

**CONSUMER PRODUCT SAFETY COMMISSION****16 CFR Part 1203****Proposed Rule: Safety Standard for Bicycle Helmets**

**AGENCY:** Consumer Product Safety Commission.

**ACTION:** Proposed rule.

**SUMMARY:** Pursuant to the Children's Bicycle Helmet Safety Act of 1994, the Commission is proposing a safety standard that would require bicycle helmets to meet impact-attenuation and other requirements. This proposal modifies the bicycle helmet standard proposed by the Commission in the Federal Register of August 15, 1994.

The proposed standard establishes requirements derived from one or more of the voluntary standards applicable to bicycle helmets. In addition, the proposed standard includes requirements specifically applicable to children's helmets and requirements to prevent helmets from coming off during an accident. The proposed standard also contains testing and recordkeeping requirements to ensure that bicycle helmets meet the standard's requirements.

**DATES:** Comments on the proposal should be submitted no later than February 20, 1996.

Comments on elements of the proposal that, if issued, would constitute collection of information requirements under the Paperwork Reduction Act may be filed with the Office of Management and Budget ("OMB"). OMB is required to make a decision concerning the collections of information contained in the proposed rule between 30 and 60 days after publication. Thus, although comments will be received by OMB until February 5, 1996, a comment to OMB is best assured of having its full effect if OMB receives it by January 4, 1996.

**ADDRESSES:** Comments to the Commission should be mailed to the Office of the Secretary, Consumer Product Safety Commission, Washington, D.C. 20207, or delivered to the Office of the Secretary, Consumer Product Safety Commission, room 502, 4330 East-West Highway, Bethesda, Maryland 20814-4408, telephone (301)504-0800. Comments also may be filed with the Commission by facsimile to (301)504-0127, or by electronic mail via [info@cpsc.gov](mailto:info@cpsc.gov). Comments should include a caption or cover indicating that they are directed to the Office of the Secretary and are comments on the

revised proposed Safety Standard for Bicycle Helmets.

Comments to OMB should be directed to the Desk Officer for the Consumer Product Safety Commission, Office of Information and Regulatory Affairs, OMB, Washington, D.C. 20503. The Commission encourages commenters to provide copies of such comments to the Commission's Office of the Secretary, with a caption or cover letter identifying the materials as comments submitted to OMB on the proposed collection of information requirements for bicycle helmets.

**FOR FURTHER INFORMATION CONTACT:** Scott Heh, Project Manager, Directorate for Engineering Sciences, Consumer Product Safety Commission, Washington, D.C. 20207; telephone (301) 504-0494 ext. 1308.

**SUPPLEMENTARY INFORMATION:****A. Introduction and Background**

*Introduction.* In this notice, the Consumer Product Safety Commission ("the Commission" or "CPSC") proposes a mandatory safety standard applicable to bicycle helmets.<sup>1</sup> This proposal modifies the bicycle helmet standard proposed by the Commission in the Federal Register of August 15, 1994. 59 FR 41719.

The Commission seeks comments from interested members of the public on the revised proposed standard. Comments should be limited to those aspects of the proposed standard that have changed substantively from the earlier proposal, or that are affected by a substantive change.

Because of the growing use of helmets, other nations may be developing or revising safety standards for bicycle helmets. Accordingly, the Commission invites comments from counterpart agencies in foreign governments, foreign standards developers, and others who might be interested in this proposed standard. This invitation is in addition to the routine international notification of this proposed rule that is provided by the World Trade Organization Agreement on Technical Barriers to Trade.

*Background.* Head injury is a leading cause of accidental death and disability among children in the United States, resulting in over 100,000 hospitalizations every year. Studies have shown that children under the age

of 14 are more likely to sustain head injuries than adults, and that children's head injuries are often more severe than those sustained by adults.

In general, head injuries fall under one of two main categories—focal and diffuse. Focal injuries are limited to the area of impact, and include injuries such as contusions, hematomas, lacerations, and fractures. Diffuse brain injuries (also known as diffuse axonal injury) involve trauma to the neural and vascular elements of the brain at the microscopic level. The effects of such diffuse damage may vary from a completely reversible injury, such as a mild concussion, to prolonged coma and death.

Based on data from CPSC's National Electronic Injury Surveillance System ("NEISS"), an estimated 606,000 bicycle-related injuries were treated in U.S. hospital emergency rooms in 1994. In addition, about 1,000 bicycle-related fatalities occur each year, according to the National Safety Council.

A Commission study of bicycle use and hazard patterns in 1993 indicated that almost one-third of the injuries involved the head.<sup>2</sup> Published data indicate that, in recent years, almost two-thirds of all bicycle-related deaths involved head injury.<sup>3</sup>

Younger children are at particular risk of head injury. The Commission's 1993 study indicated that when other factors were held constant statistically, the injury risk for children under age 15 was over 5 times the risk for older riders. About one-half of the injuries to children under the age of 10 involved the head, compared to about one-fifth of the injuries to older riders. Children were also less likely to have been wearing a helmet at the time of a bicycle-related incident than were adults.

Research has shown that helmets may reduce the risk of head injury to bicyclists by about 85 percent, and the risk of brain injury by about 88 percent.<sup>4</sup> The Commission's Bicycle Use Study

<sup>2</sup>Gregory B. Rodgers, Deborah K. Tinsworth, Curtis Polen, Suzanne Cassidy, Celestine M. Trainor, Scott R. Heh, Mary F. Donaldson, "Bicycle Use and Hazard Patterns in the United States," U.S. Consumer Product Safety Commission (June 1994) ("Bicycle Use Study").

<sup>3</sup>Jeffrey J. Sachs, MPH; Patricia Holmgren, M.S.; Suzanne M. Smith, M.D.; and Daniel M. Sosin, M.D., "Bicycle-Associated Head Injuries and Deaths in the United States from 1984 through 1988," *Journal of the American Medical Association* 266 (December 1991): 3016-3018.

<sup>4</sup>Robert S. Thompson, M.D.; Frederic P. Rivara, M.D.; and Diane C. Thompson, M.S., "A Case Control Study of the Effectiveness of Bicycle Safety Helmets," *The New England Journal of Medicine* 320 (May 1989): 1361-1367.

<sup>1</sup>The Commission approved this Federal Register notice by a vote of 2-1. Chairman Ann Brown and Commissioner Thomas H. Moore voted to approve it as published. Commissioner Mary Sheila Gall voted to approve the proposed rule with a change, which was not adopted by the Commission, to give companies more time to comply with agency requests for records.