



NSNU Policy Statement Emergency Preparedness for the Ebola Virus Disease

As Ebola Virus Disease (EVD) continues to spread through Africa, Europe and North America, it becomes all the more important that health providers in Nova Scotia provide increased training and support to ensure the health and safety of our nurses and other medical personnel. As we face a disease that has no proven pre- or post-exposure treatment modalities, a high case-fatality rate and no scientific certainty about aerosol transmissibility, we must re-evaluate our definition of acceptable risk to reflect the upgraded threat of exposure to EVD in our hospitals.

The Nova Scotia Nurses' Union (NSNU) feels the spread of EVD is substantial enough to warrant a heightened level of emergency preparedness in Nova Scotia hospitals and health care units. It is NSNU's position that nurses and other health care personnel must be adequately protected against exposure to EVD. This will require appropriate training and personal protective equipment (PPE) to be readily available in health care environments around the province. It will also require a more hands-on approach from the Nova Scotia Department of Health and Wellness and employers to ensure medical staff are well equipped to manage cases of Ebola should they present in their facilities.

The NSNU respects the position of Nurses who invoke the right to refuse work if they feel unsafe, in accordance with and subject to provincial Occupational Health and Safety (OH&S) legislation. While this is a last resort for any worker to be used only when the system fails to protect them, if they feel the need to exert that right their union will represent them.

The Ebola Virus is not the first dangerous disease we have encountered, but there are lessons to be learned from past experiences. Events like SARS and H1N1 have highlighted the necessity for preemptive actions to be taken to protect those who provide medical care. The NSNU feels our past experiences, and the experiences today of nations battling Ebola around the world, have lead us to this place where we must provide exemplary service to those who serve the community at large.

This Policy Directive covers protocols and procedures, employer containment measures, staffing/training, personal protective equipment (PPE), and communications. Further statements for other settings, Emergency Medical Services (EMS), primary care and

laboratories, and concerning training, testing, transportation of specimens, waste disposal, and other matters may follow.

Transmission of EVD

The precautionary principle, which was the primary lesson of the SARS Commission Final Report, states that actions to reduce risk cannot await scientific certainty; as an adjunct to this, if there is even the slightest potential for aerosol transmission of EVD (as has already been acknowledged by the Canadian Federation of Nurses' Unions in their Policy Directive and well explained by [Dr. Lisa Brosseau](#), a national expert on respiratory disease and infectious disease transmission), then actions should be taken to protect workers from this potential threat to their safety. In her commentary, published by the Center for Infectious Disease Research and Policy, Brosseau states that it is possible for virus-laden bodily fluids to be aerosolized and inhaled while a person is in proximity to an infectious person, noting that a wide range of particle sizes can be inhaled and deposited throughout the respiratory tract. Patient secretions such as "vomit, diarrhea, blood, and saliva are capable of creating inhalable aerosol particles in the immediate vicinity of an infected person." Aerosols are inhalable tiny particles *temporarily* suspended in the air in close proximity to the patient.

It is also necessary to specifically acknowledge the potential for indirect contact transmission through patient care equipment or surfaces contaminated with blood and/or body fluids. Nova Scotia needs to be clear that no health care worker will take care of EVD patients without proper training, testing, and appropriate PPEs. In addition, it must be clear that no health workers should be in close proximity to potential patients if they have any open skin lesions.

We believe that the current guidelines provided by the Nova Scotia Department of Health and Wellness do not go far enough to protect health care workers from the Ebola virus disease (EVD) in Nova Scotia.

Therefore the NSNU is recommending:

Current actions required by government/employers in consultation with Unions and Joint Occupational Health and Safety Committees (JOHSC) for preventing exposure

Protocols and Procedures

- Employers must conduct initial and ongoing facility risk assessments to identify potential hazards and the risk of workers being exposed to the Ebola virus. Employers must share results with the Joint Occupational Health and Safety Committees (JOHSC).¹
- Implement changes in policies, procedures, equipment and the environment to eliminate or minimize identified risks in accordance with a hierarchy of controls approach to hazards.
- Ensure that health care providers are fully trained, tested and drilled in conducting a point-of-care risk assessment before each interaction with a patient and/or the patient's environment to evaluate the likelihood of exposure to contact and/or aerosols in care procedures, equipment, and treatment settings to determine the appropriate safe work practices.
- Ensure that screening and readiness protocols are in place across all hospital points of entry, including prominent signage, active screening by workers with access to appropriate personal protective equipment and EVD training, plus the ability to summon trained, equipped personnel, when a suspect patient is identified, and implement isolation measures for those with symptoms.
- Ensure that nurses who are engaged in triage throughout the province have available personal protective equipment, including, at a minimum, fit-tested NIOSH-certified N95 particulate respirator; face shield long enough to prevent splashing underneath; gown (fluid-resistant or impermeable); double gloves (impermeable) – one under and one over cuff, and goggles.
- Ensure nurses who are engaged in treating confirmed cases PPE should include Powered air purifying respirators (PAPR) with an assigned protection factor of at least 50 or higher; leg and non-slip, impermeable foot protection; double gloves (impermeable) – one under and one over cuff, and biohazard suits that meet the American Society for Testing and Materials (ASTM) F1670 standard for blood penetration, the ASTM F1671 standard for viral penetration, and that leave no skin exposed or unprotected (such as "hazmat" suits); long-sleeved, cuffed, impermeable suits. As stated succinctly in the CDC guidance issued October 20, 2014, there should be no skin exposure when PPE is worn.
- Implement protocols for safe provision of care for patients.
- Implement cleaning protocols, waste disposal protocols.
- Implement a standardized, prescriptive Ebola PPE-specific donning and doffing procedure that includes a fully trained monitor to observe and correct the donning/doffing. Include practical direction for activities such as changing gloves while in isolation (e.g., between care tasks).
- Implement a communications strategy for all management and staff. This strategy must clearly identify the steps to take when a potential EVD patient presents in health care facilities. Similar communications must be developed for the public. It is important to maintain patient/staff confidentiality.

¹ OH&S Committee names may vary from province to province.

Employer Containment Measures*

Placement, rooms and equipment	Health care workers
<ul style="list-style-type: none"> • Direct high-risk persons (i.e., relevant travel history) to the Emergency Department; • Engineering controls (general): restricted areas, monitored points of access, plexiglass barriers as needed, disposable equipment, and separate examination rooms and waiting area; • Move patient immediately to a space in the ED, separate from other patients and with access to a dedicated washroom or commode, when a suspected case of EVD is identified; • Notify the facility’s Occupational Health and Safety team immediately; isolate in airborne infection isolation room (AIIR) if available; • Provide properly equipped isolation rooms, with ante rooms, to ensure patient, visitor and staff safety; • Ensure that sufficient protective measures and equipment are in place for screening locations; • Use closed system medical devices, needleless; needles should be for medically essential procedures only, and a safety-engineered needle must be used; • Use disposable equipment whenever possible; non-disposable equipment should be dedicated to the patient. 	<ul style="list-style-type: none"> • Avoid contact with suspected or confirmed EVD cases or their environment if have open skin areas/lesions; • Ensure workers are fully trained and drilled to avoid touching the mucous membranes of eyes, nose and mouth with hands to prevent self-contamination; • Avoid contact between contaminated gloves/hands and equipment and the face, skin or clothing when removing PPE; • Clean hands before contact with any part of the body. If in doubt, repeat hand hygiene to ensure mucous membranes (eyes, nose, mouth) are not contaminated; • Fully train workers to understand the importance of reporting potential occupational/community exposure to EVD (i.e., direct exposure without appropriate PPE, percutaneous injuries) to immediate supervisor who must notify JOHSC or delegates as well as local public health authorities; • Fully train and support workers in proactively reporting to managers any absence of, deficiency in, or failure of equipment, protocols, measures or procedures.

* Duration of precautions: For confirmed EVD cases, precautions should be maintained until all symptoms have resolved with patients undergoing ongoing assessments on a case-by-case basis in consultation with an infectious disease specialist.

Employer Duties for Staffing and Training

Staffing	Training
<ul style="list-style-type: none"> • Ensure that for high-risk patients two registered nurses for every patient , at a minimum, are provided; • Ensure that only nurses that are fully trained, tested and drilled on hazards, protections and equipment donning and doffing provide care; they must have no other duties and monitor each other’s adherence to procedures, in particular the donning and doffing of personal protective equipment (PPE); • Ensure sufficient staffing is available to supplement nurses and other health workers who need to care for patients in isolation; • Limit the numbers of staff caring for patients in isolation; • Schedule work in a manner that allows for rest periods and recovery periods, and implement systems for monitoring fatigue; • Assign an individual trained in safety observation to monitor the appropriate selection, application, removal, and disposal of PPE, to avoid contamination of the health care workers, and to monitor entry to room (i.e., limit entry to only essential workers); • Assign a manager or supervisor to be available at all times to liaise with Joint Occupational Health and Safety Committees (JOHSC). 	<ul style="list-style-type: none"> • Ensure that identified workers have ready access to, and are trained, tested and regularly drilled in the Ebola hazards, the use of all measures and procedures related to their work, including the reason for and use of protective equipment (specifically how to doff and don the equipment), and all safety protocols; • Train staff on an ongoing basis in the care provisions/protocols for patients with EVD. • Implement health care worker resilience training and psychological support to minimize stressors faced when caring for EVD patients.

If suspect exposure to EVD:

- Perform first aid immediately if there is any exposure to blood/body fluids. Follow the following steps:
 - ✓ Rinse non-intact skin thoroughly with running water if it is contaminated with blood/body fluids, secretions or excretions;

- ✓ Flush mucous membranes of the eyes, nose or mouth with running water, if contaminated with blood/body fluids, secretions or excretions;
- ✓ Rinse the site of a percutaneous injury with running water; any wound should be gently cleansed with soap and water.
- ✓ Report exposure immediately to employer and obtain immediate medical attention.

If exposed to suspected or confirmed cases of Ebola:

- Self-monitor for EVD symptoms for 21 days following last contact;
- Adhere to the guidelines established by PHAC, for example, on travel;
- Do not work if symptomatic and inform employer if symptoms arise;
- Provide monitoring and support by the staff health care nurse in the health care facility.

Employer Provision of Personal Protective Equipment (PPE)

The type of personal protective equipment (PPE) provided is based on the precautionary principle and the nature of the interaction with the client or patient, and takes into account the following elements:

- anticipated degree of contact;
- risk posed by EVD;
- potential for blood/body fluid contact;
- potential for aerosol transmissibility;
- length of potential exposure.
- PPE should be provided outside the patients’ room or in the anteroom.
- Sufficient supplies (for identified health care workers) of protective equipment should be provided, including protective full body protection with impermeable, fluid-resistant gowns, gloves, hoods, face shields, non-slip, fluid-resistant or impermeable foot protection, full bio hazard suits such as “hazmat” suits, full respiratory protection (up to and including a powered air purifying respirator (PAPR) (which, according to experts, offers advantages over an N95 filtering facepiece, being more protective, comfortable, and cost-effective in the long run²).

Low-risk ³ (such as triage)	High-risk ⁴ (confirmed case)
<ul style="list-style-type: none"> • Fit-tested NIOSH-certified N95 particulate respirator; • Face shield: face shields should be long enough to prevent splashing underneath; eye 	<ul style="list-style-type: none"> • Powered air purifying respirators (PAPR) with an assigned protection factor of at least 50 or higher standard as appropriate; • Leg and non-slip, impermeable foot protection;

² Brosseau, L., Jones, R. (September 17, 2014). Commentary: Health Workers Need Optimal Respiratory Protection for Ebola. Center for Infectious Disease Research and Policy (CIDRAP). Retrieved from <http://www.cidrap.umn.edu/news-perspective/2014/09/commentary-health-workers-need-optimal-respiratory-protection-ebola>.

³ Patient in who is mildly symptomatic and non-diagnosed: mild fever fatigue, headache, sore throat, muscle pain.

⁴ Hospitalized patient who is confirmed as infected with the Ebola Virus Disease with more advanced symptoms such as diarrhea, vomiting, sweating, etc. or high risk procedures such as AGMP.

<p>glasses are not suitable eye protection;</p> <ul style="list-style-type: none"> • Gown (fluid-resistant or impermeable); • Double gloves (impermeable) – one under and one over cuff; • Goggles; • Supplies for respiratory hygiene and emesis management available (masks, tissues, basins, hand hygiene products, designated hand washing sinks, and no-touch receptacles); • At any time where a patient appears to be developing, or you are concerned they will develop “high-risk” symptoms (i.e., vomiting, diarrhea, coughing), high-risk measures will be implemented immediately. 	<ul style="list-style-type: none"> • Double gloves (impermeable) – one under and one over cuff, fit securely over cuffs and worn to enter the patients’ room (gloves should be removed and discarded into a no-touch waste receptacle, and after doffing of each piece of PPE); hand hygiene should be performed and repeated on exit from the patient’s room; • Biohazard suits that meet the American Society for Testing and Materials (ASTM) F1670 standard for blood penetration, the ASTM F1671 standard for viral penetration, and that leave no skin exposed or unprotected (such as “hazmat” suits); long-sleeved, cuffed, impermeable suit put on prior to entry to the room; • Reusable suits should be removed and placed into a no-touch used linen receptacle immediately after use, and hand hygiene should be performed before leaving the patient room; • Disposable suits should be discarded into a no-touch waste receptacle immediately after use and after doffing of each piece of PPE, hand hygiene should be performed before leaving the patient room.
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Additional Resources

- Provide regionally-based emergency rapid-response teams to respond to any cases of Ebola identified in Nova Scotia;
- Provide a 24/7 telephone resource for frontline workers to call with questions.

Communications

Create provincial Ebola command tables which include ministers and deputy ministers of health, chief medical officers of health, ministers of labour, union representatives and union OH&S experts, as well as other health care stakeholders.

Internal communications

For cases of suspected or confirmed EVD, Joint Occupational Health and Safety Committees (JOHSC) must be immediately notified. A communications strategy to reach to all frontline health care workers with a consistent message throughout our health care system must be developed. Updated policies, procedures, fact sheets and Q&As must be made readily available and accessible.

External communications

All cases of suspected or confirmed EVD must be reported to the medical officer of health at the public health unit immediately. Hospitals and health care facilities caring for patients with suspect or confirmed EVD should have communication plans for the public and media to ensure staff and patient confidentiality.

Ongoing Commitments to Pandemic Preparedness

- Develop and implement respiratory protection programs complete with training about the hazards, protections, and appropriate equipment to ensure workers understand respiratory hazards and proper use of N95 and PAPR respirators, and that N95 respirators are fit-tested annually, and health workers receive sufficient training, including information about the health risks of an emergency and/or pandemic situation.
- Prepare institutional pandemic plans in consultation with Joint Occupational Health and Safety Committees, nurses and other health care workers, and inform and educate workers about these plans. If an OH&S committee does not exist, discussions will be expanded to health care unions.
- Adopt an approach to emergency preparedness, incorporating the precautionary principle, and requiring the same standard for personal protective equipment (PPE) and pandemic planning in Nova Scotia.
- Encourage workers to report to managers who will support and competently respond to their concerns, if they do not have confidence in the equipment, measures or procedures in place.

Conclusion

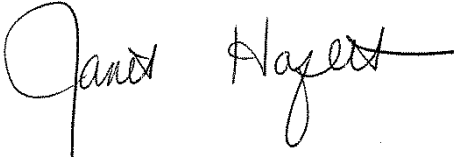
Nurses are part of a small group of people who provide care and service to individuals who are dangerously ill, with Ebola or other diseases that may present over the years. It is the responsibility of governments and employers to ensure all health care workers are well protected as they take on the challenge of caring for gravely ill patients.

A safe, secure and effective response requires the support of many parts of the health care system. It requires emergency preparedness planning, proper administrative, communication and engineering controls, the support of the administrators of the health system, as well as the government to provide the necessary protective equipment and training that takes into consideration risk and the precautionary principle. The Nova Scotia Nurses' Union is concerned that the Nova Scotia Department of Health and Wellness is not taking sufficient measures to protect the safety of frontline health care workers, and patients, in the province.

We must require a proper standard of safety and training of health care workers, especially in the event of a pandemic. We cannot take the risks associated with not providing adequate equipment in terms of the proper safety devices or in the quantity of stockpiled equipment.

Please Note: The Nova Scotia Nurses' Union may amend this position statement as necessary to accommodate changes in the situation with respect to EVD.

Sincerely,

A handwritten signature in black ink that reads "Janet Hazelton". The signature is written in a cursive style with a long horizontal stroke at the end of the last name.

Janet Hazelton,
President,
Nova Scotia Nurses Union