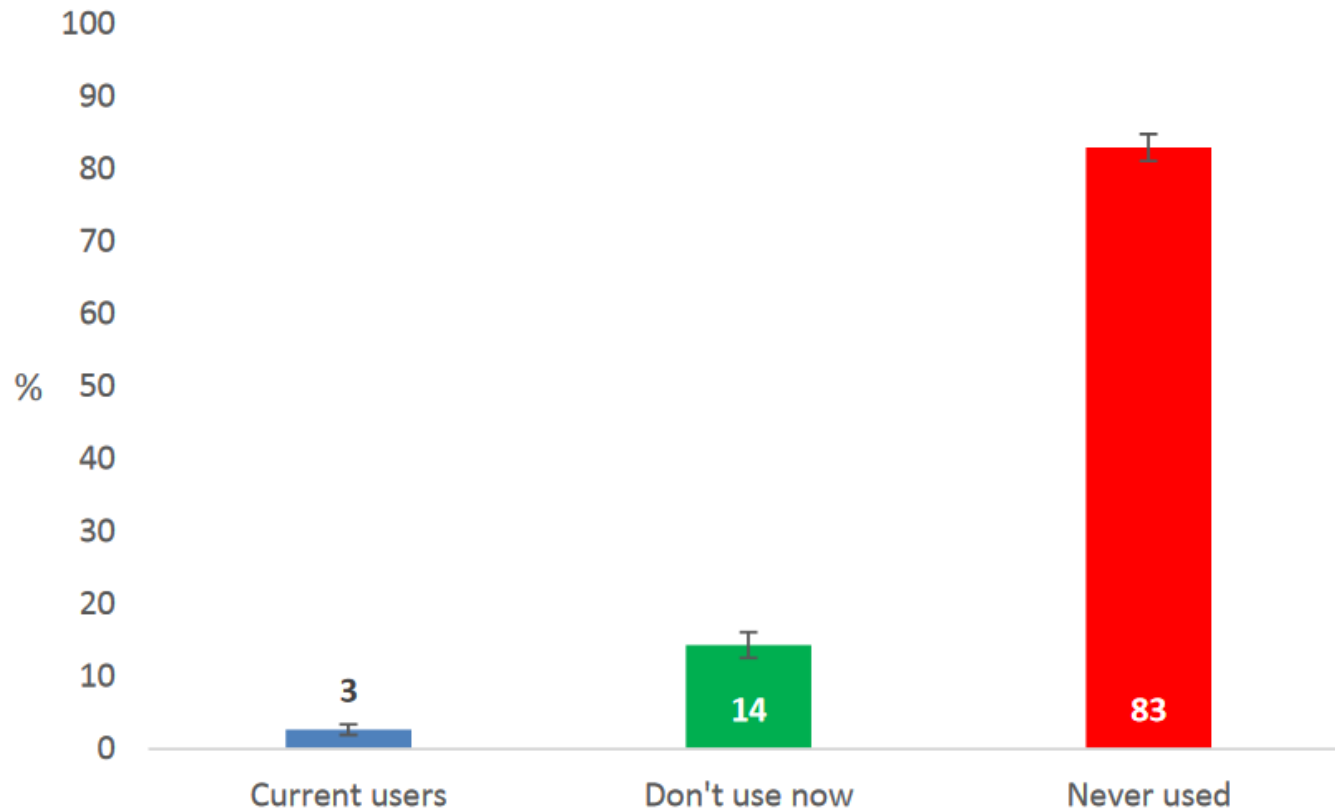


# E-cigarettes/vaping – a research update

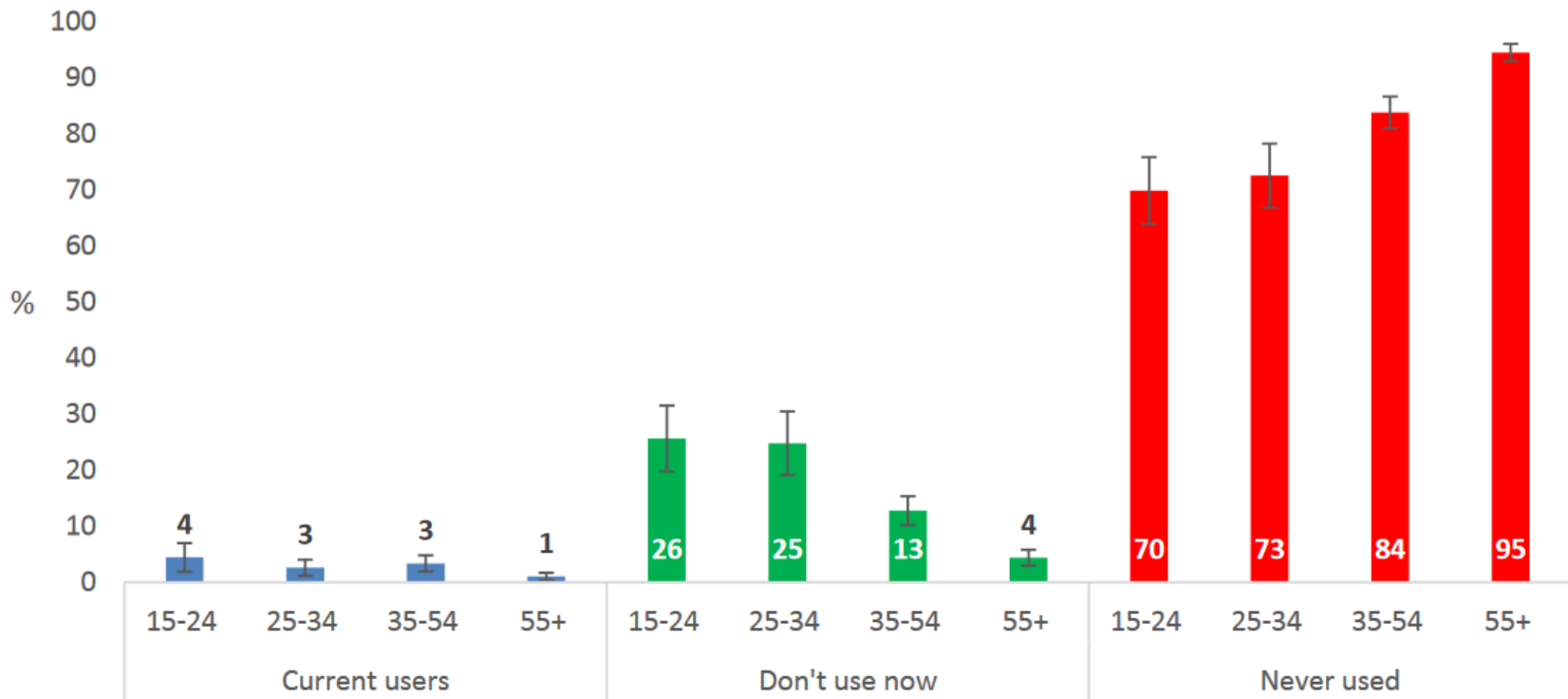
Dr Alana Oakly

# Vaping in New Zealand



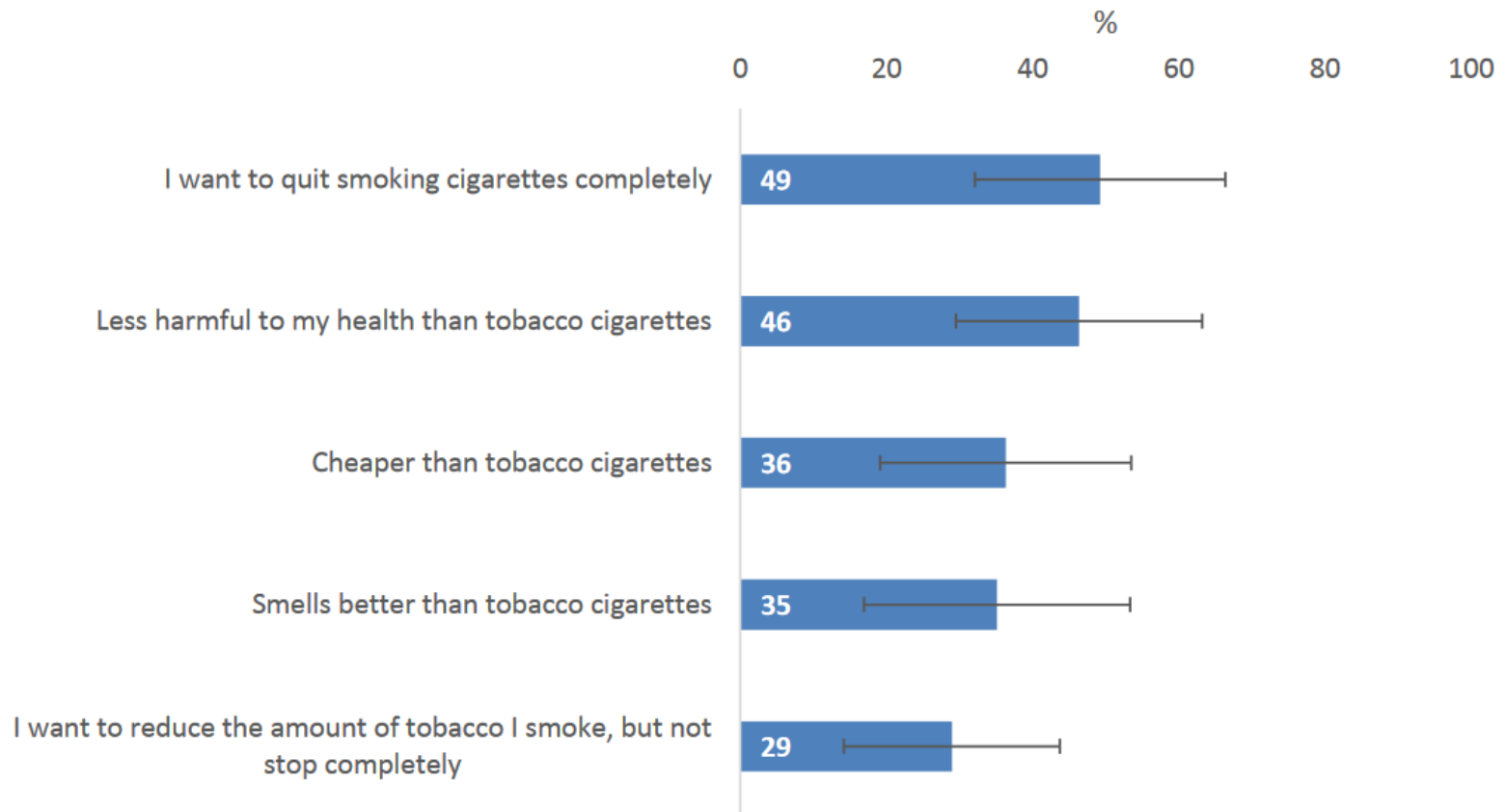
Source: 2016 Health and Lifestyles Survey  
(Health Promotion Agency)

# Vaping in New Zealand



Source: 2016 Health and Lifestyles Survey  
(Health Promotion Agency)

# Top 5 reasons for vaping



Source: 2016 Health and Lifestyles Survey  
(Health Promotion Agency)

# Growth in search interest

● **vaping**  
Search term

● **quit smoking**  
Search term

+ Add comparison

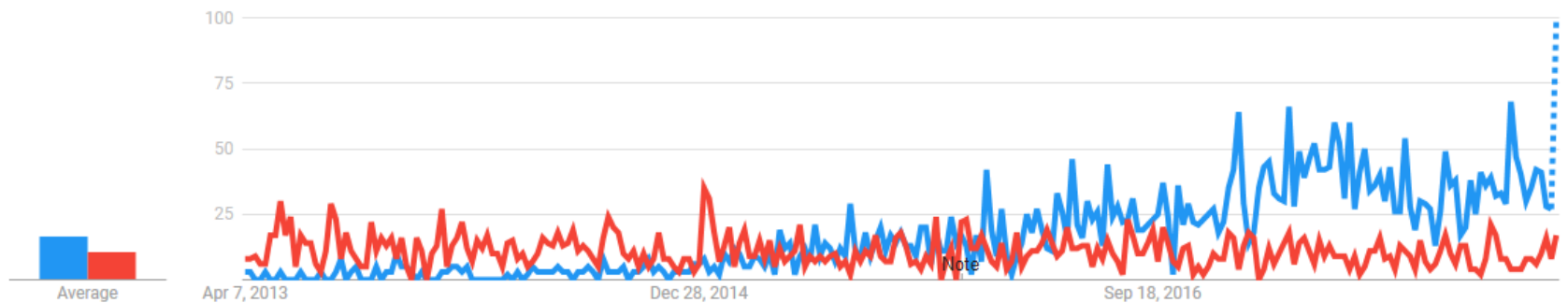
New Zealand ▾

Past 5 years ▾

All categories ▾

Web Search ▾

Interest over time ⓘ



Source: Google Trends; retrieved 4/04/2018

# Challenges for public health

“The net public health effect, harm or benefit, of e-cigarettes [vapes] depends on three factors:

1. their intrinsic toxicity,
2. their effect on adult cessation of combustible products,
3. their effect on youth initiation of combustible products.”

Source: NASEM (2018)



# 1. Toxicity and risk

- Vaping is 95% less harmful than tobacco smoking, but research on long-term health effects is lacking.
- No clear evidence that specific flavourings pose health risks. But there are suggestions that some could.
- In some cases the content of the e-liquid is unknown and therefore so are the risks.
- We don't yet know whether maternal e-cigarette use affects foetal development.

Source: Public Health England; Royal College of Physicians; American Cancer Society.

## 2. Smoking cessation

- Vaping seems to be effective as a smoking cessation aid, but this is based on a small number of studies.
  - A meta-analysis of randomised trials (one from NZ) found that participants using an e-cigarette were more likely to have abstained for at least 6 months than participants using a placebo (9% vs 4%).
  - From observational studies there is some evidence that more frequent use of e-cigarettes is associated with increased likelihood of smoking cessation.
- Dual use of e-cigarettes and tobacco is an issue.

Source: Cochrane Review, Hartman-Boyce et al., 2016



# 3. A gateway to smoking?

- Substantial evidence that “never smokers” who try e-cigarettes are more likely to try smoking compared to those who have not tried e-cigarettes.
  - However, we don’t know if vaping *causes* smoking. It may be that something else leads to both behaviours, such as novelty seeking.
- While some experimentation is common, regular use of e-cigarettes is relatively rare among young people who are “never smokers”.
- E-cigarettes do not appear to be undermining the long-term decline in tobacco smoking among young people.

Source: Public Health England, 2018; NASEM, 2018; 2016 HLS

# Conclusions

- The popularity of vaping is increasing
- Current evidence suggests:
  1. They are 95% less harmful than smoking tobacco
  2. There is some evidence that they help people to quit smoking
  3. We currently don't know whether vaping leads youth to begin smoking
- Further research is required