

Tuberculosis Update

Lincoln-Lancaster County Health Department

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Tuberculosis

- Tuberculosis (TB) is caused by a bacterium called *Mycobacterium tuberculosis*.
- The bacteria usually attack the lungs, but TB bacteria can attack any part of the body such as the kidney, spine, and brain.
- If not treated properly, TB disease can be fatal.



TB-related conditions

Latent TB infection

infected but do not have TB disease, no symptoms and are non-infectious. Usually have a positive screening test.

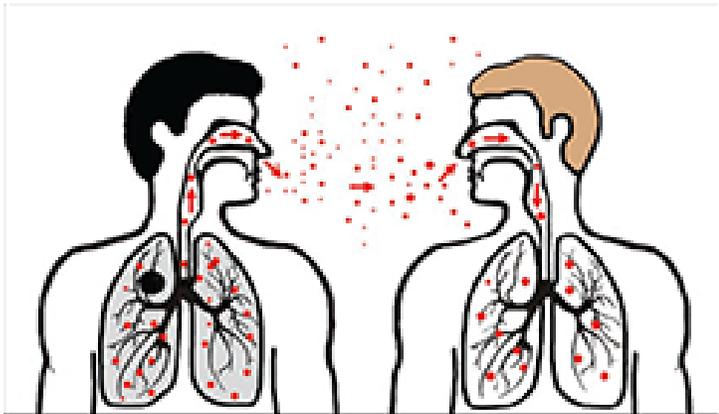
TB Disease

infected and symptomatic. TB bacteria are active (multiplying in the body)

Pulmonary vs Extrapulmonary

Transmission

- TB is spread through the air from one person to another.
- The TB bacteria are put into the air when a person with TB disease of the lungs or throat coughs, sneezes, speaks, or sings.
- People nearby may breathe in these bacteria and become infected.





Symptoms of TB disease

- a bad cough that lasts 3 weeks or longer
- pain in the chest
- coughing up blood or sputum
- weakness or fatigue
- weight loss
- no appetite
- chills
- fever
- sweating at night

Treatment for Latent TB Infection and TB Disease

Latent TB infection

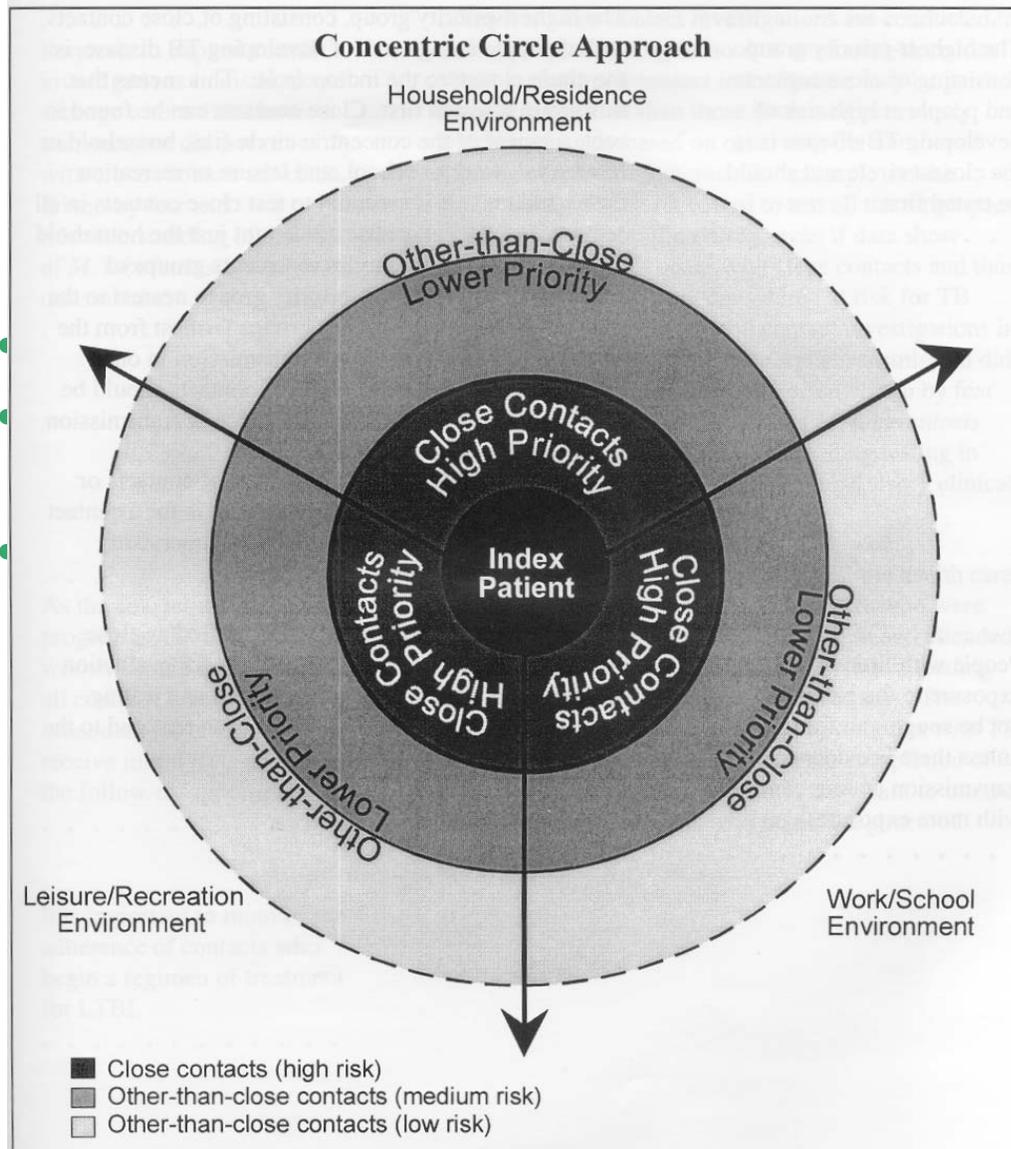
Treatment of latent TB infection reduces the risk that TB infection will progress to TB disease.

TB Disease

Treated by taking several drugs, usually for 6 to 9 months.

Directly Observed Therapy

- ensure patients adhere to therapy
- the preferred core management strategy recommended by CDC for treatment of TB disease (Latent TB if resources allow)
- reduce the development of drug resistance
- reduce treatment failure, or relapse after the end of treatment.
- Drug-resistant TB disease should always be treated with a daily regimen and under direct observation

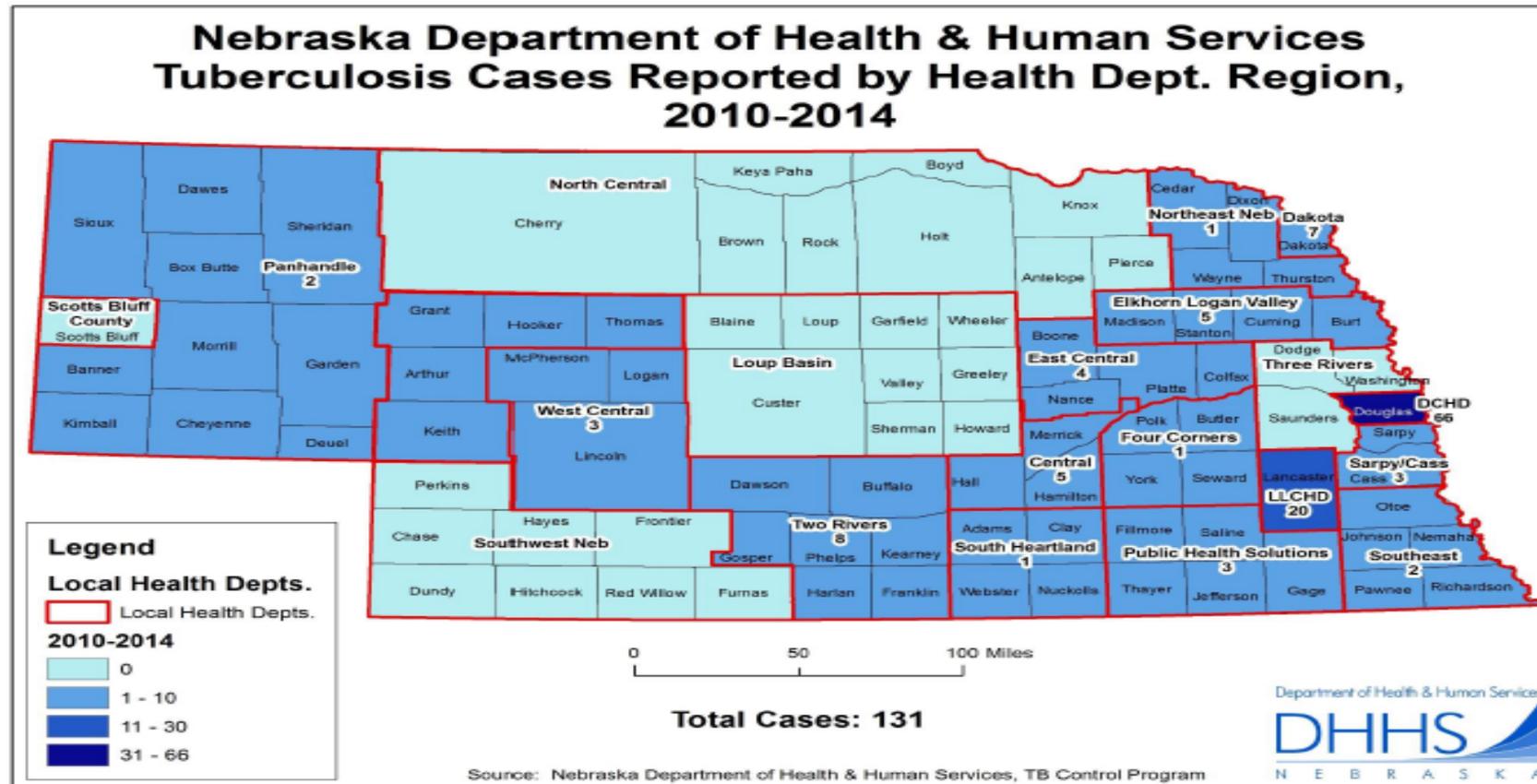


TB Disease Follow-up

- Contact investigation and testing
- Managing logistics of getting medications
- Assessing home environment
- Education of the patient and household members.
- Coordinating with the provider on monitoring for med compliance and treatment progress

Figure 6.13 Concentric circle approach. Adapted from Etkind SC. Contact tracing in tuberculosis. In: Reichman L, Hershfield E, eds. *Tuberculosis: A Comprehensive International Approach*. New York: Marcel Dekkar; 1993:283.

TB in Nebraska



TB Case Rate per 100,00 Population by Year, Nebraska, 2010 -2014

Year	Number of Cases	Rate/100,000 Pop
2010	27	1.5
2011	23	1.3
2012	22	1.2
2013	21	1.2
2014	38	2.0