TUBERCULOSIS – INFECTIONS CONTROL

POLICY.

In order to prevent transmission of Tuberculosis in the Deschutes County Sheriff's Office – Adult Jail (AJ), members will be screened for Tuberculosis.

DEFINITIONS:

- CDC – Centers for Disease Control and Prevention
- IGRA – Interferon-gamma release assay
- LTBI – Latent TB Infection
- TST – Tuberculin skin test
- TB – Tuberculosis

PROCEDURES.

SECTION A: TUBERCULOSIS SCREENING FOR CORRECTIONS MEMBERS

A-1. Members who have direct contact with inmates on a routine basis, as well as others physically located within areas in which air space is routinely shared with inmates, will be offered screening.

A-2. Members, including the Medical Unit and contracted food service providers, who do not have a documented history of a positive Tuberculosis Test should have a baseline TB risk assessment and a Mantoux Method Tuberculin Test applied and interpreted within two weeks of employment. This test will be encouraged, but not required, on a yearly basis and results will be kept on site in a locked file.

A-3. Members with a positive test who are asymptomatic, unlikely to be infected with *M. tuberculosis*, and at low risk for progression on the basis of their risk assessment should have a second test. The test will either be the preferred IGRA or a TST as recommended in the 2017 TB diagnostic guidelines of the American Thoracic Society, Infectious Diseases Society of America, and CDC. Members should be considered infected with *M. tuberculosis* **only** if both the first and second tests are positive.

A-4. After known exposure to a person with potentially infectious TB disease without use of adequate personal protection, members should have a timely symptom evaluation and additional testing, if indicated. Those without documented evidence of prior LTBI or TB

disease should have an IGRA or a TST performed. Members with documented prior LTBI or TB disease do not need another test for infection after exposure. These persons should have further evaluation if a concern for TB disease exists. Those with an initial negative test should be retested 8 – 10 weeks after the last exposure, preferably by using the same test type as was used for the prior negative test.

A-5. Members with a newly positive test result (with confirmation for those persons at low risk as described previously) should undergo a symptom evaluation and chest radiograph to assess for TB disease. Additional workup might be indicated on the basis of those results. Members with a prior positive TB test and documented normal chest radiograph do not require a repeat radiograph unless they are symptomatic or starting LTBI treatment. Deschutes County Health Services should be notified immediately if TB disease is suspected.

A-6. Members with LTBI and no prior treatment should be offered, and strongly encouraged to complete treatment with a recommended regimen, including short-course treatments, unless a contraindication exists. Health care personnel who do not complete LTBI treatment should be monitored with annual symptom evaluation to detect early evidence of TB disease and to reevaluate the risks and benefits of LTBI treatment. Members also should be educated about the signs and symptoms of TB disease that should prompt an immediate evaluation between screenings.

A-7. In the event a case of communicable Tuberculosis is diagnosed in the AJ, the AJ shall manage the case following current Oregon Revised Statutes and Rules of the Oregon State Health Division and recommendations of Deschutes County Health Services, which will assist in case management and epidemiology.

SECTION B: TUBERCULOSIS SCREENING FOR PERSONS INCARCERATED

B-1. All inmates lodged in the AJ for more than 24 hours should receive a brief medical screening using the AJ current Intake Medical Screening Form Number 501 to determine if symptoms consistent with active Tuberculosis are present. During their initial medical screening, inmates should be asked if they have a history of TB disease or if they have been treated for LTBI or TB disease previously. Documentation of any such history should be obtained from medical records, if possible.

Inmates should be observed for the presence of a cough or evidence of significant weight loss. Incoming inmates should be immediately screened for symptoms of pulmonary TB by being asked if they have had a prolonged cough (i.e., one lasting 3-weeks or more), hemoptysis (i.e., bloody sputum), or chest pain. The index of suspicion should be high when pulmonary symptoms are accompanied by general, systemic symptoms of TB (e.g., fever, chills, night sweats, easy fatigability, loss of appetite, and weight loss). If symptoms are present the inmate should be placed in respiratory isolation in a negative pressure cell (301, 302, 305, 306, 309 or the Medical Unit) until a thorough medical evaluation is performed.

B-2. All inmates incarcerated for 14 days, who do not have a documented history of a positive Tuberculin Test, should have a Tuberculin Skin Test performed. Inmates reserve the right to refuse a test.

B-3. If the Tuberculin test is negative, the inmate does not need to have further routine Tuberculin Tests, unless further incarcerations occur after one year.

B-4. If the Tuberculin test is positive, the inmate should have a chest x-ray within 72 hours and a medical evaluation to identify communicable Tuberculosis. If the inmate has had a previously documented positive Tuberculin Skin Test, and has not had adequate treatment, assessment, or medical history, current test results will be compiled by the Medical Director.

Sputum specimens can be sent to the Oregon State Public Health Laboratory in accordance with Deschutes County Health Services recommendations. An inmate with communicable or suspected communicable Tuberculosis should be placed in respiratory isolation.

B-5. Tuberculin positive inmates who do not have communicable disease and are compliant, or have completed adequate anti-tuberculosis or preventive treatment, should be released from routine Tuberculosis screening activities. Follow-up x-rays as recommended by the CDC will be done on an annual basis.

B-6. Tuberculin positive inmates who do not have communicable Tuberculosis should have the *Tuberculosis Questionnaire Form Number 534* completed to determine the presence of any of the following:

a. Evidence of an inadequately treated Tuberculosis disease
b. History of close exposure to a case of communicable pulmonary Tuberculosis within the previous two years
c. History of a negative Tuberculin Test within the previous two years
d. Diabetes mellitus (severe or poorly controlled)
e. Disease associated with severe immunologic deficiencies
f. Immuno-suppressive therapy
g. Silicosis
h. Gastrectomy
i. Excessive alcohol intake
j. Acquired Immunodeficiency Syndrome

B-7. Tuberculin positive inmates with any of the above risk factors shall have an annual chest x-ray for the duration of their incarceration in the AJ.

B-8. If an inmate has documentation of a recent Tuberculosis assessment before admission to this facility, an individual assessment of need for a repeat screening will be made by an AJ nurse. Information must be verified.

B-9. In the event a case of communicable Tuberculosis is diagnosed in the AJ, the facility shall manage the case following current Oregon Revised Statutes and Rule of the Oregon State Health Division and recommendations of Deschutes County Health Services, which will assist case management and epidemiology. This policy shall be followed for isolation technique.

SECTION C: METHOD OF ADMINISTRATION OF THE MANTOUX TB SKIN TEST

C-1. Tuberculin skin testing using 0.1 mL of 5 tuberculin units (TU) of purified protein derivative (PPD) is the most common method of testing for TB infection**.** Testing will be performed by an AJ nurse.

C-2. **Reading Test**: Nursing staff will make arrangements to read the test within 48-72 hours after plant.

a. 10mm reaction and up is considered positive, 5mm and up is considered positive in immunosuppressed individuals.

b. Immuno-suppressed patients may also have false negative test results; therefore, testing with IGRA or a chest x-ray may be in order.

c. Electronic Health Record (EHR) should show Mantoux Method PPD, Manufacturer, lot number, expiration date, strength of PPD solution if other than intermediate, site of plant, and reading in "mm induration."

SECTION D: INMATE WORKER PROGRAM

D-1. An inmate will receive a Tuberculosis screening as part of the acceptance process for inmate worker status. A PPD test will be mandatory for all inmate workers, unless the inmate has a history of a previous PPD test.

a. A negative test result requires no more screening for Tuberculosis and the inmate may be accepted into the inmate worker program.

b. An inmate with a history of a previously positive PPD who has been compliant with chemotherapy may be accepted into the inmate worker program.

c. An inmate who has a positive PPD and no previous history shall have a chest x-ray within 72 hours.

d. An inmate who shows a positive PPD test and refuses a chest x-ray shall be denied inmate worker status unless a medical history indicates there is no need for chest x-rays. Review of the medical history shall be with the Medical Director and Deschutes Health Services to determine the inmate worker's eligibility.

D-2. If an inmate refuses a PPD test for no valid reason (history of a previous positive PPD), that inmate is not eligible for the inmate worker program.

SECTION E: SPUTUM COLLECTION

Inmates or members with TB symptoms and/or chest x-ray indicative of TB will need further tests, such as sputum for "Acid Fast Bacilli" (AFB) smear and culture.

E-1. A series of three early morning sputum specimens should be collected on successive days.

E-2. Secretions need to be from the lungs (sputum) not from the nose or mouth (saliva).

E-3. The patient should inhale deeply and exhale three times, then inhale swiftly, cough deeply and spit into a sputum container, then replace the lid on the sputum container.

E-4. Sputum collection should be carried out in accordance with isolation procedures, since this is an airborne transmission.

E-5. Isolation procedures for sputum collection:

a. Wear a mask when in the room, since this is airborne transmission.

b. Wear gloves when retrieving the specimen cup containing sputum.

c. After determining the specimen cup lid is tight, drop the specimen cup in a zip-lock plastic bag. The plastic bag should be held by an assistant, who closes the zip-lock seal.

d. Take your mask off first, and then remove your gloves. Discard both the gloves and mask in the biohazard container. Wash your hands thoroughly.

e. Biohazard container should be kept near the door of the isolation cell.

SECTION F: ISOLATION PROCEDURES FOR ACTIVE TUBERCULOSIS

F-1. Masks are indicated for those who come into close contact with the inmate (masks are to meet Occupational Safety and Health Administration (OSHA) standards) while in their cell.

F-2. Masks are also to be worn by the inmate when they are out of an isolation room.

F-3. Special gowns are not indicated.

F-4. Gloves are not indicated, but wearing them is suggested when handling anything contaminated with secretions.

F-5. Hands must be washed after examining or touching the patient or potentially contaminated articles.

F-6. Articles contaminated with infected secretions should be discarded in the hazardous waste hamper.