



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. 19 • Data to Mar 31, 2012
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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://smhealth.org/sites/default/files/docs/PHS/cmr_cd_std.pdf. 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 PH_CDControlUnit@smcgov.org (Note: underscore between PH and CD)

Table 4. Selected Vaccine Preventable Diseases reported in San Mateo County Residents

Disease	2012		2011	
	1st Qtr	YTD	1st Qtr	YTD
Hepatitis A	0	0	2	2
Hepatitis B (acute)	1	1	1	1
Hepatitis B (chronic) [§]	21	21	-	-
Measles	0	0	1	1
Pertussis*	4	4	27	27

[§] 2011 data not available at this time due to reporting changes
^{*} Includes confirmed, probable and suspect cases. Compared to 2011, pertussis numbers in San Mateo County and California declined due increased awareness, immunization campaigns and education.

Table 1. Selected CD cases reported in San Mateo County Residents

Disease	2012		2011	
	1st Qtr	YTD	1st Qtr	YTD
Botulism, Infant	1	1	0	0
Coccidioidomycosis	4	4	1	1
Hepatitis C (chronic) [§]	140	140	-	-
Influenza - ICU Hosp (0-64 y)	4	4	14	14
Meningitis - Bacterial*	1	1	3	3
Meningitis - Viral	5	5	3	3
Meningococcal Disease	2	2	0	0
Staph. Aureus (severe case)	2	2	0	0

[§] 2011 data not available at this time due to reporting changes
^{*} excluding meningococcal meningitis.

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

Disease	2012		2011	
	1st Qtr	YTD	1st Qtr	YTD
Amebiasis	2	2	2	2
Campylobacteriosis	59	59	54	54
Cryptosporidium	3	3	6	6
E. Coli O157: H7	3	3	1	1
Giardia	9	9	12	12
SALMONELLA (non-typhoid)	15	15	15	15
S. Enteritidis	5	5	2	2
S. Typhimurium	1	1	1	1
Other	9	9	12	12
Shiga toxin positive feces	1	1	0	0
Shigella	3	3	2	2
Vibrio (non-cholera)	0	0	0	0

Table 3. Outbreaks in San Mateo County

Disease	2012		2011	
	1st Qtr	YTD	1st Qtr	YTD
All Gastrointestinal	14	14	1	1
Confirmed Norovirus	6	6	0	0
Respiratory	7	7	4	4
Confirmed Influenza	6	6	3	3

Focus on Botulism: Part 1: Epidemiology, Transmission and Clinical Features

Botulism is a rare but serious illness caused by the toxin produced by the anaerobic, spore-forming, soil-dwelling bacterium *Clostridium botulinum*. Botulinum toxin is a potent neurotoxin that prevents the release of acetylcholine. **Infant botulism** is the intestinal toxemia form of the disease and occurs when ingested spores colonize and grow in the large intestine and produce botulinum neurotoxin in it. **Wound botulism** is caused by toxin produced in traumatized tissue infected with the bacterium. **Foodborne botulism** results from ingesting pre-formed toxin in foods contaminated with the bacterium.

From 2006 to 2010, an average of 140 cases of botulism was reported each year in the US. Of these, 68% were **infant botulism**, 19% were **wound botulism** and 12% were **foodborne botulism**. The number of cases of **wound botulism** has recently increased because of the injection of black-tar heroin. California now reports nearly three-quarters of the wound botulism cases in the country. Since the discovery of the disease in 1976, California has had the majority of **infant botulism** cases in the nation, averaging 30-40 per year, likely due to the large birth cohort and local soil ecology.

Foodborne botulism is often associated with home-canned/home-preserved foods with low acid content, such as asparagus, green beans, beets and corn. However, outbreaks of botulism have also occurred from more unusual sources such as chopped garlic or onions in oil, improperly handled baked potatoes, and fermented fish. Persons who do home canning should follow strict procedures to reduce contamination of foods. Botulinum toxin is destroyed by high temperatures, thus persons who eat home-canned foods should consider boiling the food for ten minutes before eating it to ensure safety. Honey may contain spores of *C. botulinum*, therefore **children less than 12 months old should not be fed honey or products containing raw honey**. **Wound botulism** may be prevented by not injecting street drugs and promptly seeking medical care for infected wounds.

The main **clinical features** of botulism involve early and often severe cranial nerve palsies followed by a symmetrical, descending flaccid paralysis. Fever is usually absent and sensation remains intact. As the toxin does not cross the blood-brain barrier, sensorium remains clear, though patients may be anxious or agitated. Presenting complaints in **adults** include double or blurred vision, drooping eyelids, dry, sore throat and difficulty swallowing. **Infant botulism** patients often present with constipation, poor feeding, drooling, droopy eyelids, sluggishly reactive pupils, head lag, and lethargy. As the paralysis progresses, respiratory compromise may occur. Fatigability with repetitive muscle activity is a hallmark feature of botulism. Treatment and how to get the anti-toxin (polyvalent antitoxin for cases > 12 months vs BabyBIG for cases < 12 months) will be discussed in detail in Part 2.