

Presented at the ACMT Annual Scientific Meeting 2021 – Virtual

Published in J Med Tox 2021; 17:99

## **016. A Look Back: E-Cigarette, or Vaping, Product Use Associated Lung Injury (EVALI) Before and After the COVID-19 Pandemic**

Cherie Obilom<sup>1</sup>, Joshua McFalls<sup>1</sup>, Lindsey Claire Epperson<sup>1</sup>, Kerollos Shaker<sup>1</sup>, Jeffrey Brent<sup>2</sup>, Paul Wax<sup>1,3</sup>, Kim Aldy<sup>1,3</sup>, On Behalf of the ToxIC Investigators Consortium (ToxIC)

<sup>1</sup> *University of Texas Southwestern Medical Center, Dallas, TX, USA.*

<sup>2</sup> *University of Colorado School of Medicine, Denver, CO, USA.*

<sup>3</sup> *American College of Medical Toxicology, Phoenix, AZ, USA.*

**Background:** Since the rise of the COVID-19 crisis in February 2020, attention has fallen away from the EVALI pandemic. However, EVALI cases continue to present to hospitals around the country.

**Research Question:** Has there been a change in demographics and vaping use patterns of EVALI before and after the COVID-19 pandemic?

**Methods:** This is a retrospective review of vaping cases entered into the Toxicology Investigators Consortium (ToxIC) Registry from September 2019 to October 2020. Cases were analyzed in two groups, those reported before February 2020 and those reported after this date. Descriptive statistics are used to compare demographics and vaping use patterns before and after the COVID-19 pandemic.

**Results:** A total of 74 vaping cases were identified, with 20 cases entered after the COVID-19 pandemic started. No cases entered AC reported COVID-19 positive status. The average age before COVID-19 (BC) was 22.5, and after COVID-19 (AC) was 19.4. The majority of patients BC were in the 19–65 age group (63%), but AC most patients were 13–18 age group (80%). Sex BC and AC comprised mostly of males (66.7% and 80% respectively). THC only use BC and AC decreased from 46.3% vs 35%, respectively, while nicotine only use nearly doubled from 5.6% vs. 10%. Reported use of both THC and nicotine did not change significantly, increasing slightly from 33.3% BC to 35% AC. Two deaths were reported after vaping exposure BC, but no deaths have been reported to date AC.

**Conclusion:** EVALI has persisted through the COVID-19 pandemic, with the majority of vaping cases reported AC comprising of adolescents. This data suggests vaping has remained popular with adolescents despite the negative national attention and decreased opportunity for social interaction.