# Model Injury and Illness Prevention Program to Address Zoonotic Aerosol Transmissible Disease Hazards

This document contains information that requires font color attributes to be turned on in screen reader settings.

This is a fillable template that, if used, the employer must complete. A red font in brackets indicates where you must customize information or add your own procedures. Examples have been added to the top rows of some tables to help you understand what each column is asking for. Delete the examples if they do not apply to your operations.

Every year, thousands of workers are exposed to animal diseases on the job. Some people are infected and become ill. Animal diseases that can spread to and cause disease in humans are called zoonotic diseases. The California Division of Occupational Safety and Health (Cal/OSHA) requires that employers protect employees who have occupational exposure to zoonotic aerosol transmissible pathogens (zoonotic ATPs). California Code of Regulations, title 8, section [5199.1, Aerosol Transmissible Diseases – Zoonotic](https://www.dir.ca.gov/Title8/5199-1.html), subsection (a)(2)(A) requires all employers covered under the standard to establish, implement, and maintain written procedures to address zoonotic ATP hazards.

Employers covered under the standard are listed in section 5199.1 subsection (a)(1)(A).

All covered employers must address zoonotic aerosol transmissible disease (zoonotic ATD) hazards in writing through their Injury and Illness Prevention Program (IIPP). Employers must develop their own procedures that address the specific hazards and conditions of their worksite. Procedures may be integrated into the employer’s existing IIPP or kept as a separate document. This model program was designed to assist employers develop a document separate from their IIPP.

These model procedures only address the requirements of subsection 5199.1(a)(2)(A). If your operations include any of the higher-risk situations covered by subsections (a)(2)(B), (a)(2)(C), or (a)(2)(D), then you must also establish, implement, and maintain additional written procedures that comply with the requirements of subsections (b), (c), or (d), as applicable.This model program does not contain procedures to comply with the written program requirements of those subsections.

Please refer to the Cal/OSHA guidance document [Exposure to Zoonotic Aerosol Transmissible Disease Hazards](https://www.dir.ca.gov/dosh/dosh_publications/Zoonotic-ATD-Hazards.pdf) for further assistance.

Cal/OSHA has developed these model procedures as only an example when addressing zoonotic ATP exposure to comply with section 5199.1(a)(2)(A). Employers are not required to use it. Employers who use these model procedures must customize them by conducting a hazard assessment of their work operations, checking the appropriate boxes, and adding information to reflect their own procedures.

Use of this model program does not guarantee it will meet regulatory requirements and does not shield an employer from being issued citations for title 8 violations. However, it should save some development time.



July 2024

Copyright © 2024 State of California, Department of Industrial Relations. Permission granted to display, perform, reproduce, and distribute exclusively for nonprofit and educational purposes, and may not be used for any commercial purpose. All other rights reserved.

# Zoonotic Aerosol Transmissible Diseases Injury and Illness Prevention Program for

**[Enter Name of Employer]**

Date: [Type the date you completed this plan.]

[Name of employer] has an established, implemented, and maintained IIPP, and has developed these additional written procedures to protect our employees as required by T8CCR section 5199.1(a)(2)(A). Any of our employees involved in any of the higher-risk activities covered by section 5199.1 subsections (a)(2)(B), (a)(2)(C), or (a)(2)(D) will be covered by additional written procedures as required by T8CCR section 5199(b), (c), or (d). [If this is the case, enter the subsections that your establishment may fall under here. Also list which animal species or higher-risk activities would cause your establishment to be covered by the additional subsections. Type the titles of your written programs that cover these higher-risk activities.]

[Identify which of the following paragraphs are applicable to your workplace and delete the paragraphs that are not.]

We have determined that some or all of our employees have exposure to zoonotic ATPs and have established this written program to comply with section 5199.1(a)(2)(A). Our program contains the following procedures, as applicable, to address employee exposure to zoonotic aerosol transmissible diseases: sanitation, occupational illness investigation, training, personal protective equipment (if applicable), and biosecurity (if applicable).

[ ]  We have laboratory operations and employees have potential exposures to zoonotic ATPs through work with samples, cultures, or other materials that potentially contain zoonotic ATP. We must comply with section 5199 – Aerosol Transmissible Diseases, subsection (f) for laboratories, including implementation of a written Laboratory Biosafety Plan. We are only required to have these zoonotic ATD control procedures if we also have other operations that come under section 5199.1 or if our existing Biosafety Plan does not cover the requirements of section 5199.1(a)(2)(A).

[ ]  We are a vertebrate animal research facility. We are required by section 5199.1 to perform and document a risk assessment and use control measures consistent with Biosafety in Microbiological and Biomedical Laboratories (BMBL). We will also comply with subsection (e) of section 5199.1 to keep appropriate records. If our risk assessment determines that we must use ABSL-3 practices or higher, we will also comply with section 5199.1 subsection (d). We are only required to have these zoonotic ATD control procedures if we also have other operations that come under section 5199.1 or if our existing control procedures, consistent with BMBL, do not cover the requirements of section 5199.1(a)(2)(A).

[ ]  We conduct hazardous waste and emergency response operations to control outbreaks of animal disease, including the destruction and/or disposal of animals infected with zoonotic ATPs and the cleanup, decontamination, and disinfection of areas and equipment associated with the infected animals or their remains. We have established this Zoonotic Aerosol Transmissible Disease program to comply with section 5199.1(a)(2)(A). In addition, we must comply with section 5192.

## Hazard Assessment

The person responsible for conducting the zoonotic ATD hazard assessment is [Type name or job title of person].

This person performs the hazard assessment on the following schedule:

* When our zoonotic ATD program is first established.
* Whenever we introduce new substances (including animal species, disinfectants, etc.), procedures, or equipment to the workplace that present a new occupational hazard.
* Whenever we become aware of a new or previously unrecognized hazard.

This person follows the following procedures to conduct the hazard assessment: [Consider including the following in your assessment and enter your procedures for how you will make the determinations. Add any additional procedures or information you will gather. Also consider how often you will conduct these procedures and whether they will be repeated when employees become infected with a zoonotic ATD.

* Identify the animal species that employees have exposure to in the workplace.
* Determine the zoonotic aerosol transmissible diseases these animals may be infected with and the route(s) by which each disease can be transmitted to employees (e.g., inhalation, contact with mucous membranes).
* Find out the symptoms of the identified zoonotic diseases.
* Identify the work areas, operations, and job tasks where employees may be exposed to zoonotic ATP.
* Identify if there are any laboratory operations, vertebrate animal research facilities, or hazardous waste and emergency response operations.
* Identify any chemical hazards employees may be exposed to while performing these tasks.
* Type any additional hazard assessment procedures here.]

We have recorded the results of the assessment in Table 1 below: [Fill in the blanks in the table according to exposures your employees actually or potentially have. The table contains examples, which you should delete if they do not apply to your operations. Add more rows as needed by placing the cursor in the last table cell and hitting the Tab key.]

**Table 1: Hazard Assessment**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Area, operation, or job task with potential ATD exposure** | **Animal species** | **Potential zoonotic ATP** | **Route of exposure** | **Disease symptoms** | **Chemical hazards** |
| Cage cleaning | Bird | Histoplasmosis | Inhalation of aerosolized droppings | Fever, cough, fatigue | disinfectant |
| laboratory |  |  |  |  |  |
| Animal vertebrate research |  |  |  |  |  |
|  |  |  |  |  |  |

## Communication

We recognize that open, two-way communication between management and staff on health and safety issues, including zoonotic ATD, is essential to an injury-free, productive workplace. We use a communication system that includes all of the following items: [Type your communication procedures here. Consider using the following, but also be sure to type any other methods used:

* New worker orientation including a discussion of zoonotic ATP safety and health policies and procedures.
* Review of our zoonotic ATP procedures.
* Zoonotic ATP training programs.
* Regularly scheduled safety meetings that cover zoonotic ATP when appropriate.
* Posted or distributed zoonotic ATP safety information.
* A system for workers to anonymously inform management about zoonotic ATP hazards.
* Special communication procedures for specific tasks/areas, as described in Table 2 below. If applicable, enter the specific operation or task in the following table, along with the special communication procedure required. If not applicable, delete the table.]

**Table 2: Communication**

|  |  |
| --- | --- |
| **Operation, task, area** | **Special communication procedure** |
| Animal receiving area | Sign indicating employees must wear impermeable boots in this area. |
|  |  |
|  |  |

## Control Measures

### Engineering Controls

Our hazard assessment showed that our employees may be exposed to zoonotic ATP when conducting certain tasks. Where feasible, we have installed and use engineering controls, which are methods to control hazardous exposures by using general or local exhaust ventilation, substitution by a less hazardous material, process modification, or isolation or enclosure of the hazard.

We use the following engineering controls to reduce potential employee exposure to zoonotic ATP: [Enter operations in Table 3 below, along with the engineered controls used during each to minimize employee exposure to zoonotic ATP. Delete the example if not applicable. Add more rows if needed.]

**Table 3: Engineering Controls**

|  |  |
| --- | --- |
| **Operation or task** | **Engineering control** |
| surgery on an animal that may have a zoonotic ATD | Local exhaust ventilation downdraft table |
|  |  |
|  |  |

### Work Practice Controls

Due to the results of our hazard assessment, we require employees to use specific work practices that minimize potential exposure to zoonotic ATD when performing certain tasks. These are necessary whenever there is potential zoonotic ATP exposure and are especially important when engineering controls are not feasible for the specific operation or task. [Enter operations or tasks in Table 4 below, along with the safe work practices used during each. The first row contains an example. Delete it if it does not apply to your operations. Add more rows if needed.]

**Table 4: Work Practice Controls**

|  |  |
| --- | --- |
| **Operation or task** | **Work practices** |
| Cleaning bird cages | No dry sweeping. Wet down cage before cleaning. |
|  |  |
|  |  |

### Protective Clothing and Personal Protective Equipment (PPE)

Due to the results of our hazard assessment, we require employees to use personal protective equipment (PPE) and protective clothing when performing certain tasks. [Consider the following bullet points, then type your specific procedures for providing necessary PPE. You will enter the PPE and protective clothing that you have determined are necessary for certain tasks in Table 5 in the Respiratory Protection section below.

* Will you provide reusable—and therefore washable—PPE and protective clothing?
* How will you launder it? Note that you must not allow employees to take home contaminated clothing or PPE to launder.
* Will it all be disposable?
* Employees may accidentally contaminate their mucous membranes, skin, or clothing when removing contaminated PPE or clothing. What procedures will you use to ensure they remove used PPE and clothing to minimize risk of contaminating themselves?]

We also use the following methods to ensure that PPE and protective clothing do not become a hazard to our employees: [For example, consider having a change schedule or establish procedures that will allow PPE/clothing to stay clean in storage. Type methods here.]

### Respiratory Protection

Zoonotic ATDs are able to be transmitted through the inhalation route. Therefore, respiratory protection may be necessary to prevent employee exposures.

We evaluate each situation with potential exposure to zoonotic ATP to determine whether respiratory protection is necessary, following the procedures in our Respiratory Protection Program.

We choose the appropriate respirator based on potential employee exposures to zoonotic ATP hazards and, where applicable, concurrent exposures to chemical vapor hazards. Concurrent exposures to chemical vapors may require the use of a chemical vapor cartridge in addition to the particulate filter, which protects against exposures to zoonotic ATP and other particulate matter.

We follow the procedures in our Respiratory Protection Program to ensure that employees receive medical clearance, fit-testing, and training prior to wearing a respirator.

We require that employees wear respirators when performing certain tasks. Employees wear these respirators when performing the tasks in the following table: [Enter operations or tasks in Table 5 below, along with types of respirators to be used for each, including the types of cartridges if the respirators are not filtering facepieces. Also enter types of PPE and protective clothing to be used during each operation or task. The first row contains an example. Delete the example if not applicable. Add more rows if needed.]

**Table 5: PPE, Protective Clothing, and Respiratory Protection**

|  |  |  |
| --- | --- | --- |
| **Operation or task** | **Respirator (and cartridge type[s], if applicable)** | **PPE/Protective clothing** |
| Cleaning bird cages | N95 filtering facepiece | Gloves, goggles |
|  |  |  |
|  |  |  |

### Sanitation

Aerosol transmissible diseases are capable of being transmitted when an employee touches a contaminated surface, then touches their mucous membranes, such as their eyes, nose, or mouth. Ensuring good sanitation practices will decrease the risk of infection with zoonotic ATD through this route. We facilitate employee hygiene by providing them with the necessary facilities and equipment. [Type the procedures for ensuring that employees will wash their hands and maintain good hygiene.

Consider measures such as providing adequate handwashing and toilet facilities and ensuring that they are clean and in good working order at all times.

Also consider having change rooms and showers if you have animals, so in the event of an outbreak among animals, those facilities will be available. If you have field staff who may be exposed to zoonotic ATP at work, remember to include them in your procedures.]

We clean and disinfect work areas that may be contaminated with animal material such as respiratory secretions or fecal matter using the procedures in the following table. [Enter the specific operations or tasks in Table 6 below, along with the procedures and disinfectant used for clean-up and disinfection. Add more rows if needed.]

**Table 6: Sanitation**

|  |  |  |
| --- | --- | --- |
| **Operation or task** | **Clean-up/Disinfection Procedures** | **Disinfectant** |
|  |  |  |
|  |  |  |
|  |  |  |

Disinfectants must be of proper strength to be effective. However, because they degrade over time, we ensure its effectiveness before use by doing the following: [Type the procedures used to ensure that disinfectants are of proper strength before using. Consider measures such as purchasing new disinfectant periodically (describe how often) or testing the strength of the disinfectant before use (describe how).]

We also use these additional sanitation measures: [Type other sanitation measures here.]

### Biosecurity

(Delete this paragraph if inapplicable to your operations, even in foreseeable emergencies.) We use biosecurity measures in our operations, where applicable, to prevent the following: potential direct or indirect animal-to-animal transmission of zoonotic ATPs both within the facility and between different facilities; release of pathogens into the environment; and infection of people who may come into contact with animals, areas where animals are housed, or with debris from those areas. These measures include methods to ensure that people do not enter contaminated areas without our knowledge (e.g., traffic controls). We use the following biosecurity measures: [Delete this paragraph if inapplicable. Otherwise, type your biosecurity measures here. Consider using the following, but be sure to type any other biosecurity measures you use:

* Restriction of entry into contaminated areas (e.g., using signs or barriers).
* Isolation of animals from contact with the outside environment.
* Additional PPE or protective clothing (list types).
* Special entry/exit procedures for restricted areas (e.g., showers, disinfecting dip). List the types and where they would be used.
* Traffic controls.
* Cleaning and disinfection of vehicles that enter or leave the premises, including tires and undercarriages.]

## Occupational Illness Investigation

When an employee shows signs and symptoms consistent with a zoonotic aerosol transmissible disease, we send them to receive appropriate medical attention right away from an emergency medical service or other medical provider, as appropriate.

We send employees with symptoms of work-related zoonotic disease to the following medical facility for care: ­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­­[Type the name of the medical facility or doctor.

You should inform the licensed health care provider about the employee’s suspected or known exposures to animals and any zoonotic pathogens for quicker diagnosis and treatment. If this communication will be part of your procedures, type the method for ensuring that it will be done.]

We will investigate to determine the circumstances of exposure that led to the illness using procedures consistent with our IIPP. The local health department may provide guidance or take the lead in this process if the health care provider was required by Title 17 to report the disease to them.

In our investigation, we will determine the:

* Task the employee was conducting at the time of exposure.
* Location of the exposure.
* Route of exposure.
* Cause(s) of the exposure.
* Whether the employee(s) was (were) wearing PPE or respiratory protection.
* Other pertinent information (specify): [Type additional information that will be gathered here.]

We will also use the following procedures to investigate the exposure: [Type illness investigation procedures here. Consider how you will determine what happened. For example:

* Interview the employee and any coworkers who witnessed the likely exposure incident.
* Using proper safety protocols, go to the location where the exposure occurred.
* Locate the animal involved in the exposure.
* Examine any PPE and protective clothing the employee was wearing at the time of exposure.]

We will document our findings using the following procedure: [Type the procedure for documenting the illness investigation and what was found.]

## Corrective Action

We will identify the factors that likely contributed to the exposure and take corrective action, following the procedures in our Injury and Illness Prevention Program (IIPP) and this Zoonotic ATD Plan.

We will document our findings and the action taken by [Type the procedures for documenting corrective actions.]

Different incidents may require specific steps to be taken to prevent recurrence of the exposure. However, we will use the following general procedures to take correction action: [Type procedures for corrective action here. When determining the necessary corrective actions, consider the following:

* When an imminent hazard exists that cannot be immediately abated without endangering employee(s) and/or property, you must remove all exposed workers from the area except those necessary to correct the existing condition. Workers necessary to correct the hazardous condition must be provided with the necessary protection.]

## Training

We train supervisors and employees on how to protect themselves from potential hazards of zoonotic aerosol transmissible diseases that they may encounter in their work in accordance with our Injury and Illness Prevention Program. We include all supervisors and employees who may be tasked with performing job duties identified as having potential exposure to animals or items contaminated with animal secretions or waste products.

We provide training to employees and supervisors with the following frequency:

* Upon initial assignment.
* When site conditions are substantially changed.
* When hazards are newly introduced or newly recognized.

Training will be provided with content and vocabulary appropriate for the educational level, literacy, and language of employees.

We provide training using the following procedures:

* Training is provided by: [Type the name, job title, or company providing the training] using the following methods: [Type the method of training (e.g., in person lecture, hands-on workshop, online webinar)]
* The training includes the following topics: [Type a list of the topics included in the training. This must include specific details about your zoonotic ATD plan, including the engineering and work practice controls used to protect their health, PPE, protective clothing, and communication methods. In addition, consider including the following in your training, and type any other training topics:
* Job tasks and work locations where exposure to animals or animal waste products, and therefore zoonotic ATD, is possible.
* Proper animal and animal waste handling techniques.
* Proper methods of donning and doffing PPE and respiratory protection, as applicable.
* How to recognize if an animal may be infected and how to respond when encountering a sick animal.
* How to recognize if there may be an outbreak of disease occurring at your site and how to respond.
* Routes through which the zoonotic ATP is transmitted to people.
* How to recognize symptoms of the disease(s) in people.
* Sanitation and biosecurity procedures, as applicable, and any other exposure control procedures used.]

## Recordkeeping

We keep the following records related to zoonotic ATD, as applicable to our operations: [Complete and edit the table below to specify which records are kept and where each is stored.]

|  |  |  |
| --- | --- | --- |
| **Records** | **Location where records are stored** | **Title 8 requirement** |
| Inspection records showing identification and evaluation of zoonotic ATD hazards at the workplace, including documentation of the steps taken to correct (control) the hazards |  | 3203(b)(1), 5199.1(e)(1) |
| Records of employee Zoonotic ATD training  |  | 3203(b)(2), 5199.1(e)(1) |
| Other [Specify type, if applicable, e.g., zoonotic illness investigation records]:  |  |  |