

# Epidemiology of Mpox during the Current Outbreak

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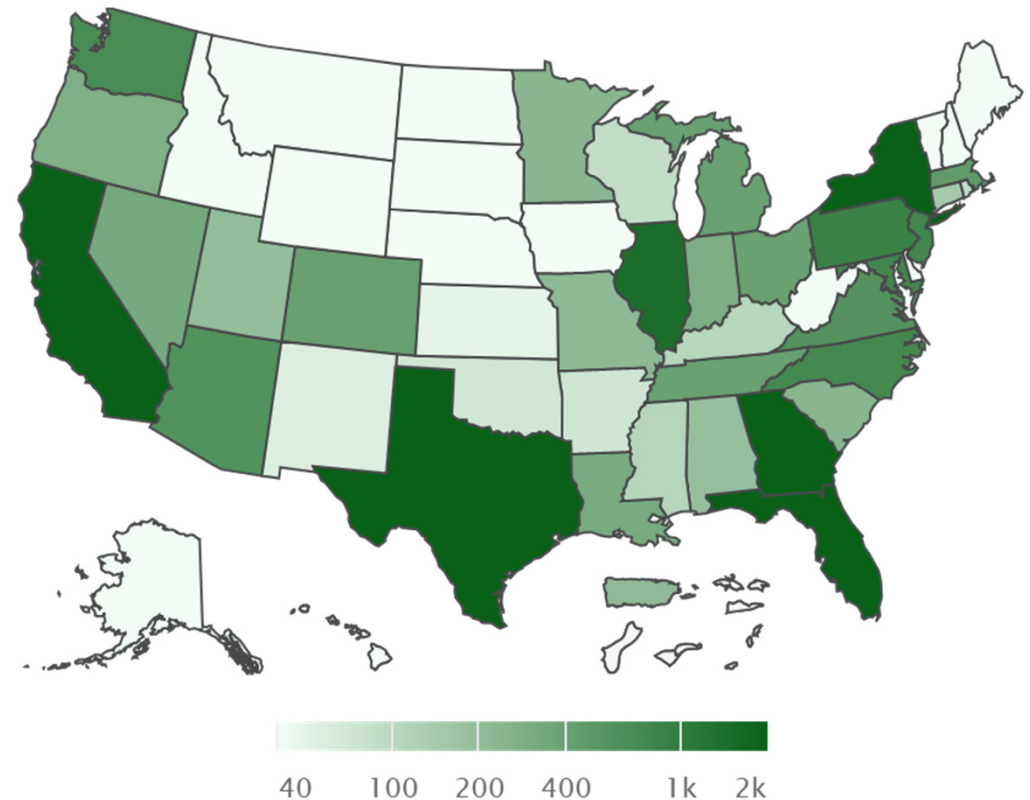


# **Epidemiology of the Current Outbreak**

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# 2022-2023 Spread of Mpox in U.S.

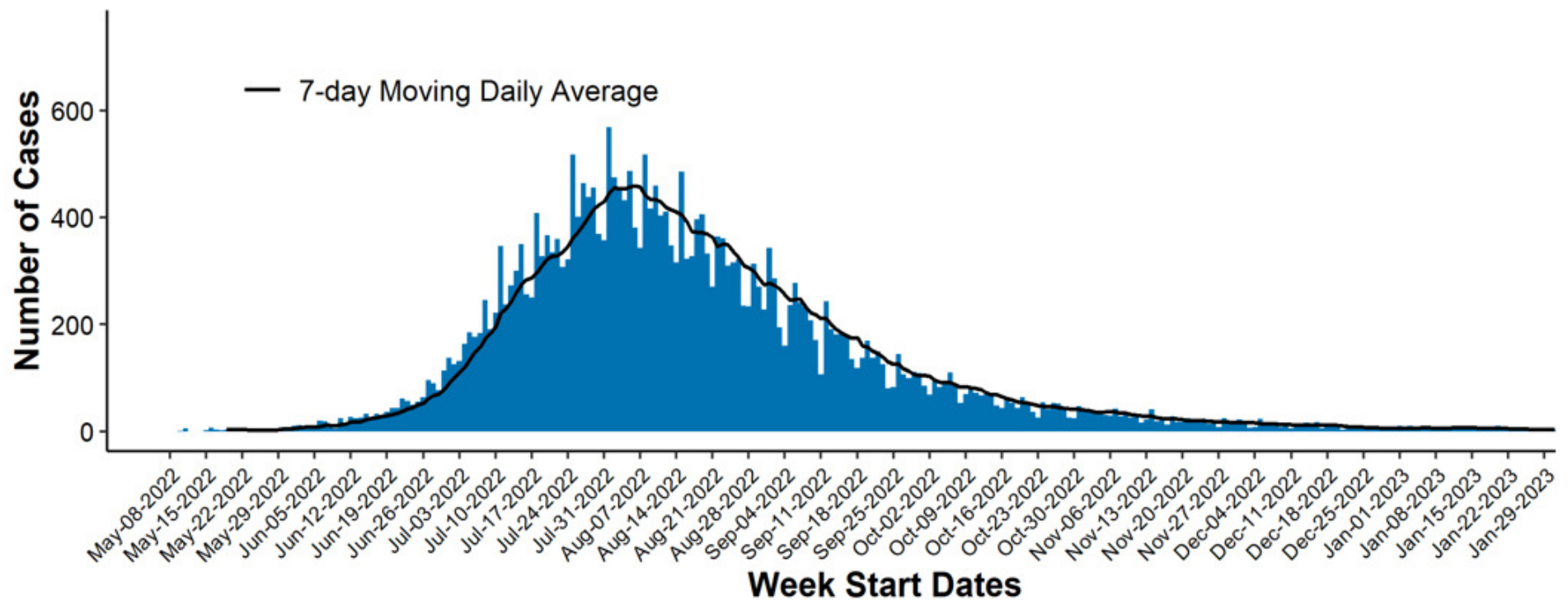
- The first U.S. case was confirmed in May 2022.
- At first, spread was associated with international travel.
- More than 30,000 U.S. cases have been reported; new cases are declining.
- Most cases have been in gay, bisexual, & other men who have sex with men.
- Cases have also been reported in men who do not have sex with men, cisgender and transgender women, transgender men, gender-diverse people, children, and teens.



Data as of February 8, 2023

# U.S. Mpox Case Trends as of February 9, 2023

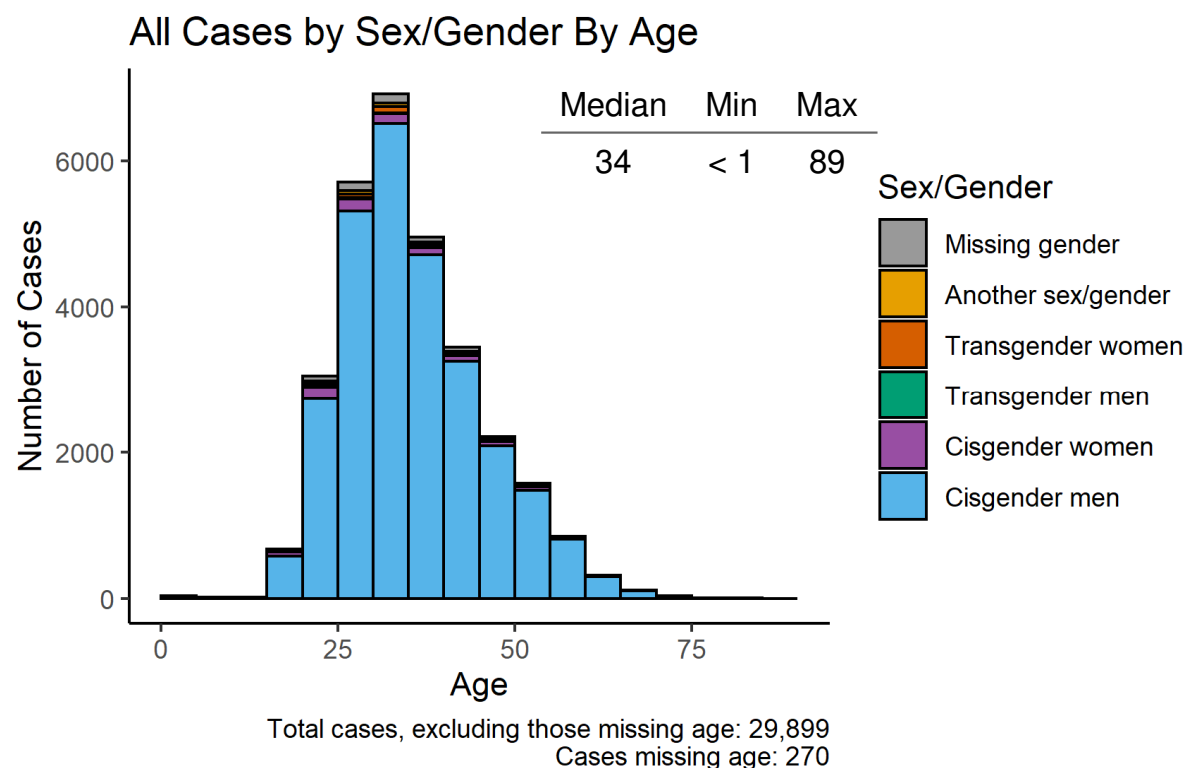
Official Case Count: 30,169



# Mpox cases reported to CDC by age and sex/gender

Sex / Gender*	Cases	Percent
Cisgender men	28,010	95.1%
Cisgender women	854	2.9%
Transgender men	76	0.3%
Transgender women	266	0.9%
Another sex/gender	235	0.8%
Missing gender	728	-

\*Sex/Gender is available for 97.6% of cases



Data as of February 8, 2023

# Mpox cases reported to CDC by race and ethnicity

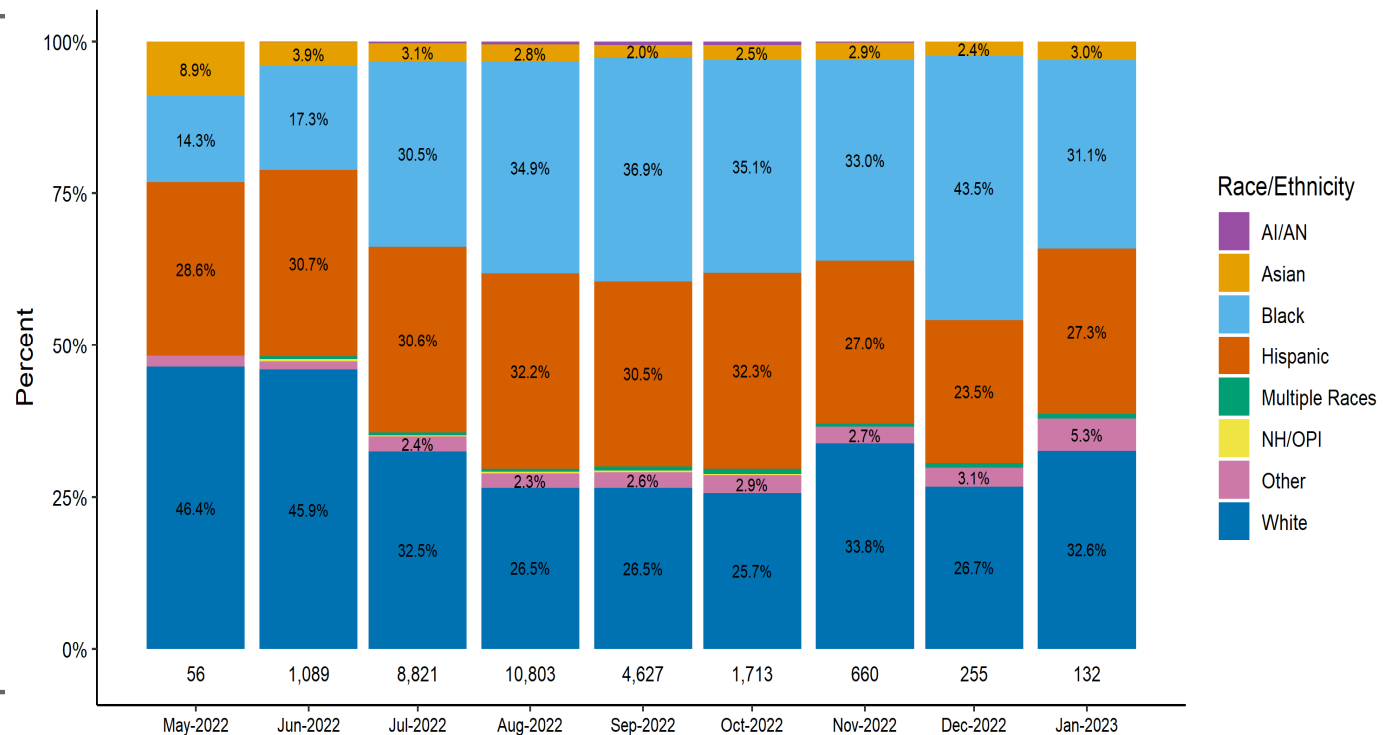
Race / Ethnicity**	Count	Percent
Black or African American	9,331	33.1%
Hispanic or Latino	8,773	31.1%
White	8,258	29.3%
Asian	789	2.8%
Other Race	690	2.4%
Multiple Races	151	0.5%
American Indian or Alaska Native (AI/AN)	111	0.4%
Native Hawaiian or Other Pacific Islander (NH/OPI)	68	0.2%
Missing	1,998	-

\*All cases reporting Hispanic ethnicity are classified into the Hispanic or Latino category

\*\*Race/Ethnicity available for 93.4% of cases

Data as of February 8, 2023

Proportion of All Cases by Race/Ethnicity by Month



# Clinical Characteristics of Mpox Cases Reported to CDC as February 9, 2023

Characteristic	Percentage
<b>HIV Status*</b>	
HIV Positive	53%
HIV Negative	47%
<b>Rash location**</b>	
Genitals or perianal area	65%
Trunk or limbs	62%
Head, face, mouth	54%
Palms or soles of feet	24%
<b>Hospitalized</b>	
Yes	7.7%
No	92%

\*HIV status available for 9,039 (30%) of mpox cases

\*\*Rash location available for 14,902 (49%) of mpox cases

32 mpox associated deaths (0.1% of all cases) reported in the U.S.



# Detection and transmission of mpox during the current outbreak

- Spread primarily through sexual or close intimate contact
- Other routes of transmission have been reported
  - Household transmission
  - Injury with contaminated sharp instrument in clinical setting
  - Piercing and tattooing
  - Perinatal transmission
- Some people can spread mpox virus to others 1-4 days before symptom onset reported (i.e. pre-symptomatic transmission)
- No evidence that people who are infected but never develop symptoms can spread mpox



# Detection and transmission of mpox during the current outbreak

Mpox Virus in Human Samples and Implications for Transmission			
Exposure source	Mpox virus DNA detected by PCR	Replication-competent virus detected/isolated	Epidemiologically supported source of infection
Skin	Yes	Yes	Yes
Oropharynx and saliva	Yes*	Yes	Yes
Anorectum	Yes	Yes	Yes†
Semen	Yes*	Yes	Insufficient data
Urine/urethra	Yes	Yes	Insufficient data
Conjunctivae or ocular fluid	Yes	Yes	Insufficient data
Blood/plasma/serum	Yes	Insufficient data	Insufficient data
Feces	Yes	Insufficient data	Insufficient data
Vagina	Yes	Insufficient data	Insufficient data†
Breastmilk	Insufficient data	Insufficient data	Insufficient data
Contaminated sharp‡	Insufficient data	Insufficient data	Yes

\* DNA has been detected at Ct values <35 in recovered patients more than 30 days after illness onset in an upper respiratory tract swab, saliva, and semen.

† The preponderance of existing data support exposure to anorectal and vulvovaginal tissues and fluids as capable of transmitting infection; however, it is difficult with current evidence to definitively isolate these exposures from other concomitant exposures (see text).

‡ Includes body modification with piercings and tattooing.

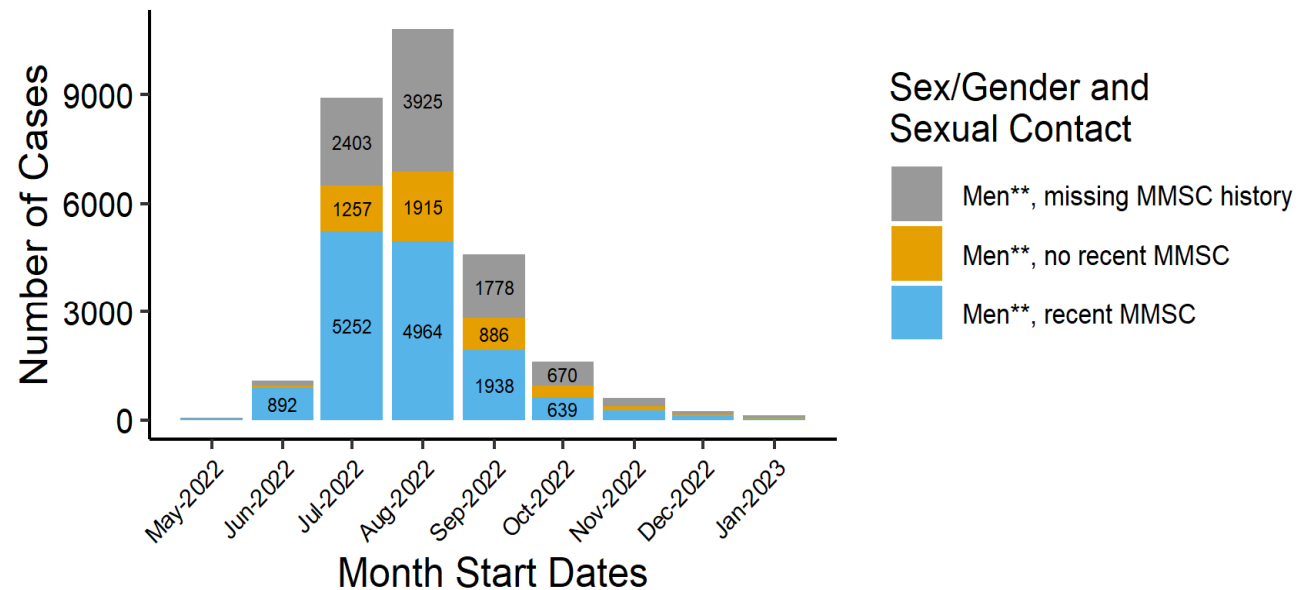
<https://www.cdc.gov/poxvirus/monkeypox/about/science-behind-transmission.html>

# Mpox cases among men reported to CDC by sexual contact history

MMSC* among Men**	Cases	Percent
Men, recent MMSC	14,143	75.4%
Men, no recent MMSC	4,612	24.6%
Missing	9,331	-

\*MMSC= male-male sexual contact

\*\*Sexual contact history and gender available for 66.8% of cases among men



Data as of February 8, 2023

# **Epidemiology of Mpox in Less Affected Populations**

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# Mpox in Cisgender Women in the United States, May 11–November 7, 2022

Characteristic	Percentage among Cisgender women (n=769)	
<b>Age</b>		
Median (Range)	32 (15–89)	2.7% of all cases reported to CDC were among cisgender women
<b>Race and ethnicity</b>		
Black, non-Hispanic	44%	
White, non-Hispanic	25%	
Hispanic or Latino	23%	
<b>HIV Status*</b>		
HIV positive	8%	
HIV negative	92%	
<b>Recent sexual or close intimate partner**</b>	71%	

\*HIV status available for 173 (22%) cisgender women

\*\*Defined as within last 3 weeks; data available for 463 (60%) cisgender women

Source: <http://dx.doi.org/10.15585/mmwr.mm7201a2>

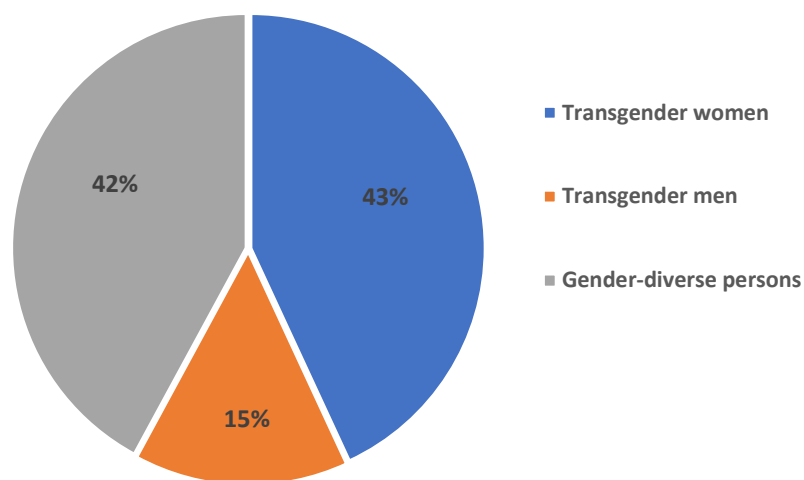
# Mpox in Pregnant and Recently Pregnant People in the U.S.

- From May 11-November 7, 2022, 21 cases of mpox reported to CDC occurred in pregnant people and 2 reported cases occurred in people who were recently pregnant (within 3 weeks of delivery)
- Among those with exposure data (n=12): 9 with sexual contact and 3 with household contact
- Similar signs and symptoms of mpox as those in non-pregnant people
  - 4 cases with genital lesions during pregnancy
- Tecovirimat provided to 48% of people with mpox during pregnancy with no adverse events reported
- None received post-exposure prophylaxis with JYNNEOS
- Outcomes
  - Four hospitalizations for mpox indications. All discharged while still pregnant.
  - No pregnant patients required intensive care, intubation, or unplanned delivery
  - 3 pregnancy outcomes: 2 uncomplicated live births (no transmission to the infant); 1 first trimester spontaneous abortion
  - Two recently pregnant persons experienced symptoms within 3 days of delivery and their newborns developed lesions within a week

Source: <http://dx.doi.org/10.15585/mmwr.mm7201a2>

# Mpox in Transgender and Gender-Diverse Adults — United States, May 17–November 4, 2022

Gender identity of transgender and gender-diverse adults with mpox (n=466)



96% of gender-diverse adults were assigned male sex at birth.

Source: <http://dx.doi.org/10.15585/mmwr.mm715152a1>

Characteristic	Percentage among transgender and gender-diverse persons
<b>Age</b>	
Median (Range)	32 (18–71)
<b>Race and ethnicity</b>	
Black, non-Hispanic	28%
White, non-Hispanic	28%
Hispanic or Latino	37%
<b>HIV Status</b>	
HIV positive	48%
HIV negative	52%
<b>Recent sexual or close intimate partner</b>	84%

\*HIV status available for 166 (36%) transgender and gender-diverse adults

\*\*Defined as within last 3 weeks; data available for 378 (80%) transgender and gender-diverse adults

# Epidemiologic Characteristics of Pediatric Cases in the U.S., May 17–September 24, 2022

Characteristic	% by age group, yrs		
	0–4 (n = 16)	5–12 (n = 12)	13–17 (n = 55)
<b>Sex</b>			
Male	75%	50%	89%
Female	25%	50%	11%
<b>Race or ethnicity</b>			
Black, non-Hispanic	44%	42%	49%
Hispanic or Latino	31%	42%	34%
White, non-Hispanic	19%	17%	9%
Asian, non-Hispanic	—	—	4%
American Indian or Alaska Native, non-Hispanic	—	—	2%
Native Hawaiian or other Pacific Islander, non-Hispanic	6%	—	—
Other, non-Hispanic	—	—	2%
<b>Exposure setting and route</b>			
Sexual contact	—	—	97%
Household contact	93%	100%	—
Other	7%	—	3%

Source: <http://dx.doi.org/10.15585/mmwr.mm7144a4>

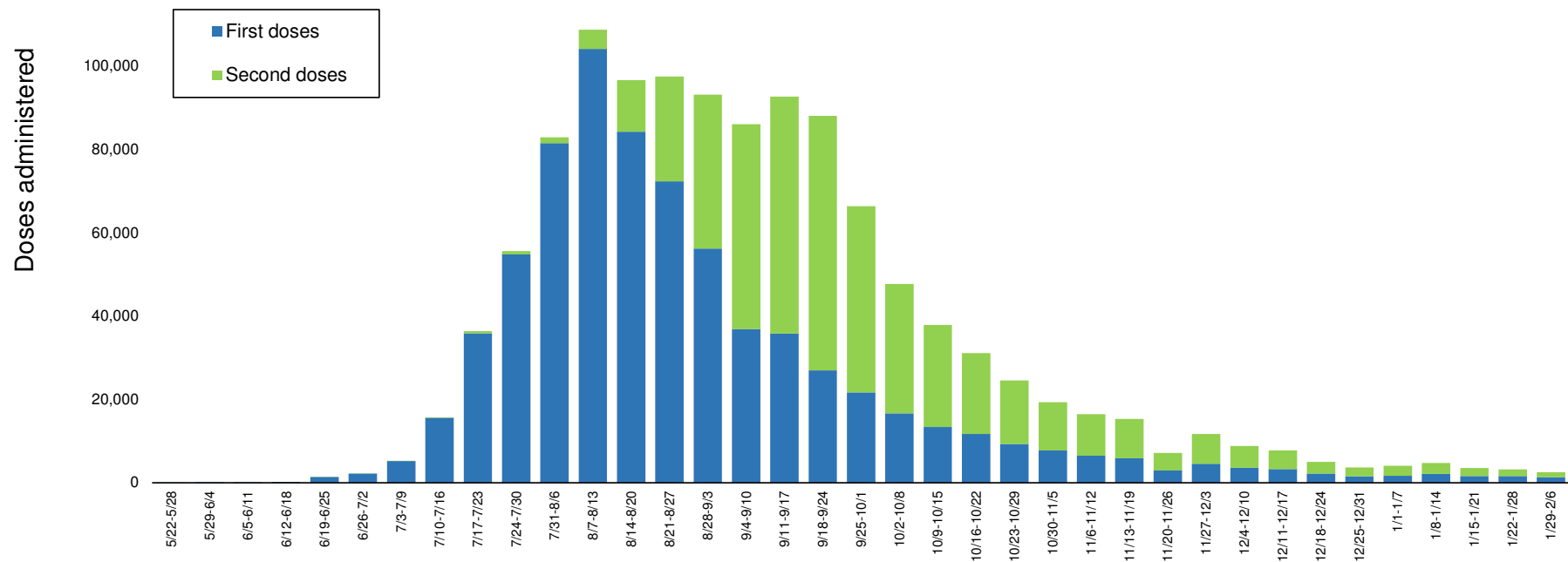


# Vaccine Administration

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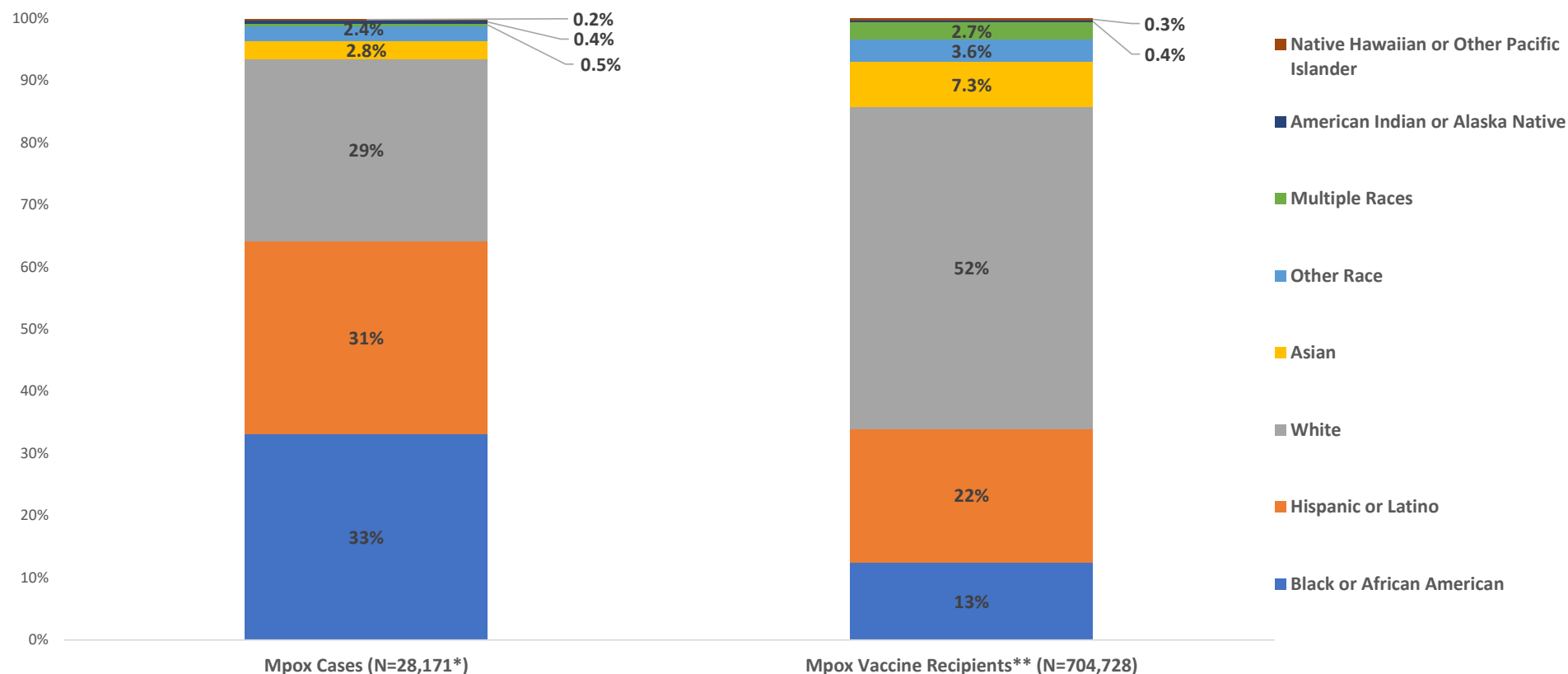
# Total JYNNEOS Vaccine Doses Administered and Reported to CDC by week

**1,185,907 doses** administered and reported to CDC since May 20, 2022



Data as of February 7, 2023

# Mpox Cases and Vaccine Recipients by Race and Ethnicity



\*Race and ethnicity available for 93% of mpox cases reported

\*\*Based on 1<sup>st</sup> dose; Data as of February 9, 2023; race and ethnicity available for 91% of first doses administered