

Aerosol Transmissible Diseases and Respiratory Protection Program

Sonoma County Sheriff's Office Detention Division



ATD Plan Purpose

The ATD Plan establishes procedures to protect employees in the Sonoma County Sheriffs Office (SCSO) Detention Division Against aerosol transmissible diseases (ATD's), such as tuberculosis and influenza. The plan is designed to meet the requirements of regulations enforced by Cal/OSHA in Title 8 CCR Section 5199, "Aerosol Transmissible Diseases."

Scope

This document applies to Detention Division staff in job classifications that have, or potentially have, occupational exposure to ATDs as defined by the ATD regulations. All correctional Deputies, Detention Specialists, Detention Assistants and Janitors must comply with the provisions outlined in this document.

ATD Plan Contents

- Identify the persons with authority and responsibility form implanting the plan (Sheriff or his designee)
- Identify hazards and procedures in which employees have occupational exposure to ATD's.
- Establish procedures for employee training and communication
- Establish procedures to be used to provide medical services, including vaccination and follow up.
- Outline procedures for employees and supervisors to follow in the event of an exposure incident.
- Identify the type of PPE and RP required to be worn.
- Define procedures to be used to identify and isolate airborne infectious disease cases or suspected cases.

Establish the methods of implementation for engineering and work practice controls.

- Establish the method of informing people entering the work setting of the source control measures.
- Outline procedures for maintain records that document implementation of plan provisions.
- Establish procedures for an annual review and update of this plan.
- Identify an effective procedure for obtaining the active involvement of employees in reviewing and updating the exposure control plan.

What are ATD's?

Aerosol Transmissible Diseases (ATD's):

- A disease or pathogen for which droplet or airborne precautions are required. Possible
 Exposures: Talking, singing, yelling, etc.
- Diseases that are transmitted by aerosols (A gaseous suspension of fine solid or liquid particles). Possible Exposures: Sneezing, coughing, etc.

Some Examples:

- Anthrax
- Avian Influenza
- Chickenpox, Shingles
- Measles
- Monkeypox
- Severe Acute Respiratory Syndrome
- Smallpox
- Tuberculosis
- Any other disease for which public health guidelines recommends airborne infection isolation.

Droplet Precautions are used to prevent contact with mucus and other secretions form the nose, sinuses, airways and lungs. When a person talks, sneezes, or coughs, droplets that contain germs can travel about 3 feet. Precautions include cough etiquette, wash hands often and maintain clean work stations.

PPE for droplet precautions include gloves, goggles, face shields, gowns or aprons, full body suits, **clothing**, masks and respirators.

The respirator has been designed to also protect the respiratory tract from **airborne** transmission of infectious agents.

Illnesses that require droplet precautions include influenza (flu), pertussis (whooping cough), and mumps.

Airborne precautions may be needed for germs that are so small they can float in the air and travel long distances.

Precautions for airborne ATD's include all PPE.

Isolation precautions may also be used.

Isolation cells: Booking MH I-Mod

Germs that warrant airborne precautions include chickenpox, measles and tuberculosis (TB).

- Locations of PPE
- Donning and Doffing sequence
- When and where to don and doff

Masking of Person with Respiratory Symptoms (Source Control)

Offer masks to person who are coughing or with suspected or confirmed ATD. Surgical Masks may be used to contain respiratory secretions. Instruct the person on how to don the masks and post the procedures. When space and chair availability permit, encourage coughing persons to sit at least three feet away from others in common areas.

Tasks Requiring Respirator Use

- Entering an airborne infection isolation room or area in use for ATD isolation
- Present during the performance of medical procedures or services for an ATD case or suspected case.
- Present during the performance of high hazard medical procedures or services for an ATD case or suspected case.
- Working in an area occupied by an ATD case or suspected case, during decontamination procedures after the person has left the area.

For Reference

- Where can I find a copy of the ATD Plan?
 - A copy of the ATD Plan will be located on the Sheriff's Office Intranet under the training section.
 - Other safety documents stored in this location:
 - Injury and Illness Prevention Plan (IIPP)
 - Blood Borne Pathogens Program (BPP)
 - The Respiratory Protection Plan

Employee Requirements

- Attend initial and annual ATD training.
- Attend initial and annual respiratory protection training.
- Participate in medical qualification to wear respiratory protection.
- Be fit tested for a respirator.
- Be familiar with the requirements of the ATD and other applicable safety programs.
- Follow the requirements of the ATD and other applicable safety programs.
- Participate in the vaccination program or sign a Vaccine Declination Form.

Vaccinations

- Vaccines are offered free of charge to employees who wish to receive them.
- Some of the vaccines that are/have been made available to employees:
 - H1N1
 - Hepatitis A
 - Influenza
 - TB
 - Whooping Cough

 Vaccines are an additional step that should be taken by each employee to help prevent illness.

Fit Testing

- Fit testing is a necessary component to the ATD Training Program.
- Fit testing ensures affected staff members are capable of wearing a protective mask effectively, thus providing a higher level of protection from ATD's.

 Fit Testing allows staff members to learn how to appropriately wear a protective mask in a controlled and safe environment.

Respirator Training

Why is a respirator necessary?

• Wearing a respirator effectively reduces the risk of contracting ATD's you may come into contact with.

Respirator use/limitations:

- Respirators shall be used if/when an inmate is suspected of having any ATD or at the recommendation of medical staff.
- Wearing a respirator does not exclude you from an exposure to an ATD, but greatly reduces the risk of contracting an ATD.

NIOSH Approved: N95 =

- At least 95% filtration efficiency against solid and liquid aerosols that do Not contain oil.
- Removes 95% of particles that are at least .3 microns in diameter.
- Human hair is typically from 30-100 microns in diameter.
- Types of respirator categories:
 - N(Not resistant to oil
 - R(Resistant to oil)
 - P(Oil Proof)

Examples of Particle Sizes (microns)

Anthrax 1-5 0.7-90 Asbestos 0.7-40 Atmospheric Dust 0.3-60 Bacteria 100-10000 Beach Sand Bone Dust 3-300 Bromine 0.1-0.7 0.00065 Carbon Dioxide Corn Starch .01-0.8 0.1-0.7 Lead 10-30 Mold Spores Oil Smoke .03-1

Oxygen	0.0005
Pesticides & Herbicides	0.001
Red Blood Cells	5-10
Saw Dust	30-600
Smoke from Natural Materials	0.01-0.1
Smoke from Synthetic Materials	1-50
Smoke from tobacco	0.01-4
Spores	3-40
Viruses	0.023

- How can improper fit or usage compromise the protective effect of a respirator?
 - Improper fit: A respirator that does not fit properly can cause an exposure to an ATD even though you think you're protected by wearing the mask.
 - Must be clean shaven in order to ensure a proper fit.
 - Extended use: A mask that is re-used for a long period of time can lose it's protective benefits due to excessive wear. Typically should not be used more than 8 hours.

- Using a respirator in emergency situations:
 - Forced cell removals, fights, malfunction, running, rapid deployment, etc.
 - It is imperative that you take the time to properly apply the respirator. You have to save yourself before you can save anyone else.
 - If your respirator is damaged (impact, broken strap, or fully removed) it must be replaced as soon as it is safe to do so.
 - If a strap breaks, you may apply additional support to the respirator, attempting to keep a safe fit until you are clear of the contaminated area and can replace your respirator.

- How to inspect a respirator:
 - Ensure the respirator packaging is sealed and hasn't been tampered with.
 - Verify the straps are present and the respirator is intact and free or damage.

- How to put on and remove a respirator:
 - Remove respirator from packaging and hold with straps facing upward (1a). Place bottom strap under center flaps next to WARNING statement.
 - Fully open top and bottom panels, bending nosepiece around thumb at center of foam. Straps should separate when panels are opened. Make certain bottom panel is unfolded and completely opened.
 - Place respirator on your face so that the foam rests on your nose and the bottom panel is open under chin. Hold the bottom panel securely under your chin. Pull the top strap over your head and position it high on the back of the head (3a). Then pull the bottom strap over your head and position it around the neck and below the ears (3b). Adjust for a comfortable fit by pulling top panel toward the bridge of the nose and bottom panel under chin.
 - Place your fingertips from both hands at the top of the metal nosepiece. Using two hands, mold the nose area to the shape of your nose by pushing inward while moving your fingertips down both sides of the nosepiece. Pinching the nosepiece using one hand may result in improper fit and less effective respirator performance. Use two hands.

Perform a User Seal Check prior to each wearing. To check the respirator-to-face seal, cover the middle panel with one or both hands. For the 9210 respirator, inhale and exhale sharply. Be careful not to disturb the position of the respirator. If air leaks around the nose, readjust the nosepiece as described in step 4. If air leaks around respirator edges, adjust panels and straps. **If you CANNOT achieve a proper fit, DO NOT enter the contaminated area. See your supervisor.**

- Respirator Removal Instructions:
 - Cup respirator in hand to maintain position on face and pull bottom strap over head. Still holding the respirator in position, pull top strap over head and remove respirator.

- Storage:
 - All Respirators should be stored in a dry location away from the elements.
- Medical concerns that may prevent effective respirator use:

 Pulmonary issues, cardiovascular issues, seizures, allergies.



Questions?

For further info.

www.cdc.gov

http://www.dir.ca.gov/title8/5199.html

http://www.dir.ca.gov

Thank you and stay safe!



