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Mini Size Cigarettes: Smoke Emissions and Toxicity Analyses

Key Messages

- The smoke from shorter, mini size cigarettes contains the same toxic chemicals, in similar concentrations as the smoke from other Canadian cigarettes.
- Mini size cigarette smoke, as with other Canadian cigarettes, can cause harmful health effects.
- Smoking mini size cigarettes poses the same risk of harmful health effects as smoking other Canadian cigarettes.

Background

The mini size cigarette is a new style of cigarette introduced into Canada in 2008.

Mini size cigarettes may give smokers the impression of reduced yields of smoke because they are shorter than regular or king size cigarettes (**Figure 1**).



Figure 1:
Total cigarette length of a
mini size brand (bottom),
a regular size brand (middle)
and a king size brand (top)

Results

Health Canada has analyzed the cigarette design and smoke emissions of mini size cigarettes and compared the results with those of other Canadian cigarettes. In addition, toxicity tests were performed.

Mini size cigarettes are shorter (69 mm) than regular size cigarettes (72 mm) and king size cigarettes (84 mm). As a result, mini size cigarette packs are shorter than those of regular size or

king size brands. Mini size cigarettes are shorter because the filter is shorter, 14 mm compared with 17 mm. Nevertheless, by increasing filter density, mini size cigarettes, with a shorter filter, deliver similar amounts of smoke per cigarette as a regular size cigarette.

Tobacco smoke contains over 4,000 different chemicals that are formed when tobacco burns. At least 60 of these are known to be cancer causing.

Analysis of smoke emissions showed that the smoke of mini size cigarettes contains the same toxic chemicals as those of other Canadian cigarettes, in about the same concentrations.

The results of the toxicity tests showed that the smoke of mini size cigarettes, like other Canadian cigarettes, is mutagenic (causes mutation in DNA), cytotoxic (affects cell structure and its components) and genotoxic (causes structural changes in chromosomes).

Conclusions

Mini size cigarette smoke emissions are very similar to those of other Canadian cigarettes and can cause harmful health effects. Health Canada considers that smoking mini size cigarettes poses the same risk as smoking other cigarettes sold in Canada.

References

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