Response to an Epidemic of Cholera
Goal of Response Activities

- Reduce deaths
  - good case management
  - mobilizing staff and supplies
  - increasing access to care

- Prevent new cases
  - intensive public education
  - environmental sanitation campaigns
  - ensuring safe water
Response Steps

- Convene epidemic committee
- Inform the public
- Treat patients
- Implement community control measures
- Collect and report data / document epidemic
- Evaluate response
  - Plan for improvements
Responsibilities
- Central Level -

- Notify World Health Organization of epidemics
- Convene National Epidemic Committee
- Plan and formulate policy
- Collect and analyze data
  – provide feedback to lower levels

Cholera / Response / 4
Responsibilities
- Central Level -

- Provide advice and assistance
- Acquire supplies and equipment
- Conduct epidemiological studies
- Provide for funding
Responsibilities
- District Level -

- Convene epidemic committee
- Inform the public
- Treat patients
  - support health facilities
  - train health workers
  - arrange for Temporary Treatment Centers
  - inventory / order supplies
Responsibilities
- District Level -

- Monitor epidemic & control measures

  - Monitor:
    - number of cases & deaths
    - CFR and attack rates
    - geographic location

  - Monitor inventory of supplies

  - Determine need for assistance

  - Monitor progress of community control measures
Responsibilities
- Health Facility Level -

- Report cases
- Collect information on patients
- Report daily during epidemics
- Treat patients
- Inventory treatment supplies
- Public education
Epidemic Committees

- Committees are needed at district, provincial and national levels
- Coordinates epidemic preparedness
- Coordinates response to epidemic
- Needs decision making powers
- Convene committee when epidemic is suspected
Duties of Epidemic Committee - 1

- Plan preparedness and control strategies
- Identify laboratory support
- Identify financing and resources for preparedness and control activities
- Establish procedures to access funds
Duties of Epidemic Committee - 2

- Assign specific responsibilities for epidemic detection and response
- Establish procedures for implementing community control measures rapidly
- Identify resources needed for rapid epidemic response
- Estimate / stockpile supplies needed
Duties of Epidemic Committee - 3

- Coordinate and monitor implementation of control measures
- Coordinate education of health care community and the public
- Evaluate impact of control measures, adjust strategy, review performance
- Report on the epidemic
Members of District Epidemic Committee

- Head of district health structure
- Members of the investigation team
- Key district decision makers
- Political authorities
Effective Control Measures
Prevent the Spread of an Epidemic

- Health Education on:
  - safe drinking water
  - hand washing / personal hygiene
  - food safety
  - seeking treatment early

- Provision of safe water

- Safe disposal of excreta

- Disposal of bodies and disinfection
Ineffective Control Measures - A dangerous waste of resources

■ Vaccination against cholera
  − does not prevent spread of disease
  − current vaccine not very effective

■ Mass Chemoprophylaxis
  − effect of the drug lasts only 1-2 days
  − does not prevent re-infection

■ Travel and Trade Restrictions
  − do not prevent spread of disease
  − costly and difficult to implement
  − most infected travelers have no signs of illness
Health Education

- Health education
  - foundation of outbreak control
  - use all channels of communication
  - explore local beliefs and correct misconceptions

- Key messages on:
  - seeking care quickly and drinking ORS on the way to a health facility
  - water safety precautions (esp. home chlorination)
  - hand washing
  - proper food preparation and storage
  - excreta disposal (latrine / toilet)
Make Water Safe by Boiling

- Bring water to a vigorous, rolling boil
- Keep it boiling one minute
  - this kills V. cholerae
- Store the water so it cannot be contaminated
Treat Water with Chlorine Solution

- Use 3 drops of chlorine solution for each liter of water
- Mix well
- Let it sit for 30 minutes before drinking

To make chlorine solution, mix 3 level tablespoons of bleaching powder in one liter of water.
Store Water Safely

- Safe water can be contaminated

- Store water in a clean container:
  - with a small opening
  - with a cover

- Use water within 24 hours

- Pour water from the container
Hand washing with soap or ashes

- after defecation
- after contact with feces
- before preparing food
- before eating food
- before feeding children
Food Safety

- Cook food thoroughly
  - all meat, fish, vegetables

- Eat cooked food while it is hot

- Wash hands and utensils
  - wash hands before preparing or serving food
  - wash dishes and utensils with soap and water
  - wash cutting surface especially well

- Peel fruits and vegetables
  - eat only fruits that were freshly peeled
Reporting During an Epidemic
Health Facility Level

- Report to the district level
- Report number of cases and deaths
- Consider daily reporting during an epidemic
- Send a report even if there were no cases
District Level Reporting During an Epidemic

- Report to national and provincial levels
- Include:
  - The time period for the report
  - The number of health facilities reporting
    > include those that reported no cases
  - Total # of health facilities in the district
  - Total number of cases and deaths
  - Progress on community control measures
Zero Reporting

- "Zero reporting" = send a report even if no cases or deaths occurred

- Distinguishes between areas
  - that really had no cases
  - that did not send a report
  - from which the report did not arrive
Response Steps

Summary

- Convene epidemic committee
- Inform the public
- Treat patients
- Implement community control measures
- Collect and report data / document epidemic
- Evaluate response
  - Plan for improvements