



Y RHWYDWAITH YMCHWIL  
IECHYD MEWN YSGOLION

SCHOOL HEALTH  
RESEARCH NETWORK

# Trends in youth smoking, cannabis use and their association

School Health & Wellbeing Research Brief, November 2020

Despite substantial falls in youth tobacco smoking in recent decades following increased regulation and controls, declines in uptake have begun to stall. Smoking and cannabis use are often shown to co-occur, and there is evidence that cannabis use may be growing. Could changes in youth cannabis use therefore be responsible for stalling declines in youth smoking uptake?

## What we already know...

Recent evidence from UK youth health surveys show that declines in smoking have plateaued, while cannabis use has grown.

Among adolescents, smoking and cannabis use are often shown to co-occur; either as singular use of both substances or simultaneous use (e.g. 'spliffs').

Combining cannabis with tobacco is a popular means by which to consume cannabis. Changes in youth cannabis use may therefore greatly impact youth tobacco smoking uptake.



## What we did...

- We combined four waves of data from SHRN's Student Health & Wellbeing survey between 2013 and 2019.
- Data were for 11-16 year olds only.
- Students who reported smoking tobacco at least weekly were classed as regular smokers.
- Students who reported using cannabis in the past month were classed as current users.
- We examined change in levels of smoking and cannabis use since 2013, accounting for student gender, school year and level of affluence.
- We also examined the relationship between smoking and cannabis use to assess the likelihood of tobacco smoking among cannabis users.
- Lastly, we explored how levels of youth tobacco smoking might have been expected to change over time if cannabis use had remained unchanged since 2013.

## In a nutshell

- Youth tobacco smoking prevalence was unchanged between 2013 and 2019.
- The proportion of adolescents currently using cannabis increased significantly over this time.
- Cannabis users were significantly more likely than non-cannabis users to regularly smoke tobacco.
- If cannabis use had remained at the same level as in 2013, youth tobacco smoking uptake might have continued to fall in Wales.



@SHRNWales



SHRN@cardiff.ac.uk



SHRN.org.uk

## What we found...

### Smoking

- **3.7%** of 11-16 year olds smoked regularly (at least weekly) in 2019, up from **3.3%** in 2013—however, this growth was not statistically significant.
- Similarly, no significant change in smoking uptake was observed among either sex or students of higher/lower affluence.
- Older students and less affluent students were more likely to report smoking regularly.

### Cannabis use

- A significant increase in the proportion of 11-16 year olds who currently use cannabis (at least monthly) was observed between 2013 and 2019—from **2.7%** to **4.3%**.
- The magnitude of this growth in cannabis use was consistent across both sexes and higher/lower affluence groups.
- Boys, older students, and less affluent students were more likely to report current cannabis use.

### Associations between smoking and cannabis use

- Cannabis users were significantly more likely than non-users to smoke tobacco regularly.
- Accounting for growth in cannabis use within our smoking analysis significantly impacted the time trend. Rather than showing no change since 2013, a significant decline in smoking was observed.
- This suggests that if cannabis use had remained at 2013 levels, youth tobacco smoking might have continued to fall in Wales.



## Issues to consider

This analysis is based on data from a large, nationally representative sample of adolescents in Wales.

In the survey, students are asked about their smoking and cannabis use separately. This means that we do not know the extent to which young people are using these substances simultaneously (e.g. 'spliffs'), or whether smoking and cannabis use are separate risk behaviours undertaken by the same young people.

Combining data from multiple waves of a survey that has been completed by a representative sample of young people, rather than tracking the same young people over time, means that while we can acknowledge that both substances are clearly related, we cannot infer the nature of this association.

## What does this mean for my school?

- **Existing tobacco control strategies may have reached the limit of what is achievable in regards to further reducing youth smoking. New interventions may need to be explored, or current approaches adapted.**
- **More joined-up approaches that address the co-use of tobacco and cannabis may be warranted given strong links between these substances.**

Read the research paper in full. Download for free here:

<https://academic.oup.com/jpubhealth/advance-article/doi/10.1093/pubmed/fdaa174/5912582?searchresult=1>

Page N et al (2020) Change over time in adolescent smoking, cannabis use and their association: findings from the School Health Research Network in Wales. Journal of Public Health. <https://doi.org/10.1093/pubmed/>