

Peer Review

Review of: "Exposure to Benzene, Toluene, and Xylenes from Electronic Cigarette Use Compared to Working Environment Permissible Exposure Limits: A Risk Assessment Analysis of a Recent Publication"

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The manuscript presents a critical analysis of an article recently published by Svarch-Pérez et al. The authors demonstrate the methodological bias, mainly focusing on the erroneous conversions and the irrelevant comparisons that led to interpretational issues.

Although the manuscript is well articulated and provides a more accurate risk assessment of user exposure to some e-cigarette emissions, like benzene, toluene, or xylenes, a few comments should be considered by the authors:

1) It has been proposed to assume a liquid specific weight of 1. This is incorrect as the main constituent of the e-liquid is not pure water, which has a density of 1 kg/L, rather propylene glycol and vegetal glycerin, with a typical density of e-liquids ranging from 1.1 to 1.3 kg/L.

2) Whereas the authors mention that working environment exposure limits like PELs are determined for a continuous exposure of an 8-hour working shift and that exposure to vape emissions is intermittent, they are comparing calculated daily exposures with PEL values after the use of conversion factors in their risk assessments. This assessment is therefore limited and does not consider the use of uncertainty factors or corrective factors. Effectively, to protect the larger part of the population, individual susceptibility and the absence of a controlled environment should be accounted for. Moreover, PELs have been calculated for workers that are exposed 5 days per week, whereas consumers will vape 7 days per week.

Declarations

Potential competing interests: No potential competing interests to declare.