HIV CARE AND PREVENTION CHARACTERISTICS AMONG PERSONS WITH MPOX AND HIV INFECTION, TEXAS 2022

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Background

The U.S. Department of Health and Human Services declared a public health emergency for the mpox outbreak on August 4, 2022. The Texas Department of State Health Services (DSHS) confirmed the first mpox case in Texas on June 7, 2022. Routine matching of sexually transmitted diseases (STDs), HIV, and mpox data registries began in September 2022 to monitor and assess epidemiological trends of the current outbreak and inform public health action. Texas law requires medical providers, facilities, and clinical laboratories to report positive HIV tests, CD4 counts, and HIV viral loads to DSHS. The objective of this analysis was to describe HIV care and prevention characteristics among persons with mpox and HIV infection in Texas.

Methods

The Texas DSHS conducted a match with the Enhanced HIV/AIDS Reporting System (eHARS) database and the state's integrated surveillance system to identify persons with mpox and HIV infection using person level identifiers including first and last name, date of birth, sex at birth, and patient address. Time from mpox diagnosis to HIV diagnosis and HIV laboratory data was examined to assess HIV care characteristics among persons with mpox and HIV infection. Mpox diagnosis date was estimated using the earliest date of either 1) rash onset, 2) illness onset, 3) positive laboratory result, or 4) health department notification. Analyses were conducted using SAS 9.4.

Table 1: CD4 and viral load laboratory data for persons with mpox and HIV infection in the 12 months prior to mpox diagnosis

Variable	N	%
Persons with HIV/Mpox Co-infection	1,451	50.4%
Laboratory Test		
CD4 Count	1,223	84.3%
<200 cells /µL	107	8.8%
200-499 cells/µL	318	26.0%
>500 cells/µL	798	65.2%
Viral Load	1,094	77.3%
<200 copies/mL	915	83.6%
200-1,000 copies/mL	46	4.2%
1,001-5,000 copies/mL	25	2.3%
5,001-10,000 copies/mL	18	1.6%
>10,000 copies/mL	90	8.2%

Results

As of January 2, 2023, there were 2,879 confirmed or probable mpox cases in Texas. 1,451 (50.4%) of persons with mpox had HIV infection. Of those, 56 (3.9%) were diagnosed with HIV infection after or within 30 days of mpox diagnosis, 88 (6.1%) between 30 days to 1 year, 78 (5.4%) between 1 to 2 years, 231 (15.9%) between 2 to 5 years, 427 (29.4%) between 5 to 10 years, and 571 (39.4%) more than 10 years ago. Of those with HIV laboratory testing in the 12 months prior to mpox diagnosis, 1,223 (84.3%) persons had CD4 count results and 1,094 (77.3%) had HIV viral load results reported. Among those with CD4 counts, 107 (8.8%) had a CD4 count of less than 200 cells/µL, 318 (26.0%) had CD4 counts between 200-499 cells/µL, 798 (65.2%) had CD4 counts greater than 500 cells/µL. For persons with HIV viral loads, 915 (83.6%) were virally suppressed (<200 copies/mL), 46 (4.2%) had viral loads between 201-1000 copies/mL, and 133 (12.2%) had viral loads greater than 1,000 copies/mL.

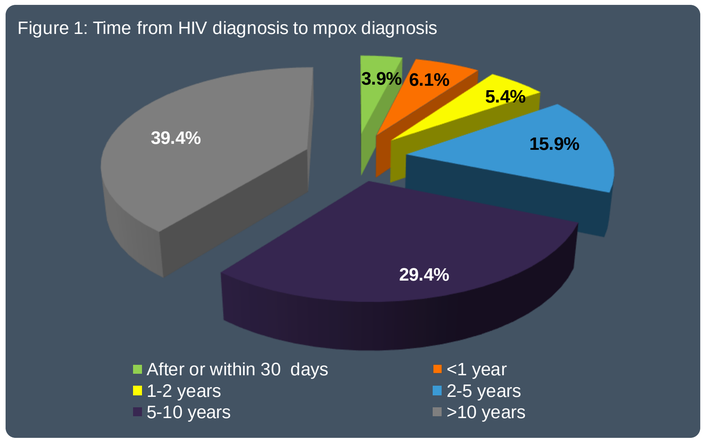

Figure 1 details the difference in time between the HIV diagnosis and mpox diagnosis for persons with mpox and HIV infection.

Conclusions

Prevalence of mpox among persons living with HIV was high. The majority of persons with mpox and HIV co-infection were diagnosed with HIV more than 5 years ago and had HIV laboratory data indicating utilization of HIV related care in the year prior to their mpox diagnosis. Of those with HIV laboratory data, a large proportion had CD4 counts above 500 cells/µL and were virally suppressed demonstrating they were relatively healthy. Limitations of this analysis include underestimation of HIV prevalence and utilization of HIV care services by Texans seeking care outside of Texas. The disproportionate impact of mpox on those living with HIV reinforces the importance of offering HIV screening testing to persons seeking care for mpox and focusing public health efforts on linkage or re-linkage to HIV care and other supportive services as needed.

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