## **Be Head Smart: Wear A Helmet**

Dr. Todd Huffman, for the Eugene Register-Guard, December 2009

For kids, there's no greater joy on Christmas morning than waking to find a set of new wheels under the tree. While moms and dads remember the thrill of discovering a shiny new bike, for children these days those wheels may take the form of scooters and skateboards. Whatever the vehicle squeezed magically down the chimney, may the jolly old elf never forget to wrap a small gift of safety: a helmet.

Each year in the United States, nearly half a million people are treated in emergency departments (ED) for injuries related to bicycle riding. About 30,000 of these visits lead to hospitalization, and close to 1,000 of the injuries are fatal.

Although head injuries are involved in only one-third of these ED visits, they lead to two-thirds of hospital admissions, and cause three-quarters of the deaths related to biking. Children younger than age 15 years account for up to one-half of these deaths.

Fewer ED visits, approximately 125,000 per year, are made for injuries related to the use of scooters, skateboards, and skates. Most of these injuries involve fractures of the wrist, hand, or ankle and trauma to the face. One-third of those injured on skateboards experience their first trauma within the first week of skateboarding.

The protective effects of helmet use for bicycle riders are uncontested. Helmets are proven to reduce the risk of head and brain injury related to a bicycle accident by as much as 90 percent. In states and cities where helmet campaigns and government-enacted legislation have resulted in significant increases in helmet use in children, as much as two-thirds reductions in the rate of bicycle-related head injury have been demonstrated among children ages 5 to 14 years.

Without question, helmet use helps prevent traumatic brain injury, and saves lives. When one considers that 7 per 1000 American children suffer a bicycle-related injury each year, and that head and traumatic brain injury occurs in one-third of all non-fatal bicycle crashes without a helmet, why would dear old Santa not bring a helmet?

Bicycle helmet laws are now in effect in 22 states and 129 municipalities in the United States. Since 1994, Oregon has required that any youth under age 16 years riding a bike or when a passenger on a bike in any public place must wear helmets labeled ANSI and/or Snell approved. Parents or guardians of children under age 12 years caught helmet-less could be fined; helmet-less teens over age 12 may themselves receive the fine.

With so much compelling evidence in support of wearing helmets, it seems astounding that the majority of states today still do not have helmet laws in place. To date, contrary to the claims of helmet opponents, no credible evidence has documented that riders who wear helmets counteract the protection by riding faster or under more dangerous conditions.

Eighty-five percent of children own a bicycle, and yet fewer than half routinely use a helmet. A number of barriers exist to helmet use in children, the biggest of which is poor role modeling by parents. Many parents, not having worn helmets during their childhood, put little or no emphasis on helmets or other safety gear.

Other parents enforce helmet use for their children, but fail to wear their own. Parents who ride a bicycle without a helmet are suggesting to their children that helmet use is optional, that the risk of injury is low. Beware the dreaded "do as I say, not as I do" style of parenting.

Other barriers include lack of comfort, poor ventilation, and concerns about appearance, the latter of which is perhaps the biggest barrier in adolescents. Helmets have thankfully come a long way in recent years towards being more comfortable, more stylish with a wider range of available colors and patterns, and better ventilated.

The final barrier is cost. Even though helmets have come down significantly in price, for many parents the \$10-30 price tag is still too steep. This is where grandparents and other relatives should come in to help mom and dad. Oops, I mean Santa.

Of children who do wear a helmet routinely, some do not wear it correctly. The correct fit is the key to safety. A helmet should fit comfortably and snugly, and not move around on the head. It should be level from front to back, not tilted to the rear of the head, and should cover most of the forehead. Foam pads inside the helmet can be removed to adjust the fit. The chin strap should be adjusted to fit so snug that only one finger can be squeezed between the strap and the chin.

Although helmets are also proven to reduce traumatic brain injury in skating activities (in-line skating, ice skating, roller skating) and skateboarding, even fewer children wear a helmet in these activities than wear a helmet riding a bicycle. However, if you're under age 16 years, going helmet-less is against the law – Oregon law also requires helmets for skateboarding, riding a scooter, or using in-line skates in any public place.

Additional safety measures proven effective for wheeled-activities include wearing wrist guards and knee and elbow pads when skating, skateboarding, and riding a scooter, and wearing bright or reflective clothing when riding on any sort of wheels at night, twilight, or dusk.

Novice skaters are encouraged to learn in rinks rather than on neighborhood streets. For those on skateboards, specifically designed parks are favored over courses that have home-constructed ramps and jumps because they provide environments that are likely to be safer and better supervised.

And, of course, children and adolescents should not ride scooters or skateboards in traffic, and should never hitch a ride on a motor vehicle.

Parents, the days until Christmas are dwindling fast. Send off those letters to the North Pole. Short and sweet will do: "Dear Santa, before your reindeer lift off that sleigh, to fly my child a new set of wheels, be a dear and throw a helmet in that sack."

Merry Christmas to all, and to all a safe ride.