

Mpox Virus Outbreak and JYNNEOS Vaccine Updates

June 8, 2023

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NH State Epidemiologist*

PPT Slides Will Be Posted to a New Healthcare Provider Resources Website

- <https://www.dhhs.nh.gov/programs-services/disease-prevention/infectious-disease-control/bidc-resources-healthcare-providers>

Healthcare Providers and Public Health Partners Call Presentations

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 **Healthcare Providers and Public Health Partners Call Presentation, May 11, 2023**

Topics:

- CDC's updated COVID-19 Infection Prevention and Control Recommendations for Healthcare
- CDC's updated COVID-19 vaccine recommendations
- Tick-borne diseases (TBDs)
- RSV vaccine

Document Format: PDF | Tags: HCP Calls
Date Filed: 05/11/2023

 **Public Health Rounds, April 13, 2023**

Topics:

- Post-Acute COVID-19 Syndrome (PACS)
- Marburg
- Avian influenza

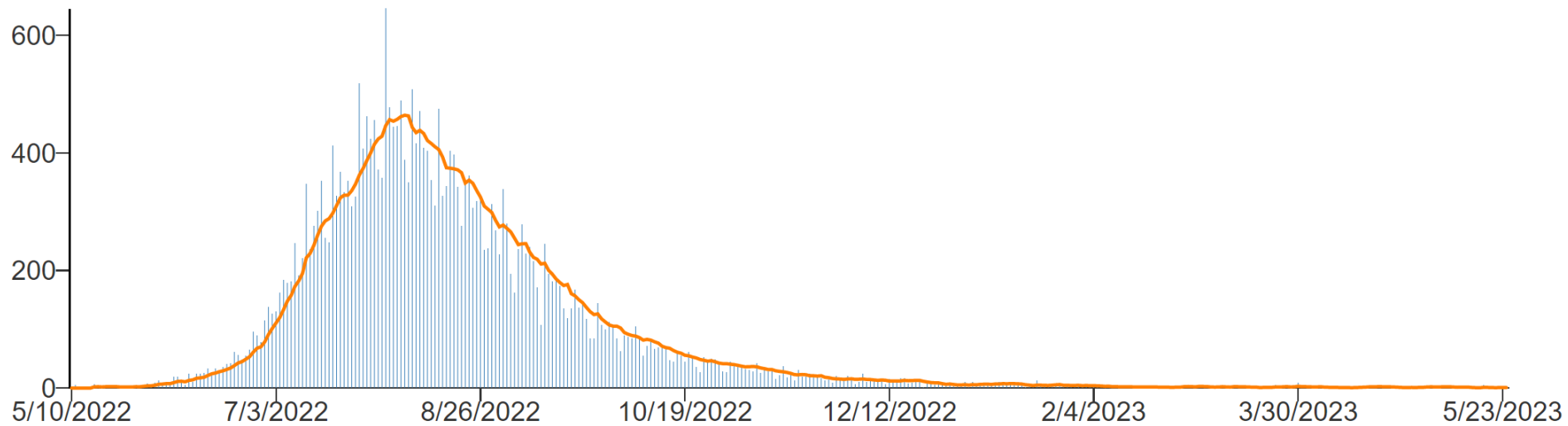
Document Format: PDF | Tags: HCP Calls
Date Filed: 04/13/2023

Background and Epidemiology

Background

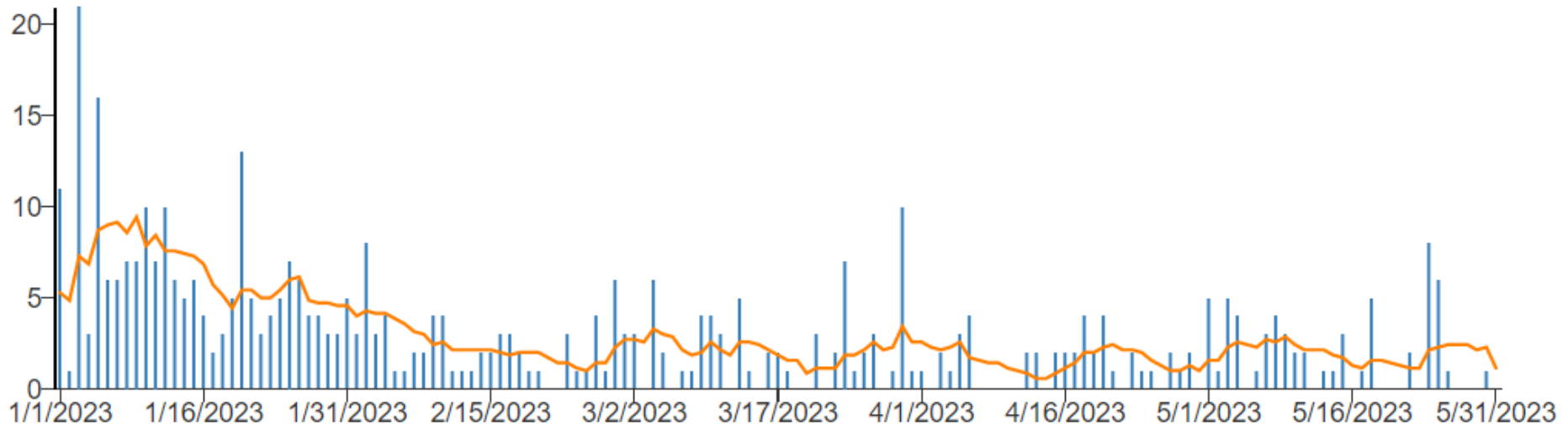
- Mpox virus is part of a group of pox viruses (Genus: *Orthopoxvirus*) that includes the smallpox virus (variola virus)
- First discovered in 1958 after two outbreaks in colonies of research monkeys (hence the original name “monkeypox”)
- First human case recorded in 1970 in the Democratic Republic of Congo (DRC)
- November 2022, the WHO recommended “mpox” as the preferred name replacement to decrease stigmatization
- Endemic in parts of west and central Africa, but in 2022 the mpox virus spread to more than 100 other countries

U.S. Mpox Trends: Cases and 7-Day Average



<https://www.cdc.gov/poxvirus/monkeypox/response/2022/mpx-trends.html>

U.S. Mpox Trends: Cases and 7-Day Average



<https://www.cdc.gov/poxvirus/monkeypox/response/2022/mpx-trends.html>

Mpox Virus Infections by State

U.S. Cases

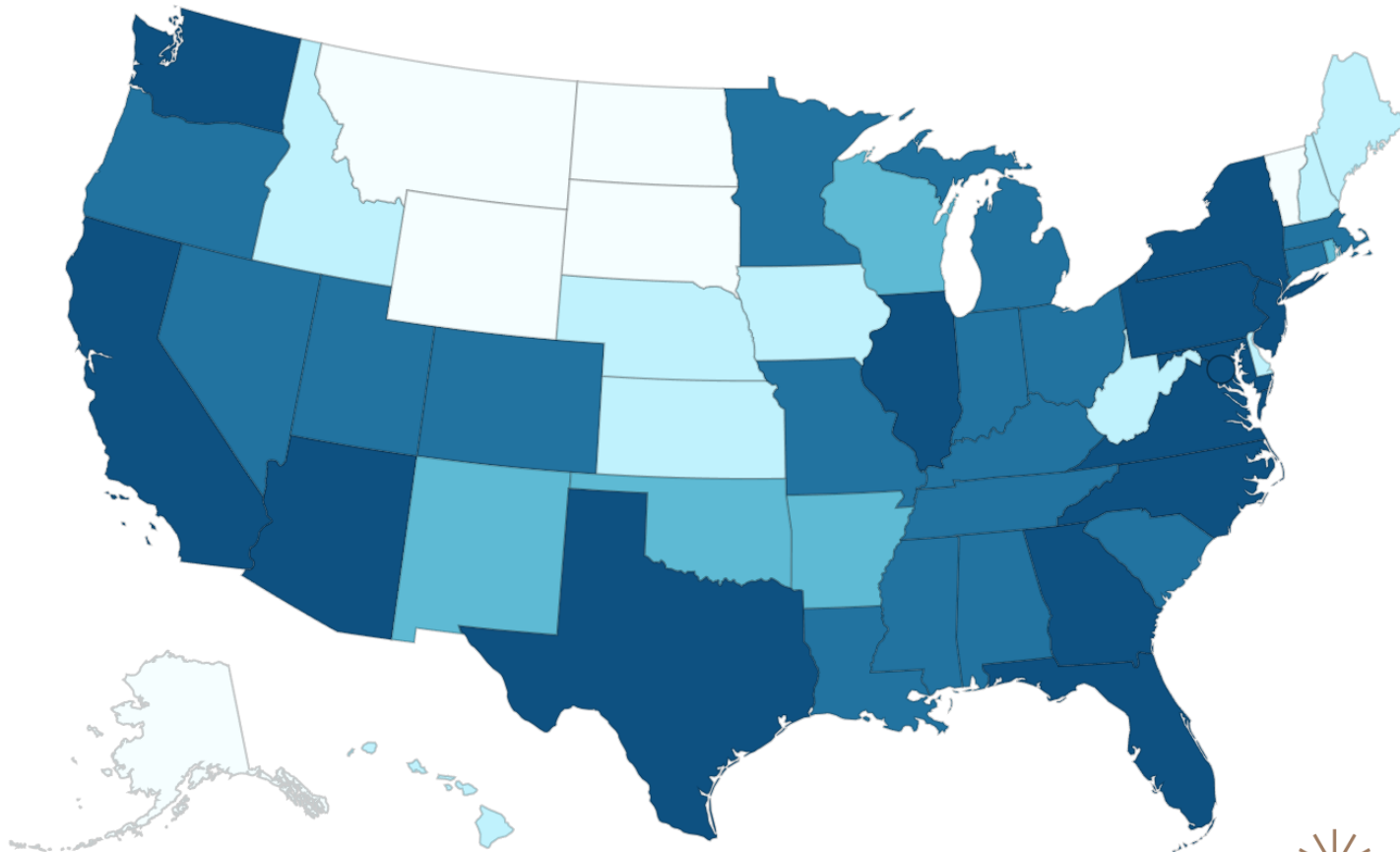
Total Cases

30,468

U.S. Deaths

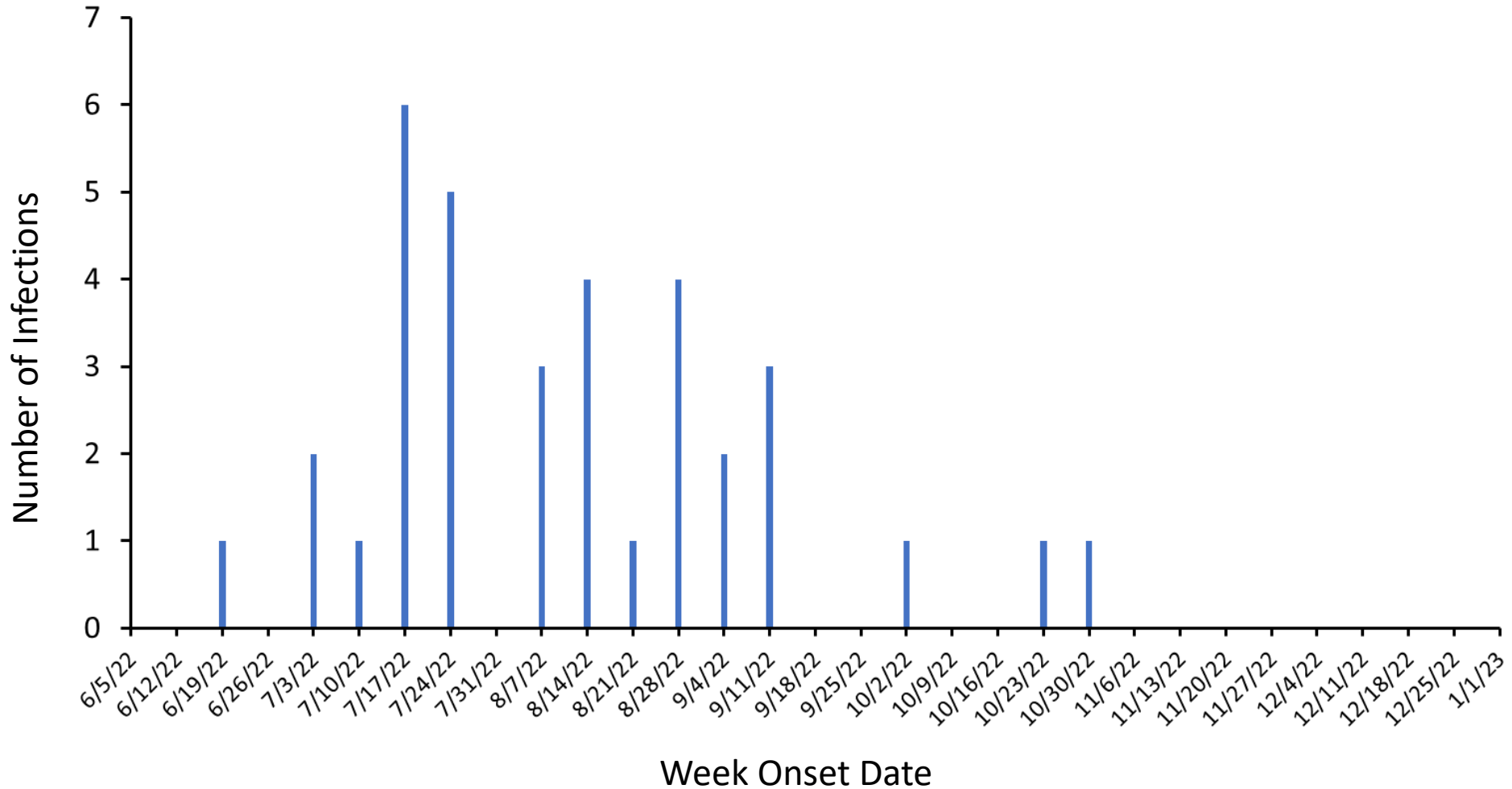
Total Deaths

42



<https://www.cdc.gov/poxvirus/monkeypox/response/2022/us-map.html>

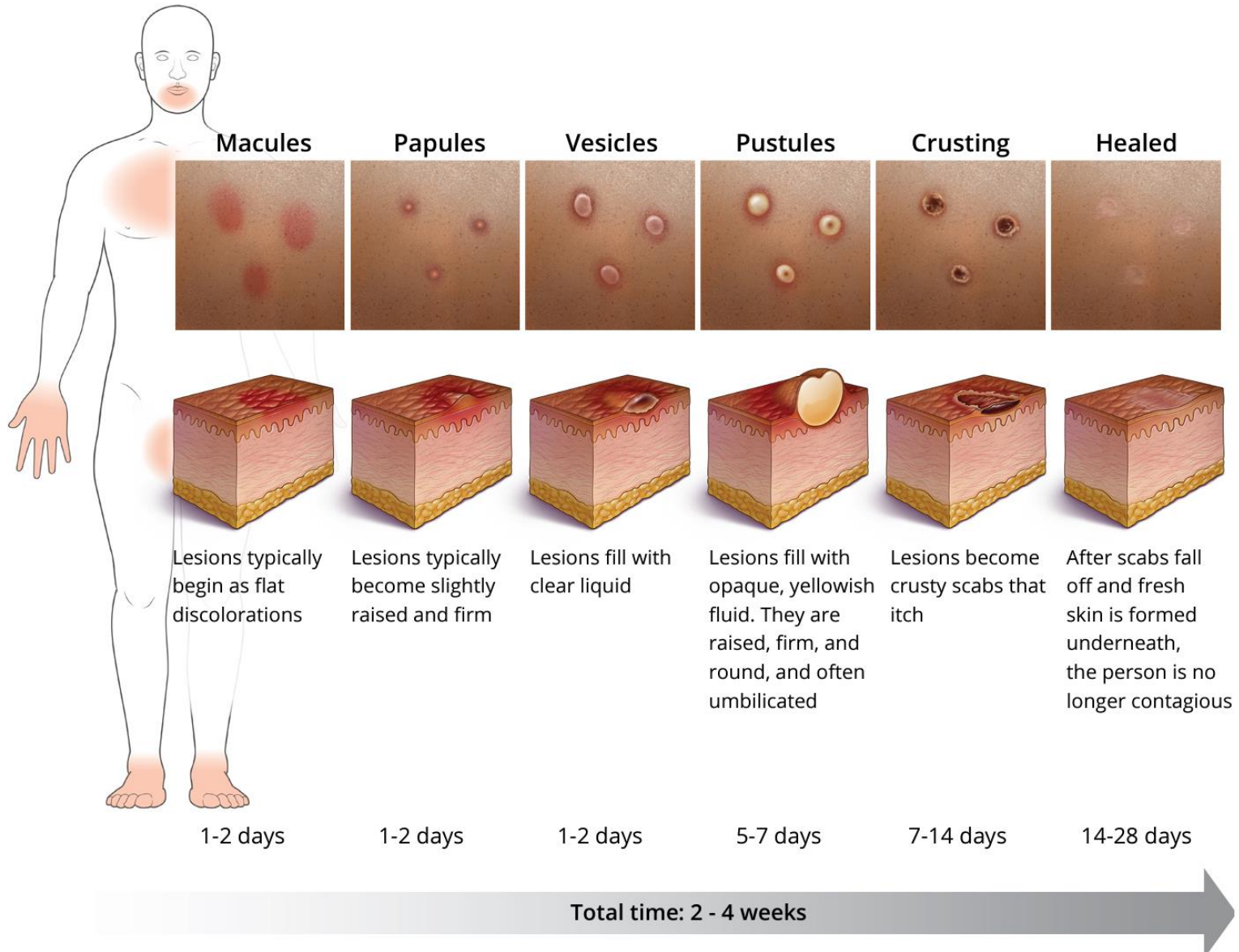
NH Mpox Infections by Week (N=35)



Signs & Symptoms

- **Incubation period:** Average ~7 days (often in the range of 3-17 days, but can be as long as 21 days)
- **General symptoms:** Fever, chills, malaise, myalgia, headache, sore throat, cough, swollen lymph nodes
- **Rash:** May be the first symptom which progresses through different stages: macular > papular > vesicular > pustular
 - Pustules are often firm, well-circumscribed, deep-seated, umbilicated, and painful
- **Additional complications:** Depending on site(s) of infection and immunocompromised status – pain, rectal bleeding, proctitis, urethral stricture, ocular infection, myopericarditis, encephalitis, myelitis, etc.

MPOX LESION PROGRESSION DESCRIPTION AND TIMELINE



Person-to-Person Transmission

- Primarily through direct physical contact with a person's infectious body fluids or skin lesions, including during sexual/intimate contact
- Contact with infectious material or fluids on heavily soiled/contaminated items (e.g., clothing, linens)
- Transmission during prolonged close-proximity interactions (via respiratory droplet spread) is theoretically possible but unlikely, and has not been identified as a common mode of transmission
- Persons can be infectious up to 4 days BEFORE symptoms begin
- A person is no longer infectious once all skin lesions have scab over, scabs have fallen off, and there is a fresh layer of new skin (which can take 2-4 weeks)

Asymptomatic Infection and Transmission May Be Possible

Annals of Internal Medicine

OBSERVATIONS: BRIEF RESEARCH REPORTS

Detection of Monkeypox Virus in Anorectal Swabs From Asymptomatic Men Who Have Sex With Men in a Sexually Transmitted Infection Screening Program in Paris, France

BRIEF COMMUNICATION

<https://doi.org/10.1038/s41591-022-02004-w>

nature
medicine

Retrospective detection of asymptomatic monkeypox virus infections among male sexual health clinic attendees in Belgium

<https://www.acpjournals.org/doi/10.7326/M22-2183>
<https://www.nature.com/articles/s41591-022-02004-w>

Pre-Symptomatic Transmission is Possible

- At least two different studies have documented pre-symptomatic transmission up to 4 days BEFORE a person develops symptoms
- But most transmission occurs AFTER the onset of symptoms (based on U.S. estimates of “serial interval” vs. incubation period)

<https://academic.oup.com/jid/advance-article/doi/10.1093/infdis/jiad091/7103467>

<https://www.bmj.com/content/379/bmj-2022-073153>

https://wwwnc.cdc.gov/eid/article/29/4/22-1622_article

Infection Control

Managing Patients with Suspected or Confirmed Mpox

- Review CDC's guidance for [Infection Prevention and Control of Mpox in Healthcare Settings](#)
- Place patient in a private room with a private bathroom (airborne isolation NOT necessary)
 - Airborne isolation only if a patient is being intubated/extubated, or having a procedure that might aerosolize and spread oral/respiratory secretions
- Don and doff appropriate personal protective equipment (PPE): Gown, gloves, eye protection, N95 or higher level respirator
- Clean and disinfect room using an EPA-registered disinfectant with an “emerging viral pathogen” claim ([List “Q” disinfectants](#))
 - Soiled laundry should never be shaken or handled in a way that disperses infectious material

National STD Curriculum: Mpox Clinical Guide

Personal protective equipment (PPE) to use

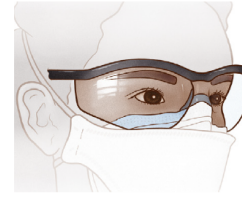


Full PPE

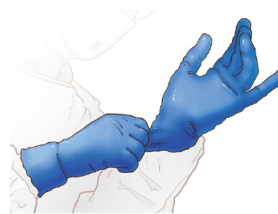
NOTE: Perform hand hygiene and then don PPE prior to entering patient room.



Fit tested NIOSH-approved respirator (equipped with a N95 filter or higher)



Eye protection (with coverage of front and sides of face)



Gloves



Gown

Rooming of patients

Patients with suspected or confirmed mpox should be placed in a single-person room; special air handling (a negative pressure isolation room) is not necessary, except during intubation, extubation, and procedures that may spread oral secretions (e.g., induced sputum collection).

Ideally, there should be a dedicated bathroom for mpox patient use.

When a patient leaves the room, all exposed lesions should be covered and the patient should wear a well-fitting medical mask.

Cleaning patient rooms

Perform standard cleaning and disinfection with an EPA-registered disinfectant from [List Q: Disinfectants for Emerging Viral Pathogens](#).

Soiled bedding, towels, and clothing should be handled while in PPE and subsequently contained; shaking or handling should be avoided so as not to aerosolize infectious particles. Avoid dry dusting, sweeping, vacuuming or other such cleaning methods.

Soiled material may be disposed of in the same way as any other infectious medical waste. This guidance applies to the monkeypox virus clade associated with the 2022 mpox outbreak.

Diagnosis and Testing

Testing for Mpox Virus

- Wear the appropriate PPE
- Contact the testing laboratory (commercial vs. public health) to determine criteria for specimen submission
 - Different laboratories have different guidance for specimen submission
 - To request testing at the NH Public Health Laboratories, first contact NH DPHS by calling 603-271-4496 (after hours 603-271-5300)
- Swab skin lesion(s), including lesions in the mouth, rectal, or genital areas
- Package and ship specimens to laboratory for mpox PCR testing
- Test for HIV and other STIs based on signs/symptoms and risk factors, per existing guidance

Review Informational Resources

- CDC website: [Guidelines for Collecting and Handling Specimens for Mpox Testing](#)
- Infographics:
 - [What To Do If You Suspect Monkeypox](#)
 - [Testing Patients for Monkeypox](#)
 - [Tips for Adequate Collection of a Lesion Specimen from a Suspect Monkeypox Virus Case](#)



STATE OF NEW HAMPSHIRE
DEPARTMENT OF HEALTH AND HUMAN SERVICES
NH PUBLIC HEALTH LABORATORIES

29 HAZEN DRIVE, CONCORD, NH 03301
603-271-4661 1-800-852-3345 Ext. 4661
Fax: 603-271-4783 TDD Access: 1-800-735-2964



MPOX SPECIMEN COLLECTION, STORAGE, AND TRANSPORT INSTRUCTIONS

For specimen collection kit availability: Call PHL at 603-271-4605 or 603-271-0305 or 1-800-852-3345 ext. 4605 or ext. 0305, or email phclinicalkitorders@dhhs.nh.gov.

Important Information:

- Mpx testing is available at PHL and at several commercial reference laboratories.
- To request testing at PHL, clinicians **must first contact** the NH Department of Public Health Services (DPHS) by calling 603-271-4496 (after hours 603-271-5300 and ask for the public health professional on call). Clinicians do NOT need to call to report testing that is occurring through commercial laboratories.
- Only viral transport media (VTM) is acceptable for liquid transport of a collection swab. Universal transport media (UTM) has not been validated for use with this assay, and specimens in UTM will be rejected for testing. Verify VTM tube is not expired.

Specimen collection:

1. Wear appropriate personal protection equipment (PPE) prior to collection.
2. Skin lesion material, including lesion surface, exudate, or crust, is the recommended specimen type.
3. Do **not** clean the site area before sampling. Vigorously swab each lesion with a sterile, dry nylon, polyester, or Dacron swab to collect adequate sample material. Do **not** use cotton swab.
4. Collect one swab from each lesion, preferably from different locations on the body or from lesions which differ in appearance (maximum 3 sites).
5. Place each swab in its own VTM tube (do not combine swabs in one tube), immersing swab in the 2-3 mL liquid. Break or snip off the swab stick end, leaving the swab end in the tube. Securely cap tube and parafilm around the top to prevent possible leakage during transport. If VTM is not available, place swab in a tube containing no liquid.
6. Label the tube with patient name or ID, date of birth, date and time of collection, and anatomical collection site.

Specimen storage and transport information:

1. Refrigerate tube (2-8°C) after collection.
2. Fill out the PHL test requisition form completely and legibly. Ensure information matches the labeled tube. If multiple sites were collected, fill out a form for each site, indicating on each form the anatomical location.
3. When ready to transport specimen, place tube in biohazard resealable specimen bag with absorbent paper. If multiple sites are collected, place each tube in its own bag.
4. Place requisition form in **outer pocket** of bag.
5. Write "Mpx testing" on the outside of the bag.
6. Transport specimen to PHL as soon as possible to ensure testing within 3 days of collection:
 - a. Hand deliver – transport in cooler secured in vehicle to prevent spillage.
 - b. Courier request – call PHL at 603-271-0305 or 1-800-852-3345 ext. 0305

For technical questions, call PHL at 603-271-4661
Test requisition forms are found at <https://www.dhhs.nh.gov/programs-services/population-health/public-health-laboratories>

5/10/2023

JYNNEOS Vaccine Updates

NH MPOX VACCINE CLINIC SITES



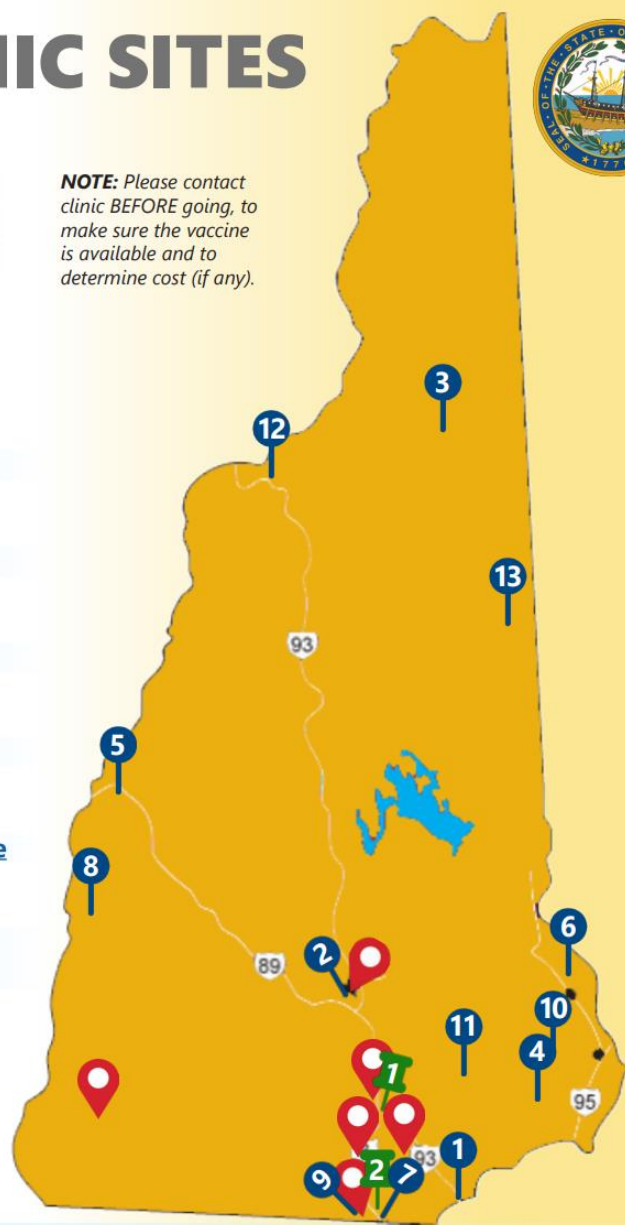
ConvenientMD Urgent Care *Taking Walk-Ins*

CONCORD	603-226-9000	MANCHESTER	603-384-3900
KEENE	603-352-3406	MERRIMACK	603-471-6069
LONDONDERRY	603-413-6800	NASHUA	603-578-3347

NOTE: Please contact clinic **BEFORE** going, to make sure the vaccine is available and to determine cost (if any).

- 1** [Manchester Health Department¹](#) MANCHESTER 603-624-6466
- 2** [Nashua Health Department²](#) NASHUA 603-589-4500

- 1** [All Care Medical](#)
SALEM
603-752-2040
- 2** [Concord Hospital](#)
CONCORD
603-225-2711
- 3** [Coos County Family Health](#)
BERLIN
603-752-2040
- 4** [CORE Internal Med](#)
EXETER
603-775-0000
- 5** [Dartmouth Health](#)
LEBANON
603-650-1818
- 6** [Goodwin Community Health](#)
SOMERSWORTH
603-749-2346
- 7** [Harbor Care](#)
NASHUA
603-821-7788
- 8** [Keady Family Practice](#)
CLAREMONT
603-863-7777
- 9** [Lamprey Healthcare](#)
NASHUA
603-659-3106
- 10** [Lamprey Healthcare](#)
NEWMARKET
603-659-3106
- 11** [Lamprey Healthcare](#)
RAYMOND
603-895-3351
- 12** [Littleton Regional Healthcare](#)
LITTLETON
603-444-9000
- 13** [White Mountain Community Health](#)
CONWAY
603-447-8900



1-Serving persons living in the Greater Manchester Area (Auburn, Bedford, Candia, Deerfield, Goffstown, Hooksett, Manchester and New Boston) with/without insurance.

2-Serving persons who are under/uninsured living in the Greater Nashua Region (Amherst, Brookline, Hollis, Hudson, Litchfield, Lyndeborough, Mason, Merrimack, Milford, Mont Vernon, Pelham, and Wilton).

Please select highlighted locations for website link.

Map is for graphical purposes only, it does not represent a legal survey. 5/24/23

<https://www.dhhs.nh.gov/programs-services/disease-prevention/infectious-disease-control/monkeypox/monkeypox-vaccine>



Enroll To Be A Mpox Vaccine Provider

- Reach out to our NH Immunization Program Mpox Vaccine Liaison for On-Boarding:
 - Phone: 603-271-4482
 - E-mail: Immunization@dhhs.nh.gov

JYNNEOS Mpox Vaccine Background

- Non-replicating live-virus vaccine (replication-deficient *Vaccinia virus*)
- FDA licensed in 2019 for prevention of smallpox or mpox in adults 18 years of age or older: 2-dose series given subcutaneously 28 days apart
- August 9, 2022: FDA issued an Emergency Use Authorization (EUA) for use of JYNNEOS in persons <18 years (subcutaneous administration at standard dose), and for intradermal administration in persons 18+ years (one-fifth the standard dose)
- Vaccine effectiveness was inferred from immunogenicity studies and from efficacy data in animal studies

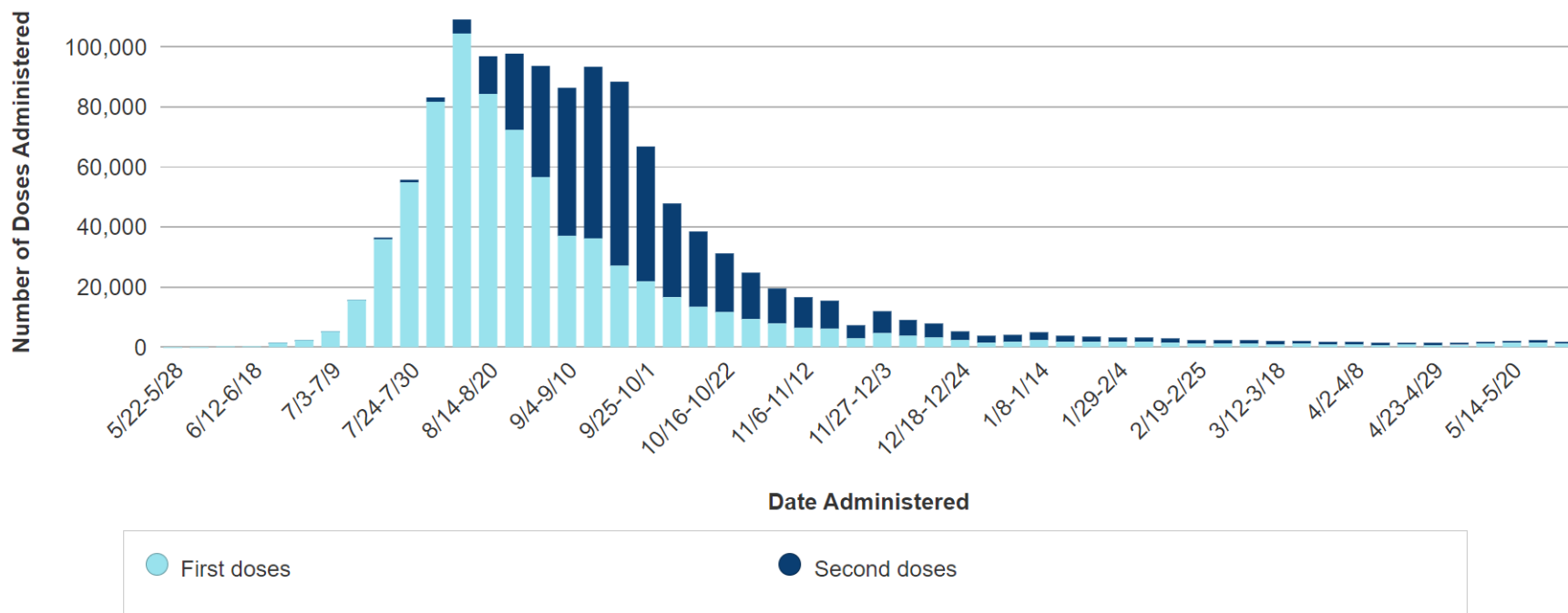
JYNNEOS Vaccine Doses Administered in U.S.

Total Vaccine Doses Administered

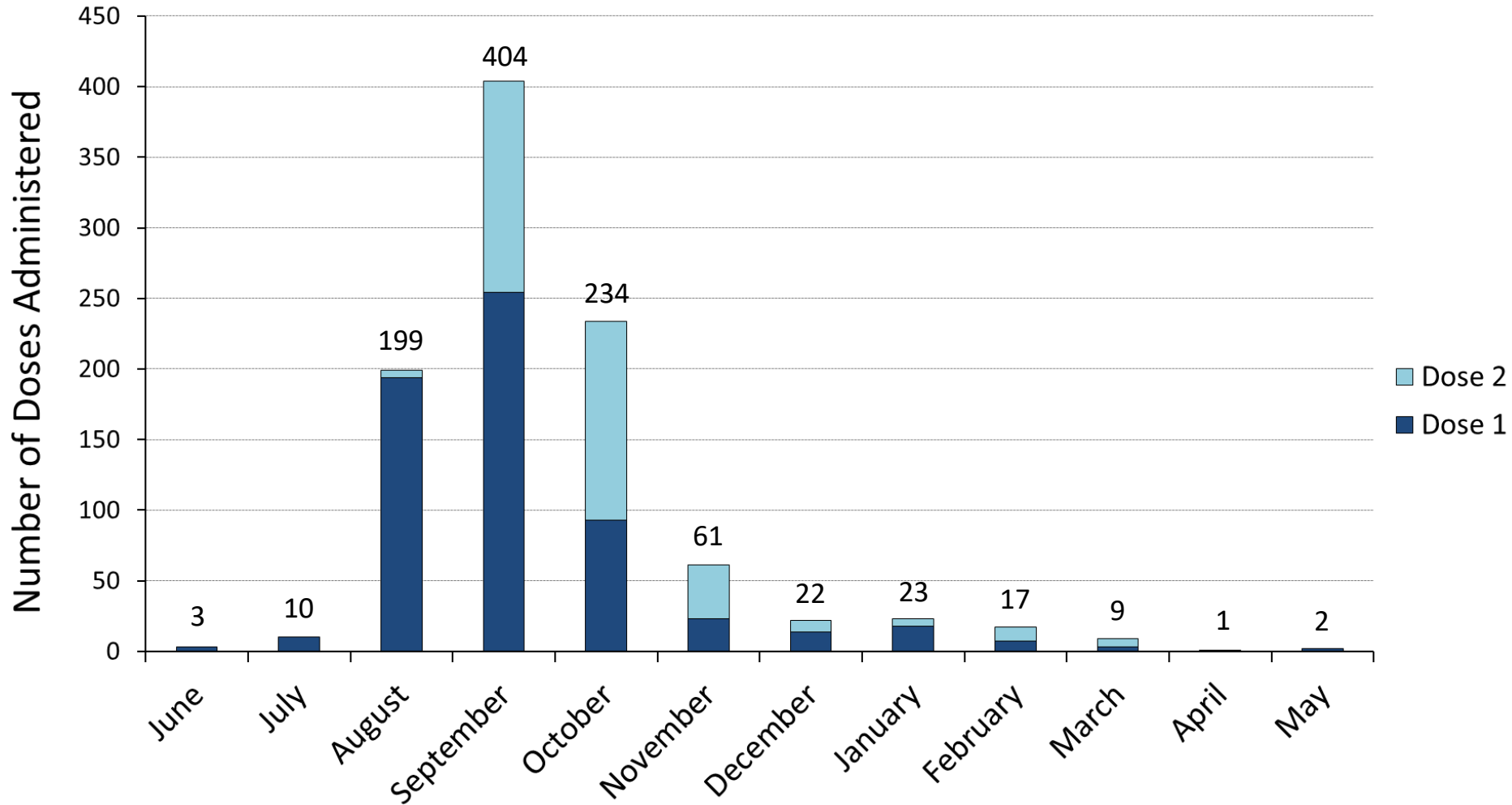
1,227,517

Doses Administered in the 57 U.S. Jurisdictions Reporting Data as of June 6 2023.

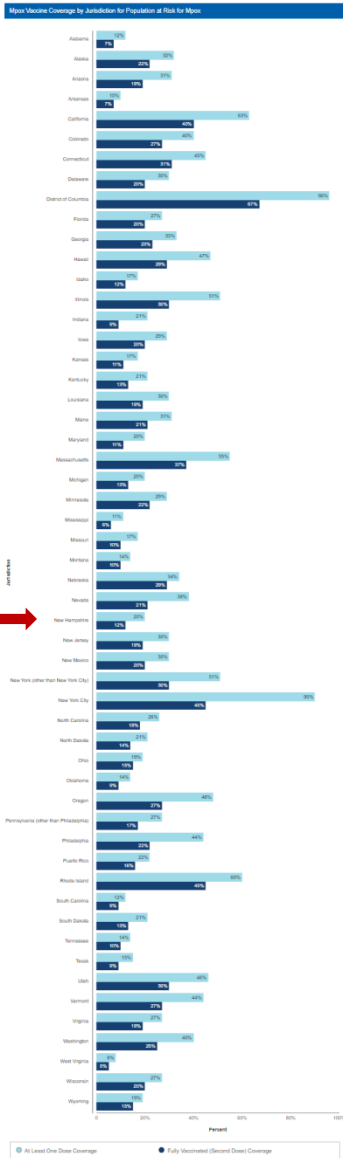
Total JYNNEOS Vaccine Second Doses and First Doses Reported to CDC



JYNNEOS Vaccine Doses Administered in NH



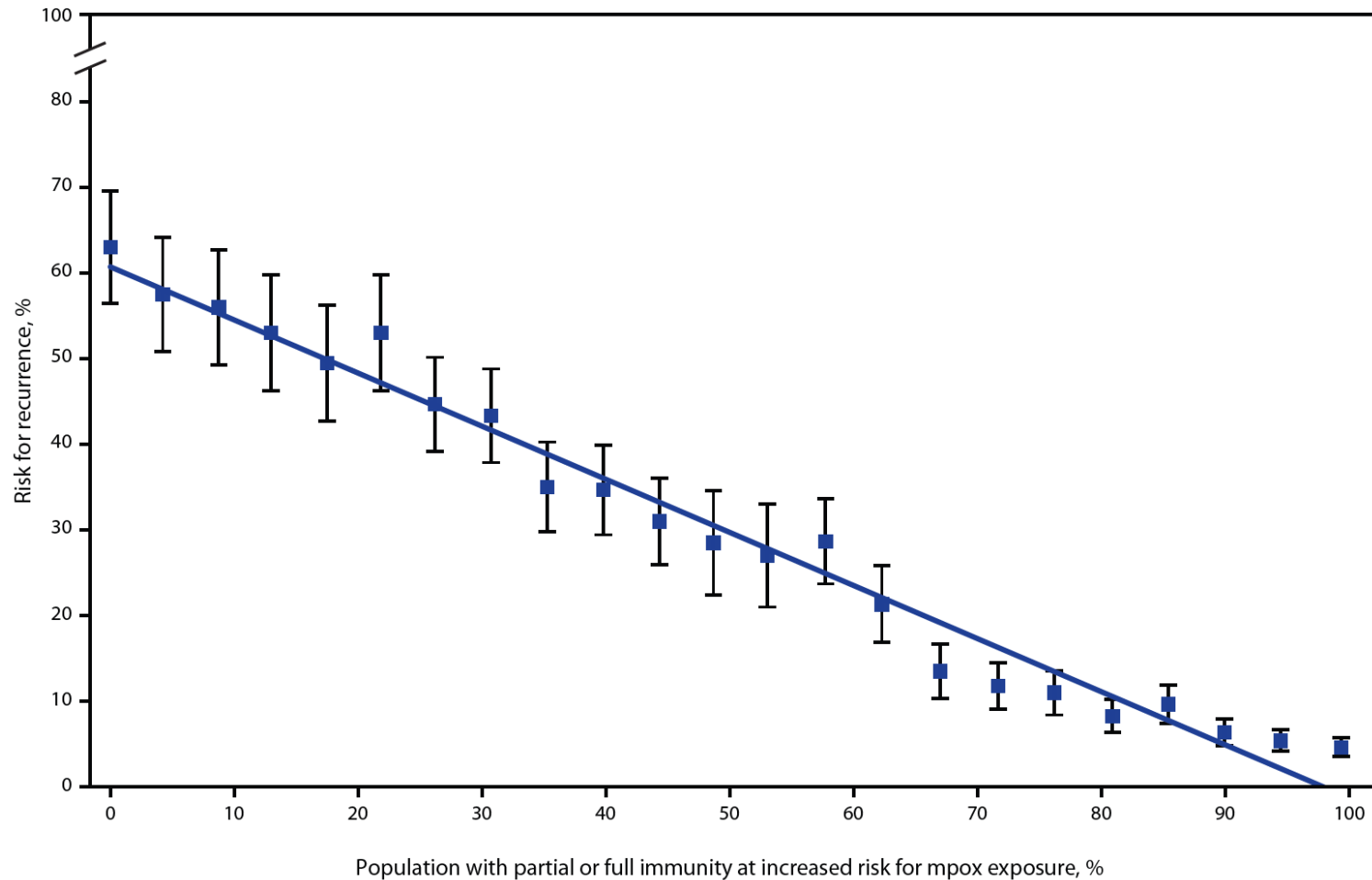
Estimated Vaccine Coverage by Jurisdiction



- 23% of U.S. at-risk population has received two doses of JYNNEOS
- 12% of NH's at-risk population has received two doses of JYNNEOS
 - 20% of NH's at-risk population has received at least one dose of JYNNEOS

Modeling of Risk for Recurrent Mpox Outbreak

FIGURE 1. Risk* for recurrent mpox outbreak lasting >3 months, by immunity level† — United States, 2023



Interim Clinical Considerations for Use of JYNNEOS and ACAM2000 Vaccines during the 2022 U.S. Mpox Outbreak

Updated March 22, 2023 [Print](#)

Table of Contents

› What You Need to Know

ACAM2000

Components of the U.S. National Vaccination Strategy

Specific Populations

JYNNEOS

Errors and Deviations

Related Resources

Talking with Patients About Vaccinations

JYNNEOS Package Insert

JYNNEOS Vaccine Information Statement (VIS) [151 KB, 2 pages]

JYNNEOS Vaccine Information Statement (VIS) in Spanish [165 KB, 2 pages]

Vaccine Storage and Handling Toolkit [70 pages]

JYNNEOS Standing Orders (Standard Regimen) [233 KB, 3 pages]

JYNNEOS Standing Orders (Alternative Regimen) [243 KB, 3 pages]

JYNNEOS Preparation and Administration Summary (Standard Regimen) [134 KB, 3 pages]

JYNNEOS Preparation and Administration Summary (Alternative Regimen) [139 KB, 3 pages]

Animated Video: How to administer a JYNNEOS vaccine intradermally (no audio)

Video: Administering JYNNEOS Intradermally

Images: Administering JYNNEOS Intradermally [ZIP – 32 MB]

ACAM 2000 Medication Guide

Vaccination Operational Planning Guide

FDA EUA Fact Sheet for Providers [900 KB, 16 pages]

FDA EUA Fact Sheet for Patients and Caregivers [465 KB, 5 pages]

FDA EUA Fact Sheet for Patients and Caregivers in Other Languages

Mpox Vaccination Program Provider Agreement

JYNNEOS Smallpox and Mpox Vaccine: Patient Screening Form [227 KB, 3 pages]

Definitions for Mpox Vaccination Guidance

- Post-Exposure Prophylaxis (PEP): Vaccination of a person within 14 days AFTER an exposure to prevent disease or limit the severity of illness (Ideally within 4 days of exposure)
- Pre-Exposure Prophylaxis (PrEP): Vaccination of a person with risk factors BEFORE exposure occurs to prevent disease

NH DPHS' "Old" Eligibility Criteria (June 2022)

- NH DPHS updated guidance in June 2022 to recommend JYNNEOS vaccination for:
 - Persons who report in the prior 14 days a known exposure to the mpox virus (goal is vaccination within 4 days of exposure to prevent disease)
 - Persons who identify as gay, bisexual, queer, or other men who has sex with men (MSM) and believe they are at risk for mpox virus infection (including persons in a monogamous relationship who have a sex partner that is at higher risk for mpox)
 - Persons of any gender or sexual orientation whom a provider thinks is at increased risk for mpox virus infection
- Intended to be inclusive and flexible for healthcare providers, and also allow patients to self-identify as being at-risk

CDC's JYNNEOS Eligibility Criteria

Currently, CDC does not recommend routine immunization against mpox for the general public. Mpox vaccination should be offered to people with high potential for exposure to mpox:

- People who had known or suspected exposure to someone with mpox.
- People who had a sex partner in the past 2 weeks who was diagnosed with mpox.
- Gay, bisexual, and other MSM, and transgender or nonbinary people (including adolescents who fall into any of these categories) who, in the past 6 months, have had
 - A new diagnosis of one or more sexually transmitted diseases (e.g., chlamydia, gonorrhea, syphilis).
 - More than one sex partner.
- People who have had any of the following in the past 6 months
 - Sex at a commercial sex venue.
 - Sex in association with a large public event in a geographic area where mpox transmission is occurring.
 - Sex in exchange for money or other items.
- People who are sex partners of people with the above risks.
- People who anticipate experiencing any of the above scenarios.
- People with HIV infection or other causes of immunosuppression who have had recent or anticipate potential mpox exposure.
- People who work in settings where they may be exposed to mpox.
 - People who work with orthopoxviruses in a laboratory.

Extensive risk assessment should not be conducted in [people who request vaccination](#) to avoid the barriers created by the stigma experienced by many who could benefit from vaccination. People in the community at risk (e.g., gay, bisexual, or other MSM; transgender or nonbinary people) asking for vaccination is adequate attestation to individual risk of mpox exposure.

JYNNEOS Vaccine Administration

	Administration Route	Injection Volume	Number of Doses	Interval Between Dose #1 and #2
SUBCUTANEOUS: “Standard Regimen”				
Persons aged <18 years	Subcutaneous (SC)	0.5 mL	2	28 days
Persons 18+ years and anybody who has a history of developing keloid scars	Subcutaneous (SC)	0.5 mL	2	28 days
INTRADERMAL: “Alternative Regimen”				
Persons aged 18+ years	Intradermal (ID)	0.1 mL	2	28 days

- CDC still “prefers” ID administration for current outbreak for adults 18+ years
- NH DPHS recommends transitioning back to SC administration for everybody, unless multiple patients are scheduled for vaccination before a vial’s expiration

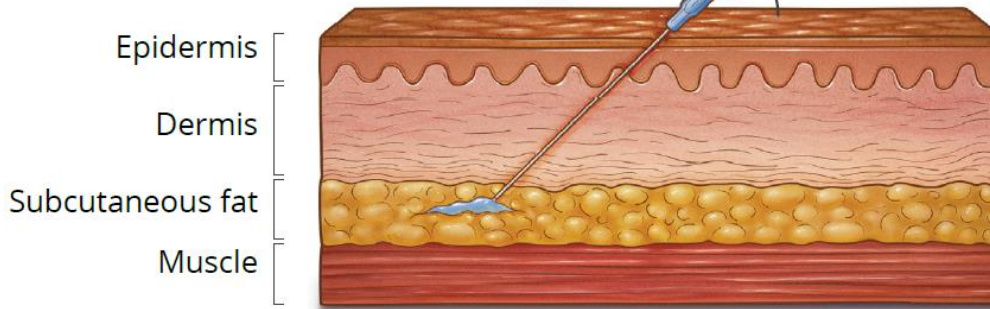
NH DPHS Recommends Transitioning Back to Standard SC Administration for Everybody

- CDC guidance allows for SC administration in all age groups – use clinical discretion
- Much less need for a dose-sparing strategy due to more supply and lower demand
- Patients may be more likely to get their 1st and 2nd dose if given SC
- Easier for healthcare providers to administer
- Fewer vaccine administration errors
- Even with ID administration, extra doses are likely to be wasted due to low current demand

SC vs. ID Vaccine Administration

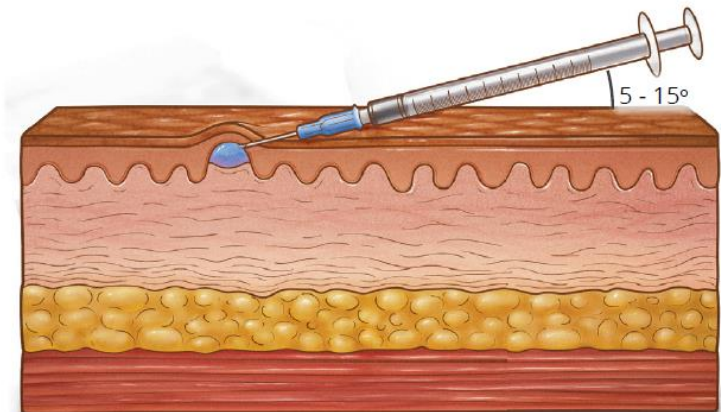
Subcutaneous Injection

0.5 mL per dose



Intradermal Injection

0.1 mL per dose



- Dosing regimens are interchangeable
- If a person gets dose #1 intradermal, they can get dose #2 subcutaneous, or vice versa

Vaccine Administration & Training

- [Subcutaneous \(SC or Subcut\) Injection: Administration \(6:27\)](#)
- [Subcutaneous \(SC or Subcut\) Injection: Supplies \(4:05\)](#)
- [Subcutaneous \(SC or Subcut\) Injection: Sites \(3:26\)](#)

Video on Administering JYNNEOS Intradermally



VIDEO

How to Administer Intradermal Vaccine in Forearm, Deltoid, and Scapula

Video Length: 00:02:49

[Watch Video](#)

Common Side Effects After Vaccination

- Local injection site reactions (pain, itchiness, redness, swelling)
- Tiredness or fatigue
- Muscle and joint aches
- Underarm pain or swelling
- Headache
- Fever/chills
- Nausea

<https://www.fda.gov/media/160773/download>

<https://www.cdc.gov/poxvirus/mpox/interim-considerations/jynneos-vaccine.html#counseling>

U.S. Safety Monitoring of JYNNEOS Vaccine

- Serious adverse events in adults was rare and no new safety concerns identified
- No serious adverse events have been identified in persons <18 years
- Reporting rates of adverse events is similar for SC and ID administration
- No evidence of increased risk for myocarditis after JYNNEOS (myocarditis has been associated with replicating smallpox vaccine ACAM2000)

TABLE 2. Reporting rates for the 10 most frequently reported adverse health events* after JYNNEOS vaccine receipt, by route of administration† — Vaccine Adverse Event Reporting System, United States, May 22–October 21, 2022

Route of administration/ Health event	No. of reports	Reporting rate [§] (95% CI)
Intradermal (n = 325)		
Injection site erythema	75	150 (118–188)
Dizziness	66	132 (102–168)
Urticaria	60	120 (91–154)
Injection site swelling	51	102 (76–134)
Syncope	43	86 (62–116)
Erythema	42	84 (60–113)
Loss of consciousness	41	82 (59–111)
Injection site pruritus	40	80 (57–109)
Hyperhidrosis	38	76 (54–104)
Pruritus	33	66 (45–92)
Subcutaneous (n = 212)		
Injection site erythema	36	107 (75–148)
Injection site swelling	36	107 (75–148)
Injection site pain	34	101 (70–141)
Pain	29	86 (57–123)
Erythema	28	83 (55–120)
Dizziness	27	80 (53–116)
Headache	26	77 (50–113)
Fatigue	25	74 (48–109)
Injection site pruritus	23	68 (43–102)
Pyrexia	23	68 (43–102)

* Excluding vaccination errors and deviations from recommendations.

† Licensed and authorized routes of administration only.

§ Reports per million doses administered; total number of intradermal doses administered = 501,228 and subcutaneous doses administered = 337,950.

JYNNEOS

Contraindications & Precautions

Medical condition or history	Interim guidance	Suggested action(s)
History of a severe allergic reaction (e.g., anaphylaxis) after a previous dose of JYNNEOS	Contraindication	Do not vaccinate. Referral to an allergist-immunologist should be considered to assess the risks versus benefits of administering a dose.
History of severe allergic reaction (e.g., anaphylaxis) following receipt of gentamicin or ciprofloxacin ¹	Precaution	<p>Discuss risks and benefits with potential recipients. Patients may be vaccinated with a 30-minute observation period following administration.</p> <p>Alternatively, vaccination may be delayed until an allergist-immunologist is consulted, but the impact of delaying vaccination should be considered.</p>
History of severe allergic reaction (e.g., anaphylaxis) to chicken or egg protein AND currently avoiding exposure to all chicken or egg products ¹	Precaution	<p>Discuss risks and benefits with potential recipients. Patient may be vaccinated with a 30-minute observation period following administration.</p> <p>Alternatively, vaccination may be delayed until an allergist-immunologist is consulted, but the impact of delaying vaccination should be considered.</p>
Moderate or severe acute illness, with or without fever	Precaution	Consider deferring vaccination until the acute illness has improved.

¹ JYNNEOS vaccine contains small amounts of gentamicin and ciprofloxacin and is produced using chicken embryo fibroblast cells.



JYNNEOS Vaccine Effectiveness & Duration of Immunity

JYNNEOS Vaccine Effectiveness (VE) Studies

Country (Reference)	Study Type	Study Population	Age (Years)	Route (SQ or ID)	1-Dose VE (95% CI)	2-Dose VE (95% CI)
Israel (Nature Med, Jan 2023)	Retrospective EHR Cohort	2,054 persons eligible for vaccine	18-42	SQ	86% (59%-95%)	--
England (Lancet, Mar 2023)	Case-Coverage	363 cases (compared to population vaccine coverage)	15+	Mostly SQ	78% (54%-89%)	--
U.S. (MMWR, May 2023)	Case-Control (New York)	252 cases 255 controls	18+	Not Reported	68% (25%-87%)	89% (44%-98%)
U.S. (MMWR, May 2023)	Case-Control (12 U.S. Jurisdictions)	309 cases 608 controls	18-49	SQ, ID, Heterologous	75% (61%-84%)	86% (74%-92%)
U.S. (NEJM, May 2023)	Case-Control (Nationwide Epic EHR Data)	2,193 cases 8,319 controls	18+	SQ, ID, Heterologous	36% (22%-47%)	66% (47%-78%)

Recent French mpox cluster includes fully vaccinated patients

News brief | April 6, 2023

Lisa Schnirring

Topics: Mpox

French officials recently posted an **update** on an mpox cluster in the Center-Val de Loire region, with 17 cases reported since the first of the year, including 14 since March 1. All occurred in men who have sex with men who had several partners but didn't attend any common events.

Five of the patients had received two mpox vaccine doses in 2022. Also, five had received one smallpox dose during childhood, plus one dose in 2022.

Chicago, IL Mpox Increase

RESURGENCE OF MPOX – Provider Update: May 9, 2023

Publish Date: 05/09/2023 05:33:11 pm | Alert Id: 46678186 | Topic: Monkeypox | Level of Alert: **HIGH**

Abstract

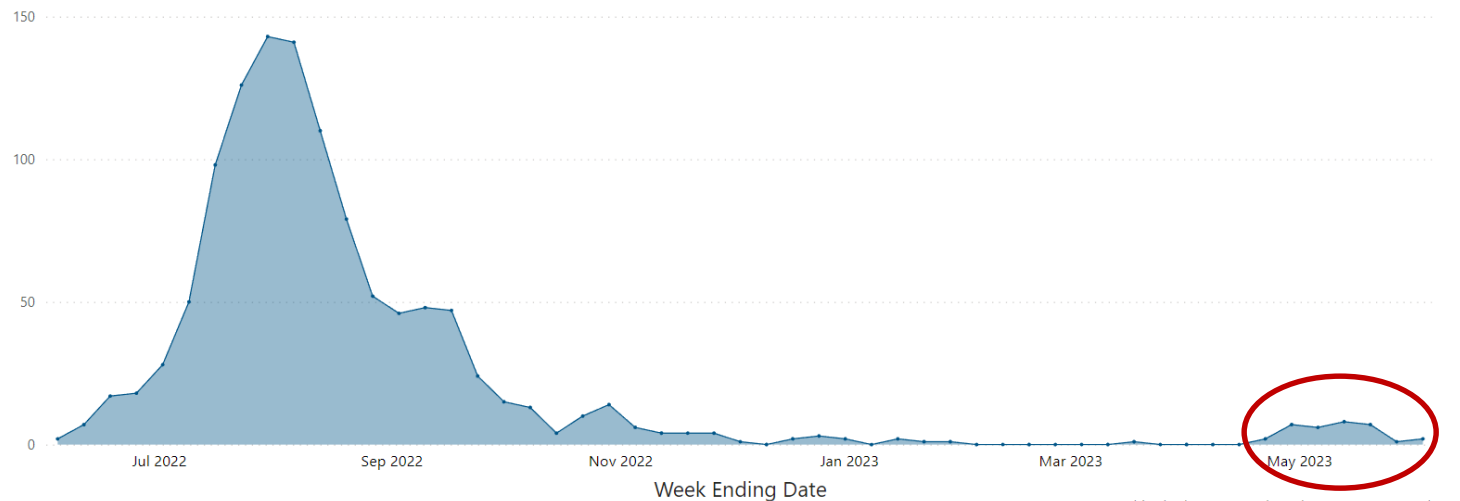
RESURGENCE OF MPOX - Provider Update: May 9, 2023

Full Details

Summary and Action Items

- Chicago Department of Public Health (CDPH) has identified a resurgence of cases of mpox (formerly monkeypox).
- From April 17th-May 5th 2023, 12 confirmed and one probable case of mpox were reported to CDPH. All cases were among symptomatic men. Nine (69%) of 13 cases were among men who were fully vaccinated for mpox.
- Transmission of mpox
- Transmitted Infection
- Healthcare providers

Mpox (Monkeypox) Cases Diagnosed in Chicago Residents, by Week



*Data represented in the last reported week are not yet complete.

What is the Duration of Immunity/Protection?

- Duration of immunity after JYNNEOS vaccination is unknown
- Multiple studies now showing that the vaccine is effective at preventing mpox in the short term (VE for 2-doses ~70-90%)
- Infection after vaccination still possible and likely dependent on multiple factors: prevalence of infection in a community, behavioral risk factors (e.g., # of opportunities for exposure), type/mode of exposure, etc.
- Recent reports may also have testing bias (e.g., people who are more likely to be vaccinated might also be more likely to seek out testing)

Future of Mpox Response

- Planning for continued mpox virus circulation and potential outbreaks
- CDC still thinks mpox elimination from the U.S. is possible
- Ongoing study of VE and duration of immunity
- ACIP is meeting in June and October to discuss JYNNEOS vaccine recommendations (outbreak settings and routine use)
- Increase JYNNEOS vaccination for at-risk persons through primary care and sexual health clinics

Enroll To Be A Mpox Vaccine Provider

- Reach out to our NH Immunization Program Mpox Vaccine Liaison for On-Boarding:
 - Phone: 603-271-4482
 - E-mail: Immunization@dhhs.nh.gov

FAQs

Can we vaccinate our healthcare providers?

- Currently healthcare providers are not a recommended group to receive JYNNEOS vaccination
- Vaccine should be reserved for PEP and PrEP vaccination in patients who have identified exposures or risk factors

Can a patient who was fully vaccinated in 2022 (i.e., received 2 doses of JYNNEOS) get a booster dose this year?

- No – additional doses beyond the recommended 2-dose series are not currently recommended

If a patient got one dose of JYNNEOS last year (months ago) and is presenting for vaccination now, do we re-start the vaccine series?

- No recommendation to re-start the vaccine series
- Give the 2nd dose of JYNNEOS now, and the person is considered “fully vaccinated”

My patient reports they got the smallpox vaccine years ago, should we still vaccinate the person with JYNNEOS if they're at risk?

- Yes – persons who have a history of smallpox vaccination likely received their vaccine years/decades ago and are recommended to be vaccinated with JYNNEOS due to waning immunity

My patient was diagnosed with mpox last year, can they still get the JYNNEOS vaccine?

- A vaccine-eligible person who has been diagnosed with mpox during the 2022-23 outbreak is not recommended to be vaccinated at this time, because mpox infection likely confers immune protection
- A person who is diagnosed with mpox after their first dose of JYNNEOS is not recommended to receive the second dose at this time, because mpox infection confers additional immune protection
- An immunocompromised person who is diagnosed with mpox after their first dose of JYNNEOS may be eligible to receive the second dose of JYNNEOS on a case-by-case shared decision-making basis based on the clinical judgment of the healthcare provider

Q&A and Discussion

PPT Slides Will Be Posted to a New Healthcare Provider Resources Website

- <https://www.dhhs.nh.gov/programs-services/disease-prevention/infectious-disease-control/bidc-resources-healthcare-providers>

Healthcare Providers and Public Health Partners Call Presentations

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 **Healthcare Providers and Public Health Partners Call Presentation, May 11, 2023**

Topics:

- CDC's updated COVID-19 Infection Prevention and Control Recommendations for Healthcare
- CDC's updated COVID-19 vaccine recommendations
- Tick-borne diseases (TBDs)
- RSV vaccine

Document Format: PDF | Tags: HCP Calls
Date Filed: 05/11/2023

 **Public Health Rounds, April 13, 2023**

Topics:

- Post-Acute COVID-19 Syndrome (PACS)
- Marburg
- Avian influenza

Document Format: PDF | Tags: HCP Calls
Date Filed: 04/13/2023