**Facility Physician:** 

February 17, 2016

# TUBERCULOSIS—INFECTIONS CONTROL

#### POLICY.

Order to prevent transmission of Tuberculosis in the Deschutes County Adult Jail (DCAJ), corrections employees will be screened for Tuberculosis.

### PROCEDURES.

### SECTION A: TUBERCULOSIS SCREENING FOR CORRECTIONS STAFF

- **A-1.** Employees 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.** Corrections Staff, including Medical and Kitchen Personnel, who do not have a documented history of a positive Tuberculosis Test should have a Mantoux Method Tuberculin Test applied and interpreted within two weeks of employment. This should be repeated on a yearly basis and results will be kept on site in a locked file.
- **A-3.** If the Tuberculin Test is positive or if the employee has a previous documented positive Tuberculin Test, and if the employee has not had adequate chemotherapy, the employee shall have a chest x-ray and medical evaluation to rule out communicable Tuberculosis within two weeks of their employment.
- **A-4.** Tuberculin positive employees who do not have known communicable Tuberculosis shall have a medical evaluation for the presence of any of the following risk factors:
  - a. Evidence of inadequately treated Tuberculosis disease
  - b. History of close exposure to a case of communicable Pulmonary Tuberculosis within the previous two years
  - c. Diabetes mellitus (severe or poorly controlled)
  - d. Diseases associated with severe immunological deficiencies
  - e. Immuno-suppressive therapy
  - f. Silicosis
  - g. Gastrectomy
  - h. Excessive alcohol intake
  - i. Acquired Immunodeficiency Syndrome

Supersedes: October 31, 2012 Review Date: February 2018

Total Pages: 5

1

- **A-5.** Tuberculin positive employees with any of the above risk factors who have not completed the recommended amount of Isoniazid Preventive Therapy shall have an annual chest x-ray for the duration of their employment.
- **A-6.** Tuberculin positive employees who have completed Isoniazid Prevention Therapy, and who do not have any of the risk factors listed in Section III A-6, shall continue to be monitored (x-ray) as prescribed by Deschutes County Health Department.
- **A-7.** In the event that a case of communicable Tuberculosis is diagnosed in the Facility, the Facility shall manage the case following current Oregon Revised Statutes and Rules of the Oregon State Health Division and recommendations of the Deschutes County Health Department, which will assist in case management and epidemiology.

### SECTION B: TUBERCULOSIS SCREENING FOR PERSONS INCARCERATED IN DCAJ

- **B-1.** All inmates lodged in the DCAJ for more than 24 hours should receive a brief medical screening using the DCAJ current <u>Intake Medical Screening Form Number 501</u> to determine if symptoms consistent with active Tuberculosis are present. If symptoms are present the inmate should be placed in respiratory isolation in a negative pressure cell (302 or 303) 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 chemotherapy, assessment, or medical history, current test results will be compiled by the Facility Provider. Sputum specimens can be sent to the Oregon State Public Health Laboratory in accordance with Deschutes County Health Department 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 local Health Department 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 who have not completed Isoniazid preventive therapy shall have an annual chest x-ray for the duration of their incarceration in DCAJ.
- **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 the Facility Nurse. Information must be verified.
- **B-9.** In the event that a case of communicable Tuberculosis is diagnosed in the Facility, the Facility shall manage the case following current Oregon Revised Statutes and Rule of the Oregon State Health Division and recommendations of the Deschutes County Health Department, 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.** The Mantoux TB Skin Test will be conducted by the Facility Nurse.
- C-2. Mantoux Method—intradermal injections of 0.1 ml of purified protein derivative (PPD) Tuberculin 5 TU. (Reference: Guidelines for the Diagnosis of Tuberculosis Injections '83.) Solution shall be dated and discarded after 30 days. Mantoux is the only acceptable method. Preferred site is left mid-forearm, volar surface.
- **C-3.** Administering Test:
  - a. Provide strong lighting and stabilization of forearm and availability of emergency equipment of drugs.
  - b. Use sterile Tuberculin syringe with 1/4 inch, 26 to 27 gauge needle. Give each dose immediately after drawing up into syringe.
  - c. Cleanse test site (about 4 inches below bend of elbow on flexor surface of forearm) with alcohol or soap and water and dry thoroughly.
  - d. Allow top of vial to dry after cleaning with alcohol before inserting needle.
  - e. Hold skin taut and insert needle between layers of skin, as close to surface as possible.
  - f. With needle bevel up, inject the 0.1 ml PPD. A discrete, pale elevation of skin (wheal or bleb) 6 mm to 10 mm in diameter should be produced when the correct amount of

- solution is injected accurately. If not given correctly, **repeat immediately about two** inches away, or on the other arm, and note on the record the correct test site.
- g. Withdraw needle and remove any leakage at site. Instruct patient that the skin area requires no special care or precaution.
- h. Make specific plans with patient for test to be read by nurse, doctor, or trained personnel in 48 to 72 hours.

## C-4. Reading Test.

- a. Position the arm in good light with elbow flexed slightly.
- b. Inspect for indurations (a firm swelling). View directly and from the side against the light. Stroke area gently and palpate. Erythema is not significant.
- c. When an induration is present, mark one side edge, then the other and measure it transversely to the long axis of the forearm and record in millimeters. Counsel patient regarding the outcome of the test and any follow-up procedures of testing.
- d. It takes two to ten weeks after the first infection for a significant skin test reaction to develop. **Ten mm and up is considered positive.**
- e. For an inmate who is immuno-suppressed 5 mm is considered a positive reaction.
- f. Immuno-suppressed patients may also have false negative test results; therefore, testing with controls or a chest x-ray may be in order.
- g. Record should show Mantoux Method PPD, Manufacturer, lot number, expiration date, strength of PPD solution if other than intermediate, site of other than left forearm, 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 Facility Provider and Public Health 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 staff 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 OSHA standards) while in his/her cell.
- **F-2.** Masks are also to be worn by the inmate when he/she is out of 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.