The Causes Of The Causes

A look at some of the wider determinants of health in Northumberland

Director of Public Health Annual Report 2017

Northumberland County Council

www.northumberland.gov.uk

Contents

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Foreword

Many of the key drivers to achieving the long and healthy lives we're seeking for the people of Northumberland are what we call the wider or social determinants, things like having a good education, decent quality housing, a good job and a reasonable income.

A lot of these are linked to Council services and responsibilities and this is one of the main reasons why the Public Health function and the duty to improve the health of residents returned to local government back in 2013.

Northumberland has the most fantastic natural assets and a rich cultural history. It has strong communities which embrace and foster those who have been less fortunate - just look at the way in which our Syrian families have been welcomed during 2017. It is also England's most northern county and its most sparsely populated, just two of the ways in which this beautiful place is unique. Rurality is a key feature and one of the reasons why it is so attractive to both visitors and those new to the County who have chosen to make Northumberland their home. Our rural communities are also very diverse and range from coastal to commuter villages.

But rurality also has a huge influence on how the social determinants of health impact on those communities; and the nature of that impact looks very different when compared to the experience of those living in our more urban areas. So this year's Annual Report is going to take a look at a few of these social determinants - the so called 'causes of the causes'. How do they influence health? What is the impact of rurality? And what are we all doing and could we all do to influence them in a way which improves people's lives?

I hope you find the report interesting and that you find out something new. What I really hope is that it stimulates you to think about what you, as well as I, can do to positively influence these areas which are so important to our health.

Finally, I would like to thank the hard-working, passionate and creative public health team, colleagues across the Council and partners outside who have contributed to the contents of this report.

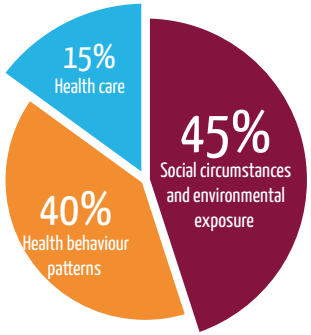
Liz Morgan FFPH

Director of Public Health

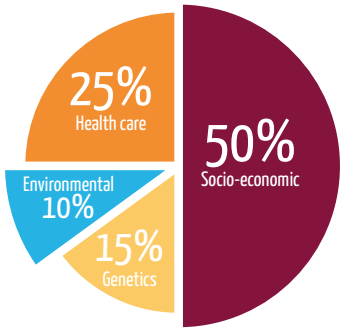
Chapter 1 Setting the scene

The social determinants of health

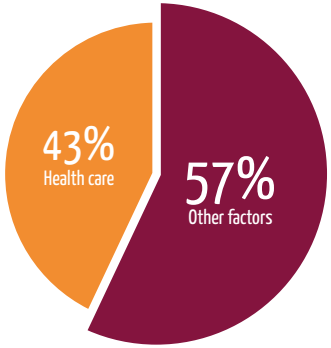
In previous reports, we have referred to the wider determinants of health. Our health is driven by how we live our lives; how we live our lives is a complex interaction between these different social determinants, all of which influence health and which have a much bigger and more fundamental impact than healthy lifestyles and healthcare. In fact some studies suggest that access to healthcare contribute as little as 10% to our health.



Mc Giniss et al (2002)



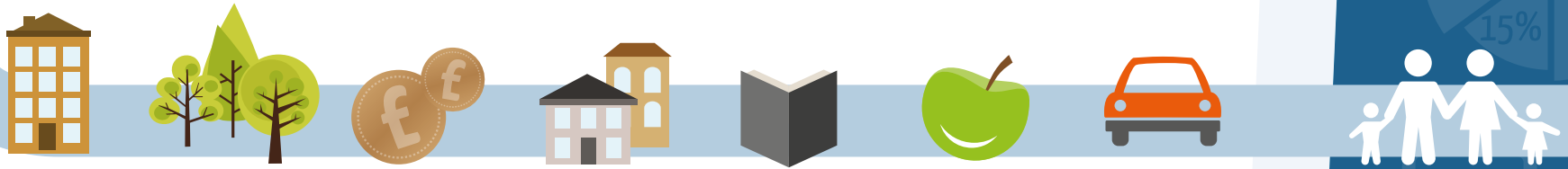
Canadian Institute of Advanced Research (2012)



Bunker et al (1995)

As little as **10%** of a population's health and wellbeing is linked to access to health care

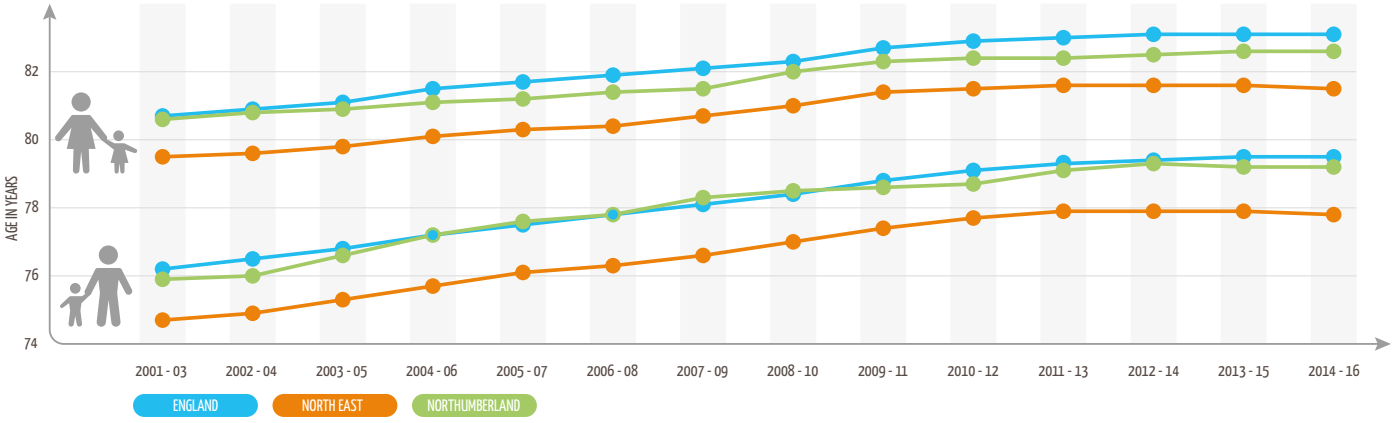
We need to look at the bigger picture



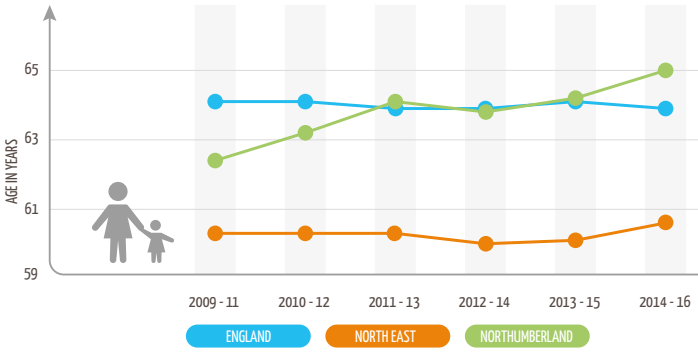
Life Expectancy (LE) & Healthy Life Expectancy (HLE)

Social gradients in health are well established and we know that life expectancy (LE) and healthy life expectancy (HLE) in our most deprived communities are much lower than in our least deprived communities. Overall though, we have made tremendous progress in increasing LE/HLE over the last 20 years or so. This increase is largely attributable to falling deaths from heart disease, heart attacks and strokes and a large proportion of that is due to reducing smoking rates. The diseases that contribute to the burden of ill health though are quite different and nationally, it is musculoskeletal and mental health problems, poor hearing and migraines that are the bigger contributors. So, whilst we're living longer, many people are spending too long living with ill health, much of which is preventable.

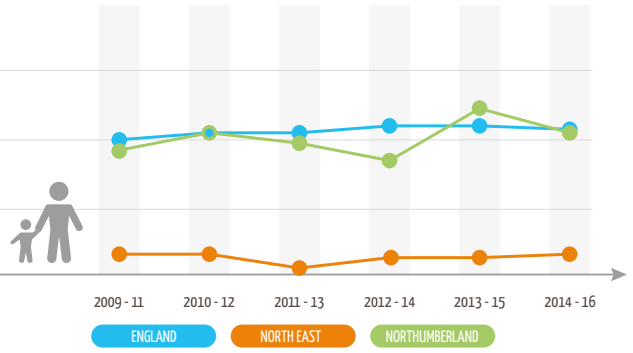
Life Expectancy at birth - Male & Female



Healthy Life Expectancy at birth - Female

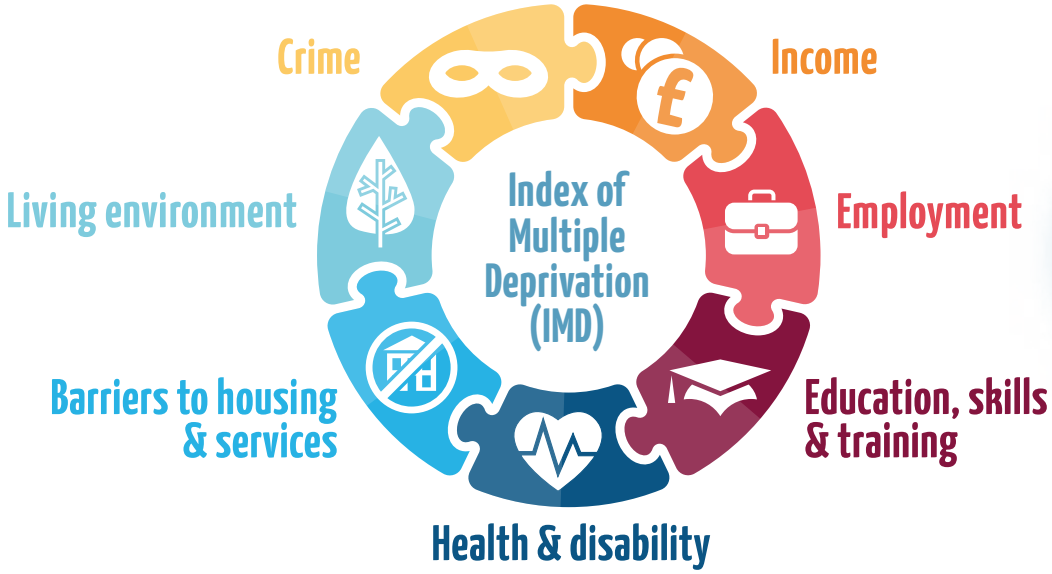


Healthy Life Expectancy at birth - Male



How we measure communities with unmet need (deprivation)

We generally measure deprivation in our communities by looking at the Index of Multiple Deprivation (IMD).[1] Deprivation has many different components so the Index is based on a whole raft of different measures and wraps them up into seven broad areas:



The IMD is not a direct measure of deprivation, so you can't say that one area is twice as deprived as another, but it does describe how relatively deprived an area is by, for instance, identifying communities which are in the most deprived 10% in England.

Index of Multiple Deprivation (IMD)
Northumberland 2015

1. https://www.gov.uk/government/statistics/english-indices-of-deprivation-2015

One of Northumberland's key features though is it's rurality and although nationally, only 17% of the population live in areas classified as rural, in Northumberland this is 54%. None of our most deprived communities are in rural locations, but that doesn't mean that there are no people who are deprived in those areas; equally, not every person in a highly deprived area will themselves be deprived.

The problem with the IMD is that because most of England's population live in urban areas, it is based on the type of material disadvantages that are most often experienced by urban populations so most deprived communities, both in Northumberland and nationally, are located largely in urban areas.[2] Rural deprivation though looks very different.

Issues that affect rural communities include fuel poverty, hidden worklessness and the distances people need to travel to get to basic services such as a post office, GP or primary school. These aren't generally experienced by those living in urban areas so they are weighted less heavily in determining overall deprivation scores. The maps on page 7 show an alternative picture of deprivation across Northumberland by looking at those difficulties experienced more in rural communities.

The barriers to housing and services domain includes indicators such as distances to a GP surgery, general store or supermarket, along with homelessness and overcrowding.

The living environment domain includes indicators related to poor housing conditions, homes without centrel heating, road traffic accidents and air quality.

Rural-Urban Classification - Output Areas

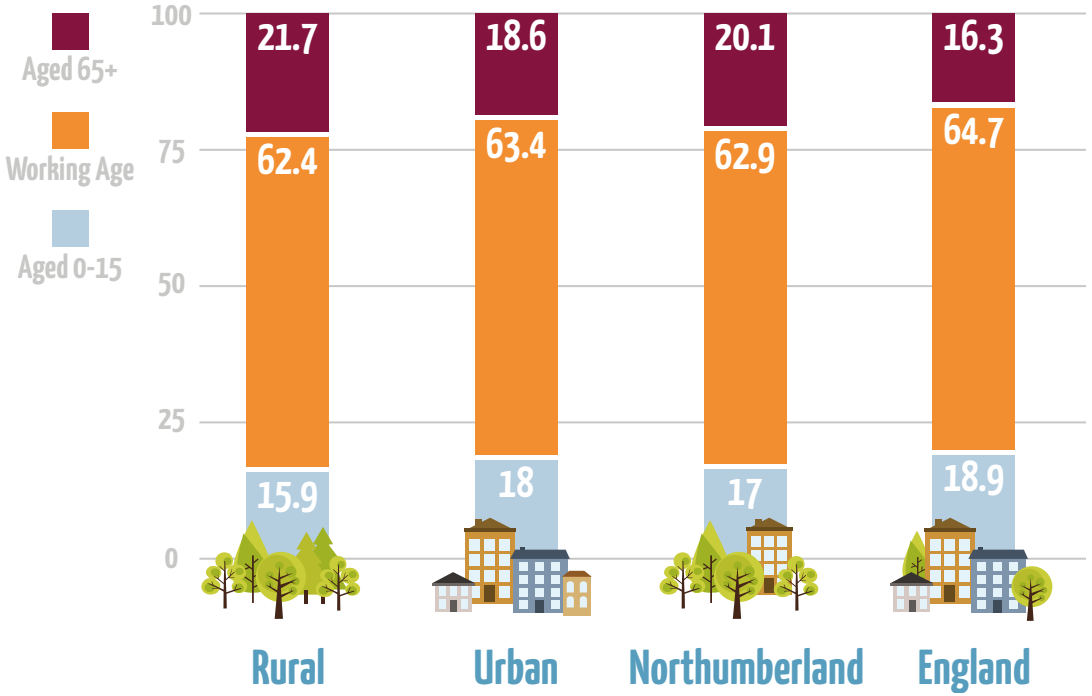
2. Fecht D et al (2017). Inequalities in rural communities: adapting national deprivation indices for rural settings. J Public Health (27 April 2017). Available from: https://doi.org/10.1093/pubmed/fdx048

Barriers to Housing & Services Domain Deciles, Northumberland 2015

Living Environment Domain Deciles Northumberland 2015

Rurality and the changing population

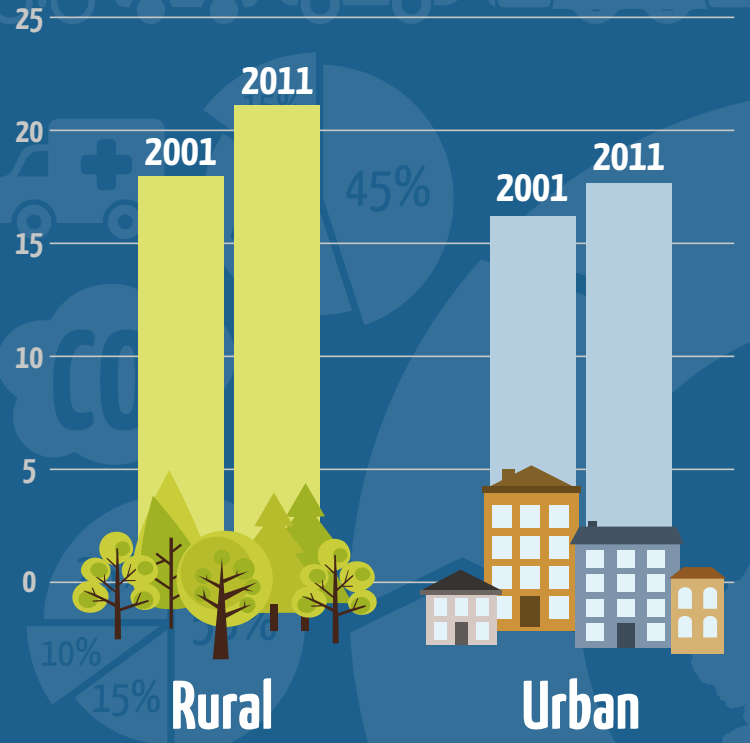
Rural areas typically have a larger proportion of older people and smaller proportion of young adults, and this is also true for Northumberland.



In recent years, Northumberland's rural population has become disproportionately older than its urban one. Northumberland's population overall is ageing, but this change is more marked in the rural population.

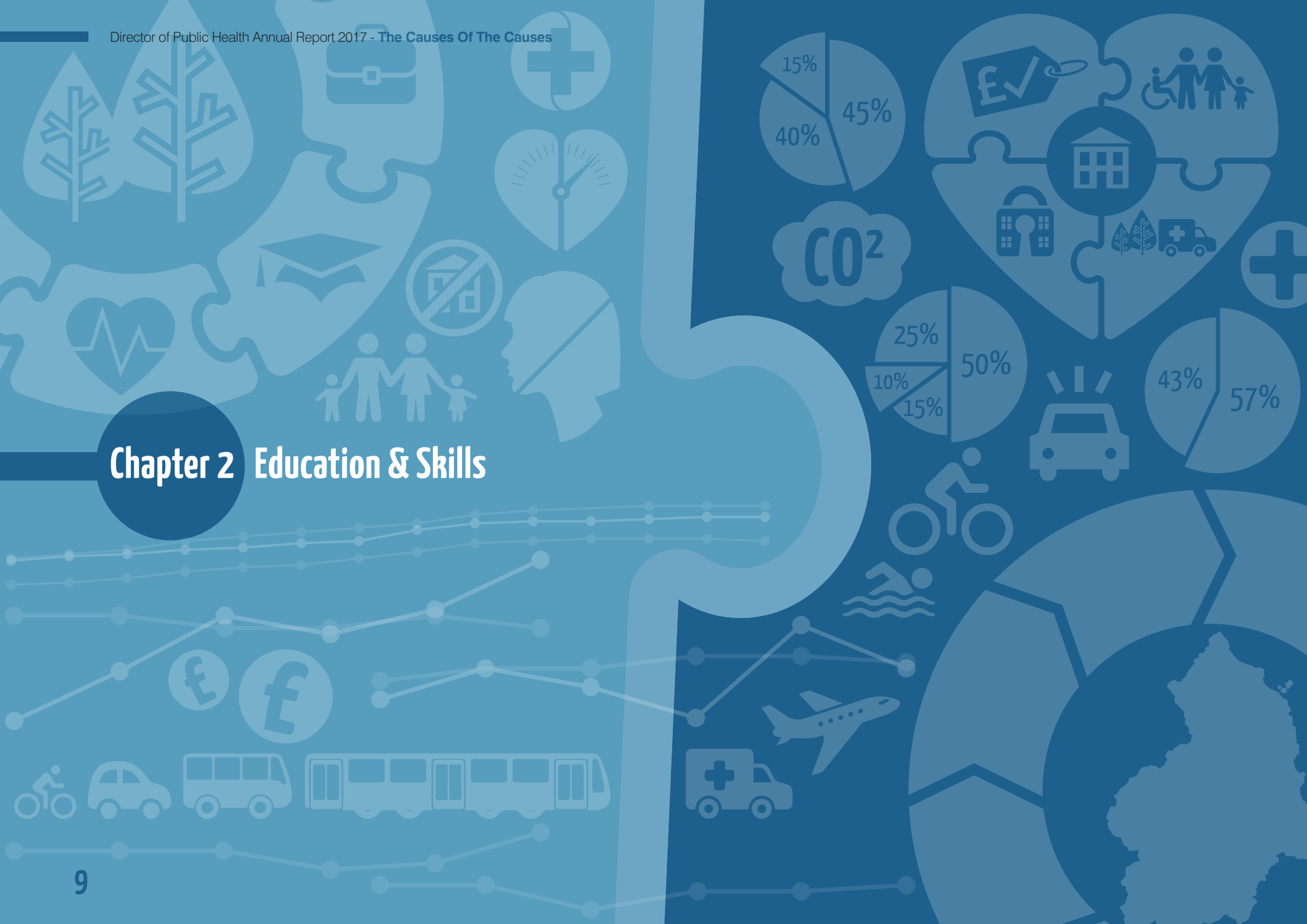
Rural/urban population structure in Northumberland by age band, ONS 2011
Source: Comparing Rural and Urban Areas of Northumberland – 2011 Census Analysis

Older populations generally have more long term conditions and are more likely to need health and social care support than younger age groups. In our increasingly older rural population this is likely to lead to disproportionately higher needs and logically, higher costs.'



People aged 65+ as proportion of Northumberland's urban and rural population, 2011
Source: Comparing Rural and Urban Areas of Northumberland – 2011 Census Analysis

Chapter 2 Education & Skills



"Education is like a "master switch" that opens up opportunities" Bill Gates, 2018.

How learning, skills and education link to health

Education has become one of the clearest indicators of life outcomes such as employment, income and social status, and is a strong predictor of attitudes and wellbeing.[3] It's no surprise that people with higher education and literacy levels are generally better off than those who left school with no or low-level qualifications.

Some of the benefit is linked to the fact that you're not only more likely to have a job, but also more likely to have a job which pays more and we talk about the health benefits (and disbenefits) of employment in a later chapter. Employment doesn't explain all of the health benefits of education and learning because we need to see education in a wider context than simple success in academic qualifications.

The link between education and health is complex and it's difficult to demonstrate cause and effect because of course income and socioeconomic status, which are themselves linked to education, will also have an impact but consider the following points from research which has been undertaken to unravel this:

Cancer Prevention

An estimated 116 - 134 cancers could have been prevented for every 100,000 women enrolled in adult learning in the UK because of greater take-up of cervical smear tests.

An estimated 61 - 213 cancers could be prevented for every 100,000 women who quit smoking because of their additional education.[4]

Depression

If 10% of women in the UK who had no qualifications were to gain a Level 1 qualification, the resulting reduction in the number of new cases of depression could lead to **estimated savings of up to £34 million per year.**

Taking women without qualifications to Level 2 (equivalent to five A*-C grade GCSEs) **would reduce their risk of depression at age 42 by 15 per cent.**[5]

3. Economic and Social Research Council (2014). The wellbeing effect of education. Evidence briefing. ESRC. July 2014.
4. Sabates R, Feinstein L (2004). Education, Training and the Take-up of Preventative Health Care. Wider benefits of learning research report No 12. The Centre for Research on the Wider Benefits of Learning. June 2004.
5. Feinstein L (2002). Quantitative Estimates of the Social Benefits of Learning, 2: Health (Depression and Obesity). Wider benefits of learning research report No 2. The Centre for Research on the Wider Benefits of Learning. October 2002.

Those with poor literacy are up to

18 times less likely
to be able to identify their medications

just under half as likely
to recognise a high blood pressure reading

just over half as likely
to recognise the symptoms of low blood sugar levels than someone with adequate health literacy.[6]

Poor literacy is intergenerational. Parents and families play an essential role in supporting children's literacy and language development, but in the UK's most deprived wards up to 35% of the adult population lack the literacy skills expected of an 11-year-old, leaving parents and carers unable to support their children's educational progress. This holds them back at every stage of their life: as a child they won't do well at school; as a young adult they will be locked out of the job market; and as a parent they won't be able to support their own child's learning.[7]

We know that families and parents are critical to children's attainment and that early intervention is vital. Parental involvement in their child's literacy practices positively affects children's academic performance and is a more powerful force for academic success than other family background variables such as social class, family size and level of parental education. The earlier parents become involved in their children's literacy practices, the more profound the results and the longer-lasting the effects.[8]

Early language acquisition impacts on all aspects of young children's non-physical development. It contributes to their ability to manage emotions and communicate feelings, to establish and maintain relationships, to think symbolically, and to learn to read and write. In the UK, between 5% and 8% of all children, and over 20% for those growing up in low-income households have early language difficulties.

The high proportion among disadvantaged children is thought to contribute to the achievement gap that exists by the time children enter school and which continues until they leave.[9]

6. Morrisroe J (2014). Literacy changes lives 2014: A new perspective on health, employment and crime. National Literacy Trust. September 2014.
7. https://literacytrust.org.uk/information/what-is-literacy/. National Literacy Trust. Literacy and health literacy as social issues, 2016
8. Cole J et al (2011). A research review: The importance of families and the home environment. National Literacy Trust. 2011.
9. Law et al (2017). Language as a child wellbeing indicator. Early Intervention Foundation. September 2017

Social mobility and the challenges of delivering education in rural areas

Where we start off in life should not dictate where we end up but a recent report by the Social Mobility Commission[10] identified that compared to most areas in the country, young people from disadvantaged backgrounds in our county may be less likely to make social progress. Learning and education are the cornerstones for good health; they are also the engines of social mobility because learning and education drives employment with all the direct and indirect health benefits which go along with that. But although our young people are spread right across the county, their opportunities to get a great education are more mixed.

Rurality delivers some very significant challenges in terms of delivering and supporting education:

- The most deprived coastal and rural communities have one and a half times the proportion of unqualified secondary teachers that the least deprived inland rural areas have.[11]
- Our rural and coastal schools may be isolated and so may struggle to tap into partnership support from other 'outstanding' schools.
- The cost and availability of transport to access post-16 education, training and employment is a significant barrier for many young people in rural areas.
- Apprenticeships are harder to fill in rural areas and the small and medium size enterprises that are more common in rural economies are less likely to offer them.[12]
- Rural primary schools are often very small and financially their viability is challenging. They often struggle to recruit staff as (new) teachers prefer to go to larger schools.[13]

The Commission Report acknowledges these challenges and suggests that poor transport links in rural areas which make it harder for people to access further education and good quality employment are the main reasons for lower social mobility. The Report also holds the North East up as a beacon for improving careers support for young people.

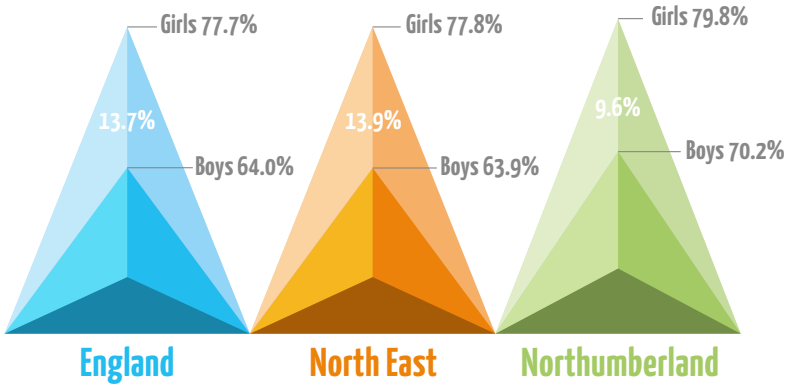
10. Social Mobility Commission (2017). State of the Nation 2017: Social mobility in Great Britain. November 2017.
11. Social Mobility Commission (2017). State of the Nation 2017: Social mobility in Great Britain. November 2017.
12. Chartered Institute of Personnel and Development (CIPD) (2018). Assessing the early impact of the apprenticeship levy – employers' perspective. Research Report. CIPD. January 2018.
13. NCC (2018). The Report of the Director of Education and Skills Version 2. Northumberland County Council 2016/17. January 2018.

The education and learning picture in Northumberland - Early Years

A child's level of development at age 5 (school readiness) is critical and children who achieve a good level of development at this age are much more likely to go on to develop good levels of literacy, numeracy, physical and social skills during their school years. This will have a positive impact later in life in terms of employment, income, health, avoiding involvement in crime and living a longer and healthier life.

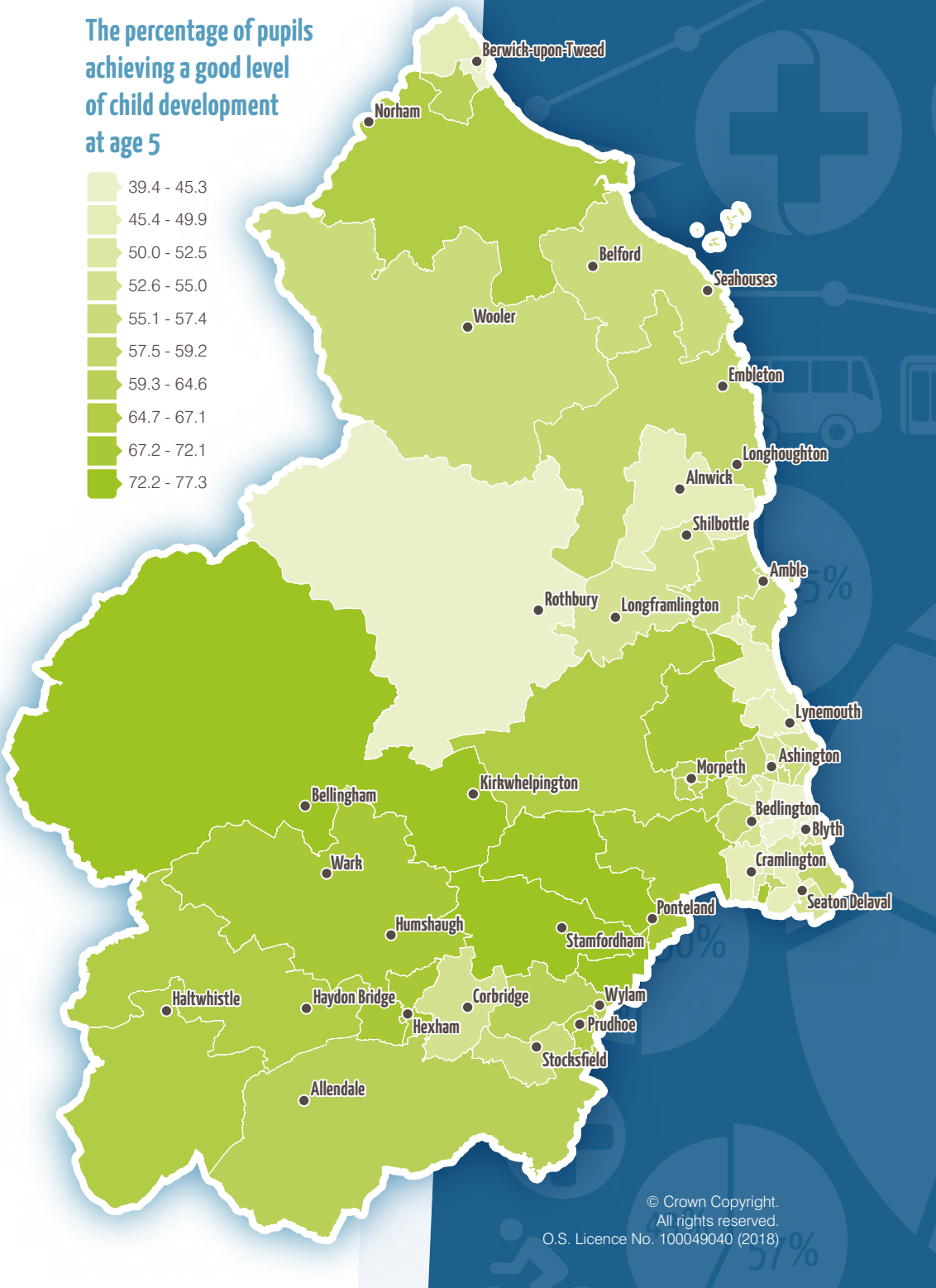
82% of eligible disadvantaged children take up access to 15 hours of educational childcare from 2 yrs of age which helps to promote sound building blocks for future education.

School Readiness (2017)



Not only has the gap between boys and girls narrowed but so has the gap between our most and least advantaged children.

The percentage of pupils achieving a good level of child development at age 5



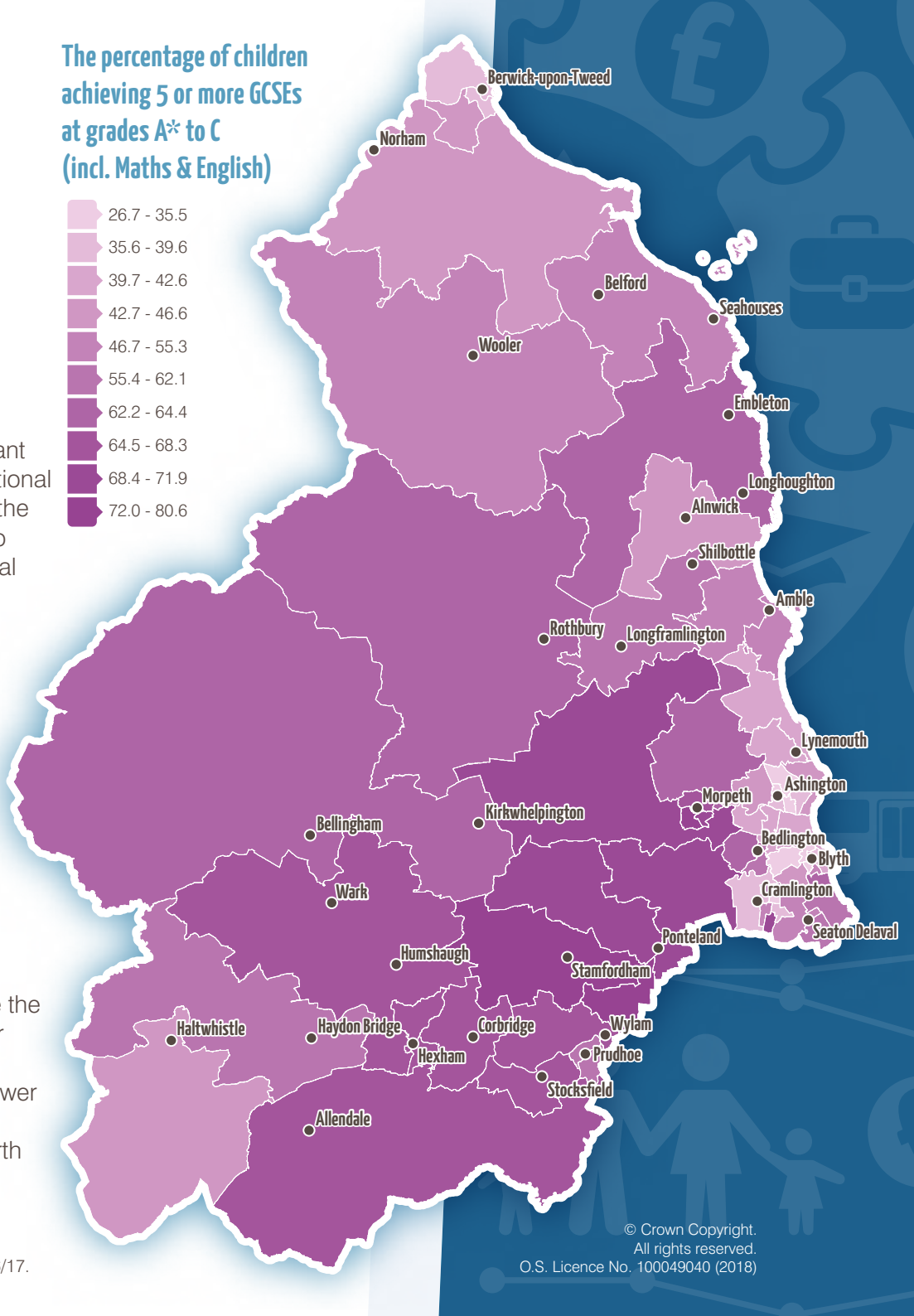
School aged children and young people

Primary school education in Northumberland is an area of strength and the proportion of children who are reaching the expected levels for reading, writing and maths at Key Stage 1 (5 - 7 years) is improving and generally better than that for England. At Key Stage 2 (7 - 11 years) expected levels of reading, writing and maths are at 61% which is still above the national average but below that of the North East.[14]

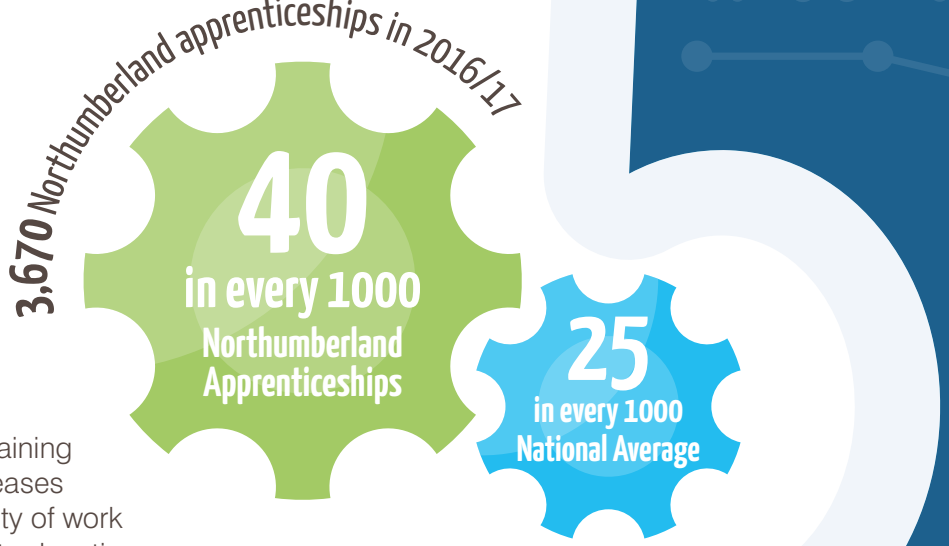
There are some stark differences though between different groups - girls continue to outperform boys; children from more advantaged areas generally do better than those from less advantaged areas; there are some striking differences in outcomes between different schools; and children with special education needs and disabilities (SEND) remain a priority.

By the time children have completed Key Stage 4 (14 - 16 years), outcomes for children in Northumberland have generally declined to a level below the England average and the gap between the most and least advantaged students remains marked. Disadvantaged pupils in secondary schools continue to achieve, on average, over half a grade worse per subject than their peers.[15] It is important that we recognise that taking average data across such a disparate area can be misleading. Some secondary schools do well, but there are pockets of severe under-achievement across the county. The fact that 75% of our secondary schools are now academies and therefore no longer under local control is an important feature of the new educational landscape and points to the importance of partnership between local and national agencies.

In 2016/17 38.5% of Northumberland pupils achieved a strong pass in English and Maths in comparison to 39.1% of all schools nationally, but again this masks some significant underachievement in particular schools and academies. Participation in further education in Northumberland is above the national average however participation is varied across the county, with lower participation in very rural areas to the west and north Northumberland.



14. DfE (2018). National curriculum assessments: key stage 2, 2017 (revised). 25 January 2018.
15. Northumberland County Council (2017). The Report of the Director of Education and Skills. NCC 16/17.



School aged children and young people

For 16 - 17 year olds, being in employment, education and training has a positive effect on physical and mental health, and increases the likelihood of employment, higher wages, and higher quality of work later on in life. Young men who are NEET (not in employment education or training) may be three times more likely to suffer from depression, and five times more likely to have a criminal record, than their peers.[16] Along with challenges around health, carer responsibilities and difficult family circumstances, low GCSE attainment is one of the biggest risk factors for young people ending up NEET. Despite the fact that GSCE attainment is lower than we would like, the most recent figures indicate that only about 4.9% of 16 - 17 year olds fall into this NEET group which is below the national average of 6.4% and the regional average of 6.0%. Part of this is probably explained by the County's commitment to apprenticeships - 3,670 apprenticeships were taken up in Northumberland in 2016/17 (3rd highest uptake in the north east); participation is above the national average (40 in every 1000 against national average of 25 in every 1000); and the achievement rate for completion of apprenticeships is 74.3%, consistently above the national average of 67.0%.[17]

Key priorities for education in Northumberland are:

- Improving outcomes at the end of secondary education
- Improving social mobility by concentrating on our most disadvantaged children
- Improving our response to those with Special Educational Needs and Disabilities
- Building school and academy partnerships.

16. The Audit Commission (2010). Against the odds. Re-engaging young people in education, employment or training. Local government, July 2010
17. Northumberland County Council (2017). The Report of the Director of Education and Skills. NCC 16/17.

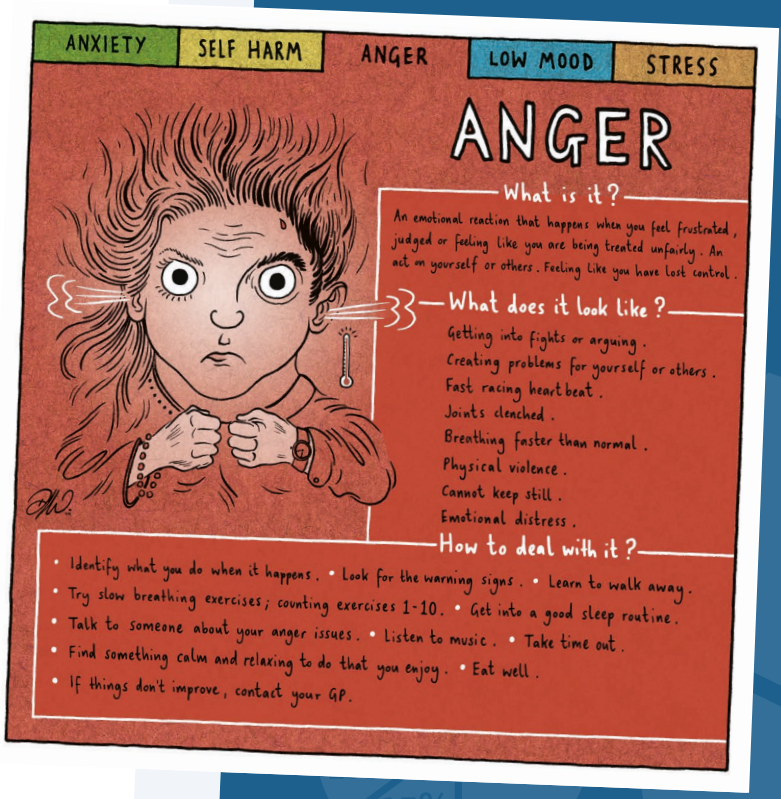
The Public Health contribution to improving learning and education

The building blocks for educational attainment begin from birth so across the County, our Health Visitors and Children's Centres encourage all pregnant mothers to read and talk to babies on a daily basis through Bookstart programmes and a range of resources which promote early years development.

Health professionals screen every child at a minimum of four touch points before the age of 36 months to identify those not meeting key stage development thresholds. Early help and support is offered through a multi-agency pathway involving healthcare professionals and specialists, social care and SEND support.

To enhance school readiness, an Early Years Passport has recently been developed by Health Visiting and Early Years leads following the 2 ½ year check. This passport supports improved communication between agencies and enables Early Years settings to be better prepared for those children requiring additional support.

Young people have told us that one of their main health concerns is mental health. Working with them, our commissioned Integrated Wellbeing Service has developed a range of resources available as an App to support emotional wellbeing. Supporting pupils in this way should put them in a better position to learn.



Chapter 3 Employment and Income

How employment/unemployment links to health

There is plenty of evidence that generally, employment is good for our health. It's the most important way of getting a level of income that provides us with our most basic material needs and to allow us to play an active part in society. It's not just the indirect benefits of the income from employment that contribute to good health; though work is a critical part of our identity, social role and status; it can provide us with a sense of purpose, self-esteem, a social network and support; and an opportunity to develop and use skills.

Work isn't always good for your health though. For instance, workplace stress may lead to mental ill health; and jobs where employees have little control over their working practices may lead to physical ill health.[18]

Unemployment and unnecessarily prolonged sickness absence are generally bad for physical and mental health and wellbeing. That is true for healthy people of working age, for many disabled people, for most people with common health problems, and for people receiving benefits. People who are unemployed have poorer physical and mental health overall; consult their GP more; are more likely to be admitted to hospital; and have higher death rates.[19]

Key points

- Job security is good for our health but the need for more flexibility by employers (zero hours and short term contracts) affects job security and can lead to low level mental health problems, even when the threat to security is gone.[21]
- Five years after re-employment, alcohol abuse may be reduced by a third compared to those still unemployed.[22] But reemployment into poor quality work may actually be worse for your health than remaining unemployed.[23]
- Unemployment may increase the risk of fatal and non fatal cardiovascular disease and deaths from all causes by 1.5 to 2.5 times; [24] and increase the risk of dying from cancer by nearly 25% (even when the figures are adjusted for lifestyle factors and socioeconomic status).[25]
- One in seven men who become unemployed will get depressed within six months; depression can then make it harder to get another job.[26]

18. Marmot, M.G., Bosma, H., Hemingway, H., Brunner, E., and Stansfeld, S. (1997). Contribution of job control and other risk factors to social variations in coronary heart disease incidence. The Lancet, 350, 235-239.
19. Waddell G, Burton AK. Is work good for your health and well-being? London (UK): The Stationery Office; 2006.
20. Marmot M (2010). The Marmot review final report: Fair society, healthy lives. University College London. 2010
21. Ferrie JE, Shipley MJ, Stansfeld SA, et al Effects of chronic job insecurity and change in job security on self reported health, minor psychiatric morbidity, physiological measures, and health related behaviours in British civil servants: the Whitehall II study Journal of Epidemiology & Community Health 2002;56:450-454.
22. Claussen, B. (1999), Alcohol disorders and re-employment in a 5-year follow-up of long-term unemployed. Addiction, 94: 133–138. doi:10.1046/j.1360-0443.1999.94113310.x
23. Tarani Chandola, Nan Zhang (2017). Re-employment, job quality, health and allostatic load biomarkers: prospective evidence from the UK Household Longitudinal Study, International Journal of Epidemiology, , dyx150, https://doi.org/10.1093/ije/dyx150
24. Siegrist, Johannes and Benach, Joan and McKnight, Abigail and Goldblatt, Peter and Muntaner, Carles (2010) Employment arrangements, work conditions and health inequalities: report on new evidence on health inequality reduction, produced by task group 2 for the Strategic review of health inequalities post 2010. Marmot Review, London, UK.
25. Lynge E. 1997. Unemployment and cancer: a literature review.IARC Sci Publ(138): 343-351.
26. RCPsych (2015). Depression and men. Fact Sheet. 2015.

What's different about employment in rural areas

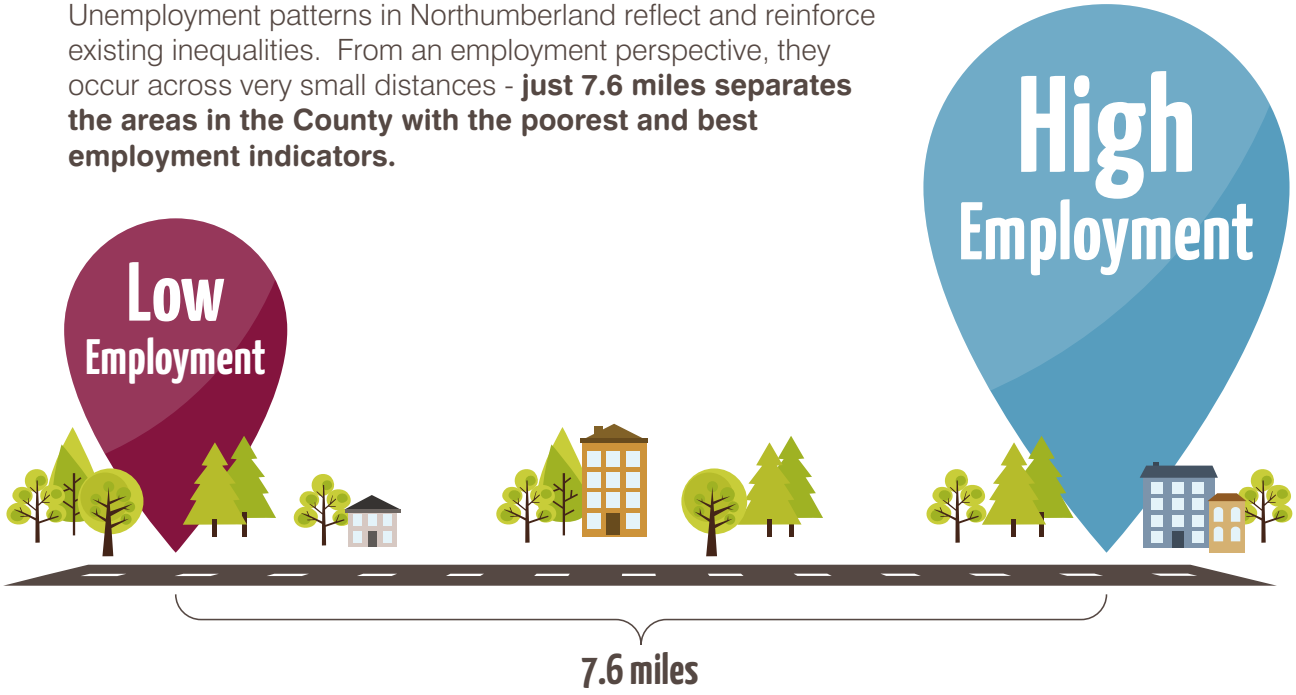
The rural economy and employment market is diverse and looks very different from employment in urban areas.

- Self-employment and home working are more common; 1 in 4 are home-based or self-employed compared to 1 in 8 in less sparse areas.[27] Self-employment can be a positive choice but might also be a response to a lack of employment opportunities; it may also bring insecurity, isolation and seasonal variation.
- Seasonal employment is common in tourism and the fishing, agriculture and forestry industries but in some of these less well paid occupations, savings may not be enough to carry people over the lean times, resulting in people 'churning' between benefits and short-term employment.[28]
- Business size tends to be smaller than the national average with the vast majority being small, micro or sole traders. They are a crucial cog in economic growth but may have limited employment and work-related training opportunities.
- Many areas with the highest proportion of low paid workers are rural;
- Progression from low skilled, low paid employment is a significant challenge;
- Nearly half of those in poverty in rural areas are in working households, a greater proportion than urban households.

27. Pateman, Tim., 'Rural and urban areas: comparing lives using rural/urban classifications', ONS, Regional Trends 43 2010/11: http://www.ons.gov.uk/ons/rel/regional-trends/regional-trends/no--43--2011-edition/rural-and-urban-areas--comparing-lives-using-rural-urban-classifications.pdf?format=print
28. LGA (2017). Health and wellbeing in rural areas. LGA/PHE. February 2017.

The employment picture in Northumberland

Unemployment patterns in Northumberland reflect and reinforce existing inequalities. From an employment perspective, they occur across very small distances - **just 7.6 miles separates the areas in the County with the poorest and best employment indicators.**



Unemployment is highest amongst those with no or low qualifications and skill levels, people with disabilities and long-term health conditions (particularly mental health conditions) people aged 50 and over and young people (18-24). Many of these groups are concentrated in our most deprived communities so, not only are our most deprived communities more likely to have higher rates of unemployment, the employment opportunities that are available are more likely to be those that contribute to poor physical and mental health - lower paid, poorer quality jobs with less opportunity for development, less control and less security. This in turn is driven by lower levels of education resulting in a vicious cycle of lower aspirations and low levels of social mobility.

The service sector dominates employment across the County - this includes the public sector (for instance the NHS, local authority staff, defence and education) but as importantly, tourism. In total, these jobs make up 44.3% of jobs across the County compared with 36% for the country as a whole.

2016	Northumberland (Employee Jobs)	Northumberland (%)	GB (%)
Human Health And Social Work Activities	19,000	18.8	13.3
Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles	16,000	15.8	15.3
Manufacturing	11,000	10.9	8.1
Accommodation And Food Service Activities	11,000	10.9	7.5
Education	9,000	8.9	8.9
Professional, Scientific And Technical Activities	6,000	5.9	8.6
Administrative And Support Service Activities	6,000	5.9	9
Construction	4,000	4	4.6
Transportation And Storage	3,500	3.5	4.9
Public Administration And Defence; Compulsory Social Security	3,500	3.5	4.3
Arts, Entertainment And Recreation	3,500	3.5	2.5
Other Service Activities	2,250	2.2	2
LReal Estate Activities	1,750	1.7	1.6
Water Supply; Sewerage, Waste Management And Remediation Activities	1,500	1.5	0.7
Information And Communication	1,250	1.2	4.2
Financial And Insurance Activities	700	0.7	3.6
Electricity, Gas, Steam And Air Conditioning Supply	350	0.3	0.4
Mining And Quarrying	250	0.2	0.2

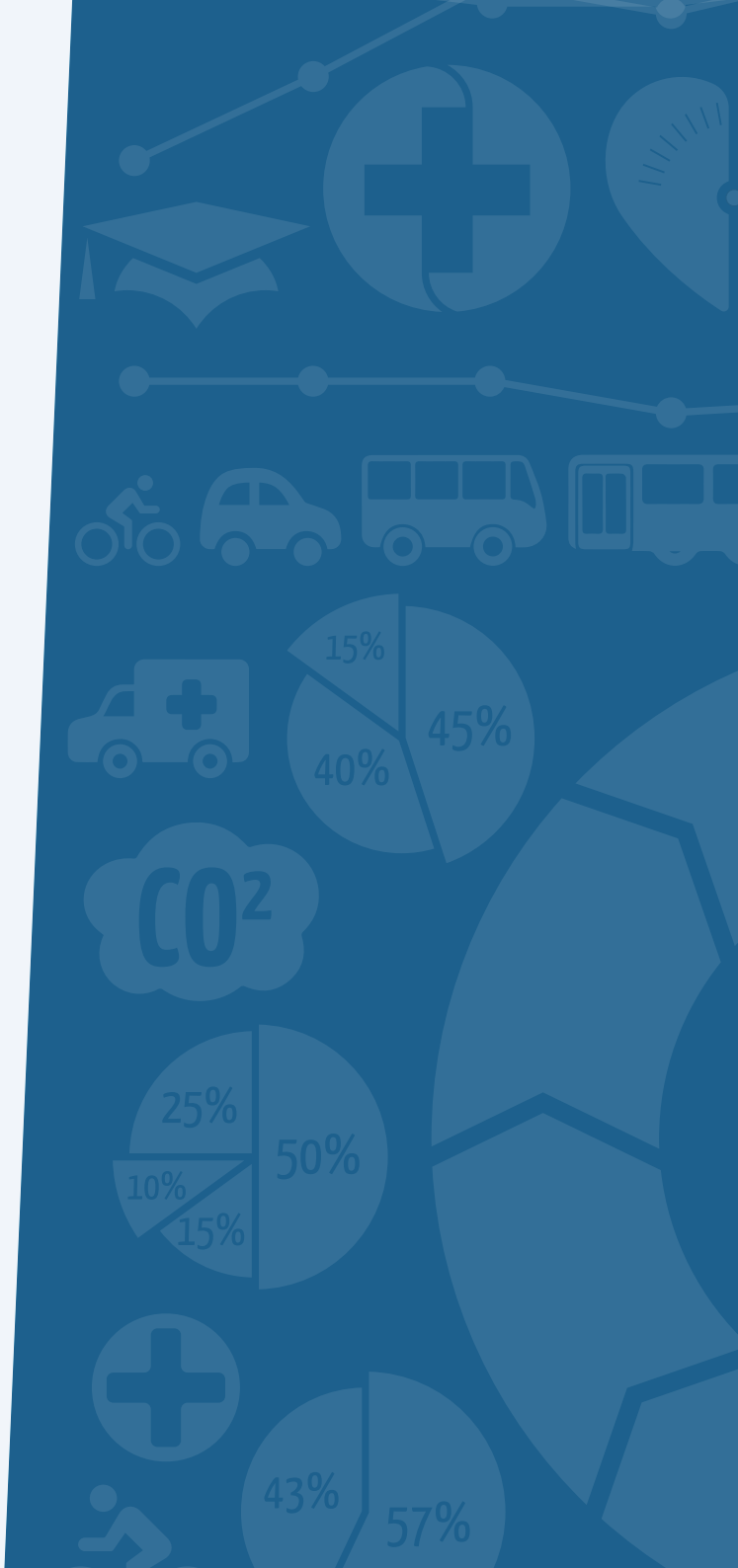
Source: ONS Business Register and Employment Survey
Notes: % is a proportion of total employee jobs excluding farm-based agriculture. Employee jobs excludes self-employed, government-supported trainees and HM Forces. Data excludes farm-based agriculture

Although employment rates have dipped in the last year (2016/17) to 70.5% (about the same as the north east rate),[29] historically they have been quite good although this masks differences between areas within the County. Employment in management and professional jobs is lower than the England average whilst employment in unskilled and elementary occupations (such as sales and cleaning) is higher. It is no surprise then that earnings are lower than the national average. Average gross weekly pay for full-time work is about 13% below UK average [30] so more than half of households are in the 'very low' or 'low' pay bands (52% against a national average of 49%.

Key Points

- Ill health is a significant barrier to work and large numbers of residents are workless and reliant on health related out-of-work benefits. Almost 12,000 people claim Employment Support Allowance (ESA), and almost 8,000 of these have claimed the benefit for two years or more. A growth in jobs won't necessarily help these individuals back into work; they also need health related interventions. As unemployment as a whole falls, those remaining unemployed are more likely to have a health condition.
- Mental and behavioural disorders are the primary condition for around half of all ESA claimants (5,680). Musculoskeletal conditions is the second highest reason for claims (1,490). Jobcentre Plus estimates that approximately 1 in 4 Jobseekers Allowance claimants have a mental health condition.
- Northumberland has a higher proportion of retired people (26.6% of the working age population compared with 13.5% nationally) who are also more likely to live in rural communities. This means a higher proportion of the population are economically inactive (25.4% of the working-age population against a UK average of 22%).
- The employment gap between those with a learning disability and the overall employment rate is narrowing in contrast to England as a whole.[31]
- The County has a lower than average proportion of people skilled above level 2 and a higher than average rate of the population with no qualifications.
- Almost 1 in 3 working-age people in the UK have a long-term health condition which puts their participation in work at risk.
- Around 1 in 5 of the working-age population has a mental health condition

29. PHOF (2017). 1.08iv - % of all respondents in the Labour Force Survey classed as employed (aged 16-64)
30. ONS (2017). Labour Market Profile - Northumberland. Earnings by place of work (2017). www.nomisweb.co.uk
31. PHOF (2017). 1.08ii - % point gap in the employment rate between those with a learning disability and the overall employment rate. 2015/16



Improving employment opportunities in Northumberland

Northumberland's current economic strategy[32] has a very clear focus on extending employment opportunities to those excluded from the workforce; and upskilling the workforce to meet the needs of local employers. There are many regional employment support programmes which deliver interventions to unemployed and economically inactive Northumberland residents, removing their barriers to work and helping them in to sustainable work.

The North East Mental Health Trailblazer delivers integrated employment support and psychological therapy to support people who have mental health conditions (most commonly anxiety and depression) into employment.

The Department for Work and Pensions (DWP) 'Opt-In' programme is utilising £6m European Social Fund (ESF) to test a local north east approach to support 2,500 long term unemployed residents with health conditions to find work over 2017-19. This will be delivered by Working Links who already provide the Links to Work programme, specifically aimed at people with health issues who are struggling to find employment. DWP also launched the Work and Health programme in January 2018 specifically to improve job outcomes for people with health conditions who are long term unemployed.

The Bridge Partnership is a locally led partnership project to support people who are the furthest from the employment market into or nearer securing a job. People with a variety of problems from health to literacy issues can be supported by a range of partners and agencies, coordinated by a dedicated Bridge worker.

Community Action Northumberland's (CAN) rural employment hubs support unemployed residents in rural areas of Northumberland to overcome the multiple barriers they face when looking to move into employment. The three Employment Hubs operate on a drop-in basis and provide support tailored to the individual's needs (whether they are young or old, have physical disabilities, mental health problems or learning disabilities, parental or caring responsibilities or face any other issues that might affect their ability to work).

Northumberland CAN

Case Study

Rural Employment Hubs

When Anne first came to the project she was suffering from depression having gone through the end of her marriage, the loss of her home and job and the death of her closest friend. For the first time in her life she was dependent on benefits, a cause of great distress, which was only made worse when she found that she was expected to look for work online every day – even though she lived in a rural area, with no broadband and would have to travel nine miles to find a public access computer.

Anne was so overwhelmed she cried for most of her first day at the hub. She told staff she couldn't face work where she had to talk to people anymore and just wanted to sit in the corner of a room and 'count beans'. Over time, Anne was helped to write a CV, to think about what kind of work she might take up, to learn to use a computer for job search, to take up a computer course at the local Adult Education Centre, and was accompanied to a work programme interview to help her overcome her nerves. The project was able to arrange for her to try some voluntary work with a local charity, which went so well it led directly to paid employment. Anne now supports the project in her spare time as a volunteer IT mentor, helping others to learn basic IT skills. She has even produced her own guide to using google and Universal Job Match, for people to take away.

32. Northumberland Economic Strategy 2015-2020. April 2015.

The Public Health Team also plays an active part in supporting the employment and workplace health agenda.

Mass unemployment events can have a devastating impact on individuals, their families and communities. Redundancy may double the likelihood of dying in the first year and this risk remains higher up to 20 years later.[33]

In response to the closure of the Coty factory in Seaton Delaval, the Public Health team worked with our Integrated Wellbeing Service provider and the HR team in Coty to review the health response and provided additional support through two bespoke wellbeing afternoons for Coty employees run by our Health Trainers.

The NHS Contribution.

The NHS has a key role to play in supporting people with long term conditions back into employment and in taking an alternative approach which looks at employment as a means to improve health and wellbeing.[34] This could be done better if health and wellbeing services could be better integrated into employment support, perhaps using alternative commissioning models. There is also a need to develop a more holistic approach as part of all doctor-patient discussions which identify root causes of ill health, such as unemployment or redundancy, and signposts patients appropriately. [35]

33. Davies AR, Homolova L, Grey C, Bellis MA (2017). Mass Unemployment Events (MUEs) – Prevention and Response from a Public Health Perspective. Public Health Wales, Cardiff ISBN 978-1-910768-42-6.
34. DWP/DH (2017). Improving Lives. The Future of Work, Health and Disability. Cm9526. 30 November 2017
35. RCP (2010). How doctors can close the gap. Tackling the social determinants of health through culture change, advocacy and education. RCP Policy Statement 2010.

Chapter 4 Healthy Homes

Why housing is important for good health

Where we live is more than just a roof of our heads. It's our home - it's where we grow up and flourish. Over a century and a half ago, Edwin Chadwick wrote the 1842 Sanitary Report[36] and commented on the short lives of cellar dwellers in Liverpool. Since then, interest in the relationship between housing conditions and physical and mental health has continued and more recent reviews[37, 38] have called for action to address housing conditions as a means to reducing health inequalities.

Housing is a key health influencer through different ways as shown in the infographic:

Investing in housing support for vulnerable people helps keep them healthy. Every £1 invested delivers nearly £2 of benefits through costs avoided to public services including care, health and crime costs.

36. Chadwick E (1842). Report on the Sanitary Condition of the Labouring Population of Great Britain.
37. Acheson D (1998). Independent Inquiry into Inequalities in Health Report. London. TSO. 1998.https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/265503/ih.pdf
38. Marmot M (2010). The Marmot review final report: Fair society, healthy lives. University College London. 2010.https://www.gov.uk/dfid-research-outputs/fair-society-healthy-lives-the-marmot-review-strategic-review-of-health-inequalities-in-england-post-2010

An Affordable, Safe and Secure Home

A safe, settled, home is the cornerstone on which individuals and families build a good quality of life and access the opportunities and services they need. Unaffordable and insecure housing can lead to frequent moves which can interrupt and harm support networks, affect peer and sibling relationships and negatively affect child development and educational outcomes. Living in insecure or temporary accommodation can contribute to poor physical and mental health such as anxiety and depression,[39] eczema and asthma and reduces the likelihood of being registered with a GP or a dentist.[40] Although there is little specific evidence on health and private renting, there is strong evidence on the health impacts of bad housing, particularly on children.
The fact that poorer housing conditions are more common in the private rented sector is therefore a cause for concern.

The lack of affordable housing is one of the biggest challenges facing the UK. Increasing house prices and private sector rents has also increased demand on the social rented sector where there has also been historical underinvestment. This perfect storm leads to people having to live in poor quality private rented housing, sofa surfing, overcrowding, falling into debt to pay high rents and young adults being unable to afford to live independently.

39. Shelter (2017). The Impact of housing problems on mental health, Shelter. April 2017
40. Barnes M et al (2013). People living in bad housing – numbers and health impacts. National Centre for Social Research. August 2013.

A Good Quality Home

The cost to the NHS of treating accidents and ill-health resulting from poor housing conditions in Northumberland over the next ten years is estimated to be £5.3 million and if the causes of these housing related illness and injuries were removed, the savings to the NHS would be £4.9 million.

Living on a low income, poor energy efficiency and high energy bills all contribute to fuel poverty.

Key facts:

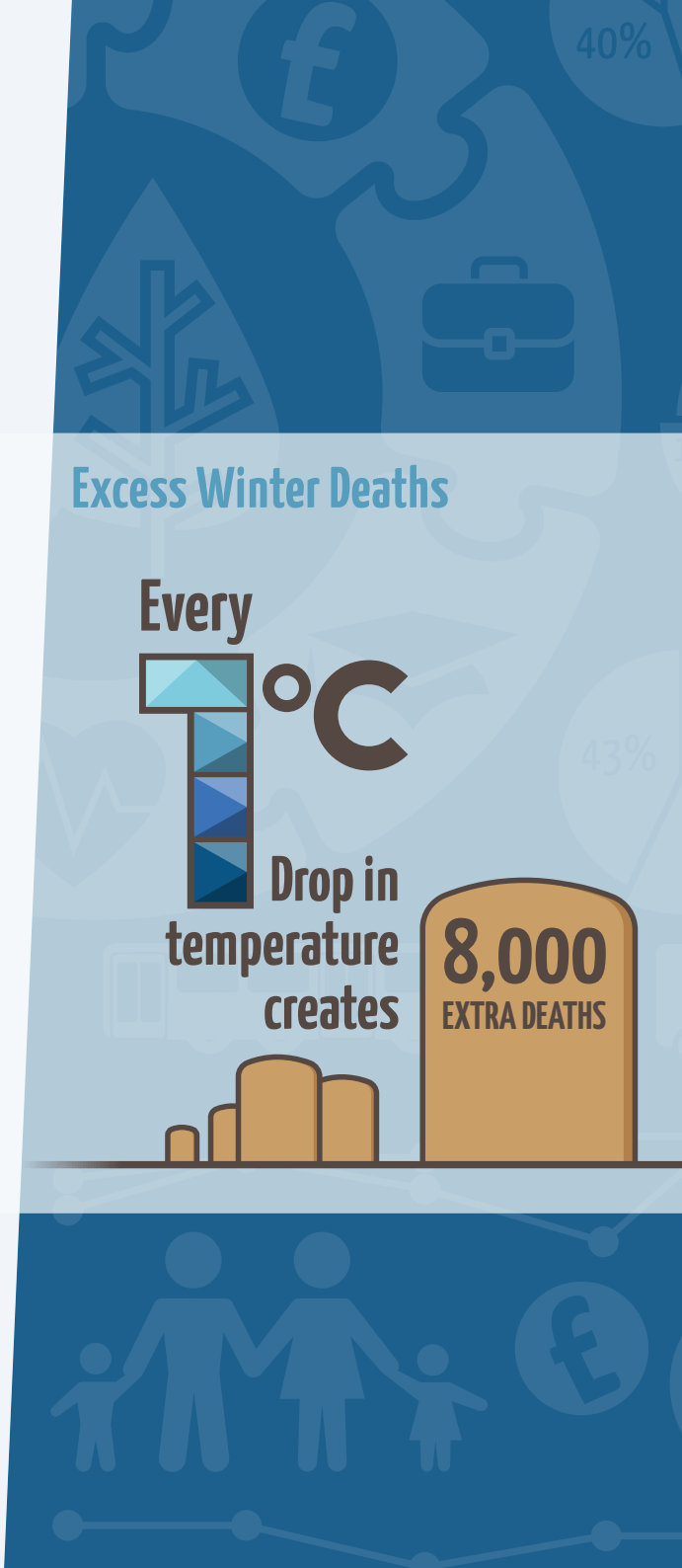
Living in fuel poverty is associated with a 30% greater risk of hospital admissions for babies and more frequent GP attendances.[41]

Living in a warm, dry home reduces the likelihood of developing respiratory conditions, eczema and poor mental health.[41] Young people living in warm homes may be up to 7 times less likely to experience multiple mental health risk than those living in cold homes.[42]

Mortality in England rises by 18% over the winter and despite other countries experiencing lower temperatures than the UK, they experience smaller increases in deaths. It has been estimated that for every one degree celsius average temperature drop in winter there are 8,000 additional deaths in England. These are known as `excess winter deaths'. An estimated 10% of excess winter deaths are due to fuel poverty, with 21.5% being attributable to the coldest 25% of homes.[43] The majority of winter deaths occur from cardiac, stroke and respiratory problems amongst the elderly and vulnerable with 56% of excess winter deaths occurring in the over 85s and 27% in the 75-84 year old age group.[44]

Overcrowding can also impact on health and has been linked to respiratory conditions and infections such as tuberculosis, slow growth and poor psychological health in children.[45]

Poor indoor air quality and household hazards are associated with increases in the likelihood of developing respiratory conditions and experiencing a slip, trip or fall.



41. PHE (2017). Spatial Planning for Health, Public Health England. 6 July 2017
42. Marmot Review Team (2011). The Health Impacts of Cold Homes and Fuel Poverty. Marmot Review Team. May 2011.
43. Balfour R, Allen J (2014). Local Action on health inequalities: fuel poverty and cold home-related problems. Health Equity Evidence Review 7: September 2014. PHE/UCL. September 2014.
44. NICE (2016). Preventing excess winter deaths and illness associated with cold homes (QS 117). NICE. 4 March 2016.
45. ADPH (2017). Policy Position: Housing and Health, The Association of Directors of Public Health. November 2017.

Housing for groups with specific needs

The health effects of poor housing have a greater impact on vulnerable groups such as older people, the young and those with disabilities or other long term conditions. Having affordable and safe housing for these groups can lead to improvement in social, behavioural, quality of life, employment and health-related outcomes. People with mental health conditions and severe substance misuse disorders are more likely to be homeless; the causes of homeless are both structural and individual. Structural factors include poverty, inequality, housing supply and unemployment and individual factors include adverse childhood experiences, poor mental health, substance misuse disorders and experiences of care and prison. The longer a person experiences homelessness the more likely their health and wellbeing are at risk with the average age of death for a homeless person being 30 years lower than the general population.[46]

Given the welcome increases in life expectancy and an increasing older population, coupled with the shift from traditional institutional provision of care and support towards enabling and developing independence, a range of services are needed to support people to live independently at home for longer.

Gypsies and Travellers have been identified as being the most disadvantaged ethnic group in the country[47] with life expectancy 10 years lower than the national average and 20 times more likely than the rest of the population to have experienced the death of a child. They are less likely to achieve 5 GCSEs A* - C; and more likely to have difficulties with economic inclusion and access to employment. Communities who are less transient and occupying authorised sites are more likely to access health and social care services.

Rurality and housing

If living in glorious countryside is your lifestyle choice then Northumberland presents numerous idyllic places to live and thrive but there are some key challenges associated with rural housing:

- Housing in the most rural areas nationally is on average less affordable and rural house prices are on average 26% higher than similar properties in urban areas;
- There is much less housing association and council housing;
- On average, around 50% of homes in the most rural areas and villages are 'non-decent' compared to 30% in small towns and urban areas;
- Two in five homes are off the gas grid, often relying on more expensive forms of heating;
- Rural homes are more likely to be energy inefficient - 50% of the most rural areas compared with 25% in village centres and 7% in urban areas. This is often related to their isolated location and construction which predates cavity wall insulation.[48]

46. PHE (2016). Homelessness, applying All our Health, Public Health England (2016)
47. Cemlyn S et al (2009). Inequalities experienced by Gypsy and Traveller Communities Equality and Human Rights Commission. Equality and Human Rights Commission. Winter 2009.
48. LGA (2017). Health and wellbeing in rural areas. LGA. February 2017.

What does the housing picture look like in Northumberland

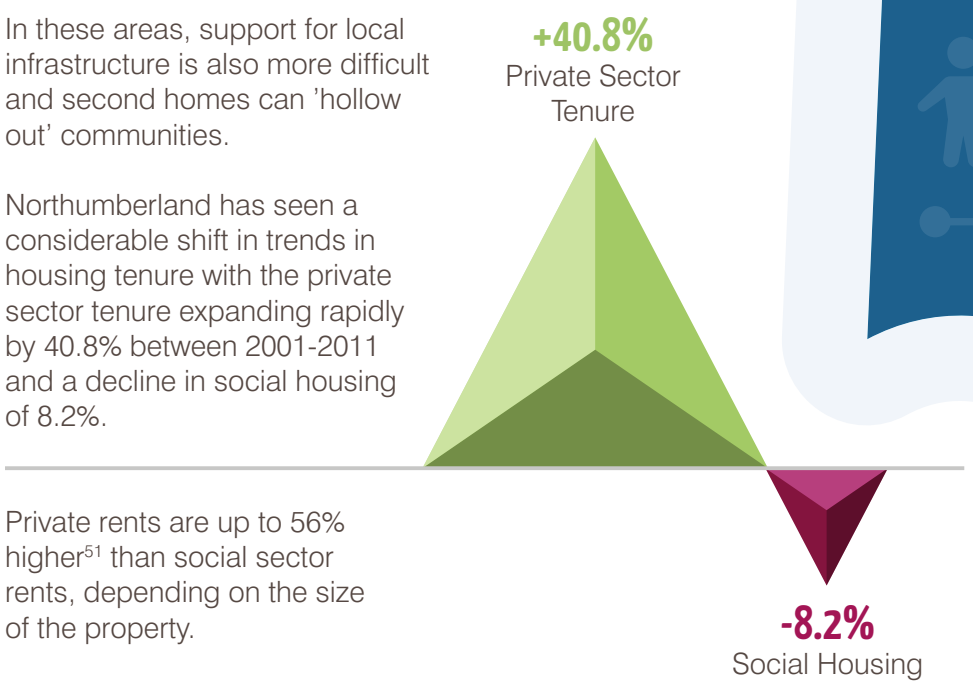
Affordable and Secure Homes

Northumberland has a diverse housing market spread across rural and urban areas with some areas having value properties with low levels of affordable housing and others affected by market failure and empty properties.

It is a popular holiday destination which is very much to be encouraged but that means we have a relatively high proportion of second homes and holiday lets. Coastal communities are particularly vulnerable to having a high proportion of properties with 'no usual residents.'[49] For example in Beadnell Parish Council area, council tax and business rates data suggests that second and/or holiday homes account for more than four out of five properties in the area. This has a substantial impact on the affordability of housing for local families and younger people. The overall house price to earnings ratio in Northumberland is 7.33[50] but in some areas surrounding Bamburgh, Beadnell and Seahouses this increases to 15.47, 11.84 and 10.09 respectively.

In these areas, support for local infrastructure is also more difficult and second homes can 'hollow out' communities.

Northumberland has seen a considerable shift in trends in housing tenure with the private sector tenure expanding rapidly by 40.8% between 2001-2011 and a decline in social housing of 8.2%.



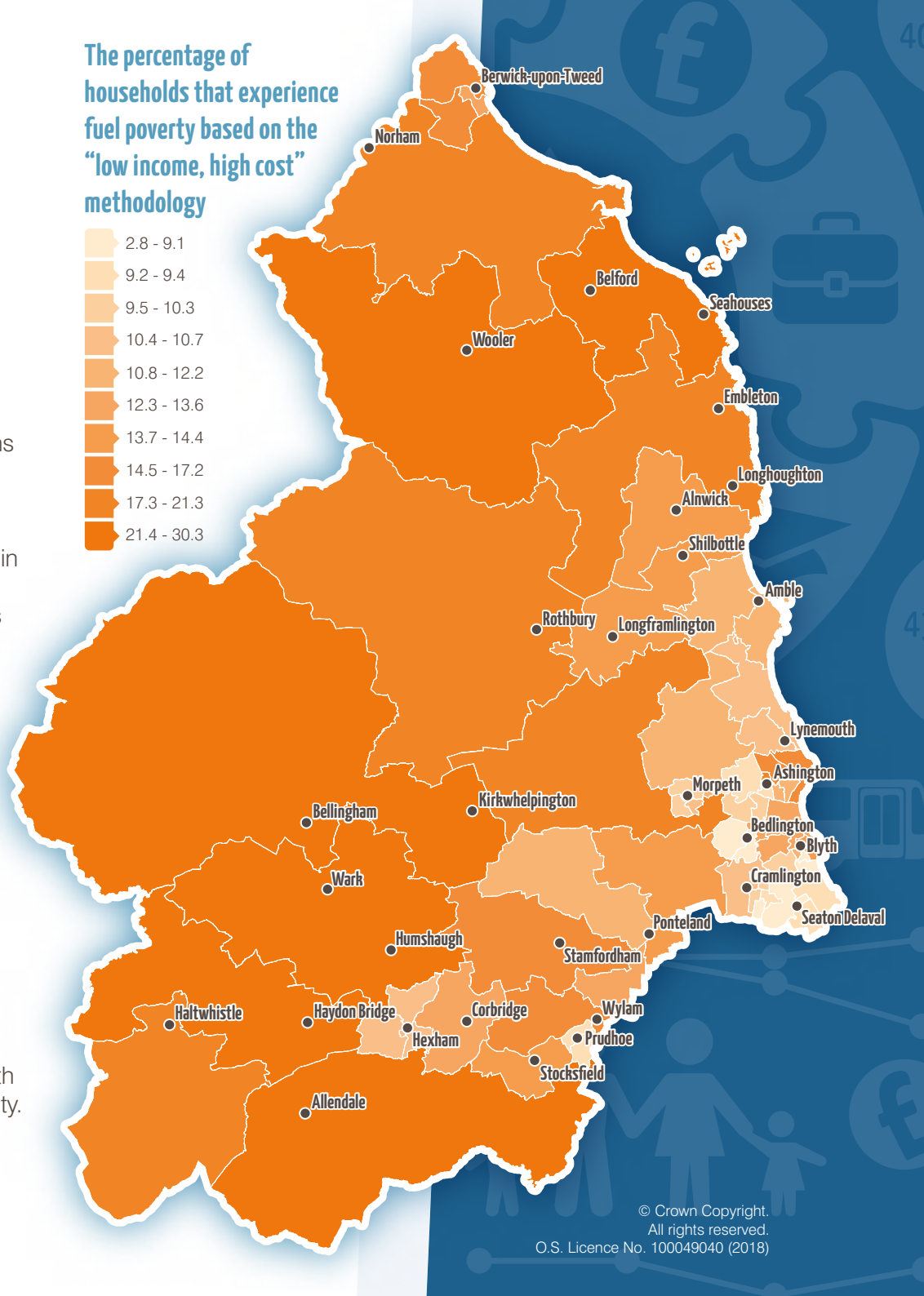
Private rents are up to 56% higher[51] than social sector rents, depending on the size of the property.

49. Depledge M et al (2017). Future of the Sea: Health and Wellbeing of Coastal Communities. Government Office for Science. August 2017.
50. Hometrack. July 2016
51. NCC (2016). Homelessness Strategy for Northumberland 2016-2021. Northumberland County Council. 2016.

Housing Quality

Over the last 25 years on average there have been 210 excess winter deaths per year in Northumberland but the number ranges from 90 to 410.[52] On average, winter deaths are not dissimilar from the England and northeast average but the County has the highest rate in the North East for female deaths.[53] This might reflect a larger proportion of older women living alone in houses which are more difficult to keep warm. Temperature and circulating seasonal flu are important predictors of winter deaths but the relationship is complex.

Most of Northumberland's social housing stock (approximately 26,000 homes) and all of Northumberland County Council (8,600) properties meet the Decent Home Standard. In the private sector though, only 41% of housing is classed as 'decent' due primarily to poor energy efficiency from solid wall construction. In rural parts of Northumberland particularly in the north, this proportion increases to 62%. There are over 6,000 properties which have been assessed as having a poor energy efficiency rating (known as the Standard Assessment Procedure (SAP)) and of these over 1,000 are occupied by a vulnerable person and are more likely to be homes in rural areas. None of the properties in Northumberland National Park are connected to mains gas and so are reliant on expensive heating fuels; 10% of properties are not connected to mains electricity.[54] Using the "low income, high cost" definition of fuel poverty, 13.3% of households in Northumberland are in fuel poverty which is joint second highest in the North East and higher than England but there is a lot of variation across the County.



52. ONS (2017). Excess winter mortality in England and Wales, Aug 2016 to July 2017 (provisional) and Aug 2015 to July 16 (final), ONS. 22 November 2017
53. PHOF (2017). 4.15iii - Excess winter deaths index (3 years, all ages). Aug 2013 - Jul 2016.
54. Northumberland National Park Authority (2016). Northumberland National Park Management Plan 2016-2021. Northumberland National Park Management Plan Partnership. 2016

On the plus side overcrowding, which is a feature of many urban areas, is not really an issue in the County. Only 3.6% of households in Northumberland are classed as overcrowded - 4.1% in urban areas and 3% in rural areas, lower than the England rate.[56]

3.6% of households in Northumberland are classed as overcrowded
lower than the England rate

The NHS Contribution

The NHS has a key role to play in tackling issues relating to cold homes by:

- Identifying those at risk and referring them to appropriate organisations who can advise on possible grants/benefits entitlements.
- Encouraging people, especially older residents, to accept help as we know that older people who are most at risk are least likely to accept help.
- Working with colleagues in supporting organisations to make sure that contact is made and maintained with those identified at risk of experiencing fuel poverty.[55]

55. FPH (2006). Fuel poverty and health. Briefing statement. FPH. May 2006.
56. Comparing Rural and Urban Areas of Northumberland - 2011 Census Analysis (2014)

Groups with specific housing needs in Northumberland

Whilst the number of homeless applications received and the numbers of people accepted as being in priority need has fallen, the number of households prevented from becoming homeless has grown (see table below).

Financial years March to April	A. Number of homeless applications taken	B. Number of households accepted as homeless and in priority need	C. Number of households prevented from becoming homeless	Total number of applications to the homelessness and housing options service (A+C)
2011-2012	540	228	373	913
2012-2013	589	225	476	1065
2013-2014	390	184	752	1142
2014-2015	340	200	514	854
2015-2016	366	190	640	1006
2016-2017	376	207	568	944
Apr 2017 to Dec 2017	197	131	167	364

The numbers of homelessness cases from the private rented sector has risen by 81% over the last five years.[57] Domestic violence continues to account for a quarter of homelessness applications; female lone parent families account for half of applications; and a quarter are aged 18-24 years of age. A shortage of accommodation or support for people with high support needs such as those who have chaotic lifestyles e.g. substance misuse disorders has been identified; there is also an accommodation gap for single homeless people.[58]

57. NCC (2013). A Housing Strategy for Northumberland 2013-2018. NCC Housing Services. 2013.
58. NCC (2017). Know Northumberland - Issue 22 – Population and Health February 2017. NCC Strategy and Change Team. February 2017.

There are about 3000 people aged between 18-64 who receive care and support from the council who either have a learning disability, mental health condition or physical disability. The majority of these live in the community and are supported to build the skills and abilities to live independently and manage their accommodation within the social and private rented sectors.[59]

About 34,000 households in Northumberland have at least one family member with a physical disability; half are over 65 years of age. 3,000 people report that they have housing needs and 800 wheelchair users are thought to be living in accommodation unsuitable for their needs.[59]

The population of the over 65s is set to increase by 42.4% by 2031 in Northumberland (North East 37.2% and England 41%.[58] Housing adaptations and support for the older population is a major strategic challenge for the council in view of the current and anticipated increase in the proportion of the population in this group. Bungalows are a popular option for older people: there's no need to manage stairs; they address any issues about over-occupation; and they allow older people to maintain privacy, control and space. However nationally, only 1% of new build homes are bungalows and that's because for a developer, they generally don't represent a good return on investment for the footprint of a site. There are also challenges with housing stock shortages for people with learning disabilities, physical disability and/or illness, enduring mental health conditions and/or challenging and complex behaviours, leaving limited choice for people to live independently.[59]

A recent report looking at housing options available for older people contains a number of recommendations[60] which could be employed in Northumberland. These include using the Local Plan to identify a target proportion of new housing developed for older people along with suitable, well-connected sites for it; and 'age-proofing' all new homes to meet the current and future needs of older people.

59. NCC (2017). Market Position Statement for Care and Support in Northumberland. NCC. 2017.
60. CLGC (2018). Housing for older people. Second Report of Session 2017–19. House of Commons Communities and Local Government Committee. 5 February 2018.

Action to improve Northumberland homes

Generating affordable homes

The council can generate affordable housing through the planning process, which is reactive and driven by applications from the private sector; or by taking a proactive approach through direct delivery and with registered providers, community led developments and private landowners. Some achievements include:

- Securing affordable homes via Section 106 agreement contributions and the planning processes has seen some key sites delivering 15-30% proportion of properties as affordable homes.
- The Council has been successful in securing funding to further develop Community-Led Housing in rural areas. "Communities CAN" will be established in partnership with Community Action Northumberland, Glendale Gateway Trust and SCATA community housing group in Stocksfield to develop partnerships with communities, the Council and developers and aims to deliver over 150 properties over the next 5 years.

To address the sustainability of some of our villages through the proliferation of second homes, residents in Seahouses, Beadnell and Bamburgh have developed the North Northumberland Coast Neighbourhood Plan.[61] Once approved a new "Principal Residence Housing Policy" will be introduced which only supports new housing schemes where each new dwelling is occupied only as a principal residence.

61. North Northumberland Coast Neighbourhood Plan Steering Group (NNCNPSG) (2017). The North Northumberland Coast Neighbourhood Plan 2017 - 2032. NNCNPSG. 13 November 2017.

Improving Housing Quality

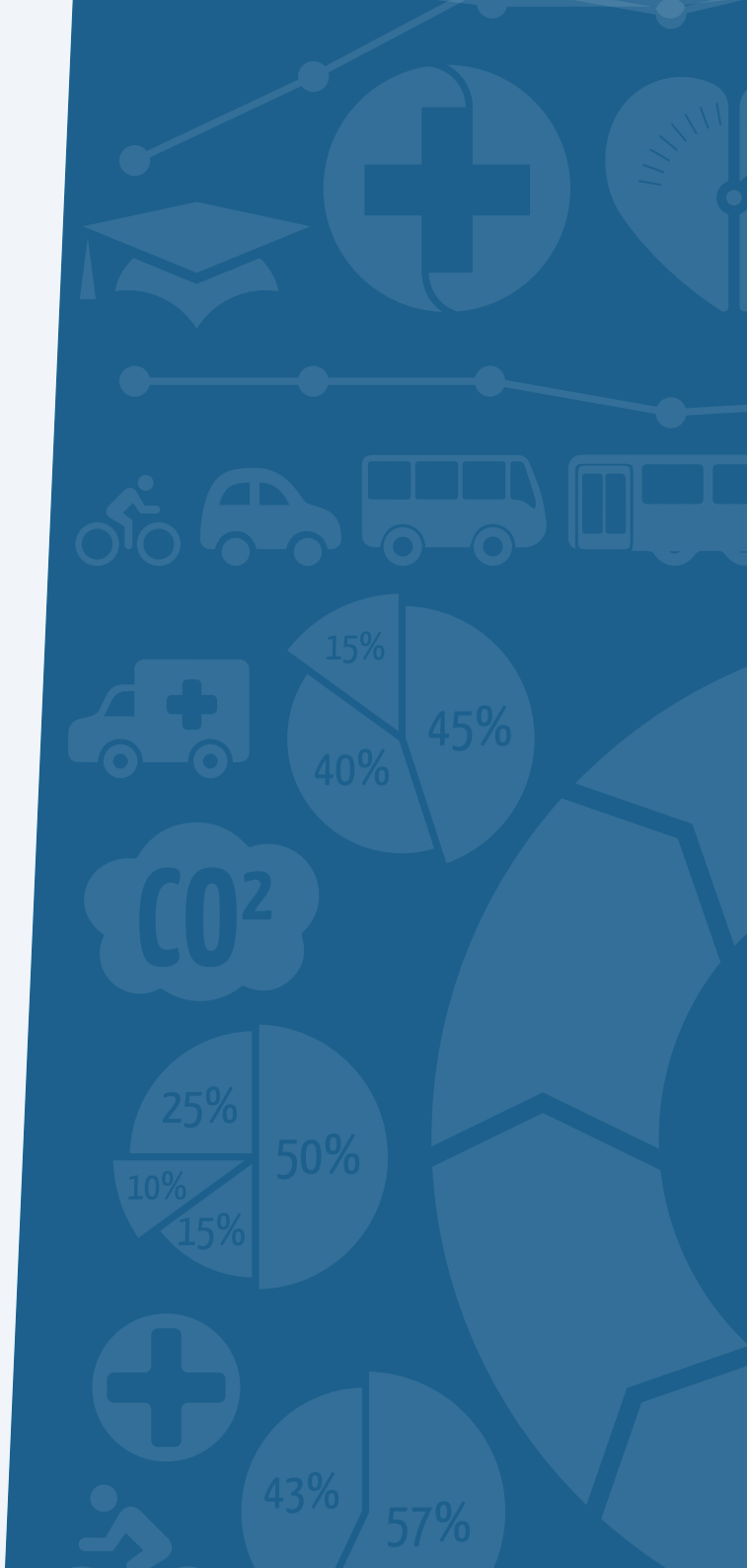
All Councils have to take action to improve the energy efficiency of all residential accomodation in their area. In Northumberland initiatives have included:

- Improving the energy efficienciency of at least 3,000 properties per year including improving at least 120 properties in the former Berwick local authority area focussing on the most vulnerable residents.
- Northumberland led the partnership in the recent Central Heating Fund project which installed 1,472 first time central heating systems from February 2016 through until March 2017. Roughly 460 of these installations were within Northumberland, targeting low income households at risk of fuel poverty (371 properties in rural areas and 87 in urban areas).
- Northumberland has also joined with other local authorities to offer Ready to Switch which is collective energy switching scheme to help save money on utility bills and to date has helped over 1000 of our residents to save money on their energy bills.

Community Action Northumberland provides support to households and organisations, particularly in rural areas, with advice and support to access fuel poverty and energy efficiency initiatives. The Warm Hub Project supports community venues to become accredited as places where vulnerable people can be assured of finding a safe, warm and friendly environment to enjoy a healthy good value meal, and the company of other people.

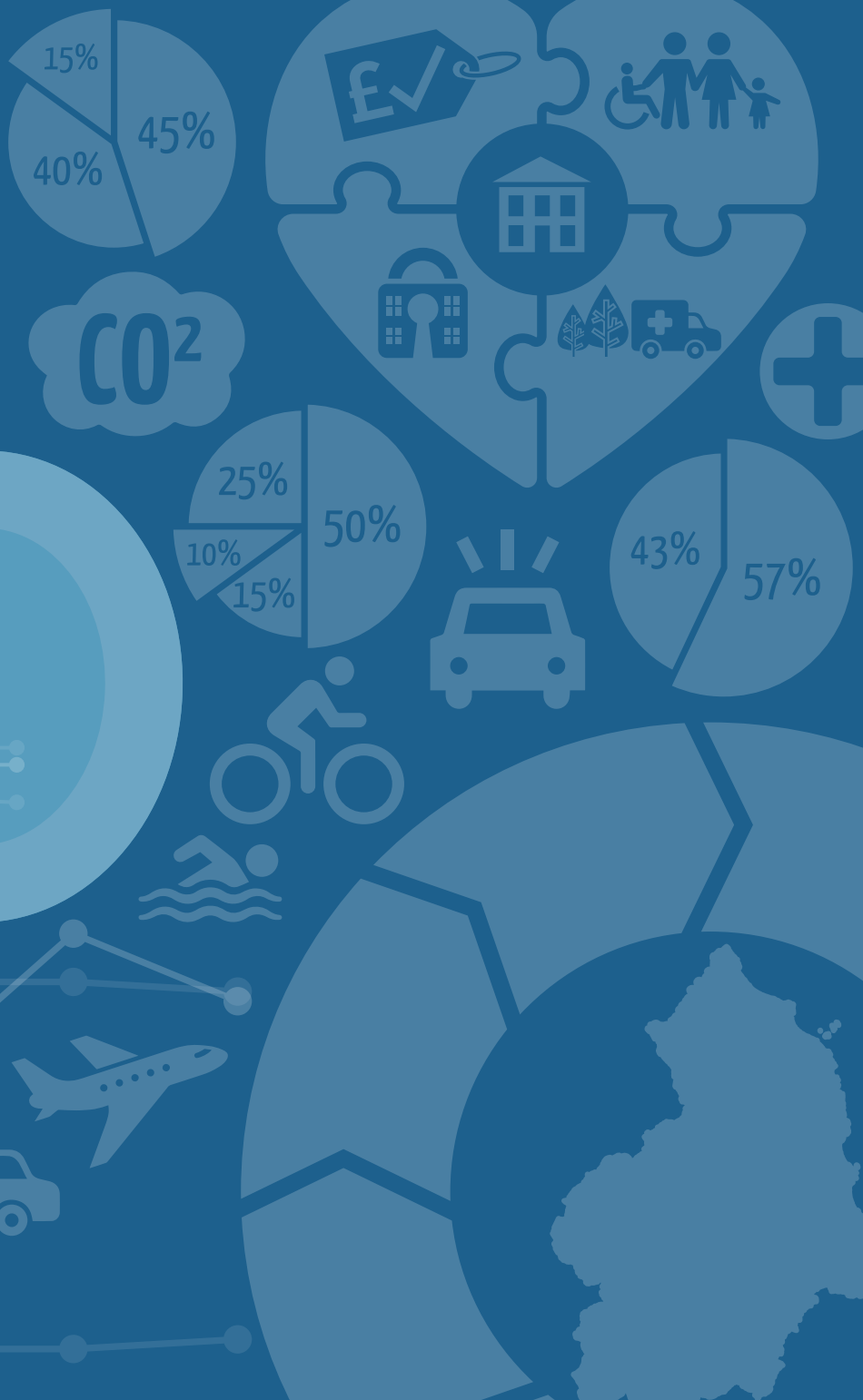
Supporting groups with specific needs

- The recently published Market Position Statement for Care and Support in Northumberland outlines the key priorities for housing support in Northumberland. It also outlines how by working collaboratively with housing developers, housing and care providers the aim is to develop mixed market developments to deliver choices for older people and younger adults with health needs to access the support they need to live independently.[59]
- The Council has made enormous progress in preventing homelessness in the private rented sector by assisting families in finding alternative accommodation or enabling them to remain in their existing home. This includes negotiating with families and landlords and prioritising those most at risk and through the development of a pre-eviction protocol.
- The Council's Gypsy, Roma Traveller Liaison officer visits unauthorised encampments and puts the Health Visitor service in contact for any identified child health needs within 48 hours. Often the families have not accessed health care services previously and have been helped to access antenatal care, child screening and primary care. Additionally there is a Gypsy Roma Traveller Housing Officer for our two permanent sites and the Council are currently working on developing the community bungalows on site to provide numeracy and literacy support as well as introduce healthy lifestyle checks with the health trainer service.
- There are over 260 Ageing Well Allies in Northumberland who receive training to act as the eyes and ears of the communities and identify vulnerable older people to signpost and alert services around issues such as health and wellbeing, falls prevention and cold homes.



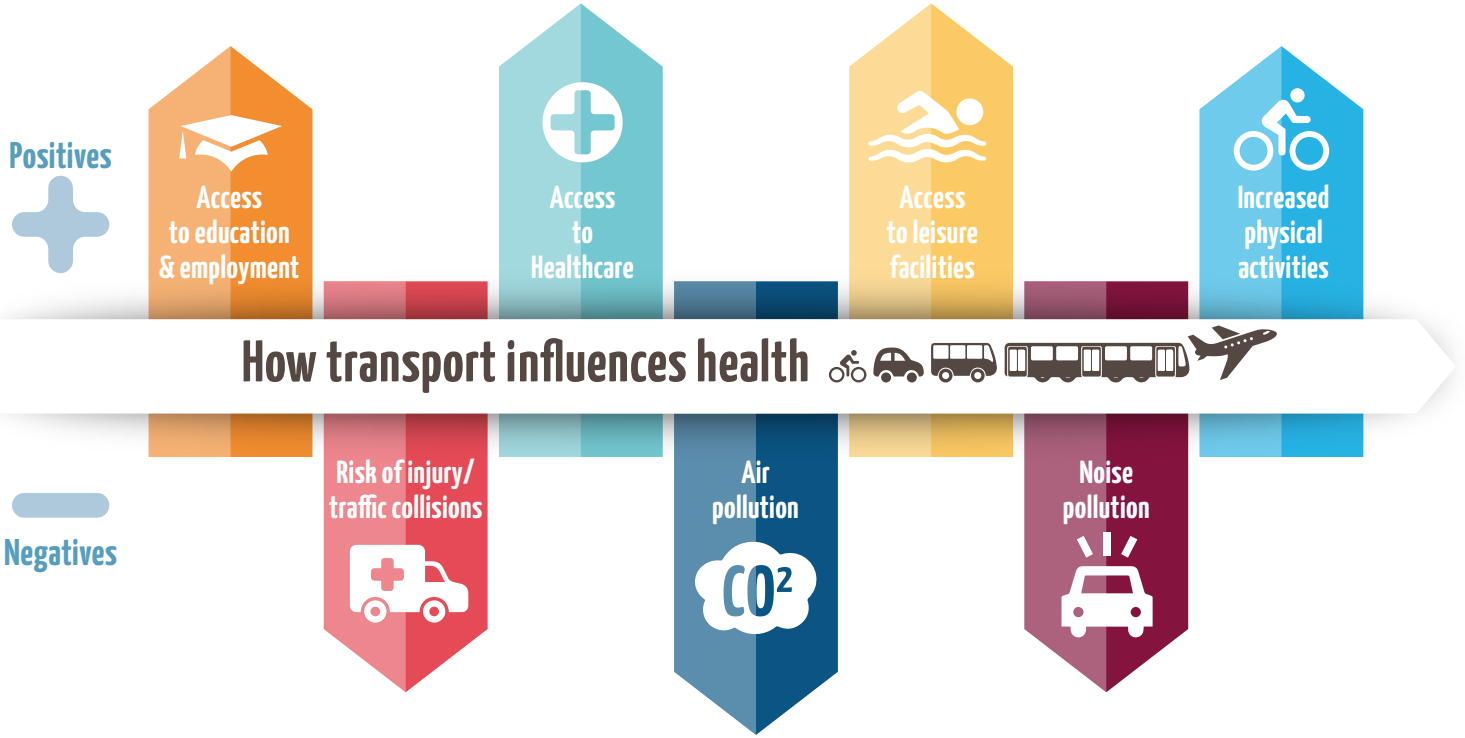
Chapter 5 Getting Out and About Easily

How Transport Can Support Good Health



How transport influences health

Being able to get out and about easily is vital to our health and wellbeing as it increases social inclusion and supports us to lead more active, healthy lives. The choice of travel can also harm health and wellbeing through traffic collisions, increased carbon production, poor air quality and noise pollution. People living in areas of higher deprivation are most likely to suffer from road traffic collisions (although road traffic collision deaths are a feature of rural areas), air-pollution-related morbidity and mortality and the effects of noise pollution.[62]



Staying connected

The standard and quality of transport can support us to have an active and social community life and enables us to access leisure opportunities and services to manage our lives and stay healthy. Transport also matters to our financial well being as it can affect our choice of education and training, access to good quality employment and can encourage new development and investment in the area.

62. BMA (2012). Healthy Transport = Healthy Lives, British Medical Association (2012) BMA. BMA July 2012.

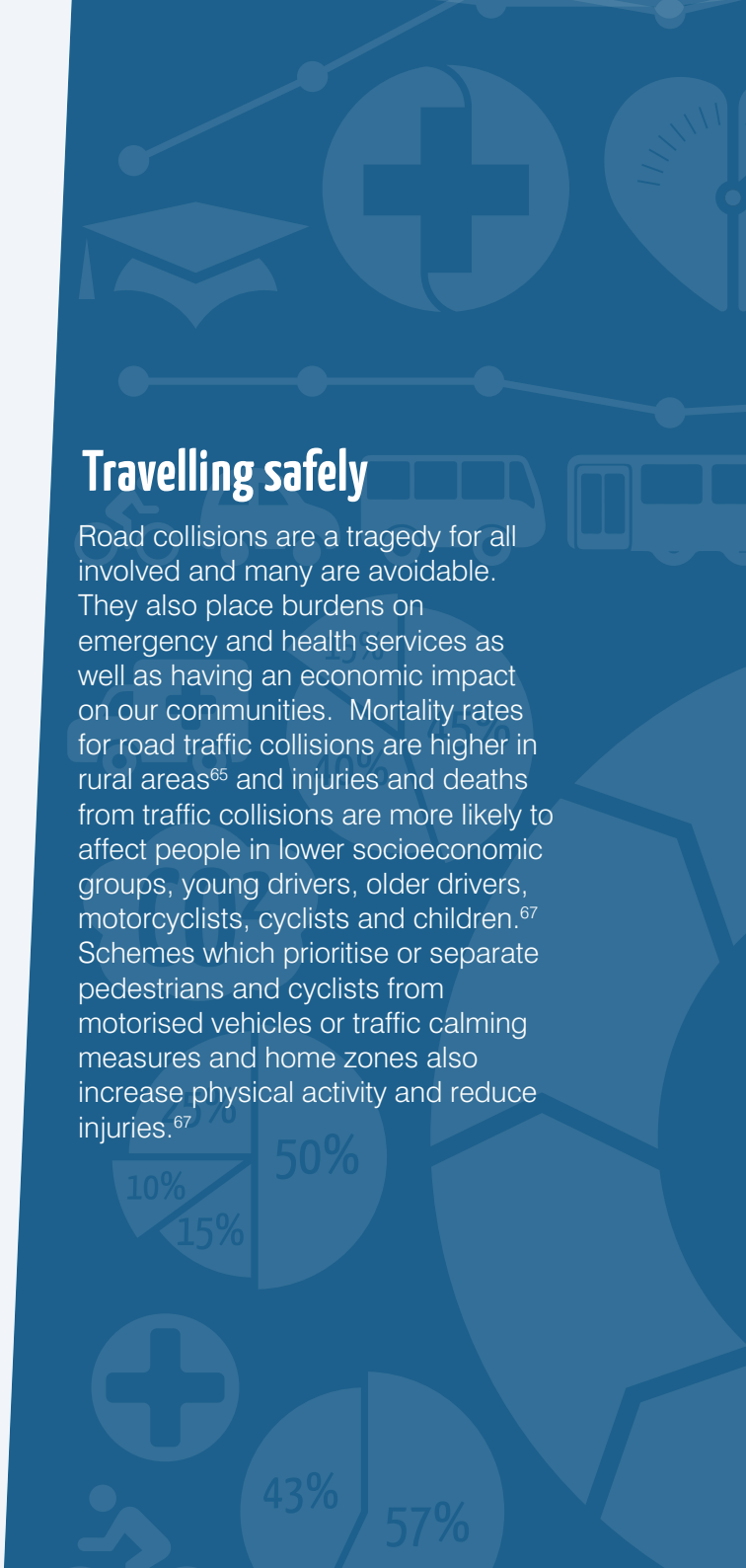
Getting and Staying Active

Cycling and walking can build everyday activity into our lives which can offset the long term conditions caused by sedentary lifestyles such as cancer, heart disease, diabetes and premature death.[63] Being physically active and enjoying the outdoors also improves our emotional health and wellbeing and quality of life. In England the average number of walking trips is 16% lower than 20 years ago which has contributed to the increase in obesity. There is a wealth of evidence showing that investing in infrastructure which supports walking and cycling increases physical activity, improves health and mobility and reduces obesity and cardiovascular disease.[64]

Taking a multi-component approach to make sustainable transport options the easier and most attractive choice are likely to be most effective in encouraging behaviour change. These include infrastructure improvements to separate cyclists and pedestrians from motorised vehicles but also need to include community based interventions such as information provision and travel planning, cycle and maintenance skills development, ride to work campaigns, cycle loan schemes and provision of changing facilities at workplaces. Working with the community to develop initiatives by building on the skills and knowledge that already exists such as developing networks of people who can support each other to be physically active can also be successful. For rural areas, it can be more challenging for cycling and walking to become a sustainable alternative to the car, so combining active travel with public transport helps our rural residents build active travel into their lives.

Travelling safely

Road collisions are a tragedy for all involved and many are avoidable. They also place burdens on emergency and health services as well as having an economic impact on our communities. Mortality rates for road traffic collisions are higher in rural areas[65] and injuries and deaths from traffic collisions are more likely to affect people in lower socioeconomic groups, young drivers, older drivers, motorcyclists, cyclists and children.[67] Schemes which prioritise or separate pedestrians and cyclists from motorised vehicles or traffic calming measures and home zones also increase physical activity and reduce injuries.[67]



63. Celis-Morales et al (2017). Association between active commuting and incident cardiovascular disease, cancer, and mortality: prospective cohort study. BMJ 2017;357:j1456.
64. PHE (2017). Spatial Planning for Health An evidence resource for planning and designing healthier places. PHE. 6 July 2017.
65. RoSPA (2017). Rural Road Safety Factsheet. RoSPA. February 2017.
66. The Kings Fund Active and Safe Travel Project (2013)
67. Celis-Morales et al (2017). Association between active commuting and incident cardiovascular disease, cancer, and mortality: prospective cohort study. BMJ 2017;357:j1456

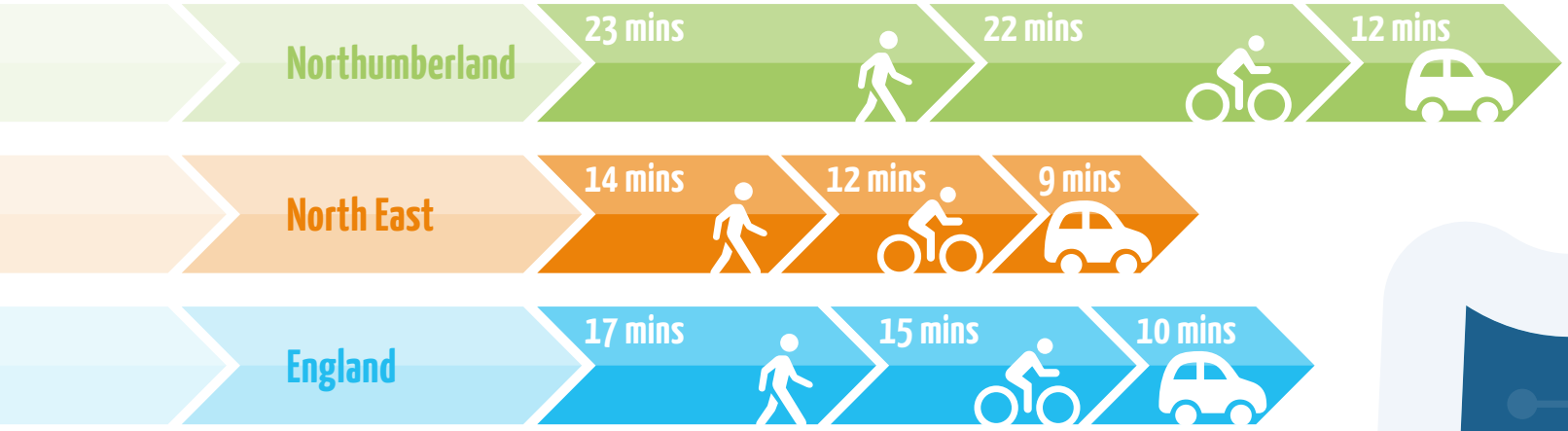
The transport picture in Northumberland - Staying connected

Living in a beautiful, geographically diverse and wide open space like Northumberland brings many advantages to our health and emotional wellbeing in terms of access to the outdoors and opportunities to take part in physical activity. As one of the most sparsely populated counties in England with just 63 people per square kilometer and two fifths of Northumberland's population living in rural areas, it can be difficult to get out and about easily. It can also be difficult for key services to be economically viable outside of the main urban centres with pressure to centralise services to keep them cost-effective but also, in the case of some healthcare services, to ensure that they remain safe and compliant with accepted standards of good practice.

Public transport usage in Northumberland is lower than the national average with our population being increasingly reliant on cars. With the rural areas of Alnwick and Berwick-upon Tweed expected to increase at a faster rate than the Northumberland average, accessibility will become increasingly important.[73]

Average minimum travel times

The latest journey time statistics for 2015[68] indicate the average minimum travel times across the range of 8 key services including employment, schools, further education, GP's, hospitals, food stores and town centres by by walking, cycling and car. As expected Northumberland average minimum travel times are higher than Tyne and Wear and England across all three transport types.



68. DfT (2017). Journey time statistics From:Department for Transport 2015. DfT. 13 July 2017.
73. NCC (2011). Northumberland's Local Transport Plan 2011-2026.

Getting and staying active

Being active has enormous health and wellbeing benefits. Most importantly, it helps prevent many common diseases but its also important in the management of many long term conditions. Keeping active also contributes to maintaining a healthy weight. The cost of physical inactivity in Northumberland is estimated to be around £6m per year[69] so getting people more active through active transport is good for them and potentially good for the environment.

There are higher levels of car ownership in rural households compared with urban areas with 26% in our urban households not having access to a car compared with 17% in rural areas. There are higher numbers of cars per household in rural areas.[70] 32% of commuter trips in Northumberland are under 5 km in distance yet only 14% are undertaken by non-motorised forms of transport and 21% of the population live within 2km of their workplace. 2km has been proposed as an acceptable distance for walking and 5km for cycling[73] which suggests there is still potential for change in behaviour in Northumberland around those shorter journeys. People may well overestimate the time it takes to walk distances and underestimate the time it takes to travel an equivalent distance by car; providing information on travel times and transport options is a key intervention in changing behaviour. If Northumberland residents were as likely to cycle to work as the Dutch (for trips of similar length and hilliness) commuter cycling rates could dramatically increase from 2% (in 2011 census) to 15% of all journeys.[71]

Role of the NHS

Again, there is a role here for the NHS. NHS staff can be powerful advocates for active travel, both as individuals and as members of organisations. They are also well placed to have conversations with patients about the benefits of physical activity, and to promote active travel or use of public transport as an option to increase levels of physical activity. For every 12 sedentary adults who receive advice or counselling on physical activity from their GP, practice nurse or health visitor, one will be meeting recommended levels of physical activity after 12 months. This is even better odds of success than for advice to stop smoking![72]

Northumberland has a high, and increasing, proportion of older residents compared to the national and regional average which increases demand for transport to healthcare services as well as additional funding for concessionary travel. About 19% of the population of Northumberland cannot access a GP's surgery within 15 minutes by public transport, whilst 59% cannot get there within an 800 metre walk.[73] Constraints on public transport means that this is not a viable option for many trips taken in and around Northumberland.

69. Sport England (2010). Health costs of physical inactivity. Local Sport Profiles: Northumberland.
70. NCC (2014). Comparing Rural and Urban Areas of Northumberland - 2011 Census Analysis (2014). Northumberland County Council Policy and Research Team. February 2014.
71. Lovelace R et al (2017). The Propensity to Cycle Tool: An open source online system for sustainable transport planning. J Transport & Land Use. Vol 10, No 1 [2017] pp. 505–528.
72. Orrow G, et al (2012). Effectiveness of physical activity promotion based in primary care: systematic review and meta-analysis of randomised controlled trials. BMJ 2012;344:e1389
73. NCC (2011). Northumberland's Local Transport Plan 2011-2026.

Travelling Safely

After Durham, Northumberland has the 2nd highest rate of emergency admissions for car accidents involving children and young people (27.5 per 100,000, North East 19.0, England 17.4)[74] and is the highest in the North East for deaths and serious injuries per 100,000 resident population (497 people killed or seriously injured between 2014 and 2016).[75] Some of these are the result of visitors or people travelling through Northumberland rather than local journeys[76] but the high rates reflect both the larger number of miles travelled generally by car and the nature of rural roads. We have seen the numbers of injuries and deaths reducing over the years, but we still need to reduce the proportion of road casualties involving motorcyclists and young drivers.

Northumberland	North East	England
27.5	19	17.4

Emergency admissions for car accidents involving children and young people

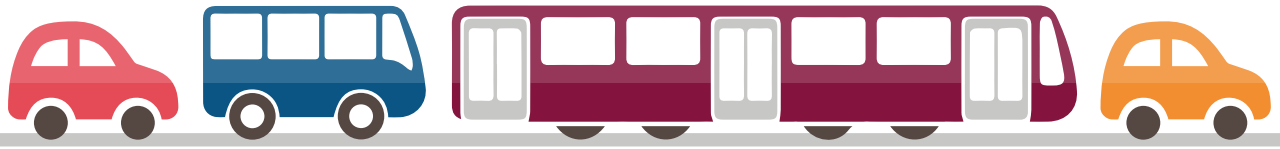
per 100,000.

74. PHOF (2016). Emergency admissions for car occupants (aged 0-24). Public Health Profiles 2011/12-2015/16
75. PHOF (2017). 1.10 - Rate of people KSI on the roads, all ages, per 100,000 resident population. Public Health Profiles 2013-215
76. NE Regional Road Safety Resource (2017). Benchmarking of North East Local Authorities' Road User Casualties Against the Rest of England, 2016. NE Regional Road Safety Resource. November 2017.

What are we doing about transport?

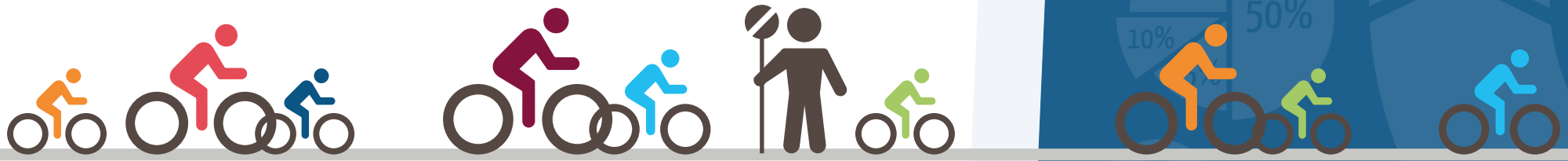
Supporting people to stay connected

- The planning process can help new developments to be well connected via public transport and good neighbourhood design can make physical activity the easier choice. One example is the use of Section 106 contributions to improve the cycle network such as £100k from a development in Blyth to improve connectivity to the National Cycle Network Coast and Castles route and £60k to improve facilities in the vicinity of the Northumbria Specialist Emergency Care Hospital in Cramlington.
- Despite the challenges of operating in a rural area, Northumberland does have a high quality bus network with high levels of customer satisfaction which provides access to key locations at key times of the day. There are also a range of concessionary travel schemes which make it possible for young and older people to travel at very low cost.
- Community Transport and Demand Responsive Services can fill the gap when commercial operators do not operate a service. There are a number of services in Northumberland such as the Getabout Scheme which provides a travel planning service for users who may be less familiar with public transport options or find it difficult to access information. For essential journeys such as hospital appointments when private and public transport are not an option, the scheme also offers volunteer drivers. This service particularly helps older people to remain independent and active for longer.



Promoting safe and active travel

- Northumberland's Local Transport Plan 2011-2026 and Road Safety Strategy contains ambitious targets to significantly reduce the numbers of people killed and seriously injured on our roads. The goals are to improve transport safety and security and promote healthier travel by improving the safety of the transport network, particularly for vulnerable road users and enabling and encouraging more physically active and healthy travel.
- Go Smarter encourages individuals, schools and businesses to travel more sustainably and has supported organisations to encourage sustainable and active travel. These have included initiatives such as School Travel Plans - to encourage children and parents to have a more active school run and working with new developments and employers to develop Corporate Travel Plans. Active Northumberland Watbike Cycle Loan Scheme aims to help get people into cycling without having to purchase a bike.
- Regional investment through NECA contributed £600k of Local Sustainable Transport Fund (LSTF) funding to the Morpeth Cycle scheme.



Case Study

Encouraging Active Travel - Mickley First School

Mickley First is a small rural school in the west of the county with approx 90 pupils. Due to its location many families travel to school by car or school transport, this makes it difficult to encourage active travel for the journey to school. However Mickley has embraced this challenge and created a culture which encourages the whole school community to travel sustainably, where possible.

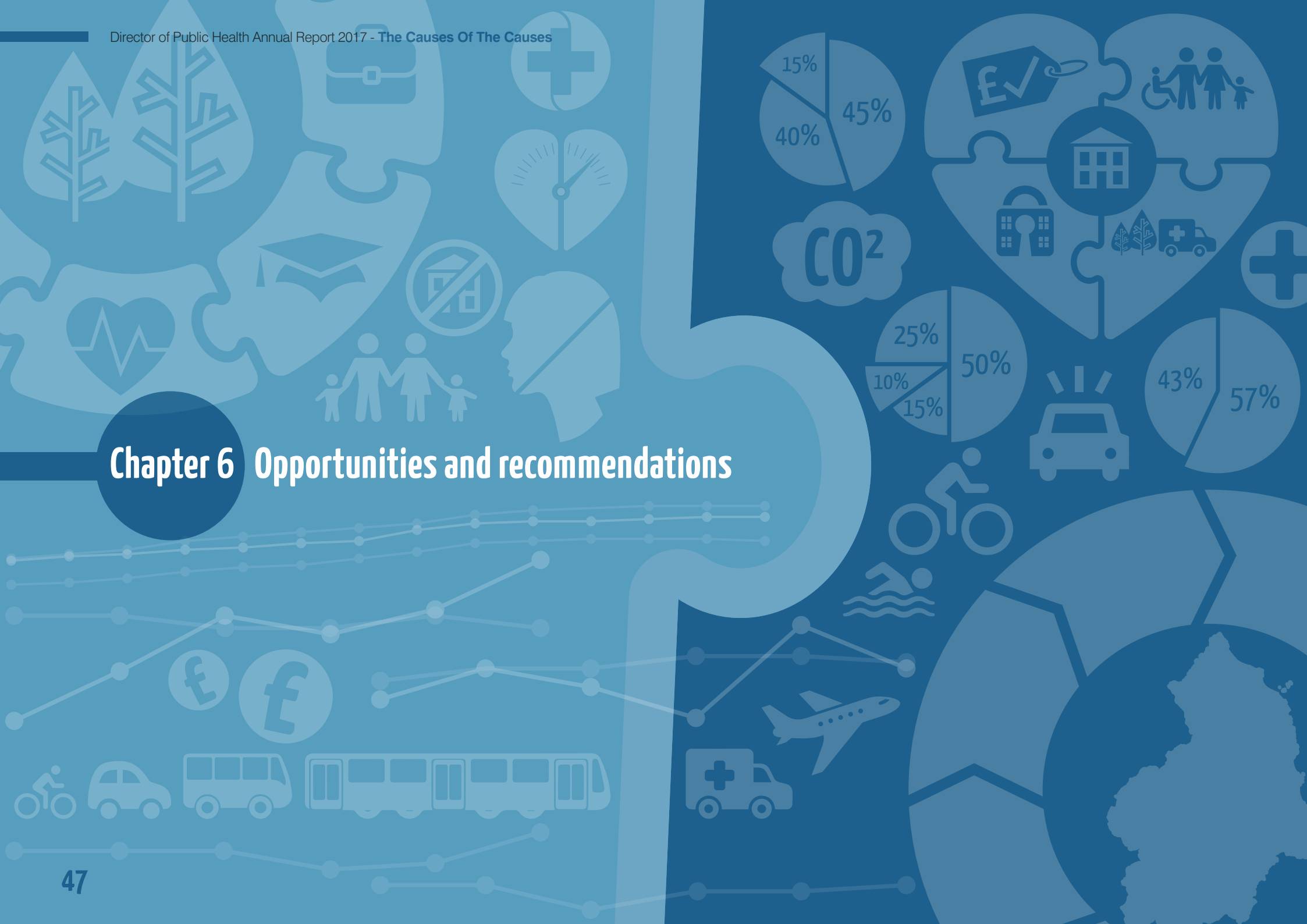
The school encourages cycling and scooting. It has supported national initiatives such as Walk on Wednesdays, Walk to School Week and Bike Week; they have scooters and balance bikes to use at break times and pupils can loan a scooter at weekends. There are scooter training sessions the PTA hold an annual family bike ride. The school has supported Tour of Britain to raise the profile of cycling in school.

Pupils understand the benefits of walking, cycling and scooting not only for their personal health and wellbeing but also how it impacts positively on the environment. By working with partners to promote safe, healthy travel and engaging the whole school community there has been a reduction in car use from 38.5% 2014 to 17% in 2017 and an overall increase in active modes of travel.

The school have also campaigned for speed reductions and crossing points in their village and working with other local schools to develop a walking map for residents, visitors and businesses.

Mickley First School were recently awarded Modeshift STARS School of the Region in the North East for their achievements in promoting healthy and sustainable travel to school and will now go forward to the National Awards.

Chapter 6 Opportunities and recommendations



Opportunities

North of Tyne Devolution

The North of Tyne 'minded-to' devolution deal[77] is a fantastic opportunity to improve the health and wellbeing of Northumberland residents by improving the picture of some of these social determinants. For Northumberland, proposals to upskill those in low paid employment; support people (back) into employment, especially those who who are experiencing barriers to returning to work; and drive improvements to rural growth and productivity are particularly relevant. There is a particular focus on the over 50s and those with disabilities or long term health conditions.

Northumberland Joint Health and Wellbeing Strategy (JHWS)

We are in the process of developing a new JHWS for Northumberland. This is one of the principle outputs of the Health and Wellbeing Board and should be taken into account by the Council, Clinical Commissioning Group and NHS England when commissioning services as it reflects the needs of people in Northumberland. This new JHWS is the means by which we plan to extend and embed the community-centred approaches that have been the subject of the previous two annual reports. It also has a theme devoted to tackling the social (or wider) determinants of health, making explicit the link between health and the conditions in which people are born, grow, work, live, and age.

77. North of Tyne 'minded-to' Devolution Deal dated 24 November 2017.
Available from: https://northoftynedevolution.com/wp-content/uploads/2017/11/North-of-Tyne-minded-to-devolution-deal.pdf

Review of Core Strategy

The review of the Core Strategy and the development of the Local Plan has provided a great opportunity for the Public Health team to join with colleagues in planning and housing to identify standards for new residential developments to ensure they are affordable and health enhancing in terms of their quality, design and energy efficiency.

Creating healthy inclusive workplaces

Healthy inclusive workplaces in which people can thrive are good for employers and employees. They improve productivity both directly and indirectly through reduced sickness absence. As the biggest employers in Northumberland, both the Council and the NHS are committed to improving the health and wellbeing of their employees but we can also act as role models for other employers across the County. The NE Commission for Health and Social Care Integration acknowledged the role that workplace health initiatives contributed to health and wellbeing.[78]

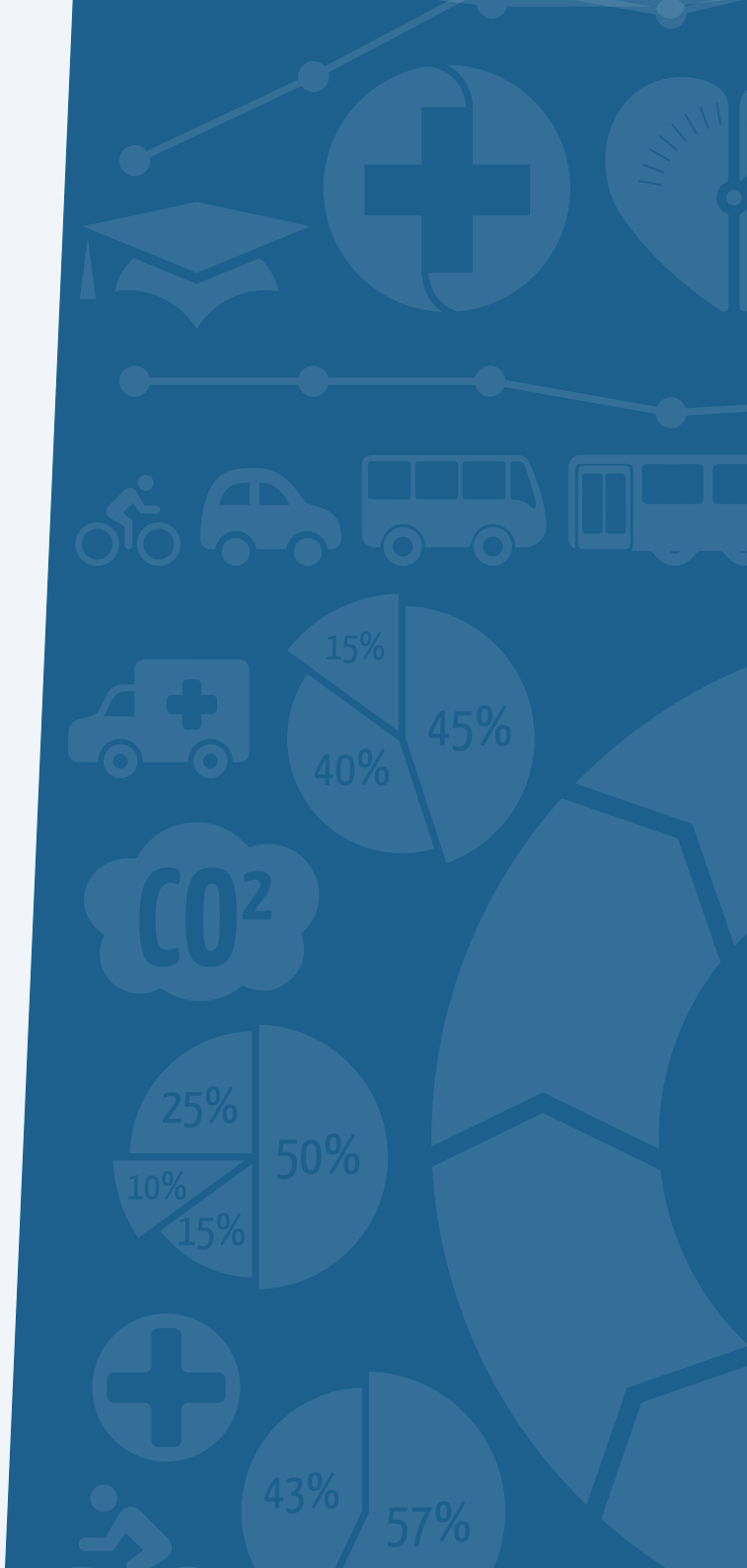
78. NECA (2016). Health and Wealth - Closing the Gap in the North East. Report of the North east Commission for Health and Social care Integration. October 2016.

Recommendations

1 Through the Health and Wellbeing Board, embed a Health in All Policies approach to ensure health and wellbeing considerations are taken into account in all relevant strategies and policies and that we exploit synergies between health and other core objectives.[79]

2 Through the Joint Health and Wellbeing Strategy, use the Making Every Contact Count approach to enable all frontline practitioners from health, social care and other areas to identify and actively support vulnerable people living in poor housing.[80] Housing Officers conduct New Tenant Visits and tenancy audits with all tenants on a three year rolling programme and offer a wide range of advice and signposting to services around their tenancies, benefits and other support services. Given the links with domestic fires, money difficulties, antisocial behaviour and relationship breakdown, this may be a feasible setting to deliver very brief advice around smoking and alcohol with referral to specialist stop smoking services or substance misuse services when required.

3 Explore how we can use the Better Health at Work Award to encourage employers to develop travel plans which promote employee walking and cycling to and from work and also as part of their working day to improve workplace health.



79. LGA (2016). Health in all policies: a manual for local government. LGA. 29th September 2016.
80. NICE (2015). Excess winter deaths and illness and the health risks associated with cold homes. NICE Guideline (NG6). NICE. 5 March 2015.

4 Consider a multi-agency review of patient or service user transport services across health and social care to identify potential options to improve services and make better use of our collective resources.

5 Work with GPs, hospital clinicians, nurses and other healthcare professionals to develop and embed a 'More than Medicine'[81] approach which connects the clinical consultation with interventions such as social prescribing aimed at, amongst other things, addressing some of the social determinants of health.

6 Use the NICE Quality Standard for preventing excess winter deaths and illness associated with cold homes[82] to drive measurable improvements in the commissioning and provision of health and social care.

81. Nesta (2013). More than medicine: New services for people powered health. Nesta. 2013
82. NICE (2016). Preventing excess winter deaths and illness associated with cold homes (QS 117). NICE. 4 March 2016.

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