

## Significance of Problem

- The college-aged demographic is at an increased risk for adverse effects surrounding the use of electronic vaping devices (Kenne et al., 2017).
- Youth e-cigarette rates were 20.9% in 2018 (Campaign for Tobacco Free Kids, 2021), and the most recent rate is 11.8% (ACHA, 2021).
- Although the rates have gone down, there is still risk for the college-aged population and intervention is necessary.

## Purpose and Framework

- To analyze the use of electronic vaping devices among college students after the Anti-Vaping Ongoing Information Dissemination (AVOID) program.
- Using the Transtheoretical Model, assessment of vaping behavior changes was conducted after the AVOID program was implemented (Prochaska & DiClemente, 1984).

## Methods

- Approval:** University IRB  
**Setting:** Private, faith-based Midwestern university  
**Design:** 900 undergraduate students were invited to participate in a survey conducted through SurveyMonkey® after the implementation of the AVOID dissemination program which included 8 campus strategies.  
**Sample:** Undergraduate students  
*N* = 464, response rate 51.6%

## AVOID Program Activities

- Posters summarizing our research findings displayed around the campus
- YouTube video narrating the posters presented
- Social Media posts on Instagram as well as newspaper articles
- Tables set up to present findings to people walking by
- Campus TV Messages displaying findings
- Presented work at Fraternity/Sorority Life Meetings
- Passed out stress balls/information regarding vaping at campus sporting events



Senior BSN Students: Shamus Marr, Alaina Meyer, Lexi Przybylski, Kaylinn Woolever  
 Juniors: Marianna Baca, Asia Janeczek, Estelle Niego  
 Sophomores: Isabella Dietrich, Nick Ridder  
 Theresa A. Kessler, PhD, RN, ACNS-BC, CNE FAAN; Lynette Rayman, DNP, RN, CNE  
 College of Nursing & Health Professions

## Percent of Respondents by College (*N* = 464)

Arts and Sciences	41.04%	Nursing & Health Professions	30.45%
Business	9.72%	Christ College	2.16%
Engineering	16.63%		

## Sample Characteristics Survey (*N* = 464)

Female:	59.7%	Year in School	
Transgender Female:	0.2%		
Male:	37.3%		
Transgender Male:	0.7%		
Gender Variant/Non-Conforming:	2.2%		
Greek-affiliated:	28.7%		
Student athlete:	4.3%		
Exposed to Someone Who Vapes:	46.8%		



## Rate of AVOID Program Exposure

Posters	74.27%
Social media	40.53%
Tabling displays	24.51%
Campus TV messages	19.90%
FSL meetings	9.71%
Youtube video	8.50%
Newspaper Article	8.01%
Sporting events	7.77%

## Stages of Change (*n* = 231)

(included those who vaped in last 30 days and beyond last 30 days)

Quitting in 30 days	54.11%
Plan to quit next 6 months	7.36%
Think about quit, but no plan	3.90%
Think about cutting back	8.23%
Do not want to stop	7.79%
Not a problem, not quitting	18.61%



## Vaping Behaviors (*N* = 464)

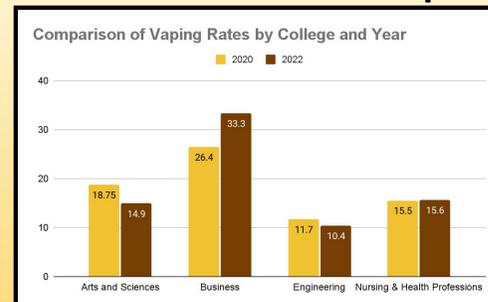
<b>Vaping habits since arriving to campus</b>		<b>Exposure to electronic vaping devices</b>	
Vaped	15.8%	Family home	19.4%
Increased	8.9%	Parties	68.3%
Decreased	8.7%	Campus home	26.3%
Same	11.0%	Outside campus building	42.0%
Not applicable	71.4%	Work	19.4%
		Inside campus building	15.7%
		Social setting	76.0%

**Vaping in the last 30 days (2020, *n* = 53/299) (2022, *n* = 73/464)**

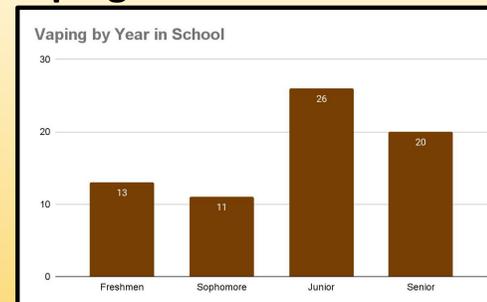
Yes	18%	15.8%
No	82%	84.2%

Vaping rates in 2022 were lower than baseline rates in 2020, but no significant difference ( $\chi^2 = 0.494$ ).

## Description of Vaping Use



There is a significant difference in vaping rates between the colleges in 2020 and 2022 ( $\chi^2 = 15.70$ ,  $p = 0.003$ ). (Current data were compared to baseline data collected in 2020).



Results demonstrated upperclassmen vaped more than lower classmen.

## Conclusions

- A majority of participants responded that the information presented had little to no impact or effect on their vaping habits. However, over half of the participants have a plan to quit vaping following the AVOID program.
- Following the AVOID program, 86.7% of participants recognized the dangers of vaping and would recommend others to quit.
- Progress is being made on getting our message across our college campus regarding the dangers of vaping through further educational efforts.

## Recommendations

- Continue to work with the student health center tailoring a more indepth section regarding e-cigarettes and vaping.
- Conduct additional research into the change of age requirement and its impact on the ability to buy e-cigarettes.
- Conduct more research into the impact of flavor bans on vaping usage.