Second-hand smoke exposure among children and young people in Northern Ireland - progress and challenges

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Second-hand smoke exposure and children

Factors governing exposure to children:

- whether their parents or carers smoke
- whether smoking is allowed in the home

Second-hand smoke exposure is:

- around three times higher if father smokes; over six times higher if mother smokes (nearly nine times higher if both parents smoke)
- higher in younger children; children from lower income households; and children whose parents had no educational qualifications
- based on UK studies of salivary cotinine levels in children
- relative to children whose parents are non-smokers

Children growing up with parents or siblings who smoke are **90%** more likely to become smokers themselves (Royal College of Physicians, 2010)

Policy context



Reducing exposure to second-hand smoke (SHS) one of three core strategic objectives.

SHS is potentially harmful to everyone. Particularly harmful to children and to adults with preexisting medical conditions.

Focus on smoking in pregnancy, smoking among 11-16 year olds and reducing smoking prevalence in most deprived areas of Northern Ireland.

Research Aim

To report on current patterns and trends over time in children's exposure to second-hand smoke in Northern Ireland.



Methods

Children and young people's surveys

Young People's Behaviour and Attitudes Survey (YPBAS) 2003-2013

Adult surveys

- Continuous Household Survey (2007/08- 2009/10)
- Health Survey Northern Ireland (2010/11 2014/15)

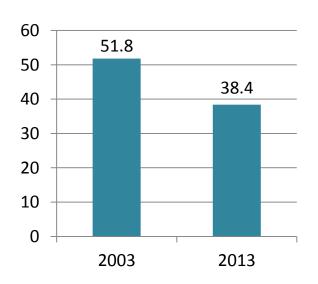
Variables

- Self-reported rules on smoking in the home and family car
- Children and young people co-resident with an adult smoker
- Children and young people co-resident with an adult smoker where an adult smoked inside the home

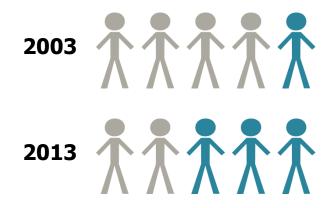
SHS exposure in the home

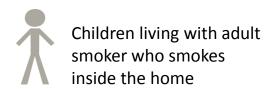
What children say

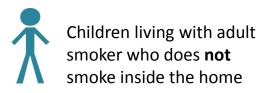
Percentage of children and young people living with an adult smoker



Percentage of children and young people co-resident with an adult smoker, reporting that an adult smokes inside their home







SHS exposure in the home

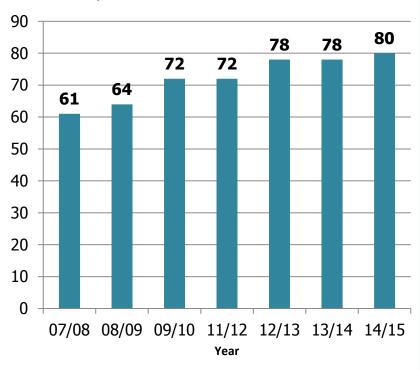
Percentage of 11-16 year olds reporting that they live with an adult smoker by multiple deprivation measure

Deprivation Quintile	2010	2013
1 (most)	66	58
2	42	41
3	38	32
4	35	32
5 (least)	26	25

SHS exposure in the home

What adults say

Percentage of adults who reported smoking is **not** permitted in the home from 2007/08 to 2014/15



- Legislation has been associated with changes in smoking at home
- Almost 9 out of 10 adults do not permit smoking in the home if children are resident
- Children in the most deprived areas are more likely to be exposed to SHS in the home

SHS exposure in the car

What children say



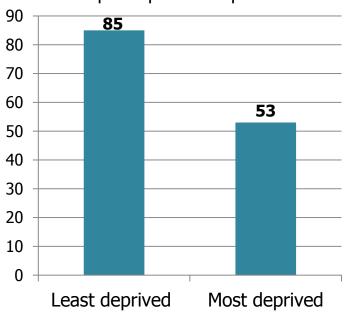
3 out of 10 young people aged 11-16 reported that smoking was permitted in the family car

SHS exposure in the car

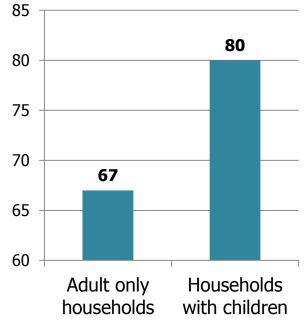
What adults say

2014/15: 7 out of 10 adults did **not** permit smoking in the car

Percentage of adults reporting that smoking is not permitted in any car by multiple deprivation quintile



Percentage of adults reporting that smoking is not permitted in any car by household composition



Global impact of SHS exposure

- SHS exposure is estimated to have caused about 603,000 premature deaths in 2004:
 - 166,000 deaths from lower respiratory infections
 - 1,100 from asthma in children
 - o 35,800 deaths from asthma
 - 21,000 deaths from lung cancer
 - o 379,000 deaths from ischaemic heart disease in adults
- Of all deaths attributable to SHS, 28% occur in children and 47% in women

Economic impact of SHS exposure in UK

Royal College of Physicians – Costs of SHS exposure to children in UK (2010)

- Over 300,000 UK GP consultations
- Approx 9,500 hospital admissions
- Cost of GP consultations £9.7m (0-16 yrs)
- Cost of hospital admissions £13.6m (0-14 yrs)
- Cost of asthma drugs for children up to 16 years £4m

Final thoughts....

- Vulnerability of children in Northern Ireland
- Legislation on smoking in cars and expansion of smoke-free zones
- E-cigarettes and vaping in public places
- Denormalising smoking
- Limitations of survey data
 - Lack of data on babies, infants and younger children most vulnerable to effects of SHS
- Agree set of indicators and monitor across UK and Ireland

Publications

