

# **Mpox/Monkeypox Virus**

Mpox is a disease caused by the mpox virus that has regularly been reported in some parts of the world. In May 2022, an international outbreak of mpox was identified in Western Europe, Canada, and the United States, where mpox does not typically occur. The mpox virus is closely related to the variola virus (the cause of smallpox) but is much less deadly. Initial symptoms of mpox disease include fever, headache and body aches, fatigue, and swollen lymph nodes, followed by a rash of lesions on the skin. Like smallpox and other pox viruses, mpox is classified as a high-risk pathogen because it can easily be transmitted from person-to-person, posing a danger to public health. Cases may be severe, especially in children, pregnant women, or people with suppressed immune systems. As a result, on August 4, 2022, the U.S. Department of Health and Human Services (HHS) declared a public health emergency (PHE) in response to the current outbreak.

Mpox virus can infect both animals and people. Employers and workers whose job duties might put them in close, personal, often skin-to-skin contact with people that have a mpox infection or in contact with contaminated materials should take precautions to prevent work-related mpox transmission. According to the Centers for Disease Control and Prevention (CDC), mpox can spread through direct contact with an infected person or animal including close contact with a mpox rash, scabs, or body fluids including respiratory droplets, and contaminated materials such as clothing, bedding, and towels. However, during the current 2022 outbreak, mpox virus has been primarily transmitted through close personal or intimate/sexual contact with a person with mpox infection.

### **Signs and Symptoms**

Early symptoms of mpox that can occur before the characteristic rash may include headache, fatigue, back and body aches, fever, chills, swollen lymph nodes, and rarely respiratory symptoms (nasal congestion, cough, sore throat). Nearly all people with mpox develop a rash, which may be painful or itchy. The rash may develop before or without other symptoms and can appear on the face, extremities, palms

of hands, soles of feet, conjunctiva (eye), anus, genitalia, and inside of the mouth. It may first appear as flat discolored spots or raised firm pimples, which turn into blister-like lesions filled with clear or yellow fluid. The blisters form scabs that later fall off. Symptoms usually develop within 3 weeks (21 days) of becoming infected with mpox. An individual with a mpox infection is contagious from the time when symptoms begin until all scabs have fallen off and new skin has formed. Symptoms usually last between 2–4 weeks and go away on their own without treatment. Some people may develop complications (e.g., pneumonia, skin infections, eye infections).



Mpox skin rash images (Source: UK Health Security Agency)

The severity of mpox illness may depend on many factors including:

- The amount of virus present during transmission.
- The health and age of the individual. People with weakened immune systems (due to advanced HIV disease, steroids, immune therapy) and those who are pregnant are at increased risk.
- Vaccination status. People born before 1972
   and others who received a vaccine against
   smallpox may have some immunity against
   mpox virus. Some people may have also been
   vaccinated during this outbreak.

## **Worker Exposure**

Risk for mpox in most work settings is extremely low. During the current outbreak, mpox virus has been transmitted primarily through close personal or intimate/sexual contact with a person with mpox infection.

Risks in the workplace can be mitigated by taking specific precautions. Workers whose duties may involve the types of contacts that could spread mpox may include (but are not limited to):

- Healthcare workers and first responders may encounter mpox through contact with a patient with mpox, contaminated materials, or biological samples. This includes those working at outpatient clinics (e.g., clinics specializing in care for sexually transmitted infections):
  - Clinical staff such as doctors, nurses, and nursing assistants.
  - Laboratory staff including clinical and research scientists and technicians who work with biological samples with the potential to contain mpox virus.
  - Housekeeping staff who may have contact with contaminated material in patient rooms when dusting, sweeping, or handling used clothing, bedding, and towels.
  - Administrative staff who may be exposed to body fluids during patient intake and other direct contact with a patient with a mpox infection.

- Workers in congregate settings such as recreational facilities or social venues, homeless shelters, group homes, hotels, dormitories, and correctional and detention facilities.
- Massage, spa, fitness, and salon workers whose jobs require close physical contact with clients.
- Housekeepers, janitors, cleaning service workers, dry cleaning, and laundry workers who may have contact with contaminated material when dusting, sweeping, or handling clothing, bedding, and towels.
- Animal care workers such as veterinary staff.

## **Information for Employers**

Employers must furnish a place of employment that is free from recognized hazards that are likely to cause death or serious physical harm to their employees (General Duty Clause of the OSH Act).

**Employers** should assess the workplace for mpox hazards according to OSHA Guidance for Hazard Prevention and Control. In addition, employers must follow applicable OSHA standards for providing appropriate Personal Protective Equipment (PPE) (29 CFR 1910, Subpart I), including Respiratory Protection (29) CFR 1910.134) to workers with increased risk of exposure to the virus. OSHA's Bloodborne Pathogens standard (29 CFR 1910.1030) applies to occupational exposure to human blood and other potentially infectious materials that typically do not include respiratory secretions, or rash lesions fluid or pus, that may contain mpox virus (unless visible human blood is present).\* However, the Bloodborne Pathogens Standard offers a framework that may help control some sources of the virus, including exposures to body fluids not covered by the standard. Other guidance on PPE, disinfection, and waste management can be found on the Centers for Disease Control (CDC) infection control website.

**Employers** should ensure that workers with mpox isolate and are restricted from work from the time symptoms start until the rash has fully healed and a fresh layer of skin has formed. Employers should offer telework and flexible, non-punitive sick leave.

According to the CDC, research is still being conducted to determine if mpox can be spread by semen and vaginal fluids. If those modes
of transmission are confirmed, then the OSHA Bloodborne Pathogens standard will apply.

#### **Precautions for Workers**

Workers should be trained on the following work practices (and how to use PPE):

- Be alert for people who have rashes or symptoms consistent with mpox.
- Isolate people with mpox infection from others and cover skin lesions.
- Avoid skin-to-skin contact with people who are ill or have visible lesions.
- Avoid unprotected contact with any potentially contaminated materials, such as clothing, bedding, or eating utensils used by someone with mpox infection in healthcare and non-healthcare settings.
- Practice good hand hygiene. Wash your hands with soap and water or use alcohol-based hand sanitizer provided by your workplace free of charge.

For more information, please see the CDC toolkit for Workplaces and Businesses.

Healthcare workers in clinical settings should follow CDC guidance on Infection Prevention and Control of Mpox in Healthcare Settings and wear recommended PPE including protective clothing and respirators.

**Laboratory workers** should follow CDC-specific biosafety guidelines for mpox.

#### **Vaccine Information**

Current information about vaccine recommendations can be found on the CDC website.

## **Workers' Rights**

#### Workers have the right to:

- Working conditions that do not pose a risk of serious harm.
- Receive information and training (in a language and vocabulary the worker understands) about workplace hazards, methods to prevent them, and the OSHA standards that apply to their workplace.
- Review records of work-related injuries and illnesses.
- File a complaint asking OSHA to inspect their workplace if they believe there is a serious hazard or that their employer is not following OSHA's rules. OSHA will keep all identities confidential.
- Exercise their rights under the law without retaliation, including reporting an injury or raising health and safety concerns with their employer or OSHA. If a worker has been retaliated against for using their rights, they must file a complaint with OSHA as soon as possible, but no later than 30 days.

For more information, visit the OSHA Worker Rights and Protections page.

For questions or to get information or advice, to report an emergency, fatality, inpatient hospitalization, amputation, or loss of an eye, to file a confidential complaint, or to request OSHA's free on-site consultation service, contact your nearest OSHA office, visit www.osha.gov, or call OSHA at 1-800-321-OSHA (6742), TTY 1-877-889-5627.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

