Fentanyl

Brief Description

Fentanyl is a powerful synthetic opiate analgesic similar to but more potent than morphine. It is typically used to treat patients with severe pain, or to manage pain after surgery. It is also sometimes used to treat people with chronic pain who are physically tolerant to opiates. It is a schedule II prescription drug.

Names

In its prescription form, fentanyl is known as Actiq, Duragesic, and Sublimaze. Street names for the drug include Apache, China girl, China white, dance fever, friend, goodfella, jackpot, murder 8, TNT, as well as Tango and Cash.

Effects

Like heroin, morphine, and other opioid drugs, fentanyl works by binding to the body’s opiate receptors, highly concentrated in areas of the brain that control pain and emotions. When opiate drugs bind to these receptors, they can drive up dopamine levels in the brain’s reward areas, producing a state of euphoria and relaxation. Medications called opiate receptor antagonists act by blocking the effects of opiate drugs. Naloxone is one such antagonist. Overdoses of fentanyl should be treated immediately with an opiate antagonist.

When prescribed by a physician, fentanyl is often administered via injection, transdermal patch, or in lozenge form. However, the type of fentanyl associated with recent overdoses was produced in clandestine laboratories and mixed with (or substituted for) heroin in a powder form.
Mixing fentanyl with street-sold heroin or cocaine markedly amplifies their potency and potential dangers. Effects include: euphoria, drowsiness/respiratory depression and arrest, nausea, confusion, constipation, sedation, unconsciousness, coma, tolerance, and addiction.

Related Resources

- Message From the Director: Fentanyl Use in Combination With Street Drugs Leading to Death in Some Cases
- Message From the Director: Increased Abuse of Prescription Drugs is Cause for Concern

Other Resources

- MEDLINEplus Health Information on Drug Abuse - National Library of Medicine, NIH
- www.abovetheinfluence.com - Office of National Drug Control Policy
- healthfinder.gov - U.S. Department of Health and Human Services

Past information on many drugs of abuse is available on our Archives site.

Clinical Trials

Clinical trials are research studies in human volunteers conducted to answer specific health questions. Learn about the NIH-sponsored clinical trials available to you.

- NIDA Clinical Trial Locator - answer a few simple questions and get contact information for Clinical Trials near you.

Other Clinical Trials information sources:

- NIH Clinical Trials and You - NIH site that helps explain about clinical trials and why people participate.
- NIDA Trials at ClinicalTrials.gov - a resource of federally and privately supported clinical trials.
- Clinical Research Studies from the National Drug Abuse Treatment Clinical Trials Network (CTN) - a NIDA coordinated network of research institutions conducting human trials on drug abuse solutions.
• Research Studies at NIDA Intramural Research Program - located in Baltimore, Maryland.

This page was last updated December 2012