

CITY OF SACRAMENTO REGULATORY COMPLIANCE PROGRAM
TOPIC: AEROSOL TRANSMISSIBLE DISEASE EXPOSURE CONTROL PROGRAM
EFFECTIVE DATE: 08/30/10
SUPERSEDES: N/A
SECTION: RCP #14

PURPOSE

The Cal-OSHA Aerosol Transmissible Disease Standard, Title 8 California Code of Regulations Sections 5199 and 5199.1 (8CCR5199 and 8CCR5199.1) requires the City of Sacramento to identify those job classifications where employees may have an elevated risk of contracting a disease caused by an aerosol transmissible pathogen such as tuberculosis, avian influenza, swine influenza and any other diseases listed in Attachment A. This regulatory compliance program (RCP) provides guidance to affected City department and employees on the procedures for controlling occupational exposure to aerosol transmissible diseases (ATD). A copy of this RCP and specific departmental procedures will be accessible to all affected employees.

An effective ATD Exposure Control Program requires early identification and isolation of person who have an active ATD. This ATD Exposure Control Program is designed to achieve this by: 1) use of administrative measures to reduce risk for exposure to persons who have an infectious ATD; 2) use of engineering controls to prevent the spread and reduce the concentration of infectious droplets by means of isolation or removal; and 3) use of personal protective equipment. Definitions of terms used in this program are included as Attachment B. Attachment C lists job classifications covered by this RCP.

RESPONSIBILITIES

I. Department Managers (Animal Care, Fire, Police and Zoo)

- a. Designate qualified persons to implement this program and develop department-specific ATD exposure control procedures as specified in Attachments D and E;
- b. Develop and implement procedures to ensure early identification of person(s) or patient(s) who have, or potentially may have, an infectious ATD in accordance with Attachment F;
- c. Develop written procedures to communicate with employees, other employers and the local health officer regarding the suspected or diagnosed infectious disease status of patients or suspects within 72 hours;
- d. Implement and document ATD training for personnel including the elements listed in this RCP;
- e. Determine if exposure control procedures need to be modified based on incidents involving exposure of employees, positive TB screening tests, the development of signs/symptoms consistent with suspected TB, or infection with an ATD;
- f. Coordinate with Environmental Health and Safety (EH&S) and Workers' Compensation staff to develop and implement post-exposure medical evaluations for all employees who have had a significant exposure;
- g. Manage all exposures and documentation of post-exposure follow up as confidential medical records; and
- h. Retain records as outlined in the record keeping section of this RCP.

2. Supervisors

- a. Monitor compliance with this plan by employees who have a potential for occupational exposure. This includes ensuring that new employees are properly trained and that all employees attend annual training sessions;
- b. Ensure respiratory protection equipment is available in accessible locations, used by personnel when appropriate and stored properly when not in use.

3. Employees

- a. Perform tasks and procedures in a manner that minimizes or eliminates employee exposure, comply with requirements of the ATD exposure control plan and performs duties as trained;
- b. Report all exposure incidents to his or her supervisor and document in accordance with the City's Workers' Compensation process.

4. Environmental Health and Safety

- a. Conduct an annual evaluation of the Citywide ATD Exposure Control RCP in coordination with managers and safety committees from affected departments;
- b. Coordinate the tuberculosis testing, ATD immunization and respirator fit testing in conjunction with affected departments;
- c. Instruct the external medical provider to maintain employee ATD medical records as required by this program;
- d. Compile a yearly analysis of reported exposures and subsequent infections based on Workers' Compensation data; and
- e. Consult with Sacramento County Public Health and physicians annually to evaluate the risk of transmission of ATDs to City personnel and determine if exposure control procedures need to be modified.

5. Medical Services

All affected Police and Fire Department employees will be screened for tuberculosis (TB) at the time of hiring. All affected Police and Fire Department employees are encouraged to participate in TB screening annually or as recommended by Sacramento County Public Health Department or the City's medical provider. The test will be paid for by the City. Employees testing positive for TB will be referred for further evaluation as recommended by the physician or other licensed health care professional. Employee declinations of TB testing will be documented (Attachment G).

The City will make the following immunization available at no cost to all covered Fire Department employees. Police Department employees will be offered seasonal influenza vaccinations. These immunizations will be offered within 10 days of hire and repeated in accordance with medical recommendations. All declinations of offered immunizations vaccinations will be documented (Attachment H).

Vaccine Type	Vaccine Schedule
Seasonal Influenza	Generally one dose annually
Measles	Two doses
Mumps	Two doses
Rubella	One dose
Tetanus, Diphtheria, and Acellular Pertussis (Tdap)	One dose, booster as recommended
Varicella-zoster (VZV)	Two doses

Following any significant exposure to an ATD, employees, will be sent for a medical evaluation, testing and any follow up tests or treatment recommended by the Sacramento County Public Health Department or the City's medical provider. The City's medical provider will be consulted to determine if precautionary removal from normal duty is required.

TRAINING

All affected employees will receive ATD training relevant to his or her position. The need for additional training beyond initial assignment of tasks where occupational exposure may take place will be re-evaluated annually and re-training will take place at least annually. Annual refresher training may be limited to provisions of the standard not previously covered as well as new tasks, work practices and exposure control measures. All training must include an opportunity for employees to ask questions which can be answered within 24 hours by a knowledgeable person.

Initial training must include:

1. Location of the Cal-OSHA ATD regulation (8CCR5199);
2. A general explanation of ATDs including signs and symptoms of ATDs that require further medical attention;
3. An explanation of the modes of transmission of aerosol transmissible pathogens (ATPs) and applicable source control procedures;
4. An explanation of the department's exposure control procedures; the means by which the employee can obtain a copy of the written exposure control plan and how they can provide input as to its effectiveness;
5. Appropriate methods for recognizing tasks and other activities that may expose employees to ATPs;
6. Use and limitations of methods to prevent or reduce exposure to ATPs including engineering and work practice controls, decontamination and disinfection procedures, and personal and respiratory protective equipment;

7. The basis for selection of personal protective equipment, location, proper use and limitations, cleaning, decontamination and disposal of contaminated equipment;
8. A description of the department's TB surveillance procedures, including the information that persons who are immune-compromised may have a false negative test for latent TB;
9. Training and fit testing meeting the requirement of Cal-OSHA's Respiratory Protection Program (8CCR5144) for employees whose assignment includes the use of a respirator;
10. Information on immunizations offered by the City;
11. An explanation of post-exposure procedures including reporting the incident, medical follow-up, and post-exposure evaluation;
12. Information on the department's surge plan as it pertains to the duties that employees will perform. As applicable, this training shall cover the plan for surge receiving and treatment of patients, patient isolation procedures, how to access supplies needed for the response including personal protective equipment and respirators, decontamination facilities and procedures and how to coordinate with other emergency response personnel and outside agencies; and
13. Information on the proper procedures for the disposal of animal waste.

RECORD KEEPING AND PLAN REVIEW

1. Training Records

Training records must be maintained by the department for a minimum of three years. Training records must include:

- a. The dates of training;
- b. The contents or a summary of training;
- c. The names and qualifications of persons conducting the training; and
- d. The names, job titles and signatures of all persons attending the training.

2. Medical Records

Medical records must be maintained for at least the duration of employment plus 30 years. Medical Records are to be kept confidential unless there is written consent from the employee to disclose information. These records must comply with 8CCR3203 and 8CCR3204 and must include:

- a. The name and social security number of the employee;
- b. The employee's vaccination status including a copy of the employee declination forms; and
- c. Results from ATD medical examinations, testing and follow-up procedure including any written opinions provided by a healthcare professional and any information provided to the healthcare professional.

3. Plan Implementation and Review

The ATD Exposure Control Program and any department-specific procedures will be reviewed at least annually or when any of the following conditions exist:

- a. New or modified tasks and procedures affect occupational exposure are developed;
- b. Changes in technology that reduce or eliminate exposure to ATPs become available;
- c. New or revised employee positions with occupational exposures are identified;
- d. Evaluation of exposure incidents indicate changes are needed;
- e. The ATD Prevention Program is deficient in any area.

Record of annual reviews of the ATD plan must include names of the persons conducting the reviews, dates of the reviews, names and work areas of employees involved and a summary of the conclusions. These records must be kept for at least three years.

4. Exposure Incidents

Workers' Compensation will retain records of exposure incidents to be made available as employee exposure records in accordance with 8CCR3204:

- a. Exposure records will include the date of the incident, the names of the employees involved, the potential disease or pathogen, the name and job title of the person performing the evaluation, the identity of any local health officer, physician or licensed health care professional consulted, the date of the evaluation and the date of contact;
- b. Department will maintain contact information for any other employers notified regarding potential employee exposure. Attachment G is the Emergency Response Employee Report (Communicable Disease) form used by fire departments in this area.

Definitions (Attachment A)

Aerosol

A suspension of liquid or solid particles in air, including droplets, droplet nuclei, fomites and dust.

Aerosol Transmissible Disease (ATD) or Aerosol Transmissible Pathogen (ATP)

A disease or pathogen for which droplet or airborne precautions are required as per 8CCR5199 or 8CCR5199.1, as listed in Attachment A; a pathogen that is transmitted by liquid or solid particles in the air including droplets, droplet nuclei, fomites and dusts.

Animal Waste

Animal carcasses, excrement, contaminated litter or debris from the bodies of animals such as feathers or dander.

CDC

United States Centers for Disease Control and Prevention.

Contaminated

A term used to describe the presence, or the reasonably anticipated presence of a known pathogen or other potentially infectious material that has soiled, stained, or corrupted by coming in contact with a surface or item.

Decontamination

The use of physical or chemical means to remove, inactivate or destroy pathogenic substances on a surface or item to the point where they are no longer capable of transmitting infection and the surface or item is deemed safe for handling, use, or disposal.

Droplet Precautions

Infection control procedures as described in Guidelines for Isolation Precautions which are 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 m in size) containing microorganisms generated from a person who has a clinical disease or who is a carrier of the microorganism.

Engineering Controls

Controls that isolate, remove, or create a barrier from pathogenic hazards from the workplace or operation (e.g. such as negative pressure ventilation systems).

Infectious is Infectious. Exposure Incident, Airborne

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) (3) it reasonably appears from the circumstances of the exposure that transmission of disease is sufficiently likely to require medical evaluation.

Occupational Exposure

Exposure from work activity or working conditions that is reasonably anticipated creating an elevated risk of contracting any disease caused by ATPs 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 8CCR5199 and 8CCR5199.1.

Personal Protective Equipment (PPE)

Specialized clothing or equipment worn or used for protection against a hazard (e.g. gloves, masks, goggles, face shields, etc.). This does not include general work clothes (e.g. uniforms, pants, shirts).

Physician or other licensed health care professional (PLHCP)

Means an individual that is legally permitted scope or practices (e.g. 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 8CCR5199 and 8CCR5199.1.

Referring Employer

Any employer that operates a facility, service, or operation in which there is occupational exposure and which refers airborne infectious disease cases and suspected cases to other facilities; the services and operations of referring facilities do not include providing diagnoses, treatment transports, housing, isolation or management to persons; 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.

Significant Exposure

An exposure to a source of ATPs in which the circumstances of the exposure make the transmission of a disease sufficiently likely that the employee requires further evaluation by a PLHCP; this can mean prolonged exposure within six feet of a source without use of source control measures.

Standard Precautions

A concept used in hospitals to assist in reducing the spread of multi-drug resistant organisms which treats all bodily secretions except sweat as potentially infectious materials. Standard precautions are the practice of assuming that anything that could be potentially

Source Control Measures

The use of administrative procedures, engineering controls, personal protective equipment and/or 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 ATP, 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.

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 Attachment A, or 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 Centers for Disease Control and published in the Morbidity and Mortality Weekly Report (MMWR) or its supplements as applied to a particular disease or condition listed in Attachment A.

Wildlife

Wild birds and other animals that are not domesticated, includes their remains and waste.

Zoonotic Aerosol Transmissible Disease (Zoonotic ATP)

A disease agent that is transmissible from animals to humans by aerosol and is capable of causing human disease.

Aerosol Transmissible Disease/Pathogens Appendix A from 8CCR5199 (Attachment B)

Aerosol Transmissible Diseases/Pathogens (Mandatory)

This Appendix contains a list of diseases and pathogens which are to be considered Aerosol Transmissible Pathogens (ATP) or diseases for the purpose of Section 5199. Employers are required to provide the protections required by Section 5199 according to whether the disease or pathogen requires Airborne Infection Isolation or Droplet Precautions as indicated by the two lists below.

Diseases/Pathogens Requiring Airborne Infection Isolation:

Aerosolizable pore-containing powder or other substance that is capable of causing serious human disease, e.g. Anthrax/Bacillus anthracis, Avian influenza/Avian influenza A viruses (strains capable of causing serious disease in humans);

Bordetellosis (Bordetella bronchiseptica) - Feline zoonotic;

Varicella disease (chickenpox, shingles) Varicella zoster and Herpes zoster viruses, disseminated disease in any patient. Localized disease in immunocompromised patient until disseminated infection ruled out;

Measles (rubella)/Measles virus;

Monkeypox / Monkeypox virus;

Novel or unknown pathogens;

Psittacosis-Avian zoonotic;

Severe acute respiratory syndrome (SARS);

Smallpox (variola) Variola virus;

Tularemia-Rabbit, hare and rodent zoonotic;

Tuberculosis (TB)/Mycobacterium tuberculosis-- extra pulmonary, draining lesion;

Pulmonary or laryngeal disease, confirmed;

Pulmonary or laryngeal disease suspected; and

Any other disease for which public health guidelines recommend airborne infection isolation.

Diseases/Pathogens Requiring Droplet Precautions:

Diphtheria pharyngeal;

E. coli infections;

Epiglottitis, due to Hemophilus influenza type b;

Hemophilus influenza Serotype b (Hib) disease/Hemophilus influenza serotype b -- Infants and children

Influenza, human (typical seasonal variations) influenza viruses;

Meningitis;

Hemophilus influenza, type b known or suspected;

Neisseria meningitidis (meningococcal) known or suspected Meningococcal disease sepsis, pneumonia (see also meningitis);

Mumps (infectious parotitis)/Mumps virus;

Mycoplasma pneumoniae;

Parvovirus B19 infection (erythema infectiosum);

Pertussis (whooping cough);

Pharyngitis in infants and young children/Adenovirus;

Orthomyxoviridae; Epstein-Barr virus; Herpes simplex virus;

Pneumonia;

Adenovirus;

Hemophilus influenza Serotype b infants and children;

Meningococcal

Diseases/Pathogens Requiring Droplet Precautions Continued:

Mycoplasma, primary atypical Streptococcus Group A;

Pneumonic plague/Yersinia pestis;

Rubella virus infection (German measles)/Rubella virus Rabies-mammal zoonotic;

Severe acute respiratory syndrome (SARS) Streptococcal disease (group A streptococcus);

Skin, wound or burn;

Major Pharyngitis in infants and young children;

Pneumonia;

Scarlet fever in infants and young children serious invasive disease;

Viral hemorrhagic fevers due to Lassa, Ebola, Marburg, and Crimean-Congo fever viruses (airborne infection isolation and respirator use may be required for aerosol-generating procedures); and

Any other disease for which public health guidelines recommend droplet precautions.

Affected Employee Classifications (Attachment C)

The ATD standards and requirements of this program apply to the following City employees:

1. Sworn Fire personnel that maintain emergency medical technician or paramedic certifications.
2. Fire Prevention Officers assigned to work in institutional occupancies.
3. Sworn Police personnel whose assignments may include transport or detention of suspects.
4. Police Community Service Officers whose assignments may include transport or detention of suspects.
5. General Services personnel assigned to veterinary, animal inspection or animal health operations.
6. Convention, Culture and Leisure personnel assigned to work with animals at the City Zoo.

Components of ATD Written Procedures for Non-Animal Related Exposures (Attachment D)

Written procedures used by departments with non-animal related exposures to ATDs will include the following:

1. A list of any high hazard procedures and the job classifications and operations in which employees are exposed to those procedures.
2. Tasks requiring the use of personal protective equipment. Respiratory protection must be at least as effective as N-95. P-100 must be used for high hazard emergency medical services.
3. A description of infection control measures for source patients or suspects and the method of informing people entering the work setting of the source control measures.
4. Procedures for employees and supervisors to follow in the event of an exposure incident, including how the department will determine which employees had a significant exposure.
5. Procedures the department will use to evaluate exposure incidents, determine the cause and revise existing procedures to prevent future incidents.
6. Procedures the department will use to ensure that there is an adequate supply of personal protective equipment and other equipment necessary to minimize employee exposure to ATDs in normal operations and foreseeable emergencies.
7. Procedures the department will use during surge conditions such as an epidemic, public health emergency or disaster. This may include procedures for providing services to persons who have been contaminated as the result of a release of a biological agent. The surge plan should include: information on work practices; decontamination facilities; procedures for stockpiling, accessing and procuring respiratory and personal protective equipment; and how the department will interact with the local and regional emergency plans.
8. Procedures for cleaning work areas, vehicles and equipment.

Components of ATD Written Procedures for Animal Care and the Sacramento Zoo (Attachment E)

Written procedures used by departments with animal-related exposures of zoonotic ATDs will include the following:

1. A detailed work plan based on assessment of the risks to employees including biological, chemical, physical and safety hazards, including a description of site control measures designating restricted access to contaminated and contamination reduction zones.
2. A list of tasks or procedures in which employees may have occupational exposure.
3. Measures used to control employee exposures including engineering controls, work practice controls and exposure monitoring.
4. Procedures for the safe handling of hazardous chemicals including hazardous substances used for disinfection and decontamination.
5. Procedures for respiratory protection, personal protective equipment and protective clothing,
6. decontamination procedures and disposal of animal waste and contaminated equipment.
7. Procedures to provide employees ready access to drinking water and sanitation facilities including appropriate decontamination methods for employees to access these facilities.
8. Procedures to protect employees from the risk of heat illness.

Screening Criteria for Referrals of Patients/Suspects to Health Care Providers (Attachment F)

Referrals to health care providers will be provided to persons who do any of the following:

1. Have a cough for more than three weeks that is not explained by non-infectious conditions.
2. Exhibit signs and symptoms of a flu-like illness starting March through October, the months outside of the typical period for seasonal influenza, or exhibit these signs and symptoms for a period longer than two weeks at any time during the year. These signs and symptoms generally include combinations of the following: coughing and other respiratory symptoms, fever, sweating, chills, muscle aches, weakness and malaise.
3. State that they have a transmissible respiratory disease, excluding the common cold and seasonal influenza.
4. State that they have been exposed to an infectious STD case, other than seasonal influenza.

Note: Per 8CCR5199, seasonal influenza does not require a referral.

Tuberculosis Screening Test Informed Declination Form (Attachment G)

I understand that I may be occupationally exposed to tuberculosis (TB) and that I may be at risk of acquiring TB. I understand that the Centers for Disease Control (CDC) and the California Occupational Safety and Health Administration (Cal-OSHA) recommend that I should be tested to determine whether I have contracted TB.

I have been given the opportunity to be tested for TB at no charge to myself. However, I decline TB testing at this time. I understand that, by declining this screening, I am at risk of having TB without my knowledge. I understand that I will be able to obtain testing for TB in the future if I choose to change my mind.

I have had the opportunity to ask questions and they have been answered to my satisfaction.

Printed Employee Name: _____

Employee Signature: _____ Date: _____

Aerosol Transmissible Disease Vaccination Acceptance/Declination Statement (Attachment H)

I understand that due to my occupational exposure to aerosol transmissible diseases, I may be at risk of acquiring infection with: mumps, measles, rubella (MMR); tetanus, diphtheria and acellular pertussis (TDAP); varicella and influenza.

I have been given the opportunity to be vaccinated against these diseases or pathogens at no charge to me.

	Accept	Decline
Mumps, measles and rubella (MMR)	_____	_____
Tetanus, diphtheria, and acellular pertussis (TDAP)	_____	_____
Varicella	_____	_____
Influenza	_____	_____

I have indicated my acceptance or declination of each vaccination at this time by signing my initials on the lines provided.

I understand that by declining vaccination, I continue to be at risk of acquiring mumps, measles, rubella, tetanus, diphtheria or acellular pertussis which are serious diseases. 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's Printed Name: _____

Employee's Signature: _____

Date: _____