Learning Collaborative: Current Best Practices for Health Centers in STI-related Care

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NATIONAL LGBTQIA+ HEALTH EDUCATION CENTER
A PROGRAM OF THE FENWAY INSTITUTE

June 4, 2025

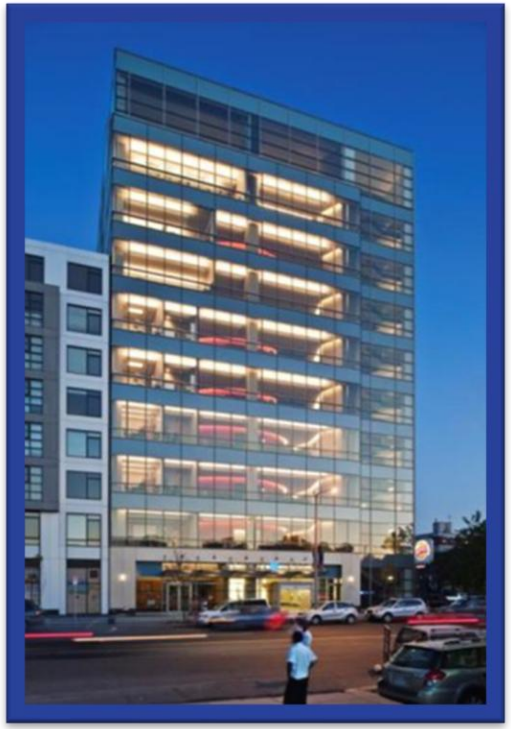
Our Roots

Fenway Health

- Independent 501(c)(3) FQHC
- Founded 1971
- Mission: To enhance the wellbeing of the LGBTQIA+ community as well as people in our neighborhoods and beyond through access to the highest quality health care, education, research, and advocacy
- Integrated primary care model, including HIV and transgender health services

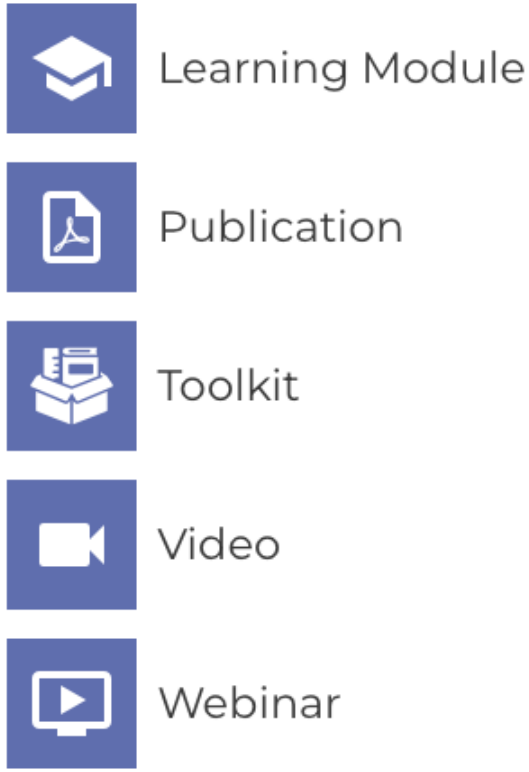
The Fenway Institute

- Research, Education, Policy



The National LGBTQIA+ Health Education Center

- Training and Technical Assistance
- Grand Rounds
- Online Learning
  - CE and HEI Credit
- Environmental Influences On Child Health Outcomes (ECHO) Programs
- Publications and Resources



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www.lgbtqiahealtheducation.org

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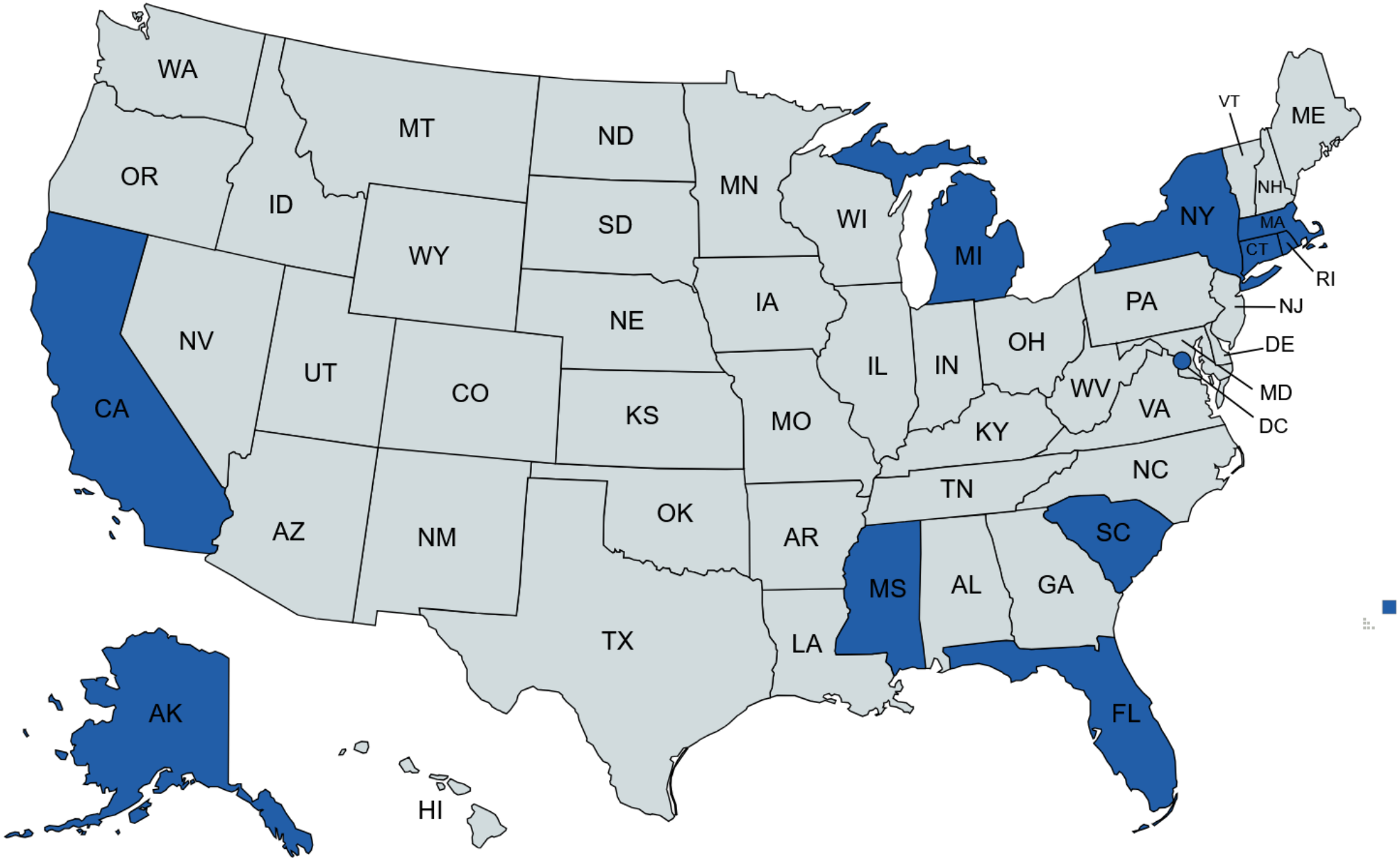
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Sexually Transmitted Infection Learning Collaborative

June 4, 2025

Learning objectives: Non-HIV viral STIs

1. Understand current best options for testing and treatment for non-HIV viral STIs such as human papillomavirus, mpox, and hepatitis A/B/C.
2. Describe how to interpret and implement vaccine schedules for non-viral STIs.

Agenda for today’s session

1. Welcome and introductions
2. Overview of testing, treatment, and vaccination for HPV, mpox, and hepatitis A/B/C
3. Case studies and discussion

Welcome and introductions

Dr. Taimur Khan

Dr. Kevin Ard

Human papillomavirus (HPV)

Recommendations for anal cancer screening

TABLE 1 Populations for screening.

Population—Risk category	When	Anal cancer incidence[2,5] per 100,000 person-years
Risk Category A (incidence ≥ 10-fold compared to the general population)		
MSM with HIV	Age 35	>70/100,000 age 30–44 >100/100,000 age 45+
Women with HIV	Age 45	>25/100,00 age 45+
MSW with HIV	Age 45	>40/100,000 age 45+
MSM not with HIV	Age 45	>18/100,000 age 45–59 >34/100,000 age 60+
History of vulvar HSIL or cancer	Within 1 year of diagnosis	>40/100,000
Solid organ transplant recipient	10 years post-transplant	>25/100,000
Risk Category B (incidence up to 10-fold higher compared to the general population)		
Cervical/vaginal cancer	Shared decision age 45[a]	9/100,000
Cervical/vaginal HSIL	Shared decision age 45[a]	8/100,000
Perianal warts (male or female)	Shared decision age 45[a]	Unknown
Persistent cervical HPV 16 (>1 year)	Shared decision age 45[a]	Unknown
Other immunosuppression (e.g., Rheumatoid arthritis, Lupus, Crohn's, Ulcerative colitis, on systemic steroid therapy)	Shared decision age 45[a]	6/100,000
Incidence among the general population: 1.7 per 100,000[8]		

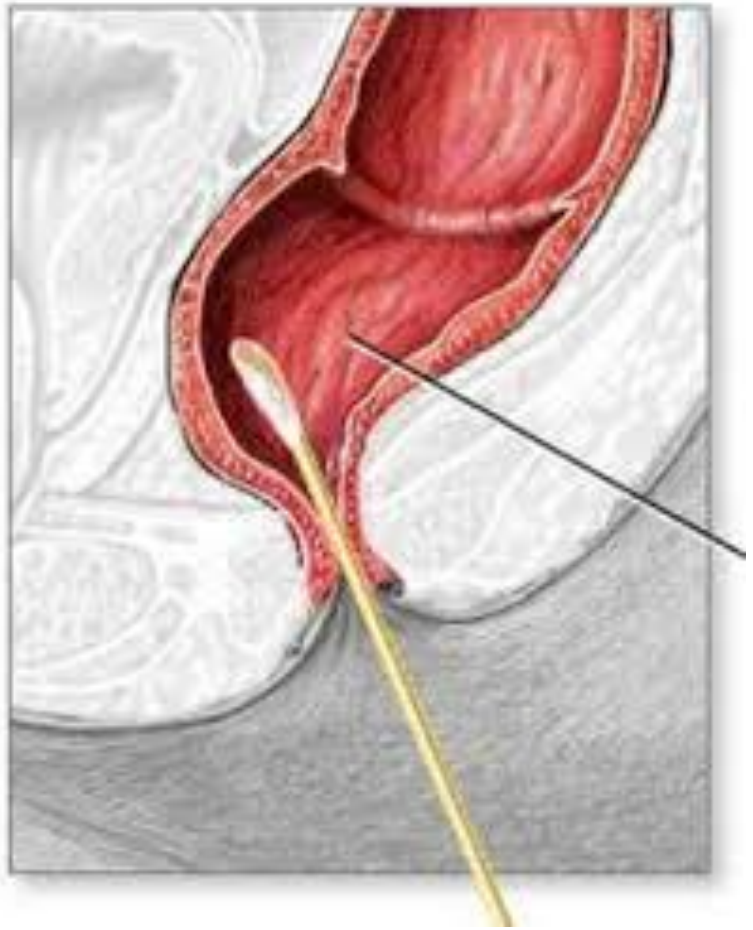
Abbreviations: HSIL, high grade squamous intraepithelial lesion; MSM, Men who have sex with men; MSW, Men who have sex with women;

[a]Shared decision-making is defined as the process in which a health care provider and patient work together to make a health care decision. The optimal decision considers evidence-based information regarding available options, the provider's knowledge and experience, and the patient's values and preferences.

Stier EA, Int J Cancer, 2024

How to perform anal cancer screening

1. Moisten a polyester swab.
2. Insert the swab into the anus.
3. Retract the swab in a spiral motion, without outward pressure on the anus.
4. Agitate the swab in cytology medium.



www.bmc.org/sites/default/files/Anal-Cancer-Brochure_AMC.pdf

Management of abnormal anal cancer screening results

Cytology/hrHPV co-testing [HPV16 genotyping]	None	NILM/hrHPV negative	Repeat screening 12–24 months	Repeat 24 months
		ASC-US/hrHPV negative	Repeat screening 12 months	ASCUS/hrHPV negative—repeat 24 months
		NILM/hrHPV positive [NILM/hrHPV positive (non16)]	Provider discretion—either HRA referral or repeat screening in 12 months	Repeat 12 months
		LSIL/hrHPV negative	Provider discretion—either HRA referral or repeat screening in 12 months	Repeat 12–24 months
		ASC-US or LSIL/hrHPV positive HSIL, ASC-H (regardless of HPV) [HPV16 positive, regardless of cytology]	HRA referral	ASC-US/LSIL/hrHPV positive (non16)—repeat 12 months HSIL, ASC-H (regardless of hrHPV)—HRA referral hrHPV16 positive (regardless of cytology)—HRA referral

Stier EA, Int J Cancer, 2024

Overview of treatments for anogenital warts

Patient-applied

- Imiquimod 3.75% or 5% cream
- Podofilox 0.5% solution or gel
- Sinecatechins 15% ointment

Clinician-applied

- Cryotherapy
- Surgical removal
- Trichloroacetic acid 80-90% solution

Workowski KA, MMWR Recomm Rep, 2021

HPV vaccine recommendations

- For all people through age 26, complete a 2- or 3-dose series depending upon the age at initial vaccination or the presence of immunocompromise.
- For adults ages 27-45 years, complete a 2- or 3-doses series (depending upon the age the vaccine series was initiated) based on shared decision-making.

www.cdc.gov/vaccines/hcp/imz-schedules/adult-notes.html#note-hpv

Shared Clinical Decision-Making

HPV Vaccination for Adults Aged 27-45 Years

Shared clinical decision-making (SCDM) is recommended regarding Human papillomavirus (HPV) vaccination for persons 27-45 year of age. Shared clinical decision-making recommendations are intended to be flexible and should be informed by the characteristics, values, and preferences of the individual patient and the clinical discretion of the healthcare provider.

HPV vaccination does not need to be discussed with most adults in this age group.
If you do decide to discuss HPV vaccination with an adult patient:

Remember:

- Most HPV infections clear on their own within a year or two, but persistent infections can lead to development of precancers or cancers, usually after several decades.
- HPV vaccination is not routinely recommended for adults 27-45 years of age.
- HPV vaccine effectiveness is highest in people who have never had sex.
- HPV vaccination prevents new HPV infection, it does not treat existing HPV infection or disease.
- Most adults who have had sex have been exposed to HPV before.
- HPV vaccine effectiveness might be low among people with more risk factors for HPV, such as having had sex with more than one person or having certain immunocompromising conditions.

Consider:

- At any age, having a new sex partner is a risk factor for getting a new HPV infection. However, this is only one possible consideration for SCDM.
- Adults with more HPV risk factors (for example, multiple previous sex partners or certain immunocompromising conditions) might have been infected with HPV in the past, so might have a lower chance of getting a new HPV infection in the future.
- Adults with fewer HPV risk factors (for example, few or no previous sex partners) might not have been infected with HPV in the past, so might have a higher chance of getting a new HPV infection from a new sex partner in the future.

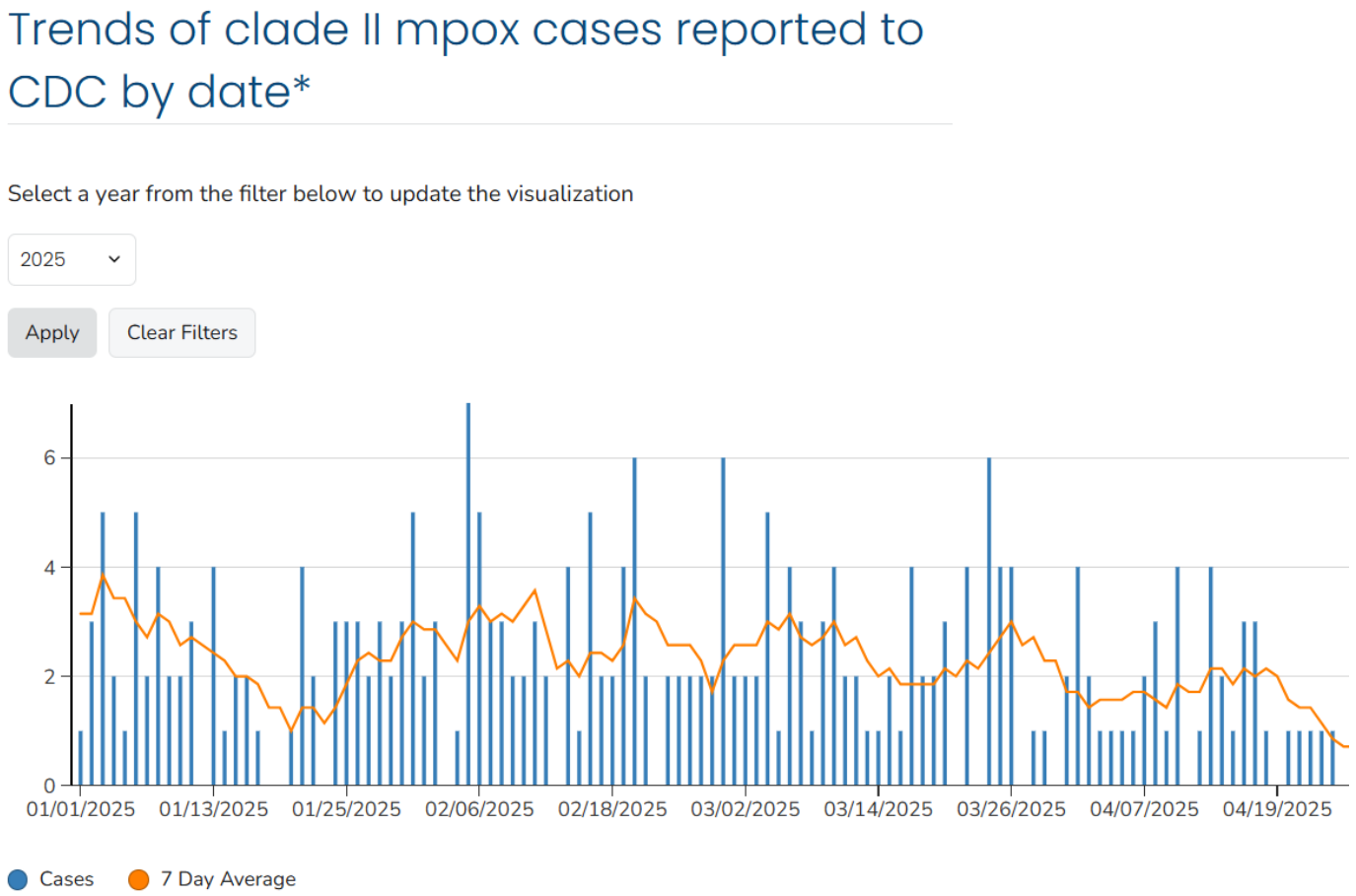
If you vaccinate:

- If you and your previously unvaccinated adult patient decide to initiate HPV vaccination, offer a 3-dose series of HPV vaccine at 0, 2, and 6 months.
- If your patient is pregnant, delay HPV vaccination until after pregnancy.
- HPV vaccination is safe, unless a patient had a severe allergic reaction after a previous dose or to a vaccine component.

www.cdc.gov/vaccines/hcp/admin/downloads/isd-job-aid-scdm-hpv-shared-clinical-decision-making-hpv.pdf

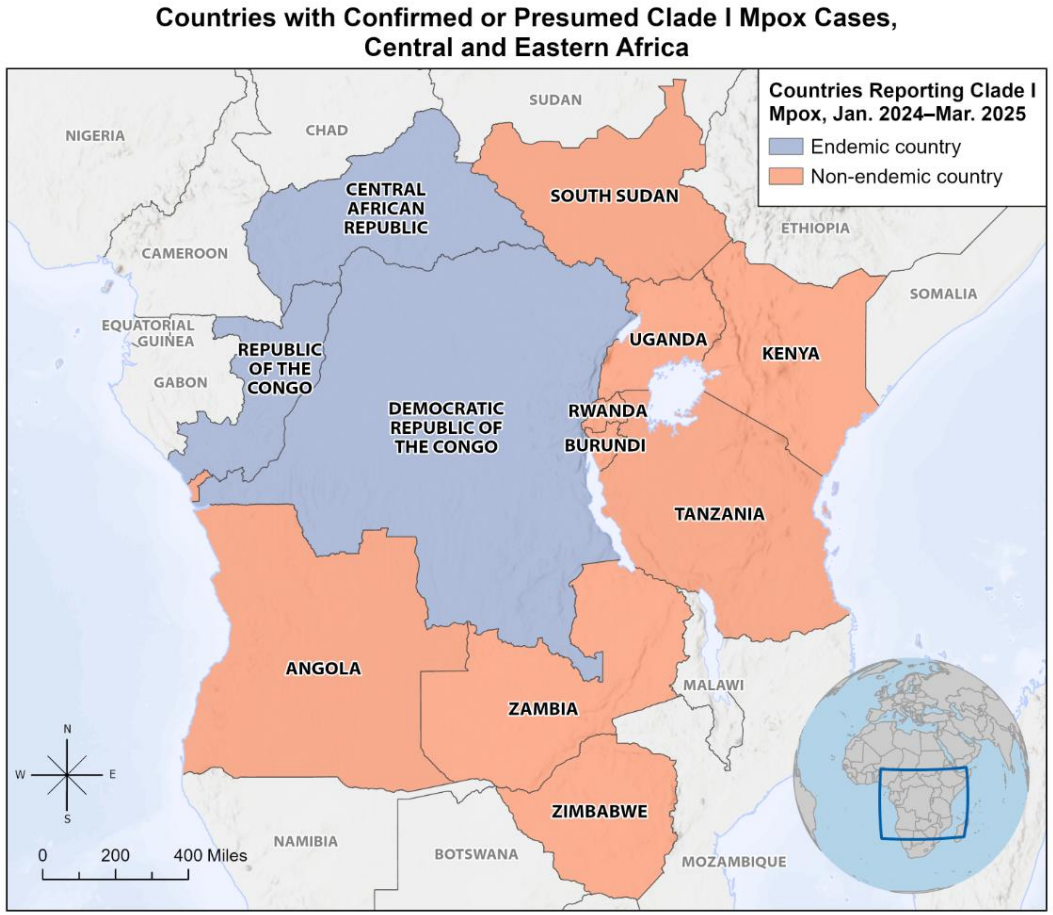
Mpox

The global mpox outbreak is not over.



www.cdc.gov/mpox/data-research/cases/index.html

Multinational clade I outbreak



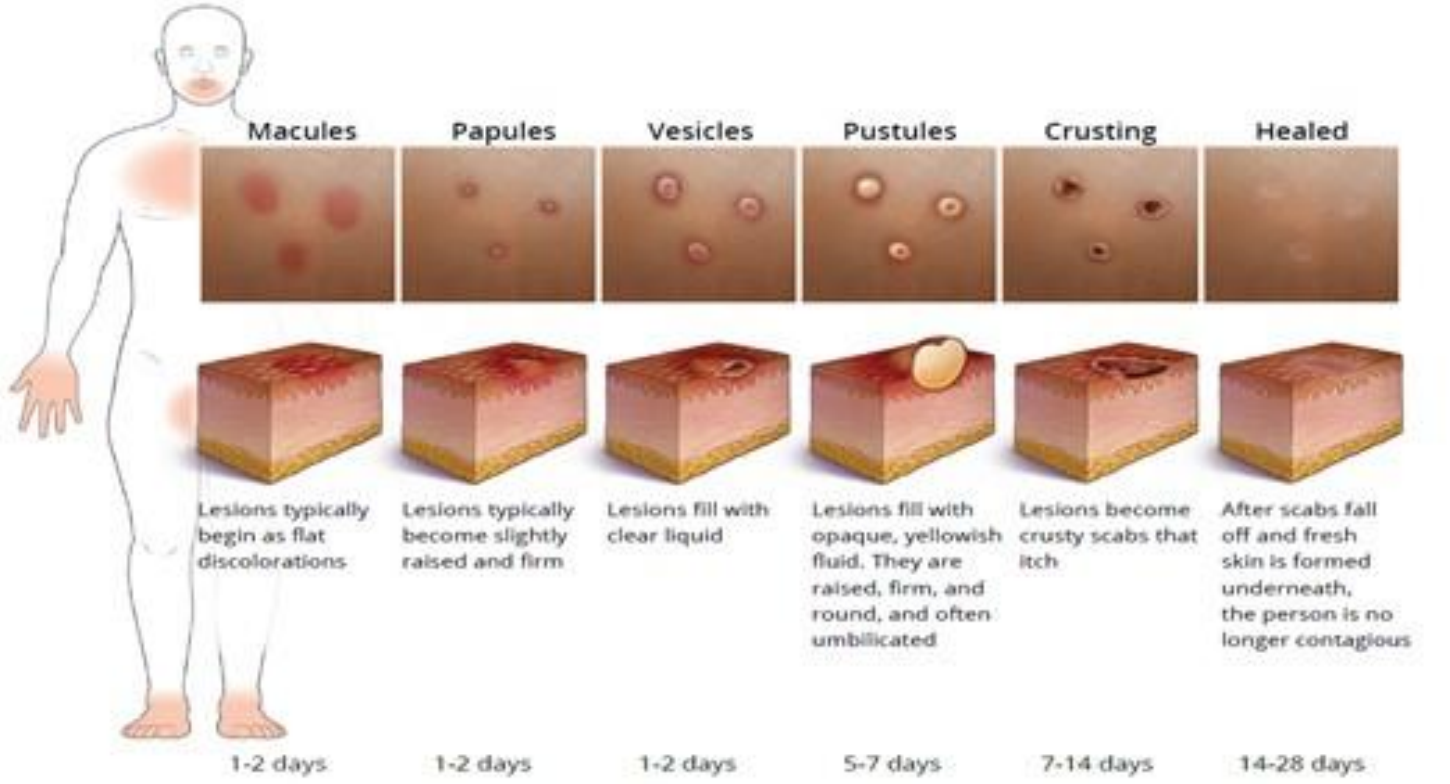
Since January 1, 2024, Democratic Republic of Congo and neighboring countries have had >21,000 confirmed cases.

Clade I cases outside Africa:

- Sweden 8/2024
- Thailand 8/2024
- India 9/2025
- Germany 10/2024
- United Kingdom, USA, Canada 11/2024
- Belgium, Oman, Pakistan 12/2024
- France, China 1/2025

www.cdc.gov/mpox/outbreaks/2023/index.html

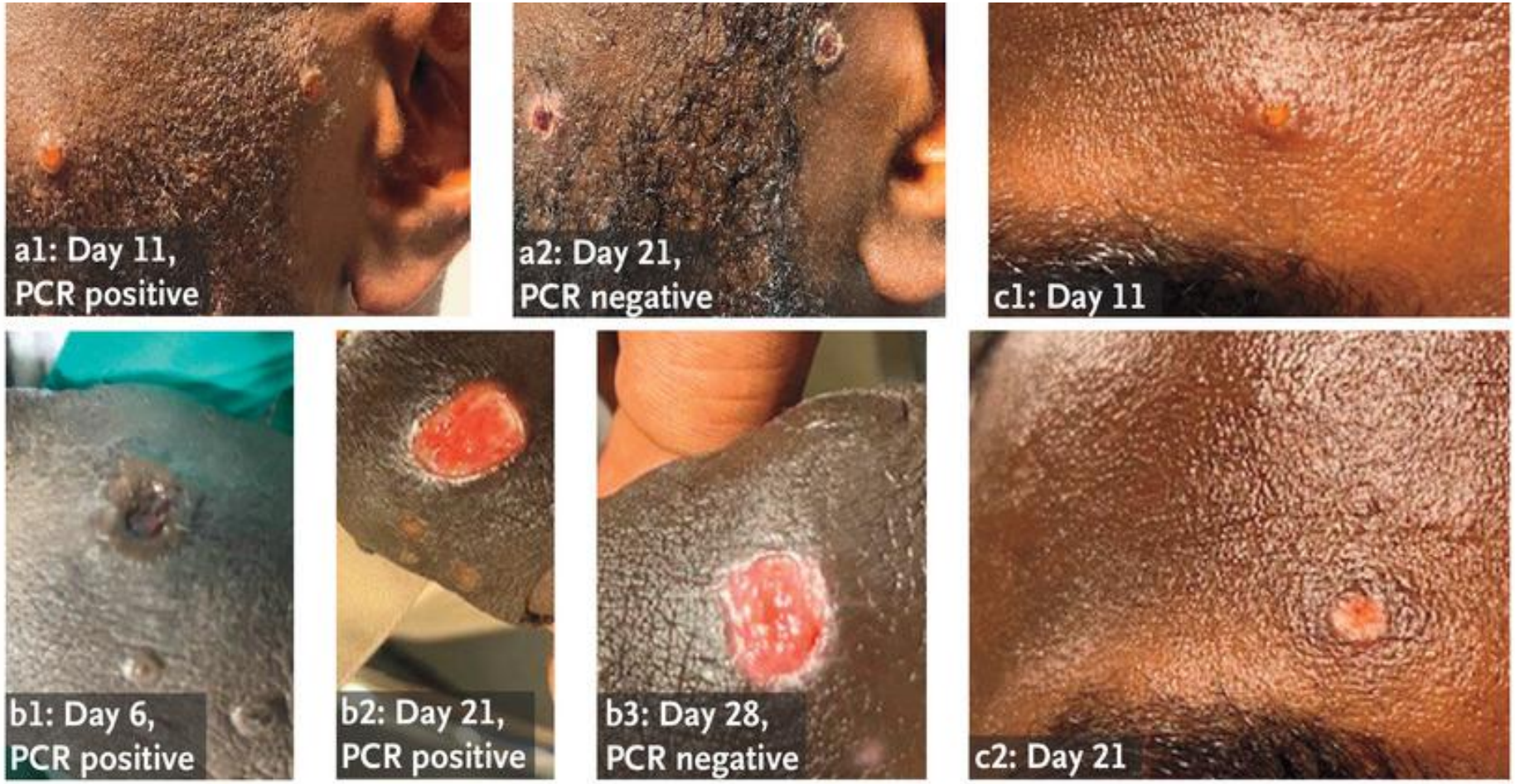
Mpox rash features and evolution



- Incubation period 3-17 days
- Lesions are often painful or itchy (64%).
- Most people have fewer than 50 lesions; occasionally, only a single lesion is present.

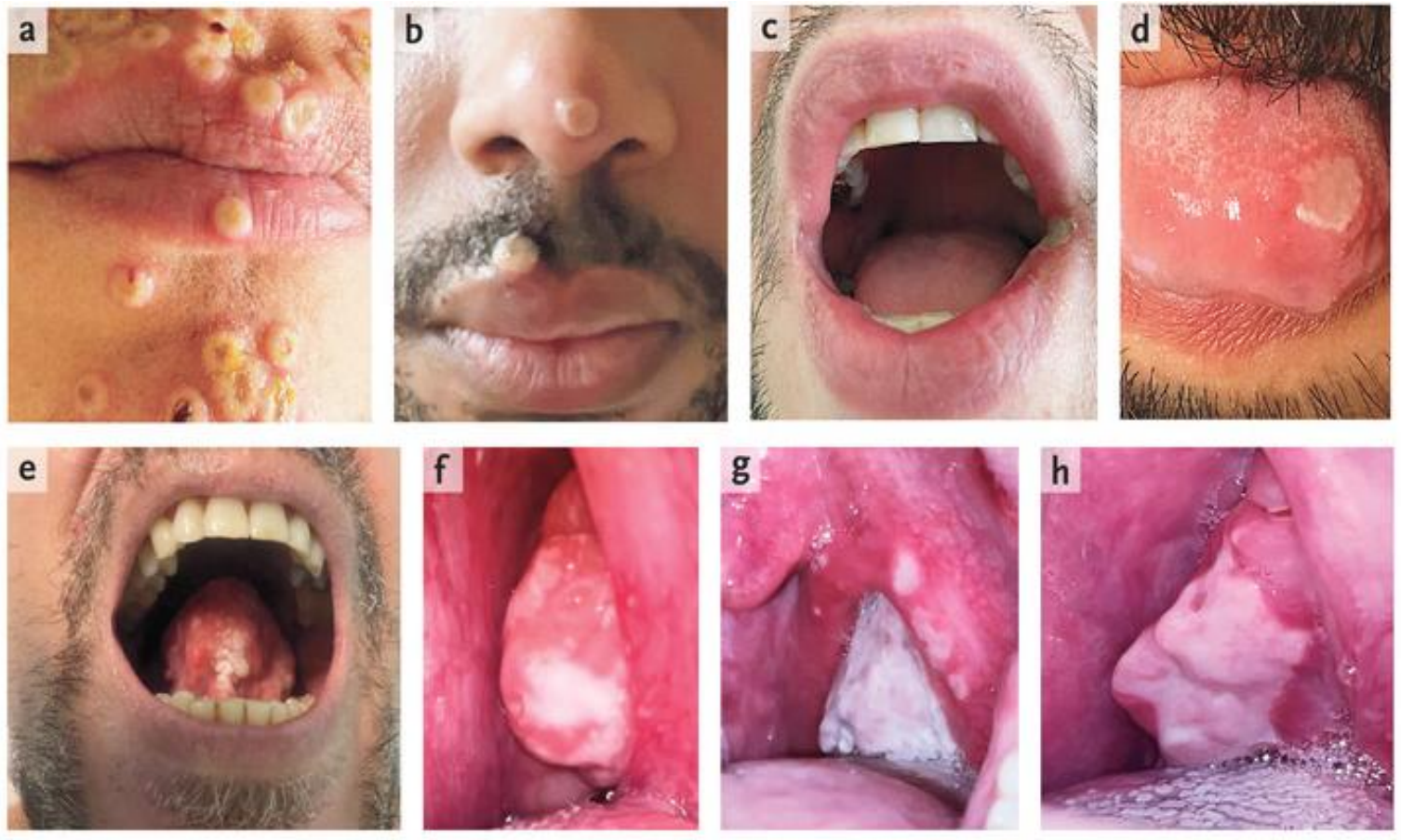
www.cdc.gov/mpox/hcp/clinical-signs/index.htmltml

Examples of mpox lesions



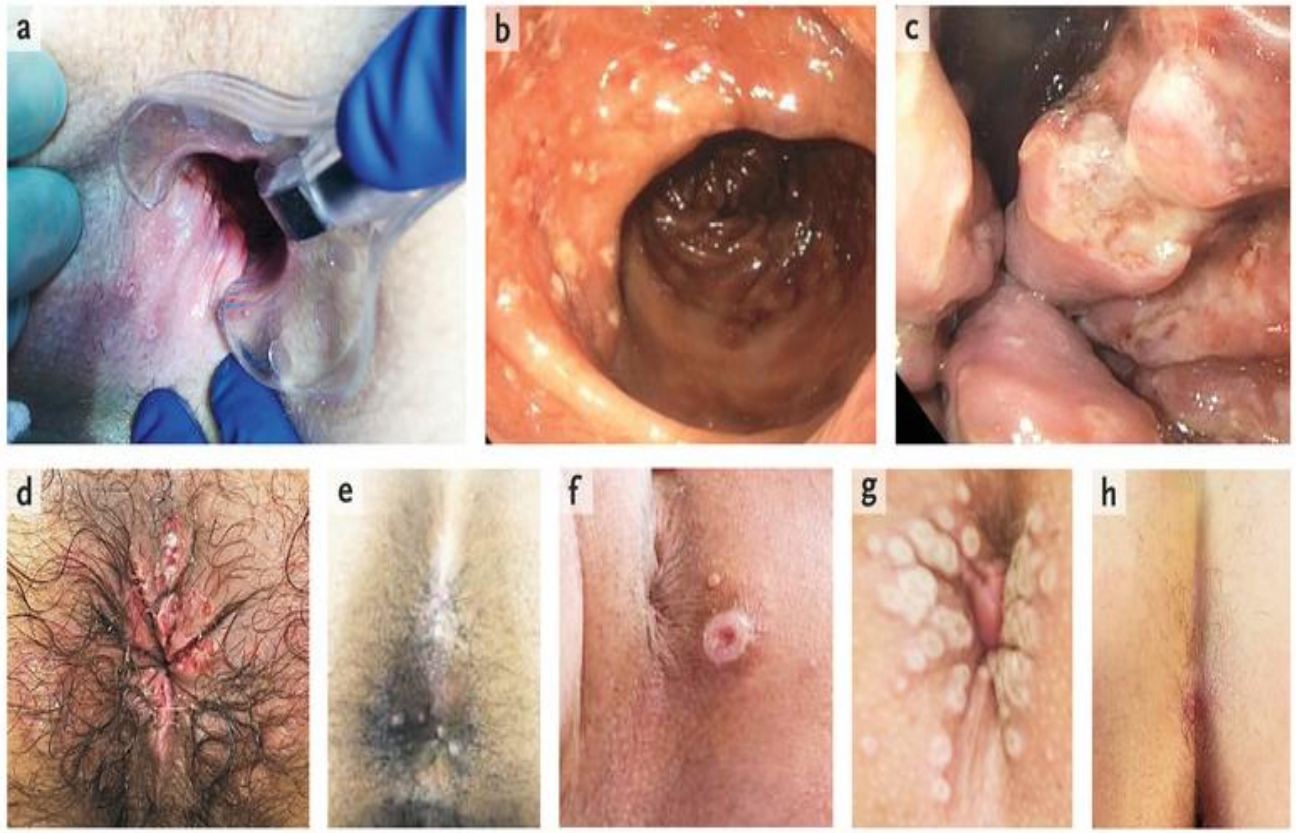
Thornhill JP, N Engl J Med, 2022

Examples of mpox lesions



Thornhill JP, N Engl J Med, 2022

Examples of mpox lesions



Thornhill JP, N Engl J Med, 2022

Specimen collection for mpox testing

- Acceptable specimen types include:
  - Dry swab of crusts and/or fluid from an open lesion
  - Dry swab of intact vesicles or pustules
  - Scab from a lesion
- Obtain samples from different-appearing lesions, if possible.
- Unroofing vesicles or pustules is unnecessary and not recommended.
- Use a synthetic (not cotton) swab.
- Instructions may depend on the laboratory.

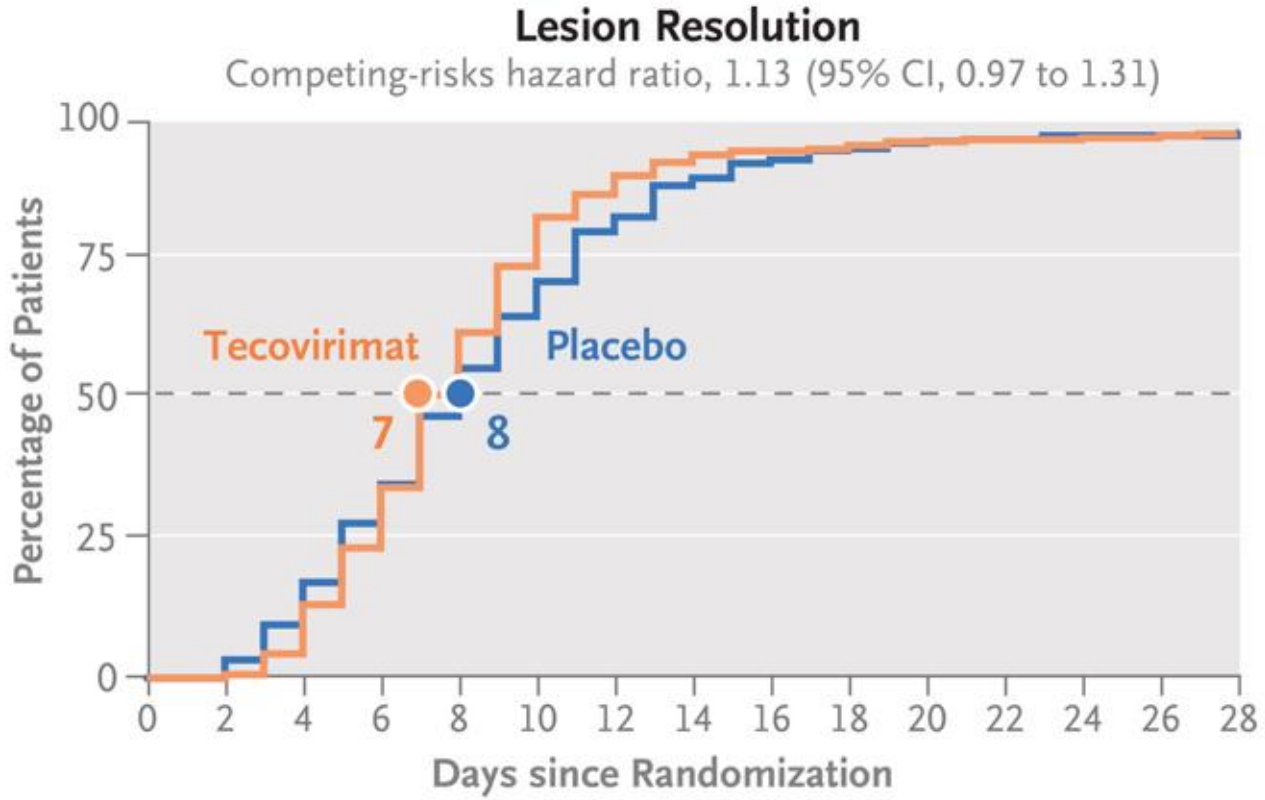
Clinical and Laboratory Testing Guidance for Mpox, April 2, 2024, Massachusetts Department of Public Health

Mpox demonstrated the importance of RCTs for unproven therapies.

- Mechanism of action: Blocking secondary viral envelope formation
- FDA approved (under the “Animal Rule”) for the treatment of smallpox in adults and children
- Not FDA approved for mpox or other orthopoxviruses
- Available during this outbreak through an expanded access protocol (ea-IND) and a clinical trial

1. Sherwat A, N Engl J Med, 2022. 2. TPOXX fact sheet, SIGA, 2019, www.siga.com/wp-content/themes/sigahba/TPOXX-Fact-Sheet.pdf.

Tecovirimat does not hasten resolution of lesions in clade I or clade II mpox.



PALM007 Writing Group, N Engl J Med, 2025

Current approaches to treatment

- For most patients, supportive care and pain management
- For people with or at risk for severe illness, antiviral medications, often in combination with tecovirimat:
  - Brincidofovir
  - Cidofovir
  - Vaccinia immune globulin

Vaccination with MVA-BN

- Replication-deficient *Vaccinia* virus
- Licensed as a series of two subcutaneous injections, 4 weeks apart
- The only contraindication is severe allergy to a vaccine component (ciprofloxacin, gentamicin, egg).
- Side effects include injection site reactions; serious side effects are rare.
- The vaccine appears to be safe in people with HIV and immunogenic in people with CD4 counts > 100.
- Recommended for “any person at risk for mpox.”

Risk factors for mpox infection

- MSM who in the past 6 months have had one of the following:
  - A new diagnosis of at least 1 sexually transmitted disease
  - More than 1 sex partner
  - Sex at a commercial sex venue
  - Sex in association with a large public event in a geographic area where mpox transmission is occurring
- Persons who are sexual partners of the persons described above
- Persons who anticipate experiencing any of the situations described above

www.cdc.gov/vaccines/hcp/imz-schedules/adult-notes.html#note-hpv

The vaccine is effective, and two doses are better than one.

Rosenberg ES, MMWR, 2023

TABLE 2. JYNNEOS vaccination history and estimated vaccine effectiveness among case-patients with mpox and control patients with sexually transmitted infections — New York,* July 24, 2022–October 31, 2022

	Mpox case-patients (n = 252)	All STI controls (n = 255)	
Vaccination status	**No. (%)**	**No. (%)**	**VE (95% CI)**
Unvaccinated	230 (91.3)	204 (80.0)	Ref
0–13 days after first dose	10 (4.0)	9 (3.5)	–36.2 (<–100 to 56.3)
≥14 days after first dose	10 (4.0)	23 (9.0)	68.1 (24.9 to 86.5)
≥0 days after second dose	2 (0.8)	19 (7.5)	88.5 (44.1 to 97.6)
≥14 days after first dose or ≥0 days after second dose	12 (4.8)	42 (16.5)	75.7 (48.5 to 88.5)

Abbreviations: Mpox = monkeypox; Ref = referent group; STI = sexually transmitted infection; VE = vaccine effectiveness.
* Outside of New York City.

Mpox tends to be milder among people who acquire it despite vaccination.

Compared to people who have never been vaccinated, those who have mpox despite full vaccination

- Have **lower** odds of hospitalization, death, systemic illness, fever, headache, malaise
- Have **fewer** skin lesions

Guagliardo SAJ, MMWR, 2024

Hepatitis A, B, and C

SURVEILLANCE AND OUTBREAK REPORT

Hepatitis A outbreak disproportionately affecting men who have sex with men (MSM) in the European Union and European Economic Area, June 2016 to May 2017

Received: 2 December 2023 | Revised: 10 May 2024 | Accepted: 6 June 2024

DOI: 10.1002/hsr2.2206

ORIGINAL RESEARCH

Health Science Reports Open Access WILEY

Prevalence of hepatitis B and C infections among HIV-positive men who have sex with men: A systematic review and meta-analysis

Ndumbi P, Euro Surveill, 2018; Shabil M, Health Sci Rep, 2024

HBV is prevalent among MSM.

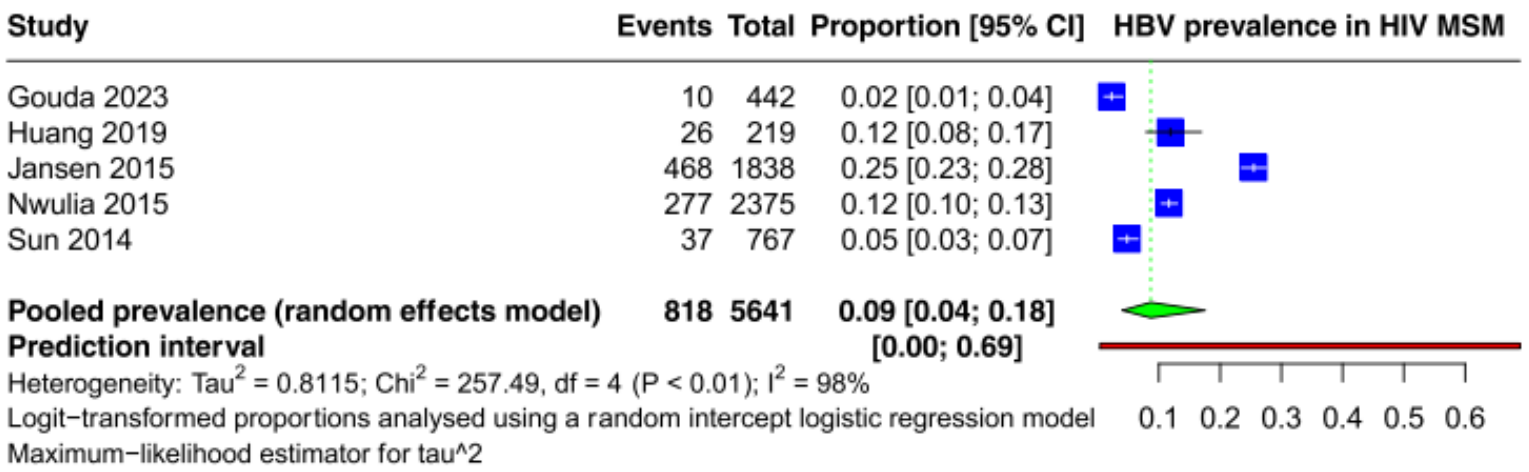
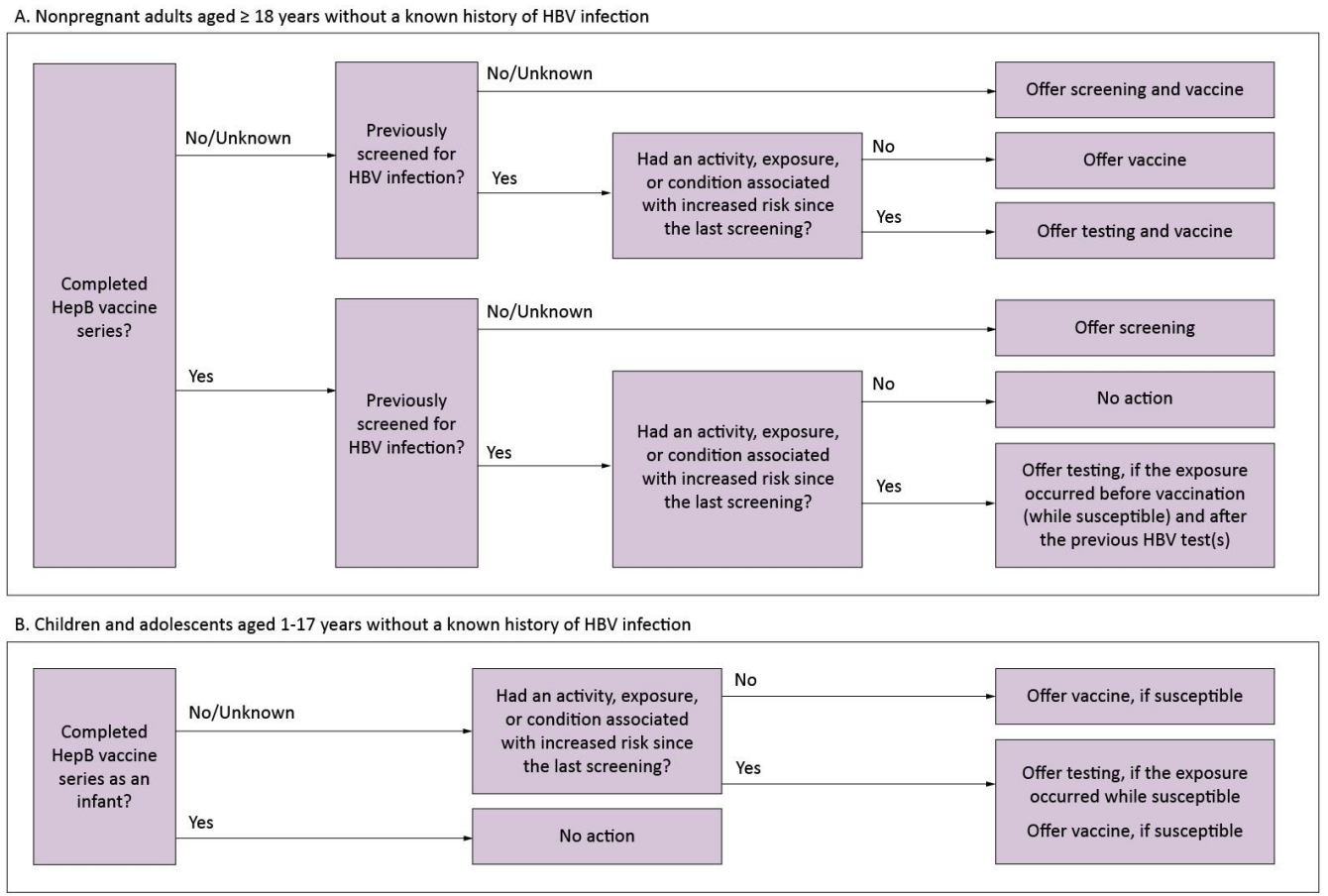


FIGURE 3 Forest plot showing the pooled prevalence of Hepatitis B virus among men having sex with men and people living with human immunodeficiency virus.

Shabil M, Health Sci Rep, 2024

CDC recommends screening people ages ≥ 18 years at least once.



www.cdc.gov/hepatitis-b/hcp/diagnosis-testing/index.html#:~:text=CDC%20recommends%20screening%20all%20adults,using%20a%20triple%20panel%20test.

Interpretation of hepatitis B serologies

TABLE 1. Interpretation of screening test results for hepatitis B virus infection and recommended actions

Clinical state	HBsAg	Anti-HBs	Total anti-HBc*	IgM anti-HBc	Action†
Acute infection	Positive	Negative	Positive	Positive	Link to HBV infection care
Chronic infection	Positive	Negative	Positive	Negative§	Link to HBV infection care
Resolved infection	Negative	Positive	Positive	Negative	Counsel about HBV infection reactivation risk
Immune (immunity inferred from receipt of previous vaccination)	Negative	Positive¶	Negative	Negative	Reassure if history of HepB vaccine series completion; if partially vaccinated, complete vaccine series per ACIP recommendations
Susceptible, never infected	Negative	Negative**	Negative	Negative	Offer HepB vaccine per ACIP recommendations
Isolated core antibody positive††	Negative	Negative	Positive	Negative	Depends on cause of positive result

Connors EE, MMWR Recomm Rep, 2023

Hepatitis A vaccine recommendations

- Any person who is not fully vaccinated and requests vaccination
- Additionally, people with increased likelihood for hepatitis A, including:
  - People with chronic liver disease
  - People with HIV
  - MSM
  - People who use drugs
  - People experiencing homelessness
  - People who work with hepatitis A in the laboratory
  - Travel to countries where hepatitis A is endemic
  - Close, personal contact with an international adoptee
  - Pregnancy, if at risk for infection or severe outcome from infection during pregnancy
  - Some settings for exposure, including group homes and nonresidential day care facilities

www.cdc.gov/vaccines/hcp/imz-schedules/adult-notes.html#note-hepa

Hepatitis B vaccine recommendations

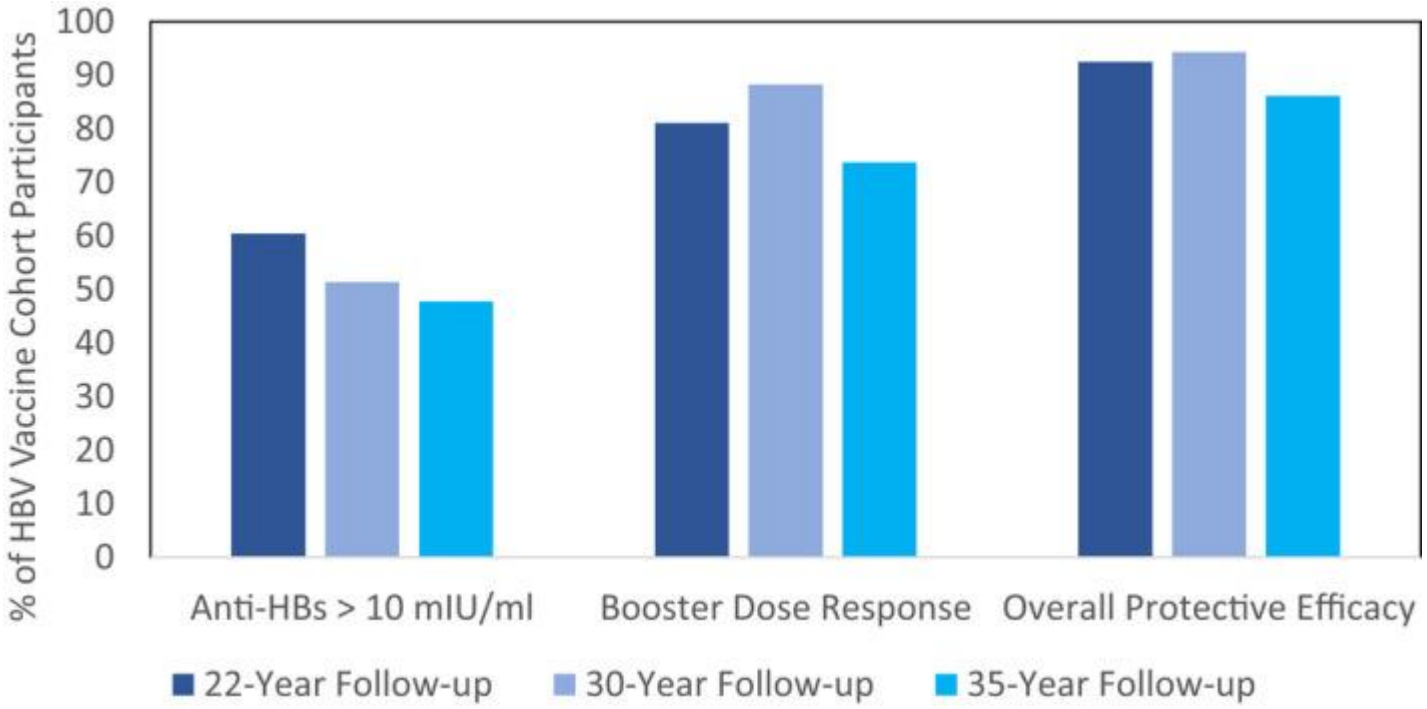
- Routine vaccination for people ages 19 and above*, including people with higher likelihood for hepatitis B:
  - People with chronic liver disease
  - People with HIV
  - People with potential sexual exposure (e.g., MSM)
  - People who inject drugs
  - Health care workers and others with possible percutaneous or mucosal exposure to HBV
  - People who are incarcerated
  - People traveling to countries endemic for hepatitis B

www.cdc.gov/vaccines/hcp/imz-schedules/adult-notes.html#note-hepb

Should fully vaccinated people be re-immunized if HBsAb titers are negative?

Fully vaccinated people's antibody levels may wane with time, but studies suggest they remain immune and would mount an immunologic response if exposed to hepatitis B.

Protective efficacy of 3-dose hepatitis B vaccine among Alaska Natives



Bruce MG, Hepatology, 2022

For which adults are post-vaccination hepatitis B antibody titers recommended?

Healthcare and public safety workers

People on hemodialysis

People with HIV

Immunocompromised people

People whose sex partners are positive for hepatitis B surface antigen

Testing should be performed 1-2 months after the final vaccine dose.

HCV treatment is often straightforward.

WHO IS ELIGIBLE FOR SIMPLIFIED TREATMENT

Simplified HCV Treatment Algorithm for Treatment-Naive Adults Without Cirrhosis

Adults with chronic hepatitis C (any genotype) who do not have cirrhosis. And have not previously received hepatitis C treatment.

WHO IS *NOT* ELIGIBLE FOR SIMPLIFIED TREATMENT

Patients who have any of the following characteristics:

- Prior hepatitis C treatment
- Cirrhosis (see simplified treatment for treatment-naive adults with compensated cirrhosis)
- HBsAg positive
- Current pregnancy
- Known or suspected hepatocellular carcinoma
- Prior liver transplantation

Case 1

- A 45-year-old woman with well-controlled HIV presents for a follow up visit. She has no history of cervical dysplasia or cancer. She has a history of two lifetime sexual partners. She has anal cancer screening, and the result shows no cytological abnormalities but is positive for HPV 16.

- **What is the next best step in management? Should she receive the HPV vaccine?**

Case 2

- A 22-year-old man presents with fever, rectal pain, and discharge for 3 days. He has condomless receptive anal sex, most recently 10 days ago. On examination, there are two ulcerations in the peri-anal area. He is unable to tolerate anoscopy.

- **What are the next best steps in evaluation and management?**

Case 3

- A 32-year-old man presents to initiate PrEP. He has sex with women and men and does not consistently use condoms. Baseline testing is negative for HIV, gonorrhea, chlamydia, and syphilis, and his serum creatinine is normal. Testing also shows a reactive hepatitis B surface antigen and hepatitis B core antibody. His ALT and AST are normal, and a hepatitis B DNA is 850. There is no evidence of cirrhosis.

- **What is the best option for PrEP for him?**

Summary

What is one thing you learned today that will impact your practice? Please post in the chat.