Falls on and From Stairs and Steps

As shown by Pauls (1998), falls outnumber fire related injuries by one or two orders of magnitude and injuries related to stairways outnumber civilian injuries from fire by a factor of approximately 35. Fall-related injuries have also outnumbered injuries related to motor vehicle accidents in the United States for quite some time (Pauls 1998), and in Australia stair and step fall injuries increased by over 70 percent during the decade 1993/4 to 2002/3 (Gunatilaka et al. 2005). In the U.S., Australia and many other countries, falls have been identified as the leading cause of non-fatal injuries and the second leading cause of spinal cord and brain injuries. In the U.S., for falls involving stairways where the location of the stairway is reported, 85% occur in residential settings. The annual cost of stair related falls in the U.S. was estimated by Pauls (1998) to be approximately three times that of the annual stair construction cost. Falls account for over 80 percent of deaths possible associated with buildings features, and falls on stairs account for over 60% of slip, trip and fall deaths in buildings. Cayless (2001) and Ragg et al.(2000) have both found that stairway falls also lead to increased mortality post hospital-admission over non-stairway falls, with 35 per cent of stairway fall patients dying in hospital, compared to 19% of non-stairway fall patients.

Despite this, there has been minimal regulatory agreement on the design and construction of stairs. Slovic (1989) posits that this is because familiar risks, including pervasive risks in homes such as stairs, cause less dread and subsequently less demand for regulation than do unfamiliar less common risks, such as injury from fire or motor vehicle accidents (Slovic 1989, cited in Pauls 1998).