

## EDITORIAL



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# Halting the E-cigarette Epidemic

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The rising use of electronic cigarettes (e-cigarettes), particularly among the youth, is a public health concern. Among adolescents, the global prevalence of ever using an e-cigarette is 16.8% (95% CI 10.6–25.6), while 4.8% (95% CI 3–7.6) of those who have used an e-cigarette in the past 30 days or are currently using them.<sup>1</sup> The prevalence of current e-cigarette use among Filipinos aged 13 to 15 is 14.1% (95% CI 12.4%, 15.8%), while the prevalence of ever e-cigarette use is 24.6% (95% CI 22.4%, 26.9%), which is double the 2015 prevalence.<sup>2</sup>

E-cigarettes, also known as vapes or electronic nicotine delivery systems (ENDS), were initially introduced as a potential aid for smoking cessation among adults. E-cigarettes, promoted by the tobacco and nicotine industries as safer than tobacco, have increased the use among both smokers and those who have never smoked. The use of flavorful agents and colorful packaging is being employed to aggressively market ENDS, particularly among the youth. For World No Tobacco Day 2025, the World Health Organization and other public health organizations focused on protecting the youth, as they are the target of the tobacco and nicotine industries.

E-cigarettes, although marketed as harmless or safe alternatives to tobacco, have been associated with adverse health effects. Their components induce inflammation, oxidative

stress, and dysregulation of both innate and adaptive immune responses.<sup>3</sup> Propylene glycol and vegetable glycerin induce lung inflammation and airway irritation.<sup>4</sup> Nicotine disrupts the mucociliary clearance and increases the likelihood of airway inflammation and persistent infection.<sup>5</sup> Flavoring additives, like the cinnamaldehyde, cause macrophage-phagocytosis impairment.<sup>6</sup> The immunological compromise directly contributes to the exacerbation of existing allergic conditions, such as asthma and contact dermatitis, and increases overall susceptibility to various infections.

We should proactively counsel our patients, especially those with pre-existing allergic or respiratory conditions, against the adverse impacts of e-cigarette use. From a public health perspective, strict implementation of policies should be done to limit the accessibility and exposure of the youth to e-cigarettes. Republic Act No. 11900, also known as the Vaporized Nicotine and Non-Nicotine Products Regulation Act, is an existing law in the Philippines that regulates vaporized nicotine and non-nicotine products, as well as novel tobacco products, to protect health and prevent sales to minors.<sup>7</sup> The Philippine Society of Allergy, Asthma, and Immunology strongly supports the implementation of smoke-free legislation in our country.<sup>8</sup> Educational campaigns must be done to communicate the documented risks of e-cigarettes.



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