



# NOCCA

**NORTH COAST CENTRE FOR ALCOHOLICS**

PBO Number - 930051627 Established August 1993 NPO Number - 020 - 409 - NPO

**P.O Box 24, Tongaat, 4400 | Tel/Fax: 032 944 5585**

## 13.2 Outbreak of Disease

### **Purpose and Rationale**

Outbreaks of infection can occur in any community but are a particular problem in institutions where people live in close proximity (e.g. schools, universities, military barracks). The risks are even higher in a facility, where many patients have underlying disease that increases their susceptibility to infection. An outbreak may develop rapidly and be related to an event that exposed many people to the pathogen or may develop gradually over many days or weeks as the pathogen is spread from person to person.

**An outbreak is defined as an unusual or unexpected increase of cases of a known healthcare associated infection or the emergence of new cases of a new infection.**

Each incident is unique requiring specific measures to deal with individual circumstances. However, certain basic arrangements are necessary and will be generally applicable to the surveillance investigation, management and control of Infection. Outbreaks can be prevented. This requires careful observance of guidelines and procedures relating to patient care and the health of staff.

### **Objectives**

Early identification of an outbreak, appropriate investigations to identify the source of the outbreak and the implementation of control measures for the management of the outbreak.

### **Procedure/guidelines**

#### **1. Identifying an outbreak**

- Early identification is important to limit transmission among patients.
- Appropriate investigations are required to identify the source of the outbreak and to implement control measures.
- The control measures will vary depending on the agent and the mode of transmission, but may include isolation procedures, improvements in patient care or environmental hygiene.

#### **2. Investigating an outbreak**

Systematic planning and implementation of an outbreak investigation is necessary.

## 2.1 Planning the investigation

- Notify the appropriate individuals and departments (Manager of facility; Municipality; DOH; Environmental Health) of the problem.
- Confirm whether there is an outbreak by:
  - reviewing preliminary information on the number of potential cases,
  - available microbiology,
  - severity of the problem,
  - demographic data of persons, place and time.

## 2.2 Case definition

- One of the first tasks of the outbreak team is to develop a working case definition based on the known facts of the outbreak.
- A case definition is a written statement of the features that describe the case or infection that is occurring so it can be recognized and differentiated from noncases.

Case definition answers the following:

- Who is developing the infection?
- What the infection appears to be? – Site, pathogen, antibiogram, clinical signs and symptoms
- Where in the facility it is occurring?
- When the infections began and how long the situation has existed?

A data collection form for case finding should be developed. The form must be easy to use.

The data collected must be checked for validity.

## 2.3 Control measures and follow-up

As soon as the etiology of the problem has been defined beyond reasonable doubt, any pertinent control measures not already implemented should now be instituted.

The aims are:

- To control the current outbreak by interrupting the chain of transmission
- To prevent future occurrence of similar outbreaks

Guidelines and procedures must be revised if necessary this is also an opportunity to initiate or improve a surveillance system to facilitate evaluation of the efficacy of the control procedures instituted.

### 2.3.1 Communication

Communication is a vital part of outbreak management. Staff should be kept informed and made aware of special precautions to be taken.

Keeping patients informed is also important as their cooperation can help contain a threatened or actual outbreak.

During the investigation of an outbreak, timely up-to-date information must be communicated to the facility management and public health authorities.

In respect of media enquiries; Provincial and Local policy will apply.

### 2.3.2 Writing a report

A final report on the outbreak should be prepared.

It should describe:

- Outbreak, interventions, and effectiveness,
- Summarize the contribution of each team member participating in the investigation.