Tuberculosis incidence in the US and Oregon, 1985-2006

For the past decade, tuberculosis (TB) incidence has been declining in both the US and Oregon. The case rate for Oregon is consistently lower than the national rate; in 2005, Oregon’s incidence was 2.8 per 100,000 population compared to the national of 4.8. In 2006, Oregon experienced the lowest incidence in state history, with only 2.2 cases per 100,000 persons.

In the US, a peak in incidence occurred in the early 1990’s due to a decrease in funding for TB coupled with a rise in TB cases related to the HIV epidemic. Since then the rate has been steadily declining, partly due to increased awareness and funding for TB/HIV. However, currently national funding for TB is again being cut.
There were only 81 cases of TB reported in 2006, marking a 21% decrease in case count from last year. Such a drop in the number of reported cases in Oregon has not been observed since the late nineties, when the count dropped from 156 cases in 1998 to 123 cases in 1999, which was also a 21% decline in case count.
In 2006, the majority of TB cases occurred in four counties: Multnomah (n=32), Marion (n=12) Washington (n=8), and Lane (n=6). Twelve other counties reported between 1 and 4 cases and 20 counties reported 0 cases.
In 2006, the 25-44 year-old age category had the highest number of TB cases, followed by 45-64 year-olds and 65 year-olds and above. There were four cases of pediatric TB reported in Oregon in 2006.
Oregon’s TB cases are predominantly male, although this gap appears to be narrowing. This finding is also seen in the US and globally. This may be due to differences in access to care, differences in underlying susceptibility to TB, or differences in TB risk factors among the sexes (homelessness, drug and alcohol use, etc).
In Oregon, the highest proportion of TB cases is seen among Asian/Pacific Islanders at 34%, followed by Whites at 31%, Hispanics at 18% and African American/Blacks at 16%. This profile is quite different from the US, where the majority of cases are among Hispanics (30%), followed closely by African Americans/Blacks (28%), and then Asians (23%) (2005 data). The vast majority (93%) of the Asian TB cases in Oregon were foreign-born. In Oregon, 77% of Black/African Americans were foreign born; in the US (2005 data) only 27% of Blacks were foreign-born.
In Oregon, the number of cases among US born has been decreasing. However, the case count among foreign-born has remained relatively stable over time. This has resulted in an increasing proportion of Oregon’s TB cases occurring in the foreign-born. In 2006, two thirds of Oregon’s TB cases were among foreign-born persons. This is a significantly higher proportion of foreign-born cases than is seen nationally (55% in 2005, p=0.02).
In 2006, the most common risk factor by far among Oregon’s TB cases was being foreign born, accounting for two-thirds of cases. 14% of Oregon’s cases were homeless. Percentages of cases with reported drug and alcohol use were between 6% and 10%.
Number of TB cases among the Homeless, Oregon 1993-2006

Over time, the number of TB cases among the homeless in Oregon has been decreasing. However, the number of cases among homeless spiked in 1996 and again in 2001 due to homeless shelter outbreaks during those years.
State performance in obtaining HIV status for TB cases has generally improved over time. However, there was a drop in reporting of HIV status in 2006. There were 18 cases (22%) who did not have HIV status reported: five refused testing and 13 were not offered testing. Age appears to be a factor in counties’ decision to offer the HIV test; among those not offered the test, 4 were under 17 years of age and 8 were over 74 years of age. The state of Oregon and CDC recommend that all TB cases be offered an HIV test, irrespective of age. It is important to collect HIV information in order to provide appropriate treatment for the patient, and to accurately estimate the burden of HIV among Oregon’s TB cases.
Mode of treatment among TB cases, Oregon 1993-2006

Over time, the use of self-administered therapy has decreased. In 2006, self-administered treatment was rarely used. Use of Directly Observed Therapy (DOT), the mode of treatment recommended by CDC, has increased over the years. Data for 2006 are not yet complete.
Completion of TB therapy within 1 year, Oregon 1993-2006

Completion of treatment (COT) for cases where less than 1 year of treatment is indicated was 93 percent in 2005, a vast improvement since 1993, where only two-thirds of cases completed treatment in that time frame. The CDC goal for COT is 90%, thus Oregon is meeting the national expectations. Data are not yet complete for 2006.

Note: Excludes deceased patients, patients resistant to rifampin, and children with bone, joint or military disease.