

Impact of COVID-19 on Individual Behavior and Household Exposure Related to Smoking, Vaping and Marijuana Use Among Adults with Asthma



PRESENTER:
Luz Huntington Moskos
PhD, RN, CPN

RATIONALE

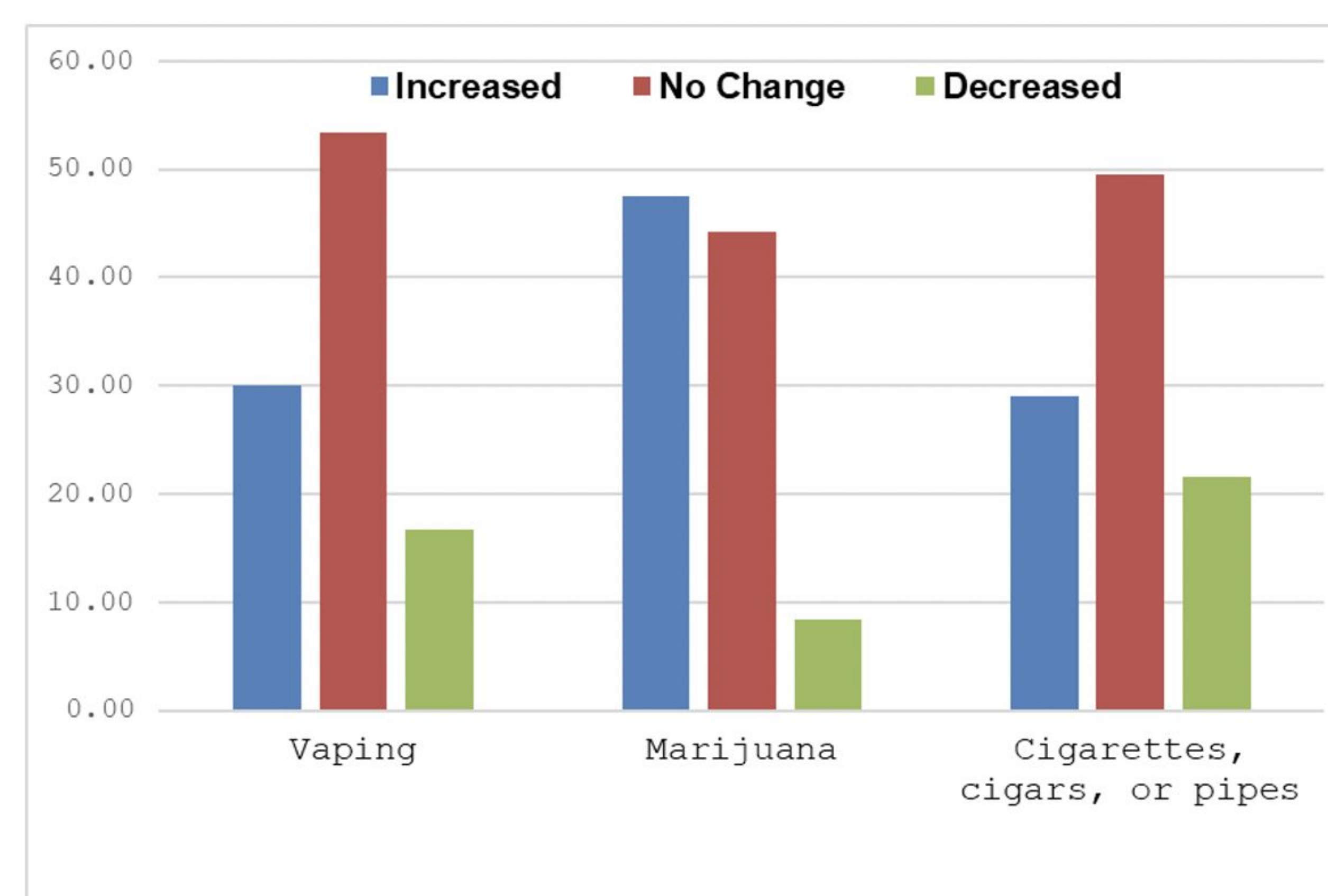
Across the United States, household, employment, and social routines have been substantially altered due to the emergence of the COVID-19 pandemic. Altered routines may drive changes in smoking behaviors. The purpose of this study was to examine self-reported behavior changes and household exposures related to tobacco, vaping, and marijuana use during the COVID-19 pandemic in a sample of adults with asthma.

METHOD

- An online, cross-sectional survey was conducted with those ≥ 18 years old, currently diagnosed with asthma, and able to read and write in English.
- The survey invitation was shared via email, social media, and ResearchMatch.
- Participants completed Asthma Control Test (ACT) and items regarding smoking behavior before and since the pandemic.
- Items to assess cigarette, marijuana, and vaping use included:
 - “Do you smoke cigarettes?”
 - “During the past 4 weeks, did you use marijuana/cannabis (e.g. joint, blunt, pipe, bong)?”
 - “During the past 4 weeks did you use vaping products?”
- Questions also assessed presence of secondhand smoking behaviors in the home and if these behaviors had changed since the COVID-19 pandemic.
- ACT scores were dichotomized: ≤ 19 (uncontrolled asthma) vs. ≥ 20 (controlled asthma).

Substantial increases in smoking behaviors (tobacco, vaping, & marijuana use) noted after onset of COVID-19 pandemic.

Changes in Household Smoking Since COVID-19



Associations of Smoking and Household Smoking with Reduced Asthma Control (ACT ≤ 19)

	Crude		Adjusted ^a	
	OR	95% CI	OR	95% CI
Cigarettes	7.69	3.15-18.81	5.79	2.28-14.66
Marijuana	1.66	1.01-2.50	1.54	0.99-2.41
Vaping	3.01	1.58-5.74	2.15	1.06-4.39
Household Smoking	2.68	1.71-4.21	2.07	1.27-3.39

^a Adjusted for age, education, sex, race/ethnicity, and residential area

Smoking Behaviors & Household Smoking

Variable	n	%
Cigarette Smoking		
Yes	35	4.40
No	760	95.60
Use of Vaping Products in Past 4 Wks		
Yes	43	5.42
No	751	94.58
Use of Marijuana/Cannabis in Past 4 Wks		
Yes	111	13.96
No	684	86.04
Current Household Smoking Cigarettes, Cigars, or Pipes		
Yes	93	11.70
No	702	88.30
Current Household Marijuana Smoking		
Yes	120	15.09
No	675	84.91
Current Household Vaping		
Yes	61	7.69
No	732	92.31

Some Additional Information to Share...

STRENGTH

- One of the first studies to address the secondary effects of COVID-19 on the home environment in adults with asthma.

LIMITATIONS

- Cross-sectional study with convenience sample.
- Limited to English speakers with relatively high socioeconomic status and low rates of tobacco use compared to the general population.

CONCLUSIONS

- The onset of the COVID-19 pandemic in the US and the resulting routine changes have brought about substantial increases in smoking behavior (tobacco, vaping, and marijuana).
- In addition to supporting the well-known impact of cigarette use on asthma, individual use of marijuana and vaping were associated with uncontrolled asthma.
- Healthcare providers should remain diligent in asking about smoking behavior changes in the household during the COVID-19 pandemic.



Huntington-Moskos, L., Nyenhuis, S., Polivka, B., & Eldeirawi, K.