To: Ohio EMS providers, EMS agencies, and EMS medical directors

From: Carol A. Cunningham, MD, FAAEM, FAEMS
        State Medical Director, Ohio Department of Public Safety, Division of EMS

Date: May 7, 2019

RE: Xylazine – A Recently Confirmed Adulterant for Illicitly Manufactured Opioids

In addition to high-potency opioids, another substance, specifically xylazine, is now being used as an adulterant compound in illegally produced opioids. Preliminary analysis of death certificate data has identified three 2019 overdose deaths involving both fentanyl and xylazine. However, many coroners may not include xylazine in their routine toxicology testing which would leave it largely undetected in this data.

Xylazine, a non-opioid alpha-adrenergic agonist, is legally administered to animals by veterinarians as a sedative and an analgesic. Unlike morphine, fentanyl, or carfentanil, xylazine is not a scheduled medication. In other words, a Drug Enforcement Administration (DEA) license is not required to obtain xylazine, and this factor makes
the drug more readily accessible. In humans, xylazine can cause respiratory depression, bradycardia, various forms of heart block, and death. Unfortunately, there is very little research on the effects of xylazine combined with opioids in human beings.

Unlike naloxone for opioids, there is no antidote or reversal agent for xylazine, and the treatment is supportive. **As simple as it sounds, maintenance of airway, breathing, and circulation should be the primary focus of patient care delivery.** The early administration of atropine may mitigate the onset or severity of bradycardia. If the patient does not have a pulse, cardiopulmonary resuscitation should be initiated without delay.

**Personal protective equipment should be donned for each and every patient encounter.** According to the manufacturer of xylazine, the routine use of protective gloves and eye/face protection is adequate, and the environment should be well-ventilated. Decontamination can be accomplished by the immediate removal of contaminated clothing followed by washing the skin with soap and water.

The Ohio Department of Public Safety, Division of EMS will provide updated information on xylazine when it becomes available. Thank you for your dedicated service to Ohio and stay safe!