HIV AND SEXUALLY TRANSMITTED DISEASES AMONG MPOX CASES, TEXAS 2022

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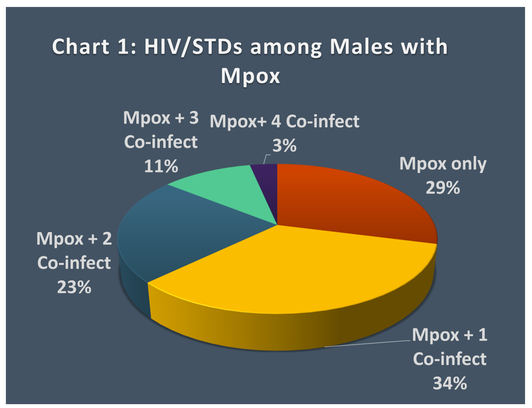
Background

Syphilis, chlamydia, gonorrhea (STD) and HIV are reportable conditions in Texas. Men who have sex with men (MSM) and racial minority populations are disproportionately impacted by these conditions. The first mpox case in Texas was identified on June 7, 2022, and the U.S Department of Health and Human Services declared mpox a public health emergency on August 4, 2022. Due to the disproportionate impact of mpox on the same populations, Texas Department of State Health Services (DSHS) began conducting routine HIV/STD/mpox matches in September 2022.

Methods

The data match was conducted with all persons reported to the Texas National Electronic Disease Surveillance System with confirmed and probable mpox. Data elements and person level identifiers reported through routine electronic reporting were used for the match, including first and last name, date of birth, sex at birth, and patient address. Mpox cases reported to DSHS thru January 2, 2023, were matched to the HIV registry and the STD registry. All persons living with HIV/AIDS (PLWHA) were included in the HIV dataset, and all persons diagnosed with an STD within the previous 12 months were included in the STD dataset. Match processes were completed using SAS 9.4 and Link Plus.



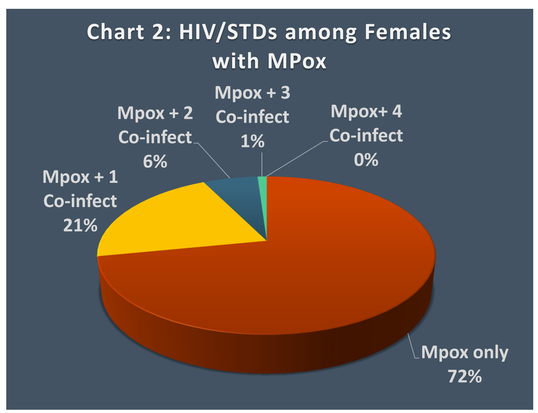


Chart 1 and 2: HIV/STD Co-infections among people with Mpox diagnosis distributed by sex at birth.

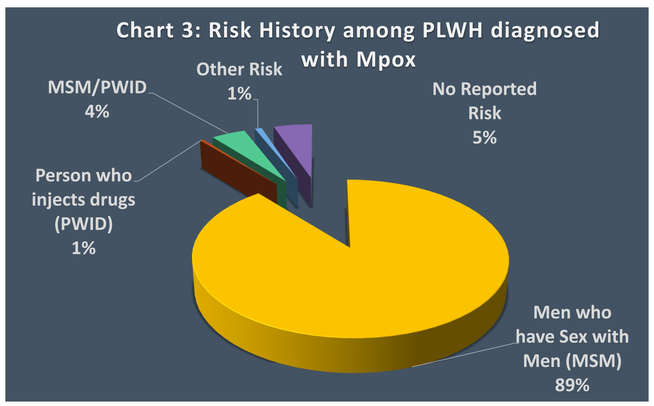


Chart 3: Reported risk in eHARS of People living with HIV and diagnosed Mpox.

Table 1: Mpox and HIV/STI Co-infections by select characteristics

	Mpox only	Mpox + 1 Co-infect	Mpox + 2 Co-infect	Mpox + 3 Co-infect	Mpox + 4 Co-infect
Birth Sex					
Male	808 (29.0%)	939 (33.7%)	640 (23.0%)	304 (10.9%)	92 (3.3%)
Female	69 (71.9%)	20 (20.8%)	6 (6.3%)	1 (1.0%)	0 (0.0%)
Age Group					
18-29	283 (33.9%)	251 (30.1%)	164 (19.6%)	103 (12.3%)	34 (4.1%)
30-39	334 (27.8%)	399 (33.2%)	303 (25.2%)	130 (10.8%)	37 (3.1%)
40-49	161 (29.5%)	195 (35.7%)	121 (22.2%)	52 (9.5%)	17 (3.1%)
50-59	61 (26.9%)	93 (41.0%)	51 (22.5%)	18 (7.9%)	4 (1.8%)
60+	21 (42.9%)	20 (40.8%)	7 (14.3%)	1 (2.0%)	0 (0.0%)
Race					
Asian	20 (42.6%)	8 (17.0%)	10 (21.3%)	8 (17.0%)	1 (2.1%)
Black Or African American	237 (24.0%)	358 (36.2%)	243 (24.6%)	115 (11.6%)	36 (3.6%)
Hispanic Or Latino	276 (32.2%)	274 (32.0%)	185 (21.6%)	89 (10.4%)	32 (3.7%)
White	223 (33.7%)	218 (32.9%)	147 (22.2%)	60 (9.1%)	14 (2.1%)
Other	48 (35.0%)	45 (32.8%)	27 (19.7%)	11 (8.0%)	6 (4.4%)
Unknown	73 (38.8%)	56 (29.8%)	34 (18.1%)	22 (11.7%)	3 (1.6%)

Results

Of the 2,879 mpox cases reported to DSHS through January 2, 2023, 1,451 (50.4%) matched to the HIV case registry. Among the 2,879 mpox cases, 2,002 (69.5%) were either PLWHA or diagnosed with an STD in the 12 months prior to their mpox diagnosis. Men were disproportionately impacted by mpox, 2,783 cases (96.7%), compared to women, 96 cases (3.3%). There are large differences in the rate of coinfection with HIV/STDs, 71% of men (n=1,975) diagnosed with mpox had an HIV/STD coinfection, while only 28.1% of women (n=27) had a coinfection. Among people in the 50-59 age range diagnosed with mpox, 73.1% had a coinfection (n=166), followed by the 30-39 age range at 72.2% (n=869). Among PLHWA and mpox cases, 1,358 (93.6%) had a documented risk history of sex with gay or bisexual men. Black and African American people living with HIV were more likely to be diagnosed with mpox (n= 611 , 61.8%) compared to White PLWHA (n=280, 42.3%) or Hispanic PLWHA (n=404, 47%).

Table 2: HIV/STD Co-Infections Among Mpox Cases

	# of People	Percent
All Mpox Cases	2,879	100%
Chlamydia	99	3.4%
Chlamydia, Gonorrhea	114	4.0%
Chlamydia, Gonorrhea, HIV	132	4.6%
Chlamydia, Gonorrhea, HIV, Syphilis	92	3.2%
Chlamydia, Gonorrhea, Syphilis	48	1.7%
Chlamydia, HIV	129	4.5%
Chlamydia, HIV, Syphilis	61	2.1%
Chlamydia, Syphilis	21	0.7%
Gonorrhea	172	6.0%
Gonorrhea, HIV	161	5.6%
Gonorrhea, HIV, Syphilis	64	2.2%
Gonorrhea, Syphilis	24	0.8%
HIV	615	21.4%
HIV, Syphilis	197	6.8%
No HIV/STDs	877	30.5%
Syphilis	73	2.5%

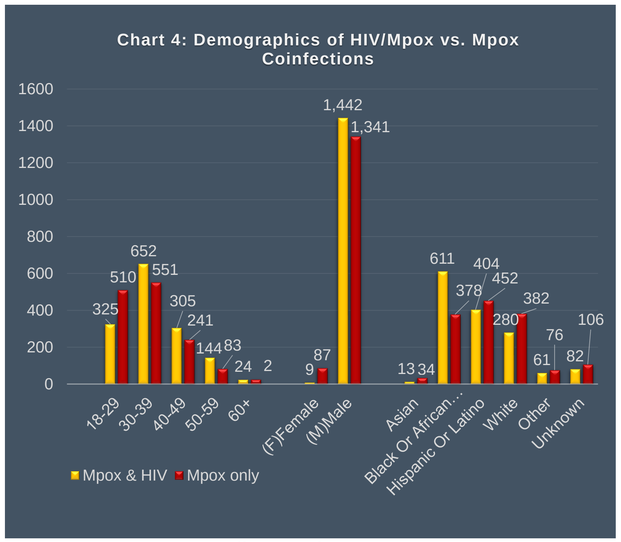


Chart 4: Select demographic differences of people with mpox diagnoses and HIV/mpox co-infection

Conclusions

Even as mpox, HIV, and STDs disproportionately impact MSM and racial minority populations, the distribution of that impact is not uniform across age, sex, race or geographic regions of the state. Prevention for all diseases should be focused on populations experiencing higher burden of disease. People who have risk factors for mpox, HIV, and STDs should be tested and evaluated for all relevant infections and educated on prevention best practices including PrEP and vaccination.

Limitations

Texas investigates all new diagnoses of HIV and syphilis, but morbidity of chlamydia and gonorrhea are calculated from labs and provider reports only. Staff continuously work to deduplicate the people and instances of disease; however, Texas receives approximately 5,000 lab results for HIV/STDs per day and this is a continuous effort.

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