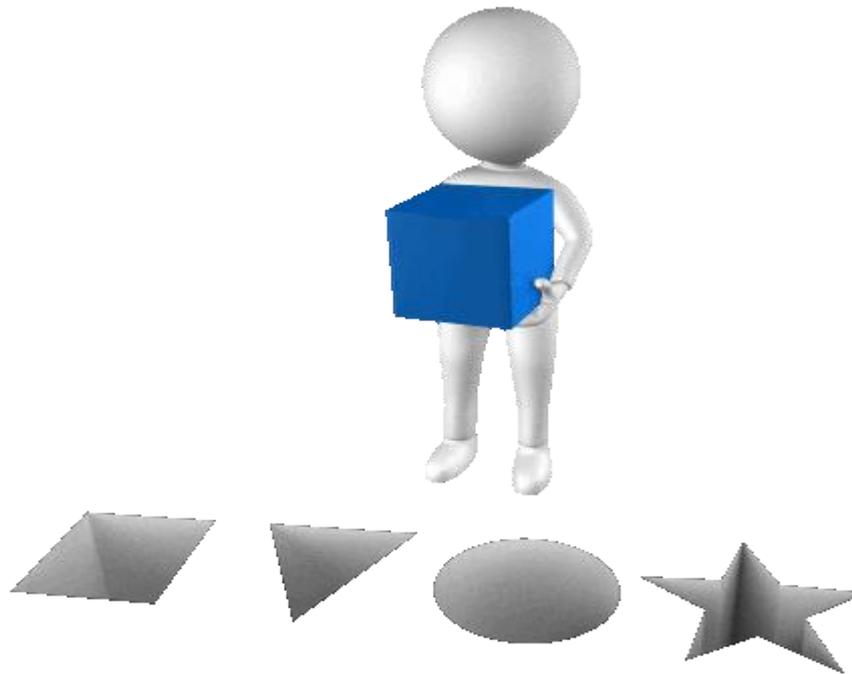


# Youth and Vaping: Gateway in or out of smoking?

Linda Bauld



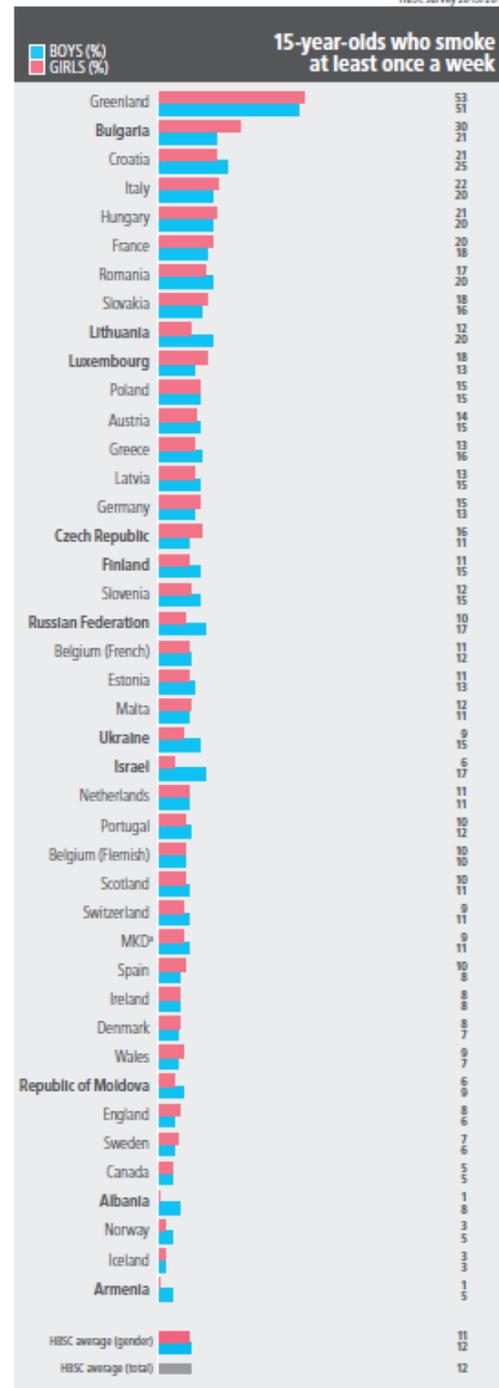
# Declaration of interest

- I have no links with any e-cigarette manufacturers
- I have received no funding from the tobacco or pharmaceutical industries
- My research is funded by Cancer Research UK, RCUK, National Institute of Health Research, Roy Castle, Chief Scientist's Office and other government and charitable bodies.

Rates of smoking in young people vary across Europe.

Based on the 2016 Health Behaviour in School Children survey, Some of the highest rates in EU countries in 15 year olds are in Bulgaria, Croatia and Italy.

The lowest are in Sweden UK, Denmark and Ireland



Note: \* indicates significant gender difference (at p<0.05). 0 means less than +/ - 0.5%.

# E-cigarettes and young people

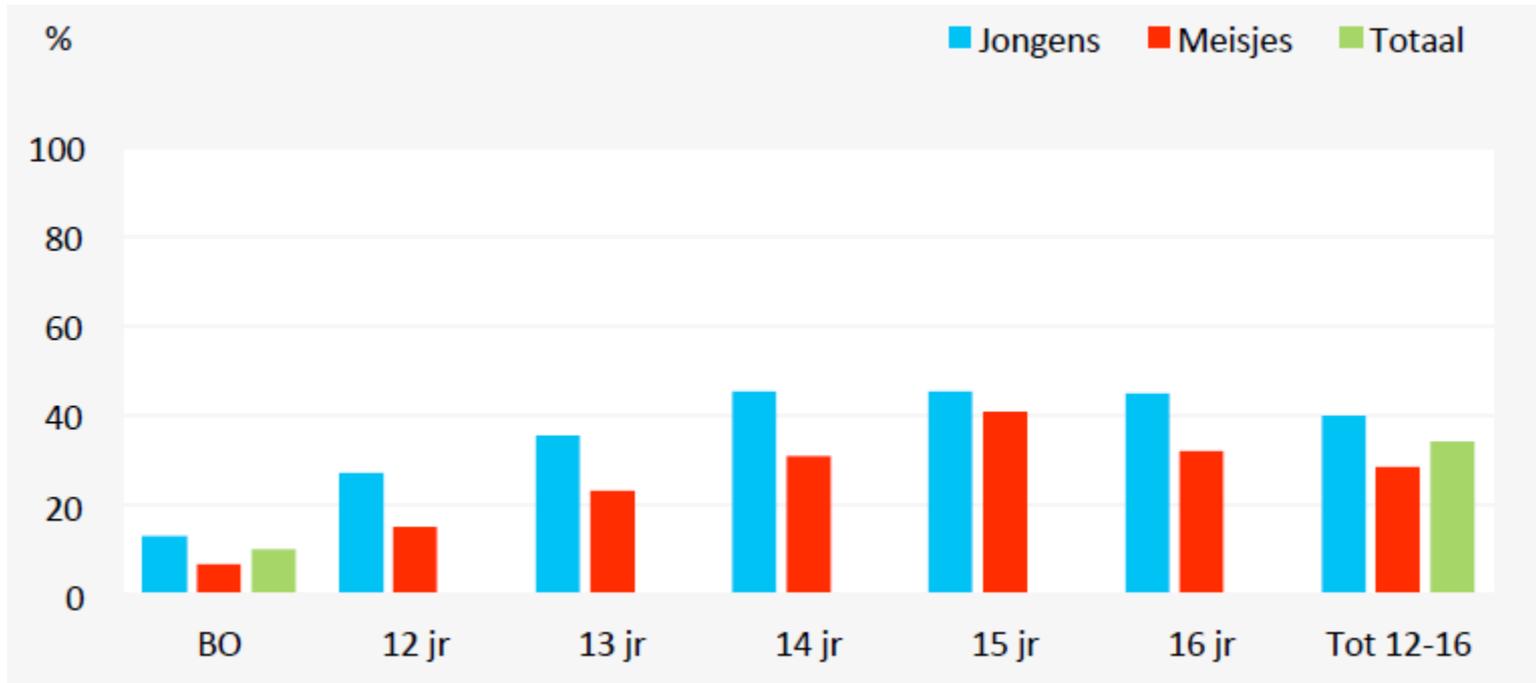
Considerable concern has been expressed that e-cigarettes will:

1. create a 'new generation' of nicotine addicts (that experimentation would lead to regular use)
2. cause young people who try e-cigarettes to become tobacco smokers

Are either of these concerns supported by recent data from Europe?

# Young people are trying e-cigarettes

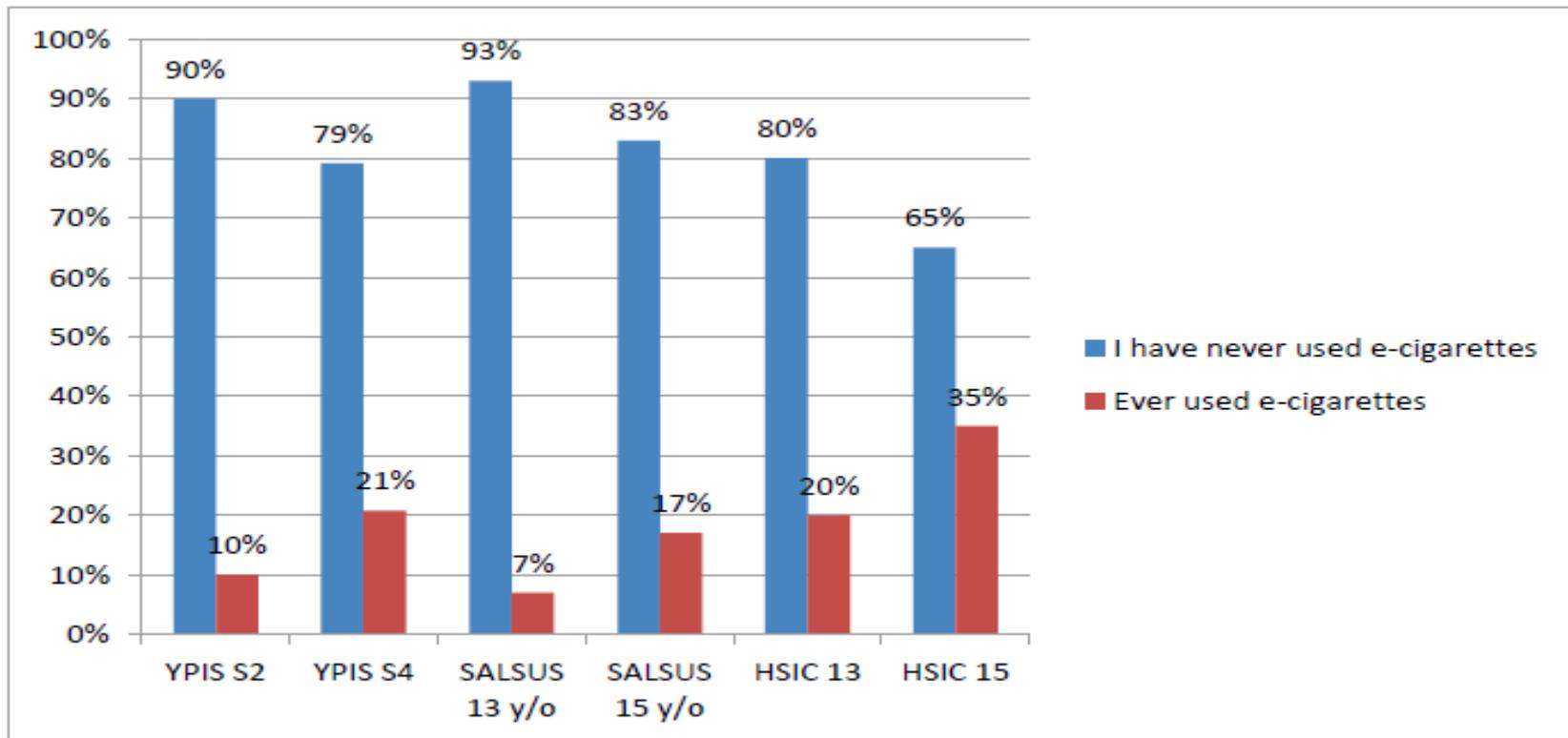
Ever use of e-cigarettes by 12-16 year olds in the Netherlands, 2015



Source: S.van Dorsselaer et al, Jeugd en riskant gedrag 2015, Trimbos instituut, <https://assets.trimbos.nl/docs/8e6ef71f-d74e-4696-a67b-98ef82fb2235.pdf>

# Young people are trying e-cigarettes

Ever use of e-cigarettes by 13-15 year olds in England and Scotland (3 surveys)



Source: Scottish Government (2015) Young people and e-cigarettes in Scotland: a survey of secondary School pupils, <http://www.gov.scot/Publications/2016/10/5514/3>

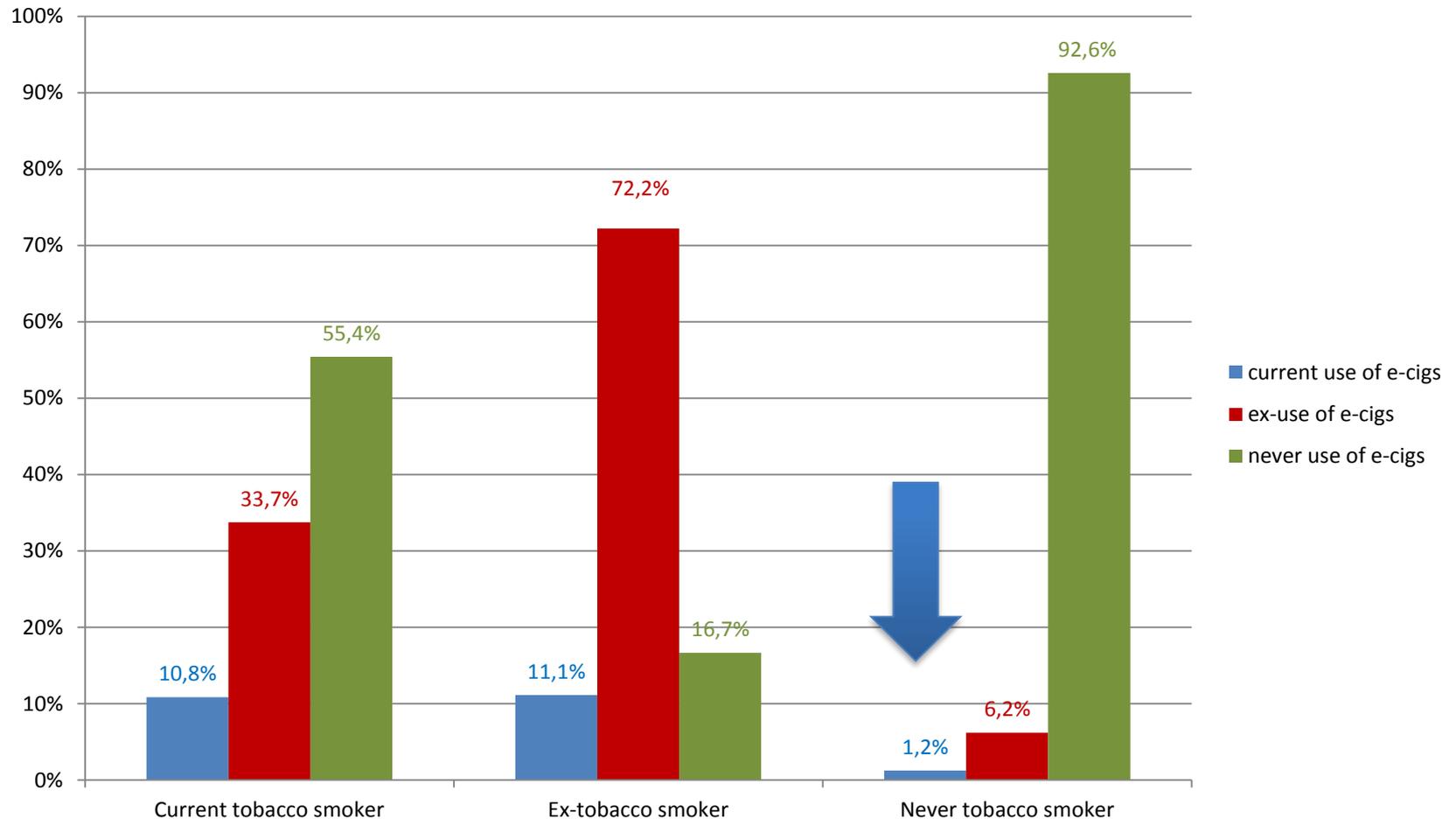
# E-cigarettes and young people

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What do studies tell us about levels of *regular* use?

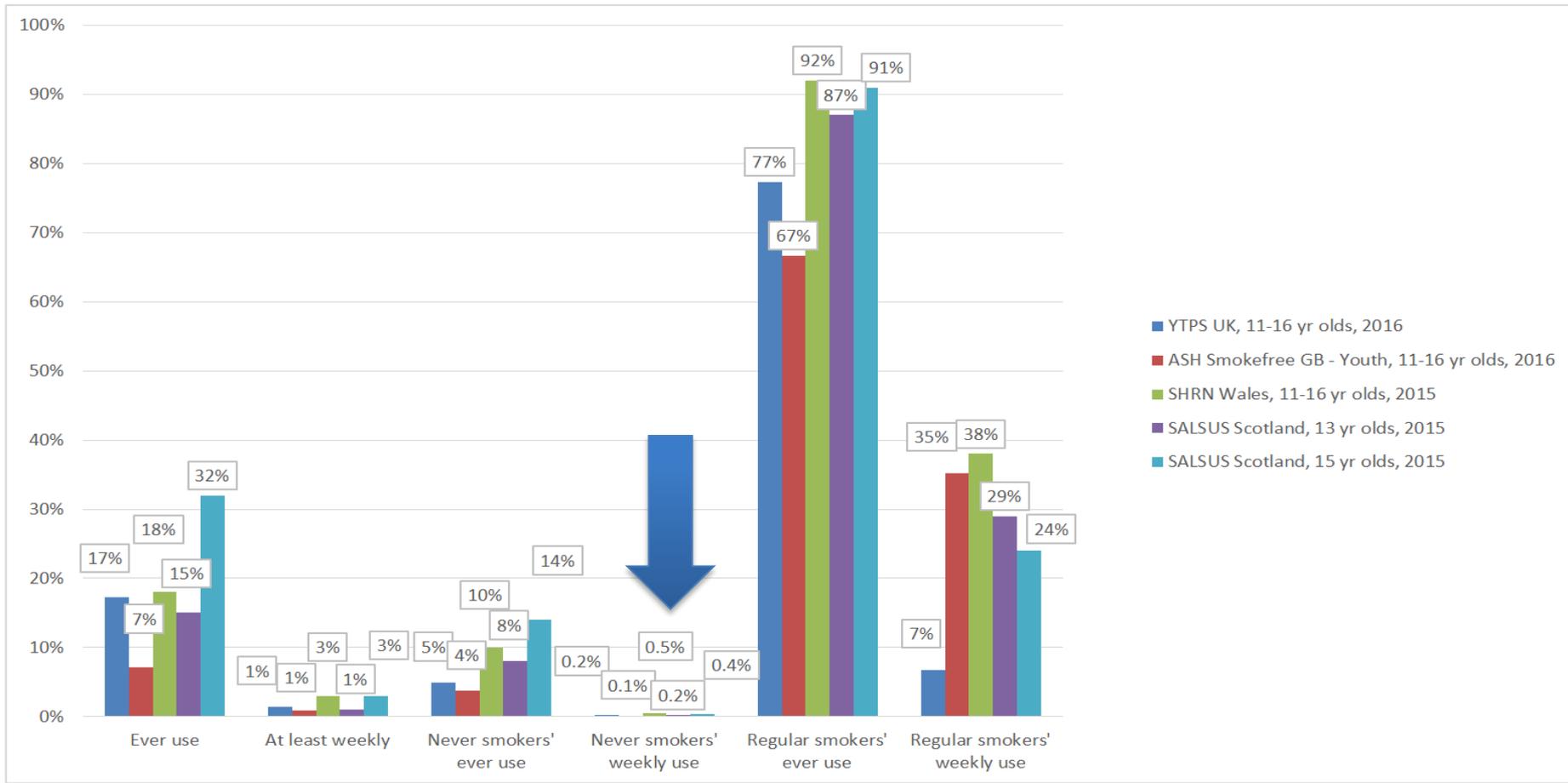
# E-cigarette use by smoking status in Germany ages 14-17



With thanks to  
Dr Daniel Kotz



# Largest study to date: Five UK surveys of over 60,000 young people



Source: Bauld, L, MacKintosh, A, Eastwood, B, Ford, A, Moore, G, Dockrell, M, Arnott, D, Cheeseman, H, McNeill, A. (2017) *Int. J. Environ. Res. Public Health*, 14, 973; doi:10.3390/ijerph14090973

# E-cigarettes and young people

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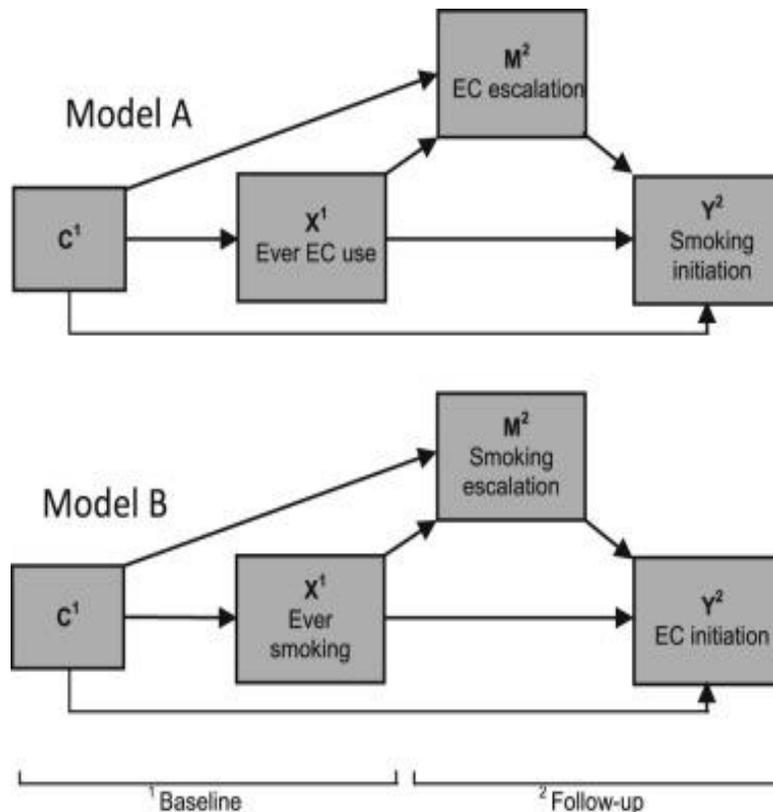
Does e-cigarette use lead to smoking and are youth smoking rates rising?

# Studies have found that some youth who try an e-cigarette go on to try smoking

		Have you ever smoked cigarettes or roll-ups, even if it is just one or two puffs? 2016		Total
		No	Yes	
<b>E-cig use 2015</b>	I have never used an e-cigarette	1689	250	1939
		87.1%	12.9%	100.0%
	I have only used them once or twice	104	64	168
		61.9%	38.1%	100.0%
	I use them sometimes (monthly)	3	5	8
		37.5%	62.5%	100.0%
	I use them often (weekly)	2	4	6
		33.3%	66.7%	100.0%
<b>Total</b>		1798	323	2121
		84.8%	15.2%	100.0%

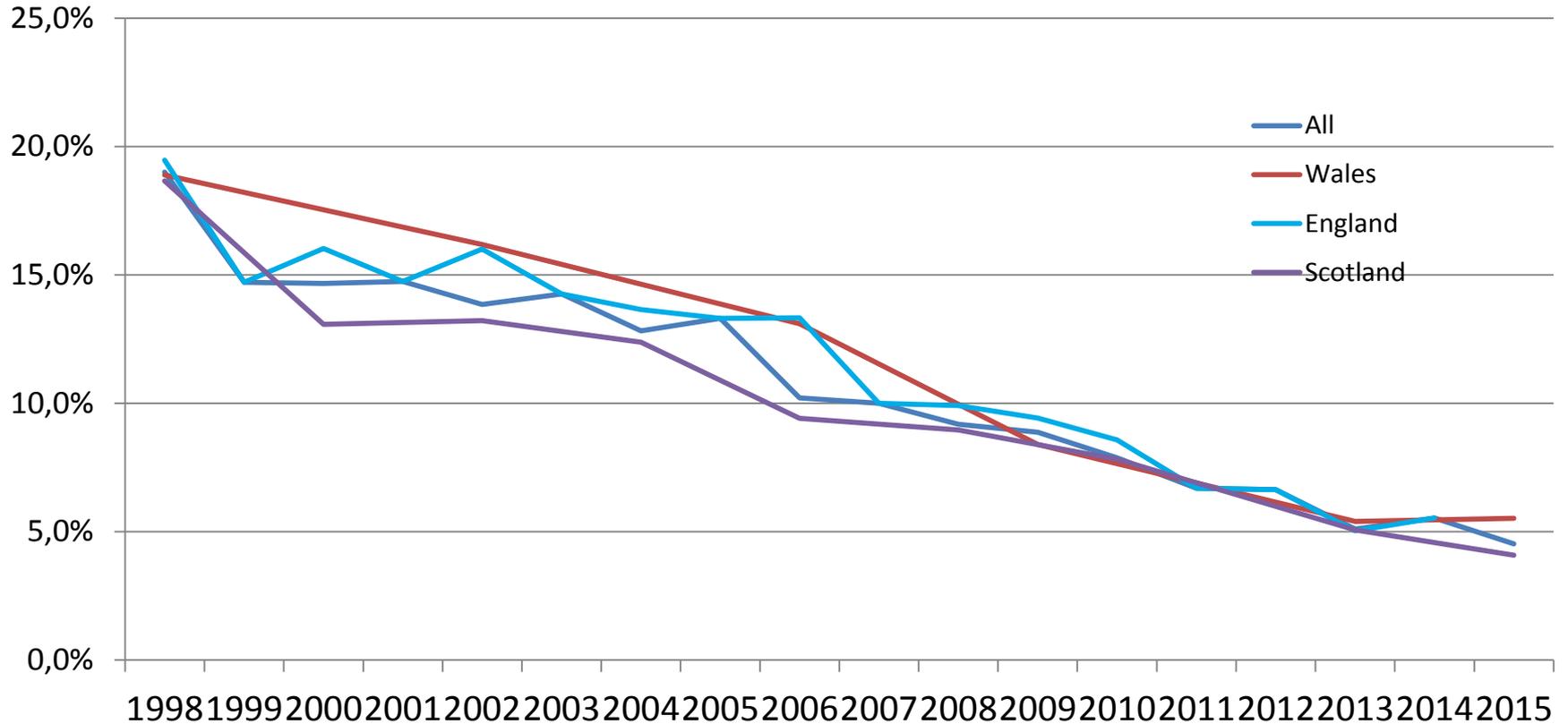
Source: Best, C. et al (2017) Relationship between trying an electronic cigarette and subsequent cigarette experimentation in Scottish adolescents: a cohort study. *Tobacco control*, <http://dx.doi.org/10.1136/tobaccocontrol-2017-053691>

# Studies have also found that young people who smoke transition to e-cigarette use



In a recent study, ever smoking had a direct causal effect on e-cigarette initiation at follow up, suggesting that pathways operate **both ways** and some young smokers may move away from tobacco via e-cigarette use

# Youth Smoking Rates: UK



In the UK where e-cigarette use has been particularly common, youth smoking rates continue to decline and there is no evidence that this consistent decline has stalled in the period since e-cigs came onto the market

# EU policies aim to protect youth

- Unlike in many parts of the world, EU member states have implemented e-cigarette marketing bans following the EU TPD
- Many member states have also introduced age of sale restrictions
- While we need to keep monitoring trends, there is currently no evidence that e-cigarettes are undermining efforts to reduce youth smoking in Europe.
- It is important that fears about 'the gateway' do not detract from the contribution that e-cigarettes can make in helping current smokers to quit

## **Institute for Social Marketing, Faculty of Health Sciences and Sport**

Martine Stead - Deputy Director. Professors Michael Ussher, Kate Hunt and Sean Semple

### **Researchers**

Kathryn Angus, Nathan Critchlow, Fiona Dobbie, Douglas Eadie, Niamh Fitzgerald, Allison Ford, Anne-Marie Mackintosh, Jennifer McKell, Andrea Mohan, Crawford Moodie, Richard Purves, Lesley Sinclair, Fiona Davidson, Isabelle Uny, Rachel O'Donnell, Ruairaidh Dobson, Ashley Brown

### **Research Support**

Kate Massie, Aileen Paton

### **PhD Students**

Danielle Mitchell, Andrew Radley, Clare Sharp, Pasquale Caponnetto, Daniel Jones

[Linda.Bauld@stir.ac.uk](mailto:Linda.Bauld@stir.ac.uk)

