1. **PURPOSE:**
   To provide current best-practice/evidence-based guidelines for Outbreak management of infectious disease(s) in Winnipeg Regional Health Authority (WRHA) Hospital settings.
   To establish a coordinated process to facilitate the prompt investigation and management of suspected or confirmed infectious disease Outbreaks within a single WRHA site or between multiple sites.

2. **DEFINITIONS:**
   **Hospital:**
   Acute care hospitals and hybrid long-term care facilities.

   **Hybrid long-term care facilities:**
   Facilities with both acute care and long-term care beds.

   **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

   **Healthcare Associated Infections (HAIs):**
   Infections transmitted within a health care setting (also referred to as nosocomial) during the provision of health care. Note: Includes any new case of disease (either infection or colonization).
Suspect Outbreak or Cluster:
Cases of an illness in a site/unit that appear to be rising in excess of baseline.

Regional Infection Prevention & Control (IP&C):
For the purposes of this document, Regional IP&C includes:
- IP&C Program Director
- IP&C Specialist
- IP&C Epidemiologist
- IP&C Secretary

3. DIRECTIVES:
3.1 Healthcare associated transmission of a reportable disease within Manitoba is considered a significant event and requires an Outbreak investigation. Manitoba Health requires notification of Outbreaks and other infectious diseases as per the Public Health Act (C.C.S.M. c. P210), Reporting of Diseases and Conditionals Regulation (37/2009).

3.2 Healthcare associated transmission of an epidemic/new strain of disease requires an Outbreak investigation, as this indicates the epidemic disease is within WRHA facilities.

3.3 Healthcare associated transmission of a regional endemic disease must exceed normal expected levels for the facility for the specific season to be considered an Outbreak.

3.4 Authority for management and control of Outbreaks shall rest with the site Chief Executive Officer (CEO)/Chief Operating Officer (COO)/designate in acute care facilities and the Executive Director/designate in long term care facilities. They shall act on the advice of site and/or Regional IP&C, appropriate site management individuals and where required, the WRHA Medical Officer of Health.

3.5 The decision to implement 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 CEO/COO/designate.

4. PROCEDURE:
The site Infection Control Professional (ICP) shall:
4.1 When an Outbreak is suspected, communicate with Regional IP&C, their Clinical Team Leader, specific site individuals, Diagnostic Services Manitoba (DSM) and other stakeholders as required. This communication is ongoing through to the resolution of the Outbreak.
4.2 Verify the presence of an Outbreak.
4.3 Coordinate the site Outbreak investigation.
4.4 Determine when Outbreak is resolved.
4.5 Complete required reporting and communication procedures as required by legislation and regional policies.
5. **ROLES AND RESPONSIBILITIES:**

5.1 Site ICP shall:
   - 5.1.1 Maintain communication with Regional IP&C, specific site individuals, DSM and other stakeholders as required throughout the Outbreak.
   - 5.1.2 Confirm the presence of an Outbreak.
   - 5.1.3 Manage the Outbreak investigation and lead site related team.
   - 5.1.4 Determine when Outbreak is over with consultation as required with Regional IP&C and/or WRHA IP&C Program Team physician(s).
   - 5.1.5 Complete required reporting and communication procedures as required by legislation and regional policies. Complete and submit the WRHA Outbreak report (Appendix A) on a routine basis.

5.2 Regional IP&C shall:
   - 5.2.1 Coordinate the Outbreak on a regional basis in consultation with site ICP.
   - 5.2.2 Coordinate communication of the Outbreak situation to:
     - WRHA Medical Officer of Health
     - WRHA IP&C Program Team
     - WRHA Media Relations
     - WRHA Director of Public Affairs
     - WRHA Regional Director of Utilization
     - WRHA Long Term Care (LTC) Manager, Personal Care Home (PCH) IP&C
     - All WRHA ICPs
     - WRHA Regional Occupational and Environmental Safety and Health

5.3 WRHA Regional Epidemiologist or delegate shall:
   - 5.3.1 Provide support for data management, analysis and interpretation.
   - 5.3.2 Assist with the posting of Canadian Network for Public Health Intelligence (CNPHI) alerts as required (especially if Outbreak is multi-site or multi-region).
   - 5.3.3 Assist with data collection, and coordinate the development of a data collection tool if required.
   - 5.3.4 Summarize the descriptive epidemiology of an Outbreak including regular and timely analysis of the data as required by the team.
   - 5.3.5 As a team member, assist with using data to inform interventions.
   - 5.3.6 Assist as required with the development of Outbreak reports.

5.4 Laboratory shall:
   - 5.4.1 Conduct laboratory investigations on patient specimens.
   - 5.4.2 Participate in Outbreak team, including provision and coordinated assessment of laboratory evidence.
   - 5.4.3 Assist in the design and implementation of Outbreak response activities and interventions.
   - 5.4.4 Share information on positive cases.

5.5 WRHA Director of Public Affairs and Media Relations shall:
   - 5.5.1 Coordinate all media and public messaging regarding the Outbreak.

5.6 Departments/sites/units affected by the Outbreak shall:
   - 5.6.1 Monitor patients for Outbreak symptoms, collect appropriate specimens in a timely manner and report new cases to site ICP.
5.6.2 Ensure infection prevention and control measures are implemented and maintained.
5.6.3 Communicate to patients and family members regarding the Outbreak and infection prevention and control measures. Educate patients and family members as required. Implement visitor restrictions as advised by site ICP.
5.6.4 Inform attending physicians regarding infection prevention and control measures.

5.7 The site Chief Medical Officer shall:
5.7.1 Liaise with the site physicians regarding the Outbreak.

5.8 The site Executive(s) shall:
5.8.1 Facilitate the acquisition, distribution and implementation of appropriate resources.
5.8.2 Consult with site ICP, and WRHA IP&C Program Team to determine when to close or reopen programs/patient areas.
5.8.3 Receive approval from WRHA CEO/COO/designate to close unit/facility to admissions.
5.8.4 Communicate with additional stakeholders about the possible requirement of future support and additional resources (e.g., Medical Device Reprocessing (MDR), Housekeeping, Laundry).

5.9 Occupational and Environmental Safety and Health shall:
5.9.1 Contact Occupational and Environmental Safety and Health (OESH) for staff assessment and / or concerns.

5.10 Allied Health/Support Services shall:
5.10.1 Communicate with site ICP to ensure additional measures are implemented as required, e.g., cleaning routines, increased laundry and other supplies, infection prevention and control measures in allied health service areas (e.g., physiotherapy).

6. REFERENCES
6.1 Canadian Network for Public Health Intelligence Disease Surveillance
6.6 Winnipeg Regional Health Authority. (2012 September). Available at: Personal Care Home/Long Term Care Facility Influenza Outbreak Management Policy.
### New Cases Daily Listing

<table>
<thead>
<tr>
<th>Date</th>
<th># New Cases/unit</th>
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### Outbreak Summary

<table>
<thead>
<tr>
<th>Ward</th>
<th>CPL Code</th>
<th># of Colonized Cases (A)</th>
<th># of Cases of Infection* (B)</th>
<th>TOTAL (add A + B)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<table>
<thead>
<tr>
<th>Types of Specimens</th>
<th>Total tested</th>
<th># of positive results</th>
<th>Microorganism</th>
<th>Date Outbreak Resolved</th>
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### Initial Outbreak Description
- Symptoms/Duration
- Information regarding index case
- Cases found in other facilities related to this Outbreak

### Infection Prevention and Control Interventions
- Droplet/Contact/ Airborne Precautions (circle all necessary)
- Active case finding
- Cohort like patients
- Specimen collection
- Increase environmental cleaning
- Education (e.g. Hand hygiene, other:__________________)
- Minimal patient transfers
- Reduced visitation
- Eradication treatment
- Dedicated equipment
- Additional intervention: ____________________________________________________________________________
- Additional intervention: ____________________________________________________________________________

### Additional Information
- (e.g., Outbreak follow-up over time, communication with OESH, etc.)
- Indicate all severe outcomes or complications
- * Note: for all infections include site of infection (UTI / wound / BSI).
- Critical incident details including rational for declaring CI, and details about deaths including cause of all deaths.

*Box lengthens to accommodate information.*
Instructions for Appendix A: Hospital Outbreak Report

1. **ALL** areas need to be updated appropriately with each new updated report.

2. Complete top hand corner with date and place specifics.

3. When completing the Daily Cases Listing, each date box used should have accompanying cases within the respective case box. **Do not add dates that have no cases.** Multiple rows are for more complex Outbreaks. Use only one row for simple Outbreaks.

4. As weekly/daily updates are completed, continue from the previous update, just continually adding new date and case data, while maintaining the previous information.

5. The Outbreak summary line has significant information that must be revised as appropriate with each update. Each box must be completed, other than CPL Code.

6. Note that cases of infection and cases of colonization are separated into two areas. Please include initial diagnosis – further follow-up over time and changes resulting are not required.

7. **All** deaths and Critical Incidents, including those in colonized and infected cases MUST have a comment within the Additional Information indicating the cause of death.

8. As there are many specimen types that are tested during an Outbreak, include those that are significant and fit within the box. The Legend for this box is:
   a. Rectal: R
   b. Nasopharyngeal: NP
   c. Nares: N
   d. Blood: B
   e. Sputum: S
   f. Cerebral spinal fluid: CSF
   g. Wound: W
   h. Invasive Lines (e.g. IV, PICC, CL): IV
   i. Urine: U
   Within this box, just indicate which type of specimens have been sent, not how many of each e.g. NP, CSF, W.

9. # tested – include the total # of samples sent for testing, regardless of whether results are pending.

10. # positive - Total number of positive results should equal # of cases indicated in case by day breakdown at the top of the form (you may have more than one from each patient, but each case should have at least one positive culture). If results are negative for a patient, but they continue to have appropriate symptomology, include in report as clinical cases.

11. If Results of Cultures (etiology) are pending at the time of first report, indicate this. Once there are reports, report this. If no findings are significant, also indicate this. Include all types of cultures – clinical, screening, etc. when determining the cause.

12. The Initial Outbreak Description should include all of your initial findings that have resulted in the conclusion that an Outbreak exists. All information regarding index case, signs and symptoms, and cases found at other facilities that were the result of transmission within this Outbreak should be included.

13. Use the check boxes to indicate your current interventions. Please add more information, if you are using additional interventions beyond those in the list.

14. Additional Information: Add all of the information that would put this Outbreak into context. Also include communication that has occurred with OESH or other Programs (Environmental/Housekeeping). Include information about any severe outcomes related to this Outbreak that did not result in death (such as any Critical Incidents that were a result of an infection) as well as any patient deaths (and association with the infection being reported - # accounted for here needs to match the # reported in the boxes reporting deaths). Even if patients are palliative, cause of death needs to be determined as relating to or not relating to this infection. Insert information regarding additional ward screens completed over time (with dates) and new interventions attempted (with dates). This reporting area could be considered a timeline of the Outbreak and the response.