

Background

Electronic cigarette (e-cigarette) use is a major public health problem for adolescents and young people.

- 1 in 7 high schoolers reported past-30-day e-cigarette use (vaping).¹
- Vaping is dangerous to adolescent health and development.**
- Most e-cigarettes contain nicotine, a highly addictive substance.²
- Toxic chemicals in e-cigarettes affect lung and heart health.²
- Underage vaping can lead to higher likelihood of smoking later in life.²
- Pharmacists can help educate on and prevent adolescent vaping.**
- Pharmacists are accessible to patients in the community.³
- Pharmacists have yet to fully engage in addressing adolescent vaping.⁴

Objective

The goal of this study was to examine adolescents' knowledge about vaping and their perspectives on the content and implementation of this pharmacy-based intervention to educate adolescents and the broader community on vaping and e-cigarette use.

Methods

Study Design

- Semi-structured interviews with adolescents
- Topic of open-ended interview questions
 - E-cigarette knowledge and experiences
 - Opinions on the e-cigarette educational handout
 - Role of pharmacists in disseminating the handout
- University of Wisconsin IRB approved

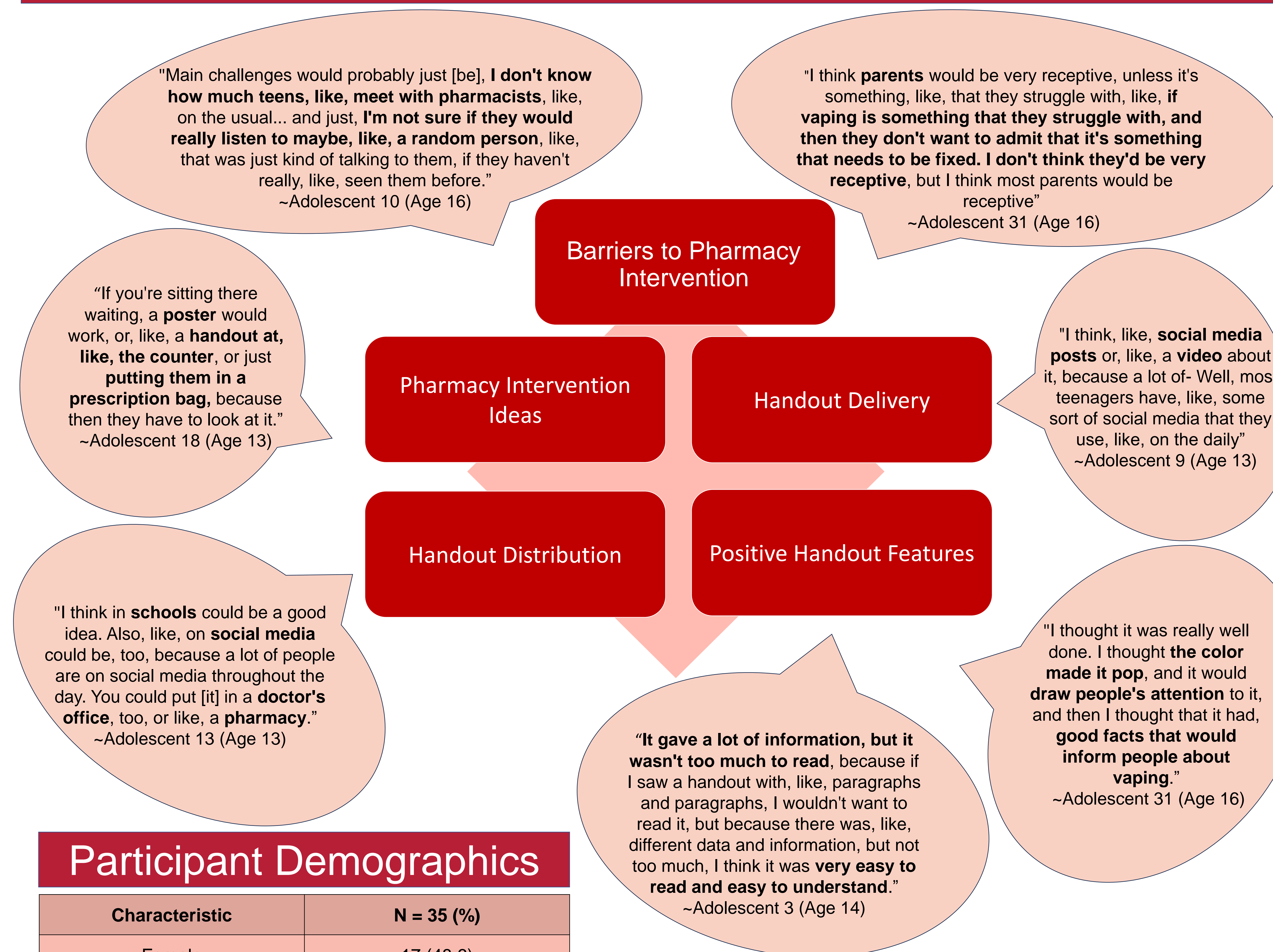
Recruitment and Participants

- Eligible participants were adolescents living in Wisconsin, aged 12 to 18, with access to internet and a device to use Zoom
- Recruited from 7 Wisconsin community pharmacies with recruitment flyers and pharmacy email newsletters
- Obtained parental consent and adolescent assent
- Total of 35 adolescents participated

Data Collection & Analysis

- Virtual interview via Zoom Video Communications
- Interviews were recorded, transcribed, and checked for accuracy
- Inductive content and thematic analysis

Results



Participant Demographics

Characteristic	N = 35 (%)
Female	17 (48.6)
White or Caucasian	26 (74.3)
Multiple Racial and Ethnic Identities	8 (22.9)
Proportion in Middle School	19 (54.3)
Age (Mean SD)	14.4 years (1.84)

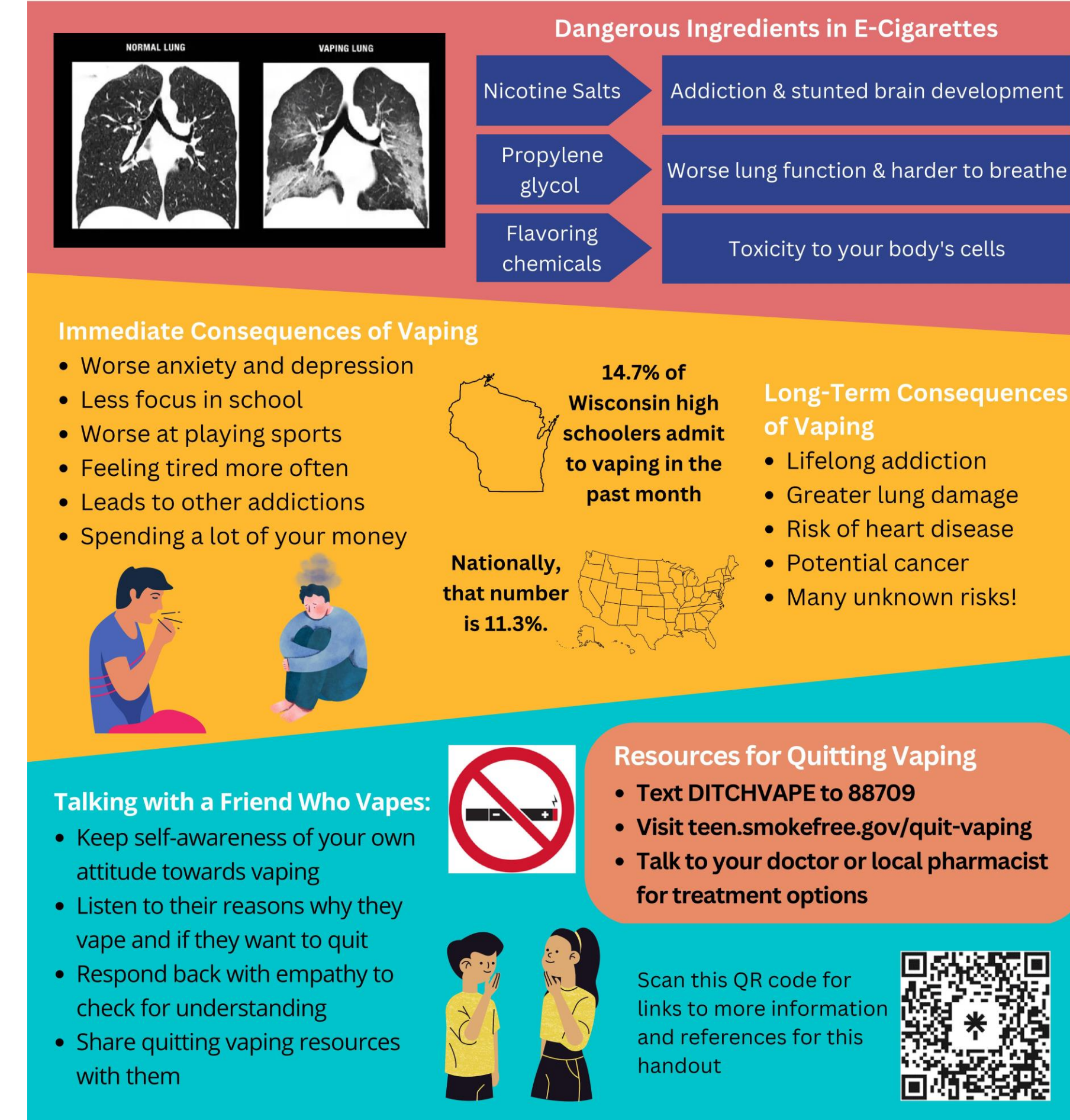
References

1. Youth and Tobacco Use. National Center for Chronic Disease Prevention and Health Promotion Office on Smoking and Health. Accessed June 1, 2021. www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/index.htm
2. Quick Facts on the Risks of E-cigarettes for Kids, Teens, and Young Adults. National Center for Chronic Disease Prevention and Health Promotion Office on Smoking and Health. Accessed July 27, 2023. https://www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html
3. Berenbrok LA, Tang S, Gabriel N, et al. Access to community pharmacies: A nationwide geographic information systems cross-sectional analysis. *J Am Pharm Assoc* (2003). 2022;62(6):1816-1822.e2. doi:10.1016/j.japh.2022.07.003
4. Mitchell TB, Shah S, Zink L. The Need for Nationwide Electronic Cigarette Smoking Cessation Curricula Across the Healthcare Spectrum. *Am J Pharm Educ*. 11 2021;85(10):8212. doi:10.5688/ajpe8212

E-Cigarettes & Vaping

What Teens Need to Know

Vaping is NOT SAFE for children, adolescents, and young adults.



Dangerous Ingredients in E-Cigarettes

- Nicotine Salts: Addiction & stunted brain development
- Propylene glycol: Worse lung function & harder to breathe
- Flavoring chemicals: Toxicity to your body's cells

Immediate Consequences of Vaping

- Worse anxiety and depression
- Less focus in school
- Worse at playing sports
- Feeling tired more often
- Leads to other addictions
- Spending a lot of your money

14.7% of Wisconsin high schoolers admit to vaping in the past month

Nationally, that number is 11.3%.

Long-Term Consequences of Vaping

- Lifelong addiction
- Greater lung damage
- Risk of heart disease
- Potential cancer
- Many unknown risks!

Talking with a Friend Who Vapes:

- Keep self-awareness of your own attitude towards vaping
- Listen to their reasons why they vape and if they want to quit
- Respond back with empathy to check for understanding
- Share quitting vaping resources with them

Resources for Quitting Vaping

- Text DITCHVAPE to 88709
- Visit teen.smokefree.gov/quit-vaping
- Talk to your doctor or local pharmacist for treatment options

Scan this QR code for links to more information and references for this handout

Conclusion

- Implement short, informative educational tools to cater to the interests of adolescents.
- Distribute education tools in a variety of settings (i.e., doctor's offices, pharmacies, schools, stores).
- Increase access to educational tools for adolescents by distributing resources about quitting treatment.
- Pharmacists can play a role in educating adolescents on e-cigarettes by integrating educational tools into their practice.

Acknowledgements

Authors would like to thank all the CRoME Lab members for their contribution to this project. The authors would also like to thank Tyler McCarthy and Sara Nadi for reviewing the poster presentation.