Statement by the World Health Network in Support of the CSA Z94.4-25 Respiratory Protection Standard

The World Health Network (WHN) supports the draft CSA Z94.4-25 standard, which establishes a science-based framework for the selection, use, and care of respirators across workplaces, including healthcare. This standard reflects up-to-date evidence on airborne hazards and lays the foundation for protecting workers, patients, and the public from avoidable harm.

Grounded in Science and Risk Assessment

The CSA standard incorporates a rigorous and comprehensive hazard identification and risk analysis framework, as outlined in Chapter 7 of the draft. It applies the Source-Pathway-Receiver model to assess risk of bioaerosol exposure and provides detailed criteria for evaluating workplace hazards, exposure scenarios, and appropriate respiratory protection. These procedures are consistent with best practices in occupational health and infection prevention, and align with international scientific consensus on airborne transmission of infectious agents【27†Chapter 7.docx†L1-L10】.

Notably, the CSA standard:

- Recognizes that airborne infectious diseases pose serious risks in both healthcare and non-healthcare workplaces;
- Emphasizes engineering and administrative controls first, with respirators as a necessary protective measure when such controls are insufficient;
- Provides clear guidance on assessing microbial hazard levels (H1 to H4) and the appropriate level of respiratory protection (PL1 to PL4) to be used in each case【27†Chapter 7.docx†L100-L120】;
- Incorporates the precautionary principle and allows for context-sensitive judgment by qualified professionals in the risks of airborne transmission.

Universal Respiratory Protection in Healthcare: A Necessary Advancement

The CSA's guidance for healthcare settings, detailed in Chapter 9, is both pragmatic and urgently needed. It establishes that all healthcare workers must wear respirators (minimum PL1) in healthcare facilities and during delivery of care, except in designated low-risk zones determined by qualified airborne transmission risk assessment. This requirement is grounded in:

- The elevated baseline risk of airborne infectious exposure in healthcare settings;
- The evidence that surgical masks are insufficient to protect against bioaerosols;
- The ethical imperative to prevent healthcare-acquired infections (HAIs), protect workers, and limit broader public transmission【28†Chapter 9.docx†L1-L20】.

By incorporating design flexibility (e.g., reusable respirators, easy-breathing CA-N95 options) and allowing for institution-specific airborne transmission risk management plans, the standard provides a scalable, adaptable path to implementation.

A Standard That Extends Across Workplaces

CSA Z94.4-25 does not treat healthcare as an isolated domain. Instead, it presents a coherent, cross-sectoral strategy that applies the same scientific principles to all workplaces, from healthcare to manufacturing, agriculture, education, and transportation. This reflects the biological reality of airborne particle behavior and transmission: pathogens do not respect workplace boundaries.

This integrated approach is especially important for pandemic and inter-pandemic preparedness. It ensures that Canada has a robust, scalable respiratory protection standard that can adapt to future infectious threats.

Conclusion

We commend the CSA for developing a transparent, science based standard that addresses longstanding gaps in respiratory protection. We urge regulators, health authorities, employers, and professional societies to adopt and implement this standard in full.

The World Health Network is committed to supporting public understanding and institutional adoption of CSA Z94.4-25. We invite other organizations, health professionals, and workers to join us in endorsing this standard as a vital tool for workplace safety and public health.