



In-Line Skating and Skateboarding: Injury Patterns and Prevention

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*Editors Note: The following is an excerpt of a published paper that originally appeared in the **1997 ASME International Mechanical Engineering Congress and Exposition: Safety Engineering and Risk Analysis**. Topics covered include Safety Helmet, Injury Statistics and Patterns, Protective Equipment and Education.*

The increased popularity of in-line skating and skateboarding has led to an increase of injuries typical of these sports activities. Protective equipment for skaters and skateboarders has not yet reached the level of sophistication of sports equipment used for more traditional recreational activities. This article reviews the injury patterns associated with in-line skates and skateboards, and analyzes the current status of protective equipment and equipment standards for these recreations.

Andrew H. Tudor, P.E. and Lucinda J. Fuller, M.L.S. published this paper in the **Safety and Risk Analysis Division** of the **American Society of Mechanical Engineers**.

For more information on helmet issues, please contact us at **Meridian One, Inc.**

Figure 1 (top, left) illustration of helmet parameters.
Figure 2 (left) cross-section of test-helmet assembly.
Figure 3 (far left) typical impact test apparatus.
As shown here, the helmet assembly, guided on a rail, accelerates downward before impacting with a steel plate at the bottom of the track.

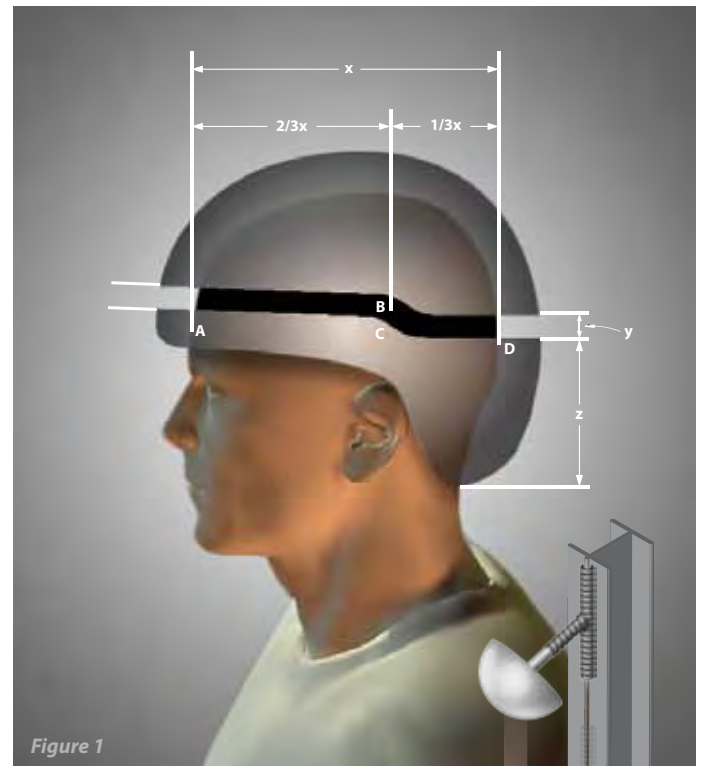


Figure 1

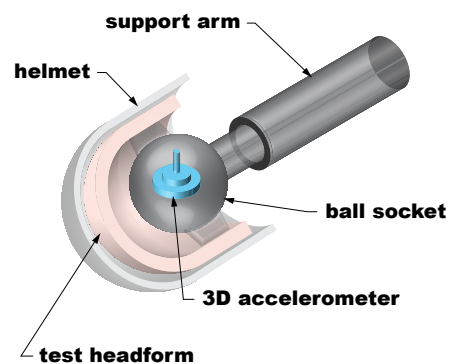


Figure 2

flat plate anvil

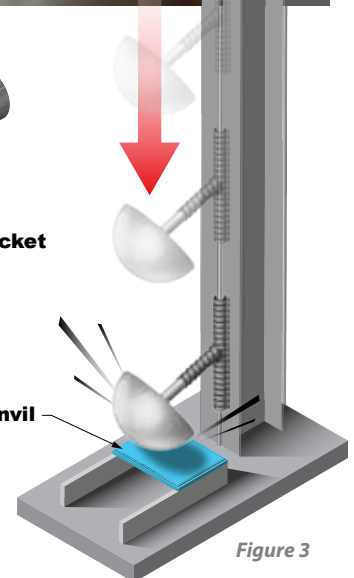


Figure 3