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. 27 ▪ Data to March 31, 2014

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

Disease	2014		2013	
	1st Qtr	YTD	1st Qtr	YTD
Coccidioidomycosis	2	2	2	2
Hepatitis C (chronic)$	138	138	85	85
Haemophilus Influenzae	0	0	1	1
Listeriosis	0	0	2	2
Meningitis - Bacterial*$	1	1	0	0
Meningitis - Viral$	3	3	1	1
Meningococcal Disease	2	2	0	0
Paratyphoid Fever	0	0	1	1
Typhoid Fever	0	0	0	0
Rocky Mountain Spotted Fever$	0	0	1	1
Staph. Aureus Infection (severe)	0	0	1	1

*Excluding meningococcal meningitis. $ Includes confirmed and probable cases

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

Disease	2014		2013	
	1st Qtr	YTD	1st Qtr	YTD
Amebiasis	2	2	1	1
Campylobacteriosis	48	48	46	46
Cryptosporidium	9	9	3	3
E. Coli 0157: H7	3	3	0	0
Giardia	10	10	16	16
SALMONELLA (non-typhoid)	21	21	32	32
S. Enteritidis	2	2	7	7
S. Typhimurium/var 5-	1	1	5	5
Pending/Others	18	18	20	20
Shigellosis	7	7	2	2
Vibrio (non-cholera)	2	2	0	0

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

Disease	2014		2013	
	1st Qtr	YTD	1st Qtr	YTD
Hepatitis A	1	1	1	1
Hepatitis B (acute)	0	0	1	1
Hepatitis B (chronic)$	93	93	104	104
Influenza - ICU Hosp (0-64 yrs)	17	17	3	3
Influenza Death (0-64 yrs)	6	6	0	0
Measles	4	4	0	0
Pertussis*	17	17	13	13

*Includes confirmed, probable and suspect cases.
$ Includes confirmed and probable cases

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, the use of different reporting systems, and changes to the resolution statuses of cases based on subsequent information received.
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Table 4. **Outbreaks in San Mateo County**

Disease	2014		2013	
	1st Qtr	YTD	1st Qtr	YTD
All Gastrointestinal*	6	6	14	14
Confirmed/Probable Norovirus	4	4	9	9
Respiratory*	7	7	18	18
Confirmed Influenza	4	4	16	16
Confirmed Pertussis	0	0	1	1

*Includes confirmed, probable and suspect outbreaks

Focus on Neisseria meningitides - Part II

Infection with *N. meningitidis* can produce a variety of **clinical manifestations**, ranging from transient fever and bacteremia to fulminant disease and death. Mortality can be very high and long-term sequelae can be severe even in successfully managed cases. *N. meningitidis* is the leading cause of bacterial meningitis in children and young adults in the United States, with an overall mortality rate of 13 percent. Acute systemic meningococcal disease is most frequently manifested by three syndromes**: meningitis alone, meningitis with meningococcemia, and meningococcemia** without meningitis. The typical initial presentation of meningitis due to *N. meningitidis* consists of sudden onset of fever, nausea, vomiting, headache and myalgias. **Myalgias** may be an important differential sign, and the pain can be intense. Disease progression is usually rapid with transition to severe disease in a few hours. Meningococcal meningitis and meningococcemia often result in **shock, disseminated intravascular coagulation, and purpura fulminans**. A number of complications have been documented in patients with meningococcal meningitis, including immune complex-associated complications such as arthritis, pleurisy, vasculitis and pericarditis.

The gold standard for **diagnosis** is the isolation of *N. meningitidis* by culture from a usually sterile body fluid, such as blood or cerebrospinal fluid (CSF), or less commonly, synovial, pleural, or pericardial fluid. Commercial latex agglutination kits are also available. These kits can detect agglutination of five capsular types: A, B, C, Y, and W135. The polymerase chain reaction (PCR) is a sensitive and rapid tool for diagnosing meningococcal infection. Meningococcal meningitis is well treated with **penicillin G** once the isolate is proven to be penicillin-susceptible. A third-generation cephalosporin is recommended for meningococcal infections in patients with organisms that are not fully susceptible to penicillin and in those with contraindications to penicillin. Vasopressor and aggressive fluid replacements are key components in the management of shock.

The methods for **prevention** of meningococcal infection include antimicrobial chemoprophylaxis following identification of an index case, use of droplet precautions for 24 hours after institution of effective antibiotics in patients with suspected or confirmed *N. meningitidis* infection, vaccination prior to exposure, and avoidance of risk factors. Because the rate of secondary disease for close contacts is highest immediately following onset of disease in the index patient, antimicrobial chemoprophylaxis should be administered as early as possible, ideally <24 hours after identification of the index patient. **Regimens for antimicrobial prophylaxis include rifampin, ciprofloxacin and ceftriaxone.**

Meningococcal vaccines in use in the U.S. include the meningococcal polysaccharide vaccine (Menomune) and meningococcal conjugate vaccines (Menactra, Menveo, and MenHibrix). These vaccines help provide immunity for serogroups A, C, W-135, and Y. **The serogroup B vaccine recommended for use on the Princeton and UCSB campuses is not available for routine use in the U.S.**

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://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).