INTRODUCTION

With the creation of award winning public spaces, the regeneration of our coastline and construction of the new bridge over the river wear, the changing landscape of our city is clear for all to see.

Sunderland’s aspirations for its future extend into every walk of life and in terms of health and wellbeing our vision is just as strong. We want Sunderland to be a city where everyone is as healthy as they can be, people live longer, enjoy a good standard of wellbeing and we see a reduction in health inequalities.

As a city we face a number of challenges which we are committed to overcoming and together with our partners we are working every day to reduce health inequalities amongst the general population and provide support to the most vulnerable people in our community.

This report provides an overview of general health within the city as well as focusing on the impact that the physical environment can have on an individual’s health.

The report also highlights some of the key achievements of the public health team during the year.

I hope that you find it useful and informative.

Councillor John Kelly,
Portfolio Holder for Public Health, Wellness and Culture
I have pleasure in presenting my annual report for 2016/17 as the Director of Public Health for Sunderland. In this report, I identify the physical assets and opportunities in Sunderland that can be used to improve the health of its residents.

In the first section of the report, I again highlight some of the key health issues for Sunderland. The report shows us that people in Sunderland, on average, die earlier than those who live in the rest of England. In addition, mental health and wellbeing often lags behind the rest of the country. The reasons for this are varied and in my last report I highlighted two issues that were determinants of the poor health experienced in Sunderland: the influence that economy, work and poverty has on health in the area and the impact of tobacco on individuals who use it.

The causes of our poor health outcomes are very complex – there are multiple causes of poor health and multiple actions to be taken to address any single cause. There are, however, occasions when it is possible to make step changes in some of our approaches to improving life chances. In my last report I described the importance of the Economic Masterplan in tackling some of our entrenched health issues in relation to poverty. In this report, I focus on the important role that the physical environment has in improving people’s health. Key to addressing some of the issues highlighted will be the development of the Local Plan and the implementation of the Housing Strategy.

As the Marmot report on Health inequalities, published eight years ago, said, ‘People’s health is affected by the nature of their physical environment; living in poor housing, in a deprived neighbourhood with a lack of access to green spaces impacts negatively on physical and mental health...’

The Marmot Review identified four actions to be taken to reduce health inequalities through the development of healthier environments:

- Improving active travel across the social gradient
- Improving good quality spaces available across the social gradient
- Improving the food environment in local areas across the social gradient
- Improving energy efficiency in housing across the social gradient.

I hope that this report illustrates how many of Sunderland’s health challenges identified in the first section of the report can, in part, be addressed by our approach to the built and natural environment. The recommendations incorporate many of the actions identified by the Marmot Review but also has a focus on local assets and needs.

I would like to take this opportunity to pay tribute to Cllr Paul Watson, the late Leader of Sunderland City Council. He was a true advocate for improving the health of the people of Sunderland and provided the leadership that enabled a “whole council” approach to achieving this through the council’s planning, policy and delivery.

Finally, my thanks go to the Public Health team who work day in, day out to improve the health of the people of Sunderland, examples of the work that the team undertook during 2016/17 are included in the final section of the report. Special thanks go to Kath Bailey and Julie Parker-Walton for their part in the production of this report. Thanks also to Les Clarke, Louise Darby, Liz McEvoy and Iain Fairlamb.

I hope you find this an interesting read and that going forward we all succeed in working together to build a healthier Sunderland.

Gillian Gibson
Director of Public Health
1. HEALTH OF THE POPULATION

Introduction

This section of the Director of Public Health’s Annual Report provides a short summary of the health of the Sunderland population. It also highlights a small number of priorities for each of the city’s five localities. This does not always make for comfortable reading, but identifying causes of poor health that have a greater impact on the people of Sunderland than they do on average across England helps us to identify those groups at highest risk of experiencing poor health. In turn, this helps us to prioritise and target interventions to improve health where they are most needed.

More information about the health of our population can be found in Sunderland’s Joint Strategic Needs Assessment (JSNA) which can be accessed at www.sunderland.gov.uk/j-s-n-a

Our city at a glance...

Figure 1:

**SUNDERLAND MALES**
- Life Expectancy: 77 YEARS
- Healthy Life Expectancy: 58.8 YEARS

**SUNDERLAND FEMALES**
- Life Expectancy: 80.9 YEARS
- Healthy Life Expectancy: 60.1 YEARS

**REST OF ENGLAND**
- Life Expectancy: 79.5 Years
- Healthy Life Expectancy: 63.4 Years
- Life Expectancy: 83.1 Years
- Healthy Life Expectancy: 64.1 Years

**CURRENT POPULATION**
- [Diagram showing current population count]

**PREDICTED BY 2030**
- [Diagram showing predicted population count]
Population profile

One of 12 local authority areas in the North East of England, Sunderland has a population of around 277,000. The population has fallen from close to 300,000 in the early 1990s, due in part to outward migration of younger working age people. Recently, this fall has levelled out and the population is currently predicted to rise to around 285,000 by 2030.

Compared to England, the population of Sunderland has a higher proportion of older people who use health and social care services more intensively than any other population group. Sunderland has also seen an increase in the population of people from black and minority ethnic groups, though the city is less ethnically diverse than the England average. The age of people from black and minority ethnic groups is generally younger than for white groups in the city. Predicted patterns of migration suggest that the increase in the ethnic diversity of the population of Sunderland is likely to continue over the next 20 years.

Deprivation and disadvantage

The Sunderland population experiences a higher level of social and economic disadvantage than the England average and there is a strong link between high levels of socioeconomic disadvantage and poor health. The English Indices of Deprivation 2015 are based around seven domains: income, employment, health, education, crime, barriers to housing and living environment. They show that 38% of the Sunderland population live in areas that are among the 20% most disadvantaged across England.

Life expectancy

Whilst average life expectancy at birth has improved, the people of Sunderland live, on average, shorter lives than the whole of England. They also tend to live a greater part of their lives with illness or disability which limits their daily activities (see Figure 1).


Figure 2:
As can be seen, more than two-thirds of the life expectancy gap between Sunderland and England is linked to higher death rates from cardiovascular diseases such as heart disease and stroke, cancers and respiratory diseases. Current plans to address early deaths include a strong focus on identifying and managing long term conditions – those that cannot, at present, be cured but can be controlled by medication and/or other treatment. This includes a focus on preventing the development of these conditions and the promotion of self-care.

Long term conditions

The prevalence of long term conditions increases with age and the proportion of the population with multiple long term conditions also increases with age. People with long term conditions are intensive users of health and social care services. People from lower socioeconomic groups have an increased risk of developing a long term condition and so a strong preventive approach, early identification, patient education and better management can help to reduce health inequalities as well as improving healthy life expectancy. Effective, evidence-based health service interventions to prevent and manage these conditions include:

Circulatory disease
- NHS Stop Smoking clinics
- NHS Health Checks to identify people at increased risk of heart disease or stroke and ensure they receive appropriate advice, treatment and monitoring
- Secondary prevention of cardiovascular disease including lifestyle changes and medicines to prevent blood clots, reduce blood pressure and reduce cholesterol
- Structured case finding of atrial fibrillation and appropriate treatment and monitoring

Cancer
- NHS Stop Smoking clinics
- Campaigns to increase uptake of cancer screening programmes and raise awareness of the signs and symptoms of different cancers
- Rapid access to diagnostic testing and treatment

Respiratory diseases
- NHS Stop Smoking Services
- Case finding of chronic obstructive pulmonary disease and appropriate treatment and monitoring
Digestive disease*

- NHS Stop Smoking Services
- NHS Health Checks to identify people at increased risk of diabetes and ensure they receive appropriate advice, treatment and monitoring
- Effective management of diabetes including control of blood pressure and blood sugar
- Identification and brief advice in higher risk drinkers
- Referral to specialist substance misuse services for dependant drinkers

NOTE*: Includes alcohol liver disease and diabetes

Mental health and emotional resilience

In recent years, there has been increasing recognition of the impact of mental illness on the population. Mental health problems represent the largest single cause of disability in the UK and the cost to the economy is estimated at £105 billion a year. One in four adults and one in ten children aged 5-16 will experience at least one mental health problem in any given year. Mental health problems are widespread, at times disabling, and yet often hidden and stigmatised. They can affect people from all walks of life at any point in their lives, including children, teenagers, adults, new mothers and older people.

The interplay between physical and psychological symptoms is becoming better understood, and the very real inequalities in health outcomes for people with mental health problems are being quantified. We also know that people with long term physical illnesses suffer more complications if they also develop mental health problems.

Key indicators of mental health, Sunderland compared to England

Figure 3:

- 8.9% of adults are diagnosed with depression compared to 8.3% across England
- 11% of adults have a low happiness score compared to 9% across England
- Premature mortality 4.0 times higher in adults with a serious mental illness compared to 3.7 across England
- 4% of adults have a low worthwhile score compared to 4% across England
- 22% of adults have a high anxiety score compared to 19% across England
- 180 per 100,000 emergency hospital admissions for intentional self-harm compared to 197 across England
- 6% of adults have a low satisfaction score compared to 5% across England
- 39 years of life lost due to suicide and injury of undetermined intent per 100,000 persons aged 15-74 compared to 32 across England

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As many of the risk factors for mental illness are linked to deprivation, it is not surprising that Sunderland experiences a relatively high burden from mental ill health. The city has poorer outcomes for all four parts of the national self-reported wellbeing score (anxiety, happiness, satisfaction and worthwhile), higher recorded prevalence of depression on GP systems, high levels of prescribing antidepressants, and a high burden on mortality.

Self-harm had been identified as an issue of concern in Sunderland. Age standardised emergency hospital admission rates for intentional self-harm at all ages have, however, fallen steadily and are now below the England average. Additionally, rates of hospital admission for self-harm in young people aged 10-24 in Sunderland have fallen over the same period. During this time, England rates have increased so that the Sunderland rate is no longer significantly above the England rate.

There is a need to increase the focus on mental health promotion, prevention of mental illness and addressing the social determinants of mental ill health to build emotionally resilient communities, alongside the continued integration and improvement of mental health services.

Lifestyle factors affecting health outcomes

There are many opportunities to reduce the burden of preventable disease on the people of Sunderland. Although death rates have fallen, these declines have not been matched by similar declines in levels of illness in the population, so people live longer with poor health. We therefore need to act to address the causes of ill health as well as the causes of premature death and to mitigate the effects of socioeconomic deprivation.

Unhealthy lifestyles remain a key cause for our increased rates of premature death.

Many people in Sunderland continue to follow unhealthy lifestyle behaviours when compared to England (see Figure 4).

Work by the Kings Fund examined how four lifestyle risk factors – smoking, excessive alcohol use, poor diet, and low levels of physical activity – occur together in the population. The report found that people who are more disadvantaged are more likely than those who are more advantaged to engage in all four poor behaviours.

In response, Sunderland City Council has commissioned the Live Life Well Service. This is a model for “integrated wellness” that can provide services for people with multiple unhealthy lifestyle behaviours, using an integrated and personalised approach. The service is underpinned by community participation and works with existing community assets.
Key indicators of health-related lifestyle, Sunderland compared to England

The public health team will be undertaking two lifestyle surveys during 2017. The first covering adults aged 18 years and over and the second covering children in school years four, six, eight and 10.

Getting the best start

While encouraging and supporting people to make healthier lifestyle choices can begin to mitigate some of the inequalities in health outcomes that we see in Sunderland, research tells us that giving every child the best start in life is essential if we are to have any significant impact on health inequalities across the life course. The foundations for virtually every aspect of human development – physical, intellectual and emotional – are laid in pregnancy and/or early childhood. What happens during these early years has a lifelong impact on many aspects of health and wellbeing, from educational achievement and economic status to a range of diseases including obesity, heart disease and mental health.

There are 61,000 children and young people aged 0-19 years in Sunderland. Their health and wellbeing is generally worse than for England overall, with many persistent challenges. Sunderland has high levels of children living in poverty. Poverty blights children’s lives and prevents them fulfilling their potential, leading to an inter-generational cycle of disadvantage. Reducing the numbers of children and families living in poverty is a key underpinning approach to giving every child the best start in life. Sunderland’s Joint Health and Wellbeing Strategy has a strong focus on early years.
Key indicators of health and wellbeing for children and young people, Sunderland compared to England

This creates a cycle of poverty that causes damage to society, blights local communities and places an increased strain on local service. Children who grow up in poverty are:

- Less likely to succeed at school;
- More likely to suffer from poor health;
- Less likely to secure a good job as an adult;
- More likely to offend;
- Less likely to access cultural and leisure activities; and
- More likely to be taken into care.

Sunderland also has higher levels of young people aged 16 to 18 years who are not in education, employment or training than the England average.

Whilst there have been recent improvements in relation to some of these persistent issues (e.g., a reduction in teenage conception rates, and levels of smoking throughout pregnancy) outcomes remain worse than for England. Rates of breastfeeding have yet to show sustained improvements. The mental health and emotional resilience of children and young people in Sunderland also needs to improve. It is important to give all of our children the best start in life, and addressing issues such as teenage pregnancy, child obesity and emotional wellbeing and resilience are an important part of this.
A locality view

Figure 6: Map of five localities across Sunderland

When considering the health of the population and planning health and care services across the city, both Sunderland City Council and Sunderland Clinical Commissioning Group divide the Sunderland area into five locality areas as below.

Local Health (www.localhealth.org.uk) is a tool published by Public Health England. It provides health information for ward and locality populations. Based on this information, priorities for localities are as follows:
Coalfields

- Strengthen provision to support people to quit smoking – there are high rates of new lung cancer cases, emergency hospital admissions and deaths due to respiratory diseases.
- Enhance the support available for children and adults to achieve and maintain healthy weight through diet and physical activity – rates of excess weight in Year 6 children and obesity in adults are high.
- Support people to manage their long-term conditions and engage in self-care – there is a high proportion of the population with a limiting long-term illness or disability and high rates of unpaid caring.

Sunderland East

- Strengthen approaches to tackling alcohol misuse and reducing alcohol related harm – there are high rates of binge drinking and alcohol related hospital admissions.
- Enhance the support available for children to achieve and maintain healthy weight through diet and physical activity – rates of excess weight in Reception class and Year 6 are high.
- Strengthen delivery of the NHS Health Check programme - there are high rates of deaths due to heart disease and stroke and high rates of emergency admission for stroke.

Sunderland North

- Understand why the rate of A&E attendances among under 5s is much higher than the Sunderland average which is itself much higher than the England average.
- Strengthen approaches to tackling alcohol misuse and reducing alcohol related harm – there are high rates of alcohol related hospital admissions.
- Enhance support for children and adults to achieve and maintain healthy weight through diet and physical activity – rates of excess weight in Reception class children and obesity in adults are high.

Sunderland West

- Understand why rates of A&E attendances among children aged under 5 years are particularly high.
- Enhance support for children and adults to achieve and maintain healthy weight through diet and physical activity – rates of excess weight in Year 6 children and obesity in adults are high.
- Strengthen provision to help people to quit smoking – there are high rates of new cancer cases, emergency hospital admissions due to respiratory diseases, heart disease and high cancer mortality rates.

Washington

- Enhance the support available for adults to achieve and maintain healthy weight through diet and physical activity – rates of obesity in adults are high.
- Tackle alcohol misuse and reduce alcohol related harm – there are high rates of binge drinking.
- Consider why rates of hospital admission for elective hip and knee replacement are high.
Key summary indicators

A selection of high level summary health indicators for Sunderland is shown in Figure 7

Key summary health indicators, Sunderland compared to England

Figure 7:

- **Healthy Life Expectancy**
  - Male: 4.6 Years less
  - Female: 4.0 Years less
  - Less than England

- **Life Expectancy**
  - Male: 2.5 Years less
  - Female: 2.2 Years less
  - Less than England

- **Early Death Rates**
  - 20% higher for heart disease and stroke
  - 21% higher for cancers
  - Compared to England

- **22%** have a limiting long term illness or disability compared to **18%** across England
- **5%** diagnosed with heart disease compared to **13%** across England

Key health challenges for the city

A summary of the high level health challenges for Sunderland is therefore as follows:

- Responding to changes to the population structure of the city including reductions in children and younger working age adults, a growing elderly population and increasing ethnic diversity
- Tackling the big four lifestyle risk factors – smoking, excessive alcohol use, poor diet, and low levels of physical activity – including for people with multiple unhealthy behaviours
- Preventing premature deaths from cancer, cardiovascular disease and respiratory disease
- Managing the likely increase in the level of long term conditions, including increasing proportions of the population with multiple long term conditions
- Delivering better integrated and more seamless care for individuals and reducing the over-reliance on hospital services, through promotion and support for self-care
- Recognising and addressing the needs of people with poorer mental health and wellbeing
2. SUNDERLAND: A HEALTHY PLACE FOR ALL

In recent years, there has been significant focus on individuals changing their behaviour as a way to improve health. Often we have seen a focus on educating people on what makes them healthy and blaming them when they don’t “choose” to take the healthiest options. Increasingly, however, there is recognition that the context in which people live can be more important in improving health outcomes than knowledge and can have a major impact.

The physical and social environment in which people live has a major impact on their mental and physical health, both positively and negatively, with the World Health Organisation estimating that that 23% of global deaths are due to modifiable environmental factors. It can also impact on the inequalities in health that people living in different areas experience. For example, research tells us that residents of more deprived neighbourhoods tend to experience less favourable living and environmental conditions than people who live in more affluent areas and that people who are exposed to poor quality environments are more likely to experience poorer health outcomes than people who enjoy good quality environments.

The model below was developed by Dahlgren and Whitehead in 1991 to illustrate the many determinants that impact on the health of an individual. While it demonstrates that genetics and lifestyle factors as well as health and care services do impact on health, it also identifies many other factors which are now known to have a significant impact on people’s health.

Determinants of Health

Figure 8:

![Determinants of Health Diagram](source: Dahlgren and Whitehead, 1991)
“We make our buildings and afterwards they make us. They regulate the course of our lives.”

Winston Churchill, addressing the English Architectural Association, 1924
The model demonstrates that if we are to see the step changes in health that we need in Sunderland so people reach their full potential, then we need to have an environment in the city that promotes the health of our people. In the last Director of Public Health’s annual report the importance of economy and “good work” as a determinant of positive health outcomes was identified. Providing some of the key infrastructure that helps to promote a strong economy and providing access to good jobs is clearly important if we are to reverse the historical impact of poor jobs and high levels of unemployment. It is equally important, however, that a growing economy should not come at the expense of people’s health. As discussed previously, a weak economy is bad for health and improving health is as good for the local economy as it is for local people.

The importance of “place” for health in Sunderland was recognised by the Health and Wellbeing Board in 2014 when it identified Sunderland as a healthy place as one of its eight priorities. This chapter of this report will highlight some of the key elements of a healthy place that needs to be considered if the built environment is to play its part in improving health. A recent review by Public Health England identifies three planning principles for designing healthy places:

- **Enhance neighbourhood walkability**
- **Build complete and compact neighbourhoods**
- **Enhance connectivity with safe and efficient infrastructure**

These considerations are particularly timely as Sunderland develops its Local Plan which will guide developments in the city until 2033. National and regional planning policy recognise the role of spatial planning in promoting health and reducing the risk of poor health stating,

> “A healthy community is a good place to grow up and grow old in. It is one which supports healthy behaviours and supports reductions in health inequalities. It should enhance the physical and mental health of the community.”

The rest of this chapter of the report will focus on some of the key elements of the built environment that can impact on people’s health, positively and negatively. It will also identify why these issues are important to the health of people in Sunderland. There is little that is surprising about these issues and the individuals, communities and organisations in the city have been working for many years to address these with some significant successes. In spite of this good work, however, health in Sunderland continues to lag behind many other areas and so it is right that we continue to make improvements where it is possible to do so. It therefore ends with a series of recommendations to consider as the city continues to develop in the years to come.

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7 National Planning Policy Framework Guidance. Paragraph 005 Reference ID: 53-005-20140306
A PLACE THAT PROVIDES HOMES FOR ALL...
Improved housing in Sunderland is key to retaining families within the city and attracting new people – this will help to rebalance the population and address some of the impacts of an ageing population that is described elsewhere in this report. It will also enable growth in the local economy which, as described in the previous Director of Public Health’s Annual Report, is key to improving health. However, alongside building new housing, it is important to ensure that existing housing also provides good homes for the people of Sunderland, including those that have the technology that will provide homes for life, if we are to maximise its impact on good health.

The impact of housing on health has long been recognised with shelter being identified as one of the eight fundamental conditions and resources for health by the World Health Organisation8. In 1991, the United Nations recognised that the human right to housing is not just a right to basic shelter but to adequate housing9. An affordable, suitable, warm and safe home is essential to ensuring the best start in life as well as living and ageing well. This is why poor physical and mental health among homeless people10 has been identified as one of the housing-related priorities in Sunderland as identified in the Sunderland Housing Strategy11.

Poor quality housing will often disproportionately affect the most vulnerable in society, especially older people, the young and those who live with disabilities, further impacting on health inequalities. Existing health conditions can be exacerbated and healthy life expectancy reduced. In addition, there are often indirect impacts arising from the neighbourhood and environment where the housing is located. In a review of the evidence12 for the national housing charity Shelter, a range of impacts of poor housing on physical health were identified. The review demonstrated that poor housing can lead to poor health as well as exacerbating existing physical health conditions. Outcomes of poor housing such as overcrowding, damp, indoor pollutants and cold have all been shown to be associated with physical illnesses including eczema, hypothermia and heart disease as well as increased winter deaths. In Sunderland, damp and excess cold has been assessed as a major hazard in 1,957 houses within the private sector13.

Respiratory health has been shown to be particularly affected by poor housing in both children and adults. This is of particular significance in Sunderland where the prevalence of Chronic Obstructive Pulmonary Disease (COPD) in Sunderland is estimated to be 4.29% compared with 2.91% nationally14.

The impacts of poor quality housing on health can be further compounded by fuel poverty. A household is in fuel poverty if the occupants are on a low income and face high costs of keeping adequately warm and other basic energy services. Fuel poverty is driven by three main factors: household income, the current cost of energy and the energy efficiency of the home. Fuel poverty in Sunderland is higher than the national average at 12.7% of households compared with 10.6% nationally15. This is particularly an issue for those living in the private rented sector with 44.8% households being assessed as being in fuel poverty16.

Trips and falls in the home, particularly amongst older people, is a potential hazard in many homes. A recent assessment identified 537 homes in the private sector in Sunderland having falling and tripping hazards17.

It is unsurprising, therefore, that poor housing results in increased demand on the NHS. It is said that the highest level of housing hazards (category 1) costs the NHS at least £1.4bn18 per year and in Sunderland this is estimated to be £117,038 with the overall cost to society estimated at £292,596.19

The impact of poor housing on health, however, goes beyond the impacts on physical health. Living in poor

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1 The Ottawa Charter for Health Promotion. 1986. Available at http://www.who.int/healthpromotion/conferences/previous/ottawa/en/
8 The Ottawa Charter for Health Promotion. 1986. Available at http://www.who.int/healthpromotion/conferences/previous/ottawa/en/
quality, crowded or unstable conditions can place immense emotional stress upon individuals and families. People who have experience of extreme housing need such as homelessness may have suffered from mental health issues both prior to and during their time spent sleeping rough or in temporary accommodation. A lack of security of tenure, housing affordability, and the struggle that many households face in meeting mortgage or rent payments, places further pressure on people, and consequently can lead to poor mental health outcomes.

Finally, the location of a home can influence access to a range of support and life opportunities such as health and social care, education, employment transport and leisure opportunities. Life expectancy and the opportunity to live a healthy life can be dramatically reduced simply because of where you live and health issues can be intensified by social issues prevalent in areas of high deprivation such as a lack of social cohesion and exposure to crime. Where we live can often shape our social status and sense of inclusion both within our immediate neighbourhood and wider society.

In December 2014, “A Memorandum of Understanding (MoU) to Support Joint Action on Improving Health through the Homes” was agreed between Government bodies, Local Government Association, NHS England and other health and housing professionals.

A better understanding of the links between health and housing in Sunderland and working together to address any issues is crucial if we are to rise to the challenge of improving the city’s health. The city’s Housing Strategy gives us a good platform for this but we need to work in partnership if it is to achieve its potential.

Summary...

<table>
<thead>
<tr>
<th>Homes</th>
<th>Homes and health in Sunderland</th>
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<tbody>
<tr>
<td>Adequate housing is a human right</td>
<td>Poor health among homeless people a priority</td>
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<tr>
<td>Poor housing affects vulnerable and can lead to or exacerbate health issues</td>
<td>High levels of fuel poverty</td>
</tr>
<tr>
<td>Essential for best start in life, living and ageing well</td>
<td>More people vulnerable to cold and damp housing</td>
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<tr>
<td>Housing issues can lead to poor mental health</td>
<td>Over 44% of homes in private rented sector in fuel poverty</td>
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Roads play a key role in the effective functioning of modern cities. A good road infrastructure can attract inward investment which will improve the local economy as well as connecting people to social and economic opportunities. The positive impact connecting with others can have on people’s wellbeing is described in a later section of this report while the benefits of a strong economy to health was identified in a previous report. Unfortunately, improved road infrastructure can also have a negative impact on health as generally it results in increased use of motorised vehicles which can be hazardous to health in a number of ways such as through increased accidents, poor air quality and a risk of increased social isolation for some communities.

While Sunderland’s overall level of road traffic accidents is not significantly different to the rest of the country, the number of children aged 0-15 killed or seriously injured in road traffic accidents in Sunderland is significantly higher than the national average at 28.4 per 100,000 population compared to 17.0 nationally. A recent review of road traffic accidents in relation to children and young people, undertaken by Public Health England, identified that the vast proportion of police-reported pedestrian, cyclist and motorcyclist fatal and serious injuries occur on 30 mph roads. In addition, there are major health inequalities in child traffic injuries with children who live in the most deprived areas at greater risk of being killed or injured on the roads. The death of a child has an unimaginable impact on families and communities while injury can have a wide and long-term impact on health that includes stress, physical disability, cognitive or social impairment, and lower educational attainment and employment prospects.

Nationally, there is increasing concern on the impact that air quality has on people’s health. Much air pollution comes from the burning of fossil fuels to generate heat and to power vehicles, resulting in the emission of a range of gases as well as small particles. Particles in the air can also arise from other sources such as the re-suspension of road dust by vehicles. A range of evidence has developed over the years that demonstrates that short-term exposure to air pollutants can cause a range of adverse effects including the exacerbation of asthma, effects on lung function, increases in hospital admissions for respiratory and cardiovascular disease as well as increases in deaths.

As discussed in the previous section of this report, these are important causes of poor health and premature death in Sunderland. In addition, it has been shown that the effect of long-term exposure to air pollution on mortality is most closely associated with levels of fine particulate matter (PM2.5). Recently published data identifies Sunderland as having, alongside Middlesbrough, one of the highest fraction of mortality attributable to particulate air pollution in the North East at 3.7, although this is has been decreasing and is lower than the national average of 4.7. Nationally, there is increasing concern on the impact that air quality has on people’s health. Much air pollution comes from the burning of fossil fuels to generate heat and to power vehicles, resulting in the emission of a range of gases as well as small particles. Particles in the air can also arise from other sources such as the re-suspension of road dust by vehicles. A range of evidence has developed over the years that demonstrates that short-term exposure to air pollutants can cause a range of adverse effects including the exacerbation of asthma, effects on lung function, increases in hospital admissions for respiratory and cardiovascular disease as well as increases in deaths.

Social connectivity is not only beneficial to individual resilience but also helps to build sustainable communities. However, while improved roads can help to connect people who live long distances away from each other, high volume, high speed traffic can reduce opportunities for positive contacts between members of a neighbourhood and can contribute to increased social isolation. A US study in the early 1980s identified reductions in social interaction as local traffic increased.

These findings have been echoed in a more recent study in Bristol which found that people living in a street with heavy traffic had significantly fewer friends and acquaintances on the street than those living on a quieter one. The opportunities for other forms of social interaction can change with age and older people often suffer from significant social isolation. Research based on the English Longitudinal Study of Ageing found that...
those experiencing high levels of social isolation had significantly higher death rates than those with low or average levels of isolation\textsuperscript{30}.

There are, however, ways in which the impact of these hazards to health can be mitigated. Harms resulting from increased road traffic can be reduced by increasing the number of areas covered by 20 mph zones. Lower speeds reduce the number of road traffic accidents and make a fatal injury unlikely in a collision between a car and a pedestrian or cyclist. The government’ s guidance on setting local speed limits cites clear evidence of the effect of reducing traffic speeds on the reduction of collisions and casualties, stating that research shows that on urban roads with low average traffic speeds any 1 mph reduction in average speed can reduce the collision frequency by around 6\% and that there is a greater chance of survival of pedestrians in collisions at lower speeds. In addition, there may also be environmental benefits as, generally, driving more slowly at a steady pace will save fuel and reduce pollution. The guidance also notes that 20 mph schemes can also lead to important quality of life and community benefits\textsuperscript{31}.

An effective way of gaining the benefits of improved infrastructure without the health harms, however, is to pursue a policy of active travel. This aims to increase physical activity through people making it part of their everyday lives by walking or cycling instead of using the car for shorter journeys and by increased use of public transport. This is discussed further below as part of an approach to improve levels of physical activity in the city.

Summary...

Connectivity

\begin{itemize}
    \item Important to attract inward investment and connect people
    \item More children killed or injured on roads in Sunderland
    \item Higher volume, high speed traffic can have negative impacts on health
    \item High levels of deaths linked to air pollution
\end{itemize}
A PLACE THAT KEEPS US ACTIVE...
There is increasing evidence that environment plays a critical part in encouraging people to be physically active. Physical inactivity is a key health risk factor and has been estimated to cause 9% of premature deaths as well as having a significant impact on ill-health. It has been estimated that 6% of coronary artery disease, 7% of strokes and diabetes, 10% of breast cancer and 10% of colon cancer can be attributed to low levels of physical activity\textsuperscript{32} while regular group-based exercise in older adults shows a 15% reduction in risk of falls\textsuperscript{33}. In Sunderland, however, only 50.6% of adults are identified as being physically active compared with 57.0% nationally and 69.8% in the area with the highest levels of physical activity\textsuperscript{34}.

Recent research\textsuperscript{35} has identified that there are four characteristics of built environments that are positively associated with higher levels of physical activity: more public parks within walking distance of a person’s home that are free and open to all, higher density of public transport, higher housing density and higher number of street interventions that can be accessed by pedestrians. The study found that the difference in physical activity between people living in the most and least active-friendly neighbourhoods was as much as 89 minutes per week which represents 59% of the 150 minutes per week that is the recommended level of exercise. This is highly compelling evidence which suggests that as the city develops we should attempt to incorporate such activity supportive environments in order to have long-term positive impacts on the health of local people.

Developments that encourage active travel (the use of walking, cycling and public transport) mean that people can build physical activity into their everyday lives. Research suggests that people walk more in places with mixed land use (e.g. shops close to housing), connected street layouts and higher population densities\textsuperscript{36, 37}. When linked with the use of public transport there can also increase in physical activity levels as well as reductions in congestion, pollution and road danger which, as I describe elsewhere in this report, also impact on health\textsuperscript{38}. Cycling also provides opportunities for people to increase their levels of physical activity. Spatial factors positively associated with cycling include the presence of dedicated cycle routes, separation of cycling from other traffic, high population density, short trip distance and proximity of a cycle path or green space\textsuperscript{39}.

Access to green space is known to have a significant positive impact on physical activity and the health benefits that come from more active living. Whilst this is positive given that Sunderland has relatively good access to green and blue space, national research suggests that children living in deprived areas are nine times less likely than those living in more affluent areas to have access to green space and places to play\textsuperscript{40}. This is particularly concerning in the context of another study of largely economically disadvantaged children that found that children living in areas with more green space had lower BMI scores than children living in areas with less green space. This could be due to reduced time spent being active outdoors\textsuperscript{41}. Excess weight in children is a significant health problem in Sunderland. In 2015/16, 39.8% of 10-11 year olds in Sunderland were classed as overweight or obese compared with 34.2% nationally\textsuperscript{42}.

A key predictor of children having a weight higher than expected is that their parents are overweight. A study in Bristol found that people who frequently visited green space were more likely to be physically active and less likely to be overweight or obese\textsuperscript{43}. Adult weight is another important health concern in Sunderland where 70.1% of adults are overweight or obese compared with 64.8% nationally\textsuperscript{44}. The preservation of green space that is used by people for leisure purposes is therefore important as the city develops and where such space is

\textsuperscript{32} Lee IM, Shiroma EJ, Puska P, Blair SN. Global physical inactivity prevalence and trends. Lancet 2012; 380:219-29


\textsuperscript{36} Heath G, Brownson RC, Kruger J, et al. The effectiveness of urban design and land use and transport policies and practices to increase physical activity: a systematic review. Phys Act Health 2006; 3: 555–71

\textsuperscript{37} Bauman AE, Reis RS, Sallis JF, Loos RF, Martyn CB, on behalf of the Lancet Physical Activity Series Working Group. Comorbidities of physical activity: why are some people physically active and others not? Lancet 2012; 380: 258–71


\textsuperscript{40} National Children's Bureau. Greater Expectations: Raising aspirations for our children. London: 2013


\textsuperscript{43} Coombes E, Jones PJ, Hilldon M. The relationship of physical activity and overweight to objectively measured green space accessibility and use. Social Science & Medicine. 2010;70(9):1816-22

developed for other purposes attempts should be made to mitigate the impact. This should particularly be the case in areas where there are significant levels of socioeconomic disadvantage to guard against further detriment to the population’s health.

**Summary...**

**Keeping active**

- Physical inactivity key health risk factor

- Active travel can increase physical activity and reduce congestion and air pollution

- Level of physical activity can be influenced through built environment

- Access to green space matters

**Keeping active in Sunderland**

- Less physically active adults in Sunderland than the national average

- More children and adults are obese in Sunderland than the national average
A PLACE THAT GIVES ACCESS TO HEALTHY FOOD...
The upward trend in the prevalence of overweight and obesity in adults and children in Sunderland has already been noted. This in turn contributes to the growing prevalence of long-term conditions we see such as cancer, diabetes and cardiovascular disease, as well as contributing to a reduced quality of life. Elsewhere in this report, it is identified that these issues form a significant part of the key health challenges for the city.

The Foresight Report on Tackling Obesity demonstrated that obesity is the result of a very large number of determinants with many of the drivers beyond the scope of individuals to influence. There is broad consensus that preventing and tackling obesity effectively requires the development of a sustained ‘whole systems approach’, with co-ordinated policies and actions across individual, environmental and societal levels involving multiple sectors, such as planning, housing, transport, children’s and adult’s services, business and health.

In the past, much of the focus on improving access to healthy food was focused on enabling people to grow their own food or access locally grown food. As the ways that people live their lives change, however, the planning system can have one of its greatest impact on health, and in particular obesity levels, by restricting the number and location of hot food takeaways. A diet which is high in saturated fat and salt and/or which includes trans-fat contributes to the risk of developing cardiovascular disease (CVD), cancers and obesity which in turn increases the risk for type 2 diabetes.

There is evidence that there are increased levels of obesity in communities with high concentrations of fast food outlets and further evidence that such concentrations are highest in areas of greatest deprivation.

NICE (2010) Guidance on prevention of cardiovascular disease outlines that food from takeaways and the ‘informal eating out sector’ comprises a significant part of many people’s diet and indicates that local planning authorities have powers to control fast-food outlets. It recommends that local planning authorities should be encouraged to restrict planning permission for takeaways and other food retail outlets in specific areas (for example, within walking distance of schools) as well as consider the concentration of fast-food outlets in specific areas to address disease prevention. It further recommends that existing planning policy guidance should be implemented in line with public health objectives.

In 2014 Public Health England (PHE), the Local Government Association (LGA) and the Chartered Institute of Environmental Health highlighted that:

“One of the dietary trends in recent years has been an increase in the proportion of food eaten outside the home, which is more likely to be high in calories. Of particular concern are hot food takeaways, which tend to sell food that is high in fat and salt, and low in fibre, fruit and vegetables.”

It outlines the obesity epidemic in England and the casual links between obesity and type 2 diabetes, raised blood pressure and colorectal cancer. It acknowledges the complexity of the way in which the environment promotes obesity and explains that actions can be taken by local authorities to reduce the extent of obesity promotion locally. It identifies that controlling the proliferation of fast food outlets has a role to play; it acknowledges that a causal link between fast food outlets and obesity cannot be established but identifies that there is some evidence of associations between obesity and fast food.

The document “Tipping the Scales” details case studies of where planning powers have been used to limit hot food takeaways in local areas (LGA 2016). This document outlines the local evidence and policy drivers used to support adoption of the policy.

Many local authorities in England have introduced policies aimed at restricting new hot food takeaways within 400 metres of schools. The distance is widely used as it equates to a five to ten minute walk, and is based on evidence from London Metropolitan University research. In addition, a 400 metre buffer is considered to

strike a reasonable balance between control, impact, and economic development considerations.

Authorities who have used planning policy to adopt a more restrictive approach to new hot food takeaways in close proximity to schools include Waltham Forest (2009), Barking and Dagenham (2010), St Helen's (2011), Central Lancashire, Sandwell and Islington (2012) Bolton (2013), Bradford, Salford and Warrington (2014), Gateshead and North Tyneside (2015) and South Tyneside (2017). All set a 400 meter radius around schools, within which new hot food takeaways will be resisted, except for Islington which set a 200 metre radius. All but four include primary schools as well as secondary schools. Two seek to set a condition that hot food takeaways within the 400 metre radius are not open to the public before 5pm on weekdays.

The gap in Sunderland’s premature life expectancy is largely due to cardiovascular disease and cancer. Obesity increases the risk of a number of diseases including the two major killers – cardiovascular disease and cancer, associated with premature death.

Sunderland has significantly higher premature deaths in cardiovascular disease and cancer, and higher rates in diabetes. There is a strong correlation between cardiovascular mortality in the under 75 years and those who live in the most deprived quintiles in Sunderland.

We know that children who are obese are five times more likely to become obese adults. In Sunderland we have a significantly higher number of wards with obese children than England and a clear link between obesity and wards in the most deprived areas.

Through reducing access to fast food and takeaway outlets we can protect our children and young people from obesity which increase the risk of a range of diseases that can have a significant impact on premature death in the city.

Summary...

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### Healthy food

- Cause of obesity is complex
- Tackling obesity needs a whole system approach
- Evidence shows higher levels of obesity where there are more fast food outlets
- Some areas restrict new hot food takeaways near schools

### Healthy food in Sunderland

- Obesity increases risk of cardiovascular disease and cancer - higher rates of death from these in Sunderland
- Obese children five times more likely to be obese adults
- Higher number of wards with obese children than England
- Protect health of children and young people by restricting fast food take aways

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A PLACE THAT SUPPORTS OUR WELLBEING...
The Five Ways to Wellbeing is a set of evidence-based public mental health actions, identified by the New Economics Foundation, as a way of living that can improve people’s mental health and emotional wellbeing. The “Ways” are described as Connect, Be Active, Take Notice, Keep Learning and Give. Each of these elements is influenced not only by choices that people make but also by the opportunities that are available to them through the environment in which they live. Mental health is a key concern in Sunderland. This is borne out by many key indicators. For example, there are four measures of self-reported wellbeing in the Public Health Outcomes Framework: satisfaction, worthwhile, happiness and anxiety. Sunderland has a worse score than the national rate for all of these measures – for three of these the measure is significantly worse. Protecting or improving the environment in ways that can support people to put into practice the Five Ways to Wellbeing is likely to improve mental health in the city.

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**Connect**

Connect, refers to social connectivity. Thoughtful approaches to the built environment can help people to connect while, as described elsewhere in this report, busy roads often prevent people from having social interaction. In addition, an appropriate level of open space is also important as it can provide a platform for community activities and social interaction leading to improved social cohesion.

**Be Active**

Be Active relates to physical activity which is discussed elsewhere in this chapter. Physical activity undoubtedly has an impact on mental as well as physical health. Research identifies a 20%-30% lower risk of depression and dementia for adults participating in daily physical activity. The prevalence of depression amongst patients registered with Sunderland GP Practices is significantly higher than the national average and so supporting local people to remain active is as important in reducing the risk of poor mental health as it is for reducing the risk of being overweight.

**Take Notice**

Take Notice, highlights the importance of natural landscapes. A review looking at the health benefits of outdoor exercise in natural environments found evidence to suggest that engaging in physical activity in these settings is associated with additional benefits to mental wellbeing that are not seen with similar levels of indoor activities. Another study which found lower rates of disease among people living in environments with more green space within a kilometre radius of the home found that the association was strongest for anxiety disorder and depression.

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54 Common Mental Health Disorders Profile. PHE. Available at: https://fingertips.phe.org.uk/profile-group/mental-health/profile/common-mental-disorders/dataset-page/5?gid=1918132720&pa=46&pa=6390000027&pa=16&ov/E38000176&ov=1946&age=1168&uv=4
Keep Learning

Keep Learning identifies the importance of learning and doing new things for our mental health and wellbeing as well as our broader health. Research shows that participation in non-accredited learning makes a contribution to individual wellbeing including increased life satisfaction and reduced depression in women as well as improved self-efficacy through leisure or interest-related learning and a positive impact of work-related training on life satisfaction and self-efficacy\textsuperscript{57}. The Marmot Review describes how adult learning improves confidence and self-efficacy which is positively associated with health behaviours. For example the estimated effect of taking one to two courses between the ages of 33 and 42 is a 3.3% increase in the probability of giving up smoking\textsuperscript{58}. The development of indoor and outdoor spaces that give people an opportunity to learn can, therefore, improve their mental wellbeing and physical health.

Give

Give recognises the importance of giving to others for our mental wellbeing that is greater than merely connecting with others. Enabling people to volunteer within the city is good for their mental health and wellbeing. By developing opportunities that involve being outdoors in green space or have some element of physical activity, we can support people’s health and wellbeing still further.

Recommendations

This chapter of the report identifies some of the key ways in which the local environment plays an important role in the health outcomes experienced by people living in Sunderland. The evidence suggests that Winston Churchill’s insights in 1924 on the built environment still hold today but we would probably add that access to the natural environment is also fundamental for good health – and that one necessarily impacts on the other. As discussed at the beginning of the chapter, this is an important time to tackle some of these issues and to ensure that as the Local Plan and related policies are developed the health of local people is considered as a significant factor in determining the way forward.

It is therefore recommended that partners within the city:

- Undertake an evidence-based Health Impact Assessment of the Local Plan and embed the recommendations from the assessment into the final publication draft of the plan;
- Consider the implications of the memorandum of understanding in relation to health and housing and take appropriate actions;
- Expedite the number of 20mph roads in residential areas of the city;
- Consider the prioritisation of healthy neighbourhoods and active travel in the city to address low levels of physical activity and to protect the environment;
- Wherever possible, protect green spaces in the city, particularly in disadvantaged neighbourhoods;
- Develop policies to restrict the access that children and young people have to unhealthy food, including those available through hot food takeaways;
- Ensure that the impact of developments on emotional health and wellbeing are considered alongside those on physical health in any Health Impact Assessment.
Siobhan Todd is a pharmacist at R Whitfield in Easington Lane, which is one of over 30 pharmacies in Sunderland to be given Healthy Living Pharmacy status. She said: “There isn’t a doctors surgery in Easington Lane so we’ve always been convenient for local people who need health advice and information. “Being a Healthy Living Pharmacy is a continuation of that service and it’s about ensuring we have a team here who can help people who want to make a change. “People drop in all the time for all sorts of advice and information and we hope that by also offering the Healthy Living Pharmacy services, we’ll see many more local people.”
3. KEY ACHIEVEMENT FOR THE PUBLIC HEALTH TEAM 2016/17

2016/17 saw the coming together of the Public Health Strategy Team, the Public Health Commissioning Team and the Health Improvement Practitioner for Children and Young People. This necessarily led to a strong focus on Commissioning during the year to comply with a challenging procurement strategy for Public Health Services.

The first key development was the new Substance Misuse Service, Wear Recovery, which started on 1 July. This service is led by Northumberland Tyne and Wear Mental Health Foundation Trust working with DISC and Changing Lives. Although there was an inevitable disruption to services following transition, by the end of the year there were clear signs of improvements in outcomes for service users.

Following continued poor outcomes relating to alcohol and children and young people in the city, there was also a focus on substance misuse services for Children and Young People. This was made more complicated by the planned movement of the YDAP (Youth Drug and Alcohol Project) service from the council to the new Children’s Company, Together for Children. In order to support this planned move, the Public Health team worked with Children’s Services to develop a new YDAP Service Specification to support improved outcomes and the transfer of the service to the new company.

The focus on alcohol continued with ongoing input to the licensing process and particularly through the commissioning of research to provide intelligence to support the development of Cumulative Impact Policies in relation to licenses for the sale of alcohol. The team also worked with other local authorities in the North East in relation to the re-commissioning of the North East Alcohol Office, Balance.

There was also a continued focus on supporting people in the city to stop smoking. A new Tobacco Alliance Action Plan was developed and the team worked with Northumberland Tyne and Wear Mental Health Trust to support it in its move towards becoming a smoke-free hospital. Again, we worked with other local authorities to re-commission the North East Tobacco Office, Fresh.

Opportunities were also taken to embed brief intervention in relation to alcohol and tobacco amongst front-line health and social care workers through a new Healthy Living Pharmacy Programme and the Making Every Contact Count (MECC) Programme.

Acting on intelligence and evidence is a key function of public health and so as part of the restructure of the team, we increased our analyst capacity. We also undertook some key pieces of analysis including an Equity Audit of access to Emergency Hormonal Contraception (EHC) and the C-Card and a Self Harm Needs Analysis. The team also commissioned a Health Related Behaviour Survey to understand key issues for school age children and young people and a Health and Lifestyle Survey to similarly understand the current lifestyle choices of adults in the city.

We continue to support Sunderland Clinical Commissioning Group in its commissioning activities and the development of its strategic plans. As part of this the team assisted in the development of an expression of interest for the National Diabetes Prevention Programme (NDPP). At the same time, we worked to improve the provision of the NHS Health Checks Programme, which supports the delivery of the NDPP.

Mental health continues to be a priority for the team and so building on the recent suicide audit, a Suicide Prevention Action Plan was developed. We also facilitated a Suicide Prevention Workshop for members of the Health and Wellbeing Board and other partners in the city.
We also undertook a range of activities to support initiatives planned for 2017/18. These included the re-development of a range of services commissioned from pharmacies and GP surgeries in Sunderland including Supervised Consumption, Needle Exchange, Stop Smoking Services, Emergency Hormonal Contraception, Long Acting Reversible Contraception (LARC) and NHS Health Checks. We also undertook a range of preparatory work to support the commissioning of the 0-19 Public Health Services. This include a 0-19 Needs Assessment, Consultation and Engagement with key stakeholders, children and young people and parents and a 0-19 Benchmarking Exercise to enable us to demonstrate value for money.

Finally, following on from the 2015 Director of Public Health Annual Report which identified the links between economy and health, the team has worked with other Local Authorities to ensure the continuation of the North East Better Health at Work Award. In addition, the Health and Wellbeing Board is regularly engaging with the Economic Leadership to identify opportunities to work together on shared priorities.