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## What Population Surveys Say about Smokeless Tobacco Use

In Canada, smokeless tobacco is generally marketed as oral snuff and chewing tobacco.<sup>1</sup> While the health risks are lower than for cigarettes, a number of serious health consequences are associated with smokeless tobacco use, including an increased risk for oral cancer, and possibly other head and neck cancers,<sup>2</sup> soft tissue lesions including leukoplakia, and periodontal disease.<sup>3</sup> Over two dozen tumorigenic agents have been identified in smokeless tobacco products, including polynuclear aromatic hydrocarbons (PAHs) and tobacco-specific nitrosamines formed during processing. Evidence also indicates that regular use of smokeless tobacco can lead to nicotine addiction.<sup>2</sup>

The use of smokeless tobacco products, particularly among youth, is a current topic of discussion in the tobacco control community. This update summarizes recent population survey findings on the prevalence of smokeless tobacco use by Canadians and discusses some of the limitations of the data.

### What Population Surveys Ask about Smokeless Tobacco Use

Canadian population surveys have generally captured information about the prevalence of smokeless tobacco use in two ways:

- 1) Asking about *ever* use of smokeless products (a measure that captures lifetime use)
- 2) Asking about use *in the last thirty days* (a measure that captures recent use and *may* be more indicative of regular use)

### What the Surveys Say

#### *Canadian Tobacco Use Monitoring Survey (CTUMS)*<sup>4</sup>

- The prevalence of *ever* use of smokeless tobacco among those aged 15 or older has remained stable from 2002 to 2005 at around 8% across Canada.
- In 2005, 9% of Canadian youth aged 15-24 reported *ever* using smokeless tobacco (7% of those aged 15-19 and 12% of those aged 20-24), compared to 7% of adults aged 25 or over. The pattern is relatively stable in these age groups from 2000 to 2005.
- Across Canada, males (13%) had a higher prevalence of *ever* using smokeless tobacco than females (2%), among those aged 15 or older in 2005. The same pattern is observed among youth aged 15-24 (15% of young men and 4% of young women in 2005).
- Saskatchewan has the highest prevalence of *ever* use of smokeless tobacco (17% of those aged 15 or older, and 25% of youth aged 15-24 in 2005), and Quebec the lowest (3% among those aged 15 or older in 2005; Quebec also has the lowest prevalence of *ever* use among youth aged 15-24, but this figure cannot be released due to small sample size). Ontario has the second-lowest prevalence of *ever* use of smokeless tobacco among those aged 15 or older (6% in 2005), and the third-lowest among youth aged 15-24 (8% in 2005), after Quebec and Newfoundland.
- The prevalence of *recent* use of smokeless tobacco (use in the last 30 days) was low, at 0.6% among those aged 15 or older, and 1.4% among youth aged 15-24 across Canada in 2005.

### **Youth Smoking Survey<sup>5</sup>**

- Compared to cigarette smoking (19% of students have *ever* tried cigarettes), the prevalence of *ever* use of smokeless tobacco is low (2% for chewing tobacco and less than 1% for snuff in 2004-2005) among students in grades 5-9 in Canada.
- The prevalence of *ever* use of chewing tobacco in Canada in grades 5-9 appears to have declined from 1994 (7%) to 2002 (2%) and remained constant in 2004-2005 (2%).
- More boys reported having *ever* tried chewing tobacco (3.1%) and snuff (0.8%) than girls (0.9% and 0.4% respectively).

### **Conclusions**

Although the overall prevalence of smokeless tobacco use in Canada is low, at around 8% for *ever* use and less than 1% for *recent* use in 2005, certain subgroups report higher use. Across Canada, the prevalence of *ever* use of smokeless tobacco was 15% of male youth aged 15-24, and 25% of youth aged 15-24 in Saskatchewan in 2005.

The sampling designs of many surveys make it impossible to report prevalence of use below the national level. National surveys are not able to provide a snapshot of what may be happening among various subgroups of the population, or in smaller geographic regions within provinces. Further, the low prevalence of smokeless tobacco use prevents in-depth analysis of factors related to use.

Improved monitoring through regional surveys, or greatly increased sampling by national population surveys, would be necessary to determine regional or subpopulation differences in the patterns and trends of smokeless tobacco use and factors related to use. For example: according to the Northwestern Ontario Student Drug Use Survey, a regional survey of students in grades 7 through 12, the prevalence of smokeless tobacco use in the past year was 10% in 2005.<sup>6</sup> Comparisons among different survey populations would be facilitated by identical measures of use.

### **References**

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