

Practice Education Guidelines for BC Respiratory Protection Respiratory Mask Fit-Testing

GL#1-4

Practice Education Guideline

August 25, 2009

Students or on site faculty are not permitted to observe or in any way provide care or service to clients with suspected, known or probable cases of TB, SARS, or other similar acute respiratory infections unless they have been properly fitted for a respiratory mask and educated on its use.

Guideline Details

The WorkSafeBC Occupational Health and Safety Regulations of BC stipulate when a N95 Respirator is used.

Students or on site faculty who, through the course of the practice education experience, directly observe* or in any way provide care to patients with suspected, known, or probable cases of TB, SARS, or other similar airborne acute respiratory infections, may do so only if **all** of the following conditions are met:

1. **Obtain fit-testing prior to the placement**, in accordance with the Receiving Agency Respiratory Protection Program and the WorkSafeBC Occupational Health and Safety Regulation Section 8.40 (1) and (4).
2. Receive education on the correct use and care of respirators, respirator limitations, donning and doffing procedures and proper disposal (as per WorkSafeBC Occupational Health and Safety Regulation Section 8.7).
3. Carry proof of fit-testing on their person at all times during the placement experience. This proof of fit-testing must include the following information:
 - Student's (or faculty's) name
 - Name of Placing Agency
 - Fit-test date (MUST be within the last year)
 - Brand, model and size of respirator successfully fit-tested [must be an N95 model available in the Receiving Agency where the practice education experience takes place (see Consequences of Non-Compliance)]
 - Fit-testers name

Those not permitted to directly observe* or in any way provide care to patients with suspected, known or probable cases of TB, SARS, or other similar acute airborne respiratory infections:

- High school students
- Visiting professionals who have not been fit-tested for the respirators available or at all
- Any other individuals/students in a learning experience where the risk of exposure is inappropriate (lack of knowledge or education in this area of practice, experience not required to complete learning objectives by the Placing Agency, lack of adequate third party liability and/or personal accidental injury insurance)

Roles & Responsibilities

Placing Agency:

- Communicate with the Receiving Agency liaison to confirm any site-specific procedures related to the '*Respiratory Protection Program*'.

* indicates term is defined under 'Definitions' section

Practice Education Guidelines for BC Respiratory Protection Respiratory Mask Fit-Testing

GL#1-4

- Communicate with the Receiving Agency liaison to confirm respiratory protection devices available at the site.
- Provide students with education (which meets WorkSafeBC standards) regarding respiratory protection and fit-tests for protection devices. (See **APPENDIX B**)
- Conduct fit-testing. (See **APPENDIX B**)
- Ensure students are able to demonstrate knowledge of the correct uses (including proper donning and doffing) and limitations of N95 respirators.
- Provide students with written confirmation following the successful completion of a fit-test.
- Direct students to carry this information with them at all times during any placement.
- Repeat fit-testing annually to ensure that the face seal remains effective. (WorkSafeBC Section 8.44)

Receiving Agency:

- Share the current '*Respiratory Protection Program*' with the Placing Agency, as well as any practice changes that arise in the future.
- Inform the Placing Agencies of the brands and sizes carried in the Receiving Agency. (See **APPENDIX B**)
- Report any changes in respiratory protection device supplier or styles to the Placing Agency, to ensure students are fit-tested and educated on the currently available protection.
- Supply students with respiratory protection required for care of patients during their placement.
- Conduct and/or recommend initial education sessions and training resources to assist in training faculty members, who will then become responsible for education and fit-testing their students in the future. (See **APPENDIX B**)
- Inform Placing Agency which practice education settings are high risk facilities* or have high risk activities*. (See **APPENDIX A**)
- Provide fit-testing and education for employees, physicians, and medical residents.

Students:

- If a situation arises where the student may be able to observe or participate in the care of a patient on airborne precautions, demonstrate to staff/faculty proper donning and doffing of protective equipment prior to entering the care environment.
- Wear only the N95 Respirator that they have been fit-tested for. If that type is not available, do not participate in activity where N95 Respirators are required.

* indicates term is defined under 'Definitions' section

Practice Education Guidelines for BC Respiratory Protection Respiratory Mask Fit-Testing

GL#1-4

Consequences of Non-compliance

If fit-testing arrangements have not been made prior to the start of the placement, the Receiving Agency may choose to:

1. Delay the placement until the Placing Agency provides fit-testing services; or
2. Provide fit-testing services at the expense of the Placing Agency; or
3. Restrict the student access to certain locations/sites and/or procedures where there is a risk of exposure to infectious airborne agents.

Rationale

Within the healthcare environment, there are a number of departments and situations which may require an individual to wear an N95 filtering facepiece respirator (N95) to prevent exposure to airborne respiratory infectious agents such as tuberculosis (TB), SARS, measles, etc. When an N95 must be worn, the WorkSafeBC Occupational Health and Safety (OHS) Regulation requires specific protocols be followed, including the need for fit-testing.

As the sponsoring body, the Placing Agency is responsible for the health and safety of its students in all learning environments. The Receiving Agency is responsible under WorkSafeBC legislation to provide for its employees and others, an environment where work can be carried out without unnecessary exposure to airborne contaminants. If exposure to airborne contaminants is likely or if placement in such situations is essential for the student to achieve his/her learning goals, it is an important joint responsibility to optimize safe learning opportunities for students by ensuring that they are fit-tested and educated regarding respiratory protection requirements by the sponsoring body prior to their initial placement at the receiving agency.

Placing Agencies should consider the benefits of including respiratory protection education and fit-testing as part of the curriculum for all students in healthcare careers, regardless of whether they will be subjected to exposure to airborne infectious agents as part of their placement. The benefits are two-fold:

1. This allows students to take up opportunities **as they arise** to observe or participate in care of patients on airborne precautions. It ensures students do not miss infrequent but key learning opportunities due to an inability to provide fit-testing on short notice.
2. This ensures the knowledge and skill required to establish safe working habits are integral to the students' development as a health care professional.

Environmental Scan of current practice in Schools in Canada (done 2006) either provide fit-testing to students or require fit-testing as an additional Admission Requirement or post-Admission (e.g. University of Alberta - all health sciences programs; SAIT - Respiratory Therapy; Universities of Western Ontario, Toronto, & University of Ottawa - Occupational Therapy; Nursing Schools in Ontario; McGill University, Quebec – Medicine).

Some Receiving Agencies in Canada require students to have respiratory mask fit-testing prior to clinical experience and request students to carry proof of testing (e.g. Capital Health Authority, Edmonton, Alberta; Chinook Health Authority, Lethbridge, Alberta; University Health Network, Toronto, Ontario; Micheal's Hospital, Toronto).

Practice Education Guidelines for BC Respiratory Protection Respiratory Mask Fit-Testing

GL#1-4

Definitions

Direct observation: the physical presence of the student with the patient (from within the patient's room) without any separation barriers present, such as an observation window.

Risk Facilities (related to TB): Hospitals have been classified as low risk, or moderate to high risk. Health care facilities can be considered to be **low risk** if there are less than six (6) admissions of patients with active tuberculosis per year, or a ratio of more than 100 potentially exposed health care workers per TB admission per year. **Moderate- to high-risk** facilities can be considered those with six (6) or more TB admissions per year, or a ratio of less than 100 potentially exposed health care workers per TB admission per year.

Risk Activities (related to TB): Within each facility, the activities of health care workers can be classified as of low, moderate or high risk for exposure to TB.¹

Low-risk activities - Minimal direct patient contact (in medical records, administration, maintenance or on certain acute care units such as pediatrics, obstetrics or gynecology).

Intermediate-risk activities - Work that entails regular, direct patient contact (e.g. by nurses, nursing aids, respiratory technologists, social workers, physiotherapists) on units to which patients with active TB may be admitted. Members of housekeeping departments may be considered in this risk category if they are involved in cleaning patients' rooms.

High-risk activities - See APPENDIX B

References

Personal Protective Clothing and Equipment - Respiratory Protection. (2005). WorkSafeBC, Occupational Health and Safety Regulation, Part 8 - Sections 8.32 - 8.44, 8.7 www.worksafebc.com

Government of Ontario. (May 13, 2003). **Directives to all Ontario Acute Care Facilities**. SARS Provincial Operations Centre, Ministry of Health and Long-Term Care, Ontario.

Public Health Agency of Canada www.sars.gc.ca

Regional Clinical Education. (February 2006) Student Practice Education Policy and Procedure DRAFT. Vancouver Coastal Health Authority, Vancouver, BC.

Health Sciences Council. (June 2004). Fit testing: Communication Plan to Students. University of Alberta. Edmonton, Alberta. Retrieved on April 18, 2006 from <http://www.uofaweb.ualberta.ca/healthsciences/nav02.cfm?nav02=25542&nav01=25682>

Canadian Lung Association. (2000). Canadian Tuberculosis Standards. 5th Edition. Government of Canada. Ottawa, Ontario. Retrieved on November 3, 2006 from [<http://www.phac-aspc.gc.ca/publicat/cts-ncla00/index.html>]

¹ Canadian Lung Association. (2000). Canadian Tuberculosis Standards. 5th Edition. Government of Canada. Ottawa, Ontario. Page 210-211 from <http://www.phac-aspc.gc.ca/publicat/cts-ncla00/pdf/cts00.pdf>

* indicates term is defined under 'Definitions' section

Practice Education Guidelines for BC Respiratory Protection Respiratory Mask Fit-Testing

GL#1-4

APPENDIX A

Where Airborne Infectious Agents May Be Encountered

The requirement for an N95 and fit-testing, as the result of exposure to airborne infectious agents, should only be considered if there is no other way in which the student is able to achieve his/her learning goals. If a student must enter such an environment, or if the student may potentially be required to enter such an environment, a fitted N95 is required.

Examples where airborne infectious agents **may be** encountered include, but are not limited to, the departments, occupations and tasks listed in the table below:

Sample High Risk Departments	Sample High Risk Occupations	Sample High Risk Tasks
Emergency Intensive Care Unit Acute Medicine units Tuberculosis wards Operating Rooms Post Anesthetic Recovery Bone Marrow Transplant Bronchoscopy/ Respiratory clinics Morgue/ Anatomical Pathology Radiology	Medicine Nursing Laboratory Technologists Respiratory Therapists/Sciences Diagnostic Services Patient Escort Services Endoscopy staff Phlebotomists Physical Therapy Occupational Therapy	Tracheotomy Suctioning Nebulizing therapy Bronchoscopy Percussive therapy Humidified oxygen Sputum induction Intubation and Extubation

Note that the above table lists examples only.

In order to determine if students may potentially be exposed to airborne infectious agents, the Placing Agency must consult with the student's supervisor within the Receiving Agency prior to placement.

Practice Education Guidelines for BC Respiratory Protection Respiratory Mask Fit-Testing

GL#1-4

APPENDIX B

N95 Respirators Used Within BC Health Authorities - 2007

The following list outlines the models of N95 respirators currently utilized in Health Authorities across BC. Since the Health Authority is providing the N95s for students to use when required, it is incumbent on the Placing Agency to ensure that the model of N95 for which the student is fit-tested is available within the applicable Health Authority.

Health Authority	N95 Make & Model							
	3M 1860	3M 1860(S)	3M 1870	3M 8110S	3M 8210	3M 9210	Kimberly Clark 46767	Kimberly Clark 46867
Fraser Health	X	X	X					
Interior Health	X		X	X				
Northern Health	X	X	X	X			X	X
Provincial Health Services	X	X	X		X	X	X	X
Vancouver Coastal Health	X	X	X				X	X
Vancouver Island Health	X	X	X				X	X

Resources Available

The following Health Authorities can provide training for fit-testers within the educational institutions/agencies:

- Fraser Health
- Interior Health
- Provincial Health Services
- Vancouver Coastal Health

The above Health Authorities can also provide guidance and direction as to what equipment is required to complete fit testing, as well as copies of their '*Respiratory Protection Programs*'.

Should the Placing Agency choose to contract a consultant to provide fit-testing services, a list of some available consultants is available through the American Industrial Hygiene Association BC-Yukon section (www.aihabc.org).