



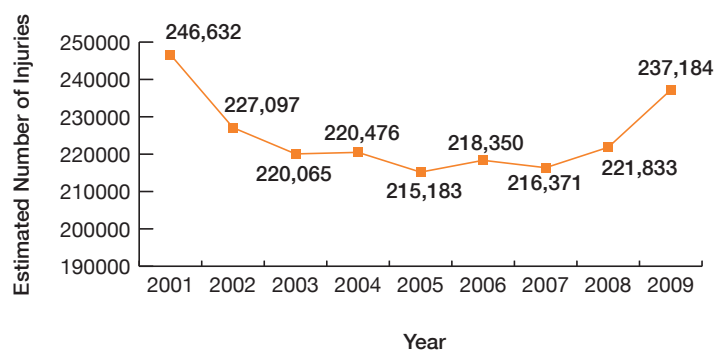
# Playground Safety



## Key Facts

- It is estimated that in 2009, nearly 220,000 children ages 14 and under were treated in emergency departments for injuries associated with playground equipment.
- From 2001 through 2008, the U.S. Consumer Product Safety Commission (CPSC) investigated 40 deaths associated with playground equipment. The average age of victims was 6 years.
- From 2001 through 2008, an average of 218,850 preschool and elementary children required care from emergency departments for playground-related injuries each year.

**2001-2009 Estimated Playground Equipment-Related Injuries**  
(United States, All Ages)



## Where, When, How

- From 2001 through 2008, a majority (57 percent) of estimated playground-related injuries treated in the emergency department occurred at schools or parks.
- Approximately 20 percent of playground-related injuries treated in emergency departments occur at home.
- Of the 40 deaths investigated by the CPSC from 2001 through 2008, 27 (68 percent) were the result of hanging or asphyxiation and 7 deaths were from head or neck injuries; the remainder were due to other causes.
- About 45 percent of playground-related injuries are severe, which include fractures, internal injuries, concussions and dislocations.
- Among children ages 4 and under, most traumatic brain injuries occurred on the playground.
- It is estimated that more than one-third (36 percent) of playground-related injuries treated in emergency departments are fractures.
- It is estimated that one-third of playground deaths and 51 percent of playground injuries occur on public playgrounds.
- The number of playground-related injuries among children tends to peak in April and May, then decrease through the summer (when school is generally out of session), then increase again in September.
- Nearly 40 percent of playground-related injuries occur during the months of May, June and September.
- Falls are the most common mode of playground injury accounting for over 75 percent of all playground-related injuries.

- Head injuries are involved in 75 percent of all fall-related deaths associated with playground equipment.
- The most common playground equipment pieces associated with injuries are climbers, which are associated with 23 percent of injuries, swings with 22 percent, slides with 17 percent and overhead ladders with 9 percent.
- On public playgrounds, the most common piece of playground equipment associated with injury are climbers, responsible for 40 percent of injuries among pre-school age children and 56 percent of injuries among school-age children.
- A 2002 survey found that 75 percent of public playgrounds lacked adequate protective surfacing, the most critical safety factor on playgrounds.
- In a study conducted by CPSC, it was found that only 9 percent of home playgrounds had proper protective surfacing.
- According to the National Playground Safety Institute, lack of or improper supervision is associated with approximately 45 percent of playground-related injuries.
- A recent study found that children play without adult supervision most often on school playgrounds (32 percent), followed by park playgrounds (22 percent) and lastly childcare centers (5 percent).

### **Who**

- Of reported incidents associated with playground equipment for which the victim's age was known, 95 percent involved children ages 14 and under.
- Children under ages 5 to 9 accounted for more than half of the estimated playground-related injuries treated in emergency departments from 2001 through 2008.
- Compared to older children, young children are more likely to suffer head and face injuries. Older children have an increased risk of upper limb fracture and are more likely to suffer from arm and hand injuries.
- Male children sustain slightly more playground-related injuries than do female children.

### **Prevention Strategies**

- It is recommended that adults actively supervise children on playgrounds.
- Supervisors should understand safety issues and know how to check for broken equipment, remove unsafe modifications (such as ropes), and make sure children are wearing proper foot wear.
- Decreasing the height of playground equipment and using protective surfaces on the playground (energy-absorbing materials such as shredded rubber, wood chips, wood fiber and sand) can reduce injuries related to falls. Both have shown to markedly reduce injury risk to children.
- A recent study found that the rate of playground-related injuries at North Carolina childcare centers dropped 22 percent after a law was passed requiring new playground equipment and surfacing in childcare facilities to conform to CPSC guidelines.
- Playground areas should include signs or labels to indicate the age range of the intended users. Only 42 percent of U.S. playgrounds have separate play areas for children ages 2 to 5 and children ages 5 to 12, and only nine percent have signs indicating the age-appropriateness of equipment.

### **Costs**

- In 1995, playground-related injuries among children ages 14 and under cost an estimated \$1.2 billion.

## **Laws and Regulations**

- Playground equipment guidelines and standards have been developed by the CPSC and the American Society for Testing and Materials (ASTM). Sixteen states have enacted all or parts of the CPSC or ASTM playground safety legislation.
- The CPSC has issued voluntary guidelines for the drawstrings of children's upper outerwear garments, such as jackets and sweatshirts. The guidelines help to prevent strangulation from the neck drawstrings and entanglement of the waist drawstrings. Children are at risk from strangulation when drawstrings on clothing become entangled in playground equipment.