

U-47700 - Background

What is U-47700?

The drug U-47700 (3,4-Dichloro-N-[2-(dimethylamino)cyclohexyl]-N-methylbenzamide) is a synthetic analgesic opioid. It was first synthesized in 1978 by an employee of pharmaceutical manufacturer The Upjohn Company. References to U-47700 began appearing in academic literature in 1982, when research conducted by Upjohn was first published.

U-47700 acts as an agonist on the mu-opioid receptors in the central nervous system. This causes effects similar to other opioids such as euphoria, analgesia, and extreme sedation. It depresses the cough reflex, and constricts pupils, and can suppress the respiratory system to potentially fatal levels. Users may also experience itchiness or constipation.

What is it used for?

Originally, U-47700 was developed to be a non-addicting analgesic as potent as morphine; however the drug was never brought to market and has not been studied in humans. There is little pharmacokinetic data available, and it is not approved for any medical use in humans.

Why is it dangerous?

Production of counterfeit oxycodone pills has been increasing, some of which have included U-47700. Many of those who consume these pills may be unaware they are taking drugs other than oxycodone. Studies have shown U-47700 to be 7.5 times more potent than morphine and as a result, a usual dosage may be more likely to result in an overdose.

This drug is easily attainable. Because it is not currently listed in the Controlled Drugs and Substances Act in Canada, it can be bought online from various distributors of research chemicals. User reports have shown that U-47700 can be ingested, snorted, or inhaled. There has been at least one report of U-47700 being detected in Canada.

Fatalities and treatment

Current data on deaths in Alberta linked to U-47700 overdoses is not available. In case studies and user reports, naloxone has been shown to reverse U-47700 overdoses; however, there is currently no approved reversal agent. Because U-47700 use in humans has not been studied, the dose of naloxone required to reverse an overdose may be different than the dose required for other opioid overdoses such as morphine or fentanyl.

U-47700 and the law

As of January 2017, U-47700 is currently not scheduled in the Canadian Controlled Drugs and Substances Act. On June 3, 2017 Health Canada proposed scheduling U-47700 to Schedule 1 of the Act, which would prohibit the possession, importation, exportation and production of the drug. It was added to the United States Controlled Substances Act as a Schedule 1 drug in November 2016.

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