



**PROTECTING WORKERS FROM MPOX
FOR EMPLOYERS AND WORKERS COVERED BY
THE AEROSOL TRANSMISSIBLE DISEASES STANDARD
(TITLE 8 SECTION 5199)**

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This guidance provides a brief overview of some, but not all, of the requirements of Title 8 CCR section 5199 as it applies to protection of workers from mpox. It is not a substitute for, or a legal interpretation of, the regulation. Please refer directly to [section 5199](#) for such information.

Employers not covered by section 5199 are not discussed in this guidance but must protect their employees under the Injury and Illness Prevention Program (section 3203), sanitation requirements (section 3362), and other laws and regulations.¹

WHAT IS MPOX (MPX)?

Mpox is an aerosol transmissible disease covered by Cal/OSHA's Aerosol Transmissible Diseases (ATD) Standard (California Code of Regulations, Title 8, [section 5199](#)), which contains mandatory requirements that certain employers must follow to protect their employees.

Mpox is a viral infection that can spread from infected humans, animals, and materials contaminated with the virus. Since May 2022, there has been a rapid rise in cases of mpox in many regions, including California. The disease is typically self-limited (resolves on its own without treatment) but may be severe in young children or immunocompromised individuals, such as those infected with HIV. On August 1, 2022, Governor Newsom issued a statewide [proclamation of emergency](#) due to mpox. On August 4, 2022, the U.S. Department of Health and Human Services declared the U.S. mpox outbreak to be a public health emergency.

MPOX TRANSMISSION

Mpox spreads primarily by close or direct contact with infectious rashes, lesions, scabs, or body fluids. It can also spread through touching materials used by a person with mpox that haven't been cleaned, such as clothing, towels, and bedding. The virus can become airborne during changing or handling of contaminated linen. In addition to lesions on the skin, lesions may be located in the mouth or throat, and research is underway to further understand the role of respiratory fluids, droplets, and particles in the transmission of mpox.

Public health recommendations to prevent the spread of mpox for employees entering into rooms in which persons with suspected or confirmed mpox are located or were recently located include:

- Use of NIOSH-approved particulate respirators equipped with fit tested N95 filters or higher
- Eye protection (i.e., goggles or a face shield that covers the front and sides of the face)
- Gowns, and gloves

As of August 11, 2022, the CDC recommends the use of airborne infection isolation rooms for intubation and extubation, and *"any procedures likely to spread oral secretions"* (e.g., saliva).

¹ Title 8 section 5199.1 [Aerosol Transmissible Diseases – Zoonotic](#) covers mpox and protects certain workers with animal exposures. This guidance does not discuss section 5199.1.

Understanding of mpox transmission will likely change as studies of the current outbreak are completed. Please see [California Department of Public Health \(CDPH\) MPX guidance](#) for the most recent information.

SYMPTOMS

Infection with mpox may start with symptoms similar to the flu, including fever, low energy, swollen lymph nodes, and general body aches, although some patients do not have these symptoms. After the fever starts, the person can develop a rash or lesions. The lesions will develop through several stages, including scabs, before healing. They can look like pimples or blisters and may be painful and itchy. The illness typically lasts 2-4 weeks.

During the current outbreak, skin lesions have presented most commonly in the anogenital area, followed by trunk and limbs, face, and palms or soles. Lesions may also occur in the mouth and throat.

This information may change. Please see [CDPH MPX guidance](#) for the latest updates.

CAL/OSHA ATD STANDARD REQUIREMENTS FOR MPOX

Covered workplaces

Workplaces covered by the Cal/OSHA ATD Standard include the following:

- Hospitals
- Skilled nursing facilities
- Clinics, medical offices, and other outpatient medical facilities
- Home health care
- Long term health care facilities and hospices
- Medical outreach services
- Paramedic and emergency medical services
- Medical transport
- Police services, provided during transport or detention of persons reasonably anticipated to be cases or suspected cases of aerosol transmissible diseases
- Police services provided with health care or public health operations
- Public health services that are reasonably anticipated to be provided to cases or suspected cases of aerosol transmissible diseases
- Public health services rendered in health care facilities or in connection with the provision of health care
- Correctional facilities and other facilities that house inmates or detainees
- Homeless shelters (includes migrant shelters)
- Drug treatment programs
- Facilities, services, or operations that perform aerosol-generating procedures on cadavers
- Laboratories that perform procedures with materials that contain or are reasonably anticipated to contain aerosol transmissible pathogens

The ATD Standard has differing requirements for three different types of employers – (1) referring employers, (2) laboratories, and (3) all other employers.

Referring employers: Outpatient clinics who may have patients or clients with mpox, and non-medical settings covered by Section 5199

To date, over 95% of people in California with suspected or confirmed mpox have been treated in outpatient clinics. According to the ATD Standard, these outpatient clinics are typically “referring employers”. A referring employer is an employer covered by the ATD Standard who refers airborne infectious disease cases and suspect cases, such as mpox, to other facilities.²

Referring employers do not typically provide medical services beyond initial treatment³, or house persons with suspected or confirmed mpox (or other airborne infectious diseases). Some of the required preventive measures for referring employers include:

- Implement written infection control procedures including procedures for cleaning and disinfecting work areas, vehicles, and equipment that may pose an infection risk to employees (See the U.S. EPA list of [disinfectants](#) tested and registered for use against MPX, and [CDC cleaning and disinfecting recommendations](#)).
- Implement procedures for handling contaminated laundry (See [CDC recommendations](#)).
- Ensure employees participate in review of infection control procedures.
- Ensure persons with suspected or confirmed mpox use face coverings and other source control including covering lesions.
- Implement written procedures for screening and referral of persons suspected of having mpox to an appropriate facility that can care for the person if there is a need for ongoing treatment or care or hospitalization (see sections 5199(c)(3)(A) and 5199(e)(5)(B)2 when transfer is not available or possible).
- Implement written procedures to reduce transmission of mpox during the period the person with suspected or confirmed mpox is in the facility or is in contact with employees. This includes, to the extent feasible:
 - Place persons with suspected or confirmed mpox in a separate room or area, and where feasible with separate ventilation or with air filtration;
 - Ensure that employees use respiratory protection and other appropriate personal protective equipment when entering the room or area; and
 - Ensure that employees performing cleaning and disinfection of such areas follow written cleaning and disinfection procedures and use appropriate respiratory and personal protective equipment.

² Mpox is expressly listed in [section 5199 Appendix A](#) as a disease requiring airborne infection isolation.

³ The ATD Standard defines initial treatment as “*Treatment provided at the time of the first contact a health care provider has with a person who is potentially an AirID (airborne infectious disease) case or suspected case. Initial treatment does not include high hazard procedures.*”

- Provide training to employees on mpox signs and symptoms, methods used to reduce risk of transmission, and screening and referring procedures. Please refer to section 5199 for additional training requirements.

Referring Employers: Outpatient Dental Clinics and Offices (may be exempt from the ATD standard)

Outpatient dental clinics or offices are considered referring employers but may be exempt from the specific requirements of section 5199, if they meet the following conditions:

1. Dental procedures are not performed on patients identified as ATD cases or suspected ATD cases.
2. The Injury and Illness Prevention Program includes a written procedure for screening patients for ATDs that is consistent with current guidelines issued by the Centers for Disease Control and Prevention (CDC) for infection control in dental settings, and this procedure is followed before performing any dental procedure on a patient to determine whether the patient may present an ATD exposure risk.
3. Employees are trained in the screening procedure in accordance with Section 3203.
4. Aerosol generating dental procedures are not performed on a patient identified through the screening procedure as presenting a possible ATD exposure risk unless a licensed physician determines that the patient does not currently have an ATD.

As stated above, mpox lesions may be located in the mouth or throat. Additionally, the role of oral and respiratory fluids, droplets, and particles in transmission of mpox is under investigation. Current CDC infection control recommendations for mpox⁴ include the use of airborne infection isolation rooms for procedures that may spread oral and respiratory fluids, droplets, and particles. For employees in the area with mpox patients, CDC also recommends, and section 5199 requires, the use of fit tested N95 or better respirators.

Outpatient dental practices may therefore either screen patients for mpox (and other aerosol transmissible diseases) and not perform dental procedures on people who meet screening criteria, or they can comply with the requirements of Section 5199 and provide airborne infection isolation for persons with suspected or confirmed mpox as well as the other requirements applicable to outpatient clinics.

Laboratories that may handle materials containing the MPX virus

Laboratory operations where employees may be exposed to certain aerosolized aerosol transmissible pathogens, including the MPX virus, are covered by the ATD Standard.

⁴ [Infection Control: Healthcare Settings | Monkeypox | Poxvirus | CDC](#)

Please see section [5199 Appendix D](#) for a list of pathogens covered and the definition of “*aerosol transmissible pathogen – laboratory*” in section 5199(b) for additional pathogens covered.

Covered laboratories must implement a written Biosafety Plan to minimize employee exposures to aerosol transmissible pathogens. The following must be included in the written Biosafety Plan and implemented in the facility:

- Identity of the biological safety officer with the knowledge, authority, and responsibility for implementing the Biosafety Plan.
- Procedures for obtaining the active involvement of employees in reviewing and updating the Biosafety Plan.
- Procedures for periodic inspection of laboratory facilities and audit of biosafety procedures.
- Risk assessment conducted by the biological safety officer for each agent and procedure involving aerosol transmissible pathogens.
- List of pathogens known or reasonably expected to be present and the applicable biosafety measures.
- Feasible engineering and work practice controls used to minimize all exposures.
- Treatment of all incoming materials with pathogens as virulent until it has been verified that pathogens have been deactivated or attenuated.
- Decontamination and disinfection procedures.
- Identity and description of appropriate respiratory and personal protective equipment as necessary for the procedure and pathogen.
- Emergency procedures for responding to and reporting uncontrolled releases.
- Procedures for communicating hazards to employees.
- Employee training program on aerosol transmissible pathogens.
- Provide vaccination and recommended medical surveillance to employees working with materials reasonably anticipated to contain MPX.

Hospitals and All Other Employers Covered by the ATD Standard

Some of the preventive measures that employers who are covered by the ATD Standard and are not referring employers or laboratories (such as hospitals), must take include:

- Implement a written Aerosol Transmissible Disease Exposure Control Plan specific to the workplace and operations.
- Obtain the active involvement of employees in reviewing and updating the Exposure Control Plan.
- Implement procedures to identify and isolate mpox cases and suspect cases. Transfer mpox cases and suspect cases to airborne infection isolation rooms or areas when possible and available (see section 5199(e)(5)(B) for further details).

- Airborne infection isolation is particularly important if intubation, extubation, or other procedures are performed that are likely to spread respiratory or oral fluids, droplets, or particles.
- Ensure persons with suspected or confirmed mpox use face coverings and other source control including covering lesions.
- Implement procedures to communicate with employees and other employers regarding the suspected or confirmed infectious disease status of persons to whom employees are exposed.
- Provide and ensure that employees use appropriate respiratory and personal protective equipment necessary to minimize employee exposure to MPX.
- Implement feasible engineering and work practice controls to minimize employee exposures to MPX.
- Implement written decontamination procedures for the cleaning and decontamination of work areas, vehicles, personal protective equipment, and other equipment.
- Conduct all aerosol generating procedures in airborne infection isolation rooms or areas. Powered air-purifying respirators or better are required for workers in rooms or areas where aerosol generating procedures occur.

Homeless Shelters, Drug Treatment Programs and Correctional/Detention Facilities (Jails and other facilities that house inmates or detainees)

Homeless Shelters,⁵ correctional facilities, and certain drug treatment programs are covered by section 5199, and, in many cases do not have health care personnel onsite to perform screening or provide treatment. These facilities must have screening procedures to identify clients who may have an aerosol transmissible disease, such as mpox, and a procedure to refer the client to a health care provider who can diagnose the disease.

Because mpox is considered an airborne infectious disease, the ATD Standard requires persons who are a suspected or confirmed case to be referred to a hospital or other facility that can provide airborne infection isolation. However, hospitals are not accepting mpox patients unless there is a medical need for hospital level care.

Section 5199 requires facilities that house persons with suspected or confirmed mpox, who cannot be transferred to airborne infection isolation⁶, follow the recommendations of their local health officer to reduce the risk of transmission within the facility, as well as other Cal/OSHA requirements, which include:

⁵ Other services provided to unhoused people, including drop-in centers that may provide laundry facilities, are not covered by Section 5199. However, California's Injury and Illness Prevention Plan and sanitation regulations require employers to develop and implement procedures to protect employees from mpox secretions and aerosols, as may be present in the air, on surfaces, and in linens and laundry. Please see [CDC guidance](#) for further information.

⁶ Correctional facilities that have available airborne infection isolation rooms or areas must place mpox patients in those areas whenever possible.

- Written screening and infection control procedures
- Housing in individual rooms, if feasible
- Source control, including masking of infected people and covering of lesions
- Sanitation facilities, including washing areas and areas where dressings can be changed and contaminated dressings can be safely disposed
- The appropriate handling of linens and laundry
- Disinfection of surfaces using appropriate EPA registered disinfectants
- Employee use of personal protective equipment such as gloves and as necessary gowns and eye protection.
- Employees who enter the immediate area of people confirmed or suspected of having mpox and employees handling contaminated linen must use fit tested N95 or better NIOSH-approved respirators.
- Training of supervisors and employees on mpox and mpox infection control procedures.

Respiratory Protection⁷

All employers, regardless of the type of employer (referring, laboratory, other) must provide and ensure use of respiratory protection (fit-tested, NIOSH-approved particulate respirator equipped with an N95 filter or higher level of protection) for employees who:

- Enter a room occupied by an airborne infectious disease case or suspected case, including mpox;
- Enter an airborne infection isolation room or area that is in use for airborne infection isolation;
- Are present during procedures or services on an airborne infectious disease case or suspected case, including mpox;
- Repair, replace, or maintain air systems or equipment that may contain or generate aerosolized pathogens;
- Work in an area occupied by an airborne infectious disease case or suspected case, including mpox;
- Are present during decontamination of an area where an infected patient or client was located;
- Work in a residence where an airborne infectious disease case or suspected case, including mpox is known to be present;
- Are present during the performance of aerosol generating procedures on patients suspected or confirmed to have an airborne infectious disease such as mpox (powered air-purifying respirator or better);

⁷ All respirators/respiratory protection described in this guidance must be used in accordance with title 8 [section 5144 Respiratory Protection](#).

- Are present during the performance of aerosol generating procedures on cadavers that may be infected with aerosol transmissible pathogens (powered air-purifying respirator or better);
- Perform a task for which the Biosafety Plan or Exposure Control Plan requires the use of respirators;
- Transport an airborne infectious disease case or suspected case, including mpox, within a facility or in an enclosed vehicle when the patient or client is not masked; or
- Handle linen potentially contaminated with MPX unless effective procedures are used that prevent the release of virus particles.

Personal Protective Equipment (PPE)

In addition to appropriate respiratory protection as outlined above, all employers, regardless of the type of employer (referring, laboratory, other) must ensure that PPE is provided and used by employees exposed to persons with or suspected to have mpox, or to linens or surfaces that may contain the virus. Such PPE includes:

- Gown or equivalent
- Gloves
- Eye protection (i.e., goggles or a face shield that covers the front and sides of the face)

Responding to MPX Exposure Incidents

All employers, regardless of the type of employer (referring, laboratory, other), must implement written procedures for exposure incidents (also known as a “significant exposure”). An exposure incident is when all of the following occurs:

1. An employee has been exposed (i.e., has been in prolonged close contact) to a person with suspected or confirmed mpox; or in contact with a work area or to equipment that is reasonably expected to contain the MPX virus. This includes contact with lesions, bodily fluids, or other materials, such as used linens, likely to contain virus particles;
2. The exposure occurred without applicable exposure controls required by the ATD Standard, such as respiratory protection and PPE; and
3. Transmission of disease is sufficiently likely to require medical evaluation.

Employers must do the following for workers who had a significant exposure to MPX⁸:

- Notify workers of the date, time, and nature of the exposure.
- Provide a post-exposure medical evaluation by a physician or other licensed health care professional (PLHCP) knowledgeable about mpox, including appropriate vaccination, prophylaxis, and treatment.⁹

⁸ There are additional requirements; see section 5199(h)(6) – (h)(9) for details.

⁹ The PLHCP may refer to these CDC guidelines - [Assessing Risk of HCP with Monkeypox Virus Exposures to Guide Monitoring and Recommendations for Postexposure Prophylaxis](#)

- Provide [post-exposure prophylaxis](#) (i.e., vaccination for mpox) as soon as possible; often done through the local health department.
- Report the exposure to the [local health officer](#).
- Remove the employee from the workplace if the PHLCP or local health officer recommends precautionary removal. Maintain the employee's pay, rights, benefits, etc. during precautionary removal.

When an exposure does not meet the criteria for “significant” exposure, workers should still monitor themselves for symptoms for 21 days after exposure and report to their employer if they develop symptoms.

ADDITIONAL RESOURCES AND INFORMATION

- [Cal/OSHA Consultation Services](#). Phone: 1(800) 963-9424. Email: InfoCons@dir.ca.gov.
- [CDC Considerations for Reducing Mpox Transmission in Congregate Living Settings](#)
- [CDC Infection Prevention and Control of Mpox in Healthcare Settings](#)
- [CDC Interim Guidance for Household Disinfection of Mpox Virus](#)
- [CDC Mpox Isolation and Infection Control At Home](#)
- [CDC Mpox: Safer Sex Info Sheet](#)
- [CDPH Mpox Communications Toolkit](#)
- [CDPH Mpox Home Isolation Guidance for the General Public](#)
- [CDPH Mpox Landing Page](#). Email: MpoxAdmin@cdph.ca.gov
- [CDPH Mpox Questions & Answers Page](#)
- [CDPH Mpox Vaccination Recommendations and Resources](#)
- [List of local health departments](#)
- [U.S. EPA Disinfectants for Emerging Viral Pathogens: List Q](#)

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