



Public Health  
England

# Public Dental Health and Sustainability

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# Introduction

1. Context
2. Business as usual: oral health in 2050
3. National and local leadership
4. Health benefits of supporting and promoting active travel for staff and patients
5. Current oral health policies : Promoting oral health in practice/communities, NICE recall etc
6. Metrics



# Recap: Social Development Goals



THE GLOBAL GOALS

[THE 17 GOALS >](#) [ACTION >](#) [NEWS >](#) [RESOURCES >](#) [SCHOOLS >](#) [\\*A](#)

## THE 17 GOALS

In 2015, world leaders agreed to 17 goals for a better world by 2030. These goals have the power to end poverty, fight inequality and stop climate change. Guided by the goals, it is now up to all of us, governments, businesses, civil society and the general public to work together to build a better future for everyone.



## GET INVOLVED

Everyone can contribute to making sure the Global Goals are met. Here you can read more about the Goals, find organizations to support and information to share. Anyone can change the world. Welcome to join the movement.





## Recap:

### **UN Social Development Goals (2015): A better world by 2030**

### **Paris Climate Change Agreement:**

keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to increase the ability of countries to deal with the impacts of climate change

### **UK Climate Change Act (2008):**

<https://www.legislation.gov.uk/ukpga/2008/27/contents>

the net UK carbon account for the year 2050 is at least 80% lower than the 1990 baseline.



## Recap:

**the net UK carbon account for the year 2050 is at least 80% lower than the 1990 baseline.**

Source: UK Climate Change Act



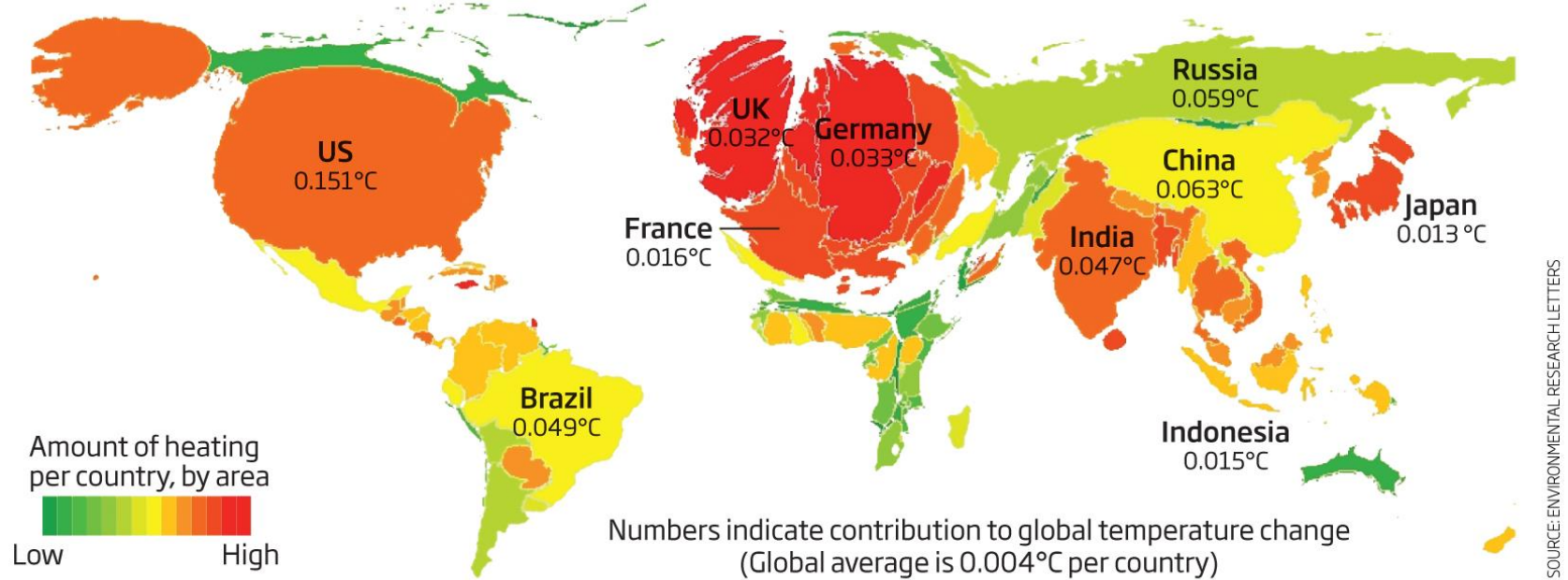
**at least 80%**



# Recap:

## Global warming culprits, judged by size

Countries that have caused disproportionately more global warming than their area would suggest are shown swollen, while low-emitters in relation to their size are shrunk

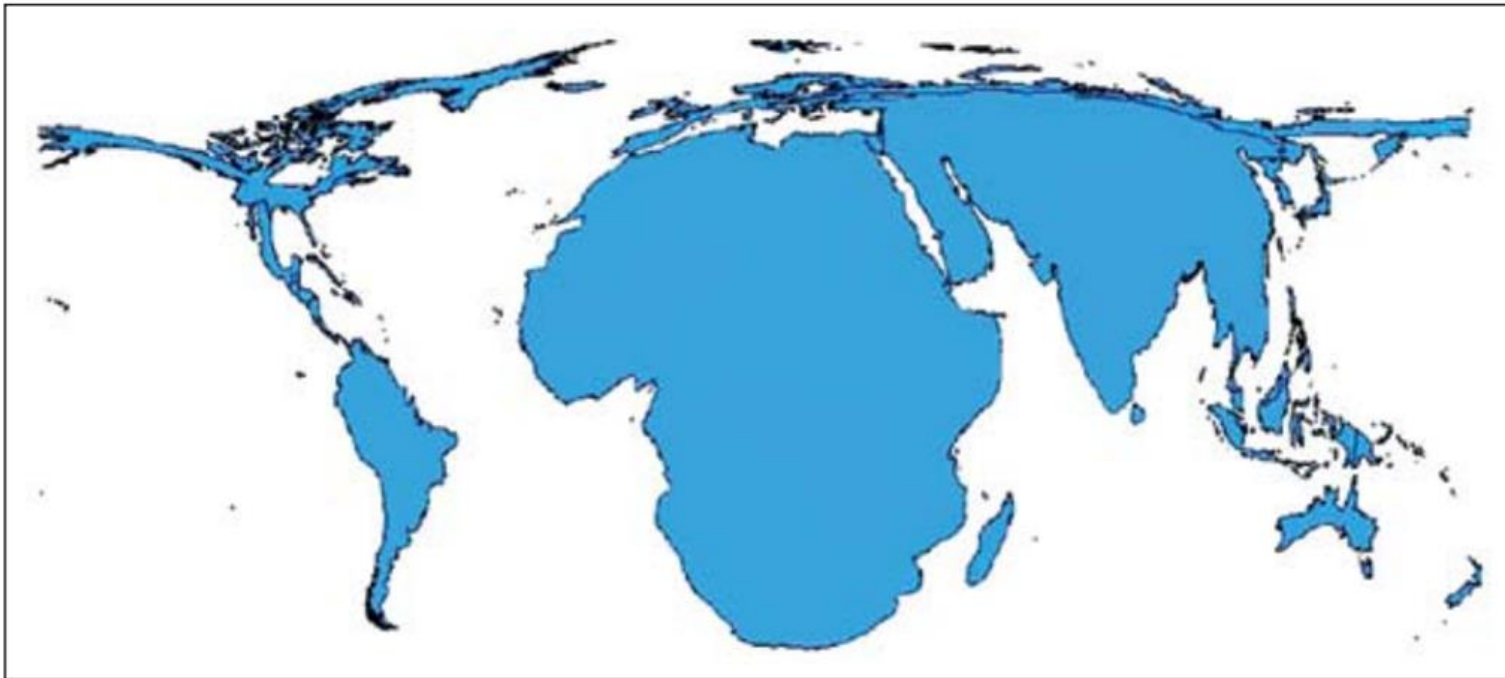


Source: New Scientist 2014



# Recap:

**Figure 6** — The world map reflecting mortality related to climate change



Source: Climate Change and Global Health: Quantifying a Growing Ethical Crisis, 2007, Jonathan A. Patz, Holly K. Gibbs, Jonathan A. Foley, Jamesine V. Rogers, and Kirk R. Smith





## Recap: Size and share of budget

**£125 billion health spend, NHS in England 2017/18:**

£110 billion - NHS healthcare

£15 billion approx - Department of Health ‘things like public health initiatives, education, training, and infrastructure (including IT and building new hospitals)’.

Source: Full Fact, the UK’s independent fact-checking charity

### **Dentistry, a Call to Action NHS 2014**

The NHS in England spends around £3.4bn per year on dental services; the value of the private market is estimated at £2.3bn per year.



## Recap:

**the net UK carbon account for the year 2050 is at least 80% lower than the 1990 baseline.**

Source: UK Climate Change Act



# Oral health in 2050

Child born in 1960: aged 90 years

Child born in 1980: aged 70 years

Child born in 1990: aged 60 years

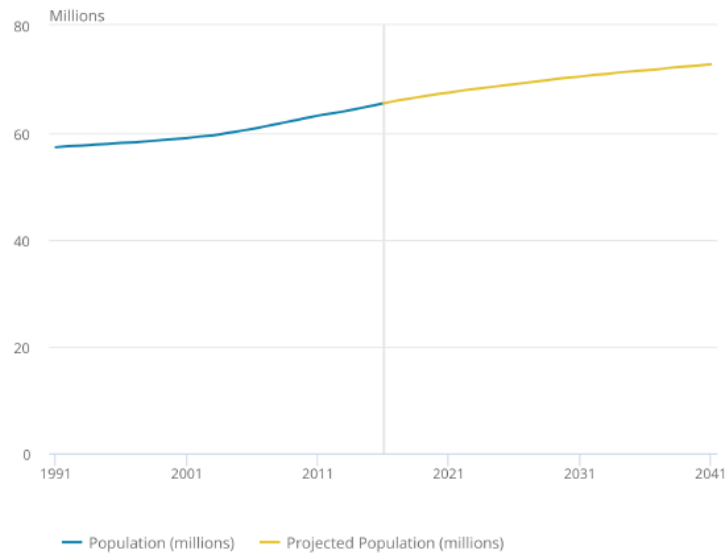
Child born in 2018: aged 32 years



# Population in 2050

Figure 1: UK population estimates, mid-1991 to mid-2016, and projections to mid-2041

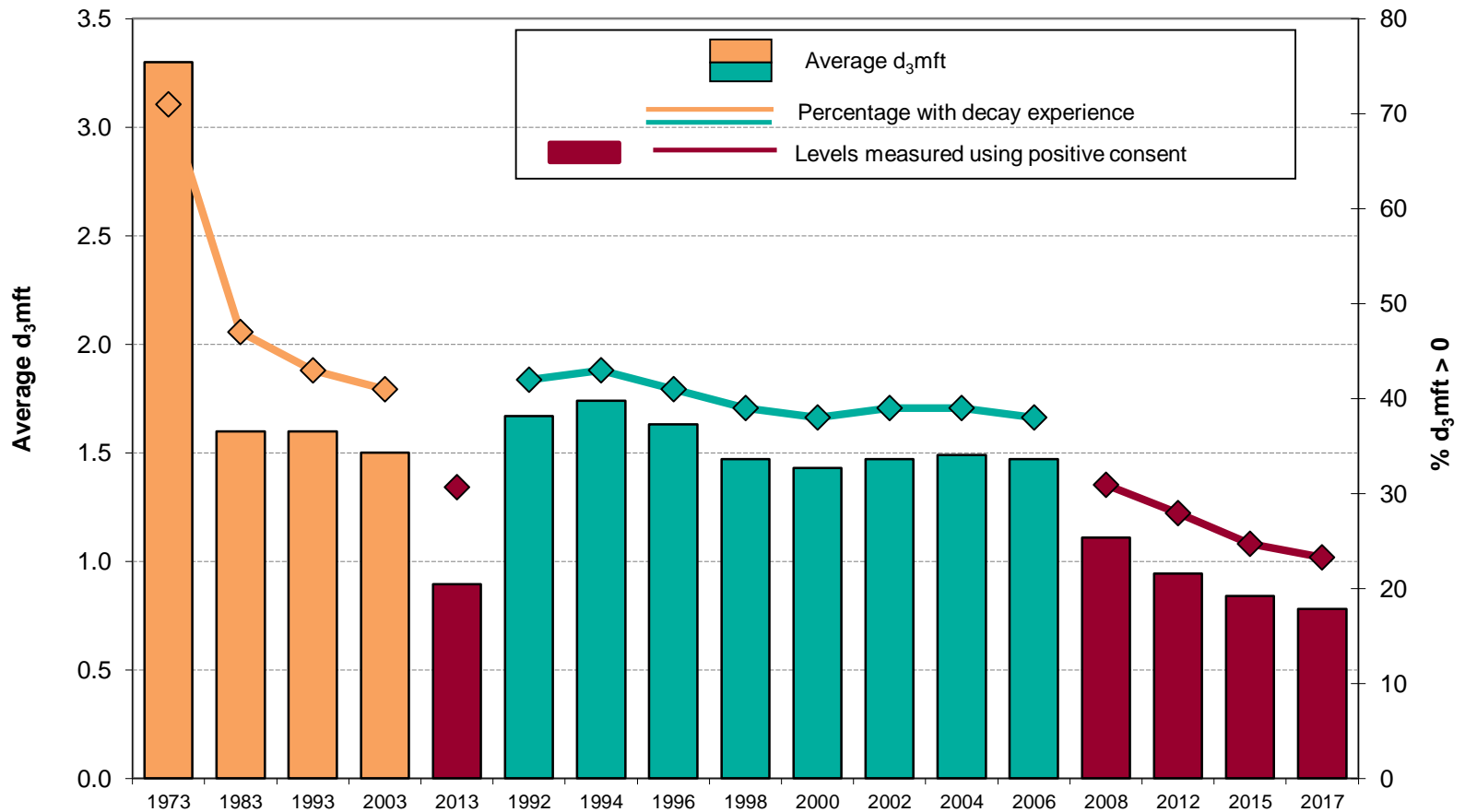
Figure 1: UK population estimates, mid-1991 to mid-2016, and projections to mid-2041



Source: Office for National Statistics



# Caries - five year old children over time

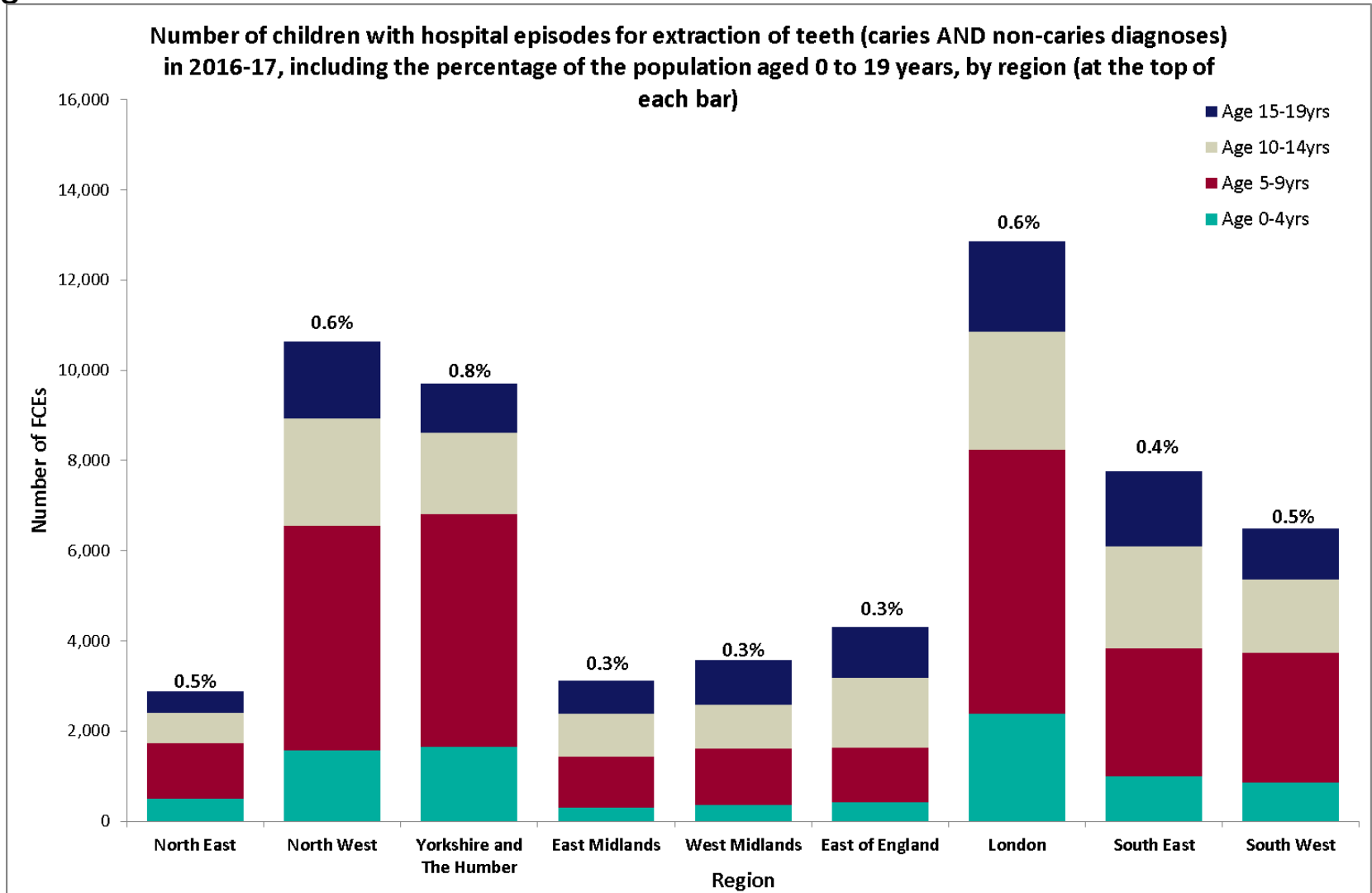


CDHS survey

NDEP surveys

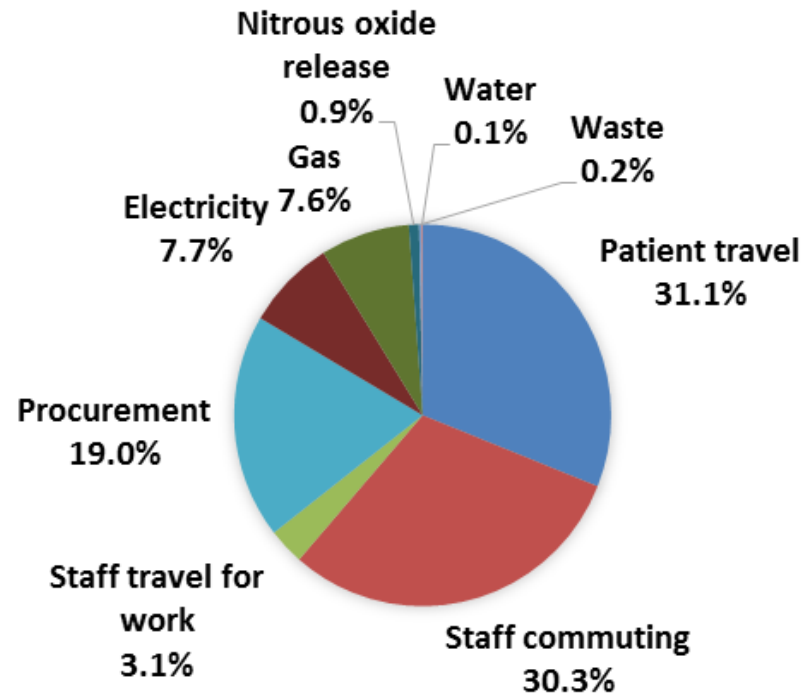


# Extractions in hospital for children





## Recap: Total annual carbon footprint of dental services in England – 2013/14



Source: Duane et als BDJ 2017



# Recap: the upstream downstream model



Diagram provided by Sandra White





# When upstream becomes downstream



Source: Salisbury Journal 2014



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# Leadership for change



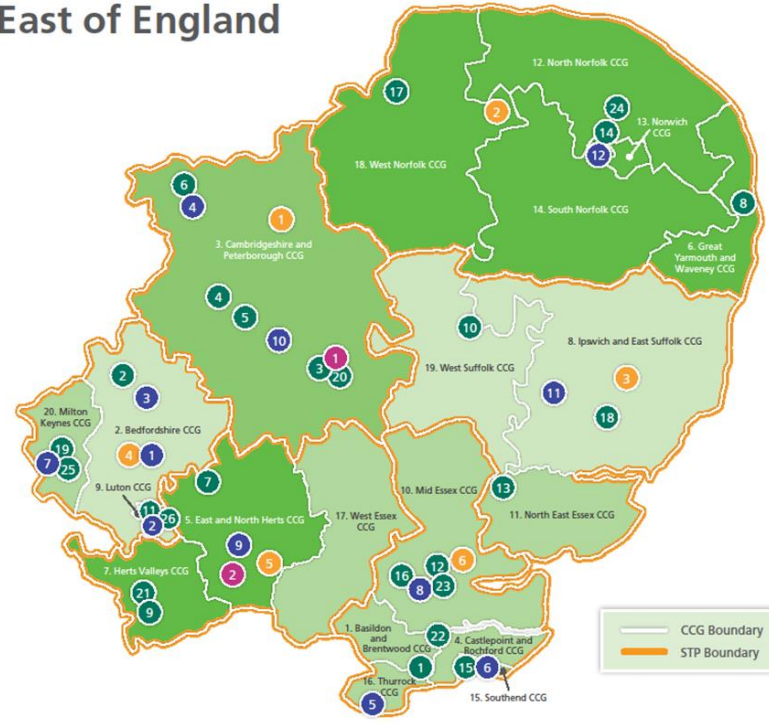
Source: The Camel Support Group





# Leading at a community level

## East of England



- Clinical Commissioning Groups**
1. Basildon and Brentwood CCG
  2. Bedfordshire CCG
  3. Cambridgeshire and Peterborough CCG
  4. Castlepoint and Rochford CCG
  5. East and North Herts CCG
  6. Great Yarmouth and Waveney CCG
  7. Herts Valleys CCG
  8. Ipswich and East Suffolk CCG
  9. Luton CCG
  10. Mid Essex CCG
  11. North East Essex CCG
  12. North Norfolk CCG
  13. Norwich CCG
  14. South Norfolk CCG
  15. Southend CCG
  16. Thurrock CCG
  17. West Essex CCG
  18. West Norfolk CCG
  19. West Suffolk CCG
  20. Milton Keynes CCG

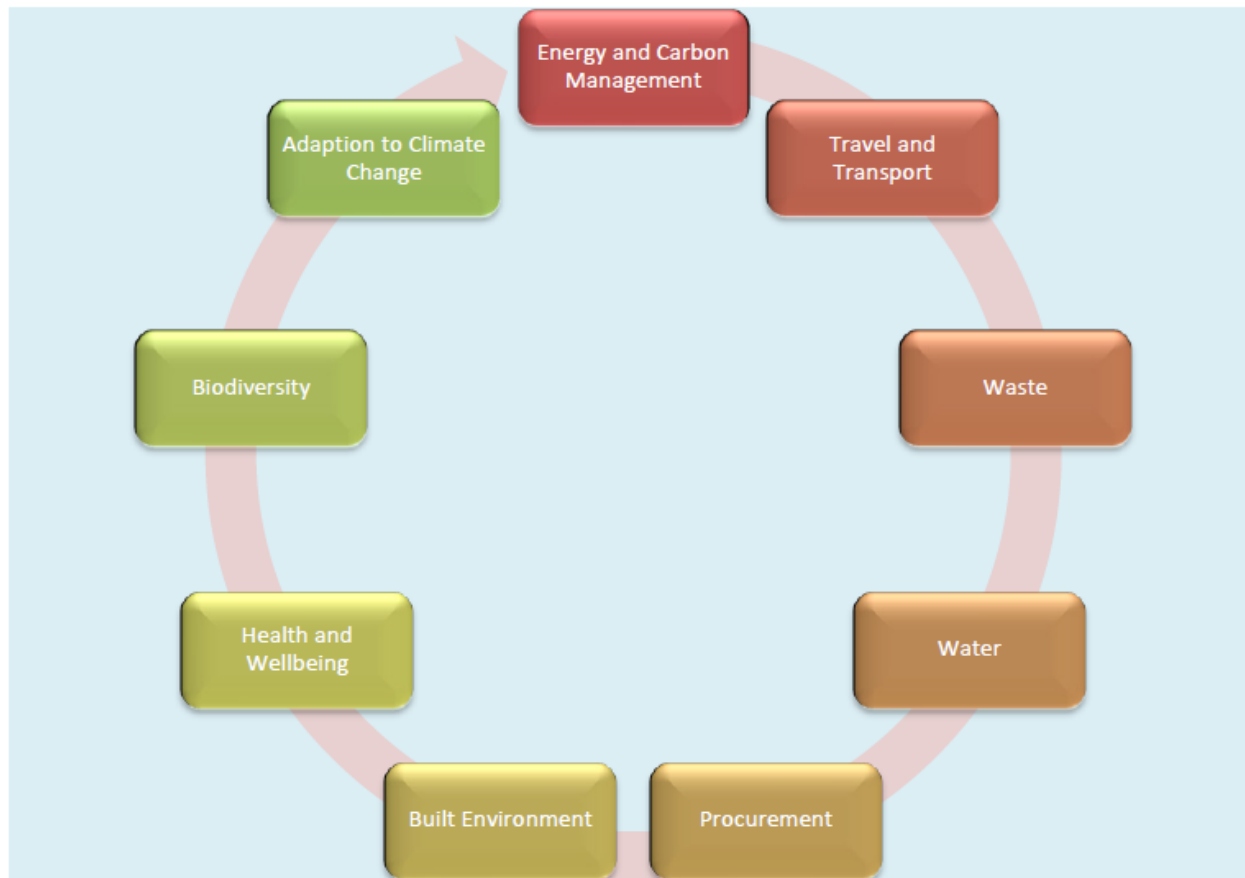
- Hospital Trusts**
1. Basildon and Thurrock University Hospitals NHS Foundation Trust
  2. Bedford Hospital NHS Trust
  3. Cambridge University Hospital NHS Foundation Trust
  4. Hinchingbrooke Health Care NHS Trust
  5. Papworth Hospital NHS Foundation Trust
  6. Peterborough and Stamford Hospitals NHS Foundation Trust
  7. East and North Hertfordshire NHS Trust
  8. James Paget University Hospitals NHS Foundation Trust
  9. West Hertfordshire Hospitals NHS Trust
  10. West Suffolk NHS Foundation Trust
  11. Luton and Dunstable Hospital NHS Foundation Trust
  12. Mid Essex Hospital Services NHS Trust
  13. Caldechester Hospital University NHS Foundation Trust
  14. Norfolk and Norwich University Hospitals NHS Foundation Trust
  15. Southend University Hospital NHS Foundation Trust
  16. The Princess Alexandra Hospital NHS Trust
  17. The Queen Elizabeth Hospital Kings Lynn NHS Foundation Trust
  18. The Ipswich Hospital NHS Trust
  19. Milton Keynes University Hospital NHS Foundation Trust
- Mental health**
20. Cambridgeshire & Peterborough NHS Foundation Trust

- Local Authorities (County Councils/Unitary Councils)**
1. Central Bedfordshire Council
  2. Luton Borough Council
  3. Bedford Borough Council
  4. Peterborough City Council
  5. Thurrock Council
  6. Southend-on-Sea Borough Council
  7. Milton Keynes Council
- County Councils**
8. Essex County Council
  9. Hertfordshire County Council
  10. Cambridgeshire County Council
  11. Suffolk County Council
  12. Norfolk County Council

- Sustainability and Transformation Plan footprints**
1. Cambridgeshire and Peterborough = 1 CCG



# Recap: Domains for sustainable development





## Working together

**All Our Health** is a call to action for all healthcare professionals to use their skills and relationships to maximise their impact on avoidable illness, health protection and promotion of wellbeing and resilience.

### **New measures to halve childhood obesity by 2030**

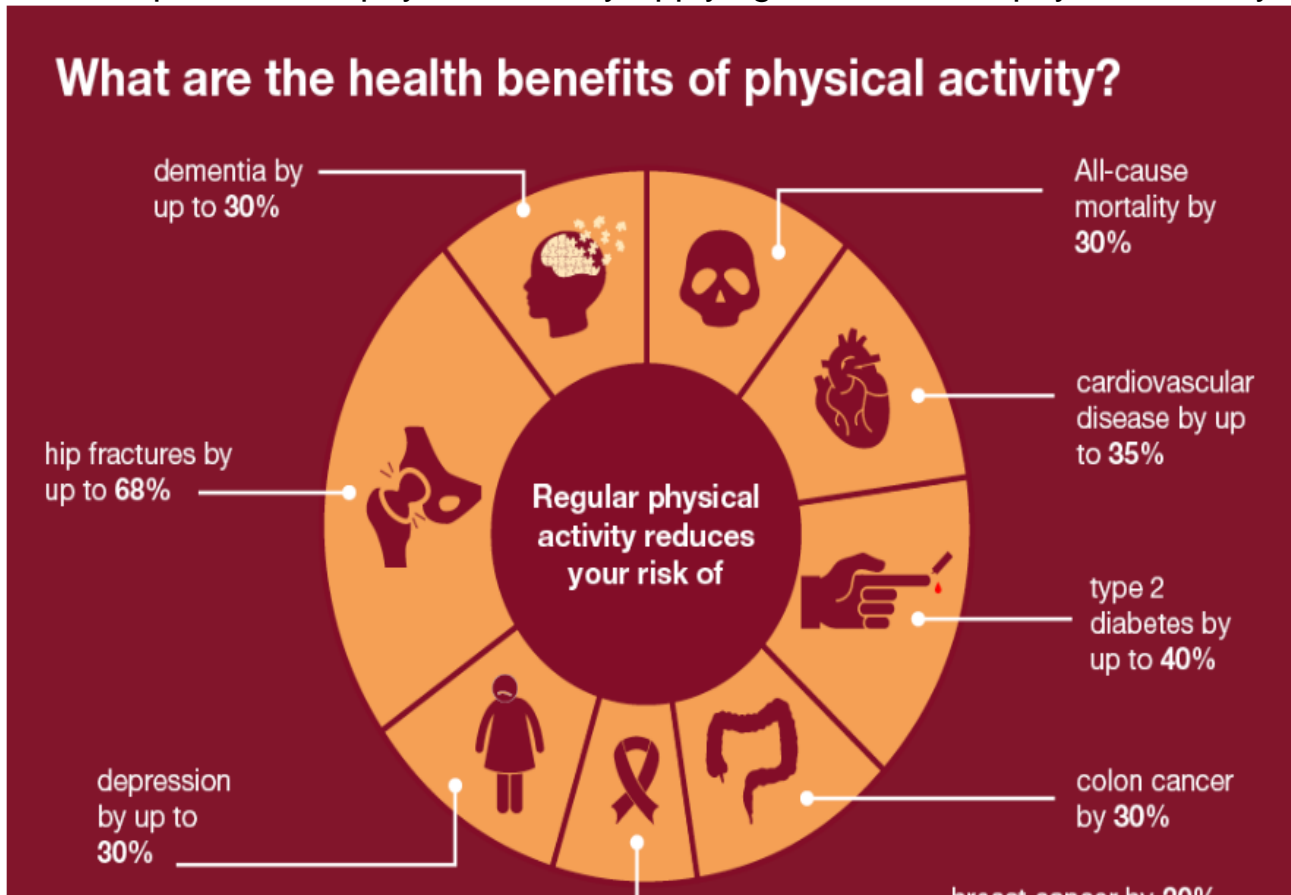
Duncan Selbie said: “Reversing this epidemic is possible provided everyone pulls together and the bold steps announced today [24 June] will help turn the tide.

### **NHS Right Care**



# All our health: health benefits of physical activity

<http://www.gov.uk/government/publications/physical-activity-applying-all-our-health/physical-activity-applying-all-our-health>





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# Inspiring behaviour change





System Organisation

Upstream

Child Oral Health Improvement Board

National sugar policy – reformulation  
Legislation – water fluoridation supporting existing schemes & proposing new schemes  
Fiscal policy – sugar levy  
SACN: guidance on carbohydrates and infant feeding

Healthy settings - Evidence based initiatives (NICE and CBOH CYP) commissioned by Local Councils e.g. local food policies, supervised tooth brushing, fluoride varnish programmes, workforce training

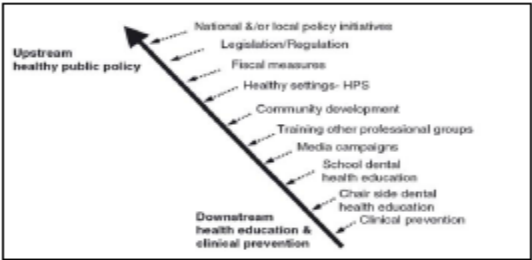
Professional Organisations Initiatives

HENRY – Parenting programme including oral health  
Supporting training: early years education, pharmacy, HVs/SNs, HENRY, dentists and their teams, e learning resources

Health Matters, Child All our Health

Best Beginnings-Baby Buddy app  
DCby1, C4L  
NHS Choices dental pages

Dental practice-based initiatives  
Starting Well  
GDS and PDS  
Dental Contract Reform Programme



Source: Watt RG. From victim blaming to upstream action: tackling the social determinants of oral health inequalities. Community dent Oral Epidemiology 2007;35: 1-11

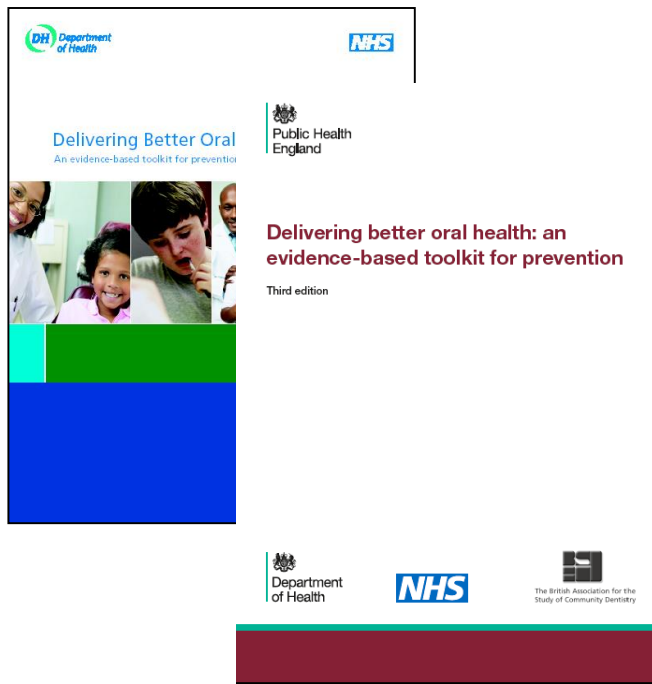
Children's care pathway

Downstream



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# Delivering Better Oral Health - prevention in practice



first published in 2007

to support dental teams in a more  
preventive approach which is  
evidence based

Universal with targeted support

living document always expected to  
update

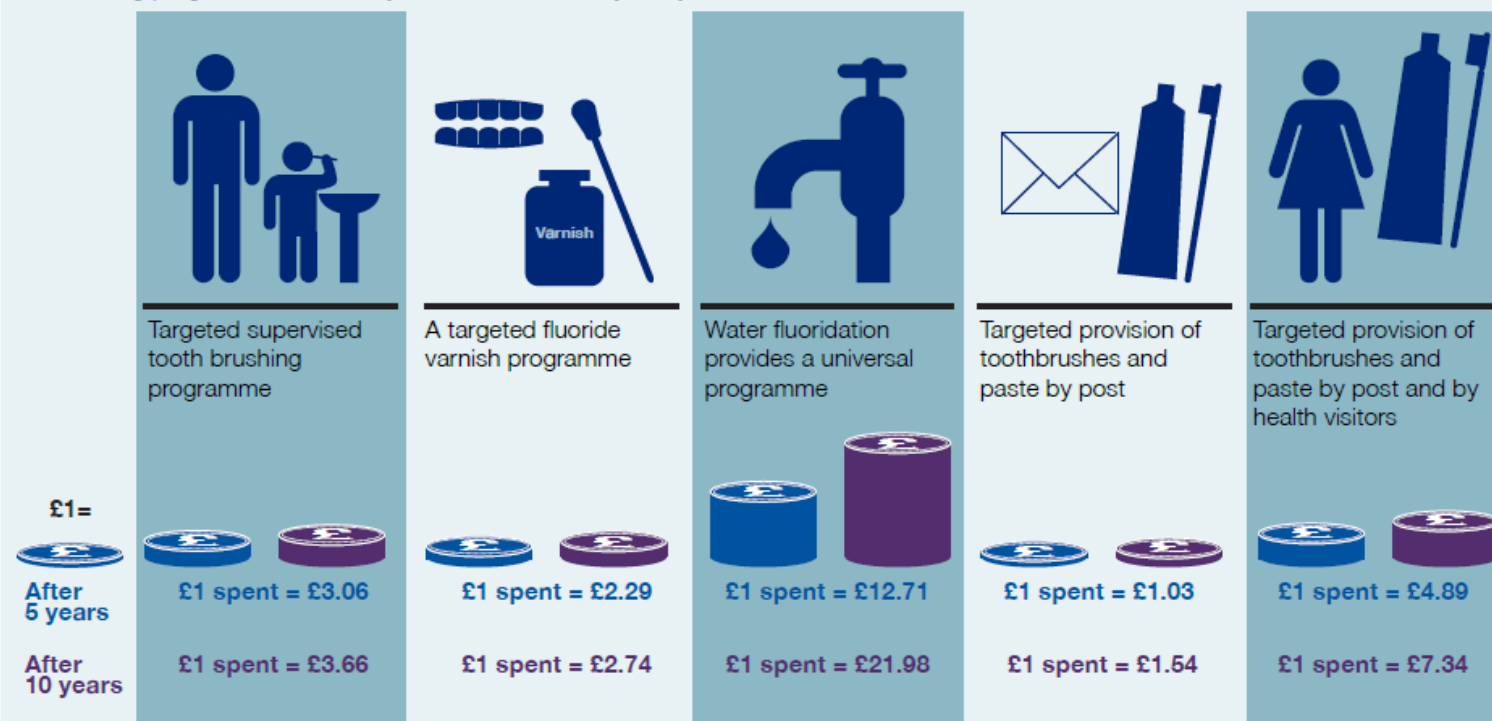
revised in 2009 and 2014

Revisions healthier eating, alcohol  
2017



## Return on investment of oral health improvement programmes for 0-5 year olds\*

Reviews of clinical effectiveness by NICE (PH55) and PHE (Commissioning Better Oral Health for Children and Young People, 2014) have found that the following programmes effectively reduced tooth decay in 5 year olds:



\*All targeted programmes modelled on population decayed, missing or filled teeth (dmft) index of 2, and universal programme on dmft for England of 0.8. The modelling has used the PHE Return on Investment Tool for oral health interventions (PHE, 2016). The best available evidence has been used in this tool and where assumptions are made these have been clearly stated

PHE Publications gateway number: 2016321

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## Working together

- Starting Well/smile for life/dental check by one



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# New ways of working

Technology/materials/methods





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# Saving teeth might save the planet

Sandra White