

INFECTION PREVENTION

FROM STERILE PROCESSING PERSPECTIVES

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 **16th & 17th April 2025**

 **MTI (Modern Technology & Information University)**

The Vital Role of Sterile Processing

Sterile Processing (SP) technicians are critical in infection prevention.

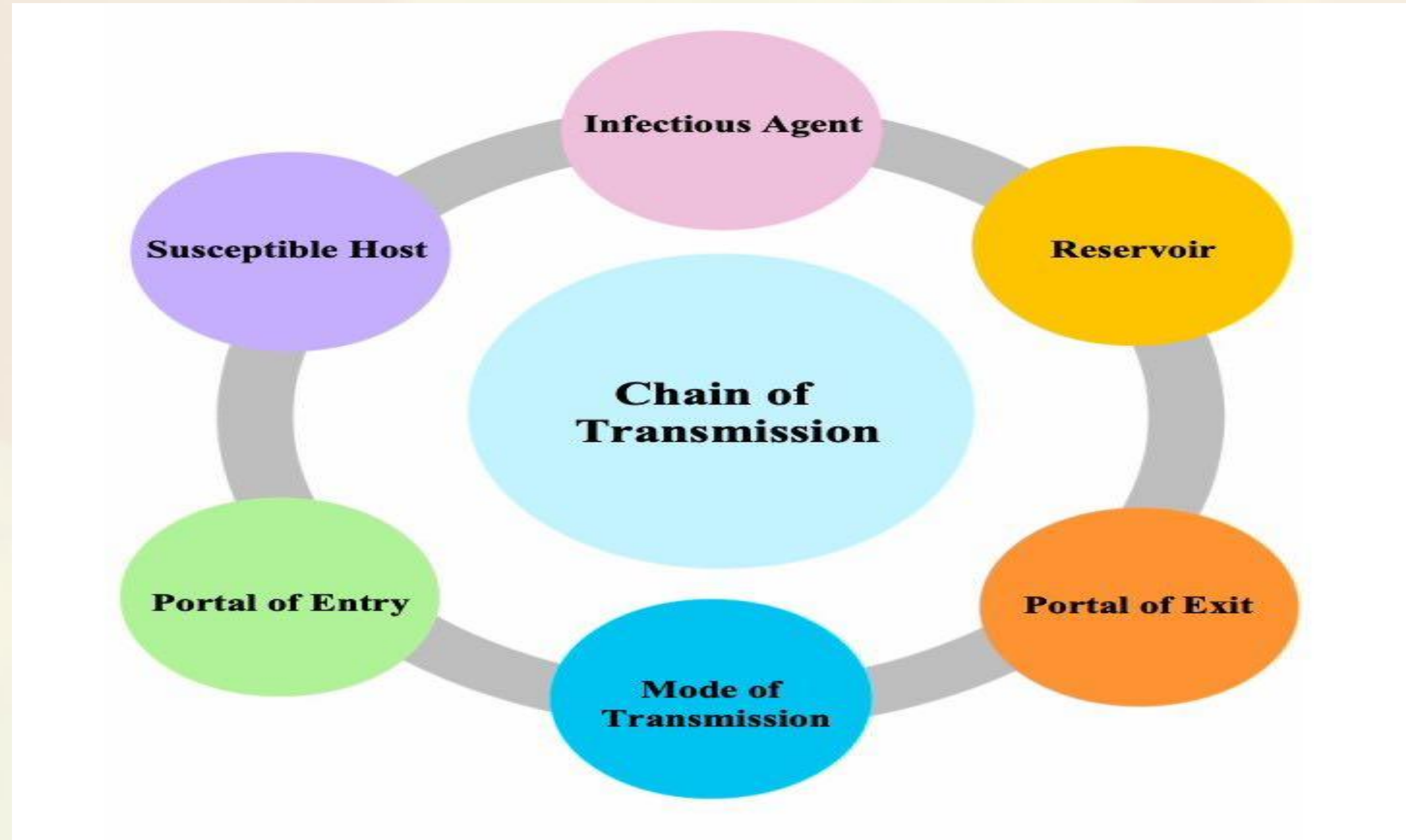
Patient Safety

Every step in SP is designed to ensure patient safety.

Critical Practices

Poor processing practices can lead to SSIs or even death.





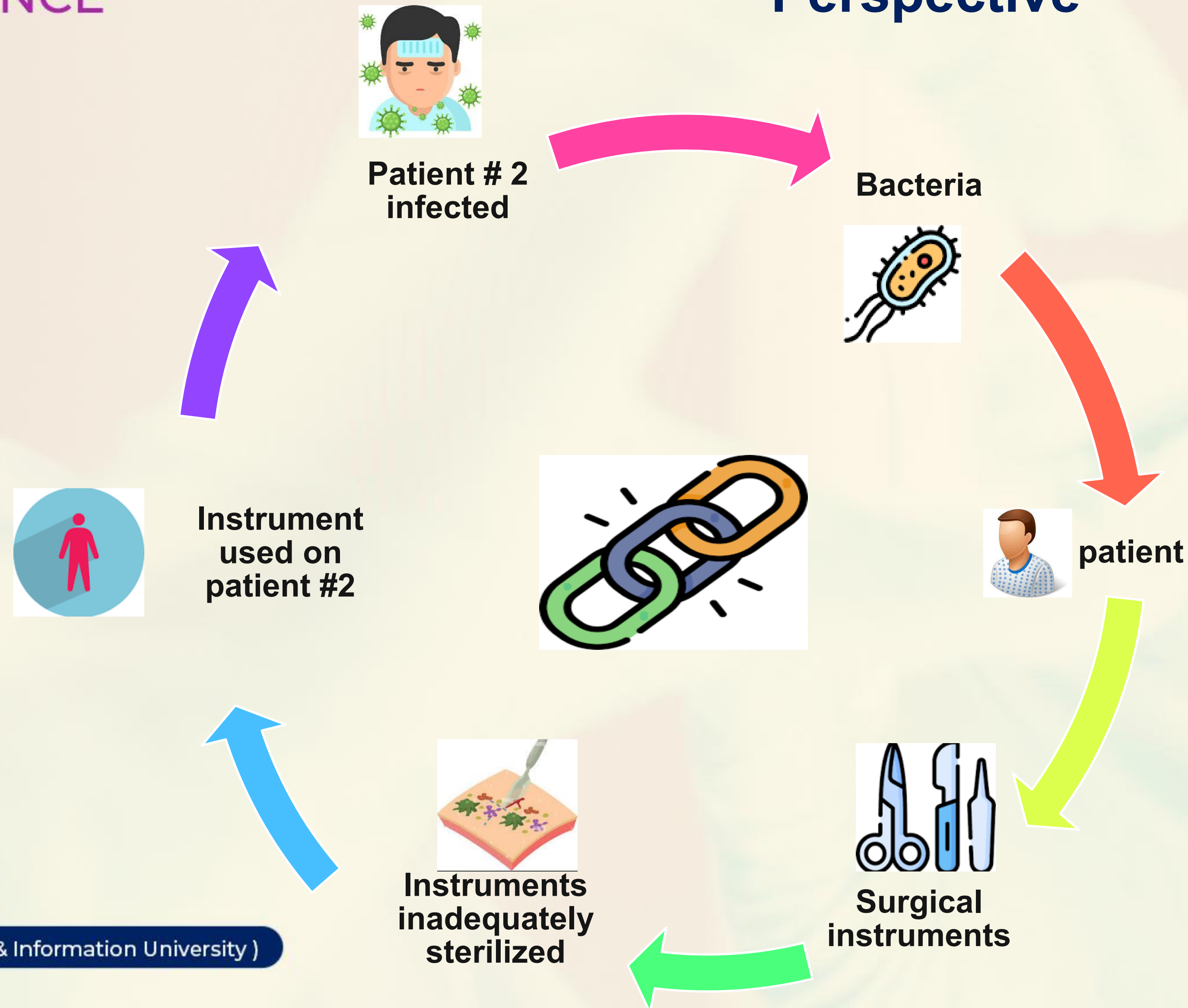
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The Chain Of Infection From A SP Perspective



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The Stark Significance of Infection Prevention

Infection prevention is paramount in healthcare



1

687K

HAIs

CDC: 687,000 HAIs in hospitalized patients (2015).

2

72K

Deaths

72,000 deaths due to HAIs—many preventable

3

310M

With 310 million surgeries performed annually worldwide, the risk of infection remains a significant concern.



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High-Profile Incidents

Colonoscopes

2011–2013: Improper colonoscope cleaning – HIV/Hepatitis risk.

CRE Superbug

2015: CRE superbug linked to endoscope contamination – 2 deaths.



Duodenoscopes

2016: 3 deaths from infected duodenoscopes in Colorado



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The Five Guiding Principles of Asepsis

1

Dirty

2

Clean

3

Sterile

4

Separate

5

Address Contamination Immediately



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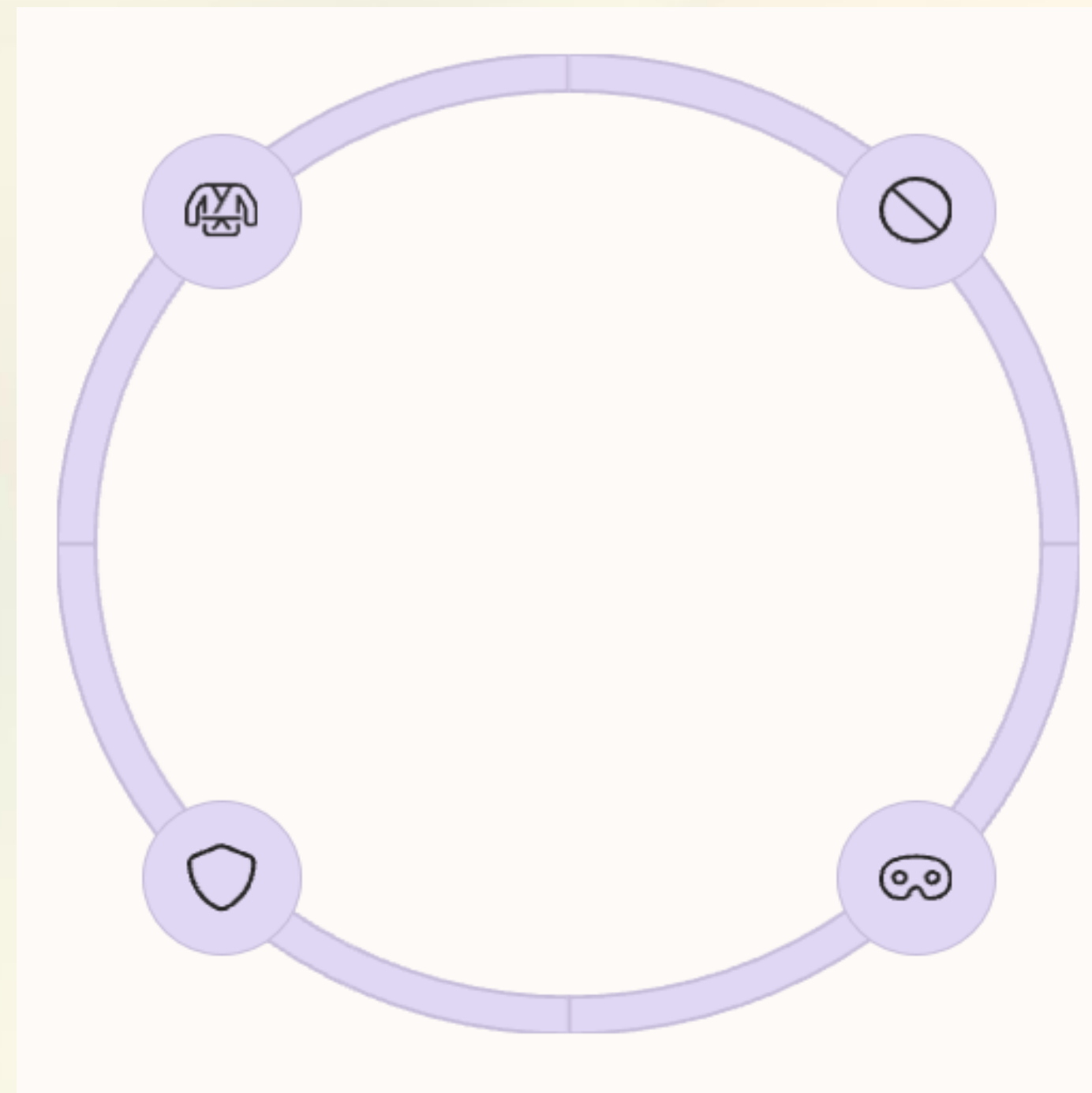
Rigorous Hygiene and Adherence to Dress Code

Scrubs and Head Covers

Always wear facility-launched scrubs and head covers.

Protective Gear

Use fluid-resistant gowns, gloves, and face protection



Prohibited Items

Avoid jewelry, personal electronics, or street clothing.

PPE Protocols

Strictly follow PPE protocols in decontamination areas.



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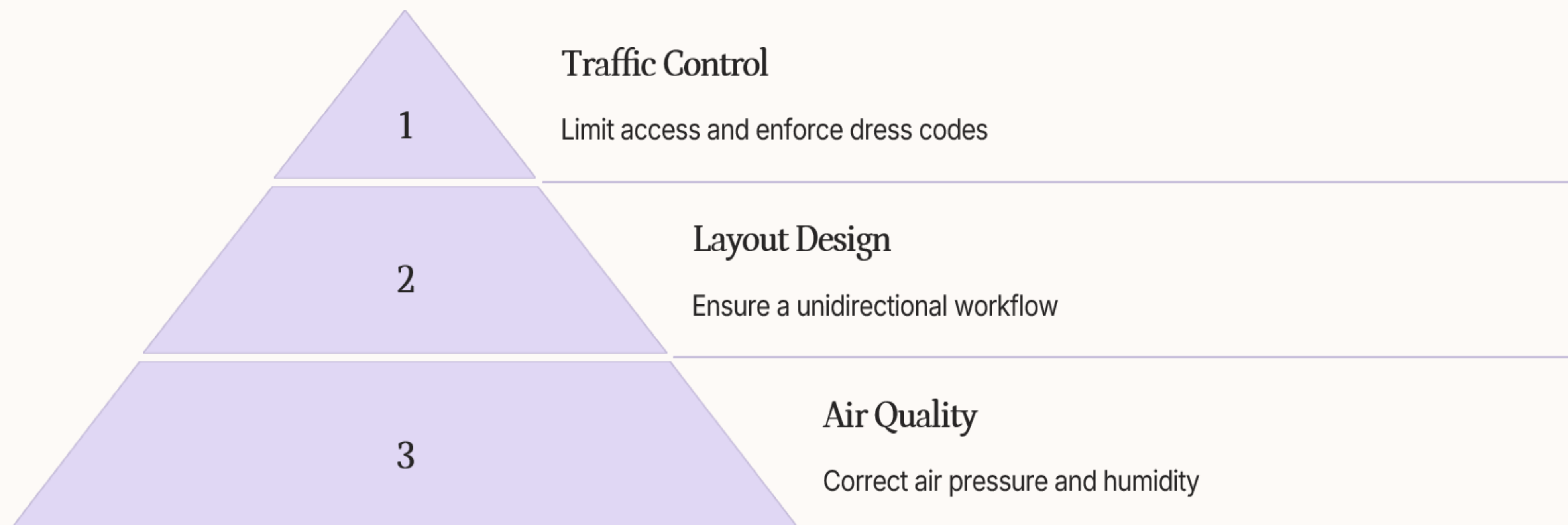
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Environmental Control: Maintaining SPD Integrity

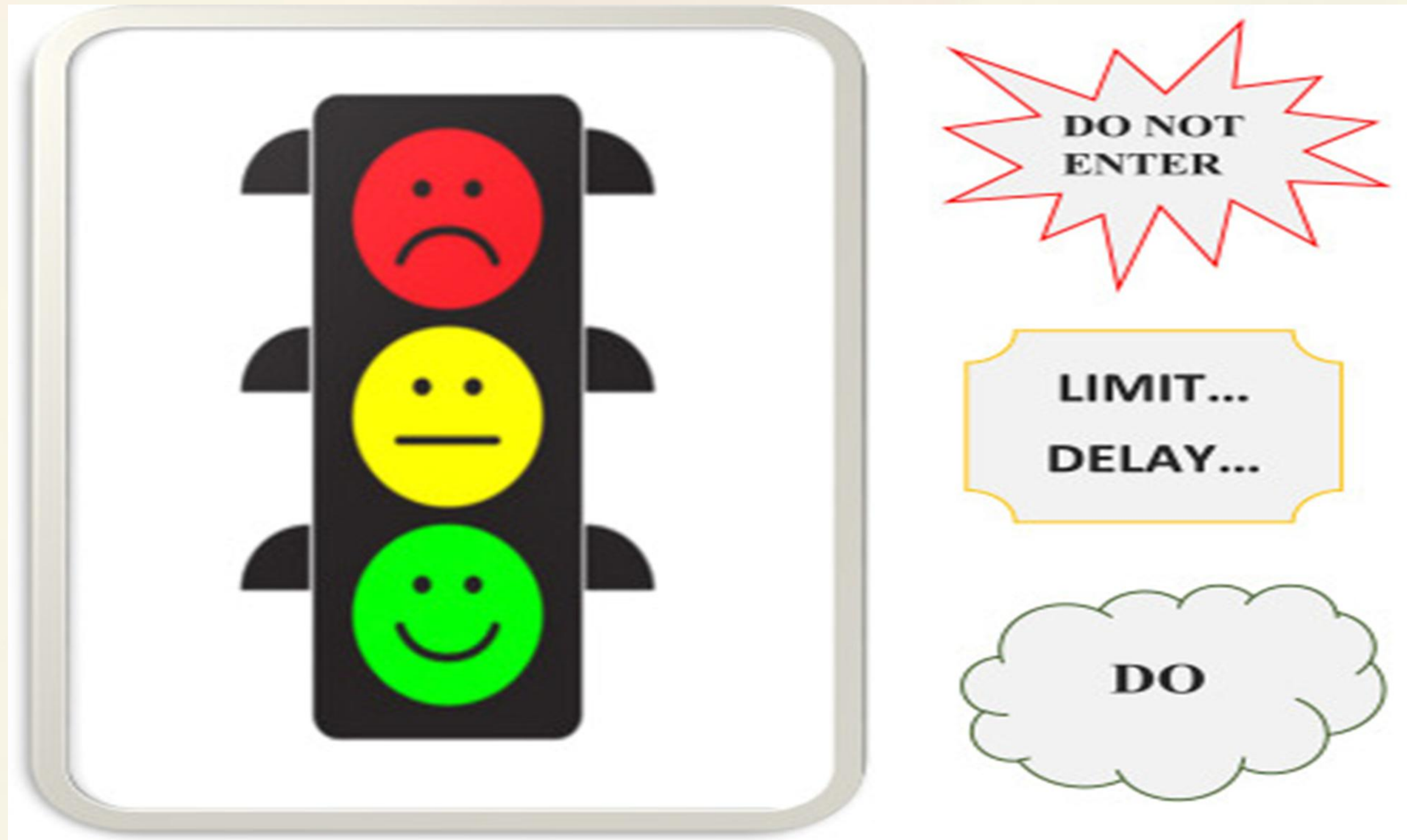


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**DECONTAMINATION
AREA
PPE REQUIRED**

**RESTRICTED
— AREA —
Decontamination
Zone**

**STERILE AREA
AUTHORIZED
PERSONNEL ONLY
SURGICAL ATTIRE
REQUIRED
NO FOOD OR DRINK**



Soiled Area



**Clean
Processing Area**



Sterile Storage



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Clean Area

- Positive Air Pressure
- (Higher Pressure)



Decontamination Area

- Negative Air Pressure
- (Lower Pressure)



Adjacent Hallway

- Positive Air Pressure
- (Higher pressure)



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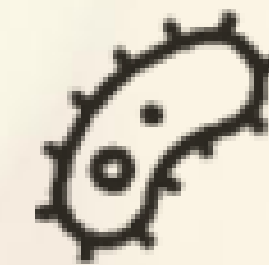


Maintaining Cleanliness in Sterile Processing



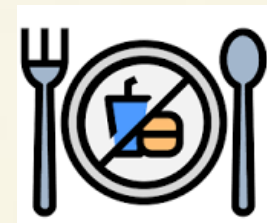
Reduce Contaminants

Minimize dust, lint, and bacteria.



Prevent Fomite Contamination

Clean door handles, keyboards, and work surfaces daily.



Ban Food and Beverages

Prevent spills, contamination, and pests



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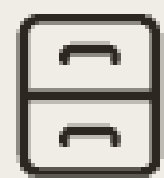
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Cleaning Protocols

- Floors wet mopped daily.
- Dedicated equipment for decontamination.
- Horizontal surfaces cleaned daily

Periodic Cleaning

- Light fixtures cleaned every six months.
- Other surfaces cleaned regularly.
- Trash emptied daily.



Storage Units

Use appropriate storage. Closed cabinets are for high-traffic areas. Open racks are for controlled areas.



Handling

Ensure proper handling. Maintain workflow. Items should be handled properly at each stage.



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