

## 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. 26
 Data to Dec 31, 2013
 Catherine Sallenave, MD, CD Controller
 Scott Morrow, MD, Health Officer

Table 1. Selected CD cases reported in San Mateo County				
Disease	2013		2012	
	4th Qtr	YTD	4th Qtr	YTD
Coccidioidomycosis	3	9	1	14
Hepatitis C (chronic)\$	91	383	118	402
Haemophilus Influenzae	0	1	1	1
Listeriosis	0	3	0	0
Meningitis - Bacterial*\$	2	3	1	3
Meningitis - Viral <sup>\$</sup>	4	8	1	12
Meningococcal Disease	0	0	0	2
Paratyphoid Fever	0	1	0	2
Typhoid Fever	0	1	1	2
Rocky Mountain Spotted Fever <sup>\$</sup>	0	2	1	1
Staph. Aureus Infection (severe)	0	1	0	2

<sup>\*</sup>Excluding meningococcal meningitis. \$ Includes confirmed and probable cases

Table 2. Selected Gastrointestinal illnesses reported in San Mateo County Residents				
Disease	2013		2012	
	4th Qtr	YTD	4th Qtr	YTD
Amebiasis	3	8	2	6
Campylobacteriosis	45	212	51	264
Cryptosporidium	5	18	6	37
E. Coli 0157: H7	7	13	2	7
Giardia	5	48	9	48
SALMONELLA (non-typhoid)	45	166	32	133
S. Enteritidis	4	23	5	25
S. Typhimurium/var 5-	3	16	3	13
Pending/Others	38	127	24	95
Shigellosis	5	13	2	17

Table 3. Selected Vaccine Preventable Diseases reported in San Mateo County Residents

	2013		2012	
Disease				
	4th Qtr	YTD	4th Qtr	YTD
Hepatitis A	2	9	0	0
Hepatitis B (acute)	0	2	1	2
Hepatitis B (chronic)\$	116	397	126	511
Influenza - ICU Hosp (0-64 yrs)	1	4	0	10
Influenza Death (0-64 yrs)	0	1	0	2
Measles	0	0	0	1
Pertussis*	11	95	16	23

<sup>\*</sup>Includes confirmed, probable and suspect cases. \$ Includes confirmed and probable cases

Vibrio (non-cholera)

Sources: California Reportable Disease Information Exchange (CalREDIE)

**Notes:** Morbidity is based on date of diagnosis. Totals for past quarters may change due to delays in reporting from labs and providers and use of different reporting

systems.

Authors: Moon Choi, Karey Shuhendler, and Catherine Sallenave

Table 4. Outbreaks in San Mateo County						
	2013		2012			
Disease	4th Qtr	YTD	4th Qtr	YTD		
All Gastrointestinal*	1	25	4	25		
Confirmed/Probable Norovirus	1	14	4	12		
Respiratory*	6	25	2	16		
Confirmed Influenza	1	17	0	12		
Confirmed Pertussis	0	2	1	1		

<sup>\*</sup>Includes confirmed, probable and suspect outbreaks

## Focus on Neisseria meningitidis

Neisseria meningitidis is a gram-negative diplococcus that exclusively infects humans. The pathobiology of meningococcal infection is related to both nasopharyngeal colonization and a variety of virulence factors. Complement deficiency has been associated with increased susceptibility to meningococcal infection. Eight serogroups most commonly cause infections in humans: A, B, C, X, Y, Z, W135, and L. Meningococcal infections are endemic in the United States, with an annual incidence of invasive meningococcal disease varying from 0.5 to 1.5 cases per 100,000 population in multiyear cycles. Disease rates are almost 10 times higher in children below two years of age than in the overall population. The predominant serogroups causing infection in the United States currently are serogroups B, C, and Y. Large scale epidemics often occur in Africa, parts of Asia, South America, and the countries of the former Soviet Union. These epidemics are most commonly caused by serogroup A and occasionally by serogroup C. Epidemics of meningococcal infection also occur at irregular intervals in the so-called "meningitis belt" of sub-Saharan Africa. The case rate during these epidemics can be as high as 1 in 1000 total population and 1 in 100 for children under two years of age.

On November 27th, 2013, the CDC issued a notice to health care providers regarding serogroup B meningococcal disease associated with outbreaks at Princeton University and the University of California at Santa Barbara (UCSB). Although both outbreaks are caused by serogroup B, additional molecular typing showed that the outbreaks are caused by 2 different strains, indicating that the outbreaks are not related. A serogroup B meningococcal vaccine (Bexsero), currently only approved for use in Europe and Australia, has been recommended for use at Princeton University and UCSB. The FDA is allowing use of the vaccine under an Investigational New Drug application. The CDC is recommending the vaccine be given only to the following groups: All undergraduate students (living in dormitories or off-campus), graduate students living in dormitories and certain members of the University community with specific medical conditions, including anatomic or functional asplenia (e.g. sickle cell disease) or a complement pathway deficiency. The serogroup B meningococcal vaccine is expected to cover 91% of circulating serogroup B meningococcus strains that cause disease in the U.S. and protect against the exact strains, ST409 and ST32 which are causing the outbreaks at the Princeton University and UCSB.

The clinical manifestations, diagnosis, prevention, and vaccine information will be provided on next quarter's report.

## **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 <a href="http://smhealth.org/sites/default/files/docs/PHS/cmr">http://smhealth.org/sites/default/files/docs/PHS/cmr</a> od 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 <a href="http://emchape.com/PH CDControlUnit@smcoov.org">PH CDControlUnit@smcoov.org</a> (Note: underscore between PH and CD).