Leading causes of death are presented in this report by gender and race/ethnicity. Mortality data is based on the Death Certificate statistical file provided by the Center for Health Statistics, Oregon Department of Human Services. The source of population data used to calculate rates by age, gender, and race/ethnicity was the National Center for Health Statistics Estimates. Age-adjusted death rates are presented. Age adjustment permits comparison of death rates across populations with different age distributions. Age-adjustment involves multiplying age-specific rates by the standard population weight for each specific age group. Using this procedure, population rates (e.g., Hispanic and White non-Hispanic death rates) can be compared without the confounding effects of age. To help stabilize rates and observe trends when there are small numbers of events, rates are aggregated into rolling averages of five-year intervals. By creating rolling rates trends can be more easily identified.

Key Findings

- The top five leading causes of death in Multnomah County in 2005 were cancer, heart disease, stroke, respiratory disease, and unintentional injury.
- The County has reached the Healthy People 2010 objectives for reducing coronary heart disease mortality and respiratory disease mortality.
- The stroke mortality rate is greater in the County than the national rate.
- Diabetes-related mortality and Alzheimer’s mortality rates have increased in the County and rates are higher than the State and the U.S.
- Death rates are highest for lung cancer, while incidence rates are highest for female breast cancer and prostate cancer.
- While cancer mortality rates are higher for African Americans, the gap between White non-Hispanic and African American cancer mortality rates has declined since the early 1990s.
- African American lung cancer, coronary heart disease, and unintentional injury mortality rates have declined.
- African Americans experience substantial inequities in prostate cancer deaths, diabetes-related deaths, and stroke deaths compared to White non-Hispanics.
- White non-Hispanic prostate cancer and coronary heart disease mortality rates have declined.
- White non-Hispanics have the highest rates of unintentional injury mortality.
- Asian/Pacific Islanders have among the lowest cancer and respiratory disease mortality rates and have met the Healthy People 2010 objectives for reducing cancer, lung cancer, and female breast cancer mortality.
- Hispanics have among the lowest cancer and diabetes-related mortality rates and have met the Healthy People 2010 objectives for reducing cancer, lung cancer, colorectal cancer, and stroke mortality.
Top Five Leading Causes of Death
The top five leading causes of death in Multnomah County in 2005 were cancer, heart disease, stroke, respiratory disease, and unintentional injury. Rates of cancer and heart disease are significantly higher than stroke, respiratory disease, and unintentional injury (Figure 9.1). Age-adjusted death rates due to cancer and unintentional injury were similar for Multnomah County and the U.S. Death rates due to heart disease were substantially lower in Multnomah County than in the U.S. Age-adjusted rates of death due to stroke and respiratory disease were higher in Multnomah County than in the U.S.

Cancer
In 2005 the age-adjusted cancer mortality rate was 196 per 100,000 population in Multnomah County. The Oregon and U.S. cancer mortality rate were 186 and 184 per 100,000 respectively. Cancer death rates have declined in Multnomah County, however they are consistently higher than death rates for the State. Figure 9.2 compares cancer incidence rates and cancer mortality rates between 2000 and 2004. While lung cancer had the highest mortality rate, prostate cancer and female breast cancer had the highest incidence rates. While rates of male prostate cancer and female breast cancer were nearly equal, rates of death due to male prostate cancer were higher than deaths due to female breast cancer.
Cancer mortality was consistently higher among males than among females in Multnomah County (Figure 9.3). In the 2001-2005 period cancer death rates were 1.4 times higher for males than females.

Overall cancer mortality rates were highest in Multnomah County for African Americans, with an average rate of 233 per 100,000 in 2001-2005 (Figure 9.4). The gap between White non-Hispanic and African American cancer mortality rates has declined since the early 1990s. Asians and Hispanics had the lowest cancer mortality rates of all racial and ethnic groups. Both Asians and Hispanics have consistently met the Healthy People 2010 objective of no more than 160 cancer deaths per 100,000 population.
In Multnomah County, the rate of lung cancer deaths among African Americans declined substantially from 87 deaths per 100,000 during 1991-1995 to a low of 54 deaths per 100,000 during 1998-2002. The rate has increased to 61 per 100,000 in 2001-2005. The average age-adjusted lung cancer death rates for White non-Hispanics, African Americans, and American Indians were similar in 2001-2005 and none have met the Healthy People 2010 objective for lung cancer deaths. Asians and Hispanics have consistently met the objective (Figure 9.5).

African American female breast cancer death rates have declined since the mid 1990s and reached their lowest rate in 2000-2004 but increased in 2001-2005 (Figure 9.6). In the 2001-2005 period, the African American rate was 23 deaths per 100,000 females and the White non-Hispanic rate was 26 deaths per 100,000 females. Asian females continue to meet the Healthy People objective for female breast cancer of 22 deaths per 100,000. The steady increase in Asian female breast cancer rates peaked in 1998-2002 and rates have declined in subsequent years. There were not enough Hispanic or American Indian events to calculate female breast cancer death rates.
The African American prostate cancer death rate at 78 deaths per 100,000 in 2001-2005 was almost two and a half times greater than the White non-Hispanic rate of 32 deaths per 100,000 (Figure 9.7). The White non-Hispanic prostate cancer death rate declined in the early 90s and has remained steady since the 1998-2002 period. Neither the African American nor the White non-Hispanic prostate cancer death rates meet the Healthy People 2010 objective. There were not enough events for Hispanics, Asians, and American Indians to calculate prostate cancer death rates.

Figure 9.8 presents colorectal death rates by race. African American colorectal cancer death rates are consistently higher than for other racial and ethnic groups. The African American colorectal cancer death rate of 25 per 100,000 population was 1.4 times higher than the White non-Hispanic rate of 18 per 100,000 during 2001-2005. Asian/Pacific Islander colorectal death rates have remained steady since the 1999-2003 period. The Hispanic colorectal cancer death rate met the Healthy People 2010 objective in the 1997-2001 period and has continued to meet the objective. There were not enough events among American Indians to calculate colorectal cancer death rates.
Coronary Heart Disease

The second leading cause of death in Multnomah County is heart disease including rheumatic fever, heart failure and coronary heart disease. Coronary heart disease comprises the majority of heart disease mortality (65% in 2005). The County has reached the Healthy People 2010 objective for reducing coronary heart disease deaths. Death rates due to coronary heart disease have declined for White non-Hispanic and African Americans over the past decade. While all racial and ethnic groups meet the Healthy People 2010 objective for reducing coronary heart disease deaths, White non-Hispanic, African American, and American Indian coronary heart disease death rates were higher than Hispanic and Asian/Pacific Islander coronary heart disease death rates in 2001-2005 (Figure 9.9).

Stroke

Stroke is the third leading cause of death in Multnomah County. The Multnomah County stroke mortality rate is 22% greater than the national stroke mortality rate. In Multnomah County, African Americans were 1.6 times more likely than White non-Hispanics to die from a stroke in 2001-2005 (Figure 9.10). The African American rate was 110 deaths per 100,000 and the White non-Hispanic rate was 70 deaths per 100,000 in 2001-2005. Hispanics met the national objective of 48 deaths per 100,000 in both the 2000-2004 and 2001-2005 periods. There were too few events to calculate American Indian rates.
Multnomah County: Leading Causes of Death

Chronic Lower Respiratory Disease

Chronic lower respiratory disease is the fourth leading cause of death in Multnomah County. Chronic lower respiratory diseases include bronchitis, emphysema, and asthma. Multnomah County has met the Healthy People 2010 objective of 60 chronic lower respiratory disease deaths per 100,000 population. The objective has been met by all racial and ethnic groups in 2001-2005 (Figure 9.11). However, there were too few Hispanic chronic lower respiratory disease deaths to calculate rates.

Unintentional Injury

Unintentional injury is the fifth leading cause of death in Multnomah County. Unintentional injuries are deaths that are considered accidental and include, among others; motor vehicle crashes, falls, fires, and drowning. Multnomah County’s unintentional injury death rate is twice the Healthy People 2010 objective of 17.5. By race/ethnicity, no group has met the objective (Fig. 9.12). The highest rates are among White non-Hispanics and American Indians and at 38 and 36 deaths per 100,000 respectively in 2001-2005. The rate of unintentional injury among African Americans has declined from a high of 52 deaths per 100,000 in 1992-1996 to 34 deaths per 100,000 in 2001-2005. The Hispanic and Asian/Pacific Islander rates were 25 deaths per 100,000 in 2001-2005.
Diabetes and Alzheimer’s disease were tied as the sixth leading cause of death in 2005. They are included in this report because rates for both causes of death have increased significantly in Multnomah County. With the exception of Asians, diabetes deaths rates have increased for all racial and ethnic groups.

Diabetes-related mortality data is another way to look at diabetes deaths. This data include all mentions of diabetes on the death certificate, whether as an underlying or contributing cause of death. Contributing cause of death is defined as any additional diagnoses considered with the cause of death, and underlying cause of death is defined as the primary diagnosis associated with the death. Diabetes is approximately three times as likely to be listed as contributing cause of death than as an underlying cause (National Center for Health Statistics, Healthy People 2000 Review, 1998-1999). Despite a decline in diabetes-related deaths starting in the 1999-2003 period, the African American rate of 178 per 100,000 was twice the rate of White non-Hispanics, 90 per 100,000, in 2001-2005 (Figure 13a). American Indians had the second highest mortality rate due to diabetes-related deaths in 2001-2005. Asian diabetes-related mortality rates have been among the lowest of all races. The increase shown in the late 1990s has reversed, and rates have decreased since 1998-2002. The Hispanic diabetes-related death rate was among the lowest in the County during 2001-2005.
Alzheimer’s mortality rates have increased in Multnomah County. African American and White non-Hispanic mortality rates have increased significantly between 1991 and 2005. While rates among Asian/Pacific Islanders are lower, those rates have increased as well. There were too few events to calculate American Indian and Hispanic rates.