Recent International Actions to Control Deadly Fentanyl Analogs

Introduction

Fentanyl analogs have emerged very rapidly as deadly drugs. In 2016, the Florida Medical Examiners Report on Drugs Identified in Deceased Persons reported these deaths separately from those caused by fentanyl. The report showed that in addition to the 1,644 fentanyl-related deaths in Florida in 2016, fentanyl analogs were present in 1,026 deaths. That was just three more than the number of heroin occurrences. Fentanyl analogs were considered a cause of death in 965 of these individuals who accounted for 94% of the deceased. Fentanyl was considered a cause of death of 85% of the decedents (Florida Medical Examiners, 2017).

Fentanyl analogs were little known as recently as 2014. Conceptually, they fall between diverted pharmaceutical drugs like fentanyl and completely illicit drugs like heroin. Carfentanil, the most common analog found in the United States, is used as a large animal tranquilizer. However, because it is 10,000 times more potent than morphine, carfentanil has no human application. Other analogs have no established medical or veterinary purpose. They appear to have been produced solely because their high potency relative to volume and their ambiguous legal status have made them easy to transport. Consequently, they are hugely profitable (2017 National Drug Threat Assessment). While typically used as an additive to heroin, fentanyl and its analogs were also discovered in 180 street samples of cocaine in Florida during 2016 and 2017 (DEA Bulletin Miami Field Division, December 2017).

Fentanyl analogs are products of international underground drug manufacturers who are primarily based in China (2017 National Drug Threat Assessment). Since 2015, the Drug Enforcement Agency (DEA) has attempted to address fentanyl analogs by banning specific substances as quickly as possible after they were identified and after trafficking was detected. However, as DEA has controlled each identified fentanyl analog, illicit manufacturers have produced new substances by making minor structural modifications. These novel analogs have been introduced into the United States by smugglers and distributed by traffickers who present them as an allegedly "noncontrolled" substance because of their novel structure (Federal Register, 2017). However, recent international cooperation has led to new approaches designed to staunch the flow of fentanyl analogs into the United States.

China’s Government’s Actions

China's government has been cooperating more closely with the United States in trying to reduce production and distribution of these drugs. Information sharing between Chinese officials and the U.S. Justice Depart-
ment now includes scientific data, trafficking trends, and sample exchanges (DEA, 2018). In 2017, China for the first time scheduled carfentanil and seven other analogs. In January 2018, the U.S. Attorney General announced that effective February 1, 2018, China’s Ministry of Public Security would schedule two precursors to the production of fentanyl analogs: NPP and 4ANPP. (Justice News, 2018) Banning these essential ingredients may make the production and sale of new compounds in China more difficult and risky.

**Actions taken by U.S. Drug Enforcement Agency (DEA):**

In December 2017 the DEA announced its intent to issue an order temporarily adding seven additional fentanyl-related substances into Schedule I of the Controlled Substances Act. Those substances are: valeryl fentanyl; para-fluorobutyryl fentanyl; para-methoxybutyryl fentanyl; para-chloroisobutyryl fentanyl; isobutyryl fentanyl; cyclopentyl fentanyl; and ofentanil. More importantly, the DEA intends to include as Schedule I substances all other substances structurally related to fentanyl even if such substances have not yet been named or have not emerged on the U.S. illicit market. This temporary scheduling order will impose the same administrative, civil, and criminal sanctions and regulatory controls under the Controlled Substances Act that are applicable to other Schedule I substances. This means sanctions and regulatory controls will be imposed on the manufacture, distribution, reverse distribution, possession, importation, and exportation, of these novel fentanyl analogs. The order will remain in effect for two years with a possible extension of one year (Federal Register, 2017).

**Summary and Implications**

China and the United States government are taking major steps to reduce the manufacture and transport of novel fentanyl analogs. These new approaches are proactive rather than waiting to respond as new substances are introduced. Scheduling changes provide law enforcement agencies with better tools to seize novel drugs and prosecute those selling them when such drugs are encountered. However, even severe restrictions on the ability to manufacture and ship these drugs may not equate to a quick reduction in their U.S. supply. There is no certain way of knowing how much already exists here. Still, it is important to remember that these synthetic opioids are so potent that they pose a great risk to users and to those encountering. Indeed, their potency means that reversal with naloxone often requires more than one dose (Maron, 2018). Therefore, law enforcement officers and first responders need to remain alert for the presence of these highly potent drugs and prepared to respond quickly to exposures.

![Fentanyl Analog Deaths in Florida 2016](image)

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