
NTDB® data points

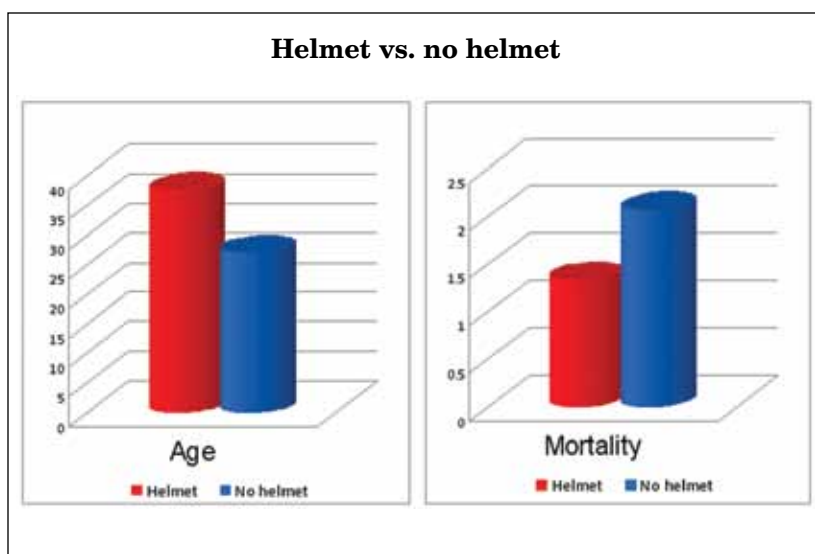
Older but wiser vs. helmetless and lifeless

by Richard J. Fantus, MD, FACS

In 2008, the U.S. bicycle industry accounted for \$6 billion of the overall economy, according to research funded by the National Sporting Goods Association (NSGA). This included the retail value of bicycles, related parts, and accessories. Sales are completed through four channels of distribution: the mass merchant, specialty bicycle retailer, full-line sporting goods stores, and “other,” which includes outdoor retailers, internet sales, and the like. The mass merchants accounted for 74 percent of the sales, but this figure accounts for only 35 percent of the dollars spent due to the (low) average selling price of those bicycles (<http://nbda.com/page.cfm?pageID=34>).

Along with these robust sales figures, the number of Americans, age seven and above, who rode a bicycle at least six or more times in 2008 was up 11 percent from 2007, to 44.7 million riders (http://www.nsga.org/files/public/2008ParticipationRankedbyAlpha_4Web_080415.pdf).

With the struggling economy and rising gasoline prices, more and more Americans are biking their way across town as an alternate means of transportation. Unfortunately, with this increase in the numbers of



cyclists, there continues to be a stagnant percentage of riders wearing helmets. In the May 2008 *Bulletin* article “Pedal to the metal” (pages 43–44), helmet use was noted at 33 percent, which is the same percentage found in the National Trauma Data Bank® (NTDB) dataset review. The \$20 cost of an average bicycle helmet is relatively inexpensive when compared to the estimated \$2.3 billion indirect costs of cyclists’ injuries each year due to not wearing a helmet (<http://www.bhsi.org/stats.htm>).

In order to examine the occurrence of injuries to bicyclists

in the NTDB research dataset 2007 admissions (formerly called research dataset 8.0), records were searched utilizing the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) cause of injury code E826.1 (pedal cycle accident where the injured person is the pedal cyclist) and E810 through E819 (motor vehicle traffic), with the fourth digit .6 (to identify injured person as the pedal cyclist). 12,807 incidents matched these E codes and of these, 8,215 had information regarding helmet use.

There were 5,521 (67.2 percent) records with no helmet use, compared to 2,694 (32.8 percent) records where a helmet was utilized. The helmeted patients were 76.4 percent male and on average 37.6 years of age; they had an average length of hospital stay of 3.9 days, an average injury severity score of 9.3, and 1.34 percent mortality. When comparing the non-helmeted group with the helmeted group, there was a statistically significant increase in death (defined by emergency department discharge disposition = death, or hospital discharge disposition = expired), and the average age was lower (see

Figure on page 50).

Cycling is an invigorating form of exercise as well as an inexpensive mode of transportation. There are no fossil fuels used in bicycling, so it also qualifies as a green mode of conveyance as opposed to a greenhouse gas-producing one. There are many advantages to riding a bicycle, and, likewise, for wearing a helmet when riding one. Next time you take to the streets it might be a good idea to be older but wiser, versus helmetless and lifeless.

The full NTDB *Annual Report Version 8.0* is available on the ACS Web site as a PDF and a PowerPoint presentation at <http://www.ntdb.org>.

If you are interested in submitting your trauma center's data, contact Melanie L. Neal, Manager, NTDB, at mneal@facs.org.

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