

Warm-up Questions 9/12/13

1. What is the difference between a pathogen and a nonpathogen?
2. Other than by microorganisms how else do we classify the spread of infection?
3. Most HIV/AIDS patients die of what type of infections?

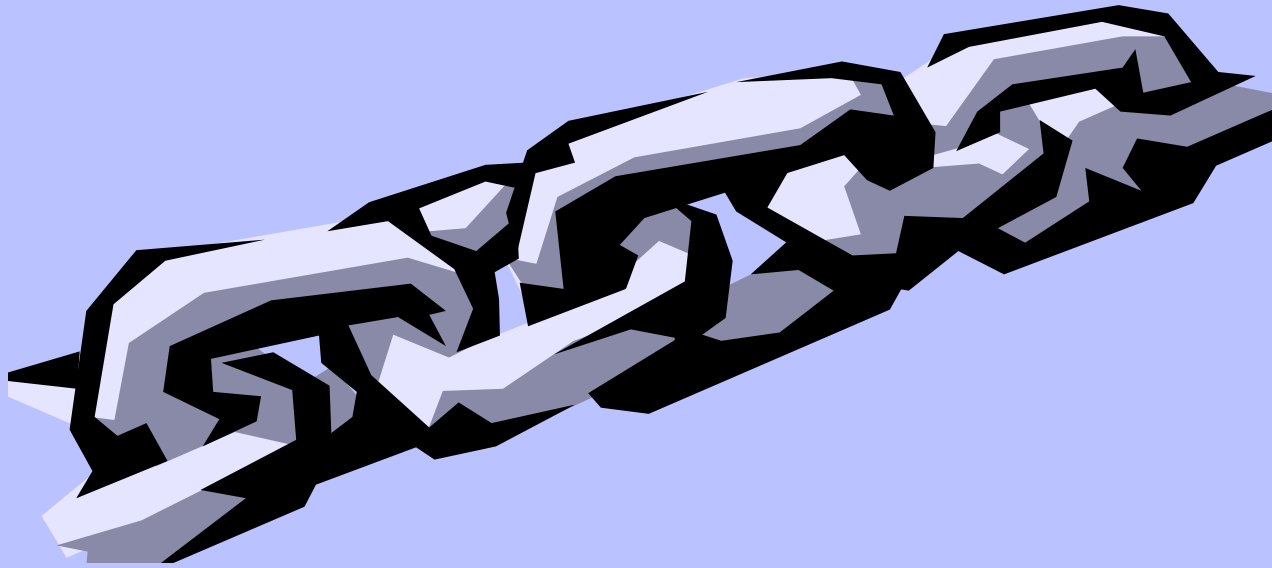
9/2/14 Today's Agenda:

1. Students will complete warm-up questions.
2. Students will document chain of infection notes.
3. Closure: students will create a chain of infection.

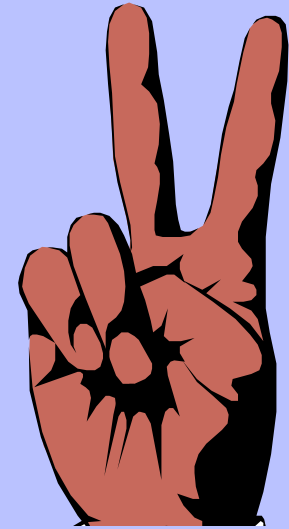
U1 EQ: What potential infectious hazards are there in medical facilities and how may we prevent them?

TO: What are the 6 links to the chain of infection?

The Chain of Infection



As HC professionals,
it is important to
understand two facts
about infection:





1. The various ways infection can be transmitted.
2. The ways the infection chain can be broken.

**There are six
links
in the chain of
infection:**

1st: Infectious or Causative Agent

Any dz-causing
microorganism
(pathogen)



2nd: Reservoir Host

The organism in which the infectious microbes reside.



What are “Carrier Hosts?”

Hosts that do not show any outward s/s of a dz, but are still capable of transmitting the dz.



The Reservoir Host

Fomites def: objects contaminated
w/ infectious pathogens.

3rd: Portal of Exit

Pathogen's escape route out of the reservoir host.

ex: respiratory secretions, bld exposure, breaks in skin



4th: Route of Transmission

How the pathogen gets from the reservoir to the new host



Transmission may occur through:

Direct Contact



Air



Insects



Food



Feces



Instruments



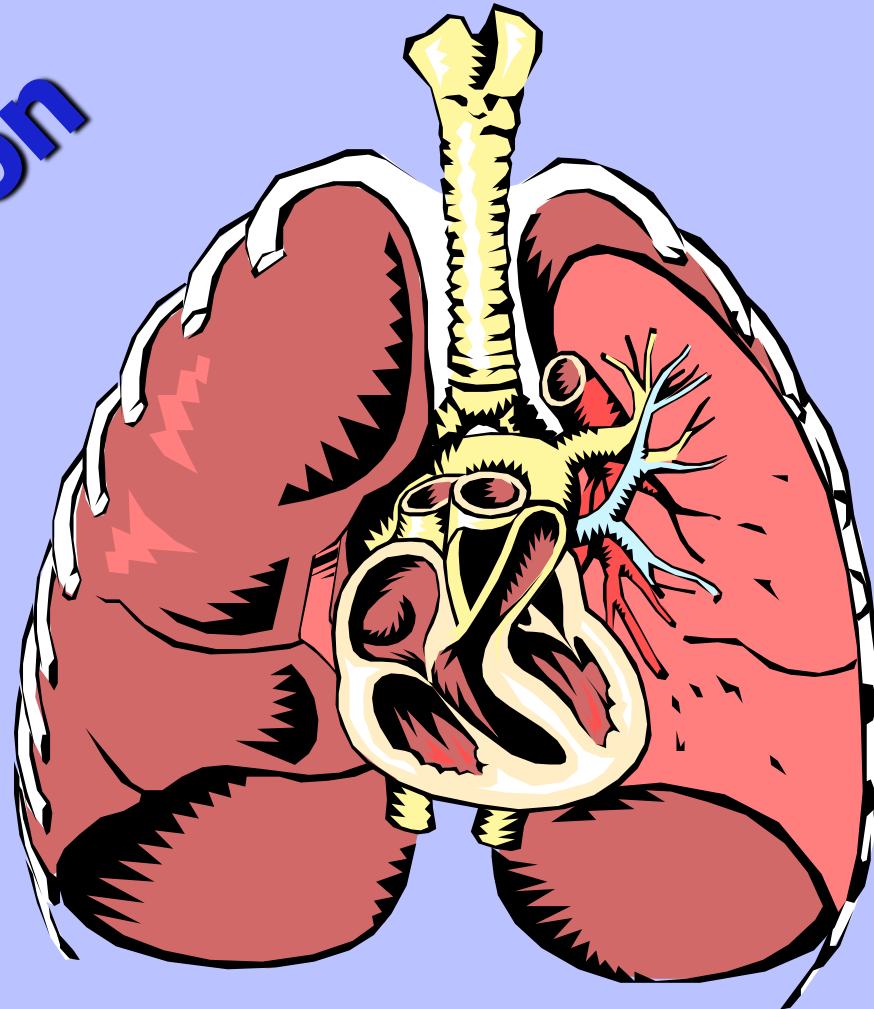
5th: Portal of Entry

Route through which the pathogen enters its new host



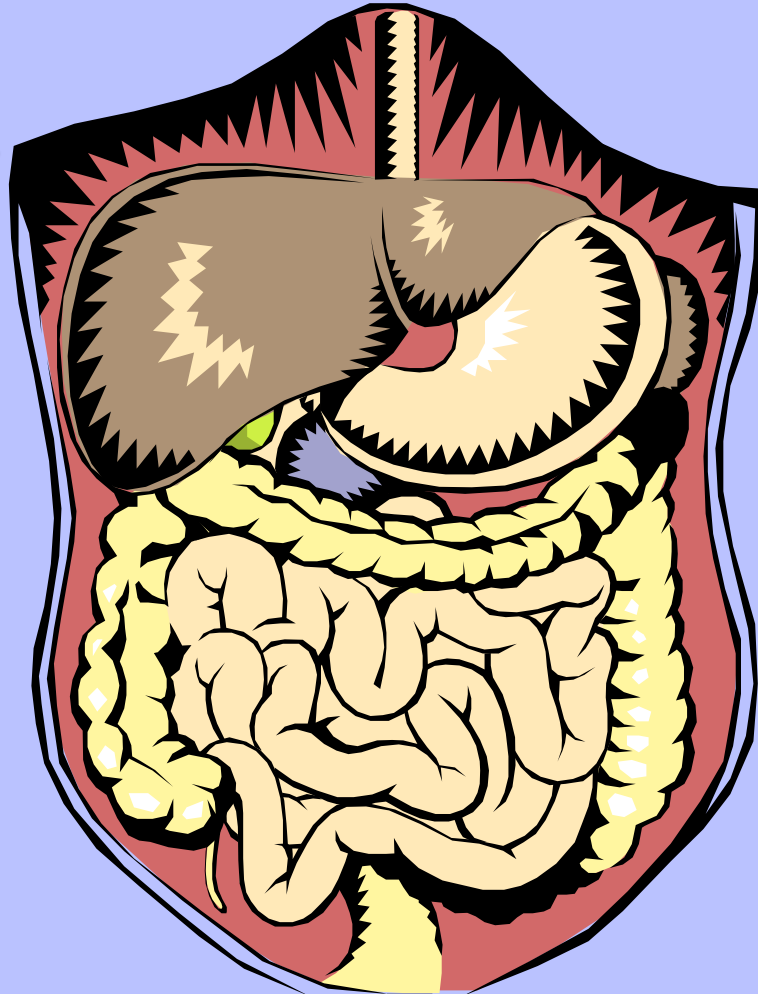
Respiratory System

inhalation



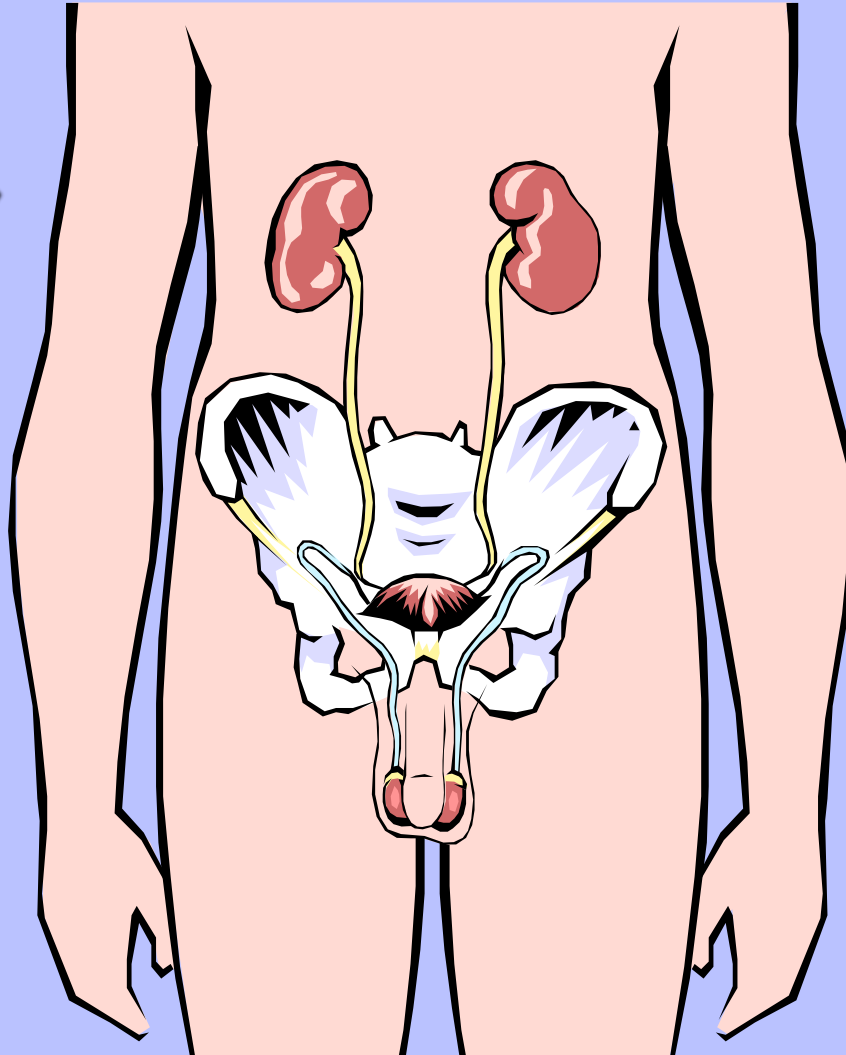
Gastrointestinal System

ingestion

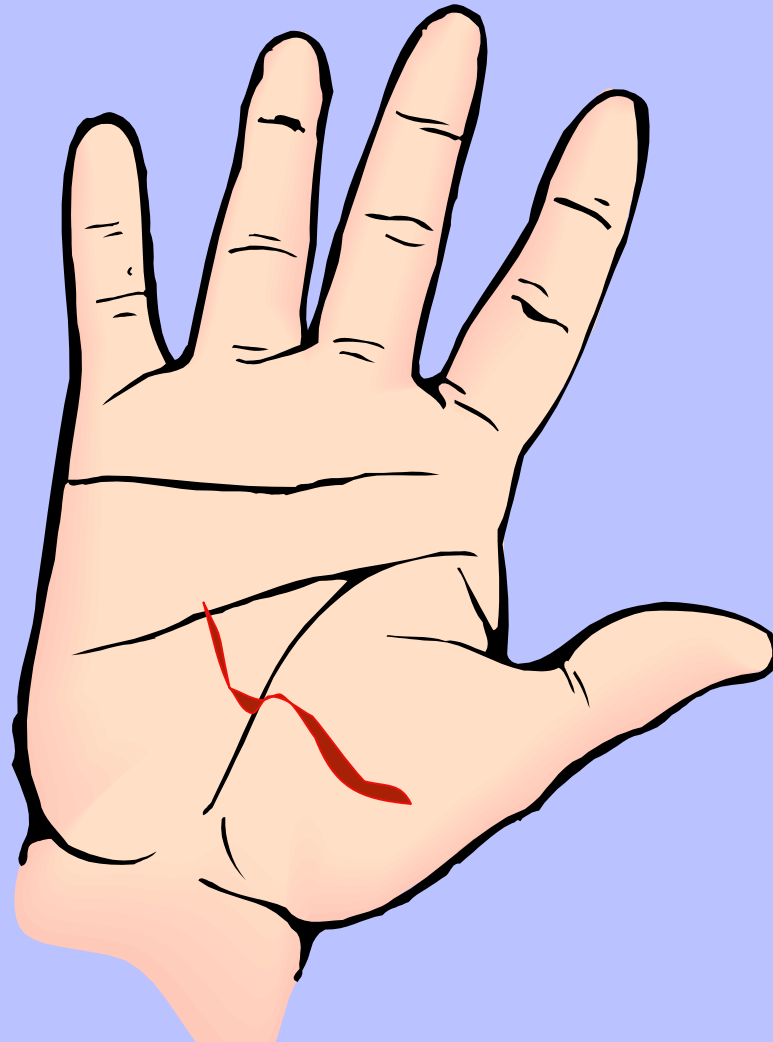


Urinary & Reproductive Tracts

**Sexual
contact**



Breaks in Protective Skin Barrier



Body Defenses

- Mucous Membrane
- Cilia
- Coughing/sneezing
- Hydrochloric acid
- Tears
- Fever
- Inflammation
- Immune response - antibodies, protective proteins and chemicals.

6th: Susceptible Host

The organism that accepts the pathogen

Pathogen life & its reproduction depend on the degree of the host's resistance.

Organisms with strong immune systems are better able to fend off pathogens.



Organisms with weakened immune systems are more vulnerable to the support and reproduction of pathogens.



Create the Chain of Infection

- You need the six following 2” strips of construction paper:
 1. Brown – Infectious Agent
 2. Pink – Reservoir Host
 3. Green – Portal of Exit
 4. Orange – Route of Transmission
 5. Yellow – Portal of Entry
 6. Red– Susceptible Host
- On one side identify the link to the chain of infection.
 - Transmission
- On the other side define /provide an example to that specific link.
 - How the infectious agents moves from the reservoir to a new susceptible host; sexual contact
- Staple each link together in order to create a chain.