

Communicable Diseases (CD) Quarterly Report 2024 1st Quarter

CD Control Program, San Mateo County Health

Provider Reporting: 650.573.2346 (phone) 650.573.2919 (fax) · Issue No. 55 · Data to March 31, 2024 Catherine Sallenave, MD, CD Controller · Kismet Baldwin-Santana, MD, Health Officer

| Selected Communicable Disease Cases Reported in San Mateo County | | | |
|--|---------------|---------------|--|
| Disease | 2024 | 2023 | |
| | 1st Qtr / YTD | 1st Qtr / YTD | |
| Brucellosis* | 1 | 0 | |
| Chikungunya | 0 | 1 | |
| Coccidioidomycosis* | 14 | 11 | |
| Dengue | 2 | 2 | |
| Legionellosis ^{\$} | 1 | 4 | |
| Listeriosis | 0 | 2 | |
| Malaria* | 4 | 1 | |
| Meningitis/Encephalitis\$ | 10 | 5 | |
| Bacterial [†] | 1 | 1 | |
| Fungal [§] | 1 | 2 | |
| Viral [¶] | 5 | 2 | |
| Not Otherwise Specified | 3 | 0 | |
| Meningococcal Disease | 0 | 0 | |
| Q Fever | 1 | 0 | |
| Relapsing Fever* | 1 | 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 1 st Qtr / YTD | 2023 1 st Qtr / YTD | | |
| Amebiasis* | 2 | 0 | | |
| Campylobacteriosis | 82 | 86 | | |
| Cryptosporidiosis | 9 | 14 | | |
| Cyclosporiasis | 0 | 0 | | |
| Giardiasis | 31 | 13 | | |
| Salmonellosis (non-typhoid) | 23 | 25 | | |
| Shigellosis | 33 | 14 | | |
| Typhoid Fever | 1 | 2 | | |
| Paratyphoid Fever | 0 | 0 | | |
| STEC [^] with HUS | 0 | 0 | | |
| STEC [^] without HUS | 15 | 21 | | |
| Vibriosis (non-cholera) | 2 | 1 | | |
| Yersiniosis | 11 | 12 | | |

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

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|--|---------------|---------------|--|--|
| Selected Vaccine Preventable Diseases Reported in San Mateo County | | | | |
| Disease | 2024 | 2023 | | |
| | 1st Qtr / YTD | 1st Qtr / YTD | | |
| Haemophilus Influenzae# | 0 | 1 | | |
| Hepatitis A* | 0 | 0 | | |
| Measles* | 0 | 0 | | |
| Mumps | 0 | 0 | | |
| Pertussis | 1 | 1 | | |

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

| Selected Outbreaks in San Mateo County | | | |
|--|--|--|--|
| Outbreak Type | 2024 1 st Qtr / YTD | 2023 1 st Qtr / YTD | |
| All Gastrointestinal* | 3 | 6 | |
| Norovirus ^{\$} | 0 | 4 | |
| All Respiratory* (except COVID-19) | 9 | 2 | |
| Influenza [†] | 5 | 0 | |

^{*}Includes confirmed, probable, and suspect outbreaks *Includes confirmed and probable outbreaks *Includes only confirmed outbreaks

Focus on: Measles, Part 1

Measles is a highly contagious and exclusively human disease, caused by the measles virus, a virus that belongs to the Paramyxovirus family. Measles occurs worldwide and remains a leading cause of mortality especially among children younger than 5 years of age. The reproduction number for measles is 12 to 18, which means that one person with measles can infect 12 to 18 susceptible individuals. By way of comparison the reproduction number for influenza is 1 to 3. The attack rate in susceptible individuals exposed to measles is 90 percent. Person-to-person contact is not necessary to transmit measles, as infectious airborne droplets produced from the respiratory secretions of a patient with measles can remain in the air for up to 2 hours after the infected person has left the area

The **incubation period** for measles ranges from 6 to 21 days with a median of 13 days. It is then followed by the **prodromal phase** which usually lasts 2 to 4 days but can persist for as long as 8 days. It is defined by the appearance of symptoms that typically include **fever**, **malaise** and **anorexia**, **followed by conjunctivitis**, **coryza** and **cough** (the 3 Cs). The prodromal symptoms typically intensify a few days before the exanthem appears.

Approximately 48 hours prior to the onset of the exanthem, patients may develop an **enanthem** characterized by **Koplik spots**, 1 to 3 mm whitish, grayish or bluish elevations with an erythematous base, typically seen on the buccal mucosa opposite the molar teeth, although they can spread to cover the buccal and labial mucosa as well as the hard and soft palate. They have been described as "grains of salt on a red background." Koplik spots may coalesce and generally last 12 to 72 hours. They often begin to slough when the exanthem appears.

The **exanthem** of measles arises approximately 2 to 4 days after the onset of fever. It consists of an **erythematous**, **maculopapular**, **blanching rash which classically begins behind the auricle and along the hair implantation line and then extends downward** to involve the face, neck, upper trunk, lower trunk and extremities. The palms and soles are rarely involved. The rash usually lasts 6 to 7 days and fades in the order it appeared, leaving brown spots and producing a thin peeling of the skin.

The period of **contagiousness** is estimated to be from 4 days before the appearance of the rash to 4 days afterward (rash onset is day zero). Immunity after measles virus infection is thought to be lifelong, although there have been some reports of reinfection.

Measles is a **severe illness** in immunocompromised patients with alterations of either cellular or humoral immunity, individuals with vitamin A deficiency or poor nutritional status as well as individuals at the extreme of age. It can result in miscarriage, preterm labor and low birth weight if acquired during pregnancy.

While the majority of low-risk patients recover without complications, one or more complications occur in approximately 30% of measles cases. Diarrhea is the most common complication. Otitis media occurs in 5 to 10% cases and is more common in young individuals. Ocular complications of measles include keratitis and corneal ulceration. Cardiac complications include myocarditis and pericarditis. Measles can also result in pneumonia and, in some cases, encephalitis.

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. Webbased 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 04/23/2024. Notes: For individual diseases, morbidity is based on the date the case was received by the CD Control Program. Totals for past quarters 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