



O R E G O N

# QUARTERLY REPORT

3rd Quarter  
September 2002

Marion County Health Department  
3180 Center St NE  
Salem OR 97301-4592  
(503) 588-5357  
[www.co.marion.or.us/mhealth](http://www.co.marion.or.us/mhealth)

To report a communicable disease:

Telephone: (503) 588-5621  
Fax: (503) 566-2920  
Evenings, Weekends & Holidays:  
(503) 731-4030

Vital Statistics Quarter Ending: Sept. 2002	3rd Quarter		Year to Date	
	2002	2001	2002	2001
<b>BIRTHS</b>				
<b>TOTAL DELIVERIES</b>	1309	1280	3720	3655
Delivery in Hospital	1296	1268	3683	3616
Teen Deliveries (10-17)	69	57	177	173
<b>DEATHS</b>				
<b>TOTAL</b>	623	570	1976	1841
Medical Investigation	46	41	163	131
Homicide	02	03	09	07
Suicide	09	07	32	23
Accident – MVA	04	07	08	21
Accident – Other	08	09	36	29
Natural / Undetermined / Pending	23	15	78	51
Non-Medical Investigation (all natural)	577	529	1813	1710
Infant Deaths	05	01	06	09
Fetal Deaths	11	03	27	11
<b>COMMUNICABLE DISEASES</b>				
<b>E-Coli: 0157</b>	07	05	25	12
Hepatitis A	01	01	05	06
Acute Hepatitis B	08	07	23	20
Chronic Hepatitis B	08	14	38	36
Meningococcus	0	01	01	12
Pertussis	06	02	18	09
Tuberculosis	06	05	13	11
<b>SEXUALLY TRANSMITTED DISEASE</b>				
<b>PID (Pelvic inflammatory Disease)</b>	02	03	03	15
Chlamydia	199	182	385	566
Gonorrhea	18	14	29	48
AIDS	02	0	13	02
HIV Positive	07	N/A	37	N/A

## West Nile Virus: Coming Soon to a Community Near You!

Karen Landers MD MPH, Health Officer

West Nile virus (WNV) is continuing its westward march with animal and/or human cases now reported in 43 states. As of October 17, 2002, there have been a total of 3104 human cases with laboratory evidence of recent WNV infection reported. Among the patients for whom data was available, the median age was 56 years (range: 1 month to 99 years). A total of 172 human deaths due to WNV have been reported in 2002. The median age of cases who died was 79 years (range: 27-99 years and 59% were males). On 10/2/02, a raven tested positive for WNV from the northeastern corner of the state of Washington, the first reported WNV activity in that state. One human case has been reported from Los Angeles County in California, but surveillance has detected no bird, animal, or mosquito in California to date. (See map) The expectation is that WNV will arrive in Oregon sometime in the spring or summer of 2002.

West Nile virus is a mosquito-borne disease first identified in the West Nile District of Uganda in 1937. In 1999, the virus made its first appearance in the Western Hemisphere on the east coast of North America. The basic transmission cycle involves mosquitoes feeding on birds infected with WNV. Birds typically develop an infectious viremia for 1-4 days after which survivors develop life-long immunity. Members of the corvid family (crows, ravens, jays, and magpies) are particularly susceptible to infection and appear to be the main reservoir for WNV. Mammals including horses, cats, dogs, and humans, are not known to develop a sufficient viremia to infect mosquitoes and are considered incidental hosts. Approximately 40% of cases in horses are fatal. A conditionally-licensed vaccine (shown to be safe with a reasonable expectation of efficacy) is available for horses but not for cats, dogs, or humans. Horse owners should discuss WNV vaccination with their veterinarian.

Most human infections with WNV occur without symptoms (approximately 80% of cases). Approximately 20% of infected individuals develop "West Nile Fever", a mild flu-like illness with fever, myalgia, lymphadenopathy and occasional rash, lasting 3-6 days. Less than 1% develop severe illness with meningoencephalitis. Muscle weakness and acute flaccid paralysis can be prominent features of the presentation which has led to mistaken diagnoses of Guillain Barre syndrome in several cases.

Continued

The risk of severe illness is higher in persons who are older than 50 years of age or who have conditions causing immune suppression. Diagnosis is made by enzyme-linked immunosorbent assay (ELISA) on serum or cerebrospinal fluid (CSF), which is currently available through the Oregon State Public Health Laboratory (OSPHL). Additional confirmatory testing will likely be needed to confirm a WNV case and distinguish it from other closely related viruses such as St. Louis encephalitis (SLE). CDC is currently investigating cases of WNV which have occurred following blood transfusion and organ transplantation. Although data are insufficient to document WNV transmission via this route at this time, blood banks are attempting to screen and defer from donation, persons with minor flu-like symptoms particularly in areas where WNV is most active. Persons developing unexplained meningitis or encephalitis 3-21 days after receipt of a blood transfusion should be reported to the local or state health department.

Control of WNV, a disease for which there is no human vaccine and for which there is no specific treatment, will focus primarily on surveillance and prevention (also known as collection for detection and protection from infection). Surveillance for WNV in birds and mosquitoes is already underway in Oregon. Greater than 2000 pools of mosquitoes have been tested for WNV and other arborviruses in 2002; all have been negative. Flocks of sentinel chickens are also being maintained by various vector-control districts in Oregon. More than 1000 blood samples from those flocks have been tested in the last year and a half and none have been positive for WNV. Bird testing for WNV is also available. To date, 10 birds in Oregon have been tested for WNV and none were positive. To assure accurate results, birds submitted for testing should be freshly dead (no more than 24 hours old) and should have NO evidence of traumatic injury or decay. Currently, ONLY birds from the corvid family (i.e. crows, ravens, jays and magpies) are being accepted for testing. Call Marion County Health Department Environmental Health, (503) 588-5401, to determine if a bird is suitable for testing, and for instructions on handling of dead birds to be submitted for WNV testing. Persons can reduce their risk of WNV infection by eliminating mosquito breeding sites in their home environment, and by

protecting themselves from mosquito bites while outdoors. The following are recommendations to reduce the risk of West Nile Virus infection:

- Routinely empty water (every 4-7 days) from flower pots, birdbaths, pet bowls, clogged rain gutters, swimming pool covers, old tires, buckets, barrels, or cans that collect water in which mosquitoes can lay eggs.
  - Install/ repair window and/or door screens to keep mosquitoes out of buildings.
  - When possible, wear long-sleeved shirts and long pants outdoors, and avoid being outside during dawn, dusk, and early evening which are peak mosquito biting times
  - Apply insect repellent to exposed skin. Insect repellents containing DEET provide longer-term protection. Assist children by applying insect repellent for them, and to avoid contact with eyes and mouth, do not apply repellents to young children's hands.
  - Place mosquito netting over infant carriers when outdoor with infants.
- Call Marion County Health Department Environmental Health (503) 588-5401 with questions about controlling for mosquitoes in the home environment.

For more information on West Nile virus, visit the excellent website at CDC: [www.cdc.gov/ncidod/dvbid/westnile/index.htm](http://www.cdc.gov/ncidod/dvbid/westnile/index.htm).

## West Nile Virus in the United States, 2002

