MONTANA DEPARTMENT OF CORRECTIONS

MONTANA STATE PRISON
HEALTH SERVICES OPERATIONAL PROCEDURE

Procedure No.: MSP HS B-02.1	Subject: **Respiratory Protection Program**
Reference: NCCHC Standards for Health Services in Prison, 2018; OSHA's Respiratory Protection standard (29 CFR 1910.134),	Pg. 1 of 8
Effective Date: June 15, 2020	Revisions: None
Signature / Title: /s/ Cindy Hiner/ Medical Bureau Chief	
Signature / Title: /s/ Paul Rees M.D./ Medical Director	

I. Purpose:

To protect the health and safety of clinical services employees by complying with both NCCHC standards for Health Services in Prison and OSHA this will be achieved through:

A. eliminating hazardous exposures where feasible;
B. using engineering and administrative controls to minimize hazardous exposures that cannot be eliminated; and
C. using respiratory protection and other personal protective equipment when the frequency and duration of exposures cannot be substantially reduced or eliminated. Additionally, it is to maximize the protection afforded by respirators when they must be used. It establishes the procedures necessary to meet the regulatory requirements described in OSHA's Respiratory Protection standard (29 CFR 1910.134)

II. Definitions:

Aerosol-generating procedures -Procedures that may increase potential exposure to aerosol transmissible disease pathogens due to the reasonably anticipated aerosolization of pathogens. Aerosol-generating procedures may also be known as high hazard or cough-inducing procedures.
Aerosol transmissible disease (ATD) or aerosol transmissible disease pathogen - Any disease or pathogen requiring Airborne Precautions and/or Droplet Precautions.
Airborne infection isolation room (AIIR) - A single-occupancy patient-care room designed to isolate persons with suspected or confirmed airborne infectious diseases. Environmental factors are controlled in AIIRs to minimize the transmission of infectious agents that can be spread from person-to-person by the airborne route. AIIRs should maintain negative pressure relative to adjacent rooms and halls (so that air flows under the door gap into the room), an air flow rate of 6–12 air changes per hour, and direct exhaust of air from the room to the outside of the building or recirculation of air through a HEPA filter.(
Airborne Precautions - A category of Transmission-Based Precautions that CDC and HICPAC may recommend when Standard Precautions alone are not sufficient to prevent the transmission of disease. When Airborne Precautions are required patients should be placed in airborne infection isolation rooms and healthcare personnel sharing patients' airspaces should wear respirators.
Clinical Services Employee – Anyone who is under the clinical services division including medical employee, mental health, and dental employee.
Droplet Precautions - A category of Transmission-Based Precautions that CDC and HICPAC may recommend when Standard Precautions alone are not sufficient to prevent the transmission of disease. When Droplet Precautions are required, patients should be spatially separated, preferably in separate rooms with closed doors. Healthcare personnel should wear surgical masks for

close contact and, if substantial spraying of body fluids is anticipated, gloves and gown as well as goggles (or face shield in place of goggles). Patients should be masked during transport.
Facemask - A loose-fitting, disposable device that creates a physical barrier between the mouth and nose of the wearer and potential contaminants in the immediate environment. Facemasks may be labeled as surgical, laser, isolation, dental, or medical procedure masks and are cleared by the FDA for marketing. They may come with or without a face shield. Facemasks do not seal tightly to the wearer's face, do not provide the wearer with a reliable level of protection from inhaling smaller airborne particles, and are not considered respiratory protection.
Facepiece - The part of a respirator that covers the nose and mouth of the wearer. Respirators may have half facepieces covering just the nose and mouth, or they may have full facepieces covering the nose, mouth, and eyes. They are designed to form a seal with the face.
Filtering facepiece respirator - A type of disposable (single-use), negative-pressure, air-purifying respirator where an integral part of the facepiece or the entire facepiece is made of filtering material.
Fit test—The use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual.
Healthcare Infection Control Practices Advisory Committee (HICPAC) - A federal advisory committee assembled to provide advice and guidance to the CDC and the U.S. Department of Health and Human Services regarding the practice of infection control and strategies for surveillance, prevention, and control of healthcare-associated infections and antimicrobial resistance in United States healthcare settings. CDC and HICPAC authored the 2007 Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, which describes Standard and Transmission-Based Precautions used for infection control.
Hood - The portion of a respirator that completely covers the head and neck and may also cover portions of the shoulders and torso, and through which clean air is distributed to the breathing zone.
Loose-fitting facepiece - The portion of a respirator that forms a partial seal with the face but leaves the back of the neck exposed, is designed to form a partial seal with the face, and through which clean air is distributed to the breathing zone.
N95 filter - A type of NIOSH-approved filter or filter material, which captures at least 95% of airborne particles and is not resistant to oil.
N95 respirator - A generally used term for a half mask air-purifying respirator with NIOSH-approved N95 particulate filters or filter material (i.e., includes N95 filtering facepiece respirator or equivalent protection).
NCCHC - National Commission on Correctional Health Care.
NIOSH - National Institute for Occupational Safety and Health
OSHA Respiratory Protection Standard (29 CFR 1910.134) – requires employers to include certain policies and procedure in their respiratory protection program.
Personal protective equipment (PPE) - Specialized clothing or equipment worn by an employee to protect the respiratory tract, mucous membranes, skin, and clothing from infectious agents or other hazards. Examples of PPE include gloves, respirators, goggles, facemasks, surgical masks, face shields, footwear, and gowns.
Powered air-purifying respirator (PAPR) - An air-purifying respirator that uses a blower to force air through filters or cartridges and into the breathing zone of the wearer. This creates a positive pressure inside the facepiece or hood, providing more protection than a non-powered or negative-pressure half mask APR.
Respirator - A device worn over the nose and mouth to protect the wearer from hazardous materials in the breathing zone. Respirators must be certified by NIOSH for the purpose for which they are used.

Respirator program administrator (RPA) - Individual designated to oversee a facility's respiratory protection program (RPP).
Respiratory protection program (RPP) - Program required by OSHA under the Respiratory Protection standard that includes development and implementation of detailed policies and worksite-specific procedures for respirator use for control of respiratory hazards.
Surgical mask - A loose-fitting, disposable type of facemask that creates a physical barrier between the mouth and nose of the wearer and potential contaminants in the immediate environment. Surgical masks are fluid resistant and provide protection from splashes, sprays, and splatter. Surgical masks do not seal tightly to the wearer's face, do not provide the wearer with a reliable level of protection from inhaling smaller airborne particles, and are not considered respiratory protection.
Surgical respirator - A filtering facepiece respirator with spray- or splash-resistant facemask material on the outside to protect the wearer from splashes. Also known as a surgical N95 respirator.
User seal check - An action conducted by the respirator user to determine if the respirator is properly seated to the face. For all tight-fitting respirators, the employer shall ensure that employees perform a user seal check each time they put on the respirator using the procedures in Appendix B-1 of OSHA's Respiratory Protection standard or equally effective procedures recommended by the respirator manufacturer. User seal checks are not substitutes for qualitative or quantitative fit tests.

III. Procedures:

A. Applicability
1. This program applies to all employees and contractors who are required to wear respiratory protection due to the nature of their work in the clinical services area. It applies to the use of air-purifying and air-supplying respirators, including filtering facepiece respirators.

B. Responsibilities:
1. The DOC Infection Prevention Manager in coordination with the Director of Nursing will oversee the RPP
    a. Conduct a hazard assessment and select the appropriate level of respiratory protection for each task or job title with potential exposure and record this information in the "Respirator Assignments by Task or Location"
    b. Develop and monitor respirator maintenance procedures.
    c. Coordinate the purchase, maintenance, repair, and replacement of respirators.
    d. Routinely evaluate the effectiveness of the RPP, with employee input, and make any necessary changes to the program.
    e. Provide or arrange for annual training on the use and limitations of respirators.
    f. Ensure that medical evaluations are provided.
    g. Ensure that annual respirator fit testing is provided.
    h. Maintain records of respirator training, medical clearance, and fit testing as required by 29 CFR 1910.134 and 29 CFR 1910.1020 .
    i. Maintain a copy of this written RPP and program evaluations and ensure that they are readily accessible to anyone in the program.

2. The MSP Clinical Service Manager will be responsible for ensuring employees and contractors are appropriately trained prior to using respiratory protection.
    a. Participate in the hazard assessment by evaluating all potential exposures to respiratory hazards, including exposure to chemicals and aerosol transmissible disease pathogens, and communicating this information to the DOC Infection Prevention Manager.

b. Identify employees and/or tasks for which respirators may be required and communicate this information to the DOC Infection Prevention Manager.
c. Be responsible for ensuring that employees in their areas follow the procedures outlined in the RPP. Schedule employees for medical evaluations, training, fit testing and ensure that they are allowed to attend these appointments during work hours if possible.

3. Employees assigned to jobs/tasks requiring the use of a respirator will:
    a. Complete the required questionnaire for medical clearance and participate in a medical examination if necessary.
    b. Adhere to CDC recommendation procedures on facial hair and respirator seal protection.
    c. Attend annual training and respirator fit testing as required in the RPP.
    d. Use, maintain, and dispose of respirators properly in accord with training and the procedures in the RPP.
4. Respirator Selection –
    a. Hazard Assessment - The DOC Infection Prevention Manager will follow recommendation of State Health Department and CDC guidelines in selecting the types of respirators to be used by clinical services employees based on the hazards to which employees may be exposed. With input from the respirator user, the DOC Infection Control Manager and supervisor will conduct a hazard assessment for each task, procedure, or work area with the potential for airborne contaminants. The hazard assessment will include the following as needed:
        i. Identification of potential exposures. The most common potential exposure for clinical services employee involved in patient care will be pathogens such as tuberculosis.
        ii. A review of work processes to determine levels of potential exposure for all tasks and locations.
        iii. Quantification or objective determination of potential exposure levels, where possible. This may not be feasible for ATD pathogens.

    b. NIOSH – All respiratory protective equipment shall be approved by the National Institute for Occupational Safety and Health (NIOSH) for the configuration and environment in which it is going to be used.
    c. Assignment of Respirators by Task and Location - The Infection Prevention and Control RN (IPC RN) will use the hazard assessment to assign appropriate types of respirators for use by specific types of personnel during specific procedures or in specific areas of the facility.
    d. Updating the Hazard Assessment - The DOC Infection Control Manager in coordination with the Director of Nursing will revise and update the hazard assessment any time an employee or supervisor identifies or anticipates a new exposure or changes to existing exposures. Any employee who believes that respiratory protection is needed during a particular activity must contact his or her supervisor or the IPC RN. The supervisor or must contact the DOC Infection Control Manager whenever respiratory protection is requested. The DOC Infection Control Manager will assess the potential hazard with the employee and supervisor. If it is determined that respiratory protection is needed, all elements of this program will be in effect for those tasks and the program will be updated accordingly.
5. Medical Evaluation – The State of Montana contractor for medical surveillance and monitoring services will be utilized for medical clearance.

a. Whenever possible before being assigned to work in an area where respirators are required supervisors will provide any clinical services employees, who could be at risk for exposure a form to enroll the employee with the contractor which must be the contractor for medical surveillance and monitoring services.
b. The contractor will then send the clinical services employee the questionnaire to fill out along with medical release of information.
c. The employee will complete the paperwork and return it to the contractor to be reviewed by a qualified healthcare professional and the employee will be given opportunity to talk to the qualified healthcare professional.
d. The qualified healthcare professional will review the completed questionnaires and make a medical determination as to whether the employee can wear a respirator safely. The qualified healthcare professional may make this determination based on the questionnaire alone but may also require a physical examination of the employee and any tests, consultations, or procedures they deem are necessary.
e. The qualified healthcare professional will provide a written recommendation to the employer, which may clear the employee for all respirator use, or may specify restrictions or limitations on use, such as the type of respirator that may be worn, the duration that it may be worn, and the acceptable level of exertion while wearing the respirator.
f. A copy of this written determination shall also be provided by the qualified healthcare professional to the employee.

6. Fit testing - The employee will then work with the contractor to schedule an appointment for a fit test at a site closest to where the employee lives.
    a. Before an employee is required to use any respirator with a tight-fitting facepiece (anything except a PAPR with loose-fitting facepiece, hood, or helmet that does not rely upon a tight-fitting facepiece-to-face seal), the employee will be fit tested by The contractor, with the same make, model, style, and size of respirator to be used. Employees who use tight-fitting respirators are not permitted to have facial hair that interferes with the facepiece seal or valve function
    b. All employees who must wear respiratory protection shall receive medical clearance before fit testing is performed or the respirator is worn. Fit tests will be provided at the time of initial assignment and annually thereafter. Additional fit tests will be provided whenever the employee experiences or the supervisor observes physical changes that could affect respirator fit. These changes include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.
    c. Employees who will be using only a PAPR with loose-fitting facepiece, hood, or helmet do not need to be fit tested. Any employee who cannot be successfully fit tested with a tight-fitting respirator may be assigned a PAPR with a loose-fitting facepiece, hood, or helmet for all tasks requiring a respirator. See MaxAir Procedure.
    d. Employees will be offered (dependent on national supply chain availability) a selection of several models and sizes of respirators from which they may choose the one that correctly fits and is most acceptable/comfortable.

7. Training- Annual respirator training will be provided for all employees covered by this program. The training will be approved by the DOC Infection Prevention Manager and provided by the IPC RN or designated qualified person and includes the following:
    a. The general requirements of the OSHA Respiratory Protection standard.
    b. The specific circumstances under which respirators are to be used.

c. Respiratory hazards to which employees are potentially exposed during routine and emergency situations.
d. Why the respirator is necessary and how proper fit, usage, and maintenance can ensure the protective effect of the respirator as well as how improper fit, usage, and maintenance can compromise the protective effect of the respirator.
e. The limitations and capabilities of the respirators that will be used.
f. How to effectively use the respirators, including emergency situations and situations in which the respirator malfunctions.
g. How to inspect, put on, remove, use, and check the seals of the respirator (for tight-fitting respirators such as N95 filtering facepiece respirators).
h. The procedures outlined in this program for maintenance, storage, and cleaning or disposal of respirators.
i. Employees who are to wear PAPRs shall be educated in procedures for charging and maintaining the batteries, and for checking the air flow rate of the system.
j. How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.
k. How and when to decontaminate (or safely dispose of) a respirator that has been contaminated with chemicals or hazardous/infectious biological materials.

8. Respirator Use
    a. Employees will follow procedures for proper use of their respirators under conditions specified by this program and in accordance with the training they receive on the use of each particular model or type of respirator. The appropriate types of respirators to be used and the exposure conditions are listed in the respirator selection chart
    b. Respirators relying on a tight facepiece-to-face seal must not be worn when conditions prevent a good seal. Such conditions may be a beard, long moustache, sideburns, or even razor stubble, as well as scars, other facial deformities such as piercings, and temple pieces on glasses. In addition, the absence of one or both dentures can seriously affect the fit of a facepiece.
    c. Employees and supervisors are expected to be diligent in observing practices pertaining to ensuring the safe use of respirators. To ensure proper protection, the wearer will perform a user seal check, in accord with manufacturer's instructions and the training provided at the time of fit testing, each time he or she puts on a tight-fitting respirator. Employees who wear corrective glasses or other personal protective equipment must wear these during their fit testing to ensure that it does not interfere with the facepiece seal.
    d. Employees must leave the respirator use area:
        i. To adjust their respirator if the respirator is not fitting correctly or impeding their ability to work.
        ii. To wash their face if the respirator is causing discomfort or rash.
        iii. To change the respirator, filters, cartridges, or canister elements.
        iv. To inspect the respirator if it stops functioning as intended, such as detection of vapor or gas breakthrough, changes in breathing resistance or leakage of the facepiece (e.g., fogging of eyeglasses).
9. Storage, Reuse, Maintenance and Care of Respirators
    a. Storage and Reuse
        i. Reusable respirators will be stored in designed area to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals.

ii. When caring for infectious patients, disposable filtering facepiece respirators will be discarded after each use (i.e., patient encounter). It should be noted that Tuberculosis is not transmitted via contact and, therefore, reuse by the same wearer in the care of the same patient is acceptable as long as the filtering facepiece respirator is not damaged or soiled. The respirator must be discarded when it is no longer in its original working condition, whether that condition results from contamination, structural defects, or wear.

iii. Disposable filtering facepiece respirators that will be reused in patient care areas should be stored in a breathable container such as a paper bag labeled with the user's name, as per CDC conservation strategies.

iv. PAPRs will be cleaned and stored after use in designated area for use by individuals who are unable to wear a respirator with a tight-fitting facepiece. PAPRs must be stored at room temperature in a dry area that is protected from exposure to hazardous contaminants as per the manufacturer's instructions

b. Inspection, Maintenance and Repairs

i. All respirators will be inspected by the user prior to each use. Inspections should include a check of:

1. Condition of the various parts including, but not limited to, the facepiece, head straps, valves, and cartridges, canisters, or filters.
2. All rubber or plastic parts, for pliability and signs of deterioration.
3. PAPR connecting tubes or hoses, air flow, and batteries.

ii. Any defective respirators shall be removed from service. Defective disposable respirators will be discarded and replaced. Defective reusable respirators will be turned in to the IPC RN for repair, adjustment, or disposal.

iii. Storeroom CHST is responsible for charging and maintaining PAPR pumps, filters, and batteries when they are stored or not in use weekly.

iv. Filters on reusable particulate respirators will be changed by the wearer whenever it becomes difficult to breathe

c. Cleaning and Disinfection

i. MAXAIR system respirators.

1. The employee using the MAXAIR system should remove the system only when safe to do so. Follow standard Donning and Doffing Procedure.
2. Once the mask is removed change your gloves.
3. Begin by removing the cuff from the helmet and wipe down with Micro kill wipes, (do not use heavily saturated wipes) allow to dry and then place in your labelled bag in the designated area.
4. Wipe all components of the helmet with the same germicidal wipes and allow to dry.
5. Check that the filter has not become damaged or contaminated with blood and then place the helmet into the grey storage bag designated for each unit to protect from dust and contamination.
6. Place battery on charger if less than 3 green lights.

10. Program Evaluation

a. The DOC Infection Prevention Manager will conduct a periodic evaluation of the RPP to ensure that all aspects of the program meet the requirements of the OSHA Respiratory Protection standard and that the RPP is being implemented effectively to protect

employees from respiratory hazards. This evaluation will be done annually and as necessary.

b. Program evaluation will include, but is not limited to:
    i. A review of the written program.
    ii. Completion of a program evaluation checklist based on observations of workplace practices.
    iii. A review of feedback obtained from employees (to include respirator fit, selection, use, and maintenance issues) that will be collected during the annual training session.
c. The RPP will be revised as necessary and records of revisions will be kept on file with the written program. Any procedural changes that are implemented as a result of program evaluation will be communicated to the employees and reinforced by their supervisors.

11. Recordkeeping
    a. The DOC Infection Prevention Manager will ensure that the following records are maintained:
        i. Personnel medical records such as medical clearance to wear a respirator shall be retained by HR as part of a confidential medical record. Medical clearance records must be made available in accordance with the OSHA Access to Employee Exposure and Medical Records standard (29 CFR 1910.1020), and maintained for a minimum of thirty (30) years after an employee's separation or termination.
        ii. Documentation of training and fit testing will be kept by the nurse educator until the next training or fit test.
        iii. A copy of this RPP and records of program evaluations and revisions shall be kept by DOC Infection Prevention Manager and made available to all affected employees, their representatives, and representatives of OSHA upon request.

IV. Closing:

Questions concerning this operational procedure will be directed to the MSP Clinical Services Manager.

V. Attachments:

Respirator Assignment by Task or Location.docx	attachment A
MT DOC PPE guidance	attachment B
User Seal Check Procedure.docx	attachment C
B-01.0 MAXAIR system protocol	attachment D