Communicable Illnesses

ECE II

Unit 8

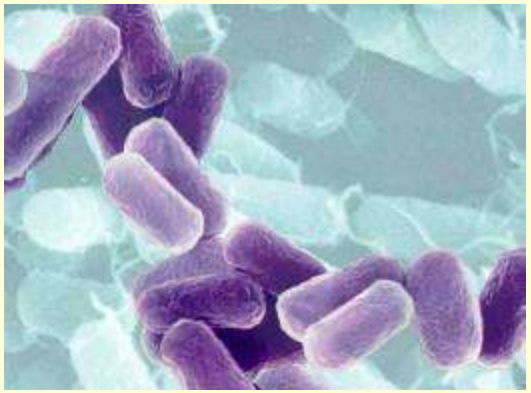
Communicable illness – an illness that can be transmitted or spread from one person or animal to another

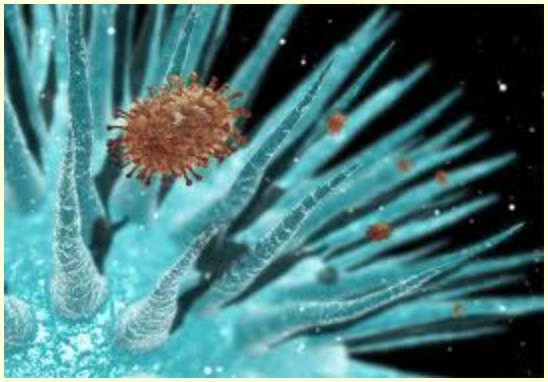
A. 3 factors, all of which must be present at approximately the same time, are required for this process to occur:

1. A pathogen – the disease causing agent must be present and available for transmission

- Example – bacteria, virus, parasite

- These germs are specific for each illness





- Germs are most commonly located in the discharges of the respiratory (nose, throat, lungs) and intestinal tract of the infected person

Can also be found in the blood, urine, and discharges from the eyes and skin

2. A susceptible host – a person who can become infected with a pathogen

- Most germs enter their new host through a break in the skin, the respiratory tract or the intestinal tract depending on the specific disease or illness
- Not every child who is exposed to a particular virus or bacteria will become infected
- Children who are well rested, adequately nourished, immunized, and in a good state of health are generally less susceptible

3. A method of transmission – the way the infectious agent moves from the original source to the new host

- Airborne transmission – tiny droplets of moisture that are expelled during coughs, sneezes, and talking

  Ex – Influenza, colds, meningitis, tuberculosis, chickenpox

- Fecal-oral transmission – germs are transferred to the mouth via hands contaminated with fecal matter. Failure to wash hands properly after changing diapers or helping children with toileting

  Ex – pinworms, Hepatitis A, salmonella, giardiasis

Direct contact with body fluids such as blood, mucus, or an area of infection on another individual

Ex – ringworm, athlete's foot, impetigo, Hepatitis B, conjunctivitis

Indirect contact – the transfer of infectious organisms from an infected individual to an intermediate object such as water, milk, dust, food, toys, towels, eating utensils, animals or insects and finally to a new host

Ex – staphylococcus

B. The elimination of any one of these factors will prevent the spread of communicable illness

C. The Communicable Illness Model

PATHOGEN

SUSCEPTIBLE HOST

METHOD OF TRANSMISSION

II. Stages of Illness – communicable illnesses generally develop in predictable stages:

A. Incubation stage – the time between exposure to a pathogen and the appearance of the first signs or symptoms of illness

1. Infectious organism enters the body and multiply rapidly in an attempt to establish themselves and overpower the body's defense systems
2. The length of this stage can be hours or days depending on the communicable disease
3. Children are often contagious before any symptoms are apparent which makes it difficult to control in the classroom

B. Prodromal stage – begins when the child experiences the first nonspecific signs of infection and ends with the appearance of symptoms characteristic of a particular communicable illness

1. May last from several hours to several days
2. Not all communicable diseases have this stage
3. Possible symptoms – headache, unexplained fatigue, low-grade fever, a slight sore throat, and a general feeling of restlessness or irritability

C. Acute stage – child is definitely sick with the onset of symptoms typical for the specific communicable illness

1. Possible symptoms may include fever, sore throat, cough, runny nose, rash, or enlarged lymph glands
2. Child is highly contagious throughout this stage

D. Convalescent or recovery stage – child begins to feel better and they are no longer contagious

III. Control Measures – limit the spread of the illness

A. Observations – teachers need to be sensitive to changes in the children's normal appearance and behavior patterns

1. unusually pale or flushed skin
2. red or sore throat
3. enlarged lymph glands
4. nausea, vomiting, diarrhea
5. rash, spots, or open lesions
6. watery or red eyes
7. headache or dizziness
8. chills, fever, or achiness
9. fatigue or loss of appetite

10. Teachers should be alert to signs of illness during the season when they are more common or whenever there is a known outbreak in the community

B. Policies – should be consistent with state regulations and in place before the program enrolls children

1. Exclusion policy – guidelines for when sick child must stay home
2. Inclusion policy – guidelines for when child may return
3. Notifying parents when children have been exposed to a communicable illness
4. Teacher illness – often the same policies that are set for children
5. administration of medications – prescription and nonprescription – in writing

C. Immunization – the introduction of a small amount of the living or dead microorganism into the body, which stimulates the production of antibodies, creating a resistance to illness

1. Ex – Diptheria, tetanus, whooping cough, polio, measles, mumps, rubella, Haemophilus influenza, chickenpox
2. Only 81% or young children have received all of the recommended age appropriate immunizations

Parents don't realize that some illnesses are still life-threatening and continue to pose a risk to unimmunized children

- Parents believe antibiotics can cure any infectious illness so they are willing to take a chance

Concern over the safety and number of vaccinations given to children

3. Most states require current immunizations in order to enroll in school or early childhood programs

D. Environmental control – practices and changes used to reduce the spread of communicable illnesses

1. Procedures should be written up, posted where they are visible, and reviewed periodically with all employees
2. Universal Infection Control Precautions
   - Developed by the U.S. Department of Labor's Occupational Safety and Health Administration – OSHA
   - Are designed to keep workers safe
   - Handling of body fluids – blood, urine, feces, saliva, vomitus
   - Washing of children's hands and skin and classroom equipment
   - Wearing and removing of gloves

E. Handwashing – the single most effective control measure against the spread of communicable and infectious illness in child care and school environments

F. Cleaning

1. Frequent cleaning of furniture, toys, and surfaces
2. Bleach solution – ¼ cup of bleach to 1 gallon of water
3. New bleach solution must be prepared daily to maintain disinfecting strength
4. Label spray bottles with the date and bleach/water ratio or purpose

G. Diapering and Toileting areas

1. Maintain a separate diapering and toilet area
2. Adhere to sanitary diapering procedures
3. Disinfection of surfaces
4. Thorough handwashing

H. Room arrangements

1. room temperature set between 68 degrees F and 70 degrees F – less favorable for the spread of illness and more comfortable for children
2. well ventilated rooms – circulate fresh air
3. humidity level- extremely warm, dry air increases the risk of respiratory infections by causing the mucous lining of the nose and mouth to become dry and cracked
4. separate infants and toddlers who are not toilet trained from older children to reduce the spread of intestinal illness

5. Laundry and food preparation areas separated from each other and the classroom
6. Pedal-operated sinks or faucets with infrared sensors encourage frequent handwashing and avoid contamination
7. Limit the number of children to prevent overcrowding at tables and in play areas
8. During naptime, arrange children in alternating directions, head to foot

9. Individual lockers for storing personal items – blankets, coats, hats, toys, toothbrushes, combs
10. Cover sandbox to prevent contamination with animal feces
11. Clean and control water pH level for the water table and wading pool
12. Launder dress-up clothes often

Education – ongoing activities that address personal health habits, exercise and nutrition in order to improve resistance to infectious organisms and shorten the length of convalescence

1. Suggested topics:
   - handwashing
   - method for covering coughs and blowing noses
   - sanitary use of drinking fountain
   - not sharing personal items – cups, toothbrushes, shoes, hats, towels, eating utensils

- Germs
- Dressing appropriately for the weather
- Good nutrition
- The need for rest and exercise

2. Families should be included in any educational program
3. Teachers can reinforce to parents the importance of:
   - serving nutritious meals and snacks
   - making sure that children get enough rest and exercise
   - obtaining immunizations for children
   - scheduling routine medical and dental visits