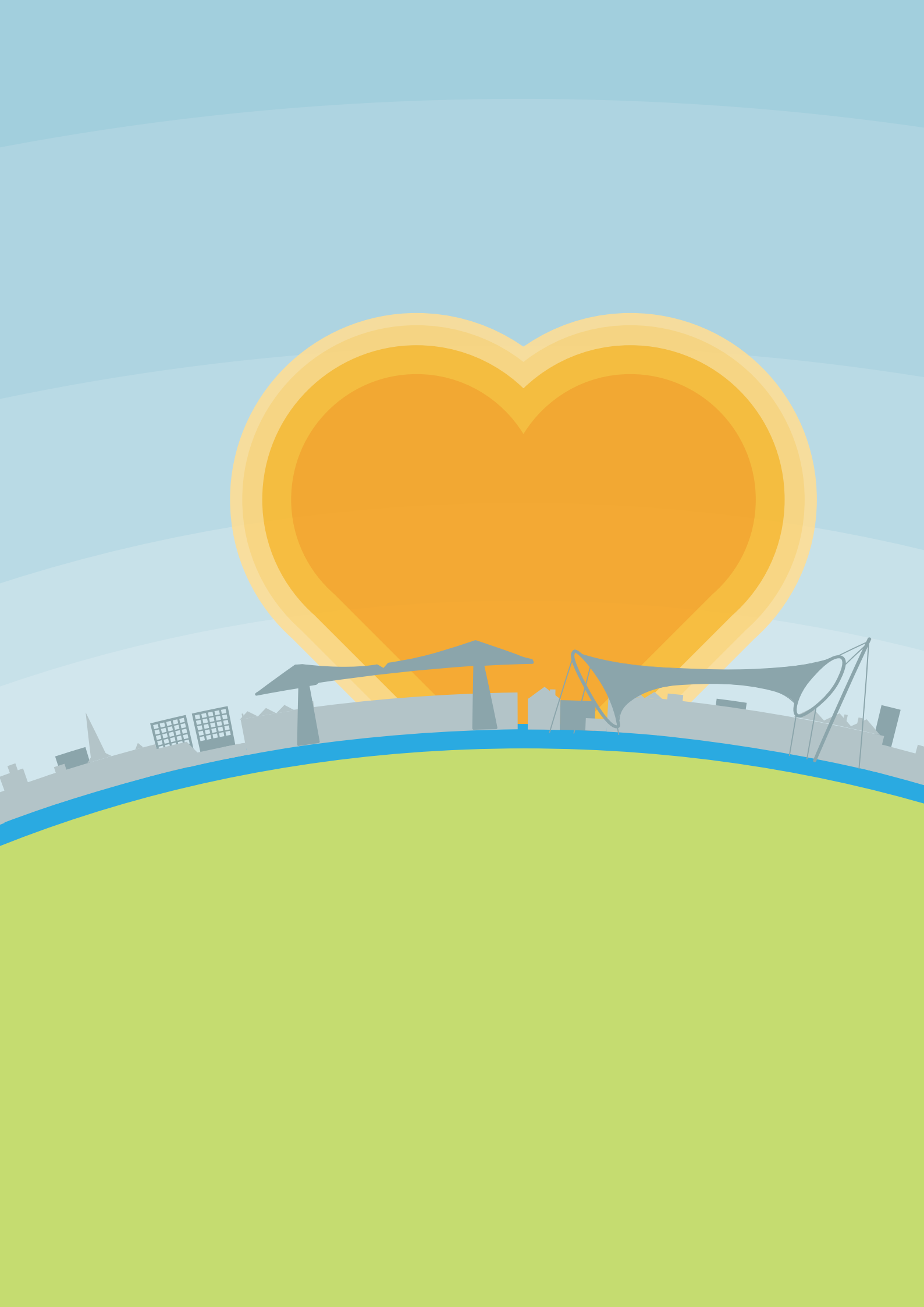


**DYING BEFORE OUR TIME?**  
**ACHIEVING LONGER  
AND HEALTHIER LIVES  
IN MIDDLESBROUGH**

**Middlesbrough DPH Annual Report 2016/17**





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# DYING BEFORE OUR TIME? ACHIEVING LONGER AND HEALTHIER LIVES IN MIDDLESBROUGH

Middlesbrough DPH Annual Report 2016/17

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# FOREWORD

BY DIRECTOR OF PUBLIC HEALTH EDWARD KUNONGA

**Welcome to this year's annual report - *Dying Before Our Time?* This is my fourth report since the transfer of public health responsibilities from the NHS to the Council as part of the Health and Social care Act 2012. The previous reports have focused on specific public health challenges as well as successes.**

Last year's report, *Dementia Friendly Middlesbrough*, drove a number of improvements summarised in the early sections of this report. More work still needs to be done on this agenda and will continue to be reported back annually through the Council's Executive and Health and Wellbeing boards.

This year's report, *Dying Before Our Time?*, highlights a concern with the trends in length and quality of our life for our residents. The year on year improvements in life expectancy at birth and healthy life expectancy across the town have stalled and the latest data is showing a downward trend. Also of concern is that the inequality gap in life expectancy at birth between us and the national average is widening, driven mainly by the widening gap within the town between deprived and affluent wards. Approximately one third of all deaths in Middlesbrough are in people aged below the age of 75. The majority of these premature deaths are in people living in our deprived wards. We also know from the data on quality of life that people within our deprived wards spend more of their shorter lives living with poor health. The challenge we face is to improve length and quality of life with a focus on deprived and disadvantaged groups across the town.

This report presents the major causes of premature deaths, describes work that is already underway and makes recommendations for further action. Whilst cancer, heart and respiratory diseases account for a large number of premature deaths, increasing deaths from suicides, drugs, alcohol, accidents, excess winter deaths and infant mortality contribute to these reductions in life expectancy. Further work needs to be done to reduce deaths, illness and suffering from these causes, most of which are preventable.

I am very encouraged by the strategic developments we have across the town as these will contribute to longer and healthier lives for our residents. I will describe some of these themes briefly here. Middlesbrough Council's Strategic Plan focuses on ensuring we achieve longer and healthier lives and reducing inequalities. The three areas of focus, namely economic regeneration, social regeneration and business imperatives, will have a positive impact on length and quality of life for our residents. The underlying causes of premature deaths and poor health outcomes are social and economic. Addressing socioeconomic factors such as unemployment, skills, housing, poverty and crime will have a greater and sustainable impact on health and wellbeing. We need to ensure economic growth is inclusive and those furthest away, the disadvantaged and vulnerable are not excluded but supported to benefit from these opportunities.

The establishment of a Joint Public Health Service together with Redcar and Cleveland provides opportunities to join forces in addressing common public health challenges, establishing a centre of excellence for public health and having a unified, stronger and credible voice on health and wellbeing issues locally, regionally and nationally.

The prevention strategy for adults and older people, *Live Well Middlesbrough*, sets out how prevention of these major causes of premature mortality and preventable illnesses is at the forefront of the agenda for healthier Middlesbrough. In July 2017 the Mayor officially launched the Live Well Centre, an innovative health and wellbeing offer for our residents. Already the centre is demonstrating improved access to preventative services in an integrated and non-stigmatising way. The redevelopment of the Middlesbrough Children's Trust arrangements provides a strategic multi-agency forum to improve outcomes for children and young people across the town. The work done to date demonstrates a renewed commitment and a sense of urgency to ensure we give our children and young people the best start in life.

I hope the report generates discussion and informs debate on the actions we all can take to ensure our residents do not die before time!

Yours sincerely,

**Edward Kunonga**

Director of Public Health  
Middlesbrough Borough Council

# PROGRESS AGAINST 2015/16 DPH ANNUAL REPORT: DEMENTIA FRIENDLY MIDDLESBROUGH

## WE SAID

## WE DID

### Dementia in Middlesbrough - Scale of the Problem

- 1 Carry out a detailed Dementia Health Needs Assessment to inform the development of a dementia strategy and action plan.
- 2 Ensure better knowledge and awareness of dementia to help tackle stigma and improve understanding amongst communities and professionals.
- 3 Strengthen working arrangements for the Dementia Collaborative to ensure it is a strategic forum for multi-agency working and co-production between agencies, patients and carers across the dementia pathway from prevention to end of life care.

NWA Research Agency have been commissioned to undertake a detailed needs assessment, which will provide strategic direction for the Dementia Collaborative.

Middlesbrough registered as a Dementia Friendly borough in March 2016 and programme of work started on creating promotion and awareness.

Business case to Better Care Fund for South Tees Collaborative was rejected March 2016.

Paper to go to the South Tees Integrated Executive Group to seek support for establishing a key group.

### Tackling the Preventable Causes of Dementia - Preventing Well

- 4 Given that some types of dementia and a number of long term conditions share common risk and protective factors, prevention programmes need to be framed and delivered with a holistic approach to improving health and wellbeing that supports the promotion of good brain and heart health throughout life.
- 5 Local public awareness campaigns developed to raise levels of understanding on preventable causes of dementia improving uptake of prevention and early intervention.

Physical activities exclusively for people with dementia and their carers.

Promotion and awareness raising through campaigns, using local media and community networks.

Programme of work includes:

- Promotion and awareness raising using local media and community networks
- Activity and promotion at the Live Well Centre
- Physical activities exclusively for people with dementia and their carers
- Promotion of Dementia Books on Prescription through Middlesbrough Libraries, general practices and the Live Well Centre.
- Single point of access to information about dementia and memory loss.

### Early Diagnosis and Effective Management of Dementia - Diagnosing Well

- 6 Increasing dementia diagnosis needs to remain as a priority so that individuals are provided with the support they need.

Variance in general practice diagnosis to be looked at and linked to work around the Primary Care Strategy.

Dementia Friends sessions being rolled out to general practices. Borough Road and Nunthorpe Practice to facilitate a Dementia Friends Café for patients.

### Living Well with Dementia

- 7 Ensure people with dementia feel safe and accepted members of the community in Middlesbrough.

A multi-agency Dementia Friendly Middlesbrough Working Group established.

A guide *6 Steps to Becoming a More Dementia Friendly Organisation* and resources developed.

A 'Dementia Grant' under the Housing Assistance Policy to help residents who have dementia to live independently, comfortably and safely in their own homes.

# PROGRESS AGAINST 2015/16 DPH ANNUAL REPORT: DEMENTIA FRIENDLY MIDDLESBROUGH

## Dying Well with Dementia

### WE SAID

- 8 Improve the early identification of patients across all diagnoses with end of life care needs, allowing timely access to advanced palliative and end of life care planning.
- 9 Work collaboratively with health and social care, to ensure that people living with dementia die with dignity and in the place of their choice.

### WE DID

Develop a dementia service plan that takes account of population projections and the impact dementia will have on the demand for health, social care and related services.

## Creating Dementia Friendly Environments

- 10 It is important for Middlesbrough to continue with the work to create dementia friendly communities and environments so that people with dementia, their families and carers feel safe and accepted members of the community.

Achievements include:

- Over 70 local businesses and organisations signed up to Dementia Friendly Middlesbrough
- Customer facing services adapting to the needs of people living with dementia and their carers
- Dementia Champions and Dementia Friends Sessions are being rolled out
- 6,017 dementia friends across Middlesbrough and 18 registered Dementia Champions
- Work progressing with BAME communities including GRT community to raise awareness of dementia.



## Chapter 1

# LIFE EXPECTANCY AND HEALTHY LIFE EXPECTANCY IN MIDDLESBROUGH

Life expectancy at birth is an important measure of the overall health and is a good indicator of inequality in length of life. Low life expectancy is indicative of poor health and wellbeing within an area.

As life expectancy improves it is important to ensure that the additional years of life are being spent in good health. Therefore it is important to not only have interventions that add the length of life but also improve the quality of life - adding years to life and life to years.

Healthy Life Expectancy is used to assess this quality of life dimension to life expectancy, the average number of years a person would expect to live in good health based on current disease rates and self-reported good health. It is therefore an important summary measure of mortality and ill-health.

Much of the lower life expectancy in some areas of Middlesbrough is due to preventable deaths. The *Public Health Outcomes Framework (PHOF)* shows a reduction in preventable mortality over time in Middlesbrough. However, inequalities still remain in deaths from cancers, circulatory disease, respiratory disease, drug related deaths, accidents, infant mortality and suicides. Inequalities in health are largely a result of the social and economic environments in which people are born into, grow, live and grow old. For a number of health and wellbeing outcomes, there is an inequality gap which matches the pattern of deprivation across the town and the gap is widening over time.

This report focuses on these major cause of preventable deaths as well as other causes that account for a significant impact on life expectancy figures because of the average ages of death. These include suicides, drug related deaths, accidents, infant and child deaths.



## LIFE EXPECTANCY

Life expectancy at birth is the number of years a child born today would be expected to live if they experienced the current mortality rates for a given period. A widely used indicator of the health of a population, life expectancy measures length rather than quality of life.

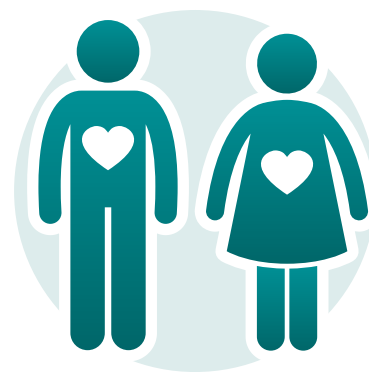
Life expectancy at birth reflects the overall mortality of a population. It summarizes the mortality pattern that prevails across all age groups - children and adolescents, adults and the elderly.

Life expectancy at birth in Middlesbrough is 76.2 years for males and 79.8 for females.

This is lower than the England average of 79.5 for males and 83.2 for females.

When compared against the local authority with the highest life expectancy in England, in Middlesbrough males are living on average 7.3 years and females 6.6 years less.

Trends in Middlesbrough show life expectancy increased year on year up to 2011-2013 when it started to reduce with a greater reduction for males. This trend is concerning and this report looks at the major contributing causes of early deaths and makes recommendations for improvement.



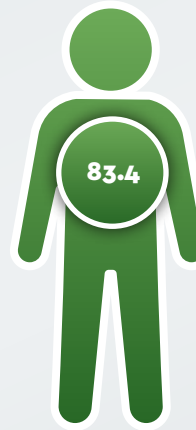
## LIFE EXPECTANCY AT BIRTH IN MIDDLESBROUGH - MALE AND FEMALE



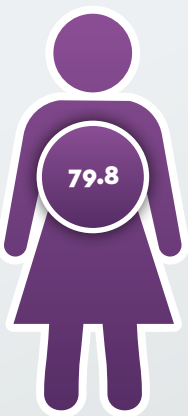
Middlesbrough



England



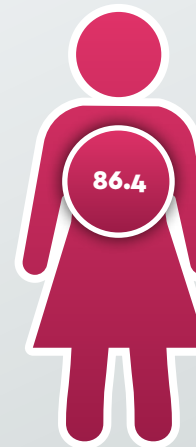
Highest Local Authority



Middlesbrough



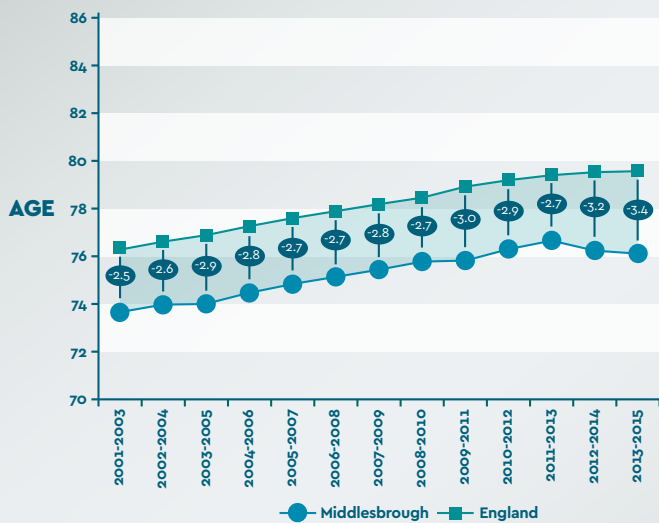
England



Highest Local Authority

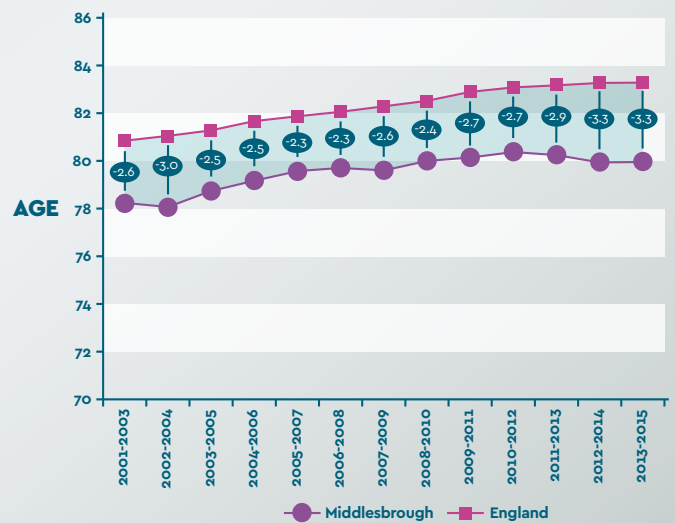
Source: ONS, 2013-15

### LIFE EXPECTANCY AT BIRTH (male)



Source: ONS, 2013-15

### LIFE EXPECTANCY AT BIRTH (female)



The second concern is the widening gap in life expectancy for men and women living in Middlesbrough compared with the England average. Based on the latest data Middlesbrough men have the same life expectancy in 2013-15 as the average male life expectancy for England in 2000-02. For females Middlesbrough's current life expectancy is the same as England female life expectancy between 1996-1998. This means there is 13 year and 17 year lag for male and female life expectancy between Middlesbrough and England respectively.

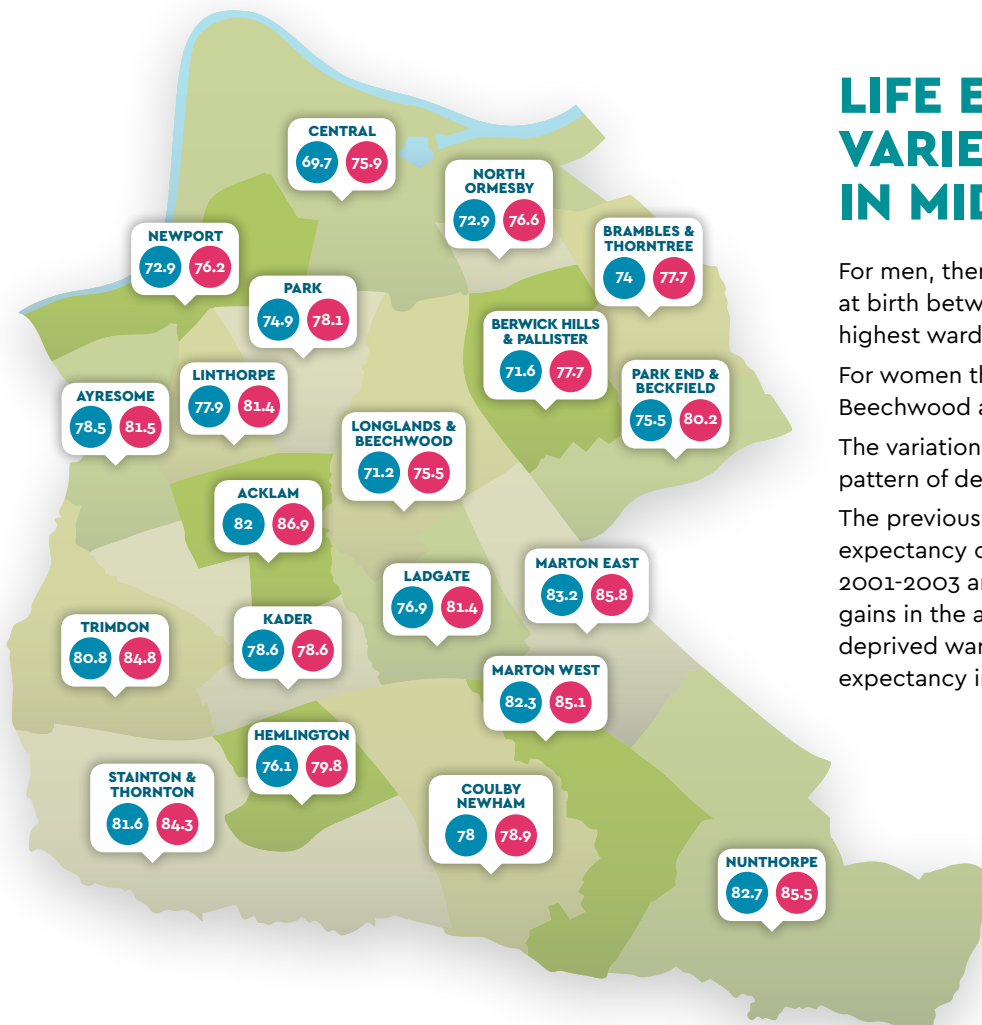


## LIFE EXPECTANCY LAG - MIDDLESBROUGH V ENGLAND



Source: ONS, 2013-15

When compared against 15 other similar local authorities in England, Middlesbrough had the lowest life expectancy for both males and females between 2013-15.



## LIFE EXPECTANCY VARIES ACROSS WARDS IN MIDDLESBROUGH

For men, there is a 13.5 year gap in life expectancy at birth between the lowest ward (Central) and the highest ward (Marton East).

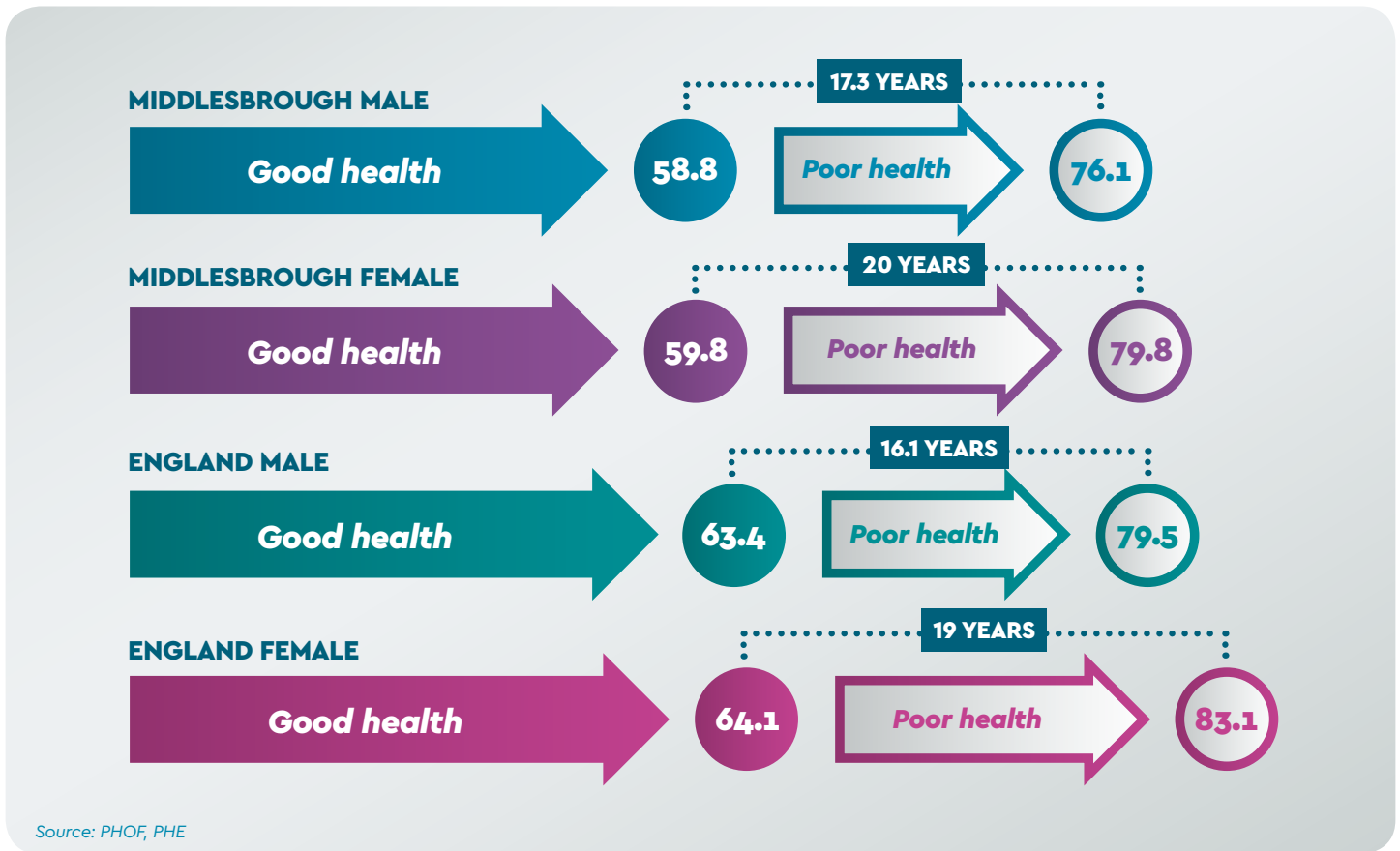
For women there is 11.4 gap between Longlands & Beechwood and Acklam.

The variation in life expectancy by wards mirrors the pattern of deprivation across the borough.

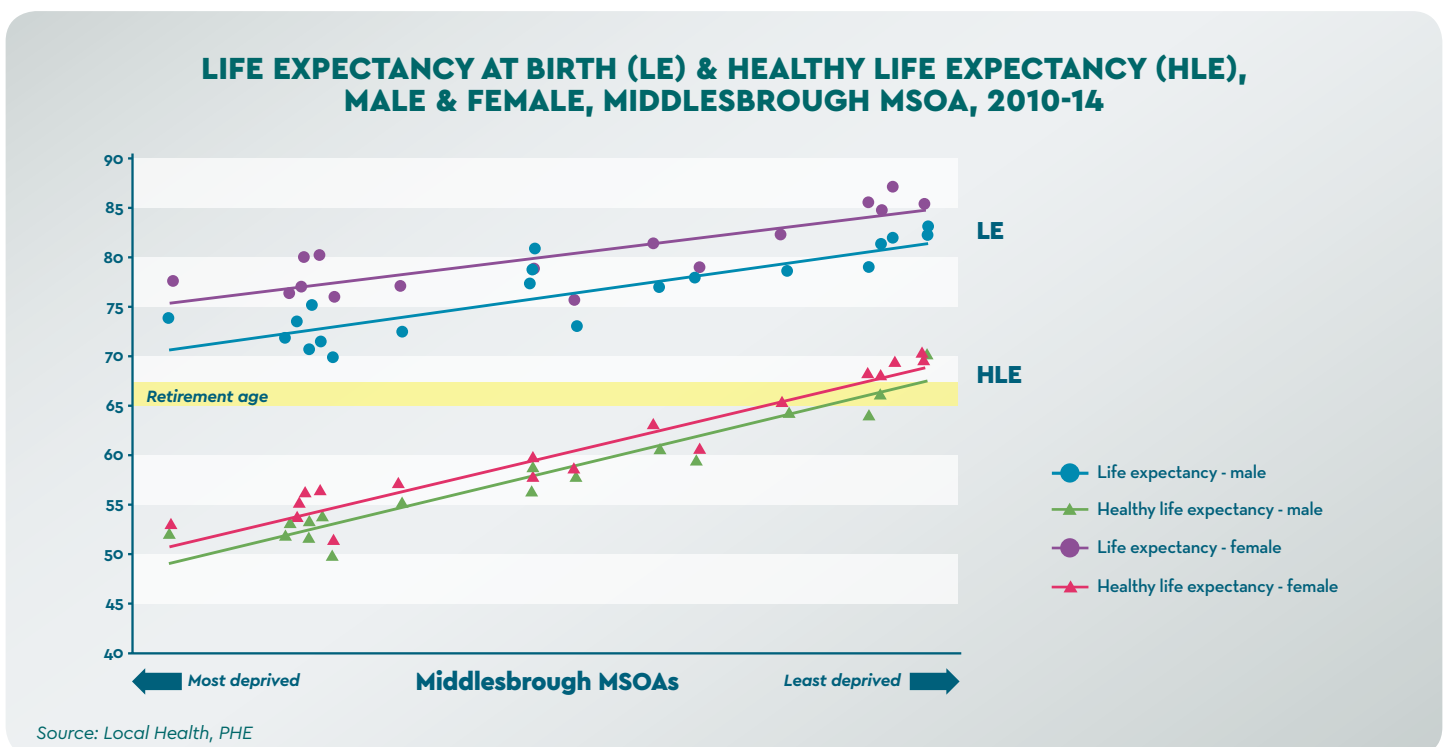
The previous year on year improvements in life expectancy observed in Middlesbrough between 2001-2003 and 2011-2013 were mainly driven by gains in the affluent wards across the town, with the deprived wards showing very small changes in life expectancy in the last 15 years.

# HEALTHY LIFE EXPECTANCY

Healthy life expectancy for both males and females is significantly lower than the England average. Not only do we have a challenge of premature deaths, a greater proportion of our population spends much of their adult life living with poor health.

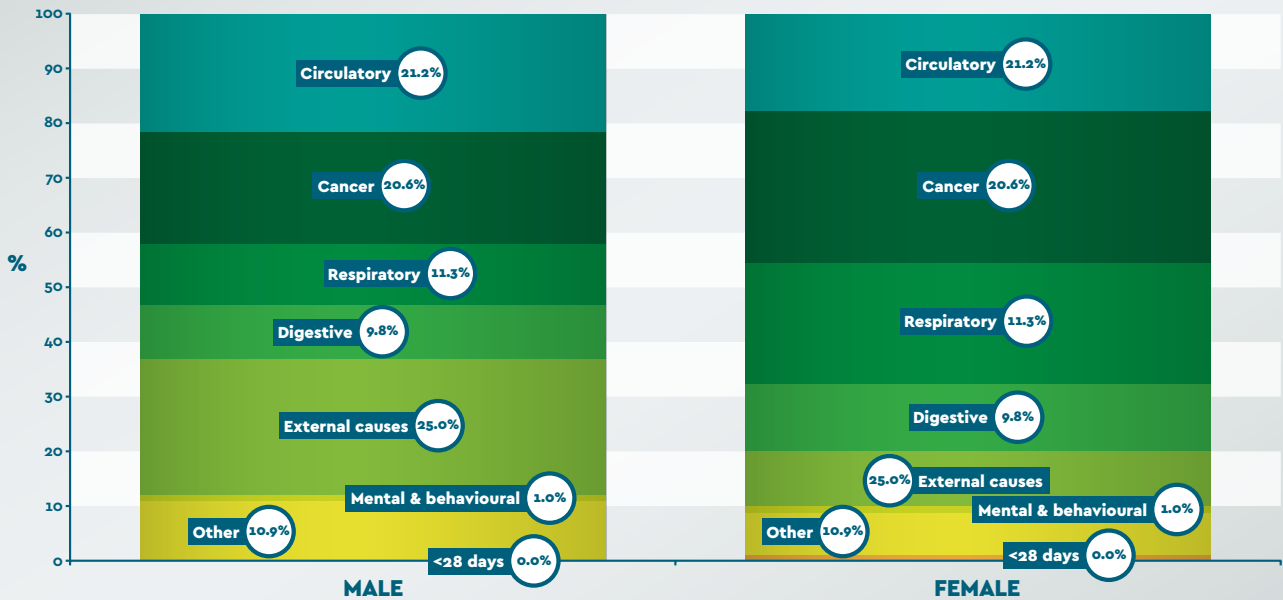


For males living in Marton and Nunthorpe, healthy life expectancy is higher than the life expectancy of the most deprived area (MSOA 1 - approximately Central ward).



# HEALTH INEQUALITIES IN LIFE EXPECTANCY

The chart below outlines the causes of death that are driving inequalities in life expectancy within Middlesbrough, by comparing the least deprived areas with the most deprived. Cancer deaths account for the biggest gap for both males and females. For males, the second biggest gap is external causes (which includes suicides, drug related deaths and accidents), followed by circulatory and respiratory disease. For females the second biggest cause of the gap in life expectancy are deaths from respiratory disease, followed by deaths from circulatory diseases. Targeting the causes of death which contribute most to the life expectancy gap should have the biggest impact on reducing health inequalities.



Circulatory diseases include coronary heart disease and stroke. Respiratory diseases include flu, pneumonia and chronic obstructive airways disease. Digestive diseases include alcohol-related conditions such as chronic liver disease and cirrhosis. External causes include deaths from injury, poisoning and suicide. Mental and behavioural include dementia and Alzheimer's disease. Analysis by Public Health England Epidemiology and Surveillance Team based on ONS death registration data, and mid year population estimates, and DCLG Index of Multiple Deprivation.

## NON-GEOGRAPHICAL INEQUALITIES

There are several groups of people who have lower life expectancy at birth and healthy life expectancy.

### People with serious mental illness

There is extensive evidence that shows people with severe mental illness die 15 to 25 years earlier than the general population. The vast majority of these deaths are due to preventable chronic physical medical conditions such as cardiovascular, respiratory and infectious diseases, diabetes and hypertension. Middlesbrough has the highest level in England for excess under 75 mortality in adults with serious mental illness.

### Learning disabilities

People with learning disabilities die, on average, 14 years younger than the general population. The causes of death for this population group are preventable long term conditions such as diabetes, obesity, heart failure, chronic kidney disease or stroke and cancers. In addition, people with learning disabilities were 26 times more likely to have epilepsy, eight times more likely to have severe mental illness, five times more likely to have dementia and three times more likely to suffer with hypothyroidism, therefore impacting on their healthy life expectancy and quality of life (Department of Health 2014, Premature Deaths of People with Learning Disabilities).

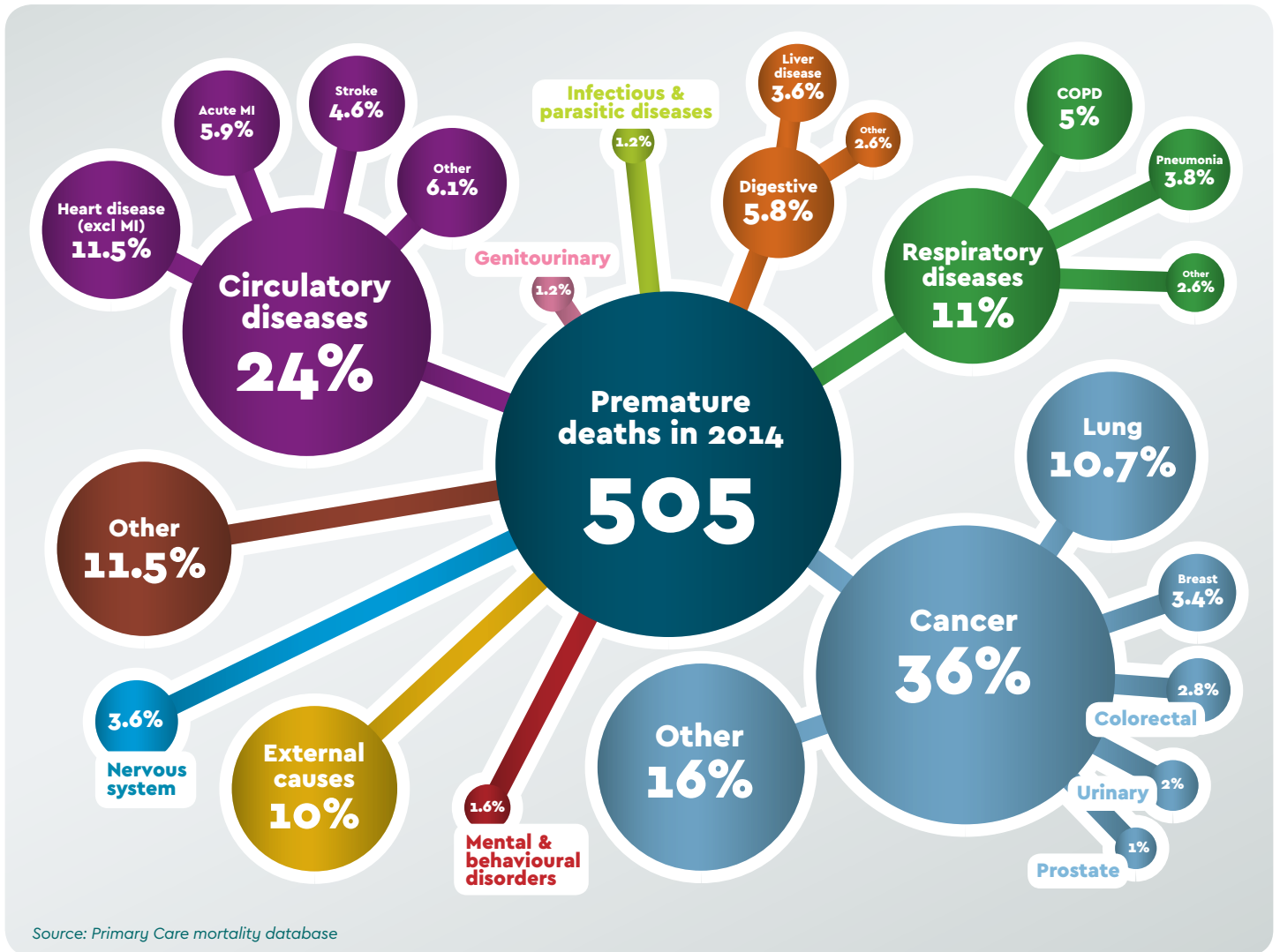
### Minority ethnic groups

Minority ethnic groups generally have poorer health and greater premature deaths compared to White British ethnic group. There are wide variations in health between different ethnic groups in England. Poor health is caused by a wide range of factors, including biological determinants (age, sex, hereditary factors) and wider social determinants such as education, social position, income, local environment and experiences of racism and racial discrimination. The social determinants of health are unequally distributed across ethnic groups, leading to unjust and preventable health inequalities (Economic and Social Research Council - ESRC: Centre on Dynamics of Diversity - CoDE, 2011).

# PREMATURE DEATHS

A large proportion of premature deaths in Middlesbrough are avoidable through preventative measures and effective health care. The scale of avoidable deaths in the town is described in more detail in the following section.

Between 2010 and 2015, an average of 1,395 people died every year in Middlesbrough. Cancer, circulatory diseases (heart disease and stroke) and respiratory diseases accounted for 70% of all deaths. 505 (36%) of deaths in 2014 were in people aged under 75 years or premature and the corresponding causes of death are shown below. Cancer accounted for the highest proportion of deaths with lung and breast cancer the main contributors. External causes such as accidents, injuries and suicides caused nearly 10% of deaths under 75.



The Public Health England report *Longer Lives* highlights premature deaths for each local authority area, focusing on the four most common causes - heart disease and stroke, lung disease, liver disease and cancer. In this report Middlesbrough is ranked 147<sup>th</sup> out of 150 local authorities for the having one of the highest under 75 mortality rates of 478 per 100,000 population.



# Middlesbrough

Similar Local Authorities

Worst 13th out of 16

National

Worst 147th out of 150



Population 139,509



Total premature deaths 1,552 2003-15



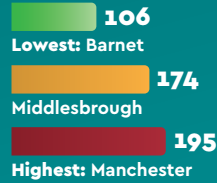
## CANCER

Common causes: Smoking, alcohol, poor diet

Rank

140th out of 150 LA's

Deaths per 100,000 for 2013-15

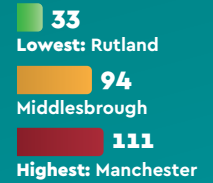


## LUNG CANCER (ALL AGES)

Rank

143rd out of 150 LA's

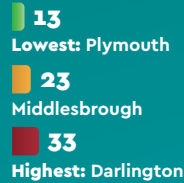
Deaths per 100,000 for 2013-15



## BREAST CANCER

Rank

113th out of 148 LA's



## COLORECTAL CANCER

Rank

147th out of 148 LA's

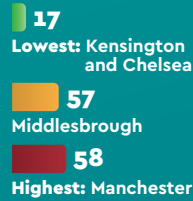


## LUNG DISEASE

Common causes: Smoking, air pollution

Rank

143rd out of 149 LA's



## LIVER DISEASE

Common causes: Alcohol, hepatitis, obesity

Rank

140th out of 148 LA's



## INJURIES

Rank

148th out of 149 LA's

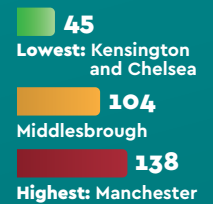


## HEART DISEASE & STROKE

Common causes: High blood pressure, smoking, poor diet

Rank

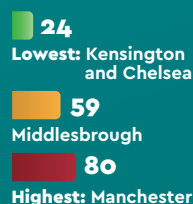
135th out of 150 LA's



## HEART DISEASE

Rank

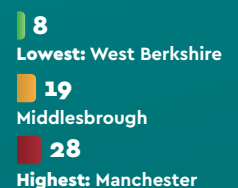
136th out of 150 LA's



## STROKE

Rank

137th out of 149 LA's



# AVOIDABLE MORTALITY IN MIDDLESBROUGH

**Avoidable mortality is a term used for causes of death that are considered unnecessary and preventable through timely public health interventions or amenable to timely effective healthcare services.**

Although deaths from particular conditions can be thought of as avoidable, this does not mean that every death from that condition could have been prevented. Other factors, such as age, lifestyle, extent of disease at diagnosis and multiple diseases in an individual are not taken into account in the list of avoidable causes.

Most of the avoidable causes of death have an upper age limit of 74 years, a few are limited to younger age groups and deaths from injuries are included for all ages.

Analysing avoidable mortality does not identify definitively variation in health care or public health interventions. Instead it highlights areas that may benefit from more detailed investigation and targeted interventions particularly in the context of preventing premature mortality.

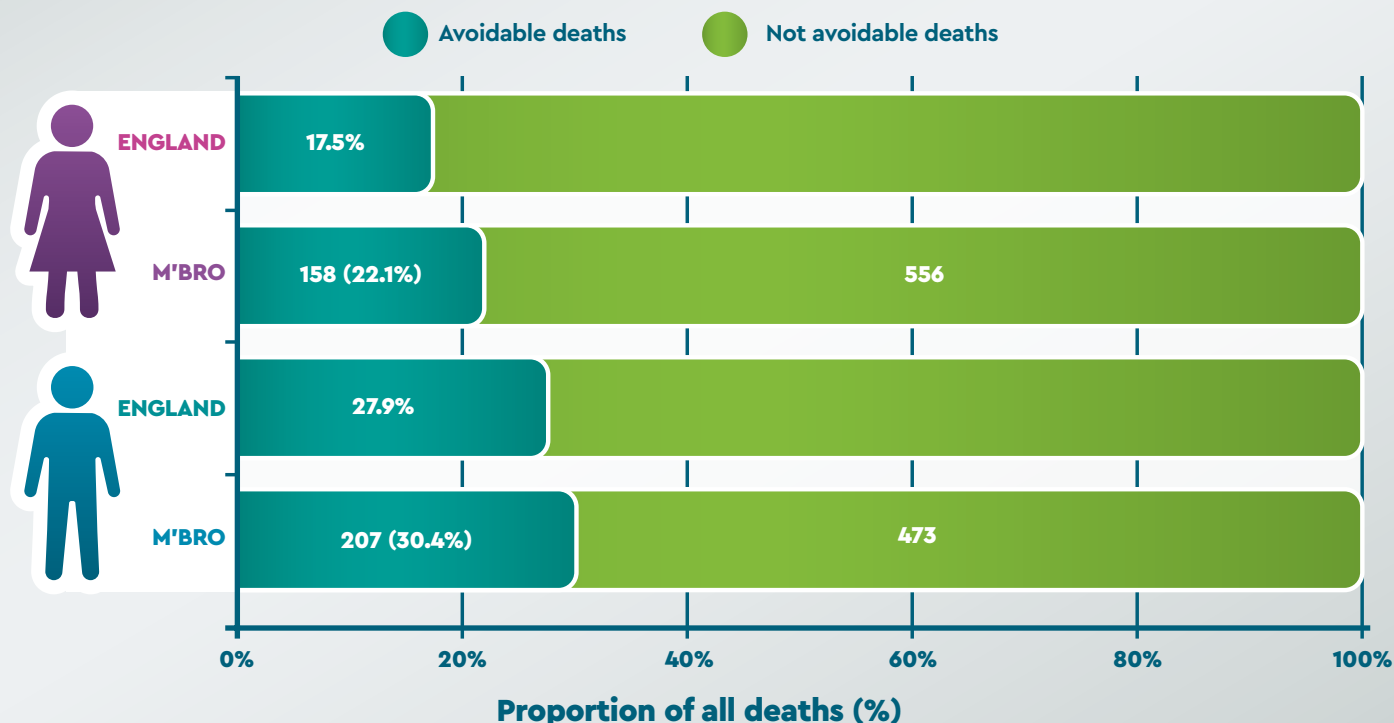
## AVOIDABLE DEATHS IN MIDDLESBROUGH

In 2014, a total of 1,394 deaths were recorded in Middlesbrough through the Primary Care Mortality Database (PCMD). The PCMD is used since it contains the clinical coding for the underlying cause of death, permitting identification of avoidable mortality.

There were 365 (26.2%) deaths were identified as avoidable. For males, the proportion of avoidable dates was 30.4% and 22.4% for females.

Compared with England, the proportion of avoidable deaths in Middlesbrough is higher for both men and women, but the gap between Middlesbrough and England is higher for women (4.6%) than for men (2.5%).

**NUMBER OF DEATHS CONSIDERED AVOIDABLE AS A PROPORTION OF ALL DEATHS, BY GENDER, MIDDLESBROUGH (2014) AND ENGLAND (2015)**

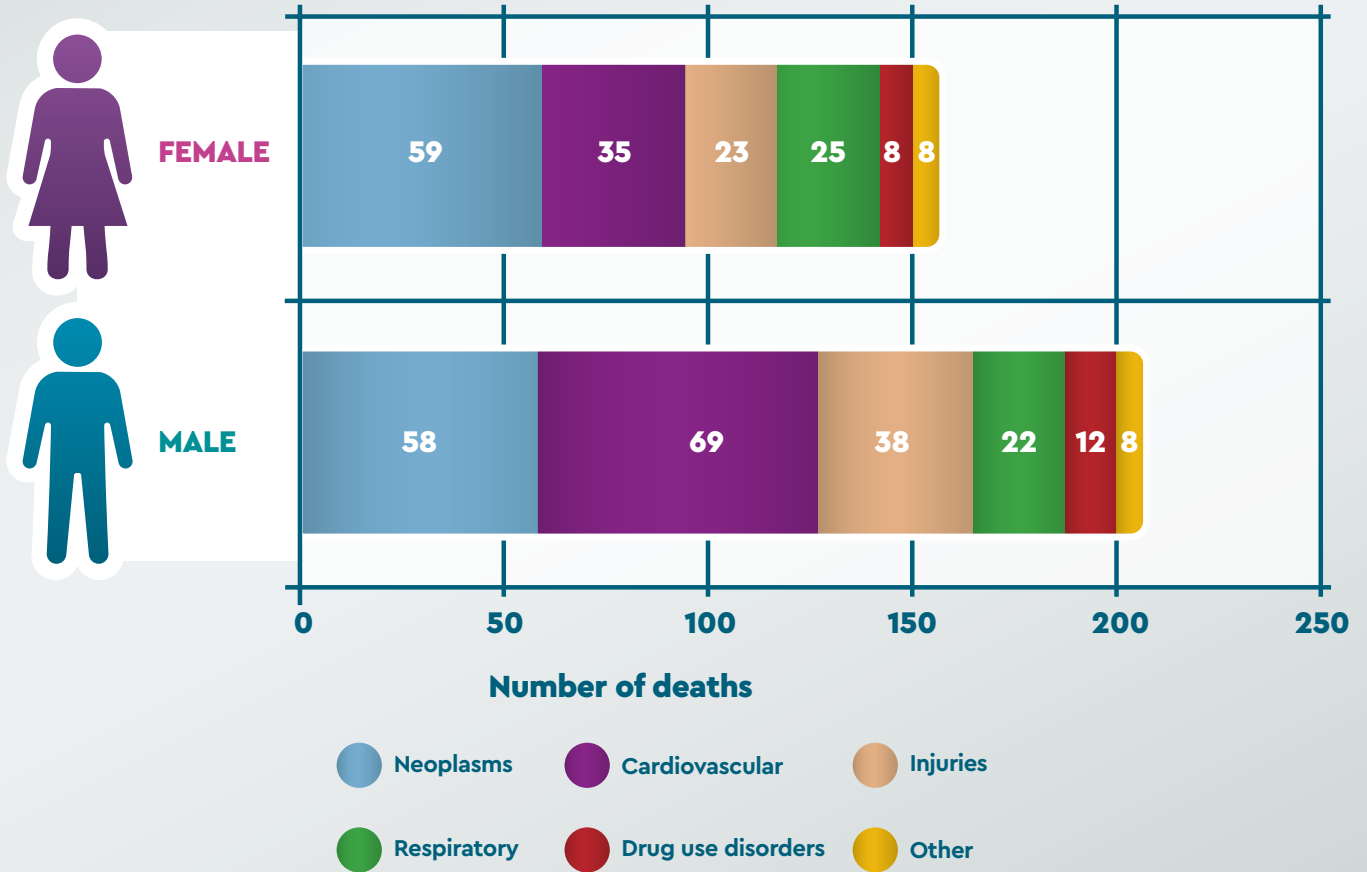


Source: PCMD / ONS

# CAUSES OF AVOIDABLE MORTALITY

Overall, mortality from neoplasms (tumours; mostly cancer but includes other abnormal tissue growth) contributed the largest number of avoidable deaths (117, 32.1%). Within the neoplasms category, lung cancer was overwhelmingly the largest single cause, accounting for 54 deaths (46.1%) in this category. The proportions for males (47%) and females (46%) were very similar. Cardiovascular diseases (28.5%) and injuries (16.7%) were the second and third largest contributors overall. Within injuries, accidental injury (excluding transport accidents) accounted for 34 (56%) of deaths. For women, neoplasms contributed the largest proportion (37.3%) but for men it was cardiovascular diseases (33.3%).

**AVOIDABLE DEATHS BY CAUSE AND GENDER, MIDDLESBROUGH (2014)**



Source: PCMD



Compared with a group of similar local authority areas, Middlesbrough has the second highest rate of avoidable mortality. Like all other areas in this group, the Middlesbrough rate is significantly higher than England. However, the Middlesbrough rate is also significantly higher than six of these statistical neighbours: Sunderland, Halton, Gateshead, Wolverhampton, St. Helens and Walsall.

## MORTALITY RATE FROM CAUSES CONSIDERED PREVENTABLE (persons) 2013-2015

Directly standardised rate - per 100,000

AREA	RECENT TREND	NEIGHBOUR RANK	COUNT	VALUE	95% LOWER CI	95% UPPER CI
ENGLAND	-	-	274,534	184.5	183.8	185.2
SALFORD	-	8	1,609	278.3	264.7	292.4
MIDDLESBROUGH	-	-	975	275.7	258.5	293.7
KINGSTON UPON HULL	-	1	1,700	272.7	259.7	286.1
TAMESIDE	-	10	1,630	267.3	254.4	280.7
KNOWSLEY	-	2	1,021	262.4	246.4	279.2
OLDHAM	-	11	1,538	261.3	248.3	274.7
ROCHDALE	-	4	1,458	261.0	247.7	274.8
STOKE-ON-TRENT	-	3	1,666	249.8	237.9	262.2
SANDWELL	-	5	1,907	247.3	236.3	258.7
HARTLEPOOL	-	12	640	243.9	225.2	263.7
SUNDERLAND	-	15	1,928	242.6	231.8	253.8
HALTON	-	7	842	236.4	220.5	253.1
GATESHEAD	-	13	1,331	232.7	220.3	245.6
WOLVERHAMPTON	-	6	1,510	231.6	220.0	243.7
ST HELENS	-	14	1,228	230.2	217.4	243.5
WALSALL	-	9	1,674	226.7	216.0	237.9

Source: Public Health England



The rate of preventable mortality in Middlesbrough tended to decline from 2002-04 to 2008-10. Since then, the Middlesbrough rate has remained similar, where the England rate has continued to reduce, resulting in a widening gap in preventable mortality between Middlesbrough and England. In 2008-10, the Middlesbrough rate was significantly lower than in 2005-07. Similar patterns are observed for males and females separately, but with male rates significantly higher than female rates.

## MORTALITY RATE FROM CAUSES CONSIDERED PREVENTABLE (persons) MIDDLESBROUGH

Directly standardised rate - per 100,000

Per  
100,000



PERIOD	COUNT	VALUE	LOWER CI	UPPER CI	NORTH EAST	ENGLAND
2001-03	1,128	326.2	307.3	345.9	-	254.7
2002-04	1,134	330.3	311.2	350.3	-	246.0
2003-05	1,116	326.5	307.5	346.4	-	238.2
2004-06	1,103	324.6	305.6	344.5	-	229.5
2005-07	1,072	314.9	296.2	334.5	-	222.7
2006-08	1,014	298.2	280.0	317.3	-	217.6
2007-09	993	291.5	273.5	310.3	-	211.5
2008-10	930	271.9	254.5	290.0	-	205.8
2009-11	971	280.7	263.2	299.1	-	197.7
2010-12	921	266.1	249.1	284.0	-	191.4
2011-13	920	264.1	247.2	281.8	-	187.4
2012-14	949	270.6	253.5	288.5	-	185.1
2013-15	975	275.7	258.5	293.7	-	184.5

● - lower than benchmark

Source: Public Health England

## SUMMARY

In 2014, more than one quarter of deaths in Middlesbrough (26.2%) were from causes considered avoidable (365 deaths out of 1,394 total deaths).

The proportion of avoidable deaths is higher for males (30.4%) than females (22.1%).

The proportion of avoidable deaths in Middlesbrough (26.2%) is higher than the proportion observed in England (22.6%). This remains true for males and females when considered separately.

Overall, neoplasms (mostly cancers) were the leading cause of avoidable deaths in Middlesbrough, accounting for 32.1% of avoidable deaths. Neoplasms were the leading cause for females, but cardiovascular diseases had the highest burden for males.

Within neoplasms, lung cancer was the most frequently recorded cause of death and accounted for 47% of avoidable neoplasm deaths for males and 46% for females. For females, breast cancer accounted for a further 29% of avoidable neoplasm deaths.

Within cardiovascular diseases, chronic ischaemic heart disease was the most frequently recorded cause of death, accounting for 35% of avoidable cardiovascular deaths for males and 40% for females. Acute myocardial infarction (heart attack) accounted for a further 30% of avoidable cardiovascular deaths for males and 26% for females.

# Chapter 2

# CANCER

## BACKGROUND AND RISKS

Cancer is a key public health priority in the UK and will affect 1 in 3 people at some point in their life. Breast, lung, bowel and prostate cancers together account for over half of all new cancers each year in the UK. Although cancer is most common in older people it is also the leading cause of death in Middlesbrough for those aged under 75 years of age.

An individual's risk of being diagnosed with cancer depends on many factors including age, lifestyle and genetic factors. About 40% of cancers are preventable by changes to lifestyle, with regard to smoking, obesity, alcohol consumption and exposure to sun.



### LIFESTYLE

### OTHER

- Eat fruit & veg**
- Keep a healthy weight**
- Be Smoke Free**
- Minimise risk at work such as asbestos**
- Minimise certain infections** (HPV, H. Pylori, EBV, HIV, Hepatitis B & C)
- Drink less alcohol**
- Minimise radiation** such as radon and unnecessary x-rays
- Be sunsmart**
- Eat less processed & red meat**
- Eat less salt**
- Be active**
- Eat a high fibre diet**
- Breastfeed if possible**
- Minimise any time spent on HRT**

Source: Cancer Research UK

The way lifestyle contributes to the risk of cancer depends on the type of cancer. For example, more than 80% of lung cancer is caused by smoking. This includes breathing in other people's cigarette smoke. For other cancers such as breast, bowel and prostate, obesity and dietary factors may increase an individual's your risk of developing them.

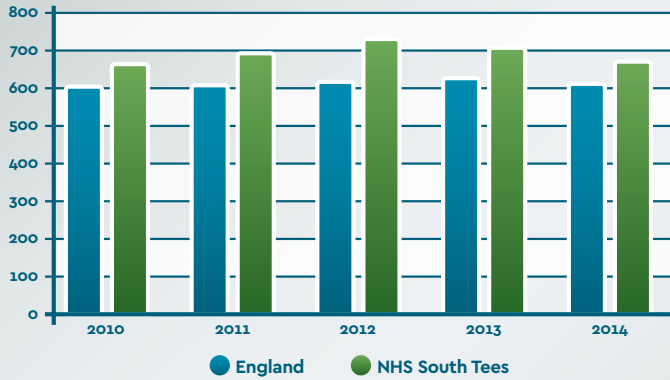
Increasing age remains the biggest risk factor for cancer. Cancer can develop at any age but it is most common in older people. More than three in five cases of cancer are diagnosed in people aged 65 and over, and over a third are diagnosed in people aged 75 and over.

# FACTS AND FIGURES

Cancer is the biggest cause of premature mortality within Middlesbrough, and the town ranks 140th out of 150 local authorities in England. There were 1,699 new cases of cancer reported in 2014 in South Tees or a rate of 665.8 per 100,000, higher than the national rate of 608.4. In 2014, 817 people died from cancer in South Tees or a rate of 338.3, again higher than the national rate of 288.6.

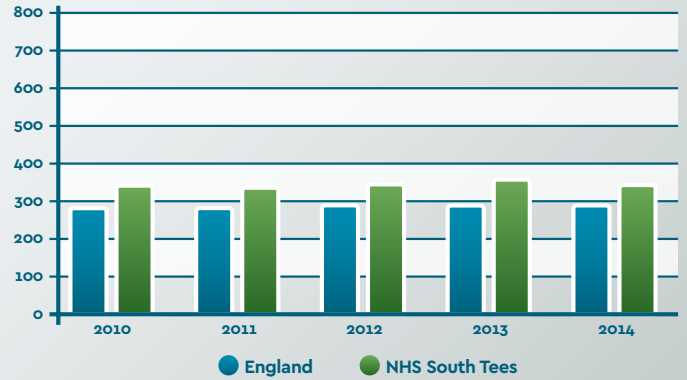
## CANCER INCIDENCE TRENDS

Age Standardised rate per 100,000



## CANCER MORTALITY TRENDS

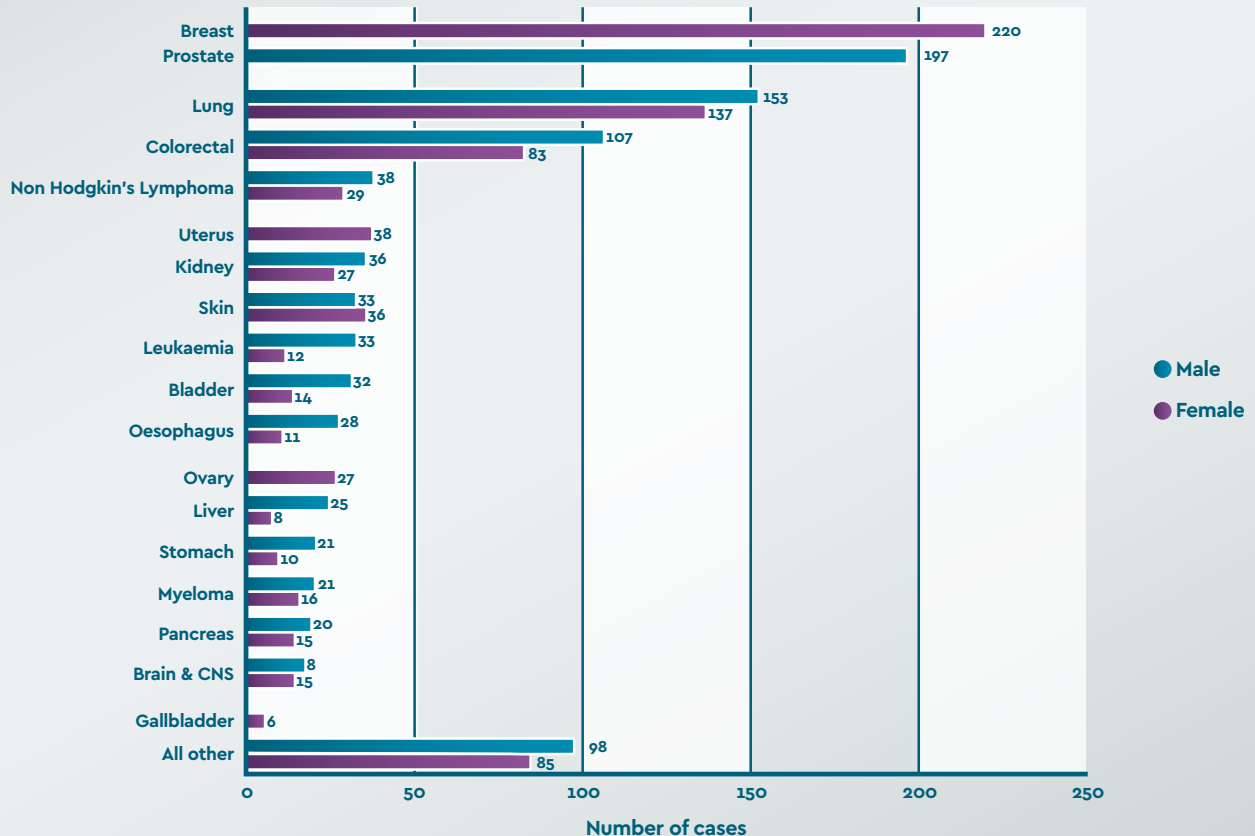
Age Standardised rate per 100,000



Source: Cancer Data, NHS England

There are more than 200 types of cancer, however breast, prostate, lung and colorectal cancers account for 54% of all cases. Locally more men are diagnosed with lung and colorectal cancer than women.

## MOST COMMON CANCERS IN SOUTH TEES, 2014



Source: Cancer Data, NHS England

Cancer is responsible for 117 avoidable deaths in Middlesbrough, where timely and effective healthcare or preventative interventions could have prevented death. More cancer cases occur and more people die from cancer in the most deprived areas of Middlesbrough compared with the least deprived areas, as shown below, where wards are ranked by highest level of deprivation.

IMD RANK	WARDS	INCIDENCE OF ALL CANCER (SIR*)	DEATHS FROM ALL CANCER, UNDER 75 (SMR**)
2	NORTH ORMESBY	127.5	183.6
10	BRAMBLES & THORNTREE	125.0	157.8
27	BERWICK HILLS & PALLISTER	130.2	184.8
30	CENTRAL	124.1	191.8
38	NEWPORT	127.1	139.0
60	LONGLANDS & BEECHWOOD	132.0	205.7
99	PARK END & BECKFIELD	127.8	150.6
228	HEMLINGTON	111.4	138.8
670	AYRESOME	113.5	141.7
742	PARK	112.6	140.8
1188	LADGATE	106.2	115.8
1339	COULBY NEWHAM	113.9	126.9
2013	STAINTON & THORNTON	111.4	99.3
2767	LINTHORPE	102.2	108.1
4853	KADER	90.2	78.0
4956	TRIMDON	98.1	126.9
5438	ACKLAM	93.7	71.0
5614	MARTON EAST	113.4	93.5
6310	MARTON WEST	108.6	79.0
7024	NUNTHORPE	113.4	86.7

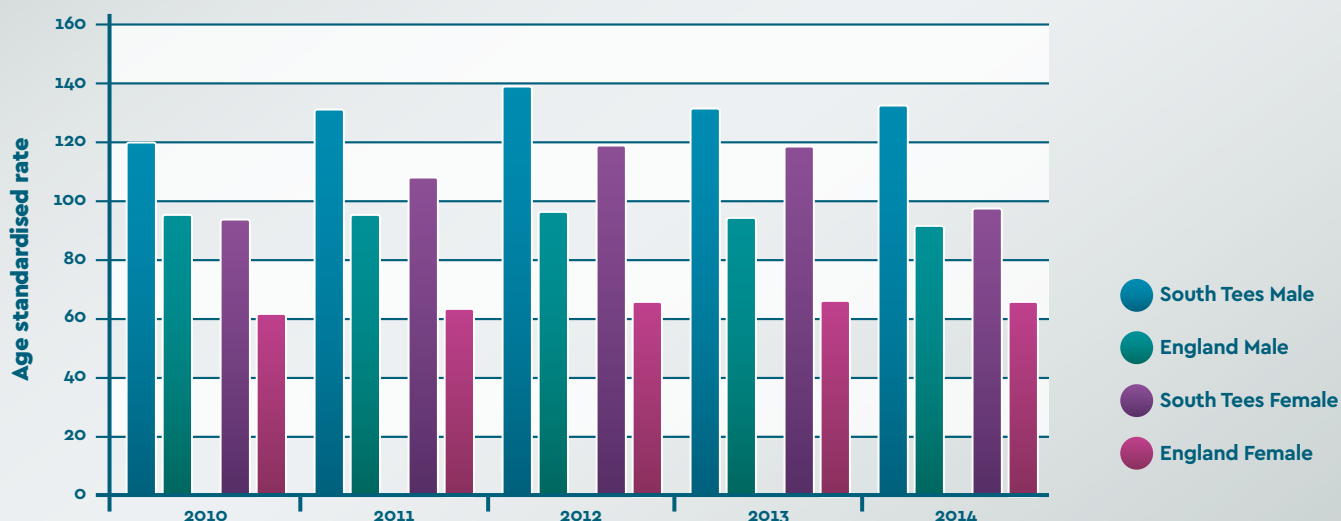
\*SIR - standardised incidence ratio  
 \*\*SMR - standardised mortality ratio

Source: Local Health, PHE

More people are diagnosed with lung cancer and die from it than any other cancer in Middlesbrough. It is the single largest contribution to premature deaths from cancer in Middlesbrough, especially for women. Incidence and mortality locally are considerably higher than national rates and have seen increases in recent years. The similarity between incidence and mortality rates is an indication of the high fatality and low survival for lung cancer.

### LUNG CANCER INCIDENCE BY GENDER - SOUTH TEES / ENGLAND

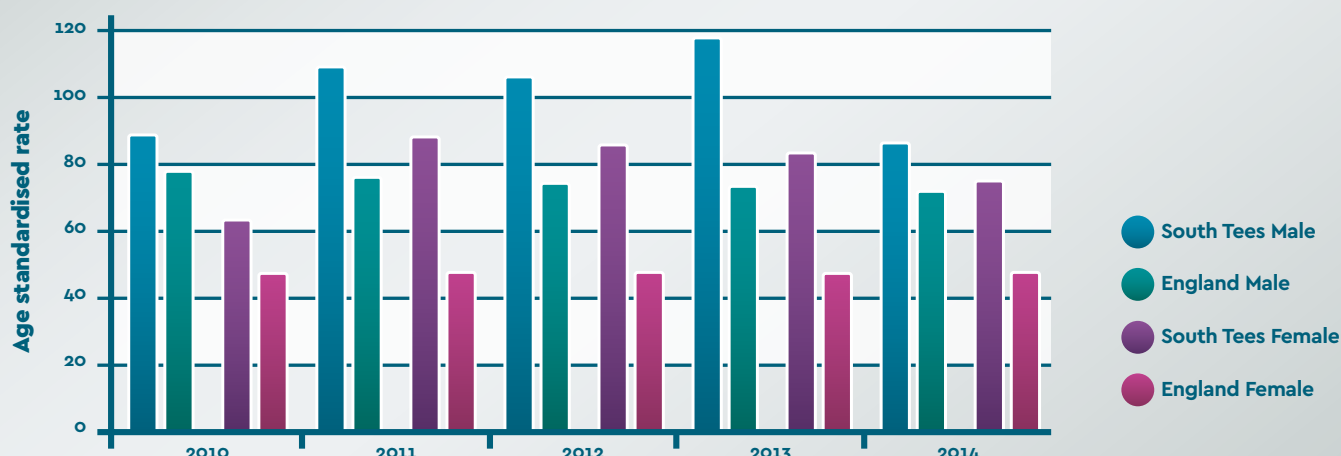
Age standardised rate per 100,000



Source: Cancer Data, NHS England

## LUNG CANCER MORTALITY BY GENDER - SOUTH TEES / ENGLAND

Age standardised rate per 100,000



Source: CancerData, NHS England

## WHAT WE ARE DOING TO REDUCE PREMATURE DEATHS FROM CANCER?

Nationally, *Achieving World-Class Cancer Outcomes, A Strategy for England 2015-2020 (Independent Cancer Task Force, 2015)*, sets out how to improve radically the outcomes that the NHS delivers for people affected by cancer.

Locally, the *South Tees Cancer Strategy* is helping to address the national requirements and the *Middlesbrough Tackling Cancer Together Partnership* is delivering some of the local objectives. They include a series of initiatives across the patient pathway with emphasis on the importance of prevention, early diagnosis, appropriate and effective treatment and support and end of life care.

Part of our prevention strategy is the provision of training and support for organisations and professionals to deliver consistent health messages at every opportunity. The Making Every Contact Count (MECC) programme is providing the framework for this. MECC raises awareness of health and wellbeing and encourages and helps people to make healthier choices to achieve long-term behaviour change. The focus on cancer-related risk factors (smoking, obesity, physical inactivity and alcohol misuse) directly addresses the prevention of premature mortality from certain cancers.

### Middlesbrough Tackling Cancer Together Partnership - Reduce Your Risk campaign

The Middlesbrough Tackling Cancer Together Partnership involves a wide range of organisations and services across South Tees. It aims to take a co-ordinated approach to addressing the challenges associated with cancer with a focus on prevention and early intervention.

A key area of work for the partnership is promoting awareness of risk factors and early diagnosis, through improving NHS screening programme coverage and early access to diagnostic services for people with signs and symptoms of cancer.

In 2010, we carried out a survey on cancer awareness Cancer Awareness Measure (CAM) with very low levels of awareness reported. Insight work carried out in 2015 to inform the 'Reduce Your Risk' campaign showed that cancer awareness in communities is still low. Whilst there were limitations in comparing the results with those of the 2010, given it was a different cohort of people and the questions and collection method were slightly different it offered an overall indication of how little knowledge and behaviour have changed over time.

For example, 93% (505/544) of respondents identify smoking as a key risk factor for cancer which indicates very high awareness of risk. However, a significant proportion of people still attributed a diagnosis of cancer down to chance. This presents a challenge in changing people's behaviour in relation to the importance of smoking and other lifestyle factors in cancer.



## Improving uptake of NHS Screening Programmes

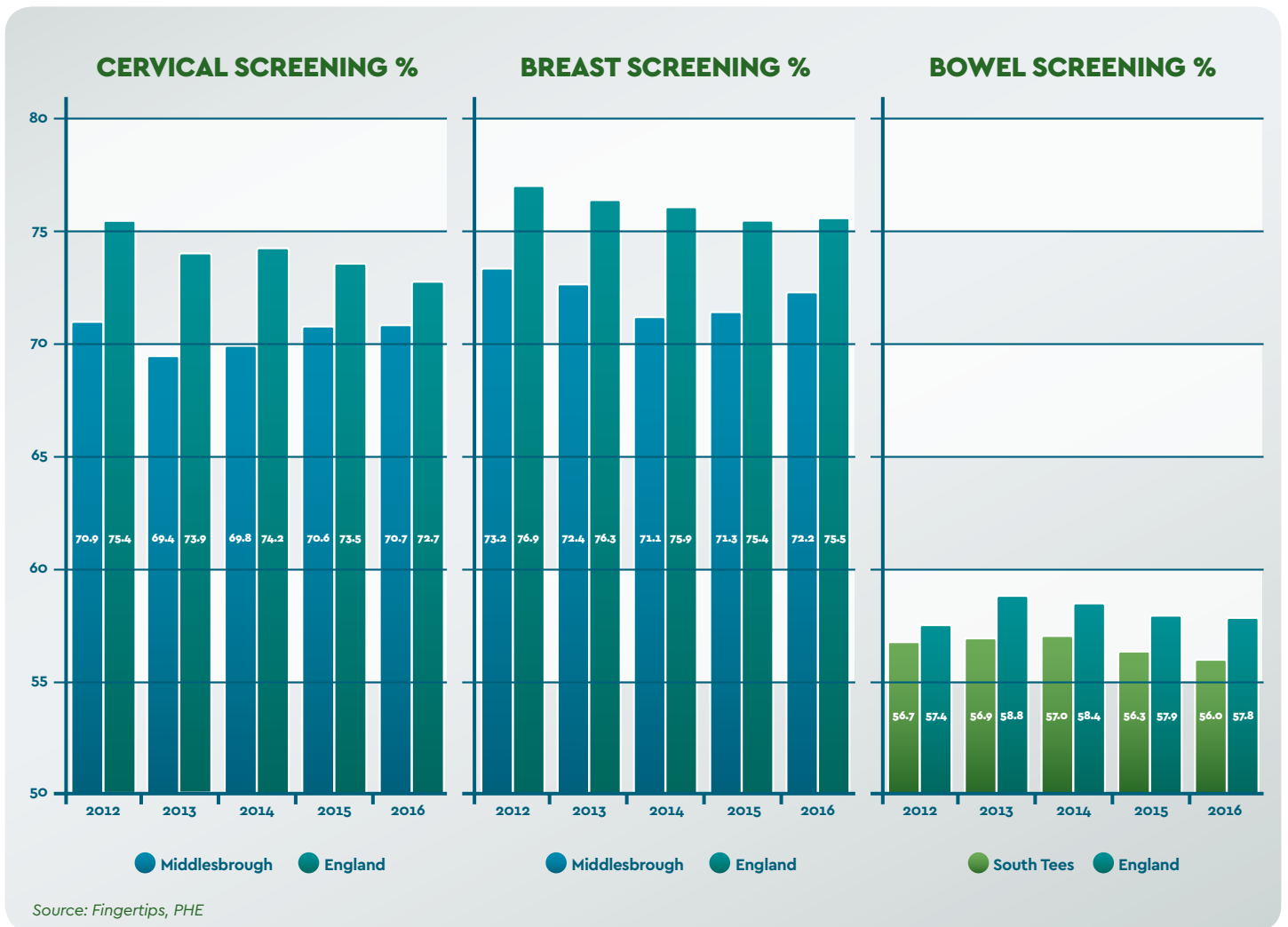
Population screening programmes are one important method through which diseases are detected early. Screening aims to find cancers early when they have the best chance of being cured. Three cancer screening programmes are available to the population of England for breast, cervical and bowel cancers.

**Breast screening is offered to women aged 50 to 70 every three years**

**Bowel screening is offered to men and women aged 60 to 74 every two years**

**Cervical screening is offered to women aged 25 to 64 every three years**

Middlesbrough has generally poor uptake of screening for cervical, breast and bowel cancers compared with the England average. However, this has increased in recent years. In 2016, the uptake rate for cervical screening was 69.8%, for breast was 72.2% and for bowel cancer (South Tees) was 56%. This means that substantial proportions of the eligible populations are not attending screening.



There is significant variation between general practices in Middlesbrough, with some above the England average and several significantly below.

### MIDDLESBROUGH GP PRACTICE POPULATION SCREENED FOR CANCER 2015/16 (%)



Please note: Not the same general practices across each row of the three charts.

● Middlesbrough    — England

Source: GP Practice Profiles, PHE

Uptake of cancer screening programmes is associated with deprivation. Individuals in more deprived socioeconomic groups and those in certain ethnic groups may be less likely to attend screening. There is a range of activities targeted at our diverse communities and settings to improve uptake.



## Improving access to services for early diagnosis of cancer

Early detection of cancer often produces better outcomes for the patient. Treatment options and chances of recovery are greater leading to improved health, and in some cases reducing premature deaths. For example, about 87% of lung cancer patients diagnosed at stage one survive at least for one year compared with less than 20% of those diagnosed at stage four. Achieving early diagnosis of lung cancer includes making it easier for patients to present early with signs and symptoms.

South Tees has higher rates of emergency cancer presentations compared to England, however trend data shows that locally more cancers have been diagnosed at an early stage than England.

### CANCER EMERGENCY PRESENTATIONS & CANCER DIAGNOSED AT EARLY STAGE (%)

South Tees CCG / England



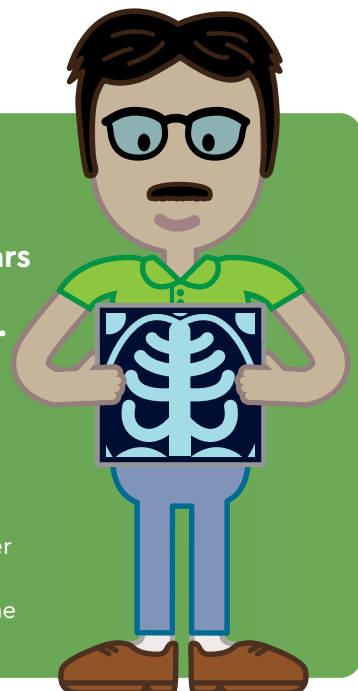
Source: Cancer Outcome Metrics, NCIN

## CASE STUDY: Open Access (Drop-in) Chest X-ray Service

In October 2016, local partners worked together to establish an Open Access Chest X-ray service at James Cook Hospital and the One Life Centre in Middlesbrough. The service is targeted at people aged 50 years and over, who smoke and are from our most deprived communities, where lung cancer is more common than the rest of the Middlesbrough. People do not require a GP referral to access service.

In one year of the service, 229 people have been X-rayed, 32 with abnormal results referred for further investigations and four people have been diagnosed with lung cancer (one at stage I, one stage III and two at stage IV). A number of other conditions are being diagnosed including chronic obstructive pulmonary disease (COPD x 9), emphysema and angioedema.

About 60% of the people accessing services including the four that were diagnosed with cancer did so because they were worried about the symptoms. People are presenting with significant symptoms (for example, coughing out blood) which points to the need for cultural change in the way people in the town view their health and access primary care.

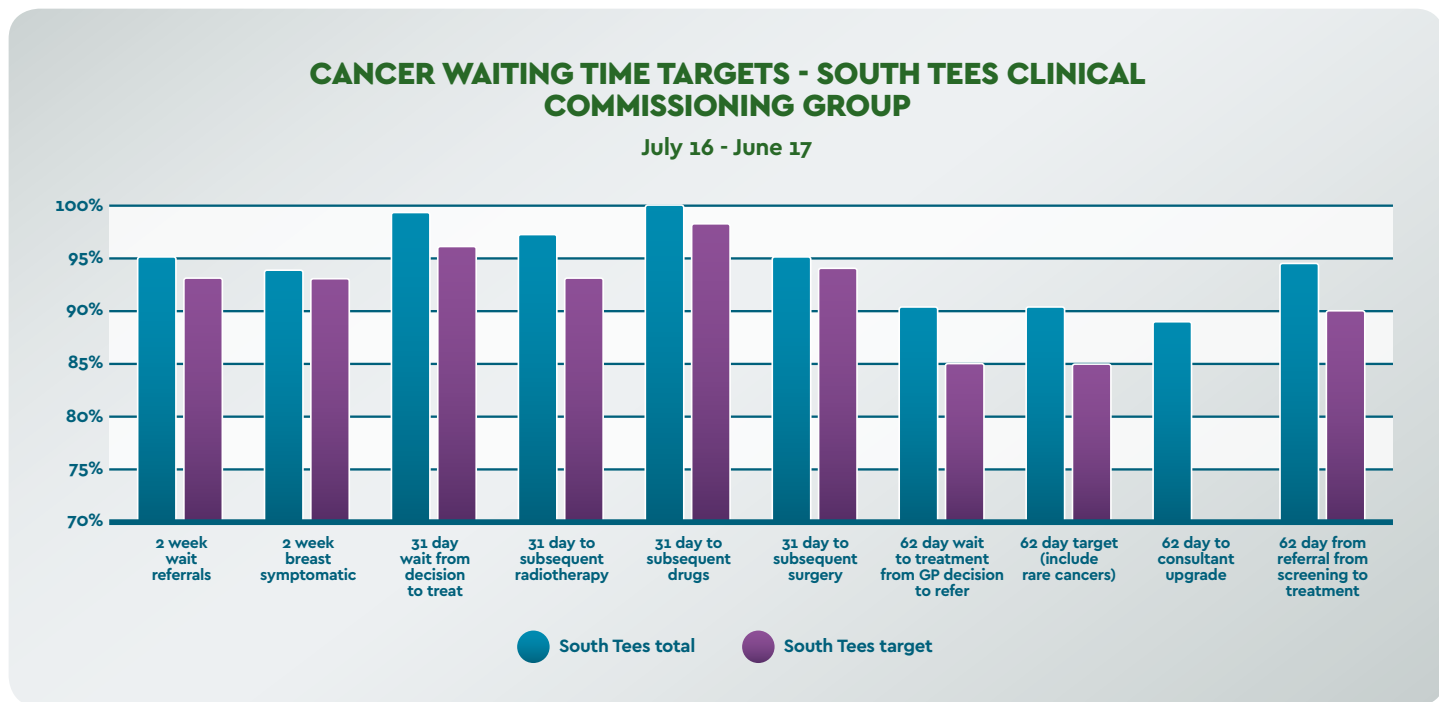




## Cancer Waiting Times

Information on the time individuals wait for cancer services are monitored regularly by commissioning and provider organisations. This includes the number of people who attended outpatient appointments within two weeks of an urgent referral by their GP for suspected cancer or breast symptoms, people who started treatment within 31 and 62 days and the number of people who started some types of subsequent treatments within 31 days. The importance of these targets is to help improve early diagnosis and appropriate and effective treatments and support to maximize survival or potential cure.

The chart below shows that NHS South Tees Clinical Commissioning Group is performing above national targets for all measures, illustrating the high quality cancer care available to Middlesbrough residents from diagnosis to treatment.



## Macmillan Integration of Cancer Care (MacICC) Programme

The South Tees Hospitals NHS Foundation Trust Macmillan Integration of Cancer Care (MacICC) partnership programme is improving care for patients with cancer. The programme is reviewing how patients move through the care system, how all the separate services can work more closely to deliver the right care in the right place at the right time and by the right professional. Achievements include the employment of Cancer Care Coordinators and Community Sisters who provide support to both patients and professionals, improving patients' experience and care outcomes (starting with patients with cancers of the lung, lymphoma and brain and central nervous system).

### GAPS AND LOCAL NEEDS

Reduce premature deaths from cancer through improved cancer prevention, early detection and prompt effective treatment and care by:

- **Making every service and care contact an opportunity to raise awareness of risk factors for cancer and the signs and symptoms of cancer, and provide support to people living with cancer**
- **Local partners continuing to work together to improve access to early diagnosis and cancer screening services, so that people have prompt and appropriate advice and investigation if symptoms occur**
- **Ensuring that patients who are diagnosed with cancer are provided with the right treatment and care, at the right time and by the right professional**
- **Ensuring we have the right level of services for cancer patients and professionals skilled and resourced to provide these services.**

## CASE STUDY:

### South Tees Hospital NHS Foundation Community Cancer Nursing Service

A dedicated community-based nursing service is helping to improve the lives of people living with cancer in South Tees (Middlesbrough, Redcar & Cleveland and Hambleton & Richmondshire). The Community Cancer Nursing Service (CCNS) was established in June 2016 as part of the Macmillan Integration of Cancer Care Programme funded by Macmillan Cancer Support and hosted by South Tees Hospital NHS Foundation Trust.

The team provides information, symptom management, social and emotional support, and financial advice on health-related benefits for patients who are moving from hospital care into a period of good health or potential cure.

Historically only a small proportion of cancer patients were referred to a Community Nurse and or Specialist Palliative Care team. This left a wide group of patients with little support at home and in the community. The CCNS aims to bridge this gap by crossing traditional boundaries into primary, secondary and community health, working in partnership with GPs, community health teams, hospital multi-disciplinary teams and other cancer agencies. There are excellent examples of care through this effective collaboration. For example, the strong relationship with clinical nurse specialists for cancer has been highly beneficial to this new innovative service.

"Having Jo (Community Cancer Nurse) in the community setting means that we have a direct contact for support for our cancer patients who in the past have at times struggled when at home."

At an individual level the service is helping to maximise patients' outcome and experience. Joan (not her real name) is a 75 year old lady diagnosed with cancer of the larynx and carries a tracheostomy and Percutaneous Endoscopic Gastrostomy (PEG). She was struggling with altered body image, low mood, self-neglect and social isolation and a feeling of wanting to give up. The lack of support in the community added to Joan's anxiety.

With support from the CCNS there is a great improvement in Joan's emotional health and wellbeing. She now goes out alone to do her own shopping which is a significant achievement for her as well as confirmation of the impact of the service.



## Chapter 3

# CIRCULATORY DISEASES



## BACKGROUND AND RISKS

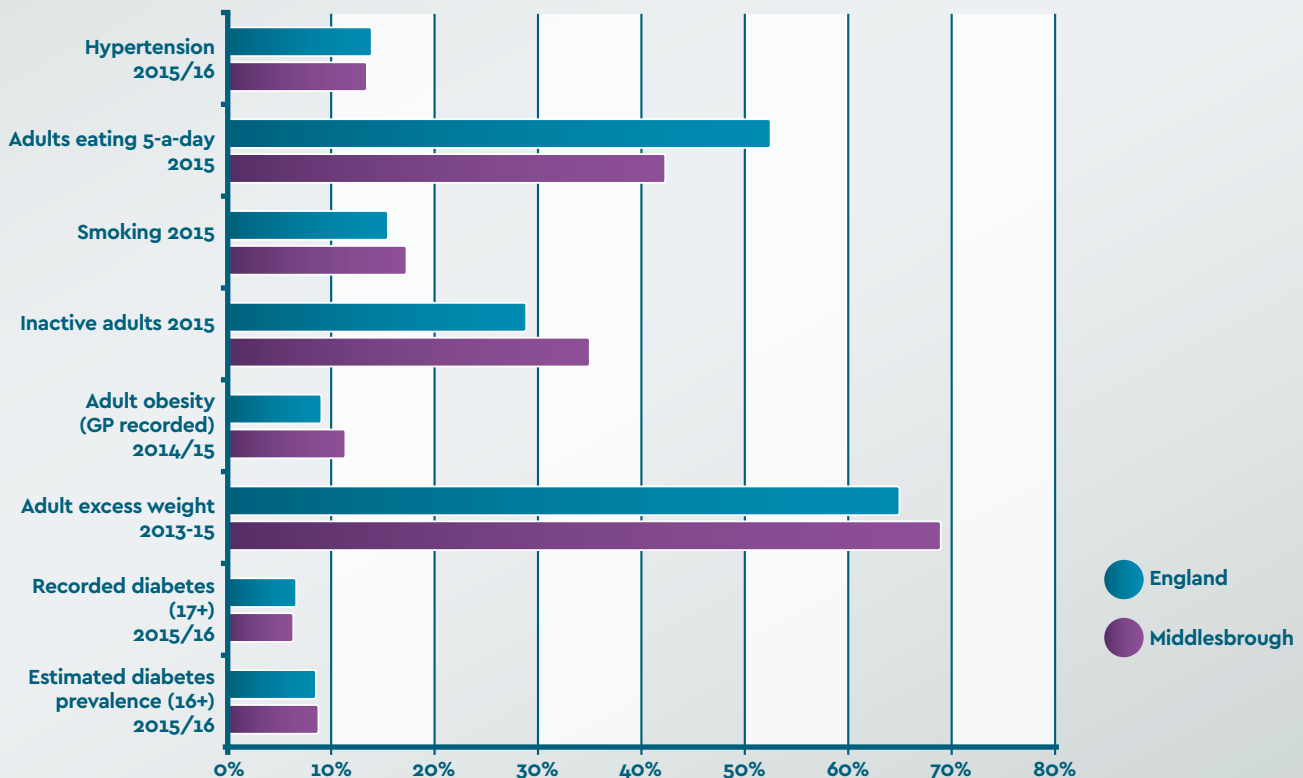
**Circulatory diseases, sometimes also known as cardiovascular diseases, include long-term (chronic) heart disease, heart attacks and strokes. Altogether, circulatory diseases account for about one quarter of deaths aged under 75 in Middlesbrough.**

Coronary heart disease (CHD) happens when the coronary arteries are narrowed by atherosclerosis (hardening caused by a build-up of fatty deposits within arteries) or obstructed by blood clots resulting in a reduced or sudden stop of the blood supply to the heart muscle. Strokes happen when the blood supply to the brain is reduced or stopped by narrowing or blocking of the cerebral arteries by atherosclerosis or by blood clots.

Many of the risk factors are similar for both heart disease and stroke such as high blood pressure, diabetes and high cholesterol. Some risks for circulatory disease cannot be changed, such as age, gender, ethnicity and genes. However, there are a number of risk factors which can be changed to decrease an individual's chances of dying prematurely. These include smoking, obesity, physical activity levels, diet and alcohol consumption.

Middlesbrough's population has a higher rate of risk factors and lower rates of protective factors for heart disease and stroke, compared with England. Collectively, these contribute towards the increased rates of disease and death seen locally.

**CARDIOVASCULAR DISEASE RISK FACTORS, MIDDLESBROUGH & ENGLAND**



## FACTS AND FIGURES

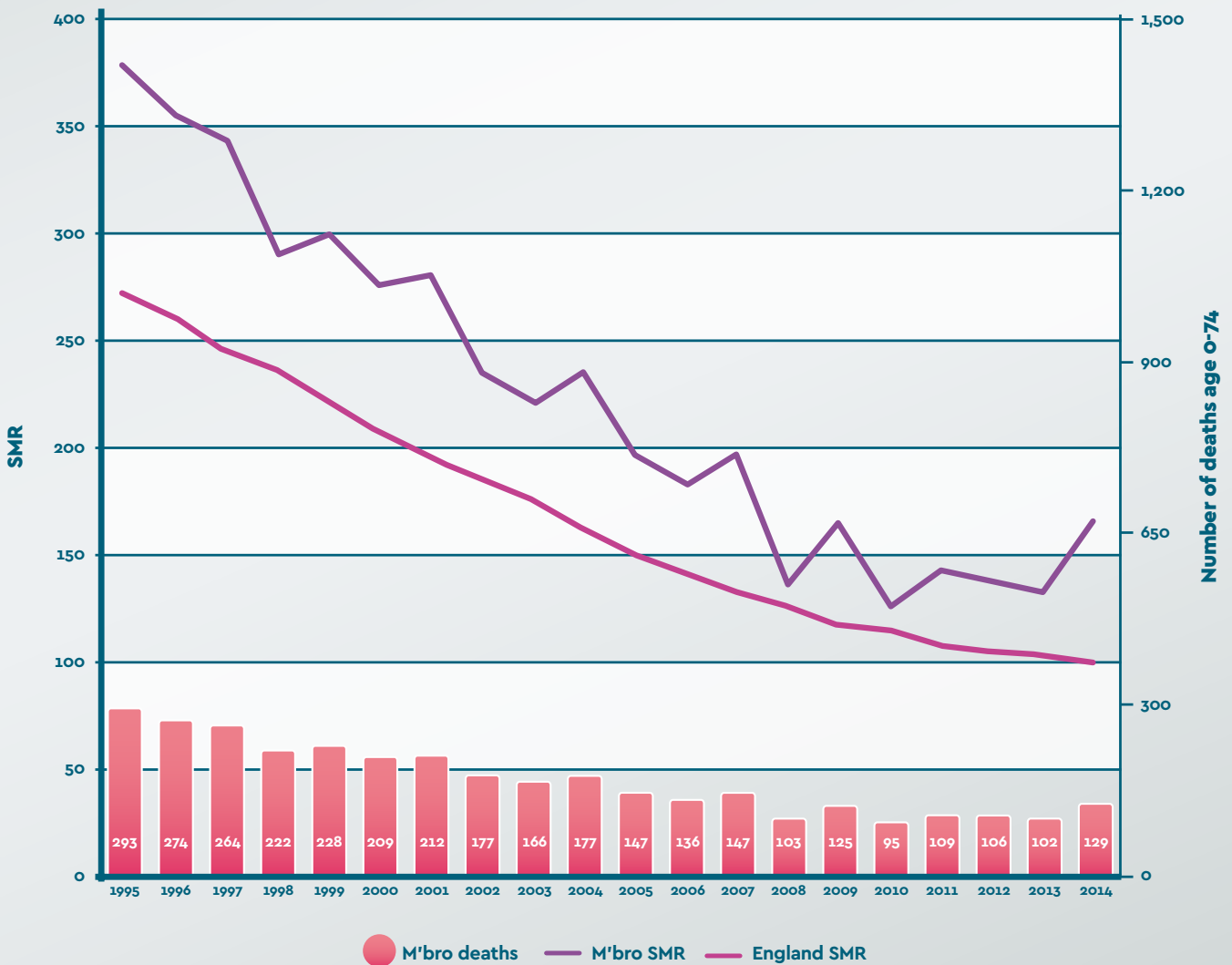
Deaths from circulatory diseases are largely preventable at younger ages (below 75 years). Since 1995, the rate of deaths from circulatory diseases in Middlesbrough has fallen considerably.

Whilst the England rate has also decreased, the gap between Middlesbrough and England narrowed such that the rates were similar in 2010.

However, since 2010, the number and rate of circulatory disease deaths has tended to increase locally while continuing to fall nationally.

### MORTALITY FROM CIRCULATORY DISEASES AGED <75 YEARS

Standardised Mortality Ratio (SMR), persons, Middlesbrough, 1995 to 2014



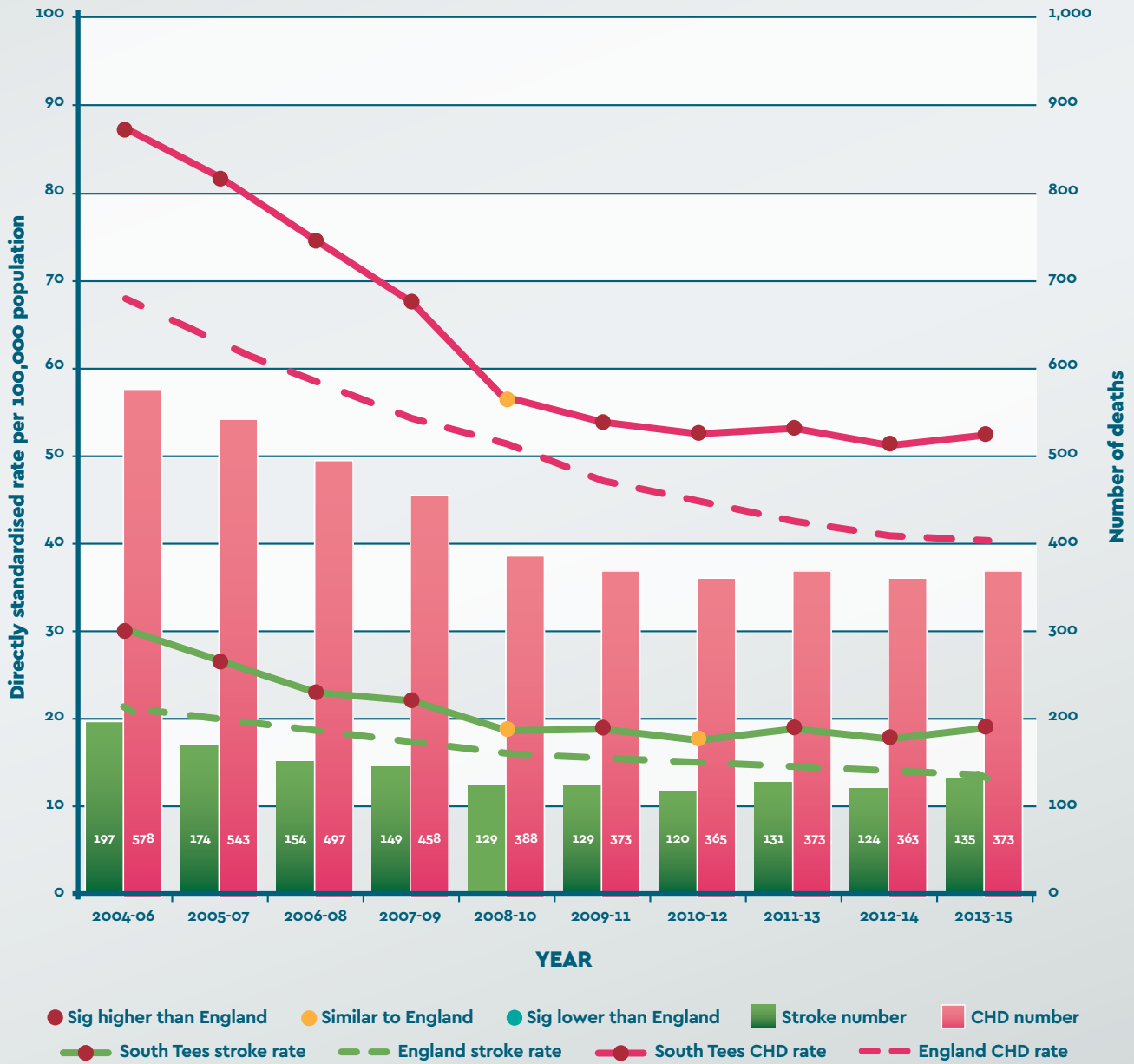
Public Health England identifies coronary heart disease as the single biggest cause of premature mortality nationally, and stroke as the third biggest. Data for stroke and heart disease separately are only routinely available for South Tees CCG (Middlesbrough and Redcar & Cleveland combined), with numbers of cases approximately equal within the two local authority areas.

The gap between South Tees and England for heart disease deaths had reduced since the early 1990s up to about 2010 when, for the first time, local rates were statistically similar to England.

Since then, the previously declining rate has tended to flatten out locally but continues to fall nationally. Stroke deaths age under 75 follow a similar pattern but with less pronounced narrowing and subsequent widening of the gap with England.

## MORTALITY FROM STROKE AND CORONARY HEART DISEASE, AGED UNDER 75 YEARS

count and directly standardised rate, South Tees CCG, 2004-06 to 2013-15



Source: Public Health England

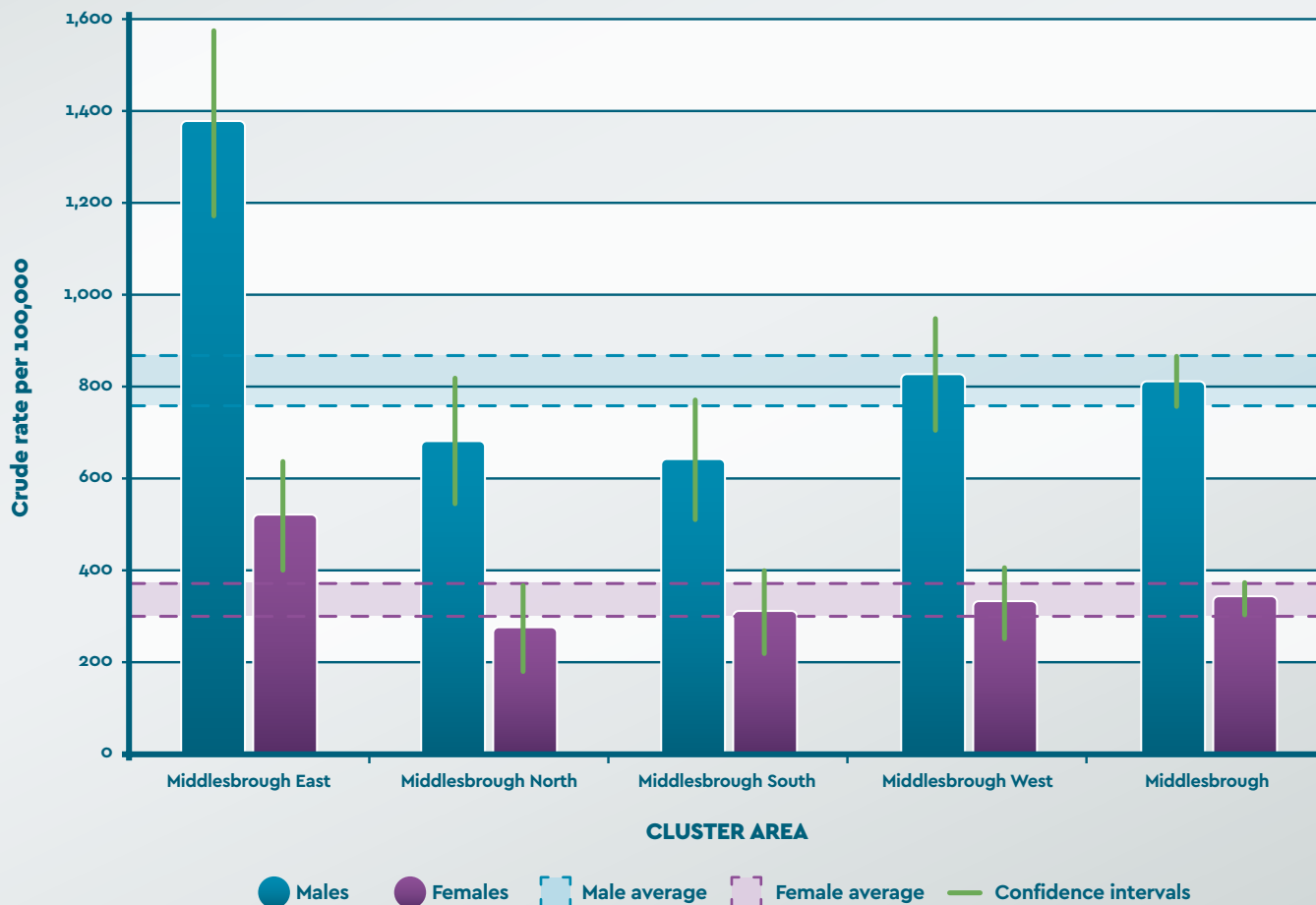
Deaths from cardiovascular diseases are only considered preventable if they occur before 75 years of age, the same age as premature mortality.

It is estimated that each year in Middlesbrough 54 male and 22 female deaths from cardiovascular diseases could be prevented. A higher proportion of these deaths occur in the most deprived parts of the town such as East Middlesbrough (Berwick Hills & Pallister, Brambles & Thorntree, North Ormesby and Park End & Beckfield wards).



## MORTALITY FROM CARDIOVASCULAR DISEASE CONSIDERED PREVENTABLE BY SEX, AGED <75

Middlesbrough Ward clusters, April 2006 - March 2016

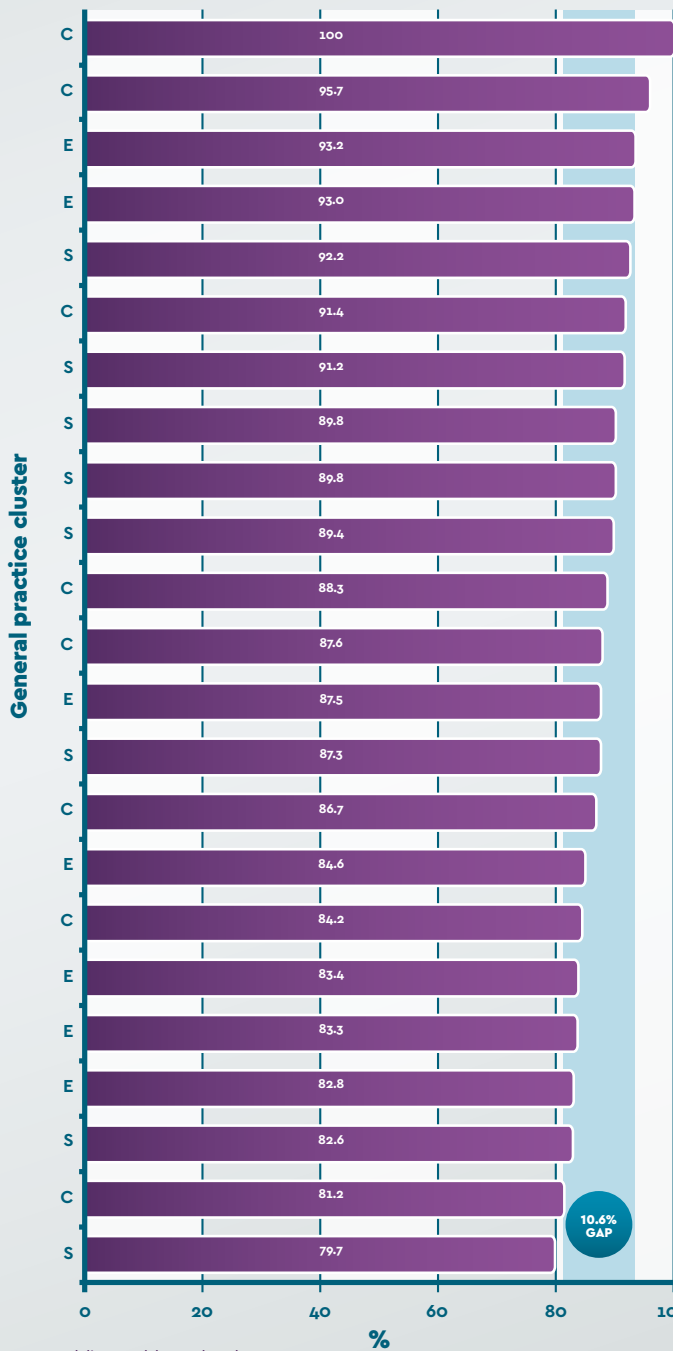


Once people have established heart disease, care can be provided to help prevent further complications, including keeping blood pressure within the normal range and treatment with aspirin or other similar drugs to prevent blood clots from forming. The following charts show rates of good blood pressure measurements and treatment with aspirin etc. for Middlesbrough general practices. Overall rates are high, demonstrating good quality secondary prevention in Middlesbrough. However, rates in some general practices are lower than others and, if rates in the lowest practices were similar to the higher practices, it is likely that there could be fewer heart attacks and strokes, and additional lives could be saved.

General practices have been formed into three geographic clusters, but recognising that patients may reside in one area but be registered with a practice in another.

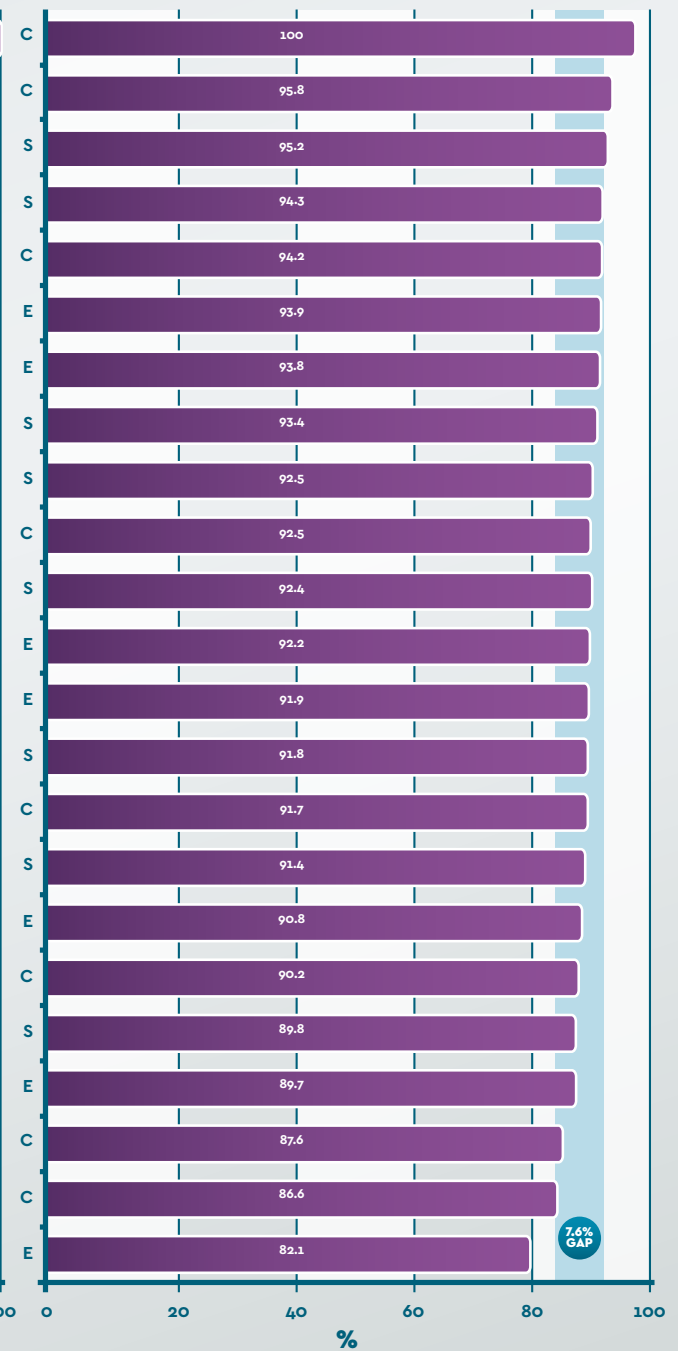
**PEOPLE WITH CORONARY HEART DISEASE WITH RECORDED BLOOD PRESSURE OF 150/90 OR BELOW**

Middlesbrough General Practices, 2015/16



**PEOPLE WITH CORONARY HEART DISEASE WITH A RECORD THAT ASPIRIN, APT OR ACT IS TAKEN**

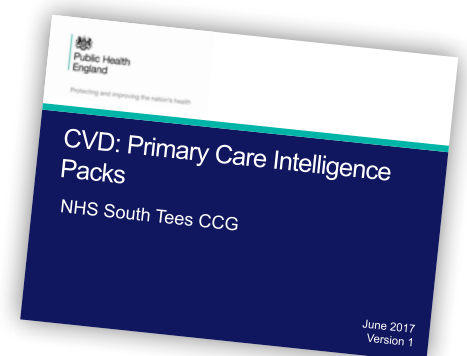
Middlesbrough General Practices, 2015/16



Source: Public Health England

Public Health England produces a CVD: Primary Care Intelligence Pack further highlighting variation and opportunities to improve local care.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/623274/NHS\\_South\\_Tees\\_CCG\\_CVD\\_intelligence\\_pack.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/623274/NHS_South_Tees_CCG_CVD_intelligence_pack.pdf)



# WHAT WE ARE DOING TO REDUCE PREMATURE DEATHS FROM CIRCULATORY DISEASES

The NHS Health Check programme aims to prevent heart disease, strokes, type 2 diabetes and kidney disease. Every resident aged 40-74 and without prior cardiovascular conditions is eligible for a Healthy Heart Check (HHC) once every five years. In April 2013, the NHS Health Check became a statutory public health service in England, with local authorities responsible for making provision to offer an NHS Health Check to eligible individuals.

Middlesbrough is ahead of schedule, having already invited 97% of eligible people for HHCs in the first four years. A higher proportion of people in Middlesbrough have received a HHC compared with England (42% v 36%). However, about half of people invited for a check in Middlesbrough do not attend.

## CASE STUDY NHS Health Check Programme

There were 4,007 NHS Health Checks recorded in Middlesbrough in 2015/16.

About 1 out of every 20 people who were checked had a circulatory disease related diagnosis made within the year following their check.

These 178 Middlesbrough residents were then able to receive advice and treatment enabling them to reduce their chances of dying early from a circulatory disease.

The most common diagnoses made were:

CONDITION	NUMBER
High blood pressure	127
Diabetes	32
Ischaemic heart disease	10
Irregular heart beat (atrial fibrillation)	8
Chronic kidney disease	5
Other conditions	9
<b>Total diagnoses</b>	<b>191</b>

The total number of diagnoses is higher than the number of people since some people were diagnosed with more than one condition.



## GAPS AND LOCAL NEEDS

In 2011, it was estimated that 7.9% of Middlesbrough's population aged 16+ are likely to have CHD. This would correspond with about 8,800 people in 2016. The prevalence in 2015/16 showed just under 6,000 Middlesbrough residents diagnosed with CHD, leaving about 2,800 people in the community with undiagnosed heart disease.

Too many people in Middlesbrough have increased chances of dying at a young age from heart disease or stroke by engaging in risky behaviours.

Although coverage is above the England average, many people still do not take up the invitation for a Healthy Heart Check.

Health services do not always support those with increased chance of developing heart disease. Preventable deaths are highest in the east of Middlesbrough.

People with confirmed cardiovascular disease sometimes have variable access to services, becoming dependent upon care services when others remain independent with support.



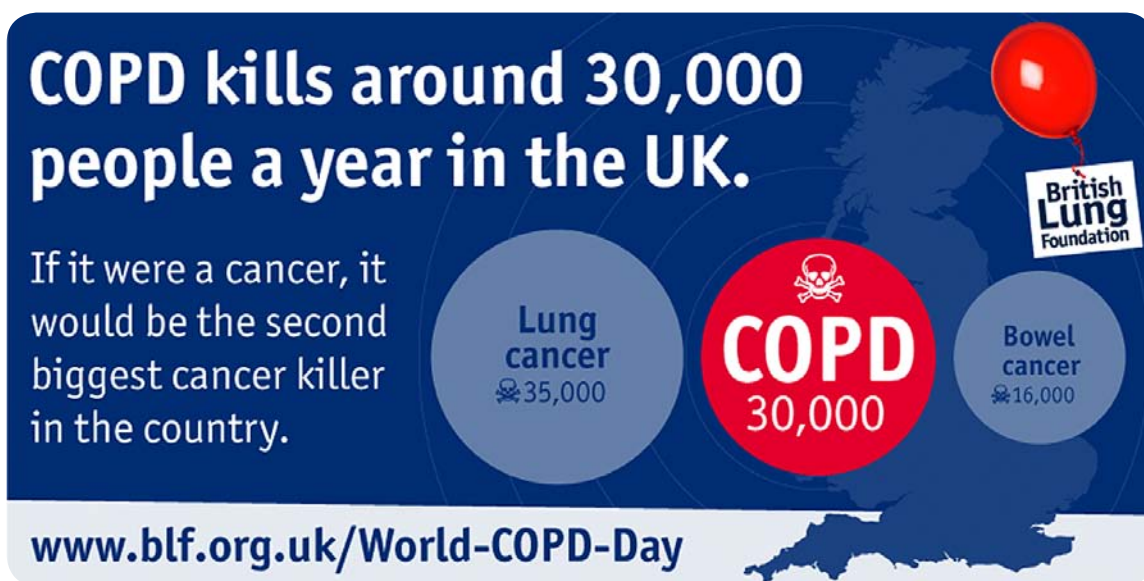
## Chapter 4

# RESPIRATORY DISEASES



## BACKGROUND AND RISKS

Respiratory diseases are conditions that affect the lungs such as asthma, chronic obstructive pulmonary disease (COPD); infections like influenza, pneumonia and tuberculosis; and lung cancer and many other breathing problems.



Chronic obstructive pulmonary disease (COPD) is the main cause of premature mortality in relation to respiratory diseases. COPD is a general term used to describe a collection of diseases that affect the lungs, and includes chronic bronchitis and emphysema.

COPD is a chronic, disabling disease which causes a gradual decline in lung function, with increasing episodes of chest infections and exacerbations as the condition progresses.

COPD mainly affects people over the age of 40, and risk increases with age. It is most common in people who smoke; about 80% of people with COPD are smokers or ex-smokers. It is also prevalent in passive smokers and in people who have been exposed to pollutants over a significant period of time. About 20% of COPD cases are caused by non-smoking-related causes.

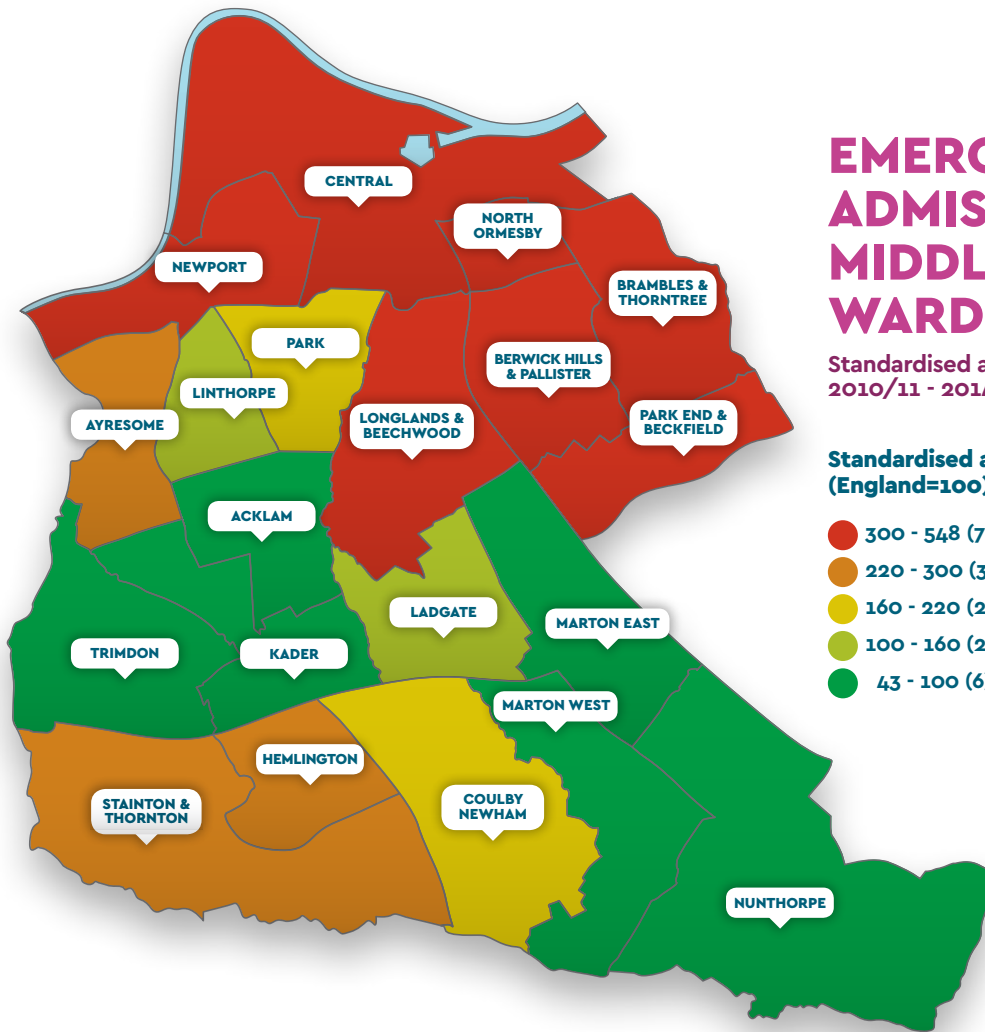
## FACTS AND FIGURES

Respiratory disease (mainly COPD) is the third biggest cause of death among Middlesbrough men and women. Around 25 people aged under 75 years die from COPD in Middlesbrough each year.

There is a clear difference in number of deaths occurring in the most deprived areas of Middlesbrough compared with the least deprived areas.

Out of 25 COPD deaths aged under 75 in 2014, 16 of them (64%) were clustered in just five adjacent wards in the east of Middlesbrough: Berwick Hills & Pallister, Brambles & Thorntree, Longlands & Beechwood, North Ormesby and Park End & Beckfield.

COPD is responsible for 1 in 8 emergency hospital admissions in England because of flare-ups of the condition if not managed properly. In 2016/17, there were 1,306 emergency admissions associated with COPD in Middlesbrough. This is significantly higher than the England average.



In 2015/16, 4,418 people (2.5% of registered GP population) were diagnosed with COPD in Middlesbrough, but it is estimated that a further 3,700 remain undiagnosed. As there is currently no cure for COPD, early diagnosis can help reduce premature death. We are working with general practices to try and close the gap between the number of people who suffer from the condition and those recorded on register.

### REPORTED VS EXPECTED RATIO OF COPD PREVALENCE

Middlesbrough GP Practices



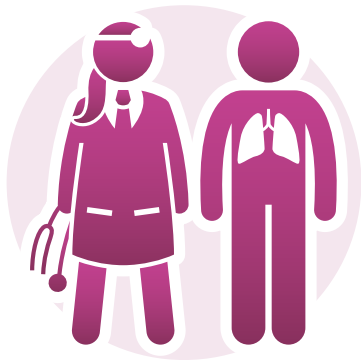
Source: Public Health England

# WHAT WE ARE DOING TO REDUCE PREMATURE DEATHS FROM RESPIRATORY DISEASE

The *Outcomes Strategy for COPD and Asthma in England* (Department of Health, 2011) sets out how the NHS, public health and social services can contribute to achieving a reduction of deaths from respiratory diseases. It identifies best practice solutions, with a focus on collaborative working including people with COPD as equal partners.

The *Cold Weather Plan for England* (Public Health England, 2016) highlights the increased risk of ill health during cold weather for people with COPD, including increased risk of pneumonia. Key actions include improving flu vaccination uptake and ensuring people with COPD live in well heated homes.

Locally, a review of respiratory services is being carried out by the NHS South Tees Clinical Commissioning Group. The aim is to ensure a system-wide perspective of respiratory services provision, looking at the entire patient pathway and to identify how services for patients can be improved.



## Tees Respiratory Network

The Tees Respiratory Network aims to encourage best practice in respiratory health across primary and secondary care services and the wider care system. A key area of work is implementing best practice guidelines and multidisciplinary training and education for professionals.

The Tees COPD management guidelines enables primary care staff to manage uncomplicated disease effectively, with indications on when to refer to secondary care. Part of this work is targeting general practices with the highest proportion of hospital admissions, providing advice and support to reduce admissions to hospital.



## Reducing smoking prevalence in Middlesbrough

Stopping smoking reduces the risk of developing COPD and can halt the progression of the disease and reduce the risk of death in those diagnosed with the disease.

The proportion of adults smoking in Middlesbrough is steadily declining with the latest figure at 17.1% (15.5% England average). Work to reduce smoking in the town continues with a proactive Tobacco Control agenda.

Initiatives are being implemented to improve access to advice and support for both outpatients and inpatients at James Cook Hospital. These have led to a five-fold increase in referrals from the hospital to the Stop Smoking Service, and are providing the building blocks for implementing the NHS Smoke Free Hospital Programme.



## Improving flu immunisation programme

Flu infections can be severe in people with COPD, causing ill-health and death. People with COPD and asthma are included in the 'at risk group' offered annual flu vaccination.

General practices deliver the vaccination and uptake in Middlesbrough is improving. In 2016/17 uptake in people aged over 65 was 73.4% (England 70.5%) and 'at risk' people under 65 was 47.7% (England 48.6%). There are initiatives to encourage James Cook Hospital and other secondary care services to provide these vaccinations for 'at risk' patients' during outpatient appointments and upon admission to hospital to improve uptake.

## Early detection of COPD - The Tees Lung Health Check Programme

The Tees Lung Health Check is a local programme started in January 2013 to increase the early detection of COPD, to slow down the progression of the disease and improve quality of life. It is offered to current smokers aged 35 years and over (without existing asthma and COPD disease) who are at greatest risk of developing COPD. The check is free and repeated every five years. The check involves assessing COPD signs and symptoms such as cough, wheeze, breathlessness and sputum (consistency, volume and colour). This is followed by a breathing test, called 'spirometry' which measures how well patients can breathe in and out. The assessment results are used to identify suspected COPD cases and further tests are carried out to confirm COPD or other lung diseases. The achievements of the programme are summarised below.

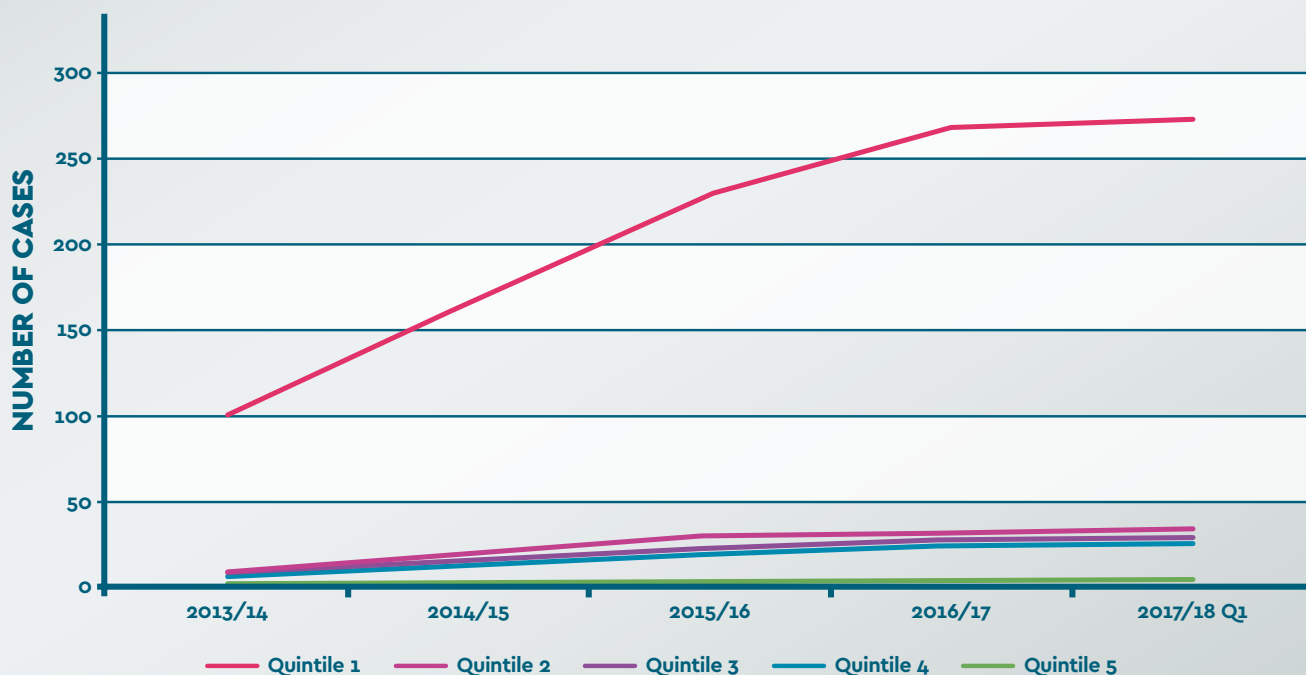
### Lung Health Check Programme Results Summary



The cumulative number of people diagnosed with COPD is highest in the most deprived communities.

### MIDDLESBROUGH - CUMULATIVE NUMBER OF NEW CASES OF COPD FOLLOWING ASSESSMENT (ELIGIBLE PATIENTS) SINCE 01/01/2013

By Quintile of Residence (Q1 most deprived, Q5 least deprived)



## GAPS AND LOCAL NEEDS

Although smoking prevalence continues to fall in Middlesbrough, there are a number of population groups where the rates remain high. Work is required to ensure these groups are provided with support to help them quit as well as continuing with the population level interventions for Tobacco Control.

The number of people with COPD dying prematurely can be reduced through a proactive approach involving prevention, early identification, diagnosis and treatment, especially in more deprived areas. This proactive preventive approach is required at all stages of the disease.

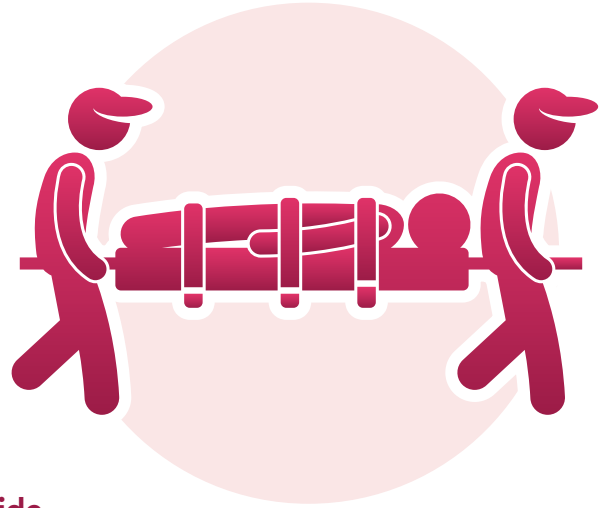
There are significant variations in the level of diagnosis and quality of COPD care among general practices in Middlesbrough, often manifesting in poor quality of life for people with COPD, inappropriate prescribing and high hospital admission rates.

Strengthen Tobacco Control and targeted smoking cessation, active case finding of disease, effective clinical management and support patients with self-management.

## Chapter 5

# EXTERNAL CAUSES

(ACCIDENTS, INJURIES, SUICIDE, ALCOHOL AND DRUGS)



This chapter considers the impact of accidents, injuries, suicide, alcohol and drugs on premature mortality. These are referred to as external causes and they account for 10% of deaths aged for people aged under 75 in Middlesbrough.

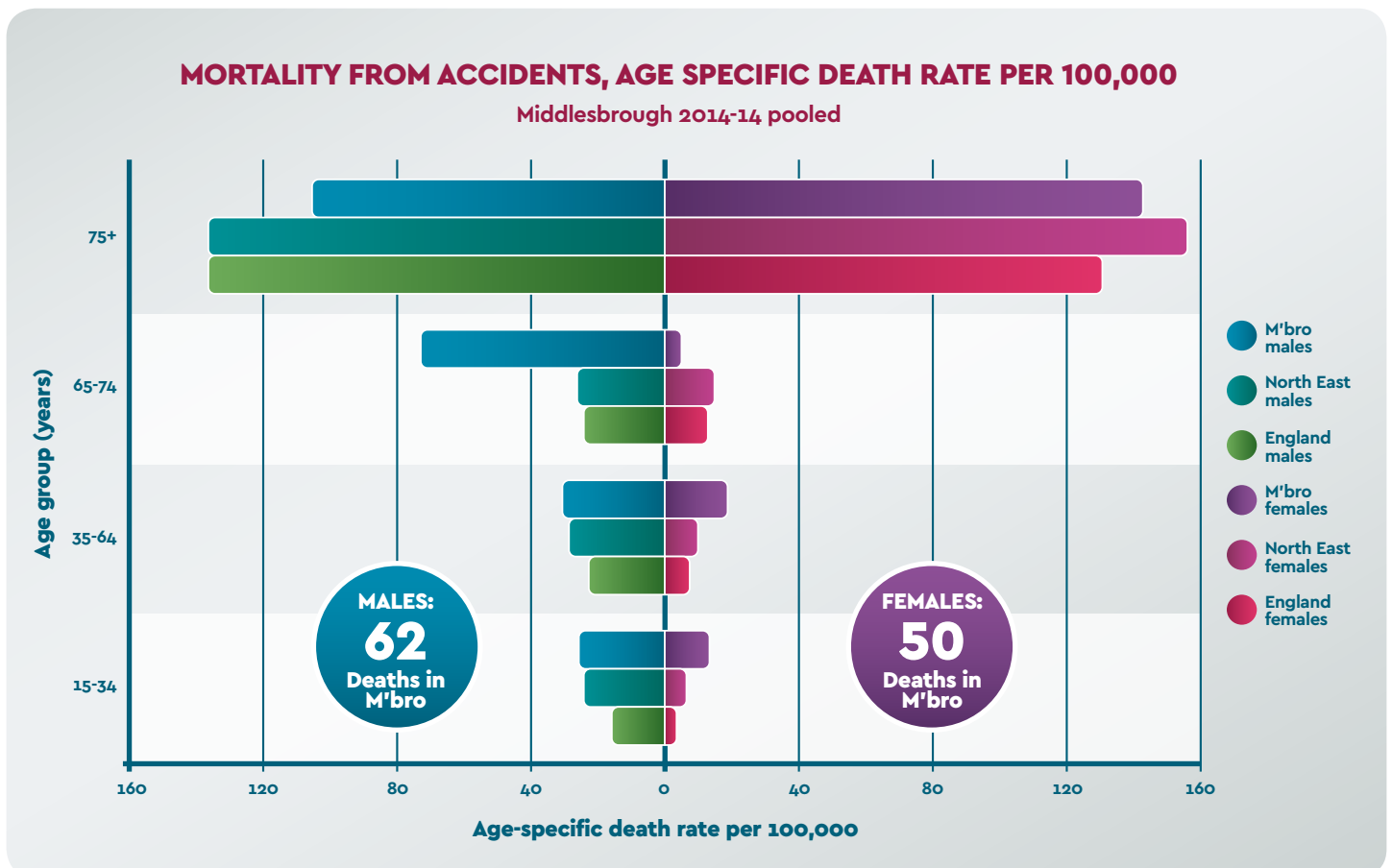
## 5.1 ACCIDENTS AND INJURIES

### BACKGROUND AND RISKS

Some people believe accidents are unavoidable events. However for most accidents the events leading to an accident, the environment and risk factors are often predictable and preventable. It is for this reason that the term 'unintentional injury' is used to describe injuries and deaths from accidents. Deliberate injuries, such as those inflicted during an assault, can be considered preventable.

### FACTS AND FIGURES

The following charts show combined deaths from a wide range of accidental causes, including transport accidents (either within vehicle or as pedestrians), falls, drowning, accidental suffocation, electrocution, fires and accidental poisoning.





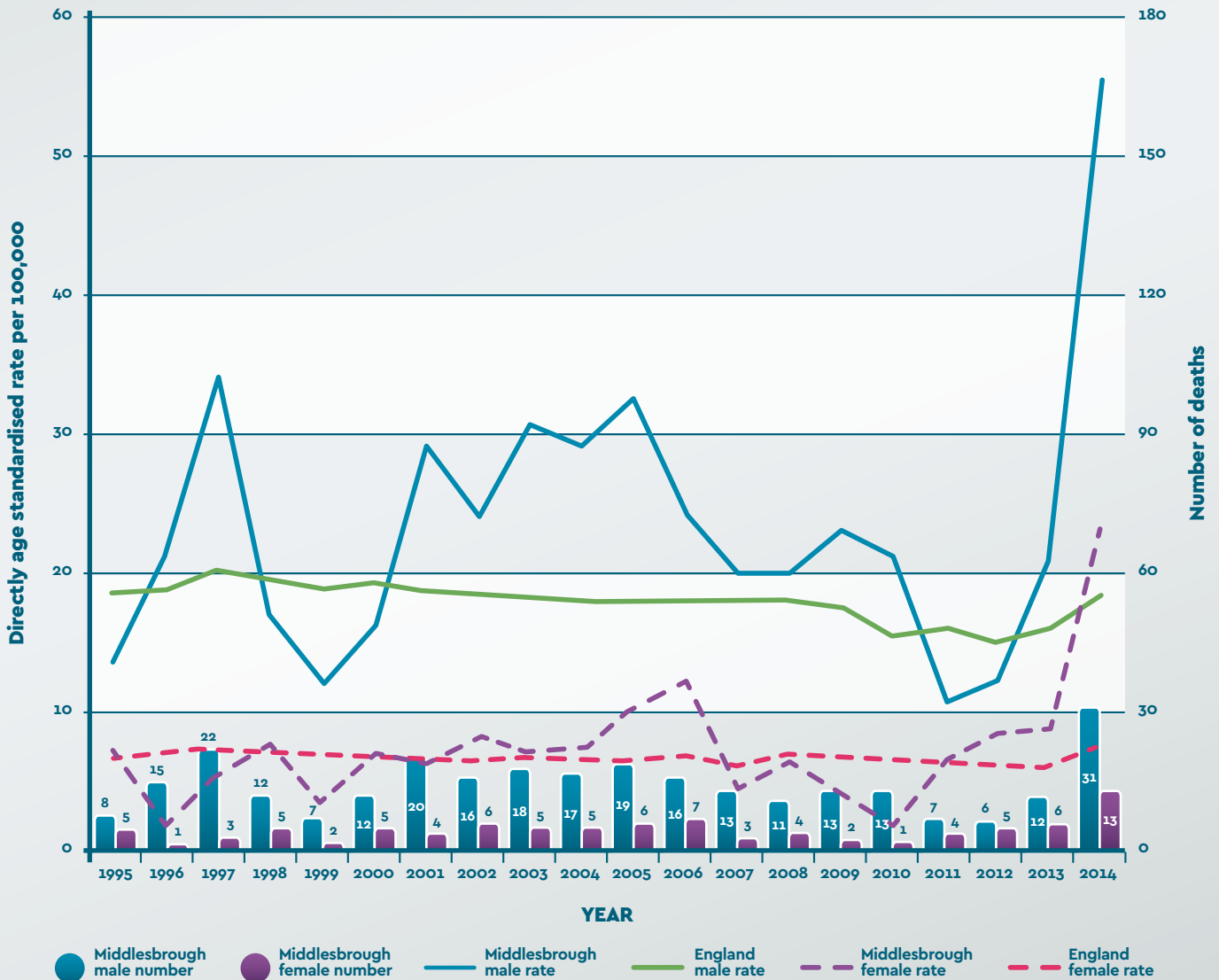
Mortality from accidents increases markedly in older age groups. In Middlesbrough, deaths due to accidents are more common in men aged under 75 compared with women. However, in the over 75s, mortality is higher in women than men.

For women aged 15-64, age specific mortality from accidents is higher in Middlesbrough than the North East and England.

Men in this age group have mortality rates similar to the North East but higher than England. In the 65-74 age group, male mortality is more than double the rate seen in the North East and England for the three years 2012 to 2014.

### MORTALITY FROM ACCIDENTS, AGED UNDER 75 YEARS, DIRECTLY AGE STANDARDISED RATE

Middlesbrough 1995-2014

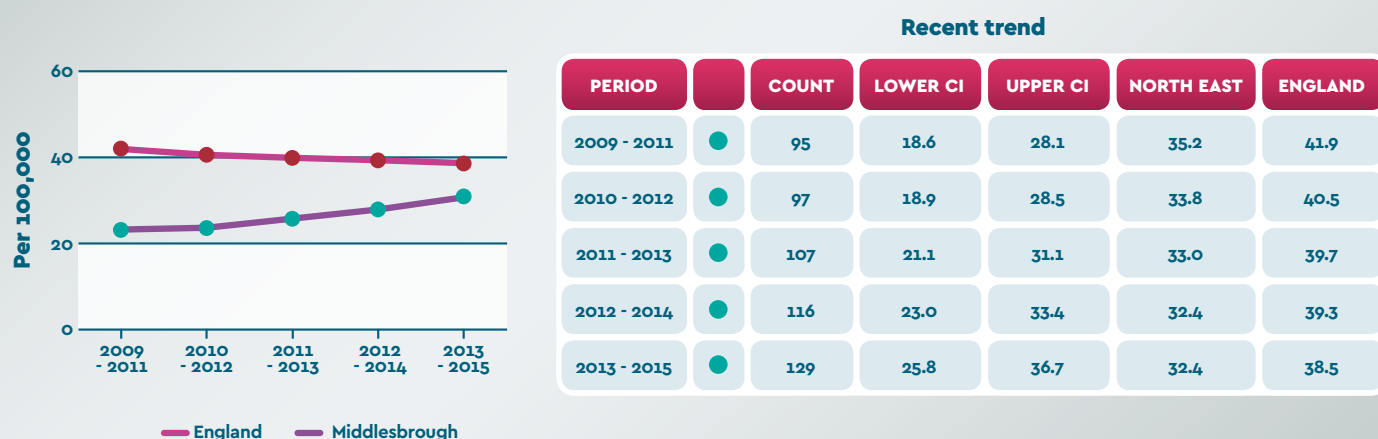


Source: NHS Digital

For under 75s, male deaths from accidents have tended to be slightly higher than England and female deaths broadly similar. The increases seen in 2014 may be a reflection of delayed registrations due to coroner inquests. In general, accidental death rates have fluctuated, with no clear trend for the past 20 years.

Within England, about one in every eight accidental deaths is due to transport accidents. In Middlesbrough, in 2014, there were 6 such deaths, all males in the 15-74 years age group. Compared with previous years, this was an unusually high number of road deaths. In general, Middlesbrough has a lower rate of road casualties compared with the England average, although this has been increasing in recent years.

## KILLED AND SERIOUSLY INJURED (KSI) CASUALTIES ON THE ROAD, MIDDLESBROUGH



## WHAT WE ARE DOING TO REDUCE PREMATURE DEATHS FROM ACCIDENTS AND INJURIES

### Falls prevention

Falls and fractures in older people are a costly and often preventable health problem and deducing them is important to maintaining health, wellbeing and independence. Many falls are the result of a combination of multiple risks, but severity of injury resulting from a fall is often associated with the presence of osteoporosis.

The South Tees Falls Prevention and Osteoporosis Service commissioned from the South Tees Hospitals NHS Foundation Trust is helping to minimise the risk of future falls in people who present to accident and emergency department or are admitted because of fall-related injuries. In addition, various local agencies provide some fall assessments or interventions as part of their work with older people (e.g. Middlesbrough Staying Put Agency, Thirteen Group Housing, Cleveland Fire Brigade and Age UK Teesside). Work is underway to develop a more proactive approach to falls prevention and related safety checks (e.g. fire safety) that target activities at the population, community, family and individual level.

### Home and road safety programmes

Initiatives in place to prevent and reduce injuries and associated morbidity include education and campaigns on general home safety actions, fire and road safety in all age groups, delivered by a range of agencies (Middlesbrough Staying Put Agency, Cleveland Fire Brigade Safe & Well Visits and Age UK).

The local authority community road safety plans include speed limits in areas of higher pedestrian activity, safe cycling for children young people and use of correctly fitting front and rear seat belts.

The Tees Valley Transport and Road Safety Partnerships coordinate the development and delivery of transport and road safety initiatives across Teesside.

## GAPS AND LOCAL NEEDS

There is need for a detailed investigation of apparent increase in accidental deaths aged under 75 in 2014, the high rate of accidental deaths in men aged 65-74 and women aged 15-64.

Further work is required to reduce the morbidity and mortality associated with accidents in the older population especially focusing on improving falls prevention.

There is need to carry out further work on the reasons behind the increasing rate of people who are killed or seriously injured on the roads, then take appropriate actions to reverse this trend.



# 5.2 SUICIDE AND INJURY UNDETERMINED

## BACKGROUND AND RISKS

Suicide is often the end point of a complex pattern of risk factors and distressing events, and the prevention of suicide has to address this complexity. They are not inevitable; the World Health Organization considers that most are preventable (WHO, 2004). There are many things that can be done in communities, outside hospital and care settings, to help those who think the only option is to end their own life.

Some population groups are at increased risk of suicide, including people receiving mental health care, those with alcohol or drug misuse problems, people who are or have been in the care of the local authority, members of the LGBT community, prisoners and people with a history of self-harming. Suicide rates are also significantly influenced by the state of the economy. There is a rise during times of economic hardship and a fall at other times, with individuals of working age (25-64) most adversely affected by economic downturns.

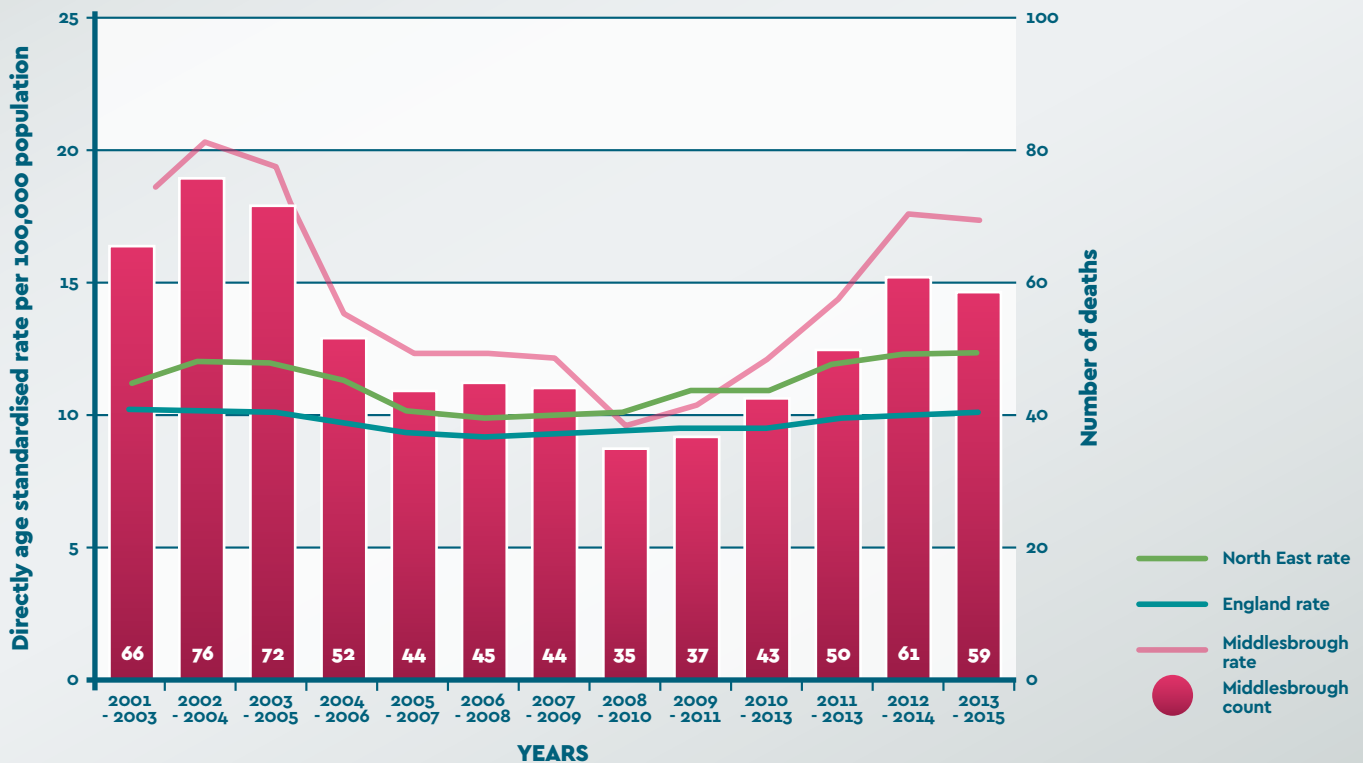
The most common place for suicides to happen is at home, but other geographical hotspots have been identified where suicides occur away from the person's home. Historically, people who have committed suicide are more likely to be single, living alone and unemployed. Physical methods of suicide and attempts are more common amongst men whereas drug overdoses are most common for women. Alcohol was detected in about two thirds of people.

## FACTS AND FIGURES

**In Middlesbrough, as with England as a whole, men are more likely than women to take their own life. For the most recent year, there were 28 suicides in Middlesbrough, 20 men and 8 women and about two-thirds were in adults aged 35-64 years.**

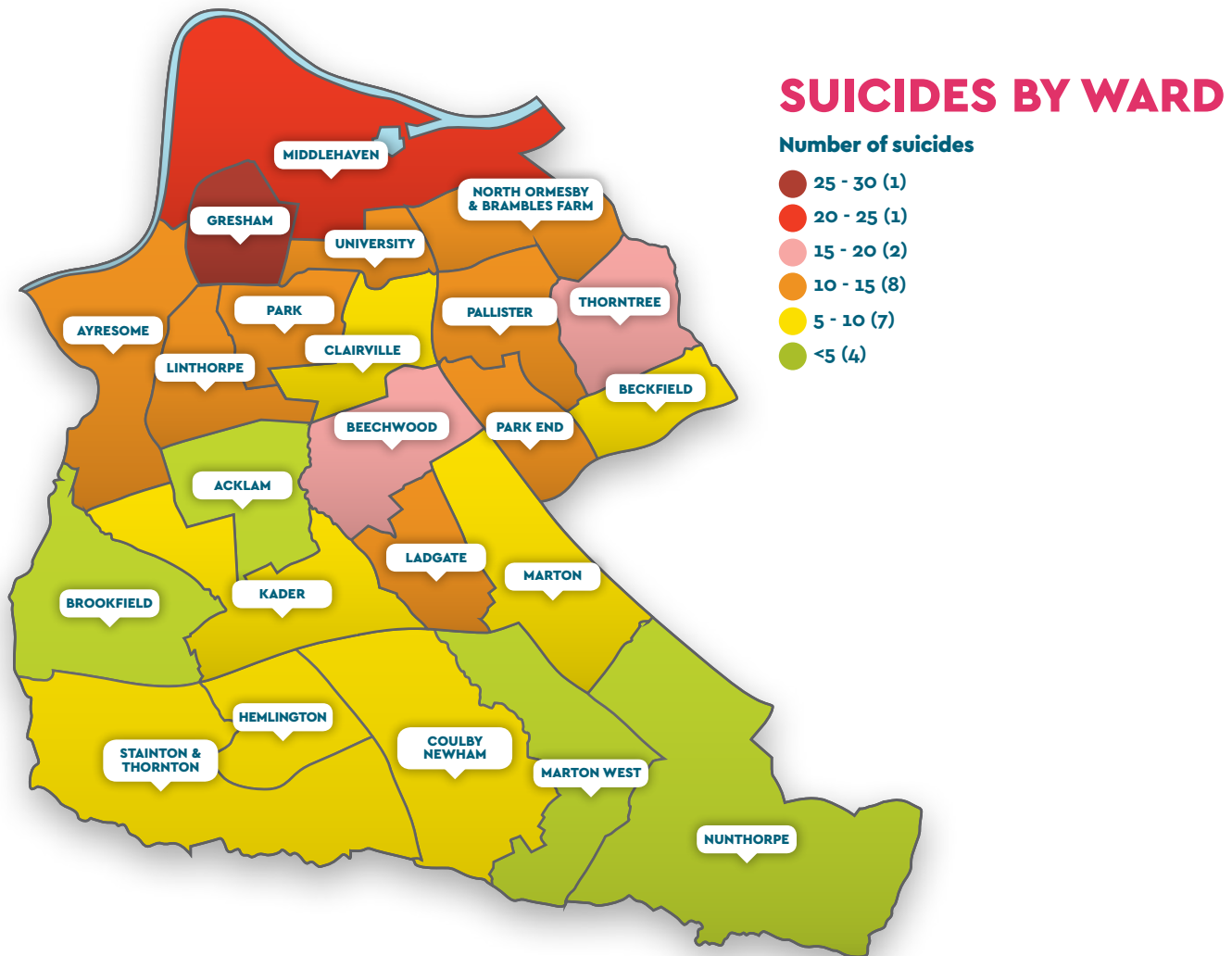
**Although the suicide rate varies from year to year, Middlesbrough has seen an increase in deaths from suicide since 2009-11, and currently has the highest rate in England.**

**DEATHS FROM SUICIDE AND INJURY UNDETERMINED, MIDDLESBROUGH**  
3 year rolling average, 2001-03 to 2013-15



Source: Public Health England

Analysis of the distribution of the 289 suicides in Middlesbrough over a 17 year period (1997 - 2013) by residential location is presented below. The number of suicides tend to mirror levels of deprivation, with North and Central Middlesbrough highest, particularly the former Gresham and Middlehaven electoral wards.



## WHAT WE ARE DOING TO REDUCE PREMATURE DEATHS FROM SUICIDES

### Tees Suicide Prevention Taskforce

The Tees Suicide Prevention Taskforce is a multi-agency partnership of more than forty organisations. It is implementing the national strategy's six areas for action:

- Reduce the risk of suicide in key high-risk groups
- Tailor approaches to improve mental health in specific groups
- Reduce access to the means of suicide
- Provide better information and support to those bereaved or affected by suicide
- Support the media in delivering sensitive approaches to suicide and suicidal behaviour
- Support research, data collection and monitoring

Suicide prevention, emotional resilience, mental health promotion and work to understand and address the social determinants of suicides featured in the 2014/15 Director of Public Health Annual Report on Mental Health and Emotional Wellbeing.



### Improving Access to Psychological Therapy programme (IAPT)

Talking therapies (Improving Access to Psychological Therapy programme) provides a range of services through a variety of providers. The services are not for people with immediate risk of self-harm or suicidal intentions, but aims to help people before they reach a crisis. People can self-refer through [www.wecantalk.org](http://www.wecantalk.org) or access services via their GP.

## Emotional resilience and wider determinants of self-harm and suicides

To improve population-wide emotional resilience we focus on "upstream" mental health promotion, starting at an early age. In Middlesbrough, we work with schools to put in place the nationally recognised Young Minds resilience framework. This approach promotes protective factors for children, their families and the communities they live in through the HeadStart programme, giving young people the knowledge, skills and support to cope with adversity and to do well at school and in life. The Suicide Prevention Taskforce continues to build population-wide emotional resilience by improving mental health literacy in targeted groups through the Tees Mental Health Training Hub. This empowers mental health service users to seek help early and tackles mental health stigma which, in most cases, brings shame and damages the self-esteem of those stigmatised. In doing so, the wider population has been engaged in openly discussing the determinants that influence people's thoughts of self-harm or suicide.

### GAPS AND LOCAL NEEDS

**There is a need to promote good emotional wellbeing and mental health. This requires building individual and community resilience and addressing the wider factors which impact on physical health and mental wellbeing.**

**The increasing number of suicides needs to be reversed, initially aiming to reduce rates by 10% by 2021. There is a lack of local, early alerts data.**

**There is a need for talk down training for specific frontline staff groups, including police, fire fighters and wardens.**

**Arrangements to employ a suicide prevention officer to co-ordinate work to reduce suicides and provide improved support are underway.**

**The Better Health at Work Awards is important for getting workplaces engaged with suicide prevention. However, uptake has been patchy in terms of championing mental health, but an increasing number of workplaces have been trained through the Mental Health Training Hub. A clear link needs to continue to be promoted between workforce productivity, sickness levels and the impact of emotional health when not addressed early. Workplaces need to therefore proactively promote early intervention initiatives such as talking therapy, books on prescription or local social prescribing initiatives.**

**The Suicide Prevention Taskforce will be initiating work streams to deliver particular targeted areas like the impact that near misses can have on preventing completed suicides or repeat self-harm behaviour.**

**The Taskforce is working on a Tees-wide anti-stigma campaign in collaboration with the regional Time to Change campaign. This aims to normalise help-seeking behaviour, improving mental health literacy and tolerance for those with enduring mental health issues.**

## 5.3 ALCOHOL

### BACKGROUND AND RISKS

Alcohol can influence premature mortality through short-term impacts on risky behaviour, such as drink driving, and by risks associated with prolonged consumption like liver disease, heart disease and some types of cancer. As well as direct health problems, long-term alcohol misuse can also lead to social problems such as unemployment, divorce, domestic abuse and homelessness. In turn, these affect mental and physical health.



# 5.3 ALCOHOL

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## FACTS AND FIGURES

In 2015, there were 75 deaths in Middlesbrough due to alcohol-related conditions, one every five days.

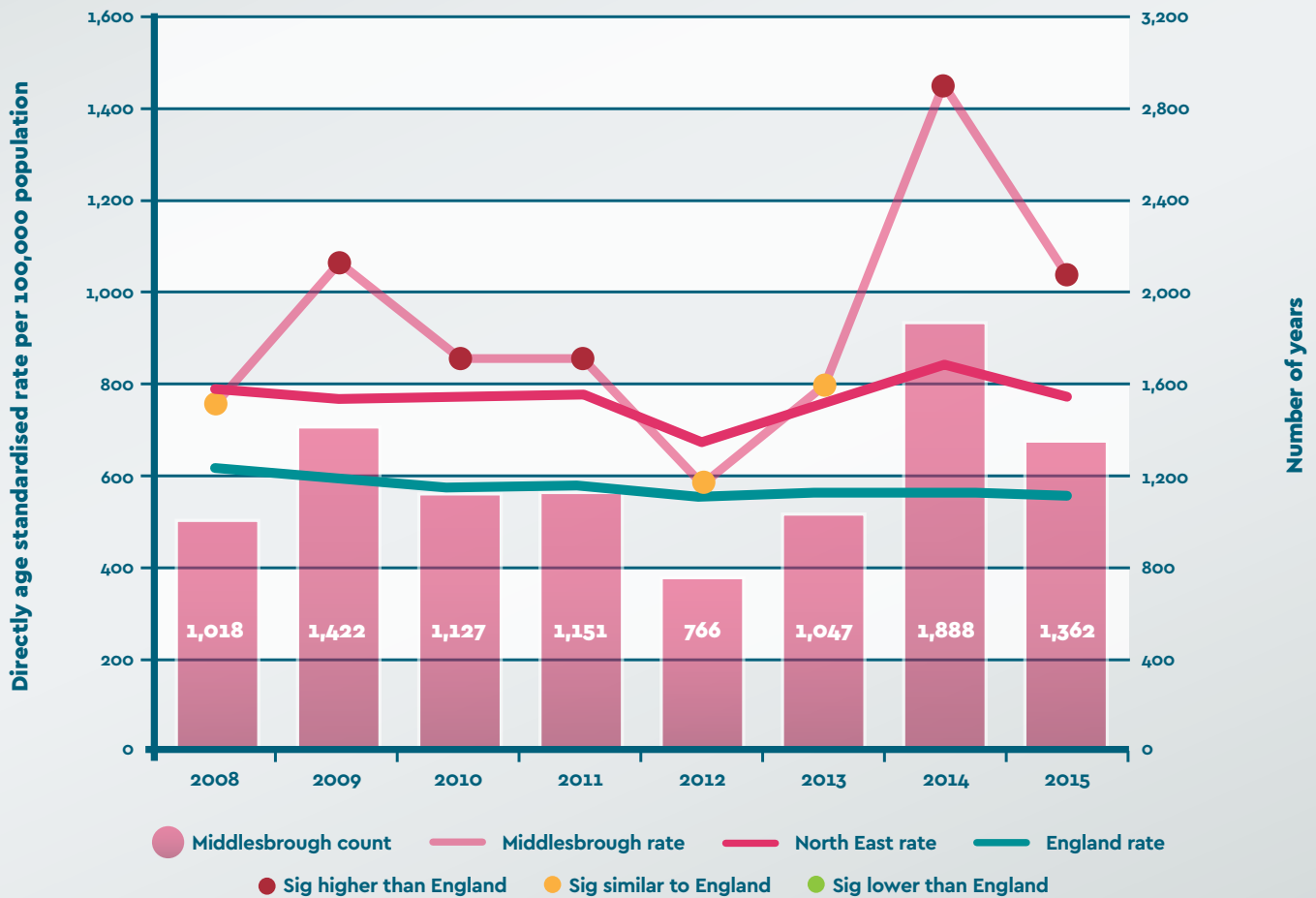
In total, 1,362 potential years of life were lost for people who died before the age of 75 years.

If all of the alcohol-related deaths were in people aged under 75 years, this would mean an average age at death of only 57 years. In reality, the average is likely to be lower than this.

The rate of years of life lost due to alcohol is higher in Middlesbrough than the North East and England averages and has risen markedly in recent years.

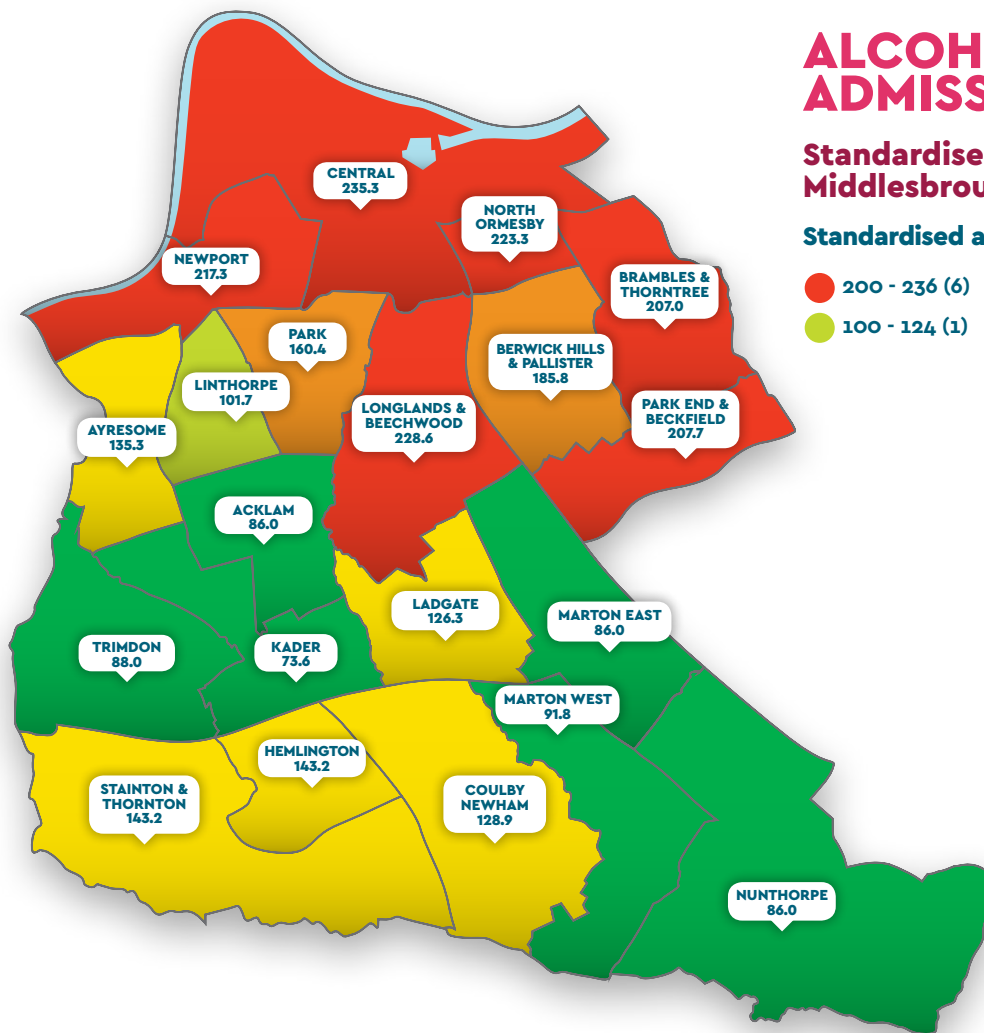
**YEARS OF LIFE LOST DUE TO ALCOHOL-RELATED CONDITIONS, MIDDLESBROUGH**

2008 - 2015



Source: Public Health England

The following map shows admissions compared with England. The England rate is defined as 100, so wards with a ratio of 200 have twice as many admissions as you would expect, if it had the England average. Six of Middlesbrough's wards have admission rates lower than England and a further six wards have admission rates more than twice as high as England. Hospital admissions due to alcohol are highest in the north and east of Middlesbrough.



## ALCOHOL-ATTRIBUTABLE ADMISSIONS

Standardised admission ratio, Middlesbrough wards 2010/11 - 2014/15

Standardised admission ratio (England = 100)



## WHAT WE ARE DOING TO REDUCE PREMATURE DEATHS FROM ALCOHOL MISUSE

### A wider tackling alcohol related harm approach

A wide alcohol agenda is being implemented in Middlesbrough, building on the Local Alcohol Action Area (LAAA) programme. The LAAA programme was set up by the Home Office to develop local actions to tackle alcohol issues across the town, particularly in relation to reducing alcohol related crime and disorder, alcohol related health harms and to promote growth by establishing diverse and vibrant night time economies.

The LAAA programme has underpinned the review and development of policies and strategies relating to the regulation and control of alcohol issues including:

- Local Government Alcohol Declaration - a local statement of intent to demonstrate local authority leadership in tackling alcohol harm and to make a collective statement about the importance of this issue locally, regionally and nationally
- Review of Middlesbrough's Statement of Licensing Policy which provides the foundation for decisions made by the Council and guidance and direction to prospective applicants for licences in Middlesbrough
- An Alcohol Harm Reduction Strategy 2017-2022 with priorities around promoting a culture of sensible drinking and responsible alcohol retailing, providing effective alcohol early help and recovery services, achieving better outcomes for children, young people and families through early identification, safeguarding and interventions and reducing alcohol related crime, disorder and anti-social behaviour.







## Key interventions and activities

There is established data sharing between health, police, public protection and safeguarding services, providing a comprehensive picture of the alcohol related harm in Middlesbrough. The Alcohol Harm Reduction Strategy sets out the challenges and how these are being tackled including:

- A Safe Haven in the town centre addresses alcohol-related injuries, reduces ambulance and A&E demands, provide a safe environment and reduce crime.
- Joint working between the Hospital Intervention and Liaison Team (HILT) ensures appropriate engagement with those at risk of alcohol-related harm.
- Promoting a responsible alcohol trade in Middlesbrough through engagement with night time economy staff, licensing condition requirements, reviews of licences and the Best Bar None programme.
- Increasing the general population's knowledge and understanding of alcohol and its related harms, working towards a culture where individuals are enabled to make informed choices about their alcohol consumption. This includes promoting sensible alcohol consumption with university and college students and promotion work during alcohol awareness week and Dry January.
- There are early help and effective alcohol recovery services for those that need them, including for children whose lives are affected by alcohol misuse in their family.
- Supporting an alcohol-free bar in the town centre, for those in recovery and the wider community.
- Training of frontline Community Safety staff on alcohol brief intervention techniques.
- Close working with the Boro Angels who offer a friendly, caring and non-judgemental presence in Middlesbrough town centre at weekends, providing assistance to vulnerable people within the night time economy.
- The co-location of alcohol, drug treatment and other services under one roof at the Live Well Centre.
- Screening and support are provided at antenatal appointments, to assess mother's alcohol status to reduce the risks to their unborn baby.

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## **GAPS AND LOCAL NEEDS**

There is a need to provide consistent advice and identification in all settings and to integrate alcohol and substance misuse services with other services especially for vulnerable and high risk populations.

Referral pathways to alcohol treatment and rehabilitation services need to be embedded across a range of services and pathways.

Prevention and early intervention measures are not always focused upon geographical areas where alcohol harm and alcohol-related deaths are greatest.

Deliver a 'poly-substance' approach to treatment services that combines screening, treatment and rehabilitation for both alcohol and drug misuse.

There is need for further work to be carried out to raise awareness of alcohol hidden harms and raise awareness of sensible drinking across the town.



## 5.4 DRUG MISUSE

### BACKGROUND AND RISKS

For the people who take them, illegal drugs can be a serious problem. They are responsible for between 1,300 and 1,600 deaths a year in the UK, and destroy thousands of relationships, families and careers.

Young people, particularly those from a range of vulnerable backgrounds, are at increased risk of problematic drug use. Older, entrenched drug users find it difficult to make progress through the treatment system.

Opiate and/or crack cocaine use shows a clear social gradient, with the most deprived populations having nearly three times the rate of the least deprived.

[www.local.gov.uk/preventing-drug-related-deaths](http://www.local.gov.uk/preventing-drug-related-deaths)

[www.gov.uk/government/publications/preventing-drug-related-deaths](http://www.gov.uk/government/publications/preventing-drug-related-deaths)



There were  
**2,383**  
drug misuse deaths  
in England in 2016...



...an INCREASE of  
**3.6%**  
on the year before  
and the highest figures  
on record



**73%**  
of drug misuse  
deaths occur  
in men



Drug misuse is the third  
most common cause of  
death for those aged  
**15 to 49** in England



All drug poisoning deaths registered in England and Wales in 2016: **3,744**  
(3,450 were in England)



Opiates (including  
heroin, methadone)  
**2,038**



Anti-depressants  
(in combination)  
**460**



Benzodiazepines  
**406**



Cocaine  
**371**



Amphetamines  
**160**



**1/3**  
of drug misuse deaths  
involve alcohol

Deaths from drug misuse in Middlesbrough are at a higher rate than any other area in the North East, and among the highest in England. During the three years from January 2013 to December 2015, there were 39 drug-related deaths in Middlesbrough, more than one per month, on average.

It is estimated that Middlesbrough has more than twice the England rate of opiate and/or crack cocaine users, about 20 per 1,000 adults, or around 2,200 users.

Nationally, the highest rate of deaths from drug misuse is among people aged 30-49 years (ONS, 2016). These deaths at a young age significantly contribute towards overall premature mortality. Men account for about three-quarters of all drug misuse deaths.

Nearly one-third (32%) of drug misuse deaths resulted from heroin and/or morphine, followed by 12% methadone-related and 10% from benzodiazepines.

## WHAT WE ARE DOING TO REDUCE PREMATURE DEATHS FROM DRUG MISUSE

Current prevention and support is organised in a four tiered service. Tier one focuses on awareness raising and training; tier two includes information and advice, needle exchanges, brief interventions, assertive outreach and drop in services; tier three has criminal justice interventions, comprehensive assessments, counselling and psychosocial support, detox programmes and support programmes; tier four comprises inpatient detox services, rehabilitation and supported living arrangements.

Take-home naloxone is being prescribed for opioid overdose in people who use drugs. If given promptly, it acts to reverse the effect of opiate overdose. Staff have been trained to train clients to administer naloxone and systems and processes including robust care pathways, clinical governance and data and information to monitor impact.

A significant number of people who misuse alcohol and drugs also suffer from mental illness, referred to as dual diagnosis. The impact of this can be considerable on health and quality of life as illustrated in the case study below.

### CASE STUDY Dual Diagnosis

**Gerry (not his real name) a 57 year old male presented to Accident & Emergency with abdominal pain possibly pancreatitis. He has had six admissions to hospital in three years due to alcohol-related conditions and mental health issues.**

He has a history of self-harm, overdoses, low mood, severe anxiety and agoraphobia impacting on his health and quality of life. There were also relationship difficulties within the wider family. He lives alone and is confined to his home and back garden. On his last admission to A&E he was seen by Hospital Inpatient Liaison Team (HILT) had an AUDIT score of 38/40 and high dependency. The HILT substance misuse workers therefore referred Gerry to the Clinical Sister for Substance Misuse who identified severe dependency.

Gerry commenced a medicated detoxification programme with the support of the nurses visiting him at home daily to monitor his physical and psychological health. He was referred for a mental health assessment after detoxification as well as community substance misuse services for continuing support and joint home visits with the mental health nurse.

**Gerry remains alcohol free and is on a relapse prevention medication. He has managed to venture outside with support and is attending appointments with the community services in the Live Well Centre.**

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## **GAPS AND LOCAL NEEDS**

There is a lack of information relating to the supply and demand of drugs in Middlesbrough, there is need to improve information sharing between agencies to inform multi-agency approaches to reduce supply and demand for drugs across the town.

There is a ten year gap between age of first misuse and presentation to treatment. Further work is required to understand the delay and support individuals to access treatment services at the earliest opportunity. Current services cater for adults aged 18 and over, however there are few people under the age of 20 in local treatment services.

Further work is required to understand the broader health needs of the substance misusing population of Middlesbrough.

Continued expansion of the naloxone programme to include frontline agencies who may have contact with people at risk of overdose. Further packs distributed to family members of those known to be at risk.

A multi-agency plan to reduce drug related deaths is to be developed led by the recently appointed preventing drug related deaths coordinator.

## Chapter 6

# INFANT MORTALITY AND CHILD DEATHS

## BACKGROUND AND RISKS

Infant mortality is the death of a child below the age of one and is usually presented as a rate per 1,000 live births.

The UK infant mortality rate is 3.9 deaths per 1,000 live births. Although low, it is slightly higher than the European Union average of 3.6 deaths per 1,000 live births. It is also the highest in Western Europe, with peers like Italy and Spain with much lower rates of 2.9 and 2.7 per 1,000, respectively.

High standards of antenatal/postnatal care and paediatric services help keep the UK rates low, but comparisons suggest there is room for improvement.

The commonest causes of infant mortality in England relates to immaturity of vital organs, such as the heart and lungs, causing 41% of child deaths in 2015. Congenital anomalies were the second largest cause accounting for around a third of infant deaths (Office for National Statistics, 2016).

The risk factors associated with increased risk of infant death vary with the infant's age and the mothers' maternal health and lifestyles. Aside from immediate health concerns, socioeconomic status and deprivation are key underlying factors, which have been linked to an increased risk of infant death locally and nationally.



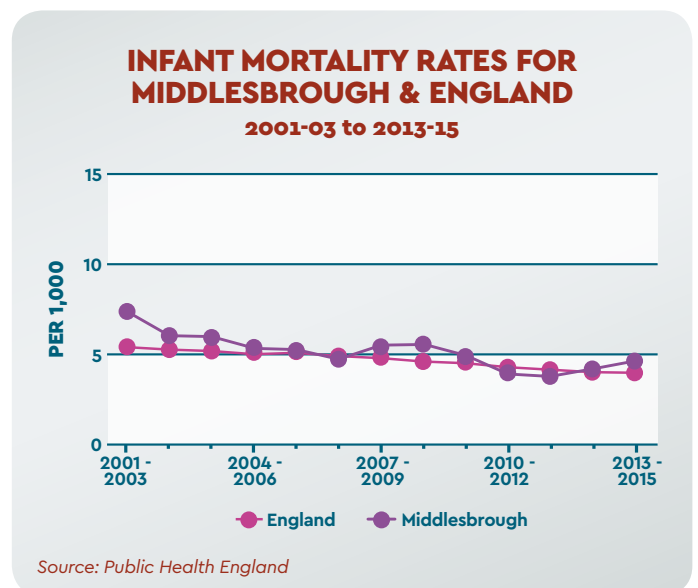
## FACTS AND FIGURES

Middlesbrough's infant mortality rate for 2013-15 was 4.6 deaths per 1,000 live births.

This is slightly higher than the previous 2012-14 average of 4.1, and remains higher than the national average of 3.9.

Although not statistically significantly higher than the national average, the Middlesbrough rate is has been close to the England average. However, it is noteworthy that despite a slight increase in Middlesbrough's rate, the actual number of deaths remain small, with eight infant deaths in 2016. Of these deaths only one death was considered to have modifiable factors.

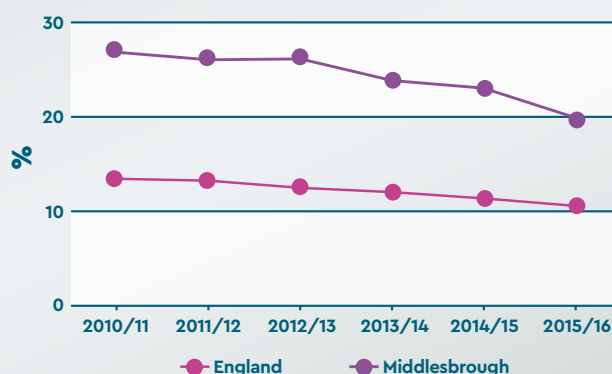
Looking cumulatively on the data from the Tees Child Death Overview Panel, over a four-year period (2012-2016), the commonest causes of infant deaths in Middlesbrough were linked to prematurity and congenital anomalies, with over half of the deaths occurring in the neonatal period i.e. the first 28 days of life.



Infant mortality rates and the percentage of low birth weight babies in Middlesbrough is higher in deprived areas compared to the affluent wards. In 2015, 1 in 25 (3.8%) of babies born in 2015 had a low birth weight despite being full term deliveries and this is higher than regional and national averages.

Babies of low birth weights are at higher risk of infant mortality. Low birth weight has many causative factors, two of the largest being maternal smoking and alcohol consumption during pregnancy. Around 20% of mothers smoked at time of delivery in Middlesbrough (2015/2016), nearly double the national rate. Promisingly this has been steadily decreasing, but further work is needed to address this and bring Middlesbrough in line with national rates.

### SMOKING STATUS AT TIME OF DELIVERY MIDDLESBROUGH & ENGLAND



Source: Public Health England

## WHAT WE ARE DOING TO REDUCE PREMATURE DEATHS IN CHILDREN UNDER 1 YEAR

**Any child death is a tragedy for the family and the local community therefore it is important that each death is reviewed correctly to consider lessons that could be learned to prevent future deaths. Locally the Tees Child Death Overview Panel reviews all child deaths and makes recommendations to agencies with the aim of preventing future deaths. The panel looks at all the details surrounding the case, including if the death was expected or unexpected, and if there are any modifiable factors.**

There is a multi-agency South Tees Maternal, Infant and Child Health strategic partnership, which includes Middlesbrough and Redcar & Cleveland councils, the local CCG and South Tees Hospitals NHS Foundation Trust, working together to address key areas. Two of these areas include reducing smoking and alcohol consumption during pregnancy. They have successfully run the 'Alcohol and Pregnancy Don't Mix' campaign and introduced Audit-C, a specialist screening questionnaire, into the midwife booking appointment. This helps identify those at risk early to allow targeted interventions and support.

Another prominent current campaign is the BabyClear, which looks to reduce smoking during pregnancy through tailored support from the midwife. The scheme which is run throughout the North East has demonstrated promising results, with increased likelihood of smoking cessation from mothers participating; and babies born to mothers who had quit were shown to be of greater birthweight than those who hadn't. It entails routine carbon monoxide monitoring in line with NICE guidance. Locally mothers who are smoking also undergo 'risk perception interventions' at their twelve and twenty week antenatal scans.

The region also benefits from a full neonatal service with a local paediatric department, including a paediatric intensive care unit. It also has a Special Care Baby Unit, helping to provide high levels of care to babies born prematurely and in need.

To compliment the BabyClear pathway, the pregnancy Early Bird sessions were changed from one-to-one to small group sessions, and the Maternity Care Assistants were trained to deliver informative messages about the harm of smoking to mum and baby using visual aids of a doll and placenta. To increase the efficacy and access to service, a stop smoking clinic was established alongside the Early Bird clinic in Thorntree, which routinely has a higher number of pregnant smokers booked in.

This integrated approach has enabled the service to be responsive to local needs and priority while also allowing women and their families to receive support and medication immediately after the Early Bird sessions. There is also currently an ongoing pilot within the maternity department to ensure easy access to Nicotene Replacement Therapy (NRT) on post-natal and antenatal wards. Evaluation is positive and reinforces the message of the benefits of quitting smoking, regardless of stage in pregnancy. It is hoped that when the hospital goes smoke free this will be embedded as standard practice across all departments. Many women have quit smoking as a result of the BabyClear programme and have used the stop smoking service support to quit as illustrated in the following case study.





## CASE STUDY INTEGRATED BABY CLEAR AND EARLY BIRD PROGRAMMES

Claire, a 30 year old was referred for Stop Smoking Support after her Early Bird appointment in December 2016. She attended clinic but did not manage to quit successfully although she had cut down. As her pregnancy progressed, Claire was concerned since she was starting to increase the numbers she was smoking. When her midwife performed routine carbon monoxide (CO) screening, the CO Level was 15ppm, indicating that her baby's oxygen levels were depleted. Claire knew she had to try again to stop smoking and asked her midwife to refer her for support again.

She attended the clinic and discussed her previous attempt. Together with the midwife they decided to use patches in combination with the lozenges and agreed to review progress in one week. On her second visit, Claire explained that she had done well but had not managed to give up her first cigarette of the day but was motivated by the fact that her CO level had dropped to just 1ppm.

Claire did not like the lozenges and whilst discussing alternatives she decided that she would like to use an E-cigarette as her second product. Whilst the Stop Smoking Service cannot provide e-cigarettes the advisor was happy to continue to support her whilst she used the patches in combination with the e-cigarette. It took a couple of weeks, but with the advisors support and encouragement she successfully quit smoking and was soon feeling the benefit in her purse! 10 weeks later Claire gave birth to a healthy and Smokefree baby boy.



## CHILD DEATHS

After the age of one, there are few deaths in children.

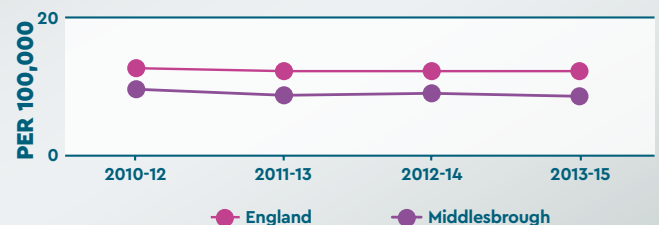
For Middlesbrough, there were seventeen deaths in children aged 1-17 years in six years (2010 to 2015), fewer than three per year, on average.

The child mortality rate is lower than England, although the difference is not statistically significant when pooling data over three year periods.

Nationally, cancer is the leading cause of child deaths (age 1-15), followed by diseases of the nervous system and external causes. Locally, there are very few child deaths making it difficult to draw meaningful conclusions from the data.

### CHILD MORTALITY RATE (AGE 1-17 YEARS)

Directly standardised rate per 100,000, Middlesbrough, 2010-12 to 2013-15



## GAPS AND LOCAL NEEDS

Further work is required to investigate the causes of infant mortality to inform a plan of action.

Work needs to continue with targeted approaches to improve maternal health and reduce the risk factors associated with infant mortality, low birth weights and poor outcomes.

Optimisation of maternal health during pregnancy, including management of conditions, which may affect foetal outcome, such as gestational diabetes. This includes early identification and control of such conditions.

Further work is required to analyse child deaths, illnesses and diseases, over a longer time period or across a wider geographical area e.g. Tees Valley to identify areas for improvement.

## Chapter 7

# EXCESS WINTER MORTALITY

## BACKGROUND AND RISKS

Each winter cold weather kills between 70 and 90 people in Middlesbrough.

Older people and people who are seriously ill are at greater risk of illness and death in winter. The number of excess winter deaths depends on many factors, including drop in temperatures, the level of disease in the population and how well equipped people are to cope with the drop in temperature. The majority of excess winter deaths are due to further deterioration in people with circulatory and respiratory diseases, rather than direct causes such as hypothermia. Research shows that mortality during winter increases more in England and Wales compared with other European countries with colder climates, suggesting that many deaths could be preventable in England and Wales.

For the purposes of this measure, winter includes the months of December, January, February and March.

Deaths in the winter months are compared with deaths in the preceding August to November and following April to July periods.

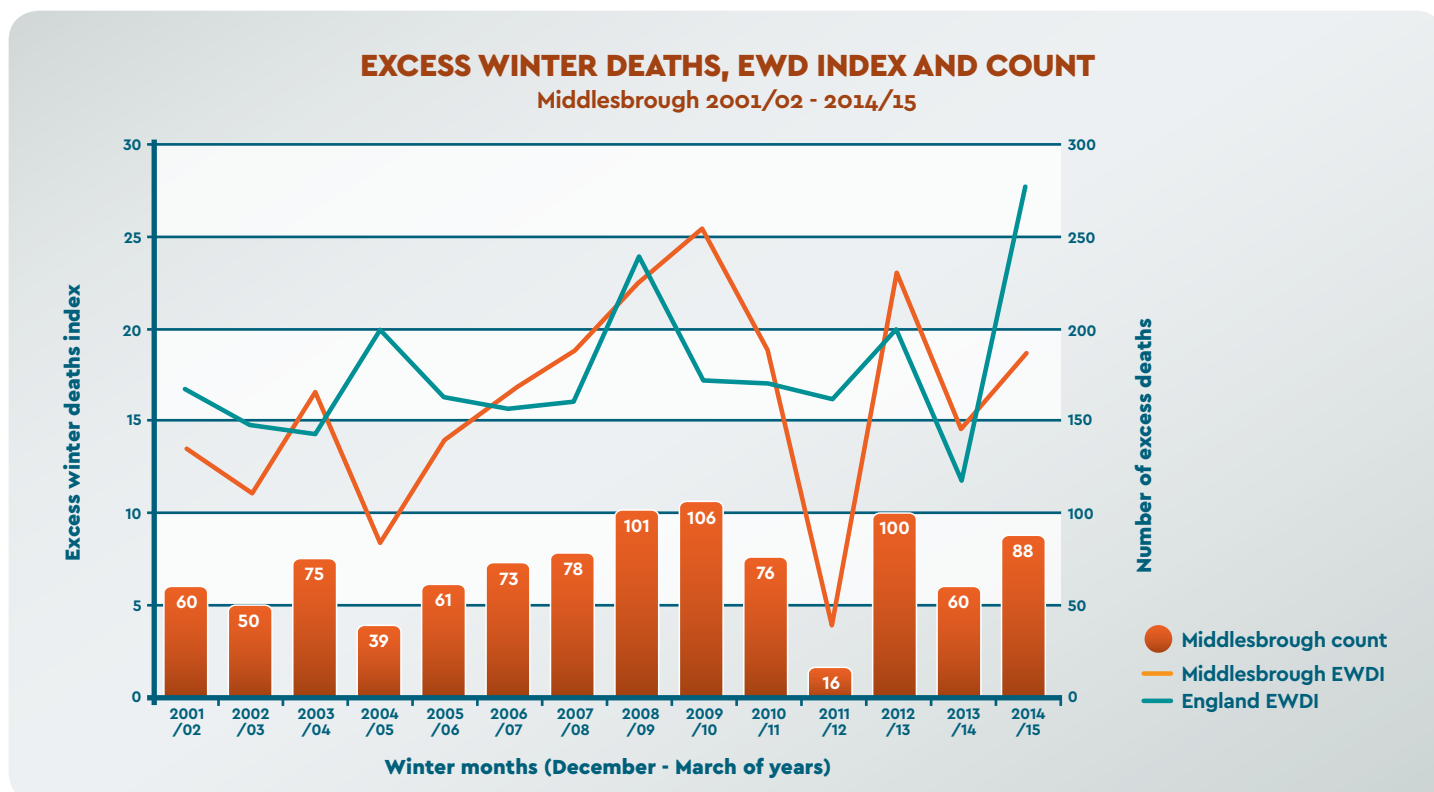


## FACTS AND FIGURES

The latest data shows Middlesbrough had an additional 88 deaths in the winter months of 2014/15 when compared with the preceding and following months.

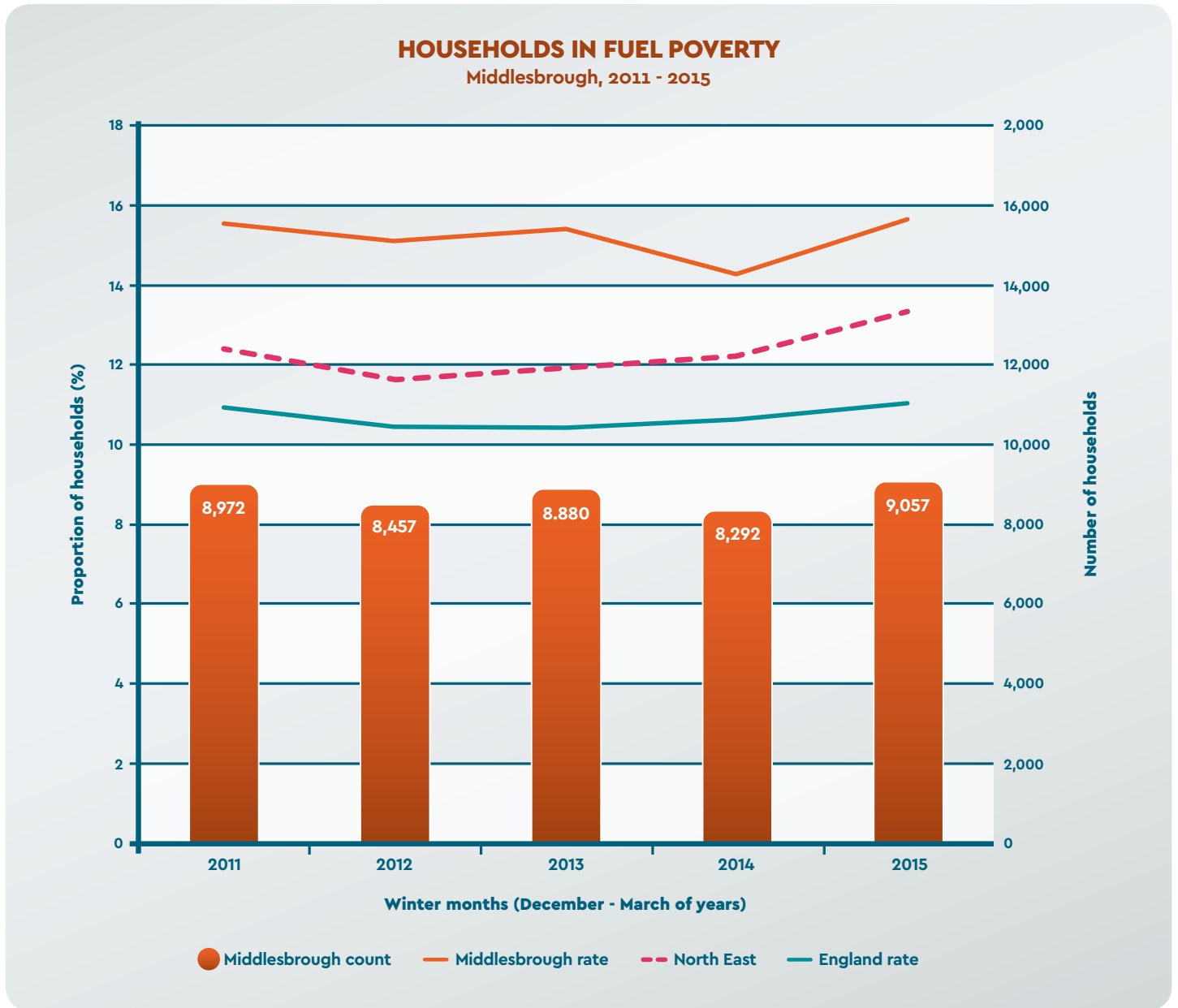
For most winters, the Middlesbrough Excess Winter Deaths Index (EWDI) is not significantly different from England, the exception being in 2011/12, when Middlesbrough had a significantly lower EWDI than England.

The main feature of the chart is how variable the measure is from one year to the next.

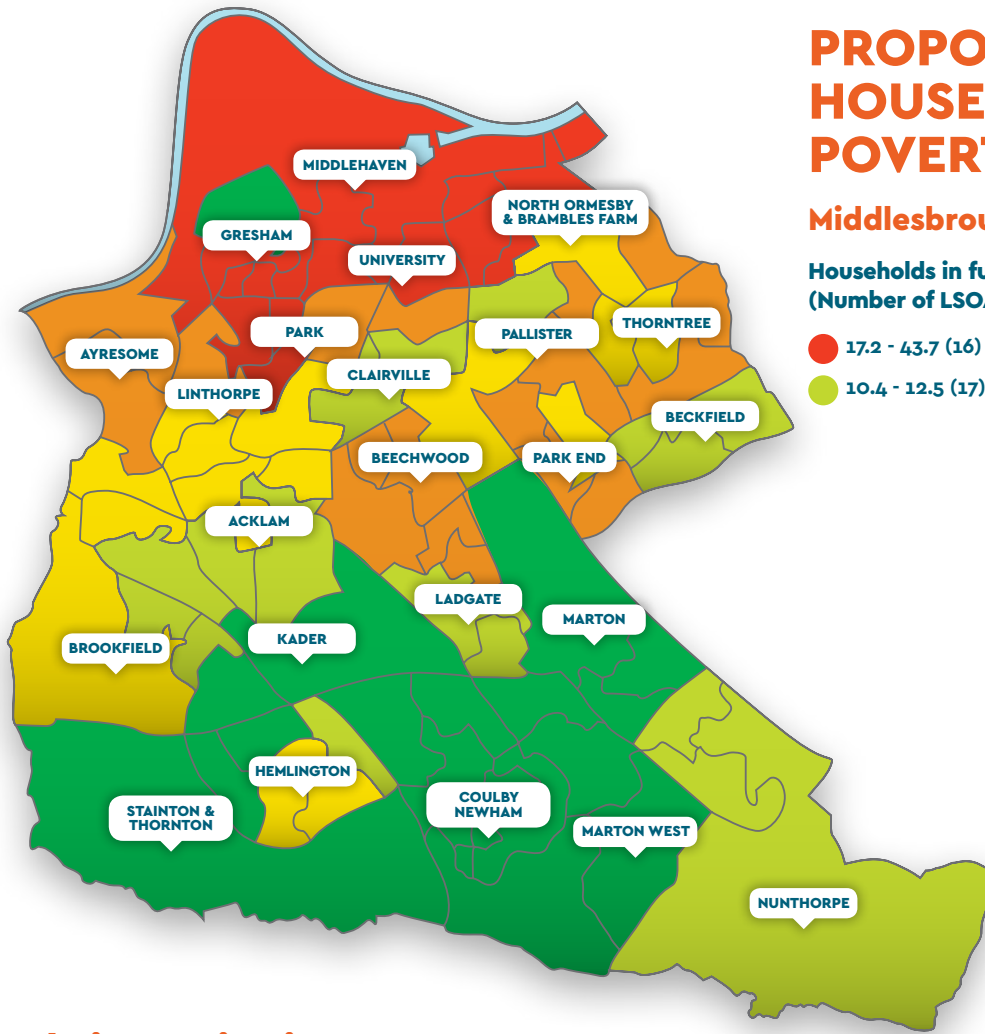




Not being able to heat your home to adequate levels may contribute to excess winter mortality. It is estimated that there are over 9,000 households in Middlesbrough in fuel poverty, spending a high proportion of household income on energy. This is more than one in every seven households. The rate of fuel poverty in Middlesbrough is higher than both the North East and England rates.



Within Middlesbrough, fuel poverty levels tend to be highest towards the town centre and lowest in the south of Middlesbrough. A neighbourhood in Central ward has 44% of households in fuel poverty. There are four more neighbourhoods where more than one third of households are in fuel poverty, three in Newport ward and another in Central ward. Sixty out of Middlesbrough's 86 neighbourhoods (LSOAs) (70%) have fuel poverty rates above the England average.



## PROPORTION OF HOUSEHOLDS IN FUEL POVERTY

### Middlesbrough LSOA's 2015

Households in fuel poverty (%) (Number of LSOAs)

- 17.2 - 43.7 (16)
- 15.1 - 17.2 (18)
- 12.5 - 15.1 (17)
- 10.4 - 12.5 (17)
- 5.1 - 10.4 (18)

## Flu immunisation

In Middlesbrough, 73.4% of people aged 65 and above had a flu vaccination in the winter of 2016/17, above the England average of 70.5%. However, about 6,500 people aged 65+ remained unprotected from flu in Middlesbrough. In people aged under 65 but considered 'at risk', only 47.7% were vaccinated, compared with 48.6% in England. This left 9,800 people in this age group unprotected from flu (*Public Health England, Seasonal flu vaccine uptake in GP patients in England: winter season 2016/2017*).

## WHAT WE ARE DOING TO REDUCE PREMATURE DEATHS FROM EXCESS WINTER RELATED HEALTH ISSUES

Cleveland Fire Brigade's "Stay safe and warm" campaign offers advice and short-term support to anyone suffering from the effects of a cold home. They can deliver equipment such as: portable heaters; fleece/mattress toppers; thermal blankets; flasks; torches; and wind up lanterns.

Middlesbrough Environment City runs a "warm and healthy homes" project, provides one-to-one energy advice and runs energy efficiency workshops as part of the Middlesbrough Affordable Warmth Partnership.

Middlesbrough Borough Council leads the Affordable Warmth Partnership, promoting energy efficiency improvements to homes, monitoring fuel poverty levels, and installing efficient heating systems and upgrades.

## GAPS AND LOCAL NEEDS

Too many people are dying in winter months compared with other times of year, particularly from circulatory and respiratory diseases. Fuel poverty and poor take up in flu vaccination contributes to these deaths.

Further work needs to be carried out to ensure a coordinated multi-agency approach to tackling fuel poverty.

About 16,000 people in the at risk groups Middlesbrough did not take up flu vaccination in the winter of 2016/17.

# Chapter 8

# RECOMMENDATIONS

This report highlights the key issues regarding length and quality of life. The following issues are a great cause for concern:

- a. the downward trend in year on year improvements in life expectancy at birth,
- b. the fact that people in the deprived wards have lower life expectancy at birth and lower healthy life expectancy
- c. the growing gap between the borough average and England and the widening inequalities within the town.

This chapter summarises the key recommendations to address the gaps and issues identified within this report.

PRIORITY	RECOMMENDATIONS
<b>Improving life expectancy at birth and healthy life expectancy</b>	<p>Inclusive growth - ensure the opportunities from economic development and regeneration are fairly distributed across all segments of the population.</p> <p>Ensure longer and healthier lives is a critical component of the social regeneration plans for the town.</p> <p>Implement the prevention strategy for adults and older people, Live Well Middlesbrough with a focus on prevention and early intervention for long term conditions and cancer.</p> <p>Develop and implement a prevention strategy for children, young people and families to address underlying causes of infant and child deaths.</p>
<b>Reducing suicide deaths</b>	<p>Implement the Tees Suicide Prevention strategy 2017 - 2020 with a focus on tackling the social determinants, building emotional resilience, mental health promotion and targeted work to reduce the risk of suicide in key high-risk groups.</p>
<b>Reducing alcohol and drug related deaths</b>	<p>Develop and implement a multi-agency comprehensive plan to reduce drug and alcohol related deaths.</p>
<b>Reducing deaths from accidents</b>	<p>Develop a multi-agency integrated approach to falls prevention.</p> <p>Review the road safety approaches to ensure awareness raising programmes and targeted action to address the rising casualties and fatalities.</p>
<b>Preventing excess winter deaths</b>	<p>Refresh the approach to tackling fuel poverty and affordable warmth across the town</p>

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### EDITORIAL TEAM

<b>Victoria Ononeze</b>	Acting Consultant in Public Health, Middlesbrough and Redcar & Cleveland Borough Councils
<b>Leon Green</b>	Public Health Intelligence Specialist, Public Health Middlesbrough and Redcar & Cleveland Borough Councils
<b>Alistair Stewart</b>	Management Information Officer, Public Health Middlesbrough Council

### CONTRIBUTORS

<b>Jonathan Bowden</b>	Advanced Public Health Practitioner, Public Health Middlesbrough Council
<b>Rachel Burns</b>	Health Improvement Specialist, Public Health Middlesbrough Council
<b>Joe Chidanyika</b>	Advanced Public Health Practitioner, Public Health Middlesbrough Council
<b>Hayley Coleman</b>	Public Health Registrar, Public Health Middlesbrough Council
<b>Michele Dickens</b>	Commissioning Manager, NHS South Tees Clinical Commissioning Group
<b>Nicky Hand</b>	Macmillan Lead Cancer Nurse, South Tees Hospitals NHS Foundation Trust
<b>Rachel McIlvenna</b>	Health Improvement Practitioner, Public Health Middlesbrough Council
<b>Emma McInnes</b>	Health Improvement Practitioner, Public Health Middlesbrough Council
<b>Spencer Robinson</b>	MacICC Service Improvement Lead, South Tees Hospitals NHS Foundation Trust

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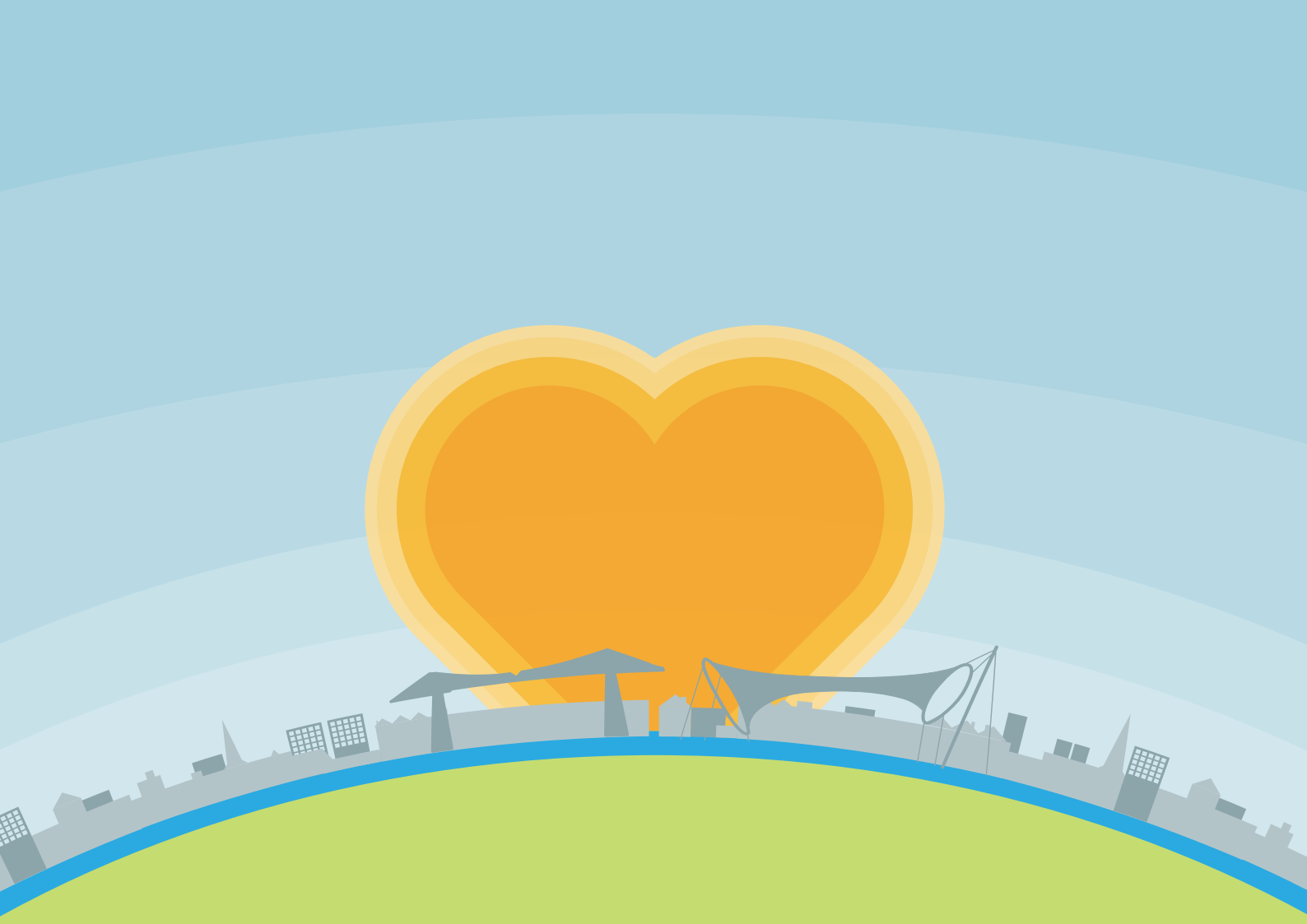
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