

#### January 31, 2025

#### From: Kansas Department of Health and Environment – Division of Public Health

To: Health Care Providers and Local Health Departments

RE: Current Tuberculosis Outbreak in Kansas City, Kan. Metro Area

#### Summary

The Kansas Department of Health and Environment (KDHE), with support from the Centers for Disease Control and Prevention (CDC) and local health departments, have been responding to an outbreak of tuberculosis (TB) in the Kansas City, Kan. Metropolitan (KCK Metro) area since January 2024. As of Jan. 31, 2025, there are 67 confirmed cases of active tuberculosis (TB) disease, including 60 in Wyandotte County and seven (7) in Johnson County, associated with this outbreak. Of these individuals, 35 have completed treatment and are considered cured and 30 are currently under treatment. Most are no longer considered infectious to others or are isolating to avoid infecting others. There are two reported deaths associated with this outbreak.

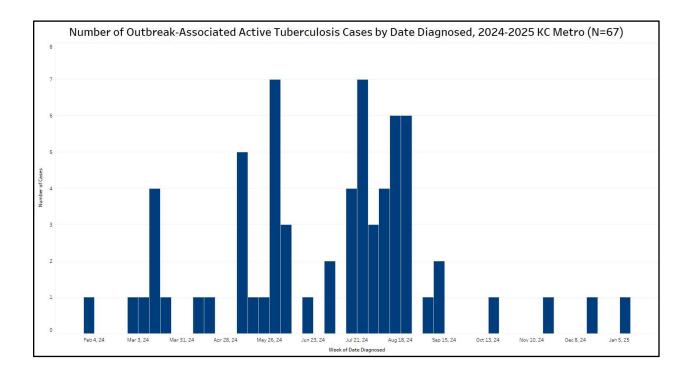
There are 79 confirmed latent TB cases, including 77 in Wyandotte County and two (2) in Johnson County. Individuals with latent TB infections are not infectious to other people. Thirty-one of these individuals have completed treatment and 28 are currently under treatment.

Although there is a **very low risk of infection to the general public** in the KCK Metro area, KDHE is working to ensure that individuals are receiving appropriate testing and treatment, which will limit the ability to spread this disease and prevent additional cases from occurring. TB is not as easily spread as COVID-19, the flu, or measles.

Mandated Reporters, including clinicians, are required by Kansas Administrative Regulation (K.A.R. 28-1-2) to report all suspected cases of active tuberculosis to the 24/7 KDHE Epidemiology Hotline (877-427-7317, option 5) within four (4) hours of suspicion. Report all cases of latent TB infection to both the county local health department and KDHE within 24 hours. Laboratories are required by K.A.R. 28-1-18 to report laboratory reports of tuberculosis cases to KDHE using an approved electronic method.

### Background

Public health officials have been actively investigating an outbreak of tuberculosis in the KCK Metro area since early 2024. The public health response includes case investigation and contact tracing to identify individuals who may have been exposed to TB and follow-up to ensure individuals are being properly tested and treated. In this current outbreak, no reports of drug-resistant TB have been identified. There is no elevated risk to individuals traveling to the KCK Metro area. As of Jan. 31, 2025, there are 67 individuals, including 60 in Wyandotte County and seven (7) in Johnson County, associated with this outbreak. As noted in the epidemiologic curve below, most cases were diagnosed in early 2024 and throughout the summer. Active TB case counts include all individuals diagnosed with confirmed active TB associated with the current outbreak. Once individuals complete their full course of treatment, cases are still classified as "active TB." However, these individuals are considered cured or successfully treated and cannot spread TB to others.



There are 79 confirmed latent TB cases, including 77 in Wyandotte County and two (2) in Johnson County, associated with this outbreak. As reference, for Kansas, CDC reported 52 active TB cases in 2022 and 46 in 2023.

According to CDC, a TB outbreak is generally defined as a situation where there are more TB cases than expected within a geographic area or population during a particular time period, AND evidence of recent transmission of *Mycobacterium tuberculosis (M. tuberculosis)* complex, the bacteria responsible for TB, among those cases. Although the precise time period is not well defined, "recent" transmission is often considered to be within the last two (2) years.

It is important to note that this outbreak is ongoing and, therefore, cannot be compared to previous TB epidemics or outbreaks that have been tracked over many years and/or have been declared over.

While this outbreak is larger than normal for Kansas, the risk remains low for the general public. TB is spread person-to-person through extended and prolonged contact with someone who has active TB, for example close contacts who spend time together daily.

To provide efficient and quality care to those individuals affected by the outbreak, KDHE assumed responsibility for the coordination and distribution of testing, treatment and medical consultation in Wyandotte County.

# **Modes of Transmission**

Tuberculosis is a contagious disease caused, most typically in humans, by the bacterium *M. tuberculosis.* TB can occur in any part of the body (the brain, spine, lymph nodes, etc.), but it most often causes infection in the lungs. TB is spread from person-to-person through the air. TB is spread when an individual with active TB in their lungs coughs, speaks or sings, releasing tiny droplets that can be inhaled by others. It is important to note that TB is **not** spread by casual contact like hugging, shaking hands, or brief encounters. Transmission typically requires prolonged close contact with someone who has active TB to be at risk.

### **Clinical Signs and Symptoms**

Symptoms of TB disease depend on where in the body the TB bacteria are growing. Common symptoms of active TB disease in the lungs include cough (lasting longer than 3 weeks), pain in the chest, and coughing up blood or sputum (phlegm). Other symptoms of active TB may include fever, night sweats, chills, loss of appetite, weakness or fatigue, weight loss.

Symptoms of TB in other parts of the body may include the following: TB of the kidney may cause blood in the urine; TB meningitis may cause headache or confusion; TB of the spine may cause back pain; and TB of the larynx may cause hoarseness.

# Latent vs Active: Types of Tuberculosis

Not everyone infected with TB bacteria becomes sick. As a result, two TB-related conditions exist: <u>latent TB infection (or inactive TB)</u> and <u>TB disease (or active TB)</u>. People with latent TB infection can be treated to prevent the development of TB disease.

**Latent TB infection** is when a person has the TB bacteria in their body, but they do not have <u>symptoms</u> and <u>cannot spread the infection to other people</u>.

Active TB disease occurs when the TB bacteria overcome the immune system and multiply, resulting in progression from latent TB infection to TB disease. Individuals who have active TB disease are usually <u>infectious and may spread the bacteria to other people</u>. TB disease can occur in different places in the body and in more than one organ or organ system at the same time.

- Pulmonary TB disease occurs in the lungs. Most cases of TB disease are pulmonary.
- **Extrapulmonary TB disease** occurs in places other than the lungs, such as the larynx, lymph nodes, pleura, brain (TB meningitis), kidneys, or bones.

• **Disseminated TB disease** (or miliary TB disease) occurs when TB bacteria enter the bloodstream and are carried to all parts of the body where they grow and cause disease in multiple sites.

# Bacille Calmette-Guérin (BCG) Vaccine

According to CDC, the Bacillus Calmette-Guérin (BCG) vaccine is not generally recommended for use in the United States because of the low risk of infection with *M. tuberculosis*, the variable effectiveness of the vaccine against adult pulmonary TB, and the vaccine's potential interference with tuberculin skin test reactivity. BCG vaccine has been given to many people born outside of the U.S. in countries where TB is common. It may cause a false-positive on tuberculin skin tests. TB blood tests (interferon-gamma release assay known as IGRA) are preferred for people who have received the BCG vaccine because this kind of test does not induce false positives for those who have received BCG vaccine. People who have been vaccinated with BCG should always have further evaluation after a tuberculin skin test.

# **Recommendations for Clinicians**

Testing for and treating latent TB infection is a critical step to reducing the spread of TB. Testing for TB infection should be part of patient's regular medical care. Here are four tips for starting the conversation using the **Think. Test. Treat TB** campaign when you see patients who have <u>symptoms and risk factors</u> that could be TB disease. It is important to reassure your patients that the risk of TB remains very low.

- 1. Introduce TB and address potential misinformation
- 2. Discuss your patient's risk
  - a. There are <u>several risk factors for TB</u>, so it's important to talk with your patients about their risk based on if they:
    - i. Were born in or frequently <u>travel to countries where TB is common</u>, including countries in Asia, Africa, and Latin America. This does not include travel to KCK Metro area.
    - ii. Recently spent time with someone who has active TB disease.
    - iii. Have a weaker immune system because of certain medications or health conditions such as <u>diabetes</u>, cancer, and <u>HIV</u>.
- 3. Explain the testing process
  - a. There are two types of <u>tests for latent TB infection</u>: the <u>TB blood test</u> and the <u>TB skin test</u>.
- 4. Discuss treatment options
  - a. If your patient is diagnosed with latent TB infection, consider recommending <u>shorter and more convenient treatments</u>. While all the regimens are safe and effective, short course, rifamycin-based regimens are the preferred treatment options for latent TB infection because they have higher completion rates.

The typical treatment for tuberculosis is a 4-drug regimen inclusive of rifampin, isoniazid, pyrazinamide, and ethambutol. The length of treatment varies but is typically 4 to 9 months. All tuberculosis patients receive medication through means of directly observed therapy (DOT). If untreated, a patient with Tuberculosis can die.

Patients with tuberculosis are considered infectious until deemed non-infectious by the treating medical provider in coordination with public health officials. Patients with infectious tuberculosis can be released from isolation when all of the following criteria are met:

- Patient has received appropriate anti-tuberculosis medication for two (2) weeks and is compliant with DOTs.
- Patient has three (3) consecutive negative AFB sputum smears, after uninterrupted DOTs.
- Patient is clinically improving.
- Patient has a plan for adherence to follow-up care.

# https://www.cdc.gov/tb/media/pdfs/Self\_Study\_Module\_5\_Infectiousness\_and\_Infection\_Co\_ ntrol.pdf

For more information on tuberculosis or the #ThinkTestTreatTB campaign visit the <u>website</u>. For questions about medication, purified protein derivative (PPD) and 340B identification numbers, or placing an order, <u>email the TB Testing and Medication Team</u> at <u>kdhe.BDCPmeds@ks.gov</u>. For general or education questions email <u>KDHE.IDmanagement@ks.gov</u>.

# Infection Prevention and Control Recommendations

- Place patients with suspected active TB disease in an Airborne Infection Isolation Room (AIIR).
  - If AIIR is not immediately available, place a facemask on the patient and isolate the patient in an exam room with the door closed. Transfer the patient as soon as possible to an area where AIIR is available. Ensure good hand-off communication if patient leaves room.
- Use Airborne + Standard Precautions for pulmonary presentations.
  - Airborne: a fit-tested, NIOSH-approved N-95 (or higher) respirator
  - Standard: Use other personal protective equipment (PPE), such as gowns, gloves, and eye protection, appropriately and as needed
- Remove and dispose of contaminated PPE prior to transport. Don clean PPE at the transport location.
- Limit visitation per facility policy.
- Use an antimicrobial product registered with EPA for Claims against *Mycobacterium tuberculosis* (TB) (<u>EPA List B</u>).
  - o Perform thorough routine daily and terminal cleaning and disinfection
  - Ensure shared medical equipment is properly cleaned and disinfected after each use
- Track for occupational exposures.

- Maintain tracking of all healthcare workers and support staff who care for or enter the rooms of active TB patients.
- Educate staff to monitor and report symptoms, should an exposure occur.

# **Recommendations for Local Health Departments**

Local health departments are advised to take the following actions in response to the KCK Metro TB outbreak. Your proactive response and collaboration are vital to protecting public health in Kansas.

- Share this alert with hospitals, healthcare providers, and laboratories in your county to ensure they are informed and prepared.
- Promptly report all suspected cases of active TB disease to KDHE and encourage clinicians and laboratories to do the same.
- For any questions or further clarification, please reach out to the KDHE TB Program at <u>KDHE.idmanagement@ks.gov</u> during business hours.
- Reassure the public that the risk of TB remains low and travel to the KCK Metro area does not put them at an increased risk of TB.

# **Recommendations for the General Public**

The risk of exposure to TB disease remains low for most individuals. If you think you might have been exposed to someone with TB disease:

- Monitor for symptoms of TB disease, including a productive cough that lasts more than 3 weeks, chest pain, fever, night sweats, chills, loss of appetite, and weight loss.
- Follow guidance from public health officials, including getting tested for TB disease, attending follow-up appointments, and following any prescribed treatments or precautions. Early detection can help prevent its spread and treatment is highly effective.
- Wash your hands regularly and follow coughing/sneezing etiquette, such as coughing or sneezing into a tissue or the inside of the elbow.
- Stay home from school or work until evaluated by a healthcare provider if you or anyone in your household is feeling unwell or showing symptoms of TB disease. Your healthcare provider will give appropriate guidance.
- Open windows and use fans to increase the ventilation in your home, especially if someone in your household has symptoms or been diagnosed with TB disease.

With proper treatment, persons diagnosed with active TB disease are expected to make a full recovery.

# For More Information

KDHE Tuberculosis (TB) Program: <u>https://www.kdhe.ks.gov/530/Tuberculosis-TB-Program</u> KDHE Tuberculosis Outbreaks: <u>https://www.kdhe.ks.gov/2242/Tuberculosis-Outbreaks</u> KDHE Reportable Infectious Disease Statistics:

https://kshealthdata.kdhe.ks.gov/t/KDHE/views/InfectiousDiseaseCaseDashboard/HomePage ?%3Aembed=y&%3AisGuestRedirectFromVizportal=y

Tuberculosis-United States, 2023:

https://www.cdc.gov/mmwr/volumes/73/wr/mm7312a4.htm#:~:text=In%202023%2C%20the %2050%20U.S.,the%20highest%20rate%20(10.6).

Exposure to Tuberculosis: <u>https://www.cdc.gov/tb/exposure/index.html</u>

Signs and Symptoms of Tuberculosis: <a href="https://www.cdc.gov/tb/signs-symptoms/index.html">https://www.cdc.gov/tb/signs-symptoms/index.html</a>

Think. Test. Treat TB.: <u>https://www.cdc.gov/think-test-treat-</u> tb/index.html#:~:text=Treat%20TB.-,Think.,and%20treatment%20for%20inactive%20TB

TB Elimination BCG Vaccine:

https://www.cdc.gov/tb/publications/factsheets/prevention/bcg.pdf

Bacille Calmette-Guerin (BCG) Vaccine: <u>https://www.cdc.gov/tb/hcp/vaccines/index.html</u>