

## Higher Numbers and Closer Proximity of Tobacco Retailers to Schools in Lower Socioeconomic Areas in San Diego County

**P. Munoz**<sup>1</sup>, A. N. Perryman<sup>2</sup>, K. Emory<sup>3</sup>, T. A. Morris<sup>4</sup>, P. R. Montgrain<sup>5</sup>, L. E. Crotty Alexander<sup>6</sup>;  
<sup>1</sup>University of California San Diego, San Diego, CA, United States, <sup>2</sup>University of California San Diego, La Jolla, CA, United States, <sup>3</sup>CSU Dominguez Hills, Carson, CA, United States, <sup>4</sup>Univ of California At San Diego Med Ctr, San Diego, CA, United States, <sup>5</sup>VA San Diego Healthcare System, San Diego, CA, United States, <sup>6</sup>Medicine, UCSD and VASDHS, San Diego, CA, United States.

**Rationale:** Around three million middle and high school students currently use tobacco products in the United States, with electronic (e)-cigarettes the most widely used tobacco product with over 1.5 million youth currently vaping and over 25% vaping e-cigarette products daily. Thus, our youth continue to be burdened by tobacco consumption throughout the United States. With an explosive increase in tobacco products, including electronic (e)-cigarettes, youth are now at higher risk of tobacco usage, addiction, and stunted mental and physical development, as around 90% of smokers begin before the age of 18. Twenty percent of Californian youth are tobacco users, with e-cigarettes being the most prominent, specifically flavored products, despite the various bans on these goods. Here we assessed the proximity of tobacco retail locations to middle and high schools in two school districts in southern San Diego. **Methods:** Google maps was used to locate qualifying retail locations within a one mile radius of middle and high schools. The following covariates were included: average income levels; hispanic enrollment; minority enrollment; and total economic disadvantage, which includes the percentage of students who receive free or reduced lunch, and R Studio was used to analyze the results. **Results:** Using univariable analysis, we found an association between: 1. Hispanic enrollment, and 2. Total economic disadvantage with an increase in tobacco retail locations near middle and high schools. Furthermore, there was an association between lower average household income and higher numbers of tobacco retailers near schools. In the multivariable analysis, only total economic disadvantage remained significant, showing a higher concentration of tobacco retailers near schools with greater financial disadvantages. **Conclusions:** We found that economically disadvantaged middle and high schools had higher numbers of retailers selling tobacco in their vicinity. Thus, students at these schools are at higher risk of initiating tobacco and becoming life-long users. These findings serve as an important starting point in gaining further insight and understanding around where and how youth are accessing tobacco in southern San Diego, and how tobacco is continuing to disproportionately affect certain communities. Children should continue to be a core focus regarding tobacco, continuing with mixed or qualitative studies to understand the ease of accessibility of tobacco products within this vulnerable community. Further enforcements and regulations should be made to combat these findings to ensure these harmful products are not easily accessible, targeted and advertised toward youth around their schools neighborhoods.

This abstract is funded by: TRDRP SVFSI T32SR5359 and T34IR8251; NHLBI K24HL155884; VA Merit Award 1I01BX006447

