



Infection prevention
education with **GAMA**

iQ glossary

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5 Principles of Cleaning - Specifically designed by GAMA Healthcare to make the practice of cleaning easy to remember. 5 simple principles to make sure microorganisms are removed and not transferred to clean surfaces. Includes wipe in an 'S' shaped pattern, work from top to bottom, work from clean to dirty, ensure correct contact time and one wipe, one surface.

Abrasion - A minor wound in which the surface of the skin or a mucous membrane has been worn away by rubbing or scraping.

Acid mantle - A very fine and very vital film on the surface of your outermost layer (stratum corneum) on top of the outer layer (epidermis) of your skin, can be easily and very commonly damaged leaving the skin open to infection.

Acute - Includes hospitals/healthcare organisations with emergency departments, large surgical or complex treatment centres, regional or national treatment centres, major dental surgery centres.

Aerobe - An organism able to live and reproduce only in the presence of free oxygen.

Aerobic Colony Count (ACC) - Also known as the viable count or aerobic plate count, refers to the total number of colonies of viable bacteria growth on a nutrient agar plate in oxygenated conditions.

Aerosol Generating Procedure (AGPs) - Certain medical and patient care activities that can result in the release of airborne particles (aerosols). AGPs can increase the risk of transmission of infections.

Agar plate - A petri dish that contains agar as a solid growth medium plus nutrients used to culture microorganisms.

Airborne (aerosol) transmission - The spread of infection from one person to another by airborne particles (aerosols) containing infectious agents.

Airborne particles (aerosols) - Very small particles that may contain infectious agents. They can remain in the air for long periods of time and can be carried over long distances by air currents. Aerosols can be released during aerosol generating procedures (AGPs).

Airborne precautions - A set of practices used for patients known or suspected to be infected with agents transmitted person-to-person by the airborne route.

Alcohol based hand rub (ABHR) - A gel, foam or liquid formulation containing one or more type of alcohol that is rubbed on hands to inactivate microorganisms and/or temporarily suppress their growth. Should only be used if hands are visibly clean.

Alcohol hand rub - A formulation of alcohol (e.g., ethanol, isopropanol, n-propanol) used to reduce the number of microorganisms on hands that are not visibly soiled.

Alpha - Describes the SARS-CoV-2 variant, a specific mutation (B.1.1.7) of coronavirus.

Anaerobe - An organism that grows in the absence of oxygen.

Anteroom - An area with a door from/to the outside corridor and a second door giving access to the patient area (where both doors will never be open at the same time).

Antibiogram - The result of a laboratory testing for the sensitivity of an isolated bacterial strain to different antibiotics.

Antibiotic - A substance that kills or inhibits the growth of bacteria and therefore treats or prevents some bacterial infections.

Antibiotic Resistance (ABR) - The failure of an antibiotic to inhibit or kill a bacterium at the antibiotic concentration usually achieved over time with standard dosing regimens.

Antibiotic resistant organism - A microorganism that has developed resistance to the action of certain antibiotics.

Antifungal - Also known as an antimycotic, are used to treat and prevent fungal infections.

Antimicrobial - Any substance of natural, semisynthetic origin that kills or inhibits the growth of microorganisms (bacteria, viruses or fungi) but causes little or no damage to the host.

Antimicrobial hand wipes - Hand wipes that are impregnated with an antimicrobial solution/agent at a concentration sufficient to inactivate microorganisms and/or temporarily inhibit their growth when applied correctly to hands.

Antimicrobial Resistance (AMR) - Failure of an antimicrobial to inhibit or kill a microorganism at the antimicrobial concentrations usually achieved over time with standard dosing regimens.

Antimicrobial Stewardship (AMS) - An ongoing effort by a health service organisation to reduce the risks associated with increasing antimicrobial resistance and to extend the effectiveness of antimicrobial treatment. It may include several strategies such as monitoring and review of antimicrobial use.

Antiseptic - An agent that can kill or inhibit the growth of microorganisms on living tissue and skin.

Antiviral - An agent that kills or suppresses the ability of a virus to replicate. Used to treat viral infections.

Aseptic Non-Touch Technique (ANTT) - A specific type of aseptic technique with a unique theory and practice framework e.g., large complex wound dressings.

Aseptic technique - A healthcare procedure designed to minimise the risks of exposing the person being cared for to microorganisms during care procedures (e.g. from dressing wounds to surgical procedures).

Asymptomatic - Neither causing nor exhibiting symptoms of disease.

Bacteria - Single-celled microorganisms that can exist either as independent (free living) organisms or as parasites (dependent on another organism for life). They can be pathogenic, such as when they cause infection, or beneficial, as in the process of fermentation (such as wine) and that of decomposition. Bacteria have a simple internal structure that lacks a nucleus and contains DNA.

Bacteraemia - Asymptomatic patients with the presence of bacteria in the blood.

Bactericidal - Lethal activity against bacteria.

Bacteriostatic - Prevents multiplication of bacteria but does not kill it.

Bed days - Sum of the number of occupied beds for each day of the period. A bed which is used by an inpatient at the bed count is counted as one occupied bed day. A bed which is used by an inpatient at the bed count and is simultaneously reserved for a patient on pass is counted as two occupied bed days.

Beta - Describes the SARS-CoV-2 variant, a specific mutation (B.1.351) of coronavirus.

Biguanides - An organic molecule which sticks to cell membranes, causing them to leak small molecules and making proteins form solid deposits. This group includes Chlorhexidine and Polyhexamethylene biguanide (PMBH).

Bioburden - The number of contaminated organisms found in each material before undergoing a sterilising procedure.

Biocidal product (according to Biocidal Products Regulation (EU) 528/2012) - Any substance or mixture, in the form in which it is supplied to the user, consisting of, containing, or generating one or more active substances, with the intention of destroying, deterring, rendering harmless, preventing the action of, or otherwise exerting a controlling effect on, any harmful organism by any means other than mere physical or mechanical action.

Biocide - Usually a broad-spectrum chemical or physical agent that inactivates microorganisms.

Biofilm - A group of microorganisms in which cells stick to each other and form communities. They form when there is a change in interface between solid, liquid and gas, primarily on dry and wet surfaces. These adherent cells are frequently embedded within a self-produced matrix of extracellular polymeric substance (EPS). They are commonly of mixed species. Advantages of being in a community include protection from physical, chemical and biological forces and agents such as antibiotics.

Bi-level Positive Airway Pressure ventilation (BiPAP) - A form of non-invasive ventilation (NIV) therapy used to facilitate breathing. Used in hospital or home care. BiPAP use pressure to push air into the lungs with two air pressure settings:

- When you breathe in, BiPAP machines deliver more air pressure. This is known as inspiratory positive airway pressure (IPAP).
- When you breathe out, the machine reduces that air pressure. This is called expiratory positive airway pressure (EPAP).

Body fluids - Fluids produced by the body such as urine, faeces, vomit and blood.

Broad spectrum antibiotic - Effective against a wide range of disease-causing bacteria - opposite of narrow spectrum antibiotic that is targeted against one, maybe two specific bacterial groups.

BS/EN standards - Mandatory technical specifications created by either the British Standards Institute (BSI) or European Standardisation Organisations (ESO) in collaboration with government bodies, industry experts and trade associations. They aim to ensure the quality and safety of products, services and systems.

Bugs - Are small insects and small creatures such as cockroaches, fleas and millipedes. This term is sometimes used to describe microorganisms to people unfamiliar with such terms, or children in a conversational rather than a professional manner.

Candida auris - A rapidly emerging fungal pathogen able to cause severe infections with high mortality rates. It is frequently misidentified thus requiring specialized virological identification techniques. Furthermore, several clinical isolates have been found to be multidrug resistant and there is evidence of healthcare related transmission and outbreaks.

Capsid - The shell of protein that protects the nucleic acid of a virus.

Carbapenem antibiotics - A substance that kills or inhibits the growth of bacteria, fungi or parasites. Generally used as a last option when resistance to other antibiotic families has been identified and for certain severe infections. They include doripenem, ertapenem, imipenem and meropenem amongst others.

Carbapenemase-Producing Enterobacterales (previously known as Carbapenemase-Producing Enterobacteriaceae) (CPE) - A group of bacteria called *enterobacterales* (such as *Escherichia coli* and *Klebsiella spp.*) that have become extremely resistant to antibiotics including those called carbapenems. This term is sometimes inaccurately used to include carbapenem-resistant bacteria other than *enterobacterales*. CPE are a subset of CRE.

Carbapenemase-Producing Organisms (CPO) - Inclusive term for all bacteria that produce enzymes called carbapenemases that destroy Carbapenem antibiotics. (Enterobacterales and bacteria such as *Acinetobacter spp.*, *Pseudomonas spp.*). CPO are a subset of CRO.

Carbapenemase-Resistant *Enterobacterales* (previously known as Carbapenem-Resistant *Enterobacteriaceae*) (CRE) - *Enterobacterales* such as *E. coli* or *Klebsiella* spp. that are resistant to Carbapenem antibiotics through any mechanism such as enzyme production, by mutation or inherent resistance.

Carbapenem-Resistant Organisms (CRO) - A blanket term for any organism resistant to Carbapenem antibiotics by any mechanism.

Catheter-Associated Urinary Tract Infection (CAUTI) - A urinary tract infection developed either during or after placement of a urinary catheter.

CE Marked - The European Union's (EU) mandatory conformity marking for regulating products under applicable legislation. A disinfectant would typically only be CE marked if it was intended for use on medical devices.

Central Vascular Catheter (CVC) - An intravenous catheter that is inserted directly into a large vein in the neck, chest or groin to allow intravenous drugs and fluids to be given, and to allow blood monitoring.

Chain of infection - A model commonly used in infection prevention and control training to illustrate how infection spreads. You can help prevent the spread of infection by breaking one or more of the links in the chain. The links are: causative agent (pathogen), reservoir, portal of exit, means of transmission, portal of entry and a susceptible host.

Clearance - No evidence of visible soil (inorganic or organic material) from objects and surfaces, by manually or mechanically using water with detergents or enzymatic products.

***Clostridioides difficile* (C. diff)** - A spore-forming bacterium that can cause mild to severe diarrhoea which in some cases can lead to gastro-intestinal complications and death. (See [Antibiotic](#)).

Cohorting - Placing patients who are infected with the same pathogen together in the same room (mostly after consultation with an infection control expert).

Co-infection - A new infection following or in addition to an earlier infection.

Colony Forming Unit (CFU) – Bacteria usually grow and multiply in a group or colony. These colonies can be seen on an 'agar plate' and are used as a representative amount of bacterial contamination. Colonies may have more than one type of bacteria growing in them.

Colonisation/carriage – The sustained presence of replicating infectious agents on a body surface (like on the skin, mouth, intestines or airway) without causing disease in the person.

Combined detergent/disinfectant – A 2-in-1 cleaning system that utilises a formula containing both a detergent and disinfectant to clean and disinfect in one process with one product.

Commensal – An organism living in or on another organism to gain benefit, i.e., in nutrition, without hurting or helping it.

Contact precautions – Type of transmission-based precautions used to interrupt the transmission of infectious agents that are spread by direct or indirect contact with the patient or the patient's environment.

- Direct contact and indirect contact. Direct transmission occurs when microorganisms are transmitted directly from an infectious individual to another individual without the involvement of another contaminated person or object (fomite).
- Indirect transmission occurs when microorganisms are transmitted from an infectious individual to another individual through a contaminated object (fomite) or person.

Contact time – How long the surface needs to have wet contact with a disinfectant to result in a significant reduction in microorganisms. For example, a 60 second contact time for a 99.999% reduction in *E. coli* means the surface being disinfected needs to be in wet/damp contact with the disinfectant for 60 seconds to achieve the specified log reduction.

Contamination – The presence of an infectious agent on the surface or body area, surgical instruments, dressings or other inanimate items or substances including water and food.

Contaminated – The presence of an infectious agent on a surface or body area, or surgical instruments, dressings or other inanimate items or substances including water and food.

Continuous Positive Airway Pressure ventilation (CPAP) - A machine to help a person who has obstructive sleep apnoea (OSA) breathe more easily during sleep. CPAP machine increases air pressure in your throat so that your airway doesn't collapse when you breathe in.

Corneometry - Measure electric changes (resistance) of skin due to water-binding capacity of stratum corneum.

Coronavirus - A family of viruses, of which SARS-CoV-2 is a part.

COVID-19 - Is the disease caused by SARS-CoV-2.

Cosmetic (according to Regulation (EC) 1223/2009) - Any substance or mixture intended to be placed in contact with the external parts of the human body (epidermis, hair system, nails, lips, and external genital organs) or with the teeth and the mucous membranes of the oral cavity with a view exclusively or mainly to cleaning them, perfuming them, changing their appearance, protecting them, keeping them in good condition or correcting body odours (UK).

Cross-infection/cross-transmission - Spread of infection from one person to another.

Decolonisation - Use of topical and/or systemic antibiotics and/or other measures to reduce or eradicate pathogenic or MROs/MDROs from colonised persons. (See [Multi-Resistant Organisms \[MROs\]](#)/[Multidrug-Resistant Organisms \[MDROs\]](#)).

Decontamination - Use of physical or chemical means to remove, inactivate or destroy microorganisms on a surface to make it safe for handling, re-use or disposal, by cleaning, disinfection and/or sterilisation so that they are no longer capable of transmitting infectious particles.

Dermatitis - Is a general term that describes a skin irritation presenting as itchy, dry skin or a rash on swollen reddened skin.

Delta - Describes the SARS-CoV-2 variant, a specific mutation (B.1.617.2) of coronavirus.

Detergent - An emulsifying agent that contains surfactants and/or protease enzymes and whitening agents. They are made for cleaning: they interact with soiling such as dirt, oil and grease, loosening them from a surface or picked up by a cloth/wipe. The physical action of wiping will also remove microorganisms from the surface.

Discharge clean (or terminal clean) - Cleaning/decontamination of the environment following transfer/discharge of a patient, or when they are no longer considered infectious, to ensure the environment is safe for the next patient or for the same patient on return.

Disinfection - The reduction, inactivation or removal of microorganisms to a safe level for the use of the equipment or surface. (UK)

Disinfectant - A chemical applied on surfaces or medical equipment/devices which is capable of disinfection. According to the CDC there are three levels of disinfection, depending on the intended use of the instruments:

- High-level disinfection – a disinfectant that kills all microbial pathogens, except large numbers of bacterial endospores, when used as recommended by manufacturer.
- Intermediate level disinfection – a disinfectant that kills all microbial pathogens except bacterial endospores, when used as recommended by the manufacturer. It is bactericidal, tuberculocidal, fungicidal and viricidal.
- Low-level disinfection – a process that can kill most bacteria (except mycobacteria or bacterial spores), most viruses (except some nonlipid viruses), and some fungi.

Double cleaning (AUS) - Procedure of cleaning with a neutral detergent followed by a TGA registered disinfectant, e.g., bleach or hospital grade disinfectant. This must involve either a 2-step clean using a detergent then a chemical disinfectant, or a 2-in-1 clean, combined detergent/disinfectant wipe.

Droplet precautions - Precautions designed to limit transmission of microorganisms spread by droplets (via coughing and sneezing).

Droplet transmission - Form of direct transmission by expelled aerosols that can carry microorganisms.

Dual purpose cleaner/disinfectant - These combine a detergent cleaning effect with a disinfecting biocide. Dual purpose cleaner/disinfectants are designed to eliminate the need for separate cleaning and disinfection processes by combining them into a single process. The most common use is for terminal cleans. It is also frequently used for a short, defined period for all routine cleaning in a ward or area where there is an outbreak of infection, and for routine cleaning in extreme risk areas on frequently touched surfaces and items.

Emollient - An agent used to soothe the skin and make it soft and supple by increasing the hydration of the skin usually by occlusion.

Endemicity - Usual level or incidence of a microorganism in a healthcare setting.

Endospore - A differentiated cell formed within cells of certain Gram-positive bacteria that are extremely resistant to heat and other harmful conditions and agents.

Enhanced - This is a higher quality of disinfection in successfully killing more microorganisms.

Enterobacterales (previously known as Enterobacteriaceae) - Are a large group of bacteria that usually live harmlessly in the gut of humans and animals but can cause serious infections. They include species such as *Escherichia coli*, *Klebsiella spp* and *Enterobacter spp*. However, these organisms are also some of the most common causes of infections, including urinary tract infections, intra-abdominal and bloodstream infections.

Enterococci - A group of bacteria that are naturally present in the intestinal tract of humans and normally cause no harm (colonisation). Sometimes enterococci can cause infections in wounds and in the urinary tract, as well as more serious infections such as in the bloodstream.

Excretion - Waste products produced by the body such as urine and faeces (bowel movements).

Fallow time - The period of time required for droplets and/or aerosols to settle and be removed from the air following a procedure. It is also known as settle time.

Fluid impervious - Is a material that does not allow any liquid to pass through.

Fluid-resistant - A term applied to fabrics that resist liquid penetration, often used interchangeably with 'fluid-repellent' when describing the properties of protective clothing or equipment.

Fomite - An inanimate object that may become contaminated with microorganisms and serve as a vehicle of transmission.

FFP3 - Respiratory protection that is worn over the nose and mouth designed to protect the wearer from inhaling hazardous substances, including airborne particles (aerosols). FFP stands for filtering facepiece. There are three categories of FFP respirator: FFP1, FFP2 and FFP3. An FFP3 respirator or hood provides the highest level of protection and is the only category of respirator legislated for use in UK healthcare settings.

Frequently touched surfaces/high touch surfaces - Are those that have frequent contact with the hands of staff and patients. Examples include doorknobs, lift call buttons, call bells, bedrails, keyboards, toilet handrails, phones and edges of privacy curtains.

Fungi - Can be single celled or very complex multicellular organisms. They are found in many habitats but most live on the land, in soil or on plant material rather than in sea or fresh water. A very small number of fungi cause diseases in animals. In humans these include skin diseases such as athlete's foot, ringworm and thrush. Not to be confused with fungi such as mushrooms and toadstools.

Gamma - Describes the SARS-CoV-2 variant, a specific mutation (P.1) of coronavirus.

Germ (microbe/microorganism) - Names for the same thing. They are forms of life that are invisible to the naked eye. Can be made up of a single cell, cell clusters or many cells together that are too small to be seen by the naked eye e.g., bacteria, viruses, fungi, protozoa and algae.

Gram-negative - Classification of bacteria based on the cell wall structure by using Gram staining. Gram-negative bacteria stain pink/red.

Gram-positive - Classification of bacteria based on the cell wall structure by using Gram staining. Due to their thick walls, Gram-positive bacteria stain purple.

Gram stain - Differential staining technique for bacteria in which cells either stain pink (Gram-negative) or purple (Gram-positive) depending upon the structure of the bacterial cell wall.

Hand hygiene - The process of decontaminating your hands using either alcohol-based hand rub or liquid soap, water and hand wipes.

Hand rubbing - The decontamination of hands using an alcohol-based hand rub.

Hand washing - The decontamination of hands where soap, water and drying are involved in a physical rather than disinfectant process.

Health Protection Team (HPT) - A team of healthcare professionals whose role it is to protect the health of the local population and limit the risk of them becoming exposed to infection and environmental dangers.

Healthcare Associated Infection (HAI/HCAI) - An infection that occurs because of medical care, or treatment, in any healthcare setting which was not present or incubating at the time of admission (also known as nosocomial or hospital acquired infection). (WHO)

Hierarchy of controls - A systematic process which provides a consistent approach to minimizing or eliminating exposures to hazards in the workplace.

High Consequence Infectious Diseases (HCID) - In the UK, a high consequence infectious disease (HCID) is defined according to the following criteria: acute infectious disease, typically has a high case-fatality rate, may not have effective prophylaxis or treatment, often difficult to recognise and detect rapidly, ability to spread in the community and within healthcare settings, requires an enhanced individual, population and system response to ensure it is managed effectively, efficiently and safely. e.g EVD, Lassa fever, monkeypox, SARS.

High Efficiency Particulate Air (HEPA) - An air filter that removes >99.97% of particles > 0.3 microns (the most penetrating particle size) at a specified flow rate of air. HEPA filters come in different grades. HEPA 13, for example, filters 99.97% of particles where as HEPA 14 filters 99.995% of particles.

High Frequency Oscillatory Ventilation (HFOV) - A ventilation mode that achieves adequate alveolar ventilation despite using very low tidal volume (VT) at or below the dead space volume (VD) (approximately 1-2 mL/kg), at frequencies significantly above normal physiological values.

High touch surfaces/frequently touched surfaces - Are those that have frequent contact with the hands of staff and patients. Examples include doorknobs, lift call buttons, call bells, bedrails, light switches, toilet handrails, flush button and edges of privacy curtains.

Humectants - Are 'hygroscopic' which means that they attract water into the epidermis from the dermis and/or from humid environmental conditions.

Incidence - The rate at which a certain event occurs, as the number of new cases of a specific disease occurring during a certain period in a population at risk. It is different to prevalence.

Incontinence Associated Dermatitis (IAD) - Moisture-associated skin damage caused by urine and faeces.

Incubation period - The period between the infection of an individual by a pathogen and the manifestation of the illness or disease it causes.

Infection - The invasion of an organism's body tissue by disease-causing agents, such as a virus, bacterium or fungus, their multiplication and the reaction of host tissue to these organisms and the toxins they produce, resulting in symptoms such as high temperature, local swelling and discharge of pus, etc.

Infection prevalence - The total number of cases of a disease in a given population at a specific time.

Infection Prevention and Control (IPC) - Is a practical, evidence-based approach preventing patients and health workers from being harmed by avoidable infections. Effective IPC requires constant action at all levels of the health system, including policymakers, facility managers, health workers and those who access health services. (WHO)

Infection Prevention and Control Team (IPCT) - A multidisciplinary team responsible for preventing, investigating and managing an infection incident or outbreak.

Infectious agent - Is the microorganism, such as a virus, bacterium, or fungus, that is capable of invading body tissues, multiplying and causing disease.

Influenza (flu) - An acute respiratory infection caused by influenza viruses, with types A, B, C and D. Influenza symptoms include fever, cough, headache, muscle and joint pain, severe malaise, sore throat and a runny nose. It spreads easily, with rapid transmission from coughs or sneezes. Transmission by inhaling droplets or touching contaminated surfaces and then touching eyes, mouth etc with unwashed hands.

Inpatient - A patient who is admitted to a hospital or clinic for treatment that requires at least one overnight stay.

Invasive medical device - Devices which in whole or part enter the body through an orifice or through any surface of the body. This includes penetrating skin, mucous membranes, organs or internal cavities of the body. Examples include surgical instruments, implantable devices, dental equipment, intravascular devices, medical and therapeutic devices.

Immunocompromised - Denoting a person with an immunologic mechanism deficiency either because of an immunodeficiency disorder or because it has been so rendered by immunosuppressive agents.

Isolation - Physically separating patients or people with suspected or confirmed infection to prevent the spread of infection.

Isolation room - A single occupancy patient care room used to isolate persons with a suspected or confirmed infectious disease.

Lateral Flow Device (LFD) testing - Lateral flow testing is a fast and simple way to test people who do not have symptoms of COVID-19, but who may still be spreading the virus. In some circumstances lateral flow tests can also be used for other diagnostic tasks.

Legionella - Bacteria that are widely distributed in natural and artificial water supplies, and in soil. Exposure is airborne (either indoor or outdoor) usually through aerosolized water which is contaminated with Legionella.

Lipids - Natural compounds in the skin. The main one is ceramides; cholesterol and fatty acids.

Logarithmic reduction (log reduction) - A mathematic measure of how thoroughly a decontamination process reduces the concentration of a contaminant, for example, 1 log reduction stands for a 10-fold (or one decimal point) or 90% reduction in number of live bacteria, therefore a log 5 reduction is 99.999%.

Meatus - An opening or passage into the body; there is a urethral meatus but there is also an auditory one as well as others.

Medical device (Medical Device Regulation (EU) 2017/745) - Any instrument, apparatus, appliance, software, implant, reagent, material or other article intended by the manufacturer to be used, alone or in combination, for human beings for one or more of the following specific medical purposes: - diagnosis, prevention, monitoring, prediction, prognosis, treatment or alleviation of disease, - diagnosis, monitoring, treatment, alleviation of, or compensation for, an injury or disability, - investigation, replacement or modification of the anatomy or of a physiological or pathological process or state, - providing information by means of in vitro examination of specimens derived from the human body, including organ, blood and tissue donations, and which does not achieve its principal intended action by pharmacological, immunological or metabolic means, in or on the human body, but which may be assisted in its function by such means.

Medical equipment - Equipment used in a patient care environment to support patient treatment and diagnosis.

Methicillin-Resistant *Staphylococcus aureus* (MRSA) - Are strains of the bacterium *Staphylococcus aureus* that are resistant to the antibiotic methicillin.

Microbe (or germ/microorganism) - Germs, microbes and microorganisms are different names for the same thing. They are forms of life that are very small that can be made up of single cell, cell clusters or many cells together that are too small to be seen by the naked eye e.g., bacteria, viruses, fungi, protozoa and algae.

Micron(μ) - A unit of length equal to one millionth of a metre; a micrometre.

Minimum inhibitory concentration (MIC) - In microbiology, the lowest concentration of an antibiotic that prevents the visible growth of bacteria. Potent antibiotics, therefore, have low MIC values. As bacteria become less susceptible to an antibiotic, MIC values increase.

Minimum bactericidal concentration - Is the lowest concentration of an antibacterial agent required to kill a bacterium over a fixed, somewhat extended period, such as 18 hours or 24 hours, under a specific condition.

Mode of transmission/means of transmission - The way that microorganisms spread from one person or site to another. This can be through direct contact, ingestion, inoculation or inhalation. The main modes or routes of transmission are airborne (aerosol) transmission, droplet transmission and contact transmission and inoculation - for example by contaminated needle or blade.

Moisture Associated Skin Dermatitis (MASD) - An umbrella term for four types of MASD, namely; incontinence-associated dermatitis (IAD), intertriginous dermatitis (ID), periwound and peristomal skin damage.

Morbidity - The prevalence of a disease or of all diseases in a given population.

Mortality - The rate of actual deaths to expected deaths. This is calculated by the deaths per unit time in a population divided by the population number.

Mucous membranes/Mucosa - The surfaces lining the cavities of the body that are exposed to the environment such as the lining of the mouth and nose.

Multi-Resistant Organisms (MROs)/Multidrug-Resistant Organisms (MDROs) - Microorganisms that are resistant to one or more classes of antimicrobial agents.

Multi-use items - A multi-use or reusable medical device that healthcare providers can reprocess and reuse on multiple patients such as a commode and PATSLIDE®.

Negative pressure room - A single-occupancy patient care room used to isolate people with a suspected or confirmed airborne infectious disease. Environmental factors are controlled to minimise the transmission of infectious agents that are usually transmitted from person-to-person by droplet nuclei associated with coughing or aerosolization of contaminated fluids. The air handling system operates at lower pressure with respect to adjacent areas such as the anteroom and corridor, and is exhausted to the outside.

Non-Invasive Ventilation (NIV) - The delivery of oxygen (ventilation support) via a face mask and therefore eliminating the need of an endotracheal airway.

Nosocomial infection (also known as HAI) - An infection acquired in a healthcare environment, which was not present before the patient entered the healthcare environment.

Nucleic acid - Any of the high-molecular-weight molecules that carry the genetic information crucial to the replication of cells and the manufacturing of cellular proteins.

Occlusives - Create a barrier on top the skin in order to reduce/physically block transepidermal water loss (TEWL) and are most effective when applied to wet skin.

Occupational exposure - This is contact with potential physical, chemical, biological and sometimes psychological sources as a result of your working environment.

Omicron - Describes the SARS-CoV-2 variant, a specific mutation (B.1.1.529) of coronavirus.

Outbreak - A classification used in epidemiology to describe a sudden increase in incidence of disease or condition within a small, localised group of people.

Outpatient - A patient who visits a healthcare facility for diagnosis or treatment without spending the night. Sometimes called a day patient, day-stay patient or day-only patient.

P2 Respirator - A particulate filter personal respiratory protection device or P2 respirator is a close fitting mask worn for airborne precautions, which is capable of filtering 0.3µm particles. A P2 respirator must comply with European Standard EN140.

Pandemic - A disease outbreak that occurs over a wide geographical area (such as multiple countries and/or regions) and typically affects a significant proportion of the population.

Parenteral - Getting a drug or substance into the body by injection.

Pathogen - A disease-causing agent. The term is used to refer to infectious microorganisms, such as bacteria, virus or fungi.

Personal Protective Equipment (PPE) - Equipment a person wears to protect themselves from risks to their health or safety, including exposure to infections e.g., disposable gloves and disposable aprons.

Petri dish - A shallow cylindrical glass or plastic lidded dish that microbiologists use to culture microorganisms.

Pharmacodynamics (PD) - A study of the biochemical and physiological effects of drugs on the body, or on microorganisms, or parasites within or on the body and the mechanisms of drug action.

Pharmacokinetics (PK) - The study of the movements and interactions of drugs in the body, including the processes of absorption, distribution, localisation in tissue, biotransformation and excretion.

PKPD - Relationship between drug concentration and effect.

Plasmids - Small circular DNA molecules, highly variable in size and properties, which may carry the genetic instructions to make bacteria resistant to antibiotics. Plasmids may be transferred between bacteria, so aiding the spread of resistance.

Polymerase Chain Reaction (PCR) - A technology in microbiology which amplifies specific DNA or RNA small quantities or short sequences, generating thousands to millions of copies. Used to identify the presence of bacteria, viruses or fungi in clinical samples.

Portal of entry - The way the infectious agent can enter a new host (through broken skin, open or surgical wounds, the respiratory tract, mucous membranes or, for those in healthcare settings, catheters, drips, feeding tubes and lines).

Portal of exit - The way the infectious agent leaves the reservoir (through open wounds, aerosols, or coughing, sneezing, blood, saliva, urine or skin scales).

Positive pressure room - Maintains a higher pressure inside the room than that of the surrounding environment. In this way any airborne particle inside the room will be filtered out. Tends to be used for immunocompromised patients.

Powered Air Purifying Respirator (PAPR) hood - An article of personal protective equipment (PPE) for individuals to supply purified air. Consisting of a blower to pass contaminated air through a HEPA filter, which removes the contamination and supplies purified air to a facepiece.

Point Prevalence Survey (PPS) - A prevalence survey is a count of the number of patients with a particular condition/treatment on the same day the survey is carried out.

Prevalence - The spread and/or frequency with which an event or circumstance occurs per unit of time, population or other standard of comparison. The prevalence rate can be calculated by the number of people with a specific condition or attribute at a specified time divided by the total number of people in the population.

Prions - An infectious protein particle, devoid of nucleic acid. Prions are thought to cause certain degenerative diseases of the nervous system such as Creutzfeldt-Jakob disease (CJD) and Gerstmann-Straussler syndrome (GSS) in humans.

Prophylactic - An agent, device or measure used as a preventative treatment for disease e.g., antimicrobials can be given prophylactically as a pre-surgical measure to prevent infection.

Prophylaxis - A treatment given, or action taken to prevent infection.

Quaternary Ammonium Compounds (QACs) - Sometimes referred to as quats, are a type of chemical that is used to kill bacteria and viruses and are widely found in disinfectants that are used in places such as healthcare and industry.

Quinolones - A family of synthetic broad-spectrum antimicrobial drugs with bactericidal action.

Reservoir (chain of infection) - Places in the environment where the microorganism survives and multiplies, such as people, animals and insects, medical equipment, and even soil or water posing a risk of infection.

Resident skin flora - Live naturally within the epidermis of our skin (for example in hair follicles and sweat glands) they protect the skin from invasion by more harmful microorganisms. Resident flora are not readily transferred to other people and surfaces. They are difficult to remove from the skin and in most cases do not cause infection. (See [Transient skin flora](#)).

Resistance - A property (intrinsic or acquired) of some microorganisms to withstand the effects of drugs that are lethal to most members of its species e.g., bacteria with antibiotic resistance.

Respiratory Protective Equipment (RPE) - Respiratory protection that is worn over the nose and mouth designed to protect the wearer from inhaling hazardous substances, including airborne particles (aerosols). There are 2 types of respiratory protection that can be used; tight-fitting disposable FFP respirators and loose-fitting powered respirator hoods (TH2). FFP stands for filtering face piece. There are 3 categories of FFP respirator: FFP1, FFP2 and FFP3. FFP3 and loose-fitting powered respirator hoods provide the highest level of protection and are recommended when caring for patients in areas where high risk AGPs are being performed.

Respiratory Tract Infection (RTI) - Any infectious disease of the upper (URTI) or lower respiratory tract (LRTI).

Rifampicin - A broad-spectrum antibiotic principally used to treat tuberculosis.

Risk factor - An activity or factor that may increase the chance of developing a disease. For example, a lack of moisturising is a risk factor for dermatitis.

'S' shape - Cleaning technique in 'S' formation to ensure all surface areas are covered, but cleaned areas are not wiped again to decontaminate them.

Sanitise - A process used to lower the number of viable microorganisms on an item or surface to a safer level.

Screening - A process of identifying patients who are at risk, or already have a disease or injury by questioning medical history or physical swabbing or sampling to culture for microorganisms.

Secretions - Any body fluid that is produced by a cell or gland such as saliva or mucous, for a particular function in the organism or for excretion.

Semi-critical equipment - Items that come into contact with mucous membranes or non-intact skin and should be single use or sterilised after each use. If this is not possible, high-level disinfection is the minimum level of reprocessing that is acceptable.

Sepsis - A serious medical condition that is characterised by a whole-body inflammatory state (called a systemic inflammatory response syndrome or SIRS) and the presence of a known or suspected infection.

Sharps - Needles, blades (such as scalpels) and other medical instruments that are necessary for carrying out healthcare work and could cause an injury by pricking the skin.

Single-patient use - Medical devices may be used for more than one episode of use on one patient only; the device may undergo some form of reprocessing between each use.

Single-use items - A single-use device is used on an individual patient during a single procedure and then discarded. It is not intended to be reprocessed and used again, even on the same patient., e.g. needles.

Sodium hypochlorite (NaOCl) - A compound that can be effectively used for water purification. It is used on a large scale for surface purification, bleaching, odour removal, surface disinfection and water disinfection.

Solid tumours - Cancers of solid organs, such as lung, breast, prostate, liver etc.

Skin flora (microbiome) - Used to describe the millions of microorganisms, bacteria, fungi and viruses that live on human skin.

Spaulding Classification - A system based on instruments and items for patient care being categorised into critical, semi-critical and non-critical, according to the degree of risk for infection involved in use of the items.

- Critical - These items confer a high risk for infection if they are contaminated with any microorganism and must be sterile at the time of use. This includes any objects that enter sterile tissue or the vascular system, because any microbial contamination could transmit disease.
- Semi-critical - These items come into contact with mucous membranes or non-intact skin and should be single use or sterilised after each use. If this is not possible, high-level disinfection is the minimum level of reprocessing that is acceptable.
- Non-critical - These items come into contact with intact skin but not mucous membranes. Thorough cleaning is sufficient for most non-critical items after each individual use, although either intermediate or low-level disinfection may be appropriate in specific circumstances.

Spectrum - The range of organism against which an antimicrobial has an effective action.

Spore - A reproductive cell produced by fungi and some types of bacteria under certain environmental conditions. Spores can survive for long periods of time and are very resistant to heat, drying and chemicals.

Sporicidal - A lethal activity against spores.

Sporostatic - To prevent spores from reproducing. The inhibition of spore germination, or ability to produce bacterial cells known as vegetative bacteria or fungi that can continue to grow and multiply.

Standard Infection Control Precautions (SICPs) - SICPs are the basic IPC measures necessary to reduce the risk of transmitting infectious agents from both recognised and unrecognised sources of infection. Sources of (potential) infection include blood and other body fluids, secretions, or excretions (excluding sweat), non-intact skin or mucous membranes and any equipment or items in the care environment that could have become contaminated.

Staphylococcus aureus (*S. aureus*) - A Gram-positive bacterium responsible for many types of human infections, particularly infections of the skin. MRSA (Methicillin-Resistant *Staphylococcus aureus*) is one example of specific subtype of staph bacteria.

Sterile - Free from all living microorganisms; usually described as a probability (e.g. the probability of a surviving microorganism being 1 in 1 million).

Sterilisation - Use of a physical or chemical procedure to destroy all microorganisms including substantial numbers of resistant bacterial spores (usually by heat or chemical means).

Strain - A strain is genetic variant or subtypes of a microorganism (e.g., a virus, bacterium or fungus). Some strains may be more dangerous or difficult to treat than others.

Streptococcus pneumoniae (*S. pneumoniae, pneumococcus*) - A Gram-positive bacterium that causes several severe human infections, particularly infections of the lung, meninges, ear and sinuses.

Superbug - An informal term which describes an infective microorganism, especially bacterium that has become resistant to medication normally used against it which causes infections caused by superbugs very difficult to treat.

Susceptible host - A person who is at risk of infection. This might be a person who has an underdeveloped immune system, a decreasing immune system (such as an elderly person), breaks in their skin or tubes in their body such as catheters, drips and feeding tubes.

Surfactant - A surface-active agent that stirs up activity on the surface you are cleaning and acts as a degreasing agent that helps lift dirt and germs from the surface.

Surgical site infection - An infection occurring within 30 days after the surgical operation at the site of incision.

Surveillance - Surveillance is the routine collection of data of infections, microorganisms, antimicrobial resistance and conditions. Surveillance helps to understand the prevalence, cost and effects of HAIs.

Terminal clean (also referred to as discharge clean) - A procedure required to ensure that an area has been cleaned/decontaminated following transfer or discharge of a patient suspected or confirmed to be infected or colonised with an infectious pathogen (that is, alert organism or communicable disease) to ensure a safe environment for the next patient.

Therapeutic window - The range of concentration in which an antibiotic is effective but not toxic.

Therapeutic Drug Monitoring (TDM) - Measuring the concentration of antibiotic in the body - usually the concentration in the blood.

Therapeutic Goods Administration (TGA) - The Therapeutic Goods Administration is Australia's regulatory authority for therapeutic goods. They carry out a range of assessment and monitoring activities to ensure therapeutic goods available in Australia are of an acceptable standard with the aim of ensuring that the Australian community has access, within a reasonable time, to therapeutic advances.

Time-dependent antibiotics - Those classes of antibiotics whose killing response is dependent on the amount of time their concentration exceeds the MIC for the microorganism. (See [Minimum inhibitory concentration](#)).

Time>MIC - The cumulative percentage of time over a 24hr period that the drug concentration exceeds the MIC.

Tolerance - The ability of a bacterial strain to not be killed by an antibiotic at relatively high concentrations even though it may be inhibited by much lower concentrations.

Touchable surfaces - Surfaces that have minimal contact with hands of staff and patients however are still touched. Examples are walls, ceilings, mirrors and window sills.

Toxicity poisoning - Side effects produced by higher concentrations than the body can normally tolerate.

Toxins - Proteins produced by microorganisms that promote infection and disease by directly damaging host tissues.

Trans-Epidermal Water Loss (TEWL) - Measures the occlusivity of water as it migrates to the surface of skin.

Transient skin flora - Refers to microorganisms that are 'just passing through' temporarily colonising the skin. This includes bacteria, fungi and viruses, which reach the hands, for example, during direct contact with patients, or contaminated environmental surfaces adjacent to the patient and are most frequently associated with healthcare-associated infections. (See [Resident skin flora](#)).

Transmission Based Precautions (TBPs) - Additional precautions to be used in addition to SICPs when caring for patients with suspected or confirmed infection or colonisation, where standard precautions alone may be insufficient to prevent transmission of infection.

Tuberculosis - An infectious disease usually caused by *Mycobacterium tuberculosis* (MTB) bacteria. Tuberculosis generally affects the lungs but can also affect other parts of the body.

iQ glossary

Ultraviolet light - Light in the UV-C wavelength range (200 to 270 nanometres) that has microbiocidal properties against multiple pathogens, including *C. difficile* and other healthcare-associated pathogens.

Urinary catheter - Tube inserted via urethra into the bladder to allow urine drainage.

Urinary Tract Infection (UTI) - Infection of the bladder, ureters or kidneys.

Urine culture - A urine culture is a test to find and identify germs (usually bacteria) that may be causing a urinary tract infection (UTI). To avoid culture contaminations, urine collection process must be carefully followed.

Vaccine - A suspension that is administered in order to stimulate the immune response of the body against an infectious agent.

Vancomycin - An antibiotic of the glycopeptide group, with activity almost exclusively against gram-positive bacteria.

Vancomycin Resistant Enterococci (VRE) - Are enterococci that are resistant to an antibiotic called vancomycin and are often resistant to other types of antibiotics.

Ventilation - The process of continuously supplying a closed space with fresh purified or filtered air.

Ventilator Associated Pneumonia (VAP) - A pneumonia occurring in a patient within 48 hours or more after intubation (insertion of a breathing tube, via the mouth or through a tracheostomy, into the airway) which was not present before.

Virucidal activity - An active substance that is effective against both enveloped and non-enveloped viruses is called virucidal. This efficacy is referred to as virucidal activity.

Virus - Viruses are the smallest of all the microbes. 500 million rhinoviruses (common cold) could fit on to the head of a pin. They are unique because they are only alive and able to multiply inside the cells of other living things (hosts). It has a core of genetic material, either DNA or RNA, surrounded by a protein coat called a capsid which is sometimes surrounded by a spikey coat called the envelope.

Volatile Organic Compounds (VOC) - Volatile organic compounds are emitted as gases from certain solids or liquids. VOCs include a variety of chemicals, some of which may have short- and long- term adverse health effects.

