

## **Bicycle Helmet Key Facts**

- Almost 44,000 bicyclists have died in traffic crashes in the United States since 1932-the first year that bicycle fatality estimates were recorded.
- In 1997, 813 bicyclists were killed, and approximately 58,000 were injured in traffic-related crashes. Children ages 14 and under accounted for 232 (29%) of these fatalities, making this one of the most frequent causes of injury-related death for young children.
- Each year almost 400,000 children ages 14 and under are treated in emergency rooms for bicycle-related injuries.
- Universal bicycle helmet use by children ages 4 to 15 would prevent 39,000 to 45,000 head injuries, and 18,000 to 55,000 scalp and face injuries annually.
- Bicycle helmets are 85-88 percent effective in mitigating head and brain injuries, making the use of helmets the single most effective way to reduce head injuries and fatalities resulting from bicycle crashes.
- Despite the fact that 70 to 80 percent of all fatal bicycle crashes involve head injuries, only 18 percent of all bicyclists wear bicycle helmets.
- Nationally, bicyclists ages 14 and under are at five times greater risk for injury than older cyclists.
- As with safety belts, child safety seats, and motorcycle helmets, the enactment of laws requiring the use of bicycle helmets-along with education and visible enforcement is likely to be the most promising way to increase bicycle helmet usage.

## **Legislative Status**

- The first bicycle helmet law was passed in California in 1986. This law was amended in 1993 to cover all children under age 18.
- As of September 1997, 15 states have enacted age-specific bicycle helmet laws. Most of these laws cover bicyclists under age 16.
- On June 16, H.R. 965, the Child Safety Protection Act of 1994, was passed. It requires the Consumer Product Safety Commission (CPSC) to develop a mandatory bicycle helmet standard.
- An interim mandatory bicycle helmet standard became effective March 17, 1995. Helmets are required to meet one of the following voluntary standards: ANSI, ASTM, Snell, or Canadian (CSA).
- On March 10, 1998, the CPSC published 16 CFR Part 1203, Safety Standard for Bicycle Helmets. This rule applies to bicycle helmets manufactured after March 10, 1999. In addition, helmets meeting the new standard will have a label indicating that they meet CPSC's new safety standard. The standard mandates several performance requirements including:

- Impact protection in a crash: The standard establishes a performance test to ensure that helmets will adequately protect the head in a collision or fall.
- Children's helmets and head coverage: The standard specifies an increased area head coverage for children ages 1 to 5.
- Chin strap strength and stability: The performance tests measure chin strap strength to prevent breakage or excessive elongation, and the helmet's resistance to rolling off the head during a collision or fall.

The interim mandatory standard that went into effect on March 17, 1995, will continue to apply until March 10, 1999.

## Cost Savings

- The estimated cost of bicycle-related injuries and deaths (for all ages) is \$8 billion.
- It is expensive to treat bicycle-related head injuries because these injuries can endure throughout a lifetime.
- Every \$10 bike helmet saves this country \$30 in direct health costs, and an additional \$365 in societal costs. In fact, if 85 percent of all child bicyclists wore helmets every time they rode a bicycle for a year, the lifetime medical cost savings would total \$109 to \$142 million.

## Information Sources

1. A Case Control Study of the Effectiveness of Bicycle Safety Helmets. Thompson, Robert S., Frederick P. Rivara, and Diane C. Thompson, *New England Journal of Medicine*, 1989.
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3. Bicycle-Associated Head Injuries and Deaths in the United States from 1984 through 1988. Sacks, Jeffrey J., Patricia Holmgren, Suzanne Smith, and Daniel M. Scain, *Journal of American Medical Association*, 1991.
4. Mandatory Bicycle Helmet Use: The Victorian Experience. Vulcan, A.P., M.H. Cameron, and M.H. Watson, *World Journal of Surgery*, 1992.
5. *Bicycle Helmet Laws and Educational Campaigns: An Evaluation of Strategies to Increase Children's Helmet Use*. Dannenberg, Andrew, et al., 1993.
6. *Bicycle Use and Hazard Patterns in the United States*. Rodgers, Gregory, Consumer Product Safety Commission, Washington, DC, 1994.
7. *Injury Control Recommendations: Bicycle Helmets*. Morbidity and Mortality Weekly Report, Centers for Disease Control, 1995.
8. *Mandatory Helmet Laws: A Summary*. Bicycle Helmet Safety Institute, BHSI web page: [www.helmets.org](http://www.helmets.org), 1997.

### **Mandatory Bicycle Helmet Laws: A Summary\***

| <b>Jurisdiction</b> | <b>Ages/Conditions</b> |
|---------------------|------------------------|
| New Jersey          | Under 14               |
| Georgia             | Under 16               |
| Connecticut         | Under 15               |
| Oregon              | Under 16               |
| Tennessee           | Under 12               |
| New York            | Under 14               |
| California          | Under 18               |
| Massachusetts       | Under 13               |
| Jurisdiction        | Ages/Conditions        |
| Pennsylvania        | Under 12               |
| Alabama             | Under 16               |
| Maryland            | Under 16               |
| Delaware            | Under 16               |
| West Virginia       | Under 15               |
| Rhode Island        | Under 16               |
| Florida             | Under 16               |

Source: BHSI

\*Check with your state bicycle and pedestrian coordinators for county, city, and local bicycle helmet laws.