Tuberculosis Latent Infection Surveillance System (TBLISS) Instruction Manual 2023

Version 6/2023

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Administrative

1. DATE REPORTED

Primary Purpose: The Date Reported is used to determine when the health department was first notified that a person may have LTBI.

Date Format	Description	Comment
Month, day, and year (e.g., 01/17/2020)	Date that a health department first **thought** that the patient may have LTBI. ***or*** Date the health department received notification (verbal or written) from a health care provider that a patient might have LTBI.	If the month or day is unknown, enter your best estimate or do the following: • If the day is unknown, enter the first day of the known month as the date reported (e.g., if a case was reported in February 2021, but the exact date is unknown, enter 02/01/2021 as date reported). • If the month is unknown, report the month corresponding to the first known documentation of LTBI for this person's case available to the health department.

Note: This date should correspond to the day that the reporting jurisdiction first heard about the case. If this case has already been reported by a different jurisdiction, please be sure to provide the other jurisdiction's state case number in TBLISS item 5 (Case Already Counted by Another Reporting Area).

2. DATE COUNTED

Primary Purpose: Used to determine the approximate date that the reporting area reviewed the TBLISS form data and determined that the case meets LTBI surveillance case definition for *reporting* to the National Tuberculosis Latent Infection Surveillance System.

Item	Description	Comment
MMWR* Week:	The *Morbidity and Mortality Weekly Report (MMWR)* week is the week of the epidemiologic year to when the state health department verified that the case meets the case definition for LTBI.	The *MMWR* week reported should represent the week when the reporting area verified that the case meets the LTBI surveillance case definition. This is the proxy for the LTBI case count date. *MMWR* week is used to support public health reporting in the annual *Summary of Notifiable Diseases, United States*
***MMWR* Year:**	*MMWR* year is the epidemiologic year to which a Nationally Notifiable Diseases Surveillance System case report is assigned.	The *MMWR* year reported should represent the year when the reporting area verified that the case meets the LTBI surveillance case definition. This is the proxy for the LTBI case count date. *MMWR* year is used to determine the year in which the case is included for the purposes of determining LTBI case counts and incidence rates.

*For more info on *MMWR* weeks see link below:
https://ndc.services.cdc.gov/wp-content/uploads/MMWR_Week_overview.pdf

Note: If this case is counted by a different jurisdiction, the noncounting jurisdiction should still complete TBLISS item 2 (**Date Counted**). However, this date should correspond to the week that the noncounting jurisdiction began to follow or manage the case for public health purposes (e.g., administer LTBI medications). In these situations, please be sure to provide the other jurisdiction's state case number in TBLISS item 5 (**Case Already Counted by Another Reporting Area**).

3. STATE CASE NUMBER

Primary Purpose: Used to uniquely identify case reports to facilitate communication between reporting areas and CDC.

Item	Description	Comment
Year	Year Reported is the year when the case was reported (e.g., 2020).	This year should correspond to the Report Date, which is not necessarily the same as the *MMWR* Year.
State	State Code indicates the two-letter postal code of the state reporting this case, e.g., GA for Georgia (see **Appendix C**, Reporting Area Codes).	The term *state* is used to refer to the reporting area, though not all reporting jurisdictions are states (e.g., New York City).
Number	Nine-character string unique within the reporting area.	This string can contain letters or numbers and is assigned by the reporting area. It is recommended that jurisdictions include "LTBI" in the 9-character string.

Comment: Case Numbers

Year + State + Number = State Case Number

A **State Case Number** may not be assigned to more than one case during a calendar year.

Note: The **State Case Number** is the official identification number for the case. If additional communication about a record is required between CDC and a reporting area, this number is used to identify the record.

Case numbers must not include personal identifiers. To maintain patient confidentiality, do not use names (either patient or provider), initials, Social Security numbers, addresses, telephone numbers, or other information that could directly identify a patient as part of the **State Case Number. State Case Numbers** are transmitted to CDC and therefore must not include personal identifying information.

4. LOCAL CASE NUMBER

Primary Purpose: Used to uniquely identify case reports to facilitate communication between local health departments, reporting areas, and CDC.

Item	Description	Comment
Year	Year Reported is the year when the case was reported (e.g., 2020).	This year should correspond to the Report Date, which is not necessarily the same as the *MMWR* Year.
State	State Code indicates the 2-letter postal code of the state reporting this case, e.g., GA for Georgia (see **Appendix C**, Reporting Area Codes).	The term *state* is used to refer to the reporting area, though not all reporting jurisdictions are states (e.g., New York City).
Number	Nine-character string unique within the local program's registry.	This string can contain letters or numbers and is assigned by the local program.

Note: Local Case Number is the same as **City/County Case Number**. A **Local Case Number** may not be assigned to more than one case during a calendar year. A single case may be assigned identical **City/County Case** and **State Case Numbers**.

5. CASE ALREADY COUNTED BY ANOTHER REPORTING AREA?

Primary Purpose: LTBI cases may be reported by multiple reporting areas in the event that the patient moved between reporting areas while under care for LTBI; however, to avoid double counting the case, it is important that only one reporting area officially "count" the case. This question helps to determine whether the case report should be considered "countable" for incidence calculations.

Option (select one)	Description	Comment
Yes, another U.S. reporting area (Specify state case number from other area.)	The case has already been counted by another U.S. reporting area such as another state (e.g., transfer). Under **"Specify"**, enter the state case number assigned to the case by the other reporting area.	Reporting jurisdictions are encouraged to work collaboratively to resolve disagreements about which reporting area should count a case. If necessary, CDC will arbitrate this determination. See Note (below) for definition of U.S. reporting areas.

Option (select one)	Description	Comment
Yes, another country (Specify country)	LTBI case counted by another country that is not a U.S. reporting area. Under **"Specify"**, enter the country where LTBI treatment was initiated.	It may be difficult to verify whether a case has been counted in another country. If confirmation that the case was counted cannot be obtained, consider the case to have been counted in the other country if the diagnostic evaluation was completed before arriving in the United States.
No	Case was **not** counted by another reporting area.	None.

Note: U.S. reporting areas include the 50 United States, the District of Columbia, New York City (separate from New York State), five U.S. territories (i.e., Puerto Rico, American Samoa, Guam, Commonwealth of the Northern Mariana Islands, U.S. Virgin Islands), and three freely associated states (i.e., Federated States of Micronesia, Republic of the Marshall Islands, and Republic of Palau). These freely associated states are independent countries but are considered U.S. reporting areas for LTBI surveillance purposes.

Demographics and Initial Evaluation

6. REPORTING ADDRESS

Primary Purpose: To document the approximate location of the patient's residence for the purpose of geographic analyses.

The **reporting address** is intended to represent the location of the patient's "usual residence" as described in the Council of State and Territorial Epidemiologists (CSTE) Position Statement 11-SI-04 ("Revised Guidelines for Determining Residency for Disease Notification Purposes") and the previous Position Statement 03-ID-10. In general, "usual residence" is defined as "…the place where the person lives and sleeps most of the time, which is not necessarily the same as the person's voting residence, legal residence, or the place where they became infected with a reportable disease." In most cases, determining a patient's usual residence is unambiguous; however, there are various scenarios where the determination might not be as straightforward. The table of scenarios below presents the more common scenarios for which special guidelines for determining usual residence have been established. Additional guidance for reporting, verifying, and counting cases can be found in **Appendix B**.

The CSTE Position Statement also established the concept of a "reference point" in time at which the patient's usual residence would be established for surveillance reporting purposes. For the purposes of the TBLISS, for consistency with historical practice, the reference point is the *date when the LTBI diagnostic evaluation was initiated*.

In cases where determining usual residence is not straightforward and where specific guidelines have not been established, reporting areas should confer with DTBE to determine the most appropriate reporting address to report to TBLISS.

Census Tract information is available at the U.S. Census Geocoder web site (https://geocoding.geo.census.gov/) for the 50 U.S. States, District of Columbia, and the five U.S. territories. Here you can find the 11-digit GEOID you will need to complete item 6e. Use the "Find Geographies" option on the U.S. Census Geocoder web site. You will need either the street address or the GIS coordinates of the residence in order to find the census tract. GEOID is not available for the three Freely Associated States, and these reporting areas can leave this field blank.

For **Within City Limits** select the best option.

Option (select one)	Description	Comment
Yes	Patient lives within the city limits.	None.
No	Patient does **not** live with the city limits.	None.
Unknown	It is unknown whether the patient lives within the city limits.	None.

Guidelines to Determining Reporting Address

Patient Scenarios	How to Count	Reporting Address
Persons temporarily away from their usual residence (e.g., on vacation or a business trip).	Count in the reporting area for the patient's usual residence.	Enter city, county, ZIP Code, and census tract of the patient's usual residence.
Persons without housing (e.g., persons experiencing homelessness or without a fixed residence)	Count in the reporting area where the LTBI diagnostic evaluation was initiated.	Enter city, county, ZIP Code, and census tract of location where the patient was staying when the diagnostic evaluation was initiated.

Patient Scenarios	How to Count	Reporting Address
Persons with multiple residences	Count in the reporting area where the patient lives most of the time, based on the length of the typical cycle between residences, subject to the following specific guidelines: 1. Commuter workers living away part of the week while working (on a weekly cycle) should be reported by the jurisdiction where they stay most of the week. 2. People who live in one state most of the year but who regularly spend part of the year in another state (e.g., snowbirds) can be said to have an annual cycle and should be reported by the jurisdiction of the residence where they live most of the year. 3. Children in joint custody should be reported by the jurisdiction of the residence where they live most of the time. If the time is equally divided, they are reported by the jurisdiction where they were staying at the time the LTBI diagnostic evaluation was initiated. 4. People who move between residences without any regular cycle should be reported by the jurisdiction of the residence where they live most of the time. If their time is equally divided, report based on where they were staying at the time the LTBI diagnostic evaluation was initiated.	Enter city, county, ZIP Code, and census tract of the location where the patient stays in the reporting area that is counting the case.
Students	1. College or boarding school students on a typical yearly academic cycle should be counted by the reporting area where they live most of the year. 2. Intermittent or part-time students without a regular cycle for moving between parental and school residences should be counted by the reporting area where they were living at the time that diagnostic evaluation was initiated.	Enter city, county, ZIP Code, and census tract of the location where the patient stays in the reporting area that is counting the case.

Patient Scenarios	How to Count	Reporting Address
Foster children and wards of the state	Count in the reporting area where the patient was living when LTBI diagnostic evaluation was initiated.	Enter city, county, and ZIP Code, and census tract where the patient was living when diagnostic evaluation was initiated.
Uniformed service or merchant marine personnel	1. Uniformed service personnel residing in the United States should be counted by the reporting area for their usual residence, either on- or off-base (this is not necessarily the jurisdiction where the military member is registered to vote, pays taxes, etc.). 2. Crews of uniformed service vessels with a U.S. homeport should be counted by the reporting area for their usual onshore residence if they report one (the place where they live and sleep most of the time when they are onshore); otherwise, they should be counted by the reporting area for their vessel's homeport. 3. Crews of U.S. flag merchant vessels engaged in inland waterway transportation should be counted by the reporting area for their usual onshore residence (the place where they live and sleep most of the time when they are onshore). 4. Crews of U.S. flag merchant vessels docked in a U.S. port or sailing from one U.S. port to another U.S. port should be counted at their usual onshore residence if they report one (the place where they live and sleep most of the time when they are onshore). If they have no onshore residence, count in the reporting area where the diagnostic evaluation was initiated.	Enter city, county, ZIP Code, and census tract of the location where the patient stays in the reporting area that is counting the case.

Patient Scenarios	How to Count	Reporting Address
Institutionalized persons	1. Patients in general hospitals or wards at the time of LTBI diagnosis should be counted by reporting area for their usual residence (the place where they live and sleep most of the time when they are not hospitalized). Newborn babies who have not yet been discharged following delivery should be reported by the mother's usual residence. 2. In general, persons who are institutionalized for indefinite or long-term stays should be counted by the reporting area for the facility where they are staying at the time the diagnostic evaluation was initiated. Examples of such facilities include: a. chronic or long-term disease hospitals; hospices; nursing or convalescent homes; b. inpatient drug/alcohol recovery facilities; homes, schools, hospitals, or wards for disabled persons c. federal and state prisons, jails, detention centers, and halfway houses; d. orphanages or residential care facilities for children 3. Staff members living in hospitals, nursing homes, prisons, or other institutions should be counted by the reporting area for their usual residence (the place where they live and sleep most of the time); otherwise by the reporting area where the institution is located.	Enter city, county, ZIP Code, and census tract of the location where the patient stays in the reporting area that is counting the case.

Patient Scenarios	How to Count	Reporting Address
Non-U.S. citizens (including, but not limited to, Immigrants, Refugees, Foreign Visitors (e.g., students, commercial representatives, and diplomatic personnel), and Border Crossers	1. Noncitizens who have established a household or are part of an established household in the United States, including those in the United States for work or study, should be counted by the reporting area for their usual residence in the United States. 2. Noncitizens who live on diplomatic compounds (e.g., embassies, consulates) should be counted by the reporting area where the diplomatic compound is located.	Enter city, county, ZIP Code, and census tract of the location where the patient stays in the reporting area that is counting the case. Note: Additional information about reporting cases among non-U.S. citizens can be found in **Appendix B**.

7. DATE OF BIRTH

Primary Purpose: To calculate the patient's age at the time of relevant events in the patient's lifetime.

Date Format	Description	Comment
Month, day, and year (e.g., 04/26/1968)	Patient's complete date of birth should be entered (i.e., month, day, *and* year).	If the patient is uncertain about his/her exact date of birth, provide as much specificity as possible. If the month or day is unknown, enter your best estimate or do the following: • If the day is unknown, enter the first day of the known month as the date of birth (e.g., if a patient was born in February 1972, but does not know the exact date, enter 02/01/1972 as the date of birth). • If the month and day are unknown, enter the first day of the known year as the date of birth (e.g., if a patient was born in 1972, but does not know the month or day, enter 01/01/1972 as the date of birth).

8. SEX AT BIRTH

Primary Purpose: To establish the biological sex recorded for the patient at birth for evaluation of epidemiologic trends.

Option (*select one*)	Description
Male	The biological sex recorded for the patient at birth was male.
Female	The biological sex recorded for the patient at birth was female.
Unknown	The biological sex recorded for the patient at birth is **not** known.

If **"Female,"** enter the following:

Pregnant at Time Diagnostic Evaluation was initiated?

Option (*select one*)	Description
Yes	Patient was pregnant when diagnostic evaluation was performed or initiated.
No	Patient was **not** pregnant when diagnostic evaluation was performed or initiated.
Unknown	It is **not** known if patient was pregnant when LTBI diagnostic evaluation was performed or initiated.

9. ETHNICITY

Primary Purpose: To establish the patient's ethnicity for evaluation of epidemiologic trends associated with ethnicity

Option (*select one*)	Description
Hispanic or Latino	Patient considers himself or herself Cuban, Mexican, Puerto Rican, South or Central American, or of other Latin American culture or origin, regardless of race.
Not Hispanic or Latino	Patient does **not** consider himself or herself Hispanic or Latino.
Unknown	Patient's ethnicity is **not** reported or unknown.

Note: Hispanic or Latino
Some patients prefer the term "Spanish origin" to Hispanic or Latino

Self-identity or self-reporting
The response to this item should be based on the patient's self-identity or self-reporting. It should not be based on physical appearance or surname. For example, if a woman who is not Hispanic marries a Hispanic man and takes his surname, she may self-report as **"Not Hispanic or Latino."** Similarly, people from the Philippines or Spain may have names that appear to be Hispanic, but self-report as **"Not Hispanic or Latino."**

"Other" response option
The NEDSS/HL-7 case notification message format allows reporting areas to select "other" as a response for this question. For the purposes of national LTBI surveillance, "other" is not an acceptable response and should not be used.

10. RACE

Primary Purpose: To establish the patient's race(s) for evaluation of epidemiologic trends associated with race.

Option *(select all that apply)*	Description
American Indian or Alaska Native	Patient has origins in **any** of the original peoples of North and South America (including Central America).
Asian	Patient has origins in **any** of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent (e.g., including Bangladesh, Cambodia, China, India, Indonesia, Japan, Korea, Malaysia, Nepal, Pakistan, the Philippine Islands, Thailand, and Vietnam).
Black or African American	Patient has origins in **any** of the black racial groups of Africa.
Native Hawaiian or Other Pacific Islander (NHOPI)	Patient has origins in **any** of the original peoples of Hawaii, Guam, American Samoa, or Other Pacific Islands, except islands considered to be part of Asia (see table on next page).
White	Patient has origins in **any** of the original peoples of Europe, the Middle East, or North Africa.
Other Race	Patient identifies to another race **not** listed above.
Unknown	Patient's Race is **not** reported or unknown.

Note: Self-identity or self-reporting
The response to this item should be based on the patient's self-identity or self-reporting. Therefore, patients should be offered the option of selecting more than one racial designation. Non-Hispanic patients who report more than one race will be reported as "multiple race" in national surveillance data summaries.

For "**Asian"** or **"Native Hawaiian or Other Pacific Islander"**, use the detailed race categories on the next page to complete **"Specify"**. The chart below indicates who is considered Asian and who is considered Native Hawaiian or Other Pacific Islander.

National Electronic Disease Surveillance System (NEDSS) Person Race Categories for Asian and for Native Hawaiian or Other Pacific Islander

Asian

- Asian Indian
- Bangladeshi
- Bhutanese
- Burmese
- Cambodian
- Chinese
- Filipino
- Hmong
- Indonesian
- Iwo Jiman
- Japanese
- Korean
- Laotian
- Malaysian
- Maldivian
- Nepalese
- Okinawan
- Pakistani
- Singaporean
- Sri Lankan
- Taiwanese
- Thai
- Vietnamese

Native Hawaiian or Other Pacific Islander

- Carolinian
- Chamorro
- Chuukese
- Fijian
- Guamanian
- Kiribati
- Kosraean
- Mariana Islander
- Marshallese
- Melanesian
- Micronesian
- Native Hawaiian
- New Hebrides
- Other Pacific Islander
- Palauan
- Papua New Guinean
- Pohnpeian
- Polynesian
- Saipanese
- Samoan
- Solomon Islander
- Tahitian
- Tokelauan
- Tongan
- Yapese

11. NATIVITY

Primary Purpose: To establish the patient's country of birth and citizenship status at birth for evaluation of epidemiologic trends.

A. Country of Birth

Item	Description	Comment
Specify (e.g., United States, Puerto Rico, Republic of Marshall Islands, Mexico, China)	Enter the name of the country in which the person was born. **Do not enter "United States" unless the person was born in one of the 50 U.S. states or the District of Columbia.** Otherwise, specify the name of the U.S. territory, freely associated state, or other non-U.S. reporting area/country.	Provide the actual country (or U.S. territory) of birth for all patients regardless of whether they were U.S. citizens at birth.
Date of First U.S. Arrival (If NOT born in United States)	Date (mm/dd/yyyy) patient **first arrived in one of the 50 U.S. states or the District of Columbia**, if the patient was born elsewhere. This date should be provided regardless of whether the patient was already a U.S. citizen at the time of first arrival in the United States. Partial dates are acceptable.	If the month or day is unknown, enter your best estimate or do the following: • If the day is unknown, enter the first day of the known month as the date of first U.S. arrival (e.g., if a patient arrived in the United States in February 1972, but does not know the exact date, enter 02/01/1972 as the date of first arrival). • If the month and day are unknown, enter the first day of the known year as the date of first U.S. arrival (e.g., if a patient arrived in the United States in 1972, but does not know the month or day, enter 01/01/1972 as the date of first arrival).

B. Eligible for U.S. Citizenship at Birth (regardless of country of birth)?

Option (*select one*)	Description	Comment
Yes	Eligible for U.S. citizenship *at birth*.	In certain circumstances, a person might be eligible for U.S. citizenship at birth, but the parents must take additional steps to acquire citizenship for their child. More information is available at: https://travel.state.gov/content/travel/en/legal/travel-legal-considerations/us-citizenship/Acquisition-US-Citizenship-Child-Born-Abroad.html
No	**Not** eligible for U.S. citizenship *at birth*.	Answer **"No"** if the patient was not eligible for U.S. citizenship at birth, regardless of the patient's current citizenship status.
Unknown	Not known if patient was eligible for U.S. citizenship *at birth.*	Answer **"Unknown"** if it is not known whether the person was eligible for U.S. citizenship at birth.

Note: Country of birth. In order to distinguish persons who were born in another country (regardless of whether they had U.S. citizenship by birthright) from those who were born in the United States, this question simply asks to record the actual country of birth.

Eligible for U.S. citizenship at birth. This information is requested because the U.S. Census Bureau bases its "native-born" and "foreign-born" population estimates on this characteristic.

As CDC uses the U.S. Census Bureau population estimates as denominator data in calculating incidence rates, **this information is needed to correctly categorize people with LTBI as U.S.-born or non-U.S.–born.**

C. Countries of Birth for Primary Guardian(s) (pediatric [<15 years old] patients only)

Please specify the country of birth for up to two primary guardians

Note: Country of birth. In order to distinguish persons who were born in another country (whether they had U.S. citizenship by birthright) from those who were born in the United States, this question simply asks to record the actual country of birth.

12. COUNTRY OF USUAL RESIDENCE

Primary Purpose: To determine whether a patient was a resident of the United States at the time of diagnosis.

A. Country of Usual Residence

Description	Comment
Country where patient lives or sleeps most of the time.	**Do not enter "United States" unless the person resides in one of the 50 U.S. states or the District of Columbia.** If the person resides in one of five U.S. territories or other three U.S. reporting areas, name that reporting area.

B. If NOT U.S. Reporting Area, Remained in United States for ≥90 days (inclusive of Report Date)?

Option (*select one*)	Description
Yes	Patient remained in the United States for ≥90 days inclusive of report date.
No	Patient remained in the United States <90 days inclusive of report date.
Unknown	It is **not** known how long the patient remained in the United States.

Note: Summary of updated guidelines for determining "country of usual residence"

The Council of State and Territorial Epidemiologists (CSTE) recommends that cases of disease be reported to CDC by the jurisdiction of the person's "usual residence" at the time of disease onset. For the purposes of TBLISS, for consistency with historical practice, "disease onset" is defined as the date when the LTBI diagnostic evaluation was initiated.

The following information has been adapted from CSTE position statement 11-SI-04 ("Revised Guidelines for Determining Residency for Disease Notification Purposes"). In addition, because notifiable disease data are often combined with population data, case notification guidelines based on census residence rules will contribute toward greater consistency in the numerator and denominator data used in disease rates.

Usual residence is defined as the place where the person lives and sleeps most of the time, which is not necessarily the same as the person's voting residence, legal residence, or the place where they became infected with a notifiable disease. Determining usual residence for most people is easy and unambiguous. However, the usual residence for some people is not obvious.

Persons (regardless of citizenship) who have established a household or are part of an established household (i.e., a "usual residence") in the United States should be reported with a country of usual residence of "United States." This includes persons who are in the United States for an extended period for work or study, even if they do not consider the United States to be "home."

Persons (including U.S. citizens) whose established household is outside of the United States (e.g., they are "just visiting" the United States) should be reported with a country of usual residence that is the country where they have established a household.

Persons with established households in more than one country should have country of usual residence determined based on the country where they spent the most time during the year preceding diagnosis.

13. INITIAL REASON EVALUATED FOR LTBI

Primary Purpose: To ascertain trends in how LTBI cases come to the attention of the medical or public health establishment.

Option (*select one*)	Description	Comment
Contact investigation	A health department investigation to identify persons who had close contact with an infectious TB case. **This also includes source case investigations** (e.g., to identify the source of TB transmission to a child with TB disease or LTBI).	Select if LTBI diagnosis was made based on a contact investigation evaluation and testing results from this investigation.
Screening	Any type of planned screening for TB disease or LTBI in a specific population, other than among contacts of a TB case.	**Screening** includes "targeted testing" of populations at higher risk for TB disease or LTBI (e.g., B notification, status adjusters, intake at correctional facilities or homeless shelters, administrative screening required for employment, preenrollment screening of students, and similar activities), regardless of whether the screening activity was consistent with CDC recommendations.

Option (*select one*)	Description	Comment
TB symptoms	Signs and symptoms consistent with TB (e.g., prolonged persistent cough, fever, lymphadenopathy, night sweats, weight loss).	**TB symptoms** should only be selected if the patient has TB symptoms at the time of diagnostic evaluation and neither Contact Investigation nor Screening apply to the case. However, if a person is diagnosed with TB disease instead of LTBI, they should be reported as a verified case of TB to the National TB Surveillance System, not to TBLISS. **For the purpose of an LTBI case report, TB disease must have been ruled out during the diagnostic evaluation.**
Other	Reason that does not fit into any of the above categories.	Other reasons such as lab results or other unexpected clinical findings where LTBI was not suspected at the time the test was ordered.
Unknown	Reason for evaluating the patient **not** known.	Select if the reason the person was evaluated for LTBI is not known.

Note: Select the **single initial reason** the patient was evaluated for LTBI. The definition of "initial reason" is the situation or reason that led to the initial evaluation for LTBI. If the patient was referred for evaluation, but the reason for the evaluation is unknown, try to determine that reason.

Example: TB Symptoms
If a person with TB was initially encountered via a contact investigation and during that investigation was also noted to have TB symptoms, select **"Contact Investigation"** as the initial reason for the evaluation. However, if a patient seeks medical care because of TB symptoms, select **"TB Symptoms"** as the initial reason for the evaluation.

Risk Factors

14. OCCUPATION AND INDUSTRY

Primary Purpose: To evaluate potential associations between workplace exposures and LTBI by collecting information about the person's usual occupations and industries.

A. Has the patient ever worked as one of the following?

Option (*select all that apply*)	Description
Healthcare worker	Also known as "health care personnel." Paid or unpaid person working in a health care setting.
Correctional facility employee	Person working in a correctional facility. Persons who have worked as health care personnel within a correctional facility should have both the **"Health care worker"** box and the **"Correctional facility employee"** box checked.
Migrant/seasonal worker	Person who is required to be absent from a permanent place of residence for the purpose of seeking employment, or who may vary their employment for the purpose of remaining employed while maintaining a permanent place of residence.
None of the above	Select if confirmed that the individual never worked as a health care worker, correctional facility employee, or migrant/seasonal worker.
Unknown	Select only when it cannot be confirmed or denied that the individual ever worked as a health care worker, correctional facility employee, or migrant/seasonal worker.

B. Current Occupation (complete this section for all patients ≥14 years of age [NIOSH standard], regardless of answers to item 14A).

Current Occupation is the type of job that the patient has been doing most recently, whether paid or unpaid (volunteer).

Ask this question:

> "What kind of work do you do? For example, registered nurse, custodian, cashier, auto mechanic, barber, civil engineer, volunteer firefighter, etc."

If the patient has more than one usual job, collect information on all of the patient's jobs for entry in the repeating group.

If the patient is unemployed and is not currently seeking employment (e.g., patient is retired, disabled, or a full-time student), do not leave the **Current Industry** and **Current Occupation** fields blank; instead enter "unemployed," "disabled," or "student." Include the level of study for students, e.g., "college student" or "high school student."

If he or she works on a voluntary basis, record what they do in the occupation field (e.g., zoo volunteer, school volunteer, library volunteer).

Tips for getting the best information on occupation that can be coded:

- **Be descriptive:**
  Clearly describe the kind of work.

    - Unhelpful: "teacher"
    - **Helpful**: "preschool teacher," "high school teacher"

- **Be specific:**
  General or vague terms do not always provide enough information to code.

    - Unhelpful: "laborer"
    - **Helpful**: "bricklayer"

    - Unhelpful: "worked in a warehouse," "worked in a shipping department"
    - **Helpful**: "forklift operator"

Current Industry (complete this section for all patients ≥14 years of age [NIOSH standard], regardless of answers to item 14A)

Current Industry is the kind of business or industry the patient works in. For each of the patient's current occupations, the corresponding current industry should be reported.

This is **not** the name of the employer, although if the correct industry is not apparent, it is acceptable to enter the name, city, and state of the employer unless the name of the business would be sensitive or potentially identifiable.

Ask this question:

> "What type of business or industry do you work in? For example, a hospital, dairy farm, restaurant, trade school, library, etc."

Tips for getting the best information on industry that can be coded:

If industry is not obvious, ask what is the main focus or product of the employer for which the person works.

For example, if a patient says they work in manufacturing, ask what was made at the manufacturing plant. For example:

- Unhelpful: "manufacturing"
- **Helpful**: "automobile manufacturing"

Be specific:
General or vague terms do not always provide enough information to code:

- Unhelpful: "food industry"
- **Helpful:** "restaurant" or "grocery store"

Note: Occupation and Industry should be completed for all patients ≥14 years of age (NIOSH standard). NIOCCS occupation codes include "child or infant" and "student."

Other codes include "disabled," "inmate," "never employed," "unemployed," and "volunteer."

The standard NIOSH NIOCCS codes are included for reference purposes in the TB/LTBI Message Mapping Guide (MMG); however, reporting areas are not expected to submit NIOCCS codes for occupation or industry. These data will be coded at CDC. For more information about NIOSH/NIOCCS codes, see this link: https://csams.cdc.gov/nioccs/Default.aspx.

15. OTHER RISK FACTORS

Primary Purpose: To evaluate potential risk factors for LTBI.

Risk factor	Description
Diabetic at diagnostic evaluation	Patient had diabetes (see description below) when LTBI diagnostic evaluation was performed or initiated.
Homeless in the past 12 months	Patient has been homeless within the 12 months preceding the LTBI diagnostic evaluation.
Homeless ever	Patient has ever experienced homelessness.
Resident of correctional facility at diagnostic evaluation	Patient was incarcerated or detained in a jail, prison, or other detention center when LTBI diagnostic evaluation was performed or initiated.

Risk factor	Description
Resident of correctional facility ever	Patient has ever been incarcerated or detained in a jail, prison, or other detention center at any point in their lifetime.
Resident of long-term care facility at diagnostic evaluation	Patient was a resident of long-term care facility when LTBI diagnostic evaluation was performed or initiated.
Injecting drug use in the past 12 months	Patient used injection drugs in the past 12 months not prescribed by a health care provider.
Noninjecting drug use in the past 12 months	Patient used noninjection drugs in the past 12 months not prescribed by a health care provider or approved by FDA for over-the-counter dispensing.
Heavy alcohol use in the past 12 months	Patient heavily used alcohol (see definition below) in the past 12 months.
TNF-α antagonist therapy	Patient recently received, or was receiving, tumor necrosis factor-alpha (TNF-α) antagonist therapy when LTBI diagnostic evaluation was performed or initiated.
Post-organ transplantation	Patient has ever received a solid organ transplant (e.g., kidney, heart).
End-stage renal disease	Patient had end-stage renal disease when LTBI diagnostic evaluation was performed or initiated (e.g., patients on dialysis).
Viral hepatitis (B or C only)	Patient has ever had a diagnosis of Hepatitis B or C (acute or chronic).
Other immunocompromise (other than HIV/AIDS)	Patient is immunocompromised because of either a medical condition (e.g., leukemia, Hodgkin's lymphoma, carcinoma of the head or neck), or immunosuppressive therapy, such as prolonged use of high doses of corticosteroids.
Other (specify)	Additional risk factors as defined by the reporting area may be entered as "Other." The particular risk factor being reports should be identified in the "specify" field. An unlimited number of "other" risk factors may be reported.

Option (*select one*)	Description
No	Patient does not have this risk factor.
Yes	Patient has this risk factor.
Unknown	It is unknown whether the patient has this risk factor.

Definitions:

Diabetic

The American Diabetes Association (American Diabetes Association. *Dia Care*. 2014;37:S81-S90) has established the following criteria for a diagnosis of diabetes:

- Hemoglobin A1c ≥6.5%, **or**
- Fasting (defined as no caloric intake for ≥8 hours) plasma glucose ≥126 mg/dL (7.0 mmol/L), **or**
- 2-hour plasma glucose ≥200 mg/dL (11.1 mmol/L) during an oral glucose tolerance test, as described by the World Health Organization, **or**
- In a patient with classic symptoms of hyperglycemia or hyperglycemic crisis, a random plasma glucose ≥200 mg/dL (11.1 mmol/L)

Persons who do not meet the above criteria only because they are currently receiving treatment for diabetes should still be reported as diabetic.

Homeless

A person experiencing homelessness may be an individual who has:

1. No fixed, regular, and adequate nighttime residence, **and**
2. A primary nighttime residence that is
    a. A supervised publicly or privately operated shelter designed to provide temporary living accommodations, including welfare hotels, congregate shelters, and transitional housing for the mentally ill, **or**
    b. An institution that provides a temporary residence for individuals intended to be institutionalized, **or**
    c. A public or private place not designated for, or ordinarily used as, a regular sleeping accommodation for human beings.

A **person experiencing homelessness** may also be defined as a person who has no home (e.g., is not paying rent, does not own a home, and is not steadily living with relatives or friends). Persons in unstable housing situations (e.g., alternating between multiple residences for short stays of uncertain duration) may also be considered homeless.

A **person experiencing homelessness** may be a person who lacks customary and regular access to a conventional dwelling or residence. Included as homeless are persons who live on streets or in nonresidential buildings. Also included are residents of homeless shelters and shelters for battered women. Residents of welfare hotels and single room occupancy hotels could also be considered homeless. In the rural setting, where there are usually few shelters, a homeless person may live in nonresidential structures, or substandard housing, or with relatives. *Homeless* does not refer to a person who is incarcerated or in a correctional facility.

Injecting drug use

Injecting drug use involves the use of hypodermic needles and syringes for the injection of drugs not prescribed by a health care provider. Route of administration may be intravenous, subcutaneous (e.g., skin popping), or intramuscular.

Noninjecting drug use

Marijuana use should always be recorded as noninjecting drug use, regardless of whether marijuana is legal for medicinal or recreational use in the state of residence.

Noninjecting drug use also includes misuse of licensed or prescription drugs, including opioids, or other drugs that were not injected and were not prescribed for the patient by a health care provider or approved for over-the-counter use by FDA. The drugs may be ingested, inhaled, sniffed, or smoked.

For more information, see Substance Abuse and Mental Health Services Administration, SAMHSA, Opioid Overdose Prevention Toolkit, 2018 at https://store.samhsa.gov/sites/default/files/d7/priv/opioid-use-disorder-facts.pdf.

Heavy alcohol use

The National Institute on Alcohol Abuse and Alcoholism defines heavy alcohol use as binge drinking on 5 or more days in the month preceding diagnosis. Binge drinking is defined as a pattern of drinking that brings blood alcohol concentration levels to 0.08 g/dL. This typically occurs after four drinks for women and five drinks for men in about 2 hours. https://www.niaaa.nih.gov/

16. IF RESIDENT OF CORRECTIONAL FACILITY AT DIAGNOSITIC EVALUATION, TYPE OF FACILITY

Primary Purpose: To categorize the type of correctional facility for those patients who were residing in a correctional facility at the time of diagnostic evaluation.

Option (*select one*)	Description
Federal prison	Confinement facility administered by a federal agency (except Immigration and Customs Enforcement); includes privately operated federal correctional facilities.
State prison	Confinement facility administered by a state agency; includes privately operated state correctional facilities.
Local jail	Confinement facility usually administered by a local law enforcement agency, intended for adults but sometimes also containing juveniles; holds persons detained pending adjudication or persons committed after adjudication, typically for sentences of 1 year or less.

Option (*select one*)	Description
Juvenile correctional facility	Public or private residential facility; includes juvenile detention centers, reception and diagnostic centers, ranches, camps, farms, boot camps, residential treatment centers, and halfway houses or group homes designated specifically for juveniles.
Other	Includes Immigration and Customs Enforcement (ICE) detention centers, Indian reservation facilities (e.g., tribal jails), military stockades and jails, federal park police facilities, police lockups (temporary holding facilities for persons who have **not** been formally charged in court), or other correctional facilities that are **not** included in the other specific choices.
Unknown	Inmate when the LTBI diagnostic evaluation was performed, but the type of correctional facility is **not** known.

Note: If the person with LTBI was a resident of more than one type of facility during the diagnostic evaluation, select the type of facility where the initial LTBI diagnostic evaluation was performed. This question should only be completed if **Resident of Correctional Facility at Diagnostic Evaluation"** is answered as **"Yes"** in item 15.

17. IF RESIDENT OF LONG-TERM CARE FACILITY AT DIAGNOSTIC EVALUATION, TYPE OF FACILITY?

Primary Purpose: To categorize the type of long-term care facility for those patients who were residing in a long-term care facility at the time of diagnostic evaluation.

Option (*select one*)	Description	Comment
Nursing home	Freestanding facility with three or more beds (i.e., is classified as a residential facility or congregate residential setting) that provides nursing care services (e.g., nursing or medical care or supervision of medications that may be self-administered).	Facilities may be certified by Medicare or Medicaid or may be licensed by the state as a nursing home (e.g., skilled nursing facility, intermediate care facility, nursing care unit of a retirement center). **This does *not* include assisted living facilities.**

Option (*select one*)	Description	Comment
Hospital-based facility	Distinct unit with three or more beds that is physically attached to, or managed by, a hospital.	Facilities may be certified by Medicare or Medicaid or may be licensed by the state.
Residential facility	Facility with three or more beds (i.e., classified as a residential facility or congregate residential setting) and meets both of the following criteria: 1. Not classified as a nursing home, hospital-based facility, mental health residential facility, or alcohol or drug treatment facility, as described above **and** 2. Provides personal care or supervision (not nursing care services) to its residents, in addition to room and board (e.g., help with bathing, dressing, eating, walking, shopping).	**This includes assisted living facilities.** This option should only be used for facilities that are not for mental health treatment or alcohol or drug treatment.
Mental health residential facility	Facility that provides 24-hour care in a hospital, residential treatment, or supportive setting.	Include state, local, and private psychiatric hospitals, general hospitals, Department of Veterans Affairs facilities, residential mental health treatment centers for children, and multiservice mental health residential treatment programs. For other mental health residential facilities, select **"Other"** long-term care facility. Examples include the Department of Defense, Bureau of Prisons, Public Health Service, Indian Health Service, and Indian reservation facilities.

Option (*select one*)	Description	Comment
Alcohol or drug treatment facility	Only long-term rehabilitation or residential facilities designated for treatment of **30 days or longer.**	Exclude all ambulatory or outpatient facilities, detoxification units, and facilities designated for fewer than 30 days of treatment. The state agency responsible for alcohol and drug treatment can assist in determining whether a facility is considered residential.
Other	A facility **not** mentioned above that is designated for treatment of **30 days or longer and facility type is not Unknown.**	Select if the type of long-term care facility is something other than the settings listed in this table.
Unknown	Patient known to be a resident of a long-term care facility, but the type of facility is **not** known.	Select if the type of long-term care facility is not known.

Note: If the person with LTBI was a resident of more than one facility during the diagnostic evaluation, select the facility where the initial LTBI diagnostic evaluation was performed. This question should only be completed if **Resident of Long-term Care Facility at Diagnostic Evaluation** is answered as **"Yes"** in item 15.

18. CURRENT SMOKING STATUS AT DIAGNOSTIC EVALUATION

Primary Purpose: Surveillance and patient management. To assess factors that might complicate testing, treatment, and follow-up.

Option (*select one*)	Description
Current every day smoker	Patient currently uses tobacco every day.
Current some day smoker	Patient uses tobacco some days, but not every day.
Former smoker	Patient has smoked at least 100 cigarettes/cigars in his/her lifetime and has quit.
Never smoker	Patient has not smoked at least 100 cigarettes/cigars in his/her lifetime.
Smoker, current status unknown	Patient was a smoker (or tobacco user), but current status is unknown.
Unknown if ever smoked	Patient's tobacco use history is not known.

Note: The definition of smoking includes consumption of tobacco (or nicotine) through combustible tobacco products (e.g., cigarettes) or electronic nicotine delivery systems (ENDS; e.g., vapes, e-cigarettes). It does not include chewing tobacco.

Smoking of substances other than tobacco (e.g., marijuana) should be recorded under noninjecting drug use.

Source: U.S. Food and Drug Administration. (2018). Vaporizers, E-Cigarettes, and other Electronic Nicotine Delivery Systems (ENDS). Retrieved from: https://www.fda.gov/TobaccoProducts/Labeling/ProductsIngredientsComponents/ucm456610.htm

19. LIVED OUTSIDE OF THE UNITED STATES FOR >2 MONTHS (UNINTERRUPTED)?

Primary Purpose: To determine the extent to which persons with LTBI have lived or traveled to countries that might pose a higher risk of TB exposure.

Option (*select one*)	Description
Yes	Patient indicates that she/he has lived or traveled outside the United States **(1 of the 50 states or the District of Columbia)** for >2 months (uninterrupted).
No	Patient did **not** live or travel outside the United States (1 of the 50 states or the District of Columbia) >2 months (uninterrupted).
Unknown	No information is available about patient's travel history.

Notes: "Lived" refers to the place where a person stayed or slept most of the time, or the place the person considered home during the stated period.

Examples:
Answer **"Yes,"** if patient traveled outside the United States and visited multiple countries for a total of more than 2 uninterrupted months.

- From January 1 to March 15, the patient lived outside the United States
- Lived in Zambia for 4 weeks, then
- Lived in South Africa for 3 weeks, then
- Lived in Botswana 3 weeks, then
- Returned to the United States

Answer **"No,"** if patient lived outside the United States for a total of more than 2 months, but travel was interrupted, and had no other international travel during lifetime.

- From January 1 to March 15, the patient lived outside the United States

- Lived in Zambia for 5 weeks, then
- Returned to the United States for 2 weeks, then
- Lived in South Africa for 5 weeks, then
- Returned to the United States

Diagnostic Testing
(Other than Drug Susceptibility Testing [DST])

20. TUBERCULIN SKIN TEST AND ALL NON-DST TB LAB TEST RESULTS

Primary Purpose: To verify that the case meets the surveillance definition for LTBI and to identify laboratory test characteristics of LTBI cases.

Specimen Information	Description	Comment
Date collected/placed	**Month, day, and year** the specimen was collected or tuberculin skin test (TST) was placed (e.g., 01/17/2020).	This date can be found on the laboratory report as the date the specimen was collected or TST placed. If the exact day is unknown, do one of the following: • Enter your best estimate. • Enter the first day of the known month as the date collected (e.g., if a specimen was collected in March 2020, enter 03/01/2020 as the date collected).
Date reported/read	**Month, day, and year** (mm/dd/yyyy) the laboratory reported the result, or the date that the TST was read.	This date can be found on the laboratory report as the date the report is released or made available. In many instances, the result date and report date are the same; if not, provide the earliest date available. If the exact day is unknown, do one of the following: • Enter your best estimate. • Enter the first day of the known month as the date collected (e.g., if a specimen was collected in March 2020, enter 03/01/2020 as the date collected).
Specimen source site	Select appropriate anatomic source site from **Appendix I.**	For TST, the source site is always "skin."

Test Type (*select one*)	Description	Comment
Smear	Microscopic examination of specimen (e.g., sputum, using smear technique)	
Pathology/ cytology	Microscopic examination of specimen using histopathological or cytological methods	Pathology/cytology test results should be "Negative" for persons with LTBI. A "Positive" result likely indicates that the person has TB disease. Test results can be entered as pathology, cytology, or both pathology and cytology.
NAA	Nucleic acid amplification testing (only when the specimen is tested directly; do not include results from tests on isolates obtained via culture)	NAA test results should be "Negative" for persons with LTBI. A "Positive" result likely indicates that the person has TB disease.
Culture	Mycobacterial culture of specimen to determine presence of *M. tuberculosis* complex (not nontuberculous mycobacteria)	For sputum specimens, select **"Sputum"** from the value set. Culture test results should be "Negative" for persons with LTBI. A "Positive" result indicates that the person has TB disease.
TST	Tuberculin skin test	Routinely reporting TST conversions is highly recommended. In the context of an outbreak, previous negative test results or TST conversions should be captured in the database for outbreak-related cases. If a person has a documented previous negative test result and now has a positive result, record both the previous negative and current positive results.

Test Type (*select one*)	Description	Comment
IGRA-Other, IGRA-QFT, IGRA-T-Spot, IGRA-Unknown	Interferon-gamma release assay (IGRA) IGRA-QFT: QuantiFERON (any version) IGRA-T Spot: T-Spot IGRA-Unknown: If type is unknown	Routinely reporting IGRA conversions is highly recommended. In the context of an outbreak, previous negative test results or IGRA conversions should be captured for outbreak-related cases. If a person has a documented previous negative test result and now has a positive test result, record both the previous negative and current positive results.
HIV	Serologic test for human immunodeficiency virus infection	Patient self-report of HIV status is not acceptable. HIV serology results must be documented. A documented positive test result can be from any date; a negative test result must be documented ≤12 months before the LTBI diagnostic evaluation.
CD4 count	Result of test for CD4 T-lymphocytes	Report for people with HIV to characterize the patient's immune status. At least one CD4 count should be reported for HIV-infected patients, as close to the time of LTBI diagnostic evaluation as possible. Subsequent CD4 counts may also be reported.
Hemoglobin A1c	Result of test to determine the average blood glucose level for the preceding several months	Report for people with diabetes or persons being screened for diabetes. At least one hemoglobin A1c or fasting blood glucose result should be reported for diabetic patients, as close to the time of LTBI diagnostic evaluation as possible. Subsequent hemoglobin A1c results may also be reported.
Fasting blood glucose	Result of test to determine the blood glucose at a given moment in a patient who has not eaten in several hours	Typically done with people with diabetes or persons being screened for diabetes. At least one hemoglobin A1c or fasting blood glucose result should be reported for diabetic patients, as close to the time of LTBI diagnostic evaluation as possible. Subsequent fasting blood glucose results may also be reported.
Other (specify)	Any other diagnostic tests that the reporting area wishes to include	None.

Qualitative Test Result (*select one*)	Description
Positive	For tests with a qualitative (or interpreted) result, the test result was considered positive.
Negative	For tests with a qualitative (or interpreted) result, the test result was considered negative.
Indeterminate	For tests with a qualitative (or interpreted) result, the test result was considered indeterminate (neither positive nor negative).
Not done	Used to indicate that initial TST, initial IGRA, initial sputum smear, initial sputum culture, initial NAAT, or initial HIV test was not done in this case.
Unknown	Used to indicate that the test was done but the result is unknown or that it is unknown if the test was done.
Refused	Used to indicate a test was offered, but the patient refused.
Test Done Result Unknown	Used to indicate that a test was completed, but the results of that test are unknown.
Not offered	Used to indicate a test was not offered.

Quantitative Test Information	Description
Quantitative result	For tests with a quantitative (numerical) result, record the result in this field. These tests include the TST, CD4 cell count, hemoglobin A1c, fasting blood glucose. Quantitative result is not required for IGRA tests.
Quantitative units	For tests with a quantitative (numerical) result, record the units of measurement (e.g., millimeters for TST, percentage for hemoglobin A1c).

Note: Results of the tuberculin skin test (TST) should be interpreted according to Table 7 of the currently accepted guidelines (www.cdc.gov/mmwr/PDF/rr/rr4906.pdf) [see next page].

Minimum requirements:
Always provide a response for each of the main test types (culture, smear, pathology/cytology, NAA, TST, IGRA, HIV, diabetes). Enter **"Not Done"** for any tests that were not done.

CD4 count should be reported for HIV-infected persons. Hemoglobin A1c or fasting blood glucose at diagnostic evaluation should be reported for people with diabetes. Also include the initial result of any other tests performed that are in the test type value set. If a type of test was done on different specimen sources, include the initial result for each unique combination of test type and specimen source.

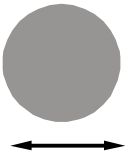
Follow-up testing should be done according to CDC guidelines and local clinical judgment. For tests that are done multiple times, only those results for each combination of test type and specimen source where the result changed (e.g., positive to negative) should be entered.

Guidelines for Entering Tuberculin Skin Test (TST) Results

Enter results from a TST performed during the current diagnostic evaluation. If the patient has a documented prior positive TST result, that result should be entered, and it is not necessary to repeat the test.

Do not enter a patient's undocumented self-report of a previous positive TST result.

Interpreting the TST Reaction

		
5 or more millimeters	**10 or more millimeters**	**15 or more millimeters**
An induration of ≥**5** millimeters is considered positive for • People living with HIV • Recent contacts of persons with infectious TB • People who have previously had TB disease • Patients with organ transplants and other immunosuppressed patients (including patients taking a prolonged course of oral or intravenous corticosteroids or TNF-α antagonists)	An induration of ≥**10** millimeters is considered positive for • People who have come to the U.S. within the last 5 years from areas of the world where TB is common (e.g., Asia, Africa, Eastern Europe, Russia, or Latin America) • People who inject drugs • Mycobacteriology lab workers • People who live or work in high-risk congregate settings • People with certain medical conditions that place them at high risk for TB (silicosis, diabetes mellitus, severe kidney disease, certain types of cancer, and certain intestinal conditions) • Children younger than 4 years • Infants, children, and adolescents exposed to adults in high-risk categories	An induration of ≥**15** millimeters is considered positive for • People with no known risk factors for TB

21. CHEST RADIOGRAPH OR OTHER CHEST IMAGING STUDY RESULTS

Primary Purpose: To verify that the case meets the surveillance definition for LTBI.

Study Type (*select all that apply*)	**Description**
Plain chest x-ray	Standard radiological study resulting in a 2-dimensional projection of internal thoracic structures onto film or a screen.
CT scan	Computed tomography, an advanced imaging technique using radiographs to display 3-dimensional images of thoracic structures with computer assistance.
MRI	Magnetic resonance imaging, an advanced imaging technique using strong magnetic fields to display 3-dimensional images of thoracic structures with computer assistance.
PET	Positron emission tomography, an advanced imaging technique that uses radioactive tracers to identify areas of higher chemical activity in the body.
Other	Select this option for imaging studies that do not fit into any of the above categories.

Result (*select one*)	**Description**
Consistent with TB	Any initial results showing abnormalities (e.g., hilar adenopathy, effusion, infiltrate[s], cavity, scarring) consistent with TB.
Not consistent with TB	Results showed **no** abnormalities consistent with TB. This category includes any other *abnormalities that are **not** consistent with TB.*
Not done	Used to indicate that a chest radiograph or chest CT scan was not done in this case.
Unknown	Result of chest imaging is not known.

Cavity (*select one*)	**Description**
Yes	The chest imaging study showed evidence of one or more cavities.
No	Results did **not** show evidence of one or more cavities.
Unknown	It is **not** known if results showed evidence of one or more cavities.

Miliary (*select one*)	Description
Yes	Results showed evidence of miliary disease (e.g., miliary or bilateral micronodular pattern).
No	Results did **not** show evidence of miliary disease (e.g., miliary or bilateral micronodular pattern).
Unknown	It is **not** known if results showed evidence of miliary disease (e.g., miliary or bilateral micronodular pattern).

Minimum requirements:
Initial plain chest radiograph; initial chest CT scan. Enter **"Not Done"** if applicable. Also include the initial result of any other chest imaging studies performed that are in the test type value set (i.e., MRI, PET).

Subsequent results for each chest imaging study type should be entered if the result changed. Note if cavity or miliary lesions are identified for each study.

Note: The minimum requirement is the initial plain chest radiograph or initial chest CT scan result; however, multiple results may be entered into the table.

Epidemiologic Investigation

22. CASE MEETS BINATIONAL REPORTING CRITERIA?

Primary Purpose: To determine whether the case meets binational reporting criteria.

Option (*select one*)	Description
Yes	The LTBI case meets binational reporting criteria. *A case is considered binational when it meets one or more of the following criteria:* • Exposure to suspected product (e.g., unpasteurized milk or cheese) from Canada or Mexico • Has case contacts in or from Mexico or Canada • Potentially exposed by a resident of Mexico or Canada • Potentially exposed while in Mexico or Canada • Resident of Canada or Mexico • Other situations that may require binational notification or coordination of response
No	The case does **not** meet binational reporting criteria.
Unknown	It is **not** known if the case meets binational reporting criteria.

If **"Yes,"** select all the criteria which were met.

Option (*select all that apply*)	Description
Exposure to suspected product from Canada or Mexico	Patient exposed to a product (e.g., dairy product for *M. bovis* case)
Has case contacts in or from Mexico or Canada	Patient has case contacts who live in Mexico or Canada
Potentially exposed by a resident of Mexico or Canada	Patient was potentially exposed to a person with TB from Mexico or Canada
Potentially exposed while in Mexico or Canada	Patient was potentially exposed to TB while physically in Mexico or Canada

Option (*select all that apply*)	Description
Resident of Canada or Mexico	The patient is a resident of either Mexico or Canada
Other situations that may require binational notification or coordination of response	Select this option if the case meets one of the following descriptions: • The patient crossed the border into the United States from Mexico during LTBI treatment, **or** • The patient was referred to a U.S-funded, binational TB program for treatment continuity (i.e., a patient who was being treated in the United States, but it was known that they would cross the border to Mexico).

23. CASE IDENTIFIED DURING A CONTACT INVESTIGATION OF ANOTHER CASE?

Primary Purpose: To determine whether the patient being reported now as an LTBI case was identified during the contact investigation of a TB disease case.

Option (*select one*)	Description
Yes	This patient was identified during the contact investigation or source case investigation of a TB disease case.
No	This patient was **not** identified during the investigation of a TB disease case.
Unknown	It is **not** known if this patient was identified during the investigation of a TB disease case.

If **"Yes,"** enter the following:

Evaluated for TB During that Contact Investigation

Option (*select one*)	Description
Yes	Patient was evaluated for TB during that investigation, regardless of whether the patient was actually diagnosed with LTBI as part of that evaluation.
No	Patient was **not** evaluated for TB during that investigation.
Unknown	It is **not** known if patient was evaluated for TB during that investigation.

Note: Remember to record epidemiological (epi) link(s) in item 24.

24. COMPLETE TABLE BELOW FOR ALL KNOWN TB AND LTBI CASES EPIDEMIOLOGICALLY LINKED TO THIS CASE

Primary Purpose: To determine potential transmission links between cases.

Item	Description	Comment
Year	Year Reported is the year when the case was reported (e.g., 2020).	This year should correspond to the Report date, which is not necessarily the same as the *MMWR* Year.
State	State Code indicates the two-letter postal code of the state reporting this case (e.g., GA for Georgia; see **Appendix C**, Reporting Area Codes).	The term *state* is used to refer to the reporting area, though not all reporting jurisdictions are states (e.g., New York City).
Number	Nine-character string unique within the reporting area.	This string can contain letters or numbers and is assigned by the reporting area. If no TB or LTBI cases with epidemiological links with this LTBI case were identified, please enter "YYYY-ST-999999999." Leave blank if an investigation was not conducted.

Note: For this variable, an "epidemiologic link" is defined as either a definite or probable link:

- **Definite:** patients shared airspace at the same location at the same time during the person with TB's estimated infectious period
- **Probable:** patients shared airspace at the same location during the same general time period, but investigator unable to document that they were there at the same time during the person with TB's infectious period

Epidemiologically linked cases might include any previous, concurrent, or subsequent cases to which this case was linked.

If epidemiologically linked cases are later identified, please update the TBLISS record.

Initial Treatment Information

25. LTBI THERAPY STARTED

Primary Purpose: To monitor LTBI treatment decisions.

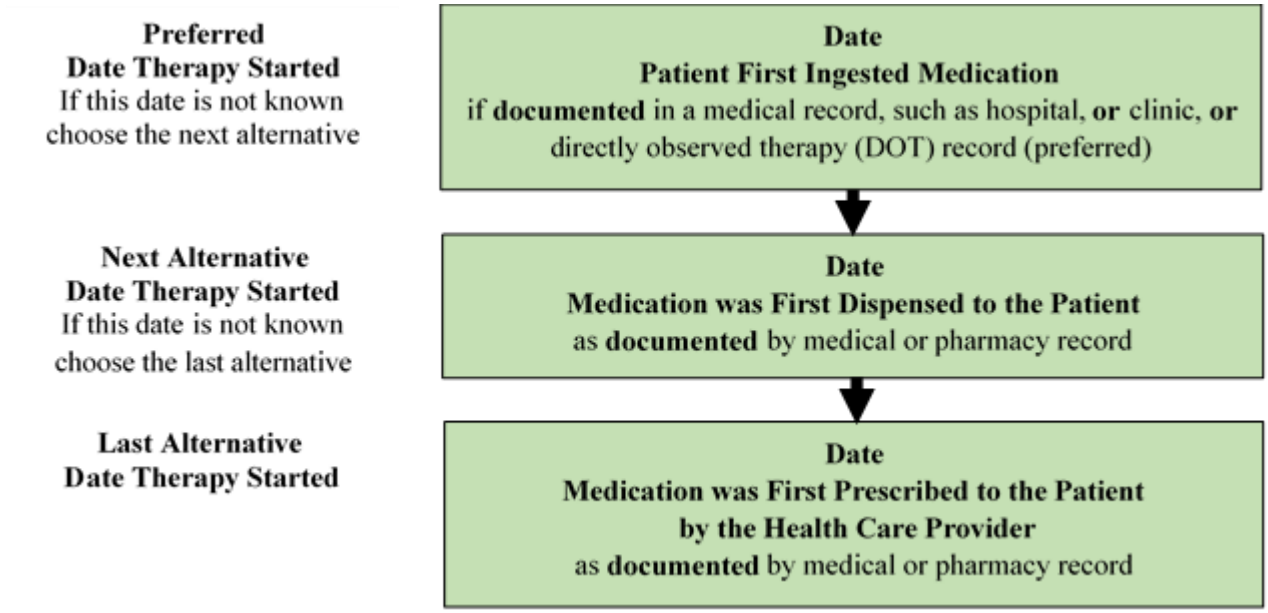
Option (*select one*)	Description
Yes	Patient initiated LTBI treatment.
No	Patient did **not** initiate LTBI treatment.
Unknown	It is **not** known if the patient initiated LTBI treatment.

If **"Yes,"** enter the following:

Treatment Start Date

Date Format	Description	Comment
Month, day, and year (e.g., 01/17/2020)	Date the patient began therapy for LTBI	This may be one of several dates, ideally, when the patient first ingested medication if documented in a medical record. If the month and/or day is unknown, enter your best estimate or do the following: • If the day is unknown, enter the first day of the known month as the date therapy started (e.g., if therapy was started in March 2020, enter 03/01/2020 as the date therapy started). • If the month is unknown, report the month corresponding to the first known documentation (refer to the figure below) of LTBI treatment available to the health department.

Note: Date Therapy Started is the month, day, and year the patient began drug therapy for LTBI. Patient history without medical documentation is not acceptable. Enter a date according to the following chart:



If **"Yes,"** enter the following:

Specify Initial LTBI Regimen

Option *(select one)*	Description	Comment
Isoniazid (9 months; 9H)	Patient was initially treated for LTBI with isoniazid for 9 months (9H)	
Isoniazid (6 months; 6H)	Patient was initially treated for LTBI with isoniazid for 6 months (6H)	
Isoniazid/Rifapentine (3 months; 3HP)	Patient was initially treated for LTBI with weekly isoniazid and rifapentine for 3 months (3HP)	
Rifampin (4 months; 4R)	Patient was initially treated for LTBI with rifampin for 4 months (4R)	

Option *(select one)*	Description	Comment
RIPE/HRZE (2 months)	Patient was initially treated for LTBI with rifampin, isoniazid, pyrazinamide, and ethambutol for 2 months	This regimen is typically only used when the patient was initially treated as a suspected TB disease case, but TB disease is later ruled out and a final diagnosis of LTBI is made.
Other (Specify Below)	Patient was initially treated for LTBI with a regimen not listed above. The specific treatment regimen used can be specified in an accompanying field.	

If **"No,"** enter the following:

Why was LTBI treatment not started?

Option *(select one)*	Description	Comment
Lost to follow up	Patient was lost to follow up. *Code patients who move outside the United States and cannot be followed up as Other.*	If the patient is offered treatment, but declines and then is lost to follow-up, select "Patient refused" rather than "Lost to follow-up." Select "Lost to follow-up" if the patient was lost before being offered treatment or before making a decision on whether to accept offered treatment.
History of previous treatment for TB or LTBI	Patient was previously treated for TB or LTBI.	
Treatment medically contraindicated	There was a medical or pharmacologic contraindication or interaction that prevented the use of LTBI therapy in this patient.	

Option *(select one)*	Description	Comment
Treatment not offered based on local clinic guidelines	Patient was not offered treatment based on local clinic guidance.	
Provider decision (not based on local clinic guidelines)	Patient was not treated based on his/her healthcare provider's personal judgment.	
Drug shortage	One or more LTBI drugs could not be used because of national or local shortage of the drug(s).	
Patient refused	Treatment was offered but patient refused.	
Other (Specify Below)	Patient was not started on LTBI therapy for a reason not listed above. Please specify reason.	

Note: This question should only be completed if patients were not started on treatment for LTBI.

26. DATE THERAPY STOPPED

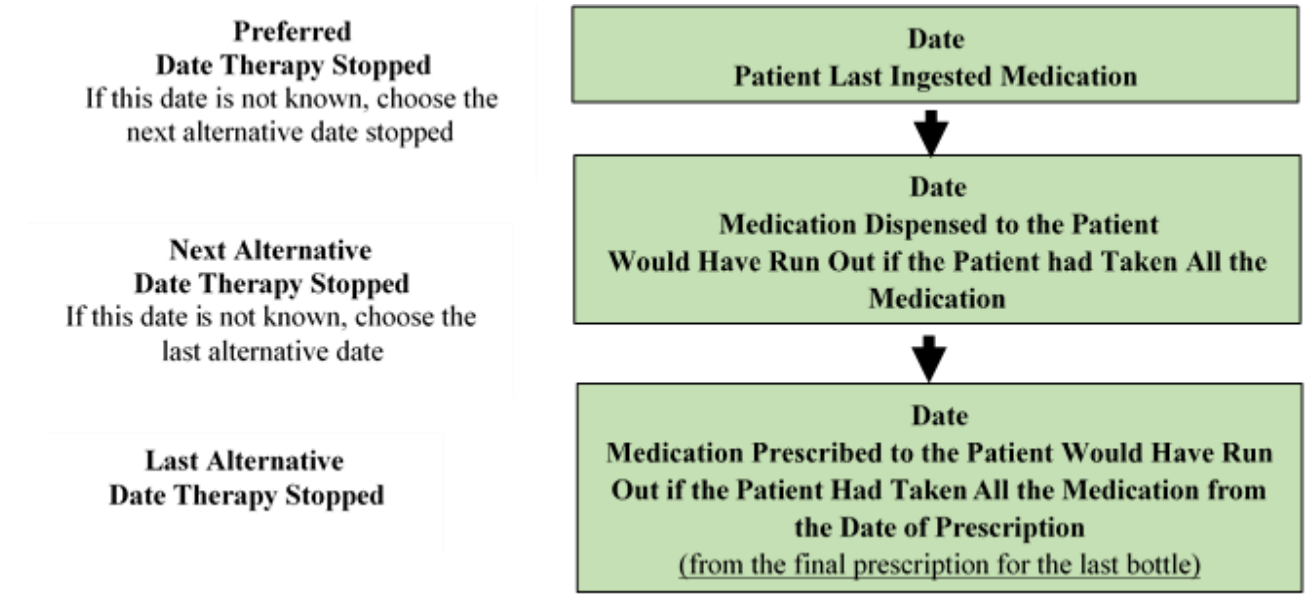
Primary Purpose: To monitor completion of therapy within a specified time.

Date Format	Description	Comment
Month, day, and year (e.g., 01/17/2020)	Date the patient stopped taking medication for confirmed or possible LTBI disease	This should be when the patient last ingested medication. However, if that date is not documented, see below hierarchy for guidance. If the month and/or day is unknown, enter your best estimate or do the following: • If the day is unknown, enter the first day of the known month as the date therapy stopped (e.g., if therapy was stopped in March 2020, enter 03/01/2020 as the date therapy stopped). • If the month is unknown, report the month corresponding to the first known documentation (refer to the figure below) of stopping LTBI treatment available to the health department.

Comment: Date Therapy Stopped

The interval between **Date Therapy Started** (item 25) and **Date Therapy Stopped** (item 26) is meant to encompass the entire period (including interruptions in therapy) that the patient was receiving medication to treat confirmed or possible LTBI. Patient self-report without medical documentation is not acceptable. Although there may be interruptions in LTBI treatment, enter the final documented date on which the patient last ingested medication for LTBI. For patients being treated for LTBI, enter **Date Therapy Stopped**, according to the following chart:

Hierarchy for Determining Date Therapy Stopped (for entire treatment period)



27. TREATMENT ADMINISTRATION

Primary Purpose: To document administration of LTBI medications.

Option *(select all that apply)*	Description
DOT	Directly Observed Therapy (DOT), in person. Response applies if DOT was used for any doses for a patient.

Option *(select all that apply)*	Description
EDOT	Electronic DOT (eDOT), via video call or other electronic method. Response applies if eDOT (e.g., video call, electronic medication bottle) was used to document adherence to the medication regimen for any doses.
Self-Administered	Any doses of medication were taken by the patient not under DOT or eDOT (**including any weekend doses**).

Note: Directly observed therapy (DOT), or supervised therapy, involves the direct visual observation by a health care provider (e.g., public health nurse, outreach worker, nurse, nurse's aide) or other reliable trained person (e.g., worker in a homeless shelter) of a patient's ingestion of medication. Delivering medication to a patient without visual confirmation of ingestion does not constitute DOT. However, electronic confirmation of ingestion of medicine of carefully selected patients (e.g., stable and compliant) constitutes electronic DOT.

28. REASON LTBI THERAPY STOPPED

Primary Purpose: To document treatment outcome.

Option *(select all that apply)*	Description
Completed therapy	Patient completed the prescribed course of therapy per the medical record as recorded by the clinician caring for the patient.
Lost to follow-up	Patient could **not** be located before the start or the completion of treatment (e.g., the patient moved to an unknown location, or the forwarding address is known but the patient was **not** found at that address). **Code patients who move outside the United States and cannot be followed up as "Other."**
Patient choice	Patient refused to complete therapy (e.g., stopped taking drugs).
Pregnancy	Therapy was stopped because the patient was pregnant.
Not LTBI	Treatment was stopped because clinician determined patient did not have LTBI.

Option *(select all that apply)*	Description
Other (specify)	Therapy was discontinued for a known reason **not** included in the above choices and is **not** Unknown, (e.g., patient moved outside the United States, or patient moved from state A to state B, and state A notified state B, but state B never followed up). Please specify other reason for stopping LTBI treatment
Developed TB	Patient was diagnosed with TB disease, i.e., met national surveillance case definition for TB. Please report case to NTSS and enter the NTSS state case number in the field provided on the TBLISS form.
Severe adverse event	Therapy was permanently stopped because of an adverse event attributed to anti-TB medications. Please indicate whether the patient was hospitalized and whether the patient died as a result of the adverse event.

If **"Other,"** enter the reason for stopping LTBI treatment.

If **"Developed TB,"** report the case to NTSS and enter the state case number in the field provided.

If **"Severe adverse event,"** enter the following:

Option *(select all that apply)*	Description
Hospitalized	Patient was hospitalized because of an adverse event attributed to anti-TB medications.
Died	Patient died because of an adverse event attributed to anti-TB medications.

Appendices

The following appendices provide information and codes that are used to complete the RVCT:

- **Appendix A – LTBI Case Definition for Public Health Surveillance**
- **Appendix B – Recommendations for Reporting and Counting LTBI Cases**
- **Appendix C – Reporting Area Codes**
- **Appendix D – Glossary**

Appendix A

Latent Tuberculosis Infection Case Definition for Public Health Surveillance

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Clinical criteria

Clinical criteria alone are not sufficient to classify a case of tuberculosis (TB) infection. Clinical criteria to confirm a suspected case of TB infection are as follows:

No clinical evidence compatible with TB disease including:

No signs or symptoms consistent with TB disease

AND

1) Chest imaging without abnormalities consistent with TB (chest radiograph or CT scan)

OR

2) Abnormal chest imaging that could be consistent with TB disease with microbiologic testing that is negative for *Mycobacterium tuberculosis* complex **AND** where TB disease has been clinically ruled out

Laboratory Criteria for Diagnosis

Laboratory/diagnostic criteria alone are not sufficient to confirm a case of TB infection. Laboratory criteria to identify suspected cases of TB infection are as follows:

A positive tuberculin skin test (TST) [As defined by the CDC (see reference)]

OR

A positive interferon-gamma release assay (IGRA) [As defined by the CDC (see reference)]

Criteria to Distinguish a New Case from an Existing Case

A new case is an incident TB infection case that meets the suspected or confirmed case criteria and has not previously been diagnosed or treated for TB infection **OR** previously treated for TB disease.

Case Classification

Suspected

A case that meets one or more of the laboratory criteria

AND

M. tuberculosis complex was not isolated from a clinical specimen, if a specimen was collected

Confirmed

A case that meets one of the laboratory criteria for TB infection

AND

M. tuberculosis complex was not isolated from a clinical specimen, if a specimen was collected

AND

Meets the clinical criteria for TB infection as listed above

References

1. Council of State and Territorial Epidemiologists (CSTE). Public Health Reporting and National Notification for Tuberculosis. CSTE Position statement 09-ID-65. Available from: http://www.cste.org/resource/resmgr/PS/09-ID-65.pdf
2. Centers for Disease Control and Prevention (CDC). Latent Tuberculosis Infection: A Guide for Primary Health Care Providers. Available from https://www.cdc.gov/tb/publications/ltbi/diagnosis.htm (Accessed February 2017)
3. Centers for Disease Control and Prevention (CDC). TB Fact Sheet on Tuberculin Skin Testing Available from: https://www.cdc.gov/tb/publications/factsheets/testing/skintesting.htm (Accessed February 2017)
4. Centers for Disease Control and Prevention (CDC). TB Fact Sheet on IGRA Blood Tests for TB infection Available from: https://www.cdc.gov/tb/publications/factsheets/testing/igra.htm (Accessed February 2017)
5. Lewinsohn DM, Leonard MK, LoBue PA et al. Official American Thoracic Society/Infectious Diseases Society of America/Centers for Disease Control and Prevention Clinical Practice Guidelines: Diagnosis of Tuberculosis in Adults and Children. *Clin Inf Dis* 2017: 64 (2): 111-5.
6. CDC 2018. NNDSS Latent Tuberculosis Infection definition. https://wwwn.cdc.gov/nndss/conditions/latenttb/case-definition/2018/. Accessed June 30, 2019.
7. CSTE 2017. Latent Tuberculosis Infection position statement. https://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2017PS/2017PSFinal/17-ID-09.pdf. Accessed June 30, 2019.

Appendix B

Recommendations for Reporting and Counting LTBI Cases

(Revised April 21, 2023)

A distinction should be made between ***reporting*** LTBI cases to a health department and ***counting*** LTBI cases for determining incidence of infection. Throughout each year, suspected and confirmed LTBI cases are reported to public health authorities by sources such as clinics, hospitals, laboratories, and health care providers. From these reports, it is determined which cases meet the current surveillance definition for TB infection and whether the case is countable.

State and local TB control officers should also report to Centers for Disease Control and Prevention (CDC) those LTBI cases that are not countable for morbidity statistics (see Counting LTBI Cases), as a measure of programmatic and case management burden.

I. Reporting LTBI Cases. For purposes of this surveillance project, health care providers and laboratories should be required to report all LTBI cases to state or local health departments based on the current "Latent Tuberculosis Infection Case Definition for Public Health Surveillance" (Appendix A). This notification is essential in order for TB programs to:

- Ensure case supervision
- Ensure completion of appropriate therapy
- Evaluate program effectiveness
- Assess trends and characteristics of LTBI morbidity

II. LTBI Surveillance. Diagnosis of LTBI made after exclusion of TB disease. For purposes of this surveillance project, a case of LTBI is defined based on laboratory test results suggesting presence of infection with *M. tuberculosis* complex but without clinical evidence of TB disease. Cases should be classified as suspected, confirmed, or not a case based on laboratory, clinical, radiographic, and microbiologic evidence.

a. <u>Suspected</u> Case Classification

A case that meets one or more of the laboratory criteria (Appendix A)

AND

M. tuberculosis complex was not isolated from a clinical specimen, if a specimen was collected

b. <u>Confirmed Case Classification</u>

A case that meets one of the laboratory criteria for TB infection (Appendix A)

AND

M. tuberculosis complex was not isolated from a clinical specimen, if a specimen was collected

AND

Meets the clinical criteria for TB Infection as listed in Appendix A

III. Counting LTBI Cases. Not all LTBI cases will be counted as part of the reported LTBI incidence for the United States. Cases that meet one or more of the following criteria will not be counted, but should still be reported as "noncountable" cases:

a. Non-U.S. residents: Cases reported in persons who are not U.S. residents (e.g., foreign visitors) are not countable as U.S. LTBI cases for the purpose of reporting official LTBI incidence data. These cases might be included in other calculations (e.g., funding allocations).

b. Transfer cases: Cases that were diagnosed with LTBI in another reporting area that participates in U.S. LTBI surveillance should not be counted in the case count for any subsequent jurisdictions to which the patient moved after being diagnosed with LTBI, unless after discussion with the other reporting areas it is determined that the case should be counted by a reporting area other than the one where the case was diagnosed.

IV. Suggested Administrative Practices

To promote uniformity in LTBI case counting, the following administrative procedures are recommended:

a. All reported countable LTBI cases will be included in epidemiologic analyses, if possible. Cases for which laboratory or microbiology results are pending or for which confirmation of LTBI is questionable for any other reason should not be counted until their status is clearly determined; they should be counted at the time they meet the criteria for counting. This means that a case reported in one calendar year could be included in the morbidity count for the following year. The reporting area should ensure that there is agreement between local and state LTBI cases reported for this project.

b. LTBI cases reported to health departments that do not have complete information should be accepted as an official morbidity report if sufficient details (i.e., core data elements) are provided; otherwise, the notification should be used as an indicator of a suspected LTBI case which should be investigated promptly for confirmation.

Appendix C

Reporting Area Codes

Name	Alpha	Code
Alabama	AL	01
Alaska	AK	02
Arizona	AZ	04
Arkansas	AR	05
California	CA	06
Colorado	CO	08
Connecticut	CT	09
Delaware	DE	10
Florida	FL	12
Georgia	GA	13
Hawaii	HI	15
Idaho	ID	16
Illinois	IL	17
Indiana	IN	18
Iowa	IA	19
Kansas	KS	20
Kentucky	KY	21
Louisiana	LA	22
Maine	ME	23
Maryland	MD	24
Massachusetts	MA	25
Michigan	MI	26
Minnesota	MN	27
Mississippi	MS	28
Missouri	MO	29
Montana	MT	30

Name	Alpha	Code
Nebraska	NE	31
Nevada	NV	32
New Hampshire	NH	33
New Jersey	NJ	34
New Mexico	NM	35
New York	NY	36
New York City	NO	975772
North Carolina	NC	37
North Dakota	ND	38
Ohio	OH	39
Oklahoma	OK	40
Oregon	OR	41
Pennsylvania	PA	42
Rhode Island	RI	44
South Carolina	SC	45
South Dakota	SD	46
Tennessee	TN	47
Texas	TX	48
Utah	UT	49
Vermont	VT	50
Virginia	VA	51
Washington	WA	53
Washington D.C.	DC	11
West Virginia	WV	54
Wisconsin	WI	55
Wyoming	WY	56

U.S.-Affiliated Island Reporting Area Codes

For information on citizenship and "U.S.-born" for Island Areas see **Nativity** (item 11)

Name	Alpha	Code
American Samoa	AS	60
Federated States of Micronesia	FM	64
Guam	GU	66
Commonwealth of the Northern Mariana Islands	MP	69
Republic of Palau	PW	70
Puerto Rico	PR	72
Republic of the Marshall Islands	MH	68
U.S. Virgin Islands	VI	78

Appendix D

Glossary

Term	Definition
Acid-fast bacilli (AFB)	Microorganisms 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.
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.
Cavity	A hollow space within the lung, visible on a chest radiograph or CT scan.
Clinician	A physician, physician's assistant, or nurse/nurse practitioner.
Congregate setting	A setting in which a group of usually unrelated persons reside in close physical proximity. These settings may include long-term care facilities, assisted living facilities, correctional facilities, or homeless shelters (see residential facilities).
Contact investigation	A procedure for interviewing a person who has TB disease to determine who may have been exposed to TB. People who have been exposed to a person with TB are located and tested for TB infection and TB disease and treated if indicated.
Contacts	People exposed to someone with TB disease, generally including family members, roommates or housemates, close friends, coworkers, classmates, and others.
Country of birth	The country where a person was born.
Culture	To grow organisms in or on media (substances containing nutrients) so that they can be identified.
Diabetes mellitus	A disease in which the body's ability to produce or respond to the hormone insulin is impaired, resulting in abnormal metabolism of carbohydrates and elevated levels of glucose in the blood and urine. See detailed diagnostic criteria for diabetes elsewhere in this manual.
Diagnostic evaluation	An evaluation used to diagnose TB disease or LTBI; includes a medical history, a chest radiograph, the collection of specimens for bacteriologic examination, and possibly a tuberculin skin test or an interferon-gamma release assay.

Term	Definition
Directly observed therapy (DOT)	Where a designated health care worker watches the person with LTBI swallow each dose of the prescribed drugs.
Epidemiologically linked	The patient has had contact with one or more persons who have/had TB disease, LTBI, or have been exposed to a point source of infection (i.e., a single source of infection, such as an event or location where one or more patients had a confirmed case of TB disease). Transmission of *M. tuberculosis* complex by the usual modes of transmission, e.g., aerosol, is plausible. A case may be considered epidemiologically linked to a laboratory-confirmed case if at least one case in the chain of transmission is laboratory confirmed.
Ethambutol (EMB)	A drug used to treat TB disease; may cause vision problems. Ethambutol should be used cautiously in children who are too young to be monitored for changes in their vision.
HIV	Human immunodeficiency virus, the virus that causes AIDS.
Immunosuppressive therapy	Therapy that suppresses or weakens the immune system.
Interferon-gamma (IFN-γ)	Protein that is normally produced by the body in response to infection.
Interferon-gamma release assay (IGRA)	A type of blood test that measures a person's immune reactivity to *M. tuberculosis* by measuring release of IFN-γ. In the U.S., QuantiFERON®-TB Gold, QuantiFERON®-TB Gold In-Tube, QuantiFERON®-TB Plus and T-SPOT®.TB are currently available IGRAs.
Isolate	A sample from a specimen that was identified as a certain organism such as *M. tuberculosis* complex.
Isoniazid (INH)	A drug that is used for treating LTBI and one of the drugs used to treat TB disease; although relatively safe, it may cause hepatitis and other severe adverse reaction in some patients.
Latent TB infection (LTBI)	Refers to the condition when a person is infected with tubercle bacilli, but TB disease has not developed. Persons with LTBI do not have TB disease symptoms and they cannot spread TB to others. Persons with LTBI usually have a positive result to the Mantoux tuberculin skin test or an interferon- gamma release assay.
LTBI treatment	Medication that is given to people who have latent TB infection to prevent them from developing TB disease.

Term	Definition
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, sometimes a palpable swollen area (induration), is measured 48 to 72 hours after TST placement and is interpreted as positive or negative depending on the size of the induration in millimeters (mm) and the patient's risk factors for TB.
Miliary TB	Miliary TB is a serious type of tuberculosis infection. It is a histological or radiologic finding, rather than a site of disease. It appears on radiographs as a great number of small, well-defined nodules that look like millet seeds scattered throughout the lungs, hence the name "miliary."
Mycobacterium tuberculosis	One of the organisms causing TB in humans, and sometimes called the tubercle bacillus; belongs to a group of bacteria called mycobacteria.
NEDSS/HL-7	National Electronic Disease Surveillance System (NEDSS)/Health Level 7 (HL-7)
Non-U.S.–born persons	Persons who are not eligible for U.S. citizenship at birth, regardless of the actual country of birth (formerly called "foreign-born").
Nucleic acid amplification (NAA)	A technique that amplifies (copies) DNA or RNA segments, in order to directly identify microorganisms in clinical specimens.
Rifampin (RIF)	A drug used to treat TB disease and LTBI.
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.
Specimen	A sample collected from a person for testing.
Sputum	Phlegm from deep in the lungs, collected in a sterile container for processing and examination.
Suspected case	A person for whom there is a high index of suspicion for LTBI (e.g., a known contact to an active TB case or to a person with signs or symptoms consistent with TB) who is currently under evaluation for TB disease.
TB disease	An illness, caused by bacteria called *Mycobacterium tuberculosis*, in which tuberculosis (TB) bacteria are multiplying and attacking parts of the body, most commonly the lungs. A person with TB disease is capable of spreading the disease to others if the TB bacteria are active in the lungs or throat. The symptoms of TB disease include weakness, weight loss, fever, no appetite, chills, and sweating at night. Other symptoms may include a bad cough, pain in the chest, and coughing up blood.