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Vaping and Smoking amongst Learners in Year 7 to 11 in Wales

**Analysis from The School Health Research Network (SHRN)
Student Health and Well-being (SHW) Survey in secondary
schools, 2023**

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1. Executive summary

Context

- The proportion of young people vaping has risen substantially in Wales and across Great Britain in recent years, despite the fact that it has been illegal to sell a vape to anyone under 18 since 2015
- The evidence suggests that the availability of disposable devices and the ways in which vapes are marketed have strongly contributed to their appeal amongst this group
- A number of pieces of legislation have been announced to address rises in vaping amongst young people, including banning the sale of tobacco products to anyone born after 1 January 2009, banning sale of disposable vapes and restricting marketing of vapes in ways likely to appeal especially to children and young people. The evidence strongly suggests that these approaches would reduce the numbers of young people in Wales taking up smoking and vaping
- The data presented are based on 129,761 learners from year 7 to 11 from 201 schools in Wales responding to The Student Health and Well-being (SHW) survey administered between September and December 2023

Key findings

- The proportion of learners in years 7 to 11 in Wales reporting vaping at least once a week is now 7%, an increase on 2021, when it was 5.4% and 2019 when it was 2.7%
- Increases in vaping since 2021 have been particularly notable amongst girls, year 11 learners and non-smokers, but weekly vaping increased between 2021 and 2023 in all year groups except year 7
- Girls (8.6%) are more likely to vape regularly than boys (5.1%). Those in year 11 (15.9%) are more likely to vape than those in younger year groups
- More than a quarter (25.7%) of all learners in year 7 to 11 have tried a vape, an increase on the 20.5% seen in 2021. Amongst year 11 learners the figure was 45.4%
- Only 2.7% of learners in years 7-11 now smoke regularly. The majority of these also vape



- The proportion of learners in years 7 to 11 who only vape is 5.2%, higher than the 3.5% seen in 2021. The proportion of learners who only smoke and the proportion who smoke and vape regularly have both fallen since 2021
- Nicotine use by smoking or vaping at least weekly is currently 8% amongst learners in years 7 to 11. This proportion has risen on every Survey since 2019 when it was 5.4%
- The data provide clear evidence that an increasing proportion of learners who have never and would never smoke regularly are vaping regularly

2. Introduction

Vaping is considerably less harmful than smoking, but not risk free¹⁻³. Whilst vapes have been available in the UK for more than a decade, increases in vaping amongst children and young people have accelerated rapidly in recent years, in particular since 2021⁴. Although it has been illegal in the UK to sell vapes containing nicotine to anyone under 18 since 2015, evidence from Wales^{5,6} has consistently shown that a minority of children and young people are vaping regularly, a finding that is consistent with data from other countries of the UK⁷⁻⁹.

Teachers, youth workers and other professionals have raised concerns that the proportion of children in Wales who are vaping regularly is increasing rapidly, and is associated with a growing number of learners experiencing nicotine dependency⁶. The rapid adoption of disposable vapes from 2021 onwards as the device of choice⁹ and the rapid increases in vaping prevalence amongst young adult age groups¹⁰, in particular those who have never smoked¹¹, have also suggested vaping is increasing amongst this group.

Legislation has been proposed to ban the sale of tobacco products to all those born on or after 1 January 2009. Whilst sale of tobacco products to those under 18 is already illegal in the UK, this legislation is likely to strengthen the current system, and help to further reduce smoking amongst children and young people. Proposed legislation to address the marketing of vapes reflect measures put into place in relation to tobacco marketing and sales that have been very effective in reducing the numbers of children and young people taking up smoking¹².

In response to these concerns, Welsh Government and the governments of the other countries of the UK have announced plans to ban disposable (non-refillable, non-rechargeable) vapes¹³ and the UK government has indicated that it will bring forward legislation to limit the sale and marketing of vapes¹⁴. The national Incident Response Group convened by Public Health Wales also identified best practices to support children and young people who are vaping and need support to quit⁶.

Robust data on the use of vapes by children and young people in Wales are essential for developing and implementing effective policies and services to meet the needs of this population. This report summarises data gathered between September and December 2023 by The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey in Secondary Schools. The SHW Survey provides the most up-to-date and reliable data on health behaviours, including smoking and vaping, amongst learners in years 7 to 11 (aged 11 to 16) in Wales.

3. The School Health Research Network (SHRN) Student Health and Well-being Survey in Secondary Schools

The School Health Research Network (SHRN) is a research-policy-practice partnership between Cardiff University, Welsh Government and Public Health Wales. SHRN administers The Student Health and Well-being (SHW) Survey in Secondary Schools to learners in years 7 to 11 in Wales every two years. Questions on vapes (e-cigarettes) have been asked since 2019. The 2023 SHW Survey was administered between September and December 2023 and includes responses from 129,761 Year 7 to 11 learners from 201 schools in Wales.

Details of the survey, including the sample frame and measures, are provided in Appendix 2.

4. Vaping amongst year 7 to 11 learners in Wales

4.1. Regular vapers

In the 2023 SHW survey, 7% of learners in years 7 to 11 in Wales reported vaping at least weekly.

Girls (8.6%) were more likely to report vaping at least weekly than boys (5.1%). This reflects patterns seen in previous years and recorded in other surveys in the UK.

As in previous years, the likelihood of being a regular vaper increases with age. Whilst only 0.8% of learners in year 7 and 2.5% in year 8 reported regular vaping, there are substantial increases in later years, with 15.9% of learners in year 11 reporting that they vape at least weekly.

These figures represent notable increases on those reported by SHW Survey respondents in 2021, when 5.4% reported vaping at least weekly. The largest absolute increase was seen amongst year 10s, with the proportion vaping rising by 2.8 percentage points from 8.9% in 2021 to 10.7% in 2023.

Figures for regular vaping by year group in 2021 and 2023 are shown in Figure 1. Table 1 to

Table 4 in Appendix 1 show detailed figures for regular use of vapes by gender and year group, including confidence intervals.

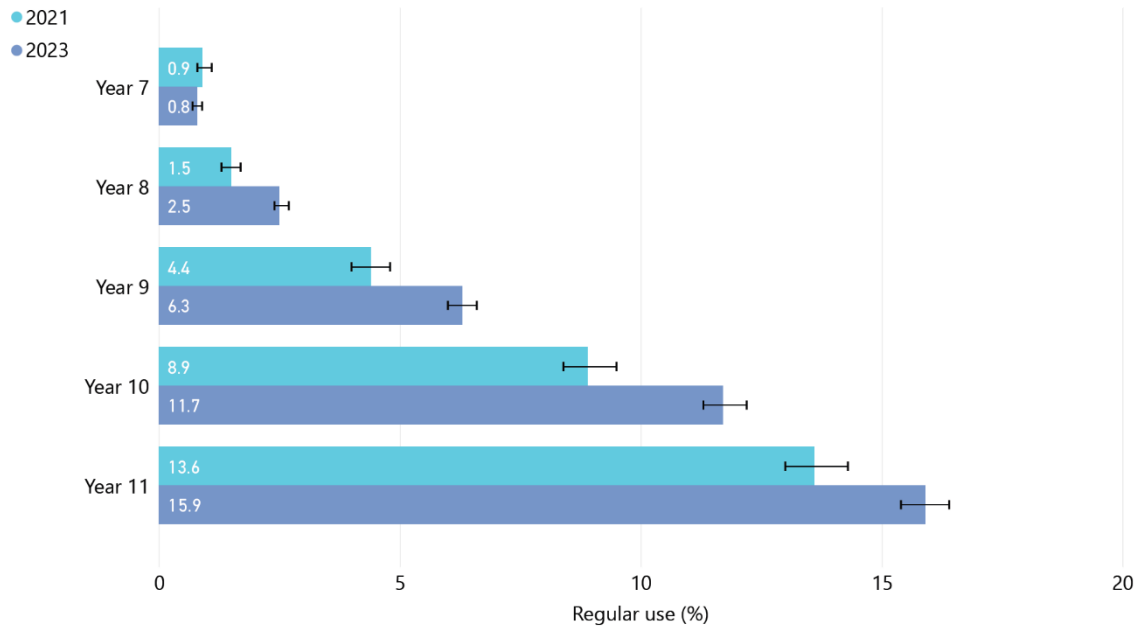


Figure 1: Regular (at least weekly) use of vapes, by year group, years 7 to 11, including 95% confidence intervals, 2021 and 2023. Source: The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey

4.2. 'Ever use' of vapes

Just over a quarter (25.7%) of all SHW Survey respondents in years 7 to 11 reported ever having tried a vape ('ever use'). As with regular use, girls (28.5%) were more likely to report ever use of a vape than boys (22.6%). Ever use was also associated with age, with 7.8% of learners in year 7 reporting ever using a vape compared to 45.4% in Year 11.

The proportion of learners in years 7 to 11 reporting ever having tried a vape was 20.5% in 2021. The largest relative rise in the proportion of learners who had ever tried vaping compared to 2021 was seen amongst younger year groups, with 16% of year 8s reporting ever trying a vape in 2023 compared with 11% in 2021, and 26.7% of year 9s in 2023 reporting 'ever use' compared to 19% in 2021. Figures for 'ever use' by year group in 2021 and 2023 are shown in Figure 2. Table 1 to

Table 4 in Appendix 1 show detailed figures for 'ever use' of vapes by gender and year group, including confidence intervals.

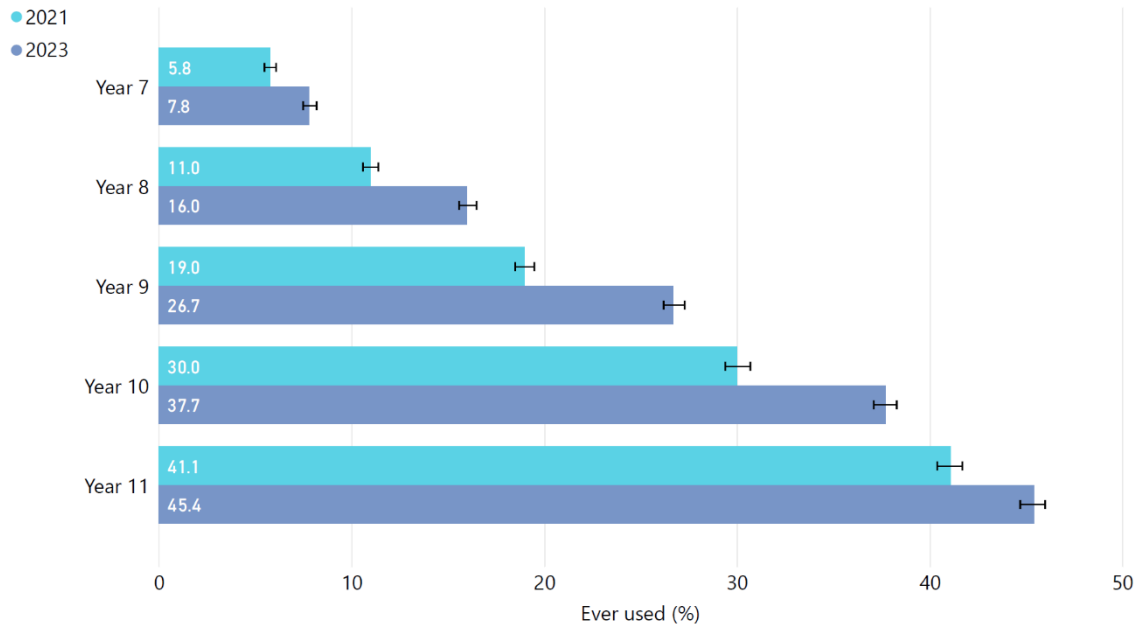


Figure 2: Ever use of a vape, by year group, years 7 to 11, including 95% confidence intervals, 2021 and 2023. Source: The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey

5. Smoking amongst year 7 to 11 learners in Wales

Children and young people are now much more likely to report vaping regularly than smoking regularly. In the 2023 SHW Survey, 2.7% of learners in years 7 to 11 reported smoking at least weekly. Patterns of use by gender are also different, with boys (2.7%) more likely to report being regular smokers than girls (2.2%). As with vaping, the proportion of learners reporting regular smoking rose with age, but there were considerably fewer smokers than vapers in older year groups, with 5.5% of learners in Year 11 reporting smoking regularly. Regular smoking by year group in 2021 and 2023 is shown in Figure 3.

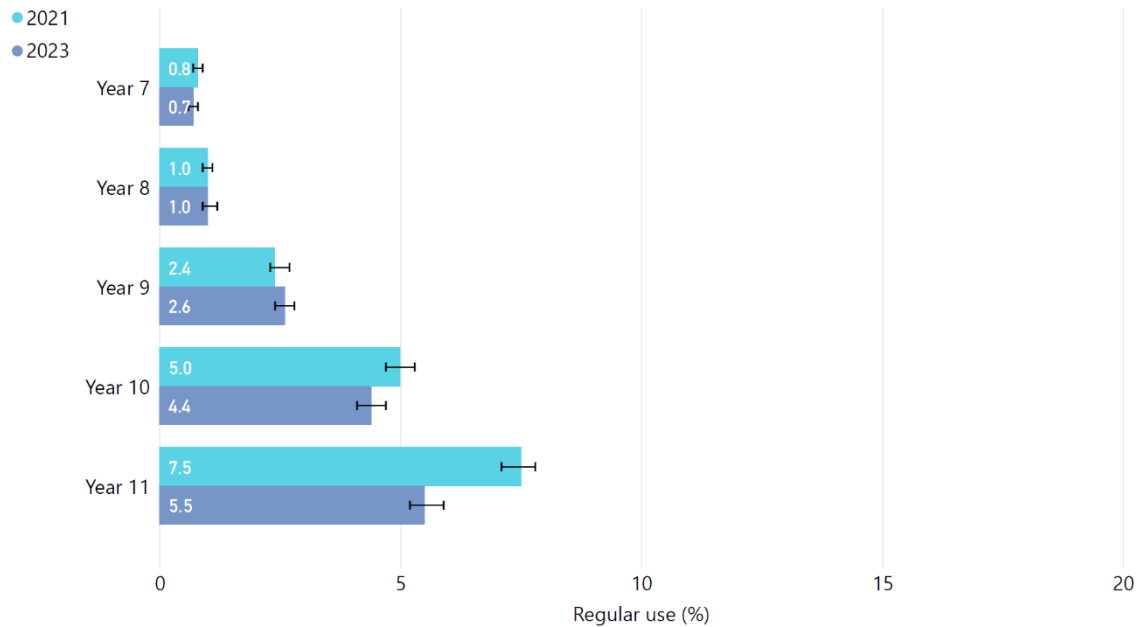


Figure 3: Regular (at least weekly) smoking, by year group, years 7 to 11, including 95% confidence intervals, 2021 and 2023. Source: The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey

'Ever use' of tobacco was reported by 8.2% of SHW Survey respondents across all years, with those in year 11 (18.7%) most likely to report ever having tried tobacco. Those who recorded that neither 'girl' nor 'boy' described their gender were more likely to report both vaping (18.5%) and smoking (17.4%).

The proportion of learners in years 7 to 11 reporting smoking regularly in 2023 (2.7%) has fallen since 2021, when it was 3.1%. This recorded fall was driven by a decline in the proportion of Year 11s smoking from the 7.5% recorded in 2021.

Table 6 to Table 9 in Appendix 1 show detailed figures for tobacco use by gender and year group, including confidence intervals.

5.1. Smoking and vaping

Previous data from the SHW Survey have shown a substantial number of learners in these year groups both smoke and vape regularly⁶. The proportion of non-smokers who vape regularly has increased substantially over time, from 1.2% in 2019 to 4.9% in 2023. As a majority of learners in these year groups do not smoke, the number of non-smokers who vape is larger than the number of smokers who vape.

Table 10 in Appendix 1 shows the proportion of learners in years 7 to 11 who vape by smoking status for the years 2019, 2021 and 2023, including confidence intervals.



In 2019, the majority of learners who vaped were also smoking regularly, and the same proportion only smoked (2.7%) as vaped. In 2023 the picture is different, with only-vapers the accounting for the largest group amongst learner who smoke and/or vape. A distinct shift appears to have happened between 2019 and 2021, with the proportion who only smoke decreasing (2.7% in 2019 to 1.2% in 2021). The proportion of dual users rose in the same period, from 1.4% 2019 to 2% in 2021 but the proportion of only vapers rose more rapidly from 1.3% in 2019 to 5% in 2021. Whilst the data do not allow us to follow individuals over time, this suggests that (1) some smokers may have started vaping in addition to smoking (2) some smokers may have moved to vaping instead of smoking (3) a distinct group of never smokers initiated vaping. Between 2021 and 2023 proportion of only smokers and dual users fell slightly, with the proportion of only vapers rising must faster, from 3.5% in 2021 to 5.2% in 2023. This suggests that changes in the behaviour of smoking and smoking initiation following the increased available and popularity of vapes in these age groups may have stabilised, whilst the number of never smokers (who never would have smoked) who vape is rising steadily. Further data is needed to confirm these trends.

The proportion of learners in years 7-11 who are using nicotine from tobacco or vapes was 8% in 2023, an increase from 2021, when it was 6.7% and 2019 when it was 5.4%. The proportions of learners who only vape, only smoke and are dual users are shown in Figure 4.

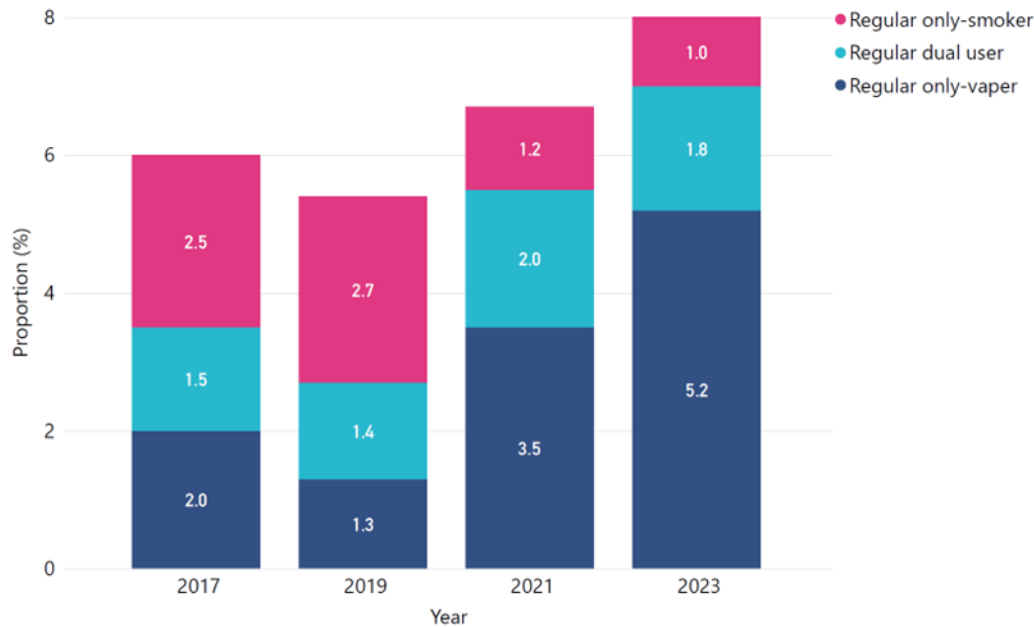


Figure 4: Regular (at least weekly) use of (1) only vapes (2) only tobacco (3) dual users, years 7 to 11, 2017-23. Source: The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey. Note that the proportions in this figure may not sum to proportions presented in other figures due to rounding

6. Conclusion

This initial analysis of data from the 2023 SHRN SHW Survey suggests that regular vaping has risen amongst learners in years 8 to 11 across Wales since 2021, in particular amongst girls, year 11 learners and non-smokers. The proportion of learners who have ever tried a vape has rose within every year group from years 7 to 11 between 2021 and 2023. Falls in smoking are driven by changes amongst learners in Years 10 and 11. Overall nicotine use is rising, and this is driven by increases in vaping amongst those who have never smoked. Legislation that addresses the age at which tobacco can be sold, and the packaging and display of vaping products is likely to reduce the rates of smoking and vaping amongst children and young people in Wales.

Acknowledgement

The School Health Research Network (SHRN) is a partnership between Cardiff University, the Welsh Government, and Public Health Wales, funded by the Welsh Government. The views expressed here are those of the author(s) and not necessarily those of The School Health Research Network (SHRN) or Cardiff University. The authors would like to thank the following members of the SHRN team at Cardiff University for their contributions to this release: Dr Nicholas Page, Dr Max Ashton, and Maria Boffey.

Appendix 1: Data tables

Table 1: Ever use and regular use of vapes, years 7 to 11, by gender, including 95% confidence intervals and sample sizes, 2023. Source: The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey

	Total (All- Wales)	Boy	Girl	Neither word describes me
Ever use	25.7% [25.5-26.0%] n=118,485	22.6% [22.2-22.9%] n=58,650	28.5% [28.1-28.9%] n=57,132	39.3% [37.0-41.7%] n=1,668
Regular use*	7.0% [6.9-7.1%] n=116,859	5.1% [5.0-5.3%] n=58,015	8.6% [8.4-8.9%] n=56,107	16.3% [14.6-18.2%] n=1,634
*At least weekly				

Table 2: Ever use and regular use of vapes, years 7 to 11, by gender, including 95% confidence intervals and sample sizes, 2021. Source: The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey

	Total (All- Wales)	Boy	Girl	Neither word describes me
Ever use	20.5% [20.2-20.7%] n=112,276	18.8% [18.5-19.1%] n=55,056	21.8% [21.5-22.2%] n=52,234	27.5% [26.0-29.1%] n=3,324
Regular use*	5.4% [5.3-5.6%], n=55,334	4.1% [3.9-4.4%], n=27,432	6.7% [6.4-7.0%] n=25,468	8.0% [6.8-9.4%] n=1,622
*At least weekly Note that questions on regular vape use were only asked to half the total sample in 2021				

Table 3: Ever use and regular use of vapes, years 7 to 11, by year group, including 95% confidence intervals and sample sizes, 2023. Source: The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey

	Year 7	Year 8	Year 9	Year 10	Year 11
Ever use	7.8% [7.5-8.2%] n=25,665	16.0% [15.6-16.5%] n=25,094	26.7% [26.2-27.3%] n=24,512	37.7% [37.1-38.3%] n=22,288	45.4% [44.7-46.0%] n=20,926
Regular use*	0.8% [0.7-0.9%] n=25,551	2.5% [2.4-2.7%] n=24,841	6.3% [6.0-6.6%] n=24,137	11.7% [11.3-12.2%] n=21,858	15.9% [15.4-16.4%] n=20,472
*At least weekly					

Table 4: Ever use and regular use of vapes, years 7 to 11, by year group, including 95% confidence intervals and sample sizes, 2021. Source: The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey

	Year 7	Year 8	Year 9	Year 10	Year 11
Ever use	5.8% [5.5-6.1%] n=23,863	11.0% [10.6-11.4%] n=23,564	19.0% [18.5-19.5%] n=23,752	30.0% [29.4-30.7%] n=21,594	41.1% [40.4-41.7%] n=19,503
Regular use*	0.9% [0.8-1.1%] n=11,877	1.5% [1.3-1.7%] n=11,812	4.4% [4.0-4.8%] n=11,762	8.9% [8.4-9.5%] n=10,478	13.6% [13.0-14.3%] n=9,405
*At least weekly Note that questions on regular vape use were only asked to half the total sample in 2021					

Table 5; Regular only-smokers, only-vapers and dual users, years 7 to 11, including 95% confidence intervals and sample sizes, 2017-23. Source: The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey

	2017 (n=96,160)	2019 (n=108,052)	2021 (n=54,780)**	2023 (n=115,609)
Regular* only-smoker	2.5% [2.4-2.6%]	2.7% [2.6-2.8%]	1.2% [1.1-1.3%]	1.0% [0.9-1.1%]
Regular* only-vaper	2.0% [2.0-2.1%]	1.3% [1.3-1.4%]	3.5% [3.3-3.6%]	5.2% [5.1-5.4%]
Regular* dual user	1.5% [1.4-1.5%]	1.4% [1.3-1.5%]	2.0% [1.9-2.1%]	1.8% [1.8-1.9%]
Non-user	94.0% [93.8-94.1%]	94.6% [94.5-94.7%]	93.3% [93.1-93.5%]	91.9% [91.8-92.1%]
*At least weekly **Note that questions on regular vape use were only asked to half the total sample in 2021 Note that the proportions in this table may not sum to proportions presented in other tables due to rounding				

Table 6: Ever use and regular use of tobacco, years 7 to 11, by gender, including 95% confidence intervals and sample sizes, 2023. Source: The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey

	Total Wales)	(All- Boy	Girl	Neither word describes me
Ever use	8.2% [8.0-8.5%] n=61,312	6.9% [6.6-7.2%] n=30,308	9.2% [8.8-9.5%] n=29,562	22.5% [19.9-25.4%] n=875
Regular use*	2.7% [2.6-2.8%], n=121,486	2.7% [2.6-2.9%], n=59,736	2.2% [2.1-2.3%] n=58,866	17.4% [15.7-19.3%] n=1,700

*At least weekly

Table 7: Ever use and regular use of tobacco, years 7 to 11, by gender, including 95% confidence intervals and sample sizes, 2021. Source: The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey

	Total (All-Wales)	Boy	Girl	Neither word describes me
Ever use	9.3% [9.1-9.5%] n=56,600**	7.3% [7.0-7.7%] n=27,891	10.9% [10.5-11.3%] n=26,171	16.2% [14.5-18.0%] n=1,680
Regular use*	3.1% [3.0-3.2%] n=115,118	2.8% [2.6-2.9%] n=56,498	3.1% [3.0-3.2%] n=53,606	8.7% [7.8-9.7%] n=3,386

* at least weekly
** derived from question on age at first cigarette that was only asked to half the total sample in 2021

Table 8: Ever use and regular use of tobacco, years 7 to 11, by year group, including 95% confidence intervals and sample sizes, 2023. Source: The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey

	Year 7	Year 8	Year 9	Year 10	Year 11
Ever use	1.6% [1.4-1.8%] n=13,289	3.4% [3.1-3.8%] n=13,013	7.4% [6.9-7.8%] n=12,696	12.6% [12.0-13.2%] n=11,520	18.7% [18.0-19.4%] n=10,794
Regular use*	0.7% [0.6-0.8%] n=26,605	1.0% [0.9-1.2%] n=25,901	2.6% [2.4-2.8%] n=25,055	4.4% [4.1-4.7%] n=22,673	5.5% [5.2-5.9%] n=21,252

*At least weekly

Table 9: Ever use and regular use of tobacco, years 7 to 11, by year group, including 95% confidence intervals and sample sizes, 2021. Source: The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey

	Year 7	Year 8	Year 9	Year 10	Year 11
Ever use	2.0% [1.8-2.3%] n=12,139	3.8% [3.5-4.1%] n=12,091	7.7% [7.2-8.2%] n=12,020	14.0% [13.4-14.7%] n=10,757	22.2% [21.3-23.0%] n=9,593
Regular use*	0.8% [0.7-0.9%] n=24,863	1.0% [0.9-1.1%] n=24,319	2.4% [2.3-2.7%] n=24,264	5.0% [4.7-5.3%] n=21,917	7.5% [7.1-7.8%] n=19,755

*At least weekly

Table 10: Regular (at least weekly) use of vapes, years 7 to 11, by smoking status, including 95% confidence intervals and sample sizes, 2023. Source: The School Health Research Network (SHRN) Student Health and Well-being (SHW) Survey

	SHRN SHW 2019 (n=107,461)	SHRN SHW 2021 (n=54,434)†	SHRN SHW 2023 (n=114,664)
Non-smoker	1.2% [1.2-1.3%]	3.3% [3.1-3.4%]	4.9% [4.8-5.0%]
Daily/weekly smoker	38.2% [36.7-39.7%]	69.2% [66.9-71.4%]	72.6% [71.0-74.2%]
†Note that questions on regular vape use were only asked to half the total sample in 2021			



Appendix 2: The School Health Research Network (SHRN) Student Health and Well-being Survey

Overview

The School Health Research Network (SHRN) is a research-policy-practice partnership between Cardiff University, Welsh Government, and Public Health Wales which generates and translates research evidence to improve children and young people's health and well-being in Wales and beyond.

SHW design and sample

The Student Health and Well-being (SHW) Survey is a cross-sectional, school-based survey administered biennially to learners in years 7 to 11 in Wales, funded by Welsh Government. The survey is led by SHRN at Cardiff University and asks questions about young people's mental and physical health and social relationships.

The sampling frame includes all maintained secondary schools in Wales (n=205) and a small number of independent schools (n=7). The survey is administered electronically with data collected between September and December. Informed consent is obtained from all students prior to survey completion. Parents are free to withdraw their child from participating via a process of opt-out consent. Students can choose not to answer any question by selecting 'I do not want to answer'. Ethical approval is obtained from Cardiff University School of Social Sciences Research Ethics Committee (SREC). In 2023, 129,761 students from 201 schools participated in the survey (a 75% response rate).

Measures

Students who reported having ever tried a cigarette (more than a puff) were classed as 'ever smokers'. Current smoking status was obtained by asking students how often they smoked at present, with students reporting daily or weekly smoking classed as 'regular smokers'. Equivalent measures were derived from comparable survey items for 'ever' and 'regular' use of vapes.



References

1. Banks, E. *et al.* Electronic cigarettes and health outcomes: umbrella and systematic review of the global evidence. *Med J Aust* **218**, 267–275 (2023).
2. McNeill, A. *et al.* ***Nicotine Vaping in England: An Evidence Update Including Health Risks and Perceptions, 2022.*** <https://www.gov.uk/government/publications/nicotine-vaping-in-england-2022-evidence-update> (2022).
3. Intrepid Lab. ***E-Cigarette Use: Evidence-Informed Guidance on Harms and Benefits.*** https://intrepidlab.ca/en/Documents/VECTOR_Guidance_Resource_FINAL.pdf (2024).
4. Action on Smoking and Health (ASH) GB. ***Use of Vapes (e-Cigarettes) among Young People in Great Britain.*** <https://ash.org.uk/uploads/Use-of-vapes-among-young-people-in-Great-Britain-2024.pdf?v=1725288402> (2024).
5. Page, N., Angel, L., Ogada, E., Young, H. & Murphy, S. ***Student Health and Well-being in Wales: Report of the 2021/22 Health Behaviour in School-Aged Children Survey and School Health Research Network Student Health and Well-being Survey.*** <https://www.shrn.org.uk/national-data/> (2023).
6. Incident Response Group. ***Incident Report: Vaping amongst Children and Young People in Wales.*** <https://phw.nhs.wales/news/tackle-dependency-visibility-and-availability-to-address-rapid-rise-in-youth-vaping-say-public-health-experts/vaping-amongst-children-and-young-people-in-wales-incident-response-group-report/> (2024).
7. Public Health Scotland. ***Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS).*** <https://www.gov.scot/publications/scottish-schools-adolescent-lifestyle-substance-use-survey-salsus-national-overview-2018/> (2018).
8. NHS Digital. ***Smoking, Drinking and Drug Use among Young People in England, 2021.*** <https://digital.nhs.uk/data-and-information/publications/statistical/smoking-drinking-and-drug-use-among-young-people-in-england/2021> (2022).
9. Action on Smoking and Health (ASH). ***Use of E-Cigarettes (Vapes) among Young People in Great Britain.*** <https://ash.org.uk/uploads/Use-of-vapes-among-young-people-GB-2023-v2.pdf?v=1697209531> (2023).



10. Jackson, S. E. *et al.* Who would be affected by a ban on disposable vapes? A population study in Great Britain. *Public Health* (2024) doi:10.1016/j.puhe.2023.12.024.
11. Jackson, S. E., Shahab, L., Tattan-Birch, H. & Brown, J. Vaping among adults in England who have never regularly smoked: a population-based study, 2016–24. *The Lancet Public Health* 9, e755–e765 (2024).
12. Haw, S. *et al.* *The Impact of the Point-of-Sale Tobacco Display Ban on Young People in Scotland: Before-and-after Study*. (NIHR Journals Library, Southampton (UK), 2020).
13. Welsh Government. Welsh Government to ban disposable vapes and back plans for raising smoking age. (2024).
14. Prime Minister’s Office. The King’s Speech. (2024).