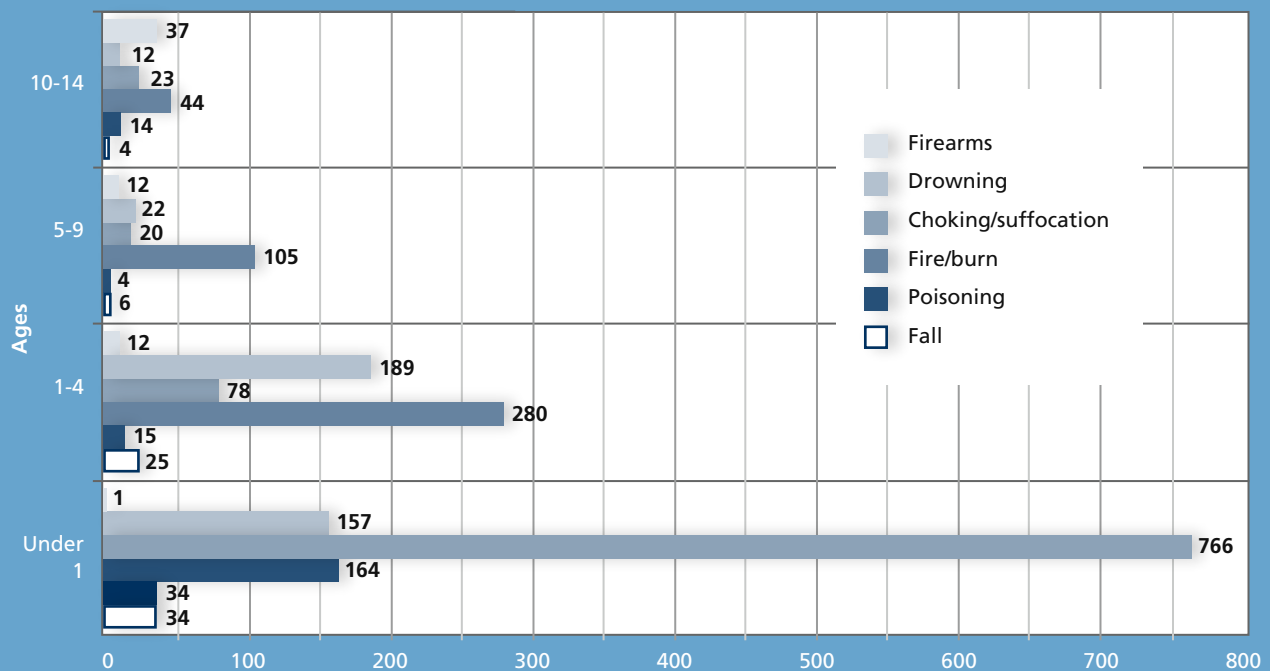


Unintentional Injury of Children in the Home

The Data

- **Thousands of deaths.** Unintentional injuries are the leading cause of death among US children. More than 20% of all unintentional injury deaths among children occur at home. At least 2,500 0- to 19-year olds die each year due to preventable injuries in the home, primarily caused by fires/burns (the leading cause of death), choking/suffocation, drowning, poisoning, falls, and firearms.¹⁻³
- **Millions of health care visits.** Residential injuries among children result in more than 4 million emergency room visits and more than 70,000 hospitalizations annually. Falls, the leading cause of nonfatal home injury, account for more than 1.5 million emergency room visits annually among children ages 0 to 19.⁴
- **Low-income and children of color more likely to die.** Deaths from fires and drowning are 2 to 4 times higher among poor children.⁵ Black children are more than twice as likely as white children to die of preventable injuries at home, despite overall declines in childhood injury rates across all groups. Racial disparities are associated with poverty, substandard housing, and restricted access to health care, among other factors.^{2,5-7}
- **Young children at greatest risk.** More than 90% of injury-related deaths in infants and 80% in 1- to 4-year-olds occur at home, in contrast to less than 40% among adolescents. Infants most often die of choking or suffocating, while fires/burns are the leading causes of residential injury death among older children.²

Unintentional Injury Deaths in the Home, by Age and Type (Deaths per 100,000 Children)



SOURCE: National Vital Statistics System, 1992-1999, in Runyan C, Casteel C. The State of Home Safety in America: Facts about Unintentional Injuries in the Home. Prepared for the Home Safety Council by the University of North Carolina Injury Prevention Research Center; 2004.

The Issues

- **Unintentional injuries can be prevented.** Product design changes, access to safety products, and legislative and regulatory measures have dramatically reduced childhood injury deaths during the past 30 years.^{8,9} Education and counseling by health care providers is most effective when it targets specific behaviors, is combined with distribution of safety devices, and is reinforced by laws and regulations.¹⁰
 - » **Fires/Burns:** If functioning, smoke detectors reduce the risk of death in residential fires by 50

continued

to 70%.^{11,12} Although new water heaters with temperatures pre-set to 125° have reduced scalds among young children, scalds from hot liquids still account for 40% of burn injuries requiring hospitalization among children.^{5,13}

- » **Choking/Suffocation:** Regulations issued by the Consumer Product Safety Commission for infant toys have reduced choking deaths during the past two decades, and changes in crib manufacturing as well as campaigns to put babies to sleep on their backs have reduced suffocations.^{8,14}
 - » **Drowning:** Ordinances that require four-sided fencing around swimming pools and swimming lessons reduce childhood drowning.¹⁵ Vigilant adult supervision of infants and young children in bathtubs and near swimming pools is critical. Preliminary results of new research suggest that swimming lessons may also reduce the risk of childhood drowning.¹⁶
 - » **Falls:** Falls—primarily from windows, stairs, or furniture—can be prevented by installing window guards and stair gates, and by not using baby walkers.^{11,17}
 - » **Poisoning:** Poisoning deaths have dramatically decreased since 1970 federal legislation that required child-proof packaging for hazardous products and medications.⁹ However, counseling by clinicians has only limited success in changing how parents store medications and poisonous substances.¹⁰
 - » **Firearms:** Storing guns, unloaded, in locked cases, and with ammunition locked and separated from the gun reduces the risk of unintentional firearm injuries.¹⁸ However, only 20 to 23% of families with children report any safe gun storage practices, and as few as 6% adhere to all recommended safety practices.^{19,20} Safe-gun storage counseling by health care providers has not proven effective.⁵
- **Children living in older, poorly maintained housing are at greater risk.** Stair gates can be difficult to install in older, poorly maintained homes, and low-income children are more likely to live in multi-level apartment buildings without window guards, or in homes without functioning smoke detectors.^{11,12} Up to one-third of federally subsidized housing units have hazards that could lead to injury.⁴

Options for Philanthropy

- Contact local agencies and organizations (e.g., fire department, SAFE Kids Coalition, health department) to find out about current local efforts to reduce childhood injuries.
- Support the distribution and installation of home safety products and the implementation of preventive practices including: (1) smoke detectors; (2) stair gates; (3) window guards; (4) four-sided fencing around swimming pools; and (5) campaigns to put babies to sleep on their backs.
- Support training of health care providers on home safety products and preventive practices so that they can incorporate education and counseling about these topics into routine health visits. Counseling and education by physicians has led to improvements in some areas (e.g., smoke alarm ownership and maintenance of safe hot water temperature).¹⁰ Support doctors' offices and emergency rooms as sites for distributing free home-safety devices.^{21,22}
- Convene leaders to develop and implement community- or state-wide plans to reduce residential childhood injuries. Gather leaders from health care, housing, manufacturing, policy, advocacy, research, parent groups, and media. Assess unsafe conditions in low-income and federally subsidized housing where children live so interventions can be delivered efficiently. Monitor and evaluate the plan.
- Support advocacy for policies to improve home safety, especially in low-income and rental communities. (1) Mandate landlords to provide long-life lithium batteries in smoke alarms in rental properties, and stair gates and medicine lock boxes in homes with young children; (2) require manufacturers to design stair gates compatible with older staircases; (3) pass ordinances that require fencing around swimming pools; and (4) pass ordinances that require window guards in multi-level apartment buildings.

Resources

Background Information:

Centers for Disease Control & Prevention:
www.cdc.gov/ncipc

The Future of Children, 2000, Unintentional Injuries in Childhood: www.futureofchildren.org

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Policy & Programs:

Home Safety Council: www.homesafetycouncil.org

Alliance for Healthy Homes: www.afhh.org

Safe Kids Worldwide: www.safekids.org

American Academy of Pediatrics, The Injury Prevention Program: www.aap.org/family/tippmain.htm

Endnotes appear in a separate document.