

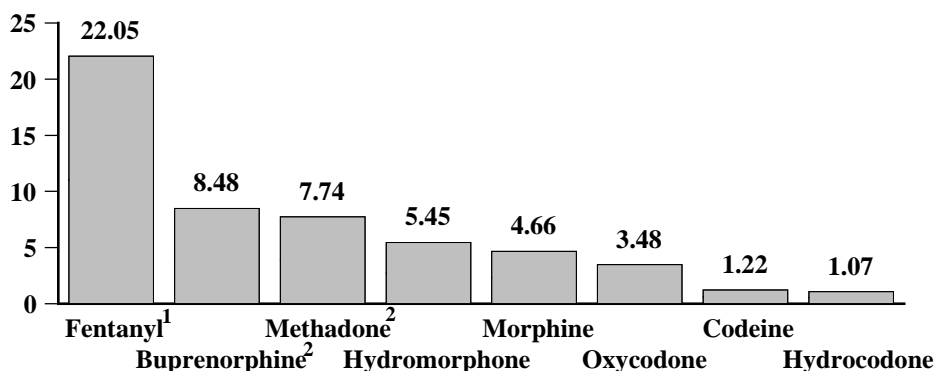
## A Weekly FAX from the Center for Substance Abuse Research

University of Maryland, College Park

### *Fentanyl and Buprenorphine Have Higher Rates of Nonmedical Use ED Visits per Dosage Units Distributed to Dispensing or Retail Institutions Than Other Opioids*

While the estimated number of emergency department (ED) visits related to the nonmedical use of buprenorphine has been increasing (see *CESAR FAX*, Volume 20, Issue 25), the magnitude of these visits is small compared to that of other opioids. For example, there were 14,266 ED visits for nonmedical use of buprenorphine in 2009, compared to 86,258 for hydrocodone and 148,449 for oxycodone. However, after controlling for the number of dosage units (DUs) distributed to dispensing and retail institutions, buprenorphine ranks second only to fentanyl<sup>1</sup> in the rate of ED visits for nonmedical use. In 2009, there were 22.05 ED visits for nonmedical use of fentanyl for every 100,000 DUs of fentanyl distributed to dispensing and retail institutions, compared to 8.48 for buprenorphine<sup>2</sup>, 7.74 for methadone<sup>2</sup> and 5.45 for hydromorphone. All other opioids had rates of less than 5 per 100,000 DUs (see figure below).

#### **Estimated Rate of Emergency Department (ED) Visits Related to Nonmedical Use of Eight Opioids (Rate per 100,000 Dosage Units Distributed to Dispensing or Retail Institutions), U.S., 2009**



<sup>1</sup>One possible reason for the higher rate of fentanyl ED visits may be that fentanyl used nonmedically is often clandestinely produced and/or mixed with heroin or cocaine (Source: [www.nida.nih.gov/drugpages/fentanyl.html](http://www.nida.nih.gov/drugpages/fentanyl.html)).

<sup>2</sup>One possible reason for the higher rate of buprenorphine and methadone ED visits may be that these drugs are frequently prescribed to opioid dependent persons, who are at a higher risk for drug misuse.

NOTES: Nonmedical use includes taking more than the prescribed dose; taking a drug prescribed for another individual; deliberate poisoning by another person; and documented misuse or abuse of a drug. Data on dosage units distributed to dispensing and retail institutions is from the DEA's Automated Reports and Consolidated Orders System (ARCOS), which requires manufacturers and distributors to report the number of grams of monitored substances distributed to dispensing and retail institutions. Dispensing and retail institutions include pharmacies, practitioners, hospitals, teaching institutions, and narcotics treatment programs. Dosage units are the standard unit in which a medication is prescribed (e.g., pill, tablet, patch).

SOURCES: 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: Nonmedical Use of Pharmaceuticals Visits*, online at [https://dawninfo.samhsa.gov/data/ed/Nation/Nation\\_2009\\_NMUP.xls](https://dawninfo.samhsa.gov/data/ed/Nation/Nation_2009_NMUP.xls) (accessed 7/20/11); and U.S. Drug Enforcement Agency (DEA), Office of Diversion Control, Automation of Reports and Consolidated Orders System (ARCOS) 2009 data requests (4/13/2010).