**Aerosol Transmissible Diseases (ATD) Exposure Control Plan (ECP) for Fire**

**Instructions**

In addition to Cal/OSHA compliance, the benefit of developing an Aerosol Transmissible Diseases (ATD) Exposure Control Plan (ECP) is to identify and implement safe work practices to help reduce occupational exposure to ATDs such as tuberculosis (TB), severe acute respiratory syndrome (SARS), meningitis, pertussis (whooping cough), and seasonal influenza.

The following sample program is provided to assist you with the preparation and implementation of effective ECP procedures that will help you comply with the requirements of the Cal/OSHA ATD regulation <http://www.dir.ca.gov/title8/5199.html>.

Please note all sections included in the sample program are required by the regulation. The BLUE TEXT indicates areas where the customization is necessary. However, each section should be reviewed to ensure the information is compatible with your fire department’s operations as well as the policies and procedures for your organization.

**Name of Entity**

**Fire**

**Aerosol Transmissible Diseases**

**Exposure Control Plan**

**Insert Date**

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# Policy

The intent of the Name of Fire Department Aerosol Transmissible Diseases (ATD) Exposure Control Plan is to promote safe work practices and to provide an environment that reduces occupational exposure to ATDs such as tuberculosis (TB), severe acute respiratory syndrome (SARS), meningitis, pertussis (whooping cough), coronavirus (COVID-19), and seasonal influenza. The objectives of the procedures are to:

* Protect our employees from the illnesses associated with ATDs
* Provide appropriate treatment and counseling following an employee exposure incident

These procedures have been established in accordance with the Cal/OSHA ATD standard, California Code of Regulations (CCR), Title 8, Section 5199.

# Scope

The ATD Exposure Control Plan applies to all emergency medical services provided by fire service personnel or other emergency responders.

The ATD Exposure Control Plan also applies to medical transport personnel in fire departments where these services are provided.

# Responsibilities

Fire Chief

The Fire Chief has the responsibility to:

* Designate the ATD Administrator
* Allocate resources and support to appropriately implement the ATD procedures including annual employee training
* Ensure employees comply with ATD procedures
* Review the results of the annual ATD procedure review and correct deficiencies if necessary

ATD Administrator

Note: The ATD Administrator may also be the Designated Infection Control Officer

Name of Person/Title is the designated ATD Administrator and has the authority and full support of the Fire Chief to perform these duties. The Administrator has the responsibility to:

* Demonstrate knowledge in infection control principles and practices as they apply to the fire department’s facilities and operations
* Provide information on health alerts and community outbreaks from the local health officer as appropriate
* Ensure ATD procedures are implemented in the department
* Determine department-specific methods for source control and cleaning and disinfection of equipment and emergency vehicles
* Implement communication procedures to inform employees and other employers involved in the exposure incident who may have had contact with the ATD case
* Document exposure incidents and implement the post-exposure evaluation process for affected employees
* Ensure employees receive initial and annual training in ATD procedures
* Offer required vaccinations and TB testing annually
* Maintain all required records for the ATD procedures, including employee medical records
* Conduct an annual review of the ATD procedures and provide a summary to the Chief

Fire Captains/Supervisors

Fire Captains/supervisors have the responsibility to:

* Ensure compliance with the ATD procedures for employees under their direct supervision and control
* Train employees on department-specific safe work practices to reduce exposure to ATDs
* Ensure employees attend initial and annual training sessions
* Monitor the post-exposure evaluation process where an exposure incident has occurred

Firefighters/Fire Engineers/EMTs/Employees

All employees with occupational exposure to ATDs have a responsibility to:

* Recognize signs and symptoms of ATDs based on screening procedures
* Comply with safe work practices when exposure to a suspected ATD case occurs
* Provide input regarding the effectiveness of the procedures to the ATD Administrator, including input during the annual review
* Attend annual ATD training
* Receive vaccinations and annual TB testing offered by the department
* Follow post-exposure evaluation procedures if an exposure incident occurs

# Occupational Exposure Determination

Cal/OSHA defines an occupational exposure as exposure from work activity or working conditions that is reasonably anticipated to create an elevated risk of contracting an ATD if protection measures are not in place.

The following job classifications/operations at the Name of Fire Department have the potential for occupational exposure as defined in the standard when providing emergency medical services and/or transport:

Each department must review the definition of occupational exposure and their operations to customize the list of job classifications to be included in the program:

Personnel who are expected to perform the duties of a certified EMT per their department policies and procedures, regardless of certification status, are included in the program.

* Personnel who are *not* expected to perform the duties of a certified EMT (i.e. first aid only) per their department policies and procedures, regardless of certification status, are *not* included in the program.
* Personnel providing medical transport (ambulance) services are included in the program.

# High Hazard Procedures

High-hazard procedures refer to procedures performed on a suspected ATD case in which the potential for generating an aerosolized pathogen is likely. The department has identified the following aerosol generating, high-hazard procedures:

* Aerosolized administration of medications
* Suctioning
* Intubation
* Other aerosol generating procedures (if applicable)

The list of high-hazard procedures in the sample program is based on the definition in the standard. The list must be reviewed and customized by each department to reflect its operations.

# Source Control Procedures

The department will provide the following source control measures to protect employees during the period of time when a confirmed ATD case or an unknown patient showing signs and symptoms of an ATD is being treated or transported to a healthcare facility:

* Temporarily isolate the suspect ATD case from others at the scene where feasible.
* Provide tissues and hand sanitizers to persons who are coughing where appropriate.
* Provide the patient with a surgical or procedure mask for use during treatment at the scene and during transport to a healthcare facility where feasible.

The source control supplies are located at Enter Location Of Supplies In The Facility And Emergency Vehicles.

**Note: It is not necessary to offer an N95 respirator to the suspect ATD case. Department personnel cannot insist on the use of source controls and must use judgment on the appropriate use of surgical masks by the patient.**

# Respiratory Protection Procedures for Employees

* Employees will use an N95 respirator with a confirmed ATD case or with an unknown patient exhibiting signs and symptoms of an ATD:
	+ During the provision of emergency medical services in the field
	+ During the provision of emergency medical services during transport
	+ During operation of the emergency vehicle where there are no physical barriers between the driver and the patient compartment to prevent air exchange
	+ During decontamination of the emergency vehicle and equipment after the confirmed or suspect ATD case has been transported to the healthcare facility
* Employees will use a P100 respirator when high-hazard procedures such as intubation are performed on a confirmed or suspect ATD case. (High Hazard Procedures for department-specific information.)

Respiratory protection use must be in compliance with Name of Fire Department’s written Respiratory Protection Program located at Enter Location. The fire department is utilizing N95 and P100 particulate respirators for protection against potentially infectious aerosols. Supplies of the single use respirators are located at Enter Facility Location and in emergency vehicles.

Note: Another option is to require employees to don an N95 respirator for all approaches to an unknown patient until an assessment regarding the potential for an ATD case can completed. Consult existing department infection control procedures for consistency.

# Cleaning and Disinfection Procedures

The department is required to clean and disinfect all contaminated emergency vehicles, equipment, and work surfaces after any exposure from a suspect or confirmed ATD case. Note: These procedures must be consistent with the department Bloodborne Pathogen Exposure Control Plan cleaning and disinfection procedures. Fire stations are equipped with disinfecting and cleaning facilities. All cleaning and disinfecting of medical equipment and personal protective equipment (PPE) shall be conducted at the designated disinfecting and cleaning area.

Disinfecting Facility

The disinfecting facility shall be utilized for the cleaning and disinfecting of emergency medical equipment.

Items stored in the disinfecting facility shall be limited to those items used for disinfection purposes.

The disinfecting facility shall be thoroughly cleaned and disinfected after each use, utilizing an EPA-approved sanitizer.

No infectious waste shall be stored in the disinfecting facility.

Cleaning Facility

Cleaning facilities are located in all fire stations.

The cleaning facility or extractor shall be used for the cleaning of PPE and other clothing that has been exposed to infectious materials utilizing the procedures in this plan.

The extractor and dryer in the cleaning facility shall be use for the cleaning and decontamination of PPE exposed to infectious materials and/or contaminants consistent with normal firefighting activities.

No infectious waste shall be stored in the cleaning facility.

General Decontamination Procedure

All equipment and working surfaces shall be cleaned and disinfected after contact with blood or other body fluids or respiratory secretions from a confirmed or suspect ATD case by using an EPA-registered sanitizer.

Apparatus shall be considered out of service until replacement or decontamination and cleaning of all soiled equipment has been completed.

Decontamination should be initiated in the field if possible and must be immediately completed upon return to quarters.

All decontamination procedures require the use of appropriate levels of PPE such as gloves, safety glasses/goggles, and face masks.

Decontamination procedures shall be performed in the disinfecting and cleaning facilities of the fire station. At no time shall the kitchen or restroom sinks be used for this purpose.

All materials that have been used for decontamination purposes shall be placed on air-drying racks.

Personal Decontamination Procedure

Hand washing shall be performed as soon as possible:

* After every patient contact
* After contamination with bodily fluids or respiratory secretions
* After handling soiled EMS equipment or supplies
* After performing decontamination procedures on equipment or supplies
* Before and after using the restroom
* Before and after handling food and food preparation utensils

Additional Information:

Hand washing shall consist of vigorous scrubbing for at least 15 seconds, using soap and warm water. If proper hand-washing facilities are not available, alcohol-based foams or gels are to be used and the hands washed in the appropriate manner upon return to quarters. Upon return to quarters, initial hand washing shall be completed in the cleaning facility.

Skin surfaces that were not covered by protective clothing or were grossly contaminated shall also be decontaminated by using the proper washing technique as soon as possible following the conclusion of the incident.

Mucous membranes that have been exposed shall be immediately flushed with water or saline solution.

Medical Equipment Decontamination Procedure

All medical equipment decontamination performed in the fire station shall be conducted in the cleaning facility.

Medical Equipment

Backboards, scoop stretchers, collapsible stretchers, traction splints, KED sleds, defibrillators, and blood pressure cuffs shall be washed with a disinfectant detergent or an EPA-registered sanitizer and then air dried.

Delicate Medical Equipment

Defibrillators, portable radios, powered suction devices, etc., shall be thoroughly cleaned with an EPA-registered sanitizer and then air dried.

Emergency Response Vehicles Decontamination Procedure (for departments with ambulance service)

After every EMS incident, all contaminated surfaces are to be cleaned with an EPA-registered sanitizer and air dried. Do not use bleach or a bleach solution on the surfaces within the ambulances. The following procedures are recommended:

* Exhaust air from the vehicle by opening the doors and windows of the vehicle while the ventilation system is running. This should be done outdoors and away from pedestrian traffic after the patient has been removed.
* Cover reusable equipment with disposable plastic covers to protect it from contamination if it cannot be decontaminated with disinfectants without the chance of damage to the equipment (per the manufacturers' recommendations).
* Use detergent and water to clean frequently touched surfaces in patient-care compartments that become directly contaminated with respiratory secretions and other bodily fluids during patient care or indirectly by touching the surfaces with gloved hands to remove gross contamination.
* After cleaning with detergent and water, disinfect using an EPA-registered sanitizer in accordance with the manufacturer’s instructions. Ensure the surface is kept wet with the disinfectant for the full contact time specified by the manufacturer.
* Adhere to any safety precautions or other recommendations as directed by the manufacturer of the sanitizer (e.g., allowing adequate ventilation in confined areas and proper disposal of unused product or used containers and use of appropriate PPE).
* Non-porous surfaces in patient-care compartments that are not frequently touched can be cleaned with detergent and water. Avoid large-surface cleaning methods that produce mists or aerosols or disperse dust in patient-care areas (e.g., use wet dusting techniques, wipe application of cleaning and/or disinfectant solutions).
* Clean any small spills of bodily fluids (e.g., vomit from an ill patient) by cleaning first with detergent and water followed by disinfection using an EPA-registered sanitizer.

Clothing and Personal Protective Equipment Decontamination (PPE) Procedure

Contaminated clothing, including wildland/turnout gear and uniforms, shall be changed and decontaminated as soon as possible.

Contaminated clothing and PPE shall be transported from the scene to the fire station in a red biohazard waste bag.

Contaminated clothing shall be laundered in the fire station washing machine, located in the cleaning facility designated for decontamination. Contaminated clothing shall not be taken home. Class B wool uniforms that become contaminated shall be dry-cleaned.

Contaminated boots, leather or turnout type, helmets, and firefighting gloves shall be brush-scrubbed with soap and hot water and then air dried in the cleaning facility.

Each department must reference its site-specific cleaning and disinfection procedures, e.g. who is expected to perform cleaning of vehicles and equipment; how frequently will periodic cleaning be performed; what will be cleaned, including vehicles or equipment; specific cleaning products approved for use; and personal protection to wear during the procedure. Enter specific locations of cleaning materials in department facilities and vehicles. If a contract cleaning service will be used for gross decontamination of a vehicle, list the name of the vendor and the procedures for using the service.

# Communication Procedures

The ATD Administrator is responsible for communicating with exposed department employees when another employer, local health authorities, or the health care provider notify the department of a ***reportable*** confirmed or suspected ATD case in accordance with Title 17. The fire department is also responsible for communicating the informationto **other employers involved in the exposure incident** (e.g. police department, ambulance service, public works, animal control officer) to the extent that exposure information is available.

When the diagnosing health care facility reports an ATD case to the local public health officer, the department will receive notification of a reportable case from the health care facility and/or the local public health officer. **The ATD Administrator is responsible for implementing the following communication procedures within the first 72 hours**:

* **Receive** feedback from the local health authority or the health care provider on the disease status of the reportable ATD case. Insert department procedures to *receive* information from the local health authority or health care facility where patients were referred. Information for the infection control contacts at hospitals typically receiving patients in the area should be included. *Include communication procedures to receive information after hours and weekends*.
* **Contact** other employers who had employees involved in the specific exposure incident *no later than 72 hours after receiving notification*. **(Note:** This is a *maximum* time frame and would not be considered appropriate for an illness such as meningitis where life threatening illness may develop within 48 hours. The department will adjust the time frame depending on the nature of the specific illness and input from the local health officer.) ***The department will not provide the identity of the source patient to other employers.***
* Insert a department contact list for your jurisdiction for other employers typically involved in exposure incidents, i.e. police department, contract ambulance service, police departments with mutual aid agreements, homeless shelters, drug treatment centers, etc. Insert department procedures for contacting other employers. *Be sure to include an appropriate contact for each employer to ensure effective communication*.
* Conduct an ATD exposure incident analysis to identify department employees with significant exposure who require post-exposure evaluation. (See Section 11)

# Exposure Incident Analysis and Post-Exposure Evaluation

ATD Exposure Incident Analysis

An ATD exposure incident is an event where ***both of the following have occurred***:

* An employee has been exposed to a person who is a case/suspected case of a reportable ATD, and
* It reasonably appears from the circumstances of the exposure that transmission of the ATD is likely to require medical evaluation

If an exposure incident occurs, the fire department will take the following steps **within 72 hours after receiving notification except where the nature of the illness requires immediate action**:

* The ATD Administrator will conduct an analysis of the exposure scenario to identify employees had significant exposures.
* The ATD Administrator will notify employees who had significant exposure of the date, time, and nature of the exposure **no later than 96 hours** from the original notification of a reportable ATD.
* The ATD Administrator will refer employees for post-exposure medical evaluation as soon as possible after the affected employees are notified.

Post-Exposure Evaluation and Follow-Up

In the event of an exposure incident, the fire department will provide a post-exposure medical evaluation, as soon as feasible, to all employees who had a significant exposure. All post-exposure evaluations will be performed by (Insert occupational health provider with infectious disease specialists):

|  |  |
| --- | --- |
| Occupational Health ProviderInfectious Disease Specialist: |  |
| Address: |  |
| Phone Number: |  |

The fire department will provide the health care professional with the following information:

* A copy of CCR, Title 8; Section 5199 located at <http://www.dir.ca.gov/title8/5199.html>
* A description of the exposed employee’s duties as they relate to the exposure incident
* The circumstances under which the exposure incident occurred
* Any available diagnostic information relating to the source of the exposure that could assist in the medical management of the employee
* The fire department’s medical records for the exposed employee(s)

The fire department will request the following information from the health care professional:

* An opinion regarding whether precautionary removal from the employee’s regular assignment is necessary to prevent spread of the disease agent and what type of alternate work assignment may be provided
* A written opinion from the health care professional limited to the following information:
	+ The employee’s test and infectivity status
	+ A statement that the employee has been informed of the results of the medical evaluation and has been offered any applicable vaccinations, prophylaxis, or treatment
	+ A statement that the employee has been told about any medical conditions resulting from the exposure that require further evaluation or treatment
	+ Any recommendations for precautionary removal from the employee’s regular assignment
	+ Any limitations on respirator use related to the medical condition of the employee or the working conditions in which the respirator will be used

All other findings or diagnoses will remain confidential and will not be included in the written report. The fire department will obtain and provide the employee with a copy of the written opinion within 15-working days from the completed medical evaluation.

# Medical Services

Vaccination Recommendations

The fire department offers and recommends all employees in the identified job classifications in Section 4 receive the following vaccination at no cost to the employee:

|  |  |
| --- | --- |
| **Vaccine** | **Schedule** |
| **Influenza** | One dose annually |
| **Measles** | Two doses |
| **Mumps** | Two doses |
| **Rubella** | One dose |
| **Tdap** (Tetanus/Diptheria/Acellular Pertussis) | One dose, booster |
| **Varicella-zoster (VZV) or Chicken Pox** | Two doses |

If the employee declines to accept the vaccination, he or she must sign the Declination Statement (Appendix B) for each declined vaccine and forward to Name/Title/Department for required record keeping.

**Note:** Seasonal influenza vaccine shall be provided during the period designated by the Centers for Disease Control (CDC) for administration and need not be provided outside of those periods.

Latent Tuberculosis Infection (LTBI) Annual Test

The fire department maintains a surveillance program for LTBI. All employees in the identified job classifications in Section 4 will be offered annual TB tests. (Refer to Appendix C for the complete definition of LTBI.)

Employees with a positive baseline TB test shall have an annual symptom screen.

If the employee’s TB test indicates a conversion (a change in the TB test results from negative to positive) the fire department will refer the employee to the following health care professional Insert occupational health provider with infectious disease specialists knowledgeable in the treatment of tuberculosis:

|  |  |
| --- | --- |
| Occupational Health ProviderInfectious Disease Specialist: |  |
| Address: |  |
| Phone Number |  |

In the case of a conversion, the department is responsible for following requirements in the standard:

* Provide a copy of the ATD standard (8 CCR 5199) and the employee’s TB test records to the health care provider.
* If the department has determined the source of the infection, the department will also provide any available diagnostic test results including drug susceptibility patterns relating to the source patient.
* The department will request, with the employee’s consent, that the health care provider perform any necessary diagnostic tests and inform the employee about appropriate treatment options.
* The department will request the health care provider determine if the employee is a TB case or suspected case and to do all the following:
	+ Inform employee and the local health officer in accordance with Title17
	+ Consult with the local health officer and inform the employer of any infection control recommendations related to the employee’s activity in the workplace
	+ Recommend whether precautionary removal from the employee’s regular assignment is necessary to prevent the spread of disease by the employee and what type of alternate work assignment may be provided; the department will request the recommendation for precautionary removal immediately via phone or fax and that a written opinion within 15 days containing the information outlined in paragraph (h)(9) of the standard.
* In cases where the health care provider or local health officer recommends precautionary removal from regular job duties, the department will maintain the employee’s earnings, seniority, and other employee rights and benefits, including the employee’s right to his or her former job status, as if the employee had not been removed from his/her job. These provisions do not extend to any period of time during which the employee is unable to work for reasons other than precautionary removal.

# Surge Procedures

In the event of an epidemic, public health emergency, and/or disaster, the fire department will coordinate emergency medical services with Enter Name Of County/Local Emergency Plan. The ATD Administrator will coordinate communication between the fire department and other entities. All exposed employees will be notified about their responsibilities to meet the increased demand for fire department services.

Note: The development of surge procedures is beyond the scope of this document and must be coordinated with the county or local emergency response agency. Fire department surge procedures should include:

* Department work practices in surge conditions
* Provision of decontamination facilities (description, location)
* PPE (adequate supply, storage location, staff access to storage facility)
* Respiratory protection (including N95 and P100)

# Training

All employees with an occupational exposure will receive training:

* At the time of initial assignment to tasks where occupational exposure may occur
* At least annually thereafter
* When changes such as introduction of new engineering or work practice controls or modification of tasks affect the employee's occupational exposure

Training will be interactive and tailored to the education and language level of all exposed fire department employees. It will include the following:

* An explanation of ATDs, including the signs and symptoms that require further medical evaluation
* Screening methods and referral procedures
* Source control measures and how these measures will be communicated to persons the employees contact
* Procedures for temporary risk reduction measures prior to transfer
* Respiratory protection training
* Review of the medical services provided
* Exposure incident reporting procedures and communication procedures
* Vaccine information and education
* Location of written procedures (ATD Exposure Control Plan and Respiratory Protection Program) and how employees can provide feedback on the effectiveness of the procedures

The training will be offered during the normal work shift and will include an opportunity for questions and answers with a person who is knowledgeable about the fire department’s exposures and ATD control procedures. Training not given in person (e.g. web-based training or training videos) shall provide for interactive questions to be answered within 24 hours by a knowledgeable person.

#

# Record Keeping

The ATD Administrator will maintain:

* Employee training records
* Employee medical records (including vaccination records, declination forms, post-exposure medical evaluations)
* Exposure incident records
* Inspection, testing, and maintenance records for engineering controls (If applicable, records of ambulance air handling systems or air filtration systems, or smoke tests for vehicles used to transport suspect ATD cases without physical barriers between the driver and patient compartment)
* Respiratory Protection Program records per Title 8 CCR Section 5144, Respiratory Protection and the department program
* Records of annual ATD procedures review

Employee training records will include the following information:

* The date(s) of the training session(s);
* The contents or a summary of the training session(s);
* The names and qualifications of persons conducting the training or those who are designated to respond to interactive questions; and
* The names and job titles of all persons attending the training sessions.

Training records will be maintained for three years from the date on which the training occurred.

Employee medical records for each employee with an occupational exposure incident will include:

* The employee name and employee identification
* The employee’s vaccination status since employed with the NAME OF FIRE DEPARTMENT; this includes dates of vaccinations, declination statements, and medical records relative to the employee’s ability to receive vaccinations
* A copy of examination results, medical testing, evaluation, and follow up of exposure incidents
* A copy of all written opinions provided by the health care professionals as required and following an exposure incident and/or the results of TB assessments

The NAME OF FIRE DEPARTMENT will ensure employee medical records are kept confidential and are not disclosed or reported without the employee’s written consent to any person within or outside the workplace expect as required by this standard and by law. Medical records are retained and coordinated by the Human Resource Department (INSERT NAME/DEPARTMENT IF NOT HR).

Records will be maintained per Title 8, CCR, Section 3204, Access to Employee Exposure and Medical Records, and made available upon employee request. Employee medical records will be maintained for at least the duration of employment plus 30 years.

Engineering control records, if applicable, will be maintained for a minimum of five years and shall include the names and affiliations of the persons performing the test, inspection or maintenance, the date, and any significant findings or corrective actions.

# ATD Control Procedures Review

An annual review of the ATD Control Procedures will be conducted by the ATD Administrator and by employees regarding the effectiveness of the procedures in their respective work areas. Deficiencies found will be corrected. The review(s) will be documented in writing and reviewed by the Fire Chief. Corrective actions will be initiated where identified.

**Appendix - A**

**Signs and Symptoms of Common Aerosol Transmissible Diseases**

**Acellular Pertussis (Whooping cough)**

* Severe coughing spell that ends in a “whooping” sound
* Runny nose
* Sneezing
* Low-grade fever

**Coronavirus (COVID-19)**

* Fever
* Tiredness
* Dry cough
* Aches & pains
* Nasal congestion
* Runny nose
* Sore throat
* Diarrhea
* Elderly and persons with a compromised immune system are more likely to develop serious illness.

**Diphtheria**

* Sore throat/hoarseness
* Painful swallowing
* Swollen glands (neck)
* Thick, gray membrane covering throat and tonsils
* Rapid breathing
* Fever and chills

**Influenza/H1N1**

* No energy
* High fever 100 - 105° F
* Bad headaches
* Aching muscles/joints
* Eye pain, discomfort in bright light
* Coughing and sore throat
* Shortness of breath
* Persistent vomiting
* Confusion and dizziness

**Measles (Rubella)**

* Full body rash - small red spots with white center inside the mouth
* Hacking cough
* Runny nose
* High fever
* Red eyes

**Mumps**

* Swelling of the salivary glands
* Fever lasting two-three days
* Sore muscles
* Loss of appetite
* Headache
* Earache aggravated by chewing
* Aversion to light and a stiff neck
* Abdominal pain, nausea, and vomiting

**Severe acute respiratory syndrome (SARS)**

* Headache
* An overall feeling of discomfort
* Body aches
* Chills
* Sore throat
* Runny nose
* Diarrhea

**Tetanus**

* Fever
* Breathing difficulty
* Stiffness and spasms in the jaw, neck, chest, back, and abdomen

**Tuberculosis**

* Unexplained weight loss
* Fatigue
* Fever
* Night sweats
* Chills
* Loss of appetite
* Coughing that lasts three or more weeks
* Coughing up blood
* Chest pain or pain with breathing or coughing

**Varicella Zoster (VZV) - Chickenpox**

* Blisters filled with fluid
* Mild fever
* Backache
* Headache
* Sore throat
* Rash (red spots)

**Appendix B**

**Appendix B1 (Complete one form for each vaccine declined)**

|  |
| --- |
| **Vaccination Declination Statement (Mandatory)**I understand that due to my occupational exposure to aerosol transmissible diseases, I may be at risk of acquiring infection with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (name of disease or pathogen). I have been given the opportunity to be vaccinated against this disease or pathogen at no charge to me. However, I decline this vaccination at this time. I understand that by declining this vaccine, I continue to be at increased risk of acquiring \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, a serious disease. If, in the future I continue to have occupational exposure to aerosol transmissible diseases and want to be vaccinated, I can receive the vaccination at no charge to me. |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Employee Signature |  | Date |  |

**Appendix B2**

|  |
| --- |
| **Seasonal Influenza Vaccination Declination Statement (Mandatory)**I understand that due to my occupational exposure to aerosol transmissible diseases, I may be at risk of acquiring seasonal influenza. I have been given the opportunity to be vaccinated against this infection at no charge to me. However, I decline this vaccination at this time. I understand that by declining this vaccine, I continue to be at increased risk of acquiring influenza. If, during the season for which the CDC recommends administration of the influenza vaccine, I continue to have occupational exposure to aerosol transmissible diseases and want to be vaccinated, I can receive the vaccination at no charge to me. |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Employee Signature |  | Date |  |

**Appendix C**

**Definitions**

***For a complete list of definitions found in the ATD standard, refer to Cal/OSHA Title 8, Chapter 4, Section 5199; Subsection (b) at*** <http://www.dir.ca.gov/title8/5199.html>.

**Aerosol transmissible disease (ATD) or aerosol transmissible pathogen (ATP)**

A disease or pathogen for which droplet or airborne precautions are required, as listed in Appendix A of the standard.

**Airborne infection isolation (AII)**

Infection control procedures as described in Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Settings. These procedures are designed to reduce the risk of transmission of airborne infectious pathogens and apply to patients known or suspected to be infected with epidemiologically important pathogens that can be transmitted by the airborne route.

**Airborne infection isolation room or area (AIIR)**

A room, area, booth, tent, or other enclosure that is maintained at negative pressure to adjacent areas in order to control the spread of aerosolized *M. tuberculosis*and other airborne infectious pathogens and that meets the requirements stated in subsection (e)(5)(D) of this standard.

**Airborne infectious disease (AirID)**

Either: (1) an aerosol transmissible disease transmitted through dissemination of airborne droplet nuclei, small particle aerosols, or dust particles containing the disease agent for which AII is recommended by the CDC or CDPH, as listed in Appendix A, or (2) the disease process caused by a novel or unknown pathogen for which there is no evidence to rule out with reasonable certainty the possibility that the pathogen is transmissible through dissemination of airborne droplet nuclei, small particle aerosols, or dust particles containing the novel or unknown pathogen.

**Airborne infectious pathogen (AirIP)**

Either: (1) an aerosol transmissible pathogen transmitted through dissemination of airborne droplet nuclei, small particle aerosols, or dust particles containing the infectious agent, and for which the CDC or CDPH recommends AII, as listed in Appendix A, or (2) a novel or unknown pathogen for which there is no evidence to rule out with reasonable certainty the possibility that it is transmissible through dissemination of airborne droplet nuclei, small particle aerosols, or dust particles containing the novel or unknown pathogen.

**CDC**

United States Centers for Disease Control and Prevention [www.cdc.gov](http://www.cdc.gov).

**CDPH**

California Department of Public Health and its predecessor, the California Department of Health Services (CDHS).

**Case**

Either of the following:

(1) A person who has been diagnosed by a health care provider who is lawfully authorized to diagnose, using clinical judgment or laboratory evidence, to have a particular disease or condition

(2) A person who is considered a case of a disease or condition that satisfies the most recent communicable disease surveillance case definitions established by the CDC and published in the Morbidity and Mortality Weekly Report (MMWR) or its supplements

**Droplet precautions**

Infection control procedures as described in Guideline for Isolation Precautions designed to reduce the risk of transmission of infectious agents through contact of the conjunctivae or the mucous membranes of the nose or mouth of a susceptible person with large-particle droplets (larger than 5 µm in size) containing microorganisms generated from a person who has a clinical disease or who is a carrier of the microorganism.

**Emergency medical services**

Medical care provided pursuant to Title 22, Division 9, by employees who are certified EMT-1, certified EMT-II, or licensed paramedic personnel to the sick and injured at the scene of an emergency, during transport, or during interfacility transfer.

**Exposure incident**

An event in which all of the following have occurred: (1) An employee has been exposed to an individual who is a case or suspected case of a reportable ATD, or to a work area or to equipment that is reasonably expected to contain ATPs associated with a reportable ATD; and (2) The exposure occurred without the benefit of applicable exposure controls required by this section, and (3) It reasonably appears from the circumstances of the exposure that transmission of disease is sufficiently likely to require medical evaluation.

**Field operation**

An operation conducted by employees that is outside of the employer’s fixed establishment, such as paramedic and emergency medical services or transport, law enforcement, home health care, and public health.

**Guideline for Isolation Precautions**

The Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, June 2007, CDC, which is hereby incorporated by reference for the sole purpose of establishing requirements for droplet and contact precautions.

**Health care provider**

A physician and surgeon, a veterinarian, a podiatrist, a nurse practitioner, a physician assistant, a registered nurse, a nurse midwife, a school nurse, an infection control practitioner, a medical examiner, a coroner, or a dentist.

**Health care worker**

A person who works in a health care facility, service, or operation or who has occupational exposure in a public health service described in subsection (a)(1)(D).

**High hazard procedures**

Procedures performed on a person who is a case or suspected case of an aerosol transmissible disease or on a specimen suspected of containing an ATP-L, in which the potential for being exposed to aerosol transmissible pathogens is increased due to the reasonably anticipated generation of aerosolized pathogens. Such procedures include, but are not limited to, sputum induction, bronchoscopy, aerosolized administration of pentamidine or other medications, and pulmonary function testing. High hazard procedures also include, but are not limited to, autopsy, clinical, surgical, and laboratory procedures that may aerosolize pathogens.

**Individually identifiable medical information**

Medical information that includes or contains any element of personal identifying information sufficient to allow identification of the individual, such as the patient's name, address, electronic mail address, telephone number, or social security number or other information that, alone or in combination with other publicly available information, reveals the individual's identity.

**Infection control PLHCP**

A PLHCP who is knowledgeable about infection control practices, including routes of transmission, isolation precautions, and the investigation of exposure incidents.

**Initial treatment**

Treatment provided at the time of the first contact a health care provider has with a person who is potentially an AirID case or suspected case. Initial treatment does not include high hazard procedures.

**Latent TB infection (LTBI)**

Infection with *M. tuberculosis* in which bacteria are present in the body, but are inactive. Persons who have LTBI but who do not have TB disease are asymptomatic, do not feel sick, and cannot spread TB to other persons. They typically react positively to TB tests.

**Local health officer**

The health officer for the local jurisdiction responsible for receiving and/or sending reports of communicable diseases, as defined in Title 17, CCR. Note: Title 17, Section 2500 requires that reports be made to the local health officer for the jurisdiction where the patient resides.

**M. tuberculosis**

*Mycobacterium tuberculosis* complex, which includes*M. tuberculosis, M. bovis*, *M. africanum*, and *M. microti*. M. tuberculosis is the scientific name of the group of bacteria that cause tuberculosis.

**Negative pressure**

A relative air pressure difference between two areas. The pressure in a containment room or area that is under negative pressure is lower than adjacent areas, which keeps air from flowing out of the containment facility and into adjacent rooms or areas.

**Non-medical transport**

The transportation by employees other than health care providers or emergency medical personnel during which no medical services are reasonably anticipated to be provided.

**Novel or unknown ATP**

A pathogen capable of causing serious human disease meeting the following criteria:

(1) There is credible evidence that the pathogen is transmissible to humans by aerosols; and

(2) The disease agent is:

(a) A newly recognized pathogen, or

(b) A newly recognized variant of a known pathogen and there is reason to believe that the variant differs significantly from the known pathogen in virulence or transmissibility, or

(c) A recognized pathogen that has been recently introduced into the human population, or

(d) A not yet identified pathogen.

Note: Variants of the human influenza virus that typically occur from season to season are not considered novel or unknown ATPs if they do not differ significantly in virulence or transmissibility from existing seasonal variants. Pandemic influenza strains that have not been fully characterized are novel pathogens.

**Occupational exposure**

Exposure from work activity or working conditions that is reasonably anticipated to create an elevated risk of contracting any disease caused by ATPs or ATPs-L if protective measures are not in place. In this context, “elevated” means higher than what is considered ordinary for employees having direct contact with the general public outside of the facilities, service categories, and operations listed in subsection (a)(1) of this standard. Occupational exposure is presumed to exist to some extent in each of the facilities, services, and operations listed in subsection (a)(1)(A) through (a)(1)(I). Whether a particular employee has occupational exposure depends on the tasks, activities, and environment of the employee, and therefore, some employees of a covered employer may have no occupational exposure. For example, occupational exposure typically does not exist where a hospital employee works only in an office environment separated from patient care facilities, or works only in other areas separate from those where the risk of ATD transmission, whether from patients or contaminated items, would be elevated without protective measures. It is the task of employers covered by this standard to identify those employees who have occupational exposure so that appropriate protective measures can be implemented to protect them as required. Employee activities that involve having contact with, or being within exposure range of cases or suspected cases of ATD, are always considered to cause occupational exposure. Similarly, employee activities that involve contact with, or routinely being within exposure range of, populations served by facilities identified in subsection (a)(1)(E) are considered to cause occupational exposure. Employees working in laboratory areas in which ATPs-L are handled or reasonably anticipated to be present are also considered to have occupational exposure.

**Physician or other licensed health care professional (PLHCP)**

An individual whose legally permitted scope or practice (i.e., license, registration, or certification) allows him or her to independently provide, or be delegated the responsibility to provide, some or all of the health care services required by this section.

**Public health guidelines**

1. In regards to tuberculosis, applicable guidelines published by the CTCA and/or CDPH as follows, which are hereby incorporated by reference:
2. Guidelines for Tuberculosis (TB) Screening and Treatment of Patients with Chronic Kidney Disease (CKD), Patients Receiving Hemodialysis (HD), Patients Receiving Peritoneal Dialysis (PD), Patients Undergoing Renal Transplantation and Employees of Dialysis Facilities, May 18, 2007.
3. Guidelines for the Treatment of Active Tuberculosis Disease, April 15, 2003 including related material: Summary of Differences Between 2003 California and National Tuberculosis Treatment Guidelines, 2004, Amendment to Joint CDHS/CTCA Guidelines for the Treatment of Active Tuberculosis Disease, May 12, 2006, Appendix 3 - Algorithm for MDR-TB Cases and Hospital Discharge, May 12, 2006.
4. Targeted Testing and Treatment of Latent Tuberculosis Infection in Adults and Children, May 12, 2006.
5. California Tuberculosis Controllers Association Position Statement: The Utilization of QuantiFERON – TB Gold in California, May 18, 2007.
6. Guidelines for Mycobacteriology Services in California, April 11, 1997.
7. Guidelines for the Placement or Return of Tuberculosis Patients into High Risk Housing, Work, Correctional, or In-Patient Settings, April 11, 1997.
8. Contact Investigation Guidelines, November 12, 1998.
9. Source Case Investigation Guidelines, April 27, 2001.
10. Guidelines on Prevention and Control of Tuberculosis in California Long-Term Health Care Facilities, October 2005.
11. Guidelines for Reporting Tuberculosis Suspects and Cases in California, October 1997.
12. CTCA recommendations for serial TB testing of Health Care Workers (CA Licensing and Certification), September 23, 2008.
13. In regards to vaccine-preventable diseases, the publication cited in the definition of Epidemiology and Prevention of Vaccine-Preventable Diseases.
14. In regards to any disease or condition not addressed by the above guidelines, recommendations made by the CDPH or the local health officer pursuant to authority granted under the Health and Safety Code and/or Title 17, California Code of Regulations.

**Referral**

The directing or transferring of a possible ATD case to another facility, service or operation for the purposes of transport, diagnosis, treatment, isolation, housing, or care.

**Referring employer**

Any employer that operates a facility, service, or operation in which there is occupational exposure and which refers AirID cases and suspected cases to other facilities. Referring facilities, services and operations do not provide diagnosis, treatment, transport, housing, isolation or management to persons requiring AII. General acute care hospitals are not referring employers. Law enforcement, corrections, public health, and other operations that provide only non-medical transport for referred cases are considered referring employers if they do not provide diagnosis, treatment, housing, isolation or management of referred cases.

**Reportable aerosol transmissible disease (RATD)**

A disease or condition which a health care provider is required to report to the local health officer, in accordance with Title 17 CCR, Division 1, Chapter 4, and which meets the definition of an aerosol transmissible disease (ATD).

**Respirator**

A device which has met the requirements of 42 CFR Part 84, has been designed to protect the wearer from inhalation of harmful atmospheres, and has been approved by NIOSH for the purpose for which it is used.

**Respirator user**

An employee who in the scope of their current job may be assigned to tasks which may require the use of a respirator, in accordance with subsection (g).

**Respiratory Hygiene/Cough Etiquette in Health Care Settings**

Respiratory Hygiene/Cough Etiquette in Health Care Settings, CDC, November 4, 2004, which is hereby incorporated by reference for the sole purpose of establishing requirements for source control procedures. (Website)

**Screening (health care provider)**

The initial assessment of persons who are potentially AirID or ATD cases by a health care provider in order to determine whether they need airborne infection isolation or need to be referred for further medical evaluation or treatment to make that determination. Screening does not include high hazard procedures.

**Screening (non health care provider)**

The identification of potential ATD cases through readily observable signs and the self-report of patients or clients. Screening does not include high hazard procedures.

**Significant exposure**

An exposure to a source of ATPs or ATPs-L in whichthe circumstances of the exposure make the transmission of a disease sufficiently likely that the employee requires further evaluation by a PLHCP.

**Source control measures**

The use of procedures, engineering controls, and other devices or materials to minimize the spread of airborne particles and droplets from an individual who has or exhibits signs or symptoms of having an ATD, such as persistent coughing.

**Surge**

A rapid expansion beyond normal services to meet the increased demand for qualified personnel, medical care, equipment, and public health services in the event of an epidemic, public health emergency, or disaster.

**Susceptible person**

A person who is at risk of acquiring an infection due to a lack of immunity as determined by a PLHCP in accordance with applicable public health guidelines.

**Suspected case.** Either of the following:

(1) A person whom a health care provider believes, after weighing signs, symptoms, and/or laboratory evidence, to probably have a particular disease or condition listed in Appendix A.

(2) A person who is considered a probable case, or an epidemiologically-linked case, or who has supportive laboratory findings under the most recent communicable disease surveillance case definition established by CDC and published in the Morbidity and Mortality Weekly Report (MMWR) or its supplements as applied to a particular disease or condition listed in Appendix A.

**TB conversion**

A change from negative to positive as indicated by TB test results, based upon current CDC or CDPH guidelines for interpretation of the TB test

**Test for tuberculosis infection** **(TB test)**

Any test, including the tuberculin skin test and blood assays for *M. Tuberculosis* (BAMT) such as interferon gamma release assays (IGRAs) which: (1) has been approved by the Food and Drug Administration for the purposes of detecting tuberculosis infection, and (2) is recommended by the CDC for testing for TB infection in the environment in which it is used, and (3) is administered, performed, analyzed and evaluated in accordance with those approvals and guidelines. Note: Where surveillance for LTBI is required by Title 22, CCR, the TB test must be approved for this use by the CDPH.

**Tuberculosis (TB)**

A disease caused by *M. tuberculosis*.