



Public Health Matters: Sex, Drugs and Fluoridation

Director of Public Health Annual Report 2016

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Design: Michael Jackson

Print: County Print Services



Cllr Izzi Seccombe, Leader of Warwickshire County Council and Local Government Association (LGA) Community Wellbeing spokesperson

“We need to move away from a focus on treating sickness to actively promoting health. Investing in prevention saves money for other parts of the public sector by reducing demand for hospital, health and social care services and ultimately improves the public’s health.”

Data Sources

This report utilises the most recently available published information from a variety of data sources.

If you would like this information in a different format, please contact Marketing and Communications on 01926 413727.

The report is available to view online or download at publichealth.warwickshire.gov.uk/annual-report

Introduction

Benjamin Franklin once said *“An ounce of prevention is worth a pound of cure”* summing up public health and its potential in both saving lives and achieving value for money.

In previous reports, I have explored in detail lifestyle risk factors, highlighted the burden of long term conditions, patterns of mortality, the importance of protecting the health of our population and the value and challenges in improving outcomes for our young people. An overview of the latest health and wellbeing needs and trends is provided in more detail in **chapter 1** of this report.

This report focuses on the return on investment. The need to make the best impact with limited and shrinking resources across the public and voluntary sector is now greater than ever. However, the significant cuts to public health will have a major impact on public health activity. In **chapter 2**, I use five case studies across the public health remit to illustrate value for money locally.

In the final section, **chapter 3**, I consider the impact of my previous annual reports as a tool or intervention for change in policy and services.

I have used evidence from a number of sources including, Public Health England (PHE), National Institute for Health and Care Excellence (NICE), and the King’s Fund and Local Government Association (LGA) report, ‘Making the case for public health interventions’. The LGA also suggest that investment in prevention could yield a net return of 90%.

In Warwickshire, we have led improvements in a number of key public health areas:

- physical activity in adults has improved across all district and boroughs - all are now similar to or better than the England average;
- physical inactivity in adults has reduced - from 1 in 3 down to 1 in 4;
- smoking during pregnancy is now below the England average;
- teenage conceptions continue to fall;
- deaths from cardiovascular disease have fallen across the north of Warwickshire; and
- number of Dementia Friends in Warwickshire has increased to over 11,000.

These achievements need to be recognised and celebrated. However we must not be complacent. We need to continue to work collaboratively to reduce preventable causes of ill health.

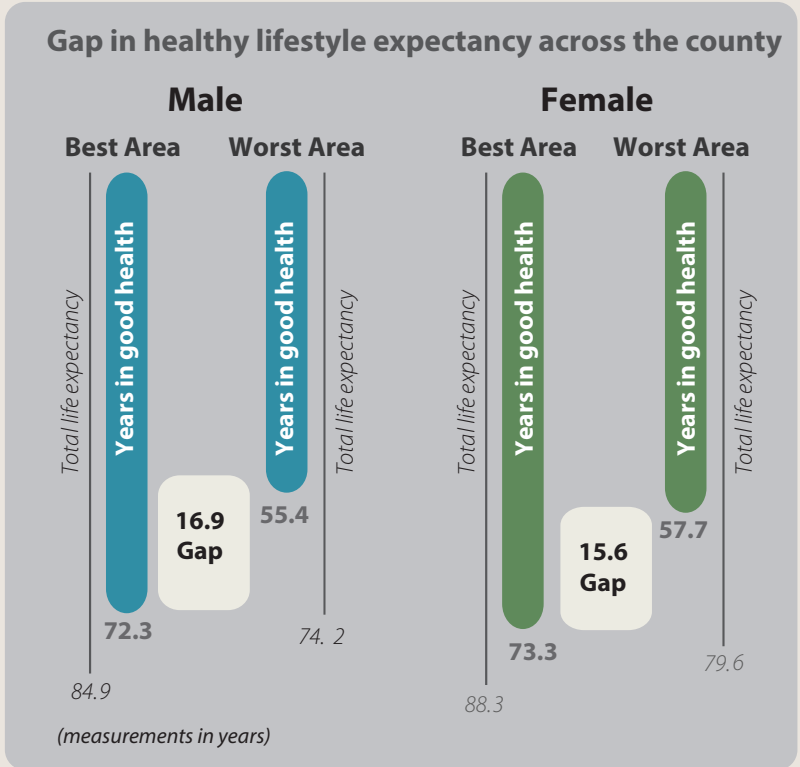
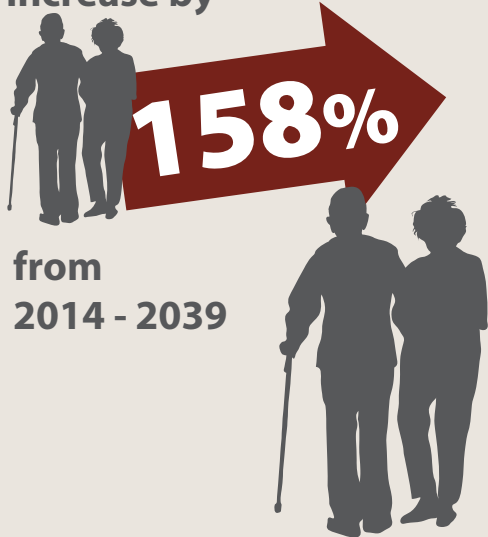


Dr John Linnane

Director of Public Health,
Warwickshire County Council

Today people in Warwickshire are living longer, but not necessarily healthier lives

Warwickshire's population of over 85s is projected to increase by



Warwickshire continues to face a number of public health challenges



1 in 4 adults are physically inactive



1 in 8 adults are smokers



1 in 4 will experience a mental health problem in any given year



Warwickshire's public health challenges are being tackled within a wider strategic context

Responsibility for public health transferred from the NHS to local authorities in April 2013. This means upper tier and unitary authorities have become responsible for improving the health of their population.

The Health and Wellbeing Board (HWBB) has strategic influence over commissioning decisions across health, social care, and public health, and delivery of the Health and Wellbeing Strategy by partner organisations.

The NHS Five Year Forward View was published on 23 October 2014 and sets out a new shared vision for the future of the NHS based around the new models of care. It calls for a radical upgrade in prevention and public health.

NHS England Sustainability and Transformation Plans (STP) outlined an approach to ensure health and care services are built around the needs of the local population, to close the health and wellbeing gap. Every health and social care system will produce an STP, detailing a partnership approach to delivery of the Five Year Forward View.

Public Health Warwickshire - Our Priorities

The public's health is our priority, where wellness and tackling health inequalities will be central to all we do, working collaboratively with all our partners on outcomes that will reduce the preventable causes of ill-health.

Public Health Warwickshire has identified health and wellbeing priorities to focus commissioning:

- ▶ Healthy start
- ▶ Mental health and wellbeing
- ▶ Physical activity
- ▶ Lifestyle risk minimisation
- ▶ Healthy place

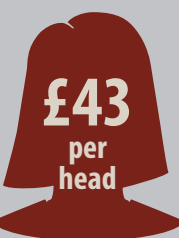
Costs and spend on health and public health varies across the country



Average NHS spending

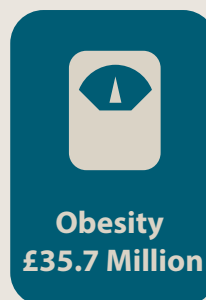


Average Public Health grants to local authorities



Warwickshire Public Health grants

Approximate costs to the NHS in Warwickshire per year



Someone in mid-life who smokes, drinks too much, exercises too little and eats poorly is



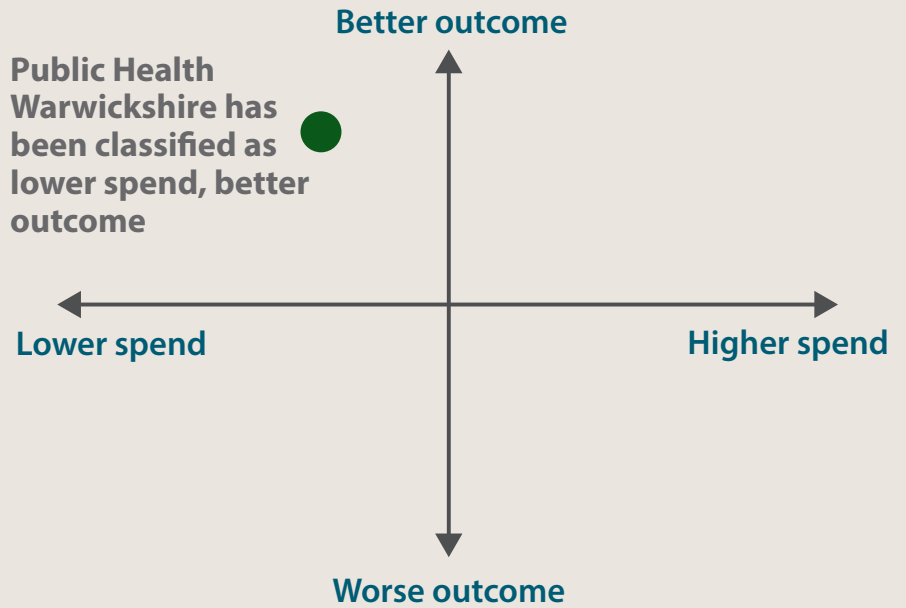
four times more likely to die

over the next 10 years than someone who does none of those things.

Source: Department of Health and NHS England (2016/17)

There are economic reasons for investment in public health

Public Health England, Spend and Outcome Tool (SPOT) gives organisations in England an overview of spend and outcomes across key areas of business.







Source: Public Health England (2016)

Economic reasons for investment in public mental health

For every **£1**

invested in public mental health interventions, the net savings are:

-  school based social and emotional learning programmes
-  suicide prevention through GP training
-  early intervention for psychosis
-  school-based interventions to reduce bullying

Economic reasons for investment in public health

For every **£1** invested the savings are:

-  smoking prevention programmes in schools
-  parenting programmes to prevent conduct disorders over six years
-  improving homes over 10 years can save the NHS
-  back to work for disadvantaged groups can reduce costs of homelessness, crime, benefits and NHS care
-  befriending services can reduce mental health service spending and improve health
-  supportive networks and motivational interviewing for alcohol and drug addictions can reduce health, social care and criminal justice costs
-  drug treatment can reduce NHS and social care and crime costs

Recommendations

Preventing people getting ill, by promoting and protecting health and wellbeing, is not only necessary to halt increasing demand on health and social care, to reduce inequalities and to improve quality and quantity of life but is actually very cost effective. Therefore, prevention and early intervention should be integral to every aspect of organisation planning to help build a resilient community and promote independence.

Recommendation 1 - Sustainability and Transformation Plan (STP)

I recommend the Health and Wellbeing Board (HWBB) does all it can to ensure that the local STPs:

- acknowledge their individual organisational responsibilities to focus on prevention and early intervention.

The local STP footprint covers Warwickshire and Coventry, and the plans must address three gaps outlined in the NHS Five Year Forward View:

- health and wellbeing gap;
- quality gap; and
- financial gap.

Recommendation 2 - Community capacity

I recommend that all statutory partners with health and wellbeing responsibilities across Warwickshire:

- develop a co-ordinated comprehensive asset based approach to community capacity;
- recognise and support the increasing role played by 'informal' carers;
- ensure the voluntary sector is central to this asset based approach;
- engage with other 'community assets' - families, friends and local people who have the ability to support each other; and
- promote 'wellbeing', and empower people to find solutions to improve their health and wellbeing.

Recommendation 3 - Place based working

I recommend the HWBB partners:

- renew their commitment to place based working to improve health and wellbeing;
- promote and challenge the STP to acknowledge and embed this place based working at the core of their plans; and
- engage with local government assets such as housing, transport and planning to develop a healthy places approach.

Recommendation 4 - Making Every Contact Count (MECC)

I recommend the HWBB partners:

- commit to the principles of MECC;
- promote the MECC approach;
- ensure all front line staff are trained in the Five Ways to Wellbeing/MECC approach and feel confident to have the conversation, where appropriate; and
- include Five Ways to Wellbeing/MECC as an essential element of the induction programme for new staff.

Recommendation 5 - The workplace

I recommend that all statutory partners in Warwickshire:

- sign up to the 'Workplace Wellbeing Charter' (or equivalent);
- promote adoption of the charter through the Local Enterprise Partnership (LEP) and the Chamber of Commerce; and
- encourage a similar commitment from partners across the combined authority area.

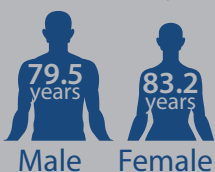
Chapter One

Patterns of Health and Wellbeing across Warwickshire: Health Profiles 2016



England

Life expectancy



Smoking prevalence



Under 18 conceptions



Excess weight in 10-11 year olds



Hospital admissions as a result of self-harm (10-24 years)

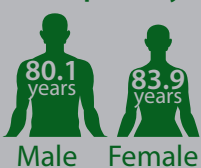


Hospital admissions for alcohol related conditions



Warwickshire

Life expectancy



Smoking prevalence



Under 18 conceptions



Excess weight in 10-11 year olds

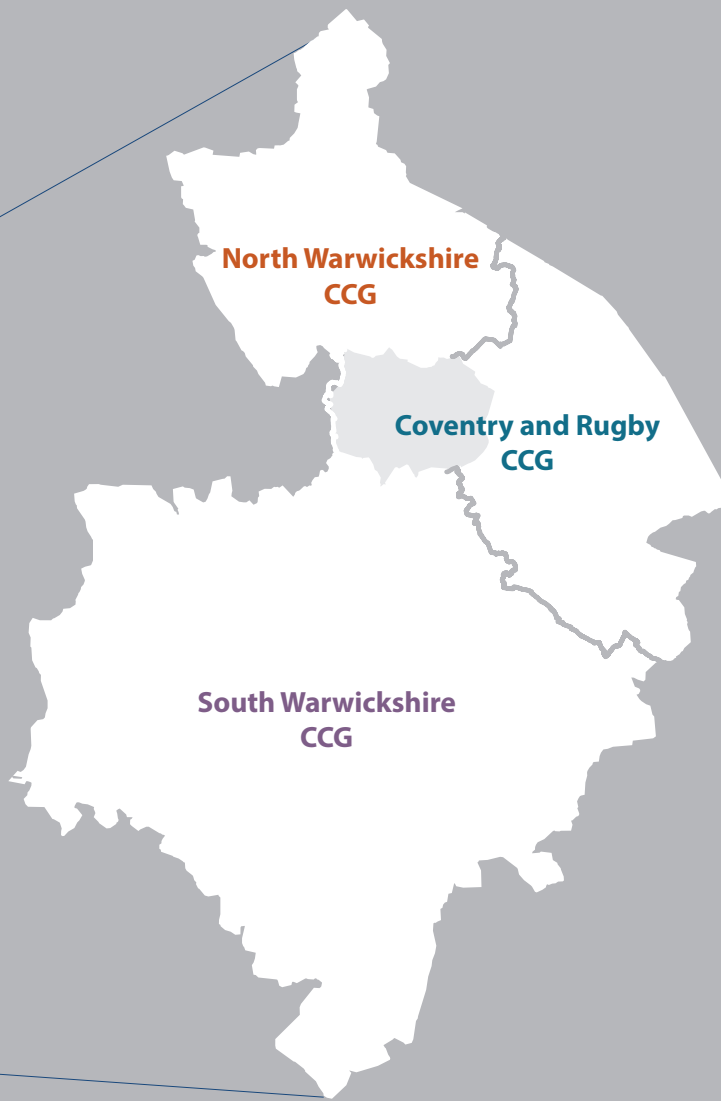


Hospital admissions as a result of self-harm (10-24 years)



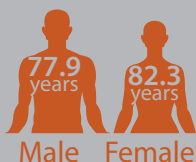
Hospital admissions for alcohol related conditions





North Warwickshire CCG

Life expectancy



Smoking prevalence



Under 18 conceptions



Excess weight in 10-11 year olds



Hospital admissions as a result of self-harm (10-24 years)

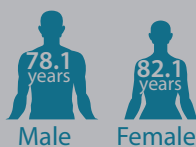


Hospital admissions for alcohol related conditions



Coventry & Rugby CCG

Life expectancy



Smoking prevalence



Under 18 conceptions



Excess weight in 10-11 year olds



Hospital admissions as a result of self-harm (10-24 years)

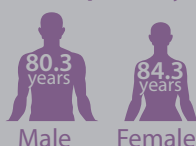


Hospital admissions for alcohol related conditions



South Warwickshire CCG

Life expectancy



Smoking prevalence



Under 18 conceptions



Excess weight in 10-11 year olds



Hospital admissions as a result of self-harm (10-24 years)



Hospital admissions for alcohol related conditions



Warwickshire Health Profile



Table 1 displays the current health performance of the Warwickshire County and allows comparisons of performance between the districts and boroughs. The values are coloured to indicate statistical significance compared to England. *This is the most recent compiled and published data as of 2nd August 2016.*

Indicator	Period	England	Warwickshire	North Warwickshire	Nuneaton & Bedworth	Rugby	Warwick	Stratford-on-Avon	Unit of measure
		Value	Value	Value	Value	Value	Value	Value	
Deprivation	2014	20.2%	5.4%	5.4%	18.3%	1.7%	1.0%	0.0%	%
Children in poverty (under 16s)	2013	18.6%	12.9%	13.9%	19.0%	12.4%	10.2%	8.5%	%
GCSE achieved (5 A*- C inc. Eng & Maths)	2014/15	57.3%	60.4%	57.3%	51.5%	56.9%	68.3%	68.3%	%
Violent crime (violence offences)	2014/15	13.5	8.9	8.6	12.8	9.3	7	7	per 1,000 population
Long term unemployment	2015	4.6	2.3	2.0	5.4	2.4	1.2	0.6	per 1,000 working-age population
Breastfeeding initiation	2014/15	74.3%	72.1%	67.2%	Value cannot be calculated	82.2%	69.1%	74.3%	%
Obese children (Year 6)	2014/15	19.1%	16.8%	19.8%	21.1%	16.7%	12.4%	14.8%	%
Alcohol-specific hospital stays (under 18)	2012/13-14/15	36.6	39.3	29.7	58.9	32.5	39.8	27.4	per 100,000 population
Under 18 conceptions	2014	22.8	22.9	24.3	43.0	18.5	12.9	14.2	per 1,000 females aged 15-17
Smoking prevalence in adults	2015	16.9%	12.1%	10.8%	15.9%	11.9%	9.8%	11.9%	% population aged 18 and over
Percentage of physically active adults	2015	57.0%	61.2%	60.0%	58.6%	61.1%	62.0%	63.6%	%
Excess weight in adults	2012-14	64.6%	65.6%	71.4%	67.3%	66.6%	61%	65.3%	%
Cancer diagnosis at early stage	2014	50.7%	43.2%	45.5%	43.6%	47.4%	37.7%	43.8%	%

Hospital stays for self-harm	2014/15	191.4	197.0	208.5	279.4	221.8	143.6	156.2	per 100,000 population
Admission episodes for alcohol-related conditions (Narrow)	2014/15	641	590	523	625	659	580	563	per 100,000 population
Recorded diabetes	2014/15	6.4%	6.1%	6.6%	7.5%	6.2%	5.4%	5.4%	% population aged 17 and over
Incidence of TB	2012-14	13.5	9.2	4.3	15.1	11.5	9.4	3.3	per 100,000 population
New sexually transmitted infections (STI)	2015	815	687	597	840	788	623	558	per 1,000 population aged 15-64
Hip fractures in people aged 65 and over	2014/15	571	576	682	657	647	432	558	per 100,000 population
Life expectancy at birth (Male)	2012-14	79.5	80.1	79.3	78.4	80.5	80.9	81.2	Years
Life expectancy at birth (Female)	2012-14	83.2	83.9	82.6	82.7	84.1	84.5	84.7	Years
Infant mortality (aged under 1 year)	2012-14	4.0	3.6	4.7	3.6	3.2	2.8	4.3	per 1,000 live births
Killed and seriously injured on roads*	2012-14	39.3	54.8	92.8	38.6	54.3	34.2	76.2	per 100,000 resident population
Suicide rate	2012-14	10.0	11.6	Suppressed suicide rate	11.0	Suppressed suicide rate	16.6	10.9	per 100,000 population aged 10 and over
Deaths from drug misuse	2012-14	3.4	2.7	Value cannot be calculated	Value cannot be calculated	Value cannot be calculated	Value cannot be calculated	Value cannot be calculated	per 100,000 population
Smoking related deaths	2012-14	274.8	226.4	260.9	272.9	228.3	210.1	186.6	per 100,000 population aged 35 and over
Under 75 mortality rate: cardiovascular	2012-14	75.7	69.6	80.4	80.7	67.9	67.1	58.1	per 100,000 population
Under 75 mortality rate: cancer	2012-14	141.5	131.8	144.8	139.8	126.3	127.4	126.1	per 100,000 population
Excess winter deaths (see glossary)	Aug 2011 - Jul 2014	15.6	15.7	21.0	15.7	19.4	11.7	14.1	*Excess Winter Death Index

*This includes all people (residents and non-residents) killed or seriously injured on Warwickshire roads, based on accidents reported to the police.

Chapter 2

Public Health Interventions: Money well spent?

Public health commission a range of services to improve health and wellbeing of the Warwickshire population. Some of these services are illustrated below. Public health initiatives are used to raise awareness and provide information on key issues.

This report focuses on the return on investment in relation to public health interventions. This chapter includes five case studies from across the public health remit to demonstrate value for money locally:

- Fluoridation
- Teenage Pregnancy
- Physical Activity
- Diabetes
- Smoking in Pregnancy



Services



Books on Prescription

Experience, Strength & Hope



Drug and Alcohol Service

The Recovery Partnership

Drug and Alcohol Service

Sexual Assault Referral Centre



Wellbeing for **Warwickshire**

Mind in Warwickshire | For better mental health

NHS HEALTH CHECK



Sexual Health Warwickshire

pass

Drug and Service

Doing It!

Secondary School Relationships and Sexual Health Education

QUIT 4 GOOD



B Big White Wall™

Fitter Futures Warwickshire

Weight Management and Physical Activity/Healthy Lifestyles on Referral 12-16 years

Fitter Futures Warwickshire

Weight Management and Physical Activity/Healthy Lifestyles on Referral 16+

five ways to wellbeing in Warwickshire

RESPECT YOURSELF

Living well with Dementia in Warwickshire

#onething

LIVING IN WARWICKSHIRE



Warm and Well in Warwickshire

WARWICKSHIRE HEALTH & WELLBEING PORTAL

Dementia Friends An Alzheimer's Society Initiative

Water Fluoridation

Although largely preventable, tooth decay remains the most common oral disease affecting children and young people and is one of the most common reasons for hospital admission in children.

Background

Fluoride is a naturally occurring mineral found in water in varying amounts. Research shows that fluoride can help prevent tooth decay; because of this it is added to many brands of toothpaste and, in some areas, to the water supply through a process called fluoridation.

Tooth decay, also known as dental caries, can damage the tooth structurally and cause pain and infection. Treatment usually involves the repair of the affected tooth but if decay is extensive, the tooth may be extracted.

Six million people (10% of England's population) benefit from a water supply where the fluoride content, either naturally or artificially, is at the optimum level to reduce tooth decay. In terms of population coverage, the West Midlands (70%) is the most extensively fluoridated area in England compared to the North West (4%) which is largely non fluoridated (table 2). The whole of Warwickshire is covered by fluoridation agreements (Severn Trent Water and a small population served by South Staffordshire Water), which were introduced progressively between 1964 and 1987.

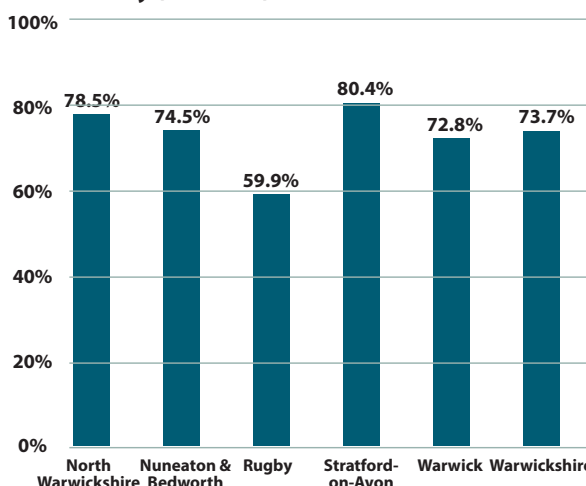
Table 2: Percentage of 5 year olds free from tooth decay and extractions for children 10 and under admitted to hospital, 2014/15

	Percentage of 5 year olds free from dental decay	Rate of extractions due to decay for children aged 10 and under, admitted to hospital (per 100,000)	Fluoridated (approximate figures)
Warwickshire	73.7	53.6	Yes
West Midlands	76.6	217.2	70%
North West	66.6	703.8	4%
England	75.2	462.2	10%

Source: Public Health England and NHS Digital

Table 2 shows the West Midlands has a significantly higher proportion of five years olds free from tooth decay (76.6%) and a lower rate of extractions compared to the North West. The water supply in the North West is largely non fluoridated and the proportion of five year olds free from tooth decay is significantly lower (66.6%) with a higher rate of admissions. In 2014/15, Warwickshire (73.7%) was similar to England (75.2%) and admissions were lower than both the national and regional rates.

Figure 1: Proportion of five year old children free from tooth decay (2014/15)



Source: Public Health England

Figure 1 shows Stratford-on-Avon (80.4%) has the highest proportion of children free from tooth decay, and Rugby (59.9%) has the lowest.

Oral health is an integral part of children's health and wellbeing; when children are not healthy this affects their ability to learn, thrive and develop. Tooth brushing, healthy eating and regular dental check ups are vital to prevent tooth decay particularly in the early years.

Evidence Base

The possible effects of fluoride in water have been extensively studied and reviewed over the last 50 years; the most recent review was conducted in 2015 by the Cochrane Oral Health Group. Public Health England recommends the use of water fluoridation as a safe and effective public health measure to improve oral health.

Does fluoridation of water pose any risks?

Consensus is that no significant health risks have been detected, in populations who have been provided with a fluoridated water supply.

One of the most compelling pieces of evidence comes from the US. Around 200 million people have been exposed to a fluoridated water supply for decades and there have been no credible reports of harm.

There is a potential risk that a condition called dental fluorosis can occur, particularly if a child's teeth are exposed to too much fluoride. Fluorosis changes the appearance but does not cause damage to the teeth.

Impact of Fluoridation

Hospital admissions: Around 45% fewer hospital admissions (55% fewer admissions, once levels of social deprivation are taken into account) in children aged one to four for tooth decay (mostly for extraction under a general anaesthetic) in fluoridated areas.

Dental health: Around 15% fewer five-year olds have tooth decay in fluoridated areas. When deprivation and ethnicity (both important factors for dental health) are taken into account, the figure is 28%. On average, there are 11% fewer 12-year olds with tooth decay in fluoridated areas than non-fluoridated areas.

Return on Investment

In 2015/16, Warwickshire County Council spent almost £200,000 on water fluoridation, equating to £0.36 per person. The benefits of this go towards alleviating health costs.

Cost effectiveness estimates vary depending on the size of the population, level of decay and water supply system complexity. However, the largest impact is considered to be in reducing avoidable hospital admissions in children, where an extraction by general anaesthetic costs **£541** per procedure.

Water fluoridation in Warwickshire costs,

£0.36

per person per year.

In 2014/15 hospital trusts in England spent

£35 million

on extraction of multiple teeth for under 18s.

Costs have risen by 61% over five years.

Excessive consumption of fizzy drinks and foods high in added sugar are a major reason behind the surge in cases of treatment.



Water fluoridation is considered to be one of public health's 10 greatest achievements of the 20th century

A return on investment tool is being developed by York Health Economics Consortium. This is expected to be available in the Autumn 2016

Teenage Conceptions

Background

A teenage conception is defined as a pregnancy which happens to a woman under 18 years old. The rates are measured per 1,000 of the 15-17 year old female population. In Warwickshire the rate is 22.9 per 1,000 of the population which is similar to the England average, 22.8 per 1,000 (table 3).

Evidence Base

Children born to teenage parents are more likely to experience a range of negative impacts, including lower educational attainment, poorer physical and mental health, poverty, and becoming teenage parents themselves. Not all conceptions lead to live births, in 2014 the abortion rate for under 18s was 56.9%.

1998

1998 - Nationally there was a plan to reduce teenage conceptions by half by 2010. This was achieved nationally in 2014.

2014

Table 3: Rate of teenage conceptions per 1,000 of the 15-17 year old female population

	1998	2011	2012	2013	2014	2014 conception numbers
North Warwickshire	44.6	29.5	29.0	26.6	24.3	27
Nuneaton & Bedworth	48.8	43.2	38.4	29.7	43.0	97
Rugby	43.1	24.3	20.8	22.6	18.5	36
Stratford-on-Avon	31.3	25.4	16.2	18.9	14.2	29
Warwick	40.1	29.6	17.1	19.7	12.9	27
Warwickshire	41.4	30.9	24.3	23.4	22.9	216
England	46.6	30.7	27.7	24.3	22.8	21,282

Source: Public Health England

From our experience of working with young people, we know the majority would not seek sexual health advice from their parents or carers. Therefore, in Warwickshire, we see that it is essential that young people get the right information, at the right time, in a way that they can understand.

What works to reduce teenage pregnancies?

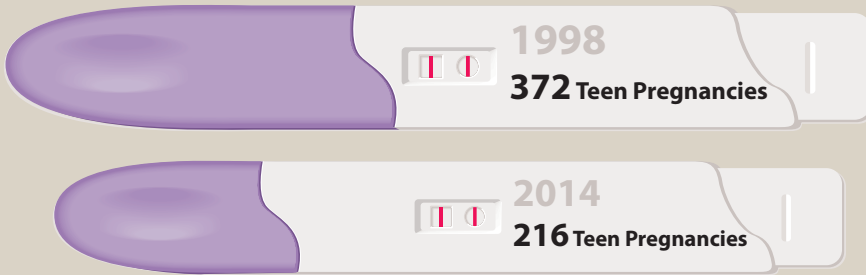
International evidence shows that access to good quality Relationship and Sex Education (RSE), and sexual health services that actively welcome young people are the key drivers to reduce teenage pregnancies.

In Warwickshire we have adopted a comprehensive 'sex positive' approach to RSE, and the services provided. Being 'sex positive' means that we accept that sex is natural and to be curious about it is normal. We aim to provide young people with the information they need to make positive choices about their relationships and sexual health. We know that this approach has worked in other countries to reduce the rate of teenage pregnancies and sexually transmitted infections and this is why we have adopted this approach here in Warwickshire.



Impact

There were 372 'teen' pregnancies in 1998 in Warwickshire. The latest (2014) figure is 216. That's 156 (42%) fewer conceptions.



How Public Health in Warwickshire has contributed to the reduction in teenage pregnancies:



Respect Yourself: respectyourself.info The programme was developed by young people for young people, using best evidence from the Netherlands (where teenage pregnancy and sexually transmitted infections have reduced dramatically over recent decades).



Spring Fever: A relationship and sex education programme for primary schools, based on the successful Dutch approach.



One stop shop approach to sexual health services:

sexualhealthwarwickshire.nhs.uk Services have been recommissioned and Public Health are working towards having integrated sexual health provision across the county, which is accessible to all.



Long Acting Reversible Contraception: Almost a quarter of women (24.3%) aged under 25 in Warwickshire choose long acting reversible contraceptives (LARC) as their main method of contraception at Sexual and Reproductive Health Services. This compares favourably with the England (20.1%) and West Midlands (18.5%) rates.

Nationally over 2/3 of men and 3/4 of women (16-19 years) reported they did not have sex before the age of 16.

Return on Investment

We know from national research that preventing teenage pregnancies in Warwickshire saves us money and because our rate has gone down we could save between £700m and £1.2bn in wider public sector costs between 2013 and 2020.

The King's Fund research estimates that for each **£1** spent preventing teenage pregnancy

saves **£11** in health care costs.

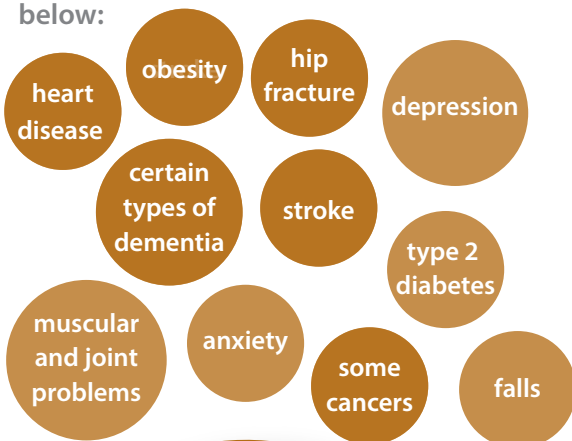
Physical Activity

Background

Being physically active can improve physical and mental health and wellbeing. Physical activity includes a variety of activities such as walking, sports, gardening and housework.

In Warwickshire, 61.2% of the adult population are meeting the recommended physical activity levels. Table 4 shows variation in adult physical activity levels across the county. The latest figures reporting physical inactivity in adults shows Warwickshire (24.4%) is better compared to the England average (28.7%). Physical inactivity increases the risk of developing a variety of health conditions and has a cost impact to society.

Being physically active can reduce the risk of a variety of health conditions outlined below:



Across the United Kingdom, it is estimated that the cost to the NHS of physical inactivity amounts to £1.1 billion per year. In Warwickshire, this equates to £9.4m each year.



Evidence Base

What are the recommended physical activity levels?

The UK Chief Medical Officers recommend the amount of physical activity which improve health and wellbeing, as shown below by age group.

Children (aged 0-5) should be allowed to move as freely as possible, whenever possible. Children (aged 0-5) who can walk without help, should be physically active for at least 3 hours spread throughout the day.

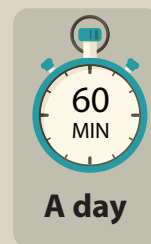


A day



A week

Children and Young People (aged 5-18) aim for at least 60 minutes per day including muscle and bone strengthening activities 3 times per week.

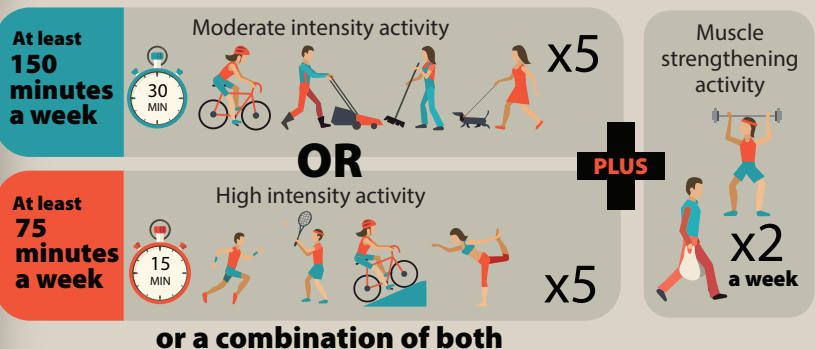


A day



A week

Adults (aged 19 and over)



or a combination of both

Table 4: Percentage of adults who are physically active in Warwickshire.

	2012	2013	2014	2015
North Warwickshire	56.6%	61.0%	57.5%	60.0%
Nuneaton & Bedworth	52.8%	53.3%	52.2%	58.6%
Rugby	54.0%	58.9%	59.3%	61.1%
Stratford-on-Avon	58.4%	59.4%	60.3%	63.6%
Warwick	55.3%	63.3%	61.1%	62.0%
Warwickshire	55.3%	59.1%	58.2%	61.2%
England	56.0%	56.0%	57.0%	57.0%

Source: Public Health England

**Public Health
Warwickshire with partners have provided and supported a range of evidence based initiatives to create local environments which support and encourage residents to be more physically active.**



Fitter Futures Warwickshire, countywide physical activity and healthy lifestyle services



Green gyms providing free outdoor gym equipment in local parks



Measured miles have been waymarked across the county at parks and hospitals



Big Day Out offers free outdoor events to encourage the use of green spaces



Healthy Travel Choices evidence review produced to encourage active travel



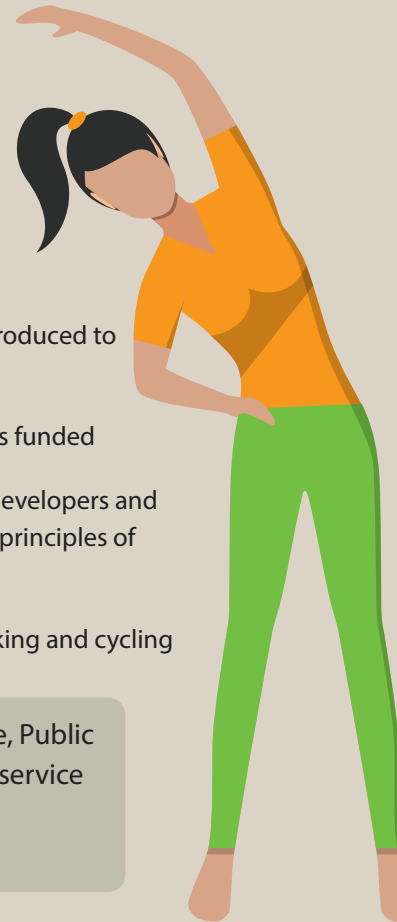
Local community physical activity projects funded



Health Planners work with planners and developers and across the health economy to embed the principles of public health into the planning system.



Signage evidence review to promote walking and cycling



Warwickshire residents are living longer, not necessarily in good health. In Warwickshire, Public Health provide a countywide physical activity/healthy lifestyles on referral service. This service has been recommended by NICE for people who are inactive and have existing health conditions to improve their health and wellbeing.

Impact of Fitter Futures Warwickshire

In Warwickshire, Public Health are able to measure the health improvement impact of some physical activity opportunities that are available to Warwickshire residents.

Residents who have completed a Fitter Futures Warwickshire service have reported the following positive health outcomes since the service launched in July 2015:



increased physical activity levels



increased consumption of fruit and vegetables



improved mental wellbeing



achieved a healthier weight



reduced feelings of loneliness and isolation



Services include:

Physical activity/healthy lifestyles on referral for young people aged 12-16 and adults 16+

Weight management on referral for young people aged 12-16 and adults 16+

Family weight management for children aged 4-12

Healthy lifestyles for children aged 0-5 and families



fitterfutureswarwickshire.co.uk

Return on Investment

Between 1st July 2015 and 31st March 2016, Warwickshire County Council, Public Health spent £89,000 on the Fitter Futures Warwickshire Physical Activity/Healthy Lifestyle on Referral service. 1,143 referrals were made to this service. Based on these figures, the cost of the service, and using a NICE return on investment tool the following savings can be estimated:

Every **£1** spent

£19.59

made in cost savings and the value of health improvement outcomes

Diabetes

Background

Diabetes is a chronic condition that causes a person's blood sugar level to become too high. There are two main types of diabetes, type 1 and type 2. This section focuses on type 2 diabetes because it can be prevented.

Type 2 diabetes develops when the insulin-producing cells in the body are unable to produce enough insulin, or when the body does not respond appropriately to the insulin that is produced (known as insulin resistance).

Type 2 diabetes is often associated with lifestyle issues such as obesity and physical inactivity which can increase the risk of cardiovascular disease.

2.9 million adults are diagnosed with diabetes in England. In Warwickshire the number is around 28,000, which is an increase of 20% from 2010/11 - equating to 4,600 new cases. It is estimated about 90% of those diagnosed have type 2 diabetes.

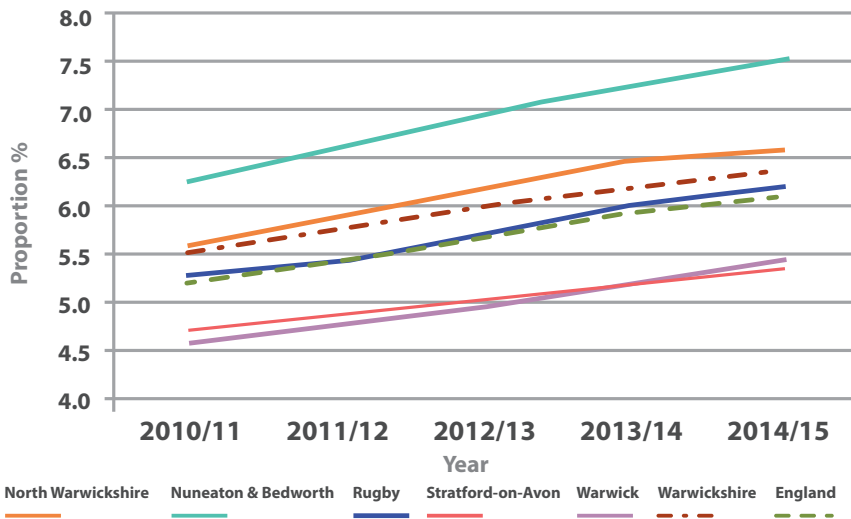
Evidence Base

How can type 2 diabetes can be prevented

Adopting a healthier lifestyle by increasing physical activity levels, eating a healthy diet and achieving a healthy weight can delay or prevent the onset of type 2 diabetes. Effective lifestyle interventions can reduce the incidence of type 2 diabetes by up to 58%.



Figure 2: Proportion of population (aged 17 and over) with recorded diabetes



Source: Public Health England

What are the benefits of prevention and early detection?

Prevention and early detection of type 2 diabetes could result in a longer healthy life expectancy for people and prevent the 20,000 early deaths which occur each year in England as result of this condition. Through early detection and control, the complications associated with type 2 diabetes - sight loss, kidney failure, heart attack, stroke, limb amputations and tooth loss - can be prevented or delayed.

By 2034:



1 in 3 people will be obese



1 in 10 will develop type 2 diabetes

Impact of health inequalities

There is strong evidence to suggest those who are more deprived are more likely to be at risk of developing type 2 diabetes. Risk factors which are associated with type 2 diabetes are more prevalent amongst those who are more deprived.



Public health interventions and their impact:

It is estimated that around 150,000 new cases of type 2 diabetes are diagnosed in the UK, and around 800 cases in Warwickshire each year.

Detecting pre-diabetes could save over £3,000 per patient over 5 years if the development of type 2 diabetes is prevented or significantly delayed through intensive lifestyle intervention. Below are three examples of programmes that support people in Warwickshire to adopt a healthier lifestyle.



Fitter Futures Warwickshire

Fitter Futures Warwickshire provides weight management, physical activity and healthy lifestyle services to support people to improve their health and wellbeing. Reported outcomes include; healthier weight, increased physical activity levels and improvement in mental wellbeing. For more information please see page 19.

fitterfutureswarwickshire.co.uk

#onething

The **#onething campaign**, as part of a wider health awareness initiative, undertook mini health checks in the community in North Warwickshire. In 2015/16, 350 blood sugar tests have identified 25 (7%) individuals with high blood sugar. These individuals were advised to visit their GP where further investigation and advice was provided.

warwickshire.gov.uk/onething



NHS Health Check programme and its role in early diagnosis of diabetes

The NHS Health Checks are a national risk assessment and prevention programme offered to all individuals aged 40-74. A healthcare professional will test for and treat certain conditions, including type 2 diabetes, and will give lifestyle advice. Around 135 cases of diabetes are diagnosed early in Warwickshire through NHS Health Checks every year.

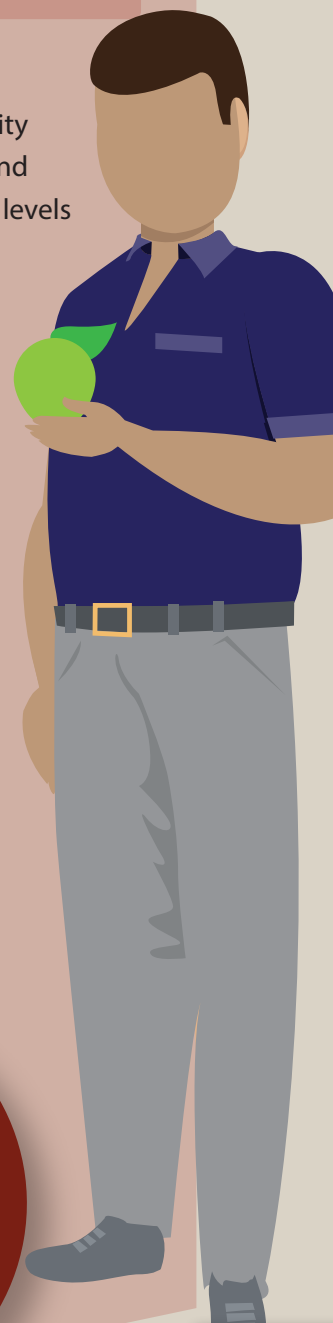
healthcheck.nhs.uk

The health checks have been assessed as cost effective, producing an estimated annual cost saving of



per patient in the short term when diabetes is detected.

In 2012 it was estimated the NHS spends approximately £8.8 billion a year on type 2 diabetes and its complications.

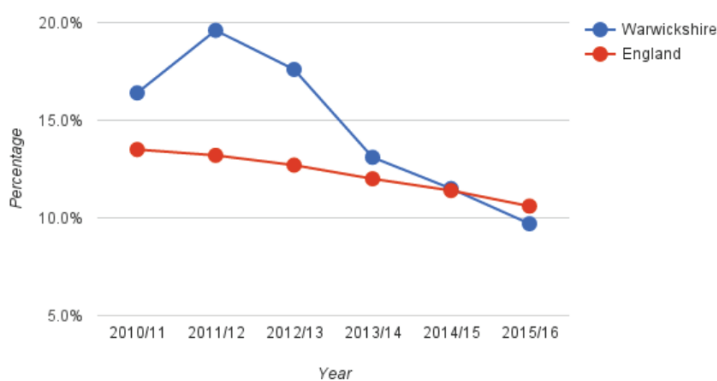


Smoking in Pregnancy

Background

Smoking in pregnancy has been a priority in Warwickshire for the last 5 years and the percentage of women smoking at time of delivery in Warwickshire has reduced (figure 3).

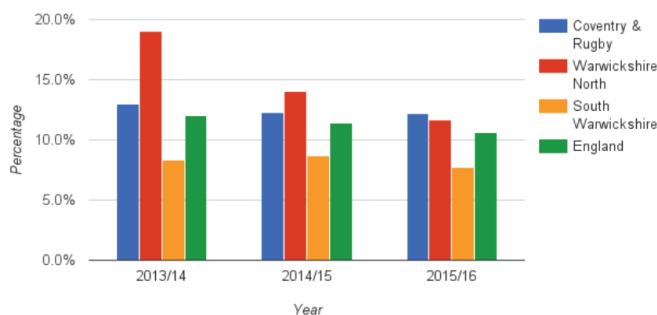
Figure 3: Percentage of births to mothers who smoked during pregnancy in Warwickshire.



Source: Public Health England and locally calculated

In particular there has been a large reduction in the north of the county which is shown in the graph below.

Figure 4: Percentage of births to mothers who smoked by CCG



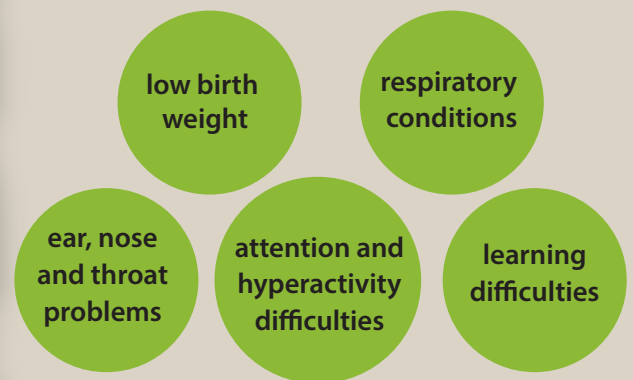
Source: Public Health England

Evidence Base

What are the risks of smoking in pregnancy?

Smoking in pregnancy can cause complications during labour and up to 2,200 premature births, 5,000 miscarriages and 300 perinatal deaths every year in the UK.

Risks for the baby born to a mother who smokes during pregnancy:



As well as human costs, there are also financial ones. Treating mothers and their babies (0-12 months) with problems caused by smoking in pregnancy is estimated to cost the NHS between £20 million and £87.5 million each year.

Who is more likely to smoke during pregnancy?

- ▶ Pregnant women aged 20 and under are 5 times more likely compared to those aged 35 and over.
- ▶ Mothers who work in routine and manual occupations are 4 times more likely to smoke during pregnancy.
- ▶ Mothers who have lower educational attainment.
- ▶ Mothers living in rented accommodation.
- ▶ Mothers who are single or have a partner who smoke.



Key fact:
Smoking during pregnancy can restrict the essential oxygen supply to the baby, making the baby's heart beat harder with every cigarette

Key fact:
Cigarettes contain over 4,000 chemicals, which pass into the baby's bloodstream, harming an unborn baby

In 2014/15, 700 babies were born in Warwickshire who have been effectively smoking for the first 9 months of their pre-birth development



Return on Investment



Warwickshire invests £150,000 in the Quit4Baby service, providing behavioural support to pregnant smokers. Using the NICE return on investment tool the following cost savings can be estimated:



Health Outcomes

In Warwickshire the stop smoking service has supported 1,725 pregnant smokers and their families to quit smoking over the past 5 years resulting in 750 quitting smoking at 4 weeks.

Table 5: Number of pregnant women and their families who set a smoking quit date and number who had quit at 4 weeks

	No. Quit Dates 	No. Quit at 4 Weeks 
2015-16	328	147
2014-15	356	162
2013-14	345	153
2012-13	322	136
2011-12	374	152

Source: Warwickshire Stop Smoking Service






NICE recommends all women who smoke and who are pregnant, planning a pregnancy or who have an infant aged under 12 months should be referred for help to quit smoking.

The guidance also recommends that advice and support be given to partners and others in the household who smoke. In Warwickshire we have a stop smoking service available to support all women who smoke during pregnancy and their partners and household members.



Warwickshire Stop Smoking Service is now available online warwickshire.gov.uk/quit4good

Benefits of quitting smoking to both the mother and baby:

-  Fewer complications in pregnancy
-  Reduce the risk of stillbirth
-  Reduce the likelihood of premature birth
-  Less likely to be born underweight. On average babies born to mothers who smoke are 200g lighter than other babies
-  Reduce the risk of cot death otherwise known as sudden infant death

Chapter 3:

The Impact of Public Health Advocacy

Evaluating public health policy is complex, because so many wider local and central Government actions impact on public health. There are also time lags, both in measuring the outcomes of public health policies, and in data release and analysis.

Despite the difficulties, there have been some real successes. I look to the previous Director of Public Health reports and more specifically the recommendations made within them to understand their impact.

The Director of Public Health Annual Report: a tool for Public Health advocacy

One of the functions of the Director of Public Health and their team is to act as an advocate and champion for local residents, seeking to improve the health of the public through effective relationships, influencing policy, and providing a robust evidence base. The annual report is also a tool for this advocacy.

The Director of Public Health Annual Report

“An [independent] vehicle for informing local people about the health of their community as well as providing necessary information for decision makers in local health services and authorities on health gaps and priorities that need to be addressed.”

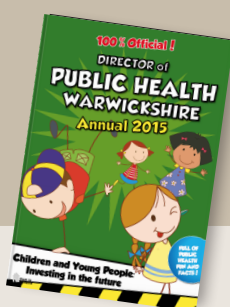
Faculty of Public Health

Each report will include a series of recommendations based on the evidence presented within the report. These may be strategic or operational. Implementing the recommendations will help achieve improvements in health and wellbeing by addressing the issues highlighted in the report.

The Director of Public Health Annual Report is a statutory responsibility

The Director of Public Health for a local authority must prepare an annual report on the health of the people in the area of the local authority. The local authority must publish the report.

2015
Children and Young People: Investing in the Future – Children’s health



2014
Protecting Health: A Hidden Agenda – Health protection



2013
Learning from the Past Planning for the Future – Reflection and action



2012
The Picture of Ill Health in Warwickshire – Long term conditions

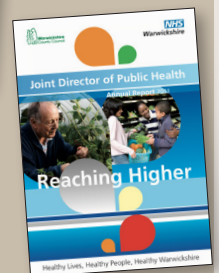


Public Health Warwickshire – Previous Reports

2009/2010
Best Health for Older People – Reviewing older people’s health



2011
Reaching Higher – The priority health concerns are everyone’s business



The Director of Public Health Annual Report: "Value for Money"?

In other words, does the report help improve and protect the health of the population in the most efficient way possible? In this section, we review feedback from previous reports and show progress against current and past recommendations to understand their impact.



What do people tell us about the report?

For the last 5 years, feedback on the Director of Public Health Annual Report has been invited and the results have been evaluated. In addition, the 2011 report went through an internal audit process of the recommendations and progress made. On two occasions, reports have been externally reviewed by peers. The process of writing and disseminating the report is also reviewed annually.

Overall, formal feedback has been limited in numbers. However, where it has been received the majority of respondents have been positive.

All respondents in 2013 stated that they agreed or strongly agreed that the report was interesting and easy to read.

88% of respondents in 2013 stated that they found the report useful, and increased their knowledge of the subjects.

In 2015, **84%** of respondents agreed or strongly agreed that the report was interesting and 89% agreed or strongly agreed it highlighted the key local issues.

70% would adopt the relevant recommendations:

'All as part of the children's development agenda - School health and Wellbeing and 0-19/25s'

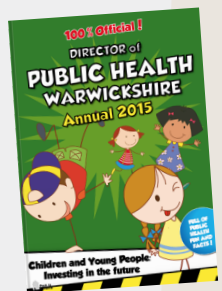
'All recommendations can be supported'

'There are a number that impact on Health Visiting, School Nursing and Family Nursing Partnership'

'We will discuss these in our executive team and ultimately our Trust Board'

PRESS RELEASE...PRESS REL

Warwickshire County Council awarded top prize in Association of Directors of Public Health Annual Report Competition



On 26th May at the Association of Directors of Public Health AGM, Warwickshire County Council, Public Health was awarded 2nd place for the 2015 Annual Report. The report looks at the needs of children in Warwickshire and is entitled 'Children and Young People: Investing in the Future'.

The report was short-listed in the top 6 in the country and received the second place accolade for its engaging content and 'wow' factor. First place was awarded to Leeds and third place to North Yorkshire.

Achievement against recommendations

Over the past 6 years...

203 recommendations have been made by the Director of Public Health to improve the health and wellbeing of our population.

Recommendations have varied:

- in theme; and
- to whom they have been addressed (councils, NHS providers and commissioners, the public, businesses and schools).

More than **60%** of the recommendations have focused on risk minimisation; these include protecting the public's health from disease, improving uptake and access to screening, improving sexual health outcomes, reducing smoking and promoting healthy lifestyles. Of these, around 17% of recommendations are complete, of those not complete, 64% are in progress.

Of the remaining recommendations:

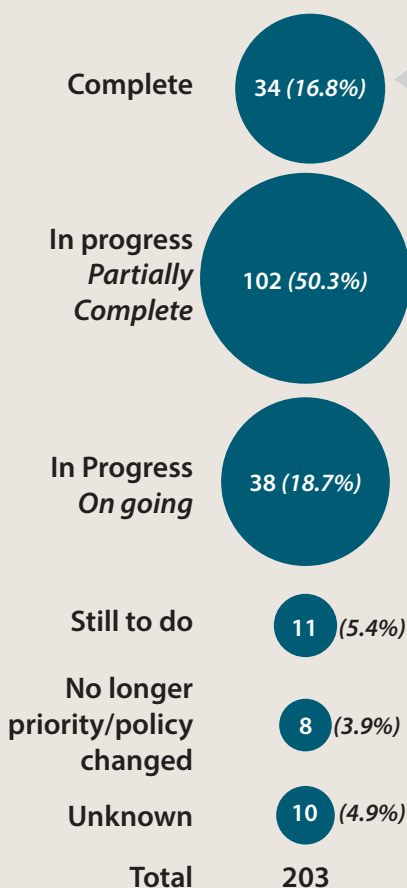
15% are related to mental health and wellbeing

7% relate to a healthy start

8% are related to creating a healthy place

9% are related to other categories (including young carers)

Overview - progress of the recommendations



There have been some quick wins and lots of progress...

Overall, 17% of the recommendations have been implemented completely. Several were implemented almost immediately during or following the production of the report.

Other completed recommendations included the production of needs assessments to develop the evidence base around mental health or HIV, the formation of an action plan (contribute to the formation and implementation of the local Tobacco Control Implementation Plan) or strategy (Dementia) to give a clearer sense of direction on specific issues.

For example,
"The health service and local government across Warwickshire must urgently ratify and implement a simple strategy and pathway of care and support for dementia."

... but public health requires a long term approach to addressing some very complex issues.

The 5.4% of recommendations that are yet to be implemented focus primarily around workplace health and liaising with businesses to create a healthy environment.

Measuring the Impact: Progress against recommendations

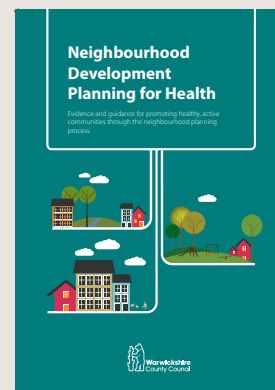
Health Impact Assessments: A tool to consider impacts on health and wellbeing

My 2012 Annual Report highlighted the importance of Health Impact Assessments (HIAs) and recommended that all public sector organisations commit to carrying out HIAs on all new major policies or plans as a way of ensuring that health and wellbeing implications are explicitly considered in planning decision making.

Following publication of the 2012 annual report, I committed to commissioning Health Impact Assessments (HIA) on each of the districts and boroughs core strategies or strategic site allocation plans, or any emerging neighbourhood plans.

By September 2016, four of the five HIAs have been completed and the final one is planned to be undertaken during the autumn, aligned to their planning cycles.

Feedback from Nuneaton and Bedworth Borough Council - *One example has been the inclusion of a new Borough Plan policy on health, a part of which focuses on limiting the number of hot food takeaways within a 400m boundary of secondary schools. This is an excellent example of the way planning can help to create healthier environments.*

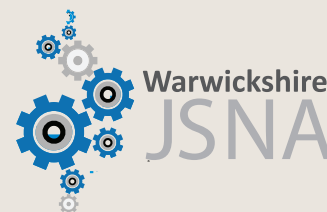


Joint Strategic Needs Assessment: The essential tool for decision makers

The Joint Strategic Needs Assessment (JSNA) was introduced in 2007 to establish a shared, evidence based consensus of the current and future health and wellbeing needs of the local population and key local priorities.

Whilst progress had been made to develop and adopt the JSNA, more work is needed to implement the findings systematically. In 2013, I recommended that all partners across health and local government should demonstrate their commitment to the Joint Strategic Needs Assessment (JSNA).

The 2015/16, review of the JSNA in our Annual Statement highlighted the good progress being made:



The Health and Wellbeing Board was peer reviewed in January 2015. Feedback was positive in concluding that Warwickshire has a “clear, credible JSNA with good analysis and data”.

A JSNA workshop for Health & Wellbeing Board members was positively received.

The JSNA is annually assessed, by the Health and Social Care Overview and Scrutiny Committee to ensure good governance.

Local stakeholders interviewed for the annual statement highlighted the positive progress but reminded us that there was still work to do in ensuring there is an evidence based culture.

Smoking in pregnancy: A countywide priority, core to maternity care

In 2013, I drew attention to the unacceptably high smoking in pregnancy (SIP) figures in Warwickshire (19.6%) compared to nationally (13.2%), recommending that all partners commit to delivering significant reductions in smoking in pregnancy. In 2015, although numbers were falling, I advocated that more needed to be done and maternity services be prioritised.

The Tobacco Control Action Plan and my commissioning intentions, continue to highlight this important issue. By implementing clauses and key performance indicators in our contracts and suggesting partners do the same, we are adopting a system wide approach to addressing the issue. These have been well received across Warwickshire.

The Family Nurse Partnership are undertaking SIP training, and maternity staff at George Eliot Hospital and South Warwickshire Foundation Trust have been trained to implement the Risk Perception Intervention with pregnant smokers who do not engage with the SIP Service. For more information on the impact of tackling SIP please see page 22.



Dementia: Rising numbers, raising awareness and a simple pathway

In 2009/10 in my first report, I raised awareness of the issues affecting older people in the county and discussed mental health and dementia. I recommended that the health service and local government across Warwickshire must urgently ratify and implement a simple strategy and pathway of care and support for dementia.

Today, we have a Living Well with Dementia Strategy. This includes a pathway of care and support for people with dementia and their carers. It supports the development of dementia friendly communities, businesses and organisations.



In addition, from the 1st April 2015 the Dementia Navigator Service was made available across Warwickshire to support people with dementia and carers and signpost to appropriate services.

The Living Well with Dementia portal, warwickshire.gov.uk/dementia is available to all and has been highly commended nationally.

To raise awareness and understanding of the condition, Warwickshire County Council and partners have now created over 11,000 Dementia Friends across the county.

Inequalities: Variation in Health and Wellbeing Outcomes

There is a strong evidence base for the causes of increasing health inequalities. All of my Annual Reports have illustrated the variation in health and wellbeing outcomes across Warwickshire by geography, age group, gender and in 2012 by GP practice.

I recommended that we continue to work to reduce the variation and continuing inequality in health outcomes, as it is a cause for concern and should be a priority for partners on the Health and Wellbeing Board.

In each of my Annual Reports, I include health profiles to highlight variation and produce performance/outcome reports, Health Needs Assessments and HIAs to raise issues with partners.



Warwickshire County Council's Quality of Life report, presented to full council in March 2015, showed long standing and growing inequalities in the county's population, including health inequalities. At that time, the council approved a recommendation around ensuring evidence is used to underpin policy development and service transformation.

We need to keep the reduction of the variation in outcomes as a priority as we strive to improve poorer outcomes.

Cancer: Spotting symptoms early and accessing screening programmes

Cancer is a major cause of ill health and death. Up to half of all cancers may be preventable through lifestyle changes.

In 2011, I dedicated a chapter of my report to cancer and I made a series of recommendations to improve outcomes.

Every effort must be made to support people to quit smoking and young people encouraged not to smoke. For the cervical screening programme locally, increasing the level of coverage in young women aged 25-29 should be a particular priority. We need to ensure prompt diagnosis and treatment of cancer in line with national guidance.



Despite continued reductions in cancer mortality since 2011, changes to the structure of the NHS in 2013 have shifted the responsibility for improving cancer outcomes and the cancer pathway has become more fragmented.

In addition, there continues to be significant variations in outcomes from cancer across Warwickshire.

The five-year strategy for Cancer 'Achieving World-Class Cancer Outcomes', together with the STP to deliver the Five Year Forward View to improve the NHS across Coventry and Warwickshire, give us an opportunity to refocus on this important issue.

Workplaces: Healthy staff make productive workplaces

The workplace is an important setting for health and wellbeing programmes. NICE shows that promoting a culture that improves the health and wellbeing of employees is good management and leads to healthy and productive workplaces.

In 2009 and 2012, I made recommendations for local businesses including the development of healthy workplace policies such as smokefree workplaces and healthy choices in food. However, this is an issue where progress in Warwickshire has been limited.

Last year, NHS England Chief Executive Simon Stevens launched a major drive to improve the health and wellbeing of health service staff, in a bid for *“the NHS to put its own house in order”*.



With this renewed drive to promote good workplace health, I recommended that statutory partners in Warwickshire promote adoption of the ‘The Workplace Wellbeing Charter’ (or equivalent approach) to encourage adopting healthy lifestyles, focusing on reducing risks to health and promoting protective factors by:

- promoting good mental well-being;
- promoting ‘health promoting environments’ for all health facilities; and
- offering staff access to physical activity opportunities as available through local programmes.

Making Every Contact Count (MECC): Putting prevention into all our contacts

MECC is about encouraging people to adopt healthier lifestyle behaviours such as stopping smoking, eating healthily or being physically active. Where appropriate, staff or volunteers who have been trained in MECC can have a conversation with the member of the public about their health and wellbeing.

All partners on the Health and Wellbeing Board need to promote the potential to improve health and wellbeing through lifestyle risk factor reduction both for their staff and for their customers. This should be achieved through a commitment to, and implementation of, the MECC approach.



Partners have confirmed that through our contracts with providers, we are promoting the MECC approach and ensuring that a smoking cessation policy is a standard component for our public sector contractors. Our local NHS Trusts have all implemented smoke free policies across all their sites.

During 2016/17, we plan to relaunch the MECC programme across all partner organisations. Recognising that for some partners the traditional MECC is too prescriptive, an enhanced MECC training scheme is being developed for implementation in 2016.

Glossary

Chief Medical Officer - the most senior medical advisor on health matters in a government.

Clinical Commissioning Group (CCG) - groups of GP Practices that are responsible for commissioning most health and care services for patients.

Commissioning (Public Health) - the contracting, or setting up of a service.

Deprivation - the damaging lack of material benefits considered to be basic necessities in a society.

Dental Fluorosis - appears as marking on the enamel surface of teeth. It is one of 90 or so 'enamel defects' that may affect teeth, and is caused when children ingest excessive amounts of fluoride while their teeth are developing in the gums.

Excess Winter Deaths Index - is the excess winter deaths measured as the ratio of extra deaths from all causes that occur in the winter months compared with the expected number of deaths, based on the average of the number of non-winter deaths.

Health inequalities - differences between people or groups due to social, geographical, biological or other factors.

Health Impact Assessment - a tool to consider impacts on health and wellbeing.

Health intervention - the action or process of intervening, which could relate to commissioning a service for disadvantaged populations, to attempt to address a particular issue.

Health Needs Assessment - is a systematic method for reviewing the health issues facing a population, leading to agreed priorities and resource allocation that will improve health and reduce inequalities.

Health outcome - a change in the health status of an individual, group or population which is attributable to an intervention.

Incidence - the number of new events e.g. new cases of disease in a defined population within a specified time period.

Insulin - a hormone produced by the pancreas for regulating blood sugar levels.

Joint Strategic Needs Assessment - a systematic method for reviewing the health and wellbeing needs of a population.

Local Authority - an organisation that is responsible for the public services and facilities in a particular area.

Long acting reversible contraception - methods of birth control including injections, intrauterine devices (IUDs) and subdermal contraceptive implants.

National Institute for Health and Care Excellence (NICE) - a public body that develops guidance, standards and information on high quality health and social care.

Perinatal - from 24 completed weeks of pregnancy to seven days after birth.

Pre-diabetes - higher than normal blood sugar, but not high enough for a diagnosis of type 2 diabetes.

Premature (birth) - birth which occurs before the start of the 37th week of pregnancy. Usually a pregnancy lasts 40 weeks.

Prevalence - measures existing cases of disease and is expressed as a proportion e.g. 1% of the population or as a rate per 1,000 or per 100,000.

Signage evidence review - to understand what signage is available and how it can encourage people to walk and cycle more.

Stakeholder - in terms of business, an organisation interested in your area of work, or a 'partner'.

Suppressed suicide rate - where the observed total number of deaths is less than 25, the rates have been suppressed as there are too few deaths to calculate directly standardised rates reliably.

Warwickshire Health and Wellbeing Board - a board made up of partners from the county, district and borough councils, NHS and public and social care sector to ensure a coordinated approach.

Public Health Warwickshire

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www.warwickshire.gov.uk/publichealth

ISBN number: Paperback - 978-0-9929533-3-1
PDF - 978-0-9929533-4-8

References are available at: publichealth.warwickshire.gov.uk/annual-report

