

Tuesday, May 31st, 2016

## Electronic cigarettes cause similar damage to lungs as tobacco cigarettes

It is now becoming conclusive that electronic cigarettes are harmful to health. Though there is much debate in the media and anti-smoking pressure groups about the health effects of e-cigarettes, more and more research is showing the harm e-cigarettes cause. In a just-published study in the Journal of Respiratory Research, a study<sup>1</sup> conducted by scientists at the University of Manchester found that e-cigarette vapour causes inflammation on the lungs similar to that of tobacco smoke.

The researchers found inflammatory markers in e-cigarette vapour have a similar effect to those produced by tobacco smoking which cause chronic obstructive pulmonary disease (COPD).

This inflammation is caused by e-cigarette vapour whose contents contain also many carcinogens, such as "saturated aldehyde propanol, the carcinogens. 2, 3-benzofuran and allylthiourea and the respiratory toxin styrene ...[and] acrolein in the vapour extract



but not the e-liquid itself... Acrolein is also a constituent of tobacco smoke." [Ref 1, p8]

E-cigarettes are fast falling under the regulation of government health agencies around the world. In the United States, the Food and Drugs Administration (FDA) now regulates the manufacture and sale of e-cigarettes in line with tobacco production and sale.<sup>2</sup> The European Union, as of 20<sup>th</sup> May 2016, has introduced legislation to regulate the content and marketing of these devices,<sup>3</sup> especially as evidence now shows that e-cigarettes do not help people quit smoking.<sup>4</sup>

Although tobacco cigarettes are recognized as deadly,<sup>5</sup> electronic cigarettes are clearly not the safe alternative they were once presumed to be. E-cigarettes should be treated as toxic and as addictive as tobacco cigarettes.

<sup>1</sup> A. Higham et al., (2016), "Electronic cigarette exposure triggers neutrophil inflammatory responses," *Journal of Respiratory Research* (17:56); <u>http://respiratory-research.biomedcentral.com/articles/10.1186/s12931-016-0368-x</u>

<sup>2</sup> http://www.fda.gov/TobaccoProducts/Labeling/ProductsIngredientsComponents /ucm456610.htm

<sup>3</sup> <u>http://europa.eu/rapid/press-release\_IP-16-1762\_en.htm</u>

<sup>4</sup> There are a number of studies now showing that e-cigarette use does not help people quit. For example, see: W. El-Delaimy et al. (2015), E-Cigarette Use in the Past and Quitting Behavior in the Future: A Population-Based Study, American Journal of Public Health, Published online ahead of print April 16, 2015: e1–e7. doi:10.2105/AJPH.2014.302482 <u>http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2014.302482</u>

<sup>5</sup> The World Foundation for Natural Science (May 2016), "Tobacco Products have no place in this world anymore – Smoking Fact Sheet" <u>https://www.naturalscience.org/publications</u>/tobacco-products-have-no-place-in-this-world-anymore/

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