



# E-cigarettes: Where there is imitation smoke, there may be authentic fire

By Michael H. Weier • February 11, 2015

Workers' compensation claims for occupational asthma and other pulmonary conditions typically obtain a history of the claimant's environmental exposures, including cigarette smoking or other tobacco use. Workers' compensation administrators are well-advised to also obtain a history of the claimant's e-cigarette use.

Manufacturers and their advertisers tout e-cigarettes as a healthier alternative to conventional cigarettes and other tobacco products.<sup>1</sup> A recent study, however, suggests otherwise.

An electronic cigarette (e-cigarette) is a battery-powered heating element that atomizes a liquid mixture of propylene glycol, glycerin, nicotine and various flavorings. E-cigarettes produce an aerosol, referred to as a vapor, rather than smoke.<sup>2</sup> They do not contain tobacco and are not associated with the addictive qualities of tobacco use.<sup>3</sup> A research review and assessment, however, notes an otherwise overlooked danger of e-cigarette vaping.

A report issued in the *New England Journal of Medicine* (NEJM) presented results of an analysis of aerosolized commercial e-liquid cigarettes.<sup>4</sup> The researchers identified significant exposure to formaldehyde from e-cigarette vaping. Moreover, the report declares long-term vaping and inhaling formaldehyde-releasing agents is associated with an incremental cancer risk between five and fifteen times greater than smoking one pack of conventional cigarettes per day. Moreover, in addition to increased risk of cancer, exposure to formaldehyde has been associated with respiratory impairments, asthma, chronic obstructive pulmonary disease and other pulmonary function conditions.<sup>5</sup>

The study demands further research to confirm the results. Nonetheless,

*Continued*



**Workers' compensation administrators are well-advised to obtain a history of the claimant's e-cigarette use**



**Michael H. Weier is firm President and Managing Partner at Reinisch Wilson Weier PC. He may be reached at 503.452.7268 or michaelw@rwwcomplaw.com.**

## Where there is imitation smoke, there may be authentic fire (continued)

workers' compensation administrators should ensure the medical provider obtains a history of a claimant's e-cigarette vaping in addition to tobacco use, particularly when considering a claim for respiratory impairment or pulmonary conditions, such as occupational asthma. ■

---

<sup>1</sup> [www.smokesafely.com](http://www.smokesafely.com)

<sup>2</sup> Grana, R. Benowitz, N., & Glantz, S.A. (2014). "E-Cigarettes: A Scientific Review." *Circulation*, 129(19), 1972-1986. Doi:10.1161/CIRCULATIONAHA.114.007667.

<sup>3</sup> O'Connor, RJ (March 2012). "Non-cigarette tobacco products: what have we learnt and where are we headed?" *Tobacco control* 21 (2): 181-90. doi:10.1136/tobaccocontrol-2011-050281.

<sup>4</sup> Jensen, R. Paul, et al, "Hidden Formaldehyde in E-Cigarette Aerosols," *New England Journal of Medicine*, Vol. 372:392 - 394, No. 4 (January 22, 2015). <http://www.nejm.org/doi/full/10.1056/NEJMc1413069>

<sup>5</sup> Akbar-Khanzadeh, PhD, et al, Formaldehyde exposure, acute pulmonary response, and exposure control options in a gross anatomy laboratory, *American Journal of Industrial Medicine*, Vol. 26, Issue 1 (January 19, 2007); Krzyzanowski, Michal, et al, Chronic respiratory effects of indoor formaldehyde exposure, *Environmental Research*, Vol. 52, Issue 2, (August 1990); Alexandersson, Rolf & Hedenstierna, Göran, Pulmonary Function in Wood Workers Exposed to Formaldehyde: A Prospective Study, *Archives of Environmental Health: An International Journal*, Vo. 44, Issue 1, (1989).

Online and printed firm materials are for educational purposes only. Please consult your attorney for legal advice on a specific claim, case or issue.



**Reinisch  
Wilson Weier PC**  
LAW OFFICES

© 2015 Reinisch Wilson Weier PC. All rights reserved.

**PORTLAND:** 10260 SW Greenburg Rd., Suite 1250, Portland, OR 97223 • T 503-245-1846 / F 503-452-8066  
**SEATTLE:** 159 South Jackson Street, Suite 300, Seattle, WA 98104 • T 206-622-7940 / F 206-622-5902  
[www.rwwcomplaw.com](http://www.rwwcomplaw.com)