

A Weekly FAX from the Center for Substance Abuse Research

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Fentanyl Linked to Recent Clusters of Drug Overdoses and Deaths in U.S.

Illicitly manufactured fentanyl combined with heroin (and, to a lesser extent, cocaine) is believed to be the cause of a recent outbreak of overdoses and deaths reported in a number of East Coast and Midwest cities, including Delaware, Illinois, Maryland, Michigan, Missouri, New Jersey, New York, Ohio, Pennsylvania, and Wisconsin. While regional outbreaks of fentanyl/heroin overdoses have occurred before (most recently in the early 1990s in New York, Maryland, and Pennsylvania), the recent overdoses and deaths are of concern because they have occurred in numerous states.

What is fentanyl? Fentanyl is a synthetic opioid that is at least 50 times more potent than morphine or heroin. It is a Schedule II prescription narcotic (sold under the brand names Actiq®, Duragesic®, and Sublimaze®) that can be legally prescribed to manage pain during surgery and for severe or chronic pain relief. It can also be illicitly produced in clandestine laboratories.

What are the slang names for fentanyl? While slang names may vary from region to region, some of the slang names that have been identified for fentanyl include the bomb, China girl, China white, dance fever, drop dead, Incredible Hulk, infamous, Fat Albert, flat line, friend, goodfella, jackpot, lethal death, lethal injection, murder 8, the omen, snow man, suicide packets, Tango and Cash, TNT, and tsunami. It has been sold as heroin under the brand names Flatline and Capone.

What does it look like? Fentanyl is available with a prescription as a transdermal patch, an oral lozenge, and as an injection. It is manufactured illicitly as powder or tablets.

Where does it come from? While some fentanyl is illicitly produced in the U.S. (from 1990 to 2005 at least 9 clandestine fentanyl labs were seized in the U.S.), Mexico is likely the source of at least some of the fentanyl associated with recent overdoses. In February of 2006, U.S. Customs and Border Protection agents seized 2.6 pounds of 83% pure fentanyl powder in California, just north of the U.S.-Mexico border. More recently, seizures of fentanyl-laced heroin have been reported in New York and New Jersey.

Who uses fentanyl? Fentanyl is typically used by heroin users in specific drug markets. It is often sold as or mixed with heroin and, less often, with cocaine. Users may or may not be aware that they are purchasing and using fentanyl.

What are the effects of fentanyl use? The effects of fentanyl are similar to other opioids, and include euphoria, drowsiness, nausea, confusion, constipation, low blood pressure, sedation, respiratory depression, irregular heart beat, inability to breath, unconsciousness, coma, tolerance, and addiction. Effects may be more pronounced when fentanyl is used in excessive amounts or with heroin or cocaine. Overdose effects occur rapidly, and include sudden death through respiratory arrest, cardiac arrest, severe respiratory depression, cardiovascular collapse, or severe anaphylactic reaction. Suspected overdoses should be treated rapidly with an opiate antagonist, such as naloxone.

Can it be detected by toxicology tests? Routine toxicology screens for opiates will not detect fentanyl. Since the only way of detecting fentanyl in blood or urine is by gas chromatography, many fentanyl overdoses may initially be classified as heroin overdoses.

SOURCES: Adapted by CESAR from Maryland Poison Center, "Fentanyl," *ToxTidbits*, May 2006 (available online at <http://www.mdpoison.com/Site/PDFs/ToxTid/May%202006%20Toxtidbits.pdf>); National Drug Intelligence Center, U.S. Department of Justice, *Fentanyl: Situation Report*, 2006 (available online at <http://www.usdoj.gov/ndic/srs/20469/index.htm>); and Substance Abuse and Mental Health Services Administration, *Fact Sheet: Heroin Fentanyl*, 2006 (available online at http://www.samhsa.gov/news/newsreleases/06%20Fentanyl_heroin.pdf).

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