Rate of Poison Center Calls for Unintentional Pediatric Marijuana Exposures
More Than Tripled in States That Decriminalized Marijuana Before 2005

There were 985 calls to U.S. poison centers for unintentional marijuana exposure in children ages 9 and younger between 2005 and 2011, according to an analysis of data from the National Poison Data System (NPDS). While this number is relatively low, the rate of calls in states that had passed legislation legalizing marijuana use for recreational or medicinal purposes before 2005 more than tripled over this period, increasing from 3.9 calls per 1,000,000 population in 2005 to 14.8 per 1,000,000 in 2011. The call rate in transitional states—those that had enacted legislation between 2005 and 2011—also increased over the period, from 5.2 per 1,000,000 to 8.7 per 1,000,000. In contrast, states that had not passed marijuana decriminalization laws as of December 31, 2011 (nonlegal states) showed no change in the rate of poison center calls for unintentional pediatric exposure to marijuana (see figure below). Furthermore, exposures in decriminalized states were more likely than those in nonlegal states to require health care evaluation, to have moderate to major clinical effects, and to require critical care admissions (data not shown). The authors conclude that “as more states pass legislation to decriminalize medical and recreational marijuana, we expect the rate of marijuana exposures in young children to continue to increase” (p. 4) and suggest that “state lawmakers should consider requirements, such as child-resistant packaging, warning labels, and public education, when drafting marijuana legislation to minimize the effect on children” (p. 5).

Rate (per 1,000,000 population) of Unintentional Pediatric Marijuana Exposure Poison Center Calls, by State Marijuana Legislation Status*, 2005-2011
(n=985 single substance, unintentional exposures in children ages 9 and younger)


NOTES: Data are from the National Poison Data System (NPDS), which contains information from the human poison exposure case phone calls taken by all 56 poison centers across the country. Single-substance, unintentional exposures in children aged 9 years and younger from January 1, 2005, to December 31, 2011 were included as cases. The authors suggest that the increased call rate may be related to increased use by family members, increased likelihood of ingestion, increased potency of the ingestion, and/or increased likelihood of caregivers calling poison centers or presenting to health care facilities for help.

Editor’s Note: The original version of this issue incorrectly listed the rates as being per 100,000 population instead of 1,000,000 population. We apologize for the error.