

More than 1,000 patients in US admitted annually for aviation-related injuries

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The first ever published study of aviation-related injuries and deaths in the U.S. finds that more than 1,013 patients are admitted to U.S. hospitals with aviation-related injuries annually, and that 753 aviation-deaths occur each year.

The study, conducted by researchers from the Johns Hopkins Bloomberg School of Public Health's Center for [Injury](#) Research and Policy and Columbia University, also reports that the largest categories of patients were occupants of civilian, noncommercial powered [aircraft](#) (32 percent) and parachutists (29 percent). For aircraft occupants as well as parachutists, lower limb fractures were the most common injury, encompassing 27 percent of all hospitalized injuries. While burns were seen in only 2.5 percent of patients, they were responsible for 13 percent of deaths. The report is published in the December issue of *Aviation, Space, and Environmental Medicine*.

"Our findings provide valuable information, not previously available, on the number and kinds of injuries sustained in aviation-related events," said lead author Susan P. Baker, professor with the Injury Center.

"Because many injuries can be prevented through changes in the structure of aircraft, these data should be used to recognize needed improvements in aircraft design. For example, the high numbers of lower limb fractures suggest modifications should be considered to the various structures likely to be contacted by the feet and legs when a crash occurs."

The researchers analyzed data from the nationwide inpatient sample (NIS), a data system sponsored by the Agency for Healthcare Research and Quality that contains information for approximately 20 percent of all hospital admissions in the U.S. Using the International Classification of Diseases, 9th edition, codes for [air transport](#) accidents were used to identify patients who were hospitalized for aviation-related injuries during 2000-2005. Aviation-related deaths were identified using International Classification of Diseases, 10th edition. The distribution of aviation-injuries was calculated by victim type, discharge status and length of stay.

"Unlike the highly effective surveillance system for all aviation crashes and incidents in the military, there is no formal injury reporting structure for civil aviation crashes," said Dennis F. Shanahan, MD, MPH, an adjunct faculty member with the Bloomberg School's Department of Health Policy and Management. "Consequently, it is difficult to identify problems in particular aircraft or to estimate the feasibility of proposed improvements. It is our strong recommendation that a group such as the National Transportation Safety Board or FAA establish a program modeled after the military or the reporting system of the National Highway Traffic Safety Administration so we can ultimately reduce the number of aviation-related injuries and deaths."

Source: Johns Hopkins University ([news](#) : [web](#))

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