

Disinfection

Disinfection: is the process of killing most but not all microbial forms on surfaces or objects ; to a level that is considered safe for public health.

OR is the process of reduce pathogenic microorganisms—bacteria, viruses, and fungi but not the spores on inanimate surfaces or objects.

Uses of Disinfectants:

Surface Disinfection: Sprays, liquids, and wipes are used on hand or hard surfaces such as tables, floors, walls, and surfaces of kitchen to kill infectious organisms.

Methods of disinfection include:

- Chemical disinfectants: Such as alcohol and chlorine compounds.
- Ultraviolet (UV) radiation: Acts primarily as a high-level disinfectant & Used to disinfect surfaces and air in certain environments.

Important terms :

Hand Sanitizer Wipes: Typically contain 70% alcohol ,making them safe for hands and sometimes skin.

Disinfectant Surface Wipes: Contain chemicals like quaternary ammonium to kill viruses and bacteria on hard, non-living surfaces.

Cleaning: uses detergent and water to physically remove dirt and organic matter.

Factors Influencing Disinfectant Efficacy:

Type & Microbial Load: The kind & number of microbial cells.

The spectrum of resistance from most to least resistant, generally follows: bacterial spores > mycobacteria > viruses > fungi > vegetative bacteria.

Concentration and Dosage: Higher concentrations generally work faster, though some agents (e.g., alcohol) are more effective at lower in diluted concentrations (70%).

Contact Time: The duration the disinfectant remains in contact with the surface. the product may need to be left on surfaces for as little as 20 minutes or as long as 12 hours.

Important terms :

*Antiseptics:

Used to reduce the number of viable organisms in the skin act on microorganism in or on host tissue ((Skin/Wounds), such as Povidone-iodine.

*Germicide :

Chemical agent capable of killing microbes.

