Pat-MedMUNC III
WHO

Preventing the Spread of Disease After Natural Disasters

Natural Disasters are inevitable and unpredictable. They occur in any nation in the world, with varying degrees of severity. When Natural Disasters strike, often countries are not prepared or equipped to handle the aftermath. In mainly developing nations, the risk for a disease outbreak rapidly increases. Most often it is the common diseases of that particular area that begin to spread. There are many factors that contribute to the threat of disease outbreaks. Population movement, environmental changes, overcrowding, and deteriorating sanitary conditions are some of the most common factors that cause an outbreak of disease after natural disasters.

Mass population movement and overcrowding in refugee camps greatly increase the risk of communicable diseases due to the close proximity of the population. If sanitary conditions are not upheld, outbreaks of illnesses can turn epidemic. Diseases that commonly affect shelters include influenza, measles, whooping cough, tuberculosis, scabies, and other skin infections. Deteriorating sanitary conditions are most often caused due to the pressure on food and water supplies, disruption of preexisting sanitation conditions (sewage pipes, water lines, etc.) and the lack of stable health facilities/programs in the immediate post-disaster period. Lack of sanitary water encourages the spread of enteric diseases.

In countries that already have issues with malnutrition, overcrowding, and lack basic sanitary conditions, the risk of diseases outbreaks after natural disasters greatly increases. Malnutrition increases the risk of spreading disease because the people are more susceptible to diseases and have a less likely chance of recovering. Children have an increased risk of getting diseases as well as the poor and homeless due to the poor living conditions.

Recent Developments

Although it has been more than a year since the earthquake in Haiti, the repercussions are still felt. A cholera outbreak has spread throughout the country due to present sanitary conditions. This is the first time in decades cholera has been present in Haiti. According to WHO, as of December 13th, 2010, the cumulative number of cholera cases and deaths are 112,330 and 2,478, respectively, despite the attempts to stop the spread of the disease. The WHO, along with other partners, set up an alert and response system to monitor the outbreak and plan for future outbreaks due to natural disasters. Countries still continue to donate money and supplies, and Health Cluster members still continue to meet to figure out solutions.

Also, in Pakistan, the 2010 floods during the Monsoon season, were some of the worst ever in history. According to the WHO, ten million people were forced to drink unsafe water. There is a huge risk of disease outbreaks due to the lack of sanitary water. Due to the increase of mosquito breeding grounds, a malaria outbreak is a realistic threat to Pakistan. Nearly 300,000 suspected malaria cases, including some severe confirmed cases, have been recorded in flood-affected areas of Pakistan since the end of July. The WHO is continuously working with the Pakistan's health ministry to try to stop an increase in this outbreak. Along with Malaria, diarrhea, gastroenteritis and skin infections have also recently immerged in increasing numbers in Pakistan.

Points to Consider

- The diseases caused after natural disasters are ones common to the area, they are usually not exotic diseases.
- After a natural disaster, dead bodies will not lead to catastrophic outbreaks of exotic d diseases.
- Though it is most often developing nations that are susceptible to disease outbreaks after natural disasters, developed nations do have a risk of disease outbreaks, like America during Hurricane Katrina.
- Developing nations often don't have the resources to prevent the spread of disease after natural disasters.
- How do natural disasters impact the spread of disease in your country?
- What can be done before a natural disaster occurs to prevent the spread of disease? (ex. Committees, education, etc.)
- What is essential to stopping disease outbreaks from occurring in all countries, developed

and developing, after a natural disaster occurs?

- What have other countries done to successfully stop the outbreak of disease after a natural disaster and how can that knowledge be used for future disasters in future countries?