



2016 Advisory # 8

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

April 21, 2016

Preliminary data show a dramatic increase in the number of unintentional drug poisoning (overdose) deaths in New York City, with 886 confirmed deaths to date in 2015,¹ compared with 800 deaths in 2014.² The largest increase in overdose deaths was among Bronx residents, which increased 39% from a rate of 15.5 per 100,000 in 2014 to 21.5 per 100,000 in 2015.^{1,2} By age group, the largest increase was among decedents aged 15-24, an increase of 33% from a rate of 4.6 per 100,000 in 2014 to 6.1 per 100,000 in 2015.^{1,2}

Of the 886 drug overdose deaths, 136 (15%) involved fentanyl.¹ In the past ten years, fentanyl was relatively uncommon in overdose in NYC with fewer than 3% of deaths involving fentanyl.² In 2015, fentanyl was identified in overdose deaths among residents of all boroughs: Bronx (n=40, 3.5 per 100,000); Brooklyn (n=34, 1.6 per 100,000); Queens (n=30, 1.7 per 100,000); Manhattan (n=14, 1.0 per 100,000); and Staten Island (n=4, 1.0 per 100,000).¹

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 have been increasingly 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 as a combination product 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 opioids 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 revive some opioid-involved overdoses due to the presence of fentanyl;^{3,4} (2) patients presenting to emergency departments with symptoms indicating opioid intoxication may be unaware 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.

For patients who are substance users, you can educate them about overdose prevention strategies, including recommending that patients participate in overdose prevention education at a local harm reduction program or participating NYC pharmacy and obtain naloxone for overdose reversal; for further information, contact DOHMH at 347-396-7909 or lmaldjian1@health.nyc.gov.

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 would like to 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 Office of the Chief Medical Examiner (2015). Analysis by Bureau of Alcohol, Drug Use, Prevention, Care and Treatment, New York City Department of Health and Mental Hygiene. Unintentional Drug Poisoning Deaths. Unpublished raw data.

² Bureau of Vital Statistics/Office of the Chief Medical Examiner (2000-2014). Analysis by Bureau of Alcohol, Drug Use, Prevention, Care and Treatment, New York City Department of Health and Mental Hygiene. Unintentional Drug Poisoning Deaths. Unpublished raw data.

³ 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>

⁴ 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>