

## **Glossary**

**acid-fast bacilli (AFB)** – mycobacteria that when stained, retain color even after they have been washed in an acid solution; may be detected under a microscope in a stained smear

**active listening** – the process of hearing what is said and paying attention to how it is said so that further dialogue can be adjusted to elicit the needed responses. Active listening utilizes various verbal and nonverbal techniques.

**alveoli** – the small air sacs of the lung that are at the end of the airway

**bacteriologic examination** – tests done in a mycobacteriology laboratory to diagnose TB disease; includes examining a specimen under a microscope, culturing the specimen, and testing for drug susceptibility

**BCG** – bacille Calmette-Guérin (BCG), a vaccine for TB disease that is used in many countries but rarely used in the United States; may cause a false-positive reaction to the tuberculin skin test (TST), but does not affect interferon-gamma release assay (IGRA) results

**case** – a person, sometimes referred to as an index case or index patient, with suspected or confirmed TB disease

**case management** – a system in which a specific health department employee is assigned primary responsibility for the patient, systematic regular review of patient progress is conducted, and plans are made to address any barriers to adherence

**case referral** – case agrees to inform their contact(s) about exposure and the importance of speaking with the health care worker regarding the need for a medical evaluation

**checking questions** – questions that are used to assess the a person’s understanding of information

**clinical evaluation** – an evaluation done to find out whether a patient has signs and symptoms of TB disease or is responding to treatment; also done to check for adverse reaction to TB medications

**closed-ended question** – a question that generates short, finite answers (i.e., yes or no) and does not encourage discussion

**communication** – the exchange of information by symbols, words, signs, or actions. It is an interactive process, which involves feedback. Communication revolves around asking questions, listening actively, understanding, and demonstrating a caring attitude while helping to solve problems.

**concentric circle approach** – a secondary tool to help further prioritize contacts based on exposure (duration, frequency, and distance). The primary method of prioritization should be based on contact’s risk for developing TB disease.

**confidentiality** – the protection of information revealed during patient-health care worker encounters, including all written or electronic records of these encounters

**congregate setting** – a congregate setting is a setting in which a group of usually unrelated persons reside, meet, or gather either for a limited or extended period of time in close physical proximity. Examples include prisons, nursing homes, and homeless shelters.

**consent** – acceptance or approval of what is planned or done; it involves voluntary agreement to an action, whether it is a treatment option or a diagnostic test; the patient-health care worker relationship is founded on the patient’s consent to the care being provided

**contact** – a person who has shared the same air space in a household or other enclosed environment for a prolonged period of time (days or weeks, not minutes or hours) with a person with suspected or confirmed TB disease

**contact investigation** – a procedure for identifying people exposed to someone with infectious TB, evaluating them for latent TB infection (LTBI) and TB disease, and providing appropriate treatment for LTBI or TB disease

**culture (1)** – to grow organisms on media (substances containing nutrients) so that they or the product of this process can be identified; a positive culture for *M. tuberculosis* contains tubercle bacilli, whereas a negative culture contains no detectable tubercle bacilli

**culture (2)** - the learned and shared behavior of a community of interacting human beings

**cultural competency** - the sensitivity to, and awareness of, various factors that shape a person’s identity

**diagnostic evaluation** – an evaluation used to diagnose TB disease; includes a medical history, a chest x-ray, the collection of specimens for bacteriologic examination, and possibly a tuberculin skin test (TST) or an interferon-gamma release assay (IGRA)

**directly observed therapy (DOT)** – a strategy devised to help patients adhere to treatment; a designated person watches the TB patient swallow each dose of the prescribed drugs

**droplet nuclei** – very small water droplets (1 to 5 microns in diameter) containing *M. tuberculosis* that may be expelled when a person who has infectious TB coughs, sneezes, speaks, or sings; the droplets can remain suspended in the air for several hours, depending on the environment

**drug-resistant TB** –TB caused by organisms that are able to grow in the presence of a particular drug

**exposure to TB** – time spent with or near someone who has infectious TB disease

**extensively drug-resistant TB (XDR TB)** – a rare type of multidrug-resistant (MDR TB) that is resistant to isoniazid and rifampin, plus resistant to any fluoroquinolone and at least one of three injectable second-line drugs (i.e., amikacin, kanamycin, or capreomycin)

**extrapulmonary TB** – TB disease that occurs in places other than the lungs, such as the lymph nodes, the pleura, the brain, the kidneys, or the bones; most types of extrapulmonary TB (except laryngeal) are not infectious

**field visit** – visiting a case’s residence, congregate settings, and other places the case spent time while infectious

**health beliefs** – one’s attitude or understanding of the cause or cure of an illness or condition

**health department referral** – health care worker assumes full responsibility for informing the contact about exposure and the need for a medical evaluation

**HIV** – human immunodeficiency virus, the virus that causes AIDS

**immune system** – cells and tissues in the body that protect the body from foreign substances

**immunosuppressive therapy** – therapy that weakens the immune system

**index patient** – a person who is the initial case reported to the health department with suspected or confirmed TB disease

**infection control procedures** – measures to prevent the spread of TB, includes administrative, environmental (e.g., ventilation), and personal protection (e.g., respirators, masks) controls.

**infectious** – capable of spreading infection; a person who has infectious TB disease expels droplets containing *M. tuberculosis* into the air when he or she coughs, sneezes, speaks, or sings

**infectious period** – the time frame during which a person with TB disease is capable of spreading *M. tuberculosis*

**interferon-gamma release assay (IGRA)** – a type of blood test that measures a person’s immune reactivity to *M. tuberculosis*. In the U.S., QuantiFERON®-TB Gold In-Tube and the T-SPOT®.TB test (T-Spot) are currently available IGRAs

**interpreter** – an individual who orally conveys the exact communication for another individual who has little or no proficiency in the language in which the interviewer is speaking. Ideally, an interpreter should be professionally trained or certified.

**latent TB infection (LTBI)** – refers to the condition when a person is infected with tubercle bacilli, but has not developed TB disease. Persons with LTBI carry the organism that causes TB, but do not have TB disease symptoms and they cannot spread TB germs to others.

**LTBI treatment** – medication that is given to people who have TB infection to prevent them from developing TB disease

**Mantoux tuberculin skin test (TST)** – a method of testing for TB infection; a needle and syringe are used to inject 0.1 ml of 5 tuberculin units of liquid tuberculin between the layers of the skin (intradermally), usually on the forearm; the reaction to this test, usually a small swollen area (induration), is measured 48 to 72 hours after the injection and is interpreted as positive or negative depending on the size of the reaction and the patient’s risk factors for TB

**multidrug-resistant TB (MDR TB)** – TB that is resistant to at least the drugs isoniazid and rifampin; MDR TB is more difficult to treat than drug-susceptible TB

**mycobacterium** – a kind of bacterium; mycobacteria can cause a variety of diseases

***Mycobacterium tuberculosis*** – the organism that causes TB in humans and is sometimes called the tubercle bacillus; belongs to a group of bacteria called mycobacteria

**nontuberculous mycobacteria** – mycobacteria that do not cause TB disease and are not usually spread from person to person; one example is *M. avium* complex

**nonverbal communication** – conveying messages through body language, such as eye contact, facial expression, posture, and gestures

**nucleic acid amplification (NAA)** – a technique that amplifies (copies) DNA and RNA segments, in order to directly identify microorganisms in sputum specimens

**open-ended question** – a question that cannot be answered with a simple "yes" or "no." Open-ended questions are designed to elicit the patient's knowledge, feelings and beliefs, by beginning with words such as "What," "Why," "Who," "How," and "When," that demand an explanation. Such questions are used to explore complex issues that do not have a finite or predetermined set of responses.

**paraphrasing** – the rewording of a patient's response in order to verify information and display that the interviewer is effectively listening

**patient education** – the process of providing information to a patient on his or her medical condition, treatment regimen, or processes in which he or she becomes involved with healthcare staff (e.g., contact investigation). Information is based on patient's level of understanding, existing knowledge, and feedback (e.g., body language or questions) he or she provides.

**period of infectiousness** – time period during which a person with TB disease is capable of transmitting *M. tuberculosis*; usually estimated by determining the date of onset of the patient's symptoms (especially coughing)

**personal respirators** – special device designed to protect users from inhaling droplet nuclei; used in health care facilities and other settings where TB may be spread

**probing question** – a question or statement that is used to gain more information. Can be either open-ended or closed-ended

**proxy** – a person who is interviewed in the place of the case; proxies can be family members or close friends. A proxy is used if the case is deceased, physically or mentally hindered, very young, or unable to be located.

**pulmonary TB** – TB disease that occurs in the lungs typically causing a cough and an abnormal chest x-ray; pulmonary TB is usually infectious if untreated. Most TB cases reported in the U.S. are pulmonary cases.

**reflection** – an interviewer's rewording of a patient's reactions through acknowledging a patient's feeling(s) and its cause

**re-interview** – a second interview within 2 weeks of the initial interview to determine additional information which the case may not have shared for various reasons and to confirm previously obtained information

**resistant** – an organism’s ability to grow despite the presence of a particular drug

**smear** – a specimen that has been smeared onto a glass slide, stained, washed in an acid solution, and then placed under the microscope for examination; used to detect acid-fast bacilli in a specimen

**social network** – a group of people interconnected by common behavior/activities

**social network analysis** – looking at routinely collected interview data to find common links amongst both cases and infected persons; these links may be persons or places

**source case investigation** – a method of identifying source cases of TB disease. Usually done if a young child is the index case with TB

**source case** – a person with TB disease who is responsible for transmitting *M. tuberculosis* to another person or persons

**sputum** – phlegm from deep in the lungs, collected in a sterile container for processing and examination

**summarizing** – the rephrasing of a series of statements that have occurred through a dialogue in order to verify information and demonstrate that the interviewer is listening carefully

**surgical mask** – device worn over the nose and mouth of a person with suspected or confirmed infectious TB disease to prevent infectious droplet nuclei from being spread into the air

**susceptible** – an organism’s ability to be killed by a particular drug

**TB interview** – an interview of a TB case by a health department staff person to identify priority contacts, build trust with the case, and provide TB education. Interactions with a case involve the basic principles of effective communication and patient education.

**transmission** – the spread of an organism, such as *M. tuberculosis*, from one person to another; probability of transmission depends on the contagiousness of the patient, the type of environment, the length of exposure, and the virulence or strength of the organism

**tubercle bacilli** – another name for the *Mycobacterium tuberculosis* organisms that cause TB disease

**tuberculin skin test (TST)** – a test used to detect TB infection (see **Mantoux tuberculin skin test** in glossary)

**tuberculous mycobacteria** – mycobacteria that can cause TB disease or other diseases very similar to TB; the tuberculous mycobacteria include *M. tuberculosis*, *M. bovis*, *M. africanum*, *M. canetti*, and *M. microti*

**undocumented** – the term used to describe a person who is not in the country on a valid visa

**verbal communication** – how something is said conveys meaning in addition to what is actually said. Verbal communication includes sound, words, and language

**window period** – the time between when a person becomes infected with TB and the time infection can be reliably detected by a tuberculin skin test (TST) or (IGRA)