

# Microbiology: The Meaning of Contamination

## Terms you need to know:



### Contamination

Microorganisms/unintended bacteria, fungi, protozoa, or viruses present on or in a surface or object, such as an endoscope channel.<sup>1</sup>



### Colonization

Microorganisms present in a host's body tissue, e.g., on the skin, mouth, intestines or airway, but doing no harm.<sup>3</sup>



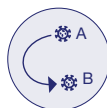
### Infection

An infectious agent (microorganism) invades and multiplies in the body tissues of the host, resulting in the person developing clinical signs and symptoms of infection. (E.g., increased temperature, rigors, rash).<sup>3</sup>



### Transmission

Occurs when microorganisms are introduced to a host's body tissue via some form of vector, often physical contact or the exchange of fluids.<sup>2</sup>



### Translocation

Occurs when microorganisms migrate from an existing and colonized body tissue (e.g., in the gut) to a new, sometimes sterile tissue, such as blood.<sup>4</sup>



### Healthcare Associated Infection (HCAI)

Infections that develop in a patient as a direct result of receiving healthcare, either in hospital or in outpatient facilities. The most commonly reported HCAI's are urinary tract infections, wound infections and infections that cause vomiting and/or diarrhea.<sup>3</sup>

## Possible routes of infection:



Transmission

### Exogenous Infection

After microorganisms enter body from their external environment.<sup>5</sup>



Translocation

### Endogenous Infection

After becoming infected with our own existing microbiome.<sup>5</sup>



**It's important to know that the presence of microorganisms alone does not guarantee an infection will occur.**

Further information can be found:  
[www.infectionprevention.olympus.com](http://www.infectionprevention.olympus.com)

1. ISO 11139:2018. 2. Available at: <https://microbiologysociety.org/why-microbiology-matters/what-is-microbiology/microbes-and-the-human-body/routes-of-transmission.html>. Last accessed: September 2023.

3. Available at: [www.infectioncontrolmanual.net/basic-principles](http://www.infectioncontrolmanual.net/basic-principles). Last accessed: September 2023. 4. Available at: [www.nature.com/subjects/bacterial-translocation](http://www.nature.com/subjects/bacterial-translocation). Last accessed: September 2023.

5. Available at: <https://blog.eoscu.com/blog/endogenous-vs.-exogenous-infections-its-all-about-crowd-control>. Last accessed: September 2023.

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