

Louisiana Pharmacists Associations Educates Patients about Opioid Overdose and Naloxone

In 2016, opioids resulted in the death of more than 42,000 people in the United States. Forty percent of those deaths involved a prescription opioid¹, and the remainder resulted from drugs like heroin and other illegal drugs laced with illicitly manufactured fentanyl or fentanyl analogs. Opioids, such as oxycodone, hydrocodone, morphine, and methadone, are often prescribed by doctors to treat moderate to severe pain. Fentanyl, a more potent opioid, can be prescribed for more severe pain, typically seen in advanced cancer; however, fentanyl is also being illegally made and distributed² throughout the country, much like the illegal opioid heroin. In a time where opioid prescribing and illegal drug use is so prevalent, what precautions can we take to prevent our loved ones from becoming a part of this statistic? Administration of a medication called naloxone to a person in a suspected opioid overdose can temporarily reverse the effects of opioids to prevent brain damage and death. Naloxone can be purchased without a prescription from a pharmacy by any person who is prescribed an opioid, and by anyone who has a concern for someone that may be prescribed an opioid, or a concern for someone that may misuse or abuse a prescription or illegal opioid.

Naloxone is currently available in three dosage forms: liquid for nasal administration, solution for injection, and an auto-injector solution. The two forms that will most likely be dispensed from a pharmacy are the nasal spray and auto-injector forms due to ease of administration. On January 23, 2017 a statewide standing order was authorized by the Louisiana Department of Health stating that any Louisiana Board of Pharmacy licensed pharmacy can distribute and dispense naloxone to any Louisiana resident.³ This means that any current resident of Louisiana can request naloxone to be dispensed from their pharmacy. A requirement of dispensing naloxone is that the pharmacy must also train the receiving party on how to recognize an opioid overdose, how to store the medication, and how to perform emergency follow-up procedures. One problem with receiving naloxone is that most public pharmacies do not carry it due to costs and the needs of the community they serve. To bypass this issue, the person requesting naloxone should have a conversation with their pharmacist about getting naloxone before the need of use. Cost can be a barrier to patients, so they should be informed to call their insurance company to clarify what dosage forms of naloxone will be covered by their plan.

During an overdose, opioids overwhelm specific receptors in the brain, interrupting the body's normal signals to breathe. Quickly identifying the signs of an opioid overdose and administering a form of naloxone can temporarily reverse the effects of opioids, preventing brain damage or death. The following are signs to be aware of in order to detect an opioid overdose.

- Will not wake up or respond to your voice or touch
- Body is limp
- Pupils are very small
- Breathing is slow, irregular, or has stopped
- Vomiting or making gurgling noises
- Skin is pale or clammy to touch
- Fingernails and lips appear blue or purple

- Slow heartbeat and/or low blood pressure⁴

Not all of these signs will be present in each person. If an opioid overdose is suspected, administer naloxone and get emergency medical assistance immediately.

The administration of naloxone varies between the dosage forms, so it is important that the person that will administer the naloxone is properly educated on the dosage form they receive from the pharmacy. Narcan is the brand name for the 4-milligram nasal spray and Evzio is the brand name for the 0.4 milligram per 2 milliliter naloxone auto-injector. One of the most important steps of using naloxone products is that emergency response must be contacted after the first dose given. If the person administering naloxone is not alone, they can instruct someone around them to call 911 while preparing to give naloxone. After administering naloxone, the person receiving it should be under supervision until emergency response arrives to make sure they do not go back into respiratory failure. The directions for administering the two different naloxone formulations are below.

Narcan Administration Instructions:⁴

- First, the device must be removed from the packaging by peeling off the front.
- The device must be held with the thumb on the plunger on the bottom and the nozzle between the pointer and middle fingers on top to hold it steady.
- Next, the nozzle needs to be placed in either nostril until the fingers touch the bottom of the person's nose.
- Finally, press the plunger firmly with the thumb to give the dose into the person's nose.
- If the person receiving the naloxone does not return to normal breathing or is still having difficulty breathing two to three minutes after giving the first dose, a second dose can be given using a new device, but must be given in the nostril that was not used previously.
- Keep administering doses in alternating nostrils every two to three minutes until emergency response arrives.

Evzio Administration Instructions:⁵

- First, remove the device from its case and make sure you are ready to use the device. The device will begin to talk to you and give you the instructions below.
- Remove the red safety guard when you are ready to give and do not touch the black base to avoid accidental injection.
- Place the black end of the device on the person's outer thigh (can be through clothing) and press down for five seconds. If the patient is less than one year old, pinch the middle of the outer thigh and keep it pinched during the injection.
- If the person does not return to normal breathing or is still having difficulty breathing a second dose can be given with a new device in a different location on the thigh every two to three minutes until emergency response arrives.

Opioid use, legal or not, should be approached with care by patients and medical professionals alike. Since the use of these medications is widespread, education regarding recognition of overdose, and proper usage of naloxone is crucial in preventing unnecessary deaths from opioid overdose. Naloxone is a useful tool in trained and ready hands but does not replace the necessity of emergency response in opioid overdose situations. It is important to remember that 911 must be called as soon as possible after administering the first dose of naloxone. The key to saving lives with naloxone is providing the best care possible in the shortest amount of time. If you or someone close to you would like to have naloxone close at hand for emergency purposes, contact your primary care physician and pharmacy to open a line of dialogue about the need for it. Every step needed for the obtaining and giving naloxone is completely reliant on communication.

References:

1. *Opioid Basics | Drug Overdose | CDC Injury Center*. Centers for Disease Control and Prevention website. <https://www.cdc.gov/drugoverdose/opioids/index.html>. Updated August 24, 2017. Accessed February 17, 2018.
2. *Opioid Overdose | Drug Overdose | CDC Injury Center*. Centers for Disease Control and Prevention website. <https://www.cdc.gov/drugoverdose/index.html>. Updated October 23, 2017. Accessed February 17, 2018.
3. *EVZIO®*. <https://www.evzio.com/patient/how-to-use-evzio/>. 2018. Accessed February 17, 2018.
4. Gee, R. *Standing Order for the Distribution or Dispensing of Naloxone or Other Opioid Antagonists*. <http://ldh.la.gov/assets/docs/BehavioralHealth/Opioids/Naloxonestandingorder.pdf>. January 23, 2017. Accessed February 17, 2018.
5. *NARCAN® Nasal Spray 4mg*. <https://www.narcan.com/>. 2017. Accessed February 17, 2018.

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