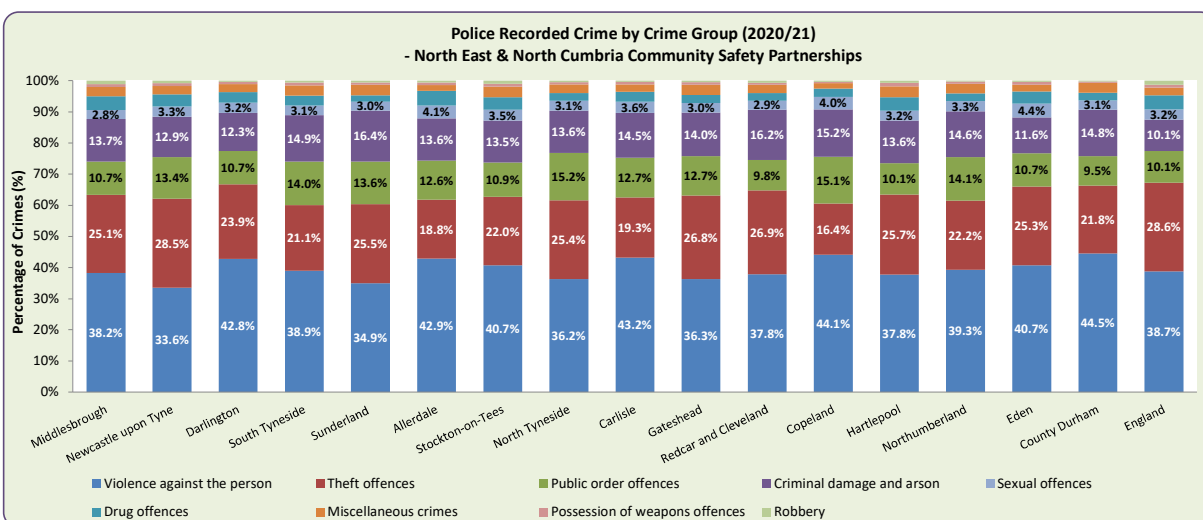
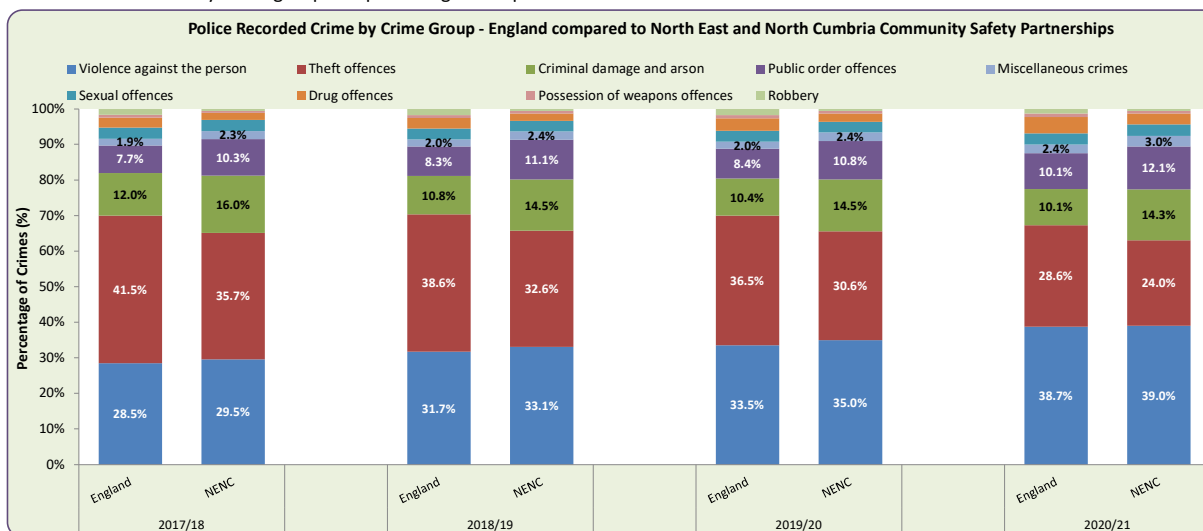
3. Lorenc, T. Petticrew, M., Whitehead, M., Neary, D., Clayton, S., Wright, K., Thomson, H., Cummins, S., Sowden, A., & Renton, A. (2014). Crime, fear of crime and mental health: synthesis of theory and systematic reviews of interventions and qualitative evidence. *Public Health Research* (Southampton, England), 2(2), 1–398. <https://doi.org/10.3310/phr02020>

4. Home Office. (2016). Police recorded crime and outcomes open data tables user guide. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/560132/pprc-user-guide-oct16.pdf

At risk and vulnerable

25b. Police Recorded Crime by Crime Group (2020/21)

Police recorded crime by crime group as a percentage of all police recorded crime.



At risk and vulnerable

Data source: Home Office. Police recorded crime and outcomes open data tables. <https://www.gov.uk/government/statistics/police-recorded-crime-open-data-tables>

Definitions / Notes

The social, economic and health impacts of crime can vary depending on the nature of the crime⁵.

The data above uses total police recorded crime by Community Safety Partnership. CSPs are made up of representatives from the police, local authorities, fire and rescue authorities and health and probation services who work together to protect their local communities from crime and help to make people feel safer. CSPs closely match local authority geographies⁴.

The number of offences for CSPs for some forces may be lower than the separately published force level totals. Some offences may not have an exact location so it may not be possible to allocate an offence to a CSP. Fraud offences are generally not included in this data as reporting of this has been taken over by Action Fraud. The exception would be where the fraud offence has been recorded by the police.

What is the data telling us?

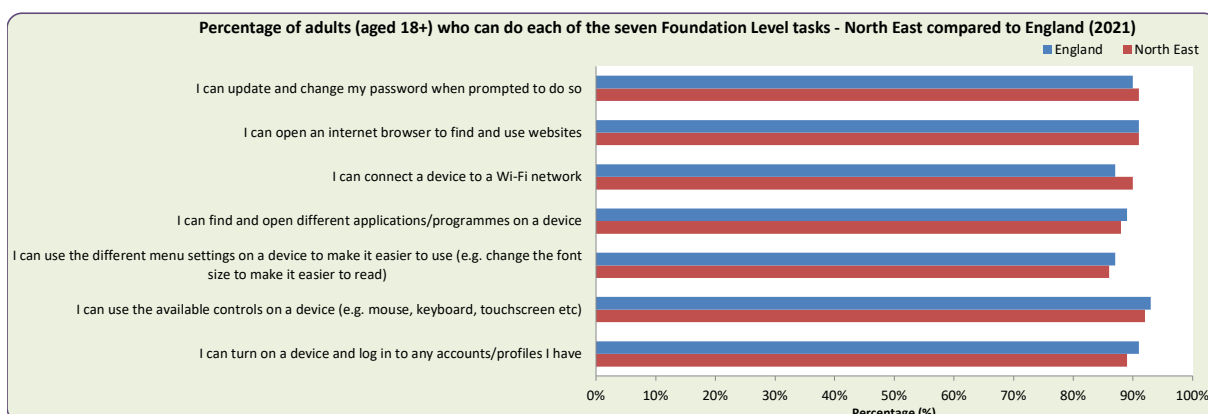
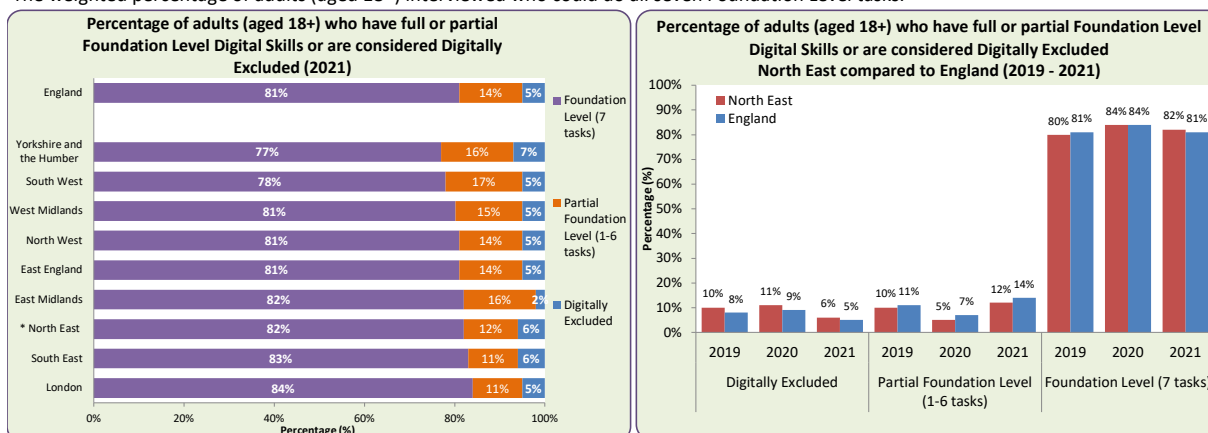
Nationally and across the NENC, from 2017/18 to 2020/21, the two most common crimes are violence against the person and theft offences. However, the proportion of crimes relating to theft offences notably dropped in the 2020/21 financial year nationally and in the NENC. The proportion of all crimes that were recorded as violence against the person has been increasing year-on-year, both nationally and in the NENC.

The nature of crime varies somewhat across the NENC although the two most common crimes in all NENC CSPs in 2020/21 are violence against the person and theft offences.

5. Home Office. (2018). The economic and social costs of crime. Second Edition. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/732110/the-economic-and-social-costs-of-crime-horr99.pdf

26. Digital Exclusion - Percentage of adults (aged 18+) who have Foundation Level Digital Skills (2021)

The weighted percentage of adults (aged 18+) interviewed who could do all seven Foundation Level tasks.



Data source: Lloyds Bank. Essential Digital Skills Data Tables. <https://www.lloydsbank.com/banking-with-us/whats-happening/consumer-digital-index/essential-digital-skills.html>

Definitions / Notes

As a result of the COVID-19 pandemic there has been an increased reliance on access to digital services⁶. Demand for digital healthcare has also increased with millions of people registering with an NHS login and signing up to the NHS app allowing users to view e-Referral services, COVID-19 support and advice, maternity and child health services, online pharmacies, services to monitor and improve health and wellbeing etc⁷. However, not everyone is able to benefit from digital technology. Digital exclusion is about not having the access, skills and confidence to use the internet and benefit fully from digital technology in everyday life⁸. Those who are digitally excluded are those most likely to experience health inequalities, which are further exacerbated by digital exclusion⁸. A proposed regional strategy for addressing digital exclusion in the North East was published in 2021⁶.

The Essential Digital Skills report⁹, produced by Lloyds Bank on behalf of the Department for Education, is the UK's digital skills benchmark, measuring the basic tasks needed to access the online world, and the essential digital skills needed for life and work. Data is collected via interviews and telephone calls and then weighted to reflect the national demographic profile. Please note that caution should be taken when comparing 2021 data to previous years due to a change in methodology from face to face interviews to solely telephone interviews.

As regional data is only given to one decimal place the regions have not been ranked.

To demonstrate Foundation Level skills participants must be able to do all of the following seven tasks: turn on a device and log in to any accounts/profiles they have; use available controls on a device; use different menu settings on a device to make it easier to use; find and open different applications/programmes; connect a device to a Wi-Fi network; open an internet browser and find and use websites and update and change passwords when prompted to do so⁹.

What is the data telling us?

The North East has a higher proportion of people with Foundation Level skills than the England average but also a higher proportion of people who are Digitally Excluded. However, there is a notable decrease in the proportion of people who are Digitally Excluded both nationally and regionally in 2021 compared to previous years. The gap in the proportion of people who are Digitally Excluded in the North East compared to England also appears to be slightly reducing.

Comparing results by task highlights that more people in the North East know how to connect a device to a Wi-Fi network and update passwords than the England average. However, for the majority of questions, the England average is higher than the North East, with the most notable difference being in the proportion who can turn on a device and log in to any accounts/profiles they have.

6. IPPR. (2021). Addressing digital exclusion in north east England. <https://www.ippr.org/research/publications/digital-exclusion-in-north-east>

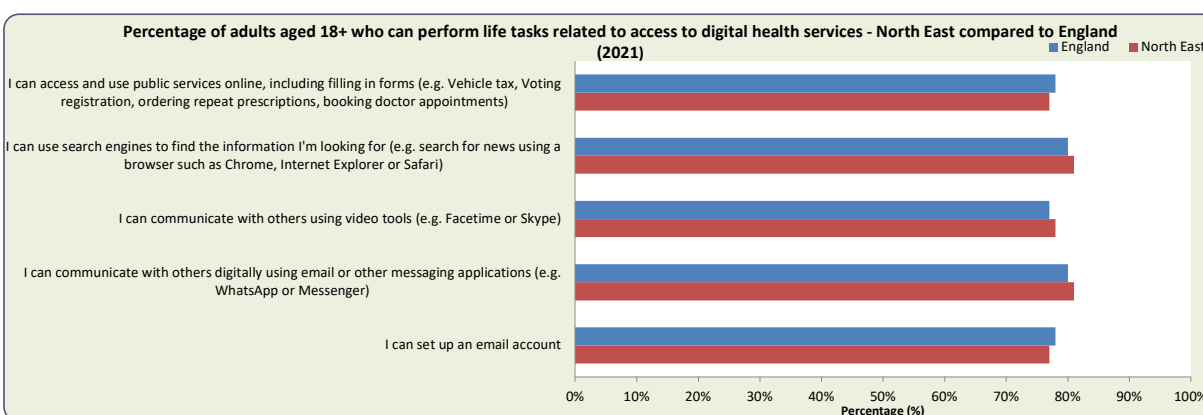
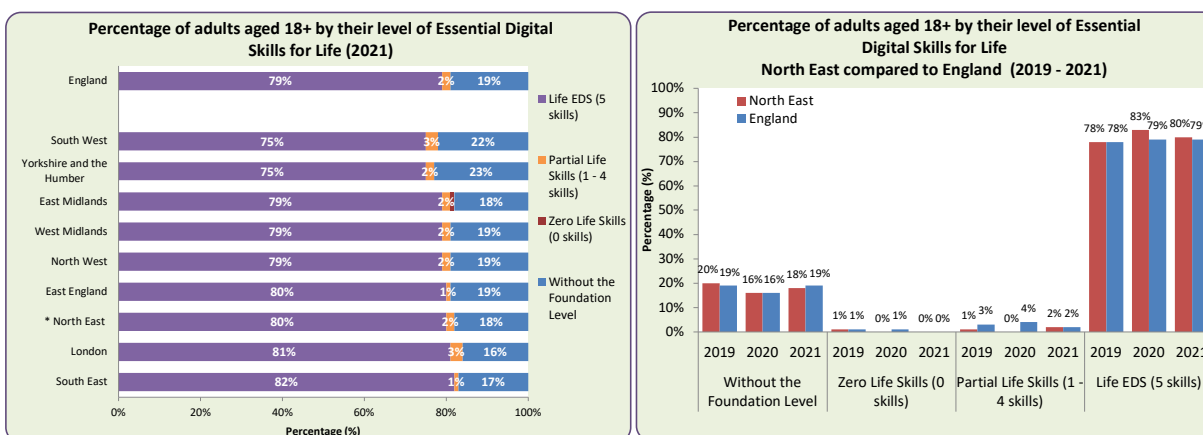
7. NHS Digital. (2021). Around half of people in England now have access to digital healthcare. <https://digital.nhs.uk/news/latest-news/around-half-of-people-in-england-now-have-access-to-digital-healthcare>

8. Good Things Foundation. Digital exclusion and health inequalities. <https://www.goodthingsfoundation.org/insights/digital-exclusion-and-health-inequalities/>

9. Lloyds Bank. (2021) Essential Digital Skills Report 2021. https://www.lloydsbank.com/assets/media/pdfs/banking_with_us/whats-happening/211109-lloyds-essential-digital-skills-report-2021.pdf

27. Digital Exclusion - Percentage of adults (aged 18+) who have Life Essential Digital Skills (EDS) (2021)

The weighted percentage of adults (aged 18+) interviewed who can perform at least one task in all five digital life skills.



Data source: Lloyds Bank. Essential Digital Skills Data Tables. <https://www.lloydsbank.com/banking-with-us/whats-happening/consumer-digital-index/essential-digital-skills.html>

Definitions / Notes

As a result of the COVID-19 pandemic there has been an increased reliance on access to digital services⁶. Demand for digital healthcare has also increased with millions of people registering with an NHS login and signing up to the NHS app allowing users to view e-Referral services, COVID-19 support and advice, maternity and child health services, online pharmacies, services to monitor and improve health and wellbeing etc⁷. However, the increased reliance on access to digital services has increased inequalities driving people to identify these inequalities and promote strategies to reduce them⁸.

The Essential Digital Skills report⁹, produced by Lloyds Bank on behalf of the Department for Education, is the UK's digital skills benchmark, measuring the basic tasks needed to access the online world, and the essential digital skills needed for life and work. Data is collected via interviews and telephone calls and then weighted to line with the national demographic profile. Please note that caution should be taken when comparing 2021 data to previous years due to a change in methodology from face to face interviews to solely telephone interviews.

As regional data is only given to one decimal place the regions have not been ranked.

To be considered as having Essential Digital Skills for Life (Life EDS), an individual must be able to do all seven Foundation Level tasks, as well as demonstrating ability in each of five Life Skill categories. The five Life Skill categories are: problem solving; communicating; transacting; being safe and legal online; and handling information and content. Those who can do at least one task in each of the five Life Skill areas, are classed as having Life EDS⁹. Across all 5 Skills there are a total of 29 Life tasks. However, for the bottom chart, NEQOS have decided to present data for five tasks which relate to being able to access digital health services.

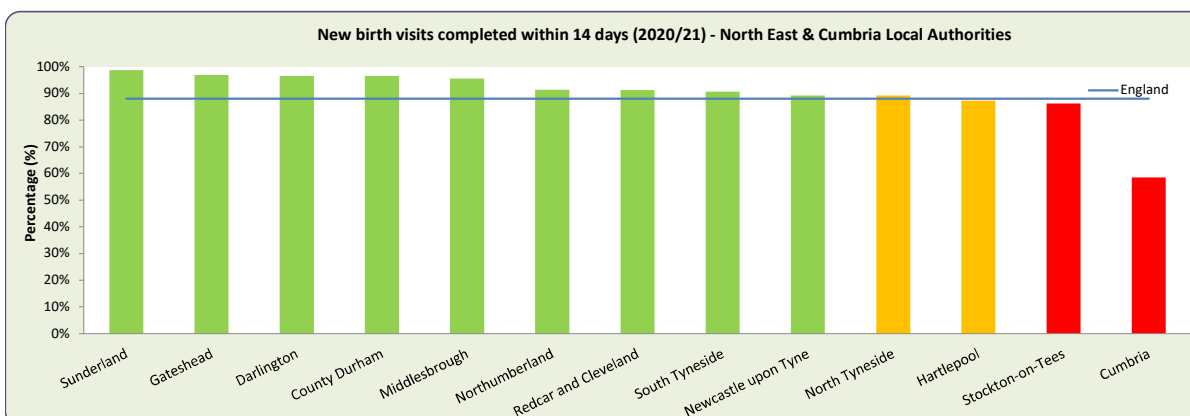
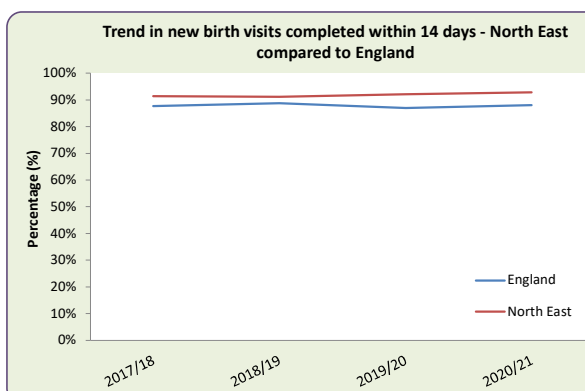
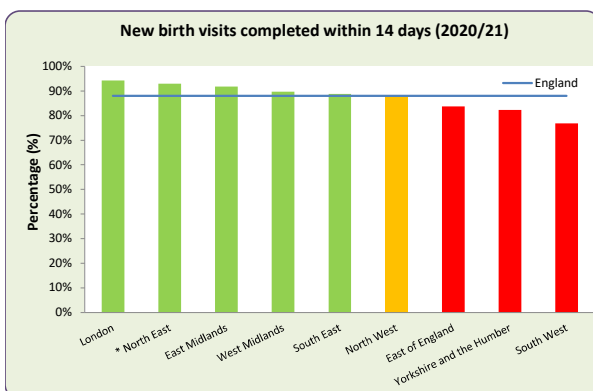
What is the data telling us?

The North East has a higher proportion of people with Life EDS than the England average. However, comparing 2020 to 2021 the proportion of people with Life EDS has decreased regionally by three percentage points despite the England average remaining the same. Comparing national and regional results for skills needed to access digital health highlights that, although more people from the North East can communicate with others digitally using email or other messaging applications, communicate with others using video tools and use search engines to find the information they are looking for, fewer can set up an email account and access public services online.

28. Percentage of New Birth Visits (NBVs) completed within 14 days (2020/21)

The percentage of infants, who turned 30 days in the reference period (financial year), receiving a new birth visit (NBV) by a Health Visitor within 14 days (two weeks) of birth.

London	North East	East Midlands	West Midlands	South East	North West	East of England	Yorkshire and the Humber	South West	England
94.3	92.9	91.8	89.8	88.8	87.9	83.8	82.3	76.8	88.0



At risk and vulnerable

Data source: Office for Health Improvement and Disparities. Public Health Profiles. 2022 (<http://fingertips.phe.org.uk>) © Crown copyright 2022

Definitions / Notes

Health visiting is a crucial aspect of childhood development, ensuring the 'best start in life', reassuring parents and tackling any issues early in the child's life¹⁰. The new birth visit forms part of the Healthy Child Programme (HCP)¹⁰, and continues the support previously given by midwife visits. This visit allows development issues with the infant to be addressed early, as well as a forum for providing support and advice to the new parents, allowing problems to be identified early and making interventions more likely to be successful. This indicator measures the percentage of infants receiving a visit within 14 days by a Health Visitor.

Please note that virtual contacts in 2020/21 during the period of the pandemic response were also counted as valid, mandated service delivery.

What is the data telling us?

92.9% of all infants in the North East who turned 30 days in the 2020/21 financial year had a new birth visit completed within 14 days. This percentage was significantly better than the national average and the second best of all the English health regions. Over the period from 2017/18 to 2020/21 there has been a slight upward trend in the North East in the percentage of infants receiving a new birth visit by a health visitor within 14 days. Nationally the proportion fell slightly in 2019/20 and although there was a slight improvement in 2020/21 the England average remains below the level it was at in 2018/19.

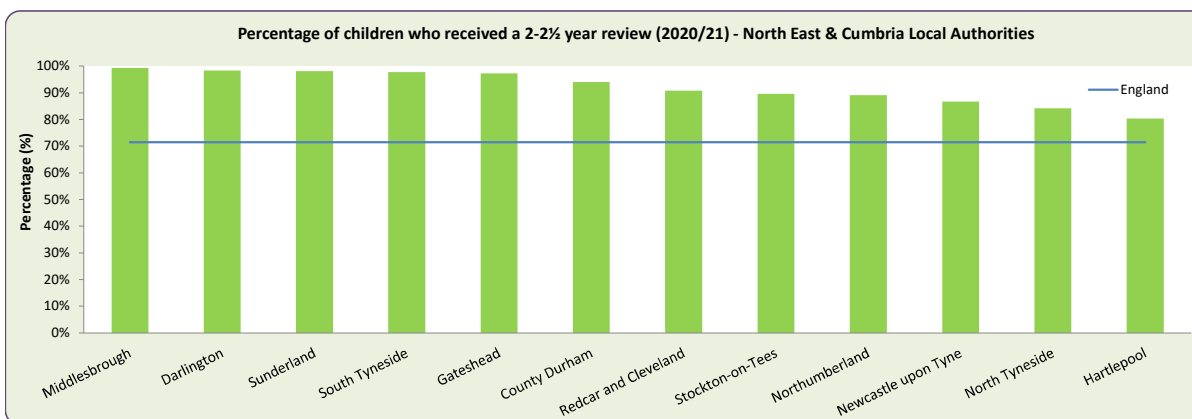
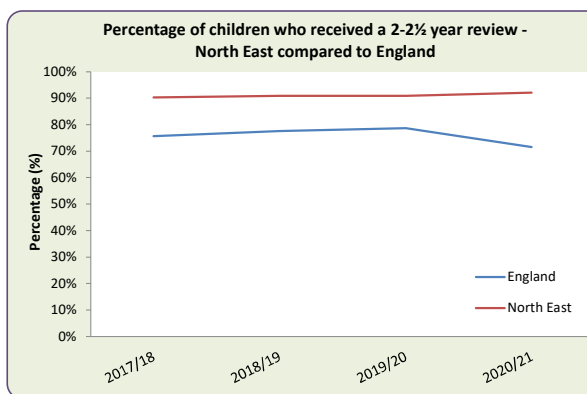
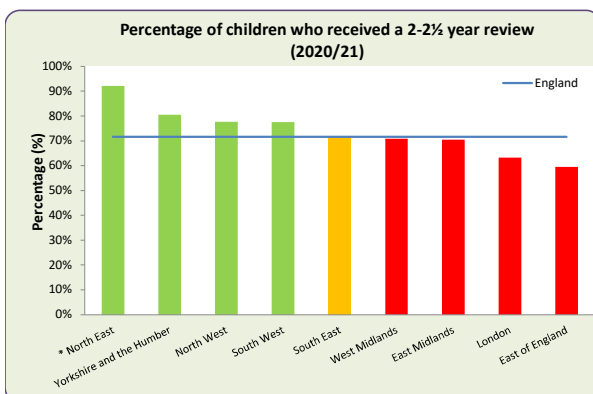
Within the North East and Cumbria, the majority of Local Authority areas were significantly better than the national average, with only Cumbria and Stockton-on-Tees having significantly lower percentages than the national average.

10. Department of Health and Social Care. (2009). Healthy Child Programme: Pregnancy and the First 5 years of Life. <https://www.gov.uk/government/publications/healthy-child-programme-pregnancy-and-the-first-5-years-of-life>

29. Percentage of children who received a 2-2½ year review (2020/21)

Percentage of children who received a 2-2½ year review by the time they turned 2½ years old.

North East	Yorkshire and the Humber	North West	South West	South East	West Midlands	East Midlands	London	East of England	England
92.1	80.4	77.6	77.6	71.4	70.7	70.5	63.3	59.4	71.5



At risk and vulnerable

Data source: Office for Health Improvement and Disparities. Public Health Profiles. 2022 (<http://fingertips.phe.org.uk>) © Crown copyright 2022

Definitions / Notes

Health visiting is a crucial aspect of childhood development, ensuring the 'best start in life', reassuring parents and tackling any issues early in the child's life¹⁰. The 2-2½ year review forms part of the Healthy Child Programme (HCP)¹⁰, and provides an opportunity for the child's social, emotional, behavioural and language development to be assessed and to provide support and advice to the parents. It also provides an opportunity to provide encouragement and support to take up early years education and to remind parents of the importance of immunisations. This indicator measures the percentage of children receiving a 2-2½ review by the time they turned 2½.

Please note that virtual contacts in 2020/21 during the period of the pandemic response were also counted as valid, mandated service delivery.

Note: Data for Cumbria has not been included due to the data failing stage 2 validation.

What is the data telling us?

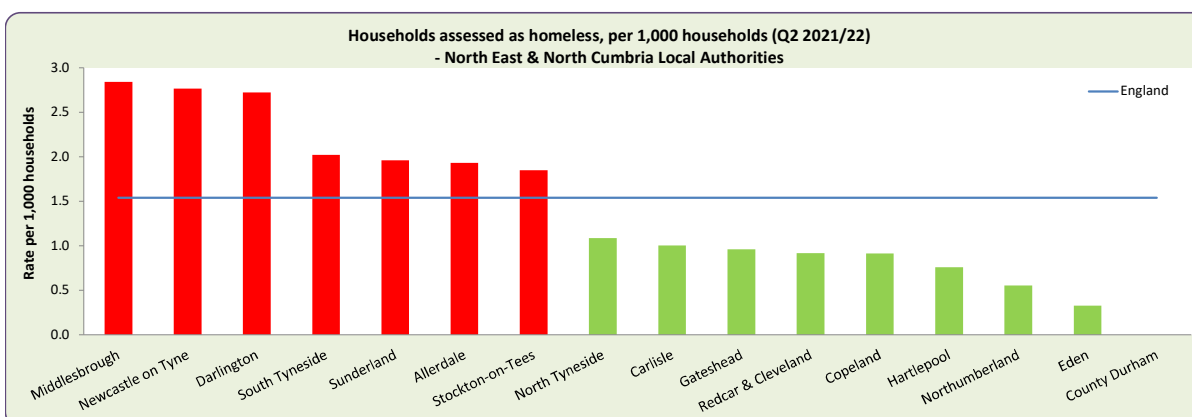
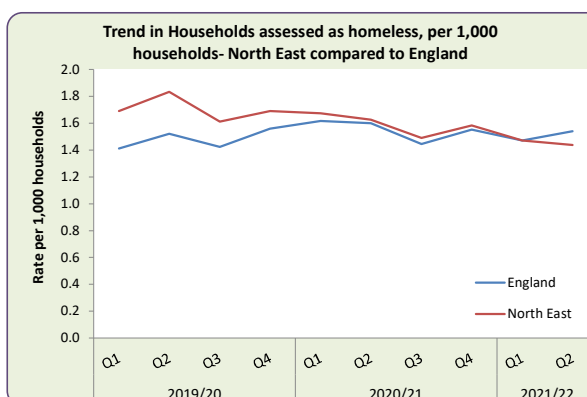
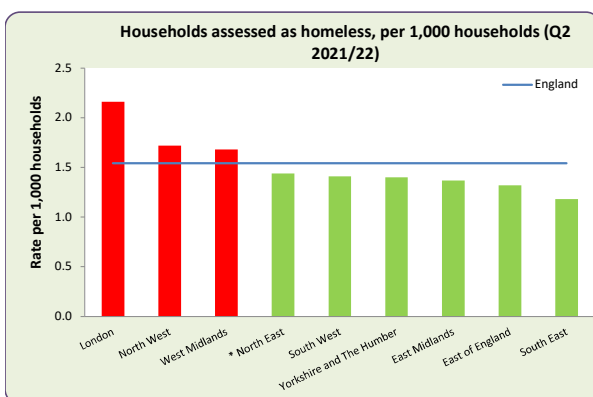
For the period 2020/21 the percentage of children who received a review by the time they turned 2½ years old was higher in the North East region than in any of the other English health regions. While 2020/21 saw a fall in the percentage of children nationally receiving a 2-2½ year review, the percentage in the North East increased slightly.

Across the North East and Cumbria, the proportion of children who received a 2-2½ year review by the time they turned 2½ years old was significantly higher in all local authorities compared to the national average.

30. Households assessed as homeless (Q2 2021/22)

Households initially assessed as homeless (owed relief duty) per thousand households.

London	North West	West Midlands	North East	South West	Yorkshire and The Humber	East Midlands	East of England	South East	England
2.2	1.7	1.7	1.4	1.4	1.4	1.4	1.3	1.2	1.5



Data source: Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities and Local Government. Homelessness statistics. <https://www.gov.uk/government/collections/homelessness-statistics>

Definitions / Notes

People experiencing homelessness are significantly more likely to suffer from a mental or physical health problem¹¹. Physical illnesses linked to or associated with homelessness include respiratory disorders, malnutrition, chronic pain, skin diseases, musculoskeletal disorders and poor dental health¹¹.

The proportion of households assessed as homeless is calculated as a rate of the number of households where relief duty is owed per 1000 households in the area. Relief duty is where local authorities are required to help households, who on approaching the local authority are already homeless, to secure settled accommodation¹². This duty lasts for up to 56 days. Only households assessed as homeless on initial assessment are included so this excludes households who were homeless at the end of a prevention duty. A prevention duty is where local authorities deliver activities aimed at preventing a household threatened with homelessness from becoming homeless¹².

County Durham did not provide accurate data in Quarter 2 of 2021/22 so no data is shown in the local authority chart above.

What is the data telling us?

In the latest time period, the rate of homelessness in the North East (1.4 per 1,000) is significantly lower than the England rate (1.5 per 1,000).

Trend data from the beginning of 2019/20 show that until recently the rate of homelessness has been higher in the North East than that observed nationally. Within the North East the rate has been slowly declining and in Quarter 1 of 2021/22 the national and regional rates converged. While the North East rate has continued its downward trend in Quarter 2 of 2021/22, the national rate, in contrast, has risen to the level it had been six months earlier.

Within the NENC AHSN, just over half of the local authorities where data were available had a rate significantly lower than the England average in Quarter 2 of 2021/22. However, the remaining seven local authorities had significantly higher rates. The highest rate in the NENC AHSN was observed in Middlesbrough (2.8 per 1,000) whilst the lowest rate was observed in Eden (0.3 per 1,000).

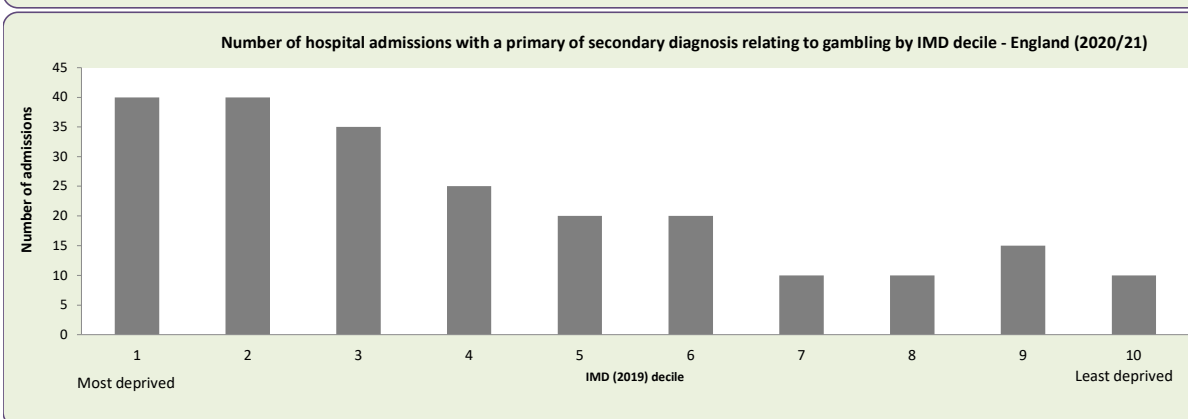
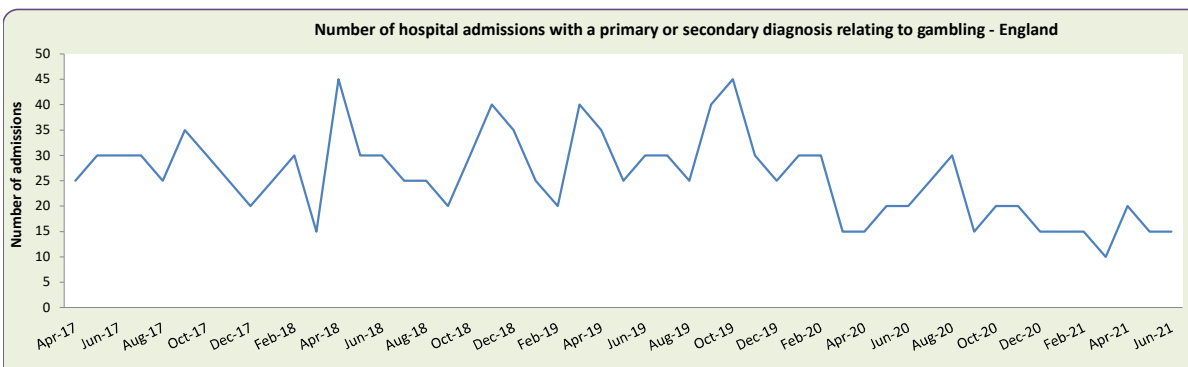
11. Onaga, H., Sharpley, C. F., Bitsika, V., McMillan, M. E., MacLure, K., Smith, L., & Agnew, L. L. (2021). The physical and mental health effects of housing homeless people: A systematic review. *Health & Social Care in the Community*. <https://doi.org/10.1111/hsc.13486>

12. Department for Levelling Up, Housing & Communities. (2022) Statutory Homelessness July to September (Q3) 2021: England. Technical Notes. <https://www.gov.uk/government/statistics/statutory-homelessness-in-england-july-to-september-2021>

31. Hospital admissions with a primary or secondary diagnosis relating to gambling (2020/21)

Number of finished admission episodes with a primary or secondary diagnosis relating to gambling.

England
220



Data source: Hospital Episode Statistics (HES) datasets are accessed via the Data Access Environment, and re-used with the permission of NHS Digital. Copyright © 2022, NHS Digital. All rights reserved. The 2021/22 HES data is classed as provisional.

Definitions / Notes

There is increasing concern about the harms associated with gambling¹³. Gambling can lead to a number of issues ranging from financial issues, family issues and health harms such as suicide¹³. It is estimated that harms associated with gambling cost society roughly £1.27 billion a year¹³. Gambling can not only harm the participant but also their family and friends with an estimated 1 million people in the UK negatively affected by a family member or friend's gambling¹⁴.

This indicator is based on hospital admissions with a primary or secondary diagnosis as classified by the International Classification of Diseases (10th revision) (ICD-10) of:

- ICD-10 F63.0 Pathological Gambling
- ICD-10 Z72.6 Gambling and Betting

Please note data relating to 2021/22 is provisional. Due to the small numbers involved data is only presented at England level.

What is the data telling us?

The number of admissions relating to gambling has fallen across England since October 2019. There is also a notable drop in March 2020 with around 25 fewer admissions compared to March 2019. Since April 2017, in comparison to other causes, admission numbers relating to gambling remain very small.

There appears to be a strong correlation between deprivation and the number of admissions associated with gambling with those living in the most deprived deciles more likely to be admitted to hospital for gambling harms than those in the least deprived areas. This pattern was also found in a Public Health England review¹³ of gambling harms which highlighted that although the highest rates of general gambling participation are among relatively less deprived groups, harmful gambling rates are higher amongst the unemployed and those living in more deprived areas.

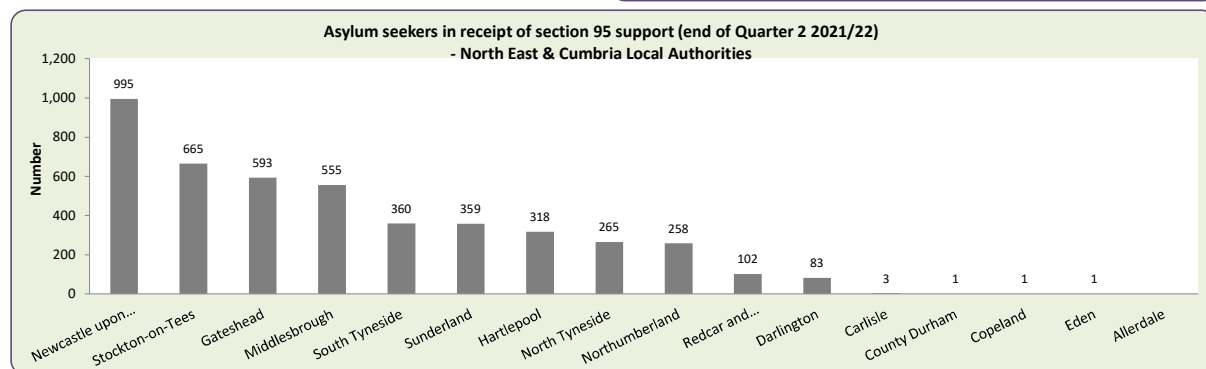
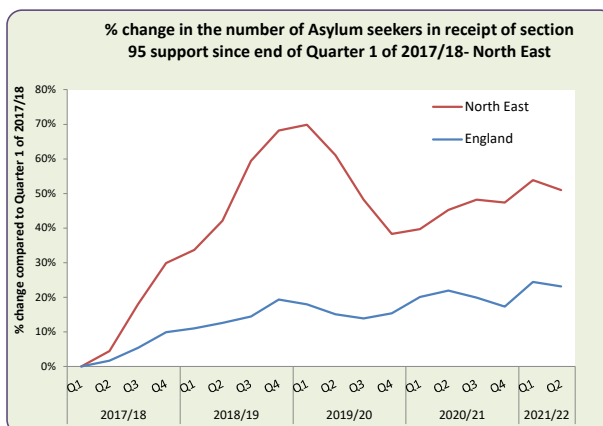
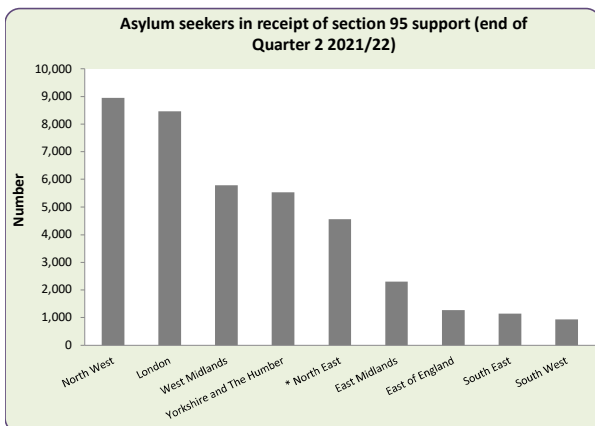
13. Public Health England. (2021). Gambling-related harms: evidence review. <https://www.gov.uk/government/publications/gambling-related-harms-evidence-review>

14. Adfam. (2021). Overlooked. <https://adfam.org.uk/files/Overlooked.pdf>

32. Asylum seekers in receipt of section 95 support (Q2 2021/22)

The number of asylum seekers in receipt of section 95 support by financial quarter.

North West	London	West Midlands	Yorkshire and The Humber	North East	East Midlands	East of England	South East	South West	England
8944	8464	5789	5536	4554	2298	1268	1138	936	38927



Data source: Home Office. Asylum and resettlement datasets. <https://www.gov.uk/government/statistical-data-sets/asylum-and-resettlement-datasets>

Definitions / Notes

Refugees and asylum seekers can have complex health needs¹⁵. Some of these health challenges include untreated communicable diseases, poorly controlled chronic conditions, maternity care and mental health and specialist support needs¹⁵. Refugees and asylum seekers have an increased risk of suffering from mental health conditions particularly if they have experienced or witnessed violence and trauma¹⁶.

Data is available at local authority level which reports the number of asylum seekers in receipt of section 95 support by local authority. These are immigration statistics provided by the Home Office. Figures reflect the number of people in receipt of support at the end of each quarter rather than the total supported throughout the period. In this report the data are reported for financial year quarters, rather than for the calendar year quarters in the source dataset.

Section 95 provides support for asylum seekers who have an asylum claim or appeal outstanding, and failed asylum seekers who had children in their household when their appeal rights were exhausted. The data includes those in receipt of:

- Dispersed accommodation - those in receipt of accommodation only, or both accommodation and subsistence.
- Subsistence only - the applicant receives cash to support themselves but they have found their own accommodation.

This data excludes unaccompanied asylum-seeking children supported by Local Authorities.

Due to technical data extraction issues, figures for Quarter 3 of 2020/21 were taken from the beginning of December rather than the end of the month.

No data was available for Allerdale.

What is the data telling us?

At the end of Quarter 2 in 2021/22, there were 4554 asylum seekers in receipt of section 95 support in the North East. Nationally the number of asylum seekers in receipt of section 95 is increasing. Regionally, between Quarter 1 of 2017/18 and Quarter 1 of 2019/20 there was a rapid increase of almost 70% in the number of asylum seekers in receipt of section 95 support. This is in sharp contrast to a more gradual increase (18%) seen nationally over the same time period. Although the number of asylum seekers dropped considerably across the region in 2019/20, the number appears to be rising again.

There is wide variation in the number of asylum seekers in receipt of section 95 support across the NENC local authorities at the end of Quarter 2 of 2021/22, ranging from 995 in Newcastle to 1 in Eden, Copeland and County Durham.

15. BMA. (2021). Refugee and asylum seeker patient toolkit - Unique health challenges for refugees and asylum seekers. <https://www.bma.org.uk/advice-and-support/ethics/refugees-overseas-visitors-and-vulnerable-migrants/refugee-and-asylum-seeker-patient-health-toolkit/unique-health-challenges-for-refugees-and-asylum-seekers>

16. Pollard, T. & Howard, N. (2021). Mental healthcare for asylum-seekers and refugees residing in the United Kingdom: a scoping review of policies, barriers, and enablers. *International Journal of Mental Health Systems*, 15(1), 60–60. <https://doi.org/10.1186/s13033-021-00473-z>