Regulations for TB Control in Minnesota Health Care Settings

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About This Webinar

- This webinar will provide an brief overview of Minnesota's TB regulations and recommendations.
- Please refer to MDH's TB regulations manual titled "Regulations for Tuberculosis Control in Minnesota Health Care Settings: A Guide for Implementing Tuberculosis (TB) Infection Control Regulations in Your Facility" for more detail and tools.
- The web address is listed at the end of this webinar.
Outline

- Abbreviations
- TB Legislation
- TB Infection Control Program
- General Principles for Screening HCWs and Residents
- Screening HCWs
- Screening Residents
- Contact Information
Abbreviations

- CDC = Centers for Disease Control and Prevention
- CDC infection control guidelines = “Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings, 2005”
- HC = health care
- HCW = health care worker
- IGRA = Interferon Gamma Release Assay (TB blood test)
- M. tb = Mycobacterium tuberculosis
- TB = tuberculosis
- TST = tuberculin skin test
CDC Infection Control Guidelines

- Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings, 2005
- 141-page document
- To view or download/print: www.cdc.gov/tb/pubs/mmwr/Maj_guide/infection_control.htm
TB Legislation
Since CDC published their updated infection control guidelines in 2005, MDH has recognized that Minnesota laws needed to be revised to meet these updated guidelines and to incorporate current knowledge and technology.

The “TB waivers” stated that licensees were required to follow the 2005 CDC infection control guidelines.

TB Legislation (1)

- For many years, Minnesota’s TB regulations consisted of separate laws written for specific settings, most based on national guidelines published in the 1990s or earlier.
- Minnesota’s TB regulations needed updating.
- MDH issued “TB waivers” in 2009 as a interim step for:
  - Boarding care homes,
  - Home care providers,
  - Nursing homes, and
  - Supervised living facilities.
TB Legislation (2)

- In 2013, MDH proposed new language to the Minnesota Legislature.
  - Requires settings to follow current CDC TB infection control guidelines.
  - Consistent with Minnesota Occupational Health and Safety (OSHA) TB requirements.
  - Three categories of regulations:
    - TB infection control program,
    - Screening HCWs, and
    - Screening residents (boarding care homes, residential hospices, and nursing homes only).
TB Legislation (3)

- The language was adopted by the legislature.
- Take effect August 1, 2013.
- Replace the 2009 “TB waivers.”
- Apply to settings licensed by MDH as:
  - Boarding care homes,
  - Home care providers,
  - Hospices,
  - Nursing homes,
  - Outpatient surgical centers, and
  - Supervised living facilities.
TB Infection Control Program
TB Infection Control Program: Overview

- All HC settings in Minnesota should have an up-to-date TB infection control program that includes:
  - A TB infection control team,
  - A facility TB risk assessment,
  - Written TB infection control procedures, and
  - Education for all HCWs.
While the idea of having a TB infection control team may seem daunting, the team can consist of one person who has overall responsibility for your setting’s TB infection control program. Larger settings may have a team of several people.

**TB Infection Control Program: Infection Control Team**

- Can be a team of one or more people.
- A qualified person should be assigned supervisory responsibility for the TB infection control program.
- Responsible for overseeing all aspects of the TB infection control program including:
  - Conducting the HC setting's facility TB risk assessment,
  - Developing, implementing, and enforcing TB infection control procedures,
  - Screening HCWs and residents (as needed), and
  - Ensuring training and education of HCWs.
The facility TB risk assessment is a systematic, structured evaluation of a HC setting’s risk for TB transmission.

You will conduct an initial facility TB risk assessment and update it periodically using one of the following methods:

- **Facility Tuberculosis (TB) Risk Assessment Worksheet for Health Care Settings Licensed by the Minnesota Department of Health (MDH).**
- **Appendix B. Tuberculosis (TB) risk assessment worksheet. Published by the CDC.**
- **Create your own worksheet using the criteria listed in CDC's infection control guidelines.**

Keep your facility TB risk assessment on file. Do not submit your assessment to MDH.
The majority of facilities in Minnesota are low risk. It is important to remember that a low risk setting may occasionally have someone with active TB disease, so staff need to remain vigilant about the signs and symptoms of active TB disease and the setting should keep their TB policies and procedures updated.

It is uncommon to have a setting that is classified as potential ongoing transmission in Minnesota. This TB risk classification means that there is evidence of person-to-person transmission of TB in that setting. Evidence for this could be found in a TB contact investigation with documented TST conversions or secondary cases of active TB disease among HCWs or patients in the setting or if you experience an unexpectedly high rate of conversions on routine TSTs. This is usually a temporary classification – a couple of years at the longest. Contact the MDH at 651-201-5414 to determine what steps you should take if you have this classification.
TB Infection Control Program: Facility TB Risk Assessment (3)

- The setting's TB risk classification determines need for serial screening of HCWs and frequency for updating your risk assessment:
  - Low-risk setting: conduct risk assessment every other year.
  - Medium-risk setting: conduct risk assessment yearly.
TB Infection Control Program: Written TB Infection Control Procedures

- Procedures should include:
  - Early recognition,
  - Isolation,
  - Referral, and
  - Information about working with the local or state public health department to conduct a TB contact investigation if health care-associated transmission of TB is suspected.
- Additional procedures are required for settings that expect to admit patients with suspected or confirmed active TB disease.

- Early recognition, meaning all HCWs know the signs and symptoms of TB and their role in their facility’s TB infection control program.

- Isolation is the process of placing potentially infectious patient in airborne infection isolation (AII) room if available; otherwise placing patient in separate room with door shut.

- If your setting does not handle TB patients, transfer (or refer) patient to setting with the capacity to evaluate and treat the patient.

- The purpose of a TB contact investigation is to find people who were closely exposed to the person with infectious TB disease, offer them testing to see whether or not they have picked up the infection or have actually become sick with active TB disease, and offer them treatment as appropriate.
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<th>Low-Risk Setting</th>
<th>Medium-Risk Setting</th>
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<tr>
<td>At time of hire</td>
<td>Required</td>
<td>Required</td>
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<tr>
<td>Annually</td>
<td>The need for TB training should be assessed or performed annually.</td>
<td>Required</td>
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TB Infection Control Program: Education for All HCWs (2)

- At a minimum, training should focus on the basics of:
  - TB pathogenesis and transmission,
  - Signs and symptoms of active TB disease, and
  - Your HC setting’s infection control program (i.e., how your early recognition, isolation, and referral plan works).
General Principles for Screening HCWs and Residents
Many people are surprised to learn that 25% of the time a person with active TB disease will have a negative TST.
General Principles for Screening HCWs and Residents (2)

- All reports or copies of the TST or IGRA and any chest X-ray and medical evaluations conducted should be maintained in the individual’s record.
- MDH has modifiable templates that can be used to document screening: [www.health.state.mn.us/divs/idepc/diseases/tb/rules/index.html](http://www.health.state.mn.us/divs/idepc/diseases/tb/rules/index.html)
  - Baseline and Serial TB Screening Tools for HCWs.
  - Baseline TB Screening Tool for Nursing Home and Boarding Care Home Residents
  - Baseline TB Screening Tool for Residents in Residential Hospice.
General Principles for Screening HCWs and Residents: Chest X-rays

- Chest X-ray should be dated after the date of the positive TST or IGRA; however, a chest X-ray done within 3 months prior to the TST/IGRA is acceptable, provided that the individual has not been exposed to infectious TB disease since the chest X-ray was done.

- After a baseline chest X-ray is performed and infectious TB disease has been ruled out, the individual will not need additional chest X-rays unless symptoms of active TB disease develop or a clinician recommends a repeat chest X-ray.
General Principles for Screening HCWs and Residents: TSTs

- TST documentation should include:
  - Date (i.e., month, day, year),
  - Number of millimeters of induration (if no induration, document “0” mm), and
  - Interpretation (i.e., positive or negative).
- BCG vaccination is not a contraindication for TST.
General Principles for Screening HCWs and Residents: IGRAs

- IGRA documentation should include:
  - Date (i.e., month, day, year),
  - Qualitative results (i.e., positive, negative, indeterminate or borderline), and
  - Quantitative assay (i.e., Nil, TB, and Mitogen concentrations or spot counts).
- Indeterminate or borderline IGRA results indicate an uncertain likelihood of *M. tuberculosis* infection and should be further evaluated by a physician.
Screening HCWs
For purposes of TB screening, HCWs are defined very broadly. It all comes down to who shares airspace with patients, even if a worker does not provide direct patient care.
## Screening HCWs: Frequency

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<tr>
<th>Risk classification</th>
<th>Baseline screening</th>
<th>Serial screening</th>
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<tr>
<td>Low</td>
<td>Required</td>
<td>Not required</td>
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<tr>
<td>Medium</td>
<td>Required</td>
<td>Annual</td>
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<tr>
<td>Potential ongoing transmission</td>
<td>Required</td>
<td>Consult with MDH at 651-201-5414</td>
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Screening HCWs: Baseline (1)

- All HCWs should receive baseline TB screening upon hire.
- Three components:
  - Assessing for current symptoms of active TB disease,
  - Assessing HCW’s history, and
  - Testing for the presence of infection with *M. tb* by administering either a two-step TST or single IGRA.
Screening HCWs: Baseline (2)

- HCWs may begin working with patients after a negative TB symptom screen (i.e., no symptoms of active TB disease) and a negative IGRA or TST (i.e., first step) dated within 90 days before hire.
- The second TST may be performed after the HCW starts working with patients.
Screening HCWs: Serial

- Sometimes called annual or ongoing TB screening.
- Conducted at regular intervals following baseline TB screening.
- Three components:
  - Assessing for current symptoms of active TB disease,
  - Assessing HCW’s history, and
  - Testing for the presence of infection with *M. tb* by administering either a one-step TST or single IGRA.
Screening HCWs: Newly-Identified Positive TST or IGRA

- Before HCW has direct patient contact, the following should be documented in their record:
  - Positive TST or IGRA result,
  - Assessment for current TB symptoms,
  - Chest X-ray to rule out infectious TB disease,
  - Medical evaluation to rule out infectious TB disease.
Screening HCWs: Previously Positive TST or IGRA

- Documentation and symptom screening requirements are the same as for HCWs who have a newly-identified positive TST or IGRA, except that no medical evaluation is required if the HCW already has a chest X-ray that is:
  - Dated after documented positive TST or IGRA, or
  - Dated within the three months prior to the positive TST or IGRA is acceptable, provided that the HCW has not been exposed to infectious TB disease since the chest X-ray was done.
Screening HCWs: Verbal (Undocumented) History of Previous Positive TST or IGRA

- These HCWs should undergo the same screening procedures as HCWs without documented previous positive test results.
- If HCW has documentation of previous treatment for latent TB infection or active TB disease, that may be substituted for documentation of previous positive TST or IGRA results.
Screening HCWs: Special Situations

- Pregnancy
- TST results 5 - 9 mm of induration
- Students
- Previous severe adverse reaction to TST
- Refusal
- Travel outside the U.S.
- Conversions
- Signs or symptoms of active TB disease
Screening Residents
Screening Residents: Overview (1)

- Routine baseline TB screening of residents is not required except for those settings with an elevated risk for TB transmission:
  - Boarding care homes,
  - Residential hospices, and
  - Nursing homes.
- Residents in other facilities may be screened at the discretion of their HC providers or the infection control team.
Screening Residents: Overview (2)

- Residents with negative baseline TB screening do not need routine periodic follow-up screening.
- Residents who are temporarily transferred to other facilities (e.g., a hospital) do not need to be re-screened upon re-admission if the other facility has a TB control program in place.
- If active TB disease is confirmed or suspected, the diagnosing clinician should notify MDH at 651-201-5414 within one working day.
Screening Residents in Boarding Care Homes and Nursing Homes: Baseline

- TB screening should be initiated within 90 days prior to or 72 hours after admission.
- Three components:
  - Assessing for current symptoms of active TB disease,
  - Assessing for TB history and risk factors, and
  - Testing for the presence of infection with TB by administering either a two-step TST or single IGRA.
Screening Residents in Residential Hospices: Baseline

- TB screening should be initiated within 90 days prior to or 72 hours after admission.
- Residents in residential hospice should be screened for symptoms of infectious TB disease at time of admission.
- Using a TST or IGRA is not necessary.
Screening Residents in Boarding Care Homes and Nursing Homes: Newly-Identified Positive TST or IGRA

- The following should be documented in the medical record:
  - TST or IGRA result,
  - Assessment for current TB symptoms,
  - Chest X-ray to rule out infectious TB disease, and
  - Medical evaluation to rule out infectious TB disease.
Screening Residents in Boarding Care Homes and Nursing Homes: Previously Positive TST or IGRA

- The documentation and symptom screening requirements are the same as for residents who have a newly-identified positive TST or IGRA, except that no medical evaluation is required if the resident already has a chest X-ray that is:
  - Dated after documented positive TST or IGRA, or
  - Dated within the three months prior to the positive TST or IGRA, provided that the resident has not been exposed to infectious TB disease since the chest X-ray was done.
Screening Residents in Boarding Care Homes and Nursing Homes: Verbal (Undocumented) History of Previous Positive TST or IGRA

- These residents should undergo the same screening procedures as residents without documented previous positive results.
- If the date and millimeters of induration cannot be obtained, documentation of a history of infection with TB (e.g., a positive TST in the past) by a physician in the resident’s medical record is acceptable.
- If the resident has documentation of previous treatment for latent TB infection or active TB disease, that may be substituted for documentation of previous positive TST or IGRA test results.
Screening Boarding Care Home and Nursing Home Residents: Special Situations

- Previous history of severe adverse reaction to TST
- Refusal
- Signs or symptoms of active TB disease
Contact Information
We are interested in your feedback about this webinar. We have a short survey available at [www.health.state.mn.us/divs/idepc/diseases/tb/rules/tbregs.html](http://www.health.state.mn.us/divs/idepc/diseases/tb/rules/tbregs.html). We really appreciate all feedback.

**Contact Information**

- To report a case of active TB disease, call MDH at 651-201-5414 and ask to speak to a TB nurse.
I’d like to close by thanking you for your work to prevent and control in Minnesota. Thank you.