



Public Education Matters

Enhancing Fire Safety Education and Prevention in Your Community

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Dear Public Educator/Fire Prevention Officer:

Ionization and Photoelectric Smoke Alarms

Recent newspaper articles continue to make claims that smoke alarms utilizing ionization technology are less effective than photoelectric type smoke alarms. Claims are generally made about significantly delayed response times from ionization alarms as determined through testing or studies by various people, predominantly in the U.S.A. Many of these articles go on to suggest that people should replace their ionization smoke alarms with photoelectric or combination units.

The Office of the Fire Marshal (OFM) would like to stress to the fire service that the public needs to be provided with properly balanced, accurate information. Scientifically-based testing conducted by the Underwriters Laboratories of Canada (ULC) and Underwriters Laboratories Incorporated (UL) measures the performance of both types of smoke alarms against internationally developed and approved standards. This testing continues to demonstrate that **both ionization and photoelectric smoke alarms that meet these standards will respond as early warning devices well before a fire situation gets to be untenable and can provide sufficient time for escape. Quite simply, the science does not support claims that ionization smoke alarms are less effective than photoelectric alarms.**

Because ionization and photoelectric alarms operate on different principles they may respond differently to various fire conditions. However, it is important for the public to understand that regardless of the type of technology used, **both alarms are tested to the same standard and must meet the same level of performance to achieve ULC listing.** Since one cannot predict the type of fire that may occur, installing both types of alarms can enhance fire safety.

When purchasing smoke alarms, consumers should look for a product which bears the mark of an accredited certification organization. This signifies that the unit has been manufactured and tested to an acceptable Canadian standard. Two examples of such marks are as follows:



The OFM feels that a much more important issue than the type of smoke alarm technology people have is the number of people that die in fires in homes that are not equipped with **any** working smoke alarms. In Ontario, between 2005 and 2009, 63 fire fatalities occurred in preventable residential fires in homes where smoke alarms were either missing, had dead batteries or no batteries installed at all.

That is why it is extremely important that the fire service continue their efforts to educate the public on how to prevent fires from occurring in the home, as well as the need to install and maintain working smoke alarms. Resources to support local smoke alarm programs and initiatives are available and can be downloaded from the OFM's [Public Education Resources website](#) by logging in using the username and password provided on the website page.

Your feedback is always welcome! Contact the OFM's Public Education and Media Relations section by [email](#) or phone (416-325-3100) if you have questions about public education or media relations in your community. Let us know about programs that work well in your community or specific public education topics you would like addressed in an upcoming notice.

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