Winnipeg Regional Health Authority / Office régional de la santé de Winnipeg	**Practice Directive:** *Infection Prevention, Control and Outbreak Management in the WRHA*	
OPERATIONAL DIRECTIVE	**Approval Date:** *January 29, 2024*	**Page:** *1 of 14*
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PURPOSE AND INTENT

- To provide current best-practice/evidence-based consistent guidelines for outbreak management of infectious disease(s) in the Winnipeg Health Region.
- To provide a structure for coordinating/facilitating the activities of the various provincial, regional, facility and laboratory agencies that have responsibility for the investigation, prevention, and control of disease outbreaks in the Winnipeg Health Region.
- To define the roles and responsibilities of key stakeholders during the course of an outbreak.

1.0 PRACTICE OUTCOME

- To prevent and/or minimize the mortality (death) and morbidity (illness) associated with outbreaks in the Winnipeg Health Region.

2.0 BACKGROUND

- The WRHA, like any healthcare region has a history of outbreaks, both seasonal and those that can occur at any time during the year. From the inception of Infection Prevention and Control, one of our primary goals is to prevent outbreaks. When outbreaks do occur, our goal changes to controlling the spread and minimizing negative outcomes of outbreaks.

3.0 DEFINITIONS

3.1 Active Surveillance:
Surveillance based on public health legislation: refers to daily, weekly or monthly contacting of physicians, hospitals, laboratories, schools or others to intentionally search for cases. This type of surveillance is usually seasonal to coincide with periods of high disease frequency and generally yields a much higher percentage of actual cases as compared to passive surveillance. Active surveillance is used also during outbreaks to identify additional cases.[7.3]

3.2 Alcohol-based Hand Rub (ABHR):
This refers to an alcohol-containing (60 to 90 per cent) preparation (liquid, gel or foam), designed for application to the hands to kill or reduce the growth of microorganisms. Such preparations contain one or more types of alcohol with emollients and other active ingredients.[6.7]

3.3 Cohort:
Cohort refers to physically separating (e.g., in a separate room or ward) two or more patients exposed to or infected with the same microorganism from other patients who have not been exposed to or infected with that microorganism.[6.4]

3.4 Communicable Disease:
An illness that is caused by the transmission of an infectious agent or its toxic products directly or indirectly from an infected person, animal or plant, an inanimate object or the environment.[6.2]

3.5 Emerging Disease:
An emerging infectious disease (EID) is an infectious disease that has appeared in a population for the first time, or that may have existed previously but is rapidly increasing in incidence or geographic range.[6.1]

3.6 Emerging Respiratory Infections:
These are acute respiratory infections of significant public health importance, including infections caused by either emergence of new variants of known respiratory pathogens (e.g., novel influenza viruses and SARS) or emergence of as yet unknown pathogens. See: Emerging Respiratory Pathogens.[6.3]

3.7 Endemic Disease:
The constant presence and/or usual prevalence of a disease or infectious agent in a population within a geographic area.

3.8 Gastroenteritis:
An illness that usually includes diarrhea and/or vomiting.[6.6]

3.9 Hand Hygiene:
This is a comprehensive term that applies to hand washing, hand antisepsis and to actions taken to maintain healthy hands and fingernails.[6.3]

3.10 Healthcare Associated Infections (HAIs):
These infections that are transmitted within a health care setting (also referred to as nosocomial) during the provision of health care.[6.3]

3.11 Healthcare Setting:
This is any location where health care is provided, including emergency care, prehospital care, hospital, long term care (LTC), home care, primary care, ambulatory care, and facilities and other community settings where care is provided (e.g., correctional facilities).[6.3]

> **Note:** Some settings provide a variety of care (e.g., chronic care or ambulatory care provided in acute care, complex care provided in LTC)

3.11.1 Prehospital Care
This is acute emergency patient assessment and care delivered in a variety of settings (e.g., street, home, LTC and mental health) at the beginning of the continuum of care. Prehospital care workers may include paramedics, fire fighters, police and other emergency first responders.

3.11.2 Acute Care
This refers to a facility where a variety of inpatient services are provided, which may include surgery and intensive care. For the purpose of this document, acute care also includes ambulatory care settings such as hospital emergency departments/urgent care centers, and free-standing ambulatory (day) surgery or other invasive day procedures (e.g., endoscopy units, hemodialysis and ambulatory wound clinics).

3.11.3 Ambulatory Care
This refers to a location where health services are provided to patients who are not admitted to inpatient hospital units, including outpatient diagnostic and treatment facilities (e.g., diagnostic imaging, phlebotomy sites, and pulmonary function laboratories).

3.11.4 Long Term Care (LTC)

This refers to settings that include a variety of activities, types and levels of skilled nursing care for individuals requiring 24-hour care, assistance, rehabilitation, restorative or medical care that does not fall under the definition of acute care.

3.11.5 Community Health Services

Community health services includes the delivery of a wide range of health care and support services to patients in the community for health restoration, health promotion, health maintenance, respite, palliative care and to prevent or delay admission to long term patient care. Home care is delivered where the patient resides (e.g., homes, assisted living and supportive housing, and group homes). Community health services also includes primary care clinics, community health centers and clinics, public health, mental health, midwifery and home care clinics.

3.11.6 Hybrid Sites

Facilities with acute care and long-term care beds as well as complex continuing care beds. In WRHA this term is used exclusively to refer to Misericordia Health Centre, Deer Lodge Centre and Riverview Health Centre.

3.12 Outbreak:

An excess over the expected incidence of disease within a geographic area during a specified time period, synonymous with epidemic.

Note: The number of cases within a certain time period that relate to an outbreak will vary according to the:

- Infectious agent
- Size and type of population exposed
- Previous experience or lack of exposure to the disease
- Time of occurrence
- Place of occurrence

The status of the 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.

3.13 Passive Surveillance:

The receipt of reports of infections/disease from physicians, laboratories and other health care professionals required to submit such reports as defined by public health legislation.[3]

3.14 Patient/Resident/Client:

For the purposes of this document, the term "person receiving care" will include those receiving health care, including patients, clients or residents.[6.3]

3.15 Respiratory Hygiene/Cough Etiquette:

This refers to a combination of measures to be taken by an infected source designed to minimize the transmission of respiratory microorganisms (e.g., influenza).[6.3]

3.16 Routine Practices:

This refers to a comprehensive set of IP&C measures that have been developed for use in the routine care of all patients at all times in all health care settings. Routine Practices aim to minimize or prevent HAIs in all individuals in the health care setting, including persons receiving care, HCWs, other staff, visitors, contractors, etc.[6.3]

3.17 Surveillance:
Surveillance may be defined as the routine collection, analysis and dissemination of various data that describe the occurrence and distribution of disease, events or conditions. Surveillance is a continuous and systematic process consisting of collection, analysis and dissemination of data.[6.3]

3.18 Targeted Surveillance:
Surveillance that is focused on certain health care facilities (e.g., intensive care unit), specific persons receiving care (e.g., surgical inpatients in acute care) and/or infection types (e.g., bloodstream infections, indwelling catheter- associated urinary tract infections), that have been identified as a priority within the health care setting.[6.5]

4.0 DIRECTIVES

4.1 Investigation

4.1.1 Transmission of a Manitoba Health (MH) reportable disease in a healthcare facility (even one case), is a significant event and requires an investigation. Transmission of a reportable disease outside of a facility may also require an investigation (by public health).

4.1.2 Investigate for a possible outbreak if there is evidence of healthcare associated transmission of high threat emerging disease.

4.1.3 Investigate for a possible outbreak if there is evidence of healthcare associated transmission of a regionally endemic (non-reportable) disease that exceeds normal expected levels for the area within that specific season. In the community, public health may investigate based on their findings.

4.2 Reporting

4.2.1 Under legislation of the Reporting of Diseases and Conditions Regulation (37/2009) of The Public Health Act (C.C.S.M. c. P210); "If a health professional becomes aware that a person has a disease or condition that is potentially serious but is not otherwise reportable under this regulation, the health professional must make a report respecting it if the disease or condition is occurring in a cluster or outbreak."

4.2.2 Report outbreaks that meet Manitoba Health requirements to the Chief Public Health Officer or designate at Manitoba Health.

4.2.2.1 In Manitoba, enteric, respiratory or vaccine preventable outbreaks are reported through the Canadian Network for Public Health Intelligence (CNPHI) online outbreak reporting system. Some of these illnesses also require phone reporting to MH, even for individual cases, see Reporting of a Communicable Disease to Manitoba Health by Infection Prevention & Control in Hospitals.

4.2.2.2 Outbreaks caused by other organisms such as methicillin-resistant *Staphylococcus aureus* (MRSA), or scabies are reported using a paper based system: Initial Outbreak Summary Report (Form # 6278)

4.3 Those with the authority for management and control of outbreaks listed below shall act on the advice of ICP(s)/designate onsite (with the consultation of the regional IP&C staff):

Acute Care	LTC	Community
Site Chief Execute Officer (CEO) / Chief Nursing Officer (CNO) / Chief Operating Officer (COO) / designate	Facility Senior Management/ Administration	Local Population and Public Health leads with community ICP acting as a consultant.

4.4 The individuals listed in 3.3 shall act on the advice of ICP(s)/designate onsite and/or (as appropriate) (with the consultation of the regional IP&C staff):

Acute Care	LTC	Community
Act on the advice of the ICP(s)/ designates onsite and Regional IP&C corporate staff.	Act on the advice of ICP(s)/designate onsite and/or WRHA Regional ICP and Regional IP&C corporate staff.	Local public health leads with community ICP acting as a consultant.

As appropriate, seek advice from appropriate area management individuals and where required, the WRHA Medical Officer of Health.

Implementation of the Incident Command System shall be determined by the site CEO/COO/designate or Execute Director/designate. The decision to implement Incident Command shall be communicated as soon as possible to the WRHA or area CEO/COO/designate or Executive Director/designate.

5.0 COMPONENTS

5.1 Outbreak Prevention Activities for Frontline Staff

5.1.1 Monitor for any cases of reportable or emerging diseases.

5.1.2 Monitor for any clusters of cases of endemic organisms (e.g., MRSA, C. difficile, scabies) that seem higher than expected.

5.1.3 Monitor for HAIs designated by organization/site's surveillance program, as applicable

5.1.4 Detect these clusters early and **ALERT ICP (or PPH as relevant, e.g., community) at your site and when required, notify regional IP&C staff. DO NOT WAIT** for further cases or lab confirmation

5.1.5 Document signs and symptoms.

5.1.6 Use Routine Practices or Additional Precautions (AP) as per documents

listed below or the Point of Care Risk Assessment (PCRA). Implement Additional Precautions upon clinical presentation of illness to stop transmission, including reinforcing hand hygiene following the 4 Moments:

- Before patient/resident/client or environment contact
- Before aseptic/clean procedure
- After body fluid exposure risk
- After patient/resident/client or environment contact

Increase auditing as per advice of IP&C.

5.1.7 Dedicate equipment to individual patients where possible. Per routine process, ensure equipment cleaning/disinfection is done after and between uses and is documented, when multiple people are receiving care. Increase auditing.

5.1.8 Use environmental cleaning procedures with Infection Prevention and Control approved disinfectants and Housekeeping/environmental services direction. Additional measures may be implemented as recommended by IP&C or Housekeeping/environmental services depending on the outbreak.

5.1.9 Educate visitors about Routine Practices and/or Additional Precautions.

Acute Care	LTC	Community
Check WRHA IP&C Clinical Presentation and Empiric Precautions Table for appropriate precautions.		Check WRHA IP&C Microorganism Infectious Disease Table for appropriate precautions.

5.2 Detection of Outbreaks

5.2.1 With guidance from the site ICP, collect appropriate and timely specimen(s) when those receiving care have symptoms of illness.

5.2.2 Add outbreak code provided by ICP(s)/designate to specimen(s) collected and to the requisitions.

5.2.3 Monitor results for cause of outbreak symptoms.

5.2.4 Communicate with ICP(s)/designate case specific information.

5.2.5 Notify primary care physicians of the outbreak in facilities.

5.2.6 Complete the following activities, depending on program type:

Acute Care	LTC	Community
Provide case specific information to site ICP(s) by line list or other as instructed by ICP(s).	Collect WRHA LTC IP&C outbreak investigation data as instructed by site ICP(s)/designate.	Provide case specific information, as requested, to WRHA Population and Public Health.

5.3 Response to Outbreaks

Step	Acute Care	LTC	Community
1	Use Routine Practices or Additional Precautions (AP) as appropriate for all cases of outbreak illness. Check WRHA IP&C Clinical Presentation and Empiric Precautions Table or Microorganism Table for appropriate precautions.		Use Routine Practices or Additional Precautions (AP) as is appropriate for all outbreak cases of illness. Check WRHA IP&C Microorganism Infectious Disease Table for appropriate precautions.
2	Review charts to determine those able to receive vaccination, if recommended, and notify ICP(s) / designate that case/contact does not meet criteria or unable to receive vaccination.	Most residents in a personal care home setting are eligible for vaccination. Complete if appropriate and able.	PPH responsibility
3	Offer vaccination, where appropriate, for people receiving care to prevent further cases.	Offer vaccination, where appropriate, for persons receiving care to prevent further cases. Administer vaccinations to all eligible cases/contacts as directed by, or in conjunction with, the facility ICP(s)/designate.	PPH responsibility
4	Cohort like cases.		Maybe setting specific; Community Health Services would lead.
5	Ensure those affected have dedicated equipment, as able. Otherwise, shared equipment cleaning practices must be adhered to before and after each persons' use.		N/A

Step	Acute Care	LTC	Community
6	Minimize transfers. Where transfers are required, ensure the receiving facility is aware of the outbreak status on unit and recommended Additional Precautions (AP).	Minimize transfers. Where transfers are required, ensure the receiving facility is aware of the outbreak status on unit and recommended Additional Precautions (AP). Transfers from hospital to LTC must not be delayed.	N/A
7	Restrict visitation to designated care-givers.		PPH will determine if visitor restriction is recommended (e.g., at an assisted living).
8	Use appropriate signage at entrance to area(s)/unit(s).	Use appropriate signage at entrance to area(s)/unit(s) and entrance to facility.	N/A
9	Coordinate the delivery of patient treatment &/or prophylaxis as ordered by physician(s).		N/A
10	Collaborate with OESH as necessary.	Collaborate with OESH (if applicable) as necessary.	N/A

5.4 ROLES AND RESPONSIBILTIES:

5.4.1 Site Frontline Staff Including Nursing:

Complete all aspects of 4.0.

5.4.2 Site ICP/Designate shall:

5.4.2.1 Confirm the presence of outbreak-like symptoms by gathering data from areas.

5.4.2.2 Coordinate the site outbreak investigation (including obtaining an outbreak code for all respiratory, gastroenteritis and vaccine preventable diseases from Cadham Provincial lab (CPL) [acute care calls directly; LTC calls WRHA Regional ICP for code]).

5.4.2.3 Consult with regional IP&C staff (acute care) or WRHA Regional LTC ICP (who will consult regional IP&C staff) to determine the presence of an outbreak.

5.4.2.4 Communicate throughout the outbreak until resolution with:

Acute Care	LTC	Community
Regional IP&C, site medical director, clinical team leader, manager, specific site individuals, Shared Health labs, environmental services and other stakeholders as required.		Community ICP shall act as consultant to Population and Public Health (PPH) who will be responsible for investigating the outbreak.

5.4.2.4.1 Further Steps:

Acute Care	LTC	Community
Direct the outbreak investigation and lead site response team. Members of the response team (as appropriate) can include: • Facility ICP(s)/designate • Facility site Executive(s) • Facility program leads/managers/supervisors • Unit staff and managers • OESH • Educator(s) • Manager of Housekeeping • Allied Health Managers • WRHA IP&C team		PPH responsibility
Acute Care	**LTC**	**Community**
Use line list and share with frontline staff as appropriate.	Gather outbreak investigation data from frontline staff and review in collaboration with regional IP&C staff.	PPH Responsibility
Ensure appropriate infection prevention and control measures are initiated and continue. Provide guidance regarding contact tracing required.		Community IP&C will liaise with community health services if needed to ensure correct PPE is being used.
Report as required by legislation and regional policies. Report deaths per the Public Health Act, Reporting of Diseases and Conditions Regulation.		PPH responsibility
Determine when outbreak is resolved in consultation with regional IP&C staff.	Determine when outbreak is resolved with the WRHA regional ICP who will consult with corporate WRHA IP&C staff.	PPH responsibility

Report to WRHA corporate IP&C using acute care IP&C report form.	Report outbreak information to WRHA Regional ICP.	PPH responsibility
Report to MHSAL using CNPHI / paper form (can be emailed as an electronic form) as appropriate (disease specific).		PPH responsibility

5.5 Regional IP&C Program shall:

5.5.1 For Single Site Outbreaks:

Acute Care	**LTC**	**Community**
Regional IP&C (director [or delegate], medical director, epidemiologist) to provide consultation with the site ICP.		Community ICP available to provide consultation to PPH
Outbreak notification distributed via WRHA email notification of an outbreak report and posted online.		Outbreak notification as per PPH protocol

5.5.2 For Multi-Site Outbreaks:

Acute Care	**LTC**	**Community**
Regional IP&C (director [or delegate], medical director, epidemiologist) to provide consultation - coordination for the outbreak on a regional basis in consultation with site ICP.	WRHA Regional ICP provides consultation to site ICP (with coordination of regional IP&C director [or delegate], medical director, epidemiologist).	Community ICP available to provide consultation to PPH
Outbreak notification distributed via WRHA email notification of an outbreak report and posted online.		Outbreak notification as per PPH protocol

5.5.3 Coordinate communication, others as required, with:

Acute Care	LTC	Community
• WRHA Medical Officer of Health • WRHA Director - Care Coordination; Patient Access & Transition Support Team • WRHA IP&C Program Team • WRHA Media Relations • WRHA Director of Public Affairs • WRHA Regional Director of Utilization • WRHA LTC ICP(s) • All WRHA ICPs • WRHA Regional OESH • Others as required	• Facility ICP(s)/designate / Facility Executives and Directors of Care • WRHA IP&C Regional Director • WRHA LTC Program • WRHA LTC Program Medical Director • WRHA Chief Nursing Officer / VP • WRHA Medical Officer of Health • WRHA Public Health Nurse(s) • WRHA Media Relations • WRHA Regional Occupational and Environmental Safety and Health • MB Health Standards lead • Others as required	PPH to arrange communication as required

5.6 WRHA Regional Epidemiologist/delegate (acute care) or Long-Term Care ICP shall:

5.6.1 LTC ICP shall provide an outbreak code upon confirmation of an outbreak.
5.6.2 Consult with IP&C program director to determine start and resolution time frames for outbreaks.
5.6.3 Provide support for data management, analysis and interpretation.
5.6.4 Assist as required with the posting of Canadian Network for Public Health Intelligence (CNPHI) alerts as required (especially if outbreak is multi-site or multi-region).
5.6.5 Assist with data collection, and coordinate the development of a data collection tool if required.
5.6.6 Summarize the descriptive epidemiology of an outbreak including regular and timely analysis of the data as required by the team.
5.6.7 As a team member, assist with using data to inform interventions.
5.6.8 Assist as required with the development of outbreak reports.

5.7 Laboratory shall:

5.7.1 Conduct laboratory investigations on specimens.
5.7.2 Participate in outbreak team, as requested, including provision and coordinated assessment of laboratory evidence.
5.7.3 Report positive cases to ICP for acute care cases and site ICP. For community cases, report these to the designated Population and Public Health lead (e.g., CDC).

5.8 WRHA Director of Public Affairs and Media Relations shall:

5.8.1 Coordinate all media and public messaging regarding the outbreak for acute care and LTC Program outbreaks. If an LTC organization has their own communication program, coordinate with these

5.9 Departments/sites/units/areas affected by the outbreak shall:

5.9.1 Follow procedures outlined in 4.0.

5.10 The site Chief Medical Officer/Medical Director shall:

Acute Care	LTC	Community
Collaborate with site ICP(s)/designate to verify outbreak and provide assistance as required. Liaise with the site physicians regarding the outbreak.	Collaborate with site ICP(s)/designate to verify outbreak and provide assistance as required. Liaise with the site physicians regarding the outbreak. Determine if facility closure is indicated in collaboration with members of the facility senior management, facility ICP(s)/designate, and WRHA Regional ICP.	Offer consultation/ oversight to PPH.

5.11 The site Executive(s) shall:

5.11.1 Facilitate the acquisition, distribution and implementation of appropriate resources.
5.11.2 Consult to determine when to close or reopen programs/areas:

Acute Care	LTC	Community
Determine if/when facility closure is indicated in collaboration with other members of the facility Senior Management or Administration team, facility ICP(s)/designate, and WRHA Regional IP&C team.		N/A

5.11.3 Receive approval to close unit/facility to admissions.

Acute Care	LTC	Community
Determine if/when facility closure is indicated in collaboration with other members of the facility Senior Management or Administration team, facility ICP(s)/designate, and WRHA Regional IP&C team.		N/A

5.11.4 Communicate with additional stakeholders about the possible requirement of future support and additional resources (e.g., Medical Device Reprocessing (MDR), Housekeeping, Pharmacy &/or Laundry, etc.).

5.12 Occupational and Environmental Safety and Health shall:

Acute Care	LTC	Community
Offer consultation on Occupational and Environmental Safety and Health (OESH) issues for staff assessment and/or concerns.		

5.13 Allied Health/Support Services shall:

Acute Care	LTC	Community
Communicate with site ICP to ensure additional measures are implemented as required (e.g., increased cleaning routine, increased laundry and other supplies, infection prevention and control measures in allied health service areas (e.g., physiotherapy, recreation therapy, etc.).		Follow IP&C and OESH guidance.

5.14 Communicable Disease Coordinators shall:

Acute Care	LTC	Community
Offer consultation when requested by site ICP(s)/designate.	Offer consultation when requested by LTC Program IP&C Coordinator or site ICP(s)/designate.	Offer consultation to community ICP as necessary.

5.15 Medical Officers of Health shall:

Acute Care	LTC	Community
Offer Consultation when requested by site ICP(s)/ designate or IP&C physician.		Offer consultation to PPH and community ICP as required.

ADDITIONAL RESOURCE TOOLS

1. **Respiratory Outbreak Toolkit for acute care**
2. **Enteric Outbreak Toolkit (upcoming)**

6.0 REFERENCES

6.1 National Collaborating Centre for Infectious Diseases, Emerging Infectious Diseases and Outbreaks. Accessed January 31, 2024
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6.5 Provincial Infectious Diseases Advisory Committee (PIDAC). Best Practices for Surveillance of Health Care-Associated Infections in Patient and Resident Populations, 3rd edition. Targeted Surveillance definition. Accessed January 31, 2024
6.6 Public Health Agency of Canada - Norovirus. Definition. Accessed January 31, 2024
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7.0 PRIMARY AUTHOR (S)

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