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Putting Thirdhand Smoke on the Policy and Research Agenda: Knowledge User Survey Results

Background

Thirdhand smoke (THS) refers to residual tobacco smoke pollutants that remain on surfaces and in dust after tobacco has been smoked, and can persist long after a cigarette is extinguished. These pollutants are reemitted into the surrounding air or react with oxidants and other compounds in the environment to yield secondary toxins. Some of these pollutants are carcinogenic or otherwise toxic for human health. This presents a health risk for people exposed to THS, especially small children who are physiologically vulnerable and may be directly exposed through contact with contaminated surfaces such as carpets, upholstery and clothing.^{1,2}

Over 90% of those who answered the post-workshop survey agreed that the workshop presentations will inform their work.

In response to growing concerns about THS, OTRU hosted a workshop for public health, tobacco control policy, and research communities in May 2012, in Toronto. A multidisciplinary panel of experts presented the current state of knowledge about THS measurement in indoor environments, human exposure pathways, the role of THS in tobacco control and the Canadian policy context. More than 100 participants from across Canada attended the workshop, either in person or by webcast. Video archives of the workshop presentations and slides can be found at <http://otru.org/resource-centre/webinar-archives/#thsvideos>.

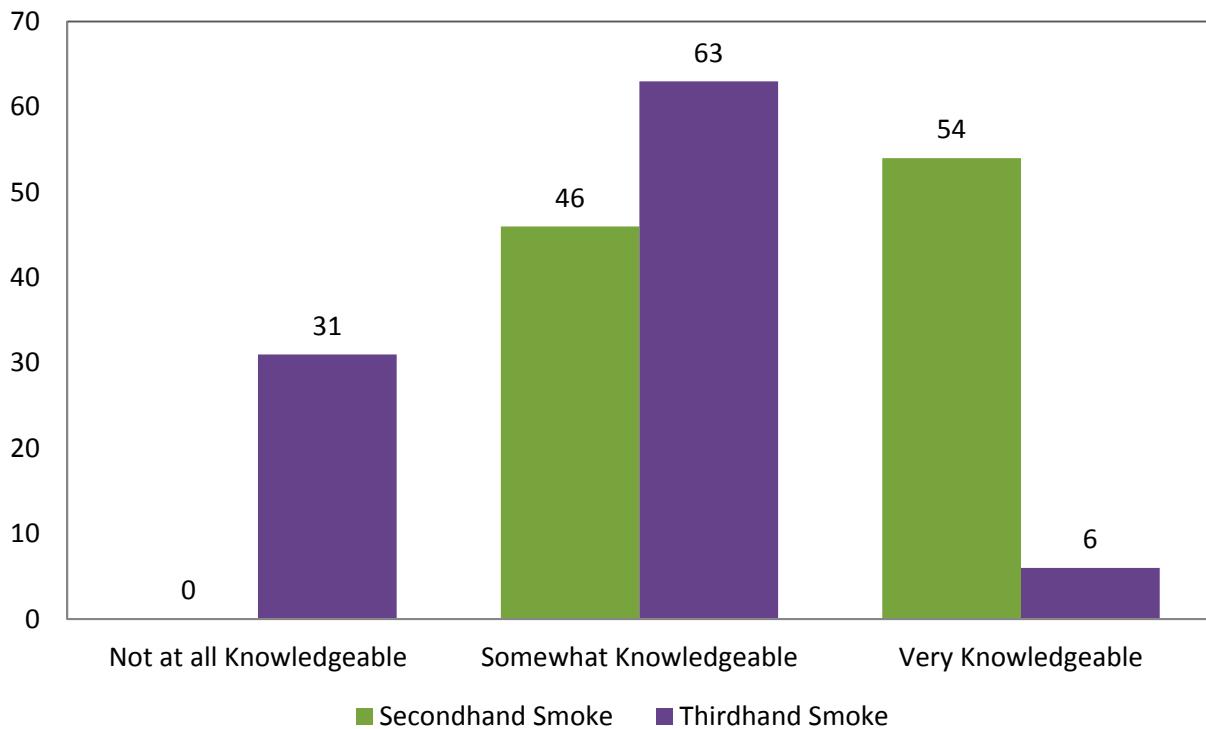
As part of the workshop knowledge exchange and translation plan, OTRU distributed an online pre-workshop survey to public health, healthcare and tobacco control knowledge users across Canada to determine information needs and opinions about THS. A similar post-workshop survey was provided by hardcopy and online to all workshop participants immediately after the event. This update highlights key findings from the knowledge user surveys and outlines next steps for dissemination.

Key Survey Findings

One hundred and four people responded to the pre-workshop survey; 75 workshop participants responded to the post-workshop survey. The majority of respondents from both surveys worked in public health practice (59% for pre-survey; 60% for post-survey). The pre-workshop survey compared knowledge and opinions about secondhand smoke (SHS) and THS:

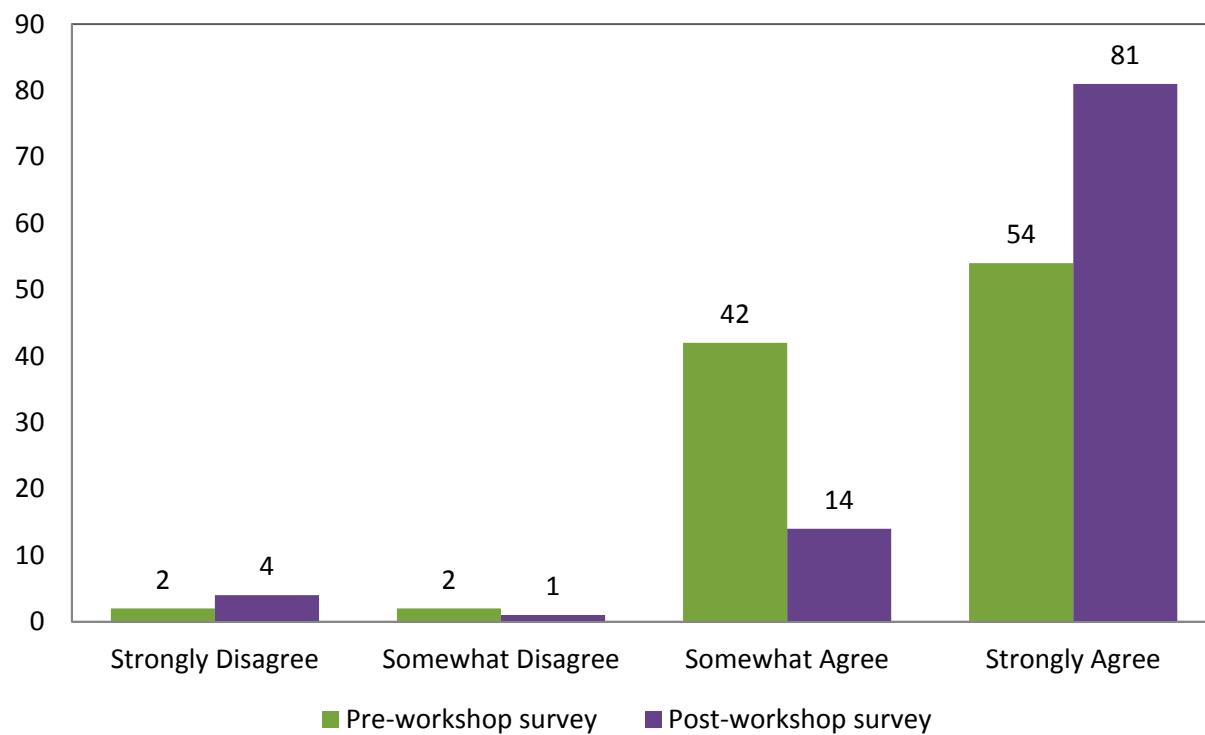
- 54% of respondents said they were very knowledgeable about SHS and the balance felt they were somewhat knowledgeable; only 6% indicated that they were very knowledgeable about THS, and 31% indicated they were not at all knowledgeable (Figure 1).
- 96% strongly agreed that SHS is a health problem; only 54% strongly agreed that THS is a health problem.
- 91% strongly agreed that SHS should be addressed through public health policies; only 44% strongly agreed that THS should be addressed through public health policies.

Figure 1: Knowledge about SHS and THS, Pre-Workshop Survey



Post-workshop respondents reported greater knowledge about THS (91% somewhat or very knowledgeable) compared to pre-workshop respondents (70% somewhat or very knowledgeable). Similarly, more respondents in the post-workshop survey (81%) strongly agreed that THS is a health problem (Figure 2), and should be addressed through public health policies (79%) than in the pre-workshop survey (54% and 44%, respectively).

Figure 2: Agreement that Thirdhand Smoke is a Health Problem



While the post-workshop survey indicates that the presentations addressed the vast majority of participants' information needs regarding THS (93%, 69/74), 97% said they were interested in further workshops on this topic. Of particular interest were:

- Evidence for health effects and chemistry
- Future action to protect vulnerable populations from exposure
- Contamination and clean-up
- Resources for the public health community
- Legal information related to exposure

Overall, 92% (67/74) of the post-workshop survey respondents agreed that the presentations will help to inform their work, by providing information that can be used to educate themselves and others about THS, and by informing policy development and planning.

*"I liked all aspects of the workshop. I think that the presentation was superb."
"It was great!"*

Next Steps

The workshop set the stage for face-to-face discussions with the international panel of experts about opportunities and challenges for research and policy on THS. OTRU is working with expert panel members to produce a report from the meeting deliberations. The report will identify key research

questions to address gaps in knowledge about THS measurement, exposure pathways and risk assessment; and discuss opportunities for policy and legislative approaches to reduce THS exposure.

Expert Panel Members

Dr. Georg Matt, San Diego State University (panel chair)

Dr. Neal Benowitz, University of California, San Francisco

Dr. Hugo Destaillats, Lawrence Berkeley National Laboratory

Dr. Roberta Ferrence, Ontario Tobacco Research Unit, University of Toronto

Dr. Geoffrey T. Fong, University of Waterloo and Ontario Institute of Cancer Research

Ms Lorraine Fry, Non-Smokers' Rights Association/Smoking Health Action Foundation

Dr. Lara Gundel, Lawrence Berkeley National Laboratory

Dr. Mel Hovell, San Diego State University

Dr. Ryan David Kennedy, Propel Centre for Population Health Impact, University of Waterloo

Dr. Thomas Novotny, San Diego State University

Dr. Mark Travers, Roswell Park Cancer Institute

Dr. Jonathan Winickoff, Harvard Medical School

OTRU Project Team

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www.cihr-irsc.gc.ca

References

¹ Matt GE, Quintana PJ, Destaillats H, et al. Thirdhand tobacco smoke: emerging evidence and arguments for a multidisciplinary research agenda. *Environmental Health Perspectives* 2011 (Sep); 119(9): 1218-1226.
[http://ehp03.niehs.nih.gov/article/info:doi/10.1289/ehp.1103500](http://ehp03.niehs.nih.gov/article/info%3Adoi%2F10.1289%2Fehp.1103500)

² Burton A. Does the smoke ever really clear? Thirdhand smoke exposure raises new concerns. *Environmental Health Perspectives* 2011 (Feb); 119(2): a70-a74. <http://ehp03.niehs.nih.gov/article/info:doi/10.1289/ehp.119-a70>