



MONO COUNTY HEALTH DEPARTMENT

Public Health

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NALOXONE FREQUENTLY ASKED QUESTIONS

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If someone is unconscious and unarousable, how do you know it's an opioid overdose or some other problem?

It can be difficult to tell. Typically, people experiencing opioid overdose will have tiny ("pinpoint") pupils and they won't be gasping to breathe-they have reduced breathing. In fact, because it can be hard to tell, in the emergency medicine field it is common practice to simply give naloxone to people who are unconscious if you don't know the cause or diagnosis. If they respond you know its opioid overdose is the diagnosis (or at least part of the picture). Remember to call 911 or have someone else call early on!

If you give naloxone (also known as Narcan) to someone and it's not an opioid overdose, can you hurt them?

No. Naloxone (Narcan) will have no meaningful effects.

What are the side effects of naloxone?

People who are rescued from overdose death with naloxone (Narcan) can be quite ill and sometimes require hospitalization, but it is not a direct effect of the drug, which is harmless in healthy volunteers. That's another reason to call 911 early on when you're trying to rescue someone with naloxone (aka Narcan).

If people who are regular opioid users receive enough naloxone (aka Narcan) not only to start breathing and wake up but to completely reverse the effects of the opioids in their body they will go into acute opioid withdrawal, with anxiety, sweating, stomach cramps, nausea, diarrhea. They may be confused and agitated.

People taking opioids for pain will experience increased pain when they regain consciousness if the opioid effects are completely blocked by naloxone.

How do opioids kill?

Opioids in high doses kill by inactivating the part of the brain that keeps us breathing. The respiratory control center in the brainstem (pons) has opioid receptors and when opioid molecules attach to the receptors the natural drive to breathe is reduced and can be eliminated. Naloxone works because it displaces the opioid drug from the receptors, reversing the respiratory depressant effects.

How long does it take for someone to die after taking a deadly dose of opioid?

Tough question, it varies. It may depend on how the opioid is used (intravenous injection always fastest), what type of opioid is used, whether other drugs or alcohol are also present in the body, and the health condition of the user (some heart and lung conditions for example seem to increase overdose risk).

In some situations, death may occur in minutes but often it probably takes hours so there is often time to intervene.

How long does it take naloxone (aka Narcan) to work?

Intranasal naloxone takes a few minutes to work. You can watch videos on YouTube of law enforcement officers around the country rescuing people with naloxone. According to the Canadian Agency for Drugs and

Technology in Health, naloxone can be detected in the blood 2 ½ minutes after it is sprayed in the nose (March 16, 2017). It has been reported that 2/3 to 3/4 of overdose victims receiving intranasal naloxone (aka Narcan) were breathing adequately and conscious within 8-10 minutes (Kelly, AM, et al 2005 and Kerr, D et al 2009)

Naloxone given intravenously works fastest (this is how it is usually administered in ERs and by paramedics. Intranasal naloxone appears to work as fast as when it is injected into a muscle (IM).

What happens if the victim is overdosing on other drugs, not opioids?

Overdoses from other “downer” type drugs or alcohol can look much like opioid overdose but naloxone will have no effect if opioids are not part of the picture. In many overdoses there are more than one drug involved. Naloxone (aka Narcan) will only reverse the effect of the opioids in the body, but that may be enough to save a life.

How long does the effect of naloxone (aka Narcan) last?

Naloxone has a short life in the body and if the victim has taken an opioid with a longer life in the body it is possible for the effects of the antidote to wear off after a while such that the person becomes unconscious again. Methadone, for example, is known for its long life in the body, while the effects of heroin and fentanyl are much shorter and relapse to coma is less likely. In summary, relapse into coma after naloxone (aka Narcan) rescue is not common but is a possibility and is another reason for rescuers to call 911 so that the victim is professionally cared for.

What is the maximum dose of naloxone (Narcan)?

There is not really a maximum accepted dose of this medication. Healthcare workers will give a lot if it is necessary. The recommendation for community use is to give one or two doses while waiting for an ambulance.

What happens if my Narcan has expired (there is an expiration date on each box and each dose blister pack)?

*Outside of an emergency we would never recommend use of an expired medication. However, if you encounter what you think is an opioid overdose and the naloxone (aka Narcan) that is available is expired, **give it** after calling 911. This medication is often effective long after its expiration date (Journal Watch, Jan 24, 2019, reviewing Pruyn S., et al in Prehospital Emergency Care, Dec 30,2018)*

Is it safe to give naloxone (aka Narcan) to a pregnant woman (is it safe for the baby)?

If a pregnant woman has overdosed on opioids give naloxone (aka Narcan). The safety of the medication for the unborn baby has not been studied but if you don't save the woman's life, they will both die.



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Can naloxone (Narcan) be used in children suffering an opioid overdose?

Yes. Accidental ingestion of opioids by young children is a genuine concern with real risk of death.

Narcan 4 mg nasal spray is FDA-approved for infants, children and adolescents who are experiencing opioid overdose. The dosing (one spray in a nostril) and frequency (repeat at 2-3-minute intervals if needed while waiting for ambulance) is the same as in adults.

Can naloxone (aka Narcan) be abused?

Abuse seems unlikely. Using naloxone provides no high and it is not habit-forming. It has not been known to be misused.

What is California's 911 Good Samaritan law?

Health and Safety Code 11376.5 (2013) provides that when someone calls 911 for a drug overdose, they will be protected from arrest for drug possession or intoxication. It is not a blanket protection from arrest for other more serious offenses.

What is the risk of being sued for distributing naloxone, which is a medication, as someone who is not a healthcare professional?

*The risks are low, and California has a law that protects distribution and use that is part of an authorized local opioid reversal distribution program, such as that operated by the Mono County Health Department. As of August 2019, no one in the United States has **ever** been sued for naloxone distribution and this is happening in hundreds or thousands of communities and programs. California Civil Code 1714.22 (AB 635, 2013-14 Opioid Overdose Treatment: Liability) states that if naloxone is administered (given to a possible overdose victim) or distributed as part of an authorized program with education, and given with "reasonable care" and "in good faith", with no compensation involved, persons will be free of professional review, civil or criminal liability.*

What is the legal authorization for Mono County's naloxone distribution efforts?

Our distribution is authorized under CA Civil Code 1714.22 and my order as local health officer of November 12, 2018 (provide link).

Non-county agencies and departments can partner with Mono County or choose to distribute under the authority of the California State Health Officer's standing order. Contact me (tboo@mono.ca.gov) for more information on how that could work.

I'm confused about whether I should do rescue breathing or administer CPR after I've called 911 and administered naloxone, while I'm waiting for the ambulance...What's the deal?

This is indeed a challenging issue. The law authorizing local naloxone training and distribution programs (again Civil Code 1714.22) states that training should include rescue breathing. And indeed, clinically this makes sense, because in the early phases of a life-threatening overdose it is a solely a breathing problem. However, the American Heart Association currently teaches in their Basic Life Support classes that hands only

*CPR is appropriate for anyone who is unresponsive does not appear to be breathing. They have consciously removed rescue breathing from their current curricula. **I think that Mono County residents who are not healthcare professionals should do either rescue breathing or CPR, whichever they are more comfortable with, while waiting for professional help to arrive.***

(Personally, as a physician, I would decide about which to administer based on whether the victim has a good pulse. If I suspect opioid overdose and the victim is not breathing but has a good pulse, ventilation, providing oxygen with rescue breathing or bag/mask, seems most important. On the other hand, if that person does not clearly have a good pulse, I would start CPR.)