

Canadian Society for Medical Laboratory Science Société canadienne de science de laboratoire médical

Position Statement

Respiratory Protection for Medical Laboratory Personnel

It is the Canadian Society for Medical Laboratory Science's (CSMLS) position that N95 respirators are the minimum level of protection for medical laboratory personnel who may be exposed to airborne infectious agents. This is in line with recommendations by the Government of Canada and the U.S. Centers for Disease Control (CDC).

Air purifying respirators such as the N95, help reduce the concentration of microorganisms in the air inhaled by the user to an acceptable exposure level. Scientific studies on the efficacy of these respirators supports their superiority over standard surgical masks in the reduction of exposure to airborne and droplet contamination when used appropriately.

Concerns related to pandemics have heightened awareness concerning respiratory protection for health care workers. Respiratory exposure to airborne infectious agents is dependent on several factors:

- the type of infectious agent,
- the size of infectious particles,
- the concentration of infectious agents in the aerosol,
- the persistence of the aerosol,
- the length of exposure time.

In all Canadian jurisdictions, employers are responsible for ensuring a healthy and safe work environment for employees. This includes making appropriate control measures available to protect workers from exposure to infectious agents. A respiratory protection program that contains provisions on selection of respirator, training, user fit testing and maintenance of the respirator (i.e. single-use disposable or reusable) is recommended.

All laboratories should have a plan in place that is defensible and ensures due diligence in the protection of workers. Until enough evidence is available to support changes to current best practice, N95 respirators should be used as the minimum standard for health care workers facing potential exposure to respiratory infectious agents.

Document History: Created: May 2013

Revision: November 2020 Page 1 of 2



Canadian Society for Medical Laboratory Science Société canadienne de science de laboratoire médical

References:

World Health Organization; Laboratory Biosafety Manual, 3rd Edition, 2004.

National Institute for Occupational Health and Safety. (2020, April 09). Approved Particulate Filtering Facepiece Respirators. Retrieved from

https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/

National Institute for Occupational Health and Safety. (2019, September 03). Respiratory Protection Infographics. Retrieved from

https://www.cdc.gov/niosh/npptl/RespiratorInfographics.html

Government of Canada. (2016, May 26). Canadian Biosafety Handbook, Second Edition. Retrieved from https://www.canada.ca/en/public-health/services/canadian-biosafety-standards-quidelines/handbook-second-edition/chapter-6-10.html

Canadian Centre for Occupational Health and Safety. (2020, November 17). Respiratory Protection Against Airborne Infectious Agents for Health Care Workers: OSH Answers. Retrieved from https://www.ccohs.ca/oshanswers/prevention/respiratory protection.html

Government of Canada. (2020, November 13). Consolidated federal laws of Canada, Human Pathogens and Toxins Act. Retrieved from http://lois-laws.justice.gc.ca/eng/acts/H-5.67/FullText.html