



Communicable Diseases (CD) Quarterly Report

San Mateo County Health System
CD Control Program

• Provider Reporting: 650.573.2346 (phone) 650.573.2919 (fax) • Issue No. 39 • Data to March 31, 2017

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Table 1. Selected Communicable Disease cases reported in San Mateo County (SMC) Residents

Disease	2017		2016	
	1st Qtr	YTD	1st Qtr	YTD
Chikungunya [§]	0	0	0	0
Coccidioidomycosis	3	3	0	0
Dengue [§]	2	2	5	5
Listeriosis	4	4	1	1
Malaria	1	1	2	2
Meningitis - Bacterial* [§]	3	3	1	1
Meningitis - Fungal ^{†§}	0	0	1	1
Meningitis - Viral [§]	2	2	3	3
Meningitis, NOS ^{‡§}	0	0	1	1
Meningococcal Disease [§]	0	0	1	1
Zika [§]	0	0	4	4

*Excluding meningococcal meningitis †Excluding coccidioidomycosis ‡Not Otherwise Specified
§Includes confirmed and probable cases

Table 2. Selected Gastrointestinal Illnesses reported in SMC Residents

Disease	2017		2016	
	1st Qtr	YTD	1st Qtr	YTD
Amebiasis	2	2	2	2
Campylobacteriosis [§]	67	67	62	62
Cryptosporidium [§]	5	5	4	4
Giardiasis	22	22	10	10
Shigellosis [§]	12	12	8	8
Vibriosis (non-cholera) [§]	0	0	0	0
Salmonellosis (non-typhoid) [§]	28	28	32	32
S. Enteritidis	2	2	7	7
S. I 4,[5],12:i:-	1	1	6	6
S. Infantis	2	2	2	2
Pending/Others	23	23	17	17
E. coli O157 w/o HUS*	0	0	3	3
Shiga Toxin Positive Feces w/o HUS [#]	1	1	1	1
STEC w/o HUS* [#]	3	3	4	4

*STEC categories exclude E. coli O157 #No HUS cases were reported for these conditions
§Includes confirmed and probable cases

Table 3. Selected Vaccine Preventable Diseases reported in SMC Residents

Disease	2017		2016	
	1st Qtr	YTD	1st Qtr	YTD
Hepatitis A	1	1	1	1
Hepatitis B (acute)	0	0	0	0
Hepatitis C (acute)	0	0	0	0
Influenza - ICU Hosp (0-64 yrs)	3	3	5	5
Influenza Death (0-64 yrs)	0	0	0	0
Measles	0	0	0	0
Mumps	1	1	0	0
Pertussis*	32	32	10	10

*Includes confirmed, probable and suspect cases

Sources: California Reportable Disease Information Exchange (CalREDIE)

Notes: Morbidity is based on the date the case was received by the CD Control Program; Salmonella serotypes are based on the date the incident was created in CalREDIE. Case definitions changed as of 1/1/2017 for several gastrointestinal illness conditions which may result in an artificial increase in 2017 case counts compared to 2016 case counts. Totals for past quarters may change due to delays in reporting from labs 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 cases, unless noted otherwise.

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Focus on Mumps

Mumps is a highly infectious RNA virus. Mumps epidemics have occurred worldwide with school-aged children often serving as the vector for spread to household family members. The first inactivated mumps vaccine was introduced in the 1940s. It was then replaced by the attenuated vaccine (Jeryl-Lynn strain) in 1967. Since the introduction of the vaccine, mumps cases have declined by more than 99 percent in the United States. Despite this significant decline, there have been a number of sporadic mumps **outbreaks** reported in cohorts of susceptible individuals in the military, high schools, summer camps and college dormitories. In 2016, outbreaks occurred among college students in Missouri and Massachusetts.

Mumps virus is typically **transmitted by respiratory droplets**, direct contact, or fomites. Infants less than one year rarely acquire mumps due to protection via maternal antibodies. The incubation period is usually 16 to 18 days from exposure to onset of symptoms.

Mumps infection is frequently accompanied by a nonspecific prodrome consisting of low-grade fever, malaise, headache, myalgias, and anorexia. These symptoms are generally followed within 48 hours by the development of **parotitis**, a classic feature of mumps infection. Routine blood testing often reveals leukopenia, with a relative lymphocytosis, and an elevated amylase. Parotid swelling is present in 95 percent of symptomatic cases of mumps and is most common in children ages 2 to 9. Of note, the more serious complications of mumps, such as meningitis, encephalitis, and orchitis, may occur in the absence of parotitis. **Other causes** of unilateral or bilateral parotitis include other viral infections (influenza A, parainfluenza, coxsackievirus, HIV, Epstein-Barr virus, cytomegalovirus and adenovirus,) and bacterial infections, particularly Staphylococcus aureus.

Laboratory evidence supportive of a mumps diagnosis include a positive IgM mumps antibody, a fourfold rise in IgG titers between acute and convalescent specimens, and isolation of mumps virus or nucleic acid from a clinical specimen (serum, buccal or oral swab). The buccal or oral specimen should be obtained as soon as possible after the onset of parotitis (ideally within three days) by gently massaging the parotid gland prior to swabbing the area around Stensen's duct with a synthetic swab. Serum IgM antibody testing should be obtained no earlier than 3 days following the onset of symptoms. The test typically remains positive for up to 4 weeks but may be negative in some individuals with acute disease who were previously immunized. In patients with aseptic meningitis due to mumps, the virus can frequently be isolated from the **CSF** during the first three days of clinical symptoms.

Therapy for mumps parotitis is symptomatic and includes analgesics or antipyretics. **Prevention** of transmission of mumps rests on early diagnosis, isolation of the infected patient for 5 days from onset of parotitis, and immunization of susceptible exposed individuals. Hospitalized patients with mumps should be isolated with droplet precautions until the parotid swelling has resolved. Immunization after exposure has not been demonstrated to be protective but will decrease the risk of disease with possible future exposures. IG is not effective and not recommended.

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 <http://www.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 enquiries may be directed to SMCCDControl@smcgov.org.