Opioid Misuse Response in New Hampshire, Update #2

Key Points and Recommendations:

- New Hampshire has one of the highest rates of drug overdose deaths in the United States, which is largely driven by opioids, including prescription pain relievers and illicit opioids such as heroin and fentanyl.

- Healthcare providers should review the attached Centers for Disease Control and Prevention (CDC) HAN which alerts healthcare providers to a sharp increase in drug overdose deaths nationally due to illicitly manufactured fentanyl (IMF) which has been distributed in counterfeit pills, mixed with heroin, or sold as heroin.

- Healthcare providers can take advantage of available resources in New Hampshire for treating patients with substance misuse disorders by utilizing the 2-1-1 phone line, connecting patients with treatment resources at http://nhtreatment.org, and promoting the NH Statewide Addiction Crisis Line (1-844-711-HELP).

- Healthcare providers should also consider prescribing the opioid antagonist naloxone for patients who are at risk of opioid overdose and/or family and friends who may respond to an overdose event. Due to the emergence of IMF, which is significantly more potent than morphine, multiple doses of naloxone may be needed per overdose event.

- For questions, please contact the NH DHHS Bureau of Drug and Alcohol Services at 603-271-6110.

Background:
Please review our prior opioid abuse/misuse HAN for additional background information and recommendations: http://www.dhhs.nh.gov/dphs/cdcs/alerts/documents/opioid.pdf

In August 2016, New Hampshire released a report providing details on a comprehensive response to address the opioid epidemic. According to this published report, in 2015 there were 439 total drug deaths, of which 397 were caused by opiates/opioids, and 2,067 opioid-related emergency department visits—the highest-ever recorded in New Hampshire. http://www.dhhs.nh.gov/dcbcs/bdas/documents/state-response-opioid-crisis.pdf
A recent publication from the CDC reported that New Hampshire had the third highest rate of drug overdose deaths in the United States in 2014, with 26.2 deaths per 100,000 persons. This drug overdose epidemic is largely due to prescription opioid pain relievers, and illicitly manufactured opioids like heroin and fentanyl. 
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6450a3.htm?s_cid=mm6450a3_e

A more recent CDC report found that from 2013 to 2014, New Hampshire had the largest increase in rate of drug overdose deaths from *synthetic* opioids out of 27 states analyzed, which was found to be largely due to illicitly manufactured fentanyl.  
http://www.cdc.gov/mmwr/volumes/65/wr/mm6533a2.htm?s_cid=mm6533a2_e

Fentanyl is a synthetic opioid but is 50 to 100 times more potent than morphine. In New Hampshire, fentanyl accounted for 145 deaths in 2014 and 283 deaths in 2015. In 2016 alone, there have already been 139 reported fentanyl-related deaths.

**Opioid Antagonist (Naloxone):**

Naloxone is an opioid antagonist which can help prevent overdose deaths. Naloxone can be prescribed in various forms including a pre-loaded intramuscular auto-injector, and an intra-nasal form administered from a pre-filled syringe with use of an atomizer. Further information about prescribing and use of naloxone, including information on how to administer naloxone, can be found at the following link: 
http://drugfreenh.org/resources-for-prescribers-and-pharmacists.

Providers can also call their local emergency medical services (EMS) provider or the NH state Bureau of Emergency Medical Services (603-223-4200) for information and training on how to administer naloxone.

**Additional Resources:**

- For information and additional resources, visit [http://drugfreenh.org/anyoneanytime](http://drugfreenh.org/anyoneanytime) or [http://drugfreenh.org](http://drugfreenh.org).
- For statewide referrals and information, dial 2-1-1 or visit [http://nhtreatment.org](http://nhtreatment.org).
- If you or someone you know is experiencing an addiction-related crisis, call the NH Statewide Addiction Crisis Line at: 1-844-711-HELP (4357).
- For questions, please contact the NH DHHS Bureau of Drug and Alcohol Services at 603-271-6110.

For any questions regarding the contents of this message, please contact NH DHHS, Bureau of Drug and Alcohol Services at 603-271-6110.
To change your contact information in the NH Health Alert Network, contact Thom Flynn at 603-271-7499 or email thomas.flynn@dhhs.nh.gov

Status: Actual
Message Type: Alert
Severity: Moderate
Sensitivity: Not Sensitive
Message Identifier: NH-HAN 20160902
Delivery Time: 6 hours
Acknowledgement: No
Distribution Method: Email, Fax
Distributed to: Physicians, Physician Assistants, Practice Managers, Infection Control Practitioners, Infectious Disease Specialists, Community Health Centers, Hospital CEOs, Hospital Emergency Departments, Nurses, NHHA, Pharmacists, Laboratory Response Network, Manchester Health Department, Nashua Health Department, Public Health Network, DHHS Outbreak Team, DPHS Investigation Team, DPHS Management Team, Northeast State Epidemiologists
From: Benjamin P. Chan, MD, MPH – State Epidemiologist
Originating Agency: NH Department of Health and Human Services, Division of Public Health Services

Attachments: CDC HAN
Influx of Fentanyl-laced Counterfeit Pills and Toxic Fentanyl-related Compounds Further Increases Risk of Fentanyl-related Overdose and Fatalities

Summary
On October 26, 2015, CDC issued HAN 384 (http://emergency.cdc.gov/han/han00384.asp) that alerted (1) public health departments, health care professionals, first responders, and medical examiners and coroners of the increase in fentanyl-related unintentional overdose fatalities in multiple states primarily driven by illicitly manufactured fentanyl (IMF) (i.e., non-pharmaceutical fentanyl); (2) provided recommendations for improving detection of fentanyl-related overdose outbreaks; and (3) encouraged states to expand access to naloxone and training for administering naloxone to reduce opioid overdose deaths.

The purpose of this HAN update is to alert public health departments, health care professionals, first responders, and medical examiners and coroners to new developments that have placed more people at risk for fentanyl-involved overdoses from IMF and may increase the risk of non-fatal and fatal overdose. These developments include the following: (1) a sharp increase in the availability of counterfeit pills containing varying amounts of fentanyl and fentanyl-related compounds (e.g., labeled as Oxycodone, Xanax, and Norco), (2) the potential for counterfeit pills containing fentanyl and fentanyl-related compounds to be broadly distributed across the United States which could impact states not previously impacted by IMF and persons using diverted prescription pills (i.e., licit drugs diverted for illicit purposes and involves the diversion of drugs from legal and medically necessary uses towards uses that are illegal and typically not medically authorized or necessary)[1], (3) the widening array of toxic fentanyl-related compounds being mixed with heroin or sold as heroin, including extremely toxic analogs such as carfentanil, and (4) continued increases in the supply and distribution of IMF (http://www.cdc.gov/drugoverdose/data/fentanyl-le-reports.html).

Background
In July 2016, the Drug Enforcement Administration (DEA) issued a nationwide report indicating that hundreds of thousands of counterfeit pills have been entering the U.S. drug market since 2014, some containing deadly amounts of fentanyl and fentanyl analogs [2]. Traditionally, fentanyl and fentanyl analogs in the illicit market have been mixed into heroin or sold as heroin, often without the knowledge of the consumer, and have primarily impacted areas where white powder heroin is prevalent, including the Northeast, Midwest, and Southeast regions of the United States. The influx of counterfeit pills, which closely resemble oxycodone [2,3], Xanax [3], and Norco [4,5], has increased the chance of fentanyl-involved overdoses among persons misusing prescription opioids or benzodiazepines who seek diverted medications on the illicit market [2], in addition to persons who inject, sniff, or snort drugs. Persons who misuse prescription pills are geographically widespread; thus, the potential risk for fentanyl overdose has spread beyond those regions previously known to be impacted by IMF, and could intensify the impact in regions already affected by IMF.

The supply, distribution, and potency of illicitly manufactured fentanyl and fentanyl-related compounds in the U.S. drug market is evolving. Carfentanil, an extremely potent fentanyl analog, has been detected in at least one state [6,7] and is currently being investigated as a possibility in a few other locations [8]. Designed in 1974, carfentanil was previously used exclusively for veterinary use with large animals and is not approved for use in humans, as it has been shown to be 100 times more potent than fentanyl in animal studies. Other fentanyl-related compounds have been reported by the DEA National Forensic Laboratory Information System (NFLIS), which systematically collects drug identification results from drug
cases submitted for analysis to forensic laboratories (referred to as drug submissions). From 2014 to 2015, the number of drug submissions testing positive for acetyl fentanyl increased substantially, rising from 463 in 2014 to 1,870 in 2015 [9,10,11]. In 2016, NFLIS reported increasing drug submissions testing positive for furanyl fentanyl (244 drug submissions from January to July 2016) [9]. States should be vigilant about the possibility of highly toxic fentanyl-related compounds becoming available in the illicit drug market, as well as other highly toxic synthetic opioid derivatives, such as U47700 [2,12].

NFLIS has reported that the overall supply of illicitly manufactured fentanyl appears to have substantially increased from 2014 to 2015, with the number of drug submissions testing positive for illicitly manufactured fentanyl doubling during this period (from 5,343 to 13,882). The number of states reporting more than 100 fentanyl submissions also increased during this period from 11 to 15 [http://www.cdc.gov/drugoverdose/data/fentanyl-le-reports.html [9]]. Recently, according to NFLIS and National Seizure System (NSS) reports, the amount of fentanyl seized in the United States has nearly doubled; from October 2014 to September 2015, federal, state, and local law enforcement agencies seized a total of 167.7 kilograms of fentanyl, and through June, 2016, they seized 363.8 kilograms of fentanyl [9].

**Recommendations**

CDC suggests the following actions in response to the increased risk of fentanyl overdose from IMF due to the influx of fentanyl-laced counterfeit pills, the widening array of highly toxic fentanyl-related compounds, and the continued expansion and geographic spread of the IMF supply:

1. **Improve detection of fentanyl outbreaks to facilitate effective response.**
   - **Public health departments:**
     - Explore methods for rapidly identifying drug overdose outbreaks through use of existing surveillance systems such as medical examiner data, emergency medical services data, near-real time emergency department data, and poison center data [13].
     - Consider engaging local poison centers to assist with treatment of patients (toll free phone number is 800-222-1222).
     - Raise awareness among key partners and stakeholders to the widening profile of those at risk for fentanyl overdose, which increasingly includes persons misusing diverted prescribed oral pain and sedative medications [2].
     - Track decedent demographics and known risk factors (e.g., drug type, recent release from an institution, previous overdose) to inform prevention efforts [14].
     - Develop general public health messaging about fentanyl, including fentanyl-laced counterfeit pills and fentanyl-related compounds that emphasizes the toxicity and potential lethality of the drug versus its high “potency.” The messaging should include warnings of the highly variable content of fentanyl present in illicit products, which further elevates risk of overdose [12,15].
   - **Medical examiners and coroners:**
     - Screen for fentanyl in suspected opioid overdose cases in regions reporting increases in fentanyl seizures, fentanyl-related overdose fatalities, or unusually high spikes in heroin or unspecified drug overdose fatalities.
     - Screen specimens using an ELISA test that can detect fentanyl. Confirmatory gas chromatography mass spectrometry (GC-MS) of positive screens for fentanyl may either confirm the presence of fentanyl or suggest the presence of a fentanyl analog [16]. When fentanyl screening is negative, or confirmatory testing is inconclusive, yet opioid or fentanyl overdose is highly suspected, consider specialized testing for fentanyl analogs, particularly if an increase in overdoses is occurring.
Law Enforcement: Law enforcement plays an important role in identifying and responding to increases in the distribution and use of illicitly manufactured fentanyl.

- Prioritize and expedite laboratory testing of drug samples taken from drug overdose scenes, if possible.
- Share data on fentanyl and fentanyl analog drug seizures with local health departments, medical examiners, and coroners.
- Carry a supply of naloxone so that it can be administered immediately to mitigate the effects of the overdose. (See Recommendation 2 below.)

Laboratories: The following government forensic laboratories supporting law enforcement can provide assistance with reference materials or reference data on a case-by-case basis.

- DEA Reference Materials Program- DEALabRefMaterials@usdoj.gov
- DEA Emerging Trends Program- DEA.Emerging.Trends@usdoj.gov
- Scientific Working Group for the Analysis of Seized Drugs - SWGDRUG.ORG

(2) Expand Use of Naloxone and Treatment

Health Care Providers:

- Multiple dosages of naloxone may need to be administered per overdose event, because of fentanyl’s increased potency relative to other opioids. Orally-ingested counterfeit pills laced with fentanyl may require prolonged dosing of naloxone in the ED/hospital setting due to a delayed toxicity that has been reported in some cases [15].
- Facilitate access to Medication-Assisted Treatment (MAT). MAT is a comprehensive approach to addressing the needs of persons with opioid use disorders that combines the use of medication with counseling and behavioral therapies. Providers should discuss treatment options with persons who have an opioid use disorder, and persons who have experienced an opioid-related overdose once they are stabilized.

Harm reduction organizations:

- Expand naloxone access to persons at risk for opioid-related overdose and to their friends and family members [17].
- Train those using drugs how to effectively administer naloxone and emphasize the importance of calling 911 immediately after recognition of an overdose, because naloxone that is available in the field may be insufficient to reverse the overdose.

For more information

- CDC Health Advisory: Recommendations for Laboratory Testing for Acetyl Fentanyl and Patient Evaluation and Treatment for Overdose with Synthetic Opioid at http://emergency.cdc.gov/han/han00350.asp
- MMWR: Fentanyl Law Enforcement Submissions and Increases in Synthetic Opioid–Involved Overdose Deaths — 27 States, 2013–2014 http://www.cdc.gov/mmwr/volumes/65/wr/mm6533a2.htm?s_cid=mm6533a2_w
- MMWR: Increase in Fentanyl-Related Overdose Deaths — Ohio and Florida, 2010-2015 http://www.cdc.gov/mmwr/volumes/65/wr/mm6533a3.htm?s_cid=mm6533a3_w
References
[8] Unpublished data, based on communications with DEA; August, 2016

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.
Categories of Health Alert Network messages:

**Health Alert**  Requires immediate action or attention; highest level of importance

**Health Advisory**  May not require immediate action; provides important information for a specific incident or situation

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**HAN Info Service**  Does not require immediate action; provides general public health information

##This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, epidemiologists, HAN coordinators, and clinician organizations##