

# OUTBREAK MANAGEMENT

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When a health care provider suspects or recognizes an outbreak (i.e. when there is an abnormal number or presentation of a disease) the following steps should be taken:

1. **REPORT** the outbreak to a supervisor and to the Office of the Chief Medical Health Officer (OCMHO).
2. **REVIEW** the illness. Signs and symptoms should be reviewed and listed to assist in the formulation of a case definition.
3. **RECORD** on a line listing those presenting with the illness, including name, date of birth, onset date, treatment, etc.
4. Once notified, the Chief Medical Health Officer (CMHO) or designate may:
  - a) **Decide** to implement disease outbreak control plan.
  - b) **Form** an outbreak management team.
  - c) **Appoint** an outbreak co-ordinator who will ensure that the team's decisions and control measures are implemented promptly; provide communication with the media, issue press statements and other issues.
  - d) When appropriate, decide that the outbreak has ended.
4. **ESTABLISH** clear reporting and communication procedures.
5. **TAKE** rapid action to institute control measures.
6. **NOTIFY** hospital of any expected influx of persons requiring hospitalization.

## PHONE NUMBERS:

### Chief Medical Health Officers (CMHO)

(867) 920-8646 or 445-3410 (cellular)

### Regional Medical Health Officers (MHO) - NWT

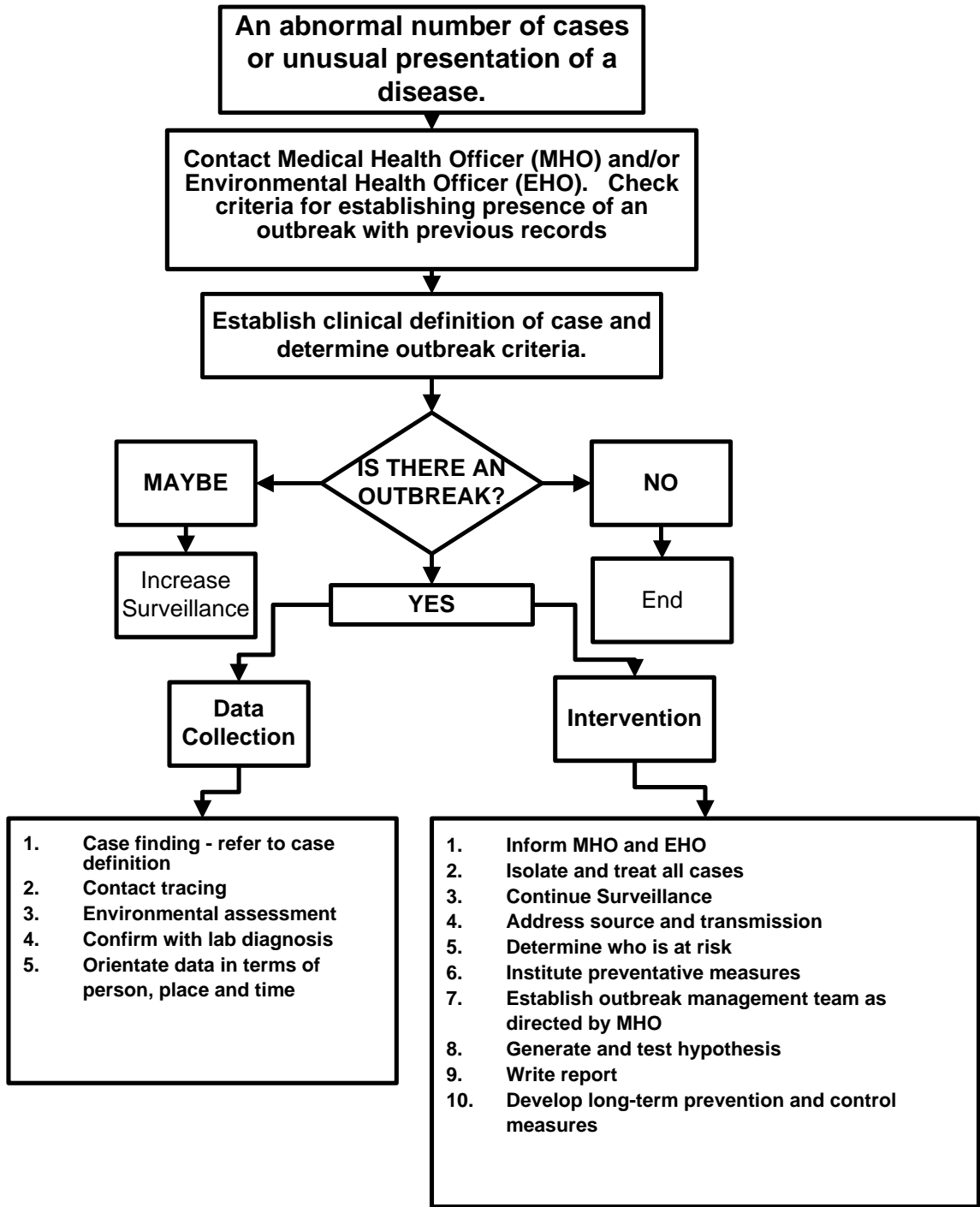
Stanton Territorial Health Authority.....(867) 920-8979

Beaufort-Delta Health and Social Services Authority..... (867) 777-2955

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**INVESTIGATION AND CONTROL OF AN OUTBREAK**



# **ESTABLISHING AN OUTBREAK MANAGEMENT TEAM**

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The team may be drawn from a variety of personnel depending on the setting and type of disease, and in consultation with the Chief Medical Health Officer (CMHO).

**An Outbreak Management Team may include:**

## **Regional/Community Health & Social Services Board**

- ◆ Chief Executive Officer (CEO)
- ◆ Nursing Manager
- ◆ Regional Medical Health Officer (RMHO)
- ◆ Nurse in Charge or Health Center Nurse
- ◆ Community Health Representative (CHR)
- ◆ Community Physician
- ◆ Environmental Health Officer (EHO)

## **Department of Health & Social Services**

- ◆ Communicable Disease Consultant
- ◆ Chief Medical Health Officer or Deputy
- ◆ Epidemiologist
- ◆ Communications Specialist

## **Objectives of the Outbreak Management Team:**

- ◆ Identify a control centre.
- ◆ Appoint a spokesperson.
- ◆ Establish clear reporting relationships and processes.
- ◆ Institute control measures.
- ◆ Notify hospital and lab of expected influx.
- ◆ Define each team members' roles and responsibilities.
- ◆ Establish work priorities.
- ◆ Ensure training in data and specimen collection.
- ◆ Ensure communications are clear and comprehensive.

## **Community Level**

- ◆ **NIC – CHN's**
- ◆ **CHR**
- ◆ **EMO**
- ◆ **Home Care**
- ◆ **Social Services**
- ◆ **Possible Community Members:**
  - **SAO**
  - **RCMP**
  - **School Principal**
  - **Clergy**

**CMHO appoints team co-ordinator.**

## **Outbreak Control Co-ordinator's Responsibilities:**

- ◆ Establish a control centre, with appropriate telephone, fax lines, etc.
- ◆ Set up meetings, arrange for accurate minute taking and distributions of agendas, minutes etc.
- ◆ Run the meetings:
  - ◆ Keep the group on track.
  - ◆ Set time limits, making sure all necessary expertise is drawn in.
  - ◆ Obtain reasonable agreement on the content and process, including a clear determination and recording of who will carry out each decision/task.
  - ◆ Ensure an understanding by members of the decisions made.
  - ◆ Ensure tasks are completed.
- ◆ Communicate progress and decisions to others.
- ◆ Evaluation.

## **CHECKLIST FOR OUTBREAK MANAGEMENT TEAM'S FIRST MEETING**

### **Items for discussion include:**

1. Define the role and area of responsibility of each member.
  - ◆ Designate one individual to assume overall responsibility for co-ordination and ensure that all decisions of the outbreak management team are carried out. This individual must have or be delegated authority to carry out this role.
  - ◆ Allocate specific tasks within the control plan to specific individuals or groups.
2. Compare baseline information and review present situation, noting the differences.
3. Determine type of infection and define its characteristics.
4. Establish case definitions according to recognized standards and use these definitions consistently throughout the outbreak.
5. Review number of cases, dates of onset and case profiles.
6. Review laboratory results if available.
7. Establish overall principles of control.
8. Define control group in unaffected population.
9. Institute measures to halt transmission of infection.
10. Ensure that a spokesperson has been designated:
  - ◆ It is essential that only one person communicate with the media to avoid confusion.
  - ◆ ALL public information related to the outbreak should be channelled through this person.
  - ◆ It may be advisable to schedule one daily press conference or prepare a daily press release to avoid multiple reporting of incomplete information.
11. Establish which lab is to be used; use the same lab throughout.
  - ◆ Notify the laboratory, where appropriate, that an investigation has begun and what is suspected.
12. Record minutes of meeting and establish date, time and place of next meeting.
  - ◆ In general, daily meetings are advisable during initial outbreak.
13. Establish external and internal communication strategies.
14. Establish work priorities.
15. Determine what human and financial resources are required and the source of these.

### Laboratory:

1. The outbreak management team will determine which laboratory or laboratories are to be used for specimen processing.
2. The outbreak co-ordinator will notify laboratory personnel of the outbreak and consult with them regarding type(s) of specimen(s) to be collected as well as specimen collection transfer and processing procedures.
3. A designated member of the team will be appointed to co-ordinate specimen collection, transportation and **reporting of results** (see appendix, Transportation of Dangerous Goods Guidelines).
  - ◆ This person will ensure that those collecting specimens receive adequate training in collection, transportation techniques and completion of data sheets.
  - ◆ This person will also ensure collection of follow-up specimens.

### Collection of Data:

1. There must be training for staff in data collection and provision made for a standardized checklist.
2. Training should be provided to ALL staff assigned to collect data as part of the investigation. NEVER assume that staff are familiar with data collection procedures. Training should include:
  - ◆ Review of methods for data collection;
  - ◆ Variables to be included in the investigation;
  - ◆ Data collection forms and their use;
  - ◆ Interviewing techniques; and
  - ◆ Sufficient practice in data collection methods to assure that ALL data will be collected in the same manner.

All suspected cases should be interviewed or available records reviewed to ascertain basic information. The core characteristics to be noted on all cases should be established at the outset of the investigation as per list below:



### CORE CHARACTERISTICS

1. Age
2. Gender
3. Other demographic characteristics thought to be important (e.g. ethnicity)
4. Illness symptoms
5. Date and time of onset of symptoms
6. Possible relationships between cases (e.g. household, sexual, etc.)
7. Location or residence
8. Treatment administered
9. Samples taken for testing: type, time of sampling, where sent for analysis
10. Other specific information according to the disease

The purpose of collecting detailed data on cases is to assist in the provision of appropriate control measures. It may provide clues as to the possible common experience, leading to detection of the probable source of the outbreak and may help to formulate strategies and plans to prevent an outbreak in the future.

**Use This Form for the Following Reportable Diseases**

<p align="center"><b>SCHEDULE A - Item I</b></p> <p align="center">Reportable to the Chief Medical Health Officer by telephone as soon as suspected and followed within 24 hours by a written report.</p>	<p align="center"><b>SCHEDULE A - Item II</b></p> <p align="center">Reportable to the Office of the Chief Medical Health Officer (OCMHO) in writing within 7 days.</p>
<ol style="list-style-type: none"> <li>1. Amoebiasis</li> <li>2. Anthrax</li> <li>3. Botulism</li> <li>4. Campylobacteriosis</li> <li>5. Cholera</li> <li>6. Diphtheria</li> <li>7. Escherichia coli (verotoxigenic)</li> <li>8. Food Poisoning (including communicable enteric infections)</li> <li>9. Gastroenteritis, epidemic (including institutional outbreaks)</li> <li>10. Hantaviral disease (including Hantavirus Pulmonary Syndrome)</li> <li>11. Hemorrhagic Fevers</li> <li>12. Hepatitis (all forms)</li> <li>13. Influenza</li> <li>14. Invasive Group A Streptococcal infections (including Toxic Shock Syndrome, Necrotizing Fasciitis, Myositis and Pneumonitis)</li> <li>15. Invasive Haemophilus influenzae type B (Hib) infections</li> <li>16. Invasive Neisseria meningitidis infections</li> <li>17. Legionellosis</li> <li>18. Malaria</li> <li>19. Measles</li> <li>20. Meningitis/Encephalitis</li> <li>21. Neonatal Group B Streptococcal infections</li> <li>22. Pertussis (whooping cough)</li> <li>23. Plague</li> <li>24. Poliomyelitis</li> <li>25. Rabies (or exposure to rabies)</li> <li>26. Rubella and congenital rubella syndrome</li> <li>27. Salmonellosis</li> <li>28. Shigellosis</li> <li>29. Syphilis</li> <li>30. Tetanus</li> <li>31. Tuberculosis</li> <li>32. Typhoid and paratyphoid fevers</li> <li>33. Yellow fever</li> <li>34. Yersiniosis</li> <li>35. Epidemic forms of other diseases</li> <li>36. Unusual clinical manifestations of disease</li> </ol>	<ol style="list-style-type: none"> <li>1. Acquired Immunodeficiency Syndrome (AIDS) and any Human Immunodeficiency Virus (HIV) Infection</li> <li>2. Brucellosis</li> <li>3. Chancroid</li> <li>4. Chicken Pox (Varicella)</li> <li>5. Chlamydial Infections</li> <li>6. Congenital Cytomegalovirus infection</li> <li>7. Congenital or Neonatal Herpes simplex infections</li> <li>8. Creutzfeldt-Jakob Disease</li> <li>9. Cryptosporidiosis</li> <li>10. Cyclospora</li> <li>11. Giardiasis (symptomatic cases only)</li> <li>12. Gonococcal infections</li> <li>13. Hemolytic Uremic Syndrome</li> <li>14. Human T-cell Lymphotropic Virus infections</li> <li>15. Leprosy</li> <li>16. Listeriosis</li> <li>17. Lyme Disease</li> <li>18. Methicillin-Resistant Staphylococcus Aureus (MRSA)</li> <li>19. Mumps</li> <li>20. Psittacosis/Ornithosis</li> <li>21. Q fever</li> <li>22. Respiratory Syncytial Virus (RSV)</li> <li>23. Tapeworm infestations (including Echinococcal disease)</li> <li>24. Trichinosis</li> <li>25. Toxoplasmosis (symptomatic only)</li> <li>26. Tularemia</li> <li>27. Vancomycin-Resistant Enterococci (VRE)</li> </ol> <p><b>Office of the Chief Medical Health Officer Population Health Department of Health and Social Services Box 1320, Yellowknife NT X1A 2L9 Phone: 867-920-8646 Fax: 867-873-0442</b></p>