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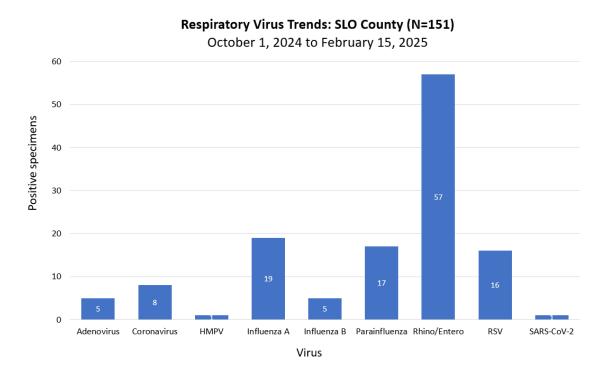
Influenza and Respiratory Virus Update

The current influenza season has been hard-hitting. According to the U.S. Centers for Disease Control and Prevention (CDC), there have been an estimated 33 million cases and 430,000 hospitalizations since October in the U.S. alone (https://www.cdc.gov/flu-burden). In addition, H5N1 avian influenza has infected poultry flocks and dairy herds, with isolated spillovers to humans.

The County of San Luis Obispo (SLO) Public Health Laboratory continues to actively monitor influenza circulation for rare or unusual strains in this challenging season. To date, we have performed influenza typing on more than 100 specimens, showing the following breakdown:

- o Influenza A, H1N1: 48%
- o Influenza A, Seasonal H3: 38%
- Influenza B, Victoria lineage: 15%

Importantly, there have been no detections of H5N1 avian influenza in humans within SLO County. Respiratory infection trends also show the prevalence of common cold viruses, such as coronaviruses and rhinoviruses.



Outbreaks in the U.S.

The SLO Public Health Laboratory is tracking a number of national outbreaks, recognizing the potential for disease spread outside current jurisdictions. This includes:

- Measles outbreaks in Texas and New Mexico: A total of 133 cases and one death have been confirmed in these states, with the majority of cases in Gaines County, Texas. Although the MMR vaccine is effective, measles remains the most contagious disease with respiratory spread. Consequently, a high vaccination rate is needed to stop transmission. See updates from the <u>Texas Department of Health and Human</u> <u>Services</u>.
- Tuberculosis in Kansas: An outbreak in Kansas City has become the largest documented tuberculosis outbreak on record in the U.S., reaching a total of 67 active and 79 latent cases. The outbreak comes amid a rising incidence of tuberculosis nationwide. See our department's 2024 news release about <u>tuberculosis in SLO</u> <u>County.</u>

Both measles and tuberculosis testing are a critical part of the SLO Public Health Laboratory's capabilities.

Specimen Acceptance Guidelines

The laboratory has now finalized changes to our specimen acceptance criteria, placing an emphasis on specimen quality, with clear requirements on specimen type, temperature, hold time, and volume. This aligns with our goal of maintaining high quality laboratory testing and ensuring reliable results for both providers and patients. Further details on specimen requirements can be found at: www.slocounty.gov/PH-Lab.

Sample Acceptance Criteria

| Test | Preferred specimen(s) | Hold time | Temperature |
|---|---------------------------------------|-----------|---------------------|
| STI, Blood, Urine | | | |
| Chlamydia, Gonorrhea, Trichomonas, | Urine in Aptima tube | 30 days | 2-30 °C (36-86 °F) |
| M. genitalium NAAT | Swab in Aptima tube | 60 days | |
| Herpes Virus NAAT | Swab in VTM | 7 days | 2-8 °C (36-46 °F) |
| HIV screening or confirmatory testing | Unspun serum or plasma | 2 hours | 15-25 °C (59-77 °F) |
| | Spun serum or plasma | 7 days | 2-8 °C (36-46 °F) |
| | (spun 30 min to 2 h after collection) | | |
| Syphilis screen or confirmatory, blood (RPR, TPPA) | Unspun serum or plasma | 2 hours | 15-25 °C (59-77 °F) |
| | Spun serum or plasma | 5 days | |
| | (spun 30 min to 2 h after collection) | | |
| Syphilis screen, CSF | CSF | 5 days | 2-8 °C (36-46 °F) |
| Urine culture | Urine in a sterile container | 24 hours | |
| Blood lead | Fingerstick blood in Tx Reagent | 7 days | |

PCR Instrument Update

The SLO Public Health Laboratory acquired two QuantStudio 5 Dx instruments to upgrade our PCR testing capabilities. These instruments will replace existing systems and enable the laboratory to continue advanced testing for bioterrorism agents, influenza, measles, and mpox, among other pathogens. Onboarding studies are currently underway.



Questions?

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