



Public Health Measures

Management of Cases and Contacts of Ebola Virus Disease

July 29, 2015

Management of individuals at risk of Ebola Virus Disease

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Definitions

Term	Definition
Active-Monitoring	The process where a health professional assesses the daily presence of fever and/or EVD-compatible symptoms in an at-risk client through direct communication (e.g. telephone or home visit) for 21 days beyond the last known EVD epidemiological risk factor. Active-monitoring may occur once or twice daily, depending on the assessed risk level.
Activity restrictions	Restrictions imposed on attendance at work, public places or gatherings, and/or public transit use.
Contact	A person identified as having come in contact with a symptomatic EVD case. The risk that the contact may further develop EVD is further defined on the basis of that contact.
Casual contact	Those who spend time less frequently with the symptomatic EVD case.
Close contact	Those who spend prolonged period of time within approximately 2 meters (6 feet) of a person with Ebola.
Client	A person who is using the public or acute health services of the Regional Health Authority.
Controlled movement	Restrictions related to long-distance travel (airplane, bus, ship), or a requirement to stay within a proximity of an EVD-designated facility.
Direct contact (transmission)	Direct and essentially immediate transfer of infectious agents to a receptive portal of entry through which infection may take place. This may be by direct contact such as touching, kissing, biting, or sexual intercourse, or by the direct projection of droplet spray onto the conjunctiva or onto the mucous membranes of the eyes, nose, or mouth. ¹
Indirect	Contaminated inanimate material or objects such as toys, handkerchiefs, soiled clothes, bedding, cooking or eating utensils, and surgical instruments or dressings; Any substance serving as an intermediate mean by which an infectious agent is transported and introduced into a susceptible host through a suitable portal of entry. ¹
Self-isolation	The separation of a symptomatic individual from those who are not infected to prevent the spread of disease.
Self-Monitoring	The process where an at-risk client takes and records their temperature and assesses the presence of fever and/or EVD-compatible symptoms for 21 days beyond the last known EVD epidemiological risk factor. Self-monitoring must occur twice daily, regardless of the assessed risk level.

¹ John M. Last. A Dictionary of Epidemiology. Forth Edition.

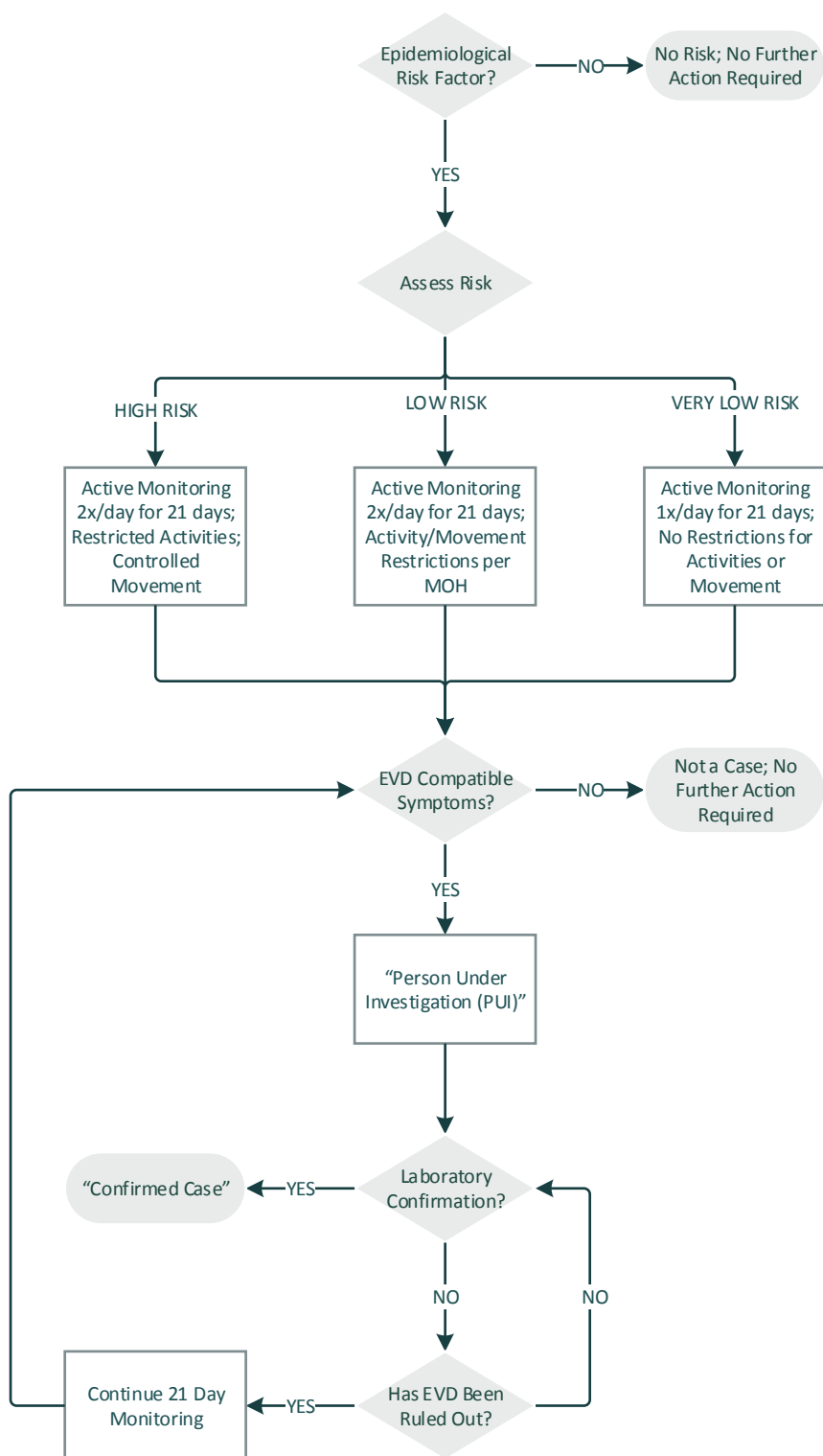


Figure 1: Algorithm for NL Public Health management of individuals at risk of developing Ebola Virus Disease.

Purpose

The purpose of this document is to provide guidance for public health practitioners regarding management of individuals at risk of developing Ebola Virus Disease (EVD).

This guideline is aligned with the embargoed Public Health Agency of Canada (PHAC) Public Health Measures January 2015 document (not publicly available).

Audience

This document will support the Communicable Disease Control Nurses (CDCNs) and Public Health Nurses (PHNs), Infection Control Practitioners (ICPs) and Occupational Health Nurses (OHNs) prepare for public health management of individuals at risk of developing Ebola Virus Disease (EVD).

Role of Public Health

Considering the severity of EVD and the lack of prophylactic and treatment options, a robust public health response is necessary. This public health response should include, but is not limited to:

- Identification of individuals potentially or actually at risk of EVD
- Early identification of symptoms and isolation to reduce transmission
- Facilitate prompt medical intervention and laboratory diagnostic testing

Public Health professionals (CDCs, PHNs, and OHNs) involved with management of individuals at risk for EVD should ensure that they are familiar with all aspects of the client management. Training should include, but is not limited to:

- Basic facts about EVD, transmission and preventive measures
- Rationale and procedures for contact tracing, follow-up, monitoring
- Information on contact tracing, follow-up tools, temperature monitoring, and reporting.
- Recommended infection prevention and control measures for contact tracing teams
- Protective Personal Equipment (PPE) use and requirements for contact and droplet precautions in the rare event that a symptomatic person presents at a community/public health clinic site
- What to do if an at-risk client becomes symptomatic
- Definitions used in contact tracing

Active monitoring will be completed by the PHN or CDCN (or designate) for community clients; the OHN will be responsible for active monitoring for health care workers.

Step 1: Identify Individuals with EVD Risk Factors

Individuals with an EVD risk factor will be identified by a Quarantine Officer (QO), Canadian Border Services Agency (CBSA), ICP, or the MOH.

Regional Public Health (CDCN/PHN/OHN) will inform the individual(s) that they have been identified as having an EVD epidemiological risk factor; if the individual is identified through a PHAC quarantine Officer or the CBSA they are issued a Quarantine Order which follows the Quarantine Act, *Minimizing the Risk of Exposure to Ebola Virus Disease in Canada Order*. A draft letter of instruction that may be sent from the Regional health authority to confirm instructions is available in Appendix A. The PHAC Order in Council is available in Appendix B.

A copy of the Quarantine Order should come through the office of the CMOH and will be directed to the appropriate regional health authority. The person responsible for following the individual must report the information listed below by either calling 1-844-800-8551 or by sending an email via Quarantine.Data@phac-aspc.gc.ca.

- Once travellers have reported to the local public health authority (within 24 hours)
- If a traveller does not report within 24 hours of the date/time specified in the order;
- If a traveller develops symptoms during the 21-day monitoring period (notification of symptomatic travellers should be done by contacting the quarantine stations or the regional Quarantine Station Manager);
- Once travellers are discharged from their 21-day monitoring period
- If a traveller expresses the intention to travel to an international destination (including to the United States).

For travellers intending to travel internationally, please include the date of departure, their itinerary (time and date of flights), the address and phone number (outside of Canada) where the person can be contacted, and whether you will continue to monitor this traveller upon his/her return to Canada.

Epidemiological Risk Factors

Epidemiological Risk Factors are located on the PHAC website: <http://www.phac-aspc.gc.ca/id-mi/vhf-fvh/national-case-definition-nationale-cas-eng.php>

- Individual who cared for a case of Ebola Virus Disease (EVD).
- Laboratory worker handling Ebola virus or processing body fluids from a case of EVD.
- Individual who spent time in a healthcare facility where cases of EVD are being treated in a country/region with widespread and intense Ebola virus transmission.
- Sexual contact with an EVD case.
- Close contact in households, healthcare facilities, or community settings with a person with Ebola while the person was symptomatic - close contact is defined as being for a prolonged period of time within approximately 2 meters (6 feet) of a person with Ebola.
- Contact with any human remains of a case of EVD or contact with human remains in a country/region with widespread and intense Ebola virus transmission.
- Contact with bats, primates or wild animal bush meat from affected countries/regions.
- A travel history to a country/region with widespread and intense Ebola virus transmission within 21 days constitutes a low risk factor.

For a list of countries where EVD is circulating: <http://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/distribution-map.html>

Step 2: Assess the risk level

Risk level definitions

Contacts will be interviewed by the MOH or designated CDCN/PHN/OHN; the information will be assessed by the MOH in order to determine their level of risk to develop EVD. There are three risk categories: high, low, and very low. Examples of EVD risk levels are provided in Appendix C.

Other public health recommendations and measures may be put in place; these measures will be based on the assessed risk level and degree of exposure determined by the MOH.

If a client falls between two categories, they should be assigned to the higher category.

Table 1: EVD risk level definitions, reference source, and examples.

	Risk Level		
	High	Low	Very Low
Definition	Direct contact with an EVD case and/or their bodily fluids, their dead body, or any other known source of Ebola virus (e.g., their laboratory specimens) without adhering to appropriate IPC precautions	No known unprotected direct contact with an EVD case or their body fluids (includes deceased bodies, a person's laboratory specimens)	No known exposure to an EVD case or their blood/bodily fluids.

Reference: PHAC (January 2015); NL IPAC Guidelines.

Step 3: Actively monitor the individual(s) for symptoms of EVD

Active monitoring of clients with EVD epidemiological risk factors

All clients with an EVD epidemiological risk factor will be actively monitored for 21 days from the most recent exposure (refer to epidemiological risk factors).

The client will be assessed for signs and symptoms and will receive education, counseling and guidance over the phone and will be advised of the level of active monitoring, and any activity restrictions or controlled movement, if necessary. See EVD Case Assessment form available in Appendix I.

Clients will be provided with a self-monitoring kit to facilitate taking their temperature twice daily (one kit per each client). The kit will include:

- An oral thermometer
- Instructions on how to check temperature (Appendix D)

- A temperature recording log (Appendix E)
- Instructions if EVD symptoms develop (Appendix F)

The kit may be provided to the contact by:

- PHN/CDCN or designate, for community clients; or
- Hospital Staff, if contact accompanies a case to the hospital; or
- OH staff, if health care worker requires active monitoring.

Clients with an EVD epidemiological risk factor will be assessed by the CDCN/PHN/OHN for any required community supports restrictions on movement that may be necessary during the 21-day active monitoring period. An assessment tool for social and information supports is available in Appendix G. If community supports are required, the nurse responsible for active monitoring should consult with their manager in their RHA.

Of note, there may be concomitant medical conditions (i.e. medical conditions not associated with fever or other EVD-compatible symptoms) that are present at the time of initial presentation or arise during the 21-day active monitoring period. In general medical or dental interventions should be deferred while some interventions may proceed (e.g. non-invasive medical examinations). Acceptable and necessary interventions should be discussed on a case-by-case basis and in conjunction with the medical practitioner, MOH, and clinical members of the EVD emergency operations center.

Risk levels

Table 2: Recommended management of at-risk individuals by Public Health Personnel, based on client risk level.

	Risk Level		
	High	Low	Very Low
Monitoring Type	Active	Active	Active
Self-Monitoring Frequency	2 x / day	2 x / day	2 x / day
Active-Monitoring Frequency	2 x / day	2 x / day	1 x / day
Contact via	Telephone	Telephone	Telephone
Activity Restrictions	Yes, as per MOH	As per MOH on a case-by-case basis	No
Controlled Movement	Yes, as per MOH	As per MOH on a case-by-case basis	No

Step 4: Identify EVD compatible symptoms, if they appear

EVD Symptoms and National Case Definitions

A client with an epidemiological risk factor AND who develop EVD-compatible symptoms within the 21-day active monitoring period is considered a “Person Under Investigation (PUI)” and must be investigated for EVD.

EVD-compatible symptoms and National Case Definitions are available on the PHAC website:

<http://www.phac-aspc.gc.ca/id-mi/vhf-fvh/national-case-definition-nationale-cas-eng.php>.

A person with EVD-compatible symptoms is defined as an individual presenting with fever (temperature ≥ 38.0 degrees Celsius) OR at least one of the following symptoms/signs:

- subjective fever
- malaise
- myalgia
- headache
- arthralgia
- fatigue
- loss of appetite
- conjunctival redness
- sore throat
- chest pain
- abdominal pain
- nausea
- vomiting
- diarrhea that can be bloody
- hemorrhage
- erythematous maculopapular rash on the trunk

Process for asymptomatic clients

If the client does not develop EVD-compatible symptoms within the 21-day active monitoring period, the client is removed from active-monitoring. There is no EVD risk and no further action is required.

Process for symptomatic clients

The CDCN/PH/OH responsible for the active monitoring may determine during the active monitoring call that the client has developed EVD-compatible symptoms. The CDCN/PHN/OHN should advise the client to self-isolate, as per the original Letter of Instruction from the MOH, and await further instructions. The CDCN/PHN/OHN will call the on-call MOH for further medical evaluation and direction. If the MOH determines that the client is a PUI, the “EVD Notification, Containment, Transportation, and Care Protocol” is activated (Appendix H). The CDCN/PHN/OHN should immediately notify their manager.

In the event that the client develops symptoms outside the time frame of the active monitoring call, the client should call HealthLine (811) for further medical evaluation and direction from the on-call MOH. If the MOH determines that the client is a PUI, the “EVD Notification, Containment, Transportation, and Care Protocol” is activated.

Person Under Investigation (PUI)

The classification of an EVD Person Under Investigation (PUI), triggers a number of responses.

Transport protocol

Please refer to the “EVD Notification, Containment, Transportation, and Care Protocol” for the process to identify, contain, and transport the PUI to a designated EVD treatment site in St. John’s (Health Sciences Centre or Janeway). This protocol is included in Appendix H.

Contact tracing

Contact tracing activities must proceed as if the individual were a confirmed EVD case, and until proven otherwise. This requires a coordinated and immediate response to identify all subsequent individuals with EVD epidemiological risk factors (refer to the epidemiological risk factor section of this document). This may include, but is not limited to:

- Close Contact(s) of the PUI/confirmed EVD case
- Health Care Workers caring for the PUI/confirmed EVD case
- Laboratory Workers handling samples from the PUI/confirmed EVD case
- Sexual contact(s) of the PUI/confirmed EVD case

A close contact is defined as being within 2 meters (6 feet) of a confirmed EVD case or PUI for a prolonged period of time. Individuals who have close contact with a confirmed EVD case or PUI PRIOR to the development of EVD-compatible symptoms are not considered to be close contacts.

The CDCN/PHN will lead the contact tracing and active monitoring for community contacts; The OHN will lead the contact tracing and active monitoring for regional health authority employees. The degree of monitoring required will be determined by the risk assessment, as per 'Step 2: Assess the risk level section of this document'.

PHAC EVD Case Report Form

The PHAC EVD Case Report Form should be filled out as soon as the client is classified as a PUI and continually updated as information becomes available. The initial form, and each subsequent update should be shared via fax or secure email with the Regional MOH Chief MOH, and Director of Disease Control.

The PHAC EVD Case Report Form is available: http://www.phac-aspc.gc.ca/id-mi/vhf-fvh/assets/pdf/evd_crf-mvd_fdc-eng.pdf

Step 5: Follow up on laboratory-confirmation details

Positive diagnosis – confirmed case

If the laboratory testing confirms EVD, all contact tracing and case reporting continue.

Negative diagnosis – EVD still a possible diagnosis

If the laboratory testing is negative for EVD, all contact tracing and case reporting continue until an EVD diagnosis is ruled out.

Negative diagnosis – EVD ruled out

If the laboratory testing is negative for EVD and EVD is no longer a possible diagnosis:

- Contact tracing activities may cease; 'contacts' should be notified that they are no longer at risk.
- Active monitoring of the client should continue for the remainder of the 21-day active monitoring period. If the client does not develop EVD-compatible symptoms within the 21-day active monitoring period, the client is removed from active-monitoring. There is no further EVD risk.
- PHAC EVD Case Report Form should be updated with the new information and shared with appropriate partners.

Appendix A: Draft Letter of Instruction

The following is a draft Letter of Instruction which can be modified to fit the immediate circumstances and the individual situation.

Date

To: (name)

You have been identified as a **very low risk/low risk/high risk** contact of Ebola Virus Disease because of your recent travel to an affected country.

You are hereby requested to conduct yourself in such a way as to limit personal contact with the general public for a period not to exceed 21 days from the time of departure from the high risk area. You are to:

List restrictions that apply to the situation, for example:

- Remain within ____ hours of a designated referral or treatment center;
- Refrain from using public transportation including buses or airplanes;
- Avoid shopping malls and movie theatres;
- *Other restrictions deemed necessary:*
-

During this time you will be expected to maintain contact (*Frequency and nature of contact to be determined*) with a public health nurse who will be responsible for monitoring your health.

Please see the attached instructions on how to take your temperature and what symptoms to look for (Appendices F, G and H).

Should you develop any symptoms suggestive of Ebola Virus Disease, you are to contact the monitoring nurse at _____ or HealthLine at 1-888-709-2929 or 811.

Thank you for your cooperation in this matter.

Yours sincerely

David J. Allison MD, FRCPC
Chief Medical Officer of Health

Appendix B: Quarantine Act – Order in Council

PUBLIC HEALTH AGENCY OF CANADA

QUARANTINE ACT

Minimizing the Risk of Exposure to Ebola Virus Disease in Canada Order (No. 3)

P.C. 2015-812 June 11, 2015

Whereas the *Minimizing the Risk of Exposure to Ebola Virus Disease in Canada Order (No. 2)*, P.C. 2014-1264, will cease to have effect on June 30, 2015;

Whereas the Governor in Council wishes to renew that Order;

And whereas the Governor in Council continues to be of the opinion that

- (a) there is an outbreak of a communicable disease, namely Ebola virus disease, in Guinea, Liberia and Sierra Leone;
- (b) the introduction or spread of the disease would pose an imminent and severe risk to public health in Canada;
- (c) the entry of persons who have recently been in any of those countries into Canada may introduce or contribute to the spread of the disease in Canada; and
- (d) no reasonable alternatives to prevent the introduction or spread of the disease are available;

Therefore, His Excellency the Governor General in Council, on the recommendation of the Minister of Health, pursuant to section 58 of the *Quarantine Act* ([see footnote a](#)), makes the annexed *Minimizing the Risk of Exposure to Ebola Virus Disease in Canada Order (No. 3)*.

MINIMIZING THE RISK OF EXPOSURE TO EBOLA VIRUS DISEASE IN CANADA ORDER (NO. 3)

Definition of “Agency”

1. In this Order, “Agency” means the Public Health Agency of Canada.

Conditions of entry — Guinea, Liberia or Sierra Leone

2. (1) A person who has been in Guinea, Liberia or Sierra Leone in the 21 days before the day of their entry into Canada must, on entry into Canada,

- (a) disclose that fact to a screening officer at the entry point;
- (b) immediately undergo a medical examination if a quarantine officer determines that the person is exhibiting symptoms of Ebola virus disease;
- (c) immediately report to a public health authority or the Agency, as specified by a quarantine officer, in the manner that the officer specifies, if the officer determines that the person is not exhibiting symptoms of Ebola virus disease and if

- (i) the person knows they have been exposed to the Ebola virus, or
 - (ii) the person had unprotected direct contact with a person exhibiting symptoms of Ebola virus disease, with the contaminated environment or cadaver of such a person, or with a vector that is capable of transmitting the Ebola virus; and
- (d) if they are not a person referred to in paragraph (b) or (c), report to a public health authority or the Agency, as specified by a quarantine officer, in the manner that the officer specifies.

Persons required to undergo medical examination

(2) A person who is required to undergo a medical examination under paragraph (1)(b) must, after undergoing the examination,

- (a) contact a quarantine officer before leaving the place where the examination takes place and answer any questions that are related to the person's exposure or possible exposure to the Ebola virus;
- (b) if they meet at least one of the criteria set out in subparagraphs (1)(c)(i) and (ii),
 - (i) immediately report to a public health authority or the Agency, as specified by the quarantine officer, in the manner that the officer specifies, and
 - (ii) isolate themselves without delay, and remain in isolation from other persons until the expiry of the 21-day period that begins on the day on which the person enters Canada, as instructed by the public health authority or the Agency, as the case may be;
- (c) if they do not meet any of the criteria set out in subparagraphs (1)(c)(i) and (ii), report to a public health authority or the Agency, as specified by the quarantine officer, in the manner that the officer specifies; and
- (d) do the following during the 21-day period that begins on the day on which the person enters Canada:
 - (i) measure their body temperature twice a day, record the measurements in writing and report them to the public health authority or the Agency, as the case may be, in the time and manner that it specifies,
 - (ii) if they are required to report to a public health authority, answer any questions about their body temperature or symptoms that they are asked by an official of the authority or the Agency,
 - (iii) if they are required to report to the Agency, answer any questions about their body temperature or symptoms that they are asked by an official of the Agency,
 - (iv) report any travel intentions to the public health authority or the Agency, as the case may be, and
 - (v) immediately report any symptom of Ebola virus disease to, and follow any instructions provided by, the public health authority or the Agency, as the case may be.

Persons at higher risk of developing symptoms

(3) A person who is required to report to a public health authority or the Agency under paragraph (1)(c) must comply with the obligations set out in subparagraph (2)(b)(ii) and paragraph (2)(d).

Persons at risk of developing symptoms

(4) A person who is required to report to a public health authority or the Agency under paragraph (1)(d) must comply with the obligations set out in paragraph (2)(d).

Exception

(5) A person who is hospitalized because they exhibit the symptoms of Ebola virus disease is not required to comply with the obligations set out in subsections (2) to (4) while they are hospitalized.

Reduction in 21-day period

(6) If a person can prove that, since leaving Guinea, Liberia or Sierra Leone but before entering Canada, they have been in a place other than Guinea, Liberia or Sierra Leone, including on a ship in international waters, the 21-day period referred to in subparagraph (2)(b)(ii) and paragraph (2)(d) is reduced by the number of days that the person spent in the place.

Quarantine Act — powers and obligations

3. For greater certainty, this Order does not affect any of the powers and obligations set out in the *Quarantine Act*.

EFFECTIVE PERIOD

Effective period

4. This Order has effect for the period beginning on July 1, 2015 and ending on December 31, 2015.

EXPLANATORY NOTE

(This note is not part of the Order.)

Proposal

The Order in Council, entitled the *Minimizing the Risk of Exposure to Ebola Virus Disease in Canada Order (No. 3)*, extends the requirements for travellers arriving in Canada from countries affected by the Ebola Virus Disease (EVD) by a period of six months.

Objective

This Order will ensure that the health and safety of the public remain protected as the Ebola outbreak continues, by ensuring that all travellers arriving to Canada from Guinea, Liberia and Sierra Leone continue to identify themselves and be monitored by public health authorities until December 31, 2015.

Background

Ebola Virus Disease is a severe disease that causes haemorrhagic fever in humans and animals. Diseases that cause haemorrhagic fevers, such as Ebola, are often fatal as they affect the body's vascular system (how blood moves through the body). This can lead to significant internal bleeding and organ failure. While there has been progress in combatting the EVD in West Africa, the World Health Organization re-affirmed on January 20, 2015 that the outbreak

continues to be a public health emergency of international concern under the *International Health Regulations*. As of May 11, 2015, there have been no cases of EVD in Canada.

On November 10, 2014, the Government of Canada made the *Minimizing the Risk of Exposure to Ebola Virus Disease (EVD) in Canada Order (No. 2)*, which is in effect until June 30, 2015. However, as the Ebola outbreak continues, there is recognition that individuals coming into Canada with a travel history from Guinea, Liberia, and Sierra Leone will need to be assessed and monitored beyond that date. Until the outbreak is under control in these countries, the Government of Canada will continue to take enhanced action at Canada's borders and work closely with the provinces and territories to support the monitoring and, in some cases, isolation of travellers arriving in Canada who have recently been in Guinea, Liberia and Sierra Leone.

This added protection will continue to complement other Canadian EVD preparedness and response activities, including the routine screening of all travellers at points of entry for EVD and other communicable diseases, the development of an EVD vaccine, and the recent deployment and training of Rapid Response Teams to ensure Canada is ready to respond in the event there is a first case of EVD in Canada.

Implications

Key obligations for travellers

The *Minimizing the Risk of Exposure to Ebola Virus Disease in Canada Order (No. 3)* continues to obligate all travellers to disclose to a Screening Officer (a Canada Border Services Agent) if they have been in Guinea, Liberia or Sierra Leone in the last 21 days. The Screening Officer will refer travellers with a recent history of travel to Guinea, Liberia or Sierra Leone to a Quarantine Officer for detailed screening and temperature check.

Travellers who have EVD symptoms such as fever, chills, sore throat, or muscle aches will be immediately required to undergo a medical examination at a hospital and be placed under isolation. The Quarantine Officer will coordinate the patient transfer with the province or the territory and local public health authorities. Symptomatic travellers who do not require hospitalization after the medical exam will be required to subsequently report to a public health authority or the Public Health Agency of Canada for continued monitoring, and may, depending on whether they have or may have been exposed to the Ebola virus, be required to isolate themselves and remain in isolation from other people for up to 21 days.

Travellers who have no symptoms of EVD but who have or may have been exposed to the Ebola virus (for example, needlestick injury, family contacts of Ebola cases) are at higher risk of developing EVD. These travellers will be required to immediately report to a public health authority specified by a Quarantine Officer and isolate themselves from other people without delay for up to 21 days after arrival into Canada. They will be monitored for EVD signs and symptoms, including twice-daily temperature checks and will be required to answer questions about their body temperature or symptoms and follow further directions.

All other travellers, including health care and humanitarian workers, who have no EVD symptoms and no known possible exposure to EVD will be required to report to a public health authority or the Public Health Agency of Canada for up to 21 days after arrival in Canada. They will be required to take their temperature twice daily, self-monitor for EVD signs and symptoms, and report daily to the public health authority. They will also be required to report planned travel, answer any questions about their body temperature or symptoms and follow further directions. The public health authority will determine if any additional public health actions, such as isolation, are needed, e.g. following direct contact with Ebola patients, cadavers or the Ebola virus.

Travellers who develop symptoms of EVD will also be required to report immediately to a public health authority as instructed by the Quarantine Officer and follow any instructions provided.

Failure to comply with this Order is an offence under section 71 of the *Quarantine Act*. The maximum penalties (on summary conviction) are a fine of up to \$750,000 and/or imprisonment for six months.

Consultation

Provinces and territories were consulted on the initial Order and informed of the extension of border measures through this Order (No. 3). The Agency will continue to collaborate with provinces and territories on the implementation of the Order and address any forthcoming challenges or concerns

Obtained from PHAC website July 29, 2015: <http://www.gazette.gc.ca/rp-pr/p1/2015/2015-06-20/html/order-decret-eng.php>

Appendix C: Risk level examples

High Risk Examples
<ul style="list-style-type: none"> Healthcare worker or humanitarian aid worker who did not consistently adhere to appropriate IPC precautions when directly or indirectly providing care to a symptomatic EVD case (e.g. provided direct patient care or had contact with environment or objects contaminated by blood or body fluids, had a breach in their use of PPE, or had a needle stick injury). Laboratory worker who processed blood and/or body fluids of a symptomatic EVD case without adhering to appropriate IPC or other biosafety measures. Family member, healthcare worker, or co-passenger on airplane who had direct contact with the blood or body fluids of a symptomatic EVD case. Sexual contact of an EVD case (confirmed, convalescent, or PUI). Household contact who provided direct care to a symptomatic EVD case. Direct exposure to human remains of a person who was suspected or confirmed to have EVD (e.g. through participation in funeral or burial rites), without wearing appropriate PPE. Direct, unprotected contact with bats, primates or wild animal bush meat from a country with widespread EVD transmission.
Low Risk Examples
<ul style="list-style-type: none"> Humanitarian aid workers, healthcare workers or laboratory staff who had direct contact with an EVD case and report that they consistently followed recommended IPC precautions with no known PPE breaches. Casual contact (no direct contact) with an EVD case while the case had only mild symptoms (e.g. low grade fever) and no advanced symptoms (e.g. diarrhea or vomiting). <ul style="list-style-type: none"> Casual contact may include sharing a seating area on public transportation, sitting in the same waiting room but no direct or indirect contact, and household contacts [e.g. child, spouse] who did not provide care and did not have contact with blood or body fluids)
Very Low Risk Examples
<ul style="list-style-type: none"> An individual who, in the past 21 days, has been a resident, worker, or traveller in an EVD-affected area and did not knowingly have direct or indirect contact with a symptomatic EVD case or their blood/body fluids, deceased bodies, or animals. Refugees from an EVD-affected area who were under strict observation and restricted movement for 21 days prior to leaving the affected country.

Appendix D: How to Take a Temperature

The 2 recommended ways to take a temperature are:

1. In the mouth (oral), preferred
2. Under the armpit (axillary), for young children only

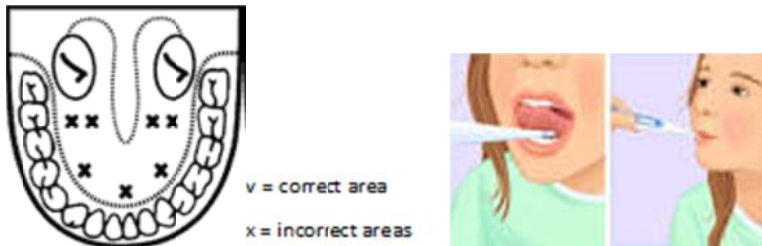
Tips for using a digital thermometer:

- A digital thermometer is best for taking temperatures:
- Press the button to turn the thermometer on.
- Follow the instructions below for the specific armpit or mouth methods.
- When you hear the beeps remove the thermometer and read the temperature on the display.
- Clean thermometers with cool, soapy water and rinse off before and after use.

Mouth Method (5 years of age and older)

The mouth (oral) method is recommended for persons 5 years of age and older.

- Carefully place the tip of the thermometer under the tongue.



- With the mouth closed, leave the thermometer in place for about 1 minute until you hear the beep, or follow the manufacturer's instructions.
- Remove the thermometer and read and record the temperature.

Armpit Method (children under 5 years only)

The armpit (axillary) method is usually used to check for fever in newborns and young children under 5 years.

- Place the tip of the thermometer in the center of the armpit.
- Make sure your child's arm is tucked snugly against their body.



- Leave the thermometer in place for about 1 minute, until you hear the beep or follow the manufacturer's instructions.

- Remove the thermometer and read the temperature.

What is a normal temperature?

The normal temperature range varies, depending on the method you use:

Method	Normal Temperature
Mouth	35.5°C - 37.5°C (95.9°F - 99.5°F)
Armpit	34.7°C - 37.3°C (94.2°F - 99.1°F)

Temperatures may vary throughout the day, rising as much as 1 degree in the morning and reaching a maximum during the late afternoon. Mild increases may be caused by exercising, too much clothing or bedding, taking a hot bath or being outside in hot weather. Do not take an oral temperature after hot or cold drinks.

Appendix F: Advice for Persons with EVD-Compatible Symptoms who are asked to Self-Monitor for 21 Days

You have been identified as a contact of Ebola disease. Please follow the following steps:

- 1. Check your temperature twice daily with a thermometer in your mouth and record the results.**
 - a. You can use the Contact Tracing and Temperature Recording Form provided to record your temperature.
 - b. Do not share your thermometer with anyone else.
 - c. If possible, do not take medications that may reduce fever. Consult a health care provider or pharmacist if you are not sure whether a medication will reduce a fever.
- 2. If you develop a fever of 38°C or greater, or any symptoms that may suggest EVD (listed below):**
 - a. Avoid all types of physical contact with other people.
 - b. Call the HealthLine at 1-888-709-2929 or 811.
 - c. The HealthLine will connect you with the health official who can provide you with what to do next.

Symptoms that may suggest EVD include:

Fever \geq than 38°C	Chills	Diarrhea
Severe headache	Vomiting	Muscle pain and weakness
Sore throat	Stomach pain	Nausea
Rash	Unexplained bleeding	

For additional information:

Newfoundland and Labrador HealthLine: 1-888-709-2929 or 811; or

Public Health Agency of Canada: <http://www.phac-aspc.gc.ca/id-mi/vhf-fvh/cases-contacts-cas-eng.php>

Appendix G: Assessment for Social and Informal Supports

Household Composition

<input type="checkbox"/> Alone	<input type="checkbox"/> Spouse & Children	<input type="checkbox"/> Parents	<input type="checkbox"/> Non-relatives
<input type="checkbox"/> Spouse/Partner	<input type="checkbox"/> Children	<input type="checkbox"/> Other relatives	<input type="checkbox"/> Homeless

Contact with Relatives

	Telephone	Visit
Once a day or more	<input type="checkbox"/>	<input type="checkbox"/>
2-6 times weekly	<input type="checkbox"/>	<input type="checkbox"/>
Once weekly	<input type="checkbox"/>	<input type="checkbox"/>
Once a month	<input type="checkbox"/>	<input type="checkbox"/>
Special occasions	<input type="checkbox"/>	<input type="checkbox"/>
Not at all	<input type="checkbox"/>	<input type="checkbox"/>

Contact with Friends

	Telephone	Visit
Once a day or more	<input type="checkbox"/>	<input type="checkbox"/>
2-6 times weekly	<input type="checkbox"/>	<input type="checkbox"/>
Once weekly	<input type="checkbox"/>	<input type="checkbox"/>
Once a month	<input type="checkbox"/>	<input type="checkbox"/>
Special occasions	<input type="checkbox"/>	<input type="checkbox"/>
Not at all	<input type="checkbox"/>	<input type="checkbox"/>

Supports Required

	Yes	No
Grocery Delivery	<input type="checkbox"/>	<input type="checkbox"/>
Housing (Alternate for Family Members)	<input type="checkbox"/>	<input type="checkbox"/>
Medication (Pick-up/Delivery)	<input type="checkbox"/>	<input type="checkbox"/>

Other Notes

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Appendix H: EVD Notification, Containment, Transportation, and Care Protocol



Patient Presents at Health Facility Ebola Virus Disease (EVD) Notification, Containment, Transportation, and Care Protocol

Overview:

The purpose of this provincial Protocol is to ensure that all relevant parties in the Newfoundland and Labrador health system, including both Public Health and Acute Care; and the Public Health Agency of Canada (PHAC) Rapid Response Team are working in a coherent and coordinated fashion. This applies to Provincial Government, Regional Health Authority (RHA) and PHAC staff who will be working together on an EVD response should a potential EVD case present in this province.

Overarching Goal:

To identify, contain, and transport suspect patients to a designated EVD treatment site in St. John's (Health Sciences Centre or Janeway) if a case of EVD is suspected.

The determination of a suspect case needing further investigation will be made by the attending physician or nurse practitioner who is assessing the patient in collaboration the Medical Officer of Health who is on-call for the Province on that day.

In an effort to support the health system and its practitioners in managing the suspect case, the attached algorithm has been developed. See attachment.

In order to contain and transport individuals safely and efficiently, separate protocols will provide greater details and instruction.

Key Teams:

There are two expert teams who will play distinct roles at different junctures in this early phase of a response to a suspected case of EVD.

1. Containment and Transport Team:

- Will comprise 9 individuals:
 - The on-call MOH (Dr. Faith Stratton, Dr. David Allison, or Dr. Catherine Donovan)
 - The attending physician at local health facility
 - The receiving physician at the Health Sciences Centre or Janeway
 - The Manager of Emergency Medical Services (Corey Banks) or designate
 - Online Medical Control Physician (Dr. Doug Baggs) or designate
 - Eastern Health - Clinical Chief of Infection Control (Dr. Natalie Bridger) or designate
 - Eastern Health - Clinical Chief of Critical Care (Dr. Mary O'Brien) or designate
 - Eastern Health - Manager of Occupational Health and Safety (Tom Goddon)
 - Eastern Health - Director of Infection Protection and Control (Amy Howard)

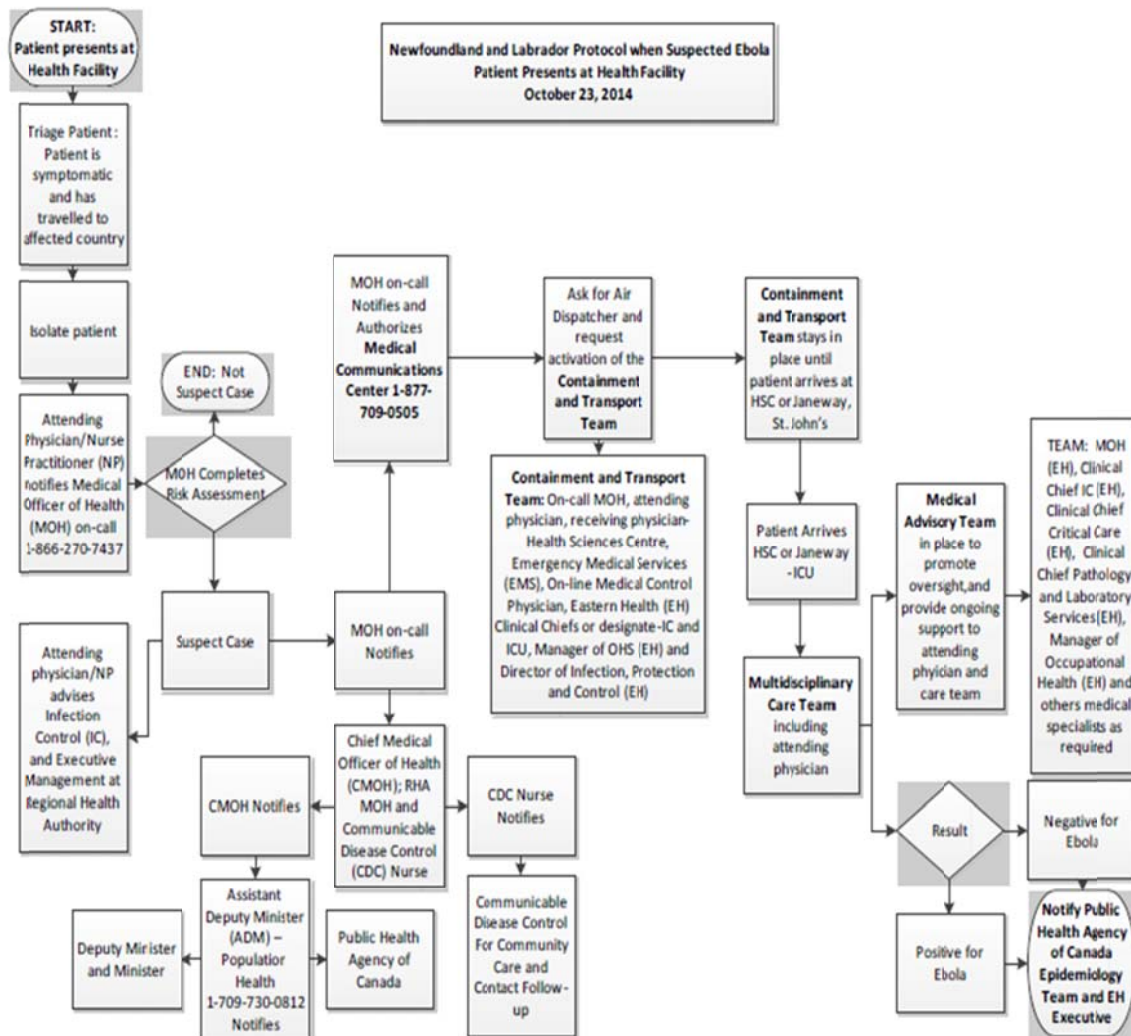


- The goal of the Containment and Transport Team is to provide advice and support on the safe containment and transportation of a suspected case of EVD to the on-site health care staff and to the Emergency Medical Services (EMS) team, and to prepare the staff at the Health Sciences Center and Janeway to assume care of the patient in St. John's.

2. Medical Advisory Team:

- Will comprise at least 6 individuals:
 - Eastern Health - Medical Officer of Health (Dr. David Allison)
 - Eastern Health - Clinical Chief of Infection Control (Dr. Natalie Bridger) or designate
 - Eastern Health - Clinical Chief of Critical Care (Dr. Mary O'Brien) or designate
 - Eastern Health - Clinical Chief of Pathology and Laboratory Medicine (Dr. Stephen Raab) or designate
 - Eastern Health - Manager of Occupational Health (Ada Cabot)
 - Other medical specialists to be determined based on the assessment of patient need.
- The goal of the Medical Advisory Team will be to provide oversight and ongoing support to the attending physician and multidisciplinary care team at the Health Sciences Center or Janeway (or other health facility in the event a patient cannot be moved due to the patient's condition or inclement weather). The team would work in close proximity to the team of experts from PHAC and local health officials to assist in containing the spread of the disease. The team will also advise Eastern Health executive staff and Department of Health and Community Services executive staff of issues and challenges with the response in order for the broader response teams to adjust policies and programs, for example infection control measures and the use of Personal Protective Equipment (PPE).
- The role of the Rapid Response Team of PHAC will include: 1) ensuring that all the necessary containment protocols are followed; 2) contact tracing; 3) laboratory expertise; 4) proper use and removal of PPE; and 5) providing any supplies from the National Emergency Strategic Stockpile that are required, such as masks, gloves and face shields. This team will not be providing direct patient care.

January 27, 2015



Appendix I: EVD Case Assessment Form

CDCN: _____ Date: _____

Case Demographics	
Name:	
Male <input type="checkbox"/> Female <input type="checkbox"/>	DOB: _____ MCP: _____
Address:	
Phone Number: _____	Alt. Phone Number: _____
Parent/Guardian:	
Family Dr: _____	Phone number: _____
Medical History:	
Surveillance Case Classification	
Outbreak Disease ID:	
Disease Name:	
Case Probable <input type="checkbox"/> Case Confirmed <input type="checkbox"/>	
Attending Doctor: _____	Phone Number: _____
Case Hospitalized: Yes <input type="checkbox"/> No <input type="checkbox"/>	
If Yes Name of Hospital: _____	Date of Admission: _____
Case Isolated: Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes is Isolation at Home <input type="checkbox"/> or in Hospital <input type="checkbox"/>	
Location Case Identified:	
Is Case a Contact of a Known Case? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Signs and Symptoms	
Fever Yes <input type="checkbox"/> No <input type="checkbox"/> Date of onset: _____	Headache Yes <input type="checkbox"/> No <input type="checkbox"/> Date of onset: _____
Sore Throat Yes <input type="checkbox"/> No <input type="checkbox"/> Date of onset: _____	Diarrhea Yes <input type="checkbox"/> No <input type="checkbox"/> Date of onset: _____
Stomach Pain Yes <input type="checkbox"/> No <input type="checkbox"/> Date of onset: _____	Vomiting Yes <input type="checkbox"/> No <input type="checkbox"/> Date of onset: _____
Muscle Pain Yes <input type="checkbox"/> No <input type="checkbox"/> Date of onset: _____	
Other Symptoms: _____ _____ _____	
Date Of Onset: _____	

Appendix J: EVD Contact Tracing Sheet

[illegible]