

CCENDU Bulletin

No Confirmed Reports of Desomorphine ("Krokodil"/"Crocodile") in Canada

Summary

- Although there have been several reports of the presence of desomorphine ("krokodil" or "crocodile") in Canada and the United States since September, 2013, as of November 21, 2013, there have been no confirmed reports of desomorphine in Canada or the United States.
- Unconfirmed reports might have resulted from the observation of severe wounds at injection sites among drug users. These wounds can resemble those associated with desomorphine. This type of tissue damage can be owing to adulterants in injected drugs or illnesses such as Methicillin-resistant *Staphylococcus aureus* (MRSA), a bacterial infection.

Background

Desomorphine (also known as krokodil) is a synthetic opioid that is a derivative of morphine. It is highly toxic and appears to have a much more rapid onset of harms than other opioids. It is most commonly injected and is associated with severe tissue damage near the site of the injection.¹ It was first reported in Russia in 2003 and is thought to have become more widely used in that country in 2009, when the supply of heroin and other opioids was restricted. The name krokodil is reportedly owing to the scale-like skin that users develop.

Recently there have been several unconfirmed reports of desomorphine in the United States^{2,3} and Canada.⁴ These reports have garnered significant media attention, perhaps in part because of the disturbing images documenting the effects of desomorphine that are available online.

Thus far, however, reports of desomorphine in the United States have failed to be confirmed by toxicology or laboratory reports.^{5,6} The U.S. Drug Enforcement Agency's National Forensic Laboratory Information System reports it identified two exhibits in 2004 that were desomorphine, but none have been identified since. In addition, the Canadian Centre on Substance Abuse (CCSA) has recently learned that a report of desomorphine in Canada in Ontario also failed to be confirmed. Therefore, as of November 21, 2013, CCSA and the Canadian Community Epidemiology Network on Drug Use (CCENDU) are unaware of any confirmed reports of desomorphine in Canada.

It is possible that some unconfirmed reports were made after observing severe wounds at injection sites among intravenous (IV) drug users. These wounds might have looked similar to those associated with desomorphine. This type of tissue damage among injection drug users can be owing to adulterants in injected drugs or illnesses such as Methicillin-resistant *Staphylococcus aureus* (MRSA), a bacterial infection. Such tissue damage from these causes underscores the inherent dangers of IV drug use, as well as the importance of not sharing needles among IV drug users.



CCENDU will continue to monitor the situation regarding desomorphine in Canada. If you have any questions, comments, information to contribute or corrections to the information contained in this bulletin, or wish to subscribe and receive updates as new information becomes available, please contact CCENDU@ccsa.ca.

For more information on CCENDU and to review previous CCENDU Alerts and Bulletins please visit www.CCENDU.ca.

Prepared by the CCSA in partnership with the
Canadian Community Epidemiology Network on Drug Use (CCENDU)

¹ <http://toxnet.nlm.nih.gov/cgi-bin/sis/search/a?dbs+hsdb:@term+@DOCNO+8070>

² <http://www.theglobeandmail.com/news/world/flesh-eating-drug-krokodil-suspected-in-us-for-first-time/article14558663/>

³ http://articles.chicagotribune.com/2013-10-17/news/ct-met-chicago-krokodil-cases-20131017_1_kathleen-kane-willis-drug-policy-heroin

⁴ http://www.thestar.com/news/crime/2013/11/20/krokodil_the_dangerous_flesheating_street_drug_shows_up_in_niagara.html

⁵ http://articles.chicagotribune.com/2013-10-27/news/ct-met-krokodil-hunt-20131027_1_bath-salts-heroin-false-alarm

⁶ http://www.deadiversion.usdoj.gov/drug_chem_info/desomorphine.pdf

The Canadian Community Epidemiology Network on Drug Use (CCENDU) is a nation-wide network of community level partners who share information about local trends and emerging issues in substance use and exchange knowledge and tools to support more effective data collection.

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