

HEALTH MATTERS

Newsletter for the Division of Communicable Disease & Epidemiology - Summer 2023

Disease Matters

West Nile Virus

Positive Mosquito Pool

Davis County recently identified its first mosquito pool of 2023 that was positive for West Nile virus (WNV). Typically, positive mosquito pools are first detected in late July to August. This year's positive pool is earlier than normal. As such, Davis County Health Department anticipates that 2023 could be a busy season for human WNV cases.

Signs and Symptoms

An estimated 70-80% of human WNV infections are subclinical or asymptomatic. Most symptomatic persons experience an acute systemic febrile illness that often includes headache, weakness, myalgia, or arthralgia; gastrointestinal symptoms and a transient maculopapular rash also are commonly reported. Less than 1% of infected persons develop neuro-invasive disease, which typically manifests as meningitis, encephalitis, or acute flaccid paralysis.

WNV disease should be considered in any person with a febrile or acute neurologic illness who has had recent exposure to mosquitoes, blood transfusion, or organ transplantation, especially during the summer months in areas where virus activity has been reported.

Testing

Laboratory diagnosis is generally accomplished by testing of serum or cerebrospinal fluid (CSF) to detect WNV-specific IgM antibodies. The IgM antibodies are usually detectable 3 to 8 days after onset of illness.

These antibodies persist for 30 to 90 days, but longer persistence has been documented. Therefore, positive IgM antibodies occasionally may reflect a past infection. If serum is collected within 8 days of illness onset, the absence of detectable virus-specific IgM does not rule out the diagnosis of WNV infection, and the test may need to be repeated on a later sample.

Prevention

No WNV vaccines are licensed for use in humans. In the absence of a vaccine, prevention of WNV disease depends on community-level mosquito control programs to reduce vector densities, personal protective measures to decrease exposure to infected mosquitoes, and screening of blood and organ donors. The best ways individuals can protect themselves include:

- Using insect repellent,
- Wearing loose-fitting, long-sleeved shirts and pants,
- Installing screens on windows and doors, and
- Removing standing water and checking regularly for water-holding containers (such as tires, buckets, toys, pools, birdbaths, flowerpots, and trash containers).



West Nile virus is most commonly spread to people by the bite of an infected mosquito.

In rare situations, human West Nile virus cases may develop neuro-invasive disease that affects the central nervous system.

There is no specific treatment for West Nile virus disease; clinical management is supportive.

Need to Report a Communicable Disease?



Call Davis County Health Department at 801-525-5220



Or fax the information to 801-525-5210

Seasonal Matters

2022 Annual Report

The Division of Communicable Disease and Epidemiology (CD/Epi) recently released its annual report for 2022.

The annual report provides an in-depth look at infectious disease trends and issues in Davis County. Major disease sections include enteric, invasive, sexually-transmitted, tuberculosis, vaccine-preventable, vector-borne, zoonotic, and more.

Aside from just showing disease counts and rates, it provides information about projects and programs to help control and prevent infectious disease. Major outbreak responses in 2022 are also discussed, including mpox (formerly monkeypox), highly pathogenic avian influenza, drug-resistant *Pseudomonas aeruginosa*, and COVID-19.



We encourage providers, non-profits, and the community to use this report to better understand how CD/Epi serves Davis County. This and many other community reports may be found on the Davis County Health Department website at <https://www.daviscountyutah.gov/health/reports-and-assessments>.

Number Matters

Selected Notifiable Diseases, 2022 & 2023

| | 2022 Year-to-Date | 2023* Year-to-Date | % Increase or Decrease Year-to-Date |
|--------------------------------|----------------------|-----------------------|---|
| Campylobacteriosis | 20 | 30 | 50% ↑ |
| Chlamydia | 513 | 497 | 3% ↓ |
| Giardiasis | 12 | 3 | 75% ↓ |
| Gonorrhea | 131 | 79 | 40% ↓ |
| Hepatitis B, chronic | 7 | 8 | 14% ↑ |
| Hepatitis C, acute | 3 | 10 | 233% ↑ |
| Meningitis, bacterial | 3 | 0 | 100% ↓ |
| Meningitis, viral | 4 | 1 | 75% ↓ |
| Norovirus | 46 | 72 | 57% ↑ |
| Pertussis | 5 | 6 | 20% ↑ |
| Salmonellosis | 15 | 24 | 60% ↑ |
| Shiga-toxin producing E. coli | 3 | 14 | 367% ↑ |
| Shigellosis | 1 | 6 | 500% ↑ |
| Syphilis, all stages | 18 | 27 | 50% ↑ |
| Tuberculosis, active disease | 0 | 0 | 0.0% ↔ |
| Tuberculosis, latent infection | 40 | 47 | 18% ↑ |

*Data are provisional and subject to change

Calendar Matters

July 24: Pioneer Day

July 28: World Hepatitis Day

August: National Immunization Awareness Month

August 8: Board of Health Meeting

August 17: First day of school for Davis School District

September 4: Labor Day

September 28: World Rabies Day



Davis County Health Department • Division of Communicable Disease & Epidemiology
22 S. State Street • Clearfield, UT 84015
Phone: 801-525-5200 • Fax: 801-525-5210 • Website: www.daviscountyutah.gov/health