

Advocating for Helmet Use

By Ronald Sing, DO, Carolinas Medical Center Department of Trauma and Surgical Critical Care

As a trauma surgeon, my team and I see head trauma cases almost every day. One of the most avoidable types is from bike injury, but statistics and experience tell us the rate of helmet use — especially among children and adolescents — is alarmingly low. Local emergency rooms see children with bike injuries, more than half of which are injuries to the head.

Despite the state mandate that children under 16 years of age wear a helmet when bicycle riding, 74 percent of Charlotte-Mecklenburg middle school students reported they rarely or never wore a bicycle helmet, according to the Centers for Disease Control and Prevention's 2009 Middle School Youth Risk Behavior Survey. Statewide, the results of the North Carolina Governor's Highway Safety Program 1999 survey of bicycle helmet use showed that only 16 percent of riders wore a helmet on local streets and only 42 percent of riders wore a helmet on greenways.

In May, in observance of Trauma Awareness Month, our team at Carolinas Medical Center's F.H. "Sammy" Ross Jr. Center (specializing in Trauma Care) and Hemby Pediatric Trauma Institute tried to do our part to improve the rate of bicycle helmet use. We advocated for helmet use on a local greenway and, in partnership with BikeSource Charlotte, provided free helmets and helmet safety checks to children and adults on the greenway. Other community partners for the event included Carolinas Center for Injury Prevention and the Mecklenburg County Parks and Recreation.

To gather information for future promotions and messaging around helmet use, we also administered a survey in partnership with Safe Kids Charlotte Mecklenburg to more than 20 parents to identify their awareness and perceptions of bike helmet safety, since their attitudes greatly influence those of their children.

The Safe Kids Charlotte Mecklenburg survey found that half of the respondents did not know, that under county ordinance, helmets are required for children under age 16 on a greenway. We also found many parents did not realize



▲ A child's bike helmet is checked for proper fit.

the alarming correlation between lack of helmet use and the potential severity of injury for children bicycle-riding on a greenway. Parents surveyed found it especially difficult to reinforce the message when few of their children's peers were seen wearing helmets. Many reported they felt enforcing helmet use hindered their child's feelings of independence and right to make their own decisions.

The survey also found that parents most likely were to go to a trusted medical provider if they were seeking child bike-safety information. The survey also was helpful in gathering recommendations on ways to improve community education and awareness of bicycle safety. According to Janice Williams, our helmet awareness event organizer and director of the Carolinas Center for Injury Prevention at CMC, specific helmet promotion suggestions from those surveyed included mandating

the sale of a helmet, and requiring helmet fittings at the time of a bike purchase, and focusing more on ensuring the helmet is comfortable and wearable. Helmets should be adjustable by head band rings instead of using foam inserts, have additional vents for circulation of air and cooling, and be more in tune with the interests of children to increase pride in wearing.

As our event showed, we have a lot of work ahead of us educating our community about trauma safety, but we are excited to get started. An inexpensive, lightweight helmet approved by the American Society for Testing and Materials — which cushions the blow of a fall, reducing the impact on the brain and neck — could truly make the difference between a minor scrape and a trauma case.

We all need to promote helmet awareness and bike safety, and physicians play a vital role. Be aggressive in

North Carolina Bicycle Statistics

- A bicyclist is killed or injured approximately every six hours.
- One out of every three bicyclists killed in North Carolina is under age 16.
- Each year, an estimated 800 children are hospitalized for bicycle-related injuries and a total of 13,300 individuals receive emergency treatment each year for bicycle injuries.

Sources:

1. Medic Mecklenburg EMS Agency. Bicycle Safety: UNC Highway Safety Research Center. Accessed from www.medic911.com/community_education/bicycle_safety
2. U.S. Department of Transportation. National Highway Traffic Safety Administration's National Center for Statistics and Analysis: Traffic Safety Facts, 2009.



▲ A parent is educated about helmet use.

educating patients — children and adults alike — about trauma prevention when riding a bike.

Article sources:

1. Bicycle Helmet Safety Institute. Bike helmets made simple. August 8, 2009. Accessed from www.bhsi.org/plain.htm

2. Helmet Law Defense League. *Helmet Law Statutes By State*. January 2009. Accessed from www.usff.com/hldl/frames/50state.html

Additional data can be found at www.pedbikeinfo.org/pbcat/_bicycle.cfm and additional bike safety information can be found at www.levinechildrenshospital.org/injuryprevention.

SOS to Providers: Help Students Avoid Exclusion from School

By Maria M. Bonaiuto, RN, MSN, NCSN, Director of School Health, Mecklenburg County Health Department

School starts in late August every year, and without fail, thousands of students do not have their immunization records and physical exam forms ready. Friday, Sept. 23, 2011 is EXCLUSION DAY this year at CMS. Private, charter and other community schools may start on different days, so their exclusion dates may vary. According to N.C. law, all schools should be excluding students who are not in compliance 30 days after the opening of school. As a result, around the last week in September, families will be calling their providers for help. Here are some things providers can do:

- **Plan Ahead:** Start now to get next year's pre-k and kindergarten physicals scheduled for the child who will be 4 years old by Aug. 31, 2012 for pre-k, or 5 years old by Aug. 31, 2012 for kindergarten.
 - Help the stragglers for this year:
 - Any physical exam done within 12 months prior to the first day of school, or after Sept. 25, 2010 is acceptable for pre-k or kindergarten entry.
 - Immunization records and physical exam forms can be faxed directly to schools for students who need only the record.
 - Try to set some time aside for last-minute appointments. The week of Sept. 25, parents will be begging to

make an appointment.

- When all else fails, and there is no way to schedule the child, refer to community events or providers and request the family bring back to you a record of what was done elsewhere.
 - A list of many community immunization and physical exam events, as well as some providers who might take clients on short notice, are listed on the following websites:
 - www.thechildrensalliance.org
 - www.cms.k12.nc.us/cmsdepartments/csh/Pages/BackToSchoolInformation.aspx