Vaping Exposure in Children

Results from a HERCULES Pilot Project measuring children's exposure to secondhand e-cigarette vapor

What did we want to know?

When parents vape, do vaping substances get into their children's bodies?

Is there an easier way than using blood samples to detect vaping substances in children?

What did we do?

We received saliva, blood, and breath samples from:

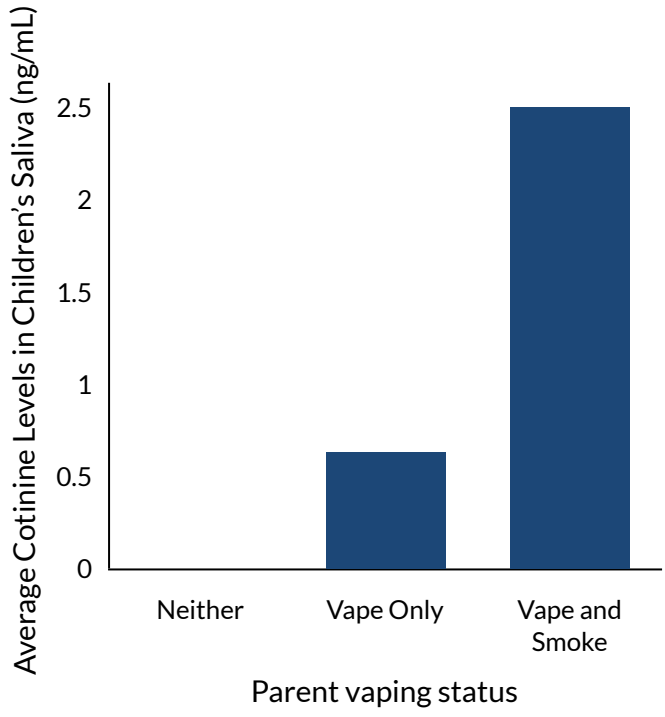
- 22 children whose parents vape daily
  (9 vaped exclusively & 13 both vaped and smoked)
- 26 children whose parents neither vape nor smoke traditional cigarettes

We measured levels of vaping chemicals in these samples and looked for ones that had higher or lower levels than expected.

We also measured cotinine levels (a measure of nicotine).

What did we find?

- Children of parents who vape daily have vaping chemicals in the their blood, saliva, and breath
- Children are exposed to nicotine and other chemicals even if their parents only vape and do not smoke
- Children of parents who vape and smoke had the highest cotinine levels followed by children of parents who only vape
- Vaping substances were detectable in saliva and breath samples, suggesting that these easy-to-collect samples may be an effective way to detect vaping substances in children's bodies



What does this mean for you?

Based on what we know about the negative health impacts of smoking cigarettes around children and the findings from this study, parents should reduce or stop vaping in the house and car when children are present.

For information about creating a smoke and vape-free home or quitting smoking or vaping:

- Smoke-Free Homes website: http://smokefreehomes.emory.edu/
- CDC website for smoke-free homes: https://www.cdc.gov/tobacco/secondhand-smoke/home.html
- CDC website on e-cigarettes: https://www.cdc.gov/tobacco/e-cigarettes/index.html
- Call 1-800-QUIT-NOW

Data from a research study conducted by HERCULES faculty members Jeannie Rodriguez PhD, RN, APRN and Irene Yang PhD, MSN, RN

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