

Module: Public Health Disaster Planning for Districts

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Resource Title: Session 1.2a: Epidemics

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Introduction: Epidemics (or outbreaks) of disease are one of the most common public health disasters likely to occur in districts. However, in many cases the districts are ill-equipped and not prepared to respond to these epidemics in time. In order to prevent the sharp rise in cases and deaths, district teams have to respond to possible outbreaks as soon as they are reported. In this session, we shall look at the public health implications of outbreaks, and the steps that district teams should take in preventing and responding to them.

General Objective

The main objective of this session is to equip district teams with the knowledge and skills to be able to respond promptly to outbreaks of disease, so as to prevent spread of infection and reduce deaths.

Specific objectives

At the end of this unit the participant should be able to:

1. Explain the meaning of an outbreak
2. Describe the criteria for detecting an outbreak in a district
3. Describe the key steps in responding to an outbreak in a district

Teaching and learning strategies

Case Studies, brain storming, drawing on participants' experiences

Climate Setting Activity

Examine the list of the top 10 disasters likely to occur in your districts

At what level do outbreaks rank in this list after the risk assessment you conducted yesterday?

Presentation:

Let us now have a presentation on key considerations for managing outbreaks in districts. We shall also refer to some case studies during the presentation.

Case Studies: These case studies shall be used within the presentation, to illustrate some of the concepts and scenarios

Case Study 1: Food Poisoning Outbreak in District X, Country Y

(Let a volunteer read for the class)

In 2004, there was an outbreak of a strange disease in a rural district in country Y. It was reported that a 40 year old woman developed diarrhoea and vomiting. She was admitted to the nearby health centre and she passed away after 3 days. On the second day after she was admitted, 10 people developed the same disease condition. By the 4th day, there were 24 cases, all developing the same symptoms. The district suspected it was a cholera epidemic and they requested for help from the Ministry of Health. The team of investigators from the Ministry discovered that all the cases had shared a common meal of sweet potatoes at a funeral vigil in that parish. It was noted that it was a cultural practice for people in this parish to stay long at funeral vigils. They often carried a reserve of food from their homes, which they kept and ate over several days during the funerals. It was therefore confirmed that the outbreak was as a result of food poisoning

Questions for general discussion:

- Is this a scenario that could occur in your district? How did the district authorities establish that there is an outbreak?

Scenario 2: Hepatitis E in District X Country Y

(Let a volunteer read for the class)

A strange disease occurred in the Displaced People's camps in Country Y. Up to 94 people died in the first half of 2008 alone due to the disease. The disease was characterised by profuse diarrhoea and yellowing of the eyes. It was associated with liver failure. Because diarrhoeal diseases are very common in this part of the country, it took several days for the district officials to establish that there was a possible outbreak. In addition, the district officials were at first

not knowledgeable on the best way to respond to the epidemic and requested for help from the Ministry of Health. Initial suspicion was that it was an outbreak of Yellow Fever. However, the Ministry of Health later established that this was Hepatitis E, a disease spread through poor sanitation and hygiene. Outbreaks of Hepatitis E had not occurred in the country for several decades. It was also realised that if interventions had been put into place in the earliest stages of the epidemic, the death rates would not have been too high.

Questions for general discussion:

- How do you think the District and Ministry of Health officials went about investigating the outbreak? What do you understand by the term 'early response'?