North East and North Cumbria's

Child Health and Wellbeing Network

The Facts of Life for children and young people growing up in the North East and North Cumbria

Introduction

September 2021

@NorthNetChild

Forward from the Network

Dear Network member

It gives us great delight to share this fantastic resource that the North East Quality Observatory Service (NEQOS) have developed for us. A fantastic baseline of our current child health and wellbeing system to enable us to monitor our progress in the coming years, so critical after the impact of the pandemic on your young people. But, and perhaps even more importantly, we are so pleased that we offer this resource to everyone working with children, young people and families – to arm you with the stark facts of life for our young people and the shocking health inequalities statistics that will motivate us to continue to raise the voice of young people, evidence their work and attract others to fund innovations and work with us to change these facts in future years.

What we don't want:

- **Middlesbrough** to be known for its twice the national average number of children in relative low income families *(page 5/6 chapter 3)*
- Or **Allerdale**, **Copeland** and **Eden** for the lower than national chlamydia detection rates for 15-24year olds (*page 46, chapter 6)*
- **South Tyneside** for its rate of asthma admissions for 19-24 year olds being double that of the England average *(page 14 chapter 2)*
- Or **Gateshead** for rates of children who started to be looked after due to abuse or neglect in 2018 – over double the national average *(page 14, Chapter 4).*

But let us be known for the massive turnaround in these facts over the next ten years.

We know there is much work already to improve many of these statistics, so the network has given each chapter a Spotlight statement to direct momentum into prominent issues highlighted within the analysis.

Tees Valley has the greatest population of 5-9yr olds, alongside the highest number of children in poverty.

Chapter One SPOTLIGHT to direct momentum for initiatives

We hope these are a helpful to spotlight and look forward to working alongside you to achieve some 10 year goals. We must also acknowledge not only NEQOS for producing this fabulous resource, but also our network membership that helps drive us forward and in particular two of our Executive members Lorraine Hughes and Chris Drinkwater for their review and contribution to its development.

Best wishes

Dr Mike McKean **Heather Corlett**

Clinical and Programme Leads of the NENC ICS's Child Health and Wellbeing Network (respectively)

Senior Responsible Officers for the NENC CYP Transformation Programme

Introduction from the Network

The Integrated Care System for the North East and North Cumbria identified the need for a Child Health and Wellbeing Network in 2018. It was developed in partnership with all organisations working within the system and has an agreed vision and workplan based on the priorities identified by over 1000 professionals and CYP. Its vision states that:

In the North East and North Cumbria we believe all children and young people should be given the opportunity to flourish and reach their potential, and be advantaged by organisations working together

All the Network's publications are developed for the whole system to access and benefit from regardless of their organisation to ultimately benefit the children and young people they work with. The network supports initiatives for the wider system and whilst the data in this report is not 'new' it offers a very local view, with the data already summarised with key points of notes to benefit even those who not routinely access data at source to freely access and use in their work to promote the needs of children and young people.

Introduction to this report

This report has been designed as a snapshot of children's, young people's and maternal health in the North East and North Cumbria (NENC). It summarises the current position and trend over time where available on a wide range of indicators relating to pregnancy and children and young people aged from birth to 25 years. These may be in the form of risk factors, outcomes, spend and healthcare usage which all combine to give us a view of how things vary across the region and compare nationally.

The report is structured across the network's child health and wellbeing priorities (figure 1), with a section covering each of the priorities with the exception of "Inequalities and Access" which will be an overarching theme throughout the report. Additionally a section on Socio-demography helps to set the scene for the challenges and opportunities facing the region, and a section on Education and Attainment has been added to highlight the links between this topic and other outcomes.

The majority of data in this report is derived from publicly available data, mainly from Public Health England's (PHE) Fingertips[1] platform which presents primary data developed by various PHE teams as well as data from other sources such as NHS Digital, the Office for National Statistics (ONS) and other organisations.

As the majority of data included in this report is from 2020 or earlier, any impact of COVID-19 on the indicators included will not yet be evident. Whilst children and young people are at a lower risk of serious illness and death from COVID-19 the longer term impacts are not yet fully understood but are expected to impact across health and wellbeing, educational and societal outcomes, both directly and indirectly[2] [3]. Such influences must be considered when comparing any future data and understanding changes in trends.

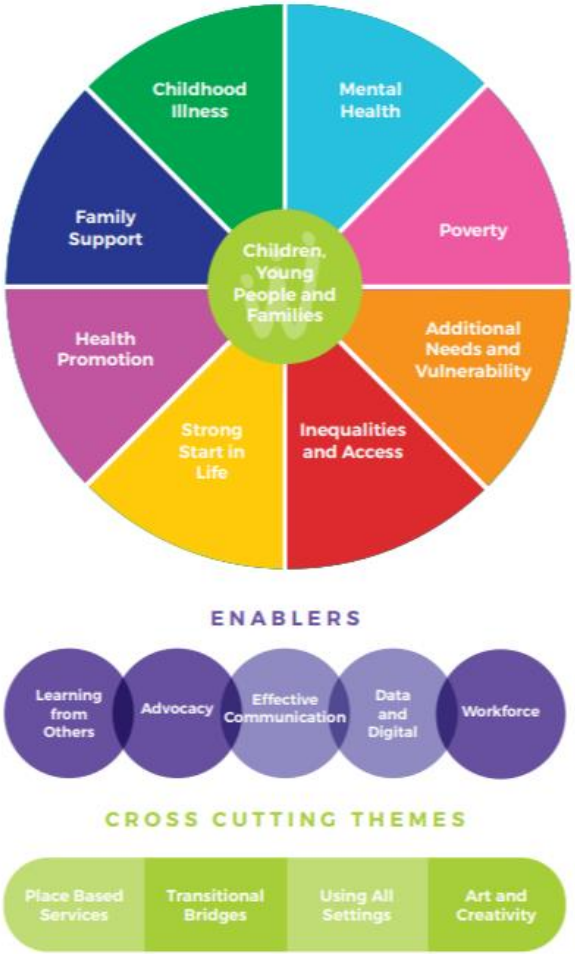
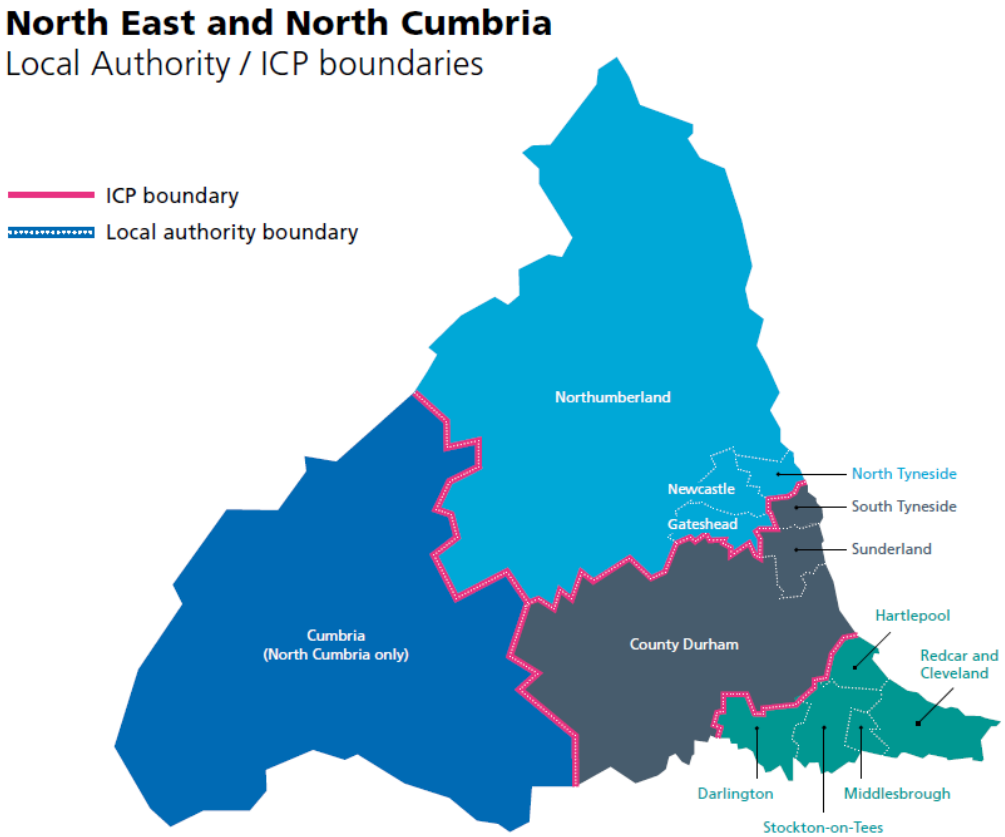


Figure 1: Child Health and Wellbeing Network priority wheel

[1] PHE Fingertips: link
[2] COVID-19 and the Northern Powerhouse, Northern Health Science Alliance: link
[3] The impact of COVID-19 on children, United Nations: link

North East and North Cumbria



NENC ICS-wide

North East Ambulance Service FT covers: North of Tyne and Gateshead ICP; Durham, South Tyneside and Sunderland ICP; Tees Valley South ICP

CNTW Mental Health FT covers: North Cumbria ICP; North of Tyne and Gateshead ICP; plus part of South Tyneside and Sunderland ICP

TEWV Mental Health FT covers: Tees Valley ICP; plus part of South Tyneside and Sunderland ICP

Newcastle upon Tyne Hospital FT: provider of highly specialised and specialised national and regional services (including transplant, paediatric specialisms and major trauma)

South Tees Hospitals FT: provider of highly specialised north of England and regional services (including cardiothoracic, spinal, cochlear implant neurosciences, gynaecology, urology and major trauma)

North of Tyne and Gateshead ICP

Population: 1.079M
3 CCGs: Northumberland, North Tyneside, Newcastle Gateshead
Primary Care Networks: 22
3 FTs: Northumbria, Newcastle, Gateshead
4 Council Areas: Northumberland, North Tyneside, Newcastle, Gateshead

Durham, South Tyneside and Sunderland ICP

Population: 997,000
3 CCGs: South Tyneside, Sunderland, County Durham
Primary Care Networks: 22
2 FTs: South Tyneside & Sunderland, County Durham and Darlington
3 Council Areas: South Tyneside, Sunderland, County Durham

North Cumbria ICP

Population: 324,000
1 CCG: North Cumbria
Primary Care Networks: 8
1 FT: North Cumbria Integrated Care NHS Foundation Trust (NCIC)
1 Council Area: Cumbria County Council (with 4 District Councils)
North West Ambulance Service

Tees Valley ICP

Population: 701,000
1 CCG: Tees Valley
Primary Care Networks: 14
3 FTs: County Durham and Darlington, North Tees & Hartlepool, South Tees
5 Council Areas: Hartlepool, Stockton on Tees, Darlington, Middlesbrough, Redcar & Cleveland

Figure 2: Geographical groupings of North East and North Cumbria Integrated Care Service

Integrated Care Partnership	Clinical Commissioning Group (CCG)	Local Authority (LA)
North Cumbria	North Cumbria CCG	Allerdale Carlisle Copeland Eden (In many cases Lower Tier Local Authority data is not available, in these cases Cumbria as a whole is displayed)
North of Tyne and Gateshead	Northumberland CCG North Tyneside CCG Newcastle Gateshead CCG	Northumberland North Tyneside Newcastle upon Tyne Gateshead
Durham, South Tyneside and Sunderland	South Tyneside CCG Sunderland CCG County Durham CCG (formerly Durham Dales, Easington and Sedgefield CCG and North Durham CCG)	South Tyneside Sunderland County Durham
Tees Valley	Tees Valley CCG (formerly Darlington CCG, Hartlepool and Stockton-on-Tees CCG and South Tees CCG)	Darlington Hartlepool Middlesbrough Redcar & Cleveland Stockton-on-Tees

Table 1: Geographical groupings of North East and North Cumbria Integrated Care Service

The North East and North Cumbria Integrated Care System (ICS) covers a large geographical area and comprises of 4 Integrated Care Partnerships (ICPs), 8 Clinical Commissioning Groups (CCGs) and 12 Upper Tier Local Authorities in the North East plus 4 Lower Tier Local Authorities which make up North Cumbria. Throughout this report data will be presented at the most appropriate available level of geography and grouped by ICP as shown in table 1. As explained in the table where lower tier North Cumbria local authorities are not available Cumbria is used in their place, and text will refer to the North East and Cumbria.

Using this report

This report has been constructed in several parts for ease of use, with each main theme having its own chapter:

- Chapter 1 – Resident population socio-demography
- Chapter 2 – Childhood illness and long-term conditions – supports network **Childhood Illness** priority
- Chapter 3 – Child poverty – supports network **Poverty** priority
- Chapter 4 – Children with additional needs and vulnerabilities – supports network **Additional Needs and Vulnerability** priority
- Chapter 5 – Mental health and emotional wellbeing – supports network **Mental Health** priority
- Chapter 6 – Health promotion – supports network **Health Promotion** priority
- Chapter 7 – Strong start in life – supports network **Strong Start in Life** priority
- Chapter 8 – Education and attainment

Each chapter contains an introduction to explain its relevance to the report, a detailed analysis of indicators relating to the theme, a summary of relevant network actions, and a list of policy and research documents to support further investigation. Additionally, presented alongside each set of indicators is a link to a live, bespoke Fingertips web page containing the indicators in the section.

This can be used to see updates to data made since production of this report as well as additional breakdowns such as inequalities and the full set of definitions for each indicator. Fingertips is maintained by Public Health England and indicators and functionality will develop over time.

Presentation of data

Benchmarking and comparisons

For ease of use, data in this report is presented in a style similar to Fingertips, with significance compared to England and trends displayed where available from the source. Indicators are presented in one of three ways as illustrated in figure 3 and according to these definitions:

1. Red/Amber/Green (RAG) whereby yellow represents a value statistically similar to England, Red represents a value statistically significantly worse and Green represents a value statistically significantly better. There are two variations on this in relation to vaccinations and chlamydia detection, these are explained in detail in the Chapter 6 - Health Promotion section.

2. Dark blue/Amber/Light blue which is similar to the RAG colour coding described above, but Fingertips has chosen not to display using better/worse. Similar still represents a value similar to England, with dark blue significantly lower and light blue significantly higher.

3. Quintile charts are used when not comparing with England. The range of data is split into five equally-sized groups (called ‘quintiles’). The lowest quintile, for example, contains the 20% of geographies with the lowest values and the upper quintile contains the 20% of geographies with the highest values.

A legend with relevant colouring is shown at the top of every page with a chart featured.

Time trends

Where trend data is available this is displayed as a triangle next to the indicator value. This is coloured in accordance with the indicator type, with RAG coloured indicators having red or green upward or downward trends. All other trends are displayed in black.

Timeliness

Indicators are presented using the most recent available data. In some cases, such as Census data this could be quite old, therefore the data period is presented for all indicators for clarity.

Data quality

Where data is not shown due to disclosure control (small numbers) or other data quality issues an '*' is shown in place of a value. Where relevant this is explained in the text and full definitions and caveats can be found through the Fingertips links in each chapter. Missing data, or where Fingertips has been unable to calculate a NENC regional figure are represented by an '-'.

				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Example Red/Amber/Green indicator	2019	12.0	7.0	1.0 ▲	2.0	3.0 ▶	4.0 ▶	5.0 ▶	6.0	7.0	8.0	9.0	10.0	11.0 ▼	12.0	13.0	14.0	15.0	16.0
Example Blue/Amber/Blue indicator	2019	12.0	7.0	1.0 ▲	2.0	3.0 ▶	4.0 ▶	5.0 ▶	6.0	7.0 ▼	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0
Example quintile indicator	2019	12.0	7.0	1.0 ▲	2.0	3.0 ▶	4.0 ▶	5.0 ▶	6.0	7.0	8.0	9.0	10.0	11.0 ▶	12.0 ▶	13.0	14.0	15.0	16.0

Figure 3: Examples of data presentation

How to guide

This report summarises a large amount of data with supporting evidence which can be overwhelming, however it has been designed so that each section can be read in isolation to support a specific priority or topic. Each section has a brief introduction and summary of evidence and related documents to support it, and one or more charts in the style of Figure 3 above with key messages summarised below. A reader may choose to study the data in detail to understand where the highs and lows are in the region, and where available how this data is changing over time, but we would strongly encourage reading the text below this to see the points we have identified as worthy of note for the region and individual areas. These messages have been highlighted by

geographical area in the same colouring as the row at the top of the figures, so for example if you are specifically looking for messages relating to the **Tees Valley** you will these highlighted in the text as shown.

Summary

The information provided in this report is a summary of available indicators as of August 2021. This is intended to be used as a reference document at this point in time, however updates to indicators occur regularly so we would encourage you to use the included links to sources and further explore the functionality of PHE's Fingertips platform. New indicators are developed regularly, for example the indicators of maternal risk factors from the Maternity Services Data Set (MSDS) were first published in 2020 and new indicators are likely to develop from the same source.

North East and North Cumbria's

Child Health and Wellbeing Network

The Facts of Life for children and young people growing up in the North East and North Cumbria:

Chapter 1 – Resident population socio-demography

September 2021

@NorthNetChild

Tees Valley has the greatest population of 5-9yr olds, alongside the highest number of children in poverty.

Chapter One SPOTLIGHT to direct momentum for initiatives

1 Resident population socio-demography

1.1 Relevance

In order to fully understand the risk factors and outcomes associated with the other chapters of this report it is important to set the scene in terms of demographics and other non-health related indicators to start to examine the challenges and opportunities faced by the region.

1.2 Commentary and findings

1.2.1 Demographics

Age breakdowns by local authorities in the region are presented, providing contextual information to compare between areas and to support research and resource provision for age specific programmes and interventions.

As a region **North East and North Cumbria (NENC)** has broadly similar proportions of young people to England as a whole. However, there is variation across the region with greater proportions of 5-9 year olds in the **Tees Valley**, a much higher proportion of 20-24 year olds in **Newcastle upon Tyne**, and lower proportions across all 0-24 age groups in **Northumberland** and some of the North Cumbrian local authorities.

				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Population aged 0-4 (Count and % of total population)	2020	3,239,447 5.7%	154,194 5.1%	4,395 4.5%	5,614 5.2%	3,260 4.8%	2,147 4.0%	10,174 5.0%	16,383 5.3%	14,506 4.5%	11,256 5.4%	25,658 4.8%	8,130 5.4%	14,370 5.2%	5,692 5.3%	5,147 5.5%	9,431 6.7%	6,954 5.1%	11,077 5.6%
Population aged 5-9 (Count and % of total population)	2020	3,539,458 6.3%	173,222 5.8%	5,175 5.3%	6,329 5.8%	3,752 5.5%	2,589 4.8%	11,378 5.6%	17,375 5.7%	16,606 5.1%	11,928 5.7%	29,949 5.6%	8,728 5.8%	16,080 5.8%	6,509 6.1%	5,774 6.2%	9,840 7.0%	8,289 6.0%	12,921 6.5%
Population aged 10-14 (Count and % of total population)	2020	3,435,579 6.1%	172,737 5.7%	5,459 5.6%	6,151 5.7%	3,748 5.5%	2,776 5.2%	11,327 5.6%	16,469 5.4%	17,580 5.4%	12,162 5.8%	30,024 5.6%	8,594 5.7%	15,738 5.7%	6,674 6.2%	5,982 6.4%	9,031 6.4%	7,990 5.8%	13,032 6.6%
Population aged 15-19 (Count and % of total population)	2020	3,115,871 5.5%	162,601 5.4%	4,741 4.8%	5,525 5.1%	3,285 4.8%	2,459 4.6%	10,917 5.4%	21,041 6.9%	15,920 4.9%	10,471 5.0%	29,348 5.5%	7,681 5.1%	14,390 5.2%	5,729 5.3%	5,126 5.5%	8,267 5.9%	6,952 5.1%	10,749 5.4%
Population aged 20-24 (Count and % of total population)	2020	4,197,633 7.4%	228,977 7.6%	5,614 5.7%	6,495 6.0%	3,957 5.8%	2,691 5.0%	14,631 7.2%	46,881 15.3%	17,444 5.4%	12,042 5.8%	43,516 8.2%	9,823 6.5%	20,071 7.2%	6,538 6.1%	6,339 6.8%	12,861 9.1%	8,575 6.2%	11,499 5.8%

Figure 1.1 – Resident population

Chart legend
Quintiles low high

				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
% population from ethnic minorities (Persons, 16+, %)	2016	13.6	4.1	*	1.1	*	*	4.3	12.6	1.3	2.8	1.5	4.5	4.2	3.5	1.2	9.2	1.1	5.2

Figure 1.2 – Percentage of the population from ethnic minorities

To further understand the demographic profile of the region an indicator showing the percentage of people from an ethnic minority is displayed. Health outcomes and prevalence of risk factors can vary greatly by ethnicity and this should be considered when assessing population health needs. For example obesity prevalence in National Child Measurement Programme (NCMP)[1] data (Chapter 6) is higher in children in some Black and Asian ethnicities than the England average, while smoking rates in early pregnancy (Chapter 7) in these groups are significantly lower than the England average. All local authorities in the region have a lower percentage of the population from ethnic minorities than England (13.6%) with the highest percentages being **Newcastle upon Tyne** (12.6%) and **Middlesbrough** (9.2%).

1.2.2 Population health outcomes

Life expectancy and healthy life expectancy at birth are key summary outcome measures of population health included as overarching indicators in the public health outcomes framework for England[2]. Life expectancy is an estimate of total length of life whereas healthy life expectancy shows the years a person can expect to live in good health (rather than with a disability or in poor health).

[1] https://digital.nhs.uk/services/national-child-measurement-programme/
[2] Public Health Outcomes Framework (2021): link

Chart legend

Significance compared with England | worse | similar | better

While a recent trend cannot be displayed by Fingertips, nationally and in the **North East region** life expectancy has increased in both males and females over time (in males by around 3 years from 2001-03 to 2010-12 and by 2 years in females in the same period), however the most recent years of data have showed this levelling off.

				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Life expectancy at birth - Male (All ages, years)	2017-19	79.8	-	79.6	78.4	78.8	82.3	77.8	77.9	79.5	78.2	78.3	77.0	77.0	78.8	76.9	75.4	78.2	78.5
Life expectancy at birth - Female (All ages, years)	2017-19	83.4	-	82.3	82.9	81.7	85.4	81.8	81.9	82.8	82.0	81.8	81.8	81.4	81.9	81.3	80.3	81.8	81.7

Figure 1.3 – Life expectancy

At a locality level, the data indicate that on average:

- Within the **NENC region** most local authorities have a significantly lower life expectancy than England for both males and females, with the **Tees Valley** local authorities having particularly low values.
- For males, life expectancy in **Allerdale** (79.6) and **Northumberland** (79.5) are similar to England (79.8), with **Eden** significantly higher at 82.3.
- For females, life expectancy in **Carlisle** (82.9) is similar to England (83.4) and again **Eden** is significantly higher at 85.4.

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Healthy life expectancy at birth - Male (All ages, years)	2017-19	63.2	-	62.9	58.2	61.0	60.9	60.6	59.6	60.4	57.5	58.1	57.0	58.5	60.2	57.8
Healthy life expectancy at birth - Female (All ages, years)	2017-19	63.5	-	66.0	59.7	58.7	61.7	59.3	58.3	58.5	57.3	62.2	57.4	58.5	60.3	56.8

Figure 1.4 – Healthy life expectancy

At a locality level, the data indicate that on average:

- Most of the **North East and Cumbria** has significantly lower healthy life expectancy (the number of years a person can expect to live in good health) than the England average.
- For males, healthy life expectancy in local authorities in the **North East and Cumbria** is significantly lower than the England average (63.2), other than **Cumbria** (62.9) which is similar.
- For females, healthy life expectancy in local authorities in the **North East and Cumbria** is significantly lower than the England (63.5) average other than **Cumbria** (66.0) which is significantly higher, and **Darlington** (62.2) which is similar.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/3wkrqU0VUe.

1.2.3 Social determinants of population health

Social determinants, also known as wider determinants, are a diverse range of social, economic and environmental factors which impact on population health. These factors, influenced by local, national and international distribution of resources, shape the conditions of daily life and the extent to which individuals of all ages have the physical, social and personal resources to identify and achieve goals, meet their needs and respond to changes in their circumstances[3].

The Marmot review emphasised the strong and persistent link between social inequalities and disparities in health outcomes and the importance of tackling the wider determinants of health to improve health outcomes and reduce health inequalities[4]. Evidence suggests that these 'wider determinants of health' are more important than health care in ensuring a healthy population and reducing health inequality[5] [6].

The purpose of this section is to present an overview of the social context, challenges and opportunities for children and families in the NENC region. It presents key summary metrics relating to the social determinants of health and compares how these vary within the region and against England averages. Further information with a greater focus on children and young people and specific determinants of their health and wellbeing is provided in the other chapters of this report.

Deprivation

The Index of Multiple Deprivation (IMD) is the official measure of relative deprivation in England and is part of a suite of outputs that form the Indices of Deprivation (IoD). It recognises that deprivation extends beyond financial resources i.e. people can be considered to be living in poverty if they lack the financial resources to meet their needs, whereas people can be regarded as deprived if they lack any kind of resources not just income[7]. Seven distinct domains of deprivation are recognised although the IMD awards different weightings to each one, the highest weightings are awarded to income and employment:

[3] Wider determinants of health, PHE Fingertips: link
[4] Marmot M. (2010) Fair society, healthy lives. Strategic review of health inequalities in England post 2010: link
[5] PHE (2018) Health profile for England. Chapter 6: Wider Determinants of Health: link
[6] Dahlgren, G. and Whitehead, M. (1993) Tackling inequalities in health: what can we learn from what has been tried?
[7] Ministry of Housing, Communities and Local Government (2020) English indices of deprivation: link

- Income
- Employment
- Health deprivation and disability
- Education skills and training
- Crime
- Barriers to housing and services
- Living environment

Deprivation, as measured by the Index of Multiple Deprivation (IMD), is an important measure to compare indicators of healthcare outcomes and behavioural risk factors. Most indicators used in this report can be displayed within Fingertips by deprivation decile at a national level in order to see association, and this will be discussed further throughout as an incredibly important factor influencing population health. This section also includes various other measures of deprivation in order to fully set the scene for the region and its constituent lower geographies.

Chart legend

Significance compared with England: worse | similar | better

Quintiles: low | high

				Lower tier local authorities															
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Percentage living in 20% most deprived areas in England (Persons, All ages, %)	2014	20.2	29.4	20.3	16.2	24.9	0.0	24.8	35.2	17.2	21.4	27.1	46.2	38.2	22.7	44.7	57.2	35.8	28.1
Deprivation score (IMD2019) (Persons, All ages, IMD Score)	2019	21.7	-	22.9	22.0	25.0	16.3	28.2	29.8	22.1	22.3	26.8	31.5	30.6	25.7	35.0	40.5	29.8	25.8
Child Poverty, Income deprivation affecting children index (IDACI) (Persons, <16, %)	2019	17.1	-	15.1	14.9	16.4	8.7	20.4	24.7	17.4	17.9	22.2	26.7	24.2	20.3	28.3	32.7	25.6	20.9
Crime deprivation: score (Score)	2015	0.0	-	-0.4	-0.3	-0.4	-1.0	-0.3	-0.1	-0.8	-0.7	-0.2	-0.3	-0.2	0.2	0.1	0.6	0.0	-0.3
Income deprivation, English Indices of Deprivation (Persons, all ages, %)	2019	12.9	-	12.1	11.6	13.0	7.0	16.7	17.9	12.6	14.4	16.5	20.6	19.2	15.3	22.8	25.1	18.6	16.4

Figure 1.5 – Deprivation

The **NENC region** as a whole has a higher proportion (29.4%) living in the 20% most deprived areas of England than the national average (20.2%), and all of our local authorities with the exception of **Eden** have a higher IMD2019 deprivation score than the national average of 21.7.

At a locality level using the most recent available data:

- In **Middlesbrough** in 2014 57.2% of people lived in the 20% most deprived areas in England, almost three times the national average.
- The percentage in child poverty using the Income deprivation affecting children index (IDACI) varies across the region. The highest rates are in **Tees Valley**, particularly **Middlesbrough** (32.7%) which is almost twice that of England (17.1%). **Middlesbrough** also has the highest crime deprivation score (0.6) and the highest level of income deprivation (25.1%).
- For most indicators relating to deprivation **North Cumbria** has lower or similar values to the national average, with the exception of **Copeland** having 24.9% living in the 20% most deprived areas in England.

Other social determinants

This section displays indicators relating to employment and job seeking alongside other social determinants. Access to employment (good work) can result in greater disposable income and less deprivation, as well as contributing to better physical and mental health and wellbeing, whilst the opposite is linked to unemployment or poor work. For people with disabilities and long-term conditions employment can help to promote participation in society and improve wellbeing[8].

[8] Is work good for your health and well-being (2006), Department of Work and Pensions: link

Chart legend

Significance compared with England	worse	similar	better
Significance compared with England	lower	similar	higher

				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Lone parent families: % of households (Persons, %)	2011	7.1	7.8	6.0	6.4	5.9	4.3	7.8	7.6	6.2	7.9	7.7	9.6	8.3	8.7	9.7	10.4	8.6	8.6
Percentage of people aged 16-64 in employment (Persons, 16-64 years, %)	2019/20	76.2 ▲	-	83.9 ▶	81.3 ▶	71.2 ▶	88.7 ▶	73.4 ▶	67.0 ▶	73.1 ▶	79.1 ▶	71.4 ▶	69.9 ▶	70.3 ▶	74.9 ▶	68.1 ▶	65.2 ▶	66.1 ▶	72.7 ▶
Average weekly earnings (Persons, 16+ years, £)	2020	474.4	-	454.9	445.8	555.6	396.9	419.4	414.7	425.3	457.3	434.1	432.1	416.2	426.3	439.8	391.8	410.5	435.7
Long term claimants of Jobseeker's Allowance (Persons, 16-64 years, rate per 1,000)	2020	2.6 ▼	4.7 ▼	1.8 ▼	1.8 ▶	2.4 ▼	1.7 ▶	3.7 ▼	2.7 ▼	6.3 ▶	4.2 ▶	2.7 ▼	10.0 ▶	7.4 ▶	5.8 ▶	3.7 ▼	7.9 ▶	7.2 ▼	5.7 ▼
Statutory homelessness: rate per 1,000 households (Persons, all ages, rate per 1,000 households)	2017/18	2.4 ▲	1.0 ▼	0.5 ▶	0.5 ▶	0.7 ▶	*	2.4 ▶	1.7 ▶	1.2 ▶	1.9 ▶	0.6 ▼	0.9 ▼	0.7 ▼	0.4 ▶	0.8 ▶	0.4 ▼	0.6 ▲	0.4 ▲

Figure 1.6 – Other social determinants

Chart legend
Quintiles low high

On average, the data relating to the **NENC region** indicate that:

- The rate of long term claimants of Jobseekers Allowance and proportion in lone parent families are higher than the England average with some regional variation. The rate of statutory homelessness is lower in the **NENC region** (1.0 per 1,000 households) than the national average (2.4 per 1,000 households).

At a locality level using the most recent available data:

- The region varies greatly across these indicators, though the percentage in employment and average weekly earnings are lower than the England average for most of the region, ranging from **Eden** (88.7%) to **Middlesbrough** (65.2%).
- All local authorities other than **Northumberland** and those in **North Cumbria** have higher proportions of lone parent households than England.
- **South Tyneside** (10.0 per 1,000 population) had the highest rate of long term claimants of Jobseekers Allowance in the region. 10 of the 18 local authorities in the region have a higher rate than England.

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Domestic abuse related incidents and crimes (Persons, 16+ years, rate per 1000)	2019/20	28.0 ▲	-	22.2	34.9	34.9	34.9	34.9	61.3	34.9	34.9	61.3	40.0	40.0	40.0	40.0

Figure 1.7 – Other social determinants – Upper tier local authority (note values based on the police force area present in the local authority)

- All police force areas in the **North East and Cumbria** have a higher rate of domestic abuse related incidents and crimes than the England average, other than **Cumbria**. Please note that Figure 1.7 is based on the police force area of the LA they are based in, e.g. **Hartlepool**, **Middlesbrough**, **Redcar & Cleveland** and **Stockton-on-Tees** are all covered by Cleveland Police and have the same value.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/ZsXlREwBTk.

1.3 Relevant key policy and research papers

Marmot M. (2010) Fair society, healthy lives. Strategic review of health inequalities in England post 2010 https://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review/fair-society-healthy-lives-full-report-pdf.pdf

Marmot M. et al (2020) Health Equity in England: The Marmot Review 10 Years On https://www.health.org.uk/publications/reports/the-marmot-review-10-years-on

PHE (2021) Supporting public health: children, young people and families https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-children

Association for Young People's health (2016) A public health approach to promoting young people's resilience. http://www.youngpeopleshealth.org.uk/wp-content/uploads/2016/03/resilience-resource-15-march-version.pdf

PHE (2018) Health profile for England. Chapter 6: Wider Determinants of Health https://www.gov.uk/government/publications/health-profile-for-england-2018/chapter-6-wider-determinants-of-health

Dahlgren, G. and Whitehead, M. (1993) Tackling inequalities in health: what can we learn from what has been tried?

Kings Fund (2012/13) Broader Determinants of health https://www.kingsfund.org.uk/projects/time-think-differently/trends-broader-determinants-health

Ministry of Housing, Communities & Local Government (2019) The English Indices of Deprivation 2019 infographic https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/833959/IoD2019_Infographic.pdf

Children's Commissioner (2018) Growing up North https://www.childrenscommissioner.gov.uk/report/growing-up-north-a-generation-of-children-await-the-powerhouse-promise/

University of Liverpool and Centre for Local Economic Strategies (2014) Due North: the report of the inquiry on Health Equity for the North https://cles.org.uk/wp-content/uploads/2016/10/Due-North-Executive-summary-report-of-the-Inquiry-on-Health-Equity-in-the-North.pdf

North East and North Cumbria's

Child Health and Wellbeing Network

The Facts of Life for children and young people growing up in the North East and North Cumbria:

Chapter 2 - Childhood illness and long-term conditions

September 2021

@NorthNetChild

How illness is managed in our communities. The current level of A&E use and emergency admissions usually from our more disadvantaged communities is unsustainable. We need to think about paediatricians and primary care networks working together to develop triage pathways and manage childhood illness in community settings.

Chapter Two SPOTLIGHT to direct momentum for initiatives

2 Childhood illness and long-term conditions

2.1 Relevance

This chapter describes hospital admissions for children and young people in regard to acute illnesses and long-term conditions.

Emergency hospital care is only one part of a complex health and social care system serving children and families. It is affected by supply (availability and quality of services) and demand (the need or desire for services) factors.

Whilst access to primary care has been shown to have an impact on the number of A&E attendances, broader environmental and socioeconomic factors also shape health-seeking behaviours as well as admission behaviour e.g. higher neighbourhood deprivation has been associated with increased A&E attendances in both adults and children[1].

The six most common conditions resulting in the presentation for paediatric acute care are: bronchiolitis/croup, fever, gastroenteritis, head injury, wheezy child/asthma and abdominal pain[2].

[1] Nuffield Trust (2017) Focus on: emergency hospital care for children and young people: link
[2] NHS Gloucestershire Clinical Commissioning Group. The big 6 most common conditions children present with to urgent care. Gloucester, 2014: link

The number of children and young people admitted to hospital is rising across the UK but there is a lack of evidence to recommend the best way to manage paediatric acute care and reduce avoidable admissions[3]. Hospital admissions are costly but also carry multiple personal costs to children, young people and their families e.g. disruption to family life, increased emotional distress and exposure to infections.

Preventive primary care can also play a key role in improving child health and reducing demand for avoidable emergency hospital admissions for both acute and chronic conditions[4].

2.2 Commentary and findings

2.2.1 Emergency healthcare use

Children and young people account for 25% of emergency department attendances and are the most likely age group to attend A&E unnecessarily[5]. Children and young people from the most deprived areas are consistently more likely both to go to A&E and to need emergency hospital treatment than children from the least deprived areas[6]. Many of these attendances could be managed effectively in primary care or community settings[7].

Emergency admissions and A&E attendances are included as a measure of healthcare need in an area, giving a picture of hospital activity across the life course of children and young people. This can be used to prompt further investigation into the causes of admissions and attendances.

[3] Husk K et al. Interventions for reducing unplanned paediatric admissions: an observational study in one hospital. BMJ Paediatrics Open 2018; 2: e000235: link
[4] BMC Medicine (2018) Impact of preventive primary care on children's unplanned hospital admissions: a population based birth cohort study of UK children 2000-2013 link
[5] Nuffield Trust (2017) Focus on: emergency hospital care for children and young people: link
[6] Nuffield Trust (2017) Admissions of inequality: emergency hospital use for children and young people: link
[7] NHS England (2018) NHS Long term plan. Redesigning other health services for children and young people: link

Chart legend

Significance compared with England: worse | similar | better

				Clinical commissioning groups							
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland			Tees Valley
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Tees Valley
A&E attendances (under 1 year) (Persons, <1 year, rate per 1000)	2018/19	1051.4	-	636.7	1615.0	1397.9	1629.5	-	2142.4	2652.9	-
A&E attendances (0-4 years) (Persons, 0-4 years, rate per 1000)	2018/19	669.9 ▲	935.3	502.6 ▲	1072.4 ▲	898.1 ▲	1006.6 ▲	645.7 ▼	1315.3 ▲	1679.9 ▲	856.7 ▲
A&E attendances (under 18 years) (Persons, <18 years, rate per 1000)	2018/19	420.5 ▲	-	354.5 ▲	663.7 ▲	556.6 ▲	612.0 ▲	-	740.3 ▲	935.4 ▲	-
A&E attendances (18-24 years) (Persons, 18-24 years, rate per 1000)	2019/20	453.6	544.0	470.7	538.6	622.2	743.0	397.7	691.2	581.3	589.5

Figure 2.1 – A&E Attendances

At a locality level, the data indicate that on average:

- Where data is available most **North East and North Cumbria (NENC)** CCGs have significantly higher rates of A&E attendances across all age ranges compared to the England average. The only exceptions are **North Cumbria** and **County Durham**, though rates are increasing in **North Cumbria**.

- The highest rates are found in younger age groups, particularly in **South Tyneside** and **Sunderland**.

Chart legend

Significance compared with England: worse | similar | better

				Clinical commissioning groups							
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland			Tees Valley
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Tees Valley
Emergency admissions (rate per 1000 population) <1 (Persons, <1 yr)	2019/20	372.9 ▲	-	560.1 ▲	560.2 ▶	499.1 ▶	532.2 ▶	486.4 ▶	339.4 ▶	375.4 ▶	619.4 ▲
Emergency admissions (aged 0-4) (Persons, 0-4 yrs, Crude rate- per 1,000)	2019/20	164.9 ▲	-	263.7 ▲	253.2 ▶	247.0 ▲	269.6 ▶	209.3 ▶	158.0 ▶	197.0 ▶	270.4 ▲
Emergency admissions under 18 years (Persons, <18 yrs, Crude rate- per 1,000)	2019/20	74.3 ▶	-	108.3 ▲	109.7 ▶	110.2 ▲	122.3 ▶	88.3 ▼	74.9 ▶	89.0 ▼	114.8 ▶
Emergency admissions (aged 18-24) (Persons, 18-24 yrs, Crude rate- per 1,000)	2019/20	68.9	71.6	62.3	54.9	117.2	116.3	64.6	90.3	58.1	76.2

Figure 2.2 – Emergency admissions

At a locality level, the data indicate that on average:

- Six of the eight **NENC** CCGs have significantly higher emergency admission rates in under 1 year olds than the England average, with rates of up to 619.4 emergency admissions per 1,000 in **Tees Valley**. Contrasting this, **South Tyneside** has a significantly lower rate than the England average whilst **Sunderland** has a rate similar to the England average.

- In children aged 0-4 and 0-17 emergency admission rates are significantly higher than the England average in all NENC CCGs other than **South Tyneside** which is similar to the England average for both age ranges.

- For young people aged 18-24 there is more variation. While the region as a whole has a significantly higher emergency admission rate than the England average, half the NENC CCGs have a significantly higher rate and half significantly lower.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/yarWnKAQHE

2.2.2 Acute illness

Hospital admissions for childhood infections reflect the complex interplay between prevention, need, health seeking behaviour and service provision.

Wider preventive care can play a key role. For example, childhood infections including gastroenteritis and lower respiratory tract infections (LRTIs) can be mitigated by health improvement and protection strategies including breastfeeding and vaccination[8] [9].

Emergency admissions for children with LRTIs is one of the key metrics included in the NHS Outcomes Framework. It is concerned with measuring how successfully the NHS manages to reduce avoidable emergency admissions for children with selected types of LRTI (bronchiolitis, bronchopneumonia and pneumonia)[10].

[8] Thomas SL. Et al. (2017) Impact of the national rotavirus vaccination programme on acute gastroenteritis in England and associated costs averted. Vaccine 2017; 35(4): 680-6: link
[9] Frank NM. Et al. (2019) The relationships between breastfeeding and reported respiratory and gastrointestinal infection rates in young children. BMC Pediatrics 2019; 339: link
[10] NHS Digital (2021) NHS Outcomes Framework Indicators February 2021 release: link

Chart legend

Significance compared with England: worse | similar | better

	Period	England	Region	Clinical commissioning groups: North Cumbria	North of Tyne and Gateshead: Newcastle Gateshead	North of Tyne and Gateshead: Northumberland	North of Tyne and Gateshead: North Tyneside	Durham, South Tyneside and Sunderland: County Durham	Durham, South Tyneside and Sunderland: South Tyneside	Durham, South Tyneside and Sunderland: Sunderland	Tees Valley: Tees Valley
Admissions of babies under 14 days (Persons, <14 days, Crude rate- per 1,000)	2019/20	76.5 ▲	-	75.8 ▲	85.2 ▶	48.9 ▶	58.4 ▶	117.8 ▶	38.3 ▶	36.8 ▶	92.3 ▶
Admissions for gastroenteritis in infants aged under 1 year (Persons, <1 yr, Crude rate- per 10,000)	2019/20	144.3 ▶	-	180.1 ▶	197.1 ▶	270.7 ▶	300.5 ▶	255.0 ▶	185.1 ▶	214.5 ▶	321.6 ▶
Admissions for gastroenteritis in infants aged 1 year (Persons, 1 yr, Crude rate- per 10,000)	2019/20	93.1 ▶	-	180.1 ▶	140.8 ▶	219.9 ▶	193.2 ▶	151.1 ▶	92.6	160.9 ▶	218.7 ▶
Admissions for gastroenteritis in infants aged 2, 3 and 4 years (Persons, 2-4 yrs, Crude rate- per 10,000)	2019/20	44.7 ▼	-	81.9 ▶	59.4 ▶	90.2 ▶	71.5 ▶	56.7 ▶	61.7 ▶	71.5 ▶	87.9 ▶

Figure 2.3 – Acute illness

Chart legend

Significance compared with England: worse | similar | better

	Period	England	Region	Clinical commissioning groups: North Cumbria	North of Tyne and Gateshead: Newcastle Gateshead	North of Tyne and Gateshead: Northumberland	North of Tyne and Gateshead: North Tyneside	Durham, South Tyneside and Sunderland: County Durham	Durham, South Tyneside and Sunderland: South Tyneside	Durham, South Tyneside and Sunderland: Sunderland	Tees Valley: Tees Valley
Admissions for lower respiratory tract infections in infants aged under 1 year (Persons, <1 yr, Crude rate- per 10,000)	2019/20	684.6 ▲	-	1162.7 ▲	1032.2 ▶	1082.8 ▲	1073.1 ▲	840.6 ▶	864.0 ▶	858.0 ▶	1177.1 ▲
Admissions for lower respiratory tract infections in infants aged 1 year (Persons, 1 yr, Crude rate- per 10,000)	2019/20	127.5 ▲	-	163.8 ▶	168.9 ▶	203.0 ▶	279.0 ▶	85.0 ▶	154.3 ▶	232.4 ▶	128.6 ▲
Admissions for lower respiratory tract infections in children aged 2, 3 and 4 years (Persons, 2-4 yrs, Crude rate- per 10,000)	2019/20	30.2 ▲	-	38.2 ▶	31.3 ▶	39.5 ▶	42.9 ▲	15.7 ▶	51.4 ▶	59.6 ▲	21.4 ▶

Figure 2.3 – Acute illness (continued)

At a locality level, the data indicate that on average:

- There is considerable variation across the **NENC region** in the emergency admissions rate of babies under 14 days with four CCGs having significantly lower rates than the England average, the lowest being in **Sunderland** (36.8 per 1,000

deliveries), but three CCGs having significantly higher rates than the England average, the highest being **County Durham** (117.8 admissions per 1,000 deliveries). Like the England average, **North Cumbria** shows a significant recent increasing trend in their admission rate, however, all other NENC CCGs show no significant changes.

- For gastroenteritis **South Tyneside** have similar emergency admission rates to the England average for all three age bands presented (under 1 year, 1 year and 2-4 years), and **North Cumbria** have a similar rate in under 1 year olds. All other CCGs and age bands have significantly higher rates of admission than the England average.

- For lower respiratory infections there is significant variation across the **NENC region**. While for under 1 year olds all NENC CCGs are higher than the England average (684.6 per 10,000), for older age groups the region is more varied:

    - In children aged 1 the emergency admission rate varies between **County Durham** (85.0 per 10,000), which is significantly lower than the England average (127.6 per 10,000), and **North Tyneside** (279.0 per 10,000) which is significantly higher.

    - In children aged 2-4, **County Durham** (15.7 per 10,000) is again significantly lower than the England average (30.2 per 10,000), with **Sunderland** (59.6 per 10,000) the highest.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/cZ9nhHrdck.

2.2.3 Long-term conditions

Three conditions - asthma, diabetes and epilepsy - account for 94% of emergency admissions for children under 19 years with long term conditions[11].

Emergency hospital admission rates for these conditions are included in the NHS Outcomes framework as indicators of how successfully the NHS is enabling a whole system approach to manage these conditions and prevent avoidable emergency hospital care. Clinical audit is a valuable pillar of care quality improvement.

Asthma

The UK has among the highest mortality rates in Europe for children and young people with the underlying cause of asthma[12]. Asthma is most common condition in children and young people affecting 1 in 10 or 11 CYP in the UK. There is wide geographical variation in emergency asthma admission rates for children across the UK. Most emergency admissions are preventable, with high-quality management (including the use of asthma plans) and early intervention to address deterioration in control[13].

The children and young people asthma audit, a component of the National Asthma and COPD Audit Programme (NACAP), is a continuous clinical audit with an episodic organisational audit component. It launched in June 2019 and captures the processes of care, clinical outcomes of treatment for children and young people admitted to hospital with asthma attacks. The most recent data found that 66.8% of children and young people admitted to hospital with asthma attacks presented with severe or life-threatening features of acute asthma, and 19.5% were so severely ill they required intravenous therapy[14].

[11] NHS Digital (2021) NHS Outcomes Framework Indicators – February 2021 release: link
[12] RCPCH (2020) State of Child Health: link
[13] Nuffield Trust (2017) Admissions of inequality: emergency hospital use for children and young people: link
[14] NACAP: Children and young people asthma clinical and organisational audits 2019/20: link

Chart legend

Significance compared with England: worse | similar | better

				Clinical commissioning groups							
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland			Tees Valley
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Tees Valley
Admissions for asthma for children aged 0 to 9 (Persons, 0-9 yrs, Crude rate- per 100,000)	2019/20	192.8	-	213.8	251.7	266.9	349.6	210.8	207.4	286.5	215.8
Admissions for asthma for young people aged 10 to 18 (Persons, 10-18 yr, Crude rate- per 100,000)	2019/20	119.0	-	117.8	195.2	214.0	214.4	146.0	238.6	202.9	184.4
Admissions for asthma for young people aged 19 to 24 (Persons, 19-24 yr, Crude rate- per 100,000)	2019/20	103.1	116.1	55.6	63.9	175.5	173.0	90.6	208.0	151.9	175.8

Figure 2.4 – Asthma

At a locality level, the data indicate that on average:

- For admissions for asthma for children aged 0 to 9 in **NENC** there is a notable geographical divide with all CCGs in the **North of Tyne and Gateshead ICP** having significantly higher rates than the England average but all other CCGs, except **Sunderland**, having rates similar to that of the England average.

- The majority of NENC CCGs have significantly higher rates of admissions for asthma for young people aged 10 to 18 than the England average (119.0 per 100,000). This is most notable in **South Tyneside** (238.6 per 100,000). **North Cumbria** (117.8 per 100,000) is the only CCG with a lower rate than the England average, but not significantly so.

- For 19 to 24 year olds rates of admission are lower in all CCGs than in 10 to 18 year olds, suggesting better management of their condition. In **Newcastle Gateshead** (63.9 per 100,000) the rate is significantly lower than the England average (103.1 per 100,000).

Diabetes

Diabetes is an increasingly common long-term conditions in children and young people. Type 1 diabetes constitutes the vast majority (90%) of diabetes in children. The prevalence of Type 1 diabetes is not linked with deprivation. Type 2 diabetes is less common in children and young people but is strongly associated with deprivation.

Poor management of diabetes in childhood can have severe long-term health implications and children and young people from deprived or black and minority ethnicity backgrounds are more likely to experience poorer diabetes control. The rate of emergency hospital admissions for type 1 diabetes is significantly higher for older children and young people. Among young adults (aged 15–19 and 20–24), emergency hospital admissions are increasing and the deprivation gradient is preserved. By contrast, there is no clear relationship with deprivation among young children (0–4 years and 5–9 years)[15].

The national paediatric diabetes audit is performed annually in England and Wales to provide information that can inform care quality improvement. The most recent audit found inequalities relating to ethnicity and deprivation with black children and young people least likely to be using real time continuous glucose monitoring and those living in more deprived areas at higher risk of retinopathy, albuminuria, needing additional psychological support, and higher HbA1c levels[16].

[15] Nuffield Trust (2017) Admissions of inequality: emergency hospital use for children and young people: link
[16] RCPCH (2021) National Paediatric Diabetes Audit: link

Chart legend

Significance compared with England: worse | similar | better

				Clinical commissioning groups							
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland			Tees Valley
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Tees Valley
Admissions for diabetes for children 0-9 (Persons, 0-9 yrs, Crude rate- per 100,000)	2019/20	27.6	-	45.8	36.0	31.4	*	26.4	*	33.7	36.0
Admissions for diabetes for young people aged 10 to 18 (Persons, 10-18 yr, Crude rate- per 100,000)	2019/20	77.7	-	84.1	58.6	49.4	95.3	91.3	68.2	110.7	95.6
Admissions for diabetes for young people aged 19 to 24 (Persons, 19-24 yr, Crude rate- per 100,000)	2019/20	102.8	122.7	139.1	111.8	117.0	173.0	101.9	*	126.5	164.8

Figure 2.5 – Diabetes

At a locality level, the data indicate that on average:

- Where data is available for 0 to 9 year olds, all **NENC** CCGs have similar rates to the England average for admissions for diabetes, however this ranges from **County Durham** (26.4 per 100,000) to **North Cumbria** (45.8 per 100,000).
- For 10 to 18 year olds all NENC CCGs have similar rates to the England average, ranging from **Northumberland** (49.4 per 100,000) to **Sunderland** (110.7 per 100,000).
- Emergency admissions for diabetes are higher in the 19 to 24 age group than in the younger groups. For 19 to 24 year olds **North Tyneside** (173.0 per 100,000) and **Tees Valley** (164.8 per 100,000) both have significantly higher rates of diabetes admissions than the England average (102.8 per 100,000). The **NENC region** (122.7 per 100,000) also has a significantly higher rate than the England average.

Epilepsy

Epilepsy is the commonest significant neurological disorder affecting children and young people. It can be difficult to diagnosis due to the lack of a specific diagnostic test and so under and over diagnosis occurs. Even among those who have a diagnosis of epilepsy, up to a third continue to have seizures despite treatment. Epilepsy is associated with a higher risk of mental health problems. 37% of children with epilepsy have a co-existing mental health disorder, a higher prevalence than found in other long term childhood conditions. Not all emergency admissions to hospital for epilepsy or seizures are avoidable. However, there is evidence that education, support with epilepsy medications and emergency seizure management plans can reduce emergency admissions[17].

High-quality epilepsy care requires a holistic approach that includes psychological and practical support in addition to medical expertise, plus early recognition and support of additional needs (including mental health and special educational needs)[18].

The Epilepsy Quality Improvement Programme (EQIP) for children and young people is underpinned by a national organisational and clinical audit, Epilepsy 12. The latest results highlighted the need to provide more mental health screening and care for those CYP with epilepsy. Other identified concerns included long waiting times for crucial investigations such as EEG or ECG and opportunities to improve rates of referral to tertiary neurology services[19].

[17] RCPCH (2020) State of Child Health: link
[18] Nuffield Trust (2017) Admissions of inequality: emergency hospital use for children and young people: link
[19] RCPCH (2021) Epilepsy12 audit: link

Chart legend

Significance compared with England: worse | similar | better

				Clinical commissioning groups							
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland			Tees Valley
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Tees Valley
Admissions for epilepsy for children 0-9 (Persons, 0-9 yrs, Crude rate- per 100,000)	2019/20	95.1	-	106.9	152.8	141.3	164.5	96.6	177.8	101.1	131.9
Admissions for epilepsy for young people aged 10 to 18 (Persons, 10-18 yr, Crude rate- per 100,000)	2019/20	56.9	-	67.3	78.1	65.9	119.1	54.8	68.2	73.8	75.1
Admissions for epilepsy for young people aged 19 to 24 (Persons, 19-24 yr, Crude rate- per 100,000)	2019/20	58.6	65.7	111.3	47.9	87.8	86.5	34.0	156.0	75.9	54.9

Figure 2.6 – Epilepsy

At a locality level, the data indicate that on average:

- The majority of **NENC** CCGs have significantly higher rates of admissions for epilepsy for children aged 0 to 9 than the England average (95.1 per 100,000), with rates highest in the region in **South Tyneside** (177.8 admissions per 100,000). The exceptions to this are in **North Cumbria**, **County Durham** and **Sunderland** with rates similar to the England average.

- For those aged 10 to 18 most NENC CCGs have rates similar to that of the England average (56.9 per 100,000). The exceptions to this are **Tees Valley** (75.1 per 100,000) and **North Tyneside** (119.1 per 100,000) both of which are significantly higher than the England average.

- For 19 to 24 year olds there is more variation across the region with **County Durham** (34.0 per 100,000) significantly lower than the England average (58.6 per 100,000), and **South Tyneside** (156.0 per 100,000) significantly higher.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/ADT7aTiG3k.

2.3 Commentary on network actions

Childhood illnesses are a priority for the network and long-term conditions are a priority of the NHS Long Term Plan that is the policy driver for the Transformation Programme within the network.

Initiatives related to this area include:

- Two successful NENC Asthma initiatives are part of the network's Integration Centre. BeatAsthma provides a standardised approach across secondary/primary care, schools and educating families and CYP and BReATHE (Beating Regional Asthma Through Health Education) is the program of education that embeds BeatAsthma.
- Beat Asthma ***(*** www.beatasthma.co.uk) and BReATHE initiative also reflect the values and ambitions that underpin the National Asthma Care Bundle which is part of the NHSEI CYP Transformation Programme, which the network delivers for the NENC.

  https://www.england.nhs.uk/childhood-asthma/

  https://www.england.nhs.uk/publication/national-bundle-of-care-for-children-and-young-people-with-asthma/

- The NENC Healthier Together website development (based on Home :: Healthier Together (what0-18.nhs.uk) is a region wide site and clinical repository for professionals and families relating to children's,(and potentially also maternal and mental health) guidance. This has been successfully implemented elsewhere and reduced the attendances for young people in urgent and emergency care settings. This initiative is also part of the networks integration centre and will be developed with the support of clinical leads and advisors from each of our 4 ICP geographies.

- The CYP Transformation programme has also funded work in our region for Spotting the deteriorating child initiatives which is being conducted in partnership across our region Great North Children's Hospital (Dr Emma Lim) in collaboration with Sunderland Royal Hospital (Dr Sarah Prudhoe) and James Cook University Hospital (Dr Jonathon Grimbley) with the support of AHSN NENC and Tony Roberts.

- Little Orange Book initiative developed by Newcastle Gateshead CCG and promoted by the network to spread across the region. It offers guidance to parents of young children (5 and under) on the top conditions that are seen in A&E but can usually be managed safely at home. The Little Orange Book is also being developed into an App by colleagues on the Tees Valley.

- The network works closely with other networks reducing duplication and connecting with others' work. The Children and Young People's North East and North Cumbria (CYPDNENC) Diabetes Network supports the work of 13 children and young people's multi-disciplinary teams/delivery units within eight Trusts around the region. It has partnered with the network on specific projects in relation to poverty proofing in clinical teams, health education support and their children and family groups.
- The network is also conducting two time limited pieces into Transitions and Epilepsy. Clinicians are leading this work, which will conclude its first phase in spring 2022.

For any further information and proposals on initiatives relating to childhood illnesses do contact the network via england.northernchildnetwork@nhs.net and the website Child Health and Wellbeing Network | North East and North Cumbria ICS.

2.4 Relevant key policy and research papers

Unplanned admissions

Nuffield Trust (2017) Focus on: emergency hospital care for children and young people https://www.nuffieldtrust.org.uk/files/2018-10/1540142848_qualitywatch-emergency-hospital-care-children-and-young-people-full.pdf

Nuffield Trust (2017) Admissions of inequality: emergency hospital use for children and young people. https://www.nuffieldtrust.org.uk/files/2017-12/nt-admissions-of-inequality-web.pdf

Health services

CQC (2014) Children's transition to adult health services https://www.cqc.org.uk/sites/default/files/CQC_Transition%20Report.pdf

RCPCH (2018) facing the future: standards for children with ongoing health needs https://www.rcpch.ac.uk/sites/default/files/2018-04/facing_the_future_standards_for_children_with_ongoing_health_needs_2018-03.pdf

NICE (2016) NICE guideline NG43 Transition from children's to adults' services for young people using health or social services https://www.nice.org.uk/guidance/ng43

NHS England (2018) NH Long term plan. Redesigning other health services for children and young people https://www.longtermplan.nhs.uk/online-version/chapter-3-further-progress-on-care-quality-and-outcomes/a-strong-start-in-life-for-children-and-young-people/redesigning-other-health-services-for-children-and-young-people/

Epilepsy

NICE (2021) Clinical Guideline CG137. Epilepsies: diagnosis and management https://www.nice.org.uk/guidance/CG137

RCPCH (2021) Epilepsy12 audit https://www.rcpch.ac.uk/resources/epilepsy12-national-organisational-audit-clinical-audit-2021

Healthy London Partnership (2018) London epilepsy standards for Children and Young People https://www.healthylondon.org/wp-content/uploads/2018/05/London-epilepsy-standards-for-children-and-young-people-May-18.pdf

Healthy London Partnership (2016) London epilepsy guide for schools https://www.healthylondon.org/wp-content/uploads/2017/11/London-epilepsy-guide-for-schools.pdf

Hargreaves et al. Association of quality of paediatric epilepsy care with mortality and unplanned hospital admissions among children and young people with epilepsy in England: a national longitudinal data linkage study. Lancet Child Adolesc Health 2019; 3(9): 627-35 https://pubmed.ncbi.nlm.nih.gov/31281027/

Diabetes

NICE (2020) NICE guideline NG18 Diabetes (type 1 and type 2) in children and young people: diagnosis and management https://www.nice.org.uk/guidance/ng18

RCPCH (2021) National Paediatric Diabetes Audit https://www.rcpch.ac.uk/work-we-do/quality-improvement-patient-safety/national-paediatric-diabetes-audit/about-national-paediatric-diabetes-audit

Healthy London Partnership (2015) London guide for teachers and parents of children and young people with diabetes https://www.healthylondon.org/wp-content/uploads/2017/11/Children-and-young-peoples-diabetes.pdf

Asthma

NICE (2021) NICE guideline NG80 Asthma: diagnosis, monitoring and chronic asthma management. https://www.nice.org.uk/guidance/NG80

Healthy London Partnership 2020. London asthma standards for children and young people https://www.healthylondon.org/wp-content/uploads/2020/09/HLP-Asthma-standards-1.pdf

NACAP: Children and young people asthma combined clinical and organisational audit 2019/20 https://www.rcplondon.ac.uk/file/30056/download

2.5 Technical note

This chapter contains five new indicators based on Hospital Episode Statistics (HES) data at new age ranges to complement indicators in Fingertips. These indicators are based on the CCG of responsibility for the admission or A&E attendance, and have been constructed in accordance with the latest HES analysis guidance[20]. The new indicators are:

- A&E attendances (18-24 years)
- Emergency admissions (18-24 years)
- Admissions for asthma for young people aged 19-24 – Emergency admissions only
- Admissions for diabetes for young people aged 19-24 – Emergency admissions only
- Admissions for epilepsy for young people aged 19-24 – Emergency admissions only

Full definitions are available on request.

[20] https://digital.nhs.uk/data-and-information/data-tools-and-services/data-services/hospital-episode-statistics/users-uses-and-access-to-hospital-episode-statistics

North East and North Cumbria's

Child Health and Wellbeing Network

The Facts of Life for children and young people growing up in the North East and North Cumbria:

Chapter 3 – Child poverty

September 2021

@NorthNetChild

We need to address the poverty cycle in which impoverished families have undernourished children with subsequent low educational attainment that results in low income employment or unemployment. We need better paid jobs, more early support, and more support for schools in disadvantaged areas.

Chapter Three SPOTLIGHT to direct momentum for initiatives

3 Child poverty

3.1 Relevance

Higher levels of child poverty are associated with a wide range of negative health impacts, resulting in worse cognitive, social-behavioural and health outcomes. Furthermore, living in poverty is associated with negative educational outcomes and adverse long- term social outcomes. These impacts are often enduring leading to poor physical and mental health and life chances in adulthood[1].

Tackling child poverty is fundamental to reducing health inequalities. Raising children out of poverty to give them the best start in life was a key recommendation in the 2010 Marmot Review[2]. The Inquiry on Health Equity for the North highlighted the relative disadvantage for children growing up in the north of England where there are higher levels of child poverty[3].

[1] Whickham S et al. Poverty and child health in the UK: using evidence for action. Arch Dis Child 2016; 101: 759-766: link
[2] Fair Society, healthy lives: the Marmot Review: strategic review of health inequalities in England post 2010: link
[3] Due North: Report of the Inquiry on Health Equity for the North. University of Liverpool and Centre for Local Economic Strategies: 2014: link

The North East currently has the second highest rate of child poverty in England behind Inner London and this is increasing[4].

The data in this chapter relate to routine measures and indicators of child poverty including:

- Percentage of resident children in low income families (relative and absolute)
- Percentage uptake of free school meals
- Rates of family homelessness

Child poverty was the second highest priority of the network as highlighted by professionals and the third highest as highlighted by children and young people themselves.

3.2 Commentary and findings

Child Poverty

Low income can be defined in absolute or relative terms.

Absolute low income is based on family income Before Housing Costs (BHC) in the reference year (2019/20 in this case) in comparison with incomes in 2010/11. Absolute low income takes the 60 per cent of median income threshold from 2010/11 and then fixes this in real terms (i.e. the line moves with inflation). A family must have claimed one or more of Universal Credit, Tax Credits or Housing Benefit at any point in the year to be classed as low income in these statistics. The children in absolute low income families measure is useful for tracking changes over time in relation to a fixed reference point and is designed to assess how low incomes are faring with reference to inflation[5].

[4] Jonathon Bradshaw (2020) Child poverty in the North East: link
[5] PHE Fingertips (2021) Indicator Definitions Children in absolute low income families (under 16s): link

Relative low income is used to measure the number and proportion of individuals who are currently in low income compared to the current me Chart legend efined as a family in low income Before Housing C Significance compared with England worse similar better d one or more of Universal Credit, Tax Credits or Housing Benefit at any point in the year to be classed as low income in these statistics[6].

				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Children in absolute low income families (under 16s) (Persons, <16 yrs, %)	2019/20	15.6 ▲	21.9 ▲	14.6 ▶	15.1 ▲	13.2 ▶	13.9 ▶	20.7 ▲	27.2 ▲	19.4 ▲	18.7 ▲	21.6 ▲	25.0 ▲	23.1 ▲	21.5 ▲	25.1 ▲	33.4 ▲	22.0 ▲	20.1 ▲
Children in relative low income families (under 16s) (Persons, <16 yrs, %)	2019/20	19.1 ▲	25.9 ▲	18.5 ▲	18.9 ▲	16.8 ▲	17.0 ▲	24.9 ▲	31.1 ▲	22.7 ▲	22.0 ▲	25.7 ▲	29.2 ▲	27.3 ▲	25.8 ▲	29.4 ▲	38.6 ▲	26.2 ▲	23.7 ▲
Children in low income families (all dependent children under 20) (Persons, 0-19 yrs, %)	2016	17.0 ▼	-	13.3 ▼	12.6 ▼	14.3 ▼	8.4 ▶	20.5 ▼	24.7 ▼	16.7 ▶	17.0 ▼	21.4 ▶	25.9 ▶	23.2 ▶	19.4 ▶	28.1 ▶	31.4 ▼	24.5 ▶	20.9 ▶

Figure 3.1 – Child poverty indicators – Lower tier local authorities

The data relating to children under 16 years indicate that, on average:

[6] PHE Fingertips (2021) Indicator Definition Children in relative low income families (under 16s): link

- There are significantly higher numbers of children living in low income families (absolute and relative) across the **North East and North Cumbria (NENC) region** compared with the England average, in all local authorities other than those in **North Cumbria**.
- In the **NENC region**, 25.9% of children are living in relative low income families compared with the England average (19.1%).
- The proportion of children in relative low income families varies between localities within the region. The lowest percentages are evident in **North Cumbria** (**Allerdale** 18.5%, **Carlisle** 18.9%, **Copeland** 16.8% and **Eden** 17.0%) but the rest of the region record significantly higher levels than the England average ranging from 22.0% in **North Tyneside** to 38.6% in **Middlesbrough** (a value which is twice the national average).
- Time trends indicate that the proportion of children in both absolute and relative low income families is rising across England as well as most of the **NENC region**.

The data relating to dependent children under 20 indicate that, on average:

- The proportion of children in low income families varies considerably across the **NENC region**.
- The four localities in **North Cumbria** have significantly lower proportions than the England average (17.0%), including **Eden** where the proportion (8.4%) is less than less than half the England average.
- All but two (**Northumberland** and **North Tyneside**) of the other areas in the NENC region have percentages which are significantly higher than England ranging from 20.5% in **Gateshead** to 31.4% in **Middlesbrough**.
- Time trends show that the numbers are falling in England and seven of the areas in the NENC region (**Allerdale**, **Carlisle**, **Copeland**, **Gateshead**, **Newcastle upon Tyne**, **North Tyneside** and **Middlesbrough**) but whilst all other areas remain stable.

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Free school meals: % uptake among all pupils (Persons, School age, %)	2018	13.5 ▼	17.1 ▼	9.8 ▼	15.9 ▼	25.5 ▶	12.3 ▼	12.6 ▼	18.1 ▼	19.2 ▼	20.9 ▶	16.5 ▼	25.8 ▶	24.2 ▼	17.9 ▼	16.4 ▼
Family homelessness (Persons, Crude rate- per 1,000)	2017/18	1.7 ▶	-	0.3 ▶	1.4 ▶	1.4 ▶	0.8 ▶	1.3 ▶	0.4 ▶	0.5 ▼	0.6 ▶	0.1 ▶	0.2 ▶	0.4 ▼	0.3	0.3

Figure 3.2 – Child poverty indicators – Upper tier local authorities

Free School Meals

The data for 2019 indicate that, on average:

- The percentage of school age children who are living in the **North East and Cumbria** and attending a state school who are eligible for and claiming free school meals (17.1%) is significantly higher than that seen on average across England (13.5%).
- This proportion varies widely between different localities in the region. The lowest proportions are reported in **Cumbria** (9.8%) and the highest in **Hartlepool** (25.8%).
- Time trends for England, the North East and Cumbria and its constituent local authorities indicate that the numbers are falling in most areas. There are three exceptions (**Newcastle upon Tyne**, **Hartlepool** and **Sunderland**) where the numbers are stable.

Family homelessness

The data for 2017/18 indicate that on average:

- Across the entire **North East and Cumbria** region, there are significantly lower rates of family homelessness per 1,000 households than the England average of 1.7 per 1,000.
- The lowest rate in the region and, based on national analysis, the second lowest across England is found in **Darlington** with a rate of 0.1 per 1,000.
- The highest rates in the region relate to **Gateshead** (1.4 per 1000), **Newcastle upon Tyne** (1.4 per 1000) and **North Tyneside** (1.3 per 1000).
- Across England, the region and most local authority areas in the region, the rates are not changing but the data for **South Tyneside** and **Middlesbrough** indicate that rates of family homelessness are falling significantly.

Live indicators and definitions from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/r8ICzjbDoE.

3.3 Commentary on network actions

Poverty is one of the top priorities of the Child Health and Wellbeing Network defined by the system and has its own workstream on the workplan.

As a baseline the network commissioned a scoping study to inform our actions around poverty proofing in health settings. Read the NENC Child health & wellbeing network (2021) Poverty proofing health settings report here.

In 2021 a second phase of this work was commenced to apply the initial consultation in practice looking at the impact of poverty on accessing diabetic services. This work is led by a partner network – the NENC CYP Diabetic network for further information contact jenny.foster5@nhs.net.

A network partnership has led to a successful NHS Charities Together bid which will enable further spread into more health care organisations in each of our 4 main geographical areas, do contact that work through Children's North East or england.northernchildnetwork@nhs.net.

This Poverty proofing work is an extension of Children North East's successful poverty proofing concept in Education (for Further details contact Children's North East luke.bramhall@children-ne.org.uk). Both the education implementation and the Network's focus on poverty proofing in health was successful in an Applied Research Collaborative bid led by Newcastle University which will start to strengthen the impact of such work on our young people. For further information on the research contact Dr Josephine Wildman NIHR Applied Research Collaboration North East & North Cumbria via Josephine.Wildman@newcastle.ac.uk .

Other work in the network is also directed to support communities in more deprived areas to ensure they are accessed by those area's first. For example the STAR initiative (South Tees ARts Project) brings an arts intervention to children adopting holiday hunger approaches to two primary schools located within geographies with high levels of deprivation.

The network partners with many organisations who have poverty as a core focus of their work and including the North East Child Poverty Commission stakeholder network who are active members of the End Child Poverty coalition and the Child Poverty action group (www.nechildpoverty.org.uk)

The networks Interactive film series tackle many issues exacerbated through poverty and support young people and professionals to explore some hard hitting issues in a safe environment.

The network has appointed new advisors to conduct a short term piece of work regarding Inequalities to be reported out in 2022 to ensure our reach into our underserved communities.

For any further information and proposals on initiatives relating to poverty do contact the network via england.northernchildnetwork@nhs.net and the website Child Health and Wellbeing Network | North East and North Cumbria ICS.

3.4 Relevant key policy and research papers

Health inequalities

Fair Society, healthy lives: The Marmot Review: strategic review of health inequalities in England post 2010 http://www.parliament.uk/documents/fair-society-healthy-lives-full-report.pdf

Health equity in England: The Marmot review 10 years on. https://www.health.org.uk/publications/reports/the-marmot-review-10-years-on

Due North: Report of the Inquiry on Health Equity for the North. University of Liverpool and Centre for Local Economic Strategies: 2014 https://cles.org.uk/wp-content/uploads/2016/10/Due-North-Executive-summary-report-of-the-Inquiry-on-Health-Equity-in-the-North.pdf

Child Poverty

IPPR (2020) Child poverty and devolution in North East England https://www.ippr.org/files/2020-09/child-poverty-and-devolution-sep20.pdf

Jonathon Bradshaw (2020) Child poverty in the North East https://cpag.org.uk/sites/default/files/files/policypost/Child%20poverty%20in%20the%20NE.pdf

NENC Child health & wellbeing network (2021) Poverty proofing health settings report https://nhsjoinourjourney.org.uk/wp-content/uploads/2021/03/NENC-CHWN-Poverty-Proofing-Health-Settings-Report.pdf

The North East Child Poverty Commission https://www.nechildpoverty.org.uk/about/

End Child Poverty Coalition http://www.endchildpoverty.org.uk/

Royal College of Paediatrics and Child Health (2020) State of Child Health. London: RCPCH https://stateofchildhealth.rcpch.ac.uk/evidence/family-and-social-environment/child-poverty/

Royal College of Paediatrics and Child Health (2018) The impact of poverty on child health https://www.rcpch.ac.uk/news-events/news/impact-poverty-child-health

Gregg P, Propper C and Washbrook E (2008) Understanding the relationship between parental income and multiple child outcomes: A decomposition analysis. Working Paper 08/193 Bristol: Centre for Market and Public Organisation University of Bristol. pp. 29. http://www.bristol.ac.uk/media-library/sites/cmpo/migrated/documents/wp193.pdf

Whickham S et al. (2016) Poverty and child health in the UK: using evidence for action. Arch Dis Child 2016; 101: 759-766 https://adc.bmj.com/content/archdischild/101/8/759.full.pdf

Taylor-Robinson D, Lai ETC, Wickham S, et al (2019) Assessing the impact of rising child poverty on the unprecedented rise in infant mortality in England, 2000–2017: time trend analysis BMJ Open 2019 https://bmjopen.bmj.com/content/9/10/e029424

National Child Mortality Database (2021) Child Mortality and Social Deprivation https://www.ncmd.info/wp-content/uploads/2021/05/NCMD-Child-Mortality-and-Social-Deprivation-report_20210513.pdf

Centre for Analysis of Social Exclusion (2017) Does Money Affect Children's Outcomes? An update https://sticerd.lse.ac.uk/dps/case/cp/casepaper203.pdf

The cost of missing lunchtime: A briefing on free school meals in the North East of England (2021) https://children-ne.org.uk/wp-content/uploads/2021/05/The-Cost-of-Missing-Lunchtime-a-Briefing-on-Free-School-Meals-in-the-North-East-of-England.pdf

Multiple disadvantage

Children's Commissioner. Building back better. London: 2021 https://www.childrenscommissioner.gov.uk/wp-content/uploads/2021/02/cco-building-back-better.pdf

North East and North Cumbria's

Child Health and Wellbeing Network

The Facts of Life for children and young people growing up in the North East and North Cumbria:

Chapter 4 – Children with additional needs and vulnerabilities

September 2021

@NorthNetChild

High numbers of children in need through abuse, neglect and family dysfunction links through into high numbers in care and high numbers in the youth justice system. We need a conversation with leads for LA Children's Services and with NENC Police and Crime Commissioners.

Chapter Four SPOTLIGHT to direct momentum for initiatives

4 Children and Young People with additional health needs and vulnerabilities

4.1 Relevance

Although there is continued academic and policy debate about the definition of vulnerability[1], vulnerable children and young people are widely considered to be those at greater risk of experiencing physical or emotional harm and/or experiencing poor outcomes because of one or more factors in their lives[2]. Key factors include:

- Physical, emotional, health and educational needs
- Any harm the child has experienced or may be at risk of experiencing - including a specific set of childhood experiences known as 'adverse childhood experiences'[3]

[1] Children's Commissioner. Defining child vulnerability: Definitions, frameworks and groups. London; 2017: link
[2] PHE (2020) No child left behind. Understanding and quantifying vulnerability: link
[3] EIF (2020) Adverse childhood experiences: what we know, what we don't know, and what should happen next: link

- The capability of the child's carers and wider family environment to meet the child's needs, or indeed to cause harm – these might include homelessness or poor housing conditions, the presence of adults in the home with mental health problems, alcohol and drug dependence, or contact with the criminal justice system, domestic abuse and poverty
- The absence of supportive relationships in a child's life
- The wider community and social conditions beyond the family including crime, the built environment, community cohesion and resilience

The national response to the COVID-19 pandemic recognised three (potentially overlapping) broad categories of vulnerability affecting children and young people[4]:

- Children and young people with underlying health conditions and/or problems accessing health services
- Children and young people and families with a statutory entitlement for care and support (education, health & care, and those with a social worker)
- Children and young people negatively impacted through wider determinants of health and/or family stressors and social circumstances

The data in this chapter explore specific domains of vulnerability affecting children and young people[5] including:

- Safeguarding concerns or in local authority care
- Disabilities
- Involved in offending and/or anti-social behaviour

[4] PHE (2020) No child left behind. A public health informed approach to improving outcomes for vulnerable children: link
[5] Children's Commissioner. Constructing a Definition of Vulnerability – Attempts to Define and Measure. London; 2017: link

- Economic circumstances - young carers, teenage parents, homeless children, NEET

Other important vulnerabilities are considered more fully in other chapters of this report:

- Poverty – Chapter 3
- Educational engagement – Chapter 8
- Long term conditions – Chapter 2

This chapter also presents local levels of spending for services supporting vulnerable children and young people.

4.2 Commentary and findings

4.2.1 Children in need

A child in need is defined under the Children Act 1989 as a child who is unlikely to achieve or maintain a reasonable level of health or development, or whose health and development is likely to be significantly or further impaired, without the provision of services; or a child who is disabled[6]. Local authorities are required to provide services for children assessed as in need for the purposes of safeguarding and promoting their welfare[7].

[6] Government statistics (2020) Characteristics of children in need: link
[7] House of Commons Library Briefing Paper 7730 (2020) Local Authority Support for Children in Need: link

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Children in need: Rate per 10,000 children aged <18 (Persons, <18 yrs, Crude rate- per 10,000)	2017/18	635 ▶	834 ▼	603 ▼	648 ▼	872 ▲	841 ▼	654 ▲	760 ▶	964 ▶	1256 ▶	601 ▶	1098 ▶	1046 ▼	816 ▶	1018 ▲
Children in need due to parent disability or illness: rate per 10,000 children under 18 (Persons, <18 yrs, Crude rate- per 10,000)	2018	8.8	6.5	5.5	7.0	9.2	4.8	*	4.2	7.4	8.1	*	6.0	6.5	*	9.9
Children in need due to socially unacceptable behaviour: rate per 10,000 aged under 18 (Persons, <18 yrs, Crude rate- per 10,000)	2018	6.9	14.0	4.2	13.1	16.0	10.5	1.5	11.0	6.8	63.0	4.4	15.0	8.6	*	8.1
Children in need due to child disability or illness: rate per 10,000 children aged under 18 years (Persons, <18 yrs, Crude rate- per 10,000)	2018	29.7	39.4	24.6	46.0	40.0	45.0	32.3	16.6	40.2	35.1	50.7	123.2	88.9	40.0	39.5
Children in need due to abuse or neglect: rate per 10,000 children aged under 18 years (Persons, <18 yrs, Crude rate- per 10,000)	2018	181.4	221.1	266.1	100.8	216.0	237.4	168.3	170.4	257.4	150.2	276.3	343.6	351.9	169.7	301.0
Children in need due to family stress or dysfunction or absent parenting: rate per 10,000 children aged under 18 (Persons, <18 yrs, Crude rate- per 10,000)	2017	93.8	143.9	56.9	255.8	118.4	181.3	123.1	83.8	134.2	229.5	86.1	150.5	243.6	251.5	152.4

Figure 4.1 – Children in need

On average, for children under 18 years of age, the data relating to the **North East and Cumbria region** as a whole show that:

- During the period 2017/18, there were statistically significantly higher rates of children in need (all/any reason) in the **region** (834 per 10,000 children) compared with the England average (635 per 10,000). This pattern was consistent for almost every cause for concern except parent disability or illness for which rates across the region were statistically significantly lower than the England average.
- During 2017 or 2018, the most common causes for concern for children in need in the **region** were "abuse or neglect" (221.1 per 10,000) or "family stress or dysfunction or absent parenting" (143.9 per 10,000).
- During 2018 the rates of children in need due to socially unacceptable behaviour more than twice as high and are significantly higher in the **region** (14.0 per 10,000) than the England average (6.9 per 10,000)
- Over time, the rates of children in need appear to be falling in the **North East and Cumbria** whereas rates across England are stable. However we are aware that COVID-19 may have a significant impact on this and related indicators which needs to monitored going forward.

On average, at a locality level, the data indicate that:

- The rates of children in need (all/any reason) vary. The lowest rates are evident in **Darlington** (601 per 10,000) and **Cumbria** (603 per 10,000) and the highest in **Sunderland** where the rate (1,256 per 10,000) is almost twice the England average (635 per 10,000).
- The frequency and pattern of various reasons for concern also vary between areas which might reflect differences in staff training or assessment methods or real differences requiring very localised public health strategies. Further work is needed to fully understand the reasons for the observed differences.
- In **Sunderland** the rate of children in need due to socially unacceptable behaviour (63.0 per 10,000) is more than four times as high as the average value for the **region** (14.0 per 10,000).

- In **Hartlepool**, the rate of children in need due to child disability or illness (123.2 per 10,000) is more than three times as high as the average value for the **region** (39.4 per 10,000). These rates are also high in **Middlesbrough** (88.9 per 10,000).
- The highest rates of children in need due to abuse or neglect are evident in **Hartlepool** (343.6 per 10,000) and **Middlesbrough** (351.9 per 10,000), values which are more than one and a half times as high as the average **regional** rate (221.1 per 10,000)
- The highest rates of children in need due to family stress or dysfunction or absent parenting are evident in **Gateshead** (255.8 per 10,000) and **Redcar & Cleveland** (251.5 per 10,000) which are more than one and a half times as high as the average **regional** rate (143.9 per 10,000)

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/KOLhJTmJw0.

4.2.2 Children on child protection plans

A child protection plan is a plan drawn up by the local authority which sets out how a child can be kept safe, how things can be made better for the family and what support they will need. Children subject to a child protection plan will have a primary need code of abuse (physical, sexual or emotional) or neglect[8] [9].

[8] PHE Fingertips (2021) Children in need statistics Children on child protection plans: link
[9] Department for Education (2020) Working together to safeguard children 2018: link

Chart legend

Significance compared with England	worse	similar	better
Significance compared with England	lower	similar	higher

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Children on child protection plans: Rate per 10,000 children <18 (Persons, <18 yrs, Crude rate- Per 10,000)	2019/20	42.8 ►	-	67.0 ▲	69.3 ►	100.4 ▲	79.8 ▲	33.0 ►	43.7 ►	62.0 ►	66.9 ►	37.7 ►	92.3 ►	115.6 ▲	94.2 ►	80.3 ►
Children subject to a child protection plan with initial category of abuse: rate per 10,000 children aged under 18 (Persons, <18 yrs, Crude rate- per 10,000)	2018	21.2	26.2	36.0	28.9	42.9	29.7	21.8	12.7	13.5	26.1	18.2	25.9	35.2	16.4	23.8
Children subject to a child protection plan with initial category of neglect: rate per 10,000 children aged under 18 (Persons, <18 yrs, Crude rate- per 10,000)	2018	21.8	38.7	30.3	45.2	39.4	34.8	14.4	36.6	63.8	61.3	32.9	57.9	46.6	36.3	26.1
Repeat child protection cases: % of children who became subject of a child protection plan for a second or subsequent time (Persons, <18 yrs, %)	2018	20.2 ▲	20.5 ▲	21.8 ▲	18.4 ▲	20.3 ►	16.0 ►	26.7 ▲	20.1 ►	25.1 ▲	21.2 ►	20.9	25.8	10.1 ►	16.5 ►	28.2 ▲

Figure 4.2 – Children on child protection plans

On average, for children under 18 years of age, the data relating to the **North East and Cumbria** in 2018 indicate that:

- Compared to the England average, there are statistically significantly higher numbers of children in the **region** on child protection plans with an initial category of abuse (26.2 per 10,000) or, more commonly, neglect (38.7 per 10,000).
- The rates of children requiring a protection plan for a second or subsequent time in the **region** (20.5 per 10,000) are similar to those across England (20.2 per 10,000).

At a locality level, the data indicate that on average:

- During 2019/20 there was wide variation in the rates of children on child protection plans in each locality. Rates varied between 33.0 per 10,000 in **North Tyneside** and 115.6 per 10,000 in **Middlesbrough** and compared with a national average of 42.8 per 10,000.
- All but two of the localities had significantly higher rates of children on child protection plans with an initial category of neglect than England (21.8 per 10,000). The two exceptions were **North Tyneside** (14.4 per 10,000, significantly lower) and **Stockton-on-Tees** (26.1 per 10,000, similar). The significantly higher rates varied across localities ranging between 30.3 per 10,000 in **Cumbria** to more than twice that rate in **South Tyneside** (63.8 per 10,000).
- The rates of children on child protection plans with an initial category of abuse were more variable, ranging between 12.7 per 10,000 in **County Durham** and more than three times that rate in **Newcastle upon Tyne** (42.9 per 10,000).
- Rates of repeat child protection plans were significantly higher than those in England (20.2 per 10,000) in three localities: **North Tyneside** (26.7 per 10,000), **South Tyneside** (25.1 per 10,000) and **Stockton-on-Tees** (28.2 per 10,000). However, rates were significantly lower than the England average (20.2 per 10,000) in two localities: **Northumberland** (16 per 10,000) and **Middlesbrough** (10.1 per 10,000).

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/X6QuPNHVQU.

4.2.3 Looked after children

Looked after children are those who are in the care of a Local Authority (LA) in the exercise of its social services function. A child is defined as "looked after" if he or she is in LA care or provided with accommodation by the LA for a continuous period of more than 24 hours. Looked after children are variably accommodated in foster homes, children's homes, schools, hospitals, hostels, flats or secure settings.

Children are taken into care for a variety of reasons, the most common being to protect a child from abuse or neglect. In other cases, their parents could be absent or may be unable to cope due to disability or illness.

Nationally, the number of looked after children has been rising since 2015 and in 2019 reports found that 41% of all children in care were living "out of area" i.e. away from where they grew up[10].

A child stops being looked after when they are adopted, return home or turn 18 when additional support is provided to ease the transition to adulthood.

Looked after children are more likely to experience greater physical, mental and emotional health needs. Almost half of children in care have a diagnosable mental health disorder and two thirds have special educational needs[11]. Delays in identifying and meeting their needs can have profoundly negative consequences which can endure throughout their lives.

[10] Children's Commissioner. Pass the parcel: children posted around the care system. London: 2019: link
[11] Department for Education and Department of Health. Promoting the health and well-being of looked after children. Statutory guidance for local authorities, clinical commissioning groups and NHS England. London: 2015: link

Chart legend

Significance compared with England	worse	similar	better
Significance compared with England	lower	similar	higher

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Children in care (Persons, <18 yrs, Crude rate- per 10,000)	2020	67.0 ▲	-	78.0 ▶	105.0 ▶	113.0 ▲	73.0 ▶	71.0 ▶	90.0 ▲	97.0 ▶	106.0 ▶	120.0 ▲	158.0 ▲	189.0 ▲	126.0 ▲	131.0 ▲
Looked after children aged <5: Rate per 10,000 population aged <5 (Persons, 0-4 yrs, Crude rate- per 10,000)	2017/18	34.9	66.0	40.7	68.6	73.7	56.1	58.6	72.9	35.0	112.0	27.8	74.0	76.4	83.4	68.8
Looked after children aged 10-15 (Persons, 10-15 yrs, Crude rate- per 10,000)	2020	78.7 ▲	119.2 ▲	101.2 ▲	141.2 ▶	125.3 ▶	77.9 ▶	81.6 ▶	98.8 ▶	121.5 ▶	126.3 ▶	128.3 ▶	187.1 ▲	213.2 ▲	128.0 ▶	154.7 ▲
Children leaving care: rate per 10,000 children aged under 18 (Persons, <18 yrs, Crude rate- per 10,000)	2017/18	25.2 ▶	37.6 ▲	24.2 ▶	42.7 ▶	46.1 ▶	33.6 ▲	39.4 ▶	37.3 ▲	30.1 ▼	59.1 ▲	36.5 ▶	39.4 ▶	50.3 ▶	27.3 ▶	30.1 ▶

Figure 4.3 – Children in care

At a locality level, the data indicate that on average:

- The majority of **North East and Cumbria** local authorities have a significantly higher rate of children in care than the England average. Rates vary between local authorities ranging from 71.0 per 10,000 in **North Tyneside** to 189 per 10,000 in **Middlesbrough**. All local authorities in the **Tees Valley** have a rate which is over 1.7 times that of the England rate. Rates of children in care are rising in England with significant increases evident in **Newcastle upon Tyne**, **County Durham**, and all of the local authorities in the **Tees Valley**.

- The majority of local authorities have rates of looked after children aged under 5 years or 10-15 years which are significantly higher than the average for England.

- **Sunderland** has the highest rate of looked after children aged under 5 years (112.0 per 10,000) which is over 3 times higher than the England average (34.9 per 10,000) and 1.7 times higher than the average rate for the **region** (66 per 10,000)

- The highest rates of looked after children aged 10-15 are evident in **Middlesbrough** where the rate (213.2 per 10,000) is over two times higher than the England average (78.7 per 10,000). High rates are evident in **Hartlepool** (187.1 per 10,000) and in Stockton on Tees (154.7 per 10,000). Rates of looked after children aged 10-15 are rising significantly across England, the region and in **Cumbria**, **Hartlepool** and **Middlesbrough**.

- In the **region** an average of 37.6 per 10,000 children aged under eighteen ceased to be looked after by local authorities in the financial year 2017/18, a rate which is significantly higher than the England average. Individually, nine of the thirteen local authorities in the region have significantly higher rates than the England average with rates of almost double that of the England average occurring in **Middlesbrough** (50.3 per 10,000).

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Unaccompanied Asylum Seeking Children looked after: count (Persons, <18 yrs, Count- Population)	2018	4480	31	*	6	8	*	*	*	0	*	0	9	*	8	*
Children who started to be looked after due to abuse or neglect: rate per 10,000 children aged under 18 (Persons, <18 yrs, Crude rate- per 10,000)	2018	16.4	26.6	20.6	40.7	33.7	16.5	21.5	29.1	29.0	26.4	24.5	31.9	31.2	19.3	27.7
Children who started to be looked after due to family stress or dysfunction or absent parenting: rate per 10,000 children aged under 18 (Persons, <18 yrs, Crude rate- per 10,000)	2017	9.3	12.1	5.3	8.5	11.7	16.6	12.6	7.0	6.4	18.1	9.3	18.5	34.2	25.3	6.3

Figure 4.4 – Children in care

These data show that, on average, in the **North East and Cumbria**:

- Counts of unaccompanied asylum-seeking children tend to be very low hence the number of suppressed local authorities above, and the **North East and Cumbria** total of 31 is based on the unsuppressed local authorities and will therefore be an underestimate.

- The rate of children who started to be looked after due to abuse or neglect in 2018 is significantly higher in the **region** (26.6 per 10,000) than the England average (16.4 per 10,000).
- The rate of children who started to be looked after due to family stress or dysfunction or absent parenting in 2017 is significantly higher in the **region** (12.1 per 10,000) than the England average (9.3 per 10,000).

At a locality level, the data indicate that on average:

- The rates of children who started to be looked after due to abuse or neglect in 2018 varies between local authorities ranging between 16.5 per 10,000 children in **Northumberland** to 40.7 per 10,000 children in **Gateshead**.
- The rates of children who started to be looked after due to family stress or dysfunction or absent parenting in 2017 varies between local authorities in the region. The lowest rates – significantly lower than England - are evident in **Northumberland** (5.3 per 10,000), **Stockton-on-Tees** (6.3 per 10,000) and **County Durham** (7.0 per 10,000). Significantly higher rates than the England average are evident in six of the local authorities, the highest being **Middlesbrough** (34.2 per 10,000) and **Redcar & Cleveland** (25.3 per 10,000).

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/1PwDVCpFV0.

4.2.4 Children with disabilities

There are a wide range of conditions with varying levels of impairment and activity limitation that can affect children. These conditions tend to be classified as physical or learning disabilities but there is often an overlap between the two.

In England, a child or young person has SEND (Special Educational Needs and Disabilities) if they have a significantly greater difficulty in learning than the majority of others of the same age, or have a disability which prevents or hinders them from making use of facilities of a kind generally provided for others of the same age in mainstream schools.

Children with disabilities are especially vulnerable to inequalities in health and health care[12]. Children and young people with SEND are more likely to experience mental health problems, lower educational attainment, challenging behaviour difficulties forming healthy relationships with others and to be in receipt of school meals. Families raising a disabled child experience higher living costs than those raising a non-disabled child[13].

The term learning disability encompasses a group of conditions that are present before the age of 18 and which impact on the way individuals develop in all core areas, how they live their lives and access health care.

School based data relating to SEND is often more complete than GP registers and can provide health and social care planners with more accurate information about the level of local need.

[12] PHE (2018) Learning disabilities: applying all our health: link
[13] RCPCH (2020) State of Child Health: link

Chart legend

Significance compared with England	worse	similar	better
Significance compared with England	lower	similar	higher

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Pupils with special educational needs (SEN): % of school pupils with special educational needs (Persons, School age, Crude rate- %)	2018	14.4 ▼	15.3 ▼	14.5 ▼	14.6 ▶	16.0 ▼	14.2 ▼	13.8 ▼	14.5 ▼	19.4 ▼	15.4 ▼	15.1 ▼	14.9 ▶	17.6 ▼	17.4 ▼	15.4 ▼
Children with Autism known to schools (Persons, School age, Crude rate- per 1,000)	2020	18.0 ▲	19.0 ▲	17.3 ▲	18.7 ▲	19.0 ▲	16.8 ▲	14.0 ▲	20.2 ▲	21.7 ▲	34.4 ▲	20.1 ▲	14.2 ▲	15.5 ▲	15.8 ▶	14.3 ▲
Percentage with a long-term illness, disability or medical condition diagnosed by a doctor at age 15 (Persons, 15 yrs, Proportion- %)	2014/15	14.1	-	12.5	17.3	12.9	15.9	13.4	16.3	13.7	14.4	15.1	14.0	13.7	16.6	15.6
Pupils with Learning Disability: % of school aged pupils (Persons, School age, Crude rate- %)	2017	5.6 ▲	6.0 ▲	6.0 ▲	5.4 ▲	7.0 ▲	4.9 ▲	4.2 ▲	6.1 ▲	6.5 ▲	5.5 ▲	5.2 ▲	6.6 ▲	8.0 ▲	7.8 ▲	6.6 ▲
Estimated number of children and young people with mental disorders – aged 5 to 17 (Persons, 5-17 yrs, Count)	2017/18	-	-	8366.4	3494.9	4930.1	5409.4	3602.4	8888.1	2600.2	4795.0	1992.7	1789.3	2735.7	2441.8	3790.6

Figure 4.5 – Children with disabilities

These data show that, on average, in the **North East and Cumbria region**:

- The **region** has a statistically higher percentage of school pupils with special educational needs (15.3%) than the England average (14.4%).
- The **region** has a higher rate of children with autism known to schools (19.0 per 1,000) than the England average (18.0 per 1,000).
- The **region** has a significantly higher percentage of school age pupils with learning disabilities (6.0%) compared to the England average (5.6%).

At a locality level, the data indicate that on average:

- Within the region, the percentage of school pupils with special educational needs varies between local authorities – the lowest rates are evident in **North Tyneside** (13.8%) and the highest in **South Tyneside** (19.4%).
- Time trends indicate that the number of school pupils with special educational needs is falling significantly in England, the region and the majority of local authorities except **Gateshead** and **Hartlepool**.
- Local rates of children with autism appear to vary geographically, with all **Tees Valley** local authorities except **Darlington** having significantly lower rates than the England average but all Durham, **South Tyneside** and **Sunderland** local authorities having significantly higher rates. All North East and Cumbria local authorities show recent significant increasing trends for this indicator with the exception of **Redcar & Cleveland**.
- Most North East and Cumbria local authorities have similar percentages of fifteen year olds who have a long-term illness, disability or medical condition diagnosed by a doctor to the England average (14.1%). The exception is **Gateshead** which has a significantly higher percentage, 17.3%
- The percentage of school children with learning disabilities varies between local authorities in the region. **Northumberland**, **North Tyneside** and **Darlington** all have a significantly lower percentage than the England average and the majority of the

other local authorities have a significantly higher percentage of school age pupils with learning disabilities. The highest percentages are in **Middlesbrough** (8.0%), **Redcar & Cleveland** (7.8%) and **Newcastle upon Tyne** (7.0%). The percentage of school age pupils with a learning disability has significantly increased compared to previous years in all local authorities and for England as a whole.

- Estimates of mental disorder prevalence are based on applying national prevalence's by age and sex to the population of an area. Other factors may influence prevalence that are not taken into account by this indicator, however they do provide an indication of the levels of need locally.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/GY34fHJEjE.

4.2.5 Children in the youth justice system

Children and young people in the justice system often have multiple and complex needs[14] and are at risk of many adverse outcomes, including higher risks of alcohol and substance misuse, higher levels of mental health conditions and learning difficulties[15], as well as being more likely to not be in education, employment or training (NEET).

The health and wellbeing needs of children and young people tend to be particularly severe by the time they are at risk of receiving a community sentence, and even more so when they receive a custodial sentence. This presents particular challenges to those addressing their health and social care needs.

[14] Ministry of Justice (2021) Assessing the needs of sentenced children in the Youth Justice System 2019/20: link
[15] Ministry of Justice (2017) Key characteristics of admissions to youth custody April 2014 to March 2016: link

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
First time entrants to the youth justice system (Persons, 10-17 yrs, Crude rate- per 100,000)	2019	208.0 ▼	-	228.5 ▼	254.4 ▶	306.9 ▼	311.5 ▶	232.9 ▶	179.5 ▼	645.9 ▶	383.2 ▼	259.4 ▶	226.0 ▼	217.4 ▼	174.7 ▼	195.8 ▶
Children aged 10 to 14 years in the youth justice system (Persons, 10-14 yrs, Crude rate- per 1,000)	2015/16	2.5	3.8	2.6	2.4	6.5	4.2	2.6	1.8	10.7	4.9	4.5	2.3	3.8	3.8	3.4
Young people aged 15 years in the youth justice system (Persons, 15 yrs, Crude rate- per 1,000)	2015/16	9.8	12.6	8.4	11.8	20.2	11.1	13.7	8.9	25.6	16.2	14.1	8.8	14.3	14.3	11.1
Young people aged 16 years in the youth justice system (Persons, 16 yrs, Crude rate- per 1,000)	2015/16	12.3	14.6	9.5	16.5	26.3	9.1	16.7	9.2	20.3	20.4	17.3	20.4	15.6	15.6	14.6
Young people aged 17 years in the youth justice system (Persons, 17 yrs, Crude rate- per 1,000)	2015/16	15.6	18.2	14.7	11.7	31.1	14.4	19.0	10.8	32.3	22.4	20.1	33.2	23.2	23.2	16.6
Young people aged 15-17 years in the youth justice system (Persons, 15-17 yrs, Crude rate- per 1,000)	2015/16	12.6	15.2	10.9	13.3	25.9	11.5	16.5	9.6	26.1	19.7	17.2	20.7	17.8	17.8	14.1

Figure 4.6 – Children in the youth justice system

These data show that on average, where data is available, in the **North East and Cumbria**:

- During 2015/16, all of the data presented here for different age groups show that at a **regional** level, rates of children and young people that have been sentenced by a youth offending team (in the youth justice system) in the region were statistically significantly higher than the average rates for England.

At a locality level, the data indicate that on average:

- In 2019, the rate of 10-17 year olds receiving their first reprimand, warning or conviction per 100,000 population (first time entrants to the youth justice system) varied between localities within the region. The lowest rates were evident in **Redcar & Cleveland** (174.7 per 100,000) and highest in **South Tyneside** (645.9 per 100,000). Rates were significantly higher than the rate for England in four local authorities in the region – **Newcastle upon Tyne**, **Northumberland**, **South Tyneside** and **Sunderland**.

- At a local authority level, rates of children and young people who have been sentenced by a youth offending team are significantly higher than England in **Newcastle upon Tyne**, **South Tyneside** and **Sunderland** for all age groups. In other areas, the numbers are more variable according to age.

- **County Durham** is the only local authority area for which any of the age specific rates of children and young people in the youth justice system are significantly below the national average.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/tBMGtJYRkU.

4.2.6 Young carers

Young carers are children or young people under the age of 18 who provide care in, or outside of, the family home for someone who is physically or mentally ill, disabled or misusing drugs or alcohol. This care may be provided on a long or short term basis and, when they (and their families) have unmet needs, caring may have an adverse impact on children's health, well-being and transitions into adulthood.[16] Young carers are a particularly vulnerable group and while the 2011 Census reported around 166,000 children were providing care to a relative this is likely to be an underestimate[17]. Carers can be at risk of social isolation and can fall behind in education and training, however can also benefit from making a positive contribution and gaining life skills.

[16] Department for Education (2017) The lives of young carers in England Omnibus survey report: link
[17] Safeguarding Network (2021) Young carers: link

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Children providing unpaid care (aged 0-15) (Persons, <16 yrs, Proportion- %)	2011	1.11	1.15	1.34	1.34	0.88	1.01	1.10	1.20	1.37	1.29	0.97	1.01	0.98	1.22	0.93
Children providing 20+ hours/week of unpaid care (aged 0-15) (Persons, <16 yrs, Proportion- %)	2011	0.21	-	0.23	0.32	0.20	0.20	0.18	0.25	0.31	0.29	0.20	0.28	0.22	0.21	0.20
Young people providing unpaid care (aged 16-24) (Persons, 16-24 yrs, Proportion- %)	2011	4.8	4.9	4.7	5.5	3.5	4.9	5.2	5.3	5.4	5.3	4.9	5.2	4.9	6.1	4.9
Young people providing 20+ hours/week of unpaid care (aged 16-24) (Persons, 16-24 yrs, Proportion- %)	2011	1.3	1.4	1.2	1.7	0.9	1.2	1.4	1.6	1.6	1.5	1.5	1.8	1.7	2.0	1.6

Figure 4.7 – Young carers

These data have poor timeliness as they are based on national census data dating back to 2011. These data show that, on average, in the **North East and Cumbria**:

- The percentage of children providing unpaid care aged 0-15 years is statistically significantly higher in the **region** (1.15%) compared with the England average (1.11%).
- The percentage of young people providing unpaid care aged 16-24 years are statistically significantly higher in the **region** (4.9%) compared with the England average (4.8%).
- The **region** has significantly more young people aged 16-24 years who are providing unpaid care for more than 20 hours per week (1.4%) than the average for England (1.3%).

At a locality level, the data indicate that on average:

- Percentages of percentage of children providing unpaid care aged 0-15 vary between local authorities in the region. The lowest (significantly lower than the average rate for England) are evident in **Stockton-on-Tees**, **Middlesbrough**, **Newcastle upon Tyne** and **Northumberland**. The highest percentages – significantly higher rates than the average rate for England - are evident in **Cumbria**, **Gateshead**, **County Durham**, **South Tyneside** and **Sunderland**.
- Rates of young carers aged 16-24 years vary between local authorities in the region. The lowest rates (significantly lower than the average rate for England) are evident in **Newcastle upon Tyne**. The highest rates – significantly higher rates than the average rate for England - are evident in **Gateshead**, **County Durham**, **North Tyneside**, **South Tyneside**, **Sunderland** and **Redcar & Cleveland**.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/xQ0WFAIvUO.

4.2.7 Additional vulnerabilities

Not in Education, Employment or Training (NEET)

Time spent Not in Education, Employment or Training (NEET) can have a detrimental effect on physical and mental health, and increase the likelihood of unemployment, low wages, or low quality of work later on in life.

The chance of being NEET is affected by area deprivation, socio-economic position, parental factors (such as employment, education, or attitudes), growing up in care, prior academic achievement and school experiences. Being NEET therefore occurs disproportionately among those already experiencing other sources of disadvantage. Because the chances of becoming NEET follow a social gradient, reducing the proportion of people NEET could help to reduce health inequalities[18].

COVID-19 is recognised to have impacted the labour market status of young people with a large fall in employment and a raise in unemployment amongst 16-24 year olds[19].

Homelessness

Homelessness is a major determinant of health and health inequalities. Experiencing homelessness in early life can impact on life chances and the longer a person experiences homelessness the more likely their health and wellbeing will be at risk[20]. Young people experiencing homelessness are more likely to experience mental health problems or sexual health problems and are extremely vulnerable to exploitation, abuse, trafficking and involvement in gang and/or criminal activity. They also find it difficult to access health and social care.

Young people leaving care, young people who have run away, BME young people, LGBT young people and young people with experience of the criminal justice system, young refugees and asylum seekers, and young people from rural areas are at greater risk of homelessness.

[18] PHE (2014) Reducing the number of young people not in employment, education or training (NEET): link
[19] House of Commons Library (2021) NEET: Young people Not in Education, Employment or Training: link
[20] Local Government Association (2017) The Impact of homelessness on health: link

Teenage mothers

Teenage mothers and young fathers often manage very well, but for many their health, education and economic outcomes remain disproportionately poor which affects the life chances for them and the next generation of children. Young mothers - including those up to the age of 25 - are at particular risk of poor mental health. See Chapter 6 for related indicators on sexual health.

Family poverty, persistent school absence by age 14, slower than expected attainment between ages 11 and 14; and being looked after or a care leaver are recognised risk factors for becoming a young parent[21].

[21] PHE and LGA (2019) A framework for supporting teenage mothers and young fathers: link

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
16-17 year olds not in education, employment or training (NEET) or whose activity is not known (Persons, 16-17 yrs, Proportion- %)	2019	5.5	-	4.0	5.2	9.2	4.7	3.8	4.8	7.3	10.6	4.2	3.7	4.7	5.5	4.9
Homeless young people aged 16-24 (Persons, 16-24 yrs, Crude rate- per 1,000 total households)	2017/18	0.5 ▼	0.2 ▼	0.1 ▶	0.4 ▶	0.3 ▶	0.3 ▶	0.3 ▶	0.1 ▶	0.2 ▼	0.2 ▼	0.2	0.3 ▶	-	0.1	0.1
Teenage mothers (Female, 12-17 yrs, Proportion- %)	2019/20	0.7 ▼	1.1 ▼	0.9 ▶	1.1 ▶	1.4 ▶	1.1 ▶	0.8 ▶	1.0 ▶	0.7 ▶	1.4 ▶	1.0 ▶	1.1 ▶	2.0 ▶	2.3 ▶	0.7 ▶

Figure 4.8 – Additional vulnerabilities

NEET

- The majority of **North East and Cumbria** local authorities have a lower percentage of 16-17 year olds not in education, employment or training (NEET) or whose activity is not known than the England average. Three local authority areas have significantly higher rates than England (5.5%) - **Sunderland** (10.6%), **Newcastle upon Tyne** (9.2%) and **South Tyneside** (7.3%). In the same period 19.6% of 19-24 year olds in the **North East** were not in education, training or employment which is higher than England (13.0%).

Homeless young people

- In 2017/18 the rate of homeless young people aged 16-24 in the **region** was significantly lower than the England average.
- Time trends show that homeless young people rates are falling across England, the **region** and in **South Tyneside** and **Sunderland**

Teenage parents

- In 2019/20, the percentage of deliveries where the mother was aged 12-17 was significantly higher in the **region** (1.1%) than the England average (0.7%)
- Time trends for England and the **region** indicate that these rates are falling
- The rates in **Middlesbrough** (2.0%) and **Redcar & Cleveland** (2.3%) are more than double the national average.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/zvAfw3eaFE.

4.2.8 Spend on services for vulnerable children

These data illustrate levels of spending on services for many of the groups of vulnerable children identified in this chapter of the report. With few exceptions, the data has emphasised higher levels of need in the region and some local authorities. Further work correlating levels of need, spend and outcomes could help to explore the extent to which spending matches need and delivers returns on investment. It is currently unclear as to whether the differences in spend illustrated by the following data reflect real differences in investment or differences in budget and accounting streams, therefore the below indicators are presented without comment.

Chart legend
Quintiles

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Spend (£000s) on Sure Start Children's Centres and early years: rate (£) per 10,000 aged 0-17 (Persons, <18 yrs)	2017/18	560 ▶	654 ▼	850 ▶	207 ▶	1591 ▶	629 ▶	450 ▶	505 ▶	1319 ▶	124 ▶	214 ▶	252 ▶	536 ▶	948 ▶	506 ▶
Spend (£000s) on Children looked after: rate (£) per 10,000 aged 0-17 (Persons, <18 yrs)	2017/18	3823 ▶	5835 ▲	4553 ▶	4913 ▶	15813 ▶	3181 ▶	4046 ▶	4139 ▶	5215 ▶	6275 ▶	5806 ▶	5268 ▶	7560 ▶	4950 ▶	4824 ▶
Spend (£000s) on Safeguarding children and young people's services: rate (£) per 10,000 aged 0-17 (Persons, <18 yrs)	2017/18	1978 ▶	2325 ▲	1943 ▶	1873 ▶	2278 ▶	2019 ▶	1706 ▶	2175 ▶	2682 ▶	3794 ▶	2722 ▶	3468 ▶	2002 ▶	2523 ▶	2260 ▶
Planned spend (£000s) on special schools: rate (£) per 100,000 pupils (Persons, School age)	2018/19	10712 ▶	12976 ▶	7100 ▶	14681 ▶	12994 ▶	18201 ▶	19961 ▶	15751 ▶	26169 ▶	10466 ▶	2488 ▶	7293 ▶	18249 ▶	11588 ▶	2206 ▶

Chart legend
Quintiles low high

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Planned spend (£000s) on pupil referral units: rate (£) per 100,000 pupils (Persons, School age)	2018/19	1324 ▶	1340 ▶	2257 ▶	0 ▶	-	-	2760 ▶	2258 ▶	-	-	0 ▶	1127 ▶	-	4979 ▶	2677 ▶
Spend (£000s) on Youth justice: rate (£) per 10,000 aged 0-17 (Persons, <18 yrs)	2016/17	230 ▶	411 ▼	111 ▶	313 ▶	326 ▶	824 ▶	223 ▶	747 ▶	420 ▶	356 ▶	335 ▶	389 ▶	678 ▶	115 ▶	198 ▶
Spend (£000s) on Local Authority children and young people's services (excluding education): rate (£) per 10,000 aged 0-17 (Persons, <18 yrs)	2017/18	8004 ▶	10983 ▲	9232 ▶	9102 ▶	21172 ▶	8240 ▶	7912 ▶	8795 ▶	14399 ▶	11932 ▶	10431 ▶	12364 ▶	13004 ▶	11200 ▶	9092 ▶

Figure 4.9 – Spend on services for vulnerable children

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/CgUrfTjhZE.

4.3 Commentary on network actions

This is a core network priority and is linked to many aspects of its work including:

The NENC Learning Disabilities Network connects into the CHW Network, one of its initiatives is part of our workplan – the Learning disabilities matters for families website Home - Learning Disability Matters or Learning Disability Network (necldnetwork.co.uk)

As a baseline the network commissioned a scoping study to inform our actions around poverty proofing in health settings. Read the NENC Child health & wellbeing network (2021) Poverty proofing health settings report here.

In 2021 a second phase of this work was commenced to apply the initial consultation in practice looking at the impact of poverty on accessing diabetic services. This work is led by a partner network – the NENC CYP Diabetic network for further information contact jenny.foster5@nhs.net.

A network partnership has led to a successful NHS Charities Together bid which will enable further spread into more health care organisations in each of our 4 main geographical areas, do contact that work through Children's North East or england.northernchildnetwork@nhs.net.

This Poverty proofing work is an extension of Children North East's successful poverty proofing concept in Education (for Further details contact Children's North East luke.bramhall@children-ne.org.uk). Both the education implementation and the Network's focus on poverty proofing in health was successful in an Applied Research Collaborative bid led by Newcastle University which will start to strengthen the impact of such work on our young people. For further information on the research contact Dr Josephine Wildman NIHR Applied Research Collaboration North East & North Cumbria via Josephine.Wildman@newcastle.ac.uk .

Other work in the network is also directed to support communities in more deprived areas to ensure they are accessed by those area's first. For example the STAR initiative (South Tees ARts Project) brings an arts intervention to children adopting holiday hunger approaches to two primary schools located within geographies with high levels of deprivation.

The Network has delivered its initial programme of Youth Mental Health First Aid training to professionals across the system. The next phase of this work, as part of an NHS Charities Together initiatives will work through VCSE's directly into communities. The network also works closely with the ICS's Children and Adolescent Mental Health Workstream.

A network 'Huddle' or webinar is planned to focus on our Refugee Community led by Dr Christian Harkensee.

Apprenticeship opportunities have been developed for those who have experienced the care system and work into out underserved communities, along with Inequalities advisor roles to conduct an initial scoping exercise to report out in the spring of 2020.

The networks Interactive film series tackle many issues experienced by vulnerable young people – the films and their resources can support young people and professionals to explore some hard hitting issues in a safe environment. The network episode filmed in NENC focuses on young parents mental health and perinatal mental health.

For any further information and proposals on initiatives relating to Children with additional needs and vulnerabilities do contact the network via england.northernchildnetwork@nhs.net and the website Child Health and Wellbeing Network | North East and North Cumbria ICS.

4.4 Relevant key policy and research papers

Vulnerability

Children's Commissioner. Defining child vulnerability: Definitions, frameworks and groups. London: 2017. https://www.childrenscommissioner.gov.uk/wp-content/uploads/2017/07/CCO-TP2-Defining-Vulnerability-Cordis-Bright-2.pdf

PHE (2020) No child left behind. Understanding and quantifying vulnerability https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/913974/Understanding_and_quantifying_vulnerability_in_childhood.pdf

EIF (2020) Adverse childhood experiences: what we know, what we don't know, and what should happen next. https://www.eif.org.uk/report/adverse-childhood-experiences-what-we-know-what-we-dont-know-and-what-should-happen-next

PHE (2020) No child left behind. A public health informed approach to improving outcomes for vulnerable children. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/913764/Public_health_approach_to_vulnerability_in_childhood.pdf

Public Health Wales and Bangor University (2019) Responding to Adverse Childhood Experiences: An evidence review of interventions to prevent and address adversity across the life course. https://phw.nhs.wales/news/responding-to-adverse-childhood-experiences-an-evidence-review/responding-to-adverse-childhood-experiences/

Children's Commissioner. Childhood in the time of COVID. London: 2020 https://www.childrenscommissioner.gov.uk/report/childhood-in-the-time-of-covid/

Looked after children

Department for Education and Department of Health. Promoting the health and well-being of looked after children. Statutory guidance for local authorities, clinical commissioning groups and NHS England. London: 2015 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/413368/Promoting_the_health_and_well-being_of_looked-after_children.pdf

Children's Commissioner. Characteristics of children entering care for the first time as teenagers. London: 2021 https://www.childrenscommissioner.gov.uk/report/characteristics-of-children-entering-care-for-the-first-time-as-teenagers/

Children's Commissioner. The children who no-one knows what to do with. London: 2020 https://www.childrenscommissioner.gov.uk/wp-content/uploads/2020/11/cco-the-children-who-no-one-knows-what-to-do-with.pdf

Children's Commissioner Building back better. London: 2021 https://www.childrenscommissioner.gov.uk/wp-content/uploads/2021/02/cco-building-back-better.pdf

Children's Commissioner. Pass the parcel: children posted around the care system. London: 2019 https://www.childrenscommissioner.gov.uk/report/pass-the-parcel-children-posted-around-the-care-system/

Children's Commissioner. Who are they? Where are they? London: 2020 https://www.childrenscommissioner.gov.uk/report/who-are-they-where-are-they-2020/

The Centre for Social Justice (2015) Finding their feet: equipping care leavers to reach their potential https://www.centreforsocialjustice.org.uk/wp-content/uploads/2018/03/Finding.pdf

Children with SEND

PHE (2015) The determinants of health inequities experienced by children with learning disabilities https://webarchive.nationalarchives.gov.uk/20160704150148/http:/www.improvinghealthandlives.org.uk/publications/313899/The_determinants_of_health_inequities_experienced_by_children_with_learning_disabilities

PHE (2018) Learning disabilities: applying all our health https://www.gov.uk/government/publications/learning-disability-applying-all-our-health/learning-disabilities-applying-all-our-health

Heslop P et al. (2014) The confidential enquiry into premature deaths of people with intellectual disabilities in the UK: a population based study. Lancet 2014; 383 (9920) - 889-5 https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)62026-7/fulltext

NHS England (2018) Guidance for health services for children and young people with SEND https://www.england.nhs.uk/wp-content/uploads/2018/07/send-health-services-children-young-people.pdf

RCPCH (2020) State of Child Health https://stateofchildhealth.rcpch.ac.uk/evidence/long-term-conditions/disability-and-additional-learning-needs/

Youth Justice

Ministry of Justice (2021) Assessing the needs of sentenced children in the Youth Justice System 2019/20
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/968700/experimental-statistics-assessing-needs-sentenced-children-youth-justice-system-2019-20.pdf

Ministry of Justice (2017) Key characteristics of admissions to youth custody April 2014 to March 2016.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/585991/key-characteristics-of-admissions-april-2014-to-march-2016.pdf

PHE (2019) Collaborative approaches to preventing offending and re-offending In children (CAPRICORN)
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/828228/CAPRICORN_resource.pdf

Young carers

Department for Education (2017) The lives of young carers in England Omnibus survey report
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/582575/Lives_of_young_carers_in_England_Omnibus_research_report.pdf

Department of Health and Social Care (2018) Carers Action Plan 2018-20 – Supporting carers today
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/713781/carers-action-plan-2018-2020.pdf

NEET

House of Commons Library (2021) NEET: Young people Not in Education, Employment or Training
https://researchbriefings.files.parliament.uk/documents/SN06705/SN06705.pdf

PHE (2014) Reducing the number of young people not in employment, education or training (NEET) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/356062/Review3_NEETs_health_inequalities.pdf

Young Homelessness

Local Government Association (2017) The Impact of homelessness on health. https://www.local.gov.uk/sites/default/files/documents/22.7%20HEALTH%20AND%20HOMELESSNESS_v08_WEB_0.PDF

PHE (2019) Homelessness: applying all our health https://www.gov.uk/government/publications/homelessness-applying-all-our-health/homelessness-applying-all-our-health

Faculty for homeless and inclusion health (2018) Homeless and Inclusion Health standards for commissioners and service providers https://www.pathway.org.uk/wp-content/uploads/Version-3.1-Standards-2018-Final-1.pdf

Teenage parents

PHE and LGA (2019) A framework for supporting teenage mothers and young fathers. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/796582/PHE_Young_Parents_Support_Framework_April2019.pdf

PHE and LGA (2018) Teenage pregnancy prevention framework https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/836597/Teenage_Pregnancy_Prevention_Framework.pdf

Robling et al. (2016) Effectiveness of a nurse-led intensive home-visitation programme for first-time teenage mothers (Building Blocks): a pragmatic randomised controlled trial. Lancet 2016; 387: 146–55 https://pubmed.ncbi.nlm.nih.gov/26474809/

North East and North Cumbria's

Child Health and Wellbeing Network

The Facts of Life for children and young people growing up in the North East and North Cumbria:

Chapter 5 – Mental health and emotional wellbeing

September 2021

@NorthNetChild

We need to do more work on self-harming behaviour. Why is the rate of hospital admissions for age 15-19, 1,351.2/100,00 in Northumberland and 193/100,00 in Hartlepool. Is this a coding or a cultural issue?

Chapter Five SPOTLIGHT to direct momentum for initiatives

5 Mental health and emotional wellbeing

5.1 Relevance

This chapter considers the mental health of children and young people, focussing on emotional wellbeing and mental illness to provide an overview of local mental health needs.

The emotional health and wellbeing of children and young people is just as important as their physical health and wellbeing. Around half of all lifetime mental health problems start by the mid-teens, and three-quarters by the mid-20s[1].

The factors that influence children and young people's mental health are wide-ranging and include both risk and protective factors operating at an individual, family, community and structural level[2]. Strategies to promote mental health recognise the importance of reducing inequalities[3]. This is particularly relevant to the North East and North Cumbria (NENC) region which has relatively low educational attainment (see chapter 8), and high numbers of vulnerable children in care or living in poverty (see chapters 3 and 4).

[1] PHE (2019) Mental health and wellbeing JSNA toolkit: Children and young people: link
[2] PHE (2019) Universal approaches to improving children and young people's mental health and wellbeing: link
[3] PHE (2015) Improving young people's health and wellbeing: a framework for public health: link

Mental health services for children and young people are currently under strain with multiple opportunities to provide more integrated support[4]. Early indications are that the COVID-19 pandemic will have a significant effect on the mental health of children and young people[5] [6] [7] [8] [9].

In this chapter, indicators of prevalence of mental health conditions are presented, alongside available data on indicators relating to wellbeing and hospital activity relating to mental health conditions and self-harm.

5.2 Commentary and findings

5.2.1 Prevalence

National surveys show that prevalence rates for mental disorders are increasing. In 2017, one in nine children aged 5 to 16 years were identified as having a probable mental disorder and this had increased to one in six in 2020. The increase was evident in boys and girls[10].

Conduct disorders are the most common mental health disorders of childhood and adolescence, they are more common in boys than girls and in some ethnic groups. They represent the most common reason for referral to child and adolescent mental health services (CAMHS). Conduct disorders commonly coexist with other mental health problems especially attention deficit hyperactivity disorder (ADHD), and their presence in childhood is associated with a significantly increased rate of mental health problems in adult life e.g. up to 50% of children and young people with a conduct disorder go on to develop antisocial personality disorder. A diagnosis of a conduct disorder is strongly associated with poor educational performance, social isolation and, in adolescence, substance misuse and increased contact with the criminal justice system. This association continues into adult life with poorer educational and occupational outcomes, involvement with the criminal justice system and a high level of mental health problems[11].

[4] CQC (2018) Are we listening: review of children and young people's mental health services: link
[5] PHE (2021) COVID-19 mental health and wellbeing surveillance: report: link
[6] Newlove-Delgado T et al (2021) Child mental health in England before and during the COVID-19 lockdown: link
[7] Young Minds (2021) The impact of Covid-19 on young people with mental health needs: link
[8] Mentally Health Schools: link
[9] Ford, T et al (2021) Mental health of children and young people during pandemic: link
[10] NHS Digital Mental Health of Children and Young People in England 2020: Wave 1 follow up to the 2017 survey: link
[11] NICE (2017) Clinical guideline CG158. Antisocial behaviour and conduct disorders in children and young people: recognition and management: link

The frequency of conduct disorders in childhood and adolescence is rising with implications for all sectors including the family, schools, communities, health and social care services, police and criminal justice agencies[12].

Eating disorders are a group of conditions in which negative beliefs about eating, body shape, and weight accompany behaviours including restricting eating, binge eating, excessive exercise, vomiting, and laxative use. Eating disorders are particularly common among adolescent girls, although they can also occur in boys and men. Eating disorders are long-lasting conditions if they are not treated, associated with high mortality and morbidity, poor quality of life, social isolation, and a substantial impact on family members and carers. Eating disorders most commonly start in adolescence, but can also start during childhood or adulthood[13].

[12] The British Psychological Society and The Royal College of Psychiatrists (2013) Antisocial behaviour and conduct disorders in children and young people. The NICE guideline on recognition and management: link

[13] NICE (2017) NICE Guideline NG 69. Eating disorders: recognition and treatment: link

Chart legend
Quintiles low high

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Estimated number of children and young people with mental disorders (aged 5 to 17, Count)	2017/18	-	-	8366	3495	4930	5409	3602	8888	2600	4795	1993	1789	2736	2442	3791
Estimated prevalence of emotional disorders (% population aged 5-16)	2015	3.6	3.8	3.6	3.8	3.9	3.7	3.6	3.9	4.0	4.0	3.8	4.1	4.2	4.0	3.8
Estimated prevalence of conduct disorders: (% population aged 5-16)	2015	5.6	6.1	5.7	6.1	6.2	5.7	5.7	6.1	6.3	6.4	5.9	6.5	6.7	6.4	5.9
Estimated prevalence of hyperkinetic disorders: (% population aged 5-16)	2015	1.5	1.6	1.5	1.6	1.7	1.5	1.6	1.6	1.7	1.7	1.6	1.7	1.8	1.7	1.6
Prevalence of ADHD among young people (estimated number aged 16 - 24, Count)	2013	-	50929	6805	2952	7883	4156	2701	8684	2282	4670	1474	1469	2755	2024	3075
Prevalence of potential eating disorders among young people (estimated number aged 16 - 24, Count)	2013	-	47995	6365	2795	7404	3881	2565	8237	2147	4440	1413	1393	2558	1917	2881

Figure 5.1 – Estimated prevalence of mental health conditions in children and young people

While a local collection of prevalence of mental disorders in children is not available, an estimate based on applying national prevalence to resident populations can help to estimate levels of need and plan services. Figure 5.1 shows estimated prevalence using either counts or percentages of the population to illustrate this. These estimates should be interpreted with caution.

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
School pupils with social, emotional and mental health needs: % of school pupils with social, emotional and mental health needs (Persons, primary school age, %)	2020	2.4 ▲	-	2.2 ▲	2.1 ▶	2.1 ▶	3.0 ▶	3.1 ▲	2.7 ▲	3.5 ▲	2.7 ▲	2.6 ▶	2.6 ▲	2.1 ▶	3.0 ▶	2.2 ▶
School pupils with social, emotional and mental health needs: % of school pupils with social, emotional and mental health needs (Persons, secondary school age, %)	2020	2.7 ▲	-	1.8 ▶	1.5 ▶	2.5 ▲	2.9 ▶	3.6 ▲	2.8 ▲	3.5 ▲	3.2 ▶	3.1 ▶	2.7 ▶	3.7 ▶	2.7 ▼	2.6 ▲
School pupils with social, emotional and mental health needs: % of school pupils with social, emotional and mental health needs (Persons, school age, %)	2020	2.7 ▲	-	2.0 ▲	2.3 ▶	2.6 ▶	3.3 ▶	3.7 ▲	3.0 ▲	3.7 ▲	3.2 ▶	3.1 ▶	2.6 ▶	3.1 ▶	3.2 ▼	2.7 ▶
Percentage of looked after children whose emotional wellbeing is a cause for concern (Persons, 5-16 years, %)	2019/20	37.4 ▶	-	36.0 ▶	46.0 ▶	40.9 ▶	55.4 ▶	37.1 ▶	35.8 ▶	38.4 ▶	35.5 ▶	37.0 ▶	28.6 ▶	37.2 ▶	36.4 ▶	43.6 ▶

Figure 5.2 – Prevalence of mental health conditions in school age children

At a locality level, the data indicate that on average:

- There is great variation across the **North East and Cumbria** and across age groups for school pupils with social, emotional and mental health needs. Among primary age children, five areas are significantly lower than the England average, six significantly higher, and two with no significant difference. The highest percentage is **South Tyneside** (3.5%) and the lowest are **Gateshead**, **Middlesbrough** and **Newcastle upon Tyne** (2.1%). All local authorities are either increasing or have no significant change over time.

- Among secondary school pupils percentages of school pupils with social, emotional and mental health needs range from **Gateshead** (1.5%) to **Middlesbrough** (3.7%), which is notable in comparison with its low rate in primary pupils. Only **Redcar & Cleveland** have a decreasing trend.

- All local authorities except **Hartlepool** have a significantly higher or similar to the England average for percentage of looked after children whose emotional wellbeing is a cause for concern. **Northumberland** has the highest percentage (55.4%) and is significantly higher than the England average (37.4%).

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/PJpPD0190m.

5.2.2 Emotional wellbeing aged 15

Wellbeing can be seen as a measure of positive mental health and a protective factor for young people. Wellbeing indicators are taken from the What About YOUth? survey[14], a large scale survey of 15 year olds in England describing a variety of behaviours and outcomes. This survey had around 120,000 responses allowing data to be presented by various breakdowns relating to ethnicity, deprivation, gender and sexual orientation which can be viewed in Fingertips.

The focus on bullying reflects evidence for a causal relationship between experiencing bullying and poorer health and wellbeing outcomes, with potentially long-term impacts into adulthood. The negative effect of bullying has also been demonstrated among the perpetrators of bullying and not just the victims. There is often an interaction between being bullied and bullying others; those who

[14] NHS Digital What About YOUth? Survey (2015): link

are both bullies and victims (bully/victims) are likely to display the worst health and social outcomes. Cyberbullying is a growing phenomenon and linked with traditional forms of bullying, very few victims of bullying are subjected to cyberbullying alone[15].

Young people are particularly vulnerable to poor body image with 66% of under 18s reporting that they feel negative or very negative about their body most of the time. Evidence shows that teenage perceptions of body image persist into adult life. School environments are formative for children to develop a health body image[16].

[15] PHE (2017) Cyberbullying: An analysis of data from the Health Behaviour in School-aged Children (HBSC) survey for England, 2014: link
[16] House of Commons (2021) Changing the perfect picture: an inquiry into body image: link

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Percentage who think they're the right size at age 15 (Persons, aged 15, %)	2014/15	52.4	-	50.5	55.2	51.7	50.6	50.9	52.7	51.9	53.2	48.1	50.9	52.8	53.5	48.8
Mean score of the 14 WEMWBS statements at age 15 (Persons, aged 15, mean score)	2014/15	47.6	-	47.3	47.6	47.9	47.0	48.1	47.6	48.3	48.2	46.8	47.4	47.8	47.8	47.4
Positive satisfaction with life among 15 year olds: % reporting positive life satisfaction (Persons, aged 15, %)	2014/15	63.8	-	64.4	66.5	67.1	64.3	65.2	66.9	68.7	64.0	64.2	58.9	63.7	66.4	65.0
Percentage reporting low life satisfaction at age 15 (Persons, aged 15, %)	2014/15	13.7	-	12.1	12.2	12.8	13.8	12.7	13.0	13.2	13.7	14.1	11.7	11.6	11.3	15.4
Percentage reporting general health as excellent at age 15 (Persons, aged 15, %)	2014/15	29.5	-	28.5	29.8	30.7	29.7	30.3	31.3	33.1	30.2	29.7	34.3	30.1	31.8	32.1
Percentage who were bullied in the past couple of months at age 15 (Persons, aged 15, %)	2014/15	55.0	-	58.4	58.4	50.1	60.7	51.6	54.0	53.7	54.3	56.3	62.3	54.1	55.0	57.1
Percentage who had bullied others in the past couple of months at age 15 (Persons, aged 15, %)	2014/15	10.1	-	8.7	9.5	9.5	10.6	8.8	9.2	7.4	8.0	9.0	11.9	6.8	10.6	11.3

Figure 5.3 – Emotional wellbeing aged 15

At a locality level, the data indicate that on average:

- All but two **North East and Cumbria** local authorities have a percentage who think they're the right size at age 15 that is similar to England (52.4%), with two significantly higher in **Stockton-on-Tees** (48.8%) and **Darlington** (48.1%).
- The survey asked the 14 questions that make up the Warwick-Edinburgh Mental Wellbeing Scales[17] to calculate a mean score between 14 and 70, with 70 being a high level of wellbeing. Most local authorities are similar to the England average (47.6), with **Darlington** (46.8) and **Northumberland** (47.0) significantly lower and **South Tyneside** (48.3) significantly higher.
- Survey respondents indicated levels of life satisfaction. Across the region only **Middlesbrough** (11.6%) and **Redcar & Cleveland** (11.3%) had a significantly lower percentage reporting low life satisfaction than the England average (13.7%), with the remaining local authorities similar to this. Significantly higher positive satisfaction with life was reported by respondents in **County Durham** (66.9%), **Newcastle upon Tyne** (67.1%) and **South Tyneside** (68.7%) compared to England (63.8%), with only **Hartlepool** (58.9%) significantly lower.
- Survey respondents were asked how they would class their general health. All but two local authorities are similar to England for the percentage reporting their general health as excellent at age 15, the two that are significantly higher than England (29.5%) are **Hartlepool** (34.3%) and **South Tyneside** (33.1%).
- Responses to questions on bullying and being bullied varied across the region, ranging from 62.3% (**Hartlepool**) to 50.1% (**Newcastle upon Tyne**) reporting they had been bullied in the last couple of months. Much lower numbers reported they had bullied others in the same period, though **Hartlepool** (11.9%) remains highest in the region. Three local authorities report significantly lower than England (10.1%) percentages of those had bullied others, these are **Sunderland** (8.0%), **South Tyneside** (7.4%) and **Middlesbrough** (6.8%).

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/vRFlhvmV06.

[17] https://warwick.ac.uk/fac/sci/med/research/platform/wemwbs/

5.2.3 Hospital admissions

Hospital admissions indicators are provided to show the scale of healthcare use for mental health conditions and self-harm at various ages, once again not only to show the amount of hospital resource used but also to highlight levels of need and the value of a whole system approach to prevention.

Self-harm is an intentional injury to one's own body and can include actions such as cutting, burning, biting oneself and ingesting toxic substances. Acts of deliberate self-harm are strongly associated with emotional distress and mental health issues. The behaviour is more common in adolescence and amongst girls more than boys. Those who self-harm in mid-late adolescence potentially face increased risk of developing mental health issues, as well as higher prevalence rates across a range of health risk behaviours in late adolescence and early adulthood; including increased likelihood of suicidal thoughts. Studies indicate that rates of self-harm amongst adolescents have increased over the last decade[18].

[18] PHE (2017) Intentional self-harm in adolescence: an analysis of data from the health behaviour in school-aged children (HBSC) survey for England, 2014: link

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Hospital admissions for mental health conditions (Persons, <18 years, Crude rate per 100,000)	2019/20	89.5 ▲	98.5 ▶	86.5 ▶	76.2 ▶	119.8 ▶	135.5 ▶	119.5 ▶	78.8 ▶	99.4 ▶	164.1 ▶	88.8 ▶	49.9 ▶	91.5 ▶	108.7 ▶	34.2 ▼
Hospital admissions as a result of self-harm (Persons, 10-24 years, Crude rate per 100,000)	2019/20	439.2 ▲	-	488.6 ▶	573.2 ▶	504.2 ▲	1039.8 ▲	867.7 ▲	361.2 ▶	484.3 ▶	440.7 ▶	505.3 ▶	248.7 ▶	604.9 ▶	529.1 ▶	471.2 ▶
Hospital admissions as a result of self-harm (10-14 years) (Persons, 10-14 years, Crude rate per 100,000)	2019/20	219.8 ▶	-	334.4 ▶	494.7 ▶	348.7 ▶	461.3 ▲	293.9 ▶	188.3 ▶	236.8 ▶	194.7 ▶	307.5	*	114.4 ▶	190.4 ▶	237.8
Hospital admissions as a result of self-harm (Persons, 15-19 years, Crude rate per 100,000)	2019/20	664.7 ▲	-	703.6 ▶	825.6 ▶	819.6 ▶	1351.2 ▲	1125.4 ▲	535.5 ▶	912.1 ▲	837.2 ▶	802.7 ▶	193.5	905.6 ▶	927.8 ▶	378.8
Hospital admissions as a result of self-harm (Persons, 20-24 years, Crude rate per 100,000)	2019/20	433.7 ▲	-	421.1 ▶	455.3 ▶	349.7 ▲	1280.0 ▲	1166.5 ▲	356.3 ▶	306.6 ▶	296.4 ▶	462.8	483.0	809.5 ▶	488.8 ▶	758.3 ▶

Figure 5.4 – Hospital admissions for mental health conditions and self-harm

On average, where available, the data relating to the **North East and Cumbria** in 2019/20 indicate that:

- The rate of hospital admissions for mental health conditions in the **region** (98.5 per 100,000 population) is significantly higher than the England average (89.5 per 100,000).

At a locality level, the data indicate that on average:

- There is a large variation across the region in the rate of hospital admissions for mental health conditions ranging from **Stockton-on-Tees** (34.2 per 100,000) to **Sunderland** (164.1 per 100,000). In addition to **Sunderland**, **Newcastle upon Tyne** (119.8 per 100,000) and **Northumberland** (135.5 per 100,000) have significantly higher rates than the England average.

- The rate of hospital admissions as a result of self-harm for the full range of 10-24 year olds is significantly higher than the England average for six of the thirteen local authorities, with two significantly lower. There is a large variation across the region ranging from **Hartlepool** (248.7 per 100,000) to **Northumberland** (1039.8 per 100,000).

- Breaking this indicator down into three 5 year age bands shows variation across the region. While **Northumberland** has the highest rate of admissions across two age bands, with an increasing trend, **Sunderland** has a significantly higher than England rate in 15-19 year olds but a significantly lower than the England average rate for 20-24 year olds. By further examining the available age breakdown rates and trends it may be possible to identify potential challenges and opportunities in a local area and across the region.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/yZt36WBovU.

5.3 Commentary on network actions

Mental health was the top priority of the network across both the children and young people and the professionals. There is a connection between the network and the Mental Health Clinical Network. Mental Health is a thread across much of the workstreams within the network, but specifically within the following.

- A key initiative was set up by the network to support training and cascade of Youth Mental Health first aid training for children above the age of eight. This programme has been extended following COVID to offer support more locally within communities by offering training opportunities to their local VCSE.
- Interactive film suite across a range of hard hitting issues for young people to choose different outcomes in a branch and narrative film for teenagers. The real life topics range from perinatal mental health to loneliness and is supported by a TryLearning package for professionals exploring this resource with young people.

For any further information and proposals on initiatives relating to mental health do contact the network via england.northernchildnetwork@nhs.net and the website Child Health and Wellbeing Network | North East and North Cumbria ICS.

5.4 Relevant key policy and research papers

Needs Assessment

PHE (2019) Public mental health and wellbeing in the North East https://www.gov.uk/government/publications/state-of-the-north-east-2018-public-mental-health-and-wellbeing

PHE (2019) Mental health and wellbeing JSNA toolkit: Children and young people https://www.gov.uk/government/publications/better-mental-health-jsna-toolkit/5-children-and-young-people

Kessler RC et al. Age of onset of mental disorders; a review of recent literature. Current Opinion Psychiatry 2002; 20(4): 359-64 https://pubmed.ncbi.nlm.nih.gov/17551351/

Mental Health Improvement & Mental Health Services

The Children's Commissioner (2021) The state of children's mental health services 2021/21 https://www.childrenscommissioner.gov.uk/wp-content/uploads/2021/01/cco-the-state-of-childrens-mental-health-services-2020-21.pdf

PHE (2021) School-aged years high impact area 1: Supporting resilience and wellbeing. https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-children/school-aged-years-high-impact-area-1-supporting-resilience-and-wellbeing

PHE (2021) Promoting children and young people's emotional health and wellbeing – a whole school approach. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/958151/Promoting_children_and_young_people_s_emotional_health_and_wellbeing_a_whole_school_and_college_approach.pdf

PHE (2019) Universal approaches to improving children and young people's mental health and wellbeing https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/842176/SIG_report.pdf

PHE (2019) Children and young people's mental health: prevention evidence https://www.gov.uk/government/publications/children-and-young-peoples-mental-health-prevention-evidence

PHE (2015, updated Dec 2019) Early adolescence: applying all our health https://www.gov.uk/government/publications/early-adolescence-applying-all-our-health/early-adolescence-applying-all-our-health

PHE (2015) Improving young people's health and wellbeing: a framework for public health https://www.gov.uk/government/publications/improving-young-peoples-health-and-wellbeing-a-framework-for-public-health

CQC (2018) Are we listening: review of children and young people's mental health services https://www.cqc.org.uk/sites/default/files/20180308b_arewelistening_report.pdf

Department of Health and Social Care and Department for Education. (2018) Government Response to the Consultation on Transforming Children and Young People's Mental Health Provision: a Green Paper and Next Steps

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/728892/government-response-to-consultation-on-transforming-children-and-young-peoples-mental-health.pdf

Association for Young People's health (2016) A public health approach to promoting young people's resilience. http://www.youngpeopleshealth.org.uk/wp-content/uploads/2016/03/resilience-resource-15-march-version.pdf

Measurement

NHS Digital (2015) What about youth study https://digital.nhs.uk/data-and-information/areas-of-interest/public-health/what-about-youth-study

NHS Digital Mental Health of Children and Young People in England 2020: Wave 1 follow up to the 2017 survey https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-of-children-and-young-people-in-england/2020-wave-1-follow-up

NHS Digital (2021) Mental health of children and young people surveys https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-of-children-and-young-people-in-england

NHS Digital (2018) Mental health of Children and Young People in England, 2017 https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-of-children-and-young-people-in-england/2017/2017

Warwick University (2021) The Warwick Edinburgh Mental Wellbeing Scales https://warwick.ac.uk/fac/sci/med/research/platform/wemwbs/

PHE (2018) The wellbeing of 15-year-olds: analysis of the What About YOUth? survey https://www.gov.uk/government/publications/the-wellbeing-of-15-year-olds-analysis-of-the-what-about-youth-survey

PHE (2017) Health behaviour in school age children (HBSC): data analysis https://www.gov.uk/government/publications/health-behaviour-in-school-age-children-hbsc-data-analysis

ADHD

NICE (2018) NICE guideline NG 87. Attention deficit hyperactivity disorder: diagnosis and management. https://www.nice.org.uk/guidance/NG87

Anxiety

NICE (2013) Clinical Guideline CG 159 Social anxiety disorder: recognition, assessment and treatment. https://www.nice.org.uk/guidance/cg159

Autism

NICE (2021) Clinical guideline CG 170. Autism spectrum disorder in under 19s: support and management. https://www.nice.org.uk/guidance/cg170

Body image

House of Commons (2021) Changing the perfect picture: an inquiry into body image. https://committees.parliament.uk/publications/5357/documents/53751/default/

Bullying

PHE (2017) Cyberbullying: An analysis of data from the Health Behaviour in School-aged Children (HBSC) survey for England, 2014 https://www.gov.uk/government/publications/health-behaviour-in-school-age-children-hbsc-data-analysis

Conduct Disorders

NICE (2017) Clinical guideline CG158. Antisocial behaviour and conduct disorders in children and young people: recognition and management https://www.nice.org.uk/guidance/cg158/chapter/Introduction

The British Psychological Society and The Royal College of Psychiatrists (2013) Antisocial behaviour and conduct disorders in children and young people. The NICE guideline on recognition and management. https://www.nice.org.uk/guidance/cg158/evidence/conduct-disorders-in-children-and-young-people-full-guideline-189848413

Depression in Children

NICE (2019) NICE Guideline NG134 Depression in children and young people: identification and management. https://www.nice.org.uk/guidance/ng134

Eating Disorders

Royal College of Psychiatrists (2020) Quality Network for CAMHS Community Eating Disorder Service Standards https://www.rcpsych.ac.uk/docs/default-source/improving-care/ccqi/quality-networks/child-and-adolescent-community-teams-cahms/quality-network-for-community-camhs-eating-disorder-services-second-edition.pdf?sfvrsn=87a71cee_8

NICE (2017) NICE Guideline NG69. Eating disorders: recognition and treatment https://www.nice.org.uk/guidance/ng69

Psychosis and schizophrenia

NICE (2016) Clinical Guideline CG155 Psychosis and schizophrenia in children and young people: recognition and management https://www.nice.org.uk/guidance/cg155

Self-harm

NICE (2011) Clinical Guideline CG133. Self-harm in over 8s: long term management https://www.nice.org.uk/guidance/cg133

NICE (2004) Clinical Guideline CG16. Self-harm in over 8s: short term management and prevention of recurrence https://www.nice.org.uk/guidance/cg16/chapter/1-Guidance

PHE (2017) Intentional self-harm in adolescence: an analysis of data from the health behaviour in school-aged children (HBSC) survey for England, 2014 https://www.gov.uk/government/publications/health-behaviour-in-school-age-children-hbsc-data-analysis

North East and North Cumbria's

Child Health and Wellbeing Network

The Facts of Life for children and young people growing up in the North East and North Cumbria:

Chapter 6 – Health promotion

September 2021

@NorthNetChild

The region on average performs better than England on immunisation and vaccination rates but is worse for three or more risky behaviours at age 15 and for hospital admissions for unintentional and deliberate injuries. Are these related?

Chapter Six SPOTLIGHT to direct momentum for initiatives

6 Health promotion

6.1 Relevance

Prevention and early intervention in childhood can save lives, promote long-term health and wellbeing and foster healthy behaviours throughout life.

This chapter provides a broad overview of public health indicators in relation to positive and adverse behaviours, as well as interventions such as vaccinations. Additional risky behaviours of smoking, alcohol and substance use are presented by local authority. Indicators of key vaccinations are presented including their target rates in the population where appropriate. This includes early years vaccinations such as MMR, as well as HPV and immunisations for children in care.

6.2 Commentary and findings

6.2.1 Prevalence

To set the scene for a number of topics within this chapter is an indicator based on the 2014 What About YOUth? survey[1], presenting the percentage of 15 year olds who take part in three or more risky behaviours (from a list of six: smoking, drinking, using cannabis, using other drugs, poor diet and lack of physical activity). Many of these behaviours are broken down further later

[1] NHS Digital, What About YOUth? Survey (2015): link

in the chapter. While this data is now several years old it is still the largest available survey data of its kind, with enough responses to provide geographical and other breakdowns as presented here and on Fingertips.

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Percentage with 3 or more risky behaviours at age 15 (Persons, 15 years, %)	2014/15	15.9		17.2	23.8	16.6	19.5	23.7	23.0	17.6	21.8	20.4	22.1	15.0	20.7	18.0

Figure 6.1 – Percentage of 15 year olds with 3 or more risky behaviours

- In the **North East and Cumbria** none of the local authorities have significantly lower proportions than the England average (15.9%) and eight were significantly higher, with **Gateshead** (23.8%) highest.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/3zR8Dlv48U.

Chart legend
Significance compared with England worse similar better

6.2.2 Diet and physical activity

From the same survey came three questions on diet and physical activity.

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Percentage who eat 5 portions or more of fruit and veg per day at age 15 (Persons, 15 years, %)	2014/15	52.4	-	49.2	46.1	47.8	50.1	50.0	44.7	46.1	44.4	44.6	43.8	50.3	48.0	46.7
Percentage with a mean daily sedentary time in the last week over 7 hours per day at age 15 (Persons, 15 years, %)	2014/15	70.1	-	69.4	78.0	73.3	71.6	76.5	75.4	77.8	75.0	74.5	81.0	75.1	76.4	73.5
Percentage physically active for at least one hour per day seven days a week at age 15 (Persons, 15 years, %)	2014/15	13.9	-	12.1	13.4	13.9	13.5	15.8	14.0	11.8	15.6	17.7	15.2	16.3	12.9	11.9

Figure 6.2 – Diet and physical activity – Children and young people

- Ten of the thirteen **North East and Cumbria** local authorities report significantly lower percentages of 15 years olds eating five portions of fruit and veg per day than the England average (52.4%) with **Hartlepool** (43.8%) lowest.

- All local authorities except two had a significantly higher percentage with a mean daily sedentary time in the last week over 7 hours per day at age 15 than the England average (70.1%). The remaining two were not significantly different to England, these were **Cumbria** (69.4%) and **Northumberland** (71.6%), the most rural local authorities in the region.

- The UK Chief Medical Officer recommends children and young people (5-18 years) are physically active for at least one hour per day seven days a week. Only one **North East and Cumbria** local authority was significantly higher than the England average (13.9%) for the percentage at age 15, this was **Darlington** (17.7%). All other local authorities in the region were not significantly different to the England average. Additionally (not shown in figure 6.2), in 2019/20 from the Active Lives Children and Young People Survey[2] 46.2% of 5-16 year olds in the **North East** achieved the recommendation which was not significantly higher than England (44.9%).

For context, more recent data on diet and physical activity is available for adults.

[2] Sport England Active Lives Survey: link

Chart legend

Significance compared with England: worse | similar | better

				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Proportion of the population meeting the recommended '5-a-day' on a 'usual day' (adults) (Persons, 16+ years, %)	2019/20	55.4	-	56.9	59.6	53.8	57.3	53.1	54.6	57.6	59.8	57.8	49.2	48.4	50.7	49.3	47.5	44.1	54.7
Percentage of physically active adults (Persons, 19+ years, %)	2019/20	66.4	-	75.3	62.5	68.0	78.7	61.8	69.0	65.5	71.6	65.5	57.2	60.8	66.9	54.9	57.6	67.1	68.6
Percentage of physically inactive adults (Persons, 19+ years, %)	2019/20	22.9	-	18.1	29.7	22.0	15.0	26.6	21.5	24.4	19.9	24.5	29.4	25.6	24.1	28.5	32.6	24.2	20.7

Figure 6.3 – Diet and physical activity – Adults

- Ten **North East and North Cumbria (NENC)** local authorities were not significantly different to England (55.4%) for the proportion of the adult population meeting the recommended '5-a-day' on a 'usual day'. The remaining six were all significantly lower than the England average. These were all of the **Tees Valley** local authorities except **Stockton-on-Tees**, as well as **South Tyneside** and **Sunderland**.

- Four NENC local authorities had a significantly higher percentage of physically active adults than the England average (66.4%). Two of these four were in **North Cumbria** (**Allerdale**, 75.3% and **Eden**, 78.7%) and the other two were **Newcastle upon Tyne** (69.0%) and **North Tyneside** (71.6%). Five NENC local authorities were significantly lower than England and seven were not significantly different.

- Two NENC local authorities had a significantly lower percentage of physically inactive adults than the England average, these were **Allerdale** (18.1%) and **Eden** (15.0%) in **North Cumbria**. Four NENC local authorities were significantly higher than England and ten were not significantly different. There is a large range in the region with the highest percentage (**Middlesbrough**, 32.6%) being more than double the lowest percentage (**Eden**, 15.0%).

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/AyfUleV4U2.

6.2.3 Obesity

More than 1 in 3 children in England are obese or overweight at the end of primary school, and this links to both poor physical and mental outcomes including type 2 diabetes as well as bullying and poor mental health. Indicators of prevalence and behaviours around diet and exercise are presented to show the scale of the situation in local areas. Deprivation is associated with these indicators, with those in more deprived areas more likely to be overweight or obese in Reception and Year 6 as recorded by the National Child Measurement Programme[3].

[3] NHS Digital National Child Measurement Programme: link

Chart legend

Significance compared with England: worse | similar | better

				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Reception: Prevalence of healthy weight (Persons, 4-5 years, %)	2019/20	76.1 ▼	74.3 ►	69.2*	75.7	65.9*	73.5*	69.5* ▼	73.0 ►	79.2 ▲	73.8 ►	74.6 ►	76.5 ►	77.2 ►	73.8 ►	70.1*	68.4* ►	69.1	77.6* ►
Reception: Prevalence of underweight (Persons, 4-5 years, %)	2019/20	0.9 ►	0.8 ►	*	1.1	*	*	1.1* ►	1.1 ►	1.4 ►	0.4 ►	0.5 ►	*	0.5 ►	*	*	*	0.7	*
Reception: Prevalence of overweight (including obesity) (Persons, 4-5 years, %)	2019/20	23.0 ▲	-	30.8* ►	23.2 ▼	34.1* ►	23.5* ►	29.4* ▲	26.0 ►	19.3 ▼	25.8 ►	24.9 ►	23.2 ►	22.1 ►	25.8 ►	29.9* ►	31* ►	30.1 ►	21.6* ►
Reception: Prevalence of obesity (including severe obesity) (Persons, 4-5 years, %)	2019/20	9.9 ▲	10.9 ►	13.5* ►	7.3 ►	12.2* ►	5.9* ►	13.0* ►	11.6 ►	9.1 ►	11.0 ►	10.7 ►	9.7 ►	10.1 ►	12.0 ►	14.3* ►	14.6* ►	13.1 ►	9.8* ►
Reception: Prevalence of severe obesity (Persons, 4-5 years, %)	2019/20	2.5 ▲	2.8 ►	3.8* ►	1.7 ►	4.9* ►	*	4.0* ►	3.0 ►	2.5 ►	2.2 ►	2.4 ►	2.8 ►	3.0 ►	2.2 ►	4.1* ►	5.1* ►	2.8 ►	1.6* ►
Reception: Prevalence of obesity (including severe obesity), 5-years data combined (Persons, 4-5 years, %)	2015/16 - 19/20	9.6	-	12.3	9.9	11.2*	8.5*	10.6*	11.8	9.8	10.2	10.6	10.7	10.9	10.1	11.9	13.1*	11.8	9.9

Figure 6.4 – National child measurement programme – Reception pupils

Note: Where a value is shown with a * next to it, coverage in this local authority is affected by the COVID-19 pandemic for 2019/20 data and should be interpreted with caution. Values shown with just *'s are suppressed due to disclosure control as previously.

On average, where available, the data relating to the **NENC region** as a whole show that for children at reception age:

- The prevalence of children with a healthy weight in the **NENC region** (74.3%) is significantly lower than the England average (76.1%).
- The prevalence of children who are obese (including severely obese) is significantly higher in **NENC** (10.9%) than the England average (9.9%), and the prevalence of those who are severely obese is significantly higher in **NENC** (2.8%) than the England average (2.5%).

At a locality level, for children at reception age:

- The region shows variation across all indicators, and within local authorities there is variation between the different BMI ranges. **Stockton-on-Tees** is not significantly different to the England average across all indicators with available data, with the exception of prevalence of severe obesity (1.6%) being significantly lower than the England average (2.5%).
- Only **Northumberland** (79.2%) had a significantly higher percentage prevalence of healthy weight children compared to the England average, as well as being the only NENC local authority with an increasing trend. **Northumberland** is also the only NENC local authority with a significantly lower proportion of overweight children (19.3%) than the England average (23.0%). However, it is also the only NENC local authority with a significantly higher prevalence of underweight children (1.4%) compared to the England average (0.9%).

At a regional level an inequality indicator for prevalence of obesity and severe obesity is produced to measure how much child obesity varies with deprivation. The slope index value for the **North East** is 9.0% compared to 7.9% for the England average, and this is the highest regional value in the country.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/hci4jkZfW0.

Chart legend

Significance compared with England: worse | similar | better

				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Year 6: Prevalence of healthy weight (Persons, 10-11 years, %)	2019/20	63.4 ▼	61.6 ►	63.0*	66.1 ►	67.1*	70.3*	60.0 ►	59.4 ►	65.4 ►	62.7 ►	61.5 ►	59.1 ►	61.8 ►	61.4	59.9*	59.1 ►	59.9 ►	63.6* ►
Year 6: Prevalence of underweight (Persons, 10-11 years, %)	2019/20	1.4 ▲	1.1 ►	*	1.1 ►	*	*	1.2 ►	1.0 ►	1.4 ►	1.3 ►	1.0 ►	0.9 ►	1.5 ►	0.8	*	0.9 ►	1.0 ►	1.2* ►
Year 6: Prevalence of overweight (including obesity) (Persons, 10-11 years, %)	2019/20	35.2 ▲	37.3 ►	37* ►	32.8 ►	32.9* ►	29.7* ►	38.5 ►	39.6 ►	33.0 ►	36.2 ►	37.6 ►	40.0 ►	36.9 ►	37.8 ►	39.4* ►	40.0 ►	39.0 ►	34.8* ►
Year 6: Prevalence of obesity (including severe obesity) (Persons, 10-11 years, %)	2019/20	21.0 ▲	23.0 ►	22.2* ►	18.4 ►	22.9* ►	16.2* ►	24.9 ►	24.8 ►	19.6 ►	21.3 ►	22.7 ►	27.0 ▲	23.6 ►	22.5 ►	23.9* ►	25.2 ►	24.0 ►	20.2* ►
Year 6: Prevalence of severe obesity (Persons, 10-11 years, %)	2019/20	4.7 ▲	5.8 ▲	6.5* ►	4.6 ►	4.3* ►	*	6.4 ►	7.1 ▲	4.2 ►	4.5 ►	5.5 ►	6.7 ▲	6.1 ►	6.0 ►	7.0* ►	7.4 ▲	5.6 ►	4.3* ►
Year 6: Prevalence of obesity (including severe obesity), 5-years data combined (Persons, 10-11 years, %)	2015/16 - 19/20	20.2	-	21.2	19.3	24.3	17.2*	23.9	24.5	20.0	21.1	22.5	24.5	24.3	22.0	24.5	23.9	22.4	20.8

Figure 6.5 – National child measurement programme – Year 6 pupils

Note: Where a value is shown with a * next to it, coverage in this local authority is affected by the COVID-19 pandemic for 2019/20 data and should be interpreted with caution. Values shown with just *'s are suppressed due to disclosure control as previously.

On average, where available, the data relating to the **NENC region** as a whole show that in children at Year 6 age:

- The prevalence of children with a healthy weight in the **NENC region** (61.6%) is significantly lower than the England average (63.4%).
- The prevalence of children who are overweight (including obese), obese (including severely obese) and severely obese is significantly higher in **NENC** than the England average.
- The prevalence of underweight children is significantly lower in **NENC** (1.1%) than the England average (1.4%).

At a locality level, in children at Year 6 age:

- As with Reception children the region shows variation across all indicators between local authorities. Significantly higher prevalences of overweight children can be found in seven of the sixteen local authorities, and all of these with the exception of **Hartlepool** (obesity including severe obesity) and **Redcar & Cleveland** (severe obesity) also have significantly higher than England average prevalences at higher BMI ranges.
- Only **Northumberland** (65.4%) had a significantly higher prevalence of healthy weight children at Year 6 age compared to the England average. **Northumberland** is also the only NENC local authority with a significantly lower proportion of overweight children (33.0%) than the England average (35.2%).
- **South Tyneside** (0.9%) has a significantly lower prevalence of underweight Year 6 pupils than the England average (1.4%). All other local authorities where data is available have similar values to the England average.

At Year 6 the slope index of inequality in the prevalence of obesity (including severe obesity) for the **North East** is lower than England at 16.3% compared to 17.2% for the England average, meaning that obesity does not vary as much with deprivation.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/FJrVuftnZ0.

Additional breakdowns of this data including to lower geography level are available from:

https://www.gov.uk/government/statistics/child-obesity-and-excess-weight-small-area-level-data.

6.2.4 Smoking

Smoking is detrimental to the health of young people throughout their lives**,** with earlier initiation linked to increased levels of smoking and dependence, a lower chance of quitting, and higher mortality. Smoking reduces lung function, increases the risk of a young person developing asthma, decreases their exercise tolerance and may impair their growth. Ninety percent of lifetime smoking is initiated between the ages of 10 and 20 years in the UK[4]. 77% of smokers aged 16-24 began smoking before the age of 18[5], therefore intervention and positive messaging at a young age is crucial.

[4] RCPCH (2021) State of Child Health – Smoking in young people: link
[5] DHSC (2020) Smoke-free generation: tobacco control plan for England: link

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Smoking prevalence at age 15 - regular smokers (WAY survey) (Persons, 15 years, %)	2014/15	5.5	-	5.1	9.8	8.3	6.0	7.5	8.6	7.7	8.9	6.8	7.7	6.5	6.0	4.6
Smoking prevalence at age 15 - occasional smokers (WAY survey) (Persons, 15 years, %)	2014/15	2.7	-	2.2	2.6	2.3	3.2	2.9	2.6	1.5	2.7	2.2	4.5	1.6	2.9	2.2
Smoking prevalence at age 15 - current smokers (WAY survey) (Persons, 15 years, %)	2014/15	8.2	-	7.3	12.4	10.7	9.2	10.3	11.2	9.1	11.6	9.0	12.2	8.2	8.9	6.8
Percentage who have tried e-cigarettes at age 15 (Persons, 15 years, %)	2014/15	18.4	-	19.9	19.9	18.3	18.0	22.3	20.6	16.7	21.9	19.3	19.8	14.3	25.9	16.3
Percentage who have tried other tobacco products at age 15 (Persons, 15 years, %)	2014/15	15.2	-	6.8	15.2	16.9	13.3	17.8	12.1	11.5	13.7	11.6	12.7	15.7	13.2	13.7

Figure 6.6 – Smoking

Smoking prevalence data is based on the What About YOUth survey, more recent national estimates for similar indicators are available from NHS Digital's Smoking, Drinking and Drug Use among Young People survey[6] however local authority data cannot be produced from this source.

On average, for the **North East and Cumbria**, the data indicate that in 2014/15:

- Six North East and Cumbria local authorities are not significantly different to the England average for smoking prevalence at age 15 (regular smokers). The remaining seven local authorities are all significantly higher than the England average, the highest is **Gateshead** (9.8%), compared to the England average (5.5%).
- Only one local authority, **Hartlepool**, is significantly higher than the England average for smoking prevalence at age 15 (occasional smokers). Two are significantly lower and the remaining ten are not significantly different to the England average.
- The local authority with the highest percentage of current smokers at age 15 is **Gateshead** (12.4%). Five other local authorities are also significantly higher than the England average. The remaining seven local authorities are not significantly different to the England average.
- Three local authorities were significantly higher than the England average for the percentage of 15 year olds who have tried e-cigarettes, these were **Redcar & Cleveland**, **North Tyneside** and **Sunderland**. One local authority was significantly lower, this was **Middlesbrough**. The remaining nine local authorities were not significantly different.
- The only local authority that was significantly higher than the England average for the percentage of 15 year olds that have tried other tobacco products was **North Tyneside** (17.8%). Four local authorities were significantly lower and the remaining eight were not significantly different. Other tobacco products are defined as shisha pipe, hookah, hubble-bubble, waterpipe etc.

[6] NHS Digital Smoking, drinking and drug use among young people in England: link

Chart legend
Significance compared with England | worse | similar | better

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/08oocZ0dfk.

6.2.5 Alcohol

Hospital admissions for alcohol are presented to show the impact of alcohol use in young people on the healthcare system.

				Clinical commissioning groups							
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland			Tees Valley
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Tees Valley
Admission episodes for alcohol-specific conditions - Under 18s (Persons, <18, rate per 100,000)	2017/18 - 19/20	30.2	53.7	36.4	46.5	62.1	74.0	47.4	111.9	89.4	36.0

Figure 6.7 – Alcohol admissions

Seven of the eight **NENC** CCGs were significantly higher than the England average for admission episodes for alcohol-specific conditions for under 18s. The highest CCG was **South Tyneside** (111.9 per 100,000), over three times the England average. The remaining CCG, **North Cumbria**, was not significantly different to the England average. The **region's** average (53.7 per 100,000) was significantly higher than the England average (30.2 per 100,000).

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Percentage of regular drinkers at age 15 (Persons, 15 years, %)	2014/15	6.2	-	7.8	11.0	7.6	11.1	9.7	9.1	7.3	10.9	12.3	11.2	5.1	9.6	6.0
Percentage who have ever had an alcoholic drink at age 15 (Persons, 15 years, %)	2014/15	62.4	-	74.0	72.0	58.7	75.8	73.5	74.3	66.0	69.3	72.3	73.1	60.3	75.0	68.3
Percentage who have been drunk in the last 4 weeks at age 15 (Persons, 15 years, %)	2014/15	14.6	-	18.0	19.4	15.6	20.3	24.6	19.9	16.6	18.9	23.4	23.1	15.7	22.4	17.9

Figure 6.8 – Alcohol prevalence

Attitudes to alcohol were queried in the What About YOUth survey. On average, for the **North East and Cumbria**, the data indicate that in 2014/15:

- Nine of the thirteen North East and Cumbria local authorities have a significantly higher percentage of regular drinkers at age 15 than the England average. The local authority with the highest percentage is **Darlington** (12.3%), which is nearly double the England average of 6.2%. The four remaining local authorities are not significantly different to the England average, the lowest is **Middlesbrough** (5.1%).

- Eleven of the thirteen local authorities are significantly higher than the England average for the percentage who have ever had an alcoholic drink at age 15. The local authority with the highest percentage is **Northumberland** (75.8%), compared to England average of 62.4%. Of the two remaining local authorities **Middlesbrough** (60.3%) is not significantly different to the England average and **Newcastle upon Tyne** (58.7%) has a significantly lower percentage than the England average.

- Ten of the thirteen local authorities are significantly lower than the England average for the percentage who have been drunk in the last four weeks at age 15. The local authority with the highest percentage is **North Tyneside** (24.6%), compared to the England average of 14.6%. The remaining three local authorities were not significantly different to the England average.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/IpJzQkCpZE.

Chart legend

Significance compared with England | worse | similar | better

6.2.6 Drugs

	Period	England	Region	Clinical commissioning groups: North Cumbria	North of Tyne and Gateshead: Newcastle Gateshead	North of Tyne and Gateshead: Northumberland	North of Tyne and Gateshead: North Tyneside	Durham, South Tyneside and Sunderland: County Durham	Durham, South Tyneside and Sunderland: South Tyneside	Durham, South Tyneside and Sunderland: Sunderland	Tees Valley
Hospital admissions due to substance misuse (15-24 years) (Persons, 15-24 years, rate per 100,000)	2017/18 - 19/20	80.1	-	70.2	96.3	187.0	153.3	74.9	168.3	118.5	119.9

Figure 6.9 – Substance misuse admissions

Six of the eight **NENC** CCGs are significantly higher than the England average for hospital admissions due to substance abuse amongst 15-24 year olds. **Northumberland** had the highest directly standardised rate of admissions with 187.0 per 100,000, over double the England average of 80.1 per 100,000. The remaining two NENC CCGs, **North Cumbria** and **County Durham**, were not significantly different to the England average.

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Percentage who have taken drugs (excluding cannabis) in the last month at age 15 (Persons, 15 years, %)	2014/15	0.9	-	0.6	1.9	1.7	1.3	2.2	0.8	1.4	1.0	0.4	1.3	0.6	1.7	0.5
Percentage who have taken cannabis in the last month at age 15 (Persons, 15 years, %)	2014/15	4.6	-	2.9	6.3	4.5	3.8	5.9	4.1	3.1	3.6	2.7	4.3	4.2	4.4	4.2
Percentage who have ever tried cannabis at age 15 (Persons, 15 years, %)	2014/15	10.7	-	6.9	14.3	12.3	10.5	13.2	11.5	8.4	10.3	10.7	12.5	9.5	13.0	9.1

Figure 6.10 – Substance misuse prevalence

Attitudes to drugs were queried in the What About YOUth survey. On average, for the North East and Cumbria, the data indicate that in 2014/15:

- Four of the thirteen North East and Cumbria local authorities are significantly higher than the England average for the percentage who have taken drugs (excluding cannabis) in the last month at age 15. **North Tyneside** is the highest (2.2%), more than double the England average of 0.9%. One local authority, **Darlington** (0.4%) is significantly lower than the England average and the remaining eight are not significantly different.

- Only one local authority is significantly higher than the England average for the percentage who have taken cannabis in the last month at age 15, this was **Gateshead** (6.3%) compared to the England average of 4.6%. Three local authorities are significantly lower than the England average and the remaining nine were not significantly different.

- Three local authorities are significantly higher than the England average for the percentage who have ever tried cannabis at age 15. **Gateshead** has the highest percentage with 14.3% compared to the England average of 10.7%. **Cumbria** and **South Tyneside** are both significantly lower than the England average and the remaining eight local authorities were not significantly different to the England average.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/UC4mm4YdDE.

6.2.7 Oral health

Oral health is important in its own right, but poor dental health is also seen as a wider indicator of public health, including diet.

Oral health is an important aspect of a child's overall health status with an additional impact on their family. Children who have toothache or who need treatment may have pain, infections and difficulties with eating, speech, sleeping, low self-esteem, school absence and difficulty socialising.

Tooth decay is largely preventable, yet it remains a serious problem and is more commonly linked with deprivation. Vulnerable groups of children and young people, such as young carers and those in the criminal justice system, may experience additional risk of poor oral health. Consumption of free sugars is a risk factor for dental caries and obesity. There is a clear association between children's BMI and the prevalence and severity of caries, even when other potential influences such as deprivation are taken into account[7].

[7] PHE (2021) School-aged years high impact area 3: Supporting healthy lifestyles: link

				Clinical commissioning groups							
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland			Tees Valley
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Tees Valley
Hospital admissions for dental caries (0-5 years) (Persons, 0-5 years, rate per 100,000)	2017/18 - 19/20	289.7	420.0	26.2	706.7	942.8	527.1	327.1	286.3	163.3	334.0

Figure 6.11 – Hospital admissions for dental caries

- The average crude rate of hospital admissions for dental caries per 100,000 for 0-5 year olds in the **NENC** region was 420.0, the England average was 289.7. The rate across the region varied greatly from 26.2 for **North Cumbria** to 942.8 for **Northumberland**.

Chart legend

Significance compared with England: worse | similar | better

Oral health in 3 year olds

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Percentage of three year olds with experience of visually obvious tooth decay (Persons, 3 years, %)	2019/20	10.7	-	10.7	18.4	7.8	6.4	16.3	11.5	9.9	21.7	7.8	8.5	14.9	*	6.6
Incisor caries prevalence in three year olds (Persons, 3 years, %)	2019/20	3.4	-	2.3	3.1	0.0	2.5	6.1	4.4	1.5	4.9	2.4	1.9	7.6	*	3.5
dmft (decayed, missing or filled teeth) in three year olds (Persons, 3 years, mean dmft per child)	2019/20	0.31	-	0.29	0.37	0.10	0.12	0.61	0.35	0.23	0.79	0.20	0.20	0.72	*	0.18

Figure 6.12 – Oral health aged 3 years

On average, at a locality level, the data indicate that in 2019/20:

- Oral health in 3 year olds is broadly similar to the England average in most **North East and Cumbria** local authorities, however **Gateshead** (18.4%) and **Sunderland** (21.7%) have significantly higher percentages of children with experience of visually obvious tooth decay.

Chart legend
Significance compared with England worse similar better

- **Sunderland** also has the highest mean decayed, missing or filled teeth in the region at 0.79, significantly higher than the England average (0.29). **Middlesbrough** has the highest incisor caries prevalence (7.6%) in the region which is significantly higher than the England average.

Oral health in 5 year olds

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Children with one or more decayed, missing or filled teeth (Persons, 5 years, %)	2016/17	23.3	-	29.1	23.2	19.3	22.6	20.0	25.8	21.7	28.4	26.4	20.5	32.1	24.9	20.6
Percentage of 5 year olds with experience of visually obvious dental decay (Persons, 5 years, %)	2018/19	23.4	-	24.2	26.6	24.2	20.3	12.7	26.8	22.1	32.5	22.3	15.9	38.1	28.0	19.5
dmft (decayed, missing or filled teeth) in five year olds (Persons, 5 years, mean dmft per child)	2018/19	0.80	-	0.77	0.58	0.78	0.68	0.41	0.81	0.73	1.10	1.01	0.50	1.68	1.15	0.74

Figure 6.13 – Oral health aged 5 years

Chart legend
Significance compared with England worse similar better

On average, at a locality level, the data indicate that:

- Oral health in 5 year olds varies between **North East and Cumbria** local authorities, with all three indicators showing local authorities higher and lower than England averages. **Middlesbrough** has higher than England average values and highest in the region for all three indicators shown, while **North Tyneside** has lower than England values for all three.

Oral health in 12 year olds

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Proportion of twelve year olds free from dental decay (Persons, 12 years, %)	2008/09	66.4	60.9	60.6	68.3	61.8	54.9	56.5	57.9	62.1	57.0	53.2	69.2	49.0	55.4	55.4
dmft (decayed, missing or filled teeth) in twelve year olds (Persons, 12 years, mean dmft per child)	2008/09	0.74	-	0.96	0.64	0.82	1.20	0.95	1.03	0.87	1.10	1.19	0.55	1.10	1.17	0.96

Figure 6.14 – Oral health aged 12 years

Indicators relating to oral health in 12 year olds is taken from a survey conducted in 2008/09 which has not been repeated since. On average, at a locality level, the data indicate that:

- Eleven of the thirteen local authorities in the **North East and Cumbria** have significantly lower proportions of children free from dental decay than the England average (66.4%), with **Middlesbrough** (49.0%) lowest.

- Ten North East and Cumbria local authorities have a significantly higher mean decayed, missing or filled teeth, with **Gateshead** (0.64) and **Hartlepool** (0.55) significantly lower.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/DypKIPyZM0.

6.2.8 Road safety

Globally, road traffic accidents are the leading cause of death among children and young people aged 5-29 years The UK has much lower road traffic death rates among children and young people than comparable Western countries. Road traffic accidents are preventable, and in 2017 the UK had the third lowest rate of road deaths in Europe and second in the European Union. There are significant health inequalities**,** with the risk of road traffic injuries higher for those young people living in deprived areas. The highest risk of injury occurs immediately after young people can start legally using cars and motorcycles in terms of rates of both hospital admissions and police-reported serious and fatal casualties[8].

The indicators in this section are based on data from the Department for Transport, and the geographies relate to the location of the accident that caused the death or serious injury.

[8] RCPCH (2021) State of Child Health – Road traffic accidents: link

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Children killed and seriously injured (KSI) on England's road (Persons, <16 years, rate per 100,000)	2017-19	18.0	24.8	30.4	20.8	23.0	27.4	29.6	25.4	19.9	23.2	29.8	26.1	17.0	24.3	18.7
Children aged 5 and under killed or seriously injured in road traffic accidents (Persons, 0-5 years, rate per 100,000)	2017-19	7.9	13.7	15.9	10.2	14.9	20.2	12.1	12.2	29.9	11.0	32.2	10.3	8.6	3.7	2.3
Children aged 6-10 killed or seriously injured in road traffic accidents (Persons, 6-10 years, rate per 100,000)	2017-19	14.3	20.8	35.0	20.1	17.5	23.3	13.9	15.5	11.5	25.1	15.1	33.5	21.3	24.7	7.6
Children aged 11-15 killed or seriously injured in road traffic accidents (Persons, 11-15 years, rate per 100,000)	2017-19	34.9	42.5	41.8	34.8	40.6	39.2	67.6	51.6	16.5	36.0	42.3	36.6	24.0	48.3	50.8

Figure 6.15 – Road traffic accidents

On average, the data relating to the **North East and Cumbria** as a whole show that in 2017-19:

- The rate of children killed or seriously injured in road traffic accidents is higher than the England average in all three age groups.

On average, at a locality level, the data indicate that:

- No local authority in the region has a significantly lower rate of children killed or seriously injured in road traffic accidents than the England average. The pattern varies across age groups, with **Cumbria**, **Northumberland**, **South Tyneside** and **Darlington** having significantly higher rates than the England average in 0-5 year olds, while **North Tyneside** and **County Durham** have significantly higher rates than the England average in 11-15 year olds.

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Pedestrians killed or seriously injured in RTAs 0-24 years (Persons, <25 years, rate per 100,000)	2015-19	11.0	13.0	13.2	13.4	18.0	11.0	16.4	10.9	9.7	12.6	9.3	18.8	15.4	9.0	10.2
Pedal cyclists killed or seriously injured in RTAs 0-24 years (Persons, <25 years, rate per 100,000)	2015-19	4.4	4.2	4.7	3.2	4.0	2.5	2.5	4.4	4.3	5.3	4.6	5.1	4.6	5.3	4.4
Motorcyclists killed or seriously injured in RTAs 15-24 years (Persons, 15-24 years, rate per 100,000)	2015-19	23.6	16.1	22.8	16.0	9.0	21.1	10.8	13.9	14.6	20.4	8.9	20.2	16.6	16.1	19.5
Car occupants killed or seriously injured in RTAs 15-24 years (Persons, 15-24 years, rate per 100,000)	2015-19	29.4	30.2	67.0	25.3	11.3	53.8	13.7	39.0	19.4	19.8	28.5	18.4	7.8	17.5	17.8

Figure 6.16 – Road traffic accidents by road user type

When breaking this data down into types of road user, on average, the data relating to the **North East and Cumbria** as a whole show that in 2015-19:

- The rate of children and young people killed or seriously injured in road traffic accidents varies between road users, with **North East and Cumbria** having a significantly higher rate than the England average among pedestrians, but a significantly lower rate for motorcyclists.

On average, at a locality level, the data indicate that:

- No local authority has a significantly lower rate of pedestrians killed or seriously injured in road traffic accidents than the England average, with **Newcastle upon Tyne**, **North Tyneside** and **Hartlepool** significantly higher.
- Four local authorities have significantly lower than England average rates for motorcyclists, with all other areas similar to England.
- There is great variation between local authorities for car occupants, with more rural areas (**Cumbria**, **Northumberland** and **County Durham**) significantly higher than the England average, while **Newcastle upon Tyne**, **North Tyneside**, **Sunderland**, **Middlesbrough** and **Stockton-on-Tees** are all significantly lower.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/efC9LC1X6U.

6.2.9 Accidents and injuries

Unintentional injuries are a major cause of morbidity and premature mortality for children and young people in England.

Unintentional injuries for the under-5s tend to happen in and around the home and are linked to a number of factors including:

- child development
- the physical environment in the home

- the knowledge and behaviour of parents and other carers (including literacy)
- overcrowding and homelessness
- the availability of safety equipment
- consumer products in the home

Five causes account for 90% of unintentional injury hospital admissions for this age group and are a significant cause of preventable death and serious long-term harm. These are:

- choking, suffocation and strangulation
- falls
- poisoning
- burns and scalds
- drowning

The personal costs of an injury can be devastating to a child or family and can have major effects on their long-term education, employment, emotional wellbeing and family relationships. The majority of unintentional injuries are preventable, making them a public health priority[9]. Hospital admissions for accidents and injuries vary depending on multiple factors, including age (as presented in the data) as well as deprivation and gender.

[9] PHE (2021) Early years high impact area 5: Improving health literacy, managing minor illnesses and reducing accidents: link

Chart legend

Significance compared with England: worse | similar | better

				Clinical commissioning groups							
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland			Tees Valley
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Tees Valley
Hospital admissions caused by unintentional and deliberate injuries in children (aged 0-4 years) (Persons, 0-4 years, rate per 10,000)	2019/20	119.0 ▼	176.9	173.6 ▶	174.5 ▶	196.3 ▲	180.3 ▶	171.9 ▼	191.3 ▶	210.9 ▶	159.5 ▼
Hospital admissions caused by unintentional and deliberate injuries in children (aged 0-14 years) (Persons, 0-14 years, rate per 10,000)	2019/20	90.6 ▼	-	115.3 ▶	134.9 ▶	156.6 ▶	137.7 ▶	133.4 ▼	134.4 ▼	147.9 ▼	112.7 ▼
Hospital admissions caused by unintentional and deliberate injuries in young people (aged 15-24 years) (Persons, 15-24 years, rate per 10,000)	2019/20	124.1 ▶	157.7	113.3 ▶	157.3 ▲	253.1 ▲	228.5 ▲	134.2 ▶	155.6 ▶	144.9 ▶	145.2 ▶

Figure 6.17 – Hospital admission for injuries

On average, where available, the data relating to the **NENC region** as a whole show that in 2019/20:

- **NENC** has a significantly higher rate per 10,000 population for injuries than the England average in 0-4 year olds (176.9 compared to 119.0) and 15-24 year olds (157.7 compared to 124.1). A regional average for 0-14 years olds cannot be calculated, however all NENC CCGs are significantly higher than the England average.

On average, at a locality level, the data indicate that:

- For 0-4 year olds all NENC CCGs are significantly higher than the England average, with **Sunderland** (210.9 per 10,000) highest. Rates are increasing over time in **Northumberland**, while **County Durham** and **Tees Valley** have a downward trend.
- In 0-14 year olds all NENC CCGs are significantly higher than the England average, with **Northumberland** (156.6 per 10,000) highest. **Tees Valley** and all of the CCGs in **Durham, South Tyneside and Sunderland ICP** have downward trends.
- In 15-24 year olds all NENC CCGs are significantly higher than the England average with the exception of **North Cumbria** which is similar. **Northumberland** (253.1 per 10,000) has the highest rate, and has an increasing trend as do **Newcastle Gateshead** and **North Tyneside**.

Injuries for top level causes

High level cause groups begin to break down the reasons for admissions. Figure 6.18 uses five categories of injury cause, these are:

- Falls
- Exposure to inanimate mechanical forces – Crushing, lacerations and impact injuries caused by inanimate objects
- Exposure to animate mechanical forces – This includes bites, stings and impacts from animals and plants, as well as accidental injuries caused by another person
- Exposure to heat and hot substances
- Accidental poisoning

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Emergency admissions for falls in children (Persons, 0-4 years, rate per 100,000)	2017/18 - 19/20	450.9	603.0	581.2	431.6	440.1	627.0	582.7	697.9	723.1	758.7	898.3	533.6	533.4	568.0	485.4
Emergency admissions for exposure to inanimate mechanical forces in children (Persons, 0-4 years, rate per 100,000)	2017/18 - 19/20	215.2	330.2	193.7	323.7	410.1	358.3	320.5	358.2	341.5	502.1	364.9	188.3	361.3	295.4	228.4
Emergency admissions for exposure to animate mechanical forces in children (Persons, 0-4 years, rate per 100,000)	2017/18 - 19/20	40.8	71.4	55.4	46.2	80.0	67.2	72.8	92.7	80.3	78.1	56.1	62.8	68.8	90.9	57.1
Emergency admissions for exposure to heat and hot substances in children (Persons, 0-4 years, rate per 100,000)	2017/18 - 19/20	79.1	117.0	228.3	123.3	140.0	112.0	116.5	92.7	80.3	111.6	84.2	62.8	68.8	68.2	57.1
Emergency admissions for accidental poisoning in children (Persons, 0-4 years, rate per 100,000)	2017/18 - 19/20	118.2	203.3	186.8	138.7	70.0	201.5	189.4	253.2	160.7	267.8	393.0	188.3	258.1	181.8	214.1

Figure 6.18 – Hospital admission for top level injury types

On average, the data relating to the **North East and Cumbria** as a whole show that in 2017/18-19/20:

- **North East and Cumbria** has a significantly higher rate per 100,000 population for injuries than the England average for all five cause groups.

On average, at a locality level, the data indicate that:

- With the exception of **Hartlepool**, which is similar to the England average for all five groups, every local authority has at least one and in most cases more cause groups where they have significantly higher rates than the England average.
- **Newcastle upon Tyne** has a significantly lower rate of admissions for accidental poisoning (70.0 per 100,000) than the England average (118.2 per 100,000). All other rates in the region are similar to or higher than the England average.

Specific key impact areas

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Emergency hospital admissions due to falls from furniture (Persons, 0-4 years, rate per 100,000)	2015/16 - 19/20	125.8	144.9	134.9	126.6	100.9	133.2	113.6	163.9	180.1	144.9	245.2	129.9	174.1	132.8	159.5
Emergency hospital admissions due to inhalation of food or vomit (Persons, 0-4 years, rate per 100,000)	2015/16 - 19/20	13.5	24.4	20.5	*	*	13.3	17.5	18.2	*	*	32.7	37.1	61.4	39.8	16.8
Emergency hospital admissions due to hot tap water scalds (Persons, 0-4 years, rate per 100,000)	2015/16 - 19/20	5.8	10.8	16.4	*	11.9	*	*	7.3	*	*	*	0.0	*	*	*
Emergency hospital admissions due to burns from food and hot fluids (Persons, 0-4 years, rate per 100,000)	2015/16 - 19/20	45.2	54.5	94.1	63.3	71.2	40.0	52.4	47.3	48.0	52.7	32.7	37.1	51.2	26.6	25.2
Emergency hospital admissions due to poisoning from medicines (Persons, 0-4 years, rate per 100,000)	2015/16 - 19/20	86.0	124.3	143.1	99.5	47.5	93.3	96.1	160.2	96.1	138.3	212.5	111.4	133.1	132.8	151.1

Figure 6.19 – Hospital admission for specific injury types

On average, the data relating to the **North East and Cumbria** as a whole show that in 2015/16-19/20:

- **North East and Cumbria** has a significantly higher rate per 100,000 population for injuries than the England average for all five specific causes.

On average, at a locality level, the data indicate that:

- Rates vary across the region for specific causes. For falls from furniture five local authorities have significantly higher rates than the England average (125.8 per 100,000), while **Newcastle upon Tyne** has a significantly lower rate (100.9 per 100,000).
- Where available, rates of admission for inhalation of food or vomit are similar to the England average (13.5) in all North East and Cumbria local authorities other than **Hartlepool** (37.1 per 100,000), **Middlesbrough** (61.4 per 100,000) and **Redcar & Cleveland** (39.8 per 100,000) which are significantly higher.
- Admissions for hot tap water scalds cannot be displayed in most areas, however **Cumbria** (16.4 per 100,000) has a significantly higher rate than the England average (5.8 per 100,000).
- Admissions due to burns from food and hot fluids are significantly higher than the England average (45.2 per 100,000) in **Cumbria** (94.1 per 100,000) and **Newcastle upon Tyne** (71.2 per 100,000). In **Stockton-on-Tees** (25.2 per 100,000) the rate of admission is significantly lower.
- Admissions due to poisoning from medicines are significantly higher than the England average (86.0 per 100,000) in seven local authorities, while **Newcastle upon Tyne** (47.5 per 100,000) has a significantly lower rate.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/3lXx8JB0uc.

6.2.10 Vaccinations and immunisations

Immunisation is a safe and highly effective way to protect children and young people against serious and potentially fatal diseases.

High vaccination rates provide increased probability of immunity throughout the population (herd immunity), which is particularly important for protecting individuals who cannot be vaccinated, and can also lead to the elimination of some diseases. Even when a disease is no longer common in the UK, without sustained high rates of vaccination it is possible for these diseases to return as demonstrated by recent measles outbreaks[10].

The childhood vaccination programme in England changes in response to requirements[11], with flu vaccinations for primary school children a recent addition and the potential for COVID-19 vaccinations for Secondary school children to be rolled out in the future.

Vaccination success is measured by population coverage, therefore RAG colouring in figures 6.20, 6.21 and 6.22 are based on targets rather than comparison with England. In figures 6.20 and 6.21 local authorities with coverage of 95% or more are coloured green, those between 90% and 95% are amber, and those below 90% are red.

[10] RCPCH (2021) State of Child Health – Immunisations: link
[11] PHE (2020) Immunisation against infectious disease: link

Chart legend

Childhood vaccinations

<90% | 90% to 95% | ≥95%

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Population vaccination coverage - Rotavirus (Rota) (Persons, 1 year, %)	2019/20	90.1	94.5	94.3	92.6	91.4	95.1	95.9	96.0	96.2	97.6	93.3	96.0	89.6	92.5	94.7
Population vaccination coverage - Dtap / IPV / Hib (1 year) (Persons, 1 year, %)	2019/20	92.6 ▼	96.0 ▶	96.1 ▼	94.8 ▶	93.2 ▶	95.6 ▶	97.1 ▼	97.8 ▼	97.7 ▶	98.5 ▶	95.2 ▼	96.1 ▶	93.1 ▼	94.1 ▶	96.0 ▶
Population vaccination coverage - Dtap / IPV / Hib (2 years) (Persons, 2 years, %)	2019/20	93.8 ▼	96.5 ▼	95.9 ▼	96.5 ▶	94.7 ▶	95.9 ▼	98.0 ▼	98.0 ▼	98.1 ▶	98.7 ▶	96.6 ▼	95.0 ▶	93.9 ▼	96.2 ▶	95.8 ▶
Population vaccination coverage - DTaP/IPV booster (5 years) (Persons, 5 years, %)	2019/20	85.4 ▼	91.4 ▼	95.1 ▲	88.9 ▶	86.5 ▼	90.4 ▶	93.1 ▶	95.8 ▶	94.2 ▼	94.5 ▶	91.3 ▶	79.9 ▼	85.2 ▶	91.1 ▼	87.7 ▼
Population vaccination coverage - PCV (Persons, 1 year, %)	2019/20	93.2 ▼	96.4 ▶	95.9 ▶	95.3 ▶	94.2 ▶	96.4 ▶	97.5 ▼	97.8 ▼	97.9 ▶	98.7 ▶	95.2 ▼	96.4 ▶	93.3 ▶	95.3 ▶	96.5 ▶
Population vaccination coverage - PCV booster (Persons, 2 years, %)	2019/20	90.4 ▼	95.3 ▶	96.1 ▶	93.8 ▶	93.2 ▶	94.3 ▶	97.0 ▶	97.1 ▶	96.6 ▶	97.7 ▶	94.1 ▶	93.5 ▶	91.6 ▶	94.1 ▶	94.9 ▶

Figure 6.20 – Childhood vaccinations – Note colours based on targets as per legend

Chart legend

Childhood vaccinations

<90%	90% to 95%	≥95%

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Population vaccination coverage - Hib / MenC booster (2 years) (Persons, 2 years, %)	2019/20	90.5 ▼	-	96.9 ▲	94.8 ▶	93.1 ▶	94.2 ▶	96.9 ▶	96.9 ▶	97.1 ▶	97.9 ▶	94.0 ▶	92.6 ▶	91.0 ▼	94.1 ▼	94.7 ▶
Population vaccination coverage - Hib / Men C booster (5 years) (Persons, 5 years, %)	2017/18	92.4 ▲	95.3 ▶	96.4 ▲	93.2 ▲	90.9 ▼	95.7 ▼	96.3 ▼	97.2 ▶	97.6 ▲	97.1 ▶	96.0 ▶	94.5 ▶	90.1 ▶	95.3 ▶	96.0 ▶
Population vaccination coverage - MMR for one dose (2 years) (Persons, 2 years, %)	2019/20	90.6 ▼	95.3 ▶	96.5 ▶	94.2 ▶	93.8 ▶	94.0 ▶	96.9 ▶	96.8 ▶	96.7 ▶	97.6 ▶	94.3 ▶	92.7 ▶	91.3 ▶	93.8 ▼	94.7 ▶
Population vaccination coverage - MMR for one dose (5 years) (Persons, 5 years, %)	2019/20	94.5 ▼	96.9 ▼	97.6 ▲	95.6 ▼	95.4 ▶	98.0 ▶	97.1 ▼	98.1 ▶	97.7 ▼	97.7 ▶	96.0 ▶	95.3 ▶	94.4 ▶	97.0 ▶	96.8 ▶
Population vaccination coverage - MMR for two doses (5 years) (Persons, 5 years, %)	2019/20	86.8 ▼	92.3 ▼	94.5 ▲	88.4 ▶	89.0 ▼	92.5 ▶	94.4 ▶	96.1 ▶	93.8 ▼	94.5 ▶	92.6 ▼	82.1 ▼	86.7 ▼	91.8 ▶	91.3 ▶

Figure 6.21 – Childhood vaccinations – Note colours based on targets as per legend

On average, the data relating to the **North East and Cumbria** as a whole show that:

- **North East and Cumbria** tend to have higher childhood vaccination rates across the board than England averages, and meet the 95% target for most vaccinations. However recent trends in some vaccinations have been downward.

On average, at a locality level, the data indicate that:

- Most North East and Cumbria local authorities meet at least the 90% target for all vaccinations.

- For rotavirus at age 1 **Middlesbrough** (89.6%) is below the coverage target.
- For the DTap/IPV booster at 5 years five local authorities do not meet the coverage target.
- For MMR two doses at age 5 four local authorities do not meet the coverage target.

School age vaccinations

School age vaccine targets are 65% or more for flu, with anything less than being marked as red, and for HPV and MenACWY 90% or above is green, 80% to 90% is amber, and less than 80% is red.

Chart legend

Flu	<65%		≥65%
HPV and MenACWY	<80%	80% to 90%	≥90%

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Population vaccination coverage - Flu (primary school children) (Persons, primary age, %)	2019	60.4	64.0	72.2	70.1	58.0	68.7	68.8	60.3	65.2	66.5	58.8	61.5	57.6	62.7	52.9
Population vaccination coverage - HPV vaccination coverage for one dose (12-13 years) (Female, 12-13 years, %)	2019/20	59.2 ▶	-	89.1 ▲	89.2 ▼	77.2 ▼	85.8 ▼	86.7 ▶	70.0 ▼	86.5 ▼	90.1 ▼	74.0 ▼	66.9 ▼	64.9 ▼	69.9 ▼	79.9 ▼
Population vaccination coverage - HPV vaccination coverage for two doses (13-14 years) (Female, 13-14 years, %)	2019/20	64.7 ▼	-	88.6 ▶	82.4 ▶	82.7 ▶	84.6 ▼	93.6 ▶	70.5 ▼	84.0 ▼	86.8 ▼	69.2 ▼	55.5 ▼	48.0 ▼	62.8 ▼	63.7 ▶
Population vaccination coverage - Meningococcal ACWY conjugate vaccine (MenACWY) (14-15 years) (Persons, 14-15 years, %)	2019/20	87.0	84.2	88.8	93.5	94.8	90.3	86.4	75.8	86.1	90.7	73.7	78.8	62.5	76.3	80.3

Figure 6.22 – School age vaccinations – Note colours based on targets as per legend

On average, where available, the data relating to the **North East and Cumbria** as a whole show that:

- **North East and Cumbria** (64.0%) has a higher primary school flu vaccine coverage rate than the England average (60.4%), however both fall short of the 65% target.

- **North East and Cumbria** (84.2%) has a slightly lower MenACWY coverage rate than the England average (87.0%). However, both achieve the lower 80% target.

On average, at a locality level, the data indicate that:

- Coverage of school age vaccinations varies across the North East and Cumbria. For all four vaccinations **Tees Valley** ICP and **County Durham** fall short of the target coverage other than **Stockton-on-Tees** for MenACWY.
- All other local authorities meet at least the lower target with the exception of **Newcastle upon Tyne** for flu and the first dose of HPV.

The final indicator in this topic is more specific, and relates to vaccination coverage for children in care. Figure 6.23 is coloured as previously by comparison to England.

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Children in care immunisations (Persons, <18 years, %)	2020	87.8 ▲	92.4 ▲	93.1 ▼	96.5 ▶	79.6 ▶	88.2	94.4 ▶	99.3	99.6	94.8 ▲	99.5	96.4	91.0 ▶	82.9	91.2 ▶

Figure 6.23 – Children in care vaccinations

Immunisation rates for children in care are higher in the **North East and Cumbria** than the England average, and nine of the thirteen local authorities have significantly higher rates than the England average. **Newcastle upon Tyne** (79.6%) and **Redcar & Cleveland** (82.9%) are significantly lower than the England average (87.8%)

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/81DzEl1g20.

6.2.11 Sexual health

Teenage pregnancy is associated with poor outcomes for young women and their children. While not all teenage conceptions are unplanned, teenagers remain at highest risk of unplanned pregnancy, with over 50% of under-18 conceptions in England and Wales in 2017 ending in abortion. There are individual and social risk factors for teenage pregnancy, including: adverse childhood experiences; socioeconomic deprivation; attention, behaviour and conduct problems; poor educational attainment and engagement; and family history of teenage pregnancy. Reducing teenage pregnancy requires comprehensive relationships and sex education and access to effective contraception in youth friendly services. Dedicated coordinated support for young parents helps improve outcomes for them and their children[12]. Further information on teenage pregnancy can be found in chapter 4.

Chlamydia detection rate is coloured by target, rates of 2300 per 100,000 and above are green, 1900 to 2299 amber and less than 1900 red.

[12] RCPCH (2021) State of child Health – Conceptions in young people: link

Chart legend

Significance compared with England	worse	similar	better
Significance compared with England	lower	similar	higher
Chlamydia detection rate	<1900	1900 to <2300	≥2300

				Lower tier local authorities																	
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley						
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Under 25s choose LARC excluding injections at SRH Services (%) (Female, <25 years, %)	2019	27.6 ▲	29.6 ▲	31.3 ▲	43.6 ▲	42.5 ▲	53.9 ▲	21.0 ▲	34.0 ▲	27.5 ▲	32.6 ▲	32.7 ▶	22.5 ▶	28.1 ▶	15.4	28.1 ▶	34.2 ▲	32.3 ▲	29.5 ▲
Under 25s individuals attend specialist contraceptive services (Female, 15-24 years, rate per 1,000)	2019	135.2 ▼	159.3 ▼	105.0 ▼	97.3 ▼	99.6 ▶	39.2 ▼	221.7 ▼	163.2 ▼	179.2 ▼	235.4 ▼	90.4 ▶	287.3 ▼	245.0 ▶	21.3 ▶	263.6 ▼	104.9 ▼	149.9 ▶	149.6 ▶
Under 25s individuals attend specialist contraceptive services (Male, 15-24 years, rate per 1,000)	2019	19.7 ▶	22.3 ▶	2.0	*	*	*	21.4 ▶	57.4 ▲	13.8 ▼	17.5 ▶	6.4 ▶	41.1 ▶	10.9 ▶	2.7 ▶	38.8 ▶	12.2 ▼	18.9 ▶	16.7 ▼
New STI diagnoses (exc chlamydia aged <25) / 100,000 (Persons, 15-64 years, rate per 100,000)	2019	900 ▲	-	624 ▲	965 ▲	372 ▶	360 ▶	735 ▶	941 ▶	480 ▶	679 ▶	574 ▶	689 ▼	667 ▼	667 ▶	537 ▶	632 ▶	619 ▲	514 ▲
Chlamydia diagnostic rate / 100,000 (Persons, all ages, rate per 100,000)	2019	401 ▲	327 ▶	229 ▶	326 ▶	201 ▶	201 ▶	368 ▶	570 ▶	262 ▶	375 ▶	281 ▶	284 ▶	292 ▶	318 ▶	324 ▶	362 ▶	332 ▲	271 ▶
Chlamydia detection rate / 100,000 aged 15 to 24 (Persons, 15-24 years, rate per 100,000)	2019	2043 ▲	-	1587 ▶	2006 ▶	1355 ▶	1683 ▶	1910 ▶	2058 ▶	1871 ▶	2480 ▶	1505 ▶	1813 ▶	1791 ▶	2108 ▶	2137 ▶	1711 ▶	2090 ▲	1711 ▲

Figure 6.24 – Sexual health – lower tier local authority – note bandings in legend for chlamydia detection

On average, at a locality level, the data indicate that:

- Use of contraceptive services vary greatly across the **NENC region**, and this should be considered carefully when planning service provision and promotion.
- Most **NENC** local authorities have a lower rate of new STI diagnoses (excluding chlamydia for those aged under 25) per 100,000 than the England average (900), with the exception of **Carlisle** (965) and **Newcastle upon Tyne** (941) which are similar to the England average.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/hSHo3eDrYE.

6.3 Commentary on network actions

Health promotion is a core priority of the network and runs through many strands of its work and as a general approach. This is evident in the prevention aspect of its work examples including:

- Youth mental health first aid training which has been offered freely to members from any setting.
- Interactive film suite across a range of hard hitting issues for young people to choose different outcomes in a branch and narrative film for teenagers. The real life topics range from knife crime to loneliness and is supported by a TryLearning package for professionals exploring this resource with young people (Teachers, youth workers). This is ideal to support discussion around risk taking behaviours.
- Other work in the network is also directed to support prevention in communities in more deprived areas to ensure they are accessed by those area's first. The STAR initiative (South Tees ARts Project) brings an arts intervention to children adopting holiday hunger approaches to two primary schools located within geographies with high levels of deprivation.
- The NENC Healthier Together website development (based on Home :: Healthier Together (what0-18.nhs.uk) is a region wide site and clinical repository for professionals and families relating to children's,(and potentially also maternal and

mental health) guidance. This has been successfully implemented elsewhere and reduced the attendances for young people in urgent and emergency care settings and includes information in relation to prevention.

For any further information and proposals on initiatives relating to health promotion do contact the network via england.northernchildnetwork@nhs.net and the website Child Health and Wellbeing Network | North East and North Cumbria ICS.

6.4 Relevant key policy and research papers

Health promotion

RCPCH (2021) State of Child Health - Prioritise public health, prevention and early intervention
https://stateofchildhealth.rcpch.ac.uk/key-priorities/prioritise-public-health-prevention-and-early-intervention/

PHE (2013) How healthy behaviour supports children's wellbeing
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/232978/Smart_Restart_280813_web.pdf

Diet and physical activity

PHE (2021) School-aged years high impact area 3: Supporting healthy lifestyles
https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-children/school-aged-years-high-impact-area-3-supporting-healthy-lifestyles

PHE (2020) Changing behaviour in families
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/873555/PHE_Family_Behaviour_Change_Guide__1_.pdf

PHE (2021) Early years high impact area 4: Supporting healthy weight and nutrition https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-children/early-years-high-impact-area-4-supporting-healthy-weight-and-nutrition

PHE (2021) Understanding and addressing inequalities in physical activity https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1011833/PHE_Inequalities_in_physical_activity_August_update_Final.pdf

PHE (2020) What works in schools and colleges to increase physical activity? https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/876242/Guidance_to_increase_physical_activity_among_children_and_young_people_in_schools_and_colleges.pdf

Obesity

PHE (2021) School-aged years high impact area 3: Supporting healthy lifestyles https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-children/school-aged-years-high-impact-area-3-supporting-healthy-lifestyles

PHE (2020) Childhood obesity: applying all our health https://www.gov.uk/government/publications/childhood-obesity-applying-all-our-health/childhood-obesity-applying-all-our-health

Prime Minister's Office (2017) Childhood obesity – a plan for action https://www.gov.uk/government/publications/childhood-obesity-a-plan-for-action/childhood-obesity-a-plan-for-action

National Audit Office (2020) Childhood obesity https://www.nao.org.uk/wp-content/uploads/2020/09/childhood-obesity.pdf

NHS Digital (2021) National Child Measurement Programme https://digital.nhs.uk/services/national-child-measurement-programme/

PHE (2020) Learning from local authorities with downward trends in childhood obesity https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/937623/Learning_from_local_authorities_Report.pdf

Bann D. et al. (2018) Socioeconomic inequalities in childhood and adolescent body-mass index, weight, and height from 1953 to 2015: an analysis of four longitudinal, observational, British birth cohort studies The Lancet Public Health 2018; 3(4): E194-203 https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(18)30045-8/fulltext

RCPCH (2021) State of Child Health - Healthy weight https://stateofchildhealth.rcpch.ac.uk/evidence/prevention-of-ill-health/healthy-weight/

Smoking

PHE (2016) Working together to promote cessation of smoking in children & young people https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/576434/Promoting_cessation_of_smoking_in_children_and_young_people_for_Tier_4_CAMHS_commissioners.pdf

NICE (2014) Public health guideline PH 14. Smoking: preventing uptake in children and young people. https://www.nice.org.uk/guidance/ph14

RCPCH (2021) State of Child Health - Smoking in young people https://stateofchildhealth.rcpch.ac.uk/evidence/health-behaviours/smoking-young-people/

Alcohol, drug misuse and risk taking behaviour

Cabinet Office (2015) Children and young people's risk behaviours: discussion paper https://www.gov.uk/government/publications/children-and-young-peoples-risk-behaviours-discussion-paper

Cabinet Office (2014) Risk behaviours and negative outcomes. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/452169/data_pack_risk_behaviours_and_negative_outcomes.pdf

Children's policy research unit (2017) Helping young people say "no": the prevalence of risk-taking behaviour and what works to reduce it. https://www.ucl.ac.uk/children-policy-research/sites/children-policy-research/files/Adolescence_ThemeV6.1_WEB_FINAL.pdf

Laski L. Realising the health and wellbeing of adolescents BMJ 2015;351:h4119 https://www.bmj.com/content/351/bmj.h4119

PHE (2018) Smoking, drinking and drug use among hard to reach children and young people; an evidence synthesis report https://www.basw.co.uk/system/files/resources/smoking_drinking_drug_use_among_hard_to_reach_children_and_young_people%20.pdf

PHE (2021) School-aged years high impact area 2: Improving health behaviours and reducing risk https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-children/school-aged-years-high-impact-area-2-improving-health-behaviours-and-reducing-risk

Oral health

PHE (2021) School-aged years high impact area 3: Supporting healthy lifestyles https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-children/school-aged-years-high-impact-area-3-supporting-healthy-lifestyles

RCPCH (2021) State of Child Health - Oral health https://stateofchildhealth.rcpch.ac.uk/evidence/prevention-of-ill-health/oral-health/

PHE (2017) Delivering better oral health: an evidence-based toolkit for prevention https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/605266/Delivering_better_oral_health.pdf

PHE (2019) Child oral health – applying all our health https://www.gov.uk/government/publications/child-oral-health-applying-all-our-health/child-oral-health-applying-all-our-health

RCS (2019) Position Statement: Children's oral health https://www.rcseng.ac.uk/-/media/files/rcs/fds/media-gov/childrens-oral-health-2019-final.pdf

NICE (2014) Public Health Guideline PH55 Oral health: local authorities and partners https://www.nice.org.uk/guidance/ph55

NICE (2004) Clinical Guideline CG19. Dental checks: intervals between oral health reviews https://www.nice.org.uk/guidance/cg19

Prof Marco A Peres et al. (2019) Oral diseases: a global public health challenge. The Lancet; 394 (10194): 249-60 https://pubmed.ncbi.nlm.nih.gov/31327369/

Accidents, injuries and road safety

PHE (2021) Early years high impact area 5: Improving health literacy, managing minor illnesses and reducing accidents https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-children/early-years-high-impact-area-5-improving-health-literacy-managing-minor-illnesses-and-reducing-accidents

RCPCH (2021) State of Child Health - Injury prevention https://stateofchildhealth.rcpch.ac.uk/evidence/injury-prevention/

Public Health England (2018) Reducing unintentional injuries on the roads among children and young people under 25 years. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/695781/Reducing_unintentional_injuries_on_the_roads_among_children_and_young_people_.pdf

PHE (2018) Reducing unintentional injuries in and around the home among children under five years https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/696646/Unintentional_injuries_under_fives_in_home.pdf

Vaccination and Immunisation

RCPCH (2021) State of Child Health - Immunisations https://stateofchildhealth.rcpch.ac.uk/evidence/prevention-of-ill-health/immunisations/

NICE (2017) Public Health guidance PH21. Immunisations: Reducing differences in uptake in under 19s https://www.nice.org.uk/guidance/ph21

PHE (2020) Immunisation against infectious disease https://www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book

Sexual health

PHE (2021) School-aged years high impact area 2: Improving health behaviours and reducing risk https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-children/school-aged-years-high-impact-area-2-improving-health-behaviours-and-reducing-risk

RCPCH (2021) State of Child Health - Conceptions in young people https://stateofchildhealth.rcpch.ac.uk/evidence/health-behaviours/conceptions-in-young-people/

BASHH (2019) 2019 BASHH National Guideline on the Management of Sexually Transmitted Infections and Related Conditions in Children and Young People https://www.bashhguidelines.org/media/1231/2019-uk-national-guidance-on-the-management-of-stis-and-related-conditions-in-yp-mr-draft-final.pdf

NICE (2014) Public Health guideline PH51. Contraceptive services for under 25s https://www.nice.org.uk/guidance/ph51

North East and North Cumbria's

Child Health and Wellbeing Network

The Facts of Life for children and young people growing up in the North East and North Cumbria:

Chapter 7 – Strong start in life

September 2021

@NorthNetChild

We do well on screening measures within the control of the NHS but despite a lot of focused work, we still lag behind the England average in teenage pregnancy, smoking status at time of delivery and breast feeding at 6-8 weeks. Newcastle (the only green among all the reds) bucks the trend in breast feeding. There may be some learning to share and an opportunity to gain a better understanding of the underlying causes of these behaviours.

Chapter Seven SPOTLIGHT to direct momentum for initiatives

7 Strong start in life

7.1 Relevance

Giving every child the best start in life is crucial to improving health and reducing health inequalities across the life course. The foundations for virtually every aspect of human development – physical, intellectual and emotional– are laid in early childhood. What happens during these early years (starting in the womb) has lifelong effects on many aspects of health and well-being– from obesity, heart disease and mental health, to educational achievement and economic status[1].

This chapter describes risk factors and outcomes in relation to preconception care, delivery and fertility rates, maternity high impact areas[2], perinatal health, pre-school child health services, and early development.

[1] Marmot M. (2010) Fair society, healthy lives. Strategic review of health inequalities in England post 2010: link
[2] PHE (2021) Supporting public health: children, young people and families: link

7.2 Commentary and findings

7.2.1 Mortality and outcomes

Perinatal and infant mortality rates are powerful summary outcome indicators of child and maternal health and care within populations.

Birth weight is used as an indicator of fetal growth and nutrition. Low birth weight is caused by intrauterine growth restriction, prematurity (born before 37 weeks) or both. It contributes to a range of poor health outcomes and is closely associated with fetal and neonatal mortality and morbidity, inhibited growth and cognitive development, and the development of long-term conditions and mental health problems in adulthood. At a population level, a high proportion of low birth weight babies (defined as a birth weight under 2,500 grams) and very low birth weight (defined as less than 1,500 grams) is primarily related to poorer antenatal maternal health[3].

[3] Nuffield Trust (2021) Low birth weight: link

Chart legend

Significance compared with England: worse | similar | better

				Clinical commissioning groups							
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland			Tees Valley
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Tees Valley
Stillbirth rate (Persons, 0yrs, Crude rate- per 1,000)	2017-19	4.0	4.0	4.8	3.8	3.8	3.3	*	5.0	3.6	*
Neonatal mortality rate (Persons, <28 days, Crude rate- per 1,000)	2017-19	2.9	2.6	3.1	3.1	2.3	2.6	*	2.0	1.9	*
Post-neonatal mortality rate (Persons, 28 days - 1 yr, Crude rate- per 1,000)	2017-19	1.1	0.8	0.5	0.8	0.9	0.9	*	0.7	1.1	*

Figure 7.1 – Mortality and outcomes – CCG

Chart legend

Significance compared with England: worse | similar | better

				Clinical commissioning groups							
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland			Tees Valley
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Tees Valley
Child mortality rate (1-17 years) (Persons, 1-17 yrs, Directly standardised rate- per 100,000)	2017-19	10.8	-	7.8	13.1	8.9	10.9	10.2	12.0	10.0	14.1
Very low birth weight of all babies (Persons, 0 yrs, Proportion- %)	2018	1.2 ▼	0.7	0.7 ▼	0.7 ▼	0.5 ▶	0.2 ▼	*	1.3 ▶	1.2 ▼	*
Low birth weight of all babies (Persons, 0 yrs, Proportion- %)	2018	7.4 ▶	6.7	6.5 ▶	6.5 ▼	5.7 ▶	5.6 ▼	*	6.6 ▶	9.0 ▶	*

Figure 7.1 – Mortality and outcomes – CCG (continued)

On average, where available, the data relating to the **North East and North Cumbria (NENC) region** indicate that:

- During 2017-19, key summary measures of childhood mortality in the **NENC region** were similar to the England average.
- The proportion of low and very low birth weight babies born in the **NENC region** was significantly lower than the England average.

At a locality level, where available, the data indicate that on average:

- Key summary measures of childhood mortality in all NENC CCGs were similar to the England average.
- All **North of Tyne and Gateshead** CCGs have significantly lower proportions of low and very low birth weight of all babies than the England average.
- **Sunderland** (9.0%) has a significantly higher proportion of babies born with low birth weight than the England average (7.4%).

Chart legend

Significance compared with England: worse | similar | better

				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Infant mortality rate (Persons, <1 yr, Crude rate- per 1,000)	2017-19	3.9	3.4	3.6	2.8	4.4	3.3	4.0	3.9	3.2	3.5	3.2	2.6	3.0	3.7	3.0	3.2	3.4	3.6
Low birth weight of term babies (Persons, >=37 weeks gestational age at birth, Proportion- %)	2019	2.9 ▲	3.0 ►	3.1 ►	2.1 ►	2.9 ►	1.1 ►	3.1 ►	3.6 ►	2.5 ►	2.6 ►	3.3 ►	3.2 ►	3.6 ►	2.6 ►	3.9 ▲	3.2 ►	2.1 ►	3.1 ►
Premature births (less than 37 weeks gestation) (Persons, >=37 weeks gestational age at birth, Crude rate- per 1,000)	2016-18	81.2	-	70.7	76.3	89.3	83.7	83.8	83.5	79.8	71.7	86.2	74.3	79.3	99.4	95.1	84.2	90.1	92.8

Figure 7.2 – Mortality and outcomes – Lower tier local authority

On average, where available, the data relating to the **NENC region** indicate that:

- During 2017-19, the infant mortality rate across the **NENC region** (3.4 per 1000) was significantly lower than the national average (3.9 per 1000)
- During 2019, the proportion of low birth weight babies born in the **NENC region** at term (3.0%) is similar to the national average (2.9%).

At a locality level, the data indicate that on average:

- For low birth weight of term babies there were two outliers in the region: **Eden** (1.1%) where the proportion was significantly lower and **Newcastle upon Tyne** (3.6%) where it was significantly higher than the England average.

- During 2016-18, compared with the England average (81.2 per 1000) there were significantly higher rates of premature births registered in five local authority areas in the NENC region, while there was a significantly lower rate registered in **North Tyneside** (71.7 per 1000).

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Neonatal mortality and stillbirth rate (Persons, <28 days, Crude rate- per 1,000)	2018	6.8 ▶	6.5 ▶	6.7 ▶	8.4 ▶	5.9 ▶	5.7 ▶	5.0 ▶	7.8 ▶	10.4 ▶	6.5 ▶	8.0 ▶	5.8 ▶	6.4 ▶	2.9 ▶	3.3 ▶

Figure 7.3 – Mortality and outcomes – Upper tier local authority

On average, the data relating to the **North East and Cumbria** indicate that:

- The rate of stillbirths and deaths within 28 days per 1,000 live births and stillbirths within the **North East and Cumbria** (6.5 per 1000) was similar to the average for England (6.8 per 1000)

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/RRa5zfYSOE.

7.2.2 Conceptions and preconception health

Women and partners who are healthier at conception have a better chance of becoming pregnant, having a healthy and safe pregnancy and giving birth to a healthy baby. Promoting health during the preconception period can also reduce inequalities and

improve the subsequent life chances for women and their children. Unplanned pregnancy (45% of all pregnancies[4]) is a risk factor for a range of adverse outcomes, including low birthweight, prematurity and postnatal depression. Teenagers are the group at highest risk of unplanned pregnancy[5].

Key areas of support for preconception health include smoking cessation, advice on nutrition, oral health, physical activity, alcohol and folic acid supplements[6].

				Clinical commissioning groups							
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland			Tees Valley
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Tees Valley
Folic acid supplements before pregnancy (Female, Proportion, %)	2018/19	27.3	-	34.7	23.3	33.8	32.4	*	*	24.7	*

Figure 7.4 – Conception and preconception health - CCG

[4] RCOG (2019) Better for women: link
[5] PHE (2020) Maternity high impact area 1 Improving planning and preparation for pregnancy: link
[6] PHE (2018) Making the case for Preconception care: link

Chart legend

Significance compared with England	worse	similar	better
Significance compared with England	lower	similar	higher

These data show that the information relating to folic acid supplementation is incomplete. This data comes from the Maternity Services Data Set (MSDS)[7] and is a new source with data quality improving over time. Where data is available:

- During 2018/19, existing data indicated folic acid supplementation before pregnancy ranged from 23.3% of women in **Newcastle Gateshead** to 34.7% in **North Cumbria**.

				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Under 18s conception rate / 1,000 (Female, <18 yrs, Crude rate- per 1,000)	2018	16.7 ▼	24.0 ▼	19.4 ►	19.1 ►	11.0 ►	11.8 ►	16.9 ▼	24.2 ►	17.3 ►	18.4 ►	26.4 ►	20.1 ►	29.0 ►	19.5 ►	38.0 ►	39.4 ►	34.6 ►	26.8 ►
Under 18s conceptions leading to abortion (%) (Female, <18 yrs, Proportion- %)	2018	53.0 ▲	45.0 ►	27.6 ►	48.4 ►	45.5 ►	77.8 ►	44.2 ►	43.4 ►	51.2 ►	42.1 ►	46.5 ►	46.7 ►	52.1 ►	39.4 ►	36.8 ►	36.4 ►	38.9 ►	52.4 ►

Figure 7.5 – Conception and preconception health – Lower tier local authority

On average, the data relating to the **NENC region** indicate that:

- The **NENC region** has a significantly higher rate of under 18s conceptions (24.0 per 1000) than England (16.7 per 1000), though this is falling in both the region and nationally.

[7] NHS Digital Maternity Services Data Set: link

- The **NENC region** has a significantly lower proportion of under 18s conceptions leading to abortion (45.0%) than the average for England (53.0%)

At a locality level, the data indicate that on average:

- The rate of under 18s conceptions varies between local authorities in the NENC region ranging from 11.0 per 1000 in **Copeland** to 39.4 per 1000 in **Middlesbrough**.
- The proportion of under 18s conception leading to abortion varies between local authorities in the NENC region ranging between 27.6% in **Allerdale** and 77.8% in **Eden**.

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Under 16s conception rate / 1,000 (Female, <16 yrs, Crude rate- per 1,000)	2018	2.5 ▼	-	2.3 ▶	3.3 ▶	4.1 ▶	2.1 ▶	3.1 ▶	4.6 ▶	3.9 ▶	4.8 ▶	4.0 ▶	7.7 ▶	9.9 ▶	8.3 ▶	4.2 ▶
Under 25s repeat abortions (%) (Female, 15-24 yrs, Proportion- %)	2019	27.7 ▲	24.4 ▶	19.9 ▶	28.7 ▶	20.5 ▶	27.7 ▶	22.5 ▶	20.8 ▶	28.6 ▶	26.4 ▶	23.8 ▶	24.6 ▶	32.4 ▶	22.8 ▶	27.9 ▶

Figure 7.6 – Conception and preconception health – Upper tier local authority

On average, the data relating to the **North East and Cumbria** indicate that:

- On average in England, under 16s conception rates are falling over time but this is not the case in any of the local authorities in the region.
- Rates of repeat abortions in under 25s are significantly lower in the **North East and Cumbria** (24.4%) compared with England (27.7%).

At a locality level, the data indicate that on average:

- Under 16s conception rates vary between local authorities in the region, ranging between 2.1 per 1000 in **Northumberland** to 9.9 per 1000 in **Middlesbrough**.
- Under 16s conception rates are significantly higher than the average for England (2.5 per 1000) in five local authorities - **County Durham**, **Sunderland**, **Hartlepool**, **Middlesbrough** and **Redcar & Cleveland**.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/blTw4VhknE.

7.2.3 Healthy pregnancy

To get the best possible start in life, a baby's mother needs to be healthy before and during pregnancy and childbirth. Tackling maternal weight and reducing the risks associated with smoking, drugs and alcohol in pregnancy are key maternity high impact areas[8] with significant implications for the health of the developing foetus and subsequent life chances of mothers, babies, children and families.[9]

New indicators taken from the MSDS detail potential risk factors relating to pregnancy which are displayed in this report by geography, however additional breakdowns by age, deprivation, ethnicity, first or subsequent pregnancy and complex social factors are available from Fingertips through the Inequalities view.

[8] PHE (2021) Supporting public health: children, young people and families: link
[9] CMO (2014) The health of the 51% - Women: link

Chart legend

Significance compared with England: worse | similar | better

				Clinical commissioning groups							
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland			Tees Valley
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Tees Valley
Obesity in early pregnancy (Female, Proportion- %)	2018/19	22.1	*	25.4	23.3	29.2	24.2	*	28.2	30.4	*
Smoking in early pregnancy (Female, Proportion- %)	2018/19	12.8	*	14.7	15.2	15.7	12.6	*	17.9	25.7	*
Drinking in early pregnancy (Female, Proportion- %)	2018/19	4.1	*	*	*	*	*	*	*	*	*
Drug misuse in early pregnancy (Female, Proportion- %)	2018/19	1.4	*	*	*	*	*	*	*	*	*

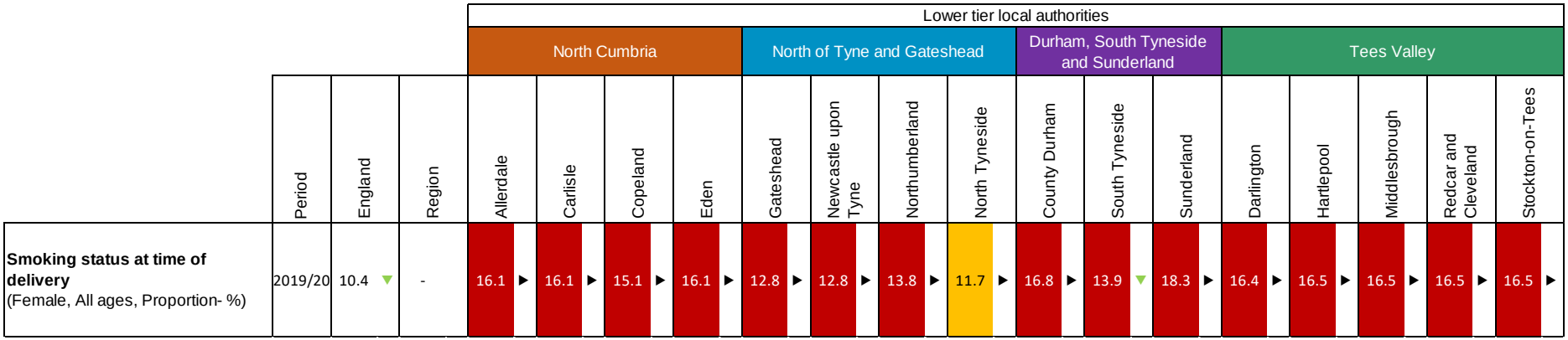
Figure 7.7 – Healthy pregnancy - CCG

Chart legend
Significance compared with England | worse | similar | better

This figure shows that, where data is available

- A significantly higher proportion of pregnant women who smoke at the time of delivery is present in most NENC CCGs compared to England.
- A significantly higher proportion of pregnant women are obese in early pregnancy in most NENC CCGs compared to England.

While data quality for drinking and drug misuse in early pregnancy is currently not robust enough to present at CCG level, this is expected to improve over time so these indicators will become more useful.



				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Smoking status at time of delivery (Female, All ages, Proportion- %)	2019/20	10.4 ▼	-	16.1 ▶	16.1 ▶	15.1 ▶	16.1 ▶	12.8 ▶	12.8 ▶	13.8 ▶	11.7 ▶	16.8 ▶	13.9 ▼	18.3 ▶	16.4 ▶	16.5 ▶	16.5 ▶	16.5 ▶	16.5 ▶

Figure 7.8 – Healthy pregnancy – Lower tier local authority

On average, the data relating to the **NENC region** indicate that:

- All NENC local authorities with the exception of **North Tyneside** (11.7%) have a significantly higher proportion of women smoking at time of delivery than the England average.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/PSzvAePy0q.

Chart legend

Significance compared with England: worse | similar | better

7.2.4 Mothers and deliveries

A detailed understanding of local birth and fertility rates across geographies and risk groups is fundamental to planning local child and maternal health and wellbeing services and strategies.

Factors which are commonly associated with poor maternal and child health outcomes include maternal age[10] [11], and Black, Asian and Minority Ethnic (BAME) ethnicity[12]. Other factors which are linked with some increased risks include multiple pregnancy[13] and delivery by caesarean section[14].

Indicators relating to mothers and deliveries are presented across four different geography types, indicators here are grouped by these geographies for ease of comparison.

				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Under 18s births rate / 1,000 (Female, All ages, Crude rate- per 1,000)	2019	4.1 ▼	7.0 ▼	5.6 ►	3.7 ►	2.0 ►	0.0	6.7 ►	7.8 ►	4.1 ▼	6.3 ►	6.6 ►	4.8 ►	7.3 ►	6.4 ►	8.8 ►	17.4 ►	14.5 ►	6.0 ►

Figure 7.9 – Mothers and deliveries – Lower tier local authority

[10] PHE (2019) A framework for supporting teenage mothers and young fathers: link
[11] Fitzpatrick KE et al. (2017) Pregnancy at very advanced maternal age: a UK population-based cohort study. BJOG (2017); 124 (7): 1097-1106: link
[12] PHE (2020) Maternity high impact area 6: Reducing the inequality of outcomes for women from Black, Asian and Minority Ethnic (BAME) communities and their babies: link
[13] NICE (2019) Guideline NG137. Twin and triplet pregnancy: link
[14] NIHR (2018) Balance of long-term benefits and risks of caesarean delivery explained: link

Chart legend
Quintiles low high

- Under 18s in the **NENC region** have a significantly higher birth rate than the England average. However, this is showing a decreasing trend and there is variation across the region with 0 per 1,000 births to mothers under 18 in **Eden** and 17.4 per 1,000 in **Middlesbrough**.

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Women of childbearing age (15-44): % of total population (Female, 15-44 yrs, Proportion- %)	2017	19.0	17.9	15.6	18.7	22.9	15.6	18.0	17.8	17.7	18.4	17.8	18.0	19.5	16.8	18.3
Births to non-UK parents: % of live births (Persons, <1 yr, Proportion- %)	2017	34.8	14.2	10.3	15.9	35.4	7.7	12.8	8.0	9.6	11.1	17.7	8.3	25.5	6.2	16.7
Percentage of deliveries to women aged 35 years or above (Female, 35+ yrs, Proportion- %)	2019/20	22.8 ▲	17.4 ▲	17.5 ▶	20.1 ▶	21.3 ▶	18.4 ▶	21.7 ▶	16.0 ▶	16.1 ▶	15.3 ▶	16.7 ▶	13.8 ▶	14.6 ▶	14.2 ▶	16.9 ▶

Figure 7.10 – Mothers and deliveries – Upper tier local authority

On average, the data relating to the **North East and Cumbria** indicate that:

- For the most recent data, the **region** on the whole has a slightly lower percentage of its total population that are women of childbearing age, a lower percentage of births to non-UK parents and a lower percentage of deliveries to women aged 35 years and above compared to the England averages.

At a locality level, the data indicate that on average:

- For women of childbearing age there is variation across the region with **Cumbria** and **Northumberland** (15.6%) being in the lowest quintile across England whilst **Newcastle upon Tyne** (22.9%) is in the highest quintile.
- All local authorities apart from **Newcastle upon Tyne** have a lower percentage of births to non-UK parents than the England average.
- On the whole, there is a lower percentage of deliveries to women aged 35 years and above in the NENC region with eight of the 13 local authorities being in the lowest quintile for this indicator across England. However, for the region as a whole there is an increasing trend in the percentage of deliveries to women aged 35 and above, as is the case for the England average.

Chart legend

Significance compared with England	worse	similar	better
Significance compared with England	lower	similar	higher
Quintiles	low		high

				Clinical commissioning groups							
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland			Tees Valley
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Tees Valley
General fertility rate (Female, 15-44 yrs, Crude rate- per 1,000)	2019	57.7 ▼	51.6	54.6	47.4 ▼	51.1 ▼	57.6 ▶	*	55.3 ▼	51.5 ▶	*
Teenage mothers (Female, 12-17 yrs, Proportion- %)	2019/20	0.6 ▶	1.1	0.7 ▶	1.2 ▶	1.0 ▶	0.7 ▶	1.0 ▶	0.7 ▶	1.4 ▶	1.5 ▶
Percentage of deliveries to mothers from Black and Minority Ethnic (BME) groups (Female, All ages, Proportion- %)	2019/20	20.8	-	1.5	15.7	2.4	5.4	2.3	6.6	6.4	10.3
Multiple births (Female, 15-44 yrs, Crude rate- per 1,000)	2018	15.4 ▶	14.3	12.7 ▶	14.2 ▶	16.5 ▶	13.4 ▶	*	12.5 ▶	15.8 ▶	*
Caesarean section % (Female, All ages, Percentage point- %)	2019/20	30.4	-	31.6	27.8	31.0	29.4	28.1	24.7	23.2	28.6

Figure 7.11 – Mothers and deliveries – CCG

On average, the data relating to the **NENC region** indicate that:

- On the whole, where data is available, women within the **NENC region** have a lower general fertility rate (51.6 per 1,000) than the England average (57.7 per 1,000).
- The percentage of deliveries where the mother is aged 12-17 in the **NENC region** (1.1%) is significantly higher than the England average (0.6%).

At a locality level, the data indicate that on average:

- There is a large range across the region in general fertility rates from **Newcastle Gateshead** (47.4 per 1,000) which is significantly lower than the England average to **North Tyneside** (57.6 per 1,000) which is similar to the England average. As is the case for the England average, the fertility rate trend in three of the NENC CCGs is decreasing.
- The percentage of deliveries where the mother is aged 12-17 is significantly higher than the England average in the majority of NENC CCGs.
- All of the CCGs in the NENC region have a lower percentage of deliveries to mothers from BME groups than the England average. **Newcastle Gateshead** and **Tees Valley** have percentages in the middle quintile for this indicator.
- The rate of multiple births per 1,000 total births for all CCGs is similar to the England average across all NENC CCGs where data is available. There are also no significant recent trends within any of the NENC CCGs data
- Five out of eight of the NENC CCGs have a significantly lower proportion of deliveries by caesarean section than the England average. The remaining three (**North Cumbria**, **North Tyneside** and **Northumberland**) have proportions similar to that of the England average (30.4%).

Chart legend

Significance compared with England: lower | similar | higher

Quintiles: low | high

				Clinical commissioning groups											
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland				Tees Valley		
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	North Durham	Durham Dales, Easington & Sedgefield	South Tyneside	Sunderland	South Tees	Hartlepool	Darlington
Births to mothers aged <20: % of live births (Female, All ages)	2017	2.9	4.7	3.9	4.3	4.1	3.1	4.2	5.5	4.3	5.9	6.5	4.9	5.1
Births to mothers aged 40+: % of live births (Female, All ages)	2017	4.4	2.9	2.8	3.2	3.2	3.6	2.7	2.9	2.4	2.3	2.6	2.4	2.8
Sole registered births: % births registered by one parent only (Persons, 0 yrs)	2017	5.1	6.3	4.3	5.9	5.5	5.7	6.2	8.1	7.2	7.1	7.8	7.0	6.7

Figure 7.12 – Mothers and deliveries – CCGs prior to April 2020

On average, the data relating to the **NENC region** indicate that:

- The **region** has a higher proportion of births to mothers under 20 than the England average, and a lower proportion of births to mothers aged 40 and above.

- The **region** as a whole has a significantly higher percentage of births registered by one parent only than the England average.

At a locality level, the data indicate that on average:

- NENC CCGs all have a higher proportion of births to mothers aged under 20 than the England average. This is particularly the case in the **Tees Valley** and **Durham**, **South Tyneside and Sunderland ICP**.
- NENC CCGs all have a lower proportions of births to mothers aged 40+ than the England average with all apart from **North Tyneside** being in the two lowest quintiles for this indicator across England.
- Most NENC CCGs have a significantly higher percentage of births registered by one parent only than the England average. However, the main exception to this is **North Cumbria** CCG which has a significantly lower percentage of births registered by one parent only than the England average.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/lDXP3OcRcU.

7.2.5 Breastfeeding

There is overwhelming evidence concluding that breastfeeding provides substantial health benefits for mothers and babies which endure far beyond the period of breastfeeding itself[15]. Breastfeeding provides short-term and long-term health and economic and environmental advantages to children, women, and society e.g. a reduced risk of gastrointestinal and respiratory conditions in infants[16], and of breast and ovarian cancer in mothers. Current UK policy is to promote exclusive breastfeeding (feeding only breast milk) for the first 6 months[17].

Breastfeeding data is now available at birth from the MSDS, as well as at 6-8 weeks through a PHE data collection.

[15] PHE (2016) Infant feeding: commissioning services: link
[16] Quigley MA et al. (2007) Breastfeeding and hospitalisation for diarrheal and respiratory infection in the United Kingdom Millennium Cohort Study. Pediatrics 2007; 119(4): e837-42: link
[17] NICE (2008): Public health guideline PH11. Maternal and child nutrition: link

Chart legend

Significance compared with England: worse | similar | better

				Clinical commissioning groups							
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland			Tees Valley
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Tees Valley
Baby's first feed breastmilk (Persons, Newborn, Proportion- %)	2018/19	67.4	52.1	51.5	*	53.2	51.1	50.7	*	48.5	54.5

Figure 7.13 – Baby's first feed breastmilk

- Where data are available, all of the CCGs in **NENC** have a lower percentage of babies whose first feed is breastmilk than the England average (67.4%). **Sunderland** (48.5%) has the lowest percentage in the NENC region.

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Breastfeeding prevalence at 6-8 weeks after birth - current method (Persons, 6-8 weeks, Proportion- %)	2019/20	48.0 ▲	-	*	38.7	50.9 ▲	38.8 ▶	42.2	27.8 ▶	*	25.7 ▶	33.5 ▶	*	32.6 ▲	27.6 ▶	*

Figure 7.14 – Breastfeeding at 6-8 weeks

- Where data is available the majority of **North East and Cumbria** local authorities have a lower percentage of infants that are totally or partially breastfed at age 6-8 weeks than the England average (48.0%). The exception to this is **Newcastle upon Tyne** (50.9%) which has a significantly higher percentage than the England average. **Sunderland** (25.7%) has the lowest percentage in the region.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/4XhLl49Bc0.

7.2.6 Perinatal mental health

Maternal mental health problems during the perinatal period (from conception to 1 year after birth) affect up to 20% of women and 15% of fathers. Parental mental health problems can have a negative impact on how parents interact, bond and respond to the needs of their baby and children[18].

[18] PHE (2020) Maternity high impact area 2: Supporting good parental mental health: link

If left unresolved, mental health issues can have significant long-term impacts on parents, their child and the broader family.

The most common mental health conditions to occur in pregnancy are depression and anxiety. Other disorders include obsessive-compulsive disorder, and post-traumatic stress disorder. Severe mental illness can emerge or relapse around the time of pregnancy[19].

About half of all cases of perinatal depression and anxiety go undetected and fail to receive evidence-based treatment. Significant inequalities are experienced by women from black and minority ethnic (BAME) communities who are at greater risk of delays in diagnosis and treatment[20].

Perinatal mental health prevalence data is not collected at local level on a large scale, so prevalence estimates have been developed by applying national prevalences to the number of maternities in an area. Using this data a local area can begin to consider the possible level of need for mental health services. As this data are estimates based solely on population Figure 7.15 is not shaded, and data is shown without comment.

[19] NIHR Dissemination Centre (2017) Themed review. Better beginnings. Improving health for pregnancy: link
[20] PHE (2020) Maternity high impact area 6: Reducing the inequality of outcomes for women from Black, Asian and Minority Ethnic (BAME) communities and their babies: link

				Clinical commissioning groups											
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland				Tees Valley		
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	North Durham	Durham Dales, Easington & Sedgefield	South Tyneside	Sunderland	South Tees	Hartlepool	Darlington
Postpartum psychosis: Estimated number of women (Female, All ages, Count)	2017/18	984	48	5	8	4	3	3	4	2	4	5	5	2
Adjustment disorders and distress in perinatal period (lower estimate): Estimated number of women (Female, All ages, Count)	2017/18	73828	3633	338	611	315	249	257	317	185	333	383	360	130
Adjustment disorders and distress in perinatal period (upper estimate): Estimated number of women (Female, All ages, Count)	2017/18	147656	7266	676	1221	629	499	514	634	371	666	767	720	260
Chronic SMI in perinatal period: Estimated number of women (Female, All ages, Count)	2017/18	984	48	5	8	4	3	3	4	2	4	5	5	2

Figure 7.15 – Perinatal mental health prevalence

				Clinical commissioning groups										
				North Cumbria	North of Tyne and Gateshead			Durham, South Tyneside and Sunderland				Tees Valley		
	Period	England	Region	North Cumbria	Newcastle Gateshead	Northumberland	North Tyneside	North Durham	Durham Dales, Easington & Sedgefield	South Tyneside	Sunderland	South Tees	Hartlepool	Darlington
Severe depressive illness in perinatal period: Estimated number of women (Female, All ages, Count)	2017/18	14766	727	68	122	63	50	51	63	37	67	77	72	26
Mild-moderate depressive illness and anxiety in perinatal period (lower estimate): Estimated number of women (Female, All ages, Count)	2017/18	49219	2422	225	407	210	166	171	211	124	222	256	240	87
Mild-moderate depressive illness and anxiety in perinatal period (upper estimate): Estimated number of women (Female, All ages, Count)	2017/18	73828	3633	338	611	315	249	257	317	185	333	383	360	130
PTSD in perinatal period: Estimated number of women (Female, All ages, Count)	2017/18	14766	727	68	122	63	50	51	63	37	67	77	72	26

Figure 7.15 – Perinatal mental health prevalence (continued)

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/IMYftHSFAk.

7.2.7 Access to screening

Screening programmes aim to identify those at high risk of a disorder to enable further investigation, diagnosis and early management. In England, the following screening programmes are offered to pregnant women and newborn babies:

- Fetal Anomaly Screening Programme (FASP)[21]
- Sickle cell and thalassaemia screening (SCT)[22]
- Infectious diseases in pregnancy screening (IDPS)[23]
- Newborn hearing screening (NHSP)[24]
- Newborn bloodspot screening (NBS)[25]
- Newborn and infant physical examination screening programme (NIPE)[26]

Screening uptake is voluntary. Coverage statistics are collected to measure the delivery of screening to an eligible population. Low coverage might indicate that:

- Not all eligible babies were offered screening
- Those offered screening are not accepting the test

[21] PHE (2021) NHS Fetal Anomaly Screening Programme (FASP): programme overview: link
[22] PHE (2013) Sickle cell and thalassaemia screening: programme overview: link
[23] PHE (2021) Infectious diseases in pregnancy screening: programme overview: link
[24] PHE (2016) Newborn hearing screening: programme overview: link
[25] PHE (2018) Newborn blood spot screening: programme overview: link
[26] PHE (2021) Newborn and infant physical examination screening programme: link

- Those accepting the test are not tested within an effective timeframe

Many newborn and screening indicators are available at regional level only, so the figure below refers to the North East and compares with England.

	Period	England		North East Region	
Newborn Blood Spot Screening - Coverage (Persons, <1 yr, Proportion- %)	2019/20	97.9	▲	98.7	▲
Infectious Diseases in Pregnancy Screening - HIV Coverage (Female, All ages, Proportion- %)	2019/20	99.8	▶	99.8	▲
Sickle Cell and Thalassaemia Screening - Coverage (Female, All ages, Proportion- %)	2019/20	99.7	▲	99.8	▲
Infectious Diseases in Pregnancy Screening - Hepatitis B Coverage (Female, All ages, Proportion- %)	2019/20	99.8		99.8	
Infectious Diseases in Pregnancy Screening - Syphilis Coverage (Female, All ages, Proportion- %)	2019/20	99.8		99.9	
Newborn and Infant Physical Examination Screening - Coverage (Persons, < 1 yr, Proportion- %)	2019/20	96.7	▲	96.3	▲
Fetal Anomaly Screening - Coverage (Female, Proportion- %)	2019/20	99.1		99.2	

Figure 7.16 – Access to screening – Region

- In 2019/20 the **North East** had higher proportions than England in the majority of screening programs with increasing trends across four of the seven and no downward trends. Fetal anomaly screening coverage was similar to England, and only newborn and infant physical examination coverage was significantly lower than England.

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Newborn Hearing Screening - Coverage (Persons, <1 yr, Proportion- %)	2019/20	98.2 ►	-	98.2	99.0	99.1	99.0	99.5	98.1	98.1	98.3	98.4	99.2	95.3	96.2	99.4

Figure 7.17 – Access to screening – Newborn hearing

- The proportion of babies eligible for newborn hearing screening for whom the screening process is complete by 4 weeks corrected age (hospital programmes: well babies, NICU babies) or by 5 weeks corrected age (community programmes: well babies) within the **North East and Cumbria** varies from **Middlesbrough** (95.3%) to **North Tyneside** (99.5%). Two local authorities, **Middlesbrough** and **Redcar & Cleveland**, have significantly lower proportions than the England average whilst six out of thirteen have significantly higher proportions.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/ykVuEaEkw0.

7.2.8 Access to services

Health visitors are specialist public health nurses leading the 0 to 5 year olds element of the Healthy Child Programme[27] and supporting families from the antenatal period up to school entry. The service is delivered in a range of settings including families' own homes, the local community or primary care. The programme is tailored to the needs of children and families and includes safeguarding as a core element. The programme also includes five mandated reviews[28]:

- Antenatal health promoting visit;
- New baby review;
- 6-8 week assessment;
- 1 year assessment;
- 2 – 2½ year review

Service performance metrics on health visitor activity can be used to inform local service evaluations.

The ASQ-3 is a national outcome measure which has been developed[29] to help monitor child development at age 2 – 2½ years[30]. Health visiting teams should have been using ASQ-3 as part of HCP two year reviews from April 2015. Coverage statistics can inform the interpretation of ASQ-3 derived indicators.

[27] PHE (2021) Healthy child programme 0 to 19: health visitor and school nurse commissioning: link
[28] PHE (2021) Healthy visiting and school nursing service delivery model: link
[29] PHE (2018) Feasibility study: developing the capability for population surveillance using indicators of child development outcomes aged 2 to 2 and a half years: link
[30] PHE Fingertips Indicator definition: Proportion of children aged 2-2½yrs receiving ASQ-3 as part of the Healthy Child Programme or integrated review: link

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Proportion of New Birth Visits (NBVs) completed within 14 days (Persons, <14 days, Proportion- %)	2019/20	86.8	-	81.7	96.2	89.0	90.9	92.2	96.3	90.8	98.2	91.5	79.6	98.5	88.4	83.4
Proportion of infants receiving a 6 to 8 week review (Persons, 6-8 weeks, Proportion- %)	2019/20	85.1	89.1	73.7	95.5	86.4	86.6	95.2	95.1	89.1	96.6	93.9	79.0	96.7	94.1	85.3
Proportion of children receiving a 12-month review (Persons, 1 yr, Proportion- %)	2019/20	83.6	93.1	77.0	97.3	93.2	95.0	93.7	97.4	86.2	99.0	99.7	93.8	98.8	95.6	95.4
Proportion of children who received a 2-2½ year review (Persons, 2-2.5 yrs, Proportion- %)	2019/20	78.6	86.7	61.6	88.7	85.5	90.1	85.7	93.7	87.9	97.7	97.8	76.7	99.2	93.6	89.6
Proportion of children aged 2-2½yrs receiving ASQ-3 as part of the Healthy Child Programme or integrated review (Persons, 2-2.5 yrs, Proportion- %)	2019/20	92.6 ▲	93.1 ▲	*	87.3	96.5	95.4 ▲	96.1 ▶	96.5 ▲	86.5	87.4	99.4 ▲	96.5 ▲	98.8	98.6	97.6

Figure 7.18 – Access to services

On average, the data relating to the **North East and Cumbria** indicate that:

- The **region** has a significantly higher proportion of children receiving a 6 to 8 week review (89.1%) and a 12 month review (93.1%) than the England averages (85.1% and 83.6% respectively).
- The **region** as a whole has a significantly higher proportion of children receiving a 2 – 2½ year review (86.7%) and receiving ASQ-3 (93.1%) than the England averages (78.6% and 92.6% respectively).

At a locality level, the data indicate that on average:

- The majority of North East and Cumbria local authorities have a significantly higher proportion of visits and reviews completed than England averages, with few exceptions. Specifically identifying those with significantly lower proportions these are **Cumbria** for all four reviews, **Hartlepool** for new birth visits and 6 to 8 week reviews, and **Stockton-on-Tees** for new birth visits.
- Most local authorities have significantly higher proportions of children receiving ASQ-3 than the England average, with the exceptions of **Gateshead**, **South Tyneside** and **Sunderland** which are all significantly lower.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/XYnu0NddvE.

7.2.9 Early development

Leading cohort studies such as the Millennium Cohort Study[31] have identified associations between deprivation and child development. The ASQ-3 (see above) provides the opportunity to explore these associations at a whole population level, by helping to monitor child development outcomes across England, over time and across various vulnerable groups, demographic or socioeconomic factors.

The ASQ-3 explores five domains of child development: communication, gross motor skills, fine motor skills, problem solving and personal-social development. Early results indicate that the development of communication skills is most heavily influenced by

[31] UCL Millennium Cohort Study: link

demographic and social factors, and is the one where the gap between boys and girls is the largest. Evidence is clear that poor communication skills can have long term consequences for social, educational, health and economic outcomes, and therefore the use of ASQ-3 and the publication of national statistics on child development outcomes provides an opportunity for early intervention to improve health and wellbeing outcomes for children and to reduce inequalities in those outcomes[32].

Data is currently collected through PHE's interim data collection system, however the longer-term strategic plan for data collection and reporting the ASQ-3 metrics and associated outcomes of child development is NHS Digital's Community Services Dataset (formerly the Children and Young Peoples (CYPHS) data set). It is mandatory for the providers of public funded services to submit the dataset to NHS Digital. Whilst the data set is operational and reporting has begun, providers are at different stages of maturity with their submissions or readiness to flow the data therefore it is expected to take some additional time for this data set to reach sufficient coverage for reporting purposes.

Indicators of early development using the Ages and Stages Questionnaire (ASQ-3) are presented for four individual sets of skills as well as the overall indicator of development. Disparities in child development are recognisable in the second year of life and have an impact by the time children enter school. If left unsupported, these children are more likely to fail to achieve their full potential.

[32] PHE (2018) Feasibility study: developing the capability for population surveillance using indicators of child development outcomes aged 2 to 2 and a half years: link

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Child development: percentage of children achieving a good level of development at 2-2½ years (Persons, 2-2.5 yrs, Proportion- %)	2019/20	83.3	-	*	85.6	85.7	91.2	87.8	89.8	*	83.2	93.9	62.1	89.4	88.0	89.8
Child development: percentage of children achieving the expected level in communication skills at 2-2½ years (Persons, 2-2.5 yrs, Proportion- %)	2019/20	88.9	-	*	89.9	89.7	95.7	92.9	92.1	*	87.6	93.7	80.2	92.9	93.4	93.0
Child development: percentage of children achieving the expected level in gross motor skills at 2-2½ years (Persons, 2-2.5 yrs, Proportion- %)	2019/20	93.8	95.6	*	95.6	95.7	98.0	97.9	95.9	*	94.0	98.5	74.5	97.9	94.1	96.5
Child development: percentage of children achieving the expected level in problem solving skills at 2-2½ years (Persons, 2-2.5 yrs, Proportion- %)	2019/20	93.9	95.3	*	95.7	95.2	97.8	96.1	95.9	*	92.6	97.5	82.8	96.5	95.6	95.2
Child development: percentage of children achieving the expected level in personal-social skills at 2-2½ years (Persons, 2-2.5 yrs, Proportion- %)	2019/20	92.9	-	*	95.6	95.1	96.5	97.1	94.8	*	93.4	97.7	80.3	96.4	95.1	94.4

Figure 7.19 – Access to screening – Early development

At a locality level, the data indicate that on average:

- Where data is available, the majority of **North East and Cumbria** local authorities have a significantly higher percentage of children achieving a good level of development at 2-2½ years than the England average. The exceptions to this are in **Sunderland** where the percentage is similar to the national average and in **Hartlepool** where the percentage is significantly lower.

- Where data is available for the percentage of children achieving the expected level in communication skills at 2-2½ years, only four local authorities do not have a significantly higher percentage than the England average. These are **Gateshead** and **Newcastle upon Tyne** which have results similar to that of the England average and **Hartlepool** and **Sunderland** which have significantly lower percentages.

- For gross motor skills most local authorities have significantly higher percentages of children achieving the expected level than the England average, with the exception of **Sunderland** and **Redcar & Cleveland** (similar) and **Hartlepool** (significantly lower).

- Where data is available, the majority of local authorities have a significantly higher percentage of children achieving the expected level in problem solving skills at 2-2½ years than the England average. The exceptions are **Sunderland** and **Hartlepool** both of which have a significantly lower percentage than the England average.

- The majority of local authorities have a higher percentage of children achieving the expected level in personal-social skills at 2-2½ years than the England average. The exceptions are **Sunderland** which has a similar percentage to the England average and **Hartlepool** which has a significantly lower percentage.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/x8aFgAfo8k.

7.3 Commentary on network actions

Strong start in life is a network priority and has threads across many areas its work and a close association to the Maternity and Perinatal Mental Health Clinical Networks a recent network. A recent 'huddle' seminar focused on the learning from the Surestart initiative to share learning from the national founding Director.

The Network's Interactive Film is based around a group of young parents to be and highlight some issues they face including perinatal mental health. This acts as an educational tool for young people to Trylife in a safe environment and is freely available to those in NENC.

The Poverty Proofing consultation exercise accessed young people and families on the impact of poverty on accessing health care settings, which highlighted key items relating to access and transport.

Little Orange Book is an initiative developed by Newcastle Gateshead CCG and promoted by the network to be spread across the region. It offers guidance to parents of young children (5 and under) on the top conditions that are seen in A&E but can usually be managed safely at home.

The NENC Healthier Together website development (based on Home :: Healthier Together (what0-18.nhs.uk) is a region wide site and clinical repository for professionals and families relating to children's,(and potentially also maternal and mental health) guidance. This has been successfully implemented elsewhere and reduced the attendances for young people in urgent and emergency care settings and includes information in relation to prevention.

For any further information and proposals on initiatives relating to strong start in life do contact the network via england.northernchildnetwork@nhs.net and the website Child Health and Wellbeing Network | North East and North Cumbria ICS.

7.4 Relevant key policy and research papers

Fetal origins of adult disease theory

Barker DJP et al. Fetal nutrition and cardiovascular disease in adult life. The Lancet 1993; 341 (8850) 938-41
https://www.sciencedirect.com/science/article/abs/pii/014067369391224A

Barker DJP. Developmental origins of chronic disease. Public health 2012; 126(3): 185-9
https://www.sciencedirect.com/science/article/abs/pii/S0033350611003660?via%3Dihub

Bhutta ZA. Early nutrition and adult outcomes: piece of the puzzle. The Lancet 2013; 382 (9891): 486-7
https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)60716-3/fulltext

Calkins K.et al. Fetal origins of adult disease. Curr Probl Pediatr Adolesc Health Care 2011; 41(6): 158-76
https://www.sciencedirect.com/science/article/abs/pii/S1538544211000265?via%3Dihub

Inequalities

UCL Millennium Cohort Study https://cls.ucl.ac.uk/cls-studies/millennium-cohort-study/

Marmot M. (2010) Fair society, healthy lives. Strategic review of health inequalities in England post 2010
https://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review/fair-society-healthy-lives-full-report-pdf.pdf

Kings Fund Collection Best start in life https://www.kingsfund.org.uk/projects/improving-publics-health/best-start-life

Knight M. et al. (2019) Saving lives, improving mothers' care - lessons learned to inform maternity care from the UK and Ireland confidential enquiries into maternal deaths and morbidity 2015–17. Oxford: National Perinatal Epidemiology Unit, University of

Oxford; 2019 https://www.npeu.ox.ac.uk/assets/downloads/mbrrace-uk/reports/MBRRACE-UK%20Maternal%20Report%202019%20-%20WEB%20VERSION.pdf

Draper ES et al. (2019) MBRRACE-UK perinatal mortality surveillance report, UK perinatal deaths for births from January to 2017. Leicester: The Infant Mortality and Morbidity Studies, Department of Health Sciences, University of Leicester; 2019. https://www.npeu.ox.ac.uk/assets/downloads/mbrrace-uk/reports/perinatal-surveillance-report-2018/MBRRACE-UK_Perinatal_Surveillance_Report_2018_-_final_v3.pdf

Children's Commissioner (2018) Growing up North https://www.childrenscommissioner.gov.uk/report/growing-up-north-a-generation-of-children-await-the-powerhouse-promise/

Life course approach

Wave Trust (2014) A cross party manifesto: The 10001 Critical Days – the importance of the conception to age two period. https://www.wavetrust.org/Handlers/Download.ashx?IDMF=e1b25e67-b13b-4e19-a3f6-9093e56d6a31

Department of Health and Social Care (2019) First 1000 days of life. https://publications.parliament.uk/pa/cm201719/cmselect/cmhealth/1496/1496.pdf

Early Intervention Foundation (2018) Realising the potential of early intervention. https://www.eif.org.uk/report/realising-the-potential-of-early-intervention

PHE (2019) Healthy beginnings: Applying All Our Health https://www.gov.uk/government/publications/healthy-beginnings-applying-all-our-health/healthy-beginnings-applying-all-our-health

PHE (2018) Making the case for Preconception care https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/729018/Making_the_case_for_preconception_care.pdf

PHE (2019) Health of women before and during pregnancy: health behaviours, risk factors and inequalities https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/844210/Health_of_women_before_and_during_pregnancy_2019.pdf

PHE (2018) Health matters: reproductive health and pregnancy planning https://www.gov.uk/government/publications/health-matters-reproductive-health-and-pregnancy-planning/health-matters-reproductive-health-and-pregnancy-planning

Maternity care and maternal health

PHE (2020) Maternity high impact area 1: Improving planning and preparation for pregnancy https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/942474/Maternity_high_impact_area_1_Improving_planning_and_preparation_for_pregnancy.pdf

PHE (2020) Maternity high impact area 2: Supporting good parental mental health https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/942475/Maternity_high_impact_area_2_Supporting_good_parental_mental_health.pdf

PHE (2019) Maternity high impact area 3. Supporting healthy weight before and between pregnancy. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/942476/Maternity_high_impact_area_3_Supporting_healthy_weight_before_and_between_pregnancies_.pdf

PHE (2020) Maternity high impact area 4. Reducing the impact of harms caused by alcohol in pregnancy. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/942477/Maternity_high_impact_area_4_Reducing_the_incidence_of_harms_caused_by_alcohol_in_pregnancy.pdf

PHE (2019) Maternity high impact area 5. Supporting parents to have a smoke free pregnancy. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/942478/Maternity_high_impact_area_5_Supporting_parents_to_have_a_smokefree_pregnancy.pdf

PHE (2020) Maternity high impact area 6: Reducing the inequality of outcomes for women from Black, Asian and Minority Ethnic (BAME) communities and their babies. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/942480/Maternity_high_impact_area_6_Reducing_the_inequality_of_outcomes_for_women_from_Black__Asian_and_Minority_Ethnic__BAME__communities_and_their_babies.pdf

CMO (2014) The health of the 51% - Women https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/595439/CMO_annual_report_2014.pdf

RCOG (2019) Better for women https://www.rcog.org.uk/globalassets/documents/news/campaigns-and-opinions/better-for-women/better-for-women-full-report.pdf

NIHR Dissemination Centre (2017) Themed review. Better beginnings. Improving health for pregnancy https://evidence.nihr.ac.uk/wp-content/uploads/2020/03/Better-beginnings-web-interactive.pdf

PHE (2019) A framework for supporting teenage mothers and young fathers https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/796582/PHE_Young_Parents_Support_Framework_April2019.pdf

RCOG (2011) Why should we consider a life course approach to Women's Health Care? https://www.euro.who.int/__data/assets/pdf_file/0016/292201/Life-Course-Approach-Womens-Health-UK.pdf

Breastfeeding

Victora CG et al. (2016) Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet; 387 (10017): 475-90 https://www.bpni.org/Article/Breastfeeding-in-the-21st-century-epidemiology-mechanisms.pdf

Rollins NC. et al. (2016) Why invest, and what it will take to improve breastfeeding practices? Lancet; 387 (10017): 491-504 https://www.ilcambiamento.it/files/allattamento2.pdf

NICE (2008): Public health guideline PH11. Maternal and child nutrition. https://www.nice.org.uk/guidance/ph11/chapter/2-public-health-need-and-practice

Quigley MA et al. (2007) Breastfeeding and hospitalisation for diarrheal and respiratory infection in the United Kingdom Millennium Cohort Study. Pediatrics 2007; 119(4): e837-42 https://pubmed.ncbi.nlm.nih.gov/17403827/

Screening

PHE (2021) NHS Fetal Anomaly Screening Programme (FASP): programme overview. https://www.gov.uk/guidance/fetal-anomaly-screening-programme-overview

PHE (2013) Sickle cell and thalassaemia screening: programme overview https://www.gov.uk/guidance/sickle-cell-and-thalassaemia-screening-programme-overview

PHE (2021) Infectious diseases in pregnancy screening: programme overview https://www.gov.uk/guidance/infectious-diseases-in-pregnancy-screening-programme-overview

PHE (2016) Newborn hearing screening: programme overview https://www.gov.uk/guidance/newborn-hearing-screening-programme-overview

PHE (2018) Newborn blood spot screening: programme overview https://www.gov.uk/guidance/newborn-blood-spot-screening-programme-overview

PHE (2021) Newborn and infant physical examination screening programme https://www.gov.uk/government/publications/newborn-and-infant-physical-examination-programme-handbook/newborn-and-infant-physical-examination-screening-programme-handbook

Perinatal Mental Health

Gutierrez-Galve L, Stein A, Hanington L, Heron J, Lewis G, O'Farrelly C, et al. (2019) Association of maternal and paternal depression in the postnatal period with offspring depression at age 18 years. JAMA psychiatry. 2019;76(3):290-6. https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2719453

NICE (2014) Clinical Guideline CG192. Antenatal and postnatal mental health https://www.nice.org.uk/guidance/cg192

PHE (2019) Perinatal Mental Health https://www.gov.uk/government/publications/better-mental-health-jsna-toolkit/4-perinatal-mental-health

RCGP (2021) Perinatal Mental Health Toolkit https://www.rcgp.org.uk/clinical-and-research/resources/toolkits/perinatal-mental-health-toolkit.aspx

Early years services and child development

PHE (2021) Supporting public health: children, young people and families https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-children

PHE (2018) Feasibility study: developing the capability for population surveillance using indicators of child development outcomes aged 2 to 2 and a half years. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/683601/Feasibility_study_developing_the_capability_for_population_surveillance_using_indicators_of_child_development_outcomes_aged_2_to_2_and_a_half_years.pdf

PHE (2021) Healthy child programme 0 to 19: health visitor and school nurse commissioning https://www.gov.uk/government/publications/healthy-child-programme-0-to-19-health-visitor-and-school-nurse-commissioning

PHE (2021) Healthy visiting and school nursing service delivery model https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-children/health-visiting-and-school-nursing-service-delivery-model

North East and North Cumbria's

Child Health and Wellbeing Network

The Facts of Life for children and young people growing up in the North East and North Cumbria:

Chapter 8 – Education and attainment

September 2021

@NorthNetChild

Ambers and greens in educational attainment in primary schools too often become reds in secondary schools and this is linked in the worst performing areas to persistent absence from school and school exclusions. The data also shows wide variation between the best and the worst performing areas. Step 1 in terms of action might be about some more granular information about what is going on here and Step 2 might be about putting in place and testing out a support system to address this.

Chapter Eight SPOTLIGHT to direct momentum for initiatives

8 Education and attainment

8.1 Relevance

Education is the most important modifiable social determinant of health[1]. Research evidence shows that education and health are closely linked throughout the life course. Pupils with better health and wellbeing are likely to achieve better academically[2] and levels of educational attainment in childhood are positively correlated with adult health behaviours, illness, life expectancy, employment and wealth[3]. School is a key setting for forming or changing health behaviours[4] and education can promote health

[1] Editorial. Education: a neglected social determinant of health. The Lancet Public Health; 2020: link
[2] PHE (2014) The link between pupil health and wellbeing and attainment A briefing for head teachers, governors and staff in education settings: link
[3] ONS (2016) How do childhood circumstances affect your chances of poverty as an adult?: link
[4] https://www.kingsfund.org.uk/projects/improving-publics-health/healthy-schools-and-pupils

equity[5]. In the UK, there is growing evidence of widening inequalities in education. How much money a child's parents earn, which region they live in and their ethnicity are all factors which shape educational attainment[6].

Early childhood is an important period of rapid brain growth. Attachment and good maternal mental health shapes a child's later emotional, behavioural and intellectual development. Getting a good start in life, building emotional resilience and getting maximum benefit from education are the most important markers for good health and wellbeing throughout life[7].

Inequalities in educational provision were also evident during the COVID 19 pandemic[8] with long-term implications for educational progression and labour market performance[9].

This section details educational indicators relating to attainment throughout school age, as well as related indicators on exclusions and absence.

8.2 Commentary and findings

8.2.1 Early years foundation stage

School readiness at the end of reception is a key measure of early years development across a wide range of developmental areas. Metrics relating to school meal status can indicate early inequalities - children from poorer backgrounds are at higher risk of poorer development and the evidence shows that differences by social background emerge early in life.

Children defined as having reached at least the expected level of development in communication and language skills means that they achieved 'expected' or 'exceeded' levels of development within all three communication and language early learning goals (listening and attention, understanding, speaking). Disparities in child language capabilities are recognisable in the second year of

[5] Hahn RA et al. (2015) Education improves public health and promotes health equity. Int J Health Serv 2015; 45(4): 657-78: link
[6] The Social Market Foundation (2017) Commission on inequality in education: link
[7] PHE (2021) Early years high impact area 6: Ready to learn and narrowing the word gap: link
[8] Children's Commissioner (2021) The numbers behind homeschooling during lockdown: link
[9] Institute for Fiscal Studies (2021) Inequalities in education skills and incomes in the UK: the implications of the COVID-19 pandemic: link

life and are clearly having an impact by the time children enter school. If left unsupported, these children are more likely to fail to achieve their full potential[10].

[10] PHE (2021) Fingertips Early Years Foundation Stage: link

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities														
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley						
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
School readiness: percentage of children achieving a good level of development at the end of Reception (Persons, 5 yrs, Proportion- %)	2018/19	71.8 ▲	-	70.6 ▲	73.4 ▲	70.4 ▲	74.8 ▲	72.0 ▲	71.8 ▲	73.3 ▲	72.6 ▲	71.7 ▲	72.2 ▶	63.1 ▲	71.1 ▲	73.8 ▲
School readiness: percentage of children achieving at least the expected level in communication and language skills at the end of Reception (Persons, 5 yrs, Proportion- %)	2018/19	82.2 ▲	-	82.4 ▲	89.9 ▲	83.0 ▶	84.8 ▲	82.6 ▶	81.6 ▲	83.4 ▲	82.9 ▲	78.1 ▶	79.3 ▶	71.8 ▶	79.9 ▶	84.4 ▲
School readiness: percentage of children achieving at least the expected level of development in communication, language and literacy skills at the end of Reception (Persons, 5 yrs, Proportion- %)	2018/19	72.6 ▲	72.4 ▲	71.7 ▲	74.3 ▲	70.8 ▲	75.6 ▲	73.1 ▲	72.4 ▲	73.8 ▲	73.4 ▲	72.2 ▶	73.2 ▶	63.3 ▲	71.6 ▲	74.3 ▲
School Readiness: percentage of children with free school meal status achieving a good level of development at the end of Reception (Persons, 5 yrs, Proportion- %)	2018/19	56.5 ▲	-	50.1 ▲	52.7 ▶	61.3 ▲	60.7 ▲	54.2 ▲	54.6 ▲	59.8 ▲	62.6 ▲	60.5 ▶	61.5 ▶	54.9 ▶	53.0 ▶	58.3 ▲

Figure 8.1 – Early years foundation stage – Upper tier local authorities

On average, where available, the data relating to the **North East and Cumbria** in 2018/19 indicate that:

- Compared to England (72.6%), a similar percentage of children (72.4%) achieve at least the expected level of development in communication, language and literacy skills at the end of reception, and this is increasing both nationally and in the region.

At a locality level, the data indicate that on average:

- **Middlesbrough** has a significantly lower rate than England across all three measures of development relating to all children, while **Northumberland** has a significantly higher rate for all three.
- All of the **Tees Valley** with the exception of **Stockton-on-Tees** have a significantly lower than England (82.2%) percentage of children who achieve at least the expected level of development in communication and language skills at the end of reception.
- For children with free school meal status **Cumbria** (50.1%) has a significantly lower percentage than the England average (56.5%) achieving a good level of development. **Newcastle upon Tyne** (61.3%) and **Sunderland** (62.6%) have a significantly higher percentage than England.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/oX5dIwtXbE.

Chart legend

Significance compared with England: worse | similar | better

8.2.2 Key stage 1 and 2

				Upper tier local authorities													
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
School readiness: percentage of children achieving the expected level in the phonics screening check in Year 1 (Persons, 6 yrs, Proportion- %)	2018/19	81.8 ▲	-	80.3 ▲	83.1 ▲	80.5 ▲	84.3 ▲	83.4 ▲	82.0 ▲	82.2 ▲	80.9 ▶	83.4 ▶	83.8 ▶	78.3 ▲	81.3 ▶	83.6 ▲
School readiness: percentage of children with free school meal status achieving the expected level in the phonics screening check in Year 1 (Persons, 6 yrs, Proportion- %)	2018/19	70.1 ▲	-	64.8 ▶	71.7 ▲	75.5 ▲	71.6 ▶	70.1 ▶	70.0 ▶	73.5 ▲	69.5 ▶	73.0 ▶	73.1 ▶	70.4 ▲	70.4 ▶	74.5 ▶

Figure 8.2 – Key stage 1 and 2 – Phonics

At a locality level, the data indicate that on average in 2018/19:

- **Cumbria** has a significantly lower percentage of children achieving the expected level in the phonics screening check than the England average, as well as a significantly lower percentage of children with free school meal status achieving the expected level. **Stockton-on-Tees** has a significantly higher percentage for both indicators.
- For all children, **Northumberland** (84.3%) has the highest percentage of children achieving the expected level in the phonics screening check in the region, while **Middlesbrough** (78.3%) has the lowest.

Chart legend

Significance compared with England: worse | similar | better

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Key stage 1 pupils meeting the expected standard in reading (Persons, 6-7 yrs, Percentage point- %)	2019	74.9	-	74.6	75.4	74.9	78.4	78.0	76.0	76.1	74.9	74.8	73.5	69.8	75.4	77.0
Key stage 1 pupils meeting the expected standard in writing (Persons, 6-7 yrs, Percentage point- %)	2019	69.2	-	68.5	69.6	71.0	73.2	72.0	71.9	70.4	71.7	68.1	70.4	65.7	72.8	73.6
Key stage 1 pupils meeting the expected standard in maths (Persons, 6-7 yrs, Percentage point- %)	2019	75.6	-	75.0	75.1	75.5	78.7	78.0	77.3	76.9	77.0	74.8	75.1	70.7	76.7	78.6
Key stage 1 pupils meeting the expected standard in science (Persons, 6-7 yrs, Percentage point- %)	2019	82.3	-	84.7	81.7	81.1	84.9	84.7	83.2	83.3	81.2	81.5	80.4	76.3	81.5	84.1
Key stage 2 pupils meeting the expected standard in reading, writing and maths (Persons, 10-11 yrs, Percentage point- %)	2018	64.9	-	64.8	70.9	69.6	64.6	68.2	67.7	67.7	68.3	65.0	66.5	63.9	70.7	70.6

Figure 8.3 – Key stage 1 and 2 – Expected standards

At a locality level, the data indicate that on average:

- **Middlesbrough** has a significantly lower than England percentage of children meeting the expected standard across all four measures at key stage 1 (reading, writing, maths and science). All other local authorities have percentages which are similar or significantly higher than England, with **Northumberland**, **North Tyneside** and **Stockton-on-Tees** significantly higher across all four.

- At key stage 2 all local authorities are similar to or higher than the England average for pupils meeting the expected standard in reading, writing and maths, with **Gateshead** (70.9%) the highest in the region.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/fEtyQan4Tk.

Chart legend

Significance compared with England | worse | similar | better

8.2.3 Key stage 4

				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Average Attainment 8 score (Persons, 15-16 yrs, Mean- Score)	2019/20	50.2	-	51.5	47.9	49.6	50.4	49.5	47.7	49.6	49.2	49.1	46.6	48.0	49.6	46.8	46.2	47.7	48.5
Educational attainment (5 or more GCSEs): % of all children (Persons, 15-16 yrs, Proportion- %)	2015/16	57.8	56.5	54.5	55.6	52.0	64.7	56.9	56.3	55.4	63.2	58.3	58.0	53.9	55.9	48.5	53.5	54.2	58.4

Figure 8.4 – Key stage 4 – Upper tier local authorities

- The majority of local authorities in the **NENC region** have significantly lower average attainment 8 scores than the England average. The only NENC local authority to have a significantly higher score than the England average (50.2) is **Allerdale** (51.5).
- Prior to the adoption of attainment 8 educational attainment at key stage 4 was based on achieving 5 or more GCSE's at grades A*-C (including English and Maths). In 2015/16 the **NENC region** as a whole has a statistically lower percentage of children achieving this than the England average. The exceptions to this are in **Eden** and **North Tyneside** both of which have statistically higher percentages than the England average.

Chart legend

Significance compared with England: worse | similar | better

Quintiles: low | high

				Upper tier local authorities												
				North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
	Period	England	Region	Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Average Attainment 8 score of children in care (Persons, 15-16 yrs, Mean- Score)	2019	19.2	-	22.2	18.6	23.4	16.5	23.9	25.6	16.0	20.5	14.6	16.7	20.0	19.3	21.2
16-17 year olds not in education, employment or training (NEET) or whose activity is not known (Persons, 16-17 yrs, Proportion- %)	2019	5.5	-	4.0	5.2	9.2	4.7	3.8	4.8	7.3	10.6	4.2	3.7	4.7	5.5	4.9

Figure 8.5 – Key stage 4 – Upper tier local authorities

- There is a lot of variation in the average attainment 8 score of children in care across the **North East and Cumbria** with both **South Tyneside** and **Darlington** being in the lowest quintile for England but **Newcastle upon Tyne**, **North Tyneside** and **County Durham** being in the highest quintile for England. Prior to the adoption of attainment 8 data for GCSE's achieved (5 A*-C's including English and maths) was published for children in care at a regional level. In 2015 11.0% of children in the North East achieved this, which was similar to England (13.8%).

- The majority of local authorities have a lower percentage of 16-17 year olds not in education, employment or training (NEET) or whose activity is not known than England. **Sunderland** (10.6%) has a percentage that is almost double the England average and is significantly higher.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/AArivWAYnE.

8.2.4 Absence and exclusions

Regular school attendance is central to raising standards and ensuring that all pupils can fulfil their potential. Missing out on lessons leaves children vulnerable to falling behind. Children with poor attendance tend to achieve less in both primary and secondary school.[11]

Pupil absence includes both authorised and unauthorised absences. Persistent absence relates to absences which equate to at least 10% of all possible sessions. Exclusion represents the removal of a child from their existing educational establishment. There are a range of reasons why a pupil might be excluded, persistent disruptive behaviour being the most prevalent.[12]

Certain vulnerabilities are recognised as increasing a child's risk of exclusion (see Chapter 4). These include: Special educational needs and disability (SEND) (including social, emotional and mental health (SEMH) needs), poverty, low attainment, being from certain minority ethnic groups, being bullied, poor relationships with teachers, life trauma and challenges in their home lives. Gender also appears to play a role - boys are more likely than girls to experience permanent exclusion[13]. Inequalities in school exclusion rates are recognised as major contributors to widening inequalities in adult life[14].

[11] Department for Education (2020) School attendance: link
[12] IPPR (2017) Making the difference. Breaking the link between school exclusion and social exclusion: link
[13] Department for Education (2019) School exclusion: a literature review on the continued disproportionate exclusion of certain children: link
[14] Children's Commissioner (2013) They go the extra mile: reducing inequality in school exclusions: link

Chart legend

Significance compared with England: worse | similar | better

	Period	England	Region	Upper tier local authorities: North Cumbria	North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley				
				Cumbria	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Persistent absentees - Primary school (Persons, Primary school age, Percentage point- %)	2018/19	8.2	-	7.0	7.7	9.5	7.4	7.1	8.4	9.5	10.2	8.8	8.5	11.8	6.9	6.9
Persistent absentees - Secondary school (Persons, Secondary school age, Percentage point- %)	2018/19	13.7	-	14.5	16.7	17.5	12.3	12.3	13.5	15.5	17.7	13.6	20.6	21.8	19.1	15.6
Primary school fixed period exclusions: rate per 100 pupils (Persons, Primary school age, rate per 100)	2016/17	1.4 ▲	0.8 ▲	0.7 ▲	0.5 ▶	1.0 ▲	1.0 ▲	0.2 ▶	1.6 ▶	0.3 ▶	1.0 ▲	1.1 ▲	0.2 ▶	1.0 ▲	0.5 ▶	0.4 ▶
Secondary school fixed period exclusions: rate per 100 pupils (Persons, Secondary school age, rate per 100)	2016/17	9.4 ▲	12.7 ▲	11.8 ▲	12.0 ▶	6.9 ▶	6.2 ▲	5.9 ▲	7.3 ▲	8.6 ▲	4.8 ▲	17.0 ▲	26.1 ▲	55.2 ▲	29.5 ▲	24.2 ▲
Fixed period exclusion due to persistent disruptive behaviour: rate per 100 school aged pupils (Persons, School age, Proportion- %)	2016/17	1.4 ▲	2.3 ▲	2.4 ▲	0.7 ▲	1.1 ▶	1.3 ▲	1.2 ▲	1.3 ▲	0.8 ▲	0.7 ▶	3.1 ▲	3.2 ▲	11.1 ▲	2.8 ▲	5.3 ▲

Figure 8.6 – Absence and exclusion – Upper tier local authorities

At a locality level, the data indicate that on average:

- The percentage of primary school enrolments classed as persistent absentees (defined as missing 10% or more of possible sessions) varies from 6.9% in both **Stockton-on-Tees** and **Redcar & Cleveland** to 11.8% in **Middlesbrough**. Four local authorities have statistically higher percentages of persistent absentees within their primary school enrolments. However, six out of thirteen of the North East and Cumbria local authorities have statistically lower percentages of persistent absentees.
- In secondary school the majority of local authorities have a statistically higher percentage of persistent absentees than the England average. The exceptions to this are in the **Northumberland** and **North Tyneside** which have statistically lower percentages, while **County Durham** and **Darlington** have similar percentages to the England average.
- For primary school exclusions all local authorities in the region with the exception of **County Durham** (1.6 per 100 pupils, significantly higher than England) have a significantly lower rate than the England average, however rates are increasing in many areas.
- For secondary school exclusions the region is split roughly halfway between areas with significantly lower rates and significantly higher rates. Rates in the **Tees Valley** local authorities are particularly high, with **Middlesbrough** (55.2 per 100 pupils) the highest. All local authorities other than **Gateshead** and **Newcastle upon Tyne** have increasing trends.
- For exclusions due to persistent disruptive behaviour the region again varies by local authority. **Cumbria**, plus all of the **Tees Valley** have significantly higher rates than England (1.4), with **Middlesbrough** (11.1 per 100) the highest. Five other local authorities have significantly lower rates, but other than **Newcastle upon Tyne** and **Sunderland** all local authorities have increasing trends.

Chart legend

Significance compared with England: worse | similar | better

				Lower tier local authorities																
				North Cumbria				North of Tyne and Gateshead				Durham, South Tyneside and Sunderland			Tees Valley					
	Period	England	Region	Allerdale	Carlisle	Copeland	Eden	Gateshead	Newcastle upon Tyne	Northumberland	North Tyneside	County Durham	South Tyneside	Sunderland	Darlington	Hartlepool	Middlesbrough	Redcar and Cleveland	Stockton-on-Tees
Pupil absence (Persons, 5-15 yrs, Proportion- %)	2018/19	4.7 ▲	-	4.9 ►	4.9 ►	4.9 ►	4.3 ►	4.7 ►	5.3 ▲	4.9 ►	4.5 ►	4.8 ►	5.0 ►	5.5 ▲	4.7 ►	5.5 ▲	5.7 ►	5.2 ►	4.8 ►

Figure 8.7 – Absence and exclusion – Lower tier local authorities

In regard to overall absence the majority of local authorities have a similar percentage of half days missed to the England average. The exceptions to this are in **Newcastle upon Tyne**, **Sunderland**, **Hartlepool**, **Middlesbrough** and **Redcar & Cleveland** all of which have statistically higher pupil absences than the England average. Like the England average, **Newcastle upon Tyne**, **Sunderland** and **Hartlepool** all show recent significant increasing trends in their data.

Live indicators from this section can be viewed at https://fingertips.phe.org.uk/indicator-list/view/IXME2j9Y1k.

8.3 Commentary on network actions

The Child Health and Wellbeing Network has worked hard to develop links with Education, it has the Regional Education Group Chair as an Executive Board Member, several Core member teachers and network manager with a background in education. This emphasis is reflected in the network's members from educational settings which has risen to 17%.

Many of the network priorities rely on educational settings to maximise their impact through the cross cutting themes like *using all settings* and *transitional bridges* as well as the Enablers such as *Workforce* and *Advocacy*. Education Advisors have been appointed to conduct a piece of work to better understand our connections into school networks to promote partnership working.

Network initiatives have been based in the school setting:

Our **Interactive film** was commissioned on our behalf by a school and targets teenage children and can be freely accessed as part of Schools, Colleges and University pastoral support. It focuses on education and prevention by enabling young people to try life in a safe setting.

Our **Integration Centre** is spreading a social prescribing model, Zone West, focused in Primary school aged children and a strong school rather than health model. It also promotes the spreading of the Beat Asthma initiatives into schools (www.beatasthma.co.uk).

The STAR initiative (South Tees ARts Project) brings an arts intervention to children adopting holiday hunger approaches to two primary schools located within geographies with high levels of deprivation. The work also includes the work of the Canadian Human Early Learning Partnership at the University of British Columbia, who have been using assessments within their schools setting to identify children's wellbeing and trigger focused improvements.

Youth Mental Health First Aid training has been offered by the network with bespoke packages delivered to a school setting with high need following the first wave of the pandemic.

For any further information and proposals on initiatives relating to education and attainment do contact the network via england.northernchildnetwork@nhs.net and the website Child Health and Wellbeing Network | North East and North Cumbria ICS.

8.4 Relevant key policy and research papers

Education and health

Hahn RA et al. (2015) Education improves public health and promotes health equity. Int J Health Serv 2015; 45(4): 657-78 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4691207/

PHE (2014) The link between pupil health and wellbeing and attainment https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/370686/HT_briefing_layoutvFINALvii.pdf

Editorial. Education: a neglected social determinant of health. The Lancet Public Health; 2020 https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(20)30144-4/fulltext

OECD (2018) Equity in education: breaking down barriers to social mobility https://www.oecd-ilibrary.org/sites/9789264073234-en/index.html?itemId=/content/publication/9789264073234-en

Early Intervention Foundation (2018) Key competencies in early cognitive development https://www.eif.org.uk/report/key-competencies-in-early-cognitive-development-things-people-numbers-and-words

Early Intervention Foundation (2018) What works to enhance the effectiveness of the Healthy Child Programme https://www.eif.org.uk/report/what-works-to-enhance-the-effectiveness-of-the-healthy-child-programme-an-evidence-update

The Social Market Foundation (2017) Commission on inequality in education https://www.smf.co.uk/wp-content/uploads/2017/07/Education-Commission-final-web-report.pdf

PHE (2021) Early years high impact area 6: Ready to learn and narrowing the word gap https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-children/early-years-high-impact-area-6-ready-to-learn-and-narrowing-the-word-gap

COVID-19 and education

Children's Commissioner (2021) The numbers behind homeschooling during lockdown https://www.childrenscommissioner.gov.uk/2020/06/11/the-numbers-behind-homeschooling-during-lockdown/

Institute for Fiscal Studies (2021) Inequalities in education skills and incomes in the UK: the implications of the COVID-19 pandemic https://ifs.org.uk/inequality/wp-content/uploads/2021/03/BN-Inequalities-in-education-skills-and-incomes-in-the-UK-the-implications-of-the-COVID-19-pandemic.pdf

United Nations (2020) The impact of COVID-19 on children
https://www.un.org/sites/un2.un.org/files/policy_brief_on_covid_impact_on_children_16_april_2020.pdf

Attendance and absence

Department for Education (2020) School attendance.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/907535/School_attendance_guidance_for_2020_to_2021_academic_year.pdf

Department for Education (2021) Improving school attendance: support for schools and local authorities.
https://www.gov.uk/government/publications/school-attendance/framework-for-securing-full-attendance-actions-for-schools-and-local-authorities

School exclusion

Department for Education (2019) School exclusion: a literature review on the continued disproportionate exclusion of certain children
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/800028/Timpson_review_of_school_exclusion_literature_review.pdf

IPPR (2017) Making the difference. Breaking the link between school exclusion and social exclusion.
https://www.ippr.org/files/2017-10/making-the-difference-report-october-2017.pdf

Children's Commissioner (2013) They go the extra mile: reducing inequality in school exclusions
https://www.childrenscommissioner.gov.uk/wp-content/uploads/2017/07/They_Go_The_Extra_Mile-.pdf