Majority of U.S. Emergency Department Visits Involving Synthetic Cannabinoids Involve No Other Substances

An estimated 11,406 U.S. emergency department (ED) visits in 2010 involved a synthetic cannabinoid product, and three-fourths of these visits were made by patients ages 12 to 29, according to the most recent data available from the Drug Abuse Warning Network (DAWN). Synthetic cannabinoids, also referred to as synthetic marijuana, Spice, or K2, are substances designed to produce physical effects similar to marijuana (see CESAR FAX, Volume 20, Issue 17). In the majority (59%) of ED visits made by patients ages 12 to 29 that involved synthetic cannabinoids, no other substances were involved. Synthetic cannabinoid were used in combination with one other substance in 36% of the visits, and were used in combination with two or more substances in only 6% of visits (see figure below). This is unusual in that the majority of ED visits involving other illicit drugs or the nonmedical use of pharmaceuticals also involve multiple drugs. For example, only 31% of ED visits involving marijuana were for marijuana alone; 69% involved other drugs (data not shown). The authors suggest that “educators can help prevent use of synthetic cannabinoids by addressing use of these substances in programs designed to prevent use of illicit drugs. Parents can also discuss the dangers of these drugs with their children and use parental controls for online purchases” (p. 3-4).

**Estimated Percentage of U.S. Emergency Department Visits Involving Synthetic Cannabinoids Only or in Combination with Other Substances, Patients Ages 12 to 29, 2010**

- Synthetic Cannabinoids Only: 59%
- Synthetic Cannabinoids Plus One Other Substance: 36%
- Synthetic Cannabinoids Plus Two or More Other Substances: 6%


NOTE: Percentages add to more than 100 percent due to rounding

1The 11,406 ED visits involving synthetic cannabinoids represent less than 1% of all ED visits. However, the authors note that “because of limited availability of tests for synthetic cannabinoids, data collection efforts in the ED may have missed visits in which they were involved” (p. 4).

2When other drugs were used with synthetic marijuana, they were most commonly marijuana (17%), pharmaceuticals (17%), and alcohol (13%).

CDC Reports Acute Kidney Injury Associated with Synthetic Marijuana Use in Six States

The Centers for Disease Control and Prevention (CDC) reports that acute kidney injury following exposure to synthetic cannabinoids has been identified in six states from March to December 2012. See CESAR FAX, Volume 22, Issue 7 for more information (available online at http://www.cesar.umd.edu/cesar/cesarfax/vol22/22-07.pdf).