

Helmets Don't Cause Injuries

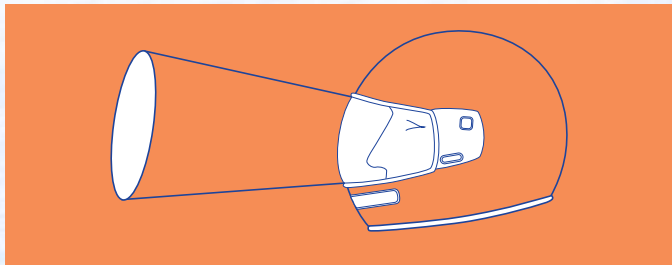
The facts simply don't support the claim by some helmet use opponents that helmets cause injuries rather than prevent them. After investigating 900 motorcycle crashes and 980 resulting head and neck injuries, the University of Southern California study concluded that:

- Helmeted riders and passengers experienced significantly fewer and less severe head and neck injuries than unhelmeted riders and passengers.
- Only four of the 980 head and neck injuries were attributed to safety helmets and all were minor injuries. "Each of these four cases showed that protection from possible fatal injury was achieved, but with a small penalty of a 'band aid' type injury." These minor injuries included bruises and abrasions to the neck, jaw, nose, and head. In each case, the helmet prevented possible fatal or critical head injury.
- There is a critical need for the use of protective equipment by every motorcycle rider. The contemporary motorcycle helmet provides a significant reduction of head and neck injury without any adverse effect on vision, hearing, or vulnerability for other injury.

Helmets Don't Impair Vision or Hearing

Helmets don't obscure vision.

In fact, less than three percent of peripheral vision is limited by a motorcycle helmet, according to a study conducted to investigate helmets and vision. All helmets provide a field of vision of more than 210 degrees – well above the 140 degree standard that state driver licensing agencies use to identify vision problems. Most helmeted motorcycle riders simply turn their heads a little more, if necessary, in order to check traffic.



Helmets don't impair hearing.

A motorcyclist out on the road will hear just as well or even better with a helmet as without one, according to the U.S. Department of Transportation. Why? Because for someone without a helmet, the wind and sound of the engine are very loud, and any other important sounds must be even louder to be heard over all that noise. With a helmet on, surrounding sounds are quieter, but in equal proportions. This means that what can be heard over wind and engine noise without a helmet, can also be heard in the same way with a helmet since wind and engine noise will also be reduced. Technically speaking, the signal to noise ratio stays the same.

A recent study to assess the impact of a motorcycle helmet on vision and hearing capabilities found that helmet use neither reduced the ability of riders to see traffic nor increased the time needed to visually check for nearby traffic. Helmet use also did not make a difference in a rider's ability to hear surrounding traffic sounds.

Helmets Protect at Normal Speeds

Helmet law opponents often claim, incorrectly, that helmets cause injuries at speeds above 13.66 miles per hour (mph) because they cannot absorb forces beyond that speed. In fact, a study conducted by the University of Southern California found that most motorcycle crashes do not involve a rider crashing head-on into a fixed object, but rather a rider traveling at 25-30 mph who strikes the pavement or other surface at an angle. Helmet safety performance criteria established by the U.S. Department of Transportation are based, in part, on crash data demonstrating what typically happens to motorcyclists in actual crashes. Helmets are tested at a 13.3 mph vertical drop to simulate the types of angle impacts that occur at much higher speeds. Crash data confirms that helmets are very effective in preventing head injuries in crashes at speeds greatly exceeding 13 mph.

Helmet Laws Make Sense

Fact: The value of motorcycle helmets in reducing deaths and serious injuries has been documented for more than 40 years.

Fact: Research has shown that helmets do not cause injuries, nor do they hamper vision or hearing. Yet without state laws that require helmet usage, too many motorcyclists will ride unprotected.

Despite the overwhelming evidence, some motorcyclists refuse to wear helmets and persistently oppose any helmet use laws. Their argument is that helmet laws are government interference, and that these laws interfere with the freedom to take risks and to gamble against death and permanent injury. But what kind of freedom is that? And who pays the price for those who gamble and lose? Families of the injured, as well as society as a whole (i.e., taxpayers) must bear the tremendous economic, psychological, and social costs involved in deaths and injuries to unhelmeted cyclists. The National Highway Traffic Safety Administration estimates more than \$7.5 billion was saved from 1984 through 1995 because of the use of helmets. An additional \$6.8 billion would most likely have been saved if all motorcyclists had worn helmets. The facts speak for themselves. Helmet use laws, like safety belt use and many other traffic safety laws, make good, common sense for motorcyclists and the general public.

Motorcycle Helmets



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The Facts of Life

Helmets and Motorcycle Safety

Each year more than 2,200 people are killed and more than 55,000 are injured in motorcycle crashes.

If these individuals had been wearing helmets, many of these deaths and disabling injuries would not have happened. Why? Because a helmet is the motorcyclist's most effective piece of safety equipment.

Yes, there are other important aspects to a comprehensive motorcycle safety program – rider training, motorcycle licensing, alcohol and other drug education, and motorist awareness. Helmets won't *prevent* crashes, but they clearly will cut down on deaths and injuries when collisions occur. And no other aspect of a motorcycle safety program has been proven more effective than state helmet laws.



The evidence is overwhelming. Consider the following:

- More than 80 percent of all motorcycle crashes result in injury or death to the motorcyclist.
- Per mile driven, a motorcyclist is 16 times more likely to die in a crash than an automobile driver. Wearing a motorcycle helmet reduces that risk by almost one-third (29 percent).
- Head injury is a leading cause of death in motorcycle crashes. Riders who don't wear helmets and who experience a crash are 40 percent more likely to sustain a fatal head injury.
- A study of 900 motorcycle crashes (conducted by the University of Southern California) showed that wearing a helmet was the single most critical factor in preventing or reducing head and neck injuries among motorcycle drivers and passengers.
- From 1984 through 1995, helmets saved the lives of more than 7,400 motorcyclists. But more than 6,300 additional deaths could have been prevented if all riders had been wearing helmets.
- Studies show that laws requiring helmet use are very effective in reducing motorcycle fatalities because such laws influence more people to wear helmets. In Louisiana, the first state to repeal and then re-adopt a helmet law for all riders, there were 30 percent fewer motorcycle deaths during 1982, the first year that the helmet law was reinstated.

Since 1989, the following states have enacted mandatory helmet laws for all riders, and experienced *significant reductions in fatalities*:

Oregon - 33% ■ **Texas - 23%** ■ **California - 37%** ■ **Nebraska - 32%** ■ **Washington - 15%** ■ **Maryland - 20%**

- Hospitalization costs are higher for motorcycle crash victims who don't wear helmets, compared to those who do. Numerous studies comparing hospital costs of helmeted and unhelmeted motorcyclists involved in crashes have found costs for unhelmeted riders to average \$3,000 more than for helmeted riders. And, riders who don't wear helmets are less likely to have health insurance, resulting in the cost of their care being forced on to taxpayers.

Helmet Laws Work

Even though helmets and helmet use laws are clearly effective in reducing motorcycle fatalities, these laws have been controversial.

In 1975, 47 states, the District of Columbia, and Puerto Rico had helmet use laws. But between 1976 and 1980, 28 states either weakened or repealed those laws. During that time motorcycle fatalities increased 55 percent, while motorcycle registrations increased by only 15 percent. The current trend is toward repealing existing helmet laws, however there are still only 25 states, the District of Columbia, and Puerto Rico that require all motorcycle riders and passengers to wear helmets. In 22 states, certain populations, such as minors, are required to wear them, and in three states there are no helmet use requirements.

Why the controversy over helmet use laws? Some say that these laws restrict freedom, that they don't work, or even that the helmets themselves are dangerous.

It is time to get the facts out. Simply put:

- Motorcycle helmets save lives.
- Motorcycle helmets reduce the severity of injuries.
- State helmet use laws result in many more people using helmets, and when more people use helmets, the costs to family and society resulting from motorcycle deaths and injuries go down.
- When helmet laws are repealed, fatalities increase an estimated 20 percent.

Helmet Laws are Constitutional and Necessary

Helmet laws are constitutional.

The highest courts in more than 25 states have declared helmet laws constitutional. Only one state supreme court (Illinois) ever invalidated a motorcycle helmet use law, and that court has since overruled its original decision. As well, the U.S. Supreme Court upheld a Massachusetts law requiring motorcyclists to wear helmets.

The question of whether motorcycle helmets should be worn involves much more than simply "freedom of choice" for the rider. America has long been committed to individual liberty, but even our society needs controls such as helmet laws that balance individual freedoms with public safety, health, and social welfare concerns.

Won't people wear helmets on their own?

Unfortunately, the answer is usually no. Surveys show that in states without helmet laws, only 34 to 54 percent of motorcyclists wear helmets voluntarily. In states that do have these laws, more than 98 percent of motorcyclists wear them – an enormous difference.

Helmets Do Save Lives

The evidence is overwhelming.

From 1984 through 1995, helmets saved the lives of more than 7,400 motorcyclists. If all motorcyclists and their passengers had worn helmets during those years, more than 6,300 additional lives could have been saved.

This data confirms numerous studies conducted in the United States, Great Britain, Canada, Japan, and Australia, that show how effective helmets are in preventing or reducing the severity of motorcycle head injuries. That's why all of these countries have laws requiring motorcycle helmet use.

Motorcycle crash data have proven time and again that motorcycle helmets, when worn, reduce the risk of death in a motorcycle crash by 29 percent, and are 67 percent effective in preventing traumatic brain injury. Tragically, some crashes are so severe that they are fatal even if a helmet is worn. But no other piece of safety equipment can make as big a difference as the motorcycle helmet.

As one safety researcher said, "Why not use common sense? If someone was going to hit you on the head with a baseball bat, would you rather have a helmet on your head or not? The answer is obvious, and the answer is the same for falling off your motorcycle and hitting your head on the ground."

