Children’s Health

This summary describes the population of children age 1 to 9 years in Multnomah County, with a focus on key health issues, including immunizations, oral health, and leading causes of death.

Population of Children Ages 1 to 9

In 2010, approximately 12% of Multnomah County residents were between ages 1 and 9. Among Hispanics, 21% were in this age group, as were 14% of African Americans, 12% of Native Americans, 12% of Asian/Pacific Islanders, and 8% of White non-Hispanics. (Figure 3.1).

Immunizations

In 2011, nearly 3 in 4 two-year olds were fully immunized with the recommended vaccinations (Figure 3.2).\(^1\)

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\(^1\) The 4:3:1:3:1:3:1 series refers to the following inoculations: 4 DPT (diphtheria/tetanus/pertussis), 3 Polio, 1 MMR (measles/mumps/rubella), 3 Hib (Haemophilus influenzae type b), 3 Hepatitis B, and 1 Varicella (chickenpox) vaccines.
Hispanic children had the highest immunization rates (82.5%), followed by African Americans (71.3%) and White non-Hispanics (67.8%). (Data are missing for some racial groups due to small numbers.)

Immunizations are legally required for children in attendance at public and private schools, preschools, childcare facilities, and Head Start programs in Oregon. Alternatively, a religious (non-medical) or medical exemption from one or more vaccinations is required for the child to stay enrolled. The percentage of kindergartners with an exemption from at least one of the required vaccines was higher in Multnomah County than in surrounding counties and Oregon (Figure 3.4).
Oral Health

Data on the oral health of children ages 6 to 9 are available from a 2012 survey of elementary school children in 1st through 3rd grades (Figure 3.5). Non-Hispanic White children had fewer cavities overall (46%) compared to all racial/ethnic groups.2

African American and Hispanic children had higher rates of untreated decay (33% and 26%) and rampant decay (10% and 18%), defined as having seven or more teeth with treated or untreated decay.

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2 Due to small sample sizes, no data provided for American Indian/Alaska Native children.
Leading Causes of Death

Between 2007 and 2011, 67 children ages 1 to 9 died in Multnomah County (data not shown). The average annual death rates per 100,000 children were similar for both boys and girls in the 1998-2002 time period, but rates for girls began to climb, while rates for boys declined. By the 2001-2005 time period, the rate for girls was nearly twice that for boys (Figure 3.6), but the trends reversed so that by the 2007-2011 time period, the rate for boys was once again higher (19.3 per 100,000) than for girls (15.4 per 100,000), though not significantly so, meaning that there weren’t real differences in death rates between girls and boys in 2007-2011.

![Figure 3.6](image)

While mortality rates have declined for White non-Hispanic and Hispanic children between 1 and 9 years, the rate for African American children increased from 11 per 100,000 during 1998-2002, to 14 per 100,000 during 2007-2011 (Figure 3.7). There were too few deaths to calculate American Indian/Alaska Native or Asian/Pacific Islander rates.

![Figure 3.7](image)
Injury, cancer, homicide, and birth defects were the leading causes of death among children ages 1 to 9 during from 1998 to 2012. (Figure 3.8). The leading causes of death remained the same from 2007-2011, though all rates declined from the previous period, with the exception of birth defects, which remained the same. Across both time periods, injuries remained the first leading cause of death. Cancer was the second leading cause of death across both periods as well; the most common forms were leukemia and brain cancer.

**Data Sources**

Children's health data come from a variety of sources. Immunization data are provided by the Oregon Health Authority's Immunization Program. Oral health information comes from the 2012 Oregon Smile Survey. Death data are from death records provided by the Oregon Health Authority, Center for Health Statistics. The sources for population data are the National Center for Health Statistics and the 2010 Census. We used statistical techniques to assess if those changes were significant, meaning that the differences were real and did not happen by chance alone.