



ADDICTION SCIENCE SERIES

KROKODIL

Desomorphine is an obscure opioid substance. In the form of “krokodil” it first came to the world’s attention in Russia, where desperate, impoverished heroin addicts concoct it from codeine as a homemade product often contaminated with paint thinner and sulfur from match heads. The use of this drug is associated with severe tissue damage, including gangrene, and may in extreme cases result in limb amputation. The term “krokodil” (Russian for crocodile) arose because of the green, scaly skin displayed by victims of the drug’s toxic effects.

In late 2012, medical reports in Arizona indicated that “krokodil” had been seen there. However, Frank LoVecchio, co-medical director of Phoenix-based Banner Poison Control and Drug Information Center, which first received reports of krokodil use in Arizona, said of krokodil, “The DEA and our legal department have said that to confirm the cases, they would like the original substance, which they have been unable to provide.”

In October 2013 krokodil-related medical problems were reported by the Chicago area print and electronic media. However, Chicago has recently been called “the heroin capital of the United States”, and that drug was and is cheap and unusually pure in Chicago. Further, krokodil does not look, smell or taste like heroin, and opioid-dependent individuals would be unlikely to confuse the two. In addition, no analytical (laboratory) reports have confirmed the presence of “krokodil” in any of the patients seen in Arizona- or Chicago-area hospitals, and the [Join Together website](#) recently stated the U.S. Drug Enforcement Administration does not believe that reports of the drug in the United States are valid. In fact, the presence of krokodil has never been confirmed anywhere in the world other than Russia, and (by rumor) several of the Eastern European countries that were formerly part of the Soviet Union.

The symptoms displayed by the people who have supposedly been exposed to krokodil could easily have been caused by a bacterial infection such as necrotizing fasciitis, widely known as the “flesh-eating disease”. It can be transmitted by dirty hypodermic needles or if someone does not properly sterilize their skin before injecting. Drug users should be made aware that sterile needles and syringes are available legally in pharmacies, and at no cost at needle exchanges in many areas, including Chicago.

On October 17, 2013, the *Lawton (Oklahoma) Constitution* published this story:



[Oklahoma Bureau of Narcotics Refutes Reports of "krokodil"](#)

The Oklahoma Bureau of Narcotics says accounts of "Krokodil" use circulated on the Internet should be "taken with a grain of salt."

Reports that Oklahoma's first death from the drug, known on the street as "crocodile meth" because it turns the skin green from injection site infections, first were brought to OBN and Duncan police last year when 33-year-old Justin McGee died in November. OBN Spokesman Mark Woodward said in February that two cases had been reported, but they were not confirmed.

"I spoke with our Chief Toxicologist and found that we did test one case for a supposed desomorphine," Amy Elliot, spokesperson for the ME's Office told The Constitution March 18. "(The test) only detected regular morphine. No desomorphine has, to date been detected."

However, an Oklahoma City woman told a news agency Sunday that McGee had died from complications from the drug, a claim OBN denies. McGee, Woodward said Tuesday, died from a drug overdose, but not from krokodil. While reports of the drug's usage in Utah and Illinois have recently surfaced, Woodward said there were no signs that desomorphine use was becoming a trend in Oklahoma.

"There have be no confirmed cases in Oklahoma, only one report, and it was ruled out as Krokodil," he said. "It was just a drug overdose. In fact, there have been no confirmed cases anywhere in the U.S."

October 24, 2013

There has still been no confirmation that desomorphine has been found in the bodily fluids of any individual in the United States or that any drug sample has contained that drug.

Dan Bigg, director of the Chicago Recovery Alliance, which serves thousands of drug users at needle exchange clinics has been quoted as saying, "In 24 years of almost daily contact with opiate users, I have never seen it, nor have I heard of anyone who has used it. There would be no reason to use it here (Chicago). Codeine is not readily available. Heroin is easily available, and costs \$5 or \$10 (per dose). Why would someone want to mix gasoline with their drugs if they didn't have to?"

Kathleen Kane-Willis, Director of the Illinois Consortium on Drug Policy stated, "Horror stories about krokodil will serve little good, said, and may harm long-term efforts to address a burgeoning problem of heroin and prescription painkiller addiction. This might have been people who got ahold of (impure) heroin, or haven't used clean needles, but those are problems that don't depend on using krokodil. If you're out there scaring people about something that isn't really happening, it's not useful when you have a real problem that is happening."

Cook County (Illinois) hospitals have yet to report any cases of krokodil-related illness, or users seeking treatment for krokodil addiction according to Dr. Steven Aks, a emergency department



physician and toxicologist at Storger Hospital. "I don't really get why someone would use it here. Heroin isn't hard to get."

October 25, 2013

Newsweek is now questioning the veracity of the krokodil reports, as confirmation of desomorphine in the United States or any other country other than Russia is still lacking. The author's [LinkedIn.com](https://www.linkedin.com/groups/1156351210512755872/) "Emerging Drugs of Abuse" discussion group, with more than 2500 members in the United States and 44 other countries has consistently maintained from the beginning that the krokodil reports are unsubstantiated. This skepticism was reported to the print and electronic media, but has not resulted in further investigation. All things considered, it seems at this time that krokodil is not a problem in Illinois.

May 2014

Krokodil has still not been documented in the United States or any other country outside of Russia and one or two Eastern European countries.

August 2020

Neither krokodil nor any other form of desmorphine have been identified in the United States.