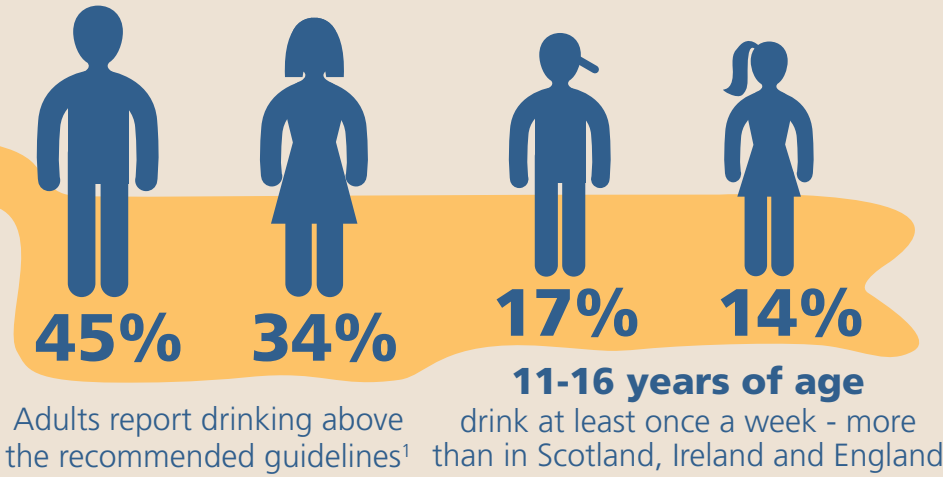


Addressing Alcohol Misuse in Wales

Alcohol remains a major threat to public health in Wales



Alcohol remains a major cause of death and ill health with high costs to the individual, the health system, the society and economy in Wales

Health impact

Alcohol is associated with

- more than **200** types of **chronic disease, accidents and injuries**
- 1,500** deaths per year = **1 in 20** of all deaths
- Alcohol hurts the poorest the most**

Cost to overall economy

- Heavy drinking increases the **risk of unemployment and absences** from work
- 800,000** working days per year lost due to absences
- 1 million** working days lost due to **job loss or reduced employment opportunities**

Societal impact for Wales

Alcohol is associated with

- more than **6000** cases of domestic violence each year
- more than **£1 billion** cost of harm to society each year

Cost to NHS Wales

- £70 – £73 million** in 2008/09
- £35 - £37 million** emergency department attendances in 2008/09

¹ Accurate as per latest data collection 2015 (Welsh Health Survey 2016) using 1995 alcohol guidelines (proposed new guidelines in 2016). Measured as men drinking more than 4 units and women drinking more than 3 units on at least one day in the past week.



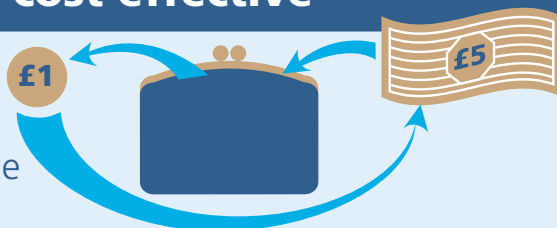
The Solutions

Addressing Alcohol Misuse in Wales

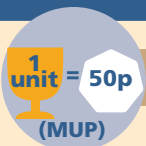


Brief advice in primary care is **cost-effective**

Every **£1** spent on **motivational interviewing** and supportive networks for alcohol dependence returns **£5** to the public sector



'Best buys' which could reduce consumption, harm and costs if fully enforced are¹



Introducing a **minimum unit price (MUP)** of 50 pence/unit of alcohol²

Wales would save:



53 deaths and **1,400 hospital admissions** per year with greatest impact in **deprived communities** and amongst **heavier drinkers**



£882 million over 20 years

from **reduced health harm, crime** and **workplace absence**

For each year of good life restored, Wales would save:



Limiting availability (outlet density, hours and days of sale)

£385 - £1,000



Better control of advertising

£700 - £770

A combined strategy



brief advice



random breath-testing (enforce drink-driving laws)



reduced access



better control of advertising



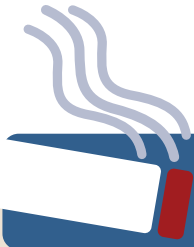
increased price

could save 10 to 20% of the alcohol burden on the individual, society and the economy

¹ "Best buys" recommended by WHO with compelling evidence of cost-effectiveness, feasibility, low-cost and appropriate to implement within the constraints of the local health system. ² Based on 2014 prices

Note: This infographic is part of the 'Making a Difference: Investing in Sustainable Health and Well-being for the People of Wales' report. The methods and sources of information are available in the 'Supporting Evidence' document on the Public Health Wales website. Where possible, latest figures for Wales are presented. Where unavailable, figures for Wales have been estimated from the latest UK/England/other data on unadjusted per capita basis.

Smoking in Wales

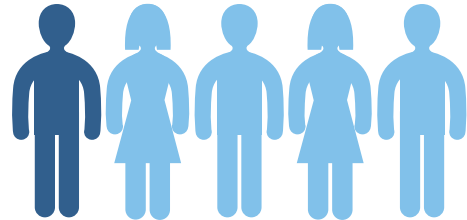


Smoking is the largest single preventable cause of ill health and death in Wales

Smoking causes

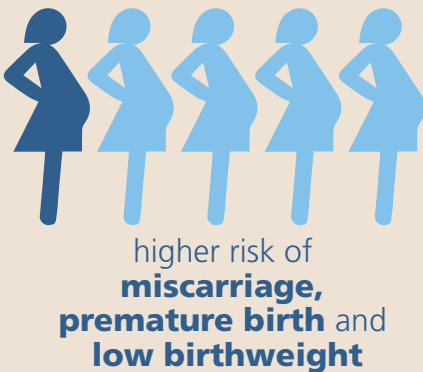


1 in 5 adults smoke



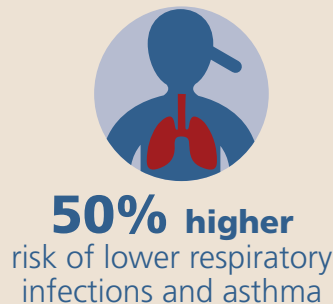
Smoking rates are
x2½ higher in the most deprived populations
x4 higher in the long term unemployed

1 in 5 pregnant women smoke resulting in



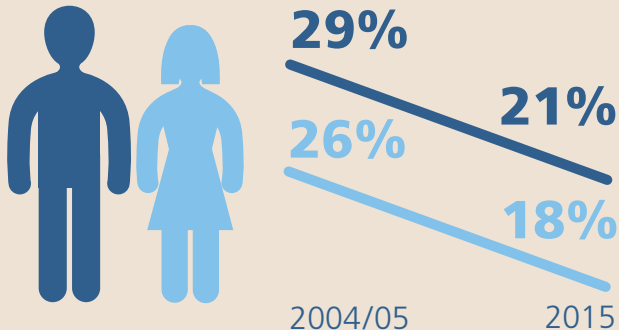
Childhood exposure to tobacco smoke is of concern

1 in 5 children aged **10-11 yrs** are exposed to second hand smoke at home resulting in

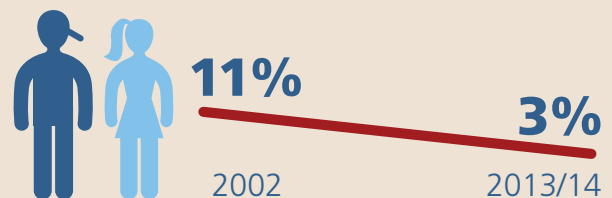


The percentage of people smoking in Wales is **decreasing**

Adults who smoke



Young people (11-16 yrs) who smoke



E-cigarette use by young people: in 2013/14 **2%** of young people reported regularly smoking an e-cigarette.

Cost to NHS Wales¹

£386 million per year approximately
7% of the NHS budget

Cost to overall economy¹

£791 million per year including costs related to health care, sickness absence, second hand smoke, premature death and fires

¹ Estimated for Wales (2007/08 figures)

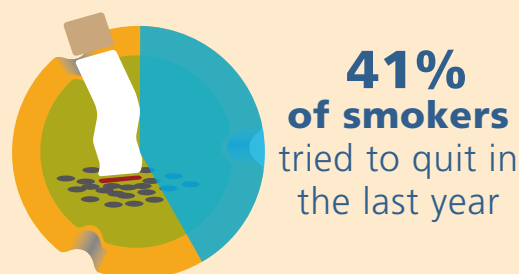
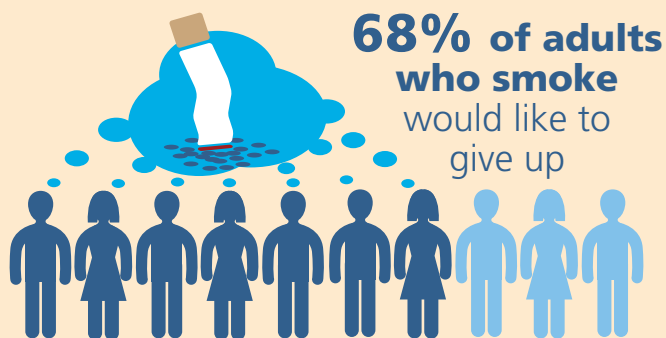


The Solutions

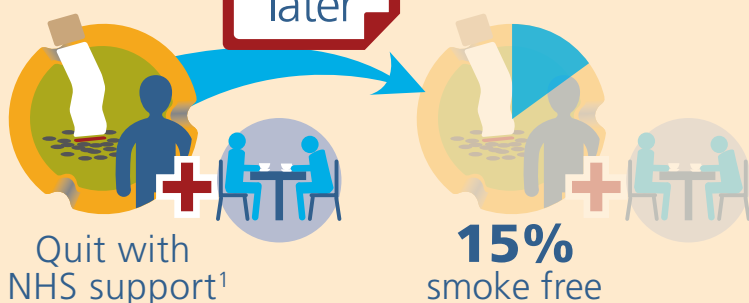
The World Health Organisation recognised the following as **cost effective**



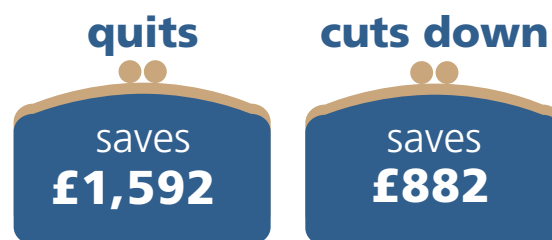
Quitting smoking



A greater proportion of smokers who try to quit are **more successful** 1 year later **if they have support**



Each 25 year old smoker who



to the NHS over their lifetime

Helping pregnant women stop smoking



¹ There is considerable variation in outcomes depending on the intervention and stop smoking medicine

Note: This infographic is part of the 'Making a Difference: Investing in Sustainable Health and Well-being for the People of Wales' report. The methods and sources of information are available in the 'Supporting Evidence' document on the Public Health Wales website. Where possible, latest figures for Wales are presented. Where unavailable, figures for Wales have been estimated from the latest UK/England/other data on unadjusted per capita basis.

Increasing Physical Activity Levels in Wales

Many people in Wales are not physically active enough to protect their health



64%
are physically active for **150 minutes** a week¹

53%

20% and **11%**
are physically active for **60 minutes every day** of the week

Journeys involving walking or cycling



21%
of trips are **on foot** in Wales

SCHOOL
1 - 2 miles

31%
of **primary** school children **walk**



62%
of **secondary** school children either **walk** or **cycle**



Inactivity has consequences for health and well-being, it places a burden on the health system and it impacts on the wider economy

Health impact

Physical inactivity causes

- 11%** of coronary heart disease cases
- 13%** of type 2 diabetes cases
- 18%** of breast cancer cases

Cost to NHS Wales

Physical inactivity costs

£51 million each year

Cost to overall economy

In Wales, physical inactivity costs:²

- £314 million** per year from **sickness absence**
- £57 million** per year from **death of working age people**

¹ Physical activity guidelines recommend that adults should do at least 150 minutes of moderate activity during the week
² 2002 data



The Solutions

Increasing Physical Activity in Wales

'Best buys' to increase physical activity include¹



Mass media campaigns
to promote physical activity



Increase physical activity participation by **2.4%**

Costs

< £1.40 per person



Promoting physical activity
**in workplaces, schools
and communities**

Workplace interventions increase physical activity participation by **12%**

Costs

< £4.11 per person



Supporting active transport strategies

Moving from
car to walking saves



£1,220
per person
per year



Moving from
car to cycling saves



£1,121
per person
per year



Increasing **cycling** and **walking**
in urban areas will save

**£0.9
billion**
over 20 years

for the NHS in Wales



Every **£1** spent on
cycling provision saves

£4
in health
costs

for the NHS in Wales

Providing primary care advice and support (brief intervention) to increase physical activity levels is more cost-effective than prescribing statins (drugs used to reduce cholesterol levels)

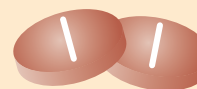
For each extra year of good health gained:

Brief intervention



Costs between
£20 and £440

Statins



Cost between
£10,000 and £17,000

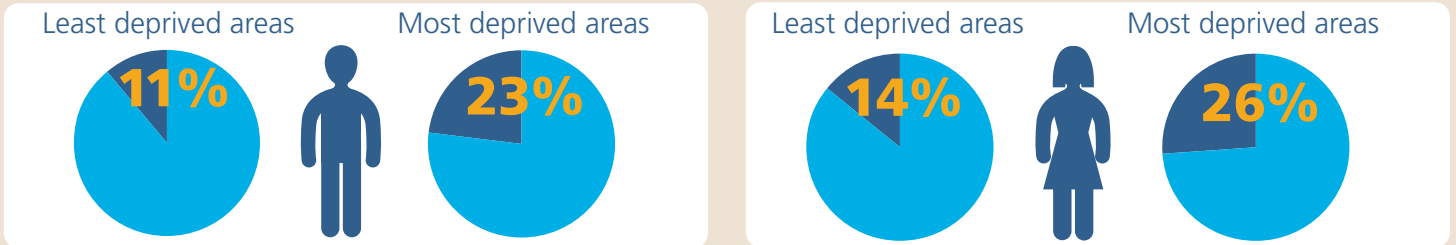
¹ "Best buys" recommended by WHO with compelling evidence of cost-effectiveness, feasibility, low-cost and appropriate to implement within the constraints of the local health system.

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Addressing Health Inequalities in Wales

In Wales, **people in the most deprived areas live more years in poor health**, compared to people in the least deprived areas

Percentage of life spent in poor health¹



Health inequalities affect a **country's prospects** and **growth**



Estimated costs of health inequalities to the Welsh economy



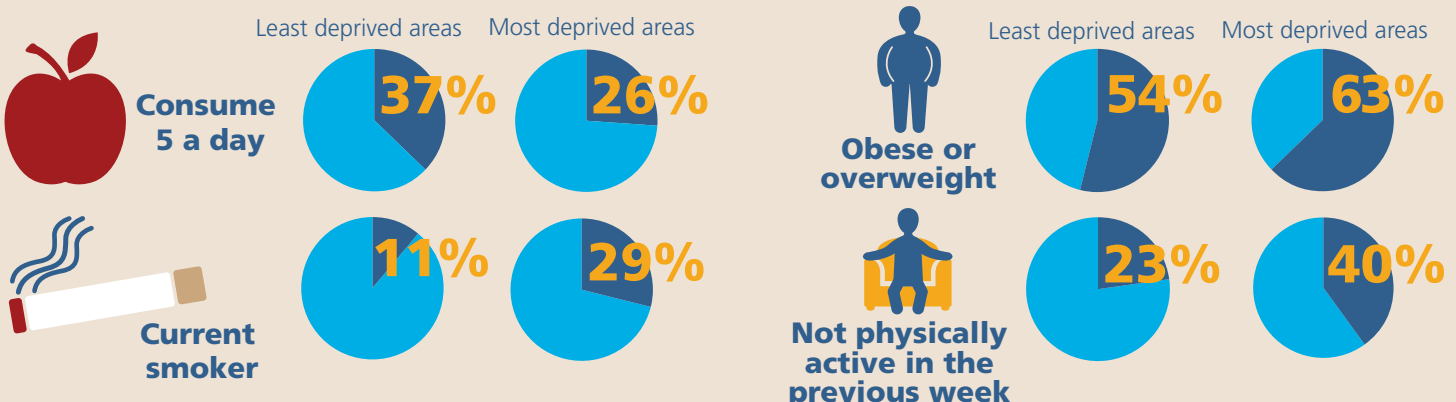
Health inequalities can cross generations

Children from low income families are at a higher risk of poor health outcomes throughout their lives

Health inequalities amongst **young people in Wales** are one of the **highest in Europe**

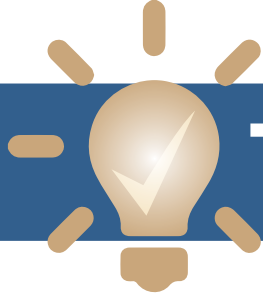
11th highest inequality (Wales flag) Out of 27 countries 18th highest inequality (England flag)

A greater proportion of people living in the most **deprived areas** in Wales adopt **unhealthy behaviours**



Death rates due to smoking are **X2** higher in deprived areas

¹ As percentage of life expected to live



The Solutions

Addressing Health Inequalities in Wales

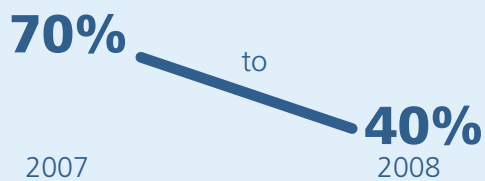


Preventing ill health across the population is generally more effective at **reducing health inequalities** than a focus on clinical interventions



Legislation

Wales 2007 Smoke free legislation resulted in fall in the reported exposure to second hand smoke in adults from



Taxation

Smoking is one of the major causes of health inequalities



Minimum unit pricing (MUP) for alcohol

Alcohol causes the greatest harm to the most disadvantaged



MUP reduces harmful alcohol consumption in those with the lowest income by **6%**



MUP reduces deaths among heavy drinkers in routine/manual occupations by **8%**



Tackling the **causes of social and economic inequalities** that drive inequalities in health are likely to be most effective



Ensure a living wage

A living wage is associated with living longer and dying less, better mental health and drinking less



Reduce unemployment

Almost a quarter (20-25%) of the deaths among unemployed people over 10 years could be prevented if these were employed



Improve physical environment

The traffic congestion charge in London resulted in a 9% reduction in hospitalisations for a lung condition

Addressing cold and damp housing could save the Welsh NHS £35 million



Invest in early years

Targeted interventions + universal childcare and paid parental leave, could address £72 billion costs of social problems due to crime, mental ill health, family breakdown, drug abuse and obesity



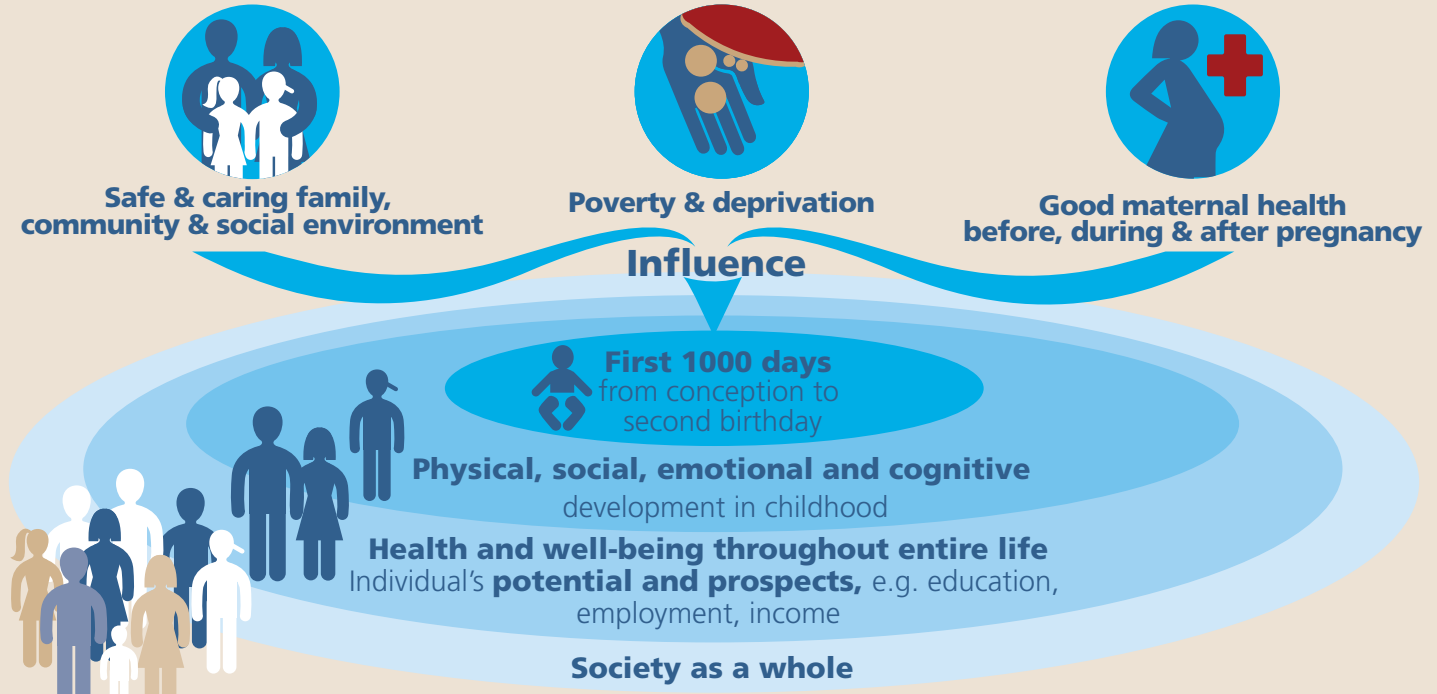
Universal services

Providing accessible services to all whilst investing in additional support for the vulnerable groups

Note: This infographic is part of the 'Making a Difference: Investing in Sustainable Health and Well-being for the People of Wales' report. The methods and sources of information are available in the 'Supporting Evidence' document on the Public Health Wales website. Where possible, latest figures for Wales are presented. Where unavailable, figures for Wales have been estimated from the latest UK/England/other data on unadjusted per capita basis.

Investing in Early Years for a Sustainable Future in Wales

Early childhood experiences, including before birth, can have a lifelong impact



Children who live in poverty and deprivation are at higher risk of dying early, developing obesity or experiencing ill health



Infants (0-28 days) in the most deprived areas in Wales are **one and a half times more likely** to die compared to those in the least deprived



Less than 1/4 (22.5%) of the babies in the most deprived areas in Wales are **exclusively breastfed at 10 days after birth** compared to **nearly 1/2** (46.8%) of those in the least deprived



Obese children (age 4 - 5) in the most deprived areas in Wales (14.7%) are **two times more** than those in the least deprived (7.3%)

Adverse Childhood Experiences



Verbal abuse



Physical abuse



Sexual abuse



Parental separation



Domestic violence



Mental illness



Alcohol abuse



Drug use



Incarceration

Parental /family

are associated with



nearly **1/4**

of current adult smoking



over **1/3**

of teenage pregnancies



more than

1/2

of the violence and drugs use



The Solutions

Investing in Early Years for a Sustainable Future in Wales



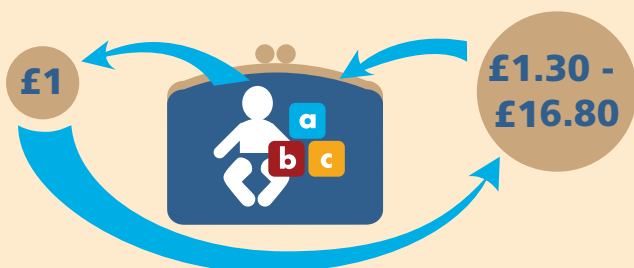
Investing in the first 1000 days from conception to the second birthday is cost-effective and has the most potential for action

Effective early child development interventions can include:

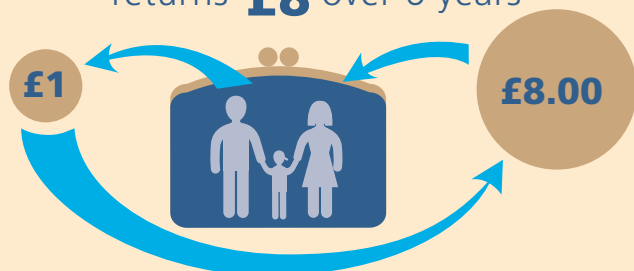
- support to mothers before & after birth
- breastfeeding and nutrition support
- parenting support
- access to health services and childcare
- access to early education

Investing in universal (accessible to all) interventions along with additional resource proportionate to need for vulnerable children works and it is cost-effective

Every **£1** invested in **early years interventions** returns **£1.30 - £16.80**



Every **£1** invested in **parenting programmes to prevent conduct disorder** returns **£8** over 6 years



from health care, education and criminal justice costs

Investing in **targeted interventions** + **universal child care** + **paid parental leave** in Wales

could save **£72 billion** over 20 years

from the costs of social problems



Drug use



Mental illness



Parental separation



Crime



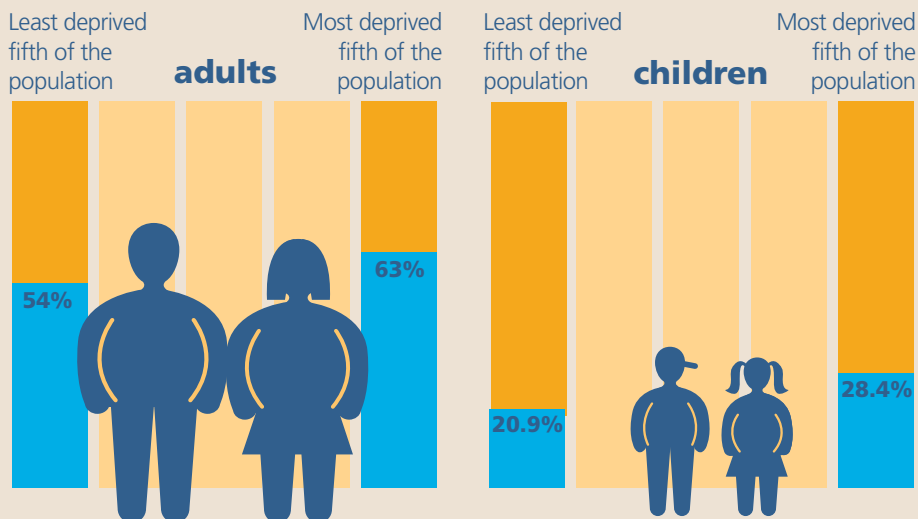
Obesity

Note: This infographic is part of the 'Making a Difference: Investing in Sustainable Health and Well-being for the People of Wales' report. The methods and sources of information are available in the 'Supporting Evidence' document on the Public Health Wales website. Where possible, latest figures for Wales are presented. Where unavailable, figures for Wales have been estimated from the latest UK/England/other data on unadjusted per capita basis.

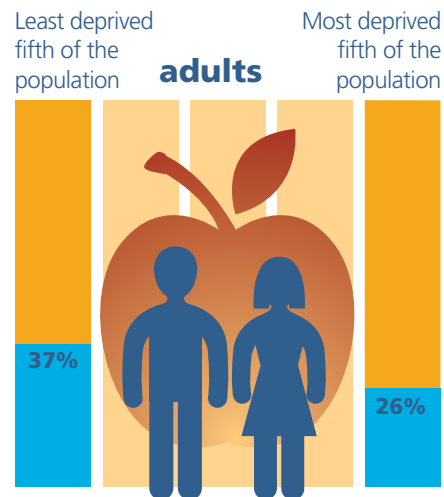
Tackling Obesity and Unhealthy Diet in Wales

The majority of Welsh adults and a large proportion of children are overweight¹ or obese²

Overweight and obesity is related to social disadvantage



Only a minority of Welsh adults eat the recommended levels of fruit and vegetables³



Overweight and obesity can lead to long term conditions, can significantly reduce life-expectancy and has costs to the health system and the economy

Health impact

Almost **3 in 4** adults are predicted to be overweight or obese

By **2035**

In Wales, rising levels of obesity could lead to an additional:⁴

- 221,700** cases of **type 2 diabetes**
- 78,200** cases of **coronary heart disease**
- 32,200** cases of **cancer**

Cost to NHS Wales

The cost of overweight and obesity is

£86 million per year (2008/09 prices)

and will be

£465 million per year By **2050**

Cost to society and the economy

If obesity rates continue to rise, the cost to society and the economy in Wales could reach

£2.4 billion By **2050**⁵

1 In adults BMI 25 to <30kg/m²; In children 85th centile to <95th centile
3 At least 5 portions of fruit and vegetables each day

2 In adults BMI 30kg/m² and over; In children 95th centile or above
4 In total, by 2035
5 In today's prices



The Solutions

Obesity and Unhealthy Diet in Wales

A healthy diet and physical activity¹ both help in maintaining a healthy weight.

"Best buys"² to reduce levels of unhealthy diet include



Raising public awareness of healthy diets

Increase intake of **fruit and vegetables** by **18g (quarter of a portion) per person per day**

Costs **< £1.40** per person



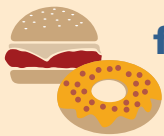
Restricting marketing of unhealthy food and drinks to children

Across all media, including digital platforms and through sponsorship



Food taxes

Taxes on:



food high in salt, sugar and fat



sugar sweetened drinks

A **10% tax on** sugar sweetened drinks in Mexico has resulted in a reduction in drinks purchased:

- by an average of **6%**
- by **9%** in more deprived households



Promoting healthy eating in schools and workplaces

For example by:



- Increasing availability of **fruit** and **vegetables**



- **Healthy diet education**



Counselling in primary care to obese people

Provides an extra **5,700 years** of **life in good health** per year in Wales



¹ See "Increasing Physical Activity Levels in Wales"

² "Best buys" recommended by WHO for nutrition with compelling evidence of cost-effectiveness, feasibility, low-cost and appropriate to implement within the constraints of the local health system.

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Tackling Violence and Abuse in Wales

Violence is a public health issue

In Wales:



While growing up



Violence impacts on deprived communities the most

hospital admission x3.7
more likely in most deprived areas compared with least deprived areas



Victims thought the offender was **under the influence of alcohol** in **half** of violent incidents



Violence is a major cause of poor physical and mental health and impacts on society, the health service and the wider economy

Health impact

Exposure to **violence in childhood** is linked to




behavioural problems



alcohol & substance misuse



poor mental health



worse sexual health



more use of health services

Societal impact for Wales

Exposure to domestic violence as a child is linked to **loss of income as an adult**



Cost to NHS Wales

Violence costs the NHS in Wales



£96 million
per year (2007 prices)

Cost to overall economy

Violence costs the Welsh economy



£2.2 billion
per year (2009 figures)

In Wales, **domestic violence** and **abuse** costs public services

£303.5 million
per year

Human and **emotional** costs are an additional

£523 million



The Solutions

Tackling Violence and Abuse in Wales

Interventions to reduce violence and abuse include



Interventions for children and young people

Preventing Adverse Childhood Experiences and improving resilience and protective factors could:

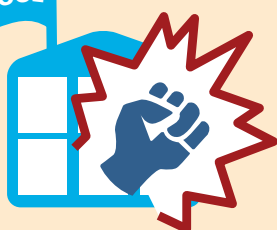


Reduce **violence perpetration** in adults by **60%**



Reduce **violence victimisation** in adults by **57%**

SCHOOL



School based interventions to reduce bullying

£1 invested in anti-bullying interventions in schools can return **£15**



Interventions in the Early Years

Support programme from nurses for **vulnerable first time mothers:**



reduces **child maltreatment** and **criminal behaviour**

Saves **£2.00** per **£0.70** invested



Parenting programmes

Parenting interventions for **5 year old children** with **conduct disorders**



Saves **X8 more** than it costs



A multi-agency approach to sharing and using **Emergency Department data**

In Cardiff: Associated with a **reduction in hospital admissions** for violence

Saves **£82** to society per **£1** invested



Interventions for domestic violence and abuse and violence against women

Implementing national guidance on Domestic Violence and Abuse

could save **£4,700** per month per person

on longer-term costs of treating and supporting someone with post-traumatic stress disorder as a result of violence and abuse

A primary care programme to identify domestic violence and abuse has societal

savings of **£37** per year

per woman registered with the practice

Note: This infographic is part of the 'Making a Difference: Investing in Sustainable Health and Well-being for the People of Wales' report. The methods and sources of information are available in the 'Supporting Evidence' document on the Public Health Wales website. Where possible, latest figures for Wales are presented. Where unavailable, figures for Wales have been estimated from the latest UK/England/other data on unadjusted per capita basis.

Improving Mental Health in Wales

Mental health in adults in Wales

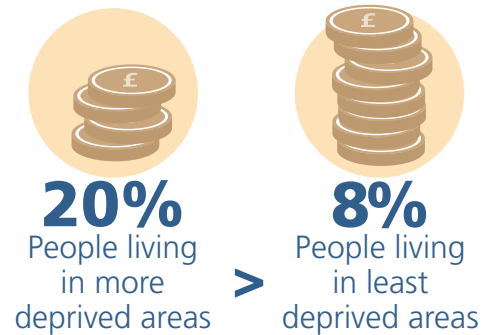
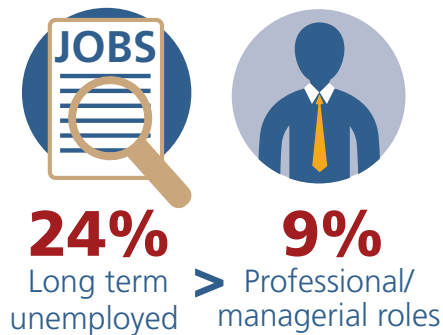
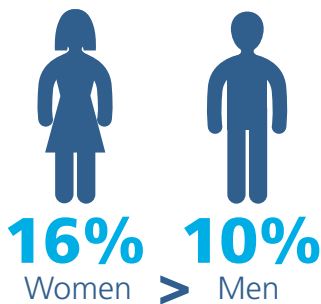
The proportion of adults who report being treated for any **mental health condition** has increased



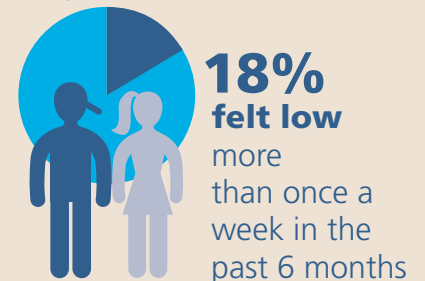
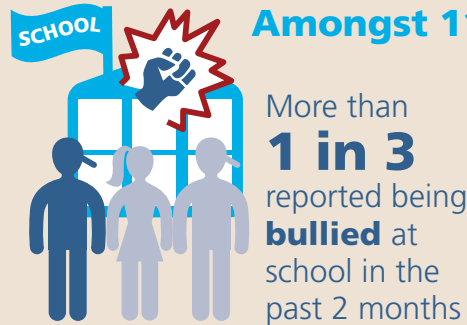
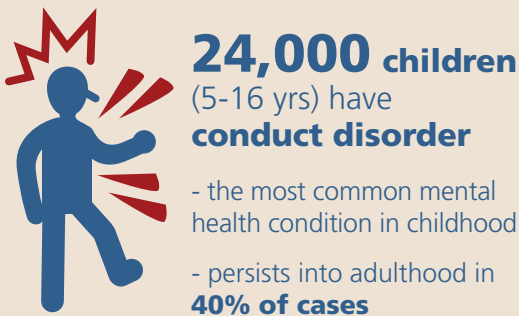
10% of adults report being **treated for depression**

8% of adults report being **treated for anxiety**

Mental ill health is higher in some groups



Mental health and well-being in children in Wales



Mental ill health is associated with poor physical health

Mental ill health accounts for more **years lost due to ill health, disability or death** than physical health conditions



People with a **serious mental illness** are:

	% who smoke	% obese
Schizophrenia	61%	33%
Bipolar disorder	46%	30%

more likely to **develop poor physical health** (eg diabetes, stroke)

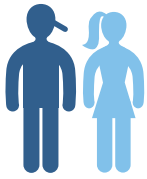
more likely to **die 15-20 years younger** than the general population

Mental ill health is a significant cost to health and society



Societal impact

Mental ill health in childhood costs society



£11,000
to **£59,000**
per year per child*

Mental ill health costs society in Wales



£7.2 billion
per year



Cost to NHS Wales

Cost of treatment
per person with depression



£2,210
per year

Mental health accounts for
only 12.2%
of public expenditure on all
health and social care in Wales



The Solutions

Improving Mental Health in Wales

'Best buys' to prevent mental ill health and improve mental well-being are likely to include¹



Supporting parents and children

For example parenting skills training, pre-school education, home learning environment

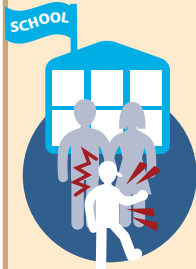


Improving working lives

Promoting wellbeing in the workplace

Cost: £40,000

Savings: £340,000 within 1 year to a business of 500 employees



Reduce conduct disorder through:

- Investing **£1** in **parenting programmes** to prevent conduct disorder **returns £8** over six years
- Investing in **school based social and emotional learning costs £132** per pupil per year **and can save the health sector £39** in the first year, **rising to £751** by the fifth year

- Investing **£1** in **anti-bullying interventions** in schools **can return £15**



Positive steps for mental health

For example, promoting healthy lifestyles such as diet, exercise. Promoting positive mental wellbeing programmes for everyone born in Wales in a single year would cost approximately £20 million, with **potential benefits of £1,113.75 million**



Supporting lifelong learning

For example, health promoting schools and continuing education.



Supporting communities

For example increase access to green spaces, and provide community facilities to bring people together

¹ "Best buys" recommended by WHO with compelling evidence of cost-effectiveness, feasibility, low-cost and appropriate to implement within the constraints of the local health system. *based on data for the UK

Note: This infographic is part of the 'Making a Difference: Investing in Sustainable Health and Well-being for the People of Wales' report. The methods and sources of information are available in the 'Supporting Evidence' document on the Public Health Wales website. Where possible, latest figures for Wales are presented. Where unavailable, figures for Wales have been estimated from the latest UK/England/other data on unadjusted per capita basis.