

# Glossary

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The following terms are defined or used in this manual. Terms are listed in alphabetical order, followed by their definition.

**ACH:** Air changes per hour. This is a measurement commonly used to express the ventilation rate of a space. ACH is the number of times an amount of air equal to the volume of the space is exhausted or supplied every hour.

**BAMT:** Blood assay test for *Mycobacterium tuberculosis*. This is a general term which refers to recently developed in vitro (*iv*) diagnostic tests that assess for the presence of infection with *M. tuberculosis*, the term includes but is not limited to IGRA's. QuantiFERON®-TB Gold is the IGRA that was approved by the FDA in 2005 and is approved by the CDC as a diagnostic test for TB infection.

**Boosted Reaction:** A positive reaction to a tuberculin skin test due to a boosted immune response from a skin test given up to a year earlier. Occurs in people who were infected a long time ago and whose ability to react to tuberculin has lessened.

**CFM:** Cubic feet per minute. This is a measurement commonly used to express an airflow quantity. Airflow hoods usually provide readouts in CFM.

**Diffuser:** Mechanical device, installed on a ceiling, that supplies air to a room.

**Droplet nuclei:** Microscopic particles (1-5 microns in size) that can become airborne when a person coughs, sneezes, shouts, sings, breathes, or talks. Droplet nuclei produced by a person who has TB disease of the lungs or larynx in an infectious state can remain airborne for a long time and can spread TB to others.

**Exhaust air:** Air that is removed from a building by a fan system, as opposed to air that is removed from a space and then recirculated or returned.

**Fit Check:** Should be conducted each time a respirator is put on to determine if it is properly sealed to the face.

**Fit Test:** Evaluation of how a respirator fits conducted by trained personnel. Includes the use of scented solution and the determination of whether the employee can detect the odor. Should be conducted prior to the use of a respirator and annually thereafter.

**Grille:** Mechanical device that usually removes exhaust or return air from a room. Grilles are usually on the ceiling but can be on the wall or floor. If a grille is on a ceiling or floor or low on a wall, it is usually for exhaust or return air. However, if a grille is high on a wall, it can be exhaust, return, or supply.

**HEPA filter:** High-Efficiency Particulate Air filter. This is a filter that is capable of removing 99.97% of particles 0.3 micron in diameter or greater. HEPA filters remove all particles in the size range of TB droplet nuclei.

**HEPA filter unit:** Self-contained device consisting mainly of a HEPA filter, a prefilter, and a fan. These units can be used to provide clean air to supplement a building ventilation system.

**HIV:** Human Immunodeficiency Virus. This is the virus that causes AIDS.

**IGRA:** Interferon gamma release assay. This is a type of blood test that detects cell-mediated immune response to this cytokine. In the U.S., QuantiFERON®-TB Gold is a currently available IGRA.

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**Index Patient:** The first case who comes to attention as an indicator of a potential public health problem.

**In-duct UVGI:** The installation of ultraviolet germicidal irradiation (UVGI) lamps in a return or exhaust air duct to kill any *M. tuberculosis* that may be in the air stream.

**MDR TB:** Multidrug-resistant TB. TB that is resistant to Isoniazid and Rifampin. More difficult to treat than drug-susceptible TB.

***Mycobacterium tuberculosis (M. tuberculosis):*** The germ that causes TB.

**Nosocomial:** Infections which are a result of treatment in a hospital or hospital-like setting, but secondary to the patient's original condition.

**OSHA 300 log:** Used by employers to record all work-related injuries and illnesses.

**PPD:** Purified Protein Derivative. It is the substance used in the Mantoux TB skin test, which is the accepted standard method of TB skin testing. Commonly, TB skin tests are referred to as TSTs.

**Recirculation:** Ventilation system in which supply air includes air that has been previously removed from an interior space.

**Return air:** Air that is removed from a space by a mechanical system, but not all of it is discharged directly outdoors. This air is usually returned to the mechanical system, where a portion of it is exhausted. The remainder is diluted with some outdoor air, filtered, conditioned (or heated), and then distributed.

**Short-circuiting:** Occurs when clean air is removed before it has mixed well with room air, such as when the exhaust is located right next to the supply of incoming air.

**Stagnation:** Occurs when part of the room does not benefit from the fresh supply air or in a room that does not have any ventilation.

**Supply air:** Air that is introduced into a space by a mechanical system.

**TB control measures:** Steps taken to reduce the risk of TB transmission. TB control measures are divided into a hierarchy: (1) administrative (work practice) controls, (2) environmental controls, and (3) respiratory protection controls.

**TST:** Tuberculin Skin Test. Refers to administration of the Mantoux TB skin test and replaces the term 'PPD.'

**Upper-air UVGI:** Refers to the use of UV lamps directly in the upper part of a room.

**UVGI:** Ultraviolet Germicidal Irradiation. The use of ultraviolet radiation to kill or inactivate microorganisms.

**UVGI lamps:** Lamps that kill or inactivate microorganisms by emitting ultraviolet germicidal irradiation, predominantly at a wavelength of 254 nanometers. UVGI lamps are used in ceiling or wall fixtures for upper-air UVGI and inside air ducts or air cleaners for in-duct UVGI.

**Ventilation:** Movement of air in a building and replacement of air with air from outside.

**Ventilation rate:** Quantity of air that is removed from or supplied to a room. It is usually expressed in air changes per hour (ACH).

**XDR TB:** Extensively Drug-resistant TB. MDR TB that is also resistant to fluoroquinolones and at least one of three injectable drugs (i.e., amikacin, kanamycin, or capreomycin).