

New study examines stair-related injuries among children in the US

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Through a combination of educating parents, use of stair gates and modifying building codes to make stairs safer, these injuries can be prevented. Credit: Nationwide Children's Hospital

A new study by researchers at the Center for Injury Research and Policy of The Research Institute at Nationwide Children's Hospital found that from 1999 through 2008, more than 93,000 children younger than 5 years of age were treated in U.S. emergency departments for stair-related injuries. On average, this equates to a child younger than 5 years of age being rushed to an emergency department for a stair-related injury every six minutes in the U.S.

The study, which is being released online March 12, 2012 and appearing in the April 2012 print issue of *Pediatrics*, noted a decline in the annual number of these injuries during the course of the study. "While we are

pleased to see a declining trend in the number of stair-related injuries, stairs continue to be a common source of injury among young children," said the study's senior author, Gary Smith, MD, DrPH, director of the Center for Injury Research and Policy at Nationwide Children's Hospital and a professor of pediatrics at The Ohio State University College of Medicine. "Through a combination of educating parents, use of stair gates, and modifying building codes to make stairs safer, we can prevent these types of injuries."

While the majority of children fell down the stairs without mention of the involvement of another object or activity, children younger than 1 year of age were more likely than older children to be injured while they were being carried down the stairs, or while they were in a baby walker or stroller. In fact, one-fourth of injuries to children younger than age 1 occurred while the child was being carried on the stairs, and these children were more than three times more likely to be hospitalized than children injured by other mechanisms. Among all children, soft tissue injuries (35 percent) were the most common type of injury followed by lacerations and puncture wounds (26 percent). The most common body regions injured were the head and neck (76 percent) followed by the upper extremities (11 percent).



Experts suggest using a mounted gate instead of a tension gate. Credit: Nationwide Children's Hospital

Study authors recommend the following to help prevent stair-related injuries:

- Keep stairs free of clutter and in good repair
- Install a handrail if one is not available
- Use stair gates at both the top and the bottom of stairs
 - ...Remember that while stair gates are important and effective, they are not a substitute for adult supervision
- Avoid carrying a child on the stairs when possible. Place him in a safe place, such as a crib, when you need to use the stairs
- When you need to carry a child on the stairs:
 - ...Do not carry other items at the same time. The child should be the only thing in your arms
 - ...Keep one hand on the handrail to steady yourself in case you trip or slip
 - ...Never use a stroller or carriage on the stairs
- Do not use mobile baby walkers. Stationary activity centers are safer for children
- When a child begins to use stairs on his own, teach him
 - ...To always have a free hand to hold onto the handrail
 - ...To ask an adult for help if he wants to take something up or down stairs
 - ...To keep toys, including riding toys, off of the stairs
 - ...That stairs are not for playing or jumping on

This is the first study to use a nationally representative sample to examine injuries associated with [stairs](#) that were treated in U.S. emergency departments. Data for this study were obtained from the National Electronic [Injury](#) Surveillance System (NEISS), which is operated by the U.S. Consumer Product Safety Commission. The NEISS

provides information on consumer product-related and sports and recreation-related injuries treated in hospital emergency departments across the country.



This is an important safety tip: Keep stairs free of clutter and in good repair.
Credit: Nationwide Children's Hospital

Provided by Nationwide Children's Hospital

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