

5 Terminologies for the principal causes of infections (diseases)

For most of the subjects I will use the definitions given by the Committee on nosocomial infections of the Health Council in 1990 (BoI90).

Aerobe: micro organisms that thrive in conditions with a high oxygen content

Anaerobe: micro organisms that favour conditions with a low oxygen content (e.g. Clostridium).

Bacteraemia: the presence of micro organisms in the bloodstream

Contamination: The transmission of living (micro) organisms from one place to another. After contamination of the human with living organisms colonization and/or infection can follow.

Carriers: persons who carry (potentially) pathogenic micro organisms on or in their bodies for a long(er) period of time without showing symptoms of disease from these micro organisms. 'Shedders' or 'Scatterers' are hosts who dispense the micro organisms into the surroundings (see "Typhoid Mary")

Endogenous infection (autogenous infection): Infection that is caused by micro organisms which belong to the microbial flora of the patient

Exogenous infection: infection that is caused by micro organisms, which do not exist in the microbial flora of the patient, but come from a source elsewhere.

Gram colouring: Colouring of bacteria, named after the Danish microbiologist Gram, based on differences in wall composition of bacter. Gram-negative bacteria colour red (many intestinal bacteria, like *E.coli*) and gram-positive bacteria colour dark blue/ purple (like staphylococci and streptococci).

Infection: the reaction of a living organism to the invasion and multiplication of (micro) organisms in or on tissues.

Source of infection: The (part of a) micro organism (human, animal, plant) or matter from which infectious material derives. The source can be e.g. road dust or river water, the stem of a flower, the intestines of an animal, or the lung of a human.

Colonization: this is the matter when, after contamination, micro organisms become part of the microbial flora of a human or an animal for a shorter or longer while.

Inflammation: A reaction of a living organism to a physical, chemical or biological stimulus (trigger)

Opportunistic infection: infection by bacteria, which cannot occur in people with normal resistance. Especially in (premature) neonates and in people with a decrease in resistance or immune disorders.

Septicaemia: the clinical picture caused by the spread and/or multiplication of bacteria in the bloodstream.

Shedders: persons who heavily spread pathogenic bacteria (like *Staphylococcus aureus*), especially by skin flakes.

Surveillance: systematic and continuous search and reporting of infectious diseases and their way of spreading, and the research of causal factors in order to influence the infection risks.

Secretors (see carrier): people who spread a certain bacterial strain in their environment

Host/ intermediate host: the macro organisms that hosts a certain micro organism

Virulence: the degree to which a micro organism is able to cause disease in its host

Viraemia: the presence of viruses in the bloodstream

Inoculum: number of germs needed to infect a host

Incubation period: the period during which a micro organism is present in its host, without the symptoms of disease (Staphylococcus: hours; typhoid: weeks, rabies: months; HIV: years)

Commensalism: The living together of organisms without damage to each other

Eradication: the extermination of a micro organis

Herd immunity: the phenomenon that persons without immunity factors towards a certain micro organism are protected by the majority of people around them, who do have these factors