

## FALLS

Falls are the leading cause of unintentional injury for children. Children ages 14 and under account for one-third of all fall-related visits to hospital emergency rooms. More than half of all nonfatal injuries to children are associated with falls, and falls are the leading cause of nursery product-related injuries.

The severity of a fall-related injury is determined by the distance of the fall and the landing surface. Head injuries are associated with the majority of deaths and severe injuries resulting from falls. Because falls are associated with a child's curiosity and development of motor skills, children ages 10 and under are at the greatest risk of fall-related death and injury.

### ***FALL-RELATED DEATHS AND INJURIES***

- In 2001, 121 children ages 14 and under died from unintentional falls. Children ages 4 and under accounted for 45 percent of these deaths.
- In 2002, more than 2.3 million children ages 14 and under were treated in hospital emergency rooms for fall-related injuries. Children ages 5 and under accounted for nearly half of these injuries.
- Nine percent of fall-related injuries associated with products (e.g., baby walkers, windows, playground equipment) result in hospitalization, more than two times the hospitalization rate of all other product-related injuries.

### ***WHEN AND WHERE FALL-RELATED DEATHS AND INJURIES OCCUR***

- Infants are at greater risk from falls associated with furniture, stairs and baby walkers. Toddlers are at risk from window-related falls, and older children tend to suffer from playground equipment-related falls.
- More than 80 percent of fall-related injuries among children ages 4 and under occur in the home. Among children ages 5 to 14, 45 percent of fall-related injuries occur in the home and 23 percent occur at school.
- The majority of falls occur between noon and early evening, the most common playtime for children.

### ***Baby Walker Falls***

- Each year, an average of two children die as a result of baby walker-related injuries.
- In 2002, nearly 4,600 children ages 4 and under were treated in hospital emergency rooms for baby walker-related injuries.
- The majority of children aged less than 15 months who sustain baby walker-related injuries fall down stairs (76 percent) or tip over (12 percent). Injuries associated with falls down stairs are the most severe and more likely to result in head injury and hospitalization.
- Nearly 80 percent of infants who suffer baby walker injuries are being supervised at the time of the incident; more than half of the caregivers are in the same room as the child.

### ***Window Falls***

- Children are more likely to die or be severely injured from window-related falls than falls associated with any other product.
- Each year, approximately 18 children ages 10 and under die from window fall-related injuries. An estimated 4,700 children ages 14 and under are treated in hospital emergency departments annually for injuries sustained from falling out of windows; 28 percent of these children require hospitalization. Head injuries account for the majority of these injuries.
- The majority of window fall-related deaths (70 percent) occur during the spring and summer months.
- Children falling from windows are more likely to be male, under age 5 and playing unsupervised at the time of the fall.

- Window falls tend to occur in large urban areas, low-income neighborhoods, and deteriorating and overcrowded housing. Children living in apartment buildings have the highest number of window fall incidents – five times more than children living in residences.

### ***Playground Falls***

- Each year, an estimated 15 children ages 14 and under die and more than 200,000 are treated in hospital emergency rooms for playground equipment-related injuries. More than 70 percent of playground-related injuries involve falls to the surface, and 10 percent involve falls onto equipment.
- Falls account for approximately 80 percent of all playground-related injuries and more than one-fifth of fatalities. Head injuries are involved in 75 percent of all fall-related deaths associated with playground equipment.

### ***WHO IS AT RISK***

- In general, children ages 10 and under are injured from falls at a rate about twice that of the total population. Preschoolers are at the greatest risk.
- Males are more than twice as likely as females to die from fall-related injuries.
- Children with disabilities who are minimally mobile may be at increased risk of falling. Children in wheelchairs, regardless of cognitive ability, are at risk from wheelchair tips and falls; falls are the most commonly reported injury among wheelchair users.
- Low-income children are more likely to be injured from falls due to improper supervision and deficiencies in the environment, including aging or deteriorating housing. African-American and Hispanic children are at greater risk of falls from heights, probably due to their increased likelihood of living in urban, multiple-story, low-income housing.

### ***FALLS PREVENTION EFFECTIVENESS***

- Window guards are effective at preventing falls. In New York City, an education and window guard distribution program, combined with window guard legislation, demonstrated a 35 percent reduction in window fall-related fatalities after two years.
- Protective surfacing under and around playground equipment can prevent the incidence and reduce the severity of fall-related injuries.

### ***FALLS PREVENTION LAWS AND REGULATIONS***

- All baby walkers manufactured after June 30, 1997, must meet American Society for Testing and Materials (ASTM) voluntary and mandatory standards, which require that baby walkers either be too wide to fit through a standard doorway or have features, such as a gripping mechanism, to stop the walker at the edge of a step.
- Playground equipment guidelines have been developed by the U.S. Consumer Product Safety Commission and ASTM. At least seven states have enacted some form of playground safety legislation.
- In June 2000, ASTM established voluntary safety standards for window guards, which ensure that those guards designed for single-family homes or the lower floors of apartment buildings have simple emergency-release mechanisms for use in the event of a fire.

### ***HEALTH CARE COSTS AND SAVINGS***

- Falls represent the largest share of injury costs for children ages 14 and under, accounting for more than one-quarter of all childhood unintentional injury-related costs.
- The total annual cost of fall-related deaths and injuries among children ages 14 and under is more than \$94.9 billion.

### ***PREVENTION TIPS***

- Never use baby walkers on wheels. Use stationary activity centers or walker alternatives.
- Use safety gates at the top and the bottom of stairs if there are infants or toddlers in the home.
- Move chairs, cribs and other furniture away from windows. Consider installing window guards that meet new federal standards for emergency egress on windows located on the ground floor and up.
- Avoid asphalt, concrete, grass and soil surfaces under playground equipment. Acceptable loose-fill materials include shredded rubber, hardwood fiber mulch or chips, and fine sand. Surfacing should be maintained at a depth of 12 inches and should extend a minimum of 6 feet in all directions around stationary equipment. Depending on the height of the equipment, surfacing may need to extend farther than 6 feet.

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