



2016 Advisory # 47

Increase in drug overdoses deaths linked to increased presence of fentanyl in New York City

October 17, 2016

This is an update to the Health Advisory issued on April 21, 2016.

Since July 1, 2016, nearly half (47%) of confirmed drug overdose deaths involved fentanyl. In 2015, 16% of overdose deaths involved fentanyl.¹ In the previous 10 years, fentanyl was relatively uncommon in overdose deaths, with fewer than 3% of deaths in New York City (NYC) involving fentanyl.

Data suggest that the increased presence of fentanyl is driving the increase in overdose fatalities. Provisional 2016 data indicate there have been 725 confirmed overdose deaths to date in NYC; 581 of these deaths occurred during the first six months of 2016. The largest increase occurred in Manhattan.

While fentanyl is most commonly found in combination with heroin-involved overdose deaths, fentanyl has also been identified in cocaine-, benzodiazepine-, and opioid analgesic-involved overdose deaths.

Fentanyl is a synthetic, short-acting opioid analgesic with a potency 50 to 100 times that of morphine. Fentanyl carries a high risk of overdose, and recent national cases of fentanyl-related morbidity and mortality increasingly have been linked to illegally manufactured fentanyl and fentanyl analogues. These drugs are sold illicitly for their heroin-like effects and may be mixed with heroin and/or cocaine with or without the user's knowledge. In addition, recent law enforcement seizures in several jurisdictions across the United States, including New York City, have identified fentanyl sold in powder and pill formulations, which may be marked as other substances, including benzodiazepines and opioid analgesics.

The New York City Department of Health and Mental Hygiene is alerting medical personnel that: (1) a higher dose or multiple doses of naloxone per overdose event may be required to reverse some opioid-involved overdoses due to the presence of fentanyl;^{2,3} (2) patients presenting to emergency departments with symptoms indicating opioid intoxication may be unaware that they ingested fentanyl. *Providers should be mindful that fentanyl is not detected by standard urine screens.*

Clinical Information:

- Fentanyl is an opioid analgesic. The biological effects of fentanyl are indistinguishable from those of heroin.
- Treatment is the same as for other opioid overdose, however, larger than usual doses of naloxone (2-10mg) might be required for reversal of the opioid effects.
- Fentanyl is not detected by standard urine opioid immunoassays; therefore, opioid exposure should not be ruled out based on toxicology screen results. Consult your

- laboratory for preferred testing methods.
- Symptoms of overdose are characteristic of central nervous system depression: lethargy, respiratory depression, pinpoint pupils, change in consciousness, seizure, and/or coma.

Providers can educate patients who are substance users about overdose prevention strategies, including not to use drugs alone, test drugs before using, and recommending that patients participate in overdose prevention education at a local harm reduction program or visiting a participating NYC pharmacy to obtain naloxone for overdose reversal. There are approximately 740 participating pharmacies, including all major chains. For further information, contact DOHMH at 347-396-7909 or lmaldjian1@health.nyc.gov. A fentanyl warning poster is available to hand out or display in health care settings at: <http://www1.nyc.gov/assets/doh/downloads/pdf/mental/fentanyl-poster.pdf>.

Medication-assisted treatment with methadone or buprenorphine also prevents overdose. Treatment locators are available at: www.oasas.ny.gov or www.buprenorphine.samhsa.gov. Referrals for medication-assisted treatment are available at 1-800-LIFENET.

We remind medical providers that they are required to report suspect or confirmed cases of poisoning by drugs or other toxic agents within 24 hours to the Poison Control Center at 1-800-222-1222 or 212-764-7667 (POISONS). These reports are critical in detecting and preventing overdose outbreaks.

Please share this with any providers you know working with substance users in New York City.

Sincerely,

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¹ Fentanyl toxicology data for 2015 are provisional; the Office of the Chief Medical Examiner (OCME) was not routinely testing for fentanyl until July 2016, however, the OCME will retrospectively test all 2015 overdose data beginning in November, 2016.

² Centers for Disease Control and Prevention. Notes from the field: Acetyl fentanyl overdose fatalities - Rhode Island, March-May 2013. MMWR: Morbidity & Mortality Weekly Report [serial online]. August 30, 2013; 62(34):703-704. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6234a5.htm>

³ Centers for Disease Control and Prevention. Recommendations for Laboratory testing for Acetyl Fentanyl and Patient Evaluation and Treatment for Overdose for Synthetic Opioids. HAN Health Advisory. June 20, 2013. <http://stacks.cdc.gov/view/cdc/25259>