



# 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. 10 • Data to Dec 31, 2009
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**Table 1. Selected CD cases reported in San Mateo County Residents**

| Disease                     | 2009    |      | 2008    |      |
|-----------------------------|---------|------|---------|------|
|                             | 4th Qtr | YTD  | 4th Qtr | YTD  |
| Varicella (hospitalization) | 1       | 1    | 0       | 0    |
| Coccidioidomycosis          | 0       | 8    | 0       | 6    |
| Cryptococcosis              | 2       | 5    | 0       | 0    |
| H1N1 related Deaths         | 0       | 10   | 0       | 0    |
| Hepatitis C (chronic)       | 94      | 544  | *       | *    |
| Listeriosis                 | 1       | 3    | 1       | 5    |
| Meningococcal Meningitis    | 0       | 1    | 0       | 2    |
| Other Bacterial Meningitis  | 2       | 7    | 1       | 5    |
| Meningitis - Viral          | 2       | 12   | 1       | 17   |
| MRSA                        | 257     | 1084 | 159     | 1010 |
| Q - Fever                   | 1       | 1    | 0       | 0    |

\* Incomplete data, not reported at this time

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

| Disease                         | 2009      |            | 2008      |            |
|---------------------------------|-----------|------------|-----------|------------|
|                                 | 4th Qtr   | YTD        | 4th Qtr   | YTD        |
| Amebiasis                       | 0         | 5          | 0         | 6          |
| Campylobacteriosis              | 68        | 229        | 50        | 197        |
| Cryptosporidium**               | 11        | 70         | 3         | 16         |
| E. Coli 0157: H7                | 2         | 8          | 2         | 14         |
| Giardia                         | 6         | 44         | 13        | 64         |
| <b>SALMONELLA (non-typhoid)</b> | <b>20</b> | <b>109</b> | <b>30</b> | <b>113</b> |
| S. Enteritidis                  | 1         | 13         | 4         | 21         |
| S. Heidelberg                   | 0         | 5          | 1         | 6          |
| S. Newport                      | 1         | 6          | 0         | 8          |
| S. Typhimurium                  | 0         | 7          | 2         | 14         |
| S. Rissen                       | 0         | 8          | 0         | 0          |
| Other                           | 5         | 47         | 23        | 64         |
| Pending                         | 13        | 23         | 0         | 0          |
| Shigella                        | 5         | 22         | 3         | 27         |
| Vibrio (non-cholera)            | 3         | 7          | 1         | 5          |

\*\*There has been a significant increase in the number of Cryptosporidium cases in 2009. All cases are investigated by the Cryptosporidium Surveillance Project. These cases remain isolated and have not been linked to any outbreak.

### CalREDIE

San Mateo County is one of three counties in California selected to pilot the California Reportable Disease Information Exchange (CalREDIE), which the California Department of Public Health (CDPH) is implementing for web-based disease reporting and surveillance. In the future, this system will be implemented for health care providers and laboratories to report cases of diseases of public health interest.

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

| Disease               | 2009    |     | 2008    |     |
|-----------------------|---------|-----|---------|-----|
|                       | 4th Qtr | YTD | 4th Qtr | YTD |
| Hepatitis A           | 1       | 7   | 0       | 6   |
| Hepatitis B (acute)   | 0       | 5   | 2       | 8   |
| Hepatitis B (chronic) | 48      | 341 | *       | *   |
| Pertussis             | 0       | 10  | 6       | 26  |

\* Incomplete data, not reported at this time

### Focus on: Cryptosporidiosis

The San Francisco Bay Area Cryptosporidiosis Surveillance Project monitors human cryptosporidiosis in Bay Area Counties served in part or completely by the San Francisco Public Utilities Commission, including San Mateo County. Significantly more cases were reported in 2009 than in previous years. Thus far, no common risk factors have been identified and potential reasons for an "artificial" increase in case numbers are being investigated.

Along with Giardia, Cryptosporidium is one of the most common parasitic enteric pathogens in humans. It can cause a mild diarrheal illness, severe enteritis with or without biliary tract involvement or an asymptomatic infection. Asymptomatic infections occur both in immunocompetent and immunocompromised individuals. As many as 30% of infected children remain asymptomatic.

In North America, incidence has been estimated at 3.0 to 6.0 per 100,000 populations per year. The incidence is significantly higher in children than in adults. While Cryptosporidium often causes infection in young children, it can also cause sporadic, often water-related, outbreaks of self-limited diarrhea in immunocompetent hosts as well as chronic, life-threatening illness in immunocompromised patients, particularly those with HIV infection.

Ingestion of only a few oocysts can lead to severe disease and persistent infection, particularly in HIV-infected patients when their CD4 count is below 100 cells/microL. The illness usually resolves without therapy in 10 to 14 days in immunologically healthy people, although it can persist longer. When therapy is required, nitazoxanide is the preferred drug in immunocompetent children and adults.

Transmission of cryptosporidiosis occurs via spread from an infected person or animal, or from a fecally contaminated environment such as a food or water source. Cryptosporidiosis outbreaks have been associated with animal contact, travel, contaminated drinking water supplies, swimming pools, and recreational water facilities. While foodborne outbreaks are uncommon, numerous waterborne outbreaks have been reported. The largest occurred in 1993, when 403,000 residents of Milwaukee developed gastrointestinal symptoms after their drinking water became contaminated. Person-to-person transmission is common, particularly among household members, sexual partners, healthcare workers, and children in daycare centers and their caretakers.

Excretion of oocysts after resolution of clinical symptoms can continue for prolonged periods of time. Oocysts are resistant to most standard purification techniques, including filtration and chlorination. Spores can be eliminated with freezing, boiling, and by high concentrations of ammonia or formalin. Good hygiene, such as handwashing and proper disposal of contaminated material, are the most important ways to prevent infection.

**2009 H1N1 influenza update:** While 2009 H1N1 activity has significantly decreased both in California and nationwide, a large segment of the population remains susceptible to the virus. Vaccine supply is now more than adequate to offer vaccination to the general public, which may help stave off a possible third wave of illness in the USA. Children remain at high risk and those younger than 10 need to receive two doses of the vaccine. San Mateo County Health System is now conducting free H1N1 influenza vaccination walk-in clinics.

For details regarding the vaccination clinics and H1N1 in general, please go to <http://www.smhealth.org/swineflu>

Sources: Automated Vital Statistics System (AVSS)

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

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