PSNet
PATIENT SAFETY NETWORK

Out-of-hospital medication errors among young children in the United States, 2002–2012.

November 4, 2014
Smith MD, Spiller HA, Casavant MJ, et al. Out-of-hospital medication errors among young children in the United States, 2002-2012. Pediatrics. 2014;134(5):867-76. doi:10.1542/peds.2014-0309.
https://psnet.ahrq.gov/issue/out-hospital-medication-errors-among-young-children-united-states-2002-2012

Medication errors are prevalent among children, especially those younger than 6 years old. Analyzing a database of telephone calls to poison control centers in the United States, this study found that medication errors are frequent. Adverse drug events are most likely with liquid medications and often occur because of confusion with units of measure or administration of an incorrect medication. These findings support prior studies which revealed the challenges related to liquid medication dosing. Of concern, compared with older children, infants (children under age 1) were twice as likely to die or require admission to the intensive care unit for medication errors. American Academy of Pediatrics guidelines on standardized units of measure may address some of these administration errors. A previous AHRQ WebM&M commentary discusses medication safety in pediatric medicine.