



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. 32 • Data to June 30, 2015

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Table 1. Selected CD cases reported in San Mateo County

Disease	2015		2014	
	2nd Qtr	YTD	2nd Qtr	YTD
Coccidioidomycosis	1	4	1	3
Listeriosis	2	2	1	1
Meningitis - Bacterial*§	3	3	1	2
Meningitis - Viral§	4	5	2	5
Meningococcal Disease§	0	2	0	2
Paratyphoid Fever	0	0	1	1
Typhoid Fever§	0	0	1	1

*Excluding meningococcal meningitis § Includes confirmed and probable cases

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

Disease	2015		2014	
	2nd Qtr	YTD	2nd Qtr	YTD
Amebiasis	1	3	2	4
Campylobacteriosis	57	118	54	102
Cryptosporidium§	7	13	11	20
E. coli O157*	3	7	4	7
Giardia	7	21	9	19
STEC w/ HUS*	0	0	0	0
STEC w/o HUS*	3	6	2	2
SALMONELLA (non-typhoid)§	30	55	30	52
S. Enteritidis	1	1	6	11
S. Typhimurium	0	0	3	6
Pending/Others	29	54	21	35
Shigellosis§	5	14	6	12
Vibrio (non-cholera)	0	3	0	2

*STEC categories exclude E. coli O157 § Includes confirmed and probable cases

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

Disease	2015		2014	
	2nd Qtr	YTD	2nd Qtr	YTD
Hepatitis A	1	1	1	2
Hepatitis B (acute)	2	4	0	0
Influenza - ICU Hosp (0-64 yrs)	1	11	0	17
Influenza Death (0-64 yrs)	0	5	0	6
Measles	0	4	0	4
Pertussis*	5	15	44	62

*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 Hepatitis B — Epidemiology and Transmission

Part Two

Sexual transmission remains the major mode of spread of HBV in developed countries. It is estimated that heterosexual transmission accounts for approximately 39 percent of new HBV infection among adults in the United States and transmission among men having sex with men (MSM) accounts for approximately 24 percent. Sexual transmission of hepatitis B can be prevented by vaccination of spouses and steady sex partners in individuals with monogamous partners, and safer sex practice including use of condoms in subjects with multiple partners.

Percutaneous transmission usually happens among intravenous drug users who share syringes and needles. In the United States, IDU accounts for 16 percent of new hepatitis B infections. The risk of HBV transmission increases with the number of years of drug use, frequency of injection, and sharing of drug preparation equipment. Certain practices like acupuncture, tattooing, and body piercing have also been associated with transmission of hepatitis B.

Adults and children may acquire HBV infection via **blood exposure to minor breaks in the skin** or mucous membranes. In addition, transmission can occur via exposure to household articles that have been contaminated with blood, such as toothbrushes, razors, and toys, since HBV can survive outside the human body for a prolonged period.

HBV can be transmitted in the **healthcare setting**. Transmission generally occurs from patient to patient or from patient to health care personnel via contaminated instruments or an accidental needle stick. Among individuals who are not immune to HBV, the risk of transmission depends upon the hepatitis B surface antigen (HBsAg), hepatitis B e antigen (HBeAg), and HBV DNA status of the source. A review of cases of viral hepatitis in the United States from 1998 to 2008 in health care settings outside hospitals revealed 18 outbreaks with 173 persons with incident HBV infection. These outbreaks occurred mainly in outpatient clinics or ambulatory hemodialysis centers due to **lapses in infection control measures** like syringe reuse, contamination of injectable medications or flush solutions, and the reuse of fingerstick devices meant only for single use.

Organ donors are routinely screened for HBsAg. Transmission of HBV infection has been reported after transplantation of extrahepatic organs, such as kidneys and even cornea, from HBsAg positive donors. The role of anti-HBc in organ donor screening is less certain because of the possibility of false positive results, the potential loss of up to 5 percent of donors even in low endemic areas, and the uncertainty about the infectivity of organs, especially extrahepatic organs, from donors who have isolated anti-HBc. Whether testing donors for HBV DNA can reduce the risk of HBV in recipients is still being determined.

Postexposure prophylaxis is recommended for all unvaccinated individuals who are exposed to blood or infectious secretions. The first dose of vaccine should be given as early as possible and within 12 hours of exposure. If the source is known to be HBsAg positive, one dose of HBIG should be administered at the same time in another site. The other two doses of vaccine should be administered according to the usual schedule. Among individuals who have been vaccinated and have a documented response, no postexposure prophylaxis is required. Individuals who are documented to be nonresponders will require two doses of HBIG given one month apart.

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).