



QUARTERLY REPORT

**2nd Quarter
June 2010**

Marion County Health Department
3180 Center St NE
Salem OR 97301-4592
(503) 588-5357
<http://health.co.marion.or.us>

To report a communicable disease
(24 hours a day, 7 days a week)

Telephone: (503) 588-5621
Fax: (503) 566-2920

Vital Statistics Quarter Ending: June 2010	2nd Quarter		Year to Date	
	2010	2009	2010	2009
BIRTHS				
TOTAL DELIVERIES	1341	1383	2617	2644
Delivery in Hospital	1327	1364	2589	2606
Teen Deliveries (10-17)	51	56	108	105
DEATHS				
TOTAL	625	657	1267	1349
Medical Investigation	56	59	125	127
Homicide	0	0	1	4
Suicide	13	12	26	20
Accident – MVA	5	7	8	14
Accident – Other	20	18	39	39
Natural / Undetermined / Pending	18	22	49	50
Non-Medical Investigation (all natural)	569	598	1142	1222
Infant Deaths	6	7	9	12
Fetal Deaths	3	4	5	9
COMMUNICABLE DISEASES				
E-Coli: 0157	2	0	2	0
Hepatitis A	0	0	0	1
Acute Hepatitis B	1	3	3	3
Chronic Hepatitis B	8	9	20	17
Meningococcus	1	0	1	0
Pertussis	11	3	14	8
Tuberculosis	3	5	4	6
SEXUALLY TRANSMITTED DISEASE				
PID (Pelvic inflammatory Disease)	10	5	20	9
Chlamydia	408	384	820	760
Gonorrhea	14	14	46	73
Syphilis	8	2	12	4
AIDS	2	3	5	4
HIV Positive	2	4	4	5

Cryptosporidiosis – Swim But Don't Swallow

Karen Landers MD MPH, Marion County Health Officer

With temperatures approaching expected values for summer, and rain no longer in the extended forecast, many people are enjoying seasonal recreational activities associated with the summer months, including camping, backpacking, boating, and swimming. Summer (through early fall) is also the time of year when an increase in *Cryptosporidium*-associated gastroenteritis may be expected. Cryptosporidiosis has been on the rise both nationally and in Oregon, where the incidence tripled from 2008 to 2009. (See graph) The Centers for Disease Control and Prevention (CDC) estimates the costs for cryptosporidiosis hospitalization at \$37-145 million annually in the U.S. Though overall numbers are low, reported cases in Marion County in 2010 have exceeded last year's cases at this time by a factor of four. To date, the cases in Marion County have been sporadic and have not been associated with an outbreak.

Cryptosporidiosis is a gastrointestinal illness caused by the protozoan parasite, *Cryptosporidium*. Infections with *Cryptosporidium* may be asymptomatic in healthy persons, but clinical illness is characterized by watery diarrhea which may be intermittent, abdominal cramps, low grade fever, nausea, vomiting, and weight loss. *Cryptosporidium* infection results from the ingestion of oocysts from fecally-contaminated water or food, or through direct person-to-person or animal-to-person (predominately cattle) contact. Infected persons may shed large numbers of oocysts (10^9 or more) in the stool which are immediately infectious on excretion. *Cryptosporidium* oocysts are small (4-6 micrometers) and may remain infectious in a moist environment for months. They are highly resistant to chemical disinfectants used to purify water including chlorine. Since the first reported U.S. drinking water-associated and recreational water-associated outbreaks in 1984 and 1988 respectively, cryptosporidiosis has emerged as the most frequently recognized cause of recreational water-associated gastroenteritis, particularly in disinfected (e.g., pools, water parks, etc.) venues.

Continued

Diagnosis and Treatment

The infectious dose is very low for *Cryptosporidium*; as few as 10-30 oocysts can cause infection. The incubation period ranges from 2-12 days with 5-8 days being most common. *Cryptosporidium* oocysts are rarely detected on ova and parasite screening of stool specimens; microscopic examination using special stains, direct fluorescent antibody (DFA) and/or immunoassays for detection of *Cryptosporidium* sp. antigens are usually required. Tests for *Cryptosporidium* are not routinely performed in most laboratories. If clinically suspected, health care providers must specifically request testing for this parasite. **Report suspected and confirmed cases of cryptosporidiosis to Marion County Health Department within 1 working day at (503) 588-5621.** Prompt reporting helps with early identification of possible outbreaks. Testing environmental water samples for *Cryptosporidium* is impractical and is not routinely recommended.

Nitazoxanide (in oral suspension 100mg/5 ml, and 500 mg tablets) is the only broad-spectrum anti-parasitic drug approved in the U.S. for treatment of diarrhea caused by *Cryptosporidium* in healthy persons one year of age and older. It may take up to 5 days for diarrhea to resolve in approximately 80% of treated patients, with a parasitologic cure rate (no *Cryptosporidium* detected in stool) ranging from 60-75%. Health care providers may consider re-testing stool at least 1 week after the last dose of nitazoxanide only if symptoms do not resolve. Advise patients diagnosed with cryptosporidiosis to refrain from swimming until 2 weeks after their symptoms have resolved. Nitazoxanide has not been shown to be effective for treatment of immunocompromised persons with cryptosporidiosis, and is not currently approved for that use.

Preventing and Controlling Cryptosporidiosis

***WASH YOUR HANDS** with soap and non-contaminated water.

Note: *Cryptosporidium* is not easily inactivated by alcohol-based sanitizers.

***DO NOT** swim or enter recreational water venues (including chlorinated pools/spas) if you have diarrhea.

***Monitor** diapered children closely around recreational water to avoid “accidental” water contamination.

***Reduce** exposure to contaminated water:

- ▶ **DO NOT** swallow recreational water.
- ▶ Bring potentially contaminated drinking water to a rolling boil for 1 minute.
- ▶ Filter potentially contaminated drinking water using a filter with reverse osmosis or absolute pore size of 1 micron or less, OR
- ▶ Use a filter tested and certified by National Safety Foundation (NSF) Standard 53 or NSF Standard 58 for cyst removal.

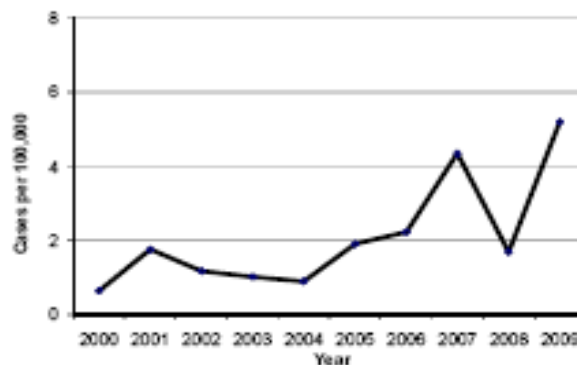
Note: Filtered water will also need disinfection for bacterial /viral pathogens)

***Avoid** contact with feces during sexual activity.

***Avoid** uncooked foods or untreated water/ice while traveling in countries whose water supply may be unsafe.

For more information visit: <http://www.cdc.gov/crypto/>.

Figure 7. Cryptosporidiosis incidence, Oregon, 2000–2009



*Taken from *CD Summary*, May 25, 2010 Vol. 59, No. 11.