

Guidance for Mitigation of Tuberculosis (TB) in Shelter Settings

Background

Tuberculosis (TB) is caused by bacterium that enters and attacks the lungs and other parts of the body such as the kidneys, spine, and brain. Not everyone who is infected with TB becomes sick; however, people experiencing homelessness are at an increased risk of TB compared to the general population due to several factors including crowding, ventilation concerns, and lack of medical care access. TB spreads from one person to another through the air when someone who is sick with TB disease of the lungs or throat coughs, sings, speaks, laughs or sneezes. TB germs can live in a person's body without making them sick. This is called latent TB. Individuals with latent TB cannot spread it to others; however, if a latent infection becomes active and begins to multiply, this turns into an active, infectious case of TB disease. This is why it is important to monitor for symptoms of TB and follow-up with a medical provider immediately if there are concerns of TB disease being present in the shelter settings.

Clinical onset of TB:

What symptoms are associated with TB?

Symptoms for active TB disease depend on where in the body the TB bacteria are growing. TB bacteria usually grow in the lungs and may cause symptoms such as:

- A bad cough that lasts 3 weeks or longer
- Pain in the chest
- Coughing up blood or sputum (phlegm from inside the lungs)
- Weakness or fatigue
- Weight loss or no appetite
- Chills
- Fever
- Sweating at night

How long does it take from exposure to onset of symptoms?

Exposure to TB can occur if someone spends time near someone with active TB disease through aerosolized bacteria from coughing, sneezing, speaking, singing, etc. Those who are exposed to TB bacteria are not able to spread the bacteria to other people right away. The close contact would need to become infected with TB disease, multiply the bacteria in their body, and contract active TB disease. Some people can get sick with active TB disease within weeks after exposure, others may not get an active infection of TB until years later after being exposed. Most people who are exposed to TB disease never develop active TB.

Risk Factors Associated with Contracting TB:

Shelter settings have an increased risk of spread due to several risk factors including substance use disorder, HIV infection, crowding, ventilation issues, and lack of medical care for early diagnosis. If there are any concerns about potentially preventable risk factors existing within the shelters, please reach out to your CDPH contact, LCO and/or other medical provider for further guidance.

Immediate Next Steps for Case Treatment and Monitoring:

Upon the identification of symptoms consistent with TB:

- 1. The guest should be isolated in a single occupancy room with the door closed or isolated outdoors (weather permitting) while awaiting transfer to a medical facility for evaluation.
- 2. Notify your CDPH contact, medical provider, and internal administration regarding the probable/confirmed case of TB **immediately**.
- 3. If a N95 respirator is available and the staff members feels comfortable wearing it, we recommend an N95 be worn by staff. Otherwise, staff members should wear at least a surgical mask or other higher-grade mask if they need to enter the isolation space or engage with the individual. Staff should minimize the amount of time they spend with the guest.
- 4. The case should then be transferred to a medical facility for evaluation, treatment and proper isolation until they are stable and long-term isolation housing has been established or they have been cleared by the medical provider to return to the shelter setting.

Rapid isolation of a potential case of TB is important in preventing the spread of the bacteria that could lead to an outbreak within the shelter setting. Additionally, shelters can increase environmental protections in order to mitigate spread by improving ventilation with HEPA filters, UV light, and negative pressure (moving the air away for the guests either into a filter or outside for the facility)., Masking in the shelter settings can also minimize exposures (masks in shelters settings are still required to prevent the spread of COVID-19 at this time).

Identification of Close Contacts to the Case of TB:

In response to a confirmed case of TB, shelter settings should partner with the Chicago Department of Public Health to conduct a contact investigation between other staff and residents. Please notify your CDPH contact with any concerns regarding a potential exposure for further assistance.

Contact Information When Responding to a Case of TB:

After the identification of a probable/confirmed case of TB, notify your CDPH contact, LCO/Community Medical Provider, and internal administration immediately. Below is a list of contacts:

Organization	Email	
Tuberculosis Program Medical Director-	Kathy Ritger, MD, MPH kathleen.ritger@cityofchicago.org	CDPH TB Reporting Line During Business Hours: (312) 743-9000
CDPH		After Business Hours: 311
CDPH Community Congregate Settings Team	During Business Hours: specialpops@cityofchicago.org	Outside of Business Hours: Call 311 for assistance
LCO	Lawndale Christian Health Center sheltercare@lawndale.org	Heartland Alliance Health sheltercare@heartlandalliance.org

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Find more information on TB at: https://www.cdc.gov/tb/topic/populations/homelessness/default.htm			