**Zoonotic Aerosol Transmissible Diseases Biosafety Plan Template**

UC Santa Barbara policy is to establish, implement, and maintain an effective exposure control plan, as required by the Zoonotic Aerosol Transmissible Diseases Standard,[Cal/OSHA CCR Title 8 Section 5199](https://www.dir.ca.gov/title8/5199-1.html).1.

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| Instructions for use: 1. Complete the fillable fields. This document is intended to compliment the project-specific Biological Use Authorization(s), the related IACUC Protocol(s), and the Field Safety Plan(s).  2. Review the Biosafety Plan and associated documentation with group members. 3. Document that your group has reviewed the Biosafety Plan. |

**Zoonotic Aerosol Transmissible Diseases Biosafety Plan**

**Purpose**

Cal/OSHA CCR Title 5 Section 5199.1, Aerosol Transmissible Diseases – Zoonotic, requires that employers take measures to protect employee health if there is the potential for exposure to aerosol transmissible zoonotic diseases in the course of assigned work. The Standard requires the employer to have a written plan which identifies potential worker exposures and measures to eliminate or minimize exposures, including training, personal protective equipment, occupational health surveillance, and engineering and work practice controls. Section 5199.1 does not require a new program, but may be implemented as a supplemental appendix to the existing Injury and Illness Prevention Program (IIPP).

The standard applies to all employees in job classifications that have potential for occupational exposure to animals that are infected with zoonotic disease or untreated waste from such animals. “Occupational exposure” means reasonably anticipated potential for inhalation, ingestion, or parenteral (needlestick or open wound) contact with animal blood, tissues or untreated waste.

Common examples of activities that present opportunities for exposure to zoonotic disease are:

1. Handling or exposure to sick or injured wildlife
2. Handling or exposure to untreated waste from animals that have zoonotic disease

The job classes affected include, but are not limited to, faculty, researchers, visiting scientists, teaching assistants, laboratory technicians, and anyone with potential occupational exposure to the items listed above.

This Biosafety Plan template is tailored for work operations involving the management, capture, sampling, transportation or disposal of wild birds or other wildlife.

Attach or reference procedures from Biological Use Authorizations and Animal Use Protocols as appropriate.

**Select Definitions**

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

Biosecurity procedures. Control measure, such as traffic control, disinfection, and isolation, that are implemented to reduce the risk of transmission of infection into, from, or within an establishment. The purpose of biosecurity measures is to prevent direct or indirect animal-to-animal transmission of zoonotic ATPs, release of pathogens into the environment, and infection of people who may come into contact with animals or areas where animals are housed, or with debris from those areas. The specific biosecurity measures necessary depend on the type of operation conducted by the employer. Typically, no provision for biosecurity other than the use of common sanitation measures is required for incidental removal of animal carcasses or other wastes, unless the activity may result in the introduction of pathogens into areas where animals are kept or housed, or unless the animal is the subject of an applicable alert or disease control order.

Decontamination. The removal of hazardous substances from employees, work areas and their equipment to the extent necessary to preclude the occurrence of foreseeable adverse health effects.

Occupational exposure. Reasonably anticipated work exposure to a source of zoonotic ATPs under conditions that, without the use of protective measures, create a significant risk of contracting the disease caused by the pathogen.

Examples of such conditions include: conducting diagnostic sampling of animals reasonably suspected of infection, performing animal husbandry activities with flocks quarantined due to an increased risk of infection with zoonotic ATPs, and disposing of infected animal carcasses or their wastes.

Untreated animal products, byproducts, or wastes. Materials derived from animals that have not been processed in a manner that will deactivate zoonotic ATPs the materials may contain. “Untreated animal products, byproducts, or wastes” do not include animal carcasses or portions thereof that have passed an inspection in accordance with the standards of the USDA or CDFA and have been determined to be fit for human consumption.

Zoonotic aerosol transmissible pathogen (Zoonotic ATP). A disease agent that is transmissible from animals to humans by aerosol, and is capable of causing human disease. Zoonotic ATPs include pathogens that are classified as transmissible either by droplets or by an airborne route.

**Scope**

A Biosafety Plan is required for work in the following facilities, service categories or operations (check all that apply):

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|  | Operations involving the management, capture, sampling, transportation or disposal of wild birds or other wildlife  |
|  | Capturing or sampling of wildlife for the purpose of determining whether they are infected with zoonotic aerosol transmissible pathogens (ATPs) |
|  | Farms producing animals or animal products, including the transport of animals and untreated animal products, byproducts, or wastes to or from farms |
|  | Slaughterhouses and initial processing facilities for untreated animal products, byproducts, or wastes |
|  | Veterinary, animal inspection, and other animal health operations |
|  | Importers of live animals and untreated animal products |
|  | Zoos, animal parks, pet stores and other operations in which animals are displayed, transported, or housed  |
|  | Laboratory operations involving samples, cultures or other materials potentially containing zoonotic aerosol transmissible pathogens (zoonotic ATPs). These laboratory operations shall comply with §5199(f), Laboratories, of the ATD regulations.  |

The following special circumstances and procedures require augmentation of this Biosafety Plan. Contact your Biosafety Officer.

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| * When the USDA or the CDFA issues a quarantine order, movement restriction, or other infection control order applicable to an establishment due to an increased risk of zoonotic ATP infection, the employer shall establish, implement and maintain effective written zoonotic disease control procedures to protect employees from hazards related to undetected or early infection in animals. Requirements are listed in a dedicated section of the regulations, 5199.1(c).
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| * Every employer with work operations involving handling, culling, transporting, killing, eradicating, or disposing of animals infected with zoonotic ATPs, or the cleaning and disinfection of areas used, or previously used, to contain such animals or their wastes, shall establish, implement, and maintain written zoonotic disease control procedures to control the risk of transmission of disease from the animals to employees. These procedures shall be available onsite at all times when employees are present, and shall be maintained as an employee exposure record, in accordance with Section 3204 {Access to Employee Exposure and Medical Records} of these orders. Requirements are listed in a dedicated section of the regulations, 5199.1(d).
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**Application**

Every employer with facilities, operations or services that are within the scope of this standard shall establish, implement, and maintain effective procedures for preventing employee exposure to zoonotic aerosol transmissible pathogens in accordance with Section 3203, Injury Illness and Prevention Program, of these orders. This subsection does not exclude the application of the employer’s Injury Illness and Prevention Program to zoonotic diseases that are not transmitted by infectious aerosols.

**List of aerosol transmissible pathogens known or reasonably expected to be present in the field environment, wild animals, and/or field specimens:**

**Exposure to Potentially Infectious Wildlife**

The employer shall establish, implement and maintain effective written procedures for operations that involve capturing or sampling of wildlife to detect the presence of infection with zoonotic ATPs. All incoming materials potentially containing ATPs are to be treated as containing the virulent or wild-type pathogen, until procedures have been conducted at the laboratory to verify that pathogens have been deactivated or attenuated. For example, specimens preserved in 70% ethanol must be assayed in the laboratory to verify that target pathogens have been deactivated.

These procedures shall include:

1. Work procedures that minimize the production of aerosols while managing, capturing, sampling, transporting or disposing of wild birds or other wildlife

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1. Use of personal protective equipment,

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Procedures must include the use of a respirator at least as effective as an N95 filtering facepiece respirator and enrollment in a Respiratory Protection Program (RPP) whenever:

* There is an increased potential of exposure to infectious aerosols, such as when handling animals in an enclosed or indoor area,
* Responding to a mortality event involving a significant number of animals, or
* There are animal-related dusts in the environment that are reasonably likely to be an aerosol infection hazard to employees.

Scenarios and procedures in which respiratory protection is required:

Prohibited procedures or work conditions in the field, even with the aerosol managing procedures and PPE described above:

1. Cleaning and decontamination procedures

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1. Medical services as recommend by the CDC, CDPH, or Local Health Officer, including applicable vaccinations

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(E) Training

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| Employees need training upon initial assignment, when site conditions are substantially changed, and when hazards are newly introduced or newly recognized. Contact the Biosafety Officer for training on the Zoonotic ATD regulations, as this unit is not yet available on the UCLC. The training covers:1. Procedures to use when dealing with infected animals or their waste
2. Use of personal and respiratory protection equipment
3. Occupational exposure

Project-specific training is provided by the Faculty Principal Investigator. 1. Precautions for procedures that are reasonably anticipated to generate aerosols
2. Procedures that are prohibited in the field
3. The meaning of any signs that will be used onsite

Animal handling and biosecurity measures are described in the IACUC protocol and wildlife permits.1. Live animal housing and/or transportation methods
2. Procedures for moribund animals included in the IACUC protocol
3. Tagging and/or sampling procedures
4. Equipment decontamination

Site-specific information is documented in the Field Safety Plan. 1. Access to sanitation facilities and drinking water
2. Methods to control the risk of heat illness
3. Emergency medical services
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**Biosafety Officer Risk Assessment**

The Biosafety Officer shall perform a risk assessment for the potential agents present and procedures involving the management, capture, sampling, transportation or disposal of wild birds or other wildlife. The BSO will record the required safe practices in the Biosafety Plan.

**Signatures Acknowledging Annual Review**

By signing below, you acknowledge that you have reviewed the Biosafety Plan.

Name Title Signature and date