

# MEDICAL ASEPSIS



**Dr. Karima Elshamy**

**Faculty of Nursing**

**Mansoura University**

**Egypt**

# Objectives:

**Upon completion of this lecture the student would be able to:-**

- ❑ Define the key terms listed.
- ❑ Identify the five elements of infection chain
- ❑ List the characteristics of microorganisms.
- ❑ Identify the common practices of medical asepsis in every day living
- ❑ Discuss the common practices of medical asepsis in personal grooming
- ❑ Identify the specific medical asepsis practices in hospital.

- Define isolation techniques.**
- Specify the types of isolation practices.**
- List common practices during isolation process**
- Define blood-born disease.**
- Identify modes of transmission of blood-born disease in the health care setting.**
- List the universal precautions to prevent blood-born infection.**

## **Definition of terms:**

**Asepsis; is the absence of disease-producing organisms.**

## **Purposes of medical asepsis;**

- To prevent cross infection on hospital environment.**
- To control infection.**
- To ensure patient's comfort, safety and psychological well-being.**

# There are two types of asepsis medical and surgical.

**A. Medical asepsis (clean technique)** All practices that reduce the number, growth, transfer and spread of pathogenic microorganisms. They include hand washing, bathing, cleaning environment, gloving, gowning, wearing mask, hair and shoe covers, disinfecting articles and use of antiseptics.

**B. Surgical asepsis (sterile technique);** Practices that keep an area or objects free from all microorganisms non pathogenic and pathogenic including spores and viruses.

## **Disinfection:**

Process of eliminating pathogenic organisms on an inanimate object with the exception of spores.

## **Disinfectant:**

Is a chemical substance that is used for disinfecting only an inanimate object e.g. (phenol, chlorine).

## **Antiseptic solution:**

**Is a substance that is used on person's skin to inhibit the growth and activity of microorganisms, but not necessarily destroy them.**

## **Contamination:**

**The process by which something is rendered unclean or unsterile**

## **Infection:**

**Is an invasion of the body tissue by pathogenic microorganism.**



**Carriers;** Are people or animals that show no symptoms of illness but that have pathogens on or in their bodies that can be transferred to others.

**Nosocomial infection (Hospital acquired infection):** It is an infection acquired from health care settings.

It may be exogenous infection when part of the client's flora become altered and an over growth results.

## **Resident pathogens:**

**These are organisms normally present on skin and are not easily removed by hand washing unless considerable friction is used.**

## **Transient pathogens;**

**These are microorganisms attached to the skin when a person comes in contact another during normal activity of living and easily removed by hand tiling.**

## **Concurrent disinfection;**

**Practices that are done, on a day to day basis in the care of the patient, his lies, and his immediate environment to limit or control spread of microorganisms.**

# CHAIN OF INFECTION

The development of an infection occurs in cyclical process that depends on the following five elements:

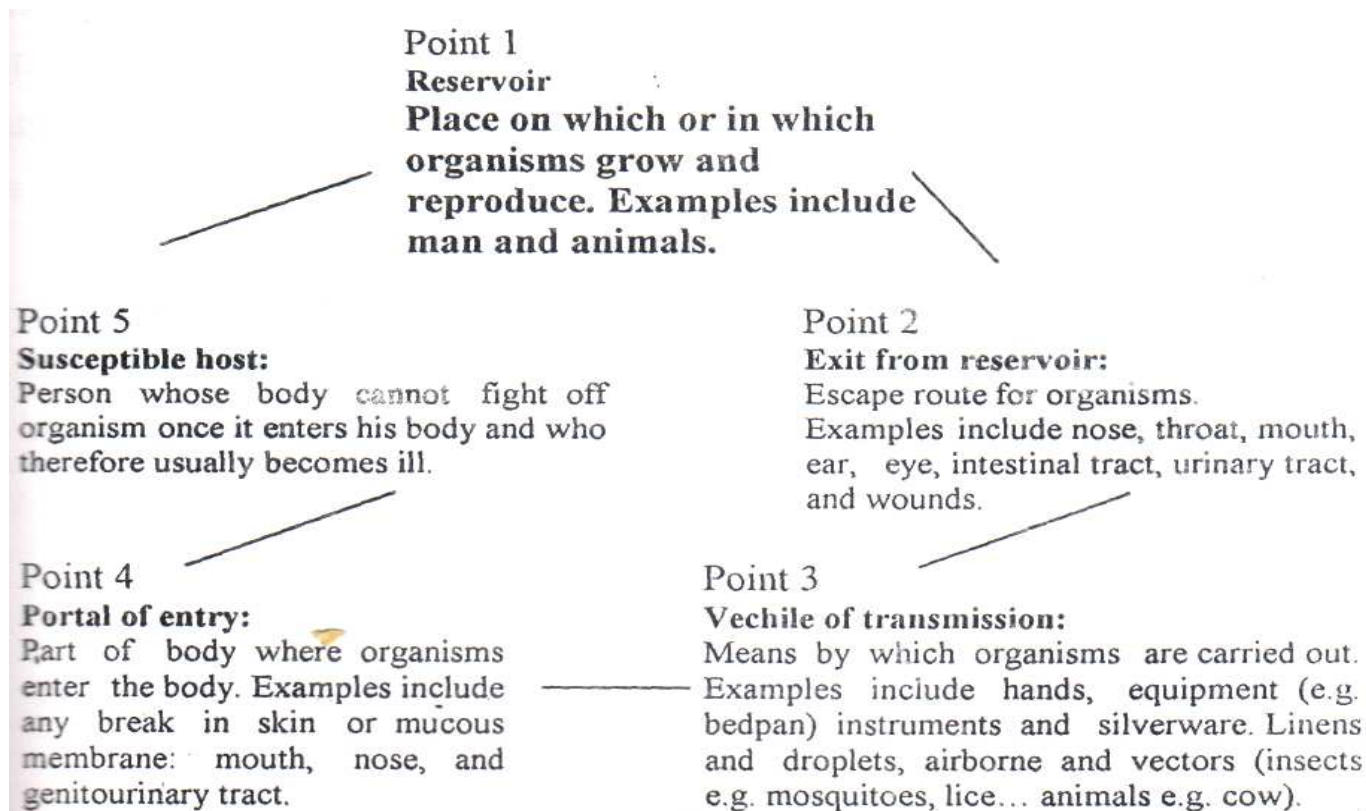


Figure 1  
The chain of infection



# Thank You

