

ASEPSIS

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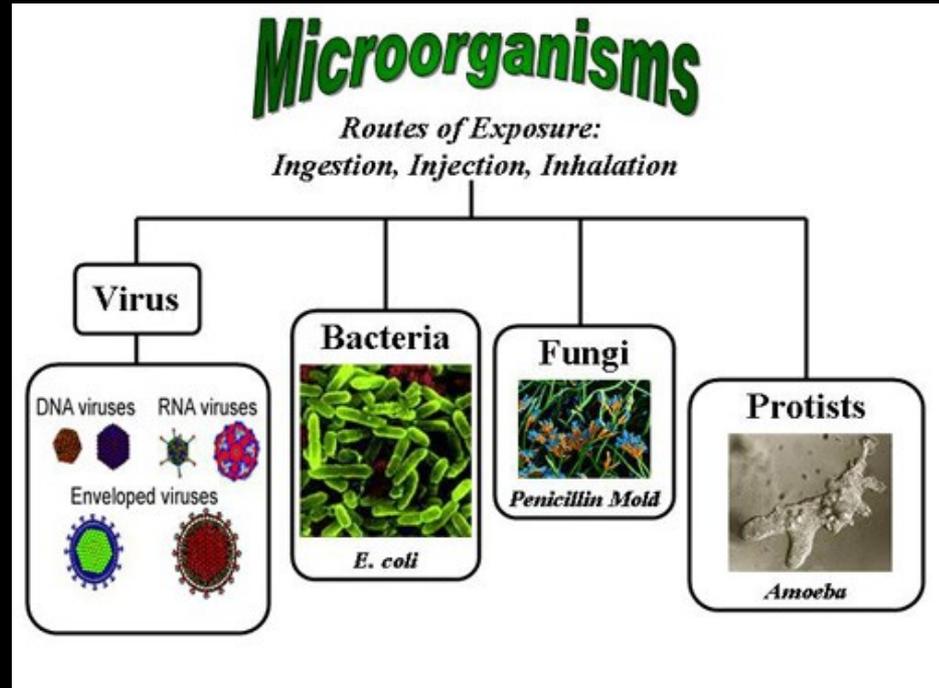
Asepsis

- State of being free from disease-causing contaminants or microorganisms
 - uncontaminated
- **Aseptic technique**
 - practices/procedures that help reduce risk for infection

Micro Organisms

are everywhere

- In the air
- In the water
- In food
- In clothes



Microorganisms can spread by:

- Touching someone who has infection
- Touching linens or belongings of a person who has an infection
- Sneezing or coughing
- Handling or consuming contaminated food, medications or water

Two Types of Asepsis

MEDICAL

- Clean technique
- Practices to confine,
- limit the growth & contamination or spread of microorganisms

SURGICAL

- Sterile technique
- Practices that keep an area free of all organisms

Hand Hygiene

- 60% alcohol-based solution for routine hand cleansing
- Antimicrobial soap and water when hands are visibly soiled
- When caring for patient with *C. difficile* one must wash hands with soap & water

Standard precautions

- Previously known as universal- are the practices used when potentially coming into contact with any patient's blood or body fluids
- They are a set of principles designed to minimize exposure to and transmission of microorganisms
- Since every patient is a potential infection risk, it is essential that you apply standard precautions to all patients at all times

Standard Precautions: Infection Control

- Hand hygiene
- Protective clothing and equipment
- Safe disposal of sharps; laundry management
- Clean clinical environment
- Management of blood and body fluid exposure
- Education of patients, caregivers and healthcare workers

Personal Protective Equipment (PPE)

- Gloves
- Gowns
- Face masks
- Eye protection

Transmission-Based Precautions

- Contact – spread by direct contact
- Droplet – spread through coughing, sneezing
- Airborne – small pathogens suspended in air and transmitted through fanning linens, ventilating systems

Cornerstones of Medical Asepsis

- Know what is dirty
- Know what is clean
- Know what is sterile
- Keep these conditions separate

- Hand hygiene!!!
- NON-STERILE (clean) gloves
- Cleaning/disinfection of equipment

Surgical Asepsis

- Also called sterile technique
- Implemented in the
 - operating room
 - delivery room
 - sterile surgical procedures
 - procedures involving insertion of catheters or surgical instruments into sterile body cavities

Levels of Asepsis

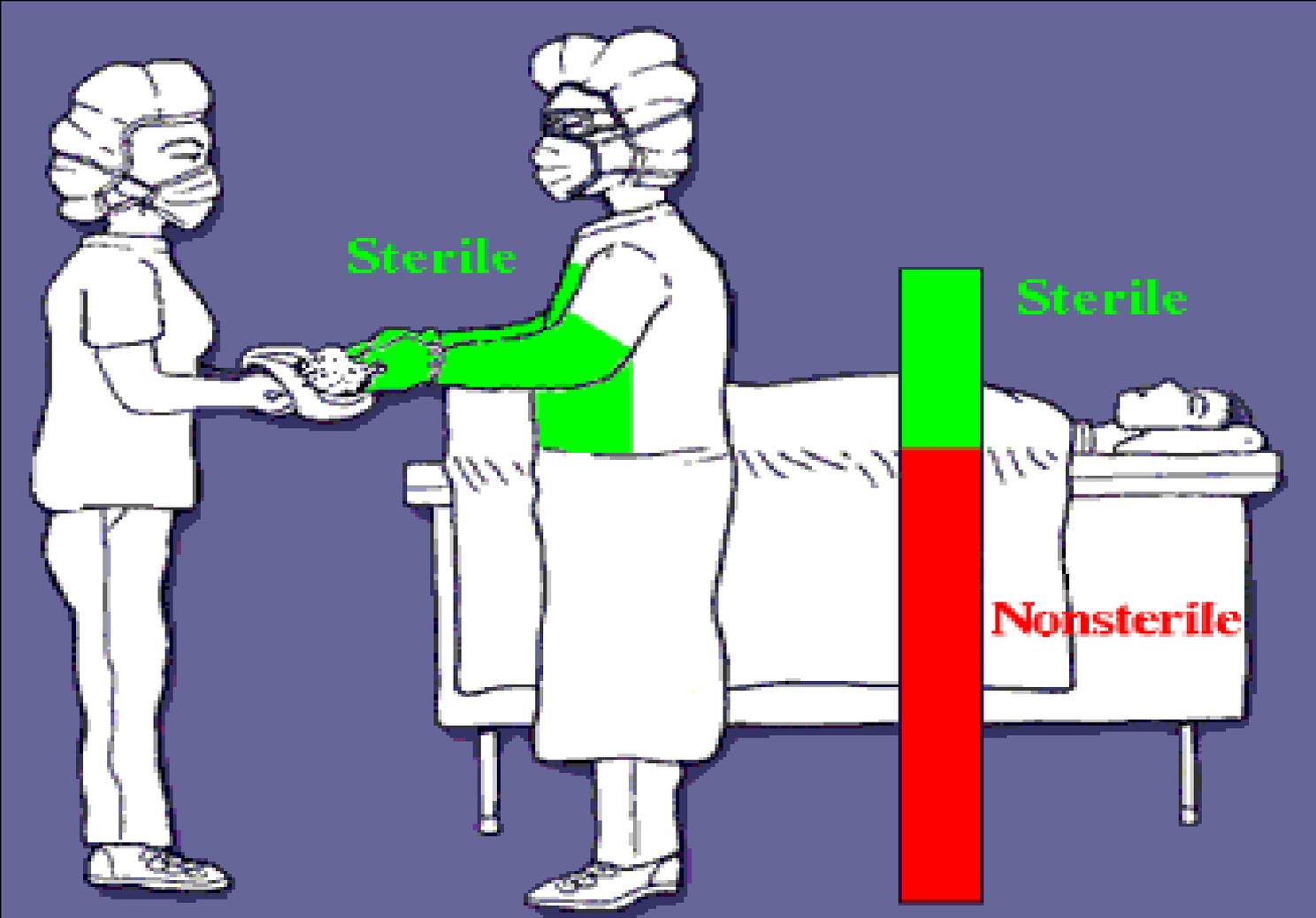
- Sterile technique – use of sterile gloves and sterile supplies (drapes, instruments, bandages, water)
- Modified sterile technique – use of non-sterile procedure gloves with sterile supplies (injections, IV starts)
- Clean technique – use of clean hands or nonsterile gloves with clean supplies and tap water

Principles of Surgical Asepsis

- Only a sterile object can touch another sterile object (**sterile only touches sterile**)
- Consider the edge (out 1 inch) of a sterile field to be contaminated
- Time management
- Avoid talking, coughing, sneezing, & reaching over a sterile field or object

Principles (cont.)

- Never walk away from or turn your back on a sterile field (face forward)
- Sterile person should keep hands in sight and keep them at or above waist level
- Avoid spilling any solution on a cloth or paper used as a field for sterile set up



Principles (cont.)

- Sterile items are stored on clean, dry surfaces
- Sterile items expire
- Sterility cannot be ensured without direct observation & vigilance
- Consider an object contaminated if you have any doubt as to its sterility

Principles (cont.)

- If you see someone contaminate a sterile field or object, make it known
- Keep fingernails short and clean
- Avoid wearing jewelry that dangles or can fall into sterile field
- Keep long hair pulled back

Elements of Surgical Asepsis

- Wash hands and determine what supplies will be needed and whether you need assistance
- Handle sterile equipment only with sterile gloves
- Some supplies are packaged in a clean wrapper and the inside is sterile
 - CVAD package

Adding Sterile Items

- Sterile items may be “flipped” on to the sterile field if it does not touch the outer 1” edge
- Items added to a sterile field demand strict awareness

Adding Sterile Fluids

- Remove bottle cap and place cap face up on surface
- Hold bottle with label in the palm of hand so solution does not run down label
- Pour required amount of sterile solution into available receptacle
- Pour solution on to the dressing or site without the bottle making contact

Nurse's Role

- Assess pain level - ALWAYS
- Initiate sterile consciousness
- Gather sterile items
- Check expiration date
- Assess package integrity
- Ensure work space is flat, clean, dry & at least waist level

Preparing for Sterile Procedure

- Place bedside table where you can keep an eye on your sterile field at all times
- Identify the patient
- Determine **allergy** status to **latex** or **antiseptic** used
- Perform hand hygiene
- Maintain sterility throughout entire procedure – **no exceptions!**

- **Medical** or clean asepsis reduces the number of organisms and prevents their spread
- **Surgical** or sterile asepsis includes procedures to eliminate micro-organisms from an area and is practiced by surgical technologists and nurses in operating rooms and treatment areas.

Sterile Gloving (Open Method)

- Select correct size
- Check for latex sensitivity
- Determine package integrity
- Medical hand wash

- Place package on a clean, dry, flat surface
- Open package without contamination
- Grasp 1st glove by outer edge of the CUFF – place hand inside
- Keeping gloved thumb up (“hitch-hiker”) slip your fingers UNDER the second glove cuff and pull on (glove to glove)
- Keep hands at waist level & in sight at all times
- FIX your fingers AFTER both gloves are on
- DO NOT let your sterile gloved hands drop below waist

1



Note left and right hand

2



3



Touch only glove cuff

4



5



Pull by cuff

6



7



With sterile gloved hand, reach under the cuff, pull on second sterile glove

8



9



Glove Removal

- Grasp outside of gloved hand, palmer side, with the other gloved hand (glove to glove)
- Pull the glove off, turning it inside out
- Place the dirty glove you just removed tightly into the palm of the remaining gloved hand.
- Place fingers of bare hand inside CUFF of other glove (skin to skin). Peel off, inside out over the dirty glove and discard both
- **Perform MEDICAL HAND HYGIENE**

1



Pinch and hold the **outside** of the glove near the wrist area.

2



Peel downwards, away from the wrist, turning the glove inside-out.

3



Pull the glove away until it is removed from the hand, holding the inside-out glove with the gloved hand.

6



Continue to pull the glove down and over the inside-out glove being held in your gloved hand.

5



Peel downwards, away from the wrist, turning the glove inside out.

4



With your un-gloved hand, slide your finger/s under the wrist of the remaining glove. **Do not touch** the outer surface of the glove.