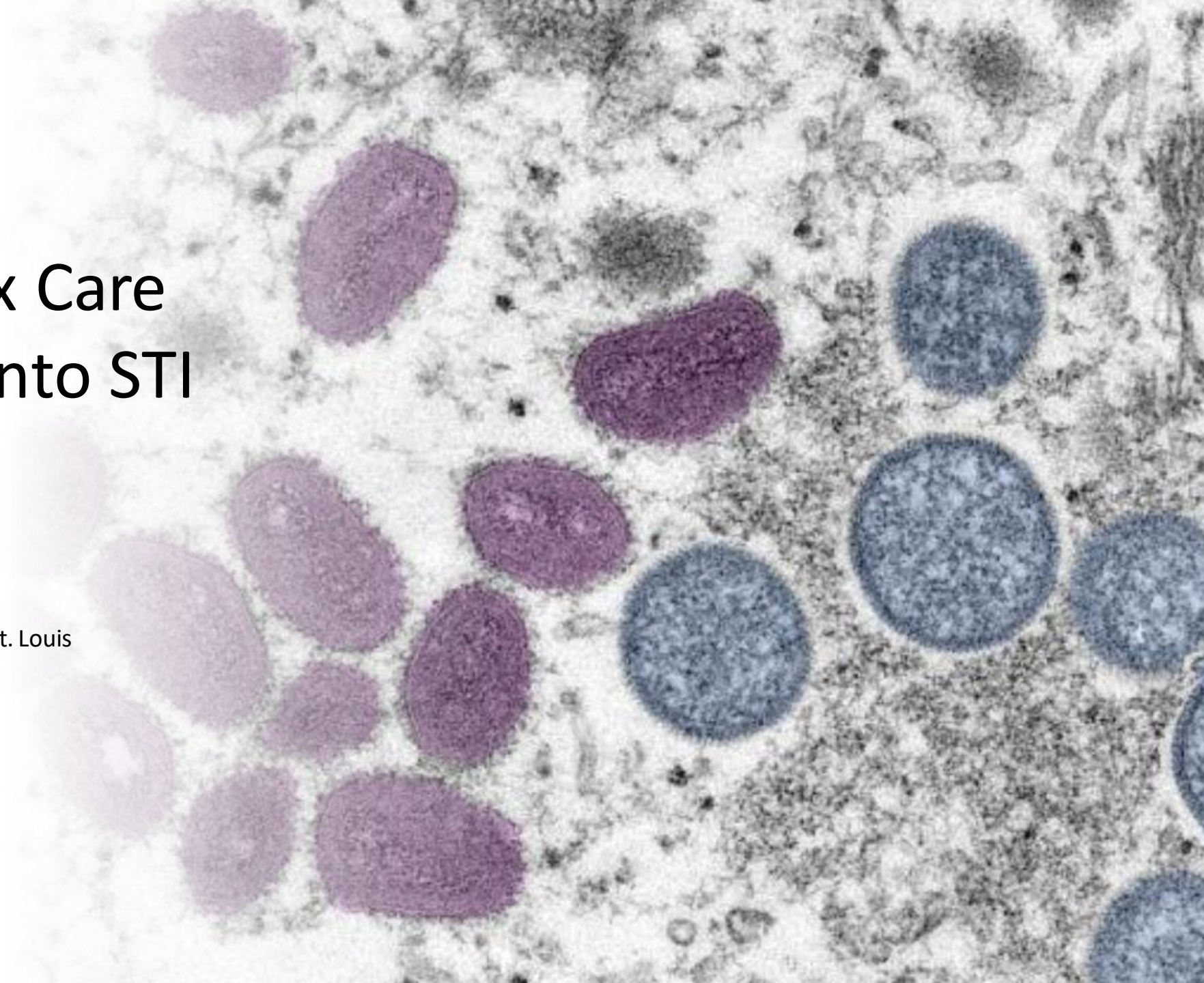


Integrating Mpox Care and Prevention into STI Services

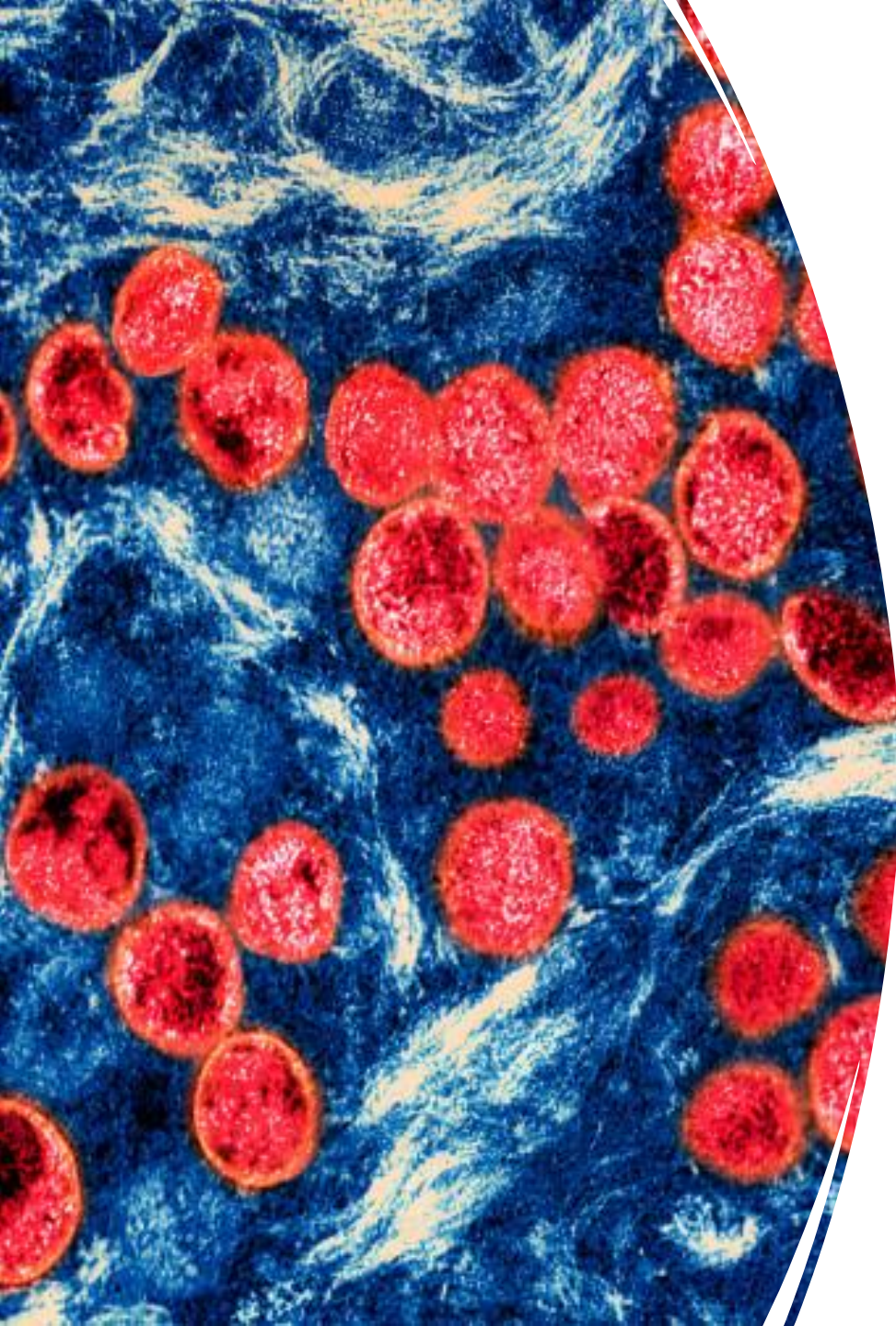
Hilary Reno, MD PhD FIDSA
Associate Professor, Washington University in St. Louis



Disclosures

Disclosure: Dr. Reno has no financial interest to disclose.

This continuing education activity is managed by The St. Louis STI/HIV Prevention Training Center and accredited by Missouri State Medical Association (MSMA) in cooperation with the Chicago Department of Public Health



Mpox: Orthopoxvirus

- Discovered in 1958 in colonies of monkeys in a research setting.
- First case in humans was reported in 1970
 - Clade I with 10% mortality
 - Clade II with <1% mortality
 - Worse outcomes in those with compromised immune systems, < 1 years old, pregnant, history of eczema
- And then in 2017, mpox cases were being diagnosed in Nigeria.

He discovered the origin of the monkeypox outbreak — and tried to warn the world

Updated July 29, 2022 · 5:04 PM ET ⓘ

Heard on Morning Edition



Michaelleen Doucleff



6-Minute Listen

+ PLAYLIST



RESEARCH ARTICLE

The 2017 human monkeypox outbreak in Nigeria—Report of outbreak experience and response in the Niger Delta University Teaching Hospital, Bayelsa State, Nigeria

Dimie Ogoina^{1*}, James Hendris Izibewule¹, Adesola Ogunleye², Ebi Ederiane³,
Uchenna Anebonam², Aworabhi Neni⁴, Abisoye Oyeyemi⁵, Ebimitula
Nicholas Etebu^{4‡}, Chikwe Ihekweazu^{2‡}

2019

Dr. Dimie Ogoina





#1 ON TRENDING

Monkeypox: Last Week Tonight with John Oliver (HBO)



LastWeekTonight ✓
9.02M subscribers

SUBSCRIBED



44K



Dislike



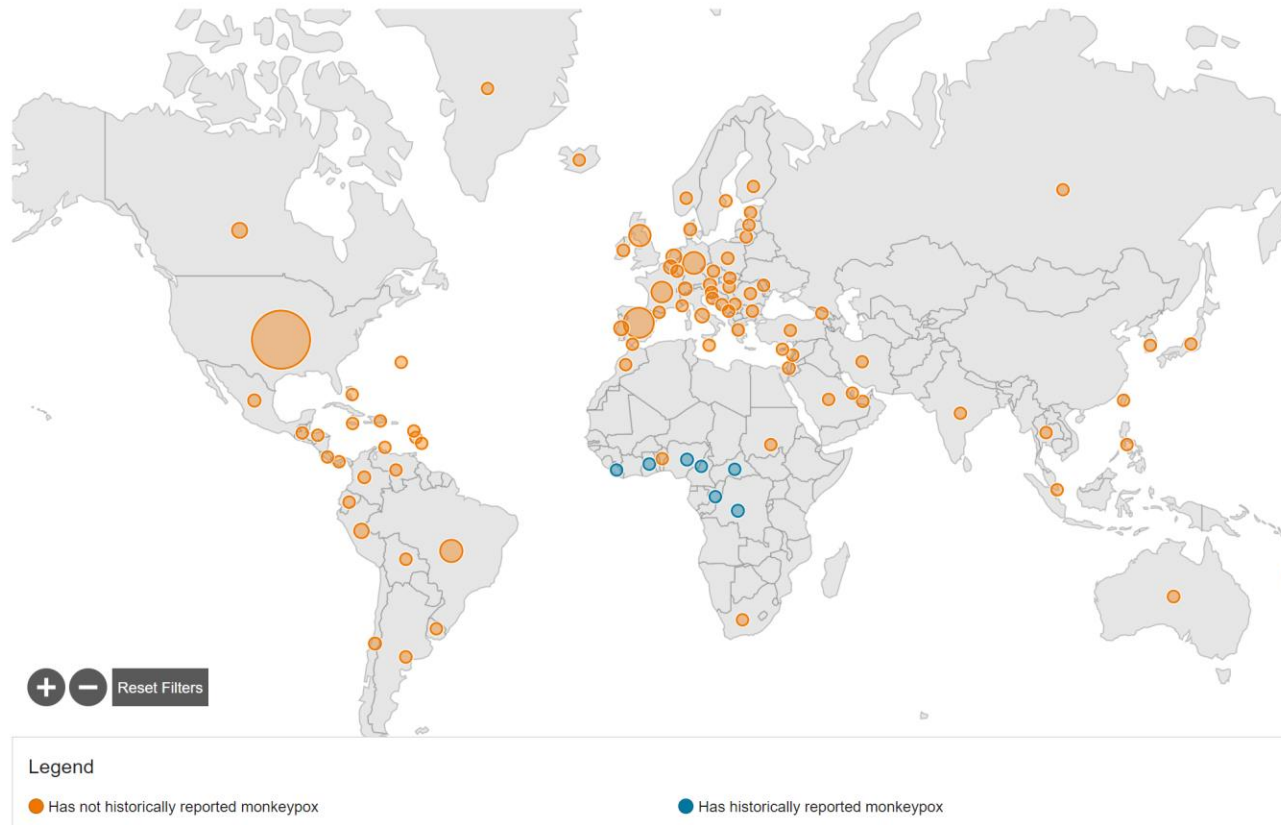
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Mpox: Orthopoxvirus



Cases in 2017 in Nigeria (after 40 years)

2018-2021: sporadic travel and animal related cases

May 2022: new outbreak reported in Europe → global

July 2022: WHO declares a public health emergency of international concern

August 2022: US Admin declares public health emergency

U.S. cases

U.S. Cases

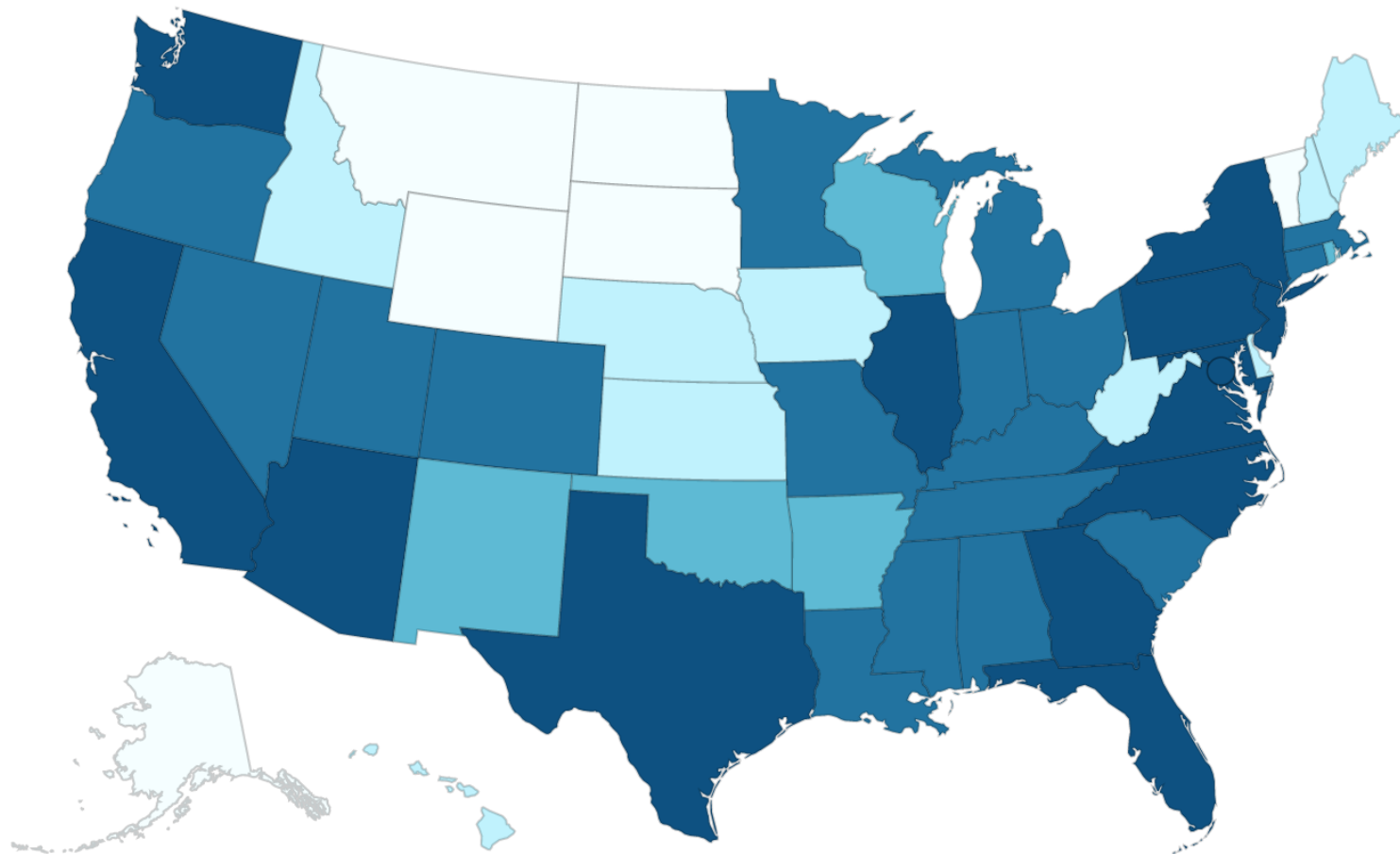
Total Cases

30,361

U.S. Deaths

Total Deaths

42

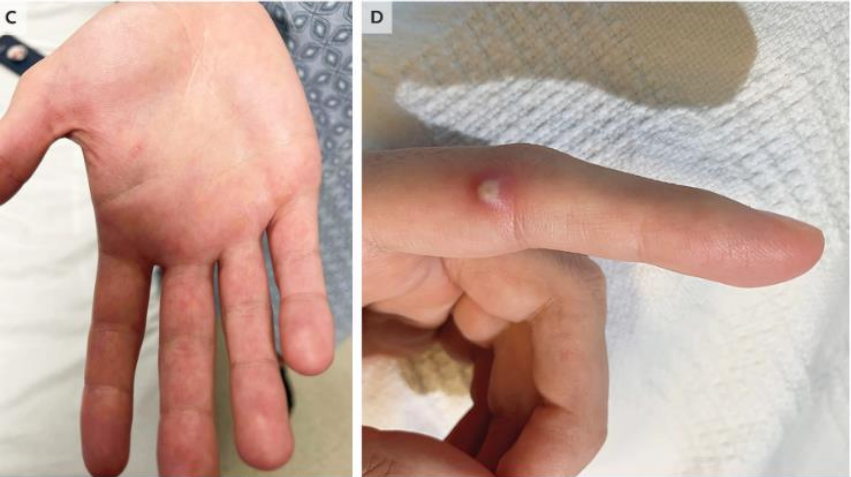


Territories

PR



Skin Rash Presentations – 2022 Mpox Outbreak



From Basgoz N, Brown CM, Smole SC, et al. Case 24-2022: A 31-Year-Old Man with Perianal and Penile Ulcers, Rectal Pain, and Rash. Epub ahead of print. *Copyright* © Jun 15 2022. Massachusetts Medical Society. Reprinted with permission from Massachusetts Medical Society

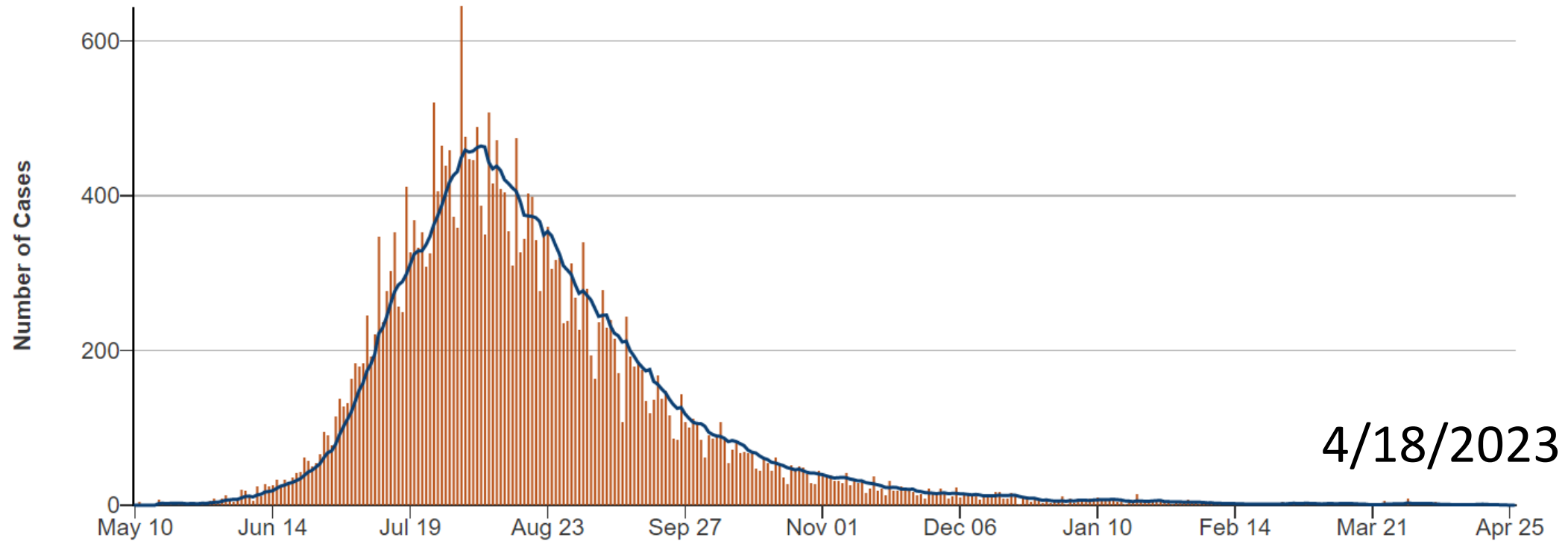
Shared with permission from patients, CDC 2022

Mucosal and genital lesions



Slide credit: Christopher Ried, Orange County Public Health

Daily Mpox Cases and 7 Day Daily Average



4/18/2023



Key Characteristics of MPox

Epidemiology

#1: Transmission

#2: High rate of co-infections

#3: Where patients were presenting

Clinical presentations

TABLE 1. Characteristics of persons with monkeypox — United States, May 17–July 22, 2022

Characteristic (no. with available information)	No. (%)*
Total	1,195 (100)
Gender identity (1,195)	
Man	1,178 (98.7)
Transgender man	3 (0.3)
Woman	5 (0.4)
Transgender woman	5 (0.4)
Prefer not to answer	4 (0.3)
Missing	0 (—)
Race and ethnicity (1,054)	
Asian, non-Hispanic	48 (4.6)
Black, non-Hispanic	276 (26.2)
White, non-Hispanic	428 (40.6)
Hispanic	296 (28.1)
Multiple races, non-Hispanic	6 (0.6)
Missing	141

* Percentages calculated using nonmissing data.

Key Epi finding #1: Transmission

Philpott D, Hughes CM, Alroy KA, et al.
Epidemiologic and Clinical Characteristics of
Monkeypox Cases — United States, May 17–
July 22, 2022. MMWR Morb Mortal Wkly
Rep 2022;71:1018-1022



Clinical Infectious Diseases

VIEWPOINTS



OXFORD

Is Mpox a Sexually Transmitted Infection? Why Narrowing the Scope of This Disease May Be Harmful

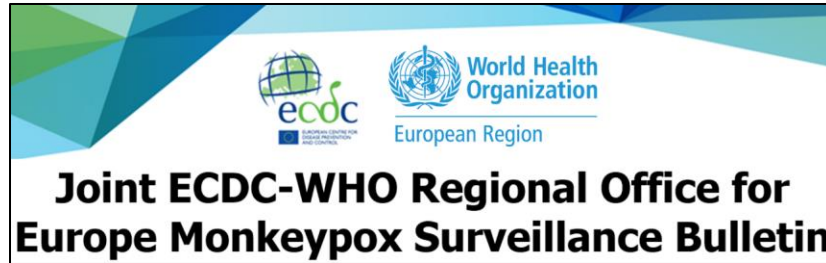
Aniruddha Hazra¹ and Joseph N. Cherabie²

¹Section of Infectious Diseases and Global Health, University of Chicago Medicine, Chicago, Illinois, USA; and ²Division of Infectious Diseases, Washington University School of Medicine—St. Louis, St. Louis, Missouri, USA

Key Epi finding #2: Co-infections

A Tale of Two Viruses: Coinfections of Monkeypox and Varicella Zoster Virus in the Democratic Republic of Congo

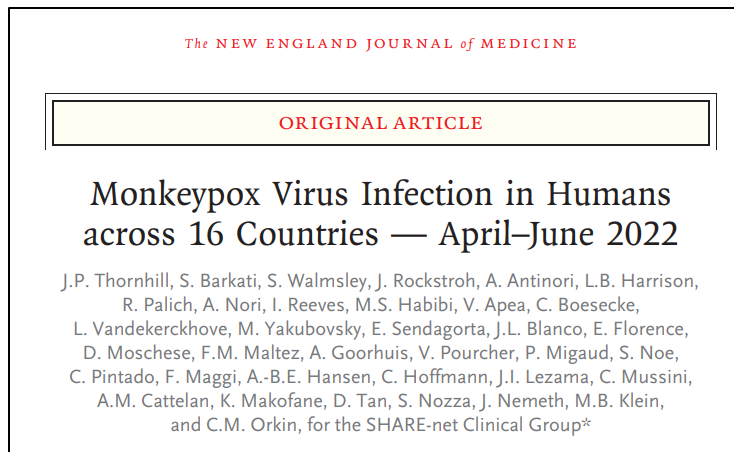
12% cases were co-infected with VZV



36% cases are co-infected with HIV

Interim Guidance for Prevention and Treatment of Monkeypox in Persons with HIV Infection — United States, August 2022

28-51% cases are co-infected with HIV



29% cases are co-infected with an STI



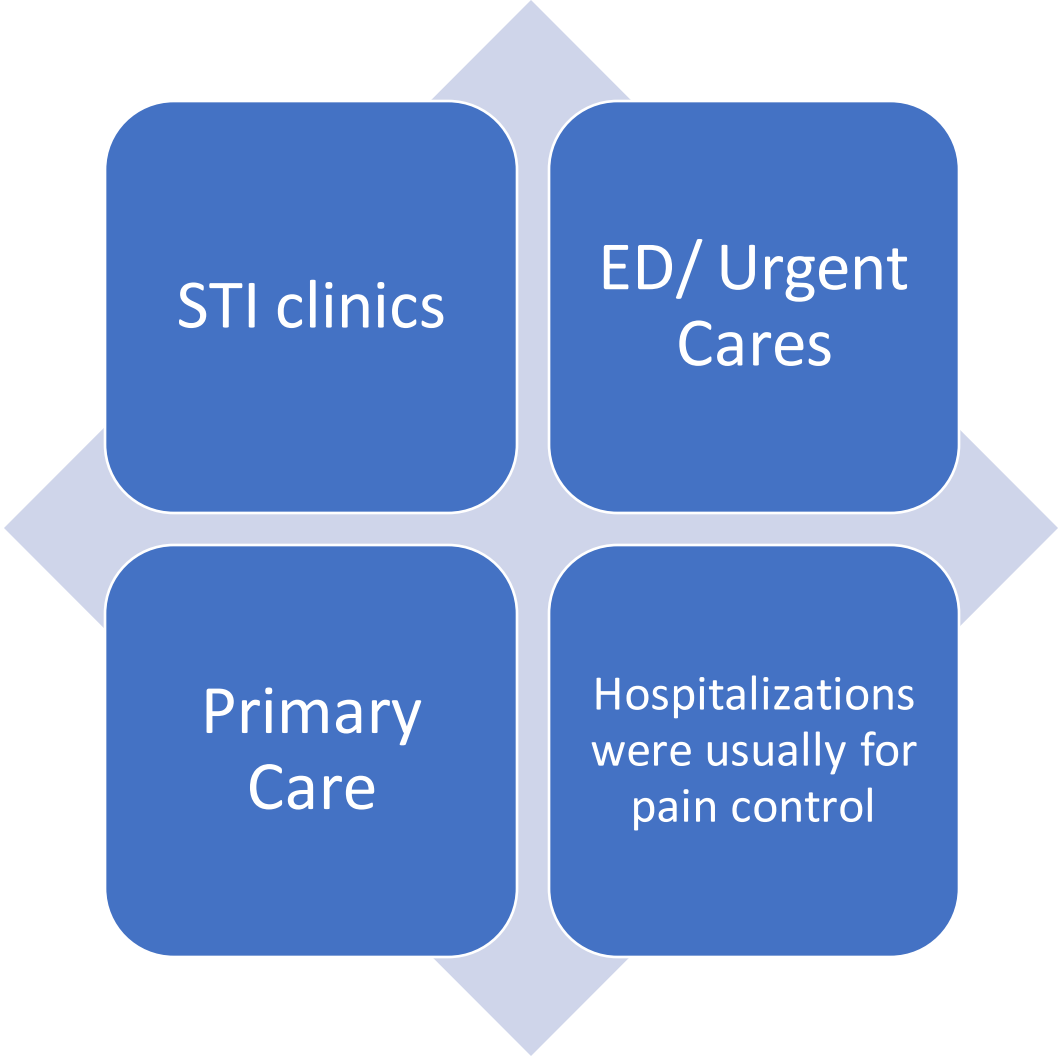
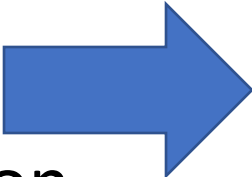
Key finding #3: Where patients were presenting

Surveillance

Education: public and health systems

Messaging: Interrupt transmission

Resource deployment: Testing, Treatment, etc



Key clinical lesions we cannot forget

INFECTIONS CAUSING DIFFUSE RASHES

- Syphilis
- Varicella/VZV
- Disseminated herpes
- Molluscum contagiosum
- Disseminated fungal infections
- Disseminated gonococcal infection
- Coxsackie Virus (HFM)

NON INFECTIOUS

(less common)

- Recurrent aphthous stomatitis
- Behcet's Disease
- Trauma
- Squamous cell carcinoma
- Drug-induced
- Other

PROCTITIS

- Chlamydia including LGV serovars
- Gonorrhoea
- HSV
- Syphilis


ULCERATIVE STIs

- Herpes simplex virus
- Syphilis
- Chancroid
- Lymphogranuloma venereum (LGV)
- *Granuloma Inguinale*

Avoid Missed Opportunities: Needed Work

Public Health must remain adaptable.


- Sexual health is health care.
 - Encourage clinicians to take a sexual history.
- Co-infection rates were high (HIV, STIs)
 - Syndemic approach means offering STI prevention including vaccination alongside STI testing and care.
- Continuing to improve care for populations most impacted
 - Trauma informed and culturally aware care.
 - Partner and share information with clinical systems, outpatient clinics, urgent cares, etc.



Hello. What brought you to STI clinic today?

I'll note that in your chart. We offer vaccination for HPV + mpox. Do you know what those infections are?

I'll note that and the NP will discuss those with you.



My partner told me they have chlamydia but I feel fine.

No, but I'd like to hear about them. I am interested in vaccines that can protect me.

Thank you!

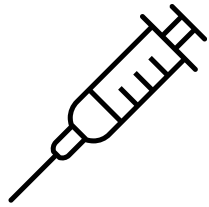


Testing

- Remember this is a dry collection tube
- Contrasts with GC culture (which we all need to have access to).

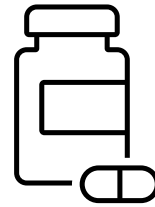


Medical Countermeasures



JYNNEOS

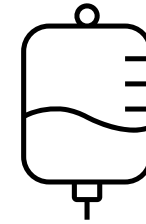
ACAM2000



Tecovirimat (TPOXX)

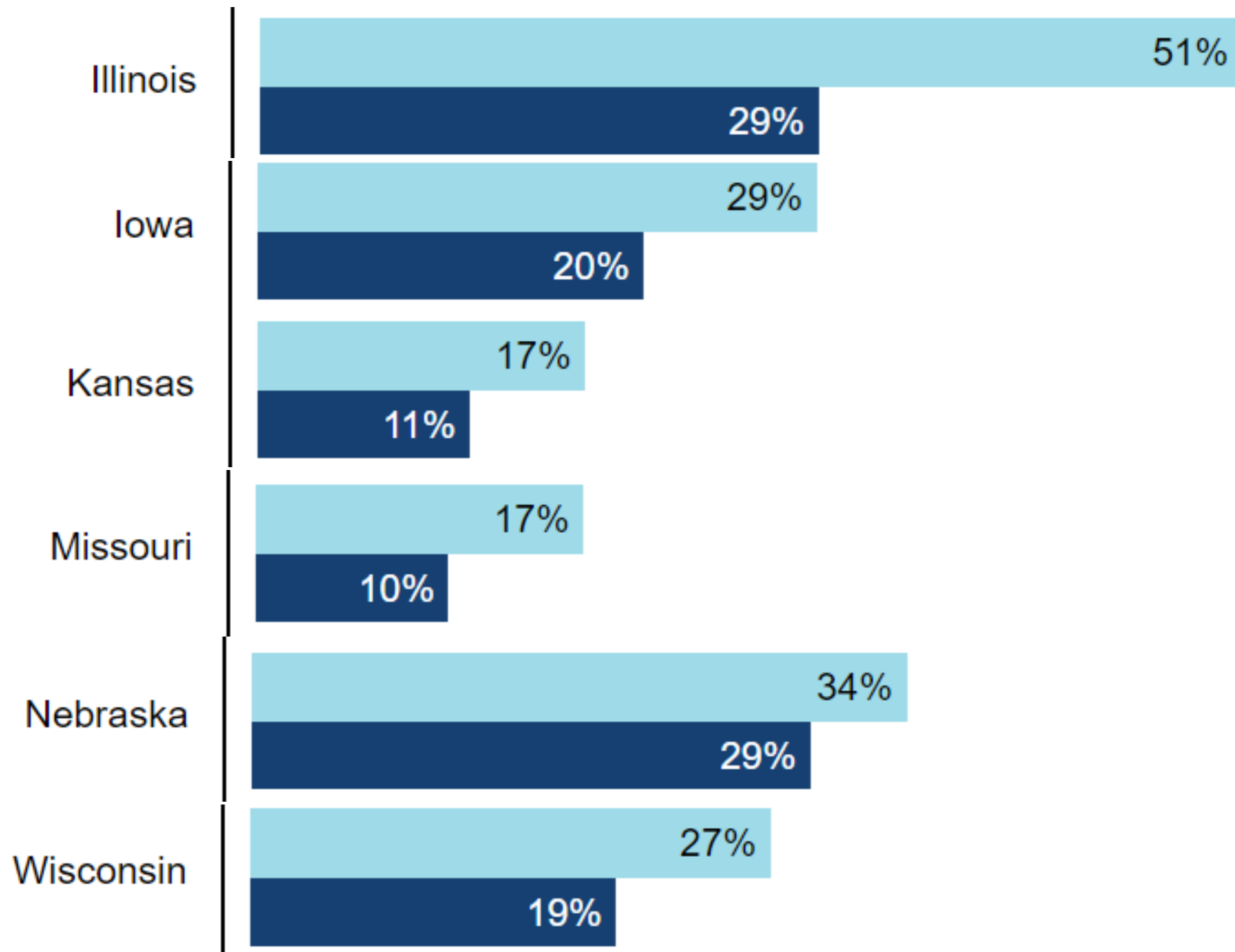
Cidofovir

Brincidofovir



Vaccinia immune globulin

Mpox vaccination coverage



Study of Tecovirimat for Human Monkeypox Virus (STOMP)

- Started enrollment September 2022
- “Randomized, placebo-controlled, double-blind study to establish the efficacy of tecovirimat for the treatment of people with laboratory-confirmed or presumptive HMPXV disease.”
- Goal: 530 participants
- Outcome: Time to clinical resolution of lesions

Study of Tecovirimat for Human Monkeypox Virus (STOMP)

United States, Illinois

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Public Health Work is Multi-faceted

