

# Tuberculosis Contact Investigation Form Instructions

## General Information

The purpose of the Tuberculosis Contact Investigation form is to provide a worksheet for Local Health Department (LHD) staff to 1) assess the need for a contact investigation, 2) prioritize the follow-up of contacts, 3) track the evaluation and treatment of contacts, and 4) provide data to the State necessary to complete Aggregate Reports for Tuberculosis Program Evaluation (ARPE) for the CDC.

The instructions for this report are not a substitute for guidelines about TB diagnosis, treatment, or control. Please refer to “Guidelines for the Investigation of Contact of Persons with Infectious Tuberculosis” (MMWR December 16, 2005 vol. 54, no. RR-15) for the current CDC guidelines on conducting a contact investigation. As always, feel free to consult with the State TB Control Program for technical assistance or advice in conducting a contact investigation.

## Submission of Tuberculosis Contact Investigation Forms

A Tuberculosis Contact Investigation form should be completed for every verified case of TB. Copies of the form are available at the State TB Control Program website at: <https://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/Tuberculosis/Documents/formdoc/contactformRIF.pdf>

### ***When to submit:***

A copy of the contact form will need to be submitted 3 times (initial, update, and final reports).

#### Initial Report:

Send a copy when all contacts have results for the initial (< 8 week) TST/QFT (please submit within 4 weeks of case report). In the top right hand page of the form, in the space next to “Initial” enter the date the form is submitted to the State. If all contacts have a negative result and a final TST is not required (e.g. contact follow-up was delayed and initial testing was not done), or case was extrapulmonary and a contact investigation was not indicated, then also mark the date for “Final” in the top right hand corner of the form, and there is no need to send any further copies of the form after this one.

#### Update Report:

Send an updated copy of the form when all contacts have a complete evaluation (please submit within 4 months of case report). Enter the date the form was submitted to the State in the space next to “Initial” on the top right hand corner of the form. A full evaluation includes:

- a) Final TST/QFTs are negative and asymptomatic
- b) Newly positive TST/QFTs have CXR results
- c) Persons with newly diagnosed LTBI have a started treatment status

If no contacts are started on treatment for LTBI, then also enter the date for “Final” and there is no need to send any further copies of the form.

Final Report:

Send a final updated copy of the contact form when all contacts who started treatment for LTBI have completed treatment or have stopped treatment for other reasons. Enter the date the form is submitted in the space next to “Final” on the top right hand corner of the form. Preliminary ARPE reports on contact investigations are sent to CDC in August of the year after the case was verified; final data are submitted in August two years after the case was verified. Please keep this in mind and send final contact reports in a timely fashion, given the above deadlines. If evaluation or treatment information is not complete we will contact you to collect this data.

**Where to submit:**

Mail: TB Control  
Oregon Health Authority  
Public Health Division  
800 NE Oregon Street, Suite 1105  
Portland, OR 97232

-or-

Fax: (971) 673-0178

Send attention TB Control

**How to fill out the Tuberculosis Contact Investigation Form**

The Tuberculosis Contact Investigation Form is divided into three main sections: Administrative Information (the header of the form), Case Information, and Contact Information. Details of the data elements collected in each section of the form are outlined below.

**ADMINISTRATIVE INFORMATION (Form Header)**

**Report and Date**

Initial \_\_\_\_/\_\_\_\_/\_\_\_\_  
Update \_\_\_\_/\_\_\_\_/\_\_\_\_  
Final \_\_\_\_/\_\_\_\_/\_\_\_\_

The contact investigation data form is submitted to the State three times as information is added to the form. Please refer to “When to submit” section above. Mark the date each report was submitted to the State.

**County/Local Health Department (LHD)**

Enter the county where the case resides at time of diagnosis.

**Case Manager**

Write the name of the case manager (TB Nurse) at the local health department who is managing the reported case of TB and the contact investigation. This should be the person who the State would contact if there are questions about information on the form.

**State Case Number**

State use only

**Local Case Number\***

Enter the case number assigned by the local health department (optional).

**CASE INFORMATION**

**Name and DOB**

Write the name and date of birth of the case for whom the contact investigation is being performed.

**Disease Site**

Pulmonary, Pleural, Laryngeal

Other

If pulmonary, pleural or laryngeal TB, mark the corresponding check box, otherwise select "Other".

**Need for Contact Investigation (case characteristics)**

High (sputum-smear pos and/or cavitary or laryngeal TB)

Medium (sputum-smear neg, culture positive pulmonary or pleural TB)

Low (sputum-smear neg, culture negative pulmonary or pleural TB)

None (all others, pulmonary involvement ruled out, contact investigation not needed)

Select the need for a contact investigation based on sputum-smear, site of disease, and chest x-ray (CXR) result. If sputum specimens could not be collected, results from other types of respiratory specimens (e.g. gastric aspirates) may be interpreted as would a sputum-smear. Please note that cavitary disease is defined by the CXR, not CT. Per p.4 of the CDC Guidelines: "Patients who have lung cavities observed on chest radiograph are more infectious than patients with noncavitary pulmonary disease...The importance of small lung cavities that are detectable with computerized topography (CT) but not with plain radiography is undetermined."

**Note: In the ARPE reports, contact investigations with need of "None" (e.g. extrapulmonary), are not counted on the report.**

**Infectious Period**

Start Date \_\_\_\_/\_\_\_\_/\_\_\_\_

A conservative method to estimating the start date is to use the date three months prior to either the onset of symptoms or the first positive finding consistent with TB disease, whichever is first. Positive findings consistent with TB include, but are not limited to: positive AFB smear, positive NAAT, positive culture for MTB, abnormal CXR consistent with TB, and initiation of treatment for TB.

End Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Pending

The end date need only be entered for sputum-smear positive cases. The date should meet the following criteria: treatment for at least 2 weeks with clinical improvement and 3

consecutive sputum-smear negative specimens or 3 negative cultures, whichever comes first. If the end of the infectious period is not known at time of report, mark pending and update this information on the next report. Note: this end date is for the purposes of contact investigations; clinical decisions for removing patients from isolation may differ from the above.

## CONTACT INFORMATION:

On page 1 of the Tuberculosis Contact Investigation form there is room for three contacts to be listed. If a case has more than three contacts in need of evaluation, please use copies of the second page of the form, and number the pages. If no contacts were identified for the case, please write "No contacts" and send the form to the State TB Control Program for our records.

**A contact is a person whom the health department believes had significant exposure and for whom enough identifying/contacting information is available. Note: only contacts to cases reported to and confirmed by the State TB Control Program are eligible for counting on the ARPE report.**

For each identified contact, complete one row of the table working across from left to right as far as appropriate for each person. Column 1 contains demographic information on the contact, columns 2 and 3 contain information for prioritizing the follow-up of contacts, columns 4-7 contain information on evaluation of contacts, column 8 collects information on treatment of contacts and column 9 collects final status of contacts started on treatment or not fully evaluated. Strike columns that are not applicable to a particular contact. For example, if a contact is negative at both initial (< 8 week) and follow-up (≥ 8 week) TST/QFT, then the CXR, LTBI Treatment Start, and Final Status columns are not applicable and should be crossed out.

### Demographic Information (Column 1)

#### First Name, Last Name, Address, Phone, Date of Birth

Enter name, locating information (optional), and date of birth of the contact

#### Country of Birth \_\_\_\_\_ DOE \_\_\_\_/\_\_\_\_

Enter country or territory of birth in the space provided. Enter date of entry (month and year) into the US (or NA if US-Born)

#### Date Last Exposed

Enter the date of last contact with the case while the case was still infectious (sputum-smear positive cases only). Select the ongoing box for contacts who continue be exposed (e.g. household). Please update this field if the date last exposed changes (i.e. if the contact saw the case again after the 1<sup>st</sup> PPD round and the case was still infectious)

### Contact Risk Assessment (Columns 2 and 3)

This section is divided into categories indicating high risk of infection or low risk of infection for the contact. This risk relates directly to the contact's exposure to the case and the individual contact's medical conditions or other risks. Under the "High Risk of Infection" heading are situations that usually indicate the contact has either a) significant exposure to the case, or b) a medical risk that increases the contact's chances of becoming sick with TB after infection. For example, if a contact is a member of the case's household, in most situations this indicates a great deal of direct exposure to the case; therefore, the contact's risk of infection would be high. Likewise, while an HIV-positive contact may have had less exposure to the case than a household contact, the fact that the contact is HIV-positive means the contact's personal risk of developing TB disease is high. Instructions for selecting contact risks in both the high and low risk of infection categories are found below.

### **Contact Risks: High Risk of Infection<sup>1</sup>**

Household  
Age <5  
HIV/AIDS  
CXR c/w Inactive TB  
Congregate Setting  
Exceeds Exposure Limits  
Other Medical Risk  
Other \_\_\_\_\_

Select all that apply. Use the "Other" box to write-in if the contact has a characteristic other than the specified categories that you feel warrants classification as a 'High' risk for infection (e.g. 6 year old child).

#### Household

Check this box if the contact lives in the same residence as the case.

#### Age<5

Check this box if the contact is <5 years old. After infection, TB disease is more likely to occur in younger children. Contacts <5 years of age should be started on window treatment.

#### HIV/AIDS

Check this box if contact is HIV positive or has AIDS. Contacts with HIV/AIDS should be started on window treatment and considered for completion of a full course of treatment for LTBI. HIV infection results in the progression of TB infection to TB disease more frequently and rapidly than any other known factor.

#### CXR c/w Inactive TB

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<sup>1</sup> For information on contact risks, see CDC's *Guidelines for the Investigation of Contacts of Persons with Infectious Tuberculosis*, found at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5415a1.htm>.

Persons with prior pulmonary tuberculosis who have not been treated are at increased risk to later develop active TB. CXRs that may indicate prior TB are apical fibronodular infiltrations. Contacts with CXRs indicating healed primary TB (e.g. a calcified pulmonary nodule) are not at higher risk for later developing active TB disease.

Note: The activity of TB CANNOT be determined from a single CXR, and unless there are previous CXRs showing the abnormality has not changed, it is recommended sputum be sent for examination to assess the possibility of active TB disease. Once active TB disease is excluded by sputum culture, these patients are high priority for treatment for LTBI.

#### Congregate setting

Check this box if exposure to the case occurred in a congregate setting, either occupationally or residentially (e.g. high school, correctional facility, homeless shelter, nursing home). If you feel that the contacts in a congregate setting fall into the category of “Low Risk of Infection”, please check the box “Other Low Risk” in the next column and write in the setting in the space provided. Please consult with the State TB Control Program for assistance in determining if contacts are at high or low risk of infection if you have any questions. The State TB Control Program is available for onsite and/or technical assistance with all investigations in congregate settings.

For airline exposures, the State TB Control Program must be notified and will coordinate an investigation of those contacts with CDC.

#### Exceeds exposure limits

Check this box for otherwise healthy individual age  $\geq 5$  with exposure to the case that exceeds exposure limits (**i.e. you believe the risk is high enough that the contact’s level of exposure could result in infection**). Examples of exceeds exposure limits might include a close friend, a coworker that shares an office with the case, daily carpool member, etc.

The North Carolina TB Control Program Manual

(<http://epi.publichealth.nc.gov/cd/lhds/manuals/tb/toc.html>) specifies exposure limits to assist in determining if a contact “exceeds environmental limits”. These limits are provided below should you wish to use them in your contact investigation. **A contact is not required to meet the limits below, these are for guidance only.**

- $\geq 4$  cumulative hours in small, poorly ventilated space such as a car or enclosed room
- $\geq 8$  cumulative hours in small well-ventilated space such as an apartment
- $\geq 12$  cumulative hours in a large space such as a classroom or house
- $\geq 50$  cumulative hours in large open area such as an auditorium or church

#### Other medical risk factor

Check this box if the contact has a significant medical risk (other than HIV/AIDS).

Examples:

- Those on immunosuppressive agents, including multiple cancer chemotherapy agents, antirejection drugs for transplants, TNF-alpha antagonists
- Someone receiving >15 mg of prednisone or its equivalent for >4 weeks
- Those with silicosis, uncontrolled diabetes mellitus, gastrectomy or jejunioileal bypass surgery, etc

All patients taking prednisone or an TNF alpha antagonist inhibitor (Enbrel, Remicade, Humira) should be treated during the window period. Consider starting all other contacts with significant medical risk(s) on treatment during the window period.

#### Other

Check this box if you believe the contact has a risk factor that contributes to their high risk of infection and progression to TB disease that is not listed above. Write in the risk factor in the space provided.

#### **Contact Risks: Low Risk of Infection**

No Risk

Other Low Risk

#### No Risk

Check this box if the contact has no known risk factors, i.e., no actual exposure to the case.

#### Other Low Risk

Check this box if the contact has limited exposure to the case, and you believe the risk of infection (and progression to TB disease) is truly low. Please write in the setting in the space provided. An example might be contacts from a school investigation (congregate setting) with little or no exposure to the case, and no other medical risks, that were tested as part of the investigation. Please feel free to consult with the State TB Control Program for assistance in determining if a contact's risk of infection is high or low.

### **Contact Prioritization and Reporting**

Contacts assigned to the "High Risk of Infection" category should receive prioritization in contact follow-up. **For contact counting purposes on ARPE, only the contacts marked under the "High Risk of Infection" category will be counted by the State.** Note: Contacts initially classified as "Low" may be moved into the "High" group as the investigation progresses or expands. This is likely to occur when the case is highly infectious and you suspect lower levels of exposure are causing infection (evidence of >10% latent infection rate among contacts tested, evidence of secondary active cases).

### **Contact Evaluation (column 4-7)**

**Symptoms**

Yes  
No

Mark whether the contact is experiencing signs and symptoms of TB such as cough, fever, night sweats, hemoptysis, weight loss, etc. If the contact is symptomatic, work up for TB disease.

**<8 week TST/QFT**

TST:  
\_\_\_\_/\_\_\_\_/\_\_\_\_  
TST mm \_\_\_\_\_

QFT:  
\_\_\_\_/\_\_\_\_/\_\_\_\_  
QFT Result \_\_\_\_\_

Prior TST/QFT+  
Prior Tx

Enter the date of the TST and/or QFT given during the window period (< 8 weeks from date last exposed to infectious case) in the appropriate space for the type of screening. If TST was performed, enter the mm induration in the space provided; if QFT, enter the result (pos, neg or indeterminate). If TST was placed but not read, leave this section blank. If both TST and QFT were performed, enter the date and result of both tests.

If prior TST/QFT positive, check the box and record the result in the space provided. If there is no documentation of the test (or scar from TST), re-testing is recommended.

If you believe adequate prior treatment was completed for TB disease or LTBI, mark the box for "Prior Tx". In absence of a documented course of therapy, some questions to ask the patient to assess whether treatment was adequate include:

- Where were you treated?
- What drugs did you receive?
- How many different drugs? How many pills each day? What size and color were the pills/capsules?
- How long were you on treatment?
- Did you take medications daily? Every pill?
- Did you miss medication sometimes? How often?
- Did health care workers observe you taking your medications?

**Note, contacts with prior TST/QFT positive and/or prior treatment are considered evaluated for the purposes of ARPE; these contacts are then**

**excluded from the treatment portion of that report.** However, the LHD should, at a minimum, perform a symptom screen on these contacts. A chest x-ray is recommended for contacts with medical risks or symptoms, or if the case is highly infectious (ie outbreak situation). Consider offering LTBI to prior positives who have not completed therapy.

**≥ 8 week TST/QFT**

TST:

\_\_\_\_/\_\_\_\_/\_\_\_\_  
TST mm \_\_\_\_\_

QFT:

\_\_\_\_/\_\_\_\_/\_\_\_\_  
QFT Result \_\_\_\_\_

Prior TST/QFT+  
Prior Tx

Enter the date of the TST and/or QFT given after window period (≥ 8 weeks) in the appropriate space for the type of screening. If a TST was performed, enter the mm induration in the space provided; if QFT, enter the result (pos, neg or indeterminate). If only one TST or QFT was performed after the window period (8-10 weeks after last exposure to case while case was still infectious), enter the result in this column. If TST was placed but not read, leave this section blank. If both TST and QFT were performed, enter the date and result of both tests.

**Chest X-ray**

\_\_\_\_/\_\_\_\_/\_\_\_\_

Negative  
Abnormal consistent with TB disease  
Abnormal consistent with inactive TB

\_\_\_\_\_  
\_\_\_\_\_

Enter the date the chest x-ray was taken (if more than one CXR was taken during the contact investigation evaluation then enter the date of the most recent x-ray). Check the appropriate box to select whether the x-ray was negative for TB, abnormal consistent with TB, or abnormal consistent with inactive TB. Enter any comments on the lines provided.

**LTBI Treatment**

Complete this section for all contacts for whom LTBI treatment has been initiated. This may include persons on window treatment, persons with HIV/AIDS being treated with a full course of preventive therapy (regardless of TST/QFT), persons

with newly diagnosed LTBI, and prior positives). **Note, only treatment for contacts with newly diagnosed LTBI are “counted” in the ARPE reports.**

**Date Started**

Enter the date LTBI treatment was started.

**Date Stopped**

Enter the date LTBI treatment was stopped (regardless of whether the contact completed the appropriate course of treatment).

**Regimen:**

**INH**

**Rif**

**Other \_\_\_\_\_**

Mark the treatment regimen the contact received. A regimen of 9 months of INH is preferred, although the 6 month INH regimen is acceptable. Other acceptable regimens include Rifampin for 4 months for adults and 6 months for children. Mark “Other” and write-in “window” for contacts started on window prophylaxis pending 8-week follow-up TST/QFT results. Mark “Other” if the contact is started on a regimen other than INH or Rifampin and indicate the regimen in the space provided.

**Final Status**

For any contact not fully evaluated or any contact started on LTBI treatment, select one option from the list below to summarize their final status:

- Completed LTBI treatment
- TB Disease
- Died
- Declined
- Lost
- Moved
- Adverse Rxn to Tx
- Other Provider Decision \_\_\_\_\_

If contact moved out of the jurisdiction, please submit an “Interjurisdictional Transfer Notification” see form: <https://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/Tuberculosis/Documents/formdoc/ijnotification.pdf>

to the receiving jurisdiction and mail a copy to the State. Also, if known, fill in the space provided for where the contact moved. The LHD is responsible for coordinating follow-up of contacts; contact the State TB Control Program if you need assistance.

If “Other Provider Decision” is selected please indicate the reason in the space provided.