

Antisepsis

The use chemicals (antiseptics) to reduce the number of microorganisms on the skin.

Disinfection

The elimination of pathogenic (disease causing) organisms on inanimate objects.

Sterilization

The process that ensures that an item is free from all microbes.

The process of choice for items that will enter sterile body sites.

Keeping it Clean

Preparations

Alcohol is excellent for removing Gram + and Gram – bacteria, and good at removing *Mycobacteria tuberculosis*, Fungi, and Viruses. It has rapid action, but no residual activity.

Hibiclens (Chlorhexidine) is excellent for removing Gram + bacteria, good at removing Gram – bacteria and viruses, but poor at removing *Mycobacteria tuberculosis* and fungi. It has an intermediate action time but excellent residual activity.

Betadine (Iodophor) is excellent at removing Gram + bacteria and good at removing Gram – bacteria, viruses, and fungi. It has intermediate action, but minimal residual activity.

Common Mistake

Using soaps that are designed for cleansing of the skin for medical devices and environmental surfaces.

- The concentration of antiseptic soaps is not high enough to achieve disinfection.
- The residual film that hinders bacterial growth on the skin actually protects microorganisms on inanimate objects.

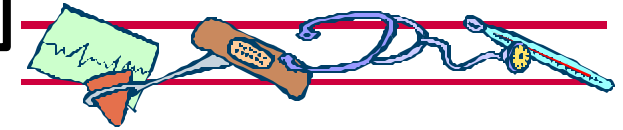


Disinfection

- All surfaces must come in contact with solution
- Surface must be free of organic matter
- Requires direct contact of the solution for a specific time
- Requires the right concentration of solution

Sterilization is the only process that ensures that an item is free from all microbes.

Steam is the least expensive, most effective and least time consuming of sterilizing instruments.



Flash

sterilization should be used only in an emergency.

- The delicate balance among processing time, temperature, pressure, and moisture are changed.
- The probability the sterilization is achieved is reduced.