

# Health Survey for England

Anne Conolly

 [anne\\_conolly](#)

---

September 2017 UKDS workshop



# Overview

---

1. Background and methodology
2. Findings & impact
3. Survey content

# Background



# What is a survey?

---

“A survey is a systematic method for gathering information from (a sample of) entities for the purpose of constructing quantitative descriptors of the attributes of the larger population of which the entities are members.”

Groves et al (2009)

# When to use a survey

---

- To quantify something
  - E.g. What proportion of adults smoke?
- To explore relationships
  - E.g. Who is more likely to smoke (age / region / income)?
- To generalise about a population
- NOT to explore feelings, experiences, motives, meanings, perceptions (in any depth)
- NOT to explore topics you don't know much about
- NOT to explore people's understanding of concepts

# What is the Health Survey for England?

---

- Annual snapshot of the nation's health
- Health Examination Survey
- Tracks trends over time
- Cross-sectional
- Nationally representative sample
  - 8,000 adults and 2,000 children year year

Commissioned by:



Carried out by:



# Methodological considerations

---

- What mode of data collection would you use?
  - E.g. online, postal, telephone, face-to-face?
- What time of year would you collect the data?
- How would you sample participants for HSE?

# Methodology: data collection

---

- Face-to-face data collection:
  - Higher response rates
  - Interview length
  - Measurements and samples
  
- Two stages:
  - Interviewer
  - Nurse
  
- Continuous data collection throughout the year



# Methodology: sample design

---

- Representative of the population living in private households in England
- Multi-stage, stratified, random probability sample
- Sampled from Postcode Address File
  - Primary Sampling Unit (PSU):
    - postcode sector (e.g. NW3 2JD)
  - Addresses, dwelling units, households
  - Individuals
- Stratification
  - Over-sample in the North East



# Methodology: fieldwork

1. Advance letter & leaflet sent
2. Interviewer makes contact
3. Interviews conducted
4. Nurse visits conducted
5. Samples to laboratory
6. Feedback letters (to participants and GPs)

## Support our health services from your home

Dear Sir or Madam,

Our health, and the health of our family and friends, is important to us all. We would like to invite your household to take part in a research interview for the Health Survey for England. Last year nearly 10,000 people took part. Many found it a rewarding experience, giving them a chance to reflect on their own wellbeing.

By taking part you will help to provide vital information to support the work of the NHS, and doctors and nurses across the country. This information is used to monitor trends in health and to plan future health services. We rely on your goodwill and cooperation to make the study a success.



### What's next?

An interviewer from the National Centre for Social Research will call at your address in the next week or so. They will explain more about the study and arrange a convenient time for you to take part. Your interviewer will show you a photo ID card, so you know who they are.



### Is the survey confidential?

We take great care to protect the confidentiality of the information people give us and we take careful steps to ensure that the information is secure at all times. Your answers are put together with the answers collected from thousands of other people across England and the survey findings are published in a report. The findings will not identify anyone who took part in the survey.



### Thank you

As a thank you for taking part, please find below a £10 voucher that can be exchanged for cash at any branch of the Post Office.

For more information please see the back of this letter or visit [www.natcen.ac.uk/taking-part/hse](http://www.natcen.ac.uk/taking-part/hse). If you would like to talk to someone about the study or don't want to take part, please call Freephone 0800 526 397.

*A. Conolly*

Anne Conolly,  
Research Director, NatCen Social Research

*J. Mindell*

Dr Jennifer Mindell,  
Health Survey Doctor, University College London

**NatCen**

Social Research that works for society



**We interview around 10,000 people each year**

as part of the Health Survey for England. It's an annual study that looks into the changing health and lifestyle habits of people living all over England.

Everything is done with voluntary co-operation and in confidence.

**Key measurements include height, weight and blood pressure.**

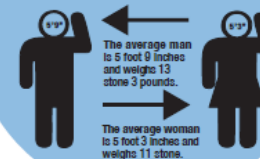


Among people receiving treatment, the proportion with well-controlled blood pressure nearly doubled between

1994 (33%)  
and  
2011 (63%).

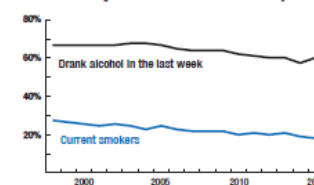


**In recent years we found out that...**

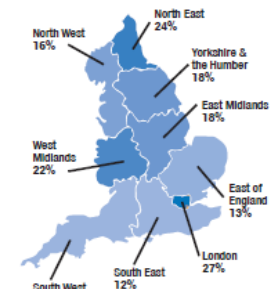


The proportions of people who don't drink alcohol varies across the country. London has the highest proportion of non-drinkers and the South East and South West the lowest.

The proportions of people in England who drink alcohol or who smoke cigarettes have fallen over the last 20 years.

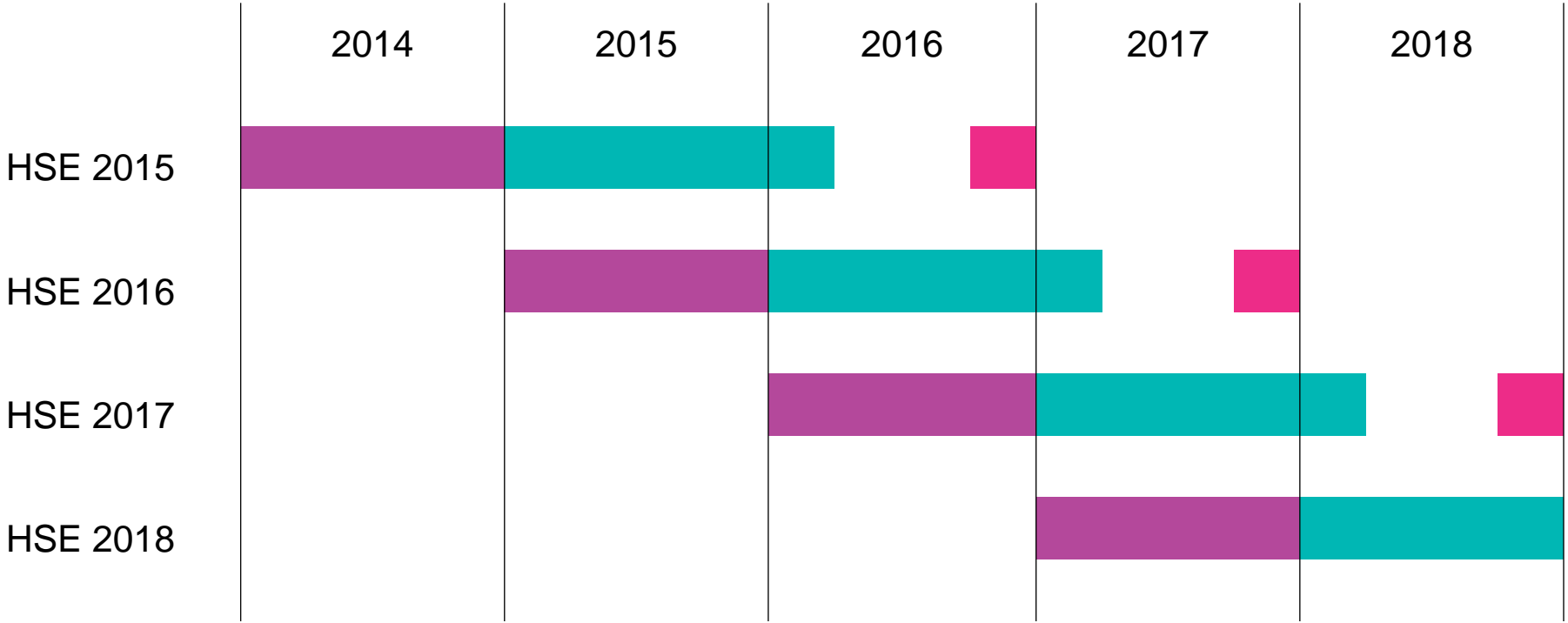


Boys and girls ate 3 portions of fruit and veg a day on average.



# Timescales

---





Questions?

# Quiz



Q1: In 2015, what proportion of adults in England were overweight (including obese)?

---

A. 26%

B. 55%

C. 63%

D. 75%

Q2: Were men or women more likely to be overweight (including obese)?

---

- A. Men
- B. Women
- C. Neither

Q3: In 2015, what proportion of children (aged 2 to 15) were overweight or obese?

---

A. 16%

B. 28%

C. 35%

D. 42%



Q4: In 2015, what proportion of children (aged 8 to 15) had ever smoked a cigarette?

---

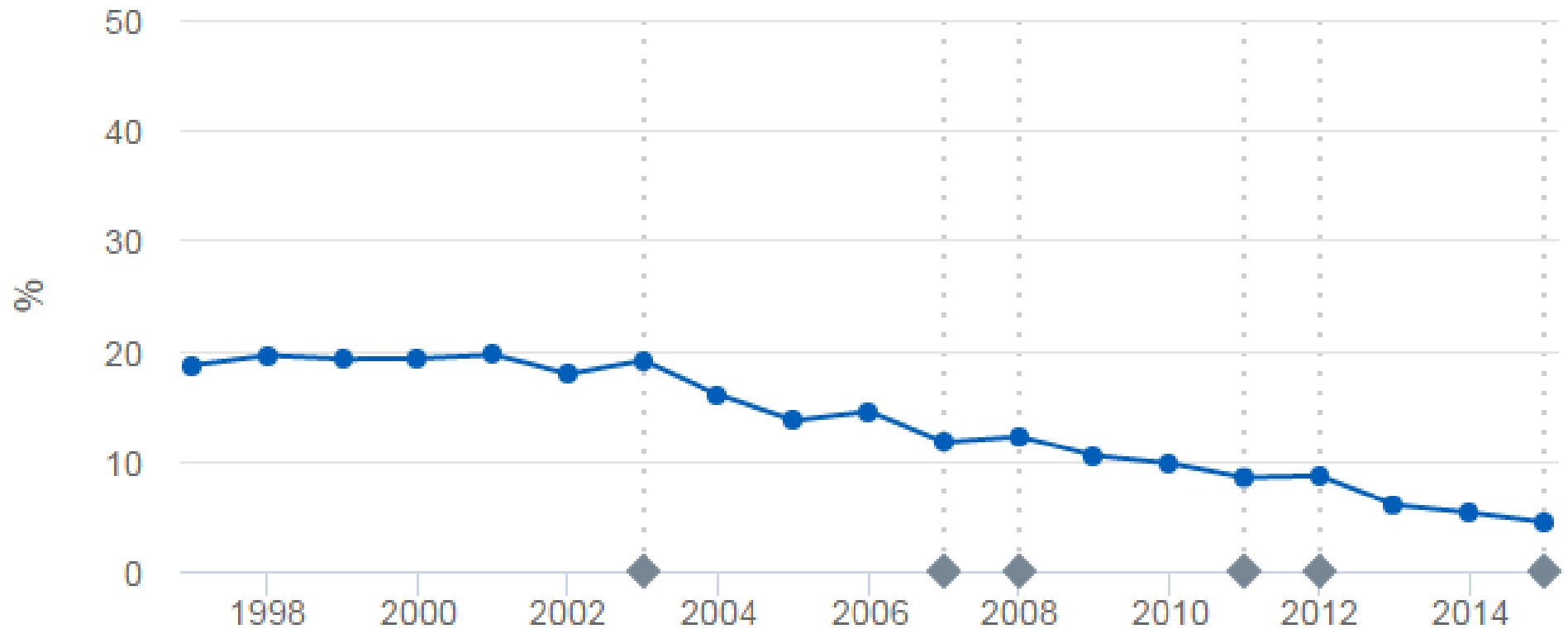
A. 4%

B. 10%

C. 16%

D. 24%

# Children aged 8 to 15 who have ever smoked



● Children

Highcharts.com

Source: NHS Digital

Base: Children aged 8-15

Q5: In 2015, what proportion of children (aged 8 to 15) had ever had an alcoholic drink?

---

A. 4%

B. 10%

C. 16%

D. 24%

Q6: In 2015, what proportion of women drank more than 14 units of alcohol per week?

---

A. 10%

B. 16%

C. 31%

D. 45%

Q7: In 2015, what proportion of men drank more than 14 units of alcohol per week?

---

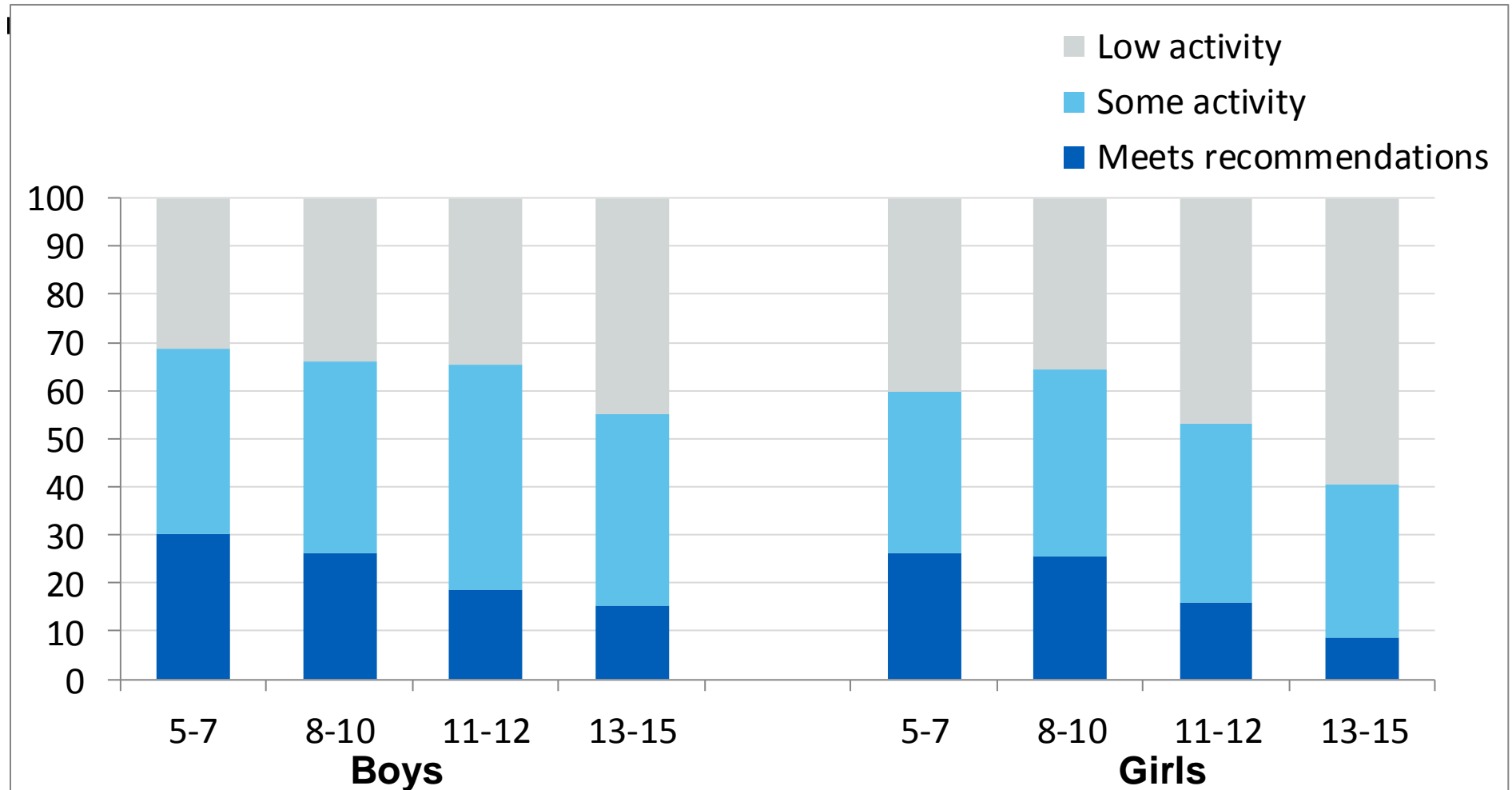
A. 10%

B. 16%

C. 31%

D. 45%

# Children's physical activity, by age and sex



Base: Aged 5 to 15

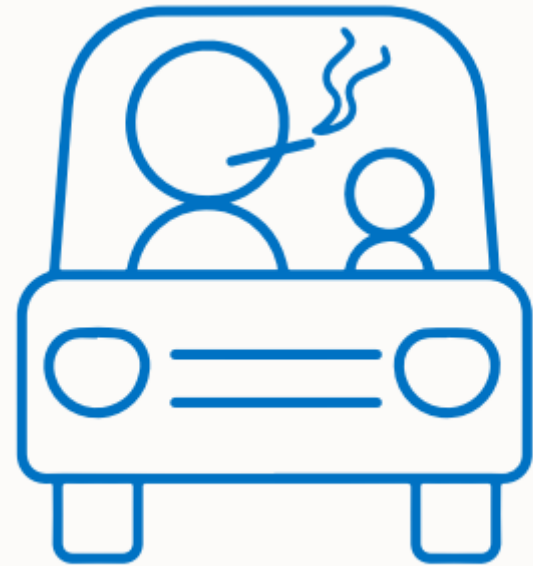
# Children's exposure to other people's smoke

---

34% of boys

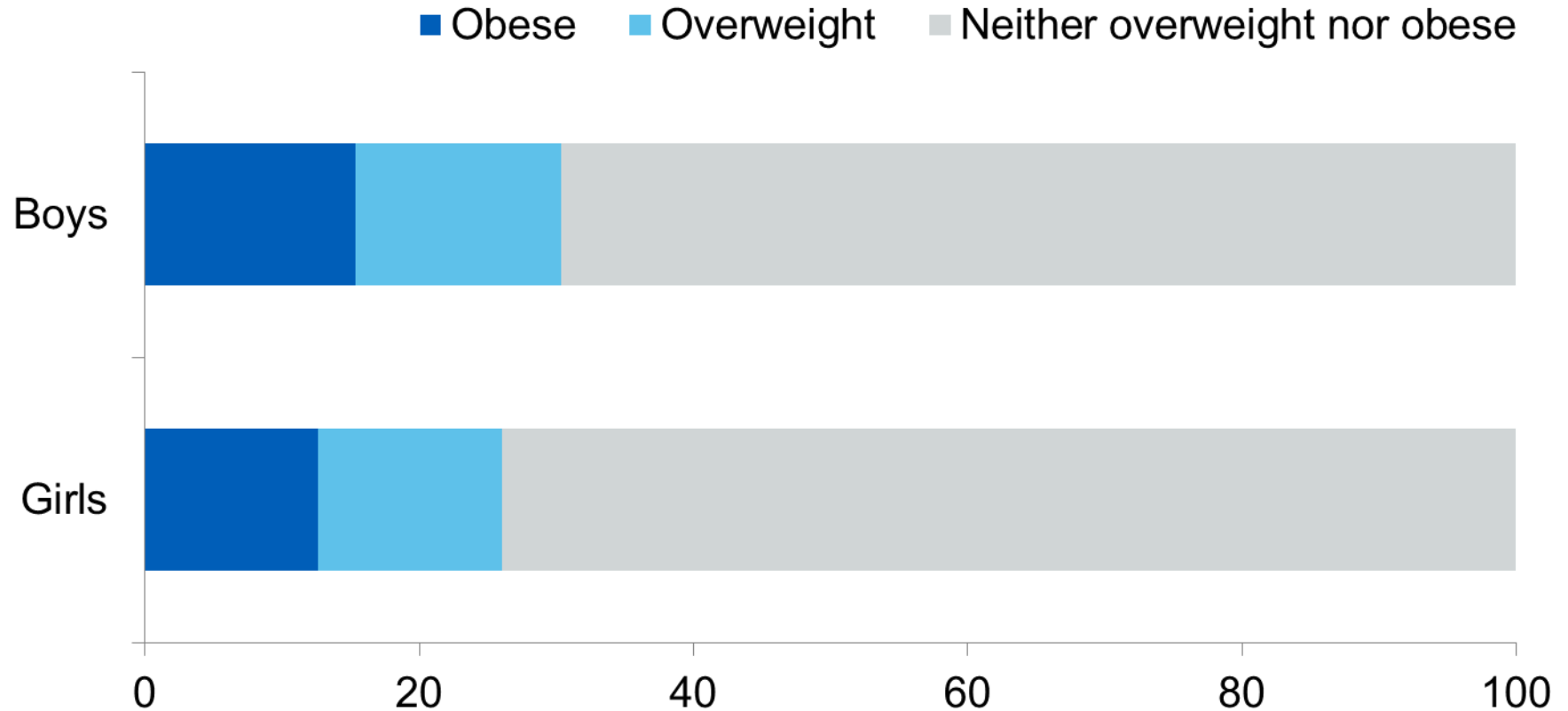
38% of girls

aged 4-15 were exposed  
to other people's smoke



# BMI status by sex

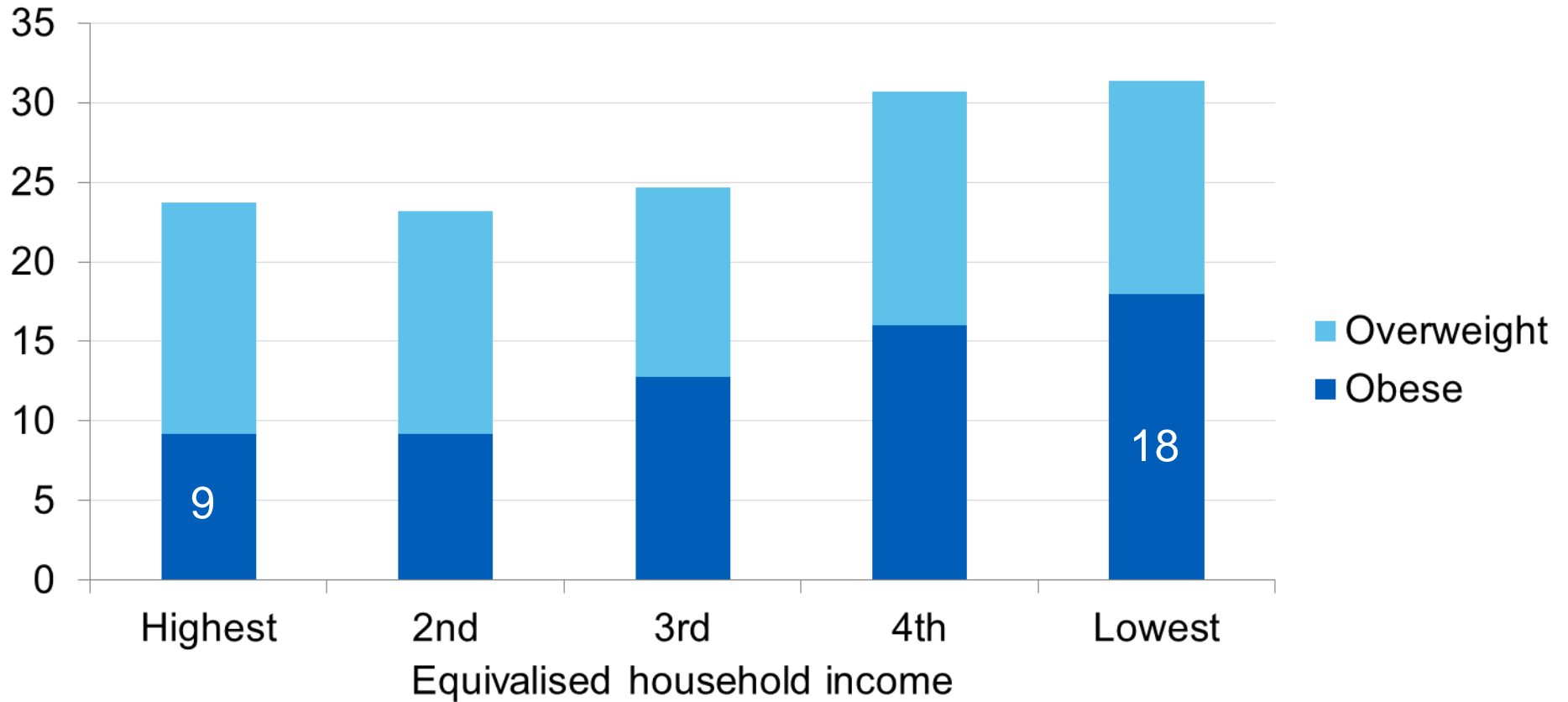
---



Base: Aged 2 to 15 with valid height and weight measurements

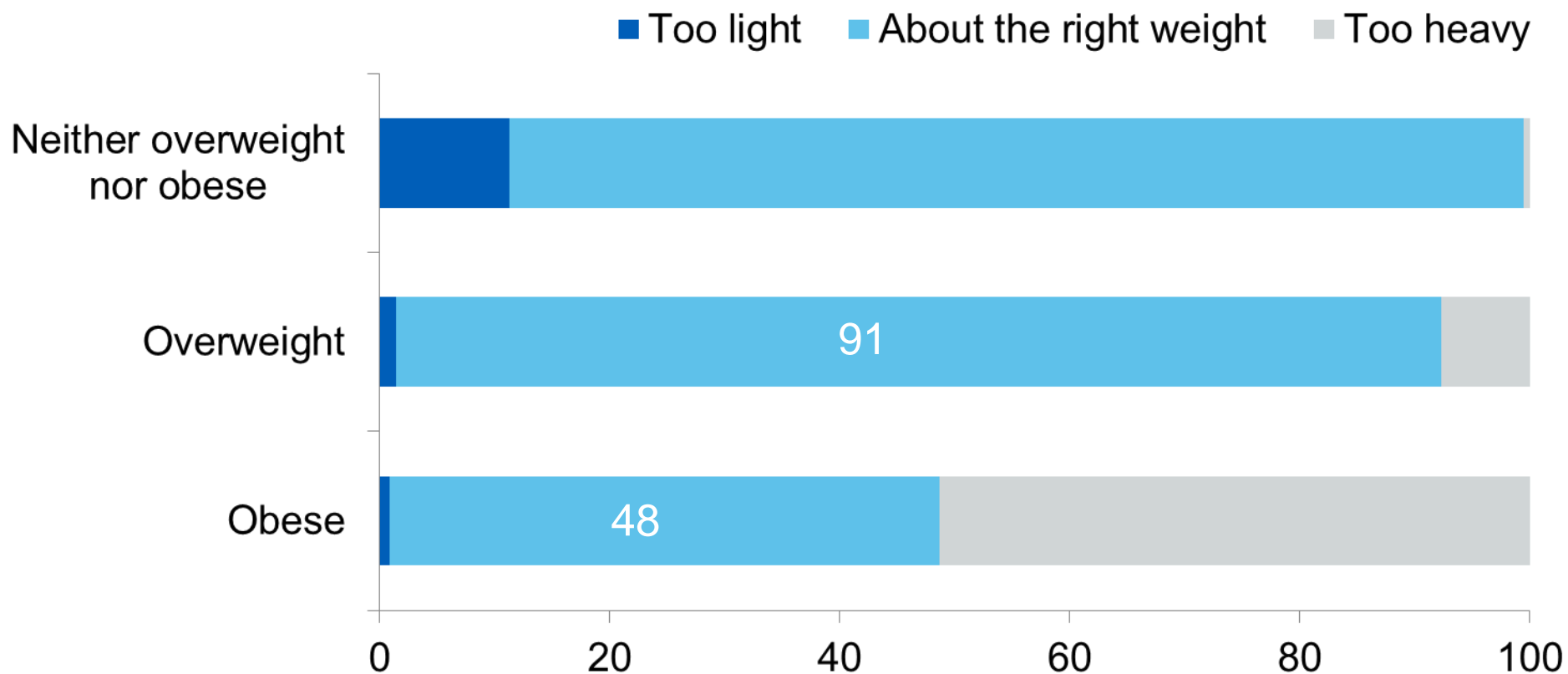


# Obesity and overweight, by income



Base: Aged 2 to 15 with valid height and weight measurements

# Mother's perceptions of child's weight



Base: Aged 4 to 15 with valid height and weight measurements

# Trend data



# England's changing health since the 1990s



Share this page:



<http://healthsurvey.hscic.gov.uk/data-visualisation/data-visualisation/explore-the-trends.aspx>

## Explore data by topic

**Smoking**



**Alcohol**



**Fruit & vegetables**



**Weight**



**High Blood Pressure**



**Diabetes**



**General health**

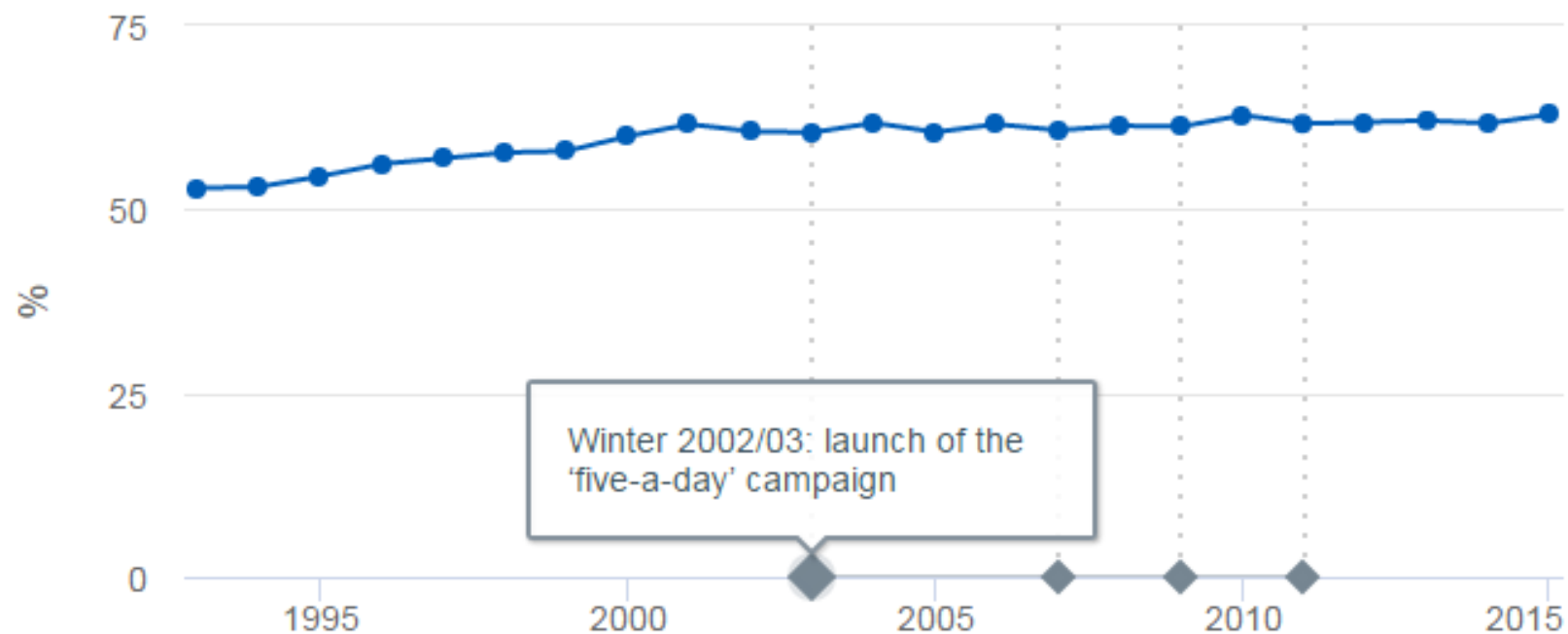


All

By Sex

By Age

## Adults who are overweight or obese



Adults

Highcharts.com

Source: NHS Digital

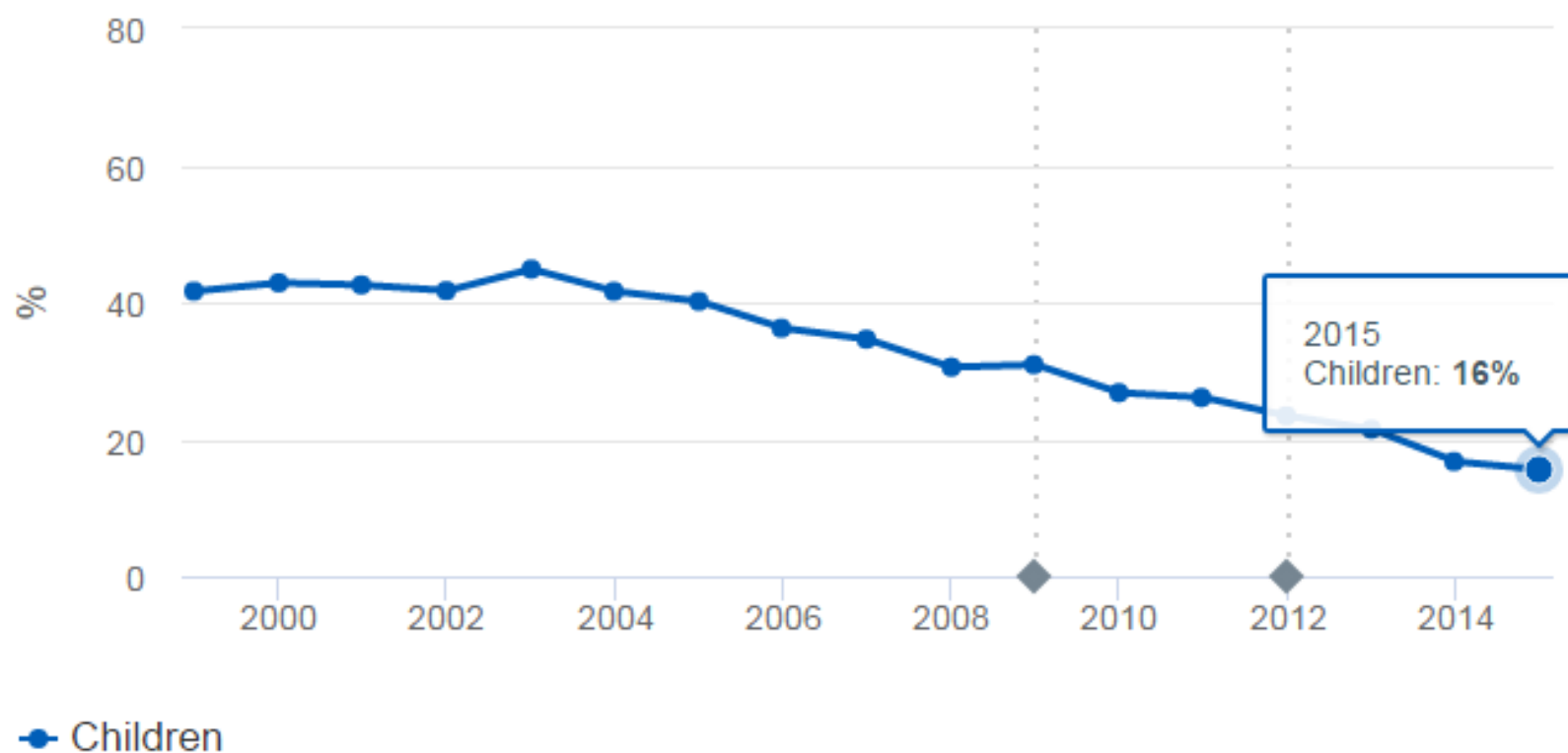
Base: Adults aged 16 and over with a valid height and weight measurement

All

By Sex

By Age

## Children aged 8 to 15 who have ever had an alcoholic drink



Children

Highcharts.com

Source: NHS Digital

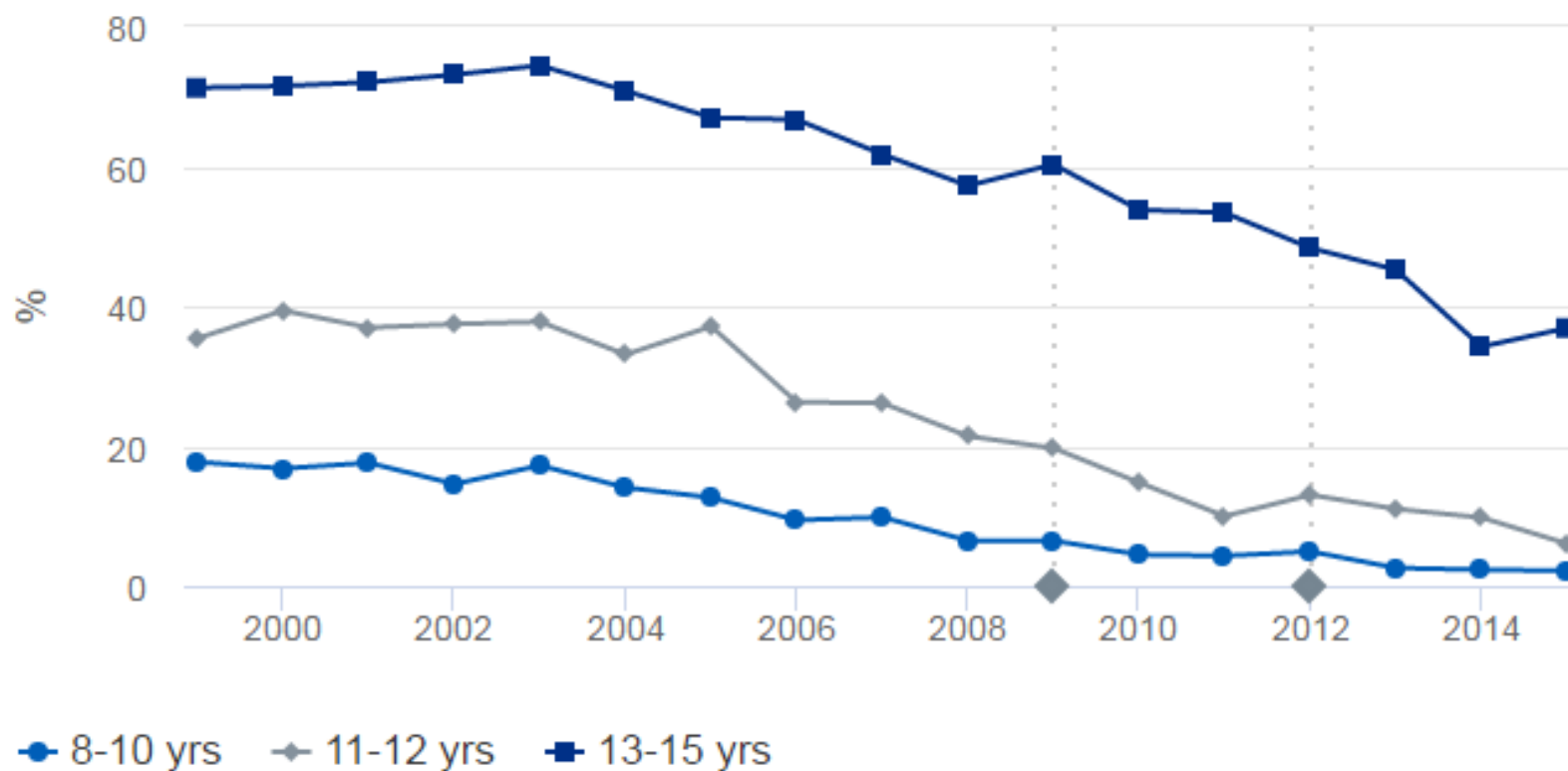
Base: Children aged 8-15

All

By Sex

By Age

## Children aged 8 to 15 who have ever had an alcoholic drink



Source: NHS Digital

Base: Children aged 8-15

Highcharts.com



# Impact





## Quick crossings

We discovered that most people aged 65 and over don't walk fast enough to get across a pelican crossing in sufficient time. Because of this, **many local authorities are now considering more time at crossings.**



## Taking the pressure off

We found that many people didn't know they had high blood pressure – which can cause serious health problems. [Doctors now check blood pressure more regularly.](#)

We learned that very few people – especially older people – knew that they had kidney disease. This signalled to **GPs that they need to be especially vigilant of the warning signs**, to provide treatment against it.

**Spotting  
kidney  
disease**





Questions?

# Survey content



# Interview: interview core content

---

Interview	
General health	Smoking
Longstanding illness	Drinking
Hypertension	Physical activity
Diabetes	GHQ-12 / WEWBS / EQ-5D
Social care	Demographic information
Fruit and veg	Height & weight

# Interview: nurse core content

---

## Nurse visit

Prescribed medication

Vitamins, folic acid

Infant immunisations

Blood pressure

Waist and hip

Saliva sample

Blood sample



# Additional content

---

Topic	Years
Gambling behaviour	2012/15/16
Child physical activity	2015
Learning difficulties	2014/15
Hearing	2014
Mental illness	2014
Eyesight problems	2013
Physical activity	2012
Sexual health	2010/2012
CVD	2011

# Additional content II

---

Topic	Years
Chronic pain	2011
Respiratory health and spirometry	2010
Contraception	2010
Swine flu	2010
Kidney disease	2009-2010
Physical activity and accelerometry	2008
Atts and knowledge about health	2007
Disability, falls, physical function	2005

# Additional sample boosts

---

- Ethnic minority groups
  - 1999, 2004
- Children / young people
  - 1997, 2002, 2006-2010, 2015
- Older people
  - 2000, 2005
- Local area (London, Dudley)
  - 2006, 2014

## 2015 child boost

---

5,714

children took part in HSE 2015

# Other ways of using HSE

- Follow-up studies
- Blood bank
- Data linkage
  - Hospital Episode Statistics (HES)
  - Cancer register
  - Mortality register



Questions?

# Thank you

---

If you want further information

**Anne Conolly**, Research Director

Tel: 0207 549 5184

Email: [anne.conolly@natcen.ac.uk](mailto:anne.conolly@natcen.ac.uk)



[@anne\\_conolly](https://twitter.com/anne_conolly)

**NatCen**

**Social Research** that works for society

# Types of sample

---

## Convenience samples

- Simply sample people who are available (e.g. intercepting people in the street).
- Results will almost certainly not be generalisable.

## Snowball samples

- Ask respondents to suggest other respondents.
- A type of convenience sample, used when the research is trying to target a specific group of people, E.g. drug users, parents
- Generally used for qualitative research rather than surveys.

## Quota samples

- Used extensively in market research, less so in academic research or for official statistics.
- The aim is to produce a sample that roughly reflects the population on key variables (e.g. gender, age groups).

## Random probability samples

- A sample that has been selected using random selection so that each unit in the population has a known chance of being selected.



# Samples – the great divide!

---

- Random probability vs. the rest
- Statistical theory assumes a random probability sample
- Random probability sample allows legitimate generalisation to the population
- However...
  - Surveys using a random probability sample tend to cost more
  - The data collection tends to take more time