

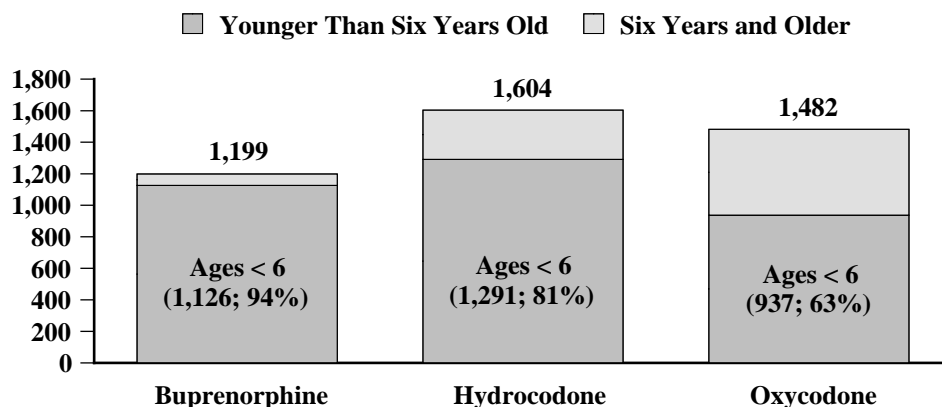
A Weekly FAX from the Center for Substance Abuse Research

University of Maryland, College Park

Nearly All Emergency Department Visits for the Accidental Ingestion of Buprenorphine Occur in Children Under the Age of Six

There were an estimated 1,199 emergency department (ED) visits related to the accidental ingestion of buprenorphine in 2009—more than double the number of visits in 2008 and representing 5% of all buprenorphine-related ED visits in 2009 (see *CESAR FAX*, Volume 20, Issue 26). According to data from the Drug Abuse Warning System (DAWN), 94% of these accidental ingestion visits involved children under the age of six, compared to 81% for hydrocodone and 63% for oxycodone¹ (see figure below). In addition to the increasing availability of buprenorphine (see *CESAR FAX*, Volume 20, Issue 23), the tablet formulation's resemblance to candy may also be a factor in the high rate of accidental ingestion by children. A recent study of buprenorphine exposure in toddlers admitted to a pediatric intensive care unit in the northeast United States² concluded that “the sublingual buprenorphine resemblance to candy in appearance and taste may pose a special risk to toddlers and lead to more severe intoxication from chewing, rather than swallowing, the tablet” (p. e103). It is possible that the sublingual film version of Suboxone approved in 2010 may have a lower risk of accidental ingestion than the tablet because it is packaged in a single-dose, child-resistant pouch.

Estimated Number of U.S. Emergency Department Visits Related to the Accidental Ingestion of Buprenorphine, Hydrocodone, and Oxycodone, 2009



¹Estimates for accidental exposure visits for other narcotic analgesics, including methadone, were unavailable because the estimate either had a relative standard error greater than 50% or an unweighted count or estimate less than 30.

²Pedapati, E. and Bateman, S.T., “Toddlers Requiring Pediatric Intensive Care Unit Admission Following At-Home Exposure to Buprenorphine/Naloxone,” *Pediatric Critical Care Medicine*, 12(2):e102-e107, 2011.

NOTES: Accidental ingestion includes childhood drug poisonings, individuals who take the wrong medication by mistake, and a caregiver administering the wrong medicine by mistake. It does not include a patient taking more medicine than directed because the patient forgot to take it earlier.

SOURCE: Adapted by CESAR from data from Substance Abuse and Mental Health Services Administration (SAMHSA), Drug Abuse Warning Network (DAWN), *National Estimates of Drug-Related Emergency Department Visits, 2004-2009: Accidental Ingestion Visits*, online at https://dawninfo.samhsa.gov/data/ed/Nation/Nation_2009_Accidental.xls (accessed 7/11/11).