SAN MATEO COUNTY HEALTH

Communicable Diseases (CD) Quarterly Report
2024 2nd Quarter
CD Control Program, San Mateo County Health

Provider Reporting: 650.573.2346 (phone) 650.573.2919 (fax) · Issue No. 56 · Data to June 30, 2024
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Selected Communicable Disease Cases Reported in San Mateo County

Disease	2024		2023	
	2nd Qtr	YTD	2nd Qtr	YTD
Brucellosis	0	1	0	0
Coccidioidomycosis*	11	25	5	16
Dengue	1	3	0	2
Hepatitis E, Acute*	1	1	0	0
Legionellosis$	5	6	2	6
Listeriosis	0	0	1	3
Malaria*	2	6	1	2
Meningitis/Encephalitis$	8	18	6	11
Bacterial†	0	1	3	4
Fungal§	1	2	1	3
Viral	4	9	2	4
Not Otherwise Specified	3	6	0	0
Meningococcal Disease	1	1	0	0
Q Fever	0	1	0	0
Relapsing Fever*	1	2	0	0

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

Selected Gastrointestinal Illnesses Reported in San Mateo County

Disease	2024		2023	
	2nd Qtr	YTD	2nd Qtr	YTD
Amebiasis*	0	2	1	1
Campylobacteriosis	93	175	78	164
Cryptosporidiosis	10	19	9	23
Cyclosporiasis	1	1	3	3
Giardiasis	20	51	19	32
Salmonellosis (non-typhoid)	55	79	28	53
Shigellosis	30	63	22	36
Typhoid Fever	1	2	0	2
Paratyphoid Fever	0	0	0	0
STEC^ with HUS	0	0	0	0
STEC^ without HUS	30	45	27	48
Vibriosis (non-cholera)	5	7	2	3
Yersiniosis	8	19	4	16

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

Selected Vaccine Preventable Diseases Reported in San Mateo County

Disease	2024		2023	
	2nd Qtr	YTD	2nd Qtr	YTD
Haemophilus Influenzae#	0	0	1	2
Hepatitis A*	2	2	2	2
Measles*	0	0	0	0
Mumps	0	0	1	1
Pertussis	28	29	0	1

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

Highlight – Animal Rabies Testing

Species # positive / # tested	2024		2023	
	2nd Qtr	YTD	2nd Qtr	YTD
Bat	0 / 6	0 / 24	1 / 15	1 / 20
Cat	0 / 3	0 / 13	0 / 9	0 / 15
Dog	0 / 8	0 / 17*	0 / 12	0 / 24
Other†	0 / 12	0 / 18*	0 / 9	0 / 11

Rabies testing was completed at the San Mateo County Public Health Laboratory. † 2024 2nd Qtr: 6 opossums, 3 raccoons, 1 skunk, 2 squirrels; 2023 2nd Qtr: 1 gopher, 4 opossums, 3 raccoons, 1 unknown. *Case counts were corrected due to errors found in original data.

Focus on: Measles, Part 2

Encephalitis occurs in up to 1 per 1000 measles cases. **Acute disseminated encephalomyelitis (ADEM)** is a demyelinating disease that is thought to be a postinfectious autoimmune response. Clinical manifestations include fever, headache, neck stiffness, seizures and mental status changes such as confusion, somnolence, or coma. Other manifestations may include ataxia, myoclonus, choreoathetosis and signs of myelitis such as paraplegia, quadriplegia, sensory loss, loss of bladder and bowel control and back pain. ADEM following measles infection is associated with a 10 to 20% mortality rate. Residual neurologic deficits are common among survivors and include cognitive deficits and epilepsy.

While ADEM presents during the recovery phase of measles, typically within 2 weeks of the exanthem, **subacute sclerosing panencephalitis (SSPE)** generally presents years after the initial infection. SSPE is a progressive degenerative, disabling and fatal disorder that occurs as a result of persistent infection in the central nervous system. Symptoms typically appear 7 to 10 years after measles infection. Demyelination of white matter is an early finding with an insidious onset that progresses to abnormal behavior, myoclonic movements, seizures, dementia, coma and death. **Death is inevitable and occurs within 1 to 3 years of diagnosis.** Measles infection at an early age is a risk factor for SPPE. About half of patients with SSPE had measles before the age of 2 years. The incidence of SSPE increases when vaccination rates fall.

Measles occurs predominantly in areas of low vaccination rates, particularly resource-limited settings but **outbreaks of measles do occur in resource-rich settings and are usually linked to imported cases from unvaccinated, infected travelers.** In the pre-vaccination era, there were as many as 500,000 reported cases of measles per year in the United States. According to estimates that account for unreported infections, there may have been as many as four million cases per year. Several years after the FDA approval of the measles killed virus vaccine in 1963, the number of cases had fallen by approximately 99 percent. The live attenuated measles vaccine was introduced in the US in 1976 and by 1985 had prevented about 52 million cases of measles and 5200 deaths. **Receipt of 1 and 2 doses of measles vaccine is respectively 93% and 97% effective in preventing measles.**

Decreases in measles vaccination coverage, attributed to the disruption of routine immunization services during the COVID-19 pandemic, have been observed worldwide and although measles was declared eliminated in the United States in 2000 global transmission is ongoing and outbreaks are occurring in many parts of the world including Europe, Africa and Asia. According to 2024 CDC data, **as of August 22, 2024, a total of 227 measles cases have been reported in the United States.** 13 outbreaks (defined as 3 or more related cases) have been reported thus far and 68% of cases (155 of 227) were outbreak-associated. For comparison, 4 outbreaks were reported during 2023 and 49% of cases (29 of 59) were outbreak-associated. **As of August 17, 2024, 13 confirmed measles cases have been reported in California. Clinicians should remain alert for possible cases of measles and should consider the diagnosis in any patient presenting with fever and a descending morbilliform rash**, especially in individuals who were born in 1957 or later and were never immunized, and in individuals with a known exposure to a case of measles, recent international travel, transit through U.S. international airports, or interaction with foreign visitors, including visiting a U.S. tourist attraction, in the preceding 3 weeks.

Polymerase chain reaction (PCR) is the preferred testing method for measles. Urine and throat or nasopharyngeal (NP) swabs are the preferred specimen types. Some commercial labs offer measles PCR testing but testing in a public health laboratory is generally preferred. It should be noted that **false positive measles IgM** results are common.

All **suspect cases** should be **isolated** right away and should immediately be reported to the San Mateo County CD Control Program. **Exposed contacts** should be identified as soon as possible as they may require **post-exposure prophylaxis (MMR or immune globulin) and/or quarantine** depending on the situation.

About the Communicable Disease Control Program

The Communicable Disease Control Program is available to help meet the reporting needs and answer the questions of San Mateo County providers. To report a disease or outbreak, please call 650-573-2346 Monday through Friday, 8:00 am to 5:00 pm, or fax a Confidential Morbidity Report (CMR) to 650-573-2919. You may download an electronic copy of the CMR at smchealth.org/communicablediseasereporting. Web-based reporting via CalREDIE is also available. Please contact us if you would like to know more about, and sign up for, web-based reporting. Non-urgent questions and/or general inquiries may be directed to SMCCDControl@smcgov.org.

Data: California Reportable Disease Information Exchange (CalREDIE); data pulled 7/19/24. **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.
Authors: Communicable Disease Control Program