SAN MATEO COUNTY HEALTH

Communicable Diseases (CD) Quarterly Report
2024 3rd Quarter
CD Control Program, San Mateo County Health

Provider Reporting: 650.573.2346 (phone) 650.573.2919 (fax) · Issue No. 57 · Data to September 30, 2024
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Selected Communicable Disease Cases Reported in San Mateo County

Disease	2024		2023	
	3rd Qtr	YTD	3rd Qtr	YTD
Brucellosis	0	1	1	1
Candida auris*	1	1	0	0
Coccidioidomycosis*	8	33	7	23
Dengue	6	9	4	6
Legionellosis$	1	7	2	8
Listeriosis	0	0	1	4
Malaria*	1	7	1	3
Meningitis/Encephalitis$	2	20	0	11
Bacterial†	1	2	0	4
Fungal§	0	2	0	3
Viral¶	0	9	0	4
Not Otherwise Specified	1	7	0	0
Meningococcal Disease	0	1	0	0

*Includes confirmed cases only $Includes confirmed, probable, and suspect cases
†Excluding meningococcal meningitis §Excluding coccidioidomycosis ¶Excluding West Nile Virus

Selected Gastrointestinal Illnesses Reported in San Mateo County

Disease	2024		2023	
	3rd Qtr	YTD	3rd Qtr	YTD
Campylobacteriosis	105	280	111	275
Cryptosporidiosis	11	30	8	31
Cyclosporiasis	1	2	6	9
Giardiasis	30	81	26	58
Salmonellosis (non-typhoid)	75	154	48	101
Shigellosis	34	97	43	79
Typhoid Fever	1	3	0	2
Paratyphoid Fever	0	0	0	0
STEC^ with HUS	0	0	0	0
STEC^ without HUS	43	88	35	83
Vibriosis (non-cholera)	3	10	8	11
Yersiniosis	10	29	5	21

*Includes confirmed cases only ^Shiga toxin-producing *Escherichia coli*

Selected Vaccine Preventable Diseases Reported in San Mateo County

Disease	2024		2023	
	3rd Qtr	YTD	3rd Qtr	YTD
Haemophilus Influenzae#	0	0	0	2
Hepatitis A*	3	5	0	2
Hepatitis B, Acute*	1	1	0	0
Measles*	0	0	0	0
Mumps	0	0	0	1
Pertussis	27	56	3	4

#Invasive disease, less than 5 years old * Includes confirmed cases only

Selected Outbreaks in San Mateo County

Outbreak Type	2024		2023	
	3rd Qtr	YTD	3rd Qtr	YTD
All Gastrointestinal$	3	14	1	9
Norovirus&	0	5	0	4
All Respiratory$ (except COVID-19)	2	16	2	6
Influenza*	0	4	0	0

$Includes confirmed, probable, and suspect outbreaks &Includes confirmed and probable outbreaks
*Includes only confirmed outbreaks

Focus on Oropouche

Oropouche virus is an emerging virus that belongs to the Simbu serogroup of the viral genus *Orthobunyavirus* in the *Peribunyaviridae* family. The virus was first detected in 1955 in a febrile forest worker in a village named Vega de Oropouche, on the island of Trinidad in the Caribbean.

The first epidemic occurred in Brazil in 1961. Since then, the virus has been linked to **large epidemics and sporadic disease in tropical areas.** Oropouche virus has probably infected more than half a million people in Brazil alone and there have been large outbreaks in other countries in South America, Central America and the Caribbean, including Peru, Panama, Haiti, Colombia and French Guiana**. Multiple cases have been recently reported in U.S. and European travelers returning from Cuba.**

Oropouche virus disease is **transmitted by biting midges** (*Culicoides paraensis*). In rural areas, the transmission cycle is thought to involve midges as well as nonhuman primates, sloths, birds, and **mosquitoes**. *C. paraensis* has been observed to breed in piles of rotting banana stumps and cacao husks; farmers with exposure to bananas and cacao seem to be at increased risk for transmission. Transmission risk appears to be greatest during the rainy season. In urban areas, Oropouche virus transmission can occur between viremic individuals and biting midges.

In the United States, *C. paraensis* has been identified in a number of states east of the Mississippi River. While human-to-human transmission by *C. paraensis* could potentially occur, the potential for the establishment of a rural transmission cycle in the United States is likely extremely low given the absence of the ecologic conditions that have been observed in epidemic settings.

The **incubation period** for Oropouche virus disease is typically 4 to 8 days, with a range of 3 to 12 days. **The illness is characterized by abrupt onset of fever (38 to 40 C), chills, severe headache, myalgias and arthralgias. Other signs and symptoms include photophobia, dizziness, retro-orbital pain, nausea and vomiting, or a maculopapular rash that starts on the trunk and goes to the extremities.** Less common symptoms include conjunctival injection, diarrhea, severe abdominal pain and hemorrhagic symptoms (epistaxis, gingival bleeding, melena, menorrhagia and petechiae). Symptoms typically last 4 to 5 days, but **recurrence** can occur a few days or even weeks later. Of note, Oropouche virus can cause **neuroinvasive disease (e.g. meningitis and encephalitis).** It is estimated that up to 4% of patients will develop neurologic symptoms after their initial febrile illness, including intense occipital pain, dizziness, confusion, lethargy, photophobia, nausea, vomiting, nuchal rigidity and nystagmus. **Patients typically recover without long-term sequalae,** even in severe cases and **very few deaths** have been reported to date. **Immunity** following infection is probably lifelong.

Laboratory findings include **leukopenia and neutropenia, elevated CRP and mildly elevated liver enzymes. Thrombocytopenia** has been reported.

The **differential diagnosis** of Oropouche virus disease includes dengue, yellow fever, chikungunya and Zika virus infections as well as malaria, leptospirosis, ehrlichiosis, and influenza.

Preliminary **diagnosis** of Oropouche virus disease is based on the patient's clinical symptoms, location where infection was likely acquired (including places and dates of travel), and activities leading to risk of possible exposure. **CDC can perform RT-PCR testing to detect viral RNA in serum and CSF samples as well as plaque reduction neutralization tests (PRNTs) to detect virus-specific neutralizing antibodies in serum and CSF. RT-PCR testing is recommended if specimen is collected within 7 days of symptom onset. PRNT testing is recommended if specimen is collected more than 7 days after the onset of symptoms**. To confirm a recent infection using serologic testing, both acute and convalescent samples are needed to document a 4-fold or greater increase in antibody titers. Viral RNA has been detected in the saliva and urine of one patient but testing of these sample types is not currently validated or available in the United States.

Treatment is supportive and includes rest, fluid, antipyretics and analgesics. To reduce the risk of bleeding, patients should avoid aspirin-containing drugs and other nonsteroidal anti-inflammatory drugs until dengue can be ruled out. Patients who develop severe symptoms should be hospitalized for close observation and supportive treatment. No drugs or vaccines are available to date. **Preventive measures** include the use of mesh screens and other interventions such as using repellents to prevent insect bites.

Of note, on July 17, 2024, the Pan American Health Organization (PAHO) issued an epidemiological alert about cases of vertical transmission of Oropouche virus in Brazil. The cases which were associated with adverse pregnancy outcomes, including fetal deaths and congenital abnormalities are currently under investigation**. Based on the limited available data from Brazil, vertical transmission of Oropouche virus is possible. However, it is not known how frequent vertical transmission occurs during pregnancy and if the timing of Oropouche virus disease during pregnancy increases the risk of an adverse outcome.** CDC has drafted Interim Clinical Considerations for Pregnant People with Confirmed or Probable Oropouche Virus Disease and has issued a Level 2 Travel Health Notice; it is currently recommended that pregnant women reconsider non-essential travel to Cuba.

Data: California Reportable Disease Information Exchange (CalREDIE); data pulled 10/22/24. **Notes:** For individual diseases, morbidity is based on the date the case was received by the CD Control Program. Past totals may change due to delays in reporting from laboratories and providers, the use of different reporting systems, and changes to the resolution statuses of cases based on subsequent information received. All totals are for confirmed and probable cases, unless noted otherwise.
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