# QUARTERLY REPORT

OREGON
Health & Services Building
3180 Center Street NE
Salem, OR 97301-4592
2nd Quarter

MARION COUNTY HEALTH DEPARTMENT
Health & Services Building
3180 Center Street NE
Salem OR 97301-4592

OREGON
Health & Services Building
3180 Center Street NE
Salem, OR 97301-4592
June 2000

| Vital Statistics Quarter Ending: June 2000 | 2nd Quarter | | Year to Date | |
|---|---|---|---|---|
| | 2000 | 1999 | 2000 | 1999 |
| **BIRTHS** | | | | |
| TOTAL DELIVERIES | 1242 | 1159 | 2414 | 2247 |
| Delivery in Hospital | 1174 | 1075 | 2282 | 2120 |
| Teen Deliveries (10-17 years) | 68 | 84 | 132 | 127 |
| **DEATHS** | | | | |
| TOTAL | 626 | 613 | 1235 | 1287 |
| Medical Investigation | 38 | 38 | 79 | 89 |
| Homicide | 01 | 01 | 03 | 01 |
| Suicide | 06 | 08 | 13 | 15 |
| Accident - MVA | 04 | 0 | 07 | 12 |
| Accident – Other | 05 | 09 | 15 | 18 |
| Natural/Undetermined/Pending | 22 | 20 | 41 | 43 |
| Non-Medical Investigation (All Natural) | 588 | 575 | 1156 | 1198 |
| Infant Deaths | 07 | 0 | 09 | 04 |
| Fetal Deaths | 02 | 05 | 08 | 10 |
| **COMMUNICABLE DISEASES** | | | | |
| E-Coli: 0157 | 02 | 02 | 02 | 03 |
| Hepatitis A | 07 | 01 | 16 | 02 |
| Acute Hepatitis B | 04 | 01 | 11 | 03 |
| Chronic Hepatitis B | 11 | 21 | 24 | 32 |
| Meningococcus | 0 | 02 | 02 | 06 |
| Pertussis | 01 | 07 | 03 | 09 |
| Tuberculosis | 07 | 03 | 08 | 10 |
| **SEXUALLY TRANSMITTED DISEASE** | | | | |
| PID (Pelvic Inflammatory Disease) | 02 | 28 | 22 | 56 |
| Chlamydia | 188 | 166 | 412 | 348 |
| Gonorrhea | 10 | 09 | 41 | 21 |
| AIDS | 06 | 01 | 09 | 04 |

## Tuberculosis in Marion County: NOT Gone and NOT Forgotten

by Karen Landers MD MPH

Tuberculosis (TB) continues to pose a major public health challenge globally and locally. Tuberculosis is still the number one infectious disease killer in the world, claiming 2-3 million lives annually. After seeing an unexpected and unwelcome rise of TB cases in the United States in the mid 1980's, the number of cases have begun to stabilize and drop. In Oregon there has been little change in the number of tuberculosis cases since the mid 1980's. (see graph). Although TB rates have also remained fairly constant over the past five years in Marion County (see graph), it has consistently ranked among the leading counties for tuberculosis in the State. The nine cases of tuberculosis reported in Marion County from just April to June of this year would seem to indicate an ominous beginning to the new century/millennium.

**Continued** ➳

**Why is TB so hard to control?**

A number of factors combine to make tuberculosis a difficult disease to control. The transmission is airborne with the bacteria capable of forming droplet nuclei, tiny particles that may remain suspended in the environment for many hours. Persons who become infected may carry the bacteria without symptoms for many years before becoming ill with disease. Persons who develop active disease must be treated with at least two medications to avoid developing resistant organisms and the treatment course is long – at least 6 months for uncomplicated disease and 2 years or longer for multidrug resistant disease. In Oregon in 1998, 9% of TB isolates were resistant to isoniazid (INH). A level of primary INH resistance of 4% or more is an indication to initiate 4 drug therapy (typically isoniazid, rifampin, pyrazinamide, and ethambutol) until drug sensitivities are available. The long and complicated medication regimens can lead to poor patient adherence, the number one reason for treatment failure and development of drug resistance.

**Reducing TB – What is the Strategy?**

The strategy to reduce tuberculosis in the United States is focused on two main objectives: 1) identify persons with active disease as quickly as possible and initiate appropriate treatment to prevent infection in others, and 2) identify and treat persons with TB infection to prevent development of active disease. A higher risk of TB is associated with:

*having close contact to an active case or being recently infected (within last two years)
*immune suppression (including cancer and HIV infection)
*being born in countries with a high prevalence of TB such as Africa, Asia, Latin America and countries of the former Soviet Union
*the elderly
*persons from long term care institutions including nursing homes and correctional facilities
*homeless persons
*persons with histories of alcohol or other substance abuse
*health care workers
*persons with chronic conditions (including diabetes, renal failure, and persons under 10% of ideal body weight)

Persons presenting with symptoms of TB (including hemoptysis, fatigue, weight loss, fevers/night sweats) should be screened with a TB skin test (Mantoux), chest x-ray, and sputum collection (three morning specimens collected on separate days is ideal). **TB is reportable!** Report all suspect (positive AFB smear) and confirmed active cases of TB to the county health department. (Marion County 588-5611 or 588-5622) (Polk County 623-8175)

**Treat TB with DOT**

Directly Observed Therapy (DOT) is a treatment strategy promoted by the World Health Organization, the Centers for Disease Control and Prevention (CDC), and the American Thoracic Society (ATS) to ensure patients receive a full course of TB therapy. Observing patients taking each medication dose for the duration of therapy reduces the risk of selective medication-taking that can lead to treatment failure and drug resistance. Twice or three times weekly medication schedules for tuberculosis reduce the number of patient visits and facilitate DOT. Marion County Health Department has been providing DOT to active TB cases since 1996 with medications provided by Oregon Health Division to assure TB cases receive appropriate treatment.

**Screen and Treat for TB infection**

Persons at higher risk of TB (see list above) should be screened for TB infection with a Mantoux skin test and if positive (5 mm or greater for HIV+ and close contacts to cases, and 10 mm or greater for all the rest) should receive a chest x-ray. If the chest x-ray is negative, persons with a positive TB skin test should be considered for treatment of latent TB infection. Treatment for TB infection has routinely consisted of 6-12 months of INH, which is 70-90% effective in reducing the risk of developing active tuberculosis. The American Thoracic Society has recently published new guidelines on the treatment of latent TB infection which includes an additional shorter treatment option using 2 months of combination therapy using rifampin and pyrazinamide. (See below under recommended reading)

Recommended Reading

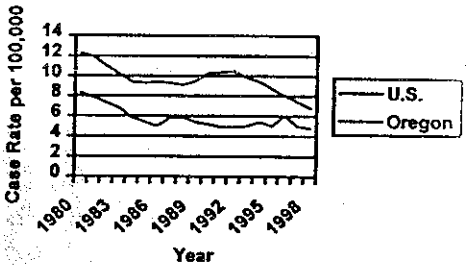
**Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection.** ATS, American Journal of Respiratory and Critical Care Medicine Vol 161 pp S221-S247 2000.

**Diagnostic Standards and Classification of Tuberculosis in Adults and Children.** ATS, American Journal of Respiratory and Critical Care Medicine Vol 161 pp 1376-1395 2000.

**Treatment of Tuberculosis and Tuberculosis Infection in Adults and Children.** American Thoracic Society, American Journal of Respiratory and Critical Care Medicine Vol 149 pp 1359-1374 1994.

**(*New guideline on treatment of tuberculosis are coming soon!)**

**Incidence of TB, U.S. and Oregon**




**Tuberculosis in Marion County**