

New method measures nicotine delivery from e-cigarettes

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The effectiveness of e-cigarettes as a smoking substitute will likely rely on whether they can consistently provide the amount of nicotine a smoker needs to resist the desire to return to traditional cigarettes.

A recent study that evaluated a new method for measuring <u>nicotine</u> <u>delivery</u> from e-cigarettes found that 'first-generation' e-cigarettes, which use 'cartomizers', deliver nicotine less consistently than latergeneration e-cigarettes, which use 'atomizers' that vaporize liquid contained in a refillable tank.

The consistency of nicotine delivery from the atomizers was similar to nicotine inhalers and <u>tobacco cigarettes</u> and within the acceptable limits for medicinal nebulizers.

"Since consistency in nicotine delivery from e-cigarettes is a requirement of the EU Tobacco Products Directive, I believe the protocol proposed in this study is feasible and reliable, and can be used for regulatory purposes," said Dr. Konstantinos Farsalinos, lead author of the *Addiction* study. "Moreover, this study provides evidence that newergeneration e-cigarette products perform better and are likely to be more effective as smoking substitutes."

More information: Konstantinos E. Farsalinos et al. Protocol proposal for, and evaluation of, consistency in nicotine delivery from the liquid to the aerosol of electronic cigarettes atomizers: regulatory implications, *Addiction* (2016). DOI: 10.1111/add.13299



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