



TITLE: Propylene Glycol, Glycerin, and Polyethylene Glycol in E-cigarettes and Other Aerosols: Safety

DATE: 18 July 2012

RESEARCH QUESTION

What is the clinical evidence regarding the safety of propylene glycol, glycerin, or polyethylene glycol inhalation from e-cigarettes or other aerosols?

KEY MESSAGE

No relevant health technology assessment reports, systematic reviews, meta-analyses, randomized controlled trials, or non-randomized studies regarding the safety of inhaled propylene glycol, glycerin, or polyethylene glycol from e-cigarettes or other aerosols was identified.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2012, Issue 7), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI (Health Devices Gold), Canadian and major international health technology agencies, as well as a focused Internet search. No methodological filters were applied to limit retrieval by publication type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2007 and July 10, 2012. Internet links were provided, where available.

RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials and non-randomized studies.

No relevant health technology assessment reports, systematic reviews, meta-analyses, randomized controlled trials, or non-randomized studies regarding the safety of propylene

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glycol, glycerin, or polyethylene glycol inhalation from e-cigarettes or other aerosols were identified. Additional references of potential interest are provided in the appendix.

Health Technology Assessments

No literature identified.

Systematic Reviews and Meta-analyses

No literature identified.

Randomized Controlled Trials

No literature identified.

Non-Randomized Studies

No literature identified.

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APPENDIX – FURTHER INFORMATION:

Additional References

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2. Wagener TL, Siegel M, Borrelli B. Electronic cigarettes: achieving a balanced perspective. *Addiction*. 2012 Apr 4.
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3. Agency for Toxic Substances and Disease, National Center for Environmental Health. Public health statement for ethylene glycol and propylene glycol encyclopedia of earth [Internet]. In: Cleveland CJ, editor. *Encyclopedia of Earth*. Washington (DC): Encyclopedia of Earth; 2008 Aug 22 [cited 2012 Jul 16]. Available from:
http://www.eoearth.org/article/Public_Health_Statement_for_Ethylene_Glycol_and_Propylene_Glycol.