New Jersey EMS Response to an Opiate Overdose Naloxone (Narcan®) Program \*\*Updated March 26, 2015\*\*







#### **Disclaimer**

- This presentation was created to assist in the education of EMTs in Naloxone administration. This presentation is available for public use and copying/distribution is encouraged.
- It is the intent that this program may serve as the lecture based portion of a BLS Medical Director's Naloxone program. A psychomotor training component is STRONGLY RECOMMENDED to enhance the didactic knowledge presented.
- The staff of OEMS recognize that an individual medical director may modify this presentation to serve his/her organization's needs.
- The materials contained in this presentation are provided for general information purposes only and do not represent endorsement for any particular product or manufacturer.



#### **New Jersey Law**

- P.L. 2013 c.46
- "Opioid Antidote and Overdose Protection Act" (May 2013)
- Provides immunity for witnesses and victims of overdose who activate emergency services
- Permits physicians to prescribe naloxone to "patients", defined as someone who may be in position to assist another individual during an overdose.
  - Thus establishes a physician-patient relationship
- Also provides grant information



#### **New Jersey Law**

- Broad immunity to the prescriber and the "patient" provided.
- Prescriber required to ensure the prescribed understands:
  - Opioid overdose prevention and recognition
  - Importance of calling 911
  - Care for the overdose victim



# Certificate of Waiver for EMT and Paramedic

- Applies to all certified New Jersey Emergency Medical Technicians and Paramedics.
- Need to successfully complete an educational program recognized by the Department.
- Administer the medication in accordance with established protocol.
- Generate a record for the individual treated in a form acceptable by the Department.

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	State of New Jersey	
	DEPARTMENT OF HEALTH	
	OFFICE OF EMERGENCY MEDICAL SERVICES PO BOX 350	
CHRIS CHRISTIE Governor	TRENTON, N.J. 08625-0360	
Kim Guadacino	www.nj.gov/health	MARY E. O'DOWD, M.
Lt. Governor		Commissioner
	CERTIFICATE OF WAIVER EMERGENCY MEDICAL TECHNICIANS	
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All certif	fied New Jersey Emergency Medical Technicians Emergency Medical Technicians-Paramedics	
Granting relief from the Administrative Code:	e provision(s) of Chapter 8:40A and Chapter 8:41A o	
	N.J.A.C. 8:40A - 10.1 Scope of Practice	
	N.J.A.C. 8:41A - 5.1 Scope of Plactice	
Prevention Act <sup>2</sup> (the Ac criminal liability of non- hydrochioride, or any o	In accordance with Public Law 2013, Chapter 46, km ct), which, under certain circumstances, provides imm -health care professionals who administer in an eme other similany acting drug approved by the United St rison believed in good faith to be experiencing an op imal and professional disciplinary immunity for health	nunity for civil and rgency naloxone ates Food and Drug old overdose. The Act
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# Opioids

- Substances that reduce pain
  - Perception of pain is reduced
  - Pain tolerance is increased
- Chemical substance that binds to receptors in the brain and central nervous system
- Natural substance opium plant
- Numerous synthetic chemicals that do the same
- Used in pain management
  - A cornerstone of modern medicine
  - Sometimes all we can offer patients



# **Common Opioids**

- Heroin
- Codeine (Tylenol #3)
- Morphine (Kadian, Avinza)
- Fentanyl (Actiq, Duragesic, Fentora)
- Hydrocodone (Vicodin, Lortab, Vicoprofen)
- Oxycodone (Percocet, Oxycontin)
- Hydromorphone (Dilaudid)
- Methadone
- Meperidine (Demerol)
- Tramadol (Ultram, Ultracet)
- Buprenorphine (Buprenex, Suboxone, Subutex)



Opioids

- Studies show addiction may increase when the patient has pain
- Tolerance and chemical dependence can occur
- In many areas, prescription narcotics are just as likely, if not more likely, to be the cause of overdose
  - Purer
  - 'Safer' to get
  - 'Easier' to get



# Frequently Prescribed Combination Opioid Medications

- Lorcet®, Lortab®, Norco®, Vicodan®: Hydrocodone + acetaminophen
- Percocet®: Oxycodone + acetaminophen
- Percodan®: Oxycodone + aspirin

### **Illegal opioids**

- o Opium
- Heroin



# Routes of Administration of Opioids by Laypersons

- Oral
- Transcutaneous
- Intravenous
- Subcutaneous ("skin popping" during the abuse of opioids)



#### **Opioid Overdose**

#### Overdose

- Too much of the medication
- Typical:
  - Unconscious
  - Slow or no respirations
  - Pinpoint pupils (miosis)
- Hypoxia (from no breathing) can take 2-4 minutes.



# Signs and Symptoms of an Opioid Overdose

- Miosis (pinpoint pupils)
- Decreased/Change mental status
- Respiratory depression or Arrest
  - Hypoxia (from no breathing) can take 2-4 minutes.
- Decreased intestinal motility



#### **Risk Factors with Opioid Overdose**

- Hypoxia
- Hypercarbia
- Aspiration
- Cardiopulmonary arrest

The incidence of risk factors increases when other substances such as alcohol, benzodiazepines, or other medications have also been taken by the patient



### Naloxone (Narcan®)

- Medication used to reverse the effects of opioids (i.e. respiratory depression)
- In New Jersey, typically carried by Paramedics





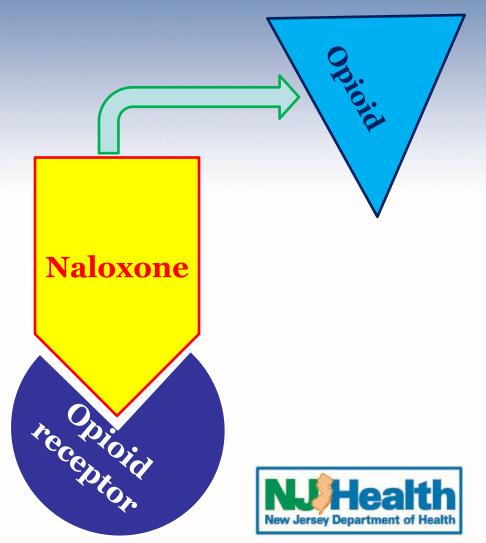
# Naloxone (Narcan®)

- Developed in the 1960s
- Opioid antagonist
- Emergency overdose treatment in the prehospital and hospital settings
- Increased demand for naloxone
  - Greater variety of available opioids
  - Increased opioid use and abuse



# Physiology of Naloxone (Narcan®)

- Naloxone displaces the opioid from the opioid receptor in the nervous system
- Duration of Action: 30-90 minutes



# Physiology of Naloxone (Narcan®)

This may result in the sudden onset of the signs and symptoms of opioid withdrawal

- Agitation/Combative
- Tachycardia
- Pulmonary edema
- Nausea
- Vomiting
  - Seizures



### **Additional Adverse Effects**

- Cardiac arrest/Ventricular fibrillation
- Dyspnea
- Abdominal cramps
- Diarrhea

- Diaphoresis
- Increased blood pressure
- Tremulousness

The adverse effects following naloxone administration, particularly in chronic opioid users and abusers, may place the patient, emergency personnel and bystanders at risk.



# Routes of Administration of Naloxone (Narcan®)

- Intranasal (IN)
- Intramuscular (IM)
- Intravenous (IV)
- Endotracheal

# EMTs may only administer naloxone via intranasal or intramuscular via auto-injector!



# Naloxone (Narcan®)

- The half-life of naloxone is relatively brief (as short as 30 minutes)
- All patients who receive naloxone must be monitored closely for recurrent symptoms such as:
  - o altered mental status
  - respiratory depression
  - o circulatory compromise

Some purer Opioid can "outlast" initial Narcan® dose



# Naloxone (Narcan®)

- Minimal effect if no opioids are in the body
- Most common route for first responders is intranasal (IN):
  - $_{\odot}\,$  Safer to use than other routes
  - Limited blood borne exposure
  - Medication is absorbed through a number of blood vessels right below the skin



Benefits of Intranasal or Intramuscular Route for Naloxone (Narcan®)e Administration

- Equivalent clinical efficacy compared to intravenous naloxone
- Intravenous access may be impossible to establish in chronic intravenous drug abusers



### Naloxone (Narcan®) Storage

- Keep out of light and temperature extremes
  - Store at "room temperature"
  - Check Package
  - Check Expiration Date
  - Check color in syringe or injector
- Protect package
- Keep in locked medication storage (similar to Epinephrine auto injector)





### **Safety Considerations**

Prior to the administration of naloxone by all EMS providers, all patients should initially receive the appropriate medical interventions:



- Airway
- Breathing
- Circulation



#### **Patient Assessment**

- Scene Size-up and primary assessment
- Assess and secure airway utilizing an OPA. If a gag reflex is present utilize an NPA, if indicated, after Naloxone administration
- Administer 100% oxygen using a BVM device at 15 liters/minute
- Suction as needed



#### **Patient Assessment continued**

- Ensure ALS has been requested
- If the patient has no pulse, begin CPR with use of an AED.
- Obtain baseline vitals and obtain a SAMPLE history
- Conduct a secondary assessment



#### Response to an Opiate Overdose

#### Survival from drug related cardiac arrest is rare, therefore, it is important to monitor ABCs.





# Considerations to a Response to an Opiate Overdose

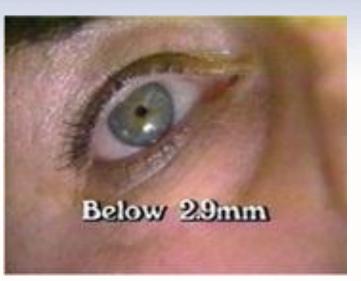
- Is it an overdose or something else (hypoglycemia, head injury, shock, stroke)?
- Is it an overdose AND something else?
  - Cardiac Arrest
    - Can still give naloxone, but likely will not help
  - OD on other substances that will not respond to naloxone
    - Alcohol
    - Benzodiazepines (Valium, Xanax, Ativan)
    - Other sedatives
  - Medical Condition
    - Low blood sugar
    - Infection
    - Stroke



#### Response to an Opiate Overdose

#### **Look for the Signs...** Overdose on opioids typically:

- Unconscious
- Slow or no breathing (<10/min)</li>
- Small "pinpoint" pupils (miosis)
- Pulse variable





# Contraindications for Naloxone (Narcan®) Use

- Medication has expired
- Known hypersensitivity or allergy
- The medication is discolored or particulate is noted, where appropriate
- There is no age restriction, but for patients under 5 years old on-line consultation with medical control and/or Medical Director protocol is required.
- The patient has met the maximum prescribed dose per the NJDOH Protocol
  - Any deviation during patient care must be under the direction of medical command (i.e., NJPIES, Medical Director or the ED receiving facility).



### Cautions for Naloxone (Narcan®) Use

#### **Use with Caution:**

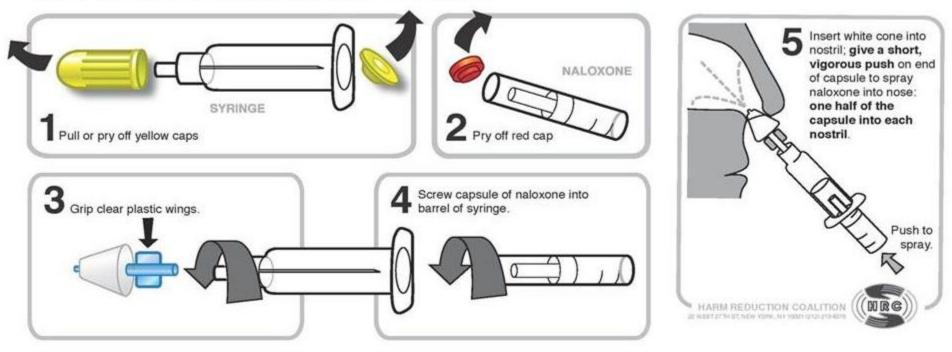
- Patients with History of SVT or other arrhythmias
- Patients with known cardiac disease
- Patients with possible head injury or brain tumor
- Poly-substance overdose





# **Intranasal Administration Technique**

#### **HOW TO GIVE NASAL SPRAY NARCAN**





#### Intranasal Administration Technique

- The tip of the syringe should be placed near or just inside the nostril
- Placement of the syringe too far inside the nasal cavity may traumatize the nasal passages or cause epistaxis





#### Dosage for Intranasal Administration

- Vial has 2mg of naloxone in 2mL
- Give 1mg (1ml) in each nostril, quickly
- Medication is atomized and absorbed through vessels in the nasal cavity





# Intramuscular Administration Technique

- 1. Remove auto injector from outer case.
- 2. Pull off the safety guard.
- 3. Place the auto injector firmly against the outer thigh, through clothing, if needed.
- 4: Continue to press firmly and hold in place for 5 seconds.

\*\* Note: All agencies should follow manufacturer guidelines where appropriate and in coordination with their Medical Director.







#### Dosage for Intramuscular Administration

- The auto injector administers 0.4 mg (0.4 mL) dose of naloxone into the muscle.
- The auto injector will have a retractable needle that the user will not see before, during, or after an injection.
- The auto injector may include voice prompts to assist with administration.
- The auto injector should be disposed of immediately after use in a sharps container.



## Precautions with Naloxone (Narcan®) – What to Expect

The administration of naloxone may result in the rapid onset of the signs and symptoms of opioid withdrawal:



- Agitation (combative)
- Tachycardia
- Pulmonary edema
- Nausea
- > Vomiting
- > Seizures



### Response to an Opiate Overdose

- After administration, repeat primary and secondary assessments
- Monitor the patient's response
- Be prepared to suction the airway
- Provide supportive care as appropriate:
  - Airway
  - Breathing (Be prepared to support respirations)
  - $\circ$  Circulation



### **Documentation and Reporting**

Documenting the use of Naloxone (Narcan®) shall be completed via the following steps:

- Providers are required to complete a patient care report.
- In addition to the agency's patient care report; providers are required to complete the brief Department web-based Naloxone (Narcan®) Reporting form.
- Both forms must be completed within <u>24 hours</u> of medication administration.



**Documentation and Reporting** To access the brief Department web-based Naloxone (Narcan®) Reporting form:

- □ Log on to: http://www.state.nj.us/health/ems/
- Click on the "Naloxone (Narcan®) Program" grey tab located on the left side of the page
- Select "Medication Administration Report" and click on the link to access the report
- Complete the entire registration form and hit submit. (You are not able to save the form and return later)
- You will receive a confirmation number once you have completed and submitted the form



## http://www.state.nj.us/health/ems/

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Applications/Forms	Attention all Visitors to OEMS: Due to increased security, ALL visitors to the Office of Emergency Medical Services MUST have OFFICE OF EMERGENCY MEDICAL SERVIC a scheduled appointment with OEMS staff. No "walk-ins" will be permitted. Visitors must have a valid government				
Emergency Medical					
Services for Children	photo ID with them to present to security upon	entering the building. Thank you fo	or your anticipated cooperation.		
Naloxone (Narcan®)     Program	Security Alert:				
Medication Administration Repor	Be Alert for Individuals Seeking Information About Emergency Response Agencies				
Agency Registration					
Naloxone (Narcan®)	Help NJ EMS Program				
General Information	Connecting those who have lost so much with th	a kindness of others			
I NJ EMS Council					
Education and	So many NJ EMS agencies have lost equipment,				
Training	continue to rebuild, we are fortunate that so ma offered donations of equipment and supplies. If y				
EMS Programs	www.ready.nj.gov or visit <u>the National Donation</u>		lation please go to		
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⊞ Licensing and Enforcement	Conference on EMS	taking photographs in the <u>E.V.E.N.T National EN</u> <u>Tool</u>	<u>ne field</u> [pdf 10k] <mark>New</mark> IS Voluntary Event Notification		

### **Documentation and Reporting**

	Patient Assessment	
Dispatch Information	Patient Presentation     Unconscious	
* EMT ID Number of person filling out this report Alpha-numeric	Unresponsive Shallow Breathing Not Breathing Cyanosis	
* Agency Name Alpha-numeric	Wesk Pulse No Pulse Other	
* Dispatch/Call Number ① Alpha-numeric	If Other, please specify: Apite-numeric	
* Date/Time of Call	* History of Present Illness Alphe-numeric	
Address of Call	Drug Stamp (if present) 🔨	
* - Street Address Alpha-numeric	Suspected Overdose Cause Select one	
* - City Alpha-numeric		Gear
	Narcan Medication Administration	
* - County Select one	Dose Administered in mg.      Numeric      Patient Response	
- <i>Zip Code</i> Alpha-numeric	Alert and oriented Alert and oriented Combative Combative No. Response to Nercen Vomiting	
<ul> <li>Patient's Age (approximate if unknown)</li> <li>Numeric</li> </ul>	Other If Other, please specify: Alpho-numeric	
* Patient's Sex Select one	Patient Disposition Select one	
* Patient's Race Select one	* Narcan Administered by  Name Apple-numeric	EMT 1D # [Alpha-numeric
		Back Submit Cancel

### **Documentation and Reporting**

# For agencies utilizing a NEMSIS Gold Compliant ePCR:

Contact your system administrator for proper documentation for medication administration.

Medication				Dose		
	Naloxone	<b>-</b>	2	MG		
Route:	IN	Concentratio	on:	L		



### **Registration with the Department**

# All Agencies are required to be registered with the Department prior to implementation of the program

- Any authorized agency representative may register their agency
- Please make sure to have the following information available before beginning the registration process (you will not be able to save and return to the form later):
  - □ Agency demographic information
  - □ Agency contact demographic information
  - Medical Command Physician demographic information





### **Registration with the Department**

#### To register an agency for the Naloxone (Narcan®) Program:

- Log onto <a href="http://www.state.nj.us/health/ems">http://www.state.nj.us/health/ems</a>
- Click on the "Naloxone (Narcan®) Program" grey tab located on the left side of the page
- Select "Agency Registration" and click on the link to access registration.
- Complete the entire registration form and hit submit
  - You will receive a confirmation number once you have completed and submitted the form



### Summary

- BLS Agency must register with the Department via <u>http://www.state.nj.us/health/ems/</u>
- BLS Agency must have a Medical Director
- BLS Agency must abide by the NJDOH protocol
- Training is mandatory
- BLS Agency must report the administration within 24 hours



### Summary

- The medical director retains the authority to limit or prohibit the administration of intranasal naloxone.
- The administration of naloxone by the endotracheal or intravenous routes is *prohibited* for EMTs.









#### For questions regarding Naloxone program, please contact the Office of EMS at (609) 633-7777



### Acknowledgements

The Department would like to thank the below for their contributions to the creation of the educational materials provided:

> Kenneth Lavelle, MD Ohio Emergency Medical Services

