Monthly Healthcare Provider & Public Health Partner Webinar

Updates on COVID-19 and Other Emerging Public Health Issues

June 9, 2022

NH DIVISION OF
Public Health Services
Department of Health and Human Services

Monthly Healthcare Provider & Public Health Partner Webinar Schedule

- **2nd Thursday** of each month from 12:00-1:00 pm

- Webinar/call information (unchanged):
  - Zoom link: https://nh-dhhs.zoom.us/s/94059287404
  - Webinar ID: 940 5928 7404
  - Passcode: 353809
  - Telephone: 646-558-8656

Agenda

- COVID-19 vaccine updates (for infants and young children)
- Monkeypox virus outbreaks
- Q&A

COVID-19 Vaccine Updates

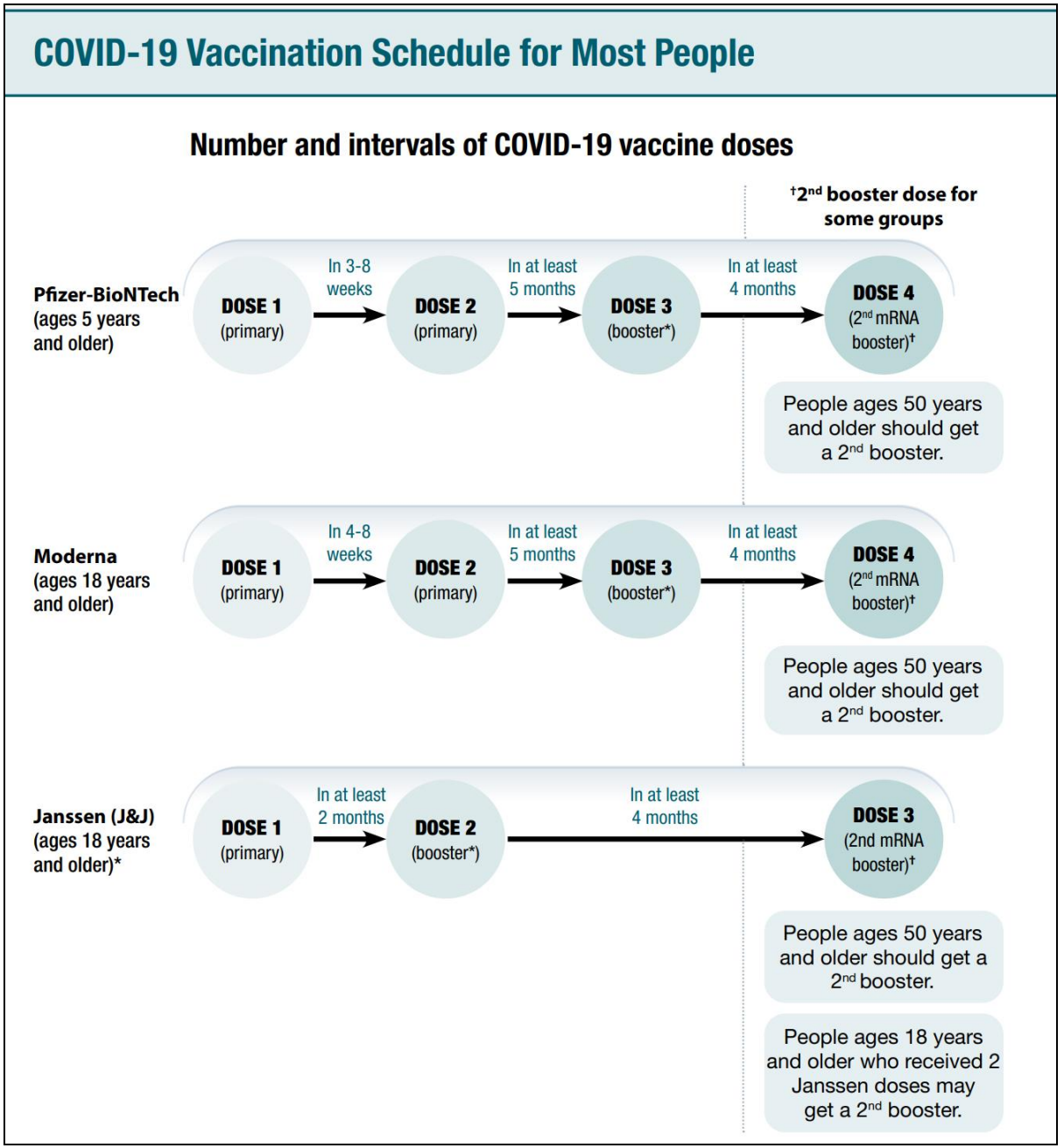
COVID-19 Vaccine Recommendations

- Everybody 5 years of age and older is now recommended to receive a booster dose after completion of their primary series:
  - Persons who are NOT moderately-severely immunocompromised are recommended to get a booster dose starting at least **5 months** after completion of a **2-dose mRNA vaccine primary series**
  - Persons who ARE moderately-severely immunocompromised are recommended to get a booster dose starting at least **3 months** after completion of a **3-dose mRNA vaccine primary series**

- CDC is also now formally recommending ("should receive") a second booster dose for:
  - People 50 years of age or older (based on age alone)
  - People 12-49 years of age who are moderately-severely immunocompromised

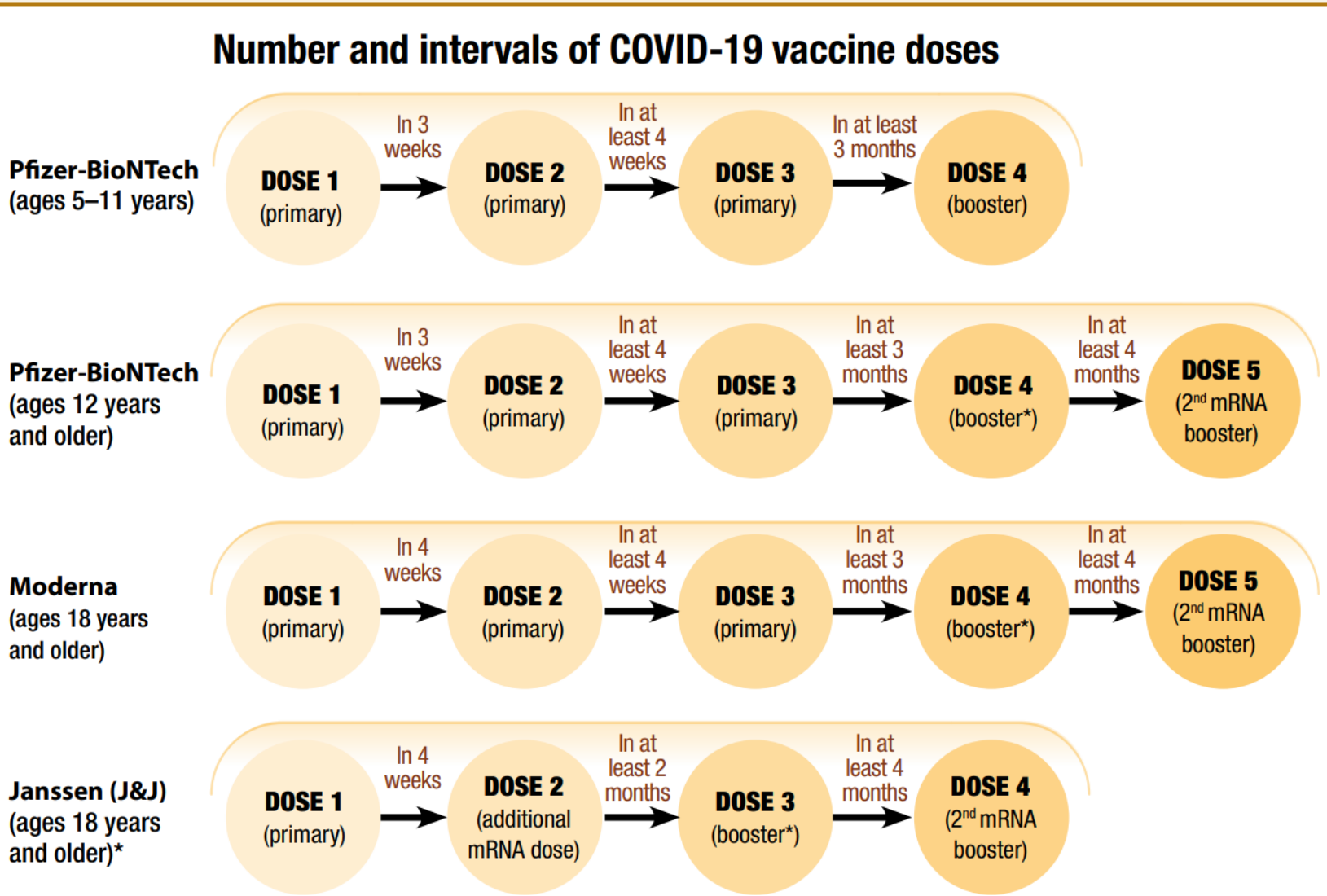
https://www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html

COVID-19 Vaccination Schedule for Most People



https://www.cdc.gov/vaccines/covid-19/downloads/COVID-19-vacc-schedule-at-a-glance-508.pdf

COVID-19 Vaccination Schedule for People Who Are Moderately or Severely Immunocompromised



https://www.cdc.gov/vaccines/covid-19/downloads/COVID-19-vacc-schedule-at-a-glance-508.pdf

FDA VRBPAC Meeting June 14-15

- June 14th:
  - Moderna COVID-19 vaccine primary series for children and adolescents 6 years through 17 years of age
- June 15th:
  - Moderna COVID-19 vaccine primary series for infants and children 6 months through 5 years of age
  - Pfizer-BioNTech COVID-19 vaccine primary series for infants and children 6 months through 4 years of age

https://www.fda.gov/advisory-committees/advisory-committee-calendar/vaccines-and-related-biological-products-advisory-committee-june-14-15-2022-meeting-announcement

ADVISORY COMMITTEE MEETING

Vaccines and Related Biological Products Advisory Committee June 14-15, 2022 Meeting Announcement

JUNE 14 - 15, 2022

Scheduled

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On This Page

Date: June 14 - 15, 2022

Day1: Tue, Jun 14 8:30 AM - 5:00 PM ET

Day2: Wed, Jun 15 8:30 AM - 5:00 PM ET

- **6/14/2022 - Day 1**
  - Youtube: https://youtu.be/GbNpaZeDPiA
- **6/15/2022 - Day 2**
  - Youtube: https://youtu.be/Ixm4UmldTGQ

https://www.fda.gov/advisory-committees/advisory-committee-calendar/vaccines-and-related-biological-products-advisory-committee-june-14-15-2022-meeting-announcement

CDC's ACIP is Meeting June 17-18

ACIP Meeting Information

The ACIP holds three regular meetings each year, in addition to emergency sessions, at the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia. The purpose is to review scientific data and vote on vaccine recommendations. Meetings are open to the public and available online via live webcast.

Hotels Located Near ACIP Meeting

Federal Register

Meeting Registration | Public Comment | **Upcoming Meetings** | Meeting Materials

2022
- June 17-18
- June 22-23
- October 19-20

2023
- February 22-23
- June 21-22
- October 25-26

2024
- February 28-29
- June 26-27
- October 23-24

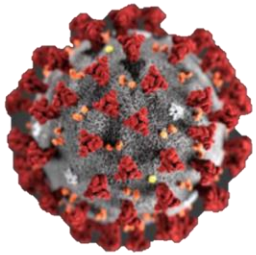
2025
- February 26-27
- June 25-26
- October 22-23

https://www.cdc.gov/vaccines/acip/meetings/index.html

New Hampshire COVID-19 Vaccination Strategy for 6 months through 5 years of age

T.W. Hull

June 9, 2022



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Pfizer and Moderna COVID-19 Presentations for the Under 5 Pop.

Moderna: Awaiting FDA approval for 6m-17y

New Formula: 6m-5y

- 2 dose primary series
- Order in quantities of 100

Pfizer: Already approved for 5y+

New Formula: 6m-4y

- 3 dose primary series
- Order in quantities of 100

Pfizer-BioNTech COVID-19 Vaccine Products

PRELIMINARY – SUBJECT TO CHANGE PENDING REGULATORY GUIDANCE AND AUTHORIZATION/APPROVAL; CDC DOCUMENT – SHARED FOR JURISDICTIONAL PLANNING PURPOSES ONLY

	Current Products		Future Product
Age Indications[a]	12 years and older	5 through 11 years	6 months through 4 years[d]
Vial Cap Color and Label with Color Border	GRAY 	ORANGE 	MAROON 
Preparation	Do Not Dilute	Dilute Before Use	Dilute Before Use
Amount of Diluent Needed per Vial[b]	Do Not Dilute	1.3 mL	2.2 mL
Dose Volume/Dose	0.3 mL/**30 mcg**	0.2 mL/**10 mcg**	0.2 mL/**3 mcg**
Doses per Vial	6 doses per vial	10 doses per vial (after dilution)	10 doses per vial (after dilution)
	Storage Conditions		
ULT Freezer (-90°C to -60°C)[c]	9 months	9 months	9 months
Freezer (-25°C to -15°C)	**DO NOT STORE**	**DO NOT STORE**	**DO NOT STORE**
Refrigerator (2°C to 8°C)	10 weeks	10 weeks	10 weeks
Room Temperature (8°C to 25°C)	12 hours prior to first puncture (including any thaw time)	12 hours prior to first puncture (including any thaw time)	12 hours prior to first puncture (including any thaw time)
After First Puncture (2°C to 25°C)	Discard after 12 hours	Discard after 12 hours	Discard after 12 hours

[a] Use the appropriate product based on the age of the recipient.
[b] Diluent: Sterile 0.9% Sodium Chloride Injection, USP. Do not use bacteriostatic 0.9% Sodium Chloride Injection or any other diluent.
[c] Regardless of storage condition, vaccines should not be used after 9 months from the date of manufacture printed on the vial and cartons.
[d] The vaccine is currently under emergency use authorization review by the Food and Drug Administration (FDA) for children 6 months through 4 years old.

Moderna COVID-19 Vaccine Presentations

DRAFT – SUBJECT TO CHANGE PENDING REGULATORY GUIDANCE AND AUTHORIZATION/ APPROVAL – SHARED FOR PLANNING PURPOSES ONLY

Age Group	Primary Series Dose: **12 years of age and older** Booster Dose: **18 years of age and older**	Booster Dose: **18 years of age and older**	Primary Series Dose: **6 months-5 years of age**
Dose Volume	Primary Series Dose: **Each 0.5 mL** Booster Dose: **0.25 mL**	Booster Dose: **0.5 mL**	Primary Series Dose: **Each 0.25 mL**
Dose Per Vial	Primary Series Doses only: **maximum of 11 doses (range: 10-11 doses)** Booster Doses only: **maximum of 20 doses** Combination of Primary Series Doses and Booster Doses: **maximum of 20 doses**	Booster Doses: **5 doses**	Primary Series Doses only: **maximum of 10 doses**
Vial Cap Color	Red 	Dark Blue 	Dark Blue 
Vial Label	Blue border  NDC 80777-273-10	Purple border  NDC 80777-275-05	Magenta border  NDC 80777-279-05
Carton	Blue border  NDC 80777-273-99	Purple border  NDC 80777-275-99	Magenta border  NDC 80777-279-99

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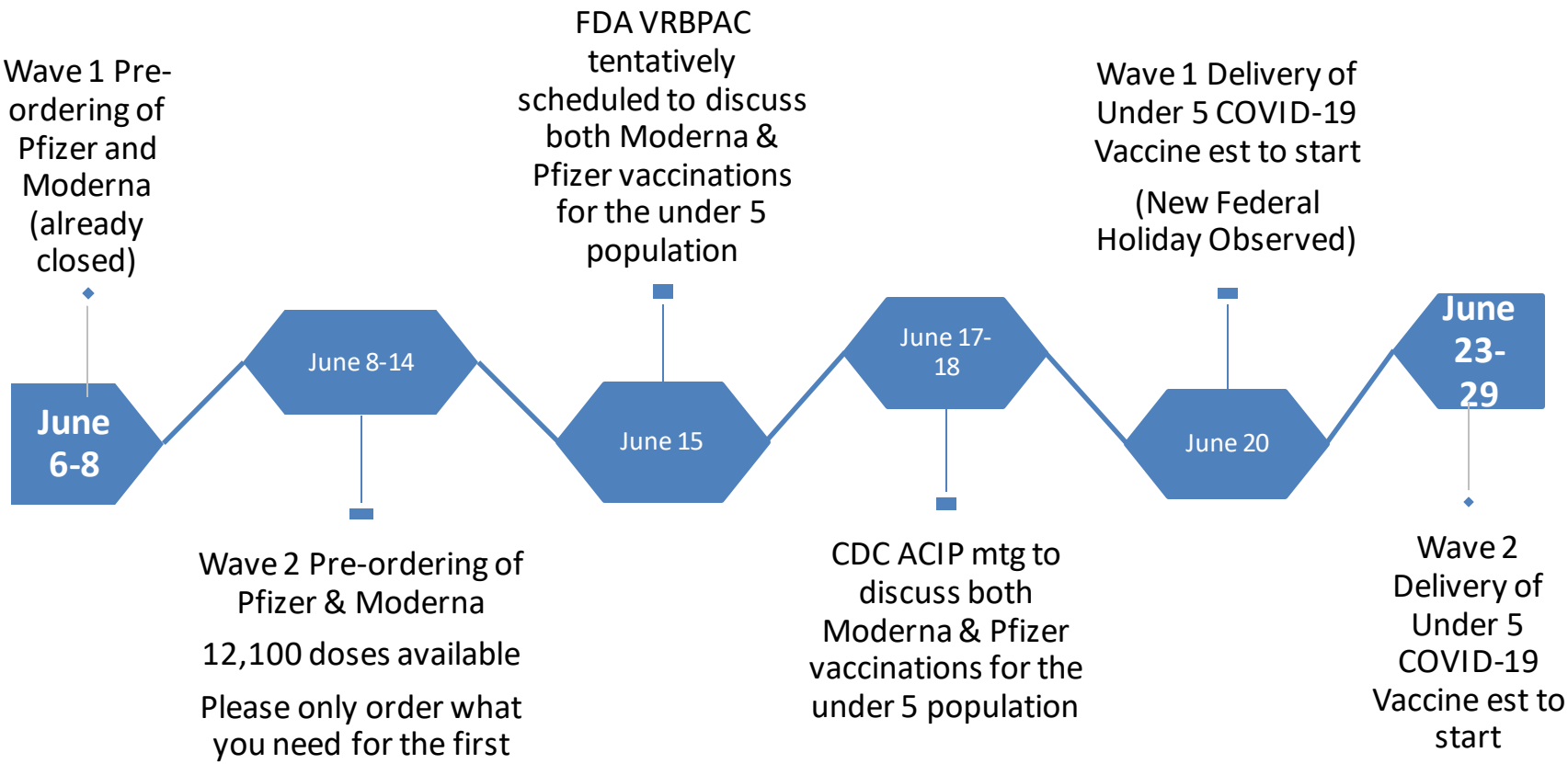
Under 5 COVID-19 Vaccination Timeline



Please direct any ordering/shipping questions to the NHIP Program at: immunization@dhhs.nh.gov or 603-271-4463

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NH COVID-19 Vaccination Plans

- Primary care practice providers and medical homes are needed to take on the primary role of administering COVID-19 vaccine for this younger age group
  - Vaccine recommendations are best received by families when they come from a trusted healthcare provider
- There is a STRONG potential for annual routine COVID-19 vaccine moving forward this fall
  - NHIP strongly encourages ALL primary care providers to enroll as COVID-19 vaccine providers
- If you are not already participating in COVID-19 Vaccination please contact the NH Immunization program to better link you with resources:
  - c19enrollment@dhhs.nh.gov or 603-271-4482

Benefits of Vaccination Through a Child's Medical Home

- Parents and caregivers are able to be individually counselled and have questions and concerns addressed
  - Includes discussion of medical recommendations and vaccine safety
- Ability to co-administer other childhood vaccines and perform routine well-child screenings
- Vaccination can occur in a medically appropriate setting with a healthcare team the child and family are familiar with
- Vaccine is administered by medical professionals experienced in childhood vaccination

Role of the Regional Public Health Networks

- Primary care providers will serve as primary vaccinators for children in this age group
- The Regional Public Health Networks (RPHNs) can provide supportive services to providers

RPHN Responsibility	Pediatrician Office Responsibility
Provide staff to support administrative functions	Provide office space
Provide vaccine product and ancillary supplies	Advertise to patients/schedule if applicable
Provide logistical support	Provide internet access, sharps disposal, etc.
Obtain documented parental consent for administration as well as offering the ability to opt-out of NHIIS	Distribute paperwork to parents in advance
Communicate and educate within community	Provide medical direction
Document in NHIIS/VINI	Document in EHR/EMR & NHIIS if not assigned to RPHN
Observe post-vaccination in non-clinical roles	Provide follow up care

NH COVID-19 Provider Participation in the Under 5 Population

- A big THANK YOU to the providers who have committed to administering COVID-19 vaccine to their under 5 populations
  - Currently 164 Provider locations (Primary, Pediatric and Urgent Care)
  - 49 Federal Pharmacies (Rite Aid, Walgreens, Walmart and CVS MinuteClinics)
  - Despite the number of providers, there are still geographic gaps across the state, please enroll to better meet the needs of your patients

Novavax COVID-19 Vaccine

Protein-Based (Protein Subunit) Vaccines

Acellular subunit vaccines that contain proteins but no genetic material

- Some on nanoparticles
- Some with adjuvants

Made using living organisms (bacteria, yeast) which require substrates on which to grow, and strict hygiene to avoid contamination

- More expensive than mRNA vaccines

Advantages

- Incapable of causing disease, very safe
- Suitable for people with compromised immune systems
- Stable
- Familiar: HBV, acellular pertussis

Novavax NVX-CoV2373 (Covovax or Nuvaxovid)

Protein-based vaccine

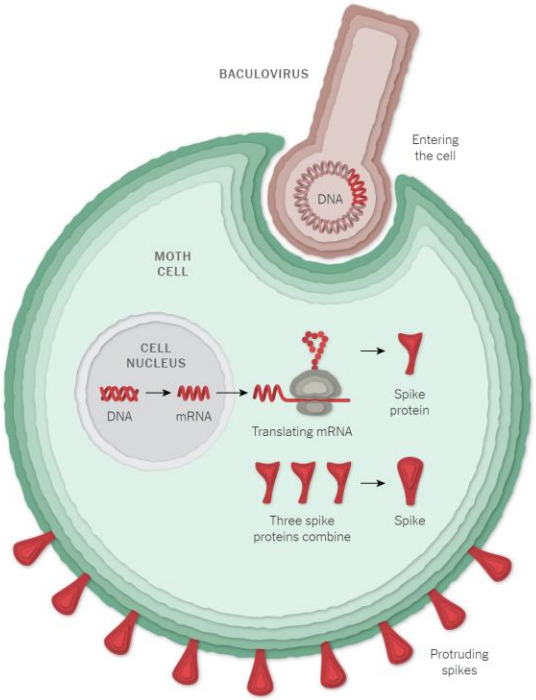
- 2-dose 21 days apart; stable 2-8°C
  - May need boost at 6m
- Phase 3 clinical trials in UK (15k) and US/Mexico (30k) in relevant populations
- Manufacturing problems, varied trial efficacy
  - UK trial VOC dependent
  - US/Mexico trial 90.4%
- Emerging expectation that protein-based technology will help win over those concerned about newer mRNA technology
- Cleared for use in adults in India, RSA, UK, EU and received WHO EUL

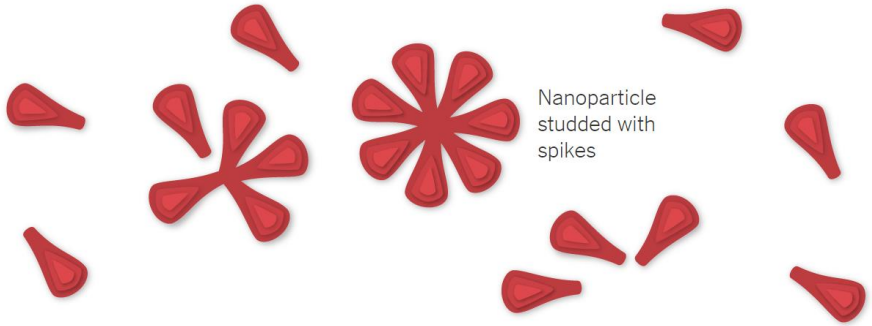
How Do They Work?

- Per CDC: “Protein subunit vaccines (vaccines under development) include harmless pieces (proteins) of the virus that causes COVID-19 instead of the entire germ. Once vaccinated, our bodies recognize that the protein should not be there and build T-lymphocytes and antibodies that will remember how to fight the virus that causes COVID-19 if we are infected in the future.”

Infecting Moth Cells with a Modified DNA Virus

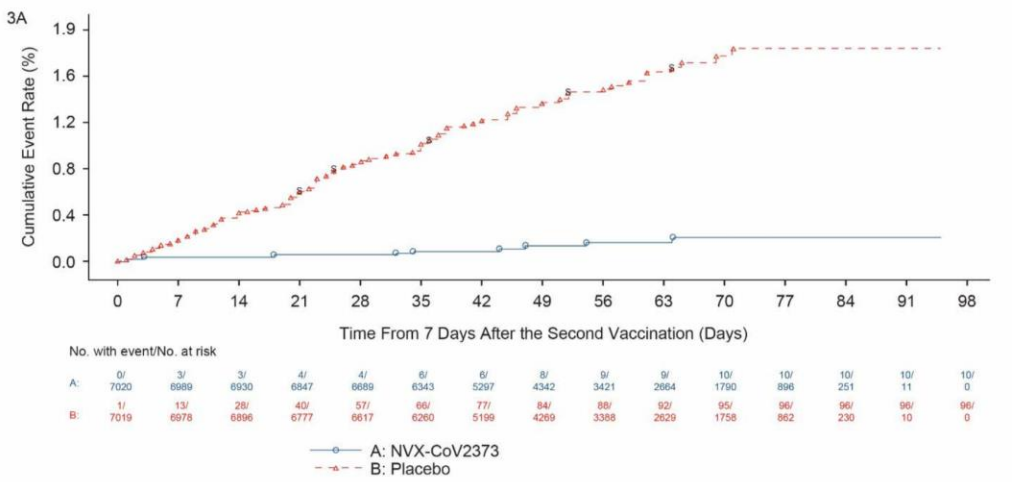
SARS-CoV-2 recombinant nanoparticle spike protein vaccine with Matrix-M adjuvant





Novavax UK Phase 3

- Randomized, double-blind, placebo-controlled study conducted in adults 18-84yo in 33 UK sites
- VE against virologically confirmed symptomatic COVID >7d after 2nd shot 89.7% (95% CI, 80.2-94.6)
  - No hospitalizations or deaths in vaccine group; 5 severe in placebo
  - 96.4% against original strain
  - 86.3% against Alpha
  - 49% against Beta (HIV co-infection?)



June 7 VRBPAC

- 30,000 patients and were conducted before the Delta and Omicron surges. Last June, a phase 3 trial found that the vaccine had 90% overall efficacy and was well tolerated, with few serious and adverse events. The FDA said based on efficacy estimates, the vaccine is likely to afford meaningful protection against Omicron, especially against severe disease
- four cases of myocarditis that occurred within 20 days of receiving the shot
- difference in the rates between the vaccine and placebo groups was very small (0.007 % and 0.005%, respectively) and that in post-crossover portions of the study, cases were within expected parameters

Busy Weeks for Novavax

- 22 Dec announced cross-reactivity against Omicron and other circulating variants from the primary 2-dose regimen
- 7 Jan received expanded US government funding to support late-stage clinical trials for 12 to 17yo, including a booster component
- 31 Jan filed for US FDA EUA among adults
- 3 Feb Ph 3 trial using third dose at six months improves protection


Thanks

Monkeypox Virus

(MPX)

Benjamin P. Chan, MD, MPH
6/9/2022

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Department of Health and Human Services

Background and Epidemiology

Sources of Monkeypox Data

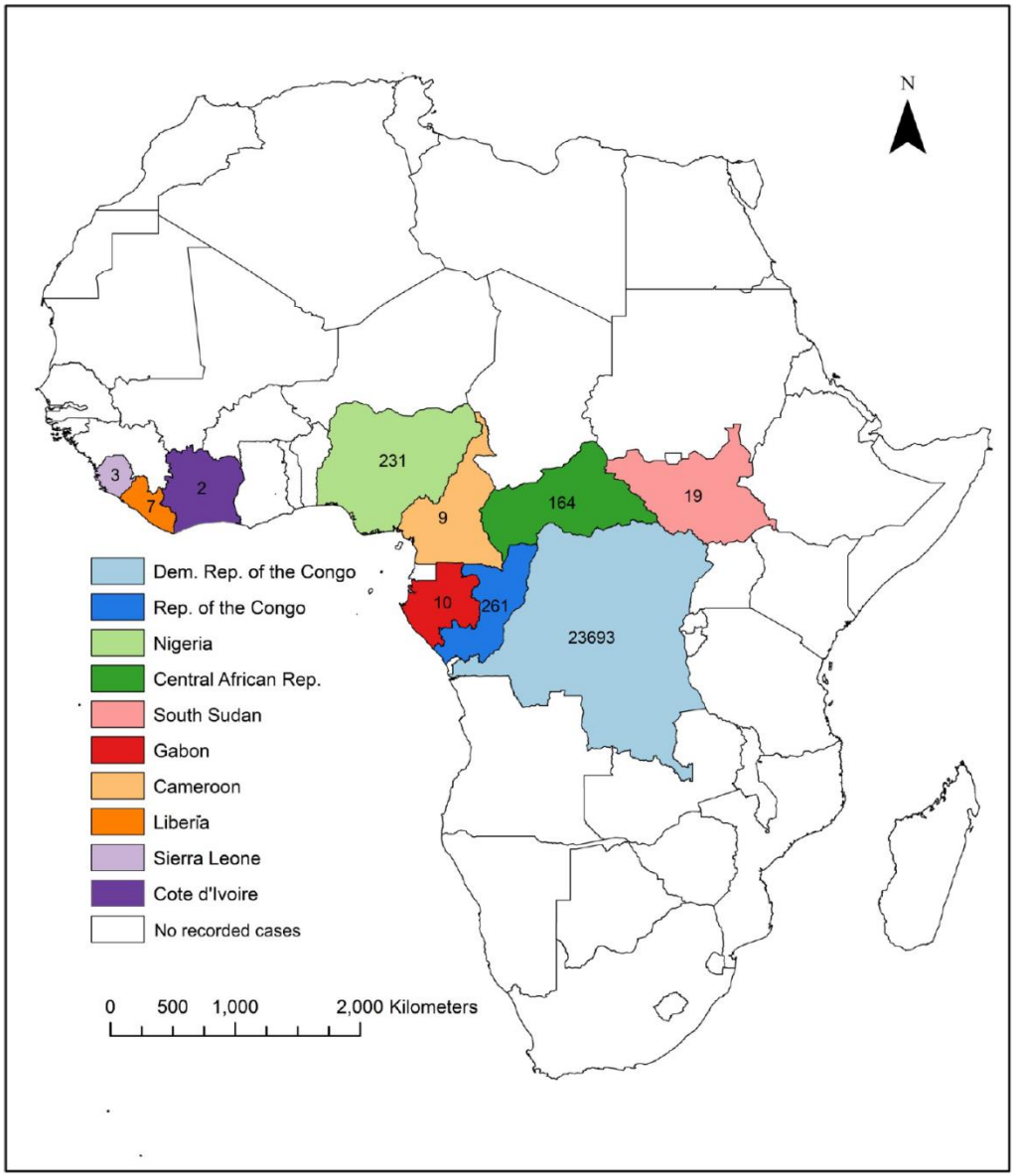
- World Health Organization
- European Centre for Disease Prevention and Control
- UK Health Security Agency (UKHSA)
- U.S. Centers for Disease Control and Prevention
- Our World in Data
- Individual journal articles/publications

Background

- Family: *Poxviridae*
- Genus: *Orthopoxvirus* (which includes the variola virus that causes smallpox)
- First discovered in 1958 after two outbreaks in colonies of research monkeys (hence the name “monkeypox”)
- First human case recorded in 1970 in the Democratic Republic of Congo (DRC)
- Endemic in parts of Africa (e.g., west African nations and DRC)
- Natural reservoir is believed to be rodents

https://www.cdc.gov/poxvirus/monkeypox/about.html

African Monkeypox Cases, 1970-2018



https://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0007791

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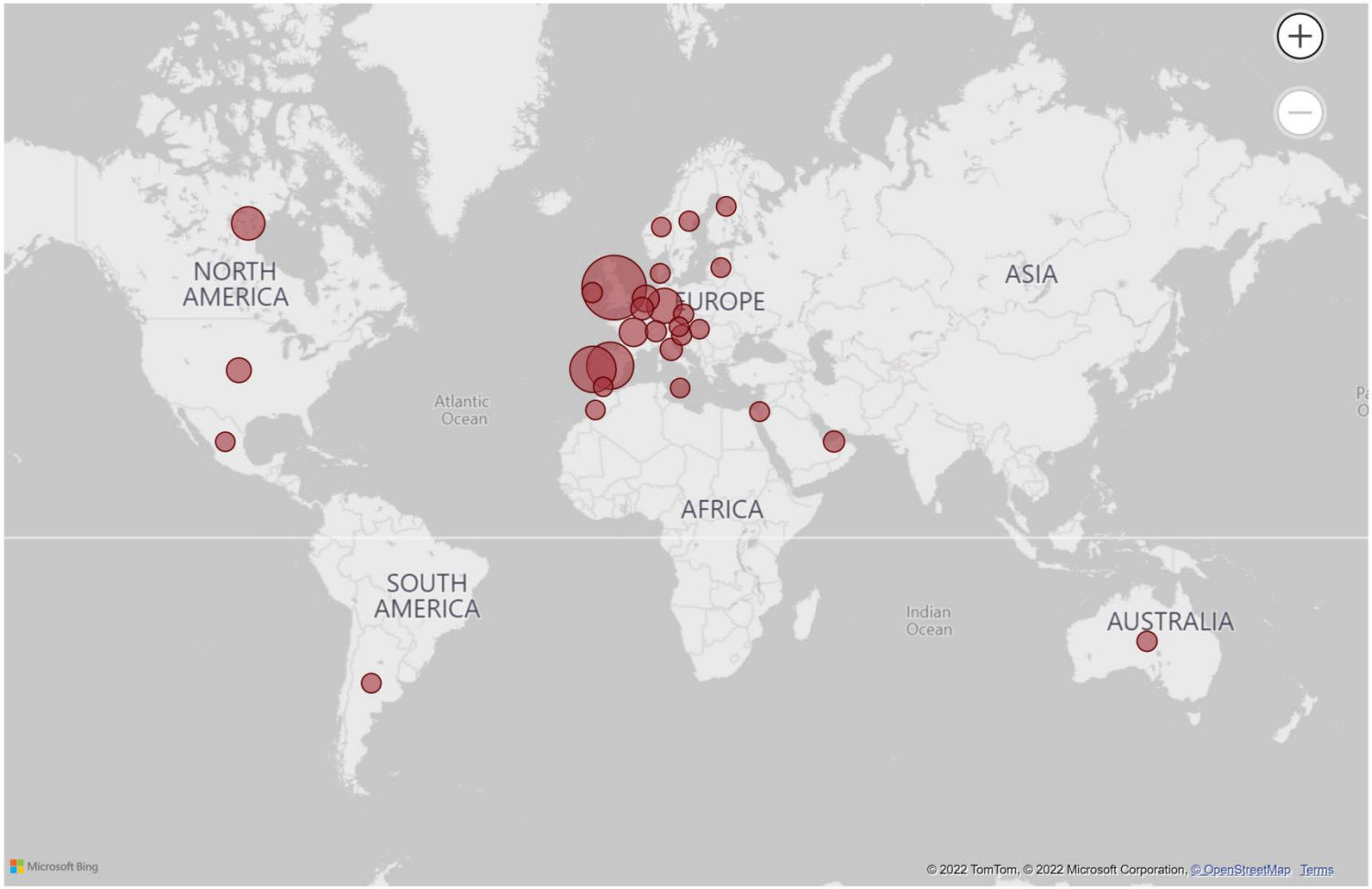
Current Global Monkeypox Outbreak Cases



Data as of 08 Jun 2022 5:00 PM EDT

Total Confirmed Cases	Number of Countries
1200	29

Country	Total Confirmed Cases
United Kingdom	321
Spain	198
Portugal	191
Germany	113
Canada	100
France	66
Netherlands	54
United States	39
Belgium	24
Italy	20
United Arab Emirates	13
Switzerland	12
Ireland	7
Australia	6
Czechia	6
Slovenia	6
Sweden	5
Denmark	3
Israel	3
Argentina	2
Total	**1200**

Notes: Numbers shown are sourced from publicly available official sources, such as the WHO, European CDC, US CDC, and Ministries of Health. Data are provided for situational awareness only and are subject to change. Confirmed cases include those confirmed as monkeypox virus and may include cases only confirmed as orthopoxvirus.

https://www.cdc.gov/poxvirus/monkeypox/response/2022/world-map.html

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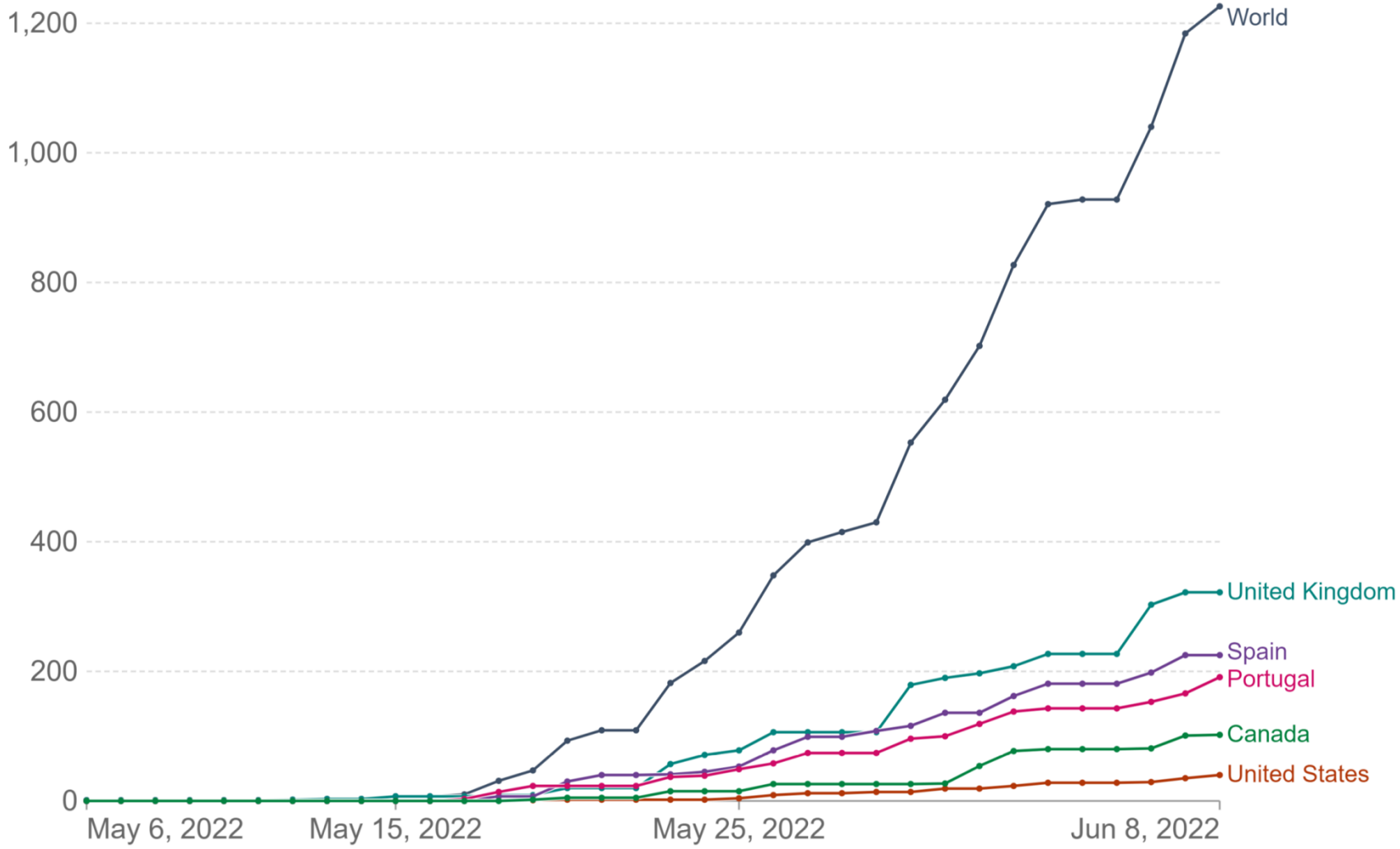
Monkeypox: Cumulative confirmed cases, by date of confirmation

Cases are shown by the date on which they were confirmed by a test.

Our World in Data



Source: Data produced by the 'Global.health' team — available at github.com/globaldothealth/monkeypox

https://ourworldindata.org/monkeypox

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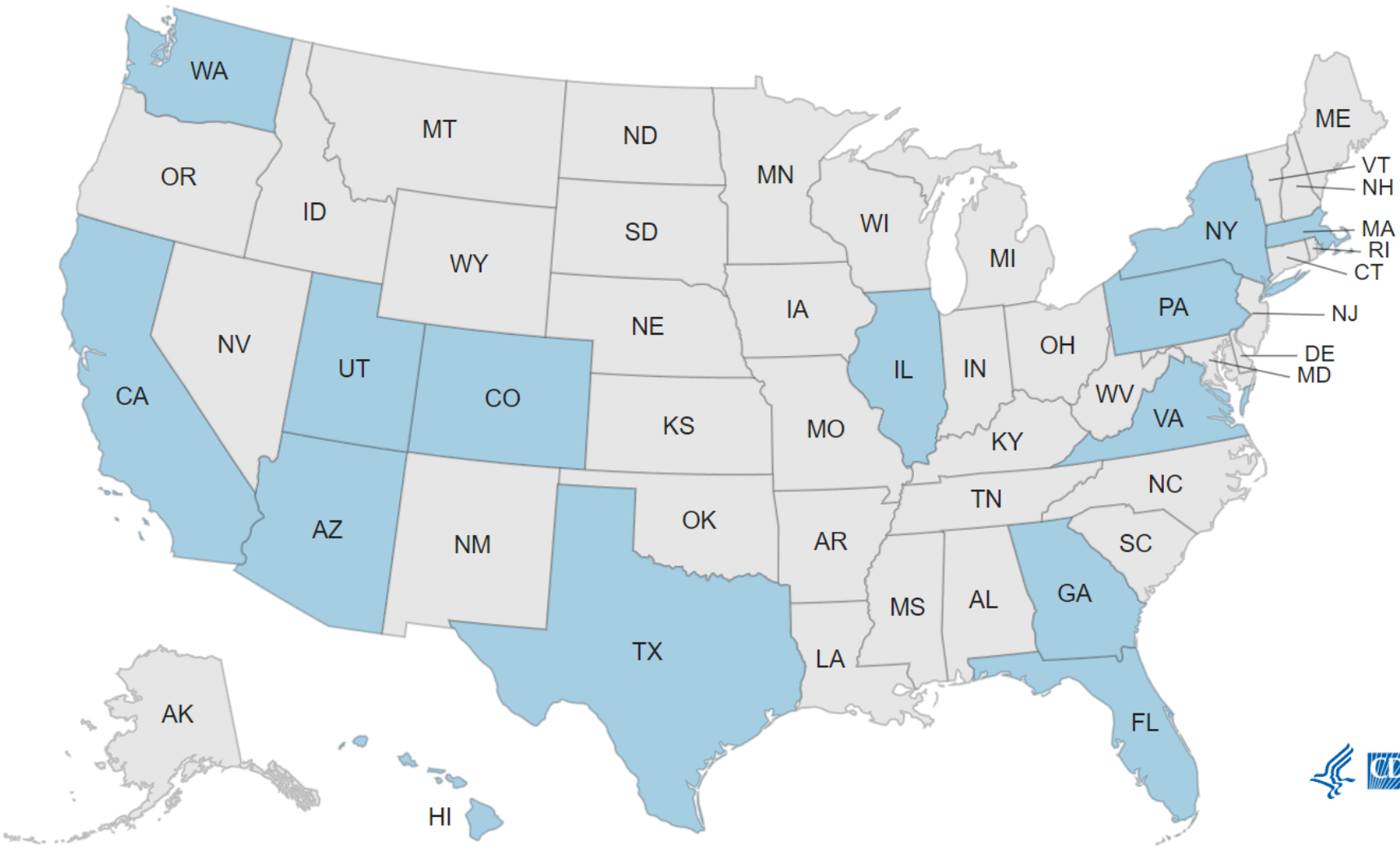
Monkeypox and Orthopoxvirus Cases in the U.S.*



https://www.cdc.gov/poxvirus/monkeypox/response/2022/index.html#anchor_1653687460218

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Community transmission of monkeypox in the United Kingdom, April to May 2022

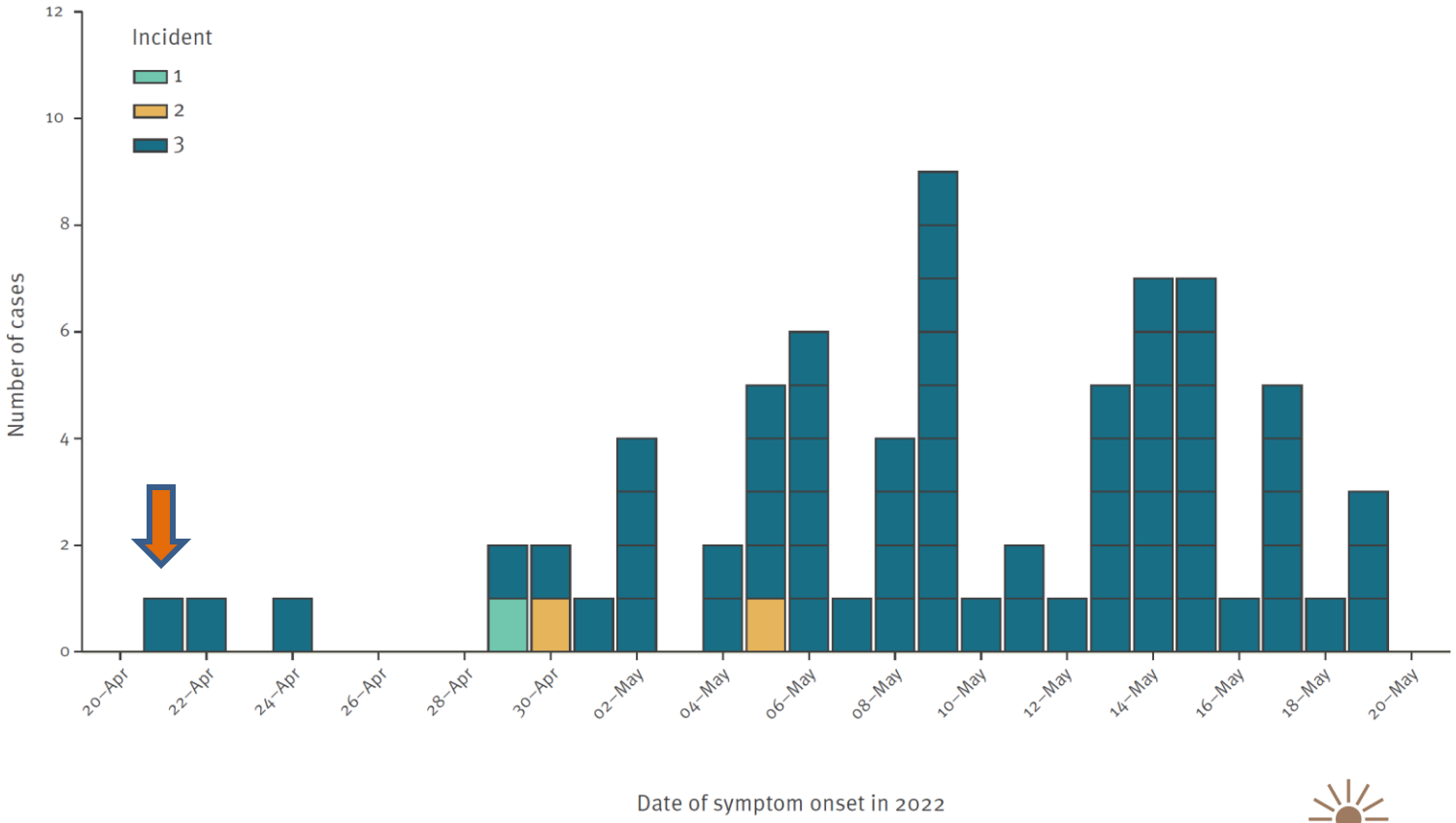
- Incident 1: Single isolated case imported from Nigeria
  - 116 contacts identified (including HCWs), none developed MPX
- Incident 2: Household cluster (2 cases)
  - No travel link and no source of infection identified
  - 98 contacts identified (including HCWs), none developed MPX
- Incident 3: Community transmission (82 cases)
  - All males
  - Median age 38 years (IQR: 32-43 years)
  - 18 reported foreign travel to multiple countries outside Africa
  - 83% identified as gay, bisexual, or men who have sex with men (MSM)
  - Sexual histories: identified links to sex parties and use of dating apps both in the UK and abroad suggesting transmission in sexual networks
  - 356 community (non-hospital) contacts identified (23%household, 22% sexual, 25% friend/shared space, 23% workplace, 7% community healthcare)

https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2022.27.22.2200422

Community transmission of monkeypox in the United Kingdom, April to May 2022

FIGURE

Distribution of laboratory-confirmed monkeypox cases, by symptom onset date and associated incident, United Kingdom, 20 April–25 May (n = 72 with known onset dates)



https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2022.27.22.2200422

Community transmission of monkeypox in the United Kingdom, April to May 2022

TABLE

Description of assessed close contacts of monkeypox cases according to their origin, risk category, and management, United Kingdom, up to 24 May 2022 (n = 588)[a]

Contact type	Low risk Number	Medium risk Number	High risk Number	Total medium and high risk Number	Vaccinated among medium and high risk Number (%)
Communityb	97	70	37	107	15 (14)
Healthcarec	139	197	48	245	169 (69)

NHS: National Health Service.

[a] Close contacts assigned a risk category up to 24 May 2022.

[b] Community contacts include household, travel, workplace, shared space and community healthcare contacts.

[c] Healthcare contacts include healthcare workers in eight NHS hospitals.

https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2022.27.22.2200422

Ongoing monkeypox virus outbreak, Portugal, 29 April to 23 May 2022

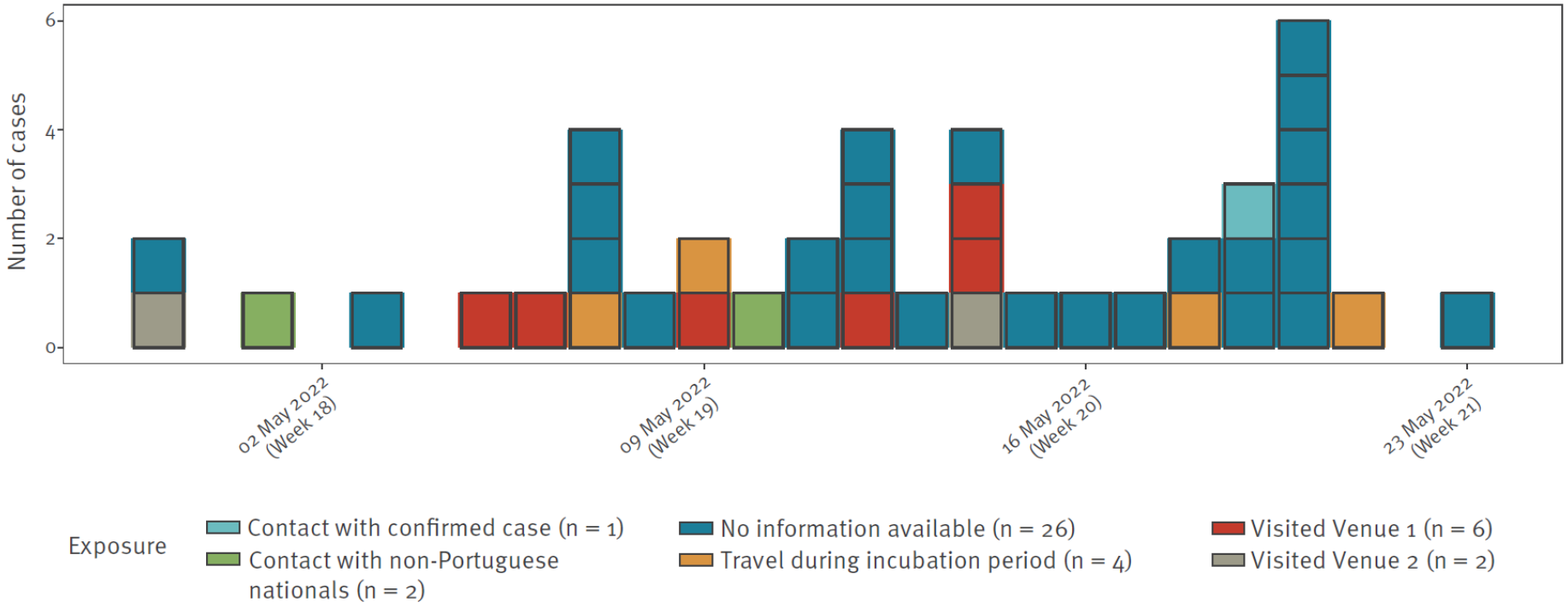
- Study reports preliminary findings from 27 cases in Portugal
  - All male
  - Median age 33 years (range from 22-51 years)
  - "Almost all" identified as MSM (one person reported having sex with only women)
  - Most (14 out of 16 persons with data) reported sex with multiple partners
  - Most common symptoms: rash (n=14), inguinal lymphadenopathy (n=14), fever (n=13), genital ulcers (n=6)
  - No deaths
- Skin lesions started in the perianal and genital areas in some patients
- Exposures: saunas used for sexual encounters and/or travel abroad
- Earliest symptom onset: April 29th

https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2022.27.22.2200424

Ongoing monkeypox virus outbreak, Portugal, 29 April to 23 May 2022

FIGURE

Confirmed monkeypox cases by date of symptom onset and exposure, Portugal, 29 April–23 May 2022 (n = 41[a])



https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2022.27.22.2200424

Centers for Disease Control and Prevention
MMWR
Morbidity and Mortality Weekly Report
Early Release / Vol. 71
June 3, 2022

Monkeypox Outbreak — Nine States, May 2022

- First 17 cases of Monkeypox identified in the U.S. (from 9 states)
  - Average age: 40 years (range 28-61 years)
  - Most (16, or 94%) identified as gay, bisexual, or MSM
  - 14 (82%) reported international travel involving 11 different countries
- Contact investigation on 13 patients (see CDC's risk classification):
  - 56 High risk
  - 117 Intermediate risk
  - 235 Low/Uncertain risk
- 8 persons (47%) had an atypical presentation
  - lesions began in the genital or perianal regions
  - No fever or prodromal symptoms before rash onset

https://www.cdc.gov/mmwr/volumes/71/wr/mm7123e1.htm?s_cid=mm7123e1_w

TABLE 2. Clinical characteristics of patients with confirmed orthopoxvirus and monkeypox (N = 17) — United States, May 2022*

Characteristic	No. (%)		
	At illness onset	Prodromal period†	At any point in illness
Signs and symptoms§ during illness			
Rash	5 (29)	NA	17 (100)
Fatigue or malaise	3 (18)	13 (76)	13 (76)
Chills	0 (—)	4 (24)	12 (71)
Lymphadenopathy	0 (—)	1 (6)	9 (53)
Inguinal	0 (—)	0 (—)	6 (35)
Cervical¶	0 (—)	1 (6)	3 (18)
Headache	2 (12)	5 (29)	8 (47)
Fever	6 (35)	5 (29)	7 (41)
Body ache	1 (6)	2 (12)	6 (35)
Sore throat or cough	2 (12)	3 (18)	5 (29)
Sweat	1 (6)	2 (12)	4 (24)
Other	3 (18)	4 (24)	13 (76)
Rash locations§			
Arm	4 (24)	NA	9 (53)
Trunk	1 (6)	NA	9 (53)
Leg	0 (—)	NA	8 (47)
Face	2 (12)	NA	7 (41)
Hand	1 (6)	NA	6 (35)
Perianal	5 (29)	NA	6 (35)
Oral	0 (—)	NA	5 (29)
Neck	1 (6)	NA	5 (29)
Genital (penis or vagina)	4 (24)	NA	4 (24)
Feet	1 (6)	NA	4 (24)

https://www.cdc.gov/mmwr/volumes/71/wr/mm7123e1.htm?s_cid=mm7123e1_w

Summary

- Case counts are increasing in the U.S. and globally with evidence of community transmission occurring largely through sexual networks
- The current MPX outbreaks are predominantly affecting younger males (ages 20-40 years) who identify as gay, bisexual, or MSM
- Signs/symptoms can be atypical:
  - Rash or skin lesions beginning in the genital or perianal regions
  - Skin lesions without a fever or other prodromal symptoms first
- Presenting with mild disease (no reported deaths so far)
- Despite multiple healthcare contacts, this infection is NOT easily transmitted without close prolonged face-to-face or physical contact

Clinical Characteristics

Symptoms

- Incubation period on average is 7-14 days (range: 5-21 days)
  - A person is NOT contagious during their incubation period
- Initial symptoms (prodromal period): fever/chills, malaise, headache, sore throat, cough, and localized or generalized lymphadenopathy
  - A person MAY be contagious during the this period
- Rash appears ~1-3 days after initial symptoms and progresses through 4 stages (macular > papular > vesicular > pustular) before scabbing and crusting over
  - A person IS contagious from the onset of the rash through the scab stage
  - Typical rash progresses from mouth > face > arms/legs > hands/feet (including palms/soles); however, this is NOT the situation with many cases currently
- Once all skin lesions have scab over and scabs have fallen off, a person is no longer considered infectious
- Illness resolves within 2-4 weeks

https://www.cdc.gov/poxvirus/monkeypox/clinicians/clinical-recognition.html

Key Characteristics for Identifying Monkeypox




- Lesions are well circumscribed, deep seated, and often develop umbilication (resembles a dot on the top of the lesion)
- Lesions are relatively the same size and same stage of development on a single site of the body (ex: pustules on face or vesicles on legs)
- Fever before rash
- Lymphadenopathy common
- Disseminated rash is centrifugal (more lesions on extremities, face)
- Lesions on palms, soles
- Lesions are often described as painful until the healing phase when they become itchy (crusts)

https://www.cdc.gov/poxvirus/monkeypox/clinicians/clinical-recognition.html

Monkeypox Skin Lesions











https://www.cdc.gov/poxvirus/monkeypox/response/2022/index.html
https://emergency.cdc.gov/coca/ppt/2022/052422_slides.pdf
https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2022.27.22.2200421
https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2022.27.22.2200411

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Human-to-Human Transmission

- Exposure occurs through broken skin, the respiratory tract, or mucous membranes, which requires:
  - Close prolonged face-to-face contact through spread of large respiratory droplets
  - Direct physical contact with infectious body fluids or lesion material
  - Indirect physical contact with infectious lesion material/fluids (e.g., clothing or linens)
- Monkeypox is not considered a sexually transmitted infection
  - Spread occurs between sexual partners through physical contact
  - It remains possible that there could be a “genital reservoir” (e.g., testes) for monkeypox, but this needs further study

https://www.cdc.gov/poxvirus/monkeypox/transmission.html

THE LANCET
Infectious Diseases

Clinical features and management of human monkeypox: a retrospective observational study in the UK

- Case-series of 7 patients diagnosed with monkeypox in the UK from 2018-2021
- Patient #4:
  - Had sexual intercourse appropriately 6 weeks post-hospital discharge resulting in increasing lymphadenopathy and new localized pustular and ulcerating skin lesions
  - PCR of skin lesions AND upper respiratory tract swabs were newly positive
- *"The temporal association between sexual intercourse, increased inguinal lymphadenopathy, and recurrence of rash could suggest a genital reservoir of monkeypox virus, as has been reported with many other emerging viruses."*

https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(22)00228-6/fulltext

Epidemiological, clinical and virological characteristics of four cases of monkeypox support transmission through sexual contact, Italy, May 2022

TABLE 2

Timeline of PCR results, monkeypox cases, Italy, May 2022 (n = 4)

	Patient 1		Patient 2			Patient 3				Patient 4
Day after symptom onset	Day 5	Day 9	Day 3	Day 5	Day 9	Day 5	Day 6	Day 8	Day 11	Day 4
Serum	Pos (29.7)	NA	AO	AO	NA	AO	AO	NA	NA	AO
Plasma	Pos (30.2)	NA	AO	AO	NA	NA	AO	NA	NA	AO
Genital or rectal lesions	Pos (15.6)	NA	Pos (17.5)	AO	NA	Pos (15.3)	NA	NA	NA	Pos (14.7)
Nasopharyngeal swab	Pos (27.6)	AO	Pos (30.2)	NA	NA	NA	AO	NA	NA	Pos (30.4)
Skin lesions	NA	NA	Pos (30.4)	AO	NA	Pos (18.2)	Pos (19.4)	NA	NA	Pos (17.6)
Seminal fluid	NA	Pos (30.1)	NA	Pos (29.4)	Pos (43.2)	NA	Pos (29.3)	Pos (27.7)	Neg	NA
Scab	Pos (13.1)	NA	NA	NA	NA	Pos (20.0)	NA	NA	NA	NA
Faeces	NA	NA	Pos (22.6)	NA	NA	NA	Pos (26.1)	NA	NA	NA
Saliva	NA	NA	Pos (27.1)	NA	NA	NA	AO	NA	NA	NA

https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2022.27.22.2200421

Persons Recommended for Testing

- Any person with new skin lesions consistent with monkeypox if the skin lesions occurred:
  - Within a few weeks after traveling to another country where monkeypox is being reported
  - After close/physical contact to a person with a similar rash or skin lesions, or who is suspected or confirmed to have monkeypox
  - After intimate physical or sexual contact with a partner, especially in men who have sex with men (MSM), or after any intimate/sexual contact that occurred during travel

- NH DPHS will also consider testing persons who do NOT have risk factors, but DO have characteristic monkeypox skin lesions

- See initial monkeypox HAN (5/20) for testing instructions

Request of Providers

- When evaluating patients for monkeypox infection:
  - Place patient in a private room with a private bathroom (airborne isolation is not required unless conducting an aerosol generating procedure)
  - Wear recommended PPE (see CDC's infection prevention guidance)
  - Take a detailed sexual history
  - Ask about travel
  - Ask about any close or physical contact to a person who may have had similar skin lesions
  - Take a detailed history of the skin rash/lesions and any other symptoms
- If evaluating a patient for perianal/genital lesions, also screen for other STIs given high risk of concurrent infection (see The Lancet Preprint)
- Report suspected cases of monkeypox to NH DPHS at 603-271-4496 (nights and weekends call 603-271-5300 and ask for the on-call public health nurse)

Report Information about Skin Lesions

- Onset date
- Progression over time
- Body parts/regions affected
- Number and size of skin lesions
- Describe skin lesions in commonly used medical terminology (e.g., macules, papules, vesicles, pustules)
- Describe other associated symptoms or skin lesion characteristics (e.g., painful, itchy)
- Consider taking an anonymous picture of skin lesions
- Use available monkeypox resources and pictures to evaluate for similarity

Public Health Response to Monkeypox

- Case Investigation
- Initiate appropriate specimen collection & submission for testing
  - *Orthopoxvirus* PCR performed at the NH PHL (turn-around-time: within 12-24 hours of specimen receipt)
  - Confirmatory monkeypox virus testing at CDC (turn-around-time: same day specimen is received at CDC)
- Contact tracing once *Orthopoxvirus* infection is confirmed
- Public health "monitoring" of contacts (no quarantine)
- Medical countermeasures (MCMs)
  - Vaccination to prevent monkeypox (PEP) using Jynneos vaccine
  - Investigational therapeutics to treat monkeypox

Jynneos 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)

https://www.cdc.gov/vaccines/hcp/admin/resource-library.html

Jynneos Vaccine Information Statement (VIS)

Multi-, Routine-, & Non-Routine-Vaccine VISs

Multi

- Multiple Vaccines (DTaP, Hib, Hepatitis B, Polio, and PCV13) (10/15/21)
  This VIS may be used in place of the individual VISs for DTaP, Hib, Hepatitis B, Polio, and PCV13 when two or more of these vaccines are administered during the same visit. It may be used for infants through children receiving their routine 4-6 year vaccines.

Routine

- Dengue (12/17/21)
- DTaP (Diphtheria, Tetanus, Pertussis) (8/6/21)
- Hepatitis A (10/15/21)
- Hepatitis B (10/15/21)
- Hib (*Haemophilus Influenzae* type b) (8/6/21)
- HPV (Human Papillomavirus) (8/6/21)
- Influenza - Live, Intranasal (8/6/21)
- Influenza - Inactivated (8/6/21)
- Measles/Mumps/Rubella (MMR) (8/6/21)
- Measles/Mumps/Rubella & Varicella (MMRV) (8/6/21)
- Meningococcal ACWY (8/6/21)
- Meningococcal B (8/6/21)
- Pneumococcal Conjugate (PCV) (2/4/22) interim
- Pneumococcal Polysaccharide (PPSV23) (10/30/19)
- Polio (8/6/21)
- Rotavirus (10/15/21)
- Tdap (Tetanus, Diphtheria, Pertussis) (8/6/21)
- Td (Tetanus, Diphtheria) (8/6/21)
- Varicella (Chickenpox) (8/6/21)
- Zoster / Shingles (Recombinant) (2/4/22)

Non-routine

- Adenovirus (1/8/20)
  Note: Adenovirus vaccine is approved for use only among military personnel.
- Anthrax (1/8/20)
- Cholera (10/30/19)
- Japanese Encephalitis (8/15/19)
- Rabies (1/8/20)
- Smallpox/Monkeypox (JYNNEOS™) (6/1/22)
- Smallpox (ACAM2000®) (12/1/15)
  Medical Guide for vaccination with ACAM2000 [6 pages] This medication guide replaces the Smallpox VIS. It is to be used before one receives the vaccination. This guide is not available in other languages.
- Typhoid (10/30/19)
- Yellow Fever (4/1/20)

https://www.cdc.gov/vaccines/hcp/vis/current-vis.html

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Q&A