



Infection Control Basics:

How to minimize the risk of
infections

New Mexico DOH - DDSO

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What is infection control?

- Infection control describes the efforts we use to lessen the risk of getting sick and spreading germs



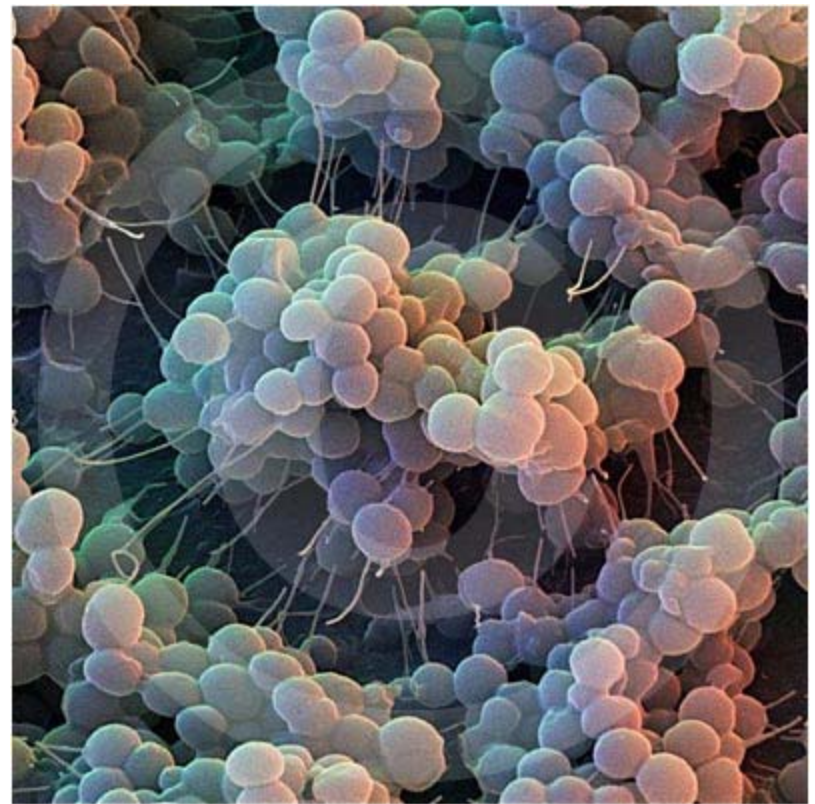
Germs = Microorganisms



- Germs are organisms which can only be seen by a microscope
- They may also be called Microbes

Microorganisms are EVERYWHERE

- May be bacteria, virus or fungus
- May be helpful
- May cause illness or infection
- Micro-organisms that cause illness are called *pathogens*

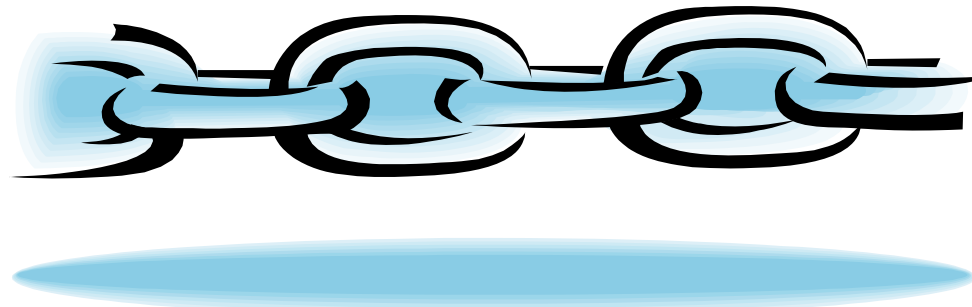




Microorganisms may spread in many ways

- Direct Contact
 - transmitted directly from one person to another
- Indirect contact
 - transferred from one object to another
- Airborne
 - carried in the air
- Oral route
 - enters body through mouth from water, food, hands
- Insects and Pests
 - picked up on insects and pests and transferred

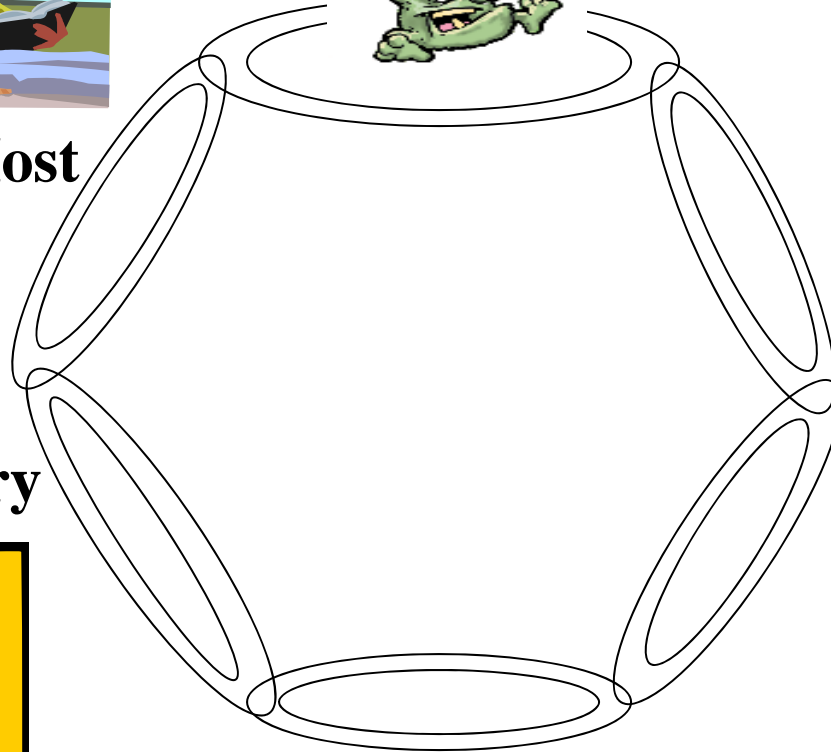
The Chain of Infection and how to break it





Susceptible Host

Infectious agent

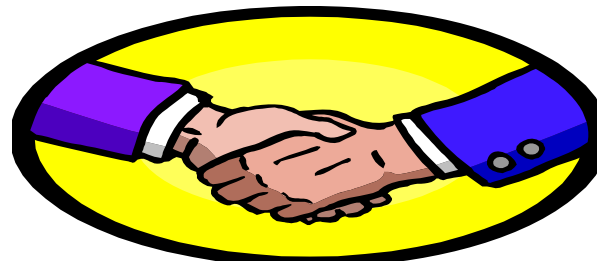


Reservoirs

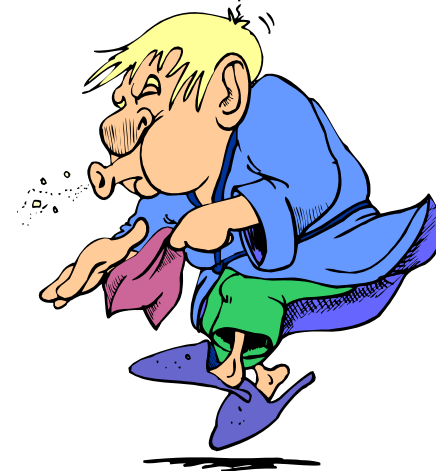
Portal of Entry



Means of Transmission



Portal of Exit





Link 1: Infectious agents

- Bacteria
- Fungi
- Viruses



Link 2: Reservoirs

- People
- Equipment
- Water
- Food



Link 3: Portal of Exit

- Excretions
- Secretions
- Skin
- Droplets





Link 4: Means of Transmission

- Direct Contact
- Contaminated objects
- Ingestion
- Airborne
- Vector



Link 5: Portal of Entry

- Mucous Membrane
- Gastric Tract
- Respiratory Tract
- Broken Skin
- Urinary Tract
- Medical tubing such as IV, G tube or urinary catheter



Link 6: Susceptible Host

- Any person who cannot fight off the microbe due to illness or chronic diseases





Not everyone gets sick when exposed to germs

- Susceptible people may get sick
- People with a strong immune system may not get sick
- We are all exposed to numerous microorganisms every day but we are not all sick everyday



What is an infection?

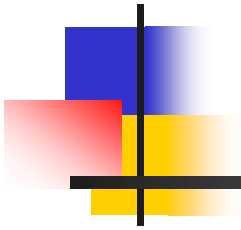
- An infection occurs when a micro organism overwhelms the defenses of someone and the body reacts to the event.



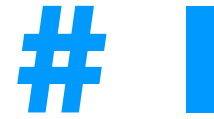
Signs and Symptoms of Infection

- Redness
- Swelling
- Heat
- Drainage
- Pain
- Temperature
- Change in behavior; thinking or function
- All of the above need to be reported to the nurse promptly.

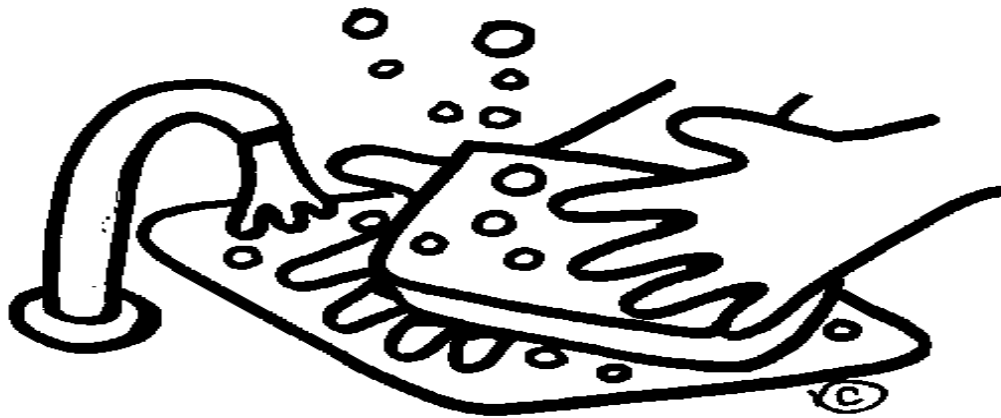
How do we break the chain of infection?



Hand washing



- Use soap and water
- Rub soap on hands for 15 sec.
- Rinse hands/fingers pointing down
- Turn off faucet with paper towel





When to wash your hands

- Arriving/leaving work
- Handling money
- Using the restroom
- Touching face, hair
- Touching another person during care
- Blowing your nose
- Eating
- After removing gloves
- After providing care
- After contact with known unclean equipment or surfaces
- After touching something that *might* be dirty
- After handling raw or partially cooked food especially meat or poultry



When To Use Alcohol Hand Sanitizer

- Only when hands are not visibly soiled
- When soap and water are not available
- Before and after any contact with another person
- After contact with medical equipment or objects in the room
- After removing gloves and before donning gloves



Other methods of breaking the chain of infection

- Cleanliness
- Precautions



Cleanliness

- Staff should practice good personal hygiene
- Use good hand washing technique
- Properly handle all equipment
- Keep the house and environment clean
- Don't put clean items near or on something dirty
- Dispose of all trash appropriately
- Use aseptic or sterile procedure when directed by the nurse



Precautions – history

During the HIV epidemic in the 1980's, Universal Precautions were introduced to use caution with bodily fluids that were obviously contaminated with blood.

We now know that blood or any bodily fluid may contain pathogenic microorganisms. We are now using STANDARD precautions to protect ourselves during routine care.



Standard Precautions

- Provide a consistent approach to the care of all persons
- Offer best protection: must assume anyone may be infected
- Knowledge of the person and the task determines what personal protective equipment (PPE) is necessary.



Standard Precautions

- Use Standard precautions at all times
- Gloves when in contact with any blood or bodily fluid
- Goggles when splash might occur
- Mask when splash or droplet might occur
- Gown/booties when splash or droplet might occur



Transmission-Based Precautions

- Are used when specific infections are present
- They include:
 - Airborne Precautions
 - Contact Precautions
 - Droplet Precautions
- These specific precautions will be trained on an as needed basis, based on the person's illness.



OSHA Blood Borne Pathogen training

- All DDW providers are required to provide thorough information to their employees regarding OSHA Blood Borne Pathogen compliance - separate from this training session – if you have not received this training contact your supervisor.
- For more information see the OSHA website:
<http://www.osha.gov/SLTC/bloodbornepathogens/index.html/>