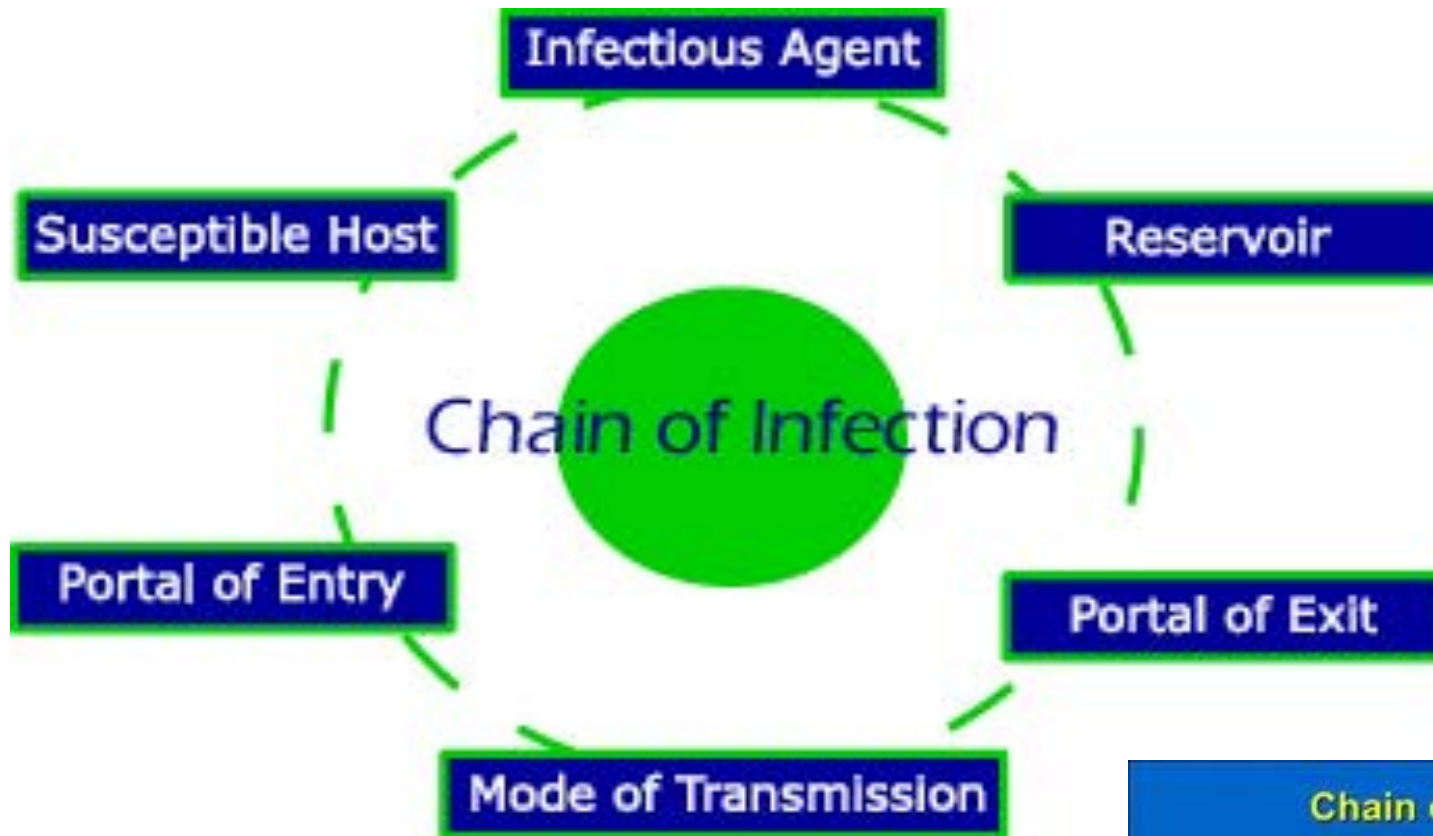


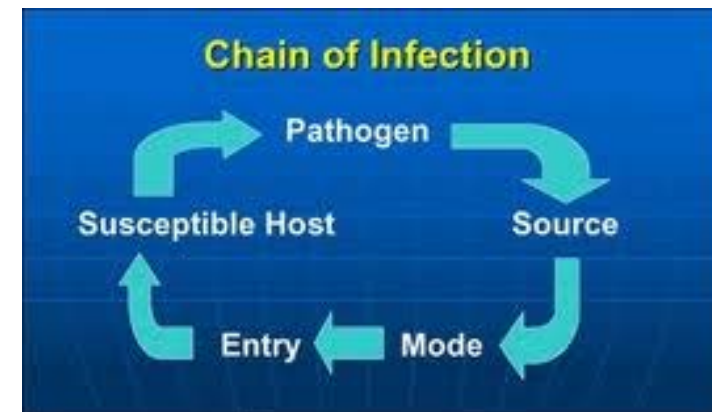
A collage of personal protective equipment (PPE) items. On the left, a person is shown wearing a blue surgical gown, a blue hairnet, and white gloves. To the right, there is a collection of PPE items: a blue surgical mask, a clear face shield, a pair of blue nitrile gloves, a box of Pains disinfectant, a bottle of Hand Sanitizer, and a bottle of disinfectant. The items are arranged in a grid-like fashion, showcasing various types of PPE available for purchase.

CNA 2 OSBN Curriculum

Chain of Infection

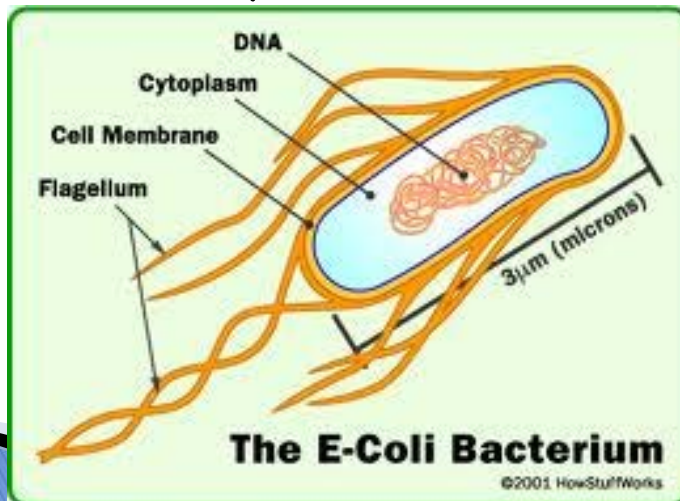
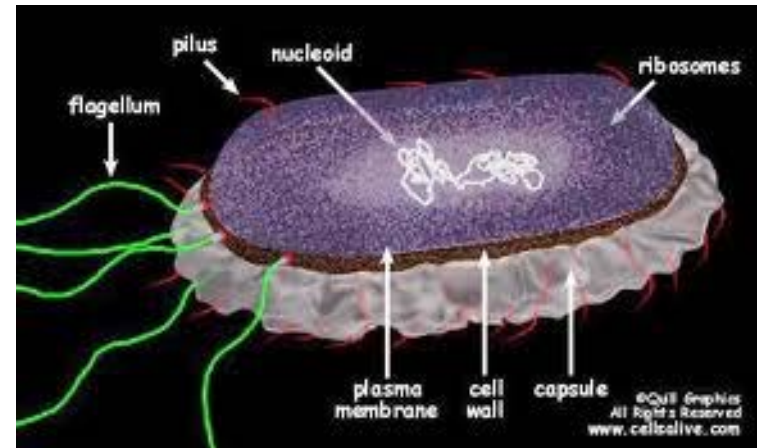


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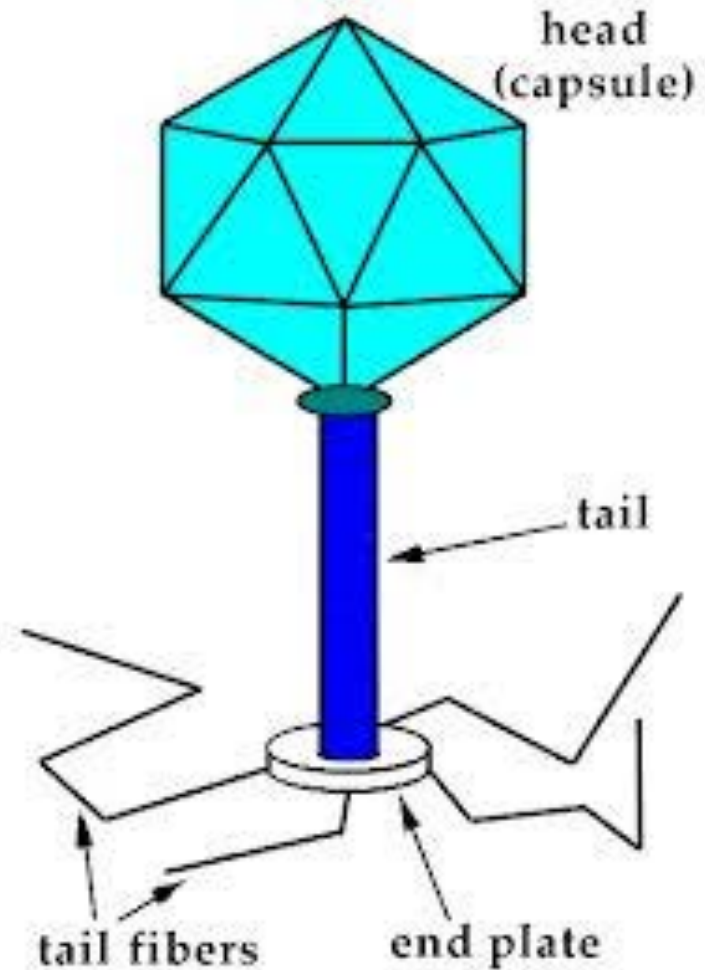
Bacteria

- ▶ Microbe that May Cause Disease
- ▶ Normal Flora
 - Staph on Skin Good
 - Infection in Wounds
 - E-Coli near Rectum Good
 - In Urinary Tract = UTI



Virus

- ▶ Very Tiny Organisms
- ▶ May Cause Disease
- ▶ Examples
 - Common Cold
 - Herpes
 - Hepatitis
- ▶ Can Live on Surfaces



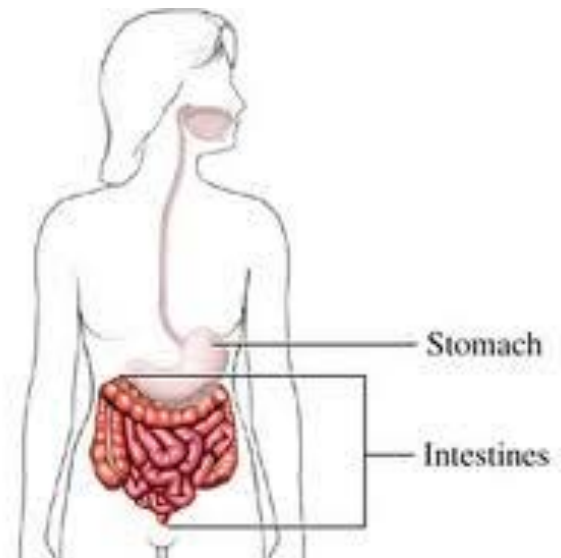
MRSA

- ▶ Methicillin Resistant Staphylococcus Aureus
- ▶ Resistant to Common Antibiotics
- ▶ Spread via Direct Contact
- ▶ Lungs: Droplet Transmission
- ▶ Survive on Surfaces up to 3 Months
- ▶ Screening
 - Patients in LTC after 12 Mos.
 - Admission to Acute Care



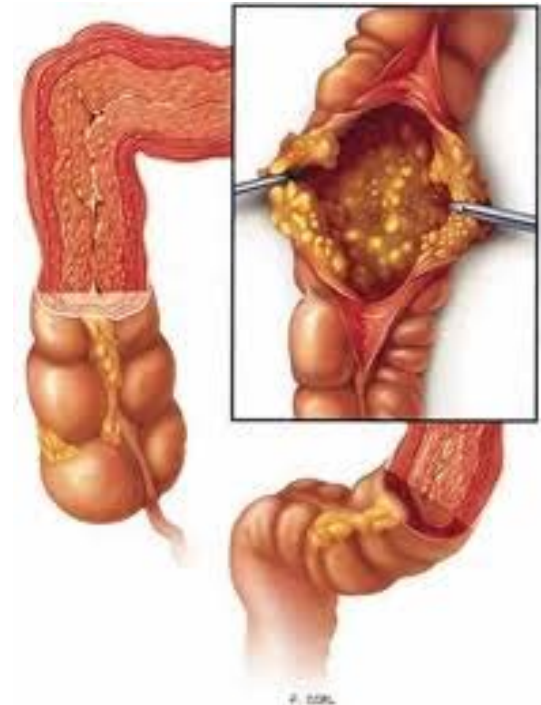
VRE

- ▶ Vancomycin Resistant Enterococcus
- ▶ Bacteria Lives in Digestive and Genitals
- ▶ Survive up to 6 Days
- ▶ Not an Issue for Healthy People



C-Diff

- ▶ Clostridium Difficile
- ▶ Infectious Diarrhea
- ▶ Most Common in Hospital/LTC
- ▶ Spread: Feces to Oral Route
- ▶ Wash w/Soap & Water



Nosocomial Infection

- ▶ Pt. Acquires in the Healthcare Facility
 - Burn & Surgical Pt.s most Susceptible
- ▶ Sources
 - Indwelling Urinary Catheters
 - IV Lines
 - Endotracheal Tubes
- ▶ Over 2mil Annually
- ▶ Prevention is the KEY
 - Standard Precautions
 - Infection Control Procedures
 - HANDWASHING



Healthcare Team

- ▶ Control & Prevent Spread of Pathogens
- ▶ Infection
 - Disease from Invasion & Growth of Microbes
 - S&S
 - Fever
 - Rash
 - Increased Pulse & RR
 - Pain/Tenderness
 - Fatigue/Loss of Energy
 - N/V/D
 - Redness & Swelling
 - Discharge/Drainage/Foul Odor



Hand Washing

- ▶ #1 preventative measure in the spread of infection!!!!!!
 - Soap & water
VS
 - Antimicrobial Hand Sanitizers

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Breaking the Chain

- ▶ Prevents the Spread of Pathogens
- ▶ 2 Techniques
 - **Medical Asepsis**
 - Clean technique
 - **Surgical Asepsis**
 - Sterile Technique



Medical Asepsis

▶ #1 HANDWASHING

► #2 PPE

- Gloves
- Masks/Face Shields
- Gowns

▶ Remove/Destroy Pathogens

► Prevent their Spread

► Clean not Sterile



Surgical Asepsis



- ▶ Sterile Technique
- ▶ Equipment/Supplies Free of Microbes
- ▶ Items kept in Sterile Field
 - Top Only Sterile
 - Only Sterile Gloves
 - Clean & Dry
- ▶ Sterile Items
 - In Sight
 - Above the Waist

<https://www.youtube.com/watch?v=CgP1fXxOAJ8>



Universal Precautions



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Standard Precautions

▶ For ALL Patients ALL the Time

▶ Wash Hands

- Before AND After Pt. Care
- Before AND After Wearing Gloves
- Before AND After Eating
- After the Bathroom
- Before AND After Your Shift



▶ Gloves

- ANY Body Fluid Contact
- Mucus Membranes
- Open Skin
- Change Between Tasks

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Masks & Eyes



Exposure

- ▶ Wash Immediate
- ▶ Notify Supervisor
- ▶ Complete Paper Work
- ▶ Blood Draw
- ▶ Consult Medical Care
- ▶ Get Documented
- ▶ Counseling



Equipment



Isolation Precautions

- ▶ In ADDITION to Standard Precautions
- ▶ Four Types
 - Contact
 - Airborne
 - Droplet
 - Reverse



Contact Precautions

- ▶ Illness Spread via
 - Direct Contact
 - Indirect Contact
- ▶ MRSA, MDRO, VRE, C-Diff, Hep. A
- ▶ Gloves & Gowns REQUIRED
 - NO EXCEPTIONS!!!!!!
- ▶ Wash Hands
 - Before Applying PPE
 - After Removing PPE
 - Before Leaving Pt. Room



Airborne Precautions

▶ Diseases Transmitted Via Air

- Measles
- Varicella
- TB

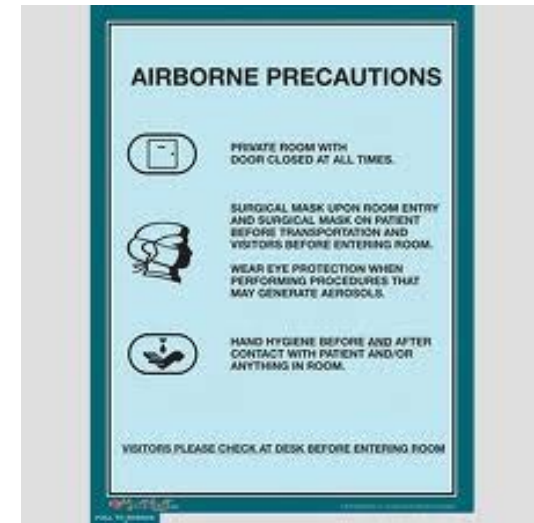
▶ Keep Door Closed

▶ Gloves for All Care

▶ Mask

- TB: Fitted Respirator

▶ Requires Negative Pressure Room



Droplet Precautions

- ▶ Infections Spread Via Droplets
 - Meningitis
 - Pneumonia
 - Pertussis
 - Influenza
- ▶ Keep Door Closed
- ▶ Wear Gloves for All Care
- ▶ Mask & Eye Protection: 3 ft.
- ▶ Mask on Pt. Out of Room



Reverse Isolation

Protective Isolation/Neutropenic Precautions

▶ Protecting the Pt. Against Infection

- Chemo/Radiation
- Depressed Resistances
- Extensive Burns

▶ WASH HANDS

▶ PPE

▶ Sterile/Disinfected Equipment

▶ Precautions

- Flowers/Plants/Fresh Produce



Surgical Prep

- ▶ Use surgical clipper, not razor.
 - Razors can rapidly remove hair, but may result in small cuts and abrasions. This minor skin damage can provide an area where bacteria flora can multiply and potentially infect the surgical incision site.
 - Clippers mechanically trim the hair close to the skin
 - https://www.youtube.com/watch?v=9Mu9AbK2Q_s
- ▶ Some studies indicate preparing the skin closer to the time of surgery results in significantly lower infection rates

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