Unintentional Injury, Violence, and Premature Death

This summary presents data on unintentional injury, homicide, adolescent violence-related behaviors, and premature death (years of potential life lost) in Multnomah County.

Unintentional Injury Mortality Rates

For the 2007-2011 period, there were 41 unintentional injury deaths per 100,000 population in Multnomah County (Figure 8.1). Unintentional injury death rates were similar for Multnomah County, Oregon, and the U.S. All rates were higher than the national Healthy People 2020 objective of 36 deaths per 100,000 population.

Unintentional injury death rates continued to be higher for American Indian/Alaska Natives (AI/AN) than for other racial/ethnic groups (Figure 8.2). The African American and White non-Hispanic unintentional injury death rates rose between the 1999-2003 and 2007-2011 time periods, and were higher than the rates for Hispanics and Asians/Pacific Islanders.
Causes of Injury Deaths

Nationally, as well as in Multnomah County and Oregon, the leading causes of unintentional injuries were accidental poisoning (which includes drug overdoses), falls, and motor vehicle accidents. The rate of accidental poisonings nearly doubled from 8.3 deaths per 100,000 population in 2001 to 15.2 deaths per 100,000 population in 2011 (data not shown). By comparison, the rate of motor vehicle deaths declined from 9.9 deaths per 100,000 population in 2001 to 4.4 deaths per 100,000 in 2011.

Accidental Poisonings

Multnomah County had a higher rate of accidental poisonings, which includes drug overdoses (15.2 per 100,000 population), than Oregon (10.3 per 100,000 population) in 2007-2011. Most of these accidental poisonings in Multnomah County (75%) occurred among people aged 25 - 54 years of age (poisonings data not shown).

Fall Mortality

Over three-quarters (79%) of the falls in 2007-2011 were among adults 75 years of age and older. White non-Hispanics, who are over-represented in the 65+ age group in Multnomah County, accounted for 95% of fall fatalities (data not shown).
**Motor Vehicle Mortality**

Rates of motor vehicle related deaths declined for all racial and ethnic groups between 1999 and 2011 in Multnomah County (Figure 8.3). There were too few American Indian/Alaska Native motor vehicle related deaths to calculate rates.

![Figure 8.3](image)

**Homicide Mortality Rates**

From 1999 to 2011, the homicide rate in Multnomah County has remained higher than the statewide rate (Figure 8.4). The U.S. homicide mortality rate for the 2007-2011 period was 5.3 per 100,000 population (data not shown), compared to 3.5 and 2.6 per 100,000 in Multnomah County and Oregon respectively. Since the 1999-2003 period, Multnomah County and Oregon have met the Healthy People 2020 objective of no more than 5.5 homicides per 100,000 population.

![Figure 8.4](image)
In Multnomah County, homicide rates have been consistently higher among African Americans than among other race/ethnicities (Figure 8.5). However, the rate among African Americans declined from 18 homicide deaths per 100,000 population during the 1991-1995 time period (data not shown) to 15 deaths per 100,000 population in the 2007-2011 period.

### Violence-Related Activities among Adolescents

The Oregon Healthy Teens Survey asks students about their experiences with fighting and possession of weapons. Just over one-third of eighth graders and nearly one-fifth of eleventh graders in Multnomah County reported in 2007-2008 that they had been in a physical fight during the past 12 months (Figure 8.6). Three percent of both eighth graders and eleventh graders in Multnomah County indicated that they had been injured in a physical fight. Injury rates were similar for Multnomah County and Oregon.
In Multnomah County, 18% of eighth graders and 15% of eleventh graders said they had carried a weapon other than a gun in the past 30 days (Figure 8.7). These percents were similar to Oregon’s. In Multnomah County, 6% of eighth graders and 4% of eleventh graders reported that they had carried a gun in the past 30 days. Among Oregon eighth graders, 7% reported they had carried a gun, while 8% of Oregon eleventh graders reported carrying a gun in the past 30 days.

### Years of Potential Life Lost

_Years of Potential Life Lost (YPLL) is a measure of premature death before age 85. For example, if someone in Multnomah County dies at aged 60, they will have lost 25 years of potential life. If another person died at age 20, they would have lost 65 years of potential life. YPLL is calculated by multiplying the number of deaths that occurred before age 85 by the total years of life lost. The previous example results in 2 deaths times 90 total years, or 180 YPLL._

Table 8.1 displays the top five contributors to premature death in Multnomah County. Cancer was the number one contributor to premature death for White non-Hispanics, American Indian/Alaska Natives, Asian/Pacific Islanders, and Hispanics. Heart disease was the number one contributor to premature death for African Americans.

Injury was the second leading cause of premature death for Hispanics, and the third leading cause for all other racial/ethnic groups. Chronic liver disease was the second leading cause of premature death for American Indian/Alaska Natives. Perinatal conditions and birth defects are among the top five contributors for Hispanics. The high ranking of perinatal conditions for Hispanics is primarily a reflection of the relatively young age distribution of the Hispanic population.
### Table 8.1
YPLL per 100,000 population by Race/Ethnicity, Multnomah County, 2007-2011

<table>
<thead>
<tr>
<th>Rank</th>
<th>Total</th>
<th>White non-Hispanic</th>
<th>African American</th>
<th>American Indian/Alaska Native</th>
<th>Asian/Pacific Islander</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Cancer</td>
<td>Cancer</td>
<td>Heart Disease</td>
<td>Cancer</td>
<td>Cancer</td>
<td>Cancer</td>
</tr>
<tr>
<td></td>
<td>2,621</td>
<td>2,968</td>
<td>2,811</td>
<td>2,164</td>
<td>1,753</td>
<td>802</td>
</tr>
<tr>
<td>2nd</td>
<td>Heart Disease</td>
<td>Heart Disease</td>
<td>Cancer</td>
<td>Chronic Liver Disease</td>
<td>Heart Disease</td>
<td>Injury</td>
</tr>
<tr>
<td></td>
<td>1,801</td>
<td>1,978</td>
<td>2,614</td>
<td>1,682</td>
<td>1,028</td>
<td>798</td>
</tr>
<tr>
<td>3rd</td>
<td>Injury</td>
<td>Injury</td>
<td>Injury</td>
<td>Injury</td>
<td>Heart Disease</td>
<td>Perinatal Conditions</td>
</tr>
<tr>
<td></td>
<td>1,266</td>
<td>1,379</td>
<td>1,506</td>
<td>1,505</td>
<td>433</td>
<td>464</td>
</tr>
<tr>
<td>4th</td>
<td>Drug-induced deaths</td>
<td>Drug-induced deaths</td>
<td>Injury by firearms</td>
<td>Drug-induced deaths</td>
<td>Suicide</td>
<td>Birth Defects</td>
</tr>
<tr>
<td></td>
<td>867</td>
<td>1,010</td>
<td>880</td>
<td>1,228</td>
<td>208</td>
<td>458</td>
</tr>
<tr>
<td>5th</td>
<td>Suicide</td>
<td>Suicide</td>
<td>Perinatal Conditions</td>
<td>Heart Disease</td>
<td>Perinatal Conditions</td>
<td>Heart Disease</td>
</tr>
<tr>
<td></td>
<td>595</td>
<td>721</td>
<td>860</td>
<td>1,226</td>
<td>187</td>
<td>411</td>
</tr>
</tbody>
</table>

Source: Oregon Health Authority, Center for Health Statistics

Rates of YPLL due to injury, suicide, and homicide are greater for males than females in all racial and ethnic groups (Figures 8.8 and 8.9). Among both males and females, American Indian/Alaska Natives had the highest rate of YPLL due to injury. African Americans had the highest rate of YPLL due to homicide, and White non-Hispanics have the highest rate of YPLL due to suicide.

### Figure 8.8
Years of Potential Life Lost*, Males, Multnomah County, 2007-2011

*Rate per 100,000 Population
Source: Oregon Health Authority, Center for Health Statistics
Data Sources

Mortality data is based on the death certificate statistical file provided by the Center for Health Statistics, Oregon Health Authority. Self-reported violence related activities among adolescents are from the 2007-2008 Oregon Healthy Teens Survey conducted by the Oregon Health Authority. Sources for population data came from the National Center for Health Statistics and the 2010 Census. To help stabilize rates and observe time trends when there are small numbers of events, rates are aggregated into rolling averages of five-year intervals. We used statistical techniques to assess if those changes were significant, meaning that the differences were real and did not happen by chance alone.