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. 38 • Data to December 31, 2016

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

Disease	2016		2015	
	4th Qtr	YTD	4th Qtr	YTD
Chikungunya$	2	2	5	22
Coccidioidomycosis	0	1	1	7
Dengue$	0	12	1	9
Infant Botulism	**1**	**3**	**0**	**0**
Listeriosis	2	6	3	8
Malaria	0	2	1	5
Meningococcal Disease$	0	2	0	2
Zika$	5	13	0	0

$Includes confirmed and probable cases

Table 2. Selected Gastrointestinal Illnesses reported in San Mateo County Residents

Disease	2016		2015	
	4th Qtr	YTD	4th Qtr	YTD
Amebiasis	1	5	1	5
Campylobacteriosis	57	276	66	241
Cryptosporidium$	7	22	15	40
Giardiasis	11	52	15	54
Shigellosis$	12	40	11	35
Vibriosis (non-cholera)	2	4	1	5
Salmonellosis (non-typhoid)$	24	122	30	137
S. Enteritidis	2	18	6	21
S. I 4,[5],12:i:-	1	15	0	3
Pending/Others	21	89	24	113
E. coli O157 w/HUS*	0	2	1	1
E. coli O157 w/o HUS*	0	4	2	10
Shiga Toxin Positive Feces w/o HUS#	1	7	1	2
STEC w/o HUS*#	4	18	3	19

*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 San Mateo County Residents

Disease	2016		2015	
	4th Qtr	YTD	4th Qtr	YTD
Hepatitis A	0	1	0	2
Hepatitis B (acute)	0	1	1	5
Hepatitis C (acute)	1	1	2	3
Influenza - ICU Hosp (0-64 yrs)	2	8	0	11
Influenza Death (0-64 yrs)	0	2	0	5
Measles	0	0	0	4
Mumps	0	1	0	0
Pertussis*	58	101	7	43

*Includes confirmed, probable and suspect cases

Sources: California Reportable Disease Information Exchange (CalREDIE)
Notes: Morbidity is based on the date the case was received; previous reports used date case incident was created in CalREDIE. 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 Infant Botulism Part 2

The **diagnosis of infant botulism should be suspected in any infant with acute onset of weak suck, ptosis, inactivity, and constipation**. However, infant botulism is a rare disorder, and the diagnosis is often missed. As an example, the diagnosis was suspected on admission in only half of the infants enrolled in a randomized trial who had laboratory-confirmed infant botulism. Serum samples for botulinum toxin are often negative in cases of infant botulism. The **diagnosis is supported by the isolation of C. botulinum spores from the stool and is confirmed by the identification of botulinum toxin in stool samples.** However, stool sample collection can be difficult because constipation is a nearly constant feature of infant botulism. In addition, stool sample assays do not yield timely results. Anaerobic cultures often take up to six days for growth and identification of the organism, and initial detection of toxin requires one to four days.

The delays with these confirmatory tests are important since therapy should be administered as early as possible. Thus, **a presumptive diagnosis should be made based upon the clinical presentation and electrophysiologic findings while the confirmatory stool studies are pending.** Electromyography (EMG) findings consistent with infant botulism are not pathognomonic and may not be present early in the course of the disease. Nevertheless, certain EMG findings support the diagnosis of botulism when coupled with the appropriate clinical presentation.

The **differential diagnosis** for infant botulism includes brainstem encephalitis, cerebral infarction, dehydration, drug ingestion, Guillain-Barré syndrome, Lambert-Eaton myasthenic syndrome, metabolic encephalopathy, myasthenia gravis, neuromuscular disorders, and sepsis. In clinical practice, spinal muscular atrophy type I and metabolic disorders are the most frequent mimics of infant botulism.

Any infant with clinical signs, symptoms, or history suspicious for botulism should be hospitalized immediately and meticulously monitored for signs of respiratory failure. The California Department of Health Services, Infant Botulism Treatment and Prevention Program should be notified of all suspected cases of infant botulism (www.infantbotulism.org/ or 510-231-7600).

Intravenous botulism immune globulin (BIG-IV or BabyBIG), a human-derived botulinum antitoxin, is a safe and effective therapy for infant botulism and **should be administered as early as possible**. Treatment should not be delayed while awaiting results of confirmatory tests. Management of infant botulism is otherwise supportive and includes close monitoring to detect sudden worsening. Current guidelines state that **antibiotics are not indicated** for infants with suspected gastrointestinal botulism because of concern that lysis of intraluminal C. botulinum could increase the amount of toxin available for absorption.

Prevention of infant botulism is limited to the avoidance of honey in infants less than 12 months; older children can safely ingest honey.

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.