

Manitoba Provincial Outbreak Response Plan (ORP)

Manitoba
Health
Public Health



Communicable Disease Control Unit

1. Introduction

The Manitoba Provincial Outbreak Response Plan (ORP) is a formalized process that activates an Outbreak Response Team (ORT) to respond to certain communicable disease outbreaks occurring in the province. The ORP outlines a response process and identifies key players who may comprise membership on the ORT. Key players consist of representatives from organizations and agencies usually involved in outbreak management and control, and those with specific areas of expertise (e.g., infectious disease specialist, environmental health officer).

The purpose of the ORP is to:

- Ensure a coordinated response to selected outbreaks thereby limiting morbidity, mortality and associated costs.
- Ensure coordinated provision of services and resources for public health agencies or other facilities involved in outbreak management.
- Ensure timely communication to the appropriate stakeholders regarding an outbreak.
- Provide expertise and consultation to assist in the management of complex issues.
- Facilitate documentation of outbreaks and ensure timely distribution of same to stakeholders.
- Provide data that will allow evidence-based recommendations for policy and practice that may help prevent future outbreaks.
- Provide opportunities for training experience for various personnel (e.g., community medicine or infectious disease residents, new staff in Infectious Disease or Public Health Nursing, laboratory trainees).
- Facilitate the provision of resources (human and financial) to assist with outbreak investigation, management and control.

2. Decision to Implement Outbreak Response Plan

Regional Health Authority (RHA) Medical Officers of Health (MOH) retain primary responsibility for the investigation and management of communicable disease outbreaks occurring in the corresponding RHA and not all outbreaks will require the mobilization of the ORP. MOHs/RHAs will assess whether they require additional assistance and may request the implementation of the ORP if they feel it is warranted.

Information regarding possible outbreaks or a specific request for implementation of the ORP should be forwarded in a timely manner directly to the attention of the CDC Epidemiologist (with back-up supplied by the CDC Program Specialist). Suspected outbreaks and requests for ORP implementation will be discussed in consultation with staff from the Public Health Branch, Office of the Chief Medical Officer of Health and Regional Health Authority. One of three possible options will be decided upon: a) to implement ORP; b) not to implement ORP; and, c) to gather more information and reassess situation.

The standard definition of an outbreak that will be used for the purposes of the ORP is as follows:

The occurrence in a community or region of cases of an illness with a frequency clearly in excess of normal expectancy. The number of cases indicating presence of an outbreak will vary according to the infectious agent, size and type of population exposed, previous experience or lack of exposure to the disease, and time and place of occurrence. Therefore, the status of outbreak is relative to the usual frequency of the disease in the same area, among the same population, at the same season of the year.¹

1 Chin, J. (2000). Control of Communicable Diseases Manual. American Public Health Association., Washington, D.C.

The decision to implement the ORP will be specific to each situation. The following criteria may assist with prioritization, but are not exhaustive:

- outbreaks involving multiple jurisdictions or Regional Health Authorities
- outbreaks with serious implications for morbidity and/or mortality
- outbreaks with policy implications
- outbreaks of “old” disease with control issues
- outbreaks involving emerging/re-emerging pathogens
- outbreaks for which incidence is amenable to preventive measures
- province-wide outbreaks
- suspected outbreaks requiring ongoing assessment and monitoring (e.g., meningitis)
- outbreaks exceeding RHA resources or requiring external resources

3. Responsibility Centres

The following is a list of the key players who may be involved in the implementation of the ORP along with a description of their responsibilities:

A. Director of Public Health/Communicable Disease Control, Manitoba Health

- Is notified of the decision to implement or not to implement the ORP.
- Has opportunity to veto decision if he/she feels it necessary.
- Endorses deployment of resources from the Public Health Branch.

B. CDC Epidemiologist, Communicable Disease Control (CDC) Unit, Public Health Branch, Manitoba Health (Back-up: Program Specialist, Non-Vaccine Preventable

Diseases, CDC Unit, Public Health Branch, Manitoba Health)

- Receives reports of outbreaks and brings those that may require ORP to the attention of the Public Health Branch and Office of the Chief Medical Officer of Health.
- Facilitates coordination of ORP (i.e., organizes first Team meeting, assists with database development and analysis and interpretation of data (where appropriate)).
- Ensures timely inter-jurisdictional and inter-regional communication (where appropriate).
- Assists with coordination of evaluation of outbreak management and outbreak response process (where appropriate).
- Assists with documentation of interim and final reports, which will include evaluation of outbreak management and outbreak response process (where appropriate).
- Receives interim and summary documents and forwards them to CDC Unit who has the responsibility for taking appropriate action.

C. Team Coordinator (appointed by ORT for duration of outbreak)

While the Team Coordinator will often come from an organization within the jurisdiction of the outbreak, another individual with the appropriate skills from outside the jurisdiction may be chosen. The criteria for choice of Team Coordinator will vary depending on the nature, location, and size of the outbreak, and availability of appropriate personnel. For large, province-wide or cross-jurisdictional

outbreaks, the Team Coordinator may be a representative of the Public Health Branch. The Team Coordinator:

- Organizes and chairs team meetings.
- Ensures that appropriate samples (e.g., clinical, food, water etc.) are collected.
- Arranges for clerical support for the outbreak (this should be carried out as early in the process as possible).
- Provides liaison with appropriate stakeholders.
- Coordinates outbreak investigation and management.
- Coordinates reporting/communication to community, MOH(s), CDC Unit, etc.
- Coordinates data collection, analysis and interpretation (with assistance as required).
- Prepares interim and final reports (with assistance as required).
- Addresses issue of publication; asks for volunteers to assist with write-up.
- Is responsible for ensuring that a communications plan is in place.
- May act as official communications contact (i.e., with media, public, Ministry, etc.) or delegate this responsibility to another member of the ORT. It is preferred however, that the same individual act as official communications contact. One suggestion is that, wherever possible, the official communications contact be a MOH.

D. Outbreak Response Team (ORT)

The individuals comprising the ORT should have the authority to generate the appropriate involvement of their organization. The ORT consists of, but is not limited to, representatives from the organizations below.*

The need for involvement of various personnel will depend on the nature and requirements of each outbreak. In addition to the Director of Communicable Disease Control (or delegate) and the appropriate regional MOH(s) and field personnel, one or more representatives may be designated from each of the following:

- Public Health Branch
- Office of the Chief Medical Officer of Health
- University Infectious Diseases
- University Community Health Sciences
- Infection Control Practitioners
- Laboratories
- First Nations and Inuit Health Branch (Health Canada)
- Communications, Provincial Government/RHA
- Population and Public Health Branch, Health Canada
- City of Winnipeg Environmental Health Services
- Regional Health Authorities – Medical Officers of Health
- Regional Health Authorities – Public Health Program Managers
- Regional Health Authorities – Public Health Staff
- Manitoba Conservation

* *Designated representatives will be assigned ahead of time with alternates listed where possible. A list of the named representatives from the various organizations will be maintained by the CDC Epidemiologist, CDC Unit, Public Health Branch, Manitoba Health.*

Requests for federal Field Epidemiology assistance may be submitted to Health Canada by the Provincial Epidemiologist (or delegate).

Students and trainees (e.g., Infectious Disease or Community Health Sciences residents, public health and laboratory employees) may be on call for the ORP as part of their field experience. In addition, representatives of other organizations may be invited to participate as required by the outbreak (e.g., Departments of Obstetrics/Gynecology and Pediatrics, Manitoba Medical Association, Manitoba Association of Registered Nurses, etc.). In addition, where possible, dedicated clerical support staff should be involved in the outbreak process as early as possible.

The members of the ORT are responsible for contributing their expertise to the investigation, management and documentation of the outbreak. At the onset, the ORT will make a recommendation as to whether to proceed with the ORP.

4. Process

A. Monitoring for presence of an outbreak

Outbreaks may be noted by:

- Public Health Branch
- Regional MOH/Office of the Chief Medical Officer of Health
- Public Health Staff
- City of Winnipeg Environmental Health Services
- Institutions
- Clinicians
- First Nations and Inuit Health Branch, Health Canada
- Manitoba Conservation (Environmental Health Officers)

- Laboratories

Outbreaks are to be reported by phone or fax (using the Outbreak Reporting Form) to the CDC Unit, Manitoba Health (204-788-6739; Fax: 948-3044).

B. Outbreak status reported and confirmed

Depending on the nature of the outbreak reported, the Public Health Branch, Office of the Chief Medical Officer of Health, Regional Medical Officer of Health or the ORT will collectively verify outbreak status. At this point the decision may be made to implement the ORP. If an outbreak is not declared, ongoing assessment and monitoring may be sought.

C. First meeting of the Outbreak Response Team (ORT)

Once an outbreak is identified, the CDC Epidemiologist will coordinate the first meeting of the Outbreak Response Team (ORT). At this time, the Team will review the available facts and decide whether and how to proceed with formal implementation of the ORP.

D. Team Coordinator selected/Outbreak planning

If it is decided to proceed with the ORP, the Team will:

- Inform the Director of Communicable Disease Control of the decision to proceed with the ORP (if necessary)
- Designate a Team Coordinator
- Decide what other players (may) need to be involved
- Discuss possible strategies and develop an implementation plan regarding outbreak investigation and management
- Identify required resources

E. Outbreak investigation and management

The Team Coordinator, with the expertise and assistance of the regional staff such as the MOH(s), field personnel and other ORT members, coordinates the investigation and management of the outbreak. Coordination and management includes the development of communications strategy (i.e., for other health professionals, the Ministry, the public, the media, etc.) and the writing and distribution of an interim report.

The following steps may be used as a guide in the investigation and management of any outbreak. They will have to be individualized to each situation as they are not necessarily sequential, nor will all steps have to be undertaken for every outbreak.

- i. Establish the existence of an outbreak
- ii. Confirm the diagnosis
- iii. Establish the case definition and count cases
- iv. Orient the outbreak in terms of time, place, and person
- v. Determine who is at risk of becoming ill
- vi. Formulate a tentative hypothesis to explain the agent(s), source(s), mode(s) of transmission and duration
- vii. Compare the hypothesis with the established facts
- viii. Plan and implement a more systematic study
- ix. Prepare a written report
- x. Implement control and prevention measures

F. Ongoing evaluation of the outbreak response process

Is it necessary to have subsequent meetings of the ORT? Have there been any “glitches” with the process? Are there any suggestions for improvements of the ORP (e.g., timeliness of process)?

G. Final Report compiled

The purpose of this report is to share knowledge, expertise and experience with the scientific and public health communities regarding the outbreak investigation, management, control and outcomes. Standard requirements for participation will be adhered to with respect to authorship.

The report will contain:

- the reason for the investigation
- a description of the implementation of the Outbreak Response Plan for the outbreak
- a summary of the investigation
 - a general summary characterizing the outbreak by person, place and time
 - a clinical description of cases
 - a summary of the epidemiologic data and findings
 - a discussion as to the source of the outbreak
- a summary describing the conclusions
- a summary describing control measures implemented or recommended
- a summary describing recommendations for changes to the Outbreak Response Plan

H. Commitment to Research

Whenever possible/reasonable, outbreaks should be written up for publication so that the public health and scientific communities can benefit from our experience. Particularly important are recommendations for primary, secondary and tertiary prevention of future outbreaks. The Team Coordinator is

responsible for raising the issue of publication at one of the initial Team meetings. Participation in publication should be extended to all participants including field staff.

- I. Appropriate action taken based on recommendations in the final report under the direction of the Director of Communicable Disease Control**