# Canadian Women’s Experiences with Personal Protective Equipment in the Workplace



## Executive Summary

Nearly 50 years ago, researchers and worker advocates drew attention to the problems women have finding appropriately sized and sufficiently protective personal protective equipment (PPE). Despite these early efforts – and evidence that poorly designed and poorly fitting PPE can potentially lead to serious injury or death – women continue to be differentially impacted by workplace hazards.

This report is aimed at gaining a better understanding of the extent to which physical differences are taken into account in the development of PPE and PPE standards for men and women. This report synthesizes the findings of a review of the scientific and grey literature, an environmental scan of PPE regulations, key informant interviews, and a survey of nearly 3000 Canadian women who use PPE in their daily job functions.

Key findings include:

- Research shows that anthropometric differences exist between the sexes and that women are not merely scaled-down versions of men. The significance of this is two-fold: (a) protective clothing and other PPE that are designed based on men’s proportions cannot be simply scaled down linearly to fit women; and (b) good quality anthropometric data representative of the contemporary working population are critical for the inclusive design of PPE.
- Canadian regulations do not consistently require that selected PPE provide protection appropriate to the hazards and that it fit the user properly.
- There is no consistency in the PPE standards and editions that are referenced in regulations across the country.
- Functional fit and comfort are two of the most important parameters in the design and usage of PPE. Canadian women identified these factors – along with trust that their PPE will protect them and allow them to move around to do their job – as key to satisfaction with their PPE. However, a significant number of women reported experiencing one or more problems with

their PPE.

- The three most common problems the Canadian women surveyed have with their PPE are that
    - it does not fit properly (50%);
    - it is uncomfortable to wear (43%); and
    - the selection of women-specific PPE is inadequate (35%).

To try and address these issues, women are paying out of pocket to source PPE with a better fit or that is specifically designed for women, and modifying or altering their PPE for safety, comfort, and improved fit.

The Canadian women surveyed reported that

- they use PPE that is the wrong size at least some of the time (58%);
- they don’t wear all the required PPE at work because of issues with fit (28%); and
- they use a workaround to make their PPE fit (38%).

Workarounds included using rubber bands, safety pins, and/or duct tape to shorten fall-arrest gear, secure work gloves, shorten sleeves, and prevent their pant legs from tripping them. Nearly 40% reported experiencing an injury or incident that they perceived to be related to their PPE.

Although PPE is considered to be the last line of defence and should only be used where other control measures are not practicable, PPE is widely used by employers because it is a simple and inexpensive way to control exposure or the PPE may provide supplementary protection where other controls are not adequately protective. For these reasons, it is paramount that the PPE fits each worker properly, that it provides maximal and effective protection, and that the workers can trust it to protect them and prevent injury.

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Source: CSA Group