# Procedures to Administer Naloxone in the School Setting

## Legislative Background

The State Health Commissioner for the Commonwealth of Virginia issued a [Declaration of Public Health Emergency](http://www.vdh.virginia.gov/commissioner/opioid-addiction-in-virginia/declaration-of-public-health-emergency/) in November 2016 due to multiple data points indicating that both the misuse of opioid pain relievers and the number of deaths associated with opioid overdoses were rapidly increasing. In response to this ongoing concern, the Virginia Board of Pharmacy updated the [Protocol for the Prescribing and Dispensing of Naloxone](https://www.dhp.virginia.gov/pharmacy/guidelines/110-44.docx) in November 2019.

The*Code of Virginia*, [§ 54.1-3408](https://law.lis.virginia.gov/vacode/title54.1/chapter34/section54.1-3408/), Professional use by practitioners, states, “*Pharmacists shall follow this protocol when dispensing naloxone pursuant to an oral, written or standing order to a person to administer to another person believed to be experiencing or about to experience a life-threatening opioid overdose as authorized in subsection X of* [§ 54.–3408](https://law.lis.virginia.gov/vacode/title54.1/chapter34/section54.1-3408/)*.”*

The protocol includes the procedures to be followed by the pharmacist, including the drug and other items to be dispensed, the minimum information that is required to be included in a standing order, the dispensing requirements for intra-nasal or auto-injector administration, and the labeling and recordkeeping required by law and regulation.

The General Assembly of Virginia (2019) passed [HB 2318](https://lis.virginia.gov/cgi-bin/legp604.exe?191+sum+HB2318) that modifies language in subsection X of [§ 54.1–3408](https://law.lis.virginia.gov/vacode/title54.1/chapter34/section54.1-3408/) to allow “…*school nurses, local health department employees that are assigned to a public school pursuant to an agreement between the local health department and the school board, [other school board employees or individuals contracted by a school board to provide school health services,]…”* who have completed a naloxone administration training program, to also possess and administer naloxone to students in schools in accordance with defined protocols.

## Recognizing and Responding to Opioid Overdose

Opioids include illegal drugs such as heroin, as well as prescription medications used to treat pain, such as morphine, codeine methadone, oxycodone (OxyContin®, Percodan®, Percocet®), hydrocodone (Vicodin®, Lortab®, Norco®), fentanyl (Duragesic®, Fentora®), hydromorphone (Dilaudid®, Exalgo®), and buprenorphine (Subutex®, Suboxone®). Opioids work by binding to specific receptors in the brain, spinal cord and gastrointestinal tract. In doing so, they minimize the body’s perception of pain. However, stimulating the opioid receptors or “reward centers” in the brain also can trigger other systems of the body, such as those responsible for regulating mood, breathing and blood pressure.

## Signs and Symptoms of Opioid Overdose

A variety of effects can occur after a person takes opioids, ranging from pleasure to nausea, vomiting, severe allergic reactions (anaphylaxis), and overdose, in which breathing and heartbeat slow or even stop. An overdose occurs when the body has more drugs in its system than it can handle, resulting in potentially life-threatening dysfunction.

Since the onset and severity of an opioid overdose is difficult to predict, the overdose may rapidly progress to respiratory depression. In some instances, signs and symptoms of an opioid overdose may appear as an individual experiencing extreme sleepiness or having breathing difficulties. Naloxone should be administered promptly at the first sign of an opioid overdose.

School staff members, including those responsible for extracurricular programs, should be trained on how to recognize the signs and symptoms of an opioid overdose requiring the use of naloxone. It is important to note that not all the signs and symptoms below may be present during an opioid overdose. Remember that someone experiencing a low blood sugar or other possible medical conditions may also be unresponsive/difficult to wake.

* Unresponsive to verbal stimuli, shaking, or sternal rub;
* Pale, clammy skin;
* Body and limbs are limp;
* Speech infrequent or slurred;
* Heartbeat slow, erratic, or not there at all;
* Breathing slow, irregular, or stopped;
* Low blood pressure;
* Deep snorting or gurgling noises;
* Noise may sound like choking;
* Drowsy/lethargic;
* Blue lips or fingertips; and
* Pupils may be pinpoint.

## Emergency Response to Opioid Overdose

If the person is not responding to verbal stimuli, shaking, or sternal rub, **ACT PROMPTLY**!

Do not leave the individual alone:

* Call for help – **Dial 9-1-1**;
* Report unresponsive person and exact location;
* Request Advanced Life Support; and
* Ask other staff members, if available, to bring naloxone and AED to scene.

Check for breathing:

* Place person on their back;
* Tilt head and lift chin;
* Check breathing for no more than ten (10) seconds and;
* Check mouth for anything blocking the airway, such as gum, toothpick, undissolved pills, syringe cap, cheeked Fentanyl® patch; and if the object is present, remove it.

If not breathing:

* If using a mask, place and hold the mask over mouth and nose and give two even breaths;
* If not using a mask, pinch their nose with one hand and place your mouth over their mouth. Give two even, regular-sized breaths and;
* Blow enough air into their lungs to make their chest rise.

Reasons the chest may not be rising:

* If you are using a mask and don’t see their chest rise out of the corner of your eye, tilt the head back more and make sure the seal around the mouth and nose is secure; and
* If you are not using a mask and do not see their chest rise out of the corner of your eye, make sure you are pinching their nose.

Continue to provide rescue breathing, give one breath every five (5) seconds

When naloxone is available, administer it and note the time:

* Place the person in a recovery position – on their side. This may prevent the person from choking if they vomit; and
* Monitor the person closely until emergency medical services (EMS) arrive.

## Administration of Naloxone

Naloxone can be administered by intra-nasal spray, such as Narcan®, or as an auto-injectable, such as Evzio®. Important things to know before you administer naloxone:

1. Form of naloxone provided in the school (intra-nasal spray or auto-injectable) and;
2. Location where naloxone is stored in the school.

Supplies that should be stored with the naloxone include:

* Face shields for rescue breathing and cardiopulmonary resuscitation (CPR);
* Gloves, if required by school division policy and procedures and;
* A minimum of two doses, if available, should be stored together.

A prompt response is essential if a person is identified as experiencing a possible opioid overdose. Restoration of breathing and the flow of oxygen to the brain is critical to survival. Naloxone has no adverse effect on people who are not taking opioid medicine.

### Facts about Intranasal Naloxone

Intranasal naloxone spray is for use in the nose only:

1. Do NOT remove the naloxone nasal spray from the box until it must be used;
2. Do NOT test the naloxone nasal spray. There is only one dose and it cannot be reused;
3. You do NOT need to prime the naloxone nasal spray;
4. The naloxone nasal spray may work immediately, but it can take up to eight (8) minutes to have an effect;
5. The effects of administering naloxone may wear off within 30–90 minutes;
6. If a person does NOT start breathing after two-three minutes, another dose of naloxone may be administered in the unused nostril;
7. If a person starts breathing after the first dose of naloxone, but then stops breathing again before EMS responds, remove the naloxone nasal spray from a second box and administer it in the unused nostril;
8. Stay with the person administered naloxone until EMS responds and ensure that person continues to breathe on their own while in the recovery position and;
9. If the person is not breathing or breathing continues to be shallow after one-two doses of naloxone, lay the person on their back and continue to perform rescue breathing until naloxone takes effect, breathing improves, or EMS arrives.

### Administration Steps for Narcan® or Intranasal Naloxone Spray

Remove Narcan® nasal spray from the box;

* Peel back the tab with the circle to remove the device from the package;
* Hold the device with thumb on the bottom of the plunger and first (index) and middle fingers on either side of the nozzle;
* Gently insert the tip of the nozzle into one nostril;
* Tilt the person’s head back and provide support under the neck with your hand;
* Gently insert the tip of the nozzle into one nostril, until fingers on either side of the nozzle are against the bottom of the person’s nose;
* Press the plunger firmly to give the dose of Narcan® nasal spray;
* Remove the Narcan® nasal spray device from the nostril after giving the dose; and
* Note the time medication is administered.

If there is no reaction in two-three minutes, or symptoms return, give the second dose of medication.

* Stay with the person administered naloxone until EMS responds and ensure that person continues to breathe on their own while in the recovery position.
* If the person is not breathing or breathing continues to be shallow after one-two doses of naloxone, lay the person on the back and continue to perform rescue breathing until naloxone takes effect, breathing improves, or EMS arrives.
* Dispose of used intranasal naloxone spray dispensers, according to school division protocol.

### Storage of Intranasal Naloxone Spray

Both the Narcan® and the generic intranasal naloxone spray need to be stored properly for optimal effectiveness.

1. Store the medication at room temperature (59° to 77°F) and away from light.
2. Avoid extremes of heat or cold (i.e., do not freeze nasal spray).
3. If the intranasal naloxone spray is used or expires, contact the provider as soon as possible for replacement. The intranasal naloxone spray should be replaced before the expiration date.
4. Each intranasal naloxone spray contains one dose of medication and cannot be reused.
5. Dispose of the used packaging properly according to the protocols of the school division.

### Video Resources for Narcan® or Naloxone Intranasal Spray

[Naloxone administration video](https://www.youtube.com/watch?v=JJmCfseNtsU)

[Manufacturer’s video on Narcan administration](https://www.youtube.com/watch?reload=9&v=hGVSaO1oxpg)

[Substance Abuse and Mental Health Services Administration (SAMHSA) video on naloxone](https://www.youtube.com/watch?v=RcAaZQQqd50)

### Facts about Injectable Naloxone

Evzio® is the only auto-injectable device currently available for administration of naloxone. The Evzio® has a speaker that provides voice instructions that are activated when the **red** safety guard is removed from the device. If there is a failure of the audio instructions for any reason the device will still work, and the user can follow the written directions on the auto-injector label.

### Administration Steps for Evzio® Auto-injector

1. Remove the auto-injector from the outer case;
2. Remove the **red** safety guard ONLY when ready to use. To reduce the chance of an accidental injection, do not touch the **black** base of the auto-injector since this is where the needle is located;
3. The **red** safety guard is made to fit tightly. Pull firmly to remove. Do NOT replace the **red** safety guard after it is removed;
4. Place the **black** end against the middle of the patient’s outer thigh, through clothing, if necessary. The Evzio® auto-injector makes a distinct sound (click and hiss) when it is pressed against the thigh;
5. Press the auto-injector firmly against the thigh, hold in place for five (5) seconds after the click, and hiss sound are heard. The needle will inject the medication and then retract into the auto-injector after use and;
6. Note the time the medication is administered.

If there is no reaction in two-three minutes or the symptoms return, give a second dose of the naloxone and continue to observe:

* Stay with the person administered naloxone until EMS responds and ensure that person continues to breathe on their own while in the recovery position;
* If the person is not breathing or breathing continues to be shallow after one-two doses of naloxone, lay the person on their back and continue to perform rescue breathing until naloxone takes effect, breathing improves, or EMS arrives and;
* Dispose of used naloxone auto-injectors in a sharps container and according to school division protocol.

### Video Resource for Evzio® Auto-injector

[Evzio auto-injector\_Oregon Health Authority](https://youtu.be/K56UGrDmfco)

[Evzio auto-injector video](https://youtu.be/-B_ZO_MUGBE)

## Post-Incident

In the school setting, staff members should follow school division policy and procedures to secure the area surrounding the person who may have experienced the opioid overdose. This includes securing any medications or substances found on/near the person that may be relevant to the treatment for opioid overdose. School division policy should also be referenced by school staff members in determining follow-up actions with a person treated for symptoms of opioid overdose and the parent/guardian.

## Documentation

Documentation of the administration of any formulation of naloxone should include:

* What prompted the identification of the person as someone possibly experiencing an opioid overdose;
* All actions taken;
* Time medication administered;
* Number of doses administered;
* Who was notified; and
* Status of the person when care transferred to EMS.

The school division policy and protocols should have provisions for the prompt replacement of any naloxone medication that is used.