

WHAT'S KILLING OUR KIDS? 1998 OREGON CHILD FATALITIES

A RECENT REPORT from the Health Division describes the leading causes of preventable death among Oregon children. The report is based on data collected by the Oregon Child Fatality Review Team for deaths in 1998. This edition of the *CD Summary* describes the key findings of this report.

METHODS

For 10 years, Oregon's Child Fatality Review process has investigated the circumstances surrounding a child's death as a means of identifying prevention strategies. This process is mandated by the Oregon Legislature. County-level teams examine each death in their jurisdiction, and the entire process is overseen by a state-level team, staffed by the Health Division. Teams are made up of representatives from at least five key groups: law enforcement, the district attorney, child protective services, public health, and the medical examiner. In many counties representatives from other agencies also participate. By pooling information, all of these partners gain a clearer understanding of the factors contributing to these deaths, and thereby hope to devise ways to prevent similar deaths in the future.

Not all child deaths are examined in detail by the teams. Although each team uses its own criteria to determine which deaths to examine, the Health Division

recommends that all child deaths investigated by the Medical Examiner be reviewed by the teams. These cases most prominently include deaths due to intentional and unintentional injury.

THE 1998 TOLL

Five hundred and six children under age 18 died in Oregon in 1998. Death rates were highest in the youngest and oldest age groups (under age 1, 594.8 per 100,000, and age 15-17, 59.9 per 100,000). Fifty-three percent of the deaths occurred in children before their first birthday.

In general, infants die in a different manner than older children. Ninety-five percent of these deaths were due to natural causes; perinatal conditions, congenital anomalies and Sudden Infant Death Syndrome (SIDS) accounted for 77% of deaths in that age group.

By contrast, most deaths (56%) in children over age 1 are due to intentional and unintentional injuries. One in two children aged 1-17 died from an unintentional injury, while one in eight children died from an intentional injury (e.g., suicide or homicide). Injury deaths account for 42% (N=21) of deaths in children aged 1-4, 50% (N=17) of deaths in children aged 5-9, 54% (N=35) of deaths in youth aged 10-14, and 67% (N=69) of deaths in youth aged 15-17. Unintentional injury is the leading cause of death in every age group over age 1. Suicide emerges as a serious injury threat at age 10, and is the second most common type of death in children aged 10-17 (see figure).

SPECIFICS

Motor Vehicle Crashes

Motor vehicle crashes killed 73 children in Oregon in 1998, making them the number one cause of child fatality from injuries. Important preventable factors in these deaths include not wearing a seat belt or using a child safety seat (N=23 or 38% of crash deaths), speeding (N=17, or 23% of crash deaths), and the use of

alcohol by drivers (of 43 drivers tested, 15 (35%) of the crashes involved an intoxicated driver). Seat belt use was particularly a problem among 15-17 year-olds who died while passengers in vehicles. Among this group 18/36 (50%) of children who died were not correctly restrained. Oregon's Graduated Driver's License Law, which went into effect March 1, 2000, could have prevented as many as 11% of crash deaths among children, had it been in effect (and observed) in 1998.

Firearms

Twenty children were killed by firearms in 1998. This includes six firearm homicides, seven firearm suicides, and seven unintentional shootings. Survey data indicate that approximately 64,000 Oregon children live in homes where guns are stored unlocked and loaded. Preventing teens at risk for suicide and young children from getting access to loaded guns is an important prevention measure.

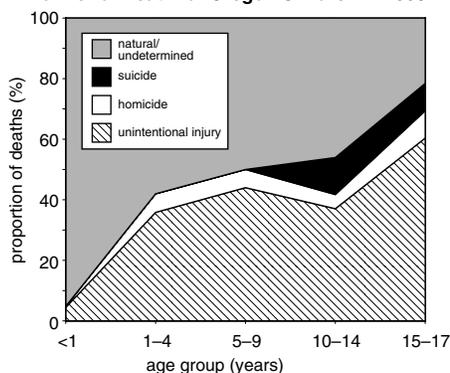
Drowning

Drowning claimed 16 children's lives in Oregon in 1998. Thirteen (76%) of these drownings occurred in youth aged 10-17, primarily in lakes and rivers, where strong currents and cold water were important factors contributing to the deaths. Appropriate supervision of teens, especially when swimming in lakes and rivers, could help prevent similar deaths.

Residential Fires

Residential fires caused seven child deaths in Oregon in 1998. A working smoke alarm was not present in any of these dwellings. Although most homes in Oregon do have smoke alarms, those alarms are often dysfunctional. Often this occurs because the battery on the smoke alarm runs out, or is "temporarily" removed to power something else. Installing smoke alarms with 10-year batteries that cannot be easily removed greatly increases the chance that the smoke alarm will be functioning should a fire occur.

Manner of Death for Oregon Children in 1998 *



* N = 506. Rate numerators derived from all deaths occurring in Oregon; denominators from residential population estimates. It should be about a wash.



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SIDS

In 1998, 36 Oregon infants died from SIDS, and another eight children died from unexplained causes. Some of the unexplained deaths may later be reclassified as SIDS before the data are finalized. Known risk factors for SIDS include infant sleep position on the stomach and maternal smoking. Although the association between these risk factors and SIDS is strong, it is unclear how these risk factors cause SIDS. Encouraging parents to put children to sleep on their backs, and encouraging parents to stop smoking could help prevent SIDS.

Child Abuse and Neglect

There were 24 abuse- and neglect-related deaths in Oregon in 1998. Nine of these deaths were due to abuse, and neglect was a contributing factor in 15 cases. Abuse deaths were inflicted by suffocation (3), stabbing (2), shaking of an infant (1), beating (1), firearms (1) and poisoning (1). Neglect contributed to deaths classified as due to the following causes: motor vehicle crash (4), natural causes (4), firearm (2), drowning (1), electrocution (1), suffocation (1), drug overdose (1), and undetermined cause (1).

Suicide

Sixteen Oregon youths under age 18 died from suicide in 1998. This includes nine suicides by hanging, and seven by firearms. Twelve of the suicide victims were males. Data were available on whether or not the following risk factors for suicide were present in each case: history of a prior suicide attempt, history of mental health problems in the past, current mental health treatment, gender or sexual orientation issues, alcohol or

substance abuse history, and problems with school attendance and/or grades. Thirteen (81%) of these children had at least one of these recognized risk factors and nine (56%) had two or more of these risk factors. The presence of these risk factors may help identify high-risk youth who should be the focus or prevention efforts.

PREVENTION

Each child's death is a tragedy. If we pay attention, these deaths can teach us how to improve the safety of Oregon communities and help generate the political will to do so. The credibility of clinicians can be an important factor in the political process that can lead to the development of prevention programs. In addition, anticipatory guidance and counseling in the clinical setting can help change behaviors that put children at risk for these causes of death. Useful resources for clinicians in this regard are available from The American Academy of Pediatrics, and include TIPP (The Injury Prevention Program) materials, STOP (Steps To Prevent Firearm Injury) materials, and Back to Sleep Campaign materials.

The full report (*Child Death in Oregon, 1998: Oregon Child Fatality Review Team Annual Report*) can be downloaded as an Acrobat (PDF) file from our website: <http://www.ohd.hr.state.or.us/ipe/98rpt/index.htm>. Printed copies of the report, as well as additional information on the Child Fatality Review Team Process, can be obtained from the Health Division's Injury Prevention and Epidemiology section (503/731-8597) while they last.

Influenza Season Over

THE OREGON STATE Public Health Laboratory is pleased to announce the beginning of its annual inter-season moratorium on complimentary rule-out influenza specimen testing. We can anticipate suspension of this hiatus some time next autumn.

The 1999–2000 season was a curious one. It got off to a record early start, with the first documented case coming from a Clackamas County man with onset in mid-October. This was (seasonally speaking) the earliest documented influenza case in modern Oregon history. And this was no fluke: four other cases were reported with onsets by the first week of November.

After that, however, things kind of wandered off course for what some feared would be a bad year. In all, only 30 isolates were confirmed at the Public Health Lab, one of the lower totals in recent years. (The median over the past decade is 96.) All of the 1999–2000 isolates were type A. Of the nine that have been subtyped, eight were H3N2; one was H1N1. (Fourteen other isolates were recovered at private labs in Portland.) Heavy advertising campaigns accompanying the introduction of newly licensed neuraminidase inhibitors may have contributed to a bogus crisis atmosphere that occasionally seeped into media reports and the public consciousness.

Lab surveillance is critical in establishing the makeup of viral strains in circulation, with attendant implications for treatment and vaccine preparation. While this season is history, lab and epidemiological services are always available for unseasonal cases or clusters of influenza-like illness. Don't hesitate to call.