

# GLOSSARY

**Airborne transmission:** Transfer of particles 5 µm or less in size into the air, either as airborne droplets or dust particles containing the infectious microorganism; can be produced by coughing, sneezing, talking or procedures such as bronchoscopy or suctioning; can remain in the air for up to several hours; and can be spread widely within a room or over longer distances. Special air handling and ventilation are needed to prevent airborne transmission. **(Chapter 21 and Appendix I)**

**Amphoteric:** Organic chemical (e.g., amino acid) having both acid and basic properties.

**Animate:** Property of having life or being alive (e.g., human tissue or organs).

**Anionic:** Positively charged particle or substance (i.e., in electrolysis, anions move toward the negatively charged cathode); opposite of cationic.

**Antisepsis:** Process of reducing the number of microorganisms on skin, mucous membranes or other body tissue by applying an antimicrobial (antiseptic) agent. **(Chapters 1, 6 and 23)**

**Antiseptic or antimicrobial agent (terms used interchangeably):** Chemicals that are applied to the skin or other living tissue to inhibit or kill microorganisms (both transient and resident) thereby reducing the total bacterial counts. **(Chapters 6 and 23)**

**Antiseptic handrub or waterless, alcohol-based antiseptic handrub (terms used interchangeably):** Fast acting antiseptic handrubs that do not require use of water to remove transient flora, reduce resident microorganisms and protect the skin. Most contain 60–90% alcohol, an emollient and often an additional antiseptic (e.g., 2–4% chlorhexidine gluconate) that has residual action. **(Chapter 3 and Appendix B)**

**Asepsis and aseptic technique:** Combination of efforts made to prevent entry of microorganisms into any area of the body where they are likely to cause infection. The goal of asepsis is to **reduce to a safe level or eliminate** the number of microorganisms on both animate (living) surfaces (skin and tissue) and inanimate objects (surgical instruments and other items). **(Chapters 1 and 7)**

**At point of use:** Equipment, instruments and supply items are at the place where needed (e.g., sharps containers are placed within an arm's reach of where injections are being given). **(Chapter 15)**

**Autoclave:** Device that sterilizes instruments or other objects by using steam under pressure. The length of time required for sterilization depends on temperature and pressure. **(Chapter 11 and Appendix G)**

**Bacterial endotoxins:** Lipopolysaccharide components from gram-negative bacteria cell membranes that result from bacterial metabolism. Endotoxins survive sterilization because they require dry heat at 270° F (132°C) for 1 hour to be inactivated. They can cause pyrogenic reaction symptoms, including fever, chills, and hypertension.

**Bactericide:** Agent that kills bacteria.

**Bioburden:** Number of types of viable microorganisms with which an item is contaminated; also known as *bioload* or *microbial load*.

**Biological indicator:** Sterilization process monitoring device consisting of a standardized, viable population of microorganisms (usually bacterial spores) known to be resistant to the process of sterilization being monitored. Biological indicators are intended to demonstrate whether or not the conditions were adequate to achieve sterilization. A negative biological indicator does not prove that all items in the load are sterile or that they were all exposed to adequate sterilization conditions. **(Chapter 11 and Appendix G)**

**Biosafety level (BSL) guidelines:** Combination of primary and secondary containment and safety guidelines designed for use in microbiology laboratories and bacteriology research units functioning at four levels (BSL-1 to BSL-4) of increasing risk. **(Chapter 17)**

**Biological safety cabinets (BSCs):** Devices that provide protection for personnel, the agent being processed and the environment. They range in complexity from level I (general research cabinets for use with low- to moderate-risk microorganisms) to level III (totally enclosed cabinets with gas-tight construction that provide maximum protection to workers and the environment). **(Chapter 17)**

**Blood bank:** Facility or hospital unit that performs the collection, processing, storage and distribution of human blood or blood products. **(Chapter 18)**

**Bowie-Dick test:** Diagnostic test of a sterilizer's ability to remove air from the chamber of a prevacuum steam sterilizer. The air-removal or Bowie-Dick test is not a test for sterilization. **(Appendix G)**

**Casefinding:** Method of identifying patients with nosocomial infections through a combination of: 1) reviewing medical records, 2) asking questions directed to patients or health workers and, 3) checking laboratory, X-ray or other relevant data if available. **(Chapter 28)**

**Cationic:** Negatively charged particle or substance (i.e., in electrolysis, cations move toward the positively charged anode); opposite of anionic.

**Chemical indicator:** Sterilization process monitoring device designed to respond with a characteristic chemical change to one or more of the physical conditions within the sterilizing chamber. Chemical indicators are intended to detect potential sterilization failures that could result from incorrect packaging, incorrect loading of the sterilizer, or malfunctions of the sterilizer. The “pass” response of a chemical indicator does not prove that the item accompanied by the indicator is sterile. **(Chapter 11 and Appendix G)**

**Clean water:** Natural or chemically treated and filtered water that is safe to drink and use for other purposes (e.g., handwashing and medical instrument cleaning) because it meets specified public health standards. These standards include: zero levels of microorganisms, such as bacteria (e.g., fecal coliform and *Escherichia coli*), parasites (e.g., *Giardia lamblia*) and viruses (e.g., hepatitis A or E); low turbidity (cloudiness due to particulate matter and other contaminants); and minimum levels of disinfectants, disinfectant by-products, inorganic and organic chemicals and radioactive materials. At a minimum clean water should be free of microorganisms and have low turbidity (is clear, not cloudy). **(Chapters 3 and 26)**

**Cleaning:** Process that physically removes all visible dust, soil, blood or other body fluids from inanimate objects as well as removing sufficient numbers of microorganisms to reduce risks for those who touch the skin or handle the object. **(Chapters 1, 9 and 10)**

**Cleaning solution:** Any combination of soap (or detergent) and water used to wash or wipe down environmental surfaces such as floors, walls, ceilings and furniture. **(Chapter 6)**

**Clinically significant antibody:** Antibody capable of producing an adverse reaction to transfused blood or blood product obtained from a donor (allogenic antibody) or recipient (autologous antibody). **(Chapter 18)**

**Closed system for obtaining blood:** System in which the blood is not exposed to air or outside elements during collection, processing—including separation of components (e.g., platelets) if required prior to transfusion—and storage. It is the safest way to collect, process and store blood. **(Chapter 18)**

**Cohorting:** Practice of placing patients with the same active infectious disease (e.g. chicken pox)—but no other infection—in the same room or ward. **(Chapter 21)**

**Colonization:** Pathogenic (illness- or disease-causing) organisms are present in a person (i.e., they can be detected by cultures or other tests) but are not causing symptoms or clinical findings (i.e., no cellular changes or damage). (**Chapters 1 and 21**)

**Contact time:** Amount of time a disinfectant is in direct contact with the surface or item to be disinfected. For surface disinfection, this time period is framed by the application to the surface until complete drying has occurred. (**Appendix F**)

**Contact transmission:** Infectious agent (bacteria, virus or parasite) transmitted directly or indirectly from one infected or colonized person to a susceptible host (patient), often on the contaminated hands of a health worker. (**Chapter 21**)

**Container:** Vessel in which waste is placed for handling, transportation, storage and/or eventual disposal. (**Chapter 8**)

**Contaminated:** State of having been actually or potentially in contact with microorganisms. As used in healthcare, the term generally refers to the presence of microorganisms that could be capable of producing disease or infection. (**Chapters 8 and 20**)

**Corrosion:** Action of chemical solutions, such as those containing salt (sodium chloride) or commercial bleach (sodium hypochlorite at concentrations above 0.5%), to cause metal instruments to be gradually eaten away (rusted) with prolonged contact (i.e., more than 1 hour). (**Appendix E**)

**Critical medical device (or item):** Devices that penetrate skin or invade normally sterile parts of the body (e.g., central venous catheters). These items contact blood and require sterilization. (**Chapter 1**)

**Culture:** Growth of microorganisms in or on a nutrient medium; to grow microorganisms in or on such a medium.

**Culture medium:** Laboratory substance or preparation used to grow and cultivate microorganisms.

**Decontamination:** Process that makes inanimate objects **safer** to be handled by staff **before** cleaning (i.e., inactivates HBV, HCV and HIV and reduces, but does not eliminate, the number of other contaminating microorganisms). (**Chapters 1, 9 and 10 and Appendices E, F and H**)

**Detergents and soaps (terms used interchangeably):** Cleaning products (bar, liquid, leaflet or powder) that lower surface tension, thereby helping remove dirt and debris and transient microorganisms from hands. **Plain** soaps require friction (scrubbing) to mechanically remove microorganisms while **antiseptic** (antimicrobial) soaps also kill or inhibit growth of most microorganisms. (**Chapters 3, 13 and 16 and Appendix B**)

**Disinfectant:** Chemical that destroys or inactivates microorganisms. Disinfectants are classified as low-, intermediate- or high-level depending on their ability to kill or immobilize some (low- or intermediate-level) or all (high-level) microorganisms (but not all spores). Phenols, chlorine or chlorine-containing compounds and quaternary ammonium compounds (QUATs) are classes of disinfectants frequently used to clean noncritical surfaces such as floors, walls and furniture. (**Chapters 12 and 16 and Appendix F**)

**Disinfectant cleaning solution:** Products that are a combination of a detergent (soap) and a chemical disinfectant. Not all detergents and disinfectants are compatible. Several combinations are available commercially or can be prepared, such as alkaline detergents with chlorine compounds, alkaline detergents with QUATs or other nonionic surfactants, and acid detergents with iodophors. (**Chapter 16 and Appendix F**)

**Disposal:** Intentional burial, deposit, discharge, dumping, placing or release of any waste material into or on air, land or water. Disposal is undertaken without the intention of retrieval. (**Chapter 8**)

**Donor-Patient:** Person whose blood is collected for possible transfusion to another person (allogenic transfusion). (**Chapter 18**)

**Donor-Recipient:** Person whose own blood is collected for possible transfusion to her/himself (autologous transfusion). (**Chapter 18**)

**Droplet transmission:** Contact of the mucous membranes of the nose, mouth or conjunctivae of the eye with infectious particles larger than 5 µm in size and can be produced by coughing, sneezing, talking or procedures such as bronchoscopy or suctioning. Droplet transmission requires close contact between the source and the susceptible person because particles remain airborne briefly and travel only about 3 feet (1 meter) or less. (**Chapter 21**)

**Dry heat sterilization:** Oven that sterilizes metal instruments, glass syringes and bottles and other items by dry heat. Plastic and rubber items cannot be dry-heat sterilized because temperatures used (160–170° C) are too high for these materials. (**Chapter 11 and Appendix G**)

**Electrolyte:** Chemical substance, such as salt (sodium chloride) or commercial bleach (sodium hypochlorite), which in solution separates into positive (sodium) and negative (chloride or hypochlorite) ions and is capable of conducting an electric current by movement of the positive and negative ions to oppositely charged electrodes. (**Appendix F**)

**Electrolytic corrosion:** Chemical process that occurs when two or more different types of metal (e.g., stainless steel medical instruments in an aluminum pan) are placed in water or weak salt (sodium chloride) or commercial bleach (sodium hypochlorite) solution. (To avoid this, instruments should be placed in plastic pans and instruments made of different metals should not be allowed to touch each other.) (**Appendix E**)

**Emollient:** Organic liquid, such as glycerol, propylene glycol or sorbitol, that when added to handrubs and hand lotions softens the skin and helps prevent skin damage (cracking, drying, irritation and dermatitis) due to frequent handwashing with soap (with or without antiseptic agent) and water. (**Chapter 3**)

**Encapsulation:** Filling a sharps container that is three-quarters full with cement or clay, which, after hardening, can be disposed of safely in a landfill. (**Chapter 8**)

**Endemic illness or disease:** Infectious disease, such as cholera or AIDS, which is continuously present at some level (prevalence) in a particular country or region. (**Chapter 26**)

**Endometritis:** Acute postpartum infection of the lining (endometrium) of the uterus with extension into the smooth muscle wall (myometrium). Clinical features include fever, usually developing on the first or second postpartum day, uterine tenderness, lower abdominal pain, foul-smelling vaginal discharge (lochia) and signs of peritonitis in women who have had a cesarean section. (**Chapter 25**)

**Endospore or spore (terms used interchangeably):** Relatively water-poor round or elliptical resting cell consisting of condensed cytoplasm and nucleus surrounded by an impervious cell wall or coat. Spores are relatively resistant to disinfectants and sterilants, specifically the bacillus and clostridium species. (**Chapters 1, 9 and 12 and Appendix F**)

**Environmental controls:** Standards specifying procedures to be followed for the routine care, cleaning and disinfection of environmental surfaces, beds, bedrails, bedside equipment and other frequently touched surfaces. (**Chapters 15 and 16**)

**Environmental hygiene:** Process of maintaining a clean, healthy and pleasing patient and work environment. (**Chapter 16**)

**Epidemic:** Rapid spread of an infectious disease, such as cholera, among many individuals in a hospital or community at the same time. (**Chapter 26**)

**Episiotomy:** Surgical cut made in the perineum (usually at the 6 o'clock position) just prior to delivery. The purpose is to facilitate delivery of the presenting part and minimize the risk of injury to the perineal area. Episiotomies are, however, associated with increased bleeding, may extend resulting in increased tearing (3rd or 4th degree perineal laceration), frequently become infected and, most importantly, usually not necessary. (Chapter 25)

**Exit site infection (microbiologic diagnosis):** Clinical infection in which culture of the discharge (pus or fluid) at the exit site yields a microorganism, with or without microbiologic evidence of bloodstream infection. (Chapter 23)

**Exposure time:** Period of time during a sterilization process in which items are exposed to the sterilant at the specified sterilization parameters. In a steam sterilization process, exposure time is the period during which items are exposed to saturated steam at the specified temperature. (Appendix G)

**Flash sterilization:** Process designed for the steam sterilization of patient-care items for immediate use. (Appendix G)

**Handwashing:** Process of mechanically removing soil and debris from the skin of hands using plain soap and water. (Chapter 3 and Appendices A and B)

**Hazard:** Intrinsic potential property or ability of any agent, equipment, material or process that can cause harm. (Chapter 8)

**High-level disinfection (HLD):** Process that eliminates **all** microorganisms **except some** bacterial endospores from inanimate objects by boiling, steaming or the use of chemical disinfectants. (Chapters 1, 9 and 12 and Appendix F)

**Hospital-acquired infection or nosocomial (terms used interchangeably):** Infection that is neither present nor incubating at the time the patient came to the hospital. (Nosocomial refers to the association between care and the subsequent onset of infection. It is a time-related criterion that does not imply a cause and effect relationship.) (Chapters 3, 20 and 21)

**Hydrophilic (water-seeking):** Substances that are capable of dissolving in, taking up or being attracted to water but **not** fats or oils (synonym: lipophobic).

**Hydrophobic (water-avoiding):** Substances that are **not** capable of dissolving in, taking up or being attracted to water but are attracted to fats and oils (synonym: lipophilic).

**Inanimate:** Object or article (e.g., surgical instrument, gloves or other items) that does not have life (not animate).

**Inanimate surface:** Nonliving surface (e.g., floors, walls, furniture).

**Incineration:** Controlled burning of solid, liquid or gaseous combustible (burnable) wastes to produce gases and residues containing little or no burnable material. (Chapter 8)

**Infectious microorganisms:** Microorganisms capable of producing disease in appropriate hosts.

**Infectious waste:** The part of medical waste that is capable of causing infectious diseases. (Chapter 8)

**Intermediate-level disinfectant:** Agent that destroys all vegetative bacteria, including tubercle bacilli, lipid and some nonlipid viruses, and fungus spores, but not bacterial spores. (Appendix F)

**Intra-amniotic infection syndrome (IAIS), also referred to as amnionitis or chorioamnionitis:** Acute clinically detectable infection in the uterus and its contents (fetus, placenta and amniotic fluid) during pregnancy. (Chapter 25)

**Invasive group B streptococcal sepsis:** Newborn infection characterized by bacteremia, pneumonia, meningitis and death in up to 25% of infants with the infection. It occurs most commonly following

IAIS. Other sites of infection include newborn skin infections (cellulitis) and infections in bones (osteomyelitis). (**Chapter 25**)

**Laboratory-acquired infection:** Nosocomial infection resulting from the performance of laboratory activities by staff, regardless of how it occurred. (**Chapters 17 and 20**)

**Linens:** Cloth items used in healthcare facilities by housekeeping staff (bedding and towels), cleaning staff (cleaning cloths, gowns and caps) and surgical personnel (caps, masks, scrub suits, surgical gowns, drapes and wrappers) as well as by staff working in specialty units such as ICUs and other units performing invasive medical procedures (e.g., anesthesiology, radiology or cardiology). (**Chapters 5 and 13**)

**Lipid virus:** Viruses consist of a core of nucleic acid surrounded by a coat of protein and, in the case of a lipid virus, surrounded by an envelope of lipoprotein. This type of virus (e.g., HIV) is generally easily inactivated by many types of disinfectants. Also referred to as enveloped or lipophilic (fat-seeking) viruses.

**Lipophilic (fat-seeking):** Substances that are capable of dissolving in, taking up or being attracted to fats or oils but are **not** attracted to water (synonym: hydrophobic).

**Lipophobic (fat-avoiding):** Substances that are not capable of dissolving in, taking up or being attracted to fats but are attracted to water (synonym: hydrophilic).

**Lookback systems:** Process of identifying persons who have received blood transfusions from donors who are subsequently found to have infections with HCV, HIV (and often HBV), and notifying them if appropriate. (**Chapter 18**)

**Low-level disinfectant:** Agent that destroys all vegetative bacteria (except tubercle bacilli), lipid viruses, some nonlipid viruses, and some fungus, but not bacterial spores. (**Appendix F**)

**Mechanical indicator:** Automated devices that monitor the sterilization process (e.g., graphs, gauges, printouts). (**Chapter 11 and Appendix G**)

**Microorganisms:** Causative agents of infection. They include bacteria, viruses, fungi and parasites. For infection prevention purposes, bacteria can be further divided into three categories: vegetative (e.g., staphylococcus), mycobacteria (e.g., tuberculosis) and endospores (e.g., tetanus). Of all the common infectious agents, endospores are the most difficult to kill due to their protective coating. (**Chapter 1**)

**Minimum effective concentration (MEC):** Minimum concentration of a chemical disinfectant needed to achieve the claimed microbicidal (killing) activity as determined by dose-response testing.

**Municipal waste:** General waste for collection by municipalities (e.g., local city or town authorities) generated mainly by households, commercial activities and street sweeping. (**Chapter 8**)

**Muslin:** Moderately woven, 100% cotton cloth. (**Chapter 5**)

**Mycobacteria:** Bacteria with a thick, waxy coat that makes them more resistant to chemical disinfectants than other types of vegetative bacteria.

**Noncritical medical device (or item):** Devices that normally make contact with the patient's intact skin (e.g., blood pressure cuff, oxygen masks). These devices require low- to intermediate-level disinfection, and reuse carries little risk. (**Chapter 1**)

**Nonionic:** Neutral (neither positively or negatively charged) particle or substance.

**Nonlipid viruses:** Viruses consist of a core of nucleic acid surrounded by a coat of protein. Nonlipid viruses are generally viewed as more resilient to inactivation than lipid viruses. Nonlipid viruses are also referred to as nonenveloped or hydrophilic (water-seeking) viruses.

**Nosocomial or hospital-acquired infection (terms used interchangeably):** Infection that is neither present nor incubating at the time the patient came to the hospital. (Nosocomial refers to the association between care and the subsequent onset of infection. It is a time-related criterion that does not imply a cause and effect relationship.) (Chapters 3, 20, 21 and 28)

**Nosocomial diarrhea:** On at least 2 consecutive days having at least three loose or watery stools with the onset more than 72 hours after admission to the hospital (or more days than the incubation period if the agent is known). (Chapter 26)

**Nosocomial infection in newborns:** Infection occurring after birth but excluding those infections known to have been transmitted across the placenta such as congenital syphilis, cytomegalovirus, rubella, varicella (chicken pox) and the protozoan parasite, *Toxoplasmosis gondii*. (Chapter 25)

**Nosocomial infection in obstetrical patients:** Infection that is neither present nor incubating at the time the patient is admitted to the hospital. Most urinary tract infections and endometritis are nosocomial even though the causative organism may be endogenous (i.e., present in the maternal lower genital tract prior to delivery). (Chapter 25)

**Occupational injury or infection:** Injury or infection acquired by healthcare staff while performing their normal duties. (Chapters 13 and 20)

**Operating room:** Area or space where surgical procedures are performed. (Chapter 15)

**Organ/Space SSI:** Any part of the body other than the incised body wall parts that were opened or handled during an operation. (Chapter 23)

**Parts per million (ppm):** Concentrations of trace contaminant gases in the air (or chemicals in a liquid) are commonly measured in parts per million (ppm) by volume. To convert percent concentration to ppm and vice versa, use this formula: ppm = percent (%) x 10,000. (Chapter 26)

**Pasteurization:** Process developed by Louis Pasteur of heating milk, wine, or other liquids to 60° C to 100°C (or the equivalent) for approximately 30 minutes to kill or markedly reduce the number of pathogenic and spoilage organisms other than bacterial spores. (Chapter 12)

**Personal protective equipment (PPE):** Specialized clothing or equipment (e.g., gloves, face mask or plastic apron) worn by an employee for protection against exposure to blood or body fluids or other hazards. Uniforms, pants, and shirts not designed to function as protection against a hazard are not considered to be PPE. (Chapter 5)

**Phlebitis:** Area of swelling, redness, warmth and tenderness of the skin around the site where the intravascular catheter comes out of the skin (the exit site). If phlebitis is associated with other signs of infection, such as fever and pus coming from the exit site, it is classified as a **clinical exit site infection**. (Chapter 23)

**Pocket infection:** Infected fluid isolated from the area around a totally implanted intravascular device, with or without microbiologic evidence of bloodstream infection. (Chapter 24)

**Prions:** Protein-containing infectious agents that require special handling and processing because they are resistant to heat and high-pressure steam sterilization. Prions are the only known infectious agents that do not contain either DNA or RNA. (Chapter 11)

**Protective barrier:** Physical, mechanical or chemical process that helps prevent the spread of infectious microorganisms from person to person (patient, healthcare client or health worker), and from equipment, instruments and environmental surfaces to people. (Chapter 1)

**QUAT:** Abbreviated form of the term quaternary ammonium compound; a surface-active, water-soluble low-level disinfecting substance that has four carbon atoms linked to a nitrogen atom through chemical (covalent) bonds. (**Chapter 16 and Appendices B and F**)

**Recipient transfusion reaction:** Adverse reaction to infusing blood or blood products into a patient (recipient). (**Chapter 18**)

**Recycling:** Physical and/or chemical process that recovers the basic material in a product (e.g., paper from newspapers, aluminum from soft drink cans or plastic from disposable syringes) for reuse as a new or different product. (**Chapter 14**)

**Reprocessing:** Decontaminating, disassembling (if necessary), cleaning, inspecting, testing, packaging, relabeling, and sterilizing or high-level disinfecting single-use devices (SUDs) after they have been used on a patient for their intended purpose. Reprocessing also is performed on SUDs that were removed from the package (or container) but not used on a patient or whose expiration date has passed. (**Chapter 14**)

**Resident flora:** Microorganisms that live in the deeper layers of the skin, as well as within hair follicles, and cannot be completely removed, even by vigorous washing and rinsing with plain soap and clean water. (**Chapter 3**)

**Resterilization:** Repeat application of a terminal process designed to remove or destroy all viable forms of microbial life, including bacterial spores, to an acceptable sterility assurance level. This process is performed on devices whose expiration date has passed or that have been opened and may or may not have been used on a patient. (**Chapters 11 and 14**)

**Safe Zone (also Neutral Zone):** Device or designated area of the sterile field in which sharps are placed, accessed, returned, and retrieved to avoid hand-to-hand transfer of sharps between personnel. (**Chapter 7**)

**Sanitary landfill:** Engineered method of disposing of solid waste on land in a manner that protects the environment (e.g., by spreading the waste in thin layers, compacting it to the smallest practical volume and then covering it with soil at the end of each working day). (**Chapter 8**)

**Sanitizer:** Chemical that reduces the number of bacterial contaminants to safe levels on inanimate objects based on public health requirements (i.e., a chemical that kills 99.999% of the specific test bacteria in 30 seconds under the conditions of the test). (**Chapter 16**)

**Scavenging:** Manual sorting of solid waste at landfills and removal of usable material. (**Chapter 8**)

**Segregation:** Systematic separation of solid waste into designated categories. (**Chapter 8**)

**Semicritical medical device (or item):** Devices that come in contact with mucous membranes or nonintact skin during use (e.g., endoscopes, respiratory equipment). These devices require high-level disinfection if sterilization is not practical, and reuse carries a greater risk for cross-contamination than noncritical items. (**Chapters 1, 9 and 12 and Appendices F and H**)

**Septic pelvic thrombophlebitis:** Thrombosis (blockage) of the deep pelvic veins due to inflammation and blood clots. It is uncommon (approximately 1 in 2000 deliveries). Predisposing factors include cesarean section after long labor (>24 hours), premature rupture of membranes, difficult delivery (forceps or vaginal extraction), anemia and malnutrition. (**Chapter 25**)

**Sewerage:** System for the collection and transport of sewage, including conduits, pipes and pumping stations. (**Chapter 8**)

**Sharps:** Suture needles, scalpel blades, scissors, wire sutures, broken glass or any object that can cause a puncture or cut. (**Chapters 7 and 8 and Appendix E**)

**Soaps and detergents (terms used interchangeably):** Cleaning products (bar, liquid, leaflet or powder) that lower surface tension, thereby helping remove dirt, debris and transient microorganisms from hands. **Plain** soaps require friction (scrubbing) to mechanically remove microorganisms while **antiseptic** (antimicrobial) soaps also kill or inhibit growth of most microorganisms. (**Chapters 3, 13 and 16 and Appendix B**)

**Soiled or contaminated linen:** Linen from multiple sources within the hospital or clinic that has been collected and brought to the laundry for processing. All items, regardless of whether or not they are visibly dirty or have been used in a surgical procedure, must be washed and dried. (**Chapter 13**)

**Sorting:** Process of inspecting and removing foreign, and in some cases dangerous, objects (e.g., sharps or broken glass), from soiled linen before washing. This step is extremely important because soiled linen from the operating room or clinic occasionally contains sharps (e.g., scalpels, sharp-tipped scissors, hypodermic and suture needles and towel clips). (**Chapter 13**)

**Spaulding classification:** Strategy for reprocessing contaminated medical devices. The system classifies medical devices as critical, semicritical, or noncritical based upon the risk from contamination on a device to patient safety. (**Chapters 1 and 15**)

**Spore or endospores (terms used interchangeably):** Relatively water-poor round or elliptical resting cell consisting of condensed cytoplasm and nucleus surrounded by an impervious cell wall or coat. Spores are relatively resistant to disinfectants and sterilants, specifically the bacillus and clostridium species. (**Chapters 1, 9 and 12 and Appendix F**)

**Steam sterilization:** Sterilization process that uses saturated steam under pressure, for a specified exposure time and at a specific temperature, as the sterilizing agent. (**Chapter 11 and Appendix G**)

**Sterilants:** Chemicals used to destroy all forms of microorganisms, including endospores. Most sterilants are also high-level disinfectants when used for a shorter period of time. Sterilants are only used on inanimate objects (e.g., surgical instruments) that are used in semicritical and critical areas (e.g., surgery). Sterilants are not meant to be used for cleaning environmental surfaces. (**Chapters 9 and 11 and Appendix F**)

**Sterile or sterility:** State of being free from all living microorganisms. In practice, usually described as a probability function (e.g., the probability of a microorganism surviving sterilization as being one in a million). (**Chapter 12 and Appendices F and G**)

**Sterilization:** Process that eliminates **all** microorganisms (bacteria, viruses, fungi and parasites) **including** bacterial endospores from inanimate objects by high-pressure steam (autoclave), dry heat (oven), chemical sterilants or radiation. (**Chapters 1, 9 and 11 and Appendix G**)

**Sterilizer:** Apparatus used to sterilize medical instruments, surgical gloves, equipment or supplies by direct exposure to the sterilizing agent (autoclave or dry-heat oven). (**Chapter 11 and Appendix G**)

**Surfactant:** Agent that reduces the surface tension of water or the tension at the interface between water and another liquid; a wetting agent found in many sterilants and disinfectants. (**Chapter 16**)

**Surgical asepsis:** Preparation and maintenance of a reduced (safe) level of microorganisms during an operation by controlling four main sources of infectious organisms: the patient, personnel, equipment and the environment. (**Chapters 6, 7 and 23**)

**Surgical site infections (SSI):** Either an **incisional** or **organ/space** infection occurring within 30 days after an operation or within 1 year if an implant is present. Incisional SSIs are further divided into **superficial incisional** (only involves skin and subcutaneous tissue) and **deep incisional** (involves deeper soft tissue, including fascia and muscle layers). (**Chapter 23**)

**Surgical unit:** Whole surgical area including lockers and dressing rooms, preoperative and recovery rooms, peripheral support areas including storage space for sterile and high-level disinfected items and other consumable supplies, corridors leading to restricted areas, the operating room(s), scrub sink areas and the nursing station. **(Chapters 7 and 15)**

**Surveillance:** Systematic collection of relevant data on patient care, the orderly analysis of the data and the prompt reporting of the data to those who need it. **Active surveillance** consists of collecting information directly from patients or staff, while **passive surveillance** includes examining reports, laboratory information and data from other sources. **(Chapter 28)**

**Time-weighted average (TWA):** Average of all concentrations of a chemical to which a worker has been exposed during a specific sampling time, reported as an average over the sampling time. The permissible exposure limit for ETO is 1 ppm as an 8-hour TWA. Exposures above the ppm limit are permitted if they are compensated for by equal or longer exposures below the limit during the 8-hour workday. **(Appendix F)**

**Transfusion service:** Facility or hospital unit that provides storage, pretransfusion testing and cross-matching, and infusion of blood or blood products to intended patients (recipients). **(Chapter 18)**

**Transient flora:** Microorganisms acquired through contact with patients, other healthcare workers or contaminated surfaces (e.g., examination tables, floors or toilets) during the course of the normal workday. These organisms live in the upper layers of the skin and are partially removed by washing with plain soap and clean water. **(Chapter 3)**

**Tunnel infection:** Tenderness, redness and swelling for more than 2 cm (about 1 inch) along the tract of an intravascular catheter, with or without microbiologic evidence of local or bloodstream infection. **(Chapter 24)**

**Type of detergent:** Commercial cleaning product (liquid or powder) that are composed of a hydrophilic (water-seeking) component and a lipophilic (fat-seeking) component and can be divided into four types: anionic, cationic, amphoteric and nonionic detergents. **(Chapter 16)**

**Unit of blood:** Sterile plastic bag in which a fixed volume of blood is collected in a suitable amount of anticoagulant. **(Chapter 18)**

**Urticarial reaction:** Allergic reaction consisting of itching (pruritis), hives, skin rash and/or similar allergic condition occurring during or following a transfusion of blood or blood products. **(Chapter 18)**

**Vegetative bacteria:** Bacteria that are devoid of spores and usually can be readily inactivated by many types of germicides.

**Visibly soiled hands:** Hands showing visible dirt or are visibly contaminated with blood or body fluids (urine, feces, sputum or vomit). **(Chapter 3)**

**Waste management:** All activities, administrative and operational (including transportation activities), involved in the handling, treatment, conditioning, storage and disposal of waste. **(Chapter 8)**

**Waterless, alcohol-based antiseptic handrub or antiseptic handrub (terms used interchangeably):** Fast acting antiseptic handrubs that do not require use of water to remove transient flora, reduce resident microorganisms and protect the skin. Most contain 60–90% alcohol, an emollient and often an additional antiseptic (e.g., 2–4% chlorhexidine gluconate) that has residual action. **(Chapter 3 and Appendix B)**