E-cigarette data don't end debate

say they are less harmful than tobacco and can help people quit smoking. Some critics of e-cigarettes say they are re-normalizing smoking and are particularly attractive to youth, including those who don't smoke. When you look at the available data on e-cigarette use, however, the winners of this debate become clear. The proponents — and the opponents.

"The reason that this is such a difficult debate is that they are both right," said David Hammond, an associate professor in the School of Public Health and Health Systems at the University of Waterloo. "These are potentially helpful to smokers but these are potentially risky to kids. The future will be determined by how these things are regulated and which direction these products go."

Hammond coauthored a recent paper on e-cigarette use in Canada, based on data from Statistics Canada's Canadian Tobacco, Alcohol and Drugs Survey. Both proponents and opponents of e-cigarettes could use these numbers to bolster their arguments, said Hammond. Consider, for example, the statistics on e-cigarette use among youth.

If you are against e-cigarettes, you could note that nearly one in five Canadians age 15–19 tried them in 2013, which works out to about 425 000 teenagers. The use among nonsmokers in this age range, at 13.6%, is particularly troubling, considering that only about 1% of nonsmoking adults tried e-cigarettes. But if you were a fan of these devices, you could point out that only 2.6% of those youth used them in the past 30 days, which suggests they are something kids



Many youth appear curious about e-cigarettes but few are using them regularly.

experiment with but don't use regularly.

The data also suggest there is little evidence, yet, that many smokers of any age are switching entirely to e-cigarettes, so their potential as a smoking-cessation product is difficult to gauge, said Hammond. The big question is whether that will change as the products evolve, and devices containing nicotine become more effective at delivering the drug into the lungs, bloodstream and brain. The problem is, the stronger hit of nicotine may also prove a selling point to those who aren't looking to quit smoking.

"That's the dilemma," said Hammond. "The thing that would make them more appealing as an alternative for smokers could also make them more appealing to youth."

One thing that is clear from the data is

that a strong market exists for e-cigarettes. Overall in 2013, about 2.5 million Canadians, or 8.5% of the population age 15 and older, used these products at least once. Unfortunately, the regulatory environment in Canada prohibits the marketing of e-cigarettes containing nicotine as smoking-cessation aids, said Hammond, so it is not possible to target the people who would benefit most from them.

"The problem in Canada is that we have a pseudo-ban that is completely unenforced, which is not preventing youth uptake; nor is it providing smokers with any type of product standards," said Hammond. "It is, I would argue, perhaps the worst of all situations." — Roger Collier, *CMAJ*

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