Skateboard-Related Injuries Double in Recent Years Say Researchers at The Children’s Hospital of Philadelphia

Philadelphia -- The rate of skateboard-related injuries doubled between 1993 and 1998 according to researchers at The Children's Hospital of Philadelphia. A significant portion of the injuries might have been prevented by avoiding skateboarding in streets and by using basic safety equipment. Findings from the study are published in the October issue of the Journal of Trauma.

"Changes in the nature of the sport could account for the increased rate of injury," states Flaura K. Winston, M.D., Ph.D., senior author and Director of TraumaLink, an interdisciplinary pediatric injury research center at The Children's Hospital of Philadelphia. "In the 1990's, the sport transitioned from a 1980's style known as 'vert', which used 10 foot high ramps, to 'street skating.' Street skating uses lower ramps and increasingly complex stunts and tricks. As its name suggests, this style encourages people to literally skate in the streets."

Dr. Winston and her co-authors believe that skateboarders, independent of skill level, are attempting difficult maneuvers as seen on national television performed by professional skateboarders. The popularity of street skating may be, in part, due to the introduction of the eXtreme Games in 1995.

Study authors looked at data from the U.S. Consumer Product Safety Commission's National Electronic Injury Surveillance System (NEISS) which provides data on consumer product-related injuries and the National Sporting Goods Association annual surveys which report sports participation among persons ages 7 years and older. Over a twelve-year period, from 1987 to 1998, researchers noted a significant decline in the rate of skateboard-associated injuries from 1987 to 1993. This was followed by a significant and rapid increase in skateboard-associated injuries treated in emergency departments. The 1998 rate was twice that of 1993, with injuries increasing by approximately 4,200 injuries per year during that period.

Recent statistics from NEISS show that the rate of skateboard-related injuries continues to increase more quickly than the number of new entrants to the sport. Between 1998 and 2001 injuries increased by an average of 16,500 per year. In 2001, more than 100,000 people, ages 7 years and older, visited an emergency department for skateboard-related injuries.

The study, involving data from 1987 to 1998, is the first national participation-based estimate of injuries associated with common sports. Compared to other sports, skateboarding is relatively safe. For instance, the 1998 rate of emergency department-treated skateboard-associated injuries was twice as high as in-line skating, but only half as high as basketball injuries.

When researchers looked only at skateboard associated injuries they noted that the increase in
injuries occurred primarily in young adults ages 12 to 17 years (53.1%) and adolescents ages 7 to 11 years (29.5%). Males had the highest rate of injuries. Wrist fracture, ankle strain/sprain, face laceration, lower arm fracture, and wrist strain/sprain were the most common types of injury.

"Since these injuries are consistent with injuries sustained in in-line skating, many may be preventable by the use of equipment such as wrist guards which have proven effective in lessening wrist injuries associated with in-line skating," states Michael Nance, M.D., study co-author and associate director of trauma at Children's Hospital.

Study participants requiring hospitalization were 11.4 times more likely to have been injured by a motor vehicle than those participants who were treated and released. The most common type of injury to those hospitalized was lower arm fracture.

"In the immediate future, the health community should continue to urge skateboarders to use helmets and wrist guards, as well as to avoid skating in the streets," recommends Dr. Nance. "The development of standards for protective equipment for skateboarders, such as wrist guards, would be effective in further reducing injuries."

Currently, there are no standards for skateboarding equipment or protective equipment except a voluntary standard for helmets intended for skateboarding set by the American Society for Testing and Materials.

Helmet, wrist guards, elbow and kneepads, as well as gloves can help prevent or reduce skateboard-associated injuries. Children's Hospital researchers recommend the following in preventing skateboard injuries:
-- Communities should continue to develop skateboarding parks and encourage youth to play and practice there.
-- Skateboards must never be ridden in or near traffic, regardless of traffic volume.
-- Holding on to the side or rear of a moving vehicle while riding a skateboard, should never be done.
-- Parents, teachers, pediatricians and others should strongly recommend skateboarders to wear a helmet, wrist guards, elbow pads, and kneepads to prevent or reduce the severity of injuries resulting from falls.
-- Children younger then ten years should not use skateboards without close supervision by an adult or responsible adolescent. Children younger than 5 should not use skateboards at all.

Founded in 1855 as the nation's first pediatric hospital, The Children's Hospital of Philadelphia is ranked today as the best pediatric hospital in the nation by a comprehensive Child magazine survey. Its pediatric research program is among the largest in the country, ranking second in National Institutes of Health funding. For more information visit us at http://www.chop.edu/.

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