



QUARTERLY REPORT

**2nd Quarter
June 2011**

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 2011	2nd Quarter 2011 2010		Year to Date 2011 2010	
BIRTHS				
TOTAL DELIVERIES	1292	1349	2486	2625
Delivery in Hospital	1275	1332	2454	2594
Teen Deliveries (10-17)	32	52	76	108
DEATHS				
TOTAL	624	628	1301	1270
Medical Investigation	73	58	138	126
Homicide	1	0	6	1
Suicide	12	13	22	26
Accident – MVA	10	6	16	9
Accident – Other	27	20	49	39
Natural / Undetermined / Pending	23	19	45	51
Non-Medical Investigation (all natural)	551	570	1163	1144
Infant Deaths	2	6	8	9
Fetal Deaths	7	3	9	5
COMMUNICABLE DISEASES				
E-Coli: 0157	1	2	1	2
Hepatitis A	0	0	0	0
Acute Hepatitis B	1	1	2*	3
Chronic Hepatitis B	10	8	15*	20
Meningococcus	0	1	0	1
Pertussis	4	11	14	14
Tuberculosis	4	3	6	4
SEXUALLY TRANSMITTED DISEASE				
PID (Pelvic inflammatory Disease)	1	10	4	20
Chlamydia	430	408	840	820
Gonorrhea	27	14	45	46
Syphilis	4	8	6	12
AIDS	3	2	3	5
HIV Positive	1	2	4	4

*Due to database transition, some discrepancies may occur

The ABCs of Hepatitis: An Update

Karen Landers MD MPH, Marion County Health Officer

Hepatitis has gradually been making its way down the alphabet; as recently as 1996, a blood borne virus labeled as hepatitis G was identified. However, hepatitis A, B, and C remain the focus of prevention and medical management activities. Acute infections with hepatitis A, B, or C may present with discrete onset of symptoms including fatigue, anorexia, nausea, abdominal pain, dark (tea or cola-colored) urine, pale stools, or jaundice with significantly elevated serum aminotransferase levels; however, asymptomatic infections are not uncommon. Diagnosis is made based on serologic tests; the type of antibody present will help distinguish acute or recent infection from chronic infections with ongoing infectivity.

Suspected infections with hepatitis A, B, and C are reportable to the local health department within one working day. **Call (503) 588-5621 to report.** Marion County Health Department communicable disease services investigate hepatitis cases, offer vaccinations to contacts as indicated, make recommendations for medical follow-up, and provide education regarding transmission prevention.

Hepatitis A (HAV)

Hepatitis A very likely represents another vaccination success story. Hepatitis A is currently at historically low levels nationally, and in Oregon. Prior to licensure of hepatitis A vaccine in 1995, epidemics occurred in the United States at approximately 10 year intervals; the most recent in Oregon (and Marion County) occurred in 1994-1995. During the past 5 years in Marion County, there have been a total of 12 reported cases, with only one case reported per year for the past 4 years. A total of 4 cases were reported in Oregon in 2010. Sixty-one percent of the cases in Oregon in 2008-2009 were acquired through travel to countries with high rates of hepatitis A. A 2-dose series of the safe and highly effective hepatitis A vaccine is now recommended for all children beginning at 12 months of age, with at least 6 months spacing between the two doses. Hepatitis A vaccination is being phased in to the requirements for school and child care attendance. Children attending child care, Head Start, preschool, and kindergarten through grade 3 will need documentation of hepatitis A immunization for the 2011-2012 school year.

Continued

Hepatitis A Testing		
Interpretation	Anti-HAV	
	Total	IgM*
Acute Infection	-	+
Immune (past infection or vaccination)	+	-

***Order this to test for acute infection; may remain elevated up to 32 months in some persons.**

Hepatitis B (HBV)

While acute hepatitis B in Oregon has declined more than 80% since 1980, chronic hepatitis B continues to be reported in more than 400 individuals annually since 1989. Marion County averages 30 reports per month of chronic hepatitis B, some of whom may have been previously identified. While the risk of developing chronic hepatitis B after infection in adolescence or adulthood is approximately 5-10%, the risk ranges from 25% in children infected after birth and before age 5, up to 90% in newborns infected at birth from mothers who are chronically infected with hepatitis B and also e-antigen positive.

Screening is recommended for the following groups:

- Pregnant women
- Infants born to HBsAg+ mothers at 9-18 months of age
- Persons who inject drugs
- Men who have sex with men (MSM)
- Persons born in regions of high prevalence (Asia, Africa, Pacific Islands, Eastern Europe)
- Persons with HIV
- Hemodialysis patients
- Household and sexual contacts of chronic HBV-infected persons

Persons who are susceptible to HBV (HBsAg-negative) should be vaccinated; newborns should receive the first dose of hepatitis B vaccine at birth (regardless of the mother's HBV status). Infants born to HBsAg+ mothers should also receive hepatitis B immune globulin (HBIG) at birth.

Hepatitis B Testing				
Interpretation	HbsAg	Anti-HBs	Anti-HBc	
			Total	IgM*
Never infected; no evidence of immunization	-	-	-	-
Acute case or chronic carrier - infectious	+	-	+	?
Recently infected acute – unknown long term status (repeat HBsAg in 6 months)	+	-	+	+
Window period of acute infection or abnormal old case/carrier (may have + HBV DNA if tested)	-	-	+	?
Recent (< 6 months) case – immune	-	+	+	+
Recovered from infection - immune	-	+	+	-
Chronic carrier - infectious	+	-	+	-
Immune due to vaccination	-	+	-	-

***Order this to test for acute or recent infection**

Hepatitis C (HCV)

Since becoming reportable in 2006, more than 6000 persons with positive tests have been reported annually in Oregon. Marion County has recorded over 3400 reports since 2006 and averaged 50 positive hepatitis C reports per month in 2010. Since most infections are asymptomatic, and 75-85% of infected persons develop chronic infection, detecting acute illness is rare.

Screening is recommended for the following groups:

- Persons who have ever injected illegal drugs (even once)
- Persons with evidence of liver disease (persistently elevated ALT)
- Persons with solid organ transplant before 1992
- Persons receiving blood from donors testing positive for hepatitis C
- Persons receiving clotting factors made before 1987
- Persons who are or have been on long-term renal dialysis
- Children born to HCV-infected mothers

A high signal-to-cut-off ratio (s/co, ranges vary by laboratory) in a person who has tested positive for hepatitis C antibodies, is strongly predictive (> 95%) of hepatitis C infection. Two new treatment options for hepatitis C were approved in May, 2011 by the Food and Drug Administration (FDA). Protease inhibitors, telaprevir and boceprevir, when used in combination with peginterferon and ribavirin, appear to significantly increase clearance of the hepatitis C virus (in at least 70% of previously untreated persons) and may also help to cut treatment time by 50%.

Hepatitis C Testing		
Interpretation	Anti-HCV Positive High s/co ratio	HCV RNA*
Acute or chronic HCV; depending on clinical context (symptoms, elevated liver function tests)	+	+
Resolution of HCV infection or acute HCV during period of low viremia, or false negative HCV RNA	+	-
Early acute infection or chronic HCV in immunosuppressed persons, or false positive HCV RNA (repeat in 4-6 months)	-	+
Absence of HCV infection	-	-

***Order this test for confirmation; if nega-**

tive, recheck HCV RNA in 4-6 months