

# Evidence, perceptions and misconceptions

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# Sunday 11<sup>th</sup> February: WhatsApp

In-laws are telling me vaporising is now worse for you than smoking. I assume info from the Daily Mail. I said I'd ask you...

Vaping tiny fraction of risk of smoking. Vaping = doorstep of risk. Smoking = skyscraper of risk

I'm releasing the news...

They laughed

Is that good?

Still not convinced

# Sunday 11<sup>th</sup> February: WhatsApp

Matt wants his Step-Dad to try one. He had a stroke last year.

And he's still smoking?

Yep

Switching def better than still smoking

Matt buying him one now

Tell him to get something decent. Not to buy the cheapest one he finds...

# What is the relative risk?

- Smoking doubles your chance of death from a stroke
- If you smoke 20 cigarettes a day you are SIX times more likely to have stroke than a non-smoker
- Nicotine in e-cigarettes could stiffen arteries which might increase the risk of a stroke...
- ....So does coffee

# Peter M. Sandman: Risk Communication (1987)

- *“To the experts, risk means expected annual mortality”*
- *“But to the public (and even the experts when they go home at night), risk... is the sum of hazard and outrage”*
- *“Familiarity: Exotic, high-tech facilities provoke more outrage than familiar risks”*
- **“the risks that kill you are not necessarily the risks that anger and frighten you”**

# Some Daily Mail headlines in the last 6 months

**Vaping makes users more likely to catch pneumonia – just like smoking tobacco or breathing in traffic fumes, experts warn**

February 2018

**Vaping causes cancer, new study warns: Human cells mutated faster than expected after exposure to e-cigarettes**

January 2018

**E-cigarette FLAVORS are toxic to white blood cells, scientists warns**

January 2018

**Fresh concerns raised about dangers of e-cigarettes: Study reveals the trendy gadgets may slow down your heart rate and cause a cardiac arrest**

November 2017

**E-cigarettes SHOULDN'T be used as a stop smoking tool because there isn't enough evidence to prove they are safe, researcher claims**

December 2017

**E-cigarettes can trigger deadly lung diseases as easily as tobacco products, study says**

October 2017

**E-cigarettes DO inflict life-long damage on nonsmokers' hearts that is similar to tobacco cigarettes, a study claims**

September 2017

Evidence review of e-cigarettes and heated tobacco products - McNeill A, Brose LS, Calder R, Bauld L & Robson D (2018)

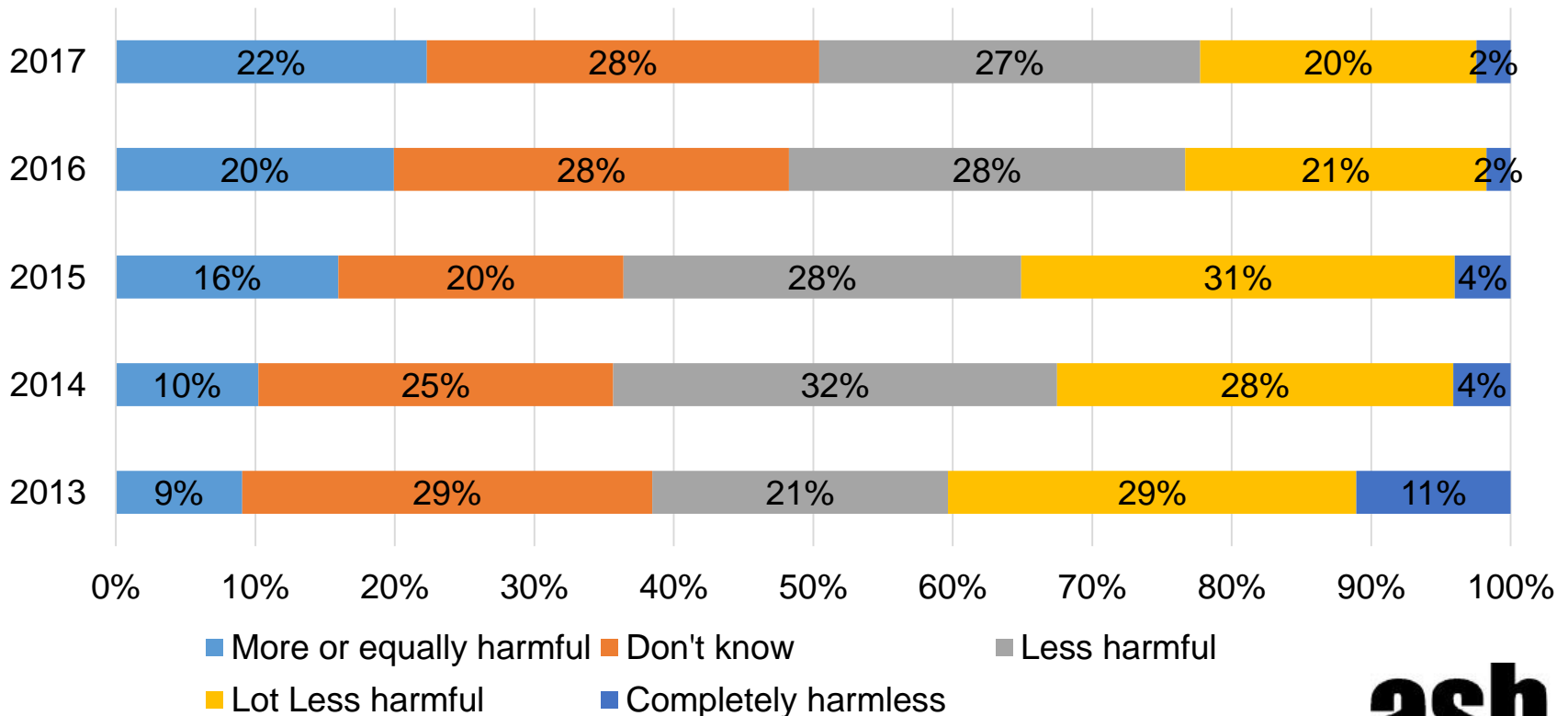
**With particular thanks to Dr Leonie Brose**

# **Widespread inaccurate perceptions of harm around e-cigarettes**



# 1 in 5 smokers now believe vaping is as or more harmful than smoking

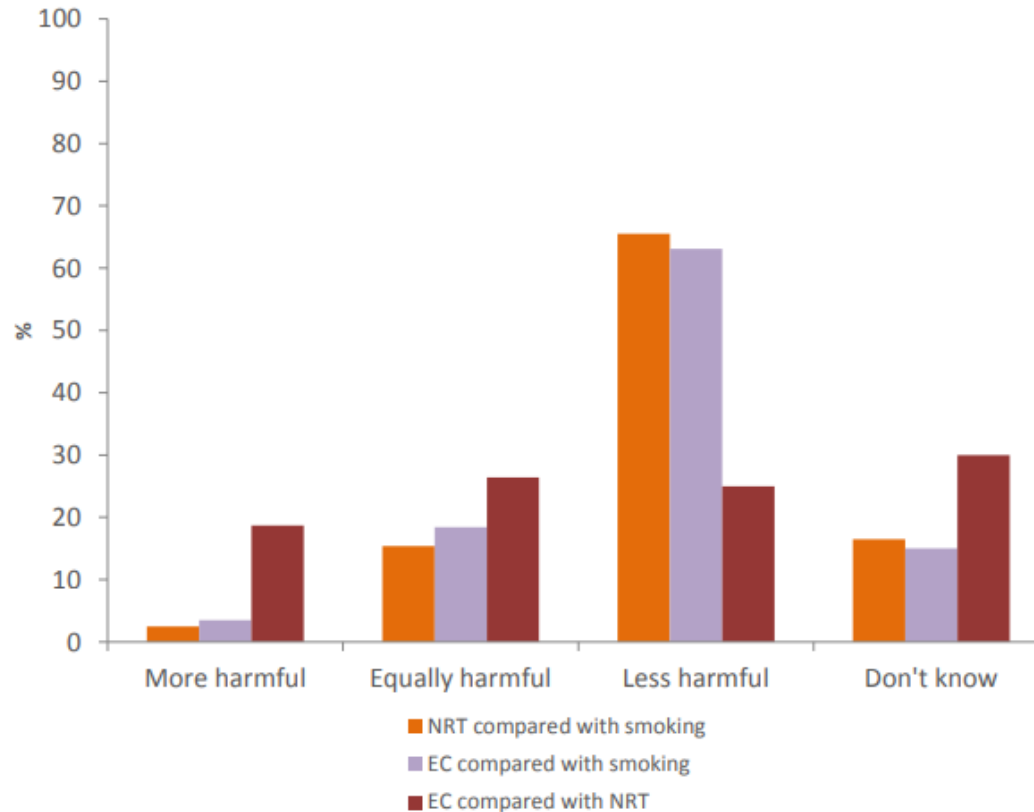
Smokers perception of harm from e-cigarettes relative to smoking



# Also inaccurate views of NRT

Evidence review of e-cigarettes and heated tobacco products 2018:  
A report commissioned by Public Health England

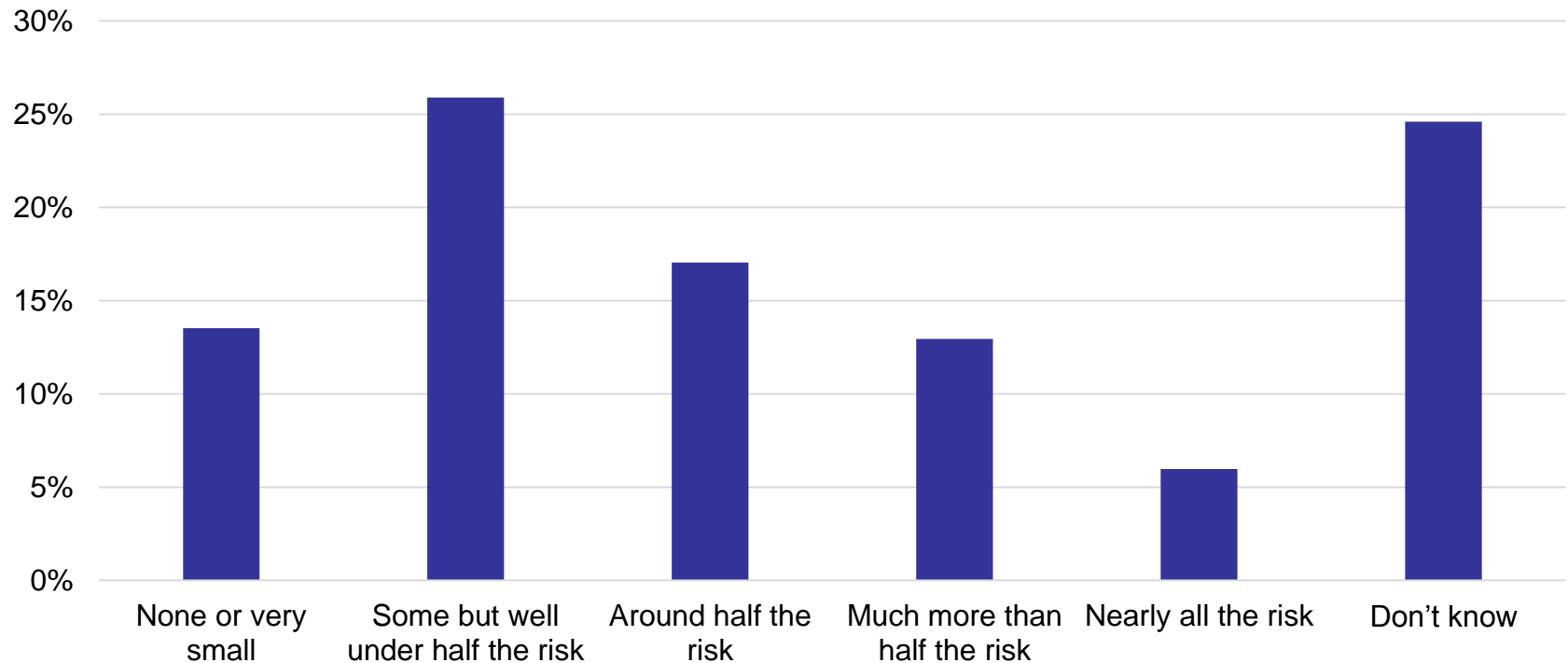
**Figure 41: Perceived relative harm of EC and NRT**



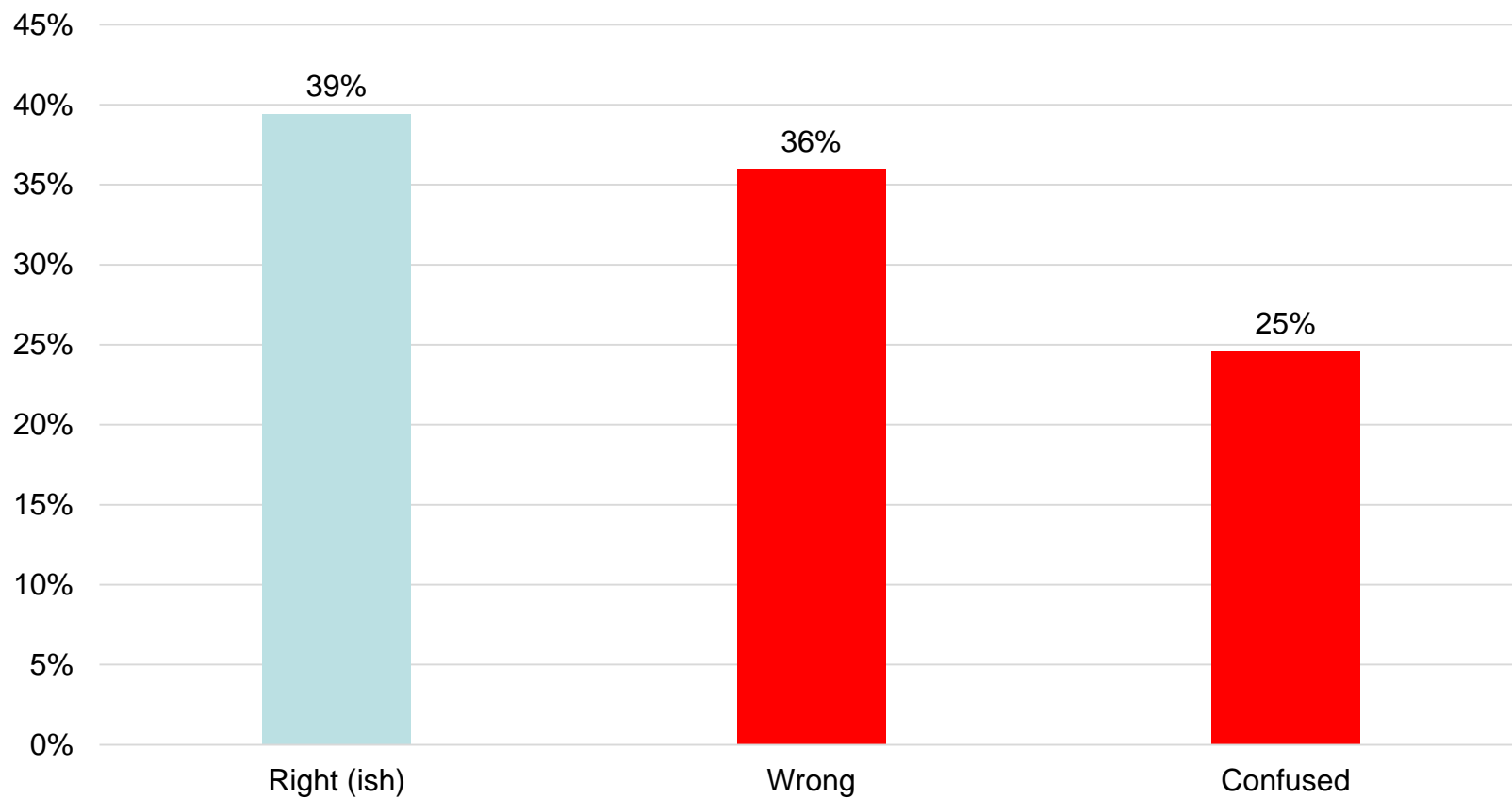
Notes: ICGBS 2016. N=3,431 adult smokers, ex-smokers and EC users aged 18+

# Nicotine is part of the problem

What portion of the risk from smoking comes from nicotine smokers (smokers 2017)



# Nicotine is part of the problem



HELP ME CRUSH THE EVIL  
**NICK O'TEEN!**  
 HIJACKER OF HEALTH  
 FOE OF THE FIT  
**NEVER SAY YES TO A  
 CIGARETTE!**

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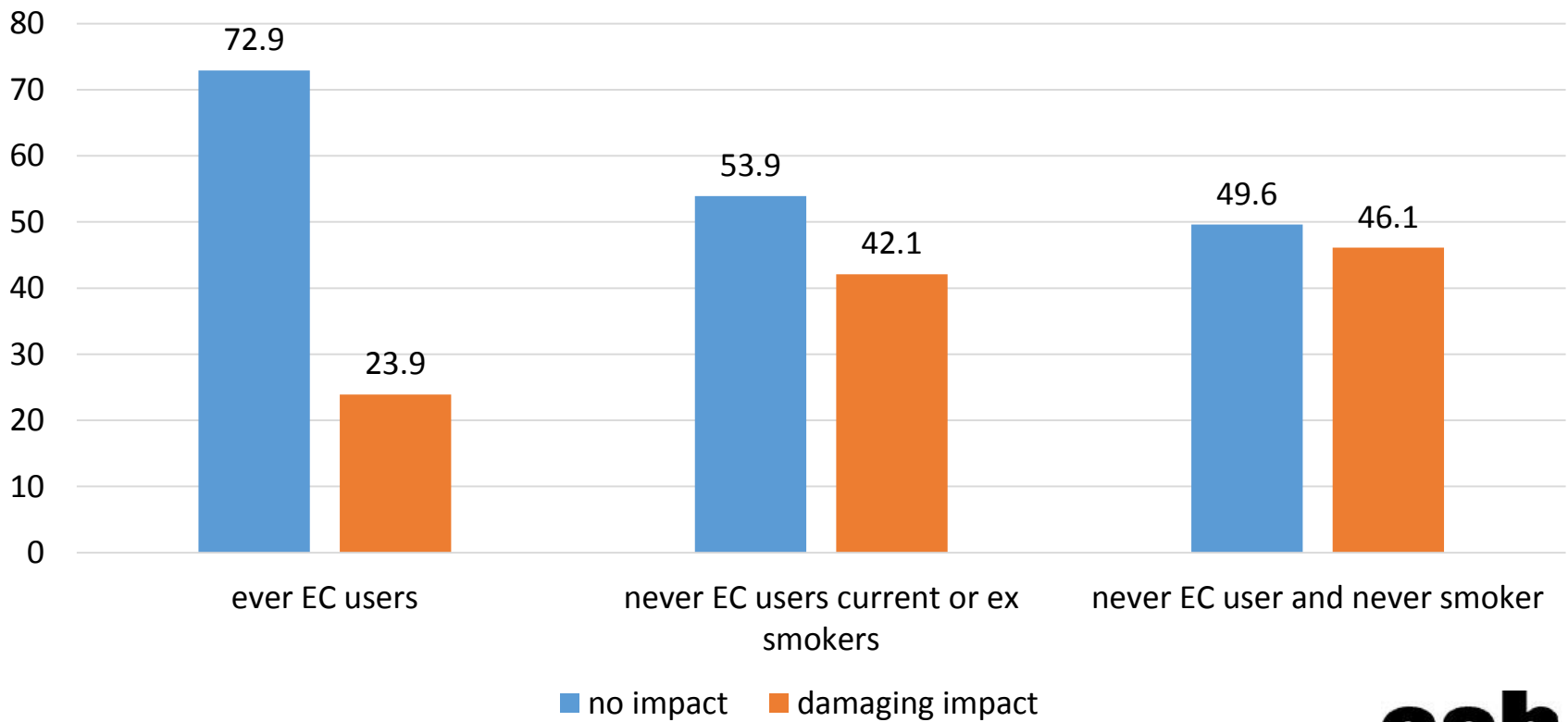
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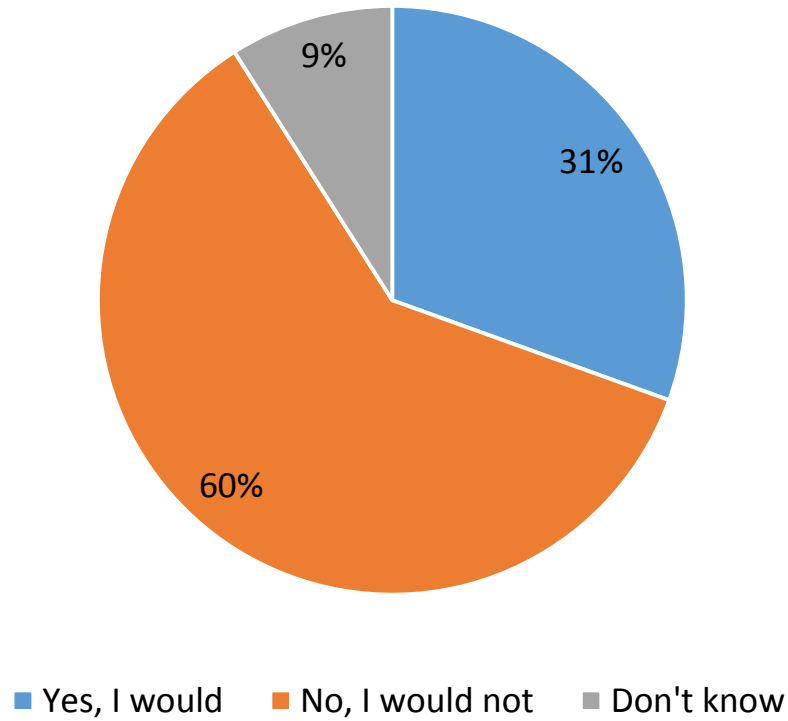
# Concern about the harm from secondhand vapour

Health impact of EC on individuals who are exposed to them but do not use them directly (ONS)



# E-cigarette use not universally welcome

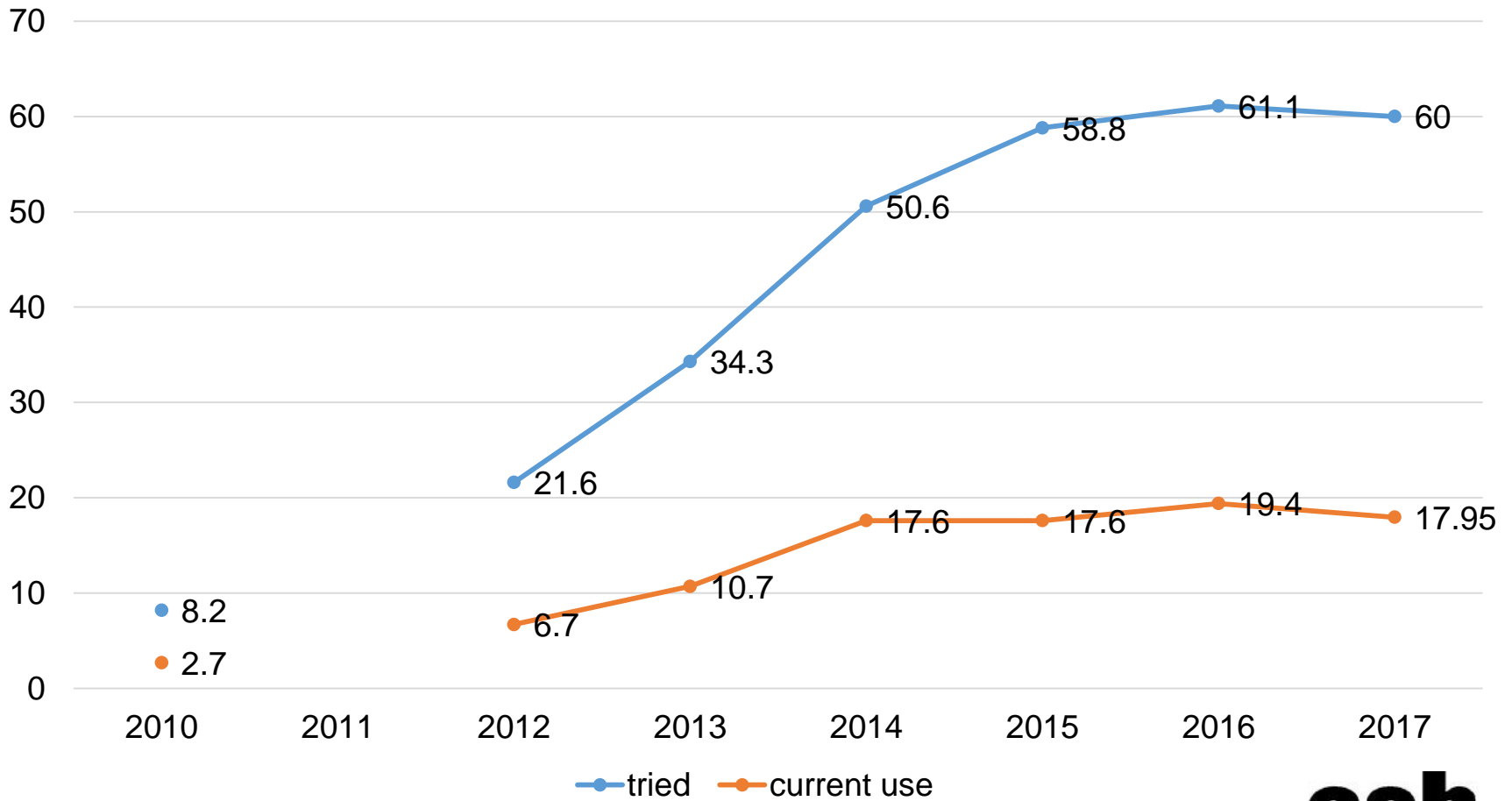
If someone wanted to use an electronic cigarette in your home would you allow them to?



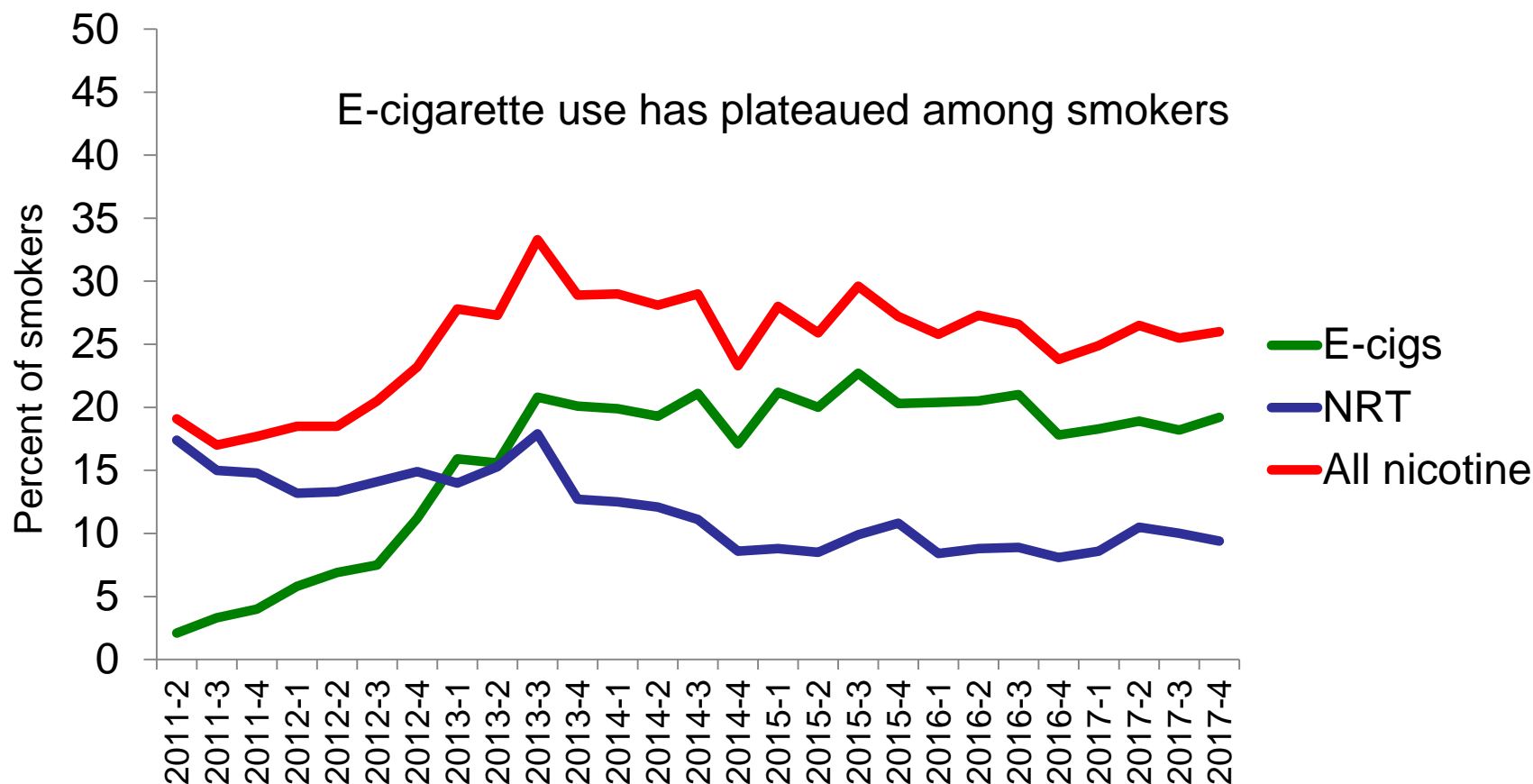


**The use of e-cigarettes grew rapidly and then plateaued**

# Electronic cigarette use among current adult cigarette smokers in Great Britain (2010 - 2017)

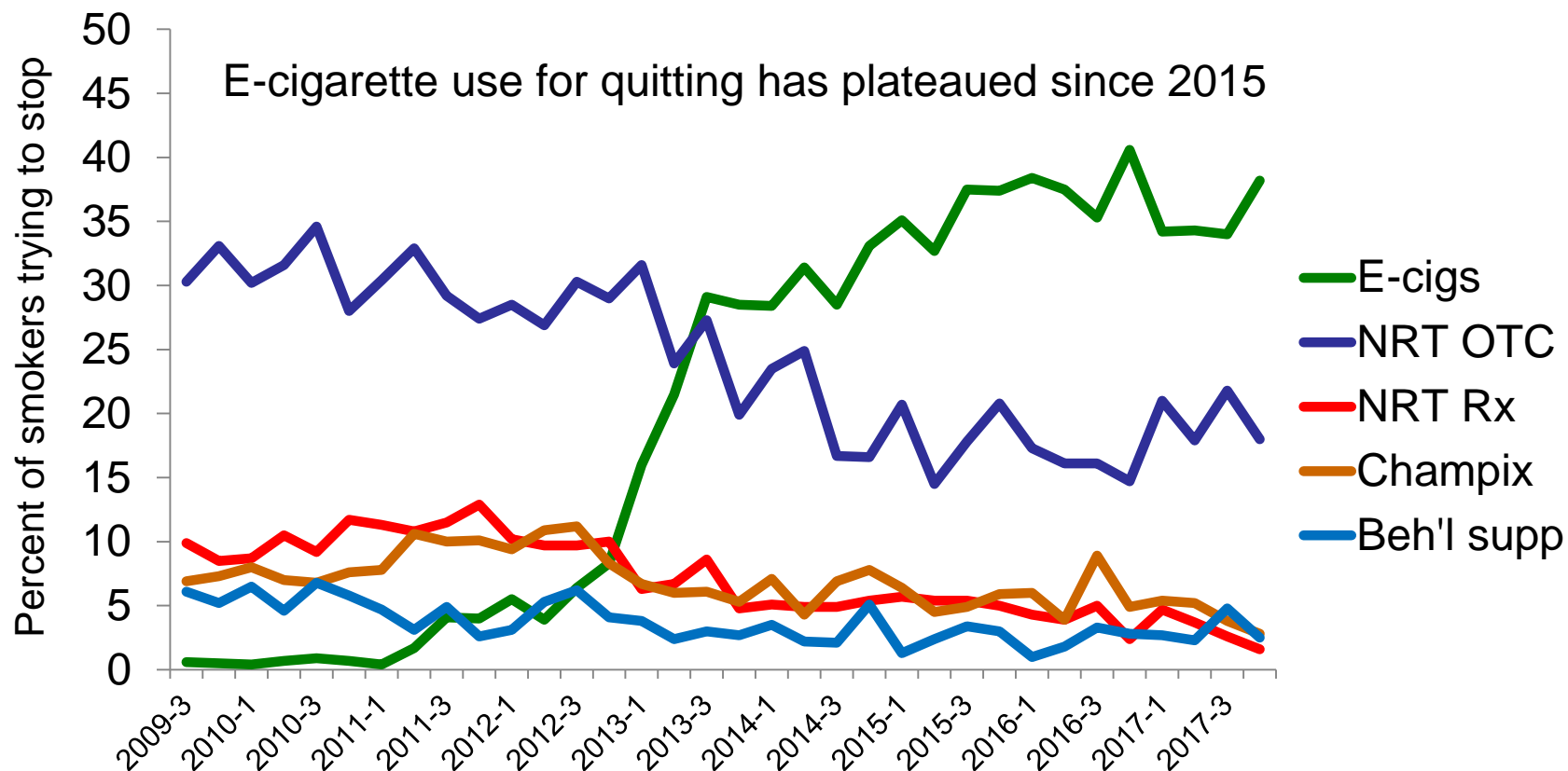


# Use of nicotine products while smoking



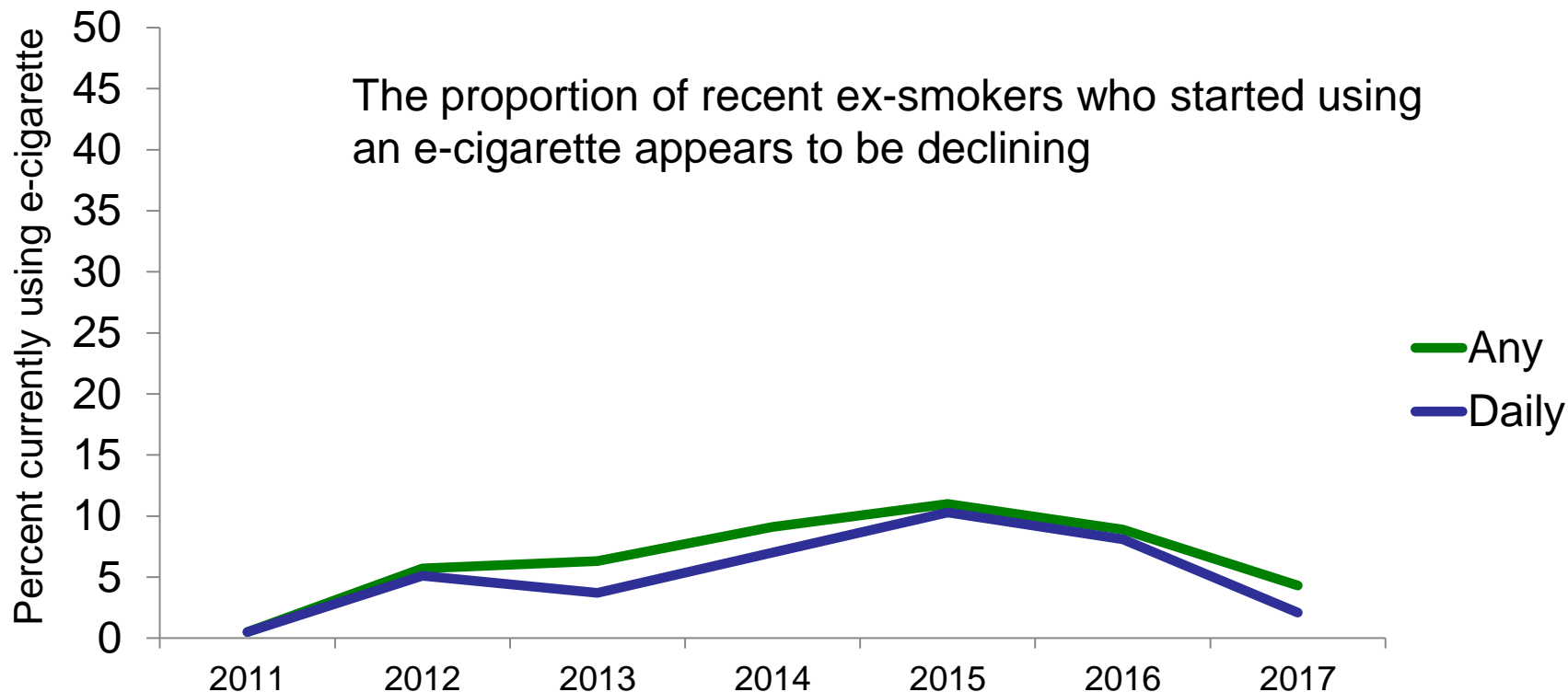
N=25549 smokers

# Aids used in most recent quit attempt



N=13456 adults who smoke and tried to stop or who stopped in the past year; method is coded as any (not exclusive) use

# Current e-cigarette use after quitting

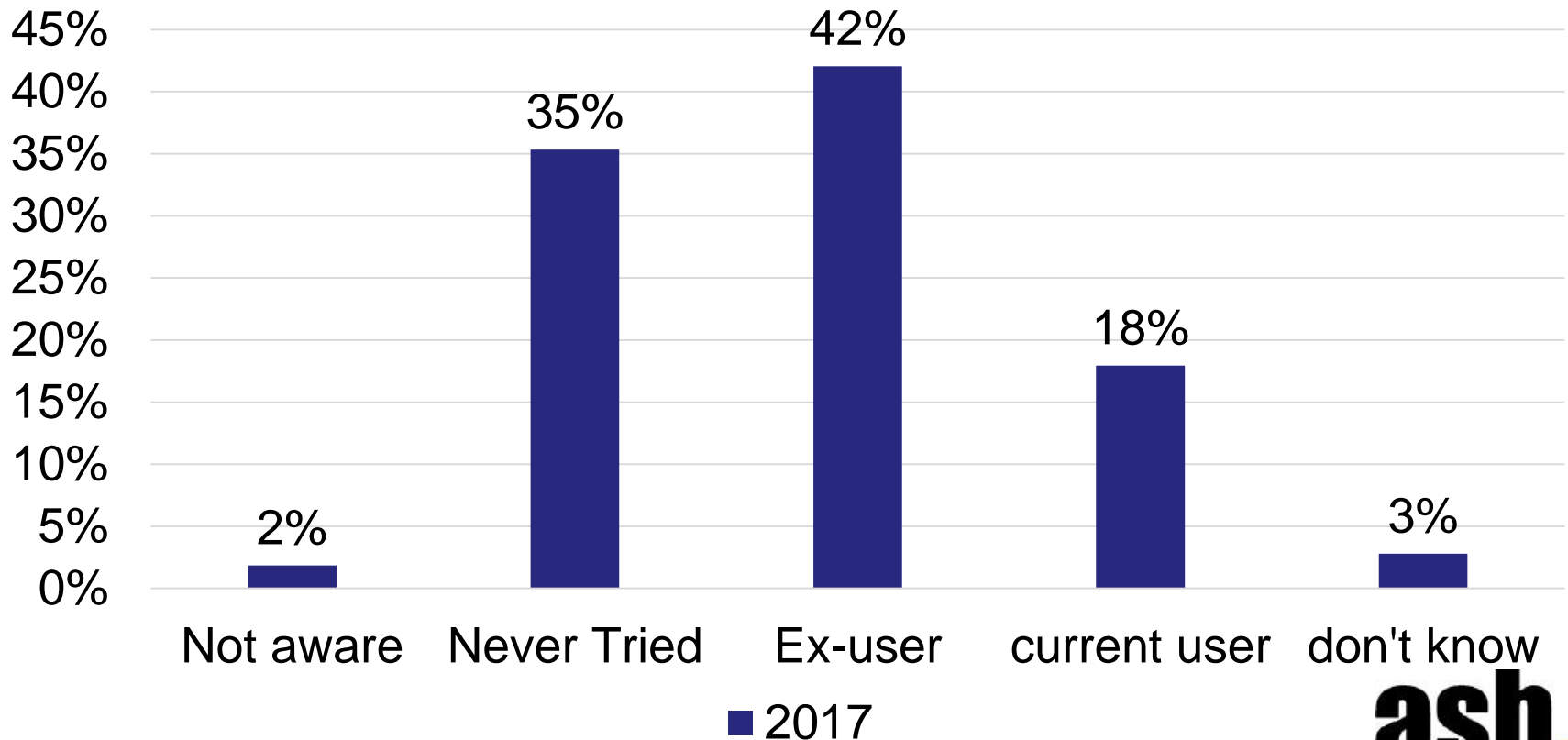


N=1078 adults who stopped in the past year and did not report using an e-cigarette to help during the quit attempt

**Perceptions of harm may be  
inhibiting use of e-cigarettes  
by smokers**

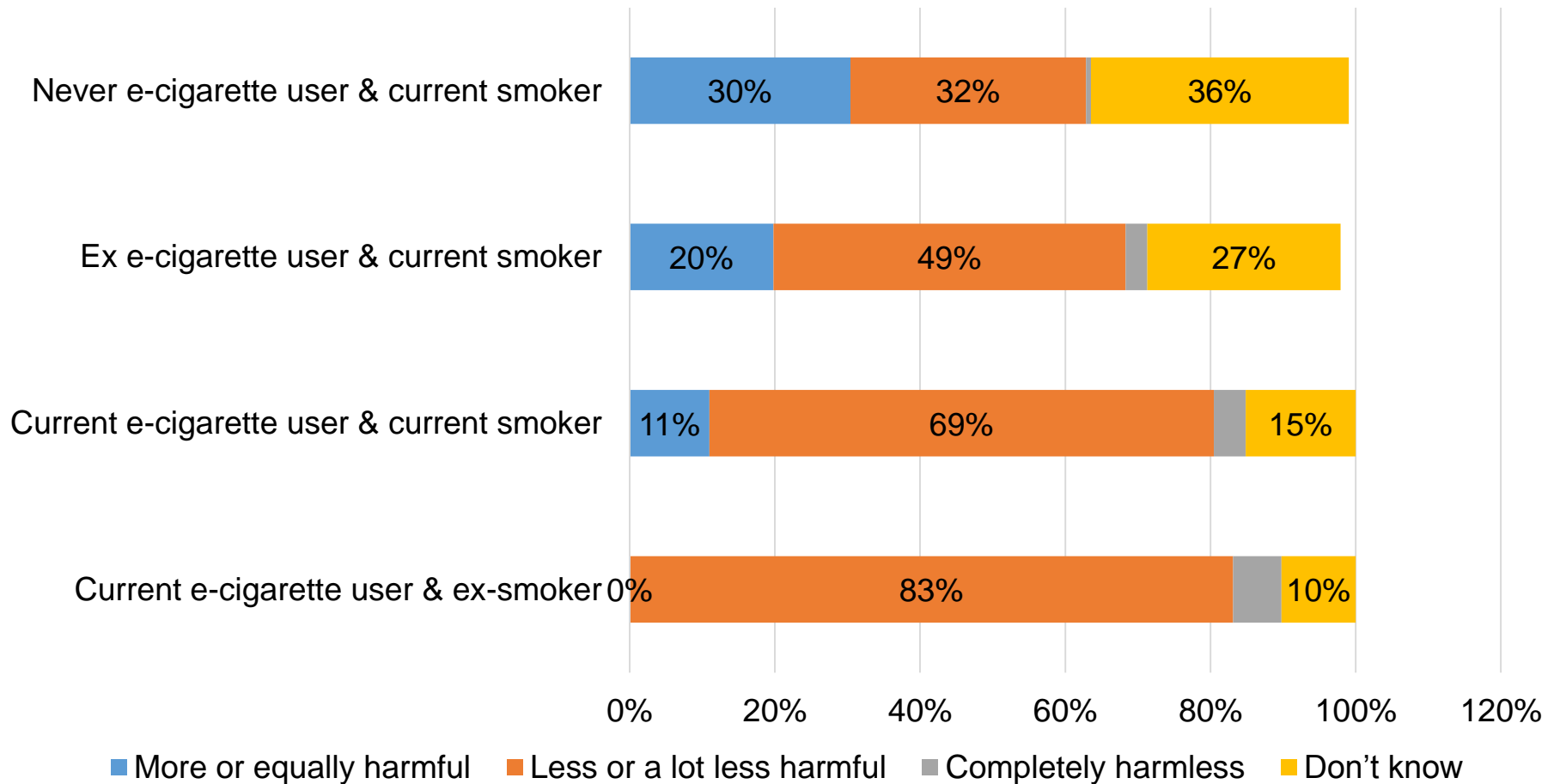
# 3 million smokers report never trying an e-cigarette

Smokers use of e-cigarettes



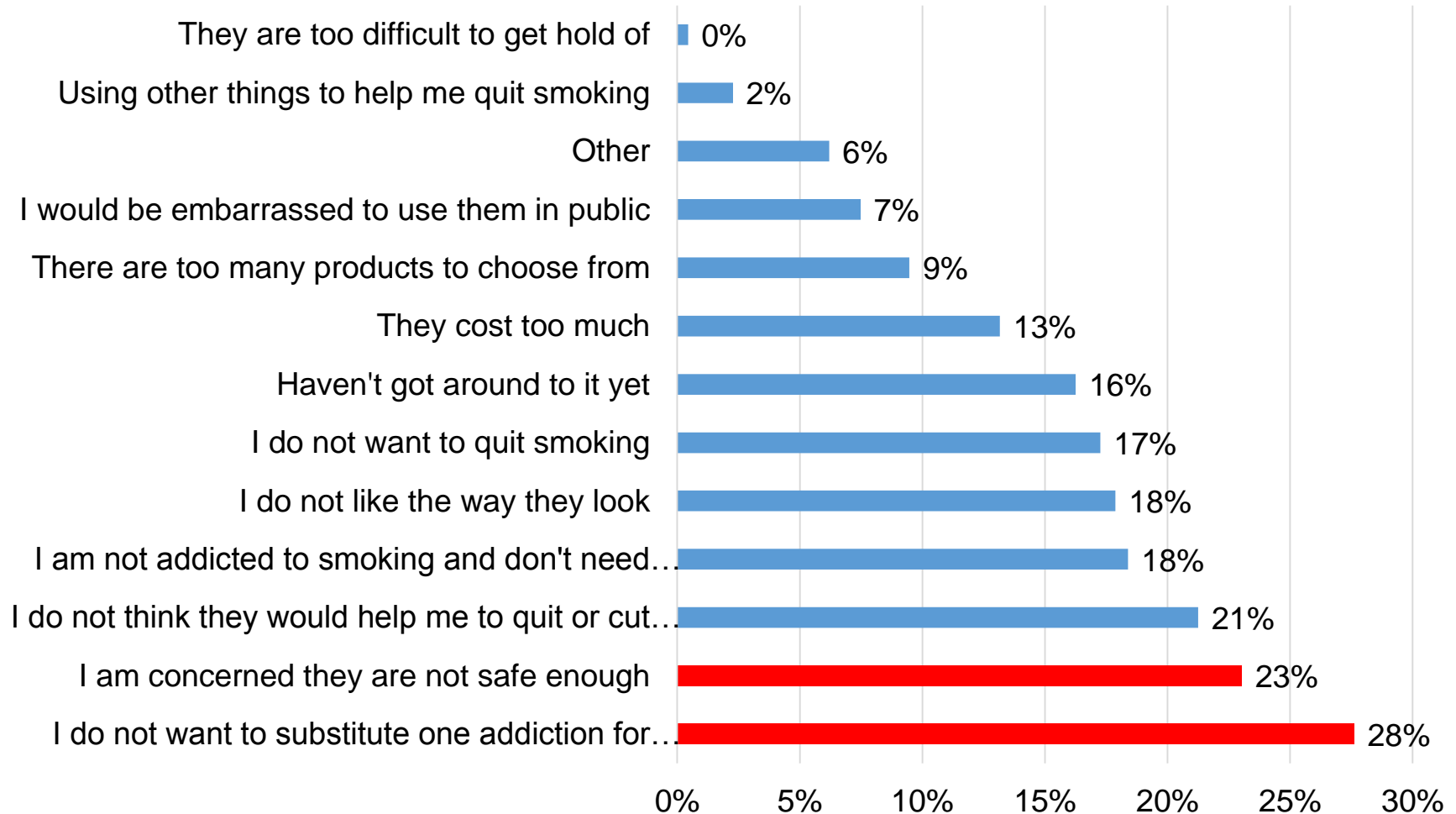
# Perceptions of harm closely linked to level of use of e-cigarettes

Perceptions of relative risk of e-cigarettes compared to smoking





# Reasons for not trying an e-cigarette among smokers who never have (2017)



# Why do a third of US parents still think vaccines cause autism?

1. Arguing the facts doesn't help—in fact, it makes the situation worse
2. Repeating the myth inadvertently popularizes it
3. Affirmation works – but we rarely use it
4. We consistently underestimate the power of narrative

**Christopher Graves** Harvard Business Review:

<https://hbr.org/2015/02/why-debunking-myths-about-vaccines-hasnt-convinced-dubious-parents>

# What can we do to support more accurate public perceptions of e-cigarettes?

- Clarity and consistency of information
- Repetition of the facts not the myths
- Recognise that concern about e-cigarette safety is concern for the health of smokers
- Tell the stories of those whose lives have changed



**THE SWITCH**





**THE SWITCH**