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Protecting and improving the nation's health

Public Health England: New beginnings. Different outcomes.

The evolution of the Health Protection Agency to an executive agency (Public Health England) in 2013

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Health and wellbeing in England today

Morbidity in England

- We are living longer.
  - Between 1990-2013, life expectancy in England saw a 5.4 year increase from 75.9 to 81.3 years (one of the biggest increases in EU15+ countries).
  - This is mainly due to falls in the death rate from CVD, stroke, COPD and some cancers.
- We are living longer but spending more years in ill-health. For several conditions, although death rates have declined, the overall health burden is increasing.
  - Deaths rates from diabetes fell by 56%, but illness and disability associated with diabetes went up 75%.
  - Sickness and chronic disability are now causing a much greater proportion of the burden of disease

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What kills English people?

Leading causes of death among English people in 2013

Cause	Deaths
Heart & circulatory disorders	158,500
Cancer	110,400
Respiratory disorders	64,600
Nervous system disorders	25,900
Digestive disorders	21,600
Kidney disorders	11,200
Infections	76,80
Non-transport accidents	7,590
Diabetes	5,070
Musculoskeletal disorders	4,070
Suicide	3,070
Transport accidents	2,680
Mental health disorders	1,480
Undetermined events	1,100
Murder	970
Medical complications	380
Preganancy & birth	350
War	72

http://www.statista.com/chart/363/what-kills-english-people/

Legend:
Communicable, maternal, neonatal and nutritional
Non-communicable
Injuries

Health and wellbeing in England today

Global Burden of Diseases Study: Leading causes of DALYs 1990 & 2013

Rank 1990	1990 Leading Causes	2013 Leading Causes	Rank 2013
1.0 (1-1)	1 Ischemic heart disease	1 Low back & neck pain	1.1 (1-2)
2.1 (2-3)	2 Low back & neck pain	2 Ischemic heart disease	1.9 (1-2)
2.9 (2-3)	3 Cerebrovascular disease	3 Cerebrovascular disease	3.9 (3-6)
4.0 (4-4)	4 Lung cancer	4 COPD	4.3 (3-7)
5.1 (5-6)	5 COPD	5 Lung cancer	4.9 (3-8)
6.6 (6-8)	6 Falls	6 Alzheimer disease	6.7 (5-10)
8.7 (6-11)	7 Lower respiratory infections	7 Sense organ diseases	6.8 (3-11)
8.9 (6-14)	8 Sense organ diseases	8 Depressive disorders	8.8 (3-14)
9.5 (7-12)	9 Alzheimer disease	9 Falls	9.0 (7-11)
9.7 (5-17)	10 Depressive disorders	10 Skin diseases	9.3 (4-14)

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Leading risk factors driving DALYs 2013

Figure 8a. DALYS attributed to Level 2 risk factors in 2013 for England for both sexes combined.

Dietary risks
Tobacco smoke
High body−mass index
High systolic blood pressure
Alcohol and drug use
High fasting plasma glucose
High total cholesterol
Low glomerular filtration rate
Low physical activity
Occupational risks
Air pollution
Low bone mineral density
Child and maternal malnutrition
Sexual abuse and violence
Other environmental risks
Unsafe sex
Unsafe water, sanitation, and handwashing

HIV/AIDS and tuberculosis
Diarrhea, lower respiratory, and other common infectious diseases
Maternal disorders
Nutritional deficiencies
Other communicable, maternal, neonatal, and nutritional diseases
Neoplasms
Cardiovascular diseases
Chronic respiratory diseases
Cirrhosis
Digestive diseases
Neurological disorders
Mental and substance use disorders
Diabetes, urogenital, blood, and endocrine diseases
Musculoskeletal disorders
Other non−communicable diseases
Transport injuries
Unintentional injuries
Self−harm and interpersonal violence

0.0 2.5 5.0 7.5 10.0 12.5 15.0
Disability−adjusted life−years (%)

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Health Inequalities

- While life expectancy has increased overall, there has been **little, if any, improvement** in inequalities:
  - By 2013, those living in the most deprived areas are only just approaching the levels of life expectancy that less deprived groups enjoyed in 1990.
- More deprived groups are **affected proportionally more by disease risk factors** than less deprived groups. The types of disease and risk factor are roughly the same across all deprivation areas however.
- While the data highlights regional differences in life expectancy and disease burden, **inequalities are actually greater within regions** than between them - so largely related to deprivation not geography.

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Social and structural determinants

- Economic prosperity and a good start to life
- While individuals' behaviours do matter (Eg. studies show half of health inequalities between rich and poor are the result of smoking), the reality is that our health is impacted by a range of wider determinants including:
  - good employment
  - higher educational attainment
  - safe, supported, connected communities
  - poor housing and homelessness, living on a low income
  - social isolation, exclusion and loneliness

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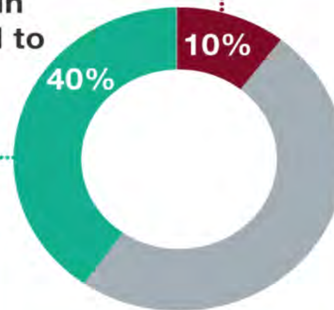
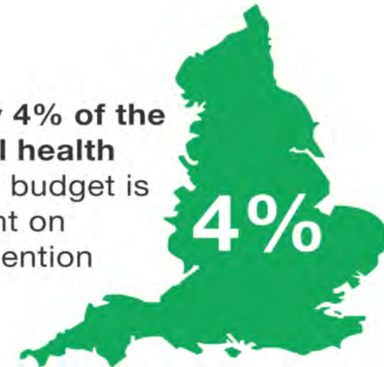
Why prevention matters

International studies suggest **healthcare contributes only about 10%** to preventing premature deaths, whilst **changes in behavioural patterns is estimated to contribute 40%**



Only **4% of the total health** care budget is spent on prevention



It is estimated that if the public were fully involved in managing their health and engaged in prevention activities

£30billion

could be saved

UK women, on average, smoke **3% more** than the EU average

In the UK in 2008, **61.1% of males** were estimated to be physically inactive and **71.6% of females**

The average consumption of alcohol by adults in the UK is **10% higher** than the EU average

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Health and wellbeing in England today

Summary

- Addressing the **health and wellbeing** gap
  - Healthy life expectancies gap
  - Increasing burden of preventable disease
  - Persistent health inequalities
- Addressing the **care and quality** gap
  - Persistent variations in healthcare
- Addressing the **financial** gap
  - Opportunity costs of not having a prevention focus

The need for a system wide approach of communities supported by their NHS, local authorities and voluntary sectors.

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Responding to the challenge

Health system transformation in England

- Health & Social Care Act 2012
- Wholesale system change across health and social care:
    - National Health Service reform
    - Refocusing on public health and prevention
    - Localism
    - Focusing on outcomes not targets
- Changes implemented from 1 April 2013

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Responding to the challenge

The new public health system provides an opportunity for renewed action and improved outcomes.

Government

DH responsible to parliament

Cross-government senior officials group to improve health outcomes

CMO to provide independent advice to government

Local authorities

New public health functions, helping to tackle wider determinants of health

Lead on improving health and coordinate protecting health

Promote population health and wellbeing (DPHs)

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New, integrated national expert body

Strengthened health protection systems

Supporting whole system with expertise, evidence and intelligence

NHS England

Delivering health care, tackling inequalities

Making every contact count

Specific public health interventions, such as cancer screening

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Responding to the challenge

The new public health system in England

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Responding to the challenge

Public health outcomes framework

To improve & protect the nation's health & wellbeing and improve the health of the poorest, fastest

Outcome 1) Increased healthy life expectancy – taking into account health quality as well as length of life

Outcome 2) Reduced differences in life expectancy between communities (through greater improvements in more disadvantaged communities)

1 Improving the wider determinants of health

19 indicators, including:

- People with mental illness or disability in settled accommodation
- Sickness absence rate
- Statutory homelessness
- % of population affected by noise
- Use of green space
- Social connectedness
- Fuel poverty

2 Health improvement

24 indicators, including:

- Excess weight
- Alcohol-related admissions to hospital
- Proportion of physically active and inactive adults
- Self-reported wellbeing
- Falls and falls injuries in the over 65s

3 Health protection

7 indicators, including:

- Air pollution
- Public sector organisations with Board approved sustainable development management plans

4 Healthcare & public health preventing premature mortality

16 indicators, including:

- Infant mortality
- Mortality from causes considered preventable
- Mortality from cardiovascular disease
- Mortality from respiratory diseases
- Excess winter deaths

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Creating a new national public health agency

- Public Health England (PHE) was established on 1 April 2013 to bring together public health specialists from more than 70 organisations into a single public health service.
- We protect and improve the nation's health and wellbeing, and reduce health inequalities.
- We employ 5,000 staff (full-time equivalent), mostly scientists, researchers and public health professionals.
- We have 8 local centres, plus an integrated region and centre for London, and 4 regions (north of England, south of England, Midlands and east of England, and London).
- We work closely with public health professionals in Wales, Scotland and Northern Ireland, and internationally.

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Our functions and the things we deliver to our stakeholders:

We do this through world-class science, advocacy, partnerships, knowledge and intelligence, and the delivery of specialist public health services

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Our priorities

PHE will focus on securing improvements against seven priorities:

- **tackling obesity** particularly among children
- **reducing smoking** and stopping children starting
- reducing **harmful drinking** and alcohol-related hospital admissions
- ensuring **every child** has the **best start** in life
- **reducing the risk of dementia**, its incidence and prevalence in 65-75 year olds
- tackling the growth in **antimicrobial resistance**
- achieving a year-on-year decline in **tuberculosis** incidence

Key risk factors driving burden of disease and premature mortality

Marmot's priority for tackling wider determinants of health

Key public concern. Reinforces need to promote risk reduction

From our first duty to protect the public's health

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Recent accomplishments

- Made a significant contribution to the world's response to the **West Africa Ebola outbreak,** while keeping people safe in the UK
- Published a world leading evidence review of how best to reduce the nation's **excessive sugar consumption** – underpinning upcoming national childhood obesity strategy and recent levy on sugary drinks
- Published an expert independent evidence review on **e-cigarettes,** which has influenced the debate worldwide
- Established an innovation fund for **new ways to tackle HIV** plus the first national home sampling service – 12,000 home test kits issued
- Established world leading **new vaccination programmes** including first infant meningitis B vaccination programme in the world
- Established NHS Prevention Board and, with NHS England and Diabetes UK, launched world's first **Diabetes Prevention Programme**

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Reflections from transition
Lessons learned

- Importance of local political leadership
- Health protection - you are only as good as your last crisis
- Choosing what not to do is key. You must prioritise to be effective, and bring others with you
- National voice does make a difference – impact on the NHS 5 Year Forward View – prevention is at its core

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Reflections from transition

Lessons learned

- Credibility is based on world class science – speaking to the evidence, not opinion
- Fewer high quality products and services. Answer the key questions well
- Our success will be determined by improving outcomes and reduced inequalities
- Winning the right arguments is everything

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Reflections from transition

Finding a national voice

- We have had the chance to make the argument
- Being a national organisation does lend credibility
- Prioritisation is a very real challenge
- But always remember the action is local

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Reflections from transition

Go where the energy is to harness new opportunities

Place-based planning	Local authorities lead on place-based planning, bring together all of the local partners, work to a joint strategic needs assessment and through statutory health and wellbeing boards. The NHS Five Year Forward View recognises and supports this approach.
Place-based funding	The NHS Five Year Forward View sets out the need to get serious about prevention. Combining NHS and local authorities resources, wherever appropriate, will help close the health, quality and financial gaps.
Devolution	The potential of devolution needs to be maximised to integrate services, improve health outcomes and reduce health inequalities.
Economic prosperity	Economic prosperity is at the heart of closing the health gap. Having a good job is good for your health and radiates wider benefits for children and families.
Public expectations, technology and scientific advances	Public expectations are changing dramatically due to developments in digital and data technologies and rapid changes in the way that people access information.

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Reflections from transition

Looking ahead

- Securing our future and the financial realities
- Focusing on what key customers want
- Winning the next stage of the prevention argument
- Health protection work requires constant vigilance

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Summary

- The most important thing is that responsibility for the health of local people has been given back to local government
- The science says life in good health is affected by wider social determinants but it is also captured in economic prosperity.
- Prevention is now part of the narrative and becoming everyone's business.
- We have found our voice. We need to build on this and win the argument on the need to recognise and invest in prevention.

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Thank you

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Our vision for success come 2020

the country is kept safe from threats to health, including outbreaks of infectious disease and environmental hazards in the UK and abroad

local authorities and the NHS regard us as the 'go to' partner for advice on protecting and improving health and return on investment and we support directors of public health as the local leaders for the public's health

our public health scientists, working with experts across the country and the world, are providing authoritative and practical expert advice to government, local government, the NHS and the public based on the evidence and on our expertise and experience

early intervention and prevention is recognised as integral to delivering the NHS efficiency challenge and the wider NHS is fully engaged in improving population health

health outcomes are improving and the health gap between the most affluent and the most vulnerable is reducing

prevention is core to the government's agenda, on which we are a trusted adviser nationally and locally

we continue to demonstrate that we are efficient, economic and effective in all that we do, with a growing reputation as one of the world's leading public health agencies