This is a stand-alone document intended to explore the primary issues surrounding the use of naloxone, commonly known by the brand name Narcan, by patrol officers in cases of opioid overdose. This document examines the predominant issue areas with the intention of providing law enforcement executives with essential information to make informed decisions—whether that decision is to implement a naloxone program, modify an existing program, or reject or defer decision-making on this matter.

I. INTRODUCTION

With 47,055 fatalities, drug overdose was the leading cause of accidental death in the United States in 2014, more than motor vehicle accidents or firearm deaths. Heroin and prescription opioids caused more than 28,000 of these fatalities, which is more than any other year on record. Since 2000, the rate of drug overdose deaths increased 137 percent, including a 200 percent increase in the rate of overdose deaths involving opioids.¹ The World Health Organization estimates that worldwide 15 million people are opioid dependent, and 69,000 people die of opioid overdoses each year.²

The magnitude of the opioid epidemic has resulted in new partnerships, programs, legislation, and funding opportunities at the state, local, tribal, and national levels. These partnerships include new drug task forces, drug treatment programs, and increased access to naloxone, a medication that counteracts the effects of an opioid overdose.

Reviving an overdose victim with naloxone depends on swift delivery of the medication at the onset of the overdose. Given law enforcement’s first responder role, many jurisdictions are training and equipping officers to administer naloxone to overdose victims. This paper explores the factors law enforcement leaders should consider when deciding whether or not to implement a naloxone program.

A. Definitions

Opioids - A class of drugs that may be derived naturally from the poppy plant or from synthetically produced chemicals. The most common opioids are the street drug heroin and prescription pain medications, including morphine, codeine, methadone, oxycodone (Percocet, OxyContin), hydrocodone (Vicodin), hydromorphone, buprenorphine, and fentanyl. Opioids bind to specific receptors in the brain, spinal cord, and gastrointestinal tract that can affect a person’s mood, blood pressure, breathing, and pain sensations.

Opioid Overdose - A serious medical condition that may lead to decreased or loss of consciousness, respiratory depression, coma, or death resulting from the consumption or use of an opioid, or another substance with which an opioid was combined.

Naloxone – Commonly known by the brand name Narcan, naloxone is a drug that counteracts the effects of opioid overdose. The drug restores an overdose victim’s ability to breath, frequently allowing him or her to survive a potentially fatal overdose.

B. Background

The Food and Drug Administration (FDA) approved the drug naloxone to treat opioid overdoses in 1971, and since then it has been widely used by paramedics and hospital staff. The World Health Organization includes naloxone on its List of Essential Medicines, a list of the minimum medicine needs for a basic health care system. The Centers for Disease Control and Prevention reported that more than 26,000 documented uses of naloxone between 1996 and 2014. The use of naloxone continues to expand, due to increased access to the medication by first responders and community members.

Law enforcement has long been trained in basic emergency medical care, including CPR, automated external defibrillator (AED), and tourniquet skills. For many agencies, naloxone is another potentially lifesaving tool added to the patrol officer’s toolbox. Law enforcement are often the first responders to overdose calls, before even EMS arrives, and the effectiveness of naloxone depends on quick administration at the onset of an opioid overdose. The longer a person is not breathing, the greater the likelihood of brain damage or death. The North Carolina Harm Reduction Coalition found that, as of December 2016, more than 1,200 law enforcement agencies in 38 states were equipped with naloxone.

II. ABOUT NALOXONE

A. How Naloxone Works

Opioid drugs bind to receptors in the brain in a way that reduces pain and produces euphoric feelings. These receptors also control respiration. When the level of opioids in the brain gets too high, breathing slows down, eventually causing respiratory failure and lack of oxygen to the brain and central nervous system. Signs of opioid overdose include non-responsiveness; inability to speak; slow or no breathing; blue or grayish lips and fingernails; and pinpoint pupils. Opioid overdose deaths typically occur within one to three hours after the intake of drugs, often allowing time for medical intervention.

Naloxone works by displacing the opioids in the brain and blocking them from binding to the brain’s receptors, so that the body can return to normal breathing. Because the drug reverses the effects of opioid overdose, naloxone treatments are commonly referred to as reversals.

After receiving a dose of naloxone, the victim will typically show signs of improvement within minutes. His or her respiratory rate and level of consciousness will increase. If a person does not begin breathing normally within three to five minutes, a second dose of naloxone may be needed. Naloxone packages typically include two doses for this reason.

In addition to naloxone, an overdose victim may need CPR and rescue breathing to increase his or her oxygen level and restart the normal breathing process. If the overdose victim is in cardiac arrest, naloxone can still be administered. However, it might not be effective, as the medicine might not be able to travel efficiently through the body if the heart has stopped beating.

The effects of naloxone are temporary, typically lasting 20-90 minutes. Opioid drugs have a longer half-life than naloxone, meaning that the heroin or prescription opioid drug may still be active in the overdose victim’s system after the naloxone wears off. If overdose symptoms reappear before EMS arrives, an additional dose should be administered.

Naloxone has no potential for abuse. It is not addictive, and it cannot be used to get high. A person cannot develop an immunity to naloxone. It will be effective if a person has experienced multiple naloxone overdose reversals. If administered to an individual who does not have opioids in his or her system, naloxone will have no effect and will cause no harm or side effects.

B. Forms of Naloxone

Naloxone is available in injectable and nasal spray formats. The most common injectable form of naloxone delivers the medicine into the muscle through a syringe or through an automatic injection device, similar to an epinephrine auto-injector. There is also an intravenous version of naloxone that is used predominantly by paramedics or hospital staff.

The nasal spray form of naloxone is approved by the FDA and uses an automatic device called an atomizer to release a mist of naloxone into the nostril. The medication is absorbed through the mucous membranes in the nostrils, rather than being inhaled, as overdose victims cannot breathe effectively. The atomizer is preloaded with the recommended dosage of naloxone, and the responder can assemble it for use in a few short steps. Most naloxone kits come with two full doses of medication, as it may take more than one to revive an overdose victim.

Both versions of naloxone are equally effective. The injectable form of naloxone is generally less expensive. However, nearly all law enforcement agencies that use naloxone use the nasal spray format. It is simpler to use, faster to prepare, and reduces the potential for needle stick accidents that can spread infectious diseases.


C. Side Effects of Naloxone

An individual treated with naloxone typically resumes consciousness and breathing quickly after administration of the medication. The victim frequently wakes up confused and lethargic and will often immediately enter into opioid withdrawal symptoms, which can be severe. Symptoms may include irritability, sweating, nausea, vomiting, and diarrhea. The risk and degree of withdrawal symptoms increases with larger doses of naloxone, as well as the level of the individual’s drug dependency.

Combative ness is sometimes noted as a side effect of naloxone, whether due to withdrawal discomfort or anger over losing the desired drug high. Most reports say that combative ness is quite rare, but that it is possible, particularly if the individual is under the influence of other non-opioid drugs not affected by naloxone. Studies suggest that the use of nasal naloxone typically used by law enforcement allows the medication to be absorbed less rapidly than the injectable version, which can lessen the chance of withdrawal symptoms and agitation upon awakening. 5 There are no known reported cases of injuries to law enforcement officers or the victim in the context of law enforcement overdose response programs.

Emergency responders, who have been using naloxone for many years, sometimes caution about the unnecessary use of the medication. It is not uncommon for a drug user to have decreased alertness but still be able to maintain regular breathing. Using naloxone in these cases will not harm the person, but it may bring on severe withdrawal symptoms unnecessarily.

D. Limitations of Naloxone

Naloxone works only on opioid drugs, the most common being heroin and prescription pain medications that contain morphine, codeine, oxycodone, and fentanyl. The drug will not work if a person has overdosed on other drugs, such as cocaine, methamphetamine, or alcohol, but naloxone may be effective if the person has taken other drugs in addition to opioids.

While there are typically very few complications from administering the medication nasally, the New York State Health Department notes the following potential issues to be aware of with nasal naloxone:

- Drugs like cocaine, which are vasoconstrictors, can prevent absorption.
- Bloody nose, nasal congestion, and mucous discharge can decrease effectiveness of nasal medication.
- Lack of nasal mucosa as a result of surgery, injury, or cocaine abuse may also decrease absorption through nose.
- If given more medication than 1 mL or more per nostril, it is likely to drain out of the nostril. 6

When an opioid dependent drug user loses his or her high due to naloxone, he or she may seek additional opioids to regain the high. This can be dangerous if done immediately after administration of naloxone. The previously taken opioids may still be active in the person’s system, even though the naloxone diminished their effects. This puts the person at increased risk to overdose again.

E. Follow-Up Medical Needs

After receiving naloxone, an individual should be transported to a hospital for further medical care. This is particularly important given the temporary nature of naloxone. Overdose patients may also have issues with drug interactions if they have used other drugs or alcohol, and they may have other medical conditions related to their drug use that need attention.

Officers should ensure EMS is en route before administering naloxone. Law enforcement agency naloxone policies typically require that officers wait with the victim and continue care until EMS technicians arrive to provide hospital transport and further medical treatment. 7 Used naloxone kits are generally considered bio-hazardous material, which should be transferred to EMS for proper disposal.

It is not uncommon for patients to refuse further treatment and transport to the hospital. Agency policies and state or local legislation vary on the protocol if a patient refuses medical transport. In some jurisdictions, policies require or give the option for involuntary medical transport, citing medical threat to self. In other jurisdictions, EMS has a waiver form and standard process to handle refusal for medical treatment or transport. While medical transport is recommended, several research studies done on the effects of a patient’s refusal for medical transport following

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7 For a collection of sample law enforcement agency naloxone policies and procedures, see the BJA Law Enforcement Naloxone Toolkit https://www.bjatrails.org/tools/naloxone/Law-Enforcement-Training.
naloxone administration found no deaths associated with refusal for transport.⁸

III. LAW ENFORCEMENT USE OF NAŁOXONE

A. Training

There are currently no specific requirements mandating the number of hours or frequency of training on the administration of naloxone. Most law enforcement agencies partner with a state or local health department, healthcare facility, community organization, or EMS unit to administer their naloxone programs, and these agencies will often provide training to law enforcement at no cost. Training programs cover how naloxone works, how to identify an opioid overdose, and safety precautions, as well as hands-on training on the use of the specific naloxone device with which officers will be equipped. Information about the agency’s naloxone policy and protocol, as well as state and local naloxone liability and access laws should be included. Trainings frequently include information about local or state substance abuse treatment resources. After the initial training, many law enforcement agencies incorporate refresher trainings into their annual training programs. If in-person training is not available, online learning resources and train-the-trainer educational programs exist that law enforcement can use.⁹

B. Officer Safety Considerations

Responding to and investigating illegal drug issues has many known risks—from chemical exposure and explosions in methamphetamine labs to dealing with violent organized crime outlets. Response to opioid issues, overdoses in particular, brings with it specific officer safety considerations.

As when dealing with all injectable drugs, the potential for needle pricks should be mitigated to avoid exposure to blood-borne infectious diseases. The nasal form of naloxone used by most first responders helps officers avoid potential needle pricks. However, needles may be present at overdose scenes, so officers should follow standard cautionary safety measures when handling and disposing of needles.

Another officer safety concern is the possibility of contact with extremely high-potency synthetic opioids, including fentanyl and the even more potent carfentanil, at some overdose scenes.

In 2014, IACP membership voted to support a resolution put forward by the Narcotics and Dangerous Drugs committee to raise awareness about the dangers of fentanyl. It states that the IACP is “concerned about the dangers law enforcement personnel are subject to each time they come into contact with fentanyl, and encourages greater awareness regarding these dangers and the best practices for safety and protection.”¹⁰

Fentanyl is 50 to 100 times more powerful than heroin. It can be snorted, smoked, injected, taken in pill form, or applied as a patch. The drug is available with a prescription, but it is increasingly available on the street, with some dealers mixing fentanyl with heroin to increase its potency.

Inhalation or skin contact with fentanyl can cause serious injury and even death. If fentanyl comes in contact with skin, it can be subsequently transferred by inadvertent touching of the mouth, nose, or other mucous membranes. Officers should exercise extreme caution when dealing with substances that may contain fentanyl, using protective clothing and equipment to avoid accidental exposure.

In June 2016, the Drug Enforcement Administration (DEA) issued a roll call video about the dangers of fentanyl. The DEA warns that officers should not try to street test a substance believed to contain fentanyl and should instead transport it directly to a lab where it can be tested safely.¹¹ The DEA and other law enforcement agencies now train officers on how to administer naloxone to themselves or their partners in case of accidental fentanyl exposure.

C. Liability and Legislation

One of the most common concerns about using naloxone is the issue of liability. Nearly all 50 states have passed some form of Good Samaritan laws to protect those

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administering, prescribing, and/or distributing naloxone.\textsuperscript{12} These laws aim to increase access to naloxone and to address liability concerns that may prevent the use of the medication.

Response to an opioid overdose is much like any other good faith effort to provide assistance in an emergency. In nearly all states, officers or their employer cannot be held responsible for the health outcomes of an overdose patient. Many states have now introduced legislation that grants civil and criminal immunity to people who administer naloxone to an overdose victim, provided the actions are taken with reasonable care. Some of these laws are specific to medical personnel, EMS, and law enforcement, but a growing number of states extend this liability to members of the public.

Another area of change related to naloxone access is granting criminal and/or civil immunity to individuals who report an overdose. Opioid overdoses are frequently witnessed by acquaintances of the drug user, but fear of personal repercussions that may arise from involving law enforcement cause many overdoses to go unreported, resulting in numerous preventable deaths. Exact protections vary by state, but many grant immunity for possession, paraphernalia, and other low-level drug offenses and violations of supervision conditions if an individual calls 9-1-1 to report that he or she is experiencing or observing what can reasonably be considered an overdose that requires medical intervention. For the immunity to apply, the reporter is generally required to remain on scene and cooperate with emergency personnel. These laws generally protect the overdose victim and any bystanders. In some states, immunity does not extend to outstanding warrants, probation or parole violations, drug manufacture or delivery, or crimes other than drug possession. It is important for law enforcement officers to understand the specific Good Samaritan protections that apply in their state.

D. Accessing Naloxone

Naloxone is not a controlled substance, but it does require a prescription. Generally, a standing order can be written to authorize an entire agency to administer the medication. Larger agencies may have their medical administrator or other licensed individual oversee the naloxone program, but most law enforcement agencies partner with a hospital, EMS program, or local or state department under a memorandum of agreement (MOA).\textsuperscript{13} If an agency already has an MOA with a hospital to carry AEDs or epinephrine auto-injectors, that MOA can often be updated to include naloxone.

Along with liability legislation, many states passed laws that allow for third-party prescriptions and standing orders for naloxone. As of July 2016, all but three states (KS, MT, WY), passed prescription legislation to increase access to naloxone by first responders and the public. In many states, pharmacies can operate under a standing order with a licensed prescriber to sell naloxone directly to individuals without an individual prescription. Large pharmacy chains along with numerous smaller chains and individual pharmacies, now offer naloxone without a prescription in states that allow standing orders. This legislation regarding prescriptions also allows state and local governments and nonprofit organizations to distribute naloxone to drug users and their families and friends. Some states accept third-party prescriptions that allow a naloxone prescription to be issued by a doctor to a family member or caretaker of an opioid drug user.

The cost of naloxone can be a barrier for some law enforcement agencies. As more jurisdictions begin to expand naloxone programs to include law enforcement and other first responders, some agencies report drug shortages and significant price increases from the pharmaceutical manufacturers. Recent reports note that, while new pharmaceutical companies are producing naloxone, the cost of the medication has increased as much as seventeen times.\textsuperscript{14}

In January 2016, the National Association of Counties, the National Governors Association, the National League of Cities, and the United States Conference of Mayors reached an agreement with Adapt Pharma to sell Narcan, the company’s nasal spray form of naloxone, to public agencies at a 40 percent discount, coming to $37.50 per dose.\textsuperscript{15}

Some law enforcement agencies are using asset forfeiture funds to cover naloxone. Some states have offered grant funding through the state criminal justice agency, while others have equipped law enforcement with naloxone with funding from the state Department of Health. State grant programs often have associated reporting requirements for each dose of naloxone administered.


\textsuperscript{13} Sample Memorandums of Agreement are available in the BJA Law Enforcement Naloxone Toolkit at https://www.bjatraining.org/tools/naloxone/Acquiring-Naloxone.


in order to capture data about the demographics of those receiving the medication and the outcomes of the drug administration.

E. Storing Naloxone

A common question among law enforcement agencies considering using naloxone is the issue of storing and managing the supply of naloxone. Agencies should store naloxone where it will not be exposed to extreme temperatures, keeping the medication between 59 and 86 degrees Fahrenheit. Most agencies are able to store naloxone in the cab of their vehicles while on patrol without issue. Depending on availability, agencies may issue naloxone kits to individual officers or distribute them at roll call. Naloxone is often stored in AED units, as both may be needed to revive a person who is not breathing.

The shelf life of naloxone is between 18 months to two years. While expired naloxone will not harm someone, the drug loses effectiveness over time. Agencies should examine naloxone supplies regularly, and expired supplies should be disposed.

F. Naloxone and Drug Abuse Issues

Though naloxone can be used in combination with buprenorphine as a part of a medication-assisted treatment program that, in addition to behavioral therapy, aims to treat opioid dependency, emergency use of naloxone to revive an overdose victim is not considered medication-assisted treatment. Given its temporary nature, naloxone does not suppress physiological drug dependency, and overdose victims may return to using opioids as soon as they are released from medical care in order to regain their high or diminish withdrawal symptoms.

Some officers and first responders express frustration with treating the same drug user with naloxone on more than one overdose occasion. Others note that opioid drug use relapses are common with almost all types of drug treatment efforts. Given the potential of uncomfortable withdrawal symptoms and the loss of the high, advocates argue that few addicts would knowingly risk getting themselves into a situation that could result in naloxone use. Repeat overdoses are, in some cases, due to the increasing potency of heroin, rather than reliance on naloxone.

Some worry that as the prevalence of naloxone increases with first responders and the public, opioid use will increase, as drug abusers may feel more impervious to the drug risks with easy access to the overdose antidote. Limited studies of naloxone distribution and training programs serving drug users have found that naloxone distribution programs reduced illicit drug use. Research has not been done specifically on the effects of law enforcement’s use of naloxone on the rates of illicit drug use. Anecdotally, officers and treatment providers report that a near-death experience from an opioid overdose reversal service can serve as a wake-up call for some drug users, encouraging them to seek treatment.

Additional Resources:


Substance Abuse and Mental Health Administration Opioid Resources - http://www.samhsa.gov/atod/opioids


Every effort has been made to ensure that this document incorporates the most current information and contemporary professional judgment on this issue. Readers outside of the United States should note that, while this document promotes procedures reflective of a democratic society, its legal basis follows United States Supreme Court rulings and other federal laws and statutes.

Law enforcement administrators should be cautioned that no “model” policy can meet all the needs of any given law enforcement agency. Each law enforcement agency operates in a unique environment of court rulings, state laws, local ordinances, regulations, judicial and administrative decisions and collective bargaining agreements that must be considered, and should therefore consult its legal advisor before implementing any policy.

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