



June 2017

## Research on Electronic Cigarettes and Waterpipe (RECIG-WP)

Electronic cigarette (e-cigarette) use has grown exponentially in the past decade and the use of tobacco and non-tobacco (or herbal) waterpipes is on the rise, especially among youth and young adults. Concerns surround youth initiating e-cigarette and waterpipe use and the relationship of these products to tobacco cigarette and marijuana use. Large gaps exist in scientific knowledge about the use, health risks/effects and marketing of e-cigarettes and waterpipe.

Ontario has adopted measures to ban e-cigarette sales to minors, ban the use of e-cigarettes where tobacco smoking is banned and restrict point of sale promotion. Some municipalities have adopted measures restricting where waterpipes can be used.

The goal of the Research on Electronic Cigarettes and Waterpipe (RECIG-WP) study is to inform e-cigarette and waterpipe policies and programs aimed at health protection and promotion. The general research questions are:

1. What are the cultures and environments that promote the initiation or maintenance of electronic cigarettes and waterpipe use, particularly among youth or young adult sub-populations?
2. What is the relationship (if any) of e-cigarettes and/or waterpipes to tobacco use, to each other, and/or to marijuana?
3. How effective are e-cigarettes in helping people quit or reduce tobacco use? What is the relationship, if any, between e-cigarettes as a cessation aid and other cessation aids?
4. How are e-cigarettes marketed to various sub-populations?
5. What is the exposure, and what are the effects of exposure, to marketing of e-cigarettes on youth, young adults and older adults (including advertising, packaging, social media, point of sale)?
6. What are the health effects of short-term, long-term and/or chronic exposure to non-tobacco products, or herbal shisha, use in waterpipes?

**Key Message:** OTRU's research on e-cigarettes and waterpipes—including product use and co-use, marketing and health effects—will provide evidence for effective policies and programs that protect and promote the health of Ontarians.

## Research Activities

To inform policy and practice development and refinement, the project will generate new knowledge through a number of activities.

### Knowledge Synthesis

A systematic review of the literature will examine:

- Cultures and environments that promote e-cigarette and waterpipe use and initiation
- The relationship of e-cigarettes and/or waterpipes to each other and/or marijuana (hereinafter products)
- The effectiveness of products (containing nicotine) as a cessation aid
- Product marketing
- Effects of product exposure

The knowledge synthesis will identify key mechanisms and contextual factors that affect outcomes and explain how and why outcomes vary for sub-groups.

### Young Adult and Adult Longitudinal Panels

Product use is rapidly evolving, underlining the need for continuing data collection. The RECIG-WP adult panel will recruit and survey 2000 product users, while the young adult panel will recruit 1000 respondents. Recruitment will be done online via invitation to existing panels, and will be supplemented with convenience sampling using Facebook and other social media, as well as by street-intercept to ensure that there are sufficient product users in the selected panel. Participants in both panels will be invited to complete an 18-month web-based follow-up survey. Closed and open-ended questions will gather information on use, co-use with tobacco and marijuana, knowledge and attitudes, exposure to marketing and respondent demographics.

### Focus Groups

Twenty focus groups will be conducted to understand how the following factors influence product use:

- Cultures and Environments/Co-Use: Ten focus groups will gather knowledge about the cultures and environments that promote the initiation and maintenance of use
- Marketing: Ten focus groups will explore how products are marketed to various sub-populations, and the effects of marketing exposure. This study will create an

understanding of what brands participants use and why, and what appeals to them about design and brand image

### Analysis of Existing Survey Data

The researchers will analyze existing Ontario surveys to estimate product awareness, use (lifetime, past year, past 30 days), reasons for use, and co-use. Data to be analyzed include: the Ontario Student Drug Use and Health Survey (grades 9-12); CAMH Monitor Survey (Ontario adults 18+); Health Canada's Canadian Tobacco, Alcohol, and Drug Survey (Canadians aged 15+); Health Canada's Canadian Student Tobacco, Alcohol, and Drug Use Survey (grades 6-12). Descriptive analyses will be run on key product indicators, crossed with sub-populations (e.g., sex, grade/age, geography) tobacco use, health status, socio-economic status, and home environment.

### Thematic Analysis and Media Analysis

A thematic/semiotic analysis of top selling product brands and advertisements placed in retail-trade magazines and local consumer-oriented print media will explore how products are marketed to various sub-populations. Analysis will focus on the marketing design elements used (textual, visual and physical design elements), and how these elements function to construct meaning (e.g., gendered, luxury and youthful packs; health-oriented messages, etc.).

To understand how products are being marketed in traditional media platforms, the researchers will conduct structured searches for the quantity and characteristics of media mentions of e-cigarettes and waterpipe on social media platforms (e.g., Facebook, Twitter, Pinterest, Instagram and YouTube) and data collected by the Media Network.

### Point of Sale Analysis (POS)

Youth and young adults see advertisements for these products most frequently in stores and on the internet. Research staff will examine POS promotion in stores, vape shops and online merchants. The project will have observers in 5 cities monitoring POS promotion in up to 15 retail stores and/or vape shops in each city.

### Knowledge Translation & Exchange

The dynamic and iterative process of knowledge translation and exchange is integrated throughout the RECIG-WP study. We will regularly engage with community representatives and select knowledge user representatives from public health, policy makers and non-

governmental organizations through participation in the Knowledge Exchange Advisory Committee (KEAC).

The KEAC will regularly and actively engage in all aspects of the study, including specifying knowledge needs, as well as planning the study design, data collection and interpretation of findings. The KEAC will also act as a key channel for dissemination and track feedback examples of research uptake and/or use. Knowledge translation of study findings to the broader communities will be in the form of newsletters, reports, presentations and webinars.

### Opportunities to Address Additional Research Questions (Applied Health Research Questions)

This project provides the opportunity to address questions from health system policy makers or providers (Knowledge Users) through an Applied Health Research Question (AHRQ) process. An AHRQ can be posed to obtain research evidence to inform planning, policy and program development. As a Research Provider, we look forward to working with you to identify and address knowledge needs for the development of policies, programs and public education about e-cigarettes and waterpipe.

### What AHRQ Responses Can Provide to Knowledge Users

Three Types of Research Provider Responses:

1. **Rapid response:** Preliminary information in one week or less providing a "first blush" response, e.g., expert opinion or relevant systematic reviews, articles or reports on a given policy topic.
2. **Research report or technical brief:** Approximately 4-8 weeks of work to quickly synthesize the existing research evidence on a given topic. The final product could be a presentation or a report. Upon conclusion of the AHRQ, the researcher will complete the AHRQ Summary of Findings Form which will be disseminated broadly once completed.
3. **Research project:** Where it has been confirmed that new knowledge must be generated, i.e., existing knowledge is not sufficient for planning or policy development requirements, new research projects will be initiated. The duration may be months, or years, depending on the project. For longer-term projects it is expected that some information be provided within the funded funding year. Institutions should contact the Research Unit prior to undertaking any longer-term projects. Organizations should not initiate new multi-year projects if they have one year funding agreements unless they

can produce some interim or preliminary findings during the funded period. At the end of the project, the researcher will complete an AHRQ Summary of Findings Form which will be disseminated broadly. Interim or preliminary findings will not be disseminated.

It is understood that not every question will result in a research response.

For more information about initiating an AHRQ request, contact Dr. Robert Schwartz: [robert.schwartz@utoronto.ca](mailto:robert.schwartz@utoronto.ca) or 416-978-3901.

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