What is Public Health?

Public Health is defined as 'the science and art of promoting and protecting health and well-being, preventing ill-health and prolonging life through the organised efforts of society'. Ultimately Public Health is about helping people to stay healthy, with a focus on the entire population. This is achieved by identifying the causes of disease and recommending effective solutions through policy development, improving service quality and provision, partnership working and health promotion.

What is a Public Health Annual Report?

It is a statutory requirement, under the Health and Social Care Act 2012, for the Director of Public Health to produce an independent annual report on the health of the population in their local area. In Wolverhampton these reports date back to 1866 when the Medical Officer for Health Dr Vincent Jackson presented his first report to the local authority.

In 1974, the Medical Director post was renamed the Director of Public Health when Public Health teams were transfered from the local authority into the NHS. Public Health returned to the local authority in April 2013, as mandated by the Health and Social Care Act 2012.

Medical Directors and Directors of Public Health in Wolverhampton: 1866 - present day

Dr Vincent Jackson	1866 - 1871
Dr John Henry Love	1871 - 1883
Dr Henry Mallet	1883 - 1921
Dr R H H Jolly	1921 - 1950
Dr James Galloway	1950 - 1968
Dr Neville Garratt	1968 - 1989
Dr Kevin Kelleher	1989 - 1995
Dr Peter Hutchby	1995 - 1998
Dr Adrian Phillips	1998 - 2012
Mrs Ros Jervis	2012 - present

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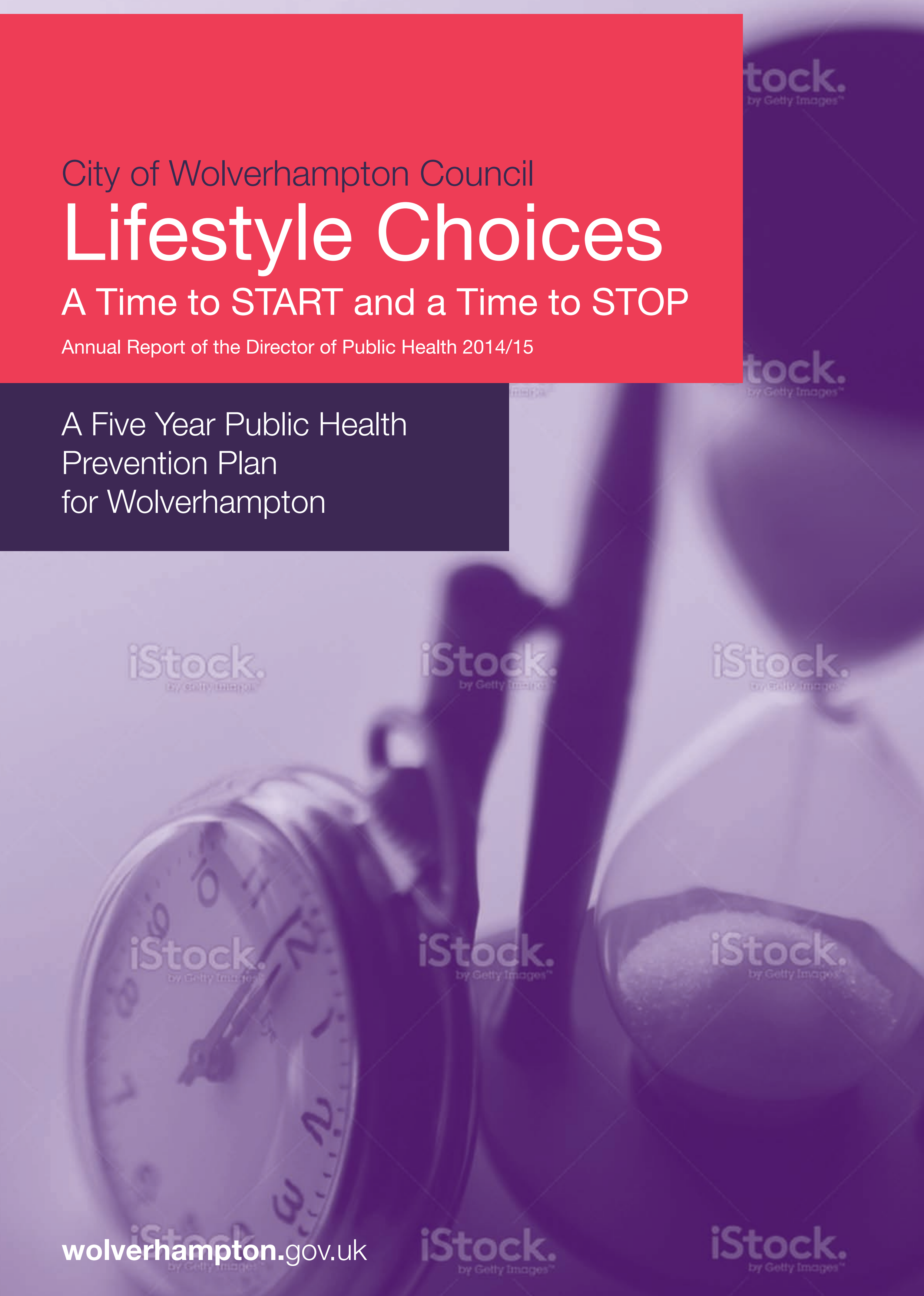

City of Wolverhampton Council

Lifestyle Choices

A Time to START and a Time to STOP

Annual Report of the Director of Public Health 2014/15

A Five Year Public Health Prevention Plan for Wolverhampton

wolverhampton.gov.uk

Contributors and Acknowledgements

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Foreword

The city council has a statutory duty to improve the mental and physical wellbeing of its citizens. As Wolverhampton's Cabinet Member with responsibility for Public Health and Wellbeing, I have clear responsibilities to ensure that we strive to address the burden of disease and disabilities, with the aim of reducing the level of health inequalities across the population. Since the transfer of public health responsibilities into local government in 2014 I've worked alongside the public health team to seek to improve service delivery, the commissioning of effective services and our relationships with key stakeholders.

This Public Health Annual Report for 2014/15, "Lifestyle Choices: A Time to Start and a Time to Stop ", raises the significant difference between the health outcomes of children and adults within our City compared to regional and national outcomes. I very much welcome the new evidence based public health prevention plan launched as part of the Annual Report, which seeks to improve the health of current and future residents of our City. The report highlights that infant mortality rates, obesity in adults and children, smoking in pregnancy and life expectancy for both men and women are worse in Wolverhampton than the average across England. The need to address lifestyle changes has to be at the heart of a preventative approach. There is recognition, within the Annual Report and the Public Health Prevention Plan, of the importance of the environment in which we live, work and play including our green spaces and opportunities to promote physical activity and wellbeing.

I would like to take this opportunity to endorse the recommendations within the Annual Report that clearly demonstrate the importance of an integrated whole system approach. Prevention is promoted through improving current services and encouraging the consideration of new, innovative programmes. I am determined that we should focus first and foremost on prevention and on shaping public health services to meet the needs of our local population; the Annual Report and prevention plan provide the foundations for these challenges.

Councillor Sandra Samuels

Cabinet Member for Public Health & Wellbeing
City of Wolverhampton Council

Foreword

A prevention plan in relation to poor lifestyle choices such as smoking, excessive alcohol intake, unhealthy eating and physical inactivity, is long overdue for the residents of Wolverhampton. Although improving, life expectancy for men and women is lower than the England average. There are an increasing number of individuals living with long term conditions and we know the major conditions that contribute to the high rate of premature deaths before the age of 75 years. These major causes of premature death are preventable conditions that are inextricably linked to poor lifestyle choices and deprivation

This evidence-based prevention plan aims to start the process of changing the Wolverhampton story, halting the increase in premature deaths, reducing inequalities and improving health for every resident of the City of Wolverhampton. A life course approach is the only way to tackle the issue with a specific focus on primary and secondary prevention of poor lifestyle choices that impact on health.

The economic argument in support of the prevention agenda is also strong. It is estimated that more than £14 billion per year is spent by the NHS alone treating illness caused by unhealthy lifestyle choices. The additional social costs would add substantially to the economic impact of lifestyle risk, if not addressed.

Therefore, our 2014/15 Public Health Annual Report sets out a five year multi-agency prevention plan to promote the prevention agenda and improve individual, family and community lifestyle choices. However, prevention is not easy and it is not a quick win. It will take concerted effort over time to raise community awareness of the poor lifestyle choices and create an environment where change can happen, and change can be sustained. Let us work together to begin the change now so our population reaps the benefits in the future.

Ros Jervis

Director of Public Health
City of Wolverhampton Council

Introduction

The old adage 'prevention is better than cure' has never been as relevant to population health as it is today. In 2002, an independent review of the long-term resource requirements for the National Health Service was undertaken. This review, by Derek Wanless[1], clearly illustrated the significant impact lifestyle changes such as smoking cessation, a healthier diet and increased activity can have on increasing life expectancy and reducing the level of resource needed for future health care. The benefits of investing in health promotion and disease prevention was highlighted throughout the review, with an emphasis on evidence based Public Health commissioned services.

Thirteen years on, *The NHS Five Year Forward View*[2] highlights the outcome of the failure to take prevention seriously as advocated by the Wanless Report. There are escalating health inequalities, increasing demands for services and unsustainable pressures on health and social care resources. The Forward View calls for a 'radical upgrade in prevention and public health' to halt the rapidly increasing burden of avoidable ill-health.

Prevention has to start at the beginning of life and continue throughout all life stages, so a life course approach is required to maximise health gain. This approach ensures that from pregnancy, throughout childhood and into adulthood, individuals, families and communities will be supported to live healthier lives, breaking the cycle of intergenerational ill-health. It is now time to START making healthy choices and time to STOP increasing risks associated with poor lifestyle choice.

This Director of Public Health Annual Report presents *A Lifestyle Choices Public Health Prevention Plan* underpinned by evidence based recommendations across the life course identified from the Public Health Prevention Strategy[3]. The aim will be to promote healthy lifestyle choices, reduce lifestyle risk and prevent lifestyle related disease across three horizons; short-term, medium term and long-term. Successful delivery of this five year Prevention Plan will result in improved health outcomes for every resident of Wolverhampton, helping to make a healthier choice, an easier choice for future generations.

> ***'We are not tinkers who merely patch and mend what is broken.... We must be watchmen, guardians of the life and health of our generation, so that stronger and more able generations may come after.'***
>
> ***Dr Elizabeth Blackwell*** *(1821-1910)*

1. *Wanless D (2002) Securing our Future Health: Taking a Long-Term View. Final report. London: HM Treasury*
2. *NHS England (2014) The NHS Five Year Forward View. NHS England: London*
3. *Public Health Wolverhampton (2015) A Five Year Prevention Strategy to Improve Lifestyle Choice. Public Health Wolverhampton: Wolverhampton*

What is Prevention?

The prevention of disease includes actions taken to prevent the occurrence of disease, stop disease progression and reduce the consequences of established disease, usually described as primary, secondary and tertiary levels of prevention *(see Table 1 below)*.

Prevention is the best approach for maximising the quality of life for current and future generations. Not only does prevention reduce the need for treatment interventions, it also ensures the best use of health and social care resources. Prevention is most effective when there is a building of individual and community resilience, alongside a reduction in vulnerability, to support positive behaviour change. However, behaviour change is a combination of personal choice and environmental factors, so there needs to be strong political, economic and cultural support to drive sustainable achievement of the prevention agenda.[4]

Why A Prevention Plan for Wolverhampton?

Life expectancy for males (77.5 years) and females (82.0 years) in Wolverhampton, although improving, is consistently lower than the national average (79.4 years and 83.1 years respectively, 2011-13). Life expectancy is affected by the number of deaths and the age at which the deaths occur. A small number of early deaths can have a significant impact on life expectancy. The top six conditions that drive low life expectancy in Wolverhampton have been identified. These are the conditions causing the most avoidable life years lost (that is, the number of years of life lost below the age of 75).

Table 1: Levels of Prevention

Level of Prevention	Definition	Example
Primary	Preventing the onset of disease by reducing risk *'stop it starting'*	Promoting healthy eating and physical activity to prevent obesity and conditions associated with excess weight
Secondary	Detecting asymptomatic disease at an early stage to slow or reverse disease progression *'catch it early and treat'*	Weight management programmes and promotion of physical activity for overweight and obese individuals to prevent development of conditions associated with excess weight
Tertiary	Reduce the damage of symptomatic disease to prevent progressive disability *'minimise consequences'*	Clinical management of obesity induced diabetes and liver disease

Adapted from: Goldston, S. E. (Ed.) (1987) Concepts of primary prevention: A framework for program development. Sacramento: California Department of Mental Health

4. *Coote A, Harris M (2013) The Prevention Papers: Upstream investment and early action to prevent harm. Nef: London*

The six conditions are:

1. Infant mortality
2. Coronary heart disease (CHD)
3. Alcohol related mortality
4. Respiratory disease
5. Stroke
6. Lung Cancer

It has been estimated that around 80% of deaths from major diseases, for example, cancer and heart disease, are attributable to lifestyle risk factors such as smoking, excess alcohol consumption, lack of exercise and an unhealthy diet. These lifestyle risk factors are often the result of individual choice with strong links to social inequalities.[5]

The conditions contributing to the excess years of life lost could be reduced and, in some cases, eliminated if healthier lifestyle choices were made by the individual. Awareness of the conditions that are affecting life expectancy presents a significant opportunity to modify the risk factors for disease through the promotion of the prevention agenda. Wolverhampton's current performance against latest lifestyle indicators alongside the regional and England average is shown in Table 2.

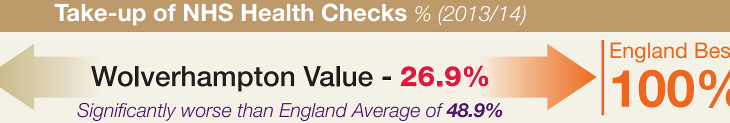
Wolverhampton is significantly higher than the England average for all of the indicators relating to lifestyle risk factors listed including preventable liver disease mortality, which is attributable to harmful alcohol consumption and obesity. Table 2 also includes data on the performance of the NHS Health Check programme offered to the population aged between 40 years and 74 years. Wolverhampton has a statistically significant higher offer of this programme compared to the national average, but uptake is significantly lower.

Public Health Wolverhampton currently commissions a young person's health check for individuals aged 18 – 39 years (outcomes not included in Table 2). There is some evidence that there are 'time windows' where exposure to vascular risk factors has the greatest effect. Over time there is an accumulation of increasing damage which contributes to an increased risk of a variety of conditions.[6]

Young and middle age (18 – 40 years) have been identified as critical periods for assessment and subsequent intervention to prevent the cumulative effects of poor lifestyle choices. Unfortunately, uptake of the young person's health check is not satisfactory. Therefore, an overarching goal for both Public Health and primary care is to promote uptake of both the young person's health check and the NHS health check. These assessments present a critical window of opportunity to promote primary and secondary prevention in respect of reducing risk factors by promoting healthy lifestyle choice.

5. *World Health Organization (2011) Global status report on non-communicable diseases 2010. Geneva: World Health Organization*
6. *Kivipelto, M, Ngandu, T, Fratiglioni, L, et al (2005) Obesity and vascular risk factors at midlife and the risk of dementia and Alzheimer disease. Arch Neurol. Oct; 62:10; 1556-60.*

Table 2: Lifestyle risk factors performance measures for Wolverhampton

Indicator	England Worst	Wolverhampton Value	England Best
Excess weight in 4-5 year olds % (2013/14)	30.6%	Wolverhampton Value - 26.4% *Significantly worse than England Average of 22.5%*	12.1%
Excess weight in 10-11 year olds % (2013/14)	43.8%	Wolverhampton Value - 41.8% *Significantly worse than England Average of 33.5%*	22.3%
Excess weight in adults % (2012)	75.9%	Wolverhampton Value - 69.8% *Significantly worse than England Average of 63.8%*	45.9%
Physically inactive adults % (2014)	39.4%	Wolverhampton Value - 29.3% *Not significantly different than England Average of 27.7%*	12.6%
Smoking prevalence % (2013)	30.0%	Wolverhampton Value - 22.0% *Significantly worse than England Average of 18.4%*	9.0%
Alcohol related admissions per 100,000 (2013/14)	1231.0	Wolverhampton Value - 851.0 *Significantly worse than England Average of 645.0*	366.0
Preventable liver disease mortality persons u75 years rate per 100,000 (2011-13)	39.5	Wolverhampton Value - 23.6 *Significantly worse than England Average of 15.7%*	7.8
Offer of NHS Health Checks % (2013/14)	8.1%	Wolverhampton Value - 58.3% *Significantly better than England Average of 37.9%*	95.8%
Take-up of NHS Health Checks % (2013/14)	21.3%	 Wolverhampton Value - 26.9% *Significantly worse than England Average of 48.9%*	100%

Key Facts on Lifestyle Choices in Wolverhampton

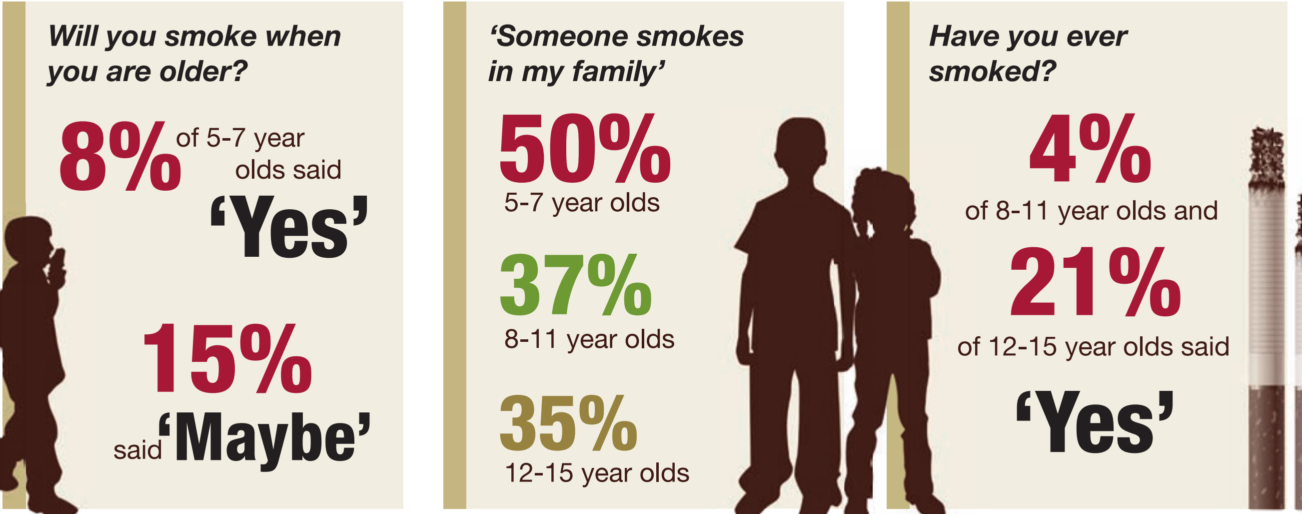
There are key facts on poor lifestyle choices made by the population of Wolverhampton, with information gained from childhood thorough to adulthood. These key facts will be discussed, highlighting the risks associated with the lifestyle choice across the life course as applicable. The importance of prevention for poor lifestyle choices is outlined indicating the need to address the associated risks to improve the health of current and future residents of Wolverhampton.

Key Facts on Smoking in Wolverhampton

Smoking is the single largest cause of preventable ill-health and premature death causing harm to almost every organ in the body.[7] Although there has been a substantial reduction in the prevalence of smoking over the past 30 years, smoking still remains a major significant health issue across local and national populations.

Protection of children from the major cause of harm associated with exposure to environmental tobacco smoke, needs to become a high public health priority for the prevention of current and future ill-health, as well as to reduce health inequalities. The initiation, maintenance and cessation of smoking is strongly influenced by peers and other family members.[9, 10]

Smoking Intention and Exposure: Children and Adolescents [8]

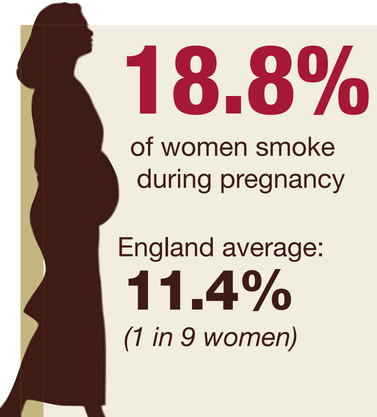


7. Department of Health (1998) Smoking Kills: a White Paper on tobacco. London: The Stationery Office
8. Schools and Students Health Education Unit (2014) Supporting the health of the young people in Wolverhampton: A summary report of the Health Related Behaviour Survey 2014. SHEU: Devon
9. Leonardi-Bee J, Jere ML, Britton J. Exposure to parental and sibling smoking and the risk of smoking uptake in childhood and adolescence: a systematic review and meta-analysis. Thorax 15 Feb. 2011 http://thorax.bmj.com/content/66/10/847.full.pdf+html [accessed 11th September 2014]
10. Saari AJ, Kentala J, Mattila KJ (2014) The smoking habit of a close friend or family member—how deep is the impact? A cross-sectional study BMJ Open 2014;4:

The results of the Wolverhampton young person's Health Related Behaviour Survey [8] outlines the high level of exposure to environmental tobacco smoke within the home, particularly at a young age. It is also quite concerning that 23% of 5-7 year olds who participated in this survey indicate that they may smoke or intend to smoke when they are older. This finding reinforces the increased risk of smoking amongst children and young people who are exposed to smoking within the home.[11, 12]

Smoking in Pregnancy [13]

Smoking during pregnancy can have adverse outcomes for maternal and child health, contributing to miscarriage, stillbirth, premature birth, low birth weight, sudden infant death and other chronic conditions throughout both childhood and adulthood.[14] It has been stated that smoking is personal choice or individual, personal responsibility; these subtle phrases in relation to smoking undermine those who have no choice in their exposure to environmental tobacco smoke.

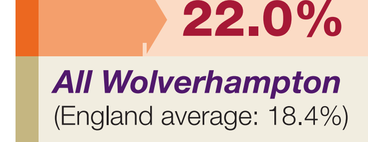


18.8% of women smoke during pregnancy
England average: **11.4%** (1 in 9 women)

Higher Smoking Rates in pregnancy are found in **specific age bands** (15-24 years) and **ethnic groups** (mixed and white British ethnic groups)

In Wolverhampton there is a **54%** increased risk of a **baby dying** before their first birthday **if the mother smokes during pregnancy**

Smoking in Adults over 18 years



22.0% ***All Wolverhampton*** (England average: 18.4%)

29.7% ***Routine and Manual Workers*** (England average: 28.6%)

Men (32.0%) aged 25-34 years are more likely to smoke than ***Women*** (23.0%)

11. Wakefield MA, Chaloupka FJ & Kaufman NJ et al (2000) Effect of restrictions on smoking at home, at school, and in public places on teenage smoking: cross sectional study. British Medical Journal 321: 333-7.
12. Farkas AJ, Gilpin EA & White MM et al (2000) Association between household and workplace smoking restrictions and adolescent smoking. Journal of the American Medical Association 284: 717-22.
13. Health and Social Care Information Centre (2015) Statistics on Women's Smoking at the time of delivery: England Quarter 4, April 2014 - March 15. Annual. Health and Social Care information Centre: London
14. Royal College of Physicians (2010) Passive smoking and children. London: Royal College of Physicians

Summary of Smoking Prevention

A Royal College of Physicians report highlighted the fact that smoking is usually described as a 'habit' rather than "a serious, often fatal, addiction to the drug nicotine." The report concludes that cigarettes "are as addictive as drugs such as heroin or cocaine". Nicotine addiction tends to be established within one year of experimenting with cigarettes which, is more likely to occur under the age of 16 for life long smokers. [15]

Therefore, the primary focus of smoking prevention is to stop children starting smoking. Once smoking has become established, prevention should be focused on starting people stopping. The health related and economic costs of smoking are well documented with robust evidence highlighting the fact that smokers are 50%-66% more likely to die as a result of a smoking related illness. However, there is strong evidence that smoking cessation can substantially reduce the risk of smoking related mortality, with a gain in life expectancy and improved heath. [16]

Tobacco control must take a multi-pronged attack with smoking cessation by adults in childbearing years taking centre stage of these efforts. This is the only way to ensure a smoke-free environment for children. [17]

Although it is acknowledged that it is possible to have a smoke-free environment for children of parents who smoke, this does not eliminate the impact of parents who smoke as poor role models promoting an unhealthy lifestyle choice.

The national ambition in relation to smoking prevalence is to: [18]

- reduce adult (aged 18 or over) smoking prevalence in England to 18.5 per cent or less by the end of 2015
- reduce rates of regular smoking among 15 year olds in England to 12 per cent or less by the end of 2015
- reduce rates of smoking throughout pregnancy to 11 per cent or less by the end of 2015 (measured at time of giving birth).

Whilst it is not possible to achieve the national targets by the end of 2015, implementation of the recommendations in this report will contribute significantly, over time, to reducing the prevalence of smoking.

15. *Royal College of Physicians (2000) Nicotine Addiction in Britain. A report of the Tobacco Advisory Group of the Royal College of Physicians. RCP: London*
16. *Office of National Statistics (2013) Opinions and Lifestyle Survey, Smoking Habits Amongst Adults 2012. ONS: London*
17. *Pattenmore PK (2013) Tobacco or healthy children: the two cannot co- exist. Frontiers in pediatrics 1:20; 1-7*
18. *HM Government (2011) Health Lives, Healthy People: tobacco control plan for England. Gateway 15513*

Key Facts on Obesity in Wolverhampton

The Director of Public Health Annual Report for 2013/14 - *Weight? We can't wait: A call to action to tackle obesity in Wolverhampton*, clearly outlined the complex problem of local childhood and adult obesity. The report established the need for a multi-faceted life-course approach with multi-agency action to produce effective local outcomes. A detailed action plan is currently being developed to provide practical interventions across the life course to tackle the level of obesity within Wolverhampton, supported by the evidence based recommendations from this report.

Obesity in Pregnancy [19]

Pregnancy is a critical life event for weight gain, but if a woman is either overweight or obese pre-pregnancy, there are increased risks of adverse outcomes for pregnancy, birth, the immediate neonatal period and throughout childhood. Weight loss during pregnancy is not advised because of the uncertainly around potential harm to the developing baby. Therefore, the current recommendation is weight management during pregnancy as opposed to weight reduction, with the aim of minimising weight gain overall, throughout the pregnancy.[20]

Following delivery there is stronger evidence to support structured weight loss programmes to prevent the retention of pregnancy weight gain which could contribute to an increased pre-pregnancy weight for subsequent pregnancies. This may result in sustained overweight and obesity following childbirth. The promotion of breastfeeding is recommended for the significant health benefits for both mother and child. These benefits include supporting weight loss for some women and a reduction in the risk of overweight and obese children in childhood.[21]

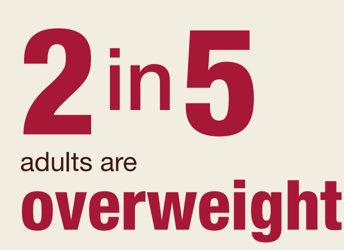
19. *Royal Wolverhampton NHS Trust Maternity Dataset (2013) Maternal weight at booking*
20. *National Institute for Health and Care Excellence. (2010). Weight management before, during and after pregnancy. NICE public health guidance 27*
21. *Kramer MS, Kakuma R (2012) Optimal duration of exclusive breastfeeding. Cochrane Database of Systematic Reviews 2012*

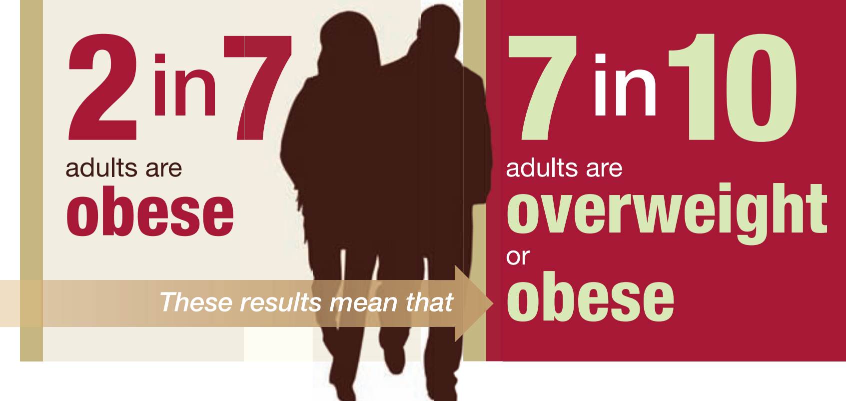
Children and Adolescents [8, 22]

The World Health Organisation states that 'obesity has a striking and unacceptable impact on children'. This is because children who are obese and remain obese throughout childhood into adulthood will have a longer exposure to the harmful effects of obesity and early onset of long-term, chronic conditions associated with obesity.

22. *Public Health England (2015) NCMP Local Authority Profile. http:://fingertips.phe.org.uk/profile/national-child-measurement-programme [accessed 22nd June 2015]*

Obesity in Adults over 18 years





Summary of Obesity Prevention

It has been well established that being overweight or obese greatly increases the risk of a number of chronic conditions, namely type 2 diabetes, hypertension, cardiovascular disease, liver disease and some forms of cancer. It is also worth noting that being overweight or obese can have a significant impact on well-being and quality of life, including the capacity to work. These findings support previous suggestions that the health impact of obesity is similar to, if not greater than, the impact of smoking and excessive use of alcohol.[23] This is primarily because a larger proportion of the population is overweight or obese, 63.8%,[24] compared to smokers, 19.5%,[25] and higher risk (harmful) drinkers, 6.75%.[26]

The National Institute of Health and Care Excellence states that prevention of obesity should be a priority for all because of the considerable health, social and economic benefits of maintaining a healthy weight and the health risks associated with overweight and obesity. There is also a clear remit for local authorities and the NHS to lead by example, alongside local business and social enterprises to 'recognise their corporate social responsibilities in relation to health and wellbeing'.[27] It is acknowledged, however, that having taken into account genetic factors and the obesogenic environment, individual decision-making and lifestyle choice also has a significant impact on maintaining a healthy weight.

23. *Sturm R & Wells KB (2001) Does obesity contribute as much as to morbidity as poverty or smoking? Public Health (2001) 115:229-235 http://www.rand.org/content/dam/rand/pubs/reprints/2008/RP952.pdf [accessed 28th October 2014]*
24. *Sport England (2012) Active People Survey 7. Sport England: London*
25. *Public Health England (2012) Integrated Household Survey. Public Health England: London*
26. *Public Health England (2014) Local Alcohol Profiles for England. Public Health England: London*
27. *National Institute for Health and Care Excellence (2013) Preventing obesity and helping people to manage their weight http://publications.nice.org.uk/lgb9 [accessed 2nd March 2015]*

The role of parents and carers in the secondary prevention of overweight and obesity in children cannot be overlooked. The strongest direct effect on childhood obesity is parental obesity due to a combination of shared genes and a shared environment. This is not surprising as parents and carers are responsible for the food choices available inside the home and, to a lesser extent as children get older, outside the home. Parents and carers also influence recreational behaviour and access to physical activity. Therefore, the secondary prevention of obesity in childhood has to address parenting and the home environment.

Ultimately, the secondary prevention of obesity for adults is dependent on more than sustained behaviour change for an individual. The change in food choices to support maintaining a healthy weight may conflict with intergenerational family and cultural practice. Therefore, secondary prevention of obesity also requires change at the family and community level to support and sustain effective weight loss. The Wolverhampton Obesity Action Plan that is in development, following the Director of Public Health Annual Report for 2013/14, will aim to address the complex, multi-factorial contributors to local obesity levels.

The national ambition in relation to excess weight (obesity and overweight)[28] is:

- a downward trend in the level of excess weight averaged across all adults by 2020;
- a sustained downward trend in the level of excess weight in children by 2020

The Obesity Action Plan, in line with the recommendations of this report will also support local achievement of the national ambition on excess weight by 2020.

28. *Department of Health (2011) Healthy Lives, Healthy People: A call to action on obesity in England. Department of Health: London*

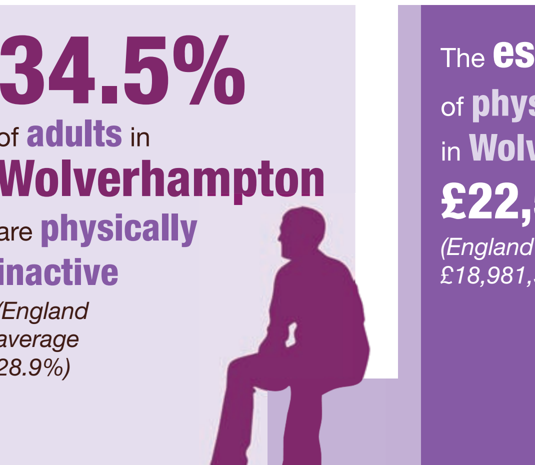
Key Facts on Physical *I*nactivity in Wolverhampton

Children and Adolescents

65% of **8-11 year olds** did **NOT** participate in **vigorous exercise five times or more** in the last week

60% of **12-15 year olds** did **NOT** go for a **walk** at least **once a week**

50% of **8-11 year olds** and **51%** of **12-15 year olds** did **NOT walk to school**



There appears to be a high degree of physical inactivity amongst children and adolescents in Wolverhampton. The Chief Medical Officer produced guidelines on the recommended levels of physical activity across the life course,[29] starting from the early years of life, children under five years old. Schools were also identified as an important component of encouraging physical activity in children, with a whole school approach that includes the promotion of active travel to and from school.

However, it was noted that after-school is a critical time to address inactivity as there is parental responsibility for activities in the evenings, weekends and school holidays. There is little evidence on effective interventions to support parents and families to increase levels of physical activity. This could be addressed through campaigns targeted at the whole family.

29. *Department of Health (2011) Start Active, Stay Active: A report on physical activity from the four home countries' Chief Medical Officers*

Page 17.

30. *UK Active (2014) Turning the tide of inactivity http://www.ukactive.com/turningthetide*

31. *Varney J, Brannan M & Aaltonen G (2014) Everybody Active Every Day – the evidence. Public Health England: London https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/374914/Framework_13.pdf [accessed 27th March 2015]*

32. *Lee I-M, Shiroma EJ, Lobelo F et al (2012) Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. The Lancet 38:9838;219-229*

33. *Health & Social Care Information centre (2014) Statistics on Smoking, England - 2014. http://www.hscic.gov.uk/catalogue/PUB14988/smok-eng-2014-rep.pdf [accessed 27th March 2015]*

Physical *I*nactivity in Adults over 18 years[30]

Wolverhampton is ranked **133 out of 150** local authorities in England for the **least physically active** population

1 = Good

AUTHORITIES RANKING

150 = Poor

34.5% of **adults** in **Wolverhampton** are **physically inactive** *(England average 28.9%)*

The **estimated cost** of **physically inactive** in **Wolverhampton** is **£22,548,412** *(England average £18,981,598)*

Physical inactivity has a significant impact on the burden of physical and mental health. Inactivity contributes to an increased risk of diabetes, strokes, heart disease, cancer, vascular dementia and moderate to severe depression.[31] A more striking finding is that 17% of premature deaths nationally (1 in 6) is attributable to inactivity[32] which is equivalent to deaths attributable to smoking.[33] This clearly highlights physical inactivity as a significant public health risk.

Summary of Physical *I*nactivity Prevention

It is undeniable that healthy eating and physical activity are inextricably linked in the prevention of overweight and obesity. However, there is a need to promote the positive benefits of physical activity separate from the obesity agenda because not all physically inactive individuals are overweight or obese. The World Health Organisation has highlighted that the continual classification of physical activity with obesity prevents the targeted promotion of the benefits of physical activity to individuals of a healthy weight.

The need for a specific focus on physical activity is highlighted by the separate *national ambition for physical activity*[29] which is:

- to have a year on year increase in the number of adults doing 150 minutes of exercise per week (in bouts of 10 minutes or more) and
- a year on year decrease in those who are inactive, defined as doing less than 30 minutes of exercise per week (in bouts of 10 minutes or more).

Chief Medical Officer Guidelines on Physical Activity

For early years *(under 5s)*

1. Physical activity should be encouraged from birth, particularly through floor-based play and water-based activities in safe environments.
2. Children of pre-school age who are capable of walking unaided should be physically active daily for at least 180 minutes (3 hours), spread throughout the day.
3. All under 5s should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

These guidelines are relevant to all children under 5 years of age, irrespective of gender, race or socio-economic status, but should be interpreted with consideration for individual physical and mental capabilities.

For children and young people *(5-18 years):*

1. All children and young people should engage in moderate to vigorous intensity physical activity for at least 60 minutes and up to several hours every day.
2. Vigorous intensity activities, including those that strengthen muscle and bone, should be incorporated at least three days a week.
3. All children and young people should minimise the amount of time spent being sedentary (sitting) for extended periods.

Based on the evidence, the guidelines can be applied to disabled children and young people, emphasising that they need to be adjusted for each individual based on that person's exercise capacity and any special health issues or risks.

For Adults *(18-64 years):*

1. Adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2 ½ hours) of moderate intensity activity in bouts of 10 minutes or more – one way to approach this is to do 30 minutes on at least 5 days a week.
2. Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or a combination of moderate and vigorous intensity activity.
3. Adults should also undertake physical activity to improve muscle strength on at least two days a week.
4. All adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

For Older Adults *(65+ years):*

1. Older adults who participate in any amount of physical activity gain some health benefits, including maintenance of good physical and cognitive function. Some physical activity is better than none, and more physical activity provides greater health benefits.
2. Older adults should aim to be active daily. Over a week, activity should add up to at least 150 minutes (2 ½ hours) of moderate intensity activity in bouts of 10 minutes or more – one way to approach this is to do 30 minutes on at least 5 days a week.
3. For those who are already regularly active at moderate intensity, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or a combination of moderate and vigorous activity.
4. Older adults should also undertake physical activity to improve muscle strength on at least two days a week.
5. Older adults at risk of falls should incorporate physical activity to improve balance and co-ordination on at least two days a week.
6. All older adults should minimise the amount of time spent being sedentary (sitting) for extended periods.

Based on the evidence, the guidelines for all adults (18-65+) can be applied to disabled adults, emphasising that they need to be adjusted for each individual, based on that person's exercise capacity and any special health or risk issues

Key Facts on Alcohol and Substance Misuse in Wolverhampton

Children and Adolescents[8]

Alcohol

1 in 5 children age **5-11 years old** said that they have **tasted alcohol**

1 in 16 children age **8-11 years old** said they **drank alcohol** in the **last week**

1 in 2 children age **12-15 years old** said they have **drunk alcohol** and **1 in 25** **drink alcohol at least once a week**

Illegal Substances

1 in 25 8-11 years olds

1 in 8 12 years olds

1 in 4 15 years olds

have been **offered illegal drugs**

over **1 in 10** 15 years olds have **taken illegal drugs**

Preventative work in relation to alcohol and substance misuse is essential for the young people of Wolverhampton. There is exposure to both alcohol and illegal substances at a young age. There appears to be a distinct period to intervene between the ages of 8 to 11 years to delay exposure to alcohol and illegal substances. One finding from the Health Related Behaviour Survey[8] was that 1 in 20 of the 8-11 year olds who were consuming alcohol reported that their parents were aware of their alcohol consumption. This indicates that some work needs to take place in conjunction with parents. There is a recommendation that childhood should be an 'alcohol-free time' and children under 15 years should not be given alcohol at any time.[34] Promotion of, and adherence to, this recommendation strongly supports the prevention agenda in relation to alcohol consumption amongst children and adolescents.

Alcohol use in Adults over 18 years

It is estimated that there are **2,135 opiate/crack users** and **5,264 dependent drinkers** aged **16 years and older** in Wolverhampton

Alcohol related hospital admissions are **increasing year on year** at **782 per 100,000** compared to **England average 637 per 100,000** *(2011-13)*

Alcohol related mortality *(due to liver disease)* is the **4th major cause of death** under the age of 75 years

The primary prevention of alcohol misuse for adults requires continually raising awareness of responsible limits of alcohol consumption and early identification of harmful use. It is more difficult to address the primary prevention of drug misuse based on the available evidence, but a similar approach to alcohol may yield effective results. As with all lifestyle choices, effective and sustained behaviour change is dependent on more than the individual. There needs to be a review of the environmental factors that contribute to harmful use of alcohol and drugs to mitigate the risk and subsequently improve individual and population outcomes.

The provision of screening and brief interventions for both alcohol and drug misuse should be implemented in a variety of health and social care settings, with concentrated delivery in primary care.

34. *Department of Health (2009) Draft Guidance on the Consumption of Alcohol by Children and Young People from the Chief Medical Officers of England, Wales and Northern Ireland. London: Department of Health*

This will enable identification and early intervention for those who may not recognise the harm associated with their level of substance use. Adequate training will ensure that staff in all settings are confident and competent to apply the tools and Making Every Contact Count[35] should assist with this process.

Summary of Substance Misuse Prevention

The issue of prevention in relation to alcohol is difficult because it is centred on promoting a responsible intake of a readily available and generally acceptable substance within society, the use of which is grounded in complex socio-cultural factors. This level of social acceptance makes it easy to forget that alcohol is a drug, not just a social norm. Unlike smoking and illicit drugs, where any exposure is harmful, the alcohol message is moderation with gender specific limits set to prevent the development of dependency and enduring harm.[36]

There is evidence that the younger the individual starts using alcohol and illegal drugs, the more likely he or she is to become addicted. Addictive behavior in younger years can also have an impact on brain development, making young people more prone to mental health disorders as the addiction progresses into their later years.[37]

There are known vulnerable groups who are deemed to be at greater risk of substance misuse, for example, looked after and disadvantaged children and young people and individuals with a family history of substance misuse.[38] It should also be noted that there are misconceptions that substance misuse is limited to young people, but there is evidence of significant substance misuse amongst middle-aged and older people.[39] Therefore any prevention plan needs to ensure a targeted approach for these particular groups in the community is implemented alongside a universal population-wide programme.

35. *Making Every Contact Count is about staff (NHS and Local Authority) taking the opportunity to help people – service users, family, friends and colleagues - improve their own health and in turn, that of our population.*
36. *Gordon R, Heim D, MacAskill S (2012) Rethinking drinking cultures: a review of drinking cultures and a reconstructed dimensional approach Public Health 126:1;3-11*
37. *Jackson KM, Barnett NP, Colby SM et al (2015) The prospective association between sipping alcohol by the sixth grade and later substance misuse J Stud Alcohol Drugs 76:2;212-21*
38. *World Health Organisation (2004) Neuroscience of psychoactive substance misuse and dependence. WHO: Geneva*
39. *Royal College of Psychiatrists (2011) Our Invisible Addicts. First Report of the Older Persons' Substance Misuse Working Group of the Royal College of Psychiatrists. College Report CR165 June 2011. London: RCPsych.*

Key Facts on Poor Mental Health and Wellbeing in Wolverhampton

Children and Adolescents[8]

Over 1 in 2 children aged 5-7 had high self-esteem
But 4 in 10 worried about bullying 'a lot'

Although 3 in 10 children aged 8-11 had high self-esteem
Equally 3 in 10 worried about bullying 'quite a lot'

Almost 4 in 10 children aged 12-15 had high self-esteem
But 1 in 7 worried about bullying

There is a strong case for investing in early years to support families and children in to reach their full potential by reducing the risk of behavioural problems and poor mental health. This process begins in the antenatal period, supporting parents to improve their parenting skills which will have positive impacts on maternal and child mental health and wellbeing. It is evident that children who are fostered or in social care are vulnerable and may begin life with poor social and emotional health. Therefore, it is essential that all carers are trained to offer support for these children and care is delivered in an environment that promotes good mental health and wellbeing.

Poor Mental Wellbeing in Adults over 18 years old[40]

1 in 10
New mothers experience postnatal depression

40. *HM Government (2011) No Health Without Mental Health: Delivering better mental health outcomes for people of all ages. London: HM Government*

Mental health/wellbeing determines and is determined by a wide range of social and health outcomes at individual, community and societal levels, and as such, has an impact on all aspects of our lives. Good mental health and wellbeing is associated with a range of better outcomes and reduced health risk behaviours, such as smoking and alcohol misuse.[40] Structured workplace interventions are effective in promoting mental wellbeing and improving health and reducing sickness absence.[41] However, not all the adult population is at work so there needs to be additional methods for targeting the working age individuals who are not in employment and older people.

Summary of Poor Mental Health and Wellbeing Prevention

Poor mental wellbeing is strongly associated with the social determinants of health which include socio-economic deprivation and social isolation. Not only do these determinants contribute to the development of mental health problems, they are equally the result of mental health problems. Across the life course existing and enduring mental health problems are related to lower levels of educational attainment, poorer work performance and productivity, and subsequently, higher rates of unemployment. Mental health problems also contribute to poor lifestyle choices, a greater incidence of addictions and higher crime rates, escalating to poor community and societal cohesion with a repetitive cycle of poor intergenerational health.[42]

The national mental health strategy states that there is 'no health without mental health',[40] highlighting the fact that improving mental health and wellbeing is fundamental to good physical health. Mental wellbeing is defined as 'the ability to cope with life's problems and make the most of life's opportunities', so is primarily about feeling good and functioning well, both as individuals and collectively as a community. Interestingly, it was found that fewer people are likely to develop mental health problems in communities with high levels of mental wellbeing.

Good mental health and well-being in childhood is important for health and wellbeing throughout the life course. A child's social, emotional and psychological well-being influences their health, educational attainment, social prospects in childhood and occupational success in adulthood. The principal shapers of mental health and wellbeing for children and adolescents are parents, carers, family, the social environment and academic experience within the school setting. Whole school based approaches demonstrate the best evidence for promoting mental health and addressing the mental wellbeing of children and young people. The involvement of parents/carers increases the effectiveness of mental health and wellbeing interventions.[43]

41. *Braun T, Bambra C Booth E et al (2015) Better health at work? An evaluation of the effects and cost-benefits of a structured workplace health improvement programme in redcuing sickness absence. J Public Health 37; 1: 138-142.*
42. *McCulloch A and Goldie I (2010) Introduction In: I Goldie (Ed) Public Mental Health Today. Brighton: Pavilion Publishing Ltd*
43. *Tennant R, Goens C, Barlow J et al (2007) A systematic review of reviews of interventions to promote mental health and prevent mental health problems in children and young people. Journal of Public Mental Health: 6; 1; 25-32*

Individual level change can be stimulated through brief intervention, promoting the five ways to wellbeing by health and social care professionals using the vehicle of Making Every Contact Count. This evidence based, individual level, promotion of wellbeing covers the physical, social and emotional domains of health with the significant potential to impact on families, communities and the wider population.

The national ambition for mental wellbeing is to:

- improve the mental wellbeing and healthy life expectancy of individuals and the population; and
- ensure that fewer people of all ages and backgrounds will develop mental health problems

Figure 1: Five Ways to Wellbeing

CONNECT
With the people around you. With family, friends, colleagues and neighbours. At home, work, school or in your local community. Think of these as the cornerstones of your life and invest time in developing them. Building these connections will support and enrich you every day.

BE ACTIVE
Go for a walk or run. Step outside. Cycle. Play a game. Garden. Dance. Exercising makes you feel good. Most importantly, discover a physical activity you enjoy and that suits your level of mobility and fitness.

TAKE NOTICE
Be curious. Catch sight of the beautiful. Remark on the unusual. Notice the changing seasons. Savour the moment, whether you are walking to work, eating lunch or talking to friends. Be aware of the world around you and what you are feeling. Reflecting on your experiences will help you appreciate what matters to you.

KEEP LEARNING
Try something new. Rediscover an old interest. Sign up for that course. Take on a different responsibility at work. Fix a bike. Learn to play an instrument or how to cook your favourite food. Set a challenge you enjoy achieving. Learning new things will make you more confident as well as being fun.

GIVE
Do something nice for a friend, or a stranger. Thank someone. Smile. Volunteer your time. Join a community group. Look out, as well as in. Seeing yourself, and your happiness, as linked to the wider community can be incredibly rewarding and creates connections with the people around you.

The Issue of Multiple Lifestyle Risk

There are separate Government strategies and targets that focus on reducing smoking, obesity and substance misuse, increasing physical activity and improving mental health and wellbeing. Whilst there is some cross-referencing of lifestyle risks in some of these strategies, there is little or no reference to how these lifestyle behaviours occur together or cluster within the population and the individual. There is no combined national strategy on how to address multiple lifestyle risks.

National analysis of four lifestyle risk factors for poor health; smoking, alcohol misuse, unhealthy eating and physical inactivity revealed that more than 25% of English adults have three or more of these risk factors. There appears to be a clustering of multiple risk factors in particular groups; men, younger people and individuals from more deprived backgrounds with lower levels of education. These groups are more likely to have three or more risk factors for poor health and experience a significant reduction in life expectancy.[44, 45] Whilst it may appear that this is an issue for a small but distinct minority, it was subsequently found that more than 70% of the population had two or more lifestyle risk factors for poor health, further widening the health inequalities and life expectancy gap for more deprived communities.[46]

The implication of these findings is that there is a need to identify the prevalence of multiple lifestyle risk within Wolverhampton to highlight groups at greater risk of premature death than previously anticipated. Targeted work will then be required to reduce inequalities and improve individual and population health. Although the evidence of effective interventions is limited, there is sufficient evidence to inform the development and commissioning of integrated programmes to support sustained behaviour change, underpinned by robust evaluation. This demonstrates a mature approach to commissioning for prevention, as highlighted by NHS England, using 'experimental approaches where the evidence of effectiveness is poor'.[47]

44. *Poortinga W (2007) The prevalence and clustering of four major lifestyle risk factors in an English adult population Preventive Medicine 44: 2; 124–8.*
45. *Khaw KT, Wareham N, Bingham S, et al (2008) Combined impact of health behaviours and mortality in men and women: the EPIC-Norfolk prospective population study Public Library of Science Medicine 5;1 http://www.plosmedicine.org/article/fetchObject.action?uri=info:doi/10.1371/journal.pmed.0050012&representation=PDF [accessed on 2nd April 2015]*
46. *D Buck & F Frosini, 2012. Clustering of unhealthy behaviours over time: Implications for policy and practice, London: King's Fund.*
47. *NHS England (2013) A Call to Action: Commissioning for Prevention. http://www.england.nhs.uk/wp-content/uploads/2013/11/call-to-action-com-prev.pdf [accessed 2nd April 2015]*

Evidence-based Recommendations Across Three Horizons

A review of the evidence for prevention of lifestyle risk factors was detailed in the Public Health Prevention Strategy.[3] The review highlighted that, with investment over time, it is possible to begin to reverse the escalating rate of ill health and widening inequalities caused by preventable disease. Therefore, recommendations have been developed across three horizons; short, medium and long-term illustrated on pages XXX. There is a clear outline of what Public Health plans to support and commission over the next five years, alongside recommendations for key stakeholders and partner agencies.

Short Term Recommendations: 2015/16

We plan to:

We recommend:

Medium Term Recommendations: 2016 - 2018

We plan to:

- commission stop smoking programmes that will take into account the specific needs of children and adolescents
- work with others to deliver the national mental health strategy objective - more people have better mental health
- look at assessing multiple lifestyle risk within the Wolverhampton
- review of women's experience of postnatal support provided by midwifery and health visiting services
- look at the possibility of a six month postnatal review to assess maternal health and wellbeing and promote positive lifestyle choices
- look at piloting local self-help materials to support women to stop smoking during and after pregnancy
- promote a local physical activity campaign for the whole family to encourage parents and children to increase levels of physical activity
- Commission programmes to prevent substance misuse which incorporates a whole school approach and family interventions that include involving parents
- work with schools to raise parental awareness of the School Food Plan and physical activity agenda
- review the possibility of introducing weight assessment for school children in Year 9 (age 13-14 years)
- work with the community to promote healthy eating and increasing physical activity, highlighting the critical periods for weight gain
- work with key partners to develop care pathways for overweight and obese children

We recommend:

- the development of individual smoke-free home policies on discharge from maternity unit, reinforced by the health visiting service, primary care and children's centres at key contacts
- age appropriate school based smoking prevention interventions are delivered
- that stop smoking services provide relapse prevention interventions to support a successful quit and people who may relapse
- weight management advice and support is provided for all stop smoking service users to reduce possible weight gain following a quit.
- the introduction of telephone counselling support delivered by stop smoking services to help support and sustain a successful quit
- audit adherence to the NICE guidance promoting smoking prevention, smoking cessation and tobacco control to ensure delivery of evidence based recommendations to improve local outcomes
- the young person's health check and the NHS Health Check are used to assess alcohol use
- brief intervention training for all front line health and social care professionals to increase awareness of stop smoking programmes and referral into services.
- following the 6-8 week postnatal assessment, offer of a structured weight loss programme to all who women were overweight and obese at the beginning of their pregnancy
- a whole school approach to the promotion of emotional and mental health and wellbeing for children
- maternal weight is assessed at 6-8 week check incorporating advice on healthy eating and the promotion of physical activity.
- a multi-agency working group is developed to improve population participation in physical activity
- the promotion of the Five Ways to Wellbeing in primary care
- promotion of the Chief Medical Officers guidelines on physical activity for adults by health and social care professionals
- the use of brief interventions within primary care to enable the early identification of harmful drinkers and referral into treatment services.
- promotion of the Chief Medical Officers guidelines on physical activity for children and adolescents by health and social care professionals
- the promotion of local parental/carer awareness of obesity prevention, highlighting home activities that encourage children to be more active, eat more nutritious foods and spend less time in screen based activities.
- primary care provides follow-up, within three – six month, for people who are overweight or obese who have declined referral to a weight management programme to assess willingness to attend services overtime
- primary care provides follow-up, within three – six month, for families of children and adolescents who are overweight or obese who have declined referral to a weight management programme to assess willingness to attend services overtime
- that The Royal Wolverhampton NHS Trust introduces a smoke-free policy during all hospital stay and becomes a smoke-free hospital site
- active promotion of the Wolverhampton young person's health check and the statutory NHS health check within primary
- development of a whole schools approach to the promotion of physical activity

Long Term Recommendations: 2018 – 2020

We plan to:

Conclusion

There has been a consistent drive to increase life expectancy and reduce inequalities, but most policy is driven by the secondary prevention, diagnosis and early treatment and tertiary prevention, dealing with the consequences of disease and harm. This is because primary prevention is long term, more complex and often difficult to measure as the results are not particularly tangible. A review of the evidence for prevention of lifestyle risk factors has highlighted that, with investment, it is possible to begin to reverse the escalating rate of ill health and widening inequalities caused by preventable disease.

The independent review into long term resource requirements for the NHS by Derek Wanless in 2002 indicated the need to drive the prevention agenda to improve health, maximise resources and minimise spend. *The NHS Five Year Forward View* calls for 'a radical upgrade in prevention and public health' as failure to heed this warning on the promotion of prevention almost thirteen years ago, is the root cause of the current burden of avoidable illness that is predicted to rapidly increase in the future.

This Annual Report has outlined a plan to address the prevention agenda through evidence-based recommendations across the life course for the short, medium and long-term, as illustrated on pages XX. These recommendations include the revision of current services, commissioning of new services, alongside the development of local indicators and scoping the feasibility of experimental, integrated interventions.

The evidence reviewed indicates that more work is required within schools, children's services, primary care and the local community to promote the prevention agenda. This should be underpinned by a competent workforce that is trained to Make Every Contact Count and committed to supporting behaviour change long term. However, success can only be realised when there is an appreciation that lifestyle choices do not exist within a vacuum and the solution is both complex and multi-faceted. Behaviour change alone is not sufficient and there needs to be local commitment from statutory and voluntary organisations to create an environment that supports a healthier choice.

There appears to be a wealth of data and evidence to support the prevention agenda. Synthesis of this information and subsequent translation into practical recommendations has been challenging. It is important to note that the evidence alone, in some circumstances, is not sufficient by itself to guide appropriate decision making. This is because the evidence base to support lifestyle changes is incomplete in a number of areas.

However, lack of evidence does not indicate lack of effectiveness of an intervention, neither should it hinder the commissioning of experimental programmes. There is a need to derive local knowledge of effectiveness through the implementation and subsequent evaluation of commissioned programmes and interventions.

A significant proportion of the local population of Wolverhampton is dying prematurely and there is a desperate need to address prevention to reduce inequalities and improve individual, family and population health.

Failure to prioritise prevention now, will result in the continuation of the intergenerational cycle of ill-health, widening inequalities and subsequent death at increasing costs to health and social care. The treatment of escalating rates of lifestyle attributable disease and the consequences of the potentially high rates of multiple lifestyle risks will not be affordable in the near future.

It is evidently clear that 'prevention is better than cure', the requirement now is action. This Annual Report highlights that now is the time to START making positive lifestyle choices and the time to STOP negative lifestyle behavior. It is our aim to actively support delivery of the recommendations within this report so that the benefits of prevention become a reality for all residents of Wolverhampton.

> ***"Diseases can rarely be eliminated through early diagnosis or good treatment, but prevention can eliminate disease"***
>
> **Denis Burkitt** *(1911-1993)*