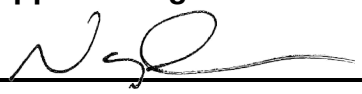
Operational Directives	**WRHA Infection Prevention & Control Program**	
	Infection Prevention and Control and Outbreak Management in the WRHA	Page 1 of 15
	Approval Signature: 	**Supersedes:** January 7, 2010
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1. PURPOSE:

- To provide current best-practice/evidence-based consistent guidelines for outbreak management of infectious disease(s) in the Winnipeg Health Region.
- To prevent and/or minimize the mortality (death) and morbidity (illness) associated with outbreaks 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.

2. DEFINITIONS:

2.1. 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. [7.4]

2.2. 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. [7.8]

2.3. 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. [4]

2.4. 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. [7.3]

2.5. 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. [7.2]

2.6. 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. www.phac-aspc.gc.ca/eri-ire/index-eng.php. [7.4]

2.7. Endemic Disease:
The constant presence and/or usual prevalence of a disease or infectious agent in a population within a geographic area. [7.1]

2.8. Gastroenteritis:
An illness that usually includes diarrhea and/or vomiting. [7.7]

2.9. Hand Hygiene:
This is a comprehensive term that applies to hand washing, hand antisepsis and to actions taken to maintain healthy hands and fingernails. [7.4]

2.10. Healthcare Associated Infections (HAIs):
These are infections that are transmitted within a health care setting (also referred to as nosocomial) during the provision of health care. [7.4]

2.11. Healthcare Setting:
This is any location where health care is provided, including emergency care, prehospital care, hospital, long term care (LTC), home care, ambulatory care, and facilities and locations in the community where care is provided (e.g., infirmaries in schools, patient or correctional facilities). [7.4]

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

2.11.1. 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.

2.11.2. 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, and free-standing ambulatory (day) surgery or other invasive day procedures (e.g., endoscopy units, hemodialysis and ambulatory wound clinics).

2.11.3. 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), community health centres and clinics, physician's offices, dental offices and offices of allied health professionals, (e.g. physiotherapy).

2.11.4. Long Term Care (LTC)
This refers to a facility that includes a variety of activities, types and levels of skilled nursing care for individuals requiring 24-hour surveillance, assistance, rehabilitation, restorative or medical care in a group setting that does not fall under the definition of acute care.

2.11.5. Home Care
Home care is the delivery of a wide range of health care and support services to patients in a variety of settings for health restoration, health promotion, health maintenance, respite, palliation and to prevent or delay admission to long term patient care. Home care is delivered where the patient resides (e.g., homes, retirement homes, group homes and hospices).

2.11.6. Hybrid Settings
Facilities with acute care and long-term care beds as well as complex continuing care beds.

2.12. Outbreak:
An excess over the expected incidence of disease within a geographic area during a specified time period, synonymous with epidemic. [7.1]

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.

2.13. 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]

2.14. 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. [7.4]

2.15. 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). [7.4]

2.16. 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 patients, HCWs, other staff, visitors, contractors, etc. [7.4]

2.17. 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. [7.3]

2.18. Targeted Surveillance:
Surveillance that is focused on certain health care setting areas (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. [7.6]

3. DIRECTIVES:

3.1. Investigation

3.1.1. Transmission of a Manitoba Health Senior and Active Living (MHSAL) reportable disease in a healthcare setting (even one case), is a significant event and requires an outbreak investigation.

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

3.1.3. Investigate for a possible outbreak if there is evidence of healthcare associated transmission of a regionally endemic disease that exceeds normal expected levels for the area within that specific season.

3.2. Reporting

3.2.1. 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."

3.2.2. Report outbreaks that meet MHSAL requirements are to the Chief Public Health Officer or designate at Manitoba Health Seniors and Active Living (MHSAL).

- 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 MHSAL, even for individual cases, see Reporting of a Communicable Disease to Manitoba Health by Infection Prevention & Control in Hospitals.
- Outbreaks caused by other organisms such as methicillin-resistant *Staphylococcus aureus* (MRSA), scabies are reported using a paper based system: https://www.gov.mb.ca/health/publichealth/surveillance/docs/mhsu_6278.pdf

3.3. Those with the authority for management and control of outbreaks listed below shall act on the advice of ICP(s)/designate onsite:

Acute Care	LTC	Community
Site Chief Executive Officer (CEO)/Chief Nursing Officer (CNO)/Chief Operating Officer (COO)/designate	Facility Senior Management/ Administration unless the outbreak is a Manitoba reportable disease. If the outbreak is of a Manitoba reportable disease, then the Medical Officer of Health (MOH)	The Medical Officer of Health leads the program/clinical outbreak response team. The Community Area Population Public Health Team Managers lead the community area operations outbreak response

3.4. The individuals listed in 3.3 shall act on the advice of ICP(s)/designate onsite and/or (as appropriate):

Acute Care	LTC	Community
Act on the advice of the ICP(s)/ designates onsite and/or Regional Acute Care IP&C corporate staff	Act on the advice of ICP(s)/designate onsite and/or LTC Program Quality Improvement & IP&C Coordinator	Act on the advice of the Community Area Population Public Health team managers and the community ICP acts 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 Executive 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.		

4. PROCEDURES FOR FRONTLINE STAFF:

4.1. Outbreak prevention activities

4.1.1. Monitor for any cases of reportable or emerging diseases

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

4.1.3. Detect these clusters early and **alert IP&C. Do not wait for further cases or lab confirmation**

4.1.4. Document signs and symptoms

4.1.5. Use Routine Practices or Additional Precautions (AP) as per documents listed below or the Point of Care Risk assessment. Implement Additional Precautions upon clinical presentation of illness to stop transmission

4.1.6. Perform 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

4.1.7. Ensure equipment cleaning done after and between uses with multiple people receiving care is completed and documented

4.1.8. Use environmental cleaning procedures based on facility 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.

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

Acute Care	LTC	Community
Check WRHA IP&C acute care Clinical	Check WRHA LTC Program IP&C	Check WRHA IP&C Community

Presentation or Empiric Precautions table or Microorganism Infectious Disease Table for appropriate precautions	Common Outbreak Causing Pathogens table for appropriate precautions	Infectious Disease table for appropriate precautions

4.2. Detection of outbreaks

- Collect appropriate and timely specimen(s) when those receiving care have symptoms of illness
- Add outbreak code provided by ICP(s)/designate to specimen(s) collected and requisitions
- Monitor results for cause of outbreak symptoms
- Communicate with ICP(s)/designate case specific information
- Complete the following activities, depending on program type:

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

4.3. 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 acute care Clinical Presentation or 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 LTC Program IP&C Common Outbreak Causing Pathogens in Long Term Care for appropriate precautions	Use routine practices or additional precautions (AP) as is appropriate for all outbreak cases of illness. Check WRHA IP&C Community Infectious Disease table for appropriate precautions
2	Review charts to determine those able to receive vaccination, if recommended, and	All Residents in a personal care home setting are eligible for immunization	PPH responsibility

	notify ICP(s) or /designate that case/contact does not meet criteria or unable to receive vaccination		
3	Offer vaccination, where appropriate, for people receiving care to prevent further cases in hospital population	Offer vaccination, where appropriate, for persons receiving care to prevent further cases. Administer immunizations to all eligible cases/contacts as directed by, or in conjunction with, the facility ICP(s)/designate	PPH responsibility
4	Cohort like cases	Cohort symptomatic cases where possible and as directed by the facility ICP(s)/designate	N/A
5	Ensure cases have dedicated equipment	Ensure those affected have dedicated equipment, as able. Otherwise, shared equipment cleaning practices must be adhered to before and after each resident use	N/A
6	Minimize internal transfers. Notify intra-facility receiving unit of status prior to transfer. Where inter-facility transfers are required ensure the inter-facility transfer form is filled out to include the outbreak status on the unit and if the person receiving care is symptomatic	Minimize transfers. Where transfers are required ensure the receiving facility is aware of the outbreak status on unit from which person receiving care is coming from and appropriate precautions. Also indicate if person receiving care is symptomatic. Transfers from hospital to LTC must not be delayed	N/A
7	Reduce visitation if directed by ICP(s)/designate	Institute visitor restrictions in collaboration with the ICP(s)/designate by discouraging visitation while the outbreak is occurring, and /or limiting the number of	PPH will determine if visitor restriction is recommended (e.g.: at an assisted living

		visitors permitted.	facility)
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. ROLES AND RESPONSIBILTIES:

5.1. Site Frontline staff including Nursing:
Complete all aspects of 4.0

5.2. Site ICP/designate shall:

5.2.1. Confirm the presence of an Outbreak

5.2.2. 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 CDC Coordinator for code])

5.2.3. Communicate throughout the outbreak until resolution with:

Acute Care	LTC	Community
Regional IP&C, Clinical Team Leader, Manager, specific site individuals, Shared Health labs, environmental services and other stakeholders as required	Site Medical Director and the WRHA LTC Program Quality Improvement & IP&C Coordinator (and MOH for a reportable disease outbreak)	Community ICP shall act as consultant to Population and Public Health (PPH) investigating the outbreak

5.2.4. 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), supervisors • Unit staff and managers • OESH • Educator(s) • Manager of Housekeeping • Allied Health Managers		PPH responsibility

Use line list and share with frontline staff as appropriate	Receive WRHA LTC IP&C Outbreak Investigation Form data from frontline staff and review in collaboration	PPH responsibility
Ensure appropriate infection prevention and control measures are initiated and continue		Community IP&C will liaise with Home Care 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 with consultation as required		PPH responsibility
Report to WRHA corporate IP&C using acute care IP&C report form	Report outbreak information to LTC Program Quality Improvement & IP&C Coordinator	N/A
Report to MHSAL using CNPHI/paper form as appropriate (disease specific)		PPH responsibility

5.3. Region Program shall:

5.3.1. For single site outbreaks:

Acute Care	LTC	Community
Regional IP&C (director [or delegate], medical director, epidemiologist) to provide consultation	LTC Program Quality Improvement & IP&C Coordinator to provide consultation. In a reportable disease outbreak, Public Health nurses may also provide consultation	Community ICP available to provide consultation to PPH
Outbreak notification distributed to WRHA internal acute care notification group and post outbreak online	Outbreak notification distributed to WRHA internal LTC Program via email notification of an outbreak report	Outbreak notification as per PPH protocol

5.3.2. <u>For</u> multi-site outbreaks

Acute Care	LTC	Community
• Regional IP&C	LTC Program Quality	Community

(director [or delegate], medical director, epidemiologist) to provide consultation-coordination for the outbreak on a regional basis in consultation with site ICP	Improvement & IP&C Coordinator provides consultation	ICP available to provide consultation to PPH
• Outbreak notification distributed to WRHA internal acute care notification group and post outbreak online	Outbreak notification distributed to WRHA internal LTC Program via email notification of an outbreak report	Outbreak notification as per PPH protocol

5.3.3. Coordinate communication, others as required, with:

Acute Care	LTC	Community
• WRHA Medical Officer of Health • WRHA IP&C Program Team • WRHA Media Relations • WRHA Director of Public Affairs • WRHA Regional Director of Utilization • WRHA LTC Quality Improvement & IP&C coordinator provide consultation • All WRHA ICPs • WRHA Regional Occupational and Environmental Safety and Health • 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

5.4. WRHA Regional Epidemiologist/delegate (acute care) or LTC Program Quality Improvement & IP&C Coordinator (LTC) shall:
- 5.4.1. Provide support for data management, analysis and interpretation
- 5.4.2. 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)
- 5.4.3. Assist with data collection, and coordinate the development of a data collection tool if required
- 5.4.4. Summarize the descriptive epidemiology of an Outbreak including regular and timely analysis of the data as required by the team
- 5.4.5. As a team member, assist with using data to inform interventions
- 5.4.6. Assist as required with the development of Outbreak reports

5.5. Laboratory shall:
- 5.5.1. Conduct laboratory investigations on specimens
- 5.5.2. Participate in Outbreak team, as requested, including provision and coordinated assessment of laboratory evidence
- 5.5.3. Report positive cases to ICP for acute care cases and CDC coordinator for LTC Program or community cases

5.6. WRHA Director of Public Affairs and Media Relations shall:
- 5.6.1. Coordinate all media and public messaging regarding the Outbreak for acute care and LTC Program outbreaks

5.7. Departments/sites/units/areas affected by the Outbreak shall:
- 5.7.1. Follow procedures outlined in Procedure section

5.8. The site Chief Medical Officer/Medical Director shall:

Acute Care	LTC	Community
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 LTC Program Quality Improvement & IP&C Coordinator	N/A

5.9. The site Executive(s) shall:
- 5.9.1. Facilitate the acquisition, distribution and implementation of appropriate resources

5.9.2. Consult to determine when to close or reopen programs/areas:

Acute Care	LTC	Community
WRHA Regional IP&C Program Team and site ICP	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 LTC Program Quality Improvement & IP&C Coordinator	N/A

5.9.3. Receive approval to close unit/facility to admissions.

Acute Care	LTC	Community
WRHA Regional IP&C Program Team and site ICP	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 LTC Program Quality Improvement & IP&C Coordinator	N/A

5.9.4. 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.)

5.10. 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	Manage any ill or exposed staff as appropriate when present. Compile statistics of staff cases and report counts to the ICP(s)/designate. Respond to questions and concerns from staff	Offer consultation on occupational and environmental safety and Health (OESH) issues for staff assessment and/or concerns

5.11. Allied Health/Support Services shall:

Acute Care	LTC	Community
Communicate with site ICP to ensure additional measures are implemented as required (e.g., 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 guidance on any additional precautions necessary

5.12. Communicable Disease Coordinators shall:

Acute Care	LTC Program	Community
Offer consultation when requested by site ICP(s)/ designate	Provide an Outbreak code upon confirmation of an outbreak if the outbreak is caused by Influenza or an enteric pathogen	Offer consultation to PPH

5.13. Medical Officers of Health shall:

Acute Care	LTC	Community
Offer consultation when requested by site ICP(s)/ designate or IP&C physician	Act as a resource to facility Medical Directors and the LTC Program Quality Improvement & IP&C Coordinator as required and leads the LTC Program Outbreak Response Team during reportable disease outbreaks	Offer consultation to PPH

6. ADDITIONAL RESOURCE TOOLS

6.1. Respiratory Outbreak Toolkit
6.2. Enteric Outbreak Toolkit

7. REFERENCES

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