

Definitions (Element V)

Cide or cidal – Terms that use the suffix cide or cidal are used to denote *killing action*. A *virucide*, *fungicide*, *bactericide*, *sporicide*, and *tuberculocide* can kill the microorganism defined by the prefix (virus, fungi, bacteria, etc.) (Rutala et al., 2008).

Contamination – The presence of microorganisms on inanimate objects (e.g., clothing, surgical instruments) or in substances (e.g., water, food, milk).

Decontamination – The process of removing disease-producing microorganisms and rendering the object safe for handling through physical or chemical means. **Cleaning, disinfection, and sterilization** are all decontamination processes. These processes differ in the number and types of microorganisms killed. By knowing the differences between these processes, you will know how to choose the right way to reprocess reusable instruments and equipment.

Cleaning – The removal of visible soil (e.g., soil, organic debris, body fluids, lubricants, and inorganic material) from objects using water, detergents or soaps or enzymatic products, and washing or scrubbing the object (APIC, 1996; Rutala et al., 2008). Cleaning prior to disinfection and sterilization is absolutely necessary because when inorganic or organic materials remain on the surface of an instrument, the effectiveness of the disinfection or sterilization is affected.

Disinfection – A process that results in the elimination of *many or all* pathogenic microorganisms on inanimate objects with the exception of bacterial spores. This is accomplished with liquid chemicals or pasteurizing agents (APIC, 1996; Rutala et al., 2008).

High-level disinfection – Kills bacteria, mycobacteria (TB), fungi, viruses and some bacterial spores with the exception of high level bacterial spores. A chemical germicide, that the FDA markets as a sterilant is used.

Intermediate-level disinfection – Kills bacteria, mycobacteria (TB), most fungi and most viruses. Does not kill resistant bacterial spores.

Low-level disinfection – Kills most bacteria, some fungi and some viruses. Will not kill bacterial spores and is less active against some gram-negative rods (*pseudomonas*) and mycobacteria.

Prions – They are transmissible pathogenic agents that cause a variety of neurodegenerative diseases of humans and animals, and Creutzfeldt-Jakob disease in humans. Prions are extremely resistant to inactivation by sterilization processes and disinfecting agents (Rutala et al., 2008).

Spaulding Classification – Classifications used where the items to be sterilized or disinfected are classified in terms of their intended use, which is either critical, semi-critical, or non-critical.

Sterilization – A process that *completely* eliminates or destroys all forms of microbial life. Sterilization is accomplished by the use of physical or chemical methods. Physical methods include the use of sterilizers under steam pressure, dry heat, ethylene oxide (ETO), and other gases. Chemical methods include the use of liquid chemicals and a prolonged soaking time (APIC, 1996; Rutala et al., 2008).