Infection Prevention and Control

Susceptible host
A person who is potentially vulnerable to an infection

Infectious agents
Pathogenic (disease-causing) microbes such as bacteria, parasites, viruses, or fungi

Portal of entry
Site through which a pathogen can enter the susceptible host and cause infection, such as a urinary catheter or central line

Reservoirs
Hosts or habitats - such as humans, animals, or environment - where infectious agents live and reproduce

Mode of transportation
Method or route an organism transfers from a reservoir to a susceptible host. Can be directly by touch or aerosolized droplets, or indirectly by contact with contaminated surfaces or intermediate vectors.

Portal of exit
Route infectious agents leave the reservoir. Can be via nose or mouth, urinary tract, or in blood or other bodily fluids.

Understanding the chain of infection

Susceptible host

Infectious agents

Portal of entry

Reservoirs

Mode of transportation

Portal of exit

Ways emergency nurses can break the chain of infection:

- Advocate for immunizations
- Perform correct hand hygiene before and after patient contact
- Use proper personal protective equipment (PPE)
- Clean contaminated objects with appropriate disinfection and sterilization products
- Participate in antimicrobial stewardship
- Use appropriate isolation precautions
- Assess patient travel and potential exposure history
- Participate in nurse-driven removal of urinary catheters
- Properly dispose soiled materials in appropriate receptacles
- Educate patients on infection prevention

REFERENCES: