

Environmental Health & Safety
(909) 469-5528; (909) 469-8231

Aerosol transmissible pathogen laboratory (ATP-L): A pathogen that meets one of the following criteria:

1. The pathogen appears on the list in Appendix D of the Standard.
2. The [Biosafety in Microbiological and Biomedical Laboratories](#) (BMBL) recommends biosafety level 3 or above for the pathogen.
3. The Biological Safety Officer recommends biosafety level 3 or above for the pathogen.
4. The pathogen is a novel or unknown pathogen.

Airborne infectious disease (AirID): Either (1) an ATD transmitted through dissemination of airborne droplet nuclei, small particle aerosols or dust particles containing the disease agent for which airborne infection isolation (AII) is recommended by the Centers for Disease Control (CDC) or the California Department of Public Health (CDPH) as listed in Appendix A of the Standard, or (2) a 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 (AirP): Either (1) an ATP transmitted through dissemination of airborne droplet nuclei, small particle aerosols or dust particles containing the infectious agent for which AII is recommended by the CDC or CDPH as listed in Appendix A of the Standard, or (2) a novel or unknown pathogen for which there is no evidence to rule out with reasonable certainty the possibility that the agent is transmissible through dissemination of airborne droplet nuclei, small particle aerosols or dust particles containing the novel or unknown pathogen.

Alert: A public announcement or notification by a local health officer, the State of California or a federal agency regarding a detected zoonotic ATP hazard. This notification may be issued for a species or type of animal and/or a geographic area.

Animal Biosafety Level 3 (ABSL-3): An animal housing facility that complies with the criteria for work practices, safety equipment and facility design and construction as recommended by the CDC in

the facility Exposure Control Plan; and who is authorized by the employer to establish and

Latent TB infection (LTBI): Infection with *Mycobacteria tuberculosis* (TB) 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 disease as defined in [Title 17, CCR](#). Note: Title 17, [§ 2500](#), requires that reports be made to the local health officer for the jurisdiction where the patient resides.

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 the Standard. Whether a particular employee has occupational exposure depends on the tasks, activities and environment of the

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 the Standard.

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 ATD.

Respirator: A device which has met the requirements of [Title 8 CCR 5144](#), has been designed to protect the wearer from inhalation of harmful atmospheres and has been approved by the National Institute for Occupational Safety and Health (NIOSH) for the purpose for which it is used.

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.

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 of the Standard.

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 purpose of detecting tuberculosis infection; (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.

Untreated animal products, byproducts, or wastes: Materials derived from animals that have not been processed in a manner that will deactivate zoonotic ATPs or materials they 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.

Wildlife: Wild birds and other animals that are not domesticated, including their remains and wastes.

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.

RESPONSIBILITIES

The Institution

All WesternU employees have the right to a safe workplace. The institution ensures compliance with applicable health, safety, and environmental laws, regulations and requirements and that activities are conducted in a manner that protects students, faculty, staff, visitors, the public, property, and the environment. WesternU is committed to excellence in health, safety and environmental performance and strives to achieve:

Zero injuries or illnesses
Zero environmental incidents
Zero property loss or damage

Achieving these goals is the responsibility of everyone at WesternU. Supervisors have particular accountability and responsibility for individuals reporting to them.

Biosafety Officer (BSO)

WesternU will appoint a Biosafety Officer (BSO) that is qualified by training and/or experience to evaluate hazards associated with laboratory procedures involving ATPs and ATPs-L. The BSO is authorized by the University to establish and implement effective control measures for

laboratory biological hazards. The BSO will be knowledgeable about the facility Exposure Control Plan. A copy of the Exposure Control plan template may be found on the [Biosafety webpage](#). Additional responsibilities of the BSO include, but may not be limited to, the following:

PROGRAM COMPONENTS

The ATD Standard requires employers to have feasible engineering and work practice controls in place to minimize employee exposure to aerosols. Employers must also provide PPE and respirators to control exposures to ATPs and/or ATPs-L. In addition, the employer is required to develop, implement and annually review a written Exposure Control Plan (ECP) in accordance with CCR, Title 8, [§ 5199](#). The Exposure Control Plan template may be downloaded from the [Biosafety webpage](#). This plan must include the following:

Identification of a qualified biosafety officer who will be responsible for implementing the Plan.

A list of job classifications, tasks and procedures in which employees may be exposed to ATPs and/or ATPs-L.

A list of the ATPs and/or ATPs-L that are known or reasonably anticipated to be present in the workplace.

A stated requirement that all incoming materials containing ATPs-L are treated as containing the virulent or wild-type pathogens until there is laboratory verification that the pathogen has been deactivated or attenuated.

Engineering controls to minimize exposure, including equipment such as biosafety cabinets.

Safe handling procedures and a list of prohibited practices, such as sniffing in vitro cultures that may increase employee exposure to infectious agents.

Effective decontamination and disinfection procedures for surfaces and equipment.

Description of PPE, including respirators.

Identification of operations or conditions that require the use of respiratory protection.

Emergency procedures for uncontrolled releases within the facility and untreated releases outside of the facility.

A medical surveillance program that includes CDC or California Department of Public Health vaccination recommendations, annual tests for latent TB infection (if applicable), and medical follow-up for employees with exposure to an ATP and/or ATP-L.

Procedures for communication of hazards and initial and annual employee training showing active involvement.

Procedures for annual inspections of laboratory facilities.

In addition, the ATD Standard also requires employers to keep records of training, medical services (including the unavailability of vaccines and respiratory protection), exposure incidents, inspections and evaluation of engineering controls and other control measures.

ATD Training

All employees with occupational exposure to ATPs and/or ATPs-L must participate in a training program. All personnel must be informed of the hazards associated with the work performed and proper safety precautions. ATD training is required at the time of initial assignment to tasks where occupational exposure may occur and annually thereafter. In addition, training is required

when changes occur, such as the introduction of new engineering or work practice controls or modification of tasks and procedures.

WesternU encourages employees to be vaccinated. However, the employee may decline the vaccination. Accepting vaccination is not a condition of employment. If you decide not to be vaccinated but later change your mind, you may still receive the vaccination(s) at no cost to you.

To obtain the vaccine(s), contact the Student-Employee Health Office at x-3871 within the ten-day period. The following is a table for ATD vaccination recommendations for susceptible health care workers from the [Immunization Branch](#) of the California Department of Public Health.

Vaccine	Schedule
Influenza	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

TB Assessments and Conversion Follow

C. Exposure Incidents Post-Exposure

Any exposure, e.g. inhalation of ATPs or ATPs-L, resulting in direct, unprotected contact with ATPs or ATPs-L gives you the right to prompt medical evaluation and treatment with a qualified physician familiar with evaluation and treatment protocols as recommended by the CDC. These services will be provided to the employee at no cost.

After any direct exposure to ATPs-L through a needlestick, immediately wash the affected area with soap and water and NOTIFY A SUPERVISOR. For splashes with ATPs-L, remove contaminated clothing and dispose of as biohazard waste. Rinse the affected area with water for 15 minutes. If necessary, seek medical attention. If ATP or ATPs-L inhalation has occurred, immediately seek medical attention.

If an exposure to ATPs-L occurs, the PI/Non-Laboratory Supervisor will immediately report the incident to the Student Employee Health Office at x-3871 and notify the IBC to document which employees had significant exposures and, if applicable, the basis for determining that an employee did not have a significant exposure, e.g. if a PLHCP determined that the employee is immune. The PI/Non-Laboratory Supervisor will notify all employees who had significant exposures of the date, time and nature of the incident within 96 hours of becoming aware of the potential exposure (or sooner if the disease has time restraints for administration of vaccine or prophylaxis, like varicella or meningococcal disease). Employees will be provided post-exposure medical evaluation at no cost to the employee as soon as feasible.

INSPECTIONS AND EVALUATION OF CONTROLS WITHIN THE LABORATORY

The BSO will be kept informed of any renovations of a facility where ATPs-L are used to ensure that construction and renovation are in accordance with the latest edition of BMBL and CCR, Title 8, [§ 5199](#).

The PI/Non-Laboratory Supervisor is responsible for registering research involving materials that may contain airborne pathogens with the IBC prior to the start of research. Laboratory inspections will be conducted at least annually for laboratories working with ATPs-L. Laboratory inspection forms will be kept on file with the IBC.

AEROSOL TRANSMISSIBLE DISEASES ZOOONOTIC

In addition to the ATD Standard, compliance with the zoonotic standard may also be required. The Aerosol Transmissible Diseases – [Zoonotic](#) standard applies to the following facilities, service categories or operations at WU:

- Operations involving the management, capture, sampling, transportation or disposal of wild birds or other wildlife.
- Veterinary, animal inspection and other animal health operations.
- Importers of live animals and untreated animal products.
- Laboratory operations involving samples, cultures or other materials potentially containing zoonotic ATPs.

Under the Standard, facilities, operations or services that fall into the above scope are required to establish, implement and maintain effective procedures for preventing employee exposure to zoonotic ATPs. The procedures shall include sanitation, investigation of occupational injuries and illnesses, training, PPE, and biosecurity if applicable. The procedures must include the following:

A detailed work plan that includes an assessment of the risks to employees (including biological, chemical, physical and safety hazards) and a description of site control measures (including designation of restricted contaminated areas and contamination reduction zones).

A list of all jobs, tasks or procedures where occupational exposure may occur.

The measures taken to control employee exposure through the following:

- Engineering and work practice controls and exposure monitoring.
- Procedures for the safe handling of hazardous substances.
- Procedures for the application of toxic or asphyxiant gases, if applicable.
- Respiratory protection.
- PPE
- Decontamination procedures.
- Disposal of animal waste and contaminated PPE.
- Medical services.
- Training.
- Recordkeeping.

Procedures to provide employees access to drinking water and sanitation facilities.

Procedures to protect employees from the risk of heat illness.

This standard requires that employers provide all safeguards, including PPE

INFORMATION AND EXTERNAL REFERENCES

Cal/OSHA Aerosol Transmissible Diseases Regulation

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

Cal/OSHA Aerosol Transmissible Diseases - Zoonotic Regulation

<http://www.dir.ca.gov/title8/5199-1.html>

Appendix D: Aerosol Transmissible Pathogens – Laboratory List

<http://www.dir.ca.gov/title8/5199d.html>

Cal/OSHA Respiratory Protection Program Regulation

<http://www.dir.ca.gov/title8/5144.html>

California's Local Health Officers

<http://www.cdph.ca.gov/programs/cclho/Documents/CCLHOHealthOfficerDirectory.pdf>

CDC Biosafety in Microbiological and Biomedical Laboratories

<http://www.cdc.gov/biosafety/publications/bmb15/>

Centers for Disease Control's Respiratory Hygiene/Cough Etiquette Guidelines

<http://www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm>

Immunization Information from the California Department of Public Health

<http://www.cdph.ca.gov/programs/immunize/Pages/HealthProfessionals.aspx>