

Nosocomial and Health Care – Associated Infections

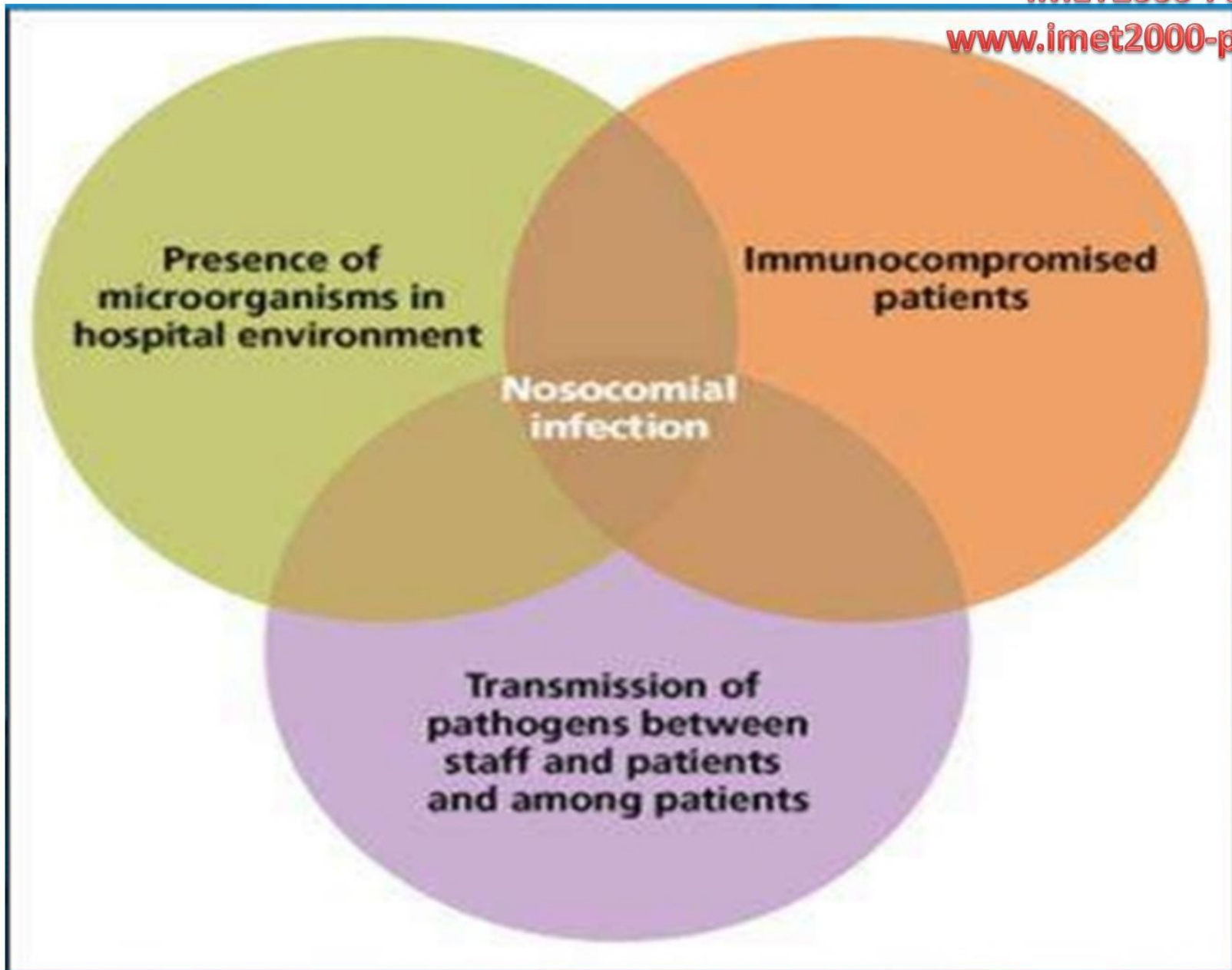
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Nosocomial Infections (NIs) are classified as infections that originate in the hospital.

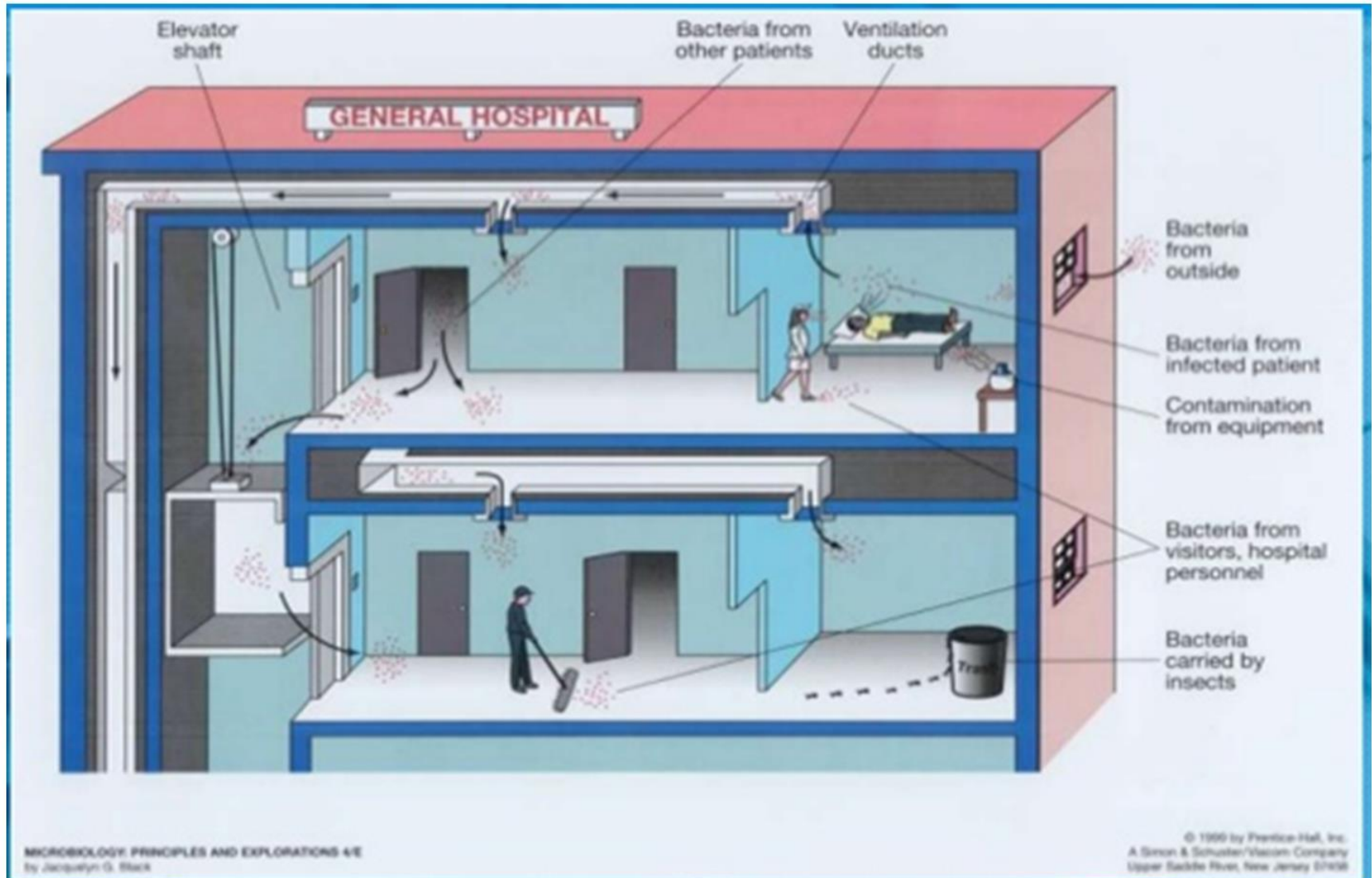
- Nosocomial Infections are a subgroup of **health care – associated infections (HAIs)** – those that originate in any health care setting.
- (*NIs*) can either develop during a client's stay in a facility or manifest after discharge.
- About 2 million clients per year involve from **HAIs**.
- The CDC(2010) reports that one third of all HAIs occur in the urinary tract, 15% in the respiratory tract, 14% in the bloodstream, and 22% in surgical wounds.



Source of Infection

The microorganisms that cause nosocomial infections can originate from the clients themselves (an **endogenous** source) or from the hospital environment and hospital personnel (**exogenous** sources).

Exogenous Infection sites



Nosocomial Infections

Most Common Microorganisms	Causes
<p><i>Urinary Tract</i></p> <ul style="list-style-type: none">-Escherichia coli-Enterococcus species-Pseudomonas aeruginosa	<p>Improper catheterization technique Contamination of closed drainage system Inadequate hand hygiene</p>
<p><i>Surgical Sites</i></p> <ul style="list-style-type: none">-Staphylococcus aureus (including MRSA)-Enterococcus species-Pseudomonas aeruginosa	<p>Inadequate hand hygiene Improper dressing change technique</p>

Most Common Microorganisms	Causes
<p><i>Bloodstream</i></p> <ul style="list-style-type: none">-Coagulase – negative Staphylococcus-Staphylococcus aureus-Enterococcus species	<p>Inadequate hand hygiene Improper intravenous fluid, tubing, and site care technique</p>
<p><i>Pneumonia</i></p> <ul style="list-style-type: none">- Staphylococcus aureus- Pseudomonas aeruginosa- Enterococcus species	<p>Inadequate hand hygiene Improper suctioning technique</p>

Factors contribute to nosocomial infections

1. Iatrogenic infections

Are the direct result of diagnostic or therapeutic procedures.

Example: bacteremia that result from an intravascular line.

2. Compromised host

A client whose normal defenses have been lowered by surgery or illness.

3. Hands of personnel / Insufficient hand hygiene

*The hands are the most important vehicle of transmission
of HAIs*



Impact of nosocomial infections

- Financial costs
- Extend time of hospitalization
- Increase client's time away from work
- Cause disability and discomfort
- Loss of life

Advise Reading

National Patient Safety Goals / Goal 7 – program: Hospital

http://www.jointcommission.org/assets/1/6/HAP_NPSG_Chapter_2014.pdf

Thank