



## INFORMATION MEMO

# Potential Infectious Disease Exposures in Municipal Operations

*Learn about infectious disease vaccinations for city workers. Find out about tuberculosis (TB) and how it spreads. Understand requirements for TB screening tests of city employees working in jails and lockups, and those working as emergency medical professionals. Learn about League of Minnesota Cities Insurance Trust workers' compensation coverage for costs associated with testing workers exposed to bloodborne pathogens and occupationally infectious diseases.*

### RELEVANT LINKS:

[Epidemiological Profile of HIV/AIDS in Minnesota](#), Dec. 31, 2015.

[CDC Prevention and Control of TB in Correctional and Detention Facilities](#), July 7, 2006.

## I. Infectious disease in the workplace

The League of Minnesota Cities Insurance Trust (LMCIT) receives questions about which vaccinations are required by law for different employee groups such as wastewater operators, public works, parks and recreation, lifeguards, and emergency services. Members occasionally have questions about tuberculosis (TB) screening and under what circumstances it is required.

The Minnesota Department of Health collects Epidemiological information on infectious disease. In its 2014 Executive summary on HIV and AIDS in Minnesota the report describes changes in several ways, both when looking at new infections and persons living with HIV/AIDS. “The population living with HIV has become more racially, ethnically, culturally and linguistically diverse, which will pose additional challenges to both prevention and service providers.”

“While HIV/AIDS continues to be geographically centered in the Twin Cities metropolitan area, injection drug users and heterosexual people living with HIV/AIDS appear to be more likely than other groups to live in Greater Minnesota than within the TGA.”

Many of these demographic changes also indicate a higher risk group for active tuberculosis disease. The Center for Disease Prevention and Control (CDC) publishes guidelines “for effective prevention and control of TB in jails, prisons, and other correctional and detention facilities”. Let’s start with vaccinations.

This material is provided as general information and is not a substitute for legal advice. Consult your attorney for advice concerning specific situations.

**RELEVANT LINKS:**

[29 C.F.R. § 1910.1030\(f\)\(1\).](#)

[29 C.F.R. § 1910.1030, Appendix A.](#)

[Hepatitis B Vaccine Declination Form, LMC Model Form.](#)

## **II. Vaccinations**

The only vaccination that is required by law (Occupational Safety and Health Act [OSHA]) is hepatitis B and only for those employees that are at risk of exposure to bloodborne pathogens as a part of their regular job duties or assigned tasks. The employer is required to pay for this three-step vaccination series. The employer must also pay for the surface antigen testing post-vaccination series when it is required, as is the case, for example, for public safety employees.

### **A. Hepatitis B**

For municipalities, this would include all emergency services employees—police, fire, and medical, including lifeguards. Wastewater operators, public works, park and recreation, and other employees are *not* considered to have routine hepatitis B infected blood and body fluid exposures as part of their job tasks and so do not need the hepatitis B vaccine (at least not for an occupational reason). Sanitary sewers and exposure to the environment represent hostile environments for the hepatitis B virus and the virus does not survive. Hepatitis B is even less infectious than hepatitis A (see below).

In addition, the hepatitis B vaccine is offered to *anyone* after an exposure incident; this is required by OSHA as part of the post-exposure medical follow-up. So, if an employee has not received the hepatitis B vaccination series but then sustains an injury or exposure to blood or potentially infected body fluids, the treating medical provider will determine if the vaccination series is recommended as a course of treatment. The city should have a process in place to route any employee, public safety or not, to medical attention in this kind of event.

### **B. Right to decline vaccination**

The employee has the right to decline the hepatitis B vaccination series. In that case, there is a required declination form employees must sign as part of the OSHA standard. If the employee decides at a later date that he or she would like to receive the hepatitis B vaccination series, the employer will provide this at no cost to the employee for those employees in job classifications that are at risk of exposure to bloodborne pathogens as a part of their regular job duties or assigned tasks.

**RELEVANT LINKS:**

[29 C.F.R. § 1910.1030\(f\)\(1\).](#)

[Adult Immunization Schedule, U.S.](#), Centers for Disease Control and Prevention, 2016.

## **C. Hepatitis B special considerations**

### **1. Ongoing exposure**

The municipality must also provide and pay for a hepatitis B surface antigen test two to three months after the vaccination series is completed if the employee has ongoing contact with patients or blood and/or is at risk of percutaneous (under the skin) injury from sharps or needle sticks. This would include emergency services employees, but not lifeguards. If necessary, the hepatitis B vaccination series is given again to those employees who are not immune, and again two to three months later, the employee is retested for hepatitis B surface antigen. There is no further action needed if, once again, immunity is not attained. It is simply noted in the medical file.

### **2. Interrupted vaccination series**

The employer is not responsible for any remaining vaccinations in the hepatitis B series for an employee who has started the hepatitis B vaccination series while working for the city but leaves city employment before completing the series.

### **3. Partial vaccination series**

Sometimes an employee, such as a police officer, may start the hepatitis B vaccination series before employment, or with another employer, but has not finished it at the time of initial employment with you. As the new employer, you are required to finish the vaccination series and to pay for it.

## **D. Other vaccination considerations – None Required**

### **1. Influenza**

There are no other required vaccinations; however, it may make sense to offer the annual influenza vaccine to emergency services employees. Not only do you want to keep this group of people healthy so they are available to work with the public, you want to prevent them from, as they carry out their regular duties, transmitting the influenza virus to the sick, elderly or other patients with weakened immune systems.

## RELEVANT LINKS:

[Hepatitis A Questions and Answers](#), Centers for Disease Control and Prevention.

[Vaccinations for Adults, Immunization Action Coalition](#), March 2016.

[Questions and answers about TB](#), Centers for Disease Control and Prevention.

Employers may “campaign” for employees to get their annual influenza vaccination as part of their personal medical benefits plan. To encourage participation, the employer may also work with its healthcare provider network to set up on-site vaccination clinics at the workplace. Employees are not required to get the vaccination, and the city is not required to pay for it.

## 2. Hepatitis A

Cities sometimes wonder whether the hepatitis A vaccine is recommended for wastewater operators or employees that may respond to natural disasters where the environment is contaminated with raw sewage. It is not. The hepatitis A virus is not able to live in the harsh environment of the sewer system or out in the elements of a natural disaster. According to the Centers for Disease Control and Prevention (CDC), there has never been a case of occupationally related hepatitis A in the United States for wastewater operators or for those responding to natural disasters such as hurricane Katrina.

## 3. Meningitis

The meningitis vaccination is recommended where there are congregate living conditions such as in a correctional facility or a college dormitory. These are not (typically) city type operations. The Minnesota Department of Health does not recommend meningitis vaccinations for city employees.

## 4. Tetanus

Employers are not required to provide a tetanus vaccination except in the course of treating a workers’ compensation injury. This vaccination is generally part of routine preventative health care.

## III. Tuberculosis screening for correctional and emergency medical workers

According to the CDC, “[T]uberculosis (TB) is a disease caused by bacteria 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 disease was once the leading cause of death in the United States.

“TB is spread through the air from one person to another. The 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.

**RELEVANT LINKS:**



Collaboration areas to improve TB control, Centers for Disease Control and Prevention.

Quarterly (tuberculosis) Surveillance Report, Minnesota Department of Health, Feb. 2016.

“However, not everyone infected with TB bacteria becomes sick. People who are infected, but not sick, have what is called latent TB infection. People who have latent TB infection do not feel sick, do not have any symptoms, and cannot spread TB to others. But some people with latent TB infection go on to get TB disease.

“TB continues to be a problem. Multidrug-resistant TB (MDR TB) remains a concern, and extensively drug-resistant TB (XDR TB) has become an important issue. While the number of TB cases in the United States has been declining, there remains a higher burden of TB among racial and ethnic minorities. This is due to uneven distribution of TB risk factors that can increase the chance of developing the disease.”

**A. Risk factors for exposure (transmission) and activation of latent TB**

The Minnesota Department of Health (MDH) explains that the risk of exposure to TB is largely based on “place.” Factors such as having been homeless, incarcerated, having worked or lived in a correctional facility or a long-term health care setting are all higher-risk settings for exposure to the bacteria. The city’s risk level can change over time. A municipality should contact MDH on an annual basis at (651) 201-5000 or (888) 345-0823 to determine the risk level for its employees.

One hundred fifty cases of TB were reported in Minnesota in 2015, and the majority of cases were reported in Hennepin and Ramsey counties. Many Minnesota counties outside the Twin Cities metropolitan area have had no reported cases of active TB in the last several years. One hundred and twenty nine of the 150 cases were to foreign born and the majority of all cases are non-white.

**RELEVANT LINKS:**

[Quarterly \(tuberculosis\) Surveillance Report, Minnesota Department of Health, Feb. 2016.](#)

[CDC Prevention and Control of TB in Correctional and Detention Facilities, July 7, 2006.](#)

[CDC best practice guidelines.](#)

[Minn. Stat. §144.445 subd. 2. 2015.](#)

Number of Cases of Tuberculosis by Location of Residence, Minnesota

Location of Residence	This Quarter		This Year to Date	
	Number	(%)	Number	(%)
Hennepin County	21	(54)	30	(52)
Ramsey County	7	(18)	9	(16)
Other Metropolitan Counties*	2	(5)	4	(7)
Olmsted County	3	(8)	3	(5)
Other Counties	6	(15)	12	(21)
<b>Total</b>	<b>39</b>	<b>(100)</b>	<b>58</b>	<b>(100)</b>

The next largest risk categories include other medical conditions, HIV-infected and substance abuse. Activation of latent TB into TB disease occurs when the immune system is compromised. Examples of compromised immune system causes include: serious infections such as HIV or diabetes, and use of certain therapeutic drugs such as Embrel or Humira for treatment of rheumatoid arthritis or psoriasis. The elderly have weakened immune systems, and people under five years of age have not fully developed their immune system. All of these situations present a higher risk for activation of latent TB into active TB disease.

**B. TB testing for certain city employees**

There are regulatory rules, standards, and Minnesota statutes, as well as best practice guidelines, that apply to managing TB in city correctional institutions, such as jails or lockups, and for city emergency medical professionals (whether volunteer or not). The CDC has guidelines for testing and diagnosis, infection control and prevention, treatment, and vaccines and immunizations. Best practice is that new employees for all levels of correctional facilities (1-4) need a baseline TB screen upon hire.

“All employees of facilities operated, licensed, or inspected by the Department of Corrections (DOC) shall be screened for tuberculosis before employment in the facility and annually thereafter, with either a Mantoux test or a chest roentgenogram (X-ray) as consistent with screening and follow-up practices recommended by the United States Public Health Service or the Department of Health, as determined by the commissioner of health.” This means DOC licensed lockups levels 1-3 require baseline and annual screening for TB. DOC class 4 facilities do not, but there is a hitch.

## RELEVANT LINKS:

[Enforcement and Procedures for Occupational Exposure to Tuberculosis](#), Minnesota OSHA Instruction CPS 2-2.48, May 21, 2013.

[Tuberculosis Fact Sheet for EMS](#), Minnesota Department of Health, June 2006.

[CDC Prevention and Control of TB in Correctional and Detention Facilities](#), July 7, 2006.

Minnesota Occupational Safety and Health (MN OSHA) requires *all* health care and correctional employees to get a baseline test for TB. Only medium and potential ongoing transmission levels have ongoing annual testing. If the facility is located in a community where the risk for exposure to TB is considered high by the Department of Health, then annual screenings are required even if it is a DOC class 4 facility. A “class 4 municipal lockup facility means an adult detention facility operated by a municipal government used to confine detainees for up to four hours.” To complicate things a little further, more than one OSHA standard applies. The General Duty Clause, Minnesota AWAIR (A Workplace Accident and Injury Reduction), Employee Right to Know (ERTK), and respirator standards all come into play with tuberculosis.

### C. Who needs what, when, and according to whom?

If you “merge” these different requirements into a comprehensive table you will find that:

- MN OSHA and Minnesota Department of Health require upon hire employees at all “correctional institutions, including lockup units, and law enforcement personnel transporting suspected or confirmed TB cases, etc.” need a baseline test for TB.
- Employees classified by the DOC as working in level 1-3 correctional facilities need upon hire a baseline and thereafter an annual test for TB.
- According to MN OSHA and the Minnesota Department of Health employees at a level 4 facility that is in a high-risk community, such as Hennepin and Ramsey counties, also need annual TB testing. (Check with your county health department to determine what the TB risk is in your area).
- Finally, the MDH recommends and MN OSHA requires health care workers, such as paramedics or EMTs, to receive the baseline and annual testing for TB regardless of the size or nature of the facility.

### D. Transporting patients and detainees

Close proximity in an enclosed air space of people with suspected or confirmed tuberculosis disease is a risk factor to all job classes of public safety employees that transport patients or detainees including police, fire, emergency medical responders, paramedics, ambulance attendants, etc. Employees can limit their exposure by using ventilation controls during transportation and in some cases wearing an N95 respirator.

Ventilation controls might include transport in an ambulance; whenever possible:

**RELEVANT LINKS:**

[29 C.F.R. § 1910.1030\(f\)\(1\)](#).

- Operate ventilation in the non-recirculating mode.
- Use the maximum amount of outdoor air.
- Use the rear exhaust fan if available.
- Use, if available, a supplemental recirculating ventilation unit that passes air through HEPA filters.
- Airflow should be from the front of the vehicle, over the patient and out the rear exhaust fan.

If an ambulance is not available:

- Operate ventilation in the non-recirculating mode.
- Use the maximum amount of outdoor air.
- If possible the cab should be physically isolated from the rest of the vehicle.
- Place the patient/detainee in the rear seat.
- Drivers and other person's transporting people with suspected or confirmed infectious TB should wear at least an N95 disposable respirator.
- Consider having the patient/detainee wear a surgical or procedural mask if possible.

#### **IV. Testing for infectious disease exposure**

Under federal and state OSHA law, employers are required to pay the cost of diagnostic testing for employees who have been exposed to certain infectious diseases, including:

- Viral or infectious hepatitis.
- Human immunodeficiency virus (HIV).
- Acquired immunodeficiency syndrome (AIDS).
- Tuberculosis (TB).
- Meningitis.
- Bacillus anthracis (anthrax).

Often this involves a series of tests over a specified period of time. The cost of this testing is not typically a covered claim under Minnesota's workers' compensation law because neither the exposure nor the subsequent testing is considered to be a compensable injury. Workers' compensation benefits are generally available only if the employee actually contracts the infectious disease.

## RELEVANT LINKS:

LMCIT provides coverage for this testing, along with coverage for diagnostic testing of the person or persons who were the source of the infectious exposure, through its standard workers' compensation package. Check with your agent or the underwriting department at the League of Minnesota Cities Insurance Trust for details. This additional coverage helps avoid confusion about who was responsible for the cost of the testing, and it helps reduce the level of anxiety in what is already a difficult situation.

This employer responsibility is covered at no additional premium charge. In fact, LMCIT coverage for exposure testing is broader than OSHA or statutory mandates. LMCIT covers the cost to test any city employee who is exposed in the course of his or her employment, not just public safety workers as required by law. The list of bloodborne pathogens and diseases covered by LMCIT is broader than required, and includes exposure testing for meningitis and anthrax exposures.

### **A. Effects on premium**

There is no across-the-board premium increase associated with this coverage. However, individual cities that submit claims will likely see an indirect effect on their premiums because the cost of the testing will impact a city's experience modifier.

### **B. Submitting costs to LMCIT**

Unlike statutorily defined workers' compensation injuries, the cost for diagnostic testing is not a mandatory benefit under Minnesota workers' compensation law. Consequently, most exposures would not be subject to the statutory mandatory reporting requirements. Therefore, a city is not required to submit the cost of diagnostic testing to LMCIT. There are, however, several benefits associated with promptly reporting the exposure incident and handling the charges through LMCIT:

- It avoids confusion about who is responsible for the costs.
- For cities in managed care, it eliminates the prospect of employees going to different medical providers if an employee later contracts an infectious disease.
- It allows the claim file to have an initial base line test result for the employee for purposes of helping determine whether later contraction of an infectious disease is compensable.
- It helps protect employee confidentiality interests by not running payments through city hall.

**RELEVANT LINKS:**

Vaccinations:  
Joel Muller  
[jmuller@lmc.org](mailto:jmuller@lmc.org)  
651.215.4079

[MN Department of Health.](#)

Coverage:  
Debra Anger  
[danger@lmc.org](mailto:danger@lmc.org)  
651.215.4170

## **C. Further assistance**

For further assistance with questions on tuberculosis screening or vaccinations, contact League staff. The Minnesota Department of Health epidemiologists and vaccination specialists will answer a variety of questions to help the city or facility sort out vaccination questions and questions about what to include in a tuberculosis surveillance program.

The city can also contact the League for guidance on coverage, submitting claims, or developing an employee safety program on bloodborne pathogens or tuberculosis.