

What Healthcare Professionals Need to Know About Monkeypox

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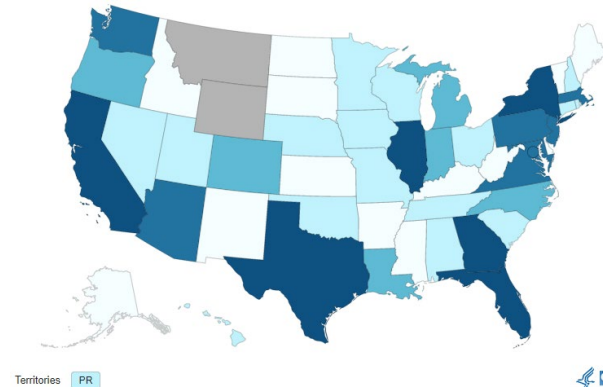
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2022: Current Situation

[Updated U.S. case data](#)
[Updated Global case data](#)

Data as of 8/8/2022

Worldwide	United States
<ul style="list-style-type: none"> • 29,844 cases have been confirmed (for monkeypox or orthopoxvirus) in 81 countries not endemic for monkeypox virus • 12 deaths reported to WHO 	<ul style="list-style-type: none"> • 8,934 cases have been confirmed (for monkeypox or orthopoxvirus) in all states except Wyoming • There have been no deaths
<p>Most, but not all, cases in the U.S. have occurred in gay, bisexual, or other men who have sex with men (MSM)</p>	

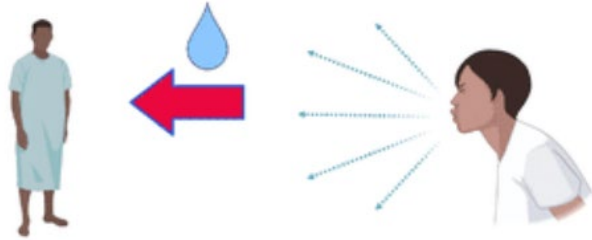


Virginia

- **145 monkeypox cases**, as of **8/8/22** (highest in Northern region, 105 cases)
 - Demographics:
 - Race: highest among white (33.8%) and black (33.8%)
 - Sex: highest among males (99.3%)
 - Age: highest among 20-39 years old (~54%)
 - No cases in people less than 20 years old
- VDH investigates all reported suspect cases and facilitates testing at Division of Consolidated Laboratory Services (DCLS), if indicated
- When cases are detected, VDH identifies close contacts and monitors them based on level of exposure and risk*
- VDH also monitors Virginia residents who are close contacts of case-patients in other states or jurisdictions

*Risk Categories are from CDC's [Monitoring People Who Have Been Exposed](#)

Monkeypox Virus



Human to human transmission is possible, by close contact with lesions, body fluids, and respiratory droplets

- *Orthopoxvirus* genus
 - Genus includes variola virus (causes smallpox), vaccinia virus (used in smallpox vaccine), and cowpox virus
- Two clades of monkeypox virus
 - West Africa clade: historically, caused less severe disease
 - Central Africa clade (Congo Basin clade): causes more severe disease
- West Africa clade has been identified in current outbreak

Transmission

Person-to Person Spread in Current Outbreak

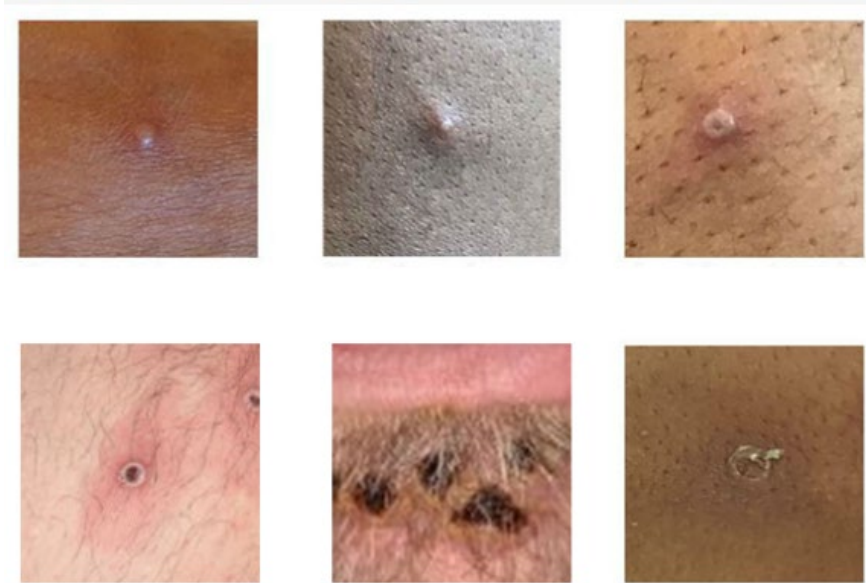
- Close contact (lesions, body fluids, contaminated materials (bedding, towels), large respiratory droplets)
- While many cases so far have been in people who identify as MSM, anyone can get and spread monkeypox through close contact
- Incubation Period: 3-17 days*
- Infectious Period: Symptom onset until skin lesions have scabbed over and fallen off

Clinical Features

- **Prodrome**
 - Fever, chills, headache, myalgia, back pain, fatigue, lymphadenopathy
- Characteristic **rash** occurs 1-3 days after prodrome
- Illness is generally **self-limiting** and lasts 2-4 weeks
 - Lesions can be very painful
- Differential diagnoses may include secondary syphilis, chancroid, herpes, chickenpox/shingles
- **Atypical presentations noted among some cases in current outbreak**
 - No prodrome
 - Presentation of 1 or just a few lesions that begin in oral, perigenital and/or peri-anal distribution) and painful lymphadenopathy
 - Lesions in an area can be in different stages

Key Characteristics of Rash

- Well circumscribed, firm, deep-seated lesions that often develop umbilication
- Cutaneous lesions progress through sequential stages - macules, papules, vesicles, pustules, scabs
- During the current global outbreak:
 - Lesions often occur in the genital and anorectal areas or in the mouth
 - Rash is not always disseminated across many sites on the body
 - Rash may be confined to only a few lesions or only a single lesion
 - Rash does not always appear on palms and soles



Patient Evaluation & Diagnosis

- History - CDC Epidemiologic Criteria
 - **Close contact with someone with a rash** or who received a diagnosis of confirmed or probable monkeypox
 - **Sexual contact** with individuals in a social network experiencing monkeypox activity.
 - **Travel** outside the US to a country with confirmed cases of monkeypox or where *Monkeypox virus* is endemic
 - **Animal exposures** with a dead or live wild animal or exotic pet that is an African endemic species or used a product derived from such animals (e.g., game meat, creams, lotions, powders, etc.)
- Isolate patient - standard and transmission-based precautions
- Contact LHD immediately to report suspected case
 - LHD Locator: vdh.virginia.gov/health-department-locator/

Testing

- Providers encouraged to use commercial labs (LabCorp, Mayo Clinic, Quest, Aegis, and Sonic Healthcare)
 - Testing is not free and out-of-pocket costs will vary
 - Refer to lab for test ordering and specimen collection information
 - Labs send positive specimens to CDC for additional characterization
- Public health testing at DCLS is available at no cost for patients who meet clinical and epidemiologic criteria
 - Consult with LHD because **pre-approval is required** at this time
 - Testing completed in batches 3 times per week
- **Regardless of lab, providers should immediately report any suspected case to LHD so LHD can prepare for treatment and Post Exposure Prophylaxis (PEP)**

CSTE Case Definitions for Monkeypox

(CSTE = Council of State and Territorial and Epidemiologists)

- **Confirmed:** Meets confirmatory laboratory criteria with detection of:
 - MPXV nucleic acid by molecular testing in a clinical specimen; OR
 - MPXV by genomic sequencing in a clinical specimen.
- **Probable:** Meets presumptive laboratory criteria with detection of:
 - Orthopoxvirus nucleic acid by molecular testing in a clinical specimen AND no laboratory evidence of infection with another non-variola orthopoxvirus; OR
 - Presence of orthopoxvirus by immunohistochemistry in tissue; OR
 - Orthopoxvirus by genomic sequencing in a clinical specimen; OR
 - Anti-orthopoxvirus IgM antibody using a validated assay on a serum sample drawn 4-56 days after rash onset, with no recent history (last 60 days) of vaccination***

Infection Prevention and Control

- Isolate patient in a single room with a dedicated bathroom
 - Limit patient transport; mask patient & cover lesions during transport
- Use standard and transmission-based precautions
 - Adequate PPE: gown, gloves, N95 respirator, eye protection
 - Any procedures likely to spread oral secretions should be performed in an airborne infection isolation room
- Avoid activities that may spread material from lesions
 - Soiled laundry should be gently and promptly contained; avoid shaking or handling in a manner that may disperse infectious material
- For more information: refer to
 - [CDC's Infection Control and Post Mortem Guidance](#)
 - [VDH's Monkeypox Infection Prevention and Control Recommendations for Healthcare Settings](#)

Infection Prevention and Control

- Collect specimens following [CDC guidance](#)
- Perform routine environmental cleaning & disinfection
 - Use an EPA-approved product labeled with [Emerging Viral Pathogens claims](#)
 - Employ wet cleaning methods to avoid resuspending dried material from lesions (avoid dry dusting, sweeping, or vacuuming)
- Manage waste according to:
 - [U.S. Department of Transportation \(DOT\) Hazardous Materials Regulations](#) & [State and local regulations](#)

Prevention during Current Outbreak

- Avoid skin-to-skin contact with people who have a rash that looks like a monkeypox virus rash.
 - Do not cuddle, have sex, kiss, or hug someone with monkeypox.
 - Do not touch the rash or scabs of a person with monkeypox.
- If you are planning to attend a gathering where you might be in close proximity to others, consider the risk
 - Seek out information from trusted sources like health department
 - Consider how much close, personal, skin-to-skin contact is likely to occur at event you plan to attend
- **Vaccine for post-exposure or pre-exposure prophylaxis**

Communication about Risk

- **Anyone can get and spread the monkeypox virus**
 - To date, most cases in gay, bisexual, or men who have sex with men
- Contagious diseases do not affect or stay within 1 population
- It is important to educate the entire population about the symptoms and behaviors that can lead to the spread of monkeypox
- Certain behaviors, rather than a specific group event, put people at increased risk of getting monkeypox.
 - It is important to emphasize that close and prolonged contact, including sexual contact, increases risk of getting monkeypox, rather than just attendance at an event.
- You can combat stigma by providing fact-based information and emphasizing that monkeypox is a public health concern for everyone

VDH Vaccination and Medication Strategies

Available Vaccines

JYNNEOS

- Replication-deficient attenuated live vaccinia virus vaccine
- Licensed in the US in 2019 to prevent smallpox and monkeypox
- Administered by subcutaneous or intradermal injection as a 2-dose series, separated by 4 weeks
 - Considered vaccinated 2 weeks after receipt of 2nd dose
 - Booster doses may be recommended for ongoing occupational exposure
- There is no visible “take” and as a result, no risk for spread to other parts of the body or other people
- Vaccination prior to vaccine administration NOT required
- Contraindications: severe allergy to any component of the vaccine (gentamicin, ciprofloxacin, egg protein) should not receive this vaccine

Either vaccine can be used for Pre-Exposure Prophylaxis (PrEP), Post-Exposure Prophylaxis (PEP), and Expanded PEP (PEP++)

ACAM2000

- Replicating live vaccinia virus vaccine
- Approved in 2007 for active immunization against smallpox disease
- Requires 1 dose
 - Considered vaccinated after 28 days
 - Booster doses may be recommended for ongoing occupational exposure
- Administered using a droplet by the percutaneous route (scarification) using 15 jabs of a bifurcated needle; verify evidence of ‘take’ at days 6-8
- Has many precautions and risk for serious adverse effects associated with vaccination
- Infection control measures required; contact with the vaccination site can result in auto-inoculation or infection to others

Currently, JYNNEOS is the primary vaccine being used in Virginia.

JYNNEOS Emergency Use Authorization

- [Emergency Use Authorization \(EUA\)](#) was issued on 8/9/22 for:
 - Active immunization by **subcutaneous** injection for prevention of monkeypox disease in individuals **less than 18 years of age** determined to be at high risk for monkeypox infection
 - Active immunization by **intradermal** injection for prevention of monkeypox disease in individuals **18 years of age and older** determined to be at high risk for monkeypox infection

JYNNEOS vaccine regimen	Route of administration	Injection volume	Recommended number of doses	Recommended interval between 1st and 2nd dose
Alternative regimen				
People age ≥18 years	ID	0.1 mL	2	28 days
Standard regimen				
<u>People age <18 years</u>	Subcut	0.5 mL	2	28 days
People of any age who have a history of developing keloid scars	Subcut	0.5 mL	2	28 days

Traditional Post-Exposure Prophylaxis (PEP)

- Goal is to vaccinate people following known exposure to help prevent illness or minimize severity of illness
- LHDs work to identify contacts of confirmed or probable cases to offer vaccination for PEP and to monitor for early signs of illness
- Vaccine works best when given quickly after exposure
 - If given within 4 days of exposure: best chance to prevent onset of symptoms
 - If given between 4 and 14 days of exposure: may reduce, but not prevent, symptoms
- When coupled with self-isolation and other prevention measures when symptoms first occur, PEP is important for controlling outbreaks and preventing further transmission of monkeypox

Expanded PEP (or PEP++)

- Goal is to vaccinate people with certain risk factors who are more likely to have had recent exposure, even if they have not had a documented/confirmed exposure
- Groups recommended in Virginia based on vaccine supply (interim recommendations):
 - Individuals who within the last 14 days are:
 - Gay, bisexual, and other men who have sex with men and have had multiple (e.g., more than 1) or anonymous sexual partners; *OR*
 - Transgender women and nonbinary persons assigned male at birth who have sex with men and have had multiple or anonymous sexual partners; *OR*
 - Sex workers (of any sexual orientation or gender); *OR*
 - Staff (of any sexual orientation or gender) at establishments where sexual activity occurs (e.g., bathhouses, sex clubs); *OR*
 - Persons (of any sexual orientation or gender) who attend sex-on-premises venues (e.g., bathhouses, sex clubs)

Pre-Exposure Prophylaxis (PrEP)

- Goal is to vaccinate people whose jobs might expose them to orthopoxviruses, such as monkeypox
- At this time, most U.S. clinicians and laboratorians are not advised to receive PrEP
- PrEP recommended by CDC for these people:
 - Clinical lab personnel who perform testing to diagnose orthopoxviruses, including PCR assays to diagnose orthopoxviruses
 - Research laboratory workers who directly handle cultures or animals contaminated or infected with orthopoxviruses that infect humans
 - Certain designated healthcare and public health response team members for preparedness purposes (HCP who plan to administer ACAM2000 or anticipate caring for many patients)
- **CDC requires approval before administering vaccine for PrEP**

VDH Vaccine Strategy

- Monkeypox vaccine is not routinely recommended for the general public, and is intended to be used in specific groups that have higher risk of exposure
- VDH has developed recommended prioritization in the context of limited vaccine supply
 - **Priority 1:** Traditional PEP
 - **Priority 2:** Expanded PEP (or PEP++)
 - **Priority 3:** PrEP
- Limiting vaccination to traditional PEP may not be effective for controlling current monkeypox outbreak
 - Cases with large number of contacts, who are hard to locate/identify
- Expanded PEP (or PEP++) may be more effective for this response

Accessing Vaccines

- U.S. Government working to increase vaccine supply to respond to the current outbreak
 - Majority of vaccines will be available at LHDs and select community partners
- States have access to treatment and vaccines for cases, known close contacts, and likely close contacts
 - At this time, VDH Central Pharmacy has only ordered JYNNEOS vaccine
- Providers should make requests for vaccines through their LHD as part of the case investigation process

Treatment Options

- No specific treatment approved in the U.S., but there are treatment options that may prove beneficial
- Can be accessed through the federal government under an EA-IND protocol
 - Brincidofovir is **not currently available**, but CDC is **currently developing** an EA-IND
- Providers should make requests for medications and vaccines through their LHD as part of case investigation process

Treatment Option	Indication	Formulations Available
Tecovirimat (TPOXX or ST-246) *antiviral	FDA approved for the treatment of smallpox in adults and children >3 kg	Oral (200 mg capsule)* Injection for intravenous administration *ability to mix with semi-solid food for pediatrics < 13 kg
Cidofovir (Vistide) *antiviral	FDA approved for treatment of cytomegalovirus retinitis in patients with AIDS	Intravenous infusion single-unit vial
Vaccinia Immune Globulin Intravenous (VIGIV)	FDA licensed for treatment of complications due to vaccinia vaccination	Intravenous infusion single-dose vial
Brincidofovir (Tembexa) *antiviral	FDA approved for the treatment of smallpox in adults and pediatrics, including neonates	Oral (100 mg tablet or 10 mg/mL suspension)

Treatment Options: TPOXX

Tecovirimat may be considered for treatment in people infected with Monkeypox virus:

- With **severe disease** (e.g., hemorrhagic disease, confluent lesions, sepsis, encephalitis, or other conditions requiring hospitalization)
- Who are at **high risk of severe disease**:
 - People with immunocompromising conditions
 - Pediatric populations, particularly patients younger than 8 years of age
 - Pregnant or breastfeeding women
 - People with a history or presence of atopic dermatitis or people with other active exfoliative skin conditions
 - People with one or more complication
- With aberrant infections involving accidental implantation in **eyes, mouth**, or other anatomic areas where Monkeypox virus infection might constitute a special hazard (e.g., **the genitals or anus**)

[CDC Treatment Information for Healthcare Professionals](#)

TPOXX Treatment: Requirements for Providers

Approved for treatment of Monkeypox under an [Expanded Access - Investigational New Drug](#) (EA-IND) Protocol through the CDC

Required Documentation ([email to regaffairs@cdc.gov](mailto:regaffairs@cdc.gov)):

- [Informed Consent](#) - Obtain prior to initiating treatment
- [Patient Intake Form](#) - Baseline assessment
- [FDA Form 1572](#) - only one signed form per facility
- [Clinical Outcome Form](#) - progress information during and post treatment
- [Serious Adverse Events](#) - must report life-threatening or serious adverse events associated with TPOXX

Optional Documentation

- Photos of lesions - If feasible, take lesion photos at baseline prior to TPOXX treatment, and post-treatment to follow lesion progression and healing during treatment.
- [Lesion samples for resistance testing](#)
- [Pharmacokinetic samples for testing](#)
- [Patient Dairy](#) - Ideally, give the diary to the patients during baseline assessment. The patient can use this form to record how they feel and any side effects to TPOXX.
- [Instructions for mixing TPOXX capsules with food](#) - This patient instruction sheet explains how to open TPOXX capsules and mix with breastmilk, infant formula, milk or food for infants and children.

For more information about obtaining TPOXX, visit the [CDC TPOXX webpage](#).

TPOXX Treatment: Requirements for Health Systems

- Treatment with TPOXX can begin upon receipt of the medication and after obtaining informed consent.
 - No pre-registration is required for clinicians or facilities.
 - Forms requested under the EA-IND can all be returned to CDC **after** treatment begins.
- Health systems do not need to have their own IRB review and approve this protocol. In order for health systems to use TPOXX under the EA-IND, a reliance agreement must be in place between the health system IRB and the CDC IRB.
 - A reliance agreement is required, but not prior to initiating treatment. Treatment can be started and paperwork submitted after.
- Health systems that anticipate needing to treat patients with TPOXX are recommended to initiate the reliance agreement so it is in place when treatment is initiated.
- CDC IRB will provide a pre-signed reliance agreement for facilities to sign documenting reliance on CDC IRB → huma@cdc.gov

Treatment Options: TPOXX Oral Dosing

4.1 Oral Therapy for Adults and Children

Table 1. Recommended Oral Dosage Instructions for 14 Days*

Weight (kg)**	Weight (lbs)	Recommended Dose (mg)*
< 6	<13	50 mg (¼ capsule) every 12 hours
6 to < 13	13 to < 28	100 mg (½ capsule) every 12 hours
13 to < 25	28 to < 55	200 mg (1 capsule) every 12 hours
25 to < 40	55 to < 88	400 mg (2 capsules) every 12 hours
40 to < 120	88 to < 264	600 mg (3 capsules) every 12 hours
120 and above	≥ 264	600 mg (3 capsules) every 8 hours

* Tecovirimat capsules should be taken within 30 minutes after a full meal containing moderate or high fat. Treatment duration is 14 days but may be longer (not to exceed 90 days) or shorter depending on the progression of the disease and clinical condition of the patient. Data on duration other than 14 days are limited.

** Please refer to [Attachment 3](#) for instructions on opening capsules and mixing with food for infants and children who require less than a 200 mg dose or who are unable to swallow capsules. Opening tecovirimat capsules and mixing with food for children weighing < 13 kg, which differs from the FDA-approved [tecovirimat package insert](#), is **allowed** under this IND protocol.

Treatment Options: TPOXX IV Dosing

4.2 IV Therapy for Adults and Children

IV tecovirimat is contraindicated in patients with severe renal impairment (creatinine clearance <30 mL/min)

Table 2. Recommended Pediatric and Adult Tecovirimat Injection for IV Infusion^a

Weight (kg)	Weight (lbs)	Recommended Dose	Volume of IV Tecovirimat ^b	Volume of Diluent ^c	Total Volume for Infusion
<35 kg ^d	< 77 lbs	6 mg/kg every 12 hours by IV infusion over 6 hours	0.6 mL/kg	1.2 mL/kg	Varies by weight
35 kg to <120 kg	77 to < 264 lbs	200 mg every 12 hours by IV infusion over 6 hours	20 mL	40 mL	60 mL
120 kg and above ^f	≥ 264 lbs	300 mg every 12 hours by IV infusion over 6 hours	30 mL	60 mL	90 mL

^a Patients should be switched to tecovirimat oral capsules to complete the 14-day treatment course as soon as oral therapy can be tolerated. Treatment duration may be longer (not to exceed 90 days) or shorter depending on the progression of the disease and clinical condition of the patient.

^b 10 mg/mL stock solution containing 40% hydroxypropyl betadex (8 g per vial) with water for injection.

^c Diluent is either 0.9% (w/v) sodium chloride injection or 5% (w/v) dextrose injection solution.

^d IV tecovirimat dose of 6 mg/kg for children <3 kg is **allowed** under this IND protocol, which **differs** from the FDA-approved tecovirimat package insert. Individualized dosing may need to be considered depending on the neonate or infant weight and any underlying conditions. Pediatric doses are solely based on predicted exposures from population PK simulation based on observed exposure in healthy adult subjects receiving 600 mg oral doses twice daily.

^e For children under 2 years of age: monitor renal function during the treatment course given the potential for drug accumulation due to renal immaturity of pediatric patients less than 2 years.

^f Depending on size of syringe available with syringe pump system, two separate syringes may be needed for each 6-hour administration

VDH Medication Strategy

Providers can request TPOXX using the [TPOXX Provider Treatment Initiation Interest Form](#)

- All providers may request TPOXX for an identified patient
- Local Health Districts, Health Systems and local Infectious Disease providers may additionally request prepositioned inventory of TPOXX
 - These requests are not guaranteed as they are dependent on VDH supply
- Providers attest to complete the required documentation
- Prescribers must complete the [TPOXX Patient Initiation Survey](#) for all patients who are started on TPOXX

Resources:

[CDC Guidance for Tecovirimat](#)

[Healthcare Providers Obtaining and Using TPOXX for the Treatment of Monkeypox](#)

[VDH - Treatment of Monkeypox - Information for Healthcare Providers](#)

Tools For Healthcare Facilities

Preparedness Checklist for Healthcare Facilities

- ☐ Share situational awareness with all staff
- ☐ Provide education (e.g., rash identification) to clinicians
- ☐ Review triage procedures to ensure timely identification and isolation of suspect cases
- ☐ Designate points of contact responsible for:
 - ☐ Communicating with the local health department (e.g., Infection Prevention)
 - ☐ Providing internal updates to HCPs and volunteers
- ☐ Review infection prevention protocols for alignment with CDC guidance
- ☐ Ensure availability of appropriate PPE and supplies
- ☐ Train, audit, and provide feedback on staff compliance with core IPC practices (HH, PPE donning doffing)
- ☐ Review specimen collection, transport, and testing procedures
- ☐ Review environmental cleaning procedures, ensuring that the facility has an EPA List Q items
- ☐ Consult with linen vendor to determine if there are vendor-specific instructions for bagging/separating soiled linen from patients with suspected or confirmed monkeypox
- ☐ Prepare a waste management plan
- ☐ Ensure staff vaccination records are up-to-date and accessible
- ☐ Review procedures for screening and monitoring of potentially exposed or ill staff

HCP Risk Assessment Tool

- Use to assess exposures and monitor contacts
- Exposure assessment
 - High, intermediate, low/uncertain, or no risk
- Healthcare facilities to monitor their own staff members
 - Consult with LHD for unusual exposure situations
 - Exposed HCP do not need to be excluded from work if they remain asymptomatic

Exposure risk assessment and public health recommendations for healthcare personnel exposed to a patient with monkeypox infection

Background: Transmission of monkeypox requires prolonged close interaction with a symptomatic individual. Brief interactions and those conducted using appropriate personal protective equipment (PPE) in accordance with Standard Precautions are not high risk and generally do not warrant postexposure prophylaxis (PEP).

Purpose: This tool is intended to assist with exposure assessment, monitoring, and PEP recommendations for healthcare personnel (HCP) with potential exposure to monkeypox in healthcare settings.

How to Use the Tool:

- Determine the degree of exposure using the *Healthcare Personnel (HCP) Exposure Risk Assessment to a Patient with Monkeypox*.
- Based on the degree of exposure, refer to the *Table of Recommendations by Exposure Risk* (pg. 4) for monitoring, post-exposure prophylaxis, and other public health recommendations.

Healthcare Personnel (HCP) Exposure Risk Assessment to a Patient with Monkeypox	
Degree of Exposure: High	
During the period of interest ¹ , did you have any unprotected skin or mucous membrane contact to the patient's skin, lesions, or bodily fluids (e.g., inadvertent splashes of patient saliva to the eyes or oral cavity, ungloved contact with patient, penetrating sharps injury from used needle), or contaminated materials (e.g., linens, clothing)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
During the period of interest ¹ , were you inside the patient's room or within 6 feet of a patient <i>during any procedures that may create aerosols²</i> from oral secretions, skin lesions, or resuspension of dried exudates (e.g., shaking of soiled linens) while you were not wearing a NIOSH-approved N95 or equivalent respirator (or higher) and eye protection?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>If Yes to any of the above, the degree of exposure is considered High and recommendations include:</p> <ul style="list-style-type: none"> • Monitor for symptoms (refer to table of recommendations by exposure risk below) • PEP: recommended (refer to table for details) 	
<p>If No to all of the above, proceed to assessing Intermediate degree of exposure risk below.</p>	

Take Home Messages

- Risk to general public is considered low.
 - People with monkeypox in the current outbreak generally report having close, sustained physical contact, including sexual contact, with other people who have monkeypox. Household contacts may also be at increased risk of monkeypox infection.
- When evaluating patients, have a high index of suspicion for monkeypox if characteristic rash is present
- Consult and collaborate with the [Local Health District](#)
- Stay updated on latest information and recommendations regarding monkeypox via [CDC](#) and [VDH](#) websites

Additional Resources

- CDC Monkeypox [website](#)
 - [Case definition](#)
 - [Information for clinicians](#)
 - [Clinician FAQs](#)
 - [Infection prevention](#)
- CDC Health Alert Network health advisory [5/20/2022](#), [6/14/22](#)
- COCA call [5/24/2022](#), [6/29/22](#)
- VDH Monkeypox [Information for Healthcare Professionals](#)
 - [VDH Monkeypox website](#)
 - [VDH Communications Resources](#)
 - [Assessing and Managing Exposed Healthcare Personnel](#)
 - [Infection Prevention and Control Recommendations for Healthcare Settings](#)
 - [Monkeypox Preparedness Checklist for Healthcare Facilities](#)
 - [DCLS Monkeypox testing and shipping instructions](#)
- NETEC [Waste Management](#)
- WHO Monkeypox [website](#)
- MMWR - [Epidemiologic and Clinical Characteristics of Monkeypox Cases – United States, May 17-July 22, 2022](#)