CITY OF MILWAUKEE
HEALTH DEPARTMENT

Clinical Laboratory Update

January 2021
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Sexually Transmitted Infections

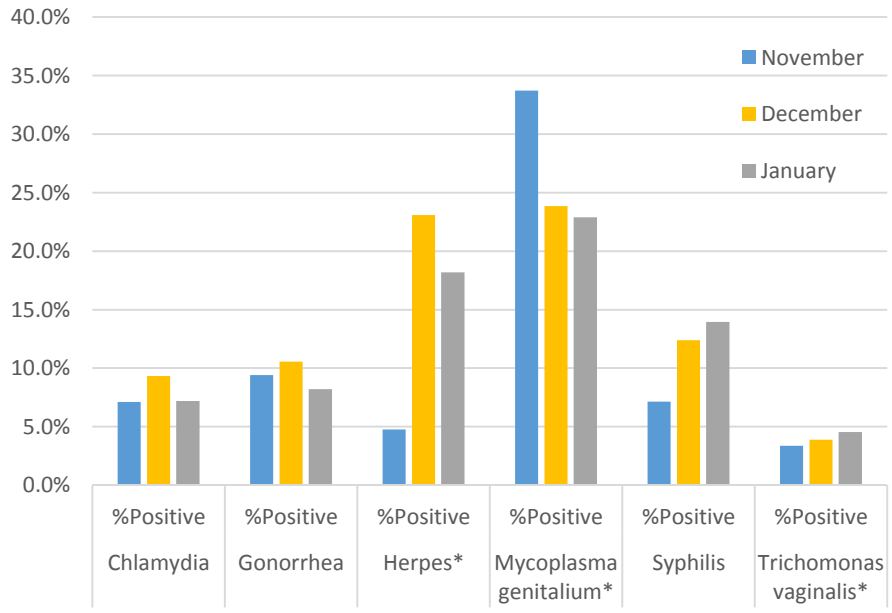

Figure 1: Percent positivity for specimens screened using molecular or serological assays for the given organism.

*Not reportable as per WI DHS 145.04 (3) (a)

Respiratory Infections

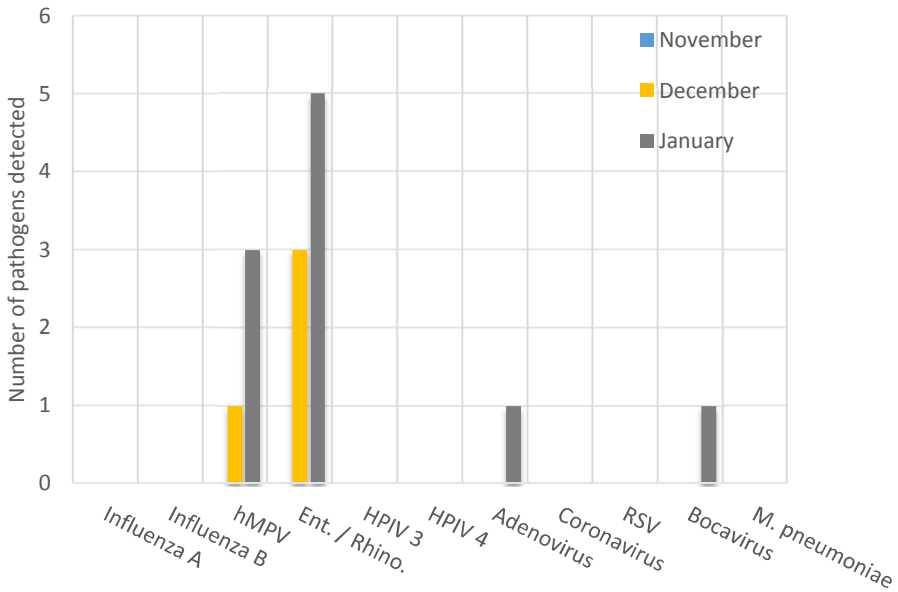

Figure 2: Respiratory pathogens detected using a Respiratory Pathogen Panel (RPP) and/or RT-PCR Influenza assay.

Connect with your health department:

From the desk of the Public Health Laboratory Director

2020- A Year of Success, Challenges and Opportunities

- One of the first laboratories in the state to begin performing SARS-CoV-2 diagnostic testing (March)
- Began performing SARS-CoV-2 IgG antibody testing; deployed POC rapid testing at 11 community locations in Milwaukee, including congregate living, student health centers, homeless shelters, and assisted Milwaukee Employees Testing (May)
- Validated Flu/COVID diagnostic assay and expanded surveillance testing; assisted UEOC (MKE County EOC) and State Emergency Operations Center (SEOC) testing requests for the Greater Milwaukee and beyond (September)
- Secured CDC COVID-19 Sequencing Grant, in partnership with UW-Madison, UWM and U-Michigan
- Analyzed >1000 COVID-19 genomes to understand transmission patterns and mutations in circulating strains (https://www.nature.com/articles/s41467-020-19346-z)
- Critical contributions to MKE-Elevate funding to MHD (by Healthier Wisconsin Partnership Program-Medical College of Wisconsin)
- MHDL staff have co-authored 6 publications on COVID-19 (with WI DHS and CDC Field teams in Milwaukee, WI)
- MHDL leadership elected to serve on the APHL Board of Directors
- Maintained ELC–Strengthening U.S. Response to Resistant Gonorrhea (SURRG) grant activities, related publications, posters and presented in 2020 APHL, STI national conferences
- Robust workforce development efforts-hired temp admin, tech staff, secured two 2021 APHL COVID Associates

Links to related information & data:
MHDL COVID-19 Testing website
MHD COVID-19 Situation
WSLH Laboratory Surveillance Report

New HIV Infections

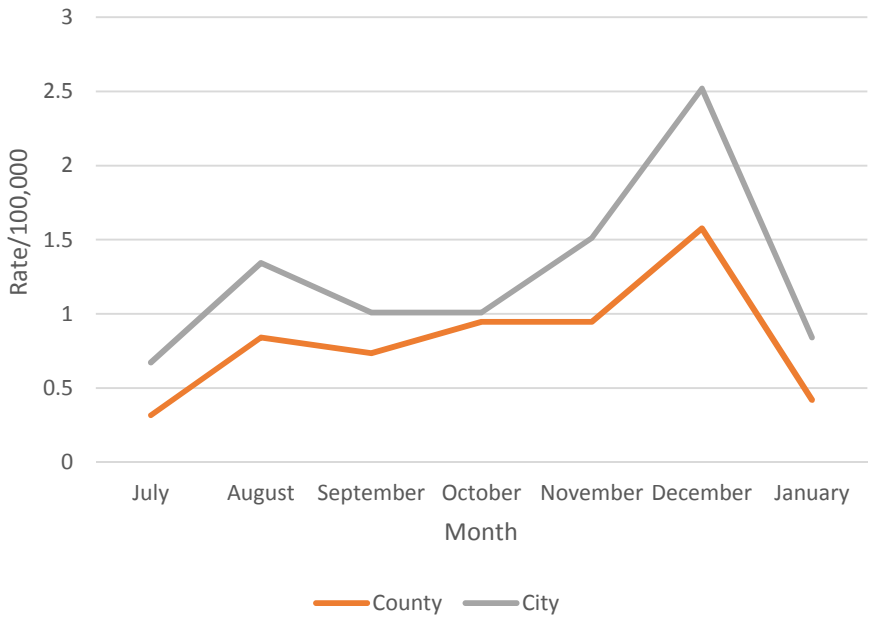

Figure 3: Monthly comparison of rate of new HIV infections in Milwaukee County and the City of Milwaukee, using data obtained from the Wisconsin Department of Health Services. Numbers are provisional and subject to change.

For statewide HIV data, visit: https://www.dhs.wisconsin.gov/hiv/data.htm

Syphilis Surveillance

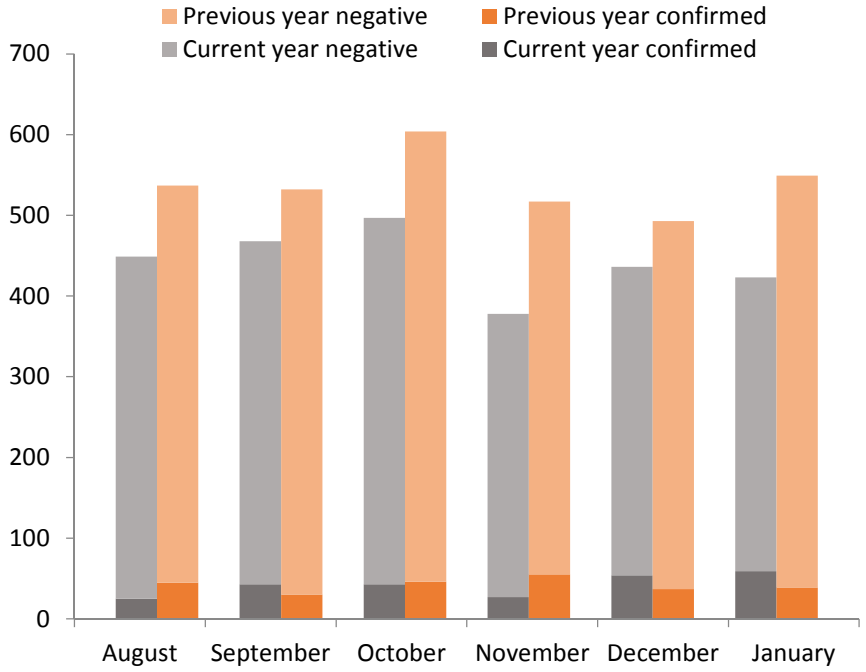

Figure 4: Monthly comparison of syphilis data with year over year comparisons.

Number of specimens screened at MHDL, darker bars represent confirmed tests.

Gonorrhea Antimicrobial Susceptibility Testing

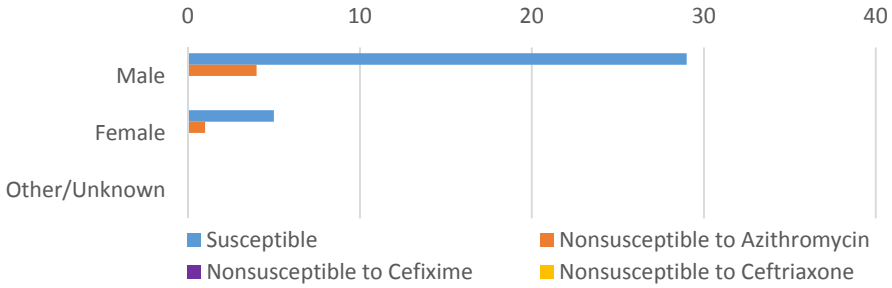

Figure 5: Antibiotic susceptibility profile of Gonorrhea isolates identified in males and females. In January 2021, 5 of 39 cultures tested were found to be nonsusceptible to Azithromycin according to CLSI guidelines. MHDL tests for antibiotic resistance to Azithromycin, Ceftriaxone, Cefixime and Gentamicin.

Sexually Transmitted Infections by Source

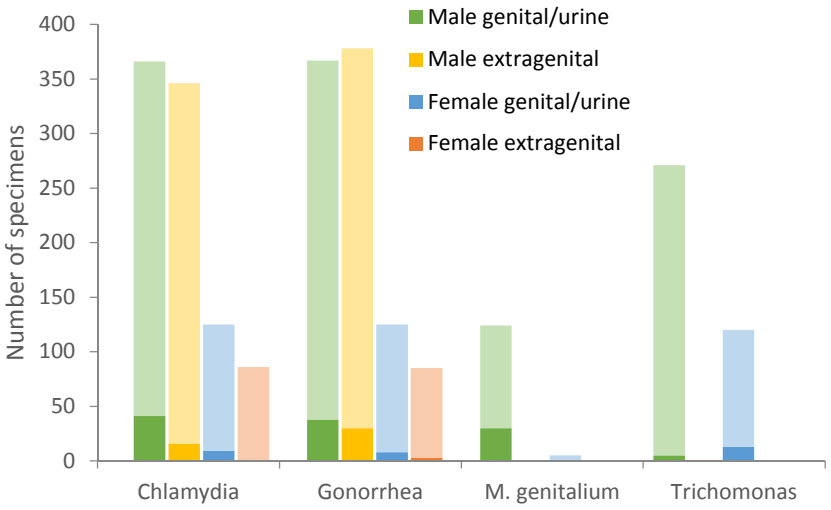

Figure 6: Distribution of STIs detected using NAAT. In January 2021, 8.0% of male and 4.7% of female specimens screened were positive for Chlamydia. 9.1% of male and 5.2% of female specimens were positive for Gonorrhea. 24.2% of male and none of the 5 female specimens were positive for *M. genitalium*. 1.8% of male specimens and 10.8% of female specimens were positive for ***Trichomonas***.

Note: Darker bars indicate positive specimens.

Viral Surveillance

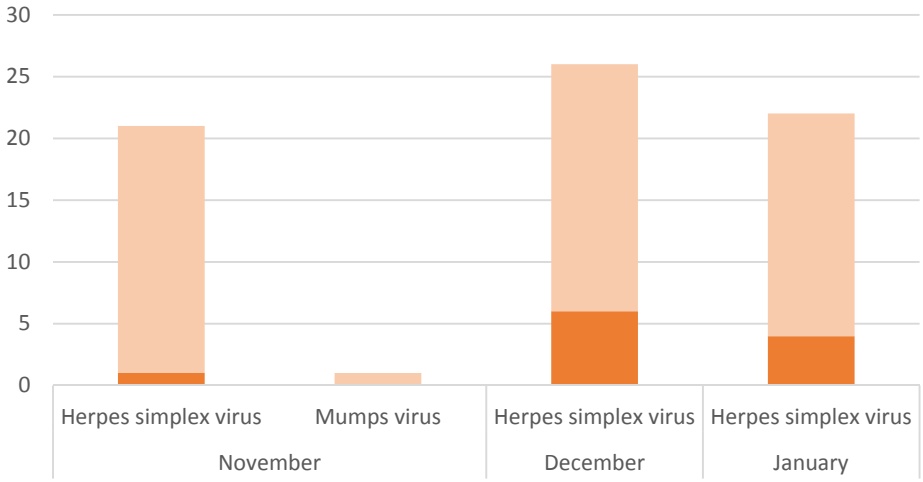

Figure 7: Specimens tested using molecular methods.

Note: Height of bar indicates number of specimens tested.

Darker bars indicate DNA/RNA detected by virus culture, real-time PCR and/or nucleotide sequencing analysis.

Legionella Testing

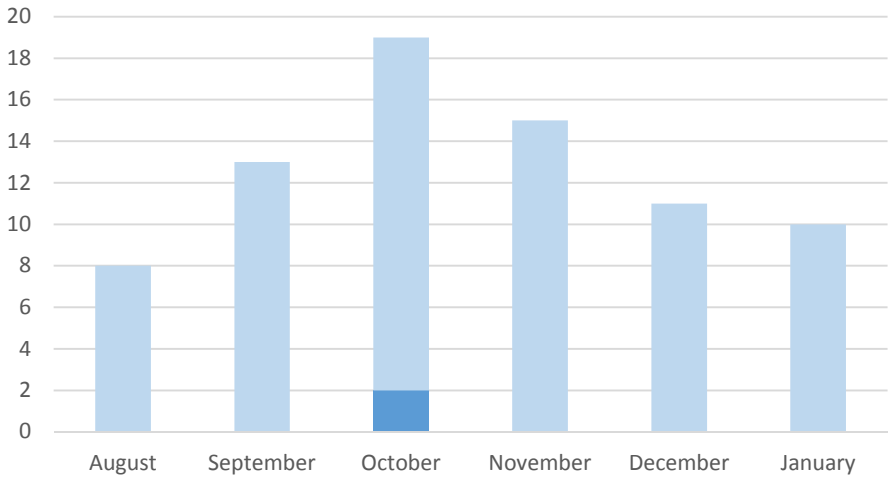

Figure 8: Clinical specimens tested using culture and molecular methods.

*MHDL is one of the **CDC ELITE** certified sites for environmental *Legionella* testing. See the Winter 2019 issue of the APHL Bridges newsletter for more information.

Note: Darker bars indicate confirmed Legionella pneumophila by culture and/or real-time PCR.