



INJURY STATISTICS

AUGUST 2003

BICYCLE INJURY: A NATIONWIDE PROBLEM

Where do bicycle crashes and injuries occur? Who is most often injured in bicycle injuries? What are the most severe bicycle injuries? How much does treating bike injuries cost?

These are questions often asked by bicyclists and health and safety professionals. National bicycle injury data are easy to find on the web. Alaska specific bicycle injury data are available thru the State of Alaska Trauma Registry.

The following information was provided by Harborview Injury Prevention and Research Center, Center for Disease Control, the Alaska Trauma Registry, and the Alaska Bureau of Vital Statistics.

Who Is Riding?

- Today, there are an estimated 67 million bicycles in the U.S.
- These bicyclists ride approximately 15 billion hours per year.
- Approximately 59% of these cyclists are children 15 years old and younger.

Death

- Over 90% of deaths from bicycle-related injuries are caused by collisions with motor vehicles.
- Head injury comprises one-third of the emergency department visits, two-thirds of hospital admissions and three-fourths of deaths.
- 30% of bicyclist deaths occur in the 5-14 age group.
- Each year approximately 300 children are killed in bicycle-related incidents nationally.

Injury

- More than 400,000 children are treated in emergency rooms for bicycle-related injuries each year, which is 70% of all bike injuries treated.



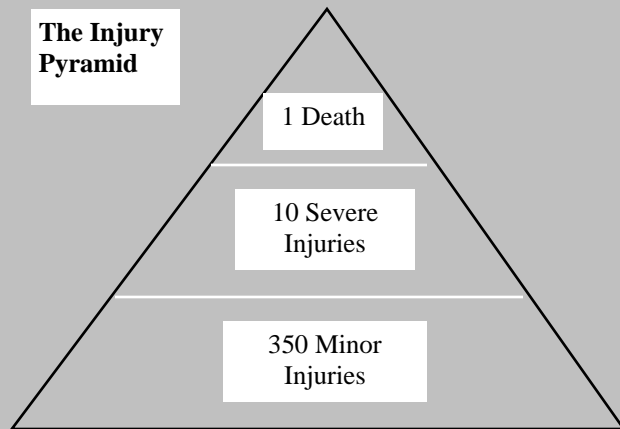
AVOIDING BICYCLE INJURIES

Many bicycle injuries can be prevented. Severe injuries occur most often to the head and upper body. These safety tips can help decrease the severity of bicycling injuries:

- ⇒ Wear a helmet.
- ⇒ Wear protective gear on elbows and knees.
- ⇒ Ride with traffic on the right side of the road.
- ⇒ Use signals to turn, slow, and stop.
- ⇒ Use reflective gear on you and your bike.

Riding a bicycle in Alaska can be dangerous. Protect yourself!

(Continued on page 2)

**The Injury Pyramid**

BICYCLE INJURY

- Approximately one-fifth of the 100,000 children who sustain non-fatal injury to the head or face while riding each year, sustain a traumatic brain injury.
- Most head injuries (between 75-85%) are considered preventable.

Preventing Head Injuries

- Proper use of a helmet can prevent about 85% of bicycle-related head injuries and deaths. Nationally, only about 5% of children bicyclists wear helmets. Adult use is about 15-20%.
- Helmet observations in Alaska in 2000 show that about 31% of all bicyclists wear a helmet.

38% of adults
16% of teens
34% of children

Cost of Bicycle Injury and Death

- The average annual cost for medical treatment of bicycle-related injury and death is \$8 billion.
- The average lifetime cost of a severe head injury is \$4,500,000.
- Average cost of a bike helmet is \$20. While helmets can cost upwards of \$100, often approved helmets can be purchased for \$15 or less.

ALASKA FACTS

Bicycle injury is the third leading cause of fatal and non-fatal hospitalized injury for Alaskan children ages 5-14 .

Death

- 1991-1998 Alaska deaths—20
- Half were under age 15.

Injury

- From 1995-1999 there were 206 hospital admissions for injuries sustained in bicycle related incidents.
- Head injury was reported as the primary injury in 32% of the incidents
- Average hospital charges were an estimated \$10,000 per case.
- Hospital stay for bicycle injuries averaged 3 days per event.
- Children ages 5-14 have the highest rate of bicycle injuries in Alaska. It is over double the rate for all ages.

The total number of bicycle-related injuries in the state of Alaska is relatively small. However, looking at the number of hospitalizations and deaths is only part of the picture. Injury and death adversely affect individuals, families and communities both emotionally and financially. The number and severity of head injuries among children bicyclists is alarming.

Outpatient visits in villages are not recorded in any type of database so we cannot track them easily.

We can use the injury pyramid to estimate the number of expected non-hospitalized/non-reported injuries in small communities (see the shaded box in the upper left). This, and the data presented above, indicate that efforts to promote safe bicycling are well-founded activities.