

Vaping behavior change in Oregon during a national outbreak of vaping-associated lung injury

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Background

- On October 4, 2019, the Oregon Governor issued Executive Order 19-09 in response to the national outbreak of **vaping-associated lung injuries (VALI)**, which proposed a temporary flavor ban among other actions to protect the public's health (see "Agency actions" sidebar for details).
- There have been **23 cases of VALI** in Oregon and electronic cigarette use increased 80% among Oregon 11th-graders between 2017 and 2019.
- We explored the following **evaluation question**: were there changes in nicotine and cannabis vaping attitudes and use during the VALI outbreak?

Results

- People who vape were **highly aware of vaping-associated lung injuries** (90%).
- About one-third (34%) of people who vape nicotine and 43% of people who vape cannabis reported **decreasing vaping or stopping** completely in the past 6 months.
- Forty percent of people who vape nicotine and 30% of those who vape cannabis reported **wanting to reduce the amount they vape or quit entirely**.
- About half (52%) of people who vape were **aware of the Oregon Tobacco Quit Line**; among those aware, about one-third (35%) saw it as a resource to quit vaping.
- Nearly one-in-five (18%) who vape nicotine and nearly one-in-three (30%) who vape cannabis reported **switching to smoking combustible** cigarettes and cannabis.

Conclusions

- Unfortunately, people who vape reported switching to smoking combustible products during the VALI outbreak, so **risk messaging may need to be adjusted** for vaping relative to use of combustibles.
- Vaping-specific quit resources are needed** to support those who want to quit or reduce; younger people in particular were not aware of the Tobacco Quit Line or did not consider it a resource to quit vaping.

Among those surveyed, 40% of people who vape nicotine and 30% of people who vape cannabis reported wanting to reduce the amount they vape or quit entirely.

Select quotes from people who vape nicotine or cannabis on vaping behavior change during the VALI outbreak

"News of **people going to the hospital** for vaping issues has made me more aware of the effects vaping can have on my lungs."
-16-20 year-old who vapes nicotine

"Decided since all vape shops are **getting rid of the flavors** to just stop."
-16-20 year-old who vapes nicotine

"**Seeing the media** and people getting sick off vaping has put a little scare in me."
-21+ year-old who vapes nicotine

"I've heard negative things about vaping, so I **switched a bit to smoking** because it's less convenient but safer."
-16-20 year-old who vapes cannabis

"I **keep trying to quit** but have a really hard time quitting juul."
-16-20 year-old who vapes nicotine

Analysis of open-ended questions on the survey to people who vape nicotine or cannabis revealed several top reasons for vaping behavior change during the VALI outbreak. Representative quotes from these respondents are included to the left.

Among those who reported decreasing or stopping vaping in the last 6 months, **top reasons for the change** included: personal fear of vaping health risks; media coverage of the health risks of vaping; the proposed temporary flavor ban; and product costs.

Example ads from tobacco cessation and youth cannabis prevention campaigns



Tobacco cessation and youth cannabis prevention campaign ads ran from **December 2019 through March 2020**. Half (50%) of people who vape nicotine saw the "No Safe Tobacco" ad, and about one-third (36%) of those aged 16-20 years who vape cannabis saw a *Stay True to You* cannabis prevention ad.

Methods

- We assessed nicotine or cannabis vape user attitudes and behaviors using an online survey to 600 Oregonians aged 16 years or older who had vaped nicotine or cannabis in the past 6 months; we report unweighted survey responses.
- The survey was administered in December 2019, about three months after the peak of the national VALI outbreak in September 2019.
- Survey topics included awareness of VALI and policy responses, changes in vaping behavior and reasons for change, and awareness of tobacco cessation resources.
- Responses to open-ended questions about reasons for vaping behavior change were double-coded by two analysts.

Vaping attitudes and behaviors among people who vape in Oregon by age group

	Nicotine		Cannabis	
	Age groups (years)			
	16-20	21+	16-20	21+
Aware of lung injuries	93%	87%	98%	81%
Aware of temporary flavor ban	86%	73%	87%	75%
Decreased vaping	34%	34%	45%	42%
Stopped vaping	13%	11%	13%	10%
Switched from vaping to smoking	12%	23%	28%	32%
Want to reduce or quit vaping	37%	44%	28%	32%
Provider gave quit resources	9%	29%	12%	14%
Heard of Oregon Tobacco Quit Line	38%	75%	38%	58%
See Quit Line as vaping quit resource	25%	37%	39%	35%

Awareness of Quit Line was **lower** among younger people and those who vape cannabis.

Agency actions to protect the public's health

Completed actions from Executive Order 19-09:

- ✓ Emergency rules temporarily banning the sale of all flavored vaping products
- ✓ Consumer warning developed
- ✓ Rules requiring healthcare providers to report all cases of VALI
- ✓ Barriers to tobacco cessation supports and services identified and remediated
- ✓ Statewide vaping prevention and education campaign