Fact Sheet

Diseases: Factors in the

Emergence and Re-Emergence of Infectious Diseases









The Difference Between "Emerging" and "Re-emerging" Infectious Disease



The basic definition of an emerging or re-emerging infectious disease is a disease whose incidence has increased in a defined time period and location. If the disease was unknown in the location before, the disease is considered to be emerging. However, if the disease had been present at the location in the past and was considered eradicated or controlled, the disease is considered to be re-emerging.

The Factors That are Making it Easier for Infectious Diseases to "Emerge" or "Reemerge" are:

- Some infectious organisms are able to mutate into more deadly strains against which humans have little resistance.
- Mass migrations of refugees or evacuees bring infectious disease into new areas.
- Global travelers visiting exotic areas may bring new diseases home with them.
- The growth of congested urban slums, lacking sanitation and clean water has resulted in large outbreaks of infections spread by food, water, and environmental factors.
- Growth of communities disturbs natural habitats and increases human contact with remote environments and poorly understood ecosystems that hide many unknown and dangerous microorganisms.
- Over time, animal infections can become transmissible to humans (zoonosis).
- The globalization of world commerce brings potential contaminants across our borders daily by way of food, plants, hitchhiking insects, and other products.
- Misuses and overuse have eroded the ability of once-dependable antibiotics to fight common infections. Many microorganisms have become resistant to our most powerful modern drugs.
- Human sexual behavior and substance abuse expedite the spread of infectious agents.
- Institutional settings, such as childcare centers and hospitals, provide an ideal environment for transmission of infectious diseases because they bring susceptible individuals into close daily contact.
- Modern medicine led to a downward spiral in public health spending, and essential surveillance and laboratory systems suffered. Cutbacks in prevention programs allowed infectious diseases to gain a strong foothold in the United States and abroad.
- There is now a threat of infectious agents being used by individuals and groups who wish to cause injury, panic, and confusion in the civilian population for personal or political reasons.



For more sources of information on this topic visit:

ST. CLAIR COUNTY HEALTH DEPARTMENT www.scchealth.co MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES www.michigan.gov/mdhhs CENTERS FOR DISEASE CONTROL AND PREVENTION www.cdc.gov

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