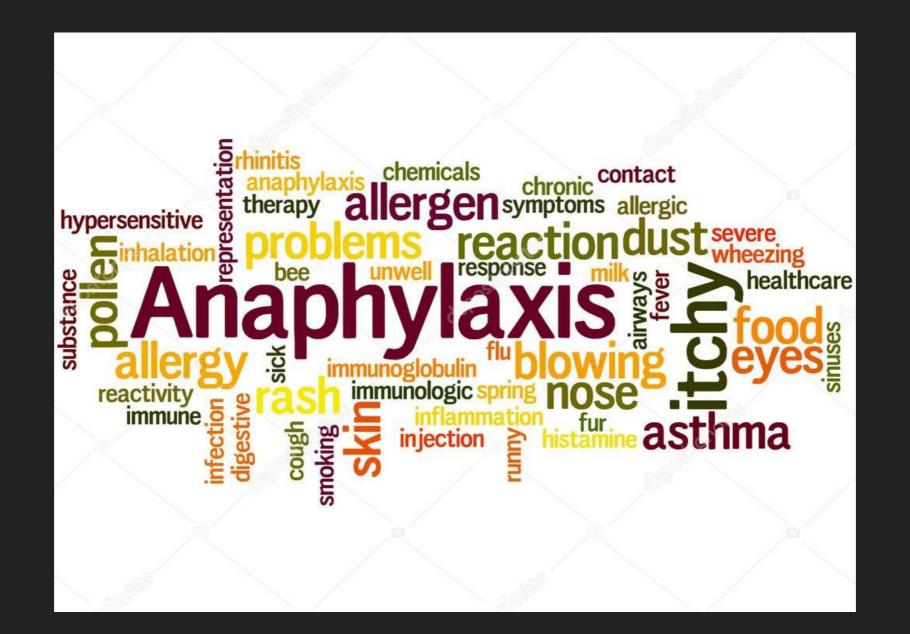


LUHSD

# EMERGENCY TRAINING FOR SCHOOL PERSONNEL

### **AGENDA**

- Severe allergic reactions
- Diabetic emergencies
- Seizure first aid
- Opioid overdoses
- Emergency/Rescue medications



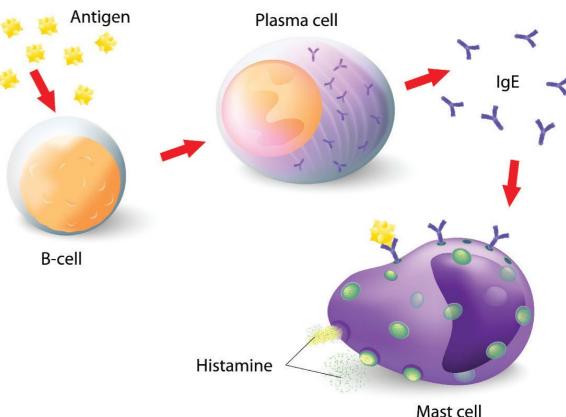
# ANAPHYLAXIS/ ANAPHYLACTIC SHOCK

### WHAT IS ANAPHYLAXIS?

- A life-threatening hypersensitivity to a substance
- Often caused by certain foods, insect sting, latex, etc.

Affects 1 out of every 13 children or approximately 2 students in

every classroom



### SIGNS & SYMPTOMS OF ANAPHYLAXIS

- Shortness of breath / difficulty breathing
- Wheezing
- Difficulty talking or swallowing
- Itching, hives
- Swelling of the face, lips, tongue
- Cramps, vomiting, diarrhea







# ANAPHYLAXIS TREATMENT

# EPINEPHRINE INJECTORS

### **EPI-PEN INFORMATION**

- Auto injector, easy to use
- Pre-filled, single use
- Stored at room temperature
- Students advised to keep it in their purse or backpack
- Can be administered through clothing
- If alone, always administer Epi before calling 911

# How to use EpiPen® and EpiPen Jr® Auto-Injectors.

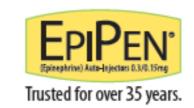
Remove the EpiPen® Auto-Injector from the carrier tube and follow these 2 simple steps:



- Grasp with orange tip pointing downward
- Remove blue safety cap by pulling straight up – do not bend or twist



- Place the orange tip against the middle of the outer thigh
- Swing and push the auto-injector firmly into the thigh until it "clicks"
- Hold in place for 3 full seconds





### AFTER ADMINISTERING AN EPI-PEN

- If insect sting was suspected, remove stinger by scrapping the skin with a fingernail or card and apply ice. Do not pinch or squeeze skin as this will release more venom.
- If unconscious, place student on their side (rescue position)
- Monitor airway and breathing
- Provide CPR if necessary & locate closest AED

### AFTER ADMINISTERING AN EPI-PEN

- ► If symptoms continue or worsen and paramedics have not arrived, use a 2nd Epi pen and give 5-15 minutes after initial injection
- Dispose used Epi-Pens in sharps container
- Document the incident
- Notify your school nurse

### THINGS TO REMEMBER ...

- If alone, administer Epi before calling 911
- Stay with the student
- Additional stock Epi-Pens are located at each campus in the main office or near the health clerk for generalized emergency use for both staff and students





# DIABETES at School

### **KNOW THE FACTS**

- Nearly 21 million adults and children in the U.S. have diabetes.
- This includes approximately one dozen children at each comprehensive site within the LUHSD.
- Diabetes is the sixth deadliest disease in the U.S.





## WHAT'S THE DIFFERENCE?

### **Type 1 Diabetes**

- Occurs when the pancreas does not produce insulin
- Requires multiple doses of insulin every day via shots or an insulin pump
- Accounts for 5 to 10% of all cases of diabetes and is the most prevalent type of diabetes among children and adolescents

# Type 1 diabetes cannot be prevented!

### **Type 2 Diabetes**

- Occurs when the pancreas does not produce enough insulin or use insulin properly
- Increased type 2 diagnoses among children and adolescents in the U.S.
- ❖ African Americans and Hispanic/Latino Americans are at higher risk
- Managed with insulin shots, oral medication, diet and other healthy living choices

### DIABETES MANAGEMENT AT SCHOOL

## Diabetes management is 24/7...

- Every student with diabetes will be different
- Diabetes requires constant juggling of insulin/medication with physical activity and food
- It's important to recognize the behaviors and signs of "high" and "low" blood sugar levels
- A student with a diabetes emergency will need help from school staff (ex. low blood sugar)
- Students with diabetes can do the same everyday activities as students without diabetes

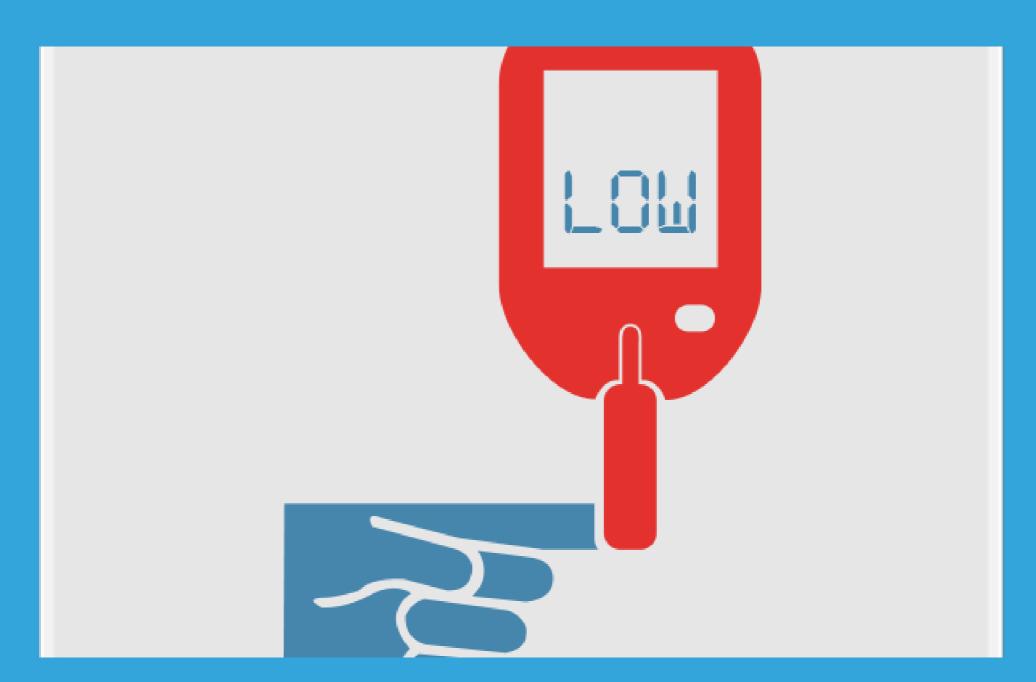
### DIABETES MANAGEMENT AT SCHOOL

# Most immediate concerns in managing type 1 diabetes:

- Hypoglycemia = low blood glucose\*
- Hyperglycemia = high blood glucose
- **Ketoacidosis** = ketone (acid) build up in the blood because there is not enough insulin in the body

Most common concern in managing diabetes at school:

# HYPOGLYCEMIA/ LOW BLOOD SUGAR



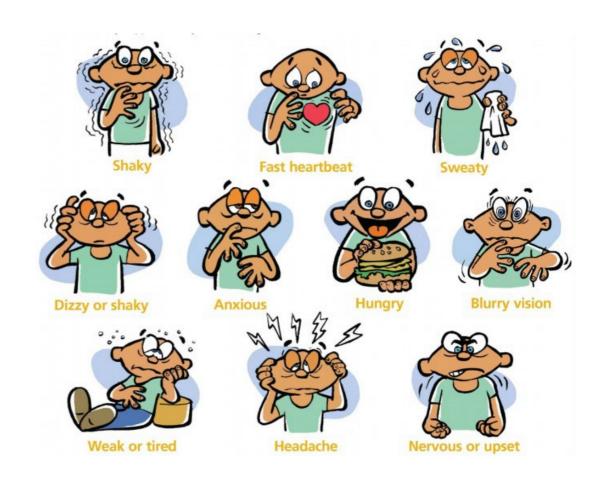
### WHAT IS HYPOGLYCEMIA?

- One of the most frequent complications of diabetes
- Can happen very quickly
- Often caused by administering too much insulin, skipping or delaying meals or snacks, and/or intense or unscheduled exercise
- Can lead to loss of consciousness and seizures
- Can cause brain damage or death

### SIGNS & SYMPTOMS OF HYPOGLYCEMIA

- Shaky
- Sweaty
- Hungry
- Pale
- ► Headache
- Blurry vision
- Fast heartbeat

- Sleepy
- Dizzy
- Confused
- Disoriented
- Irritable
- Lethargic



# Diabetes Management at School

# MILD HYPOGLYCEMIA

(low blood sugar)

Shaky, weak, tired, pale

Quick-acting sugar snack

like juice, regular soda, glucose tabs

# Diabetes Management at School

# SEVERE HYPOGLYCEMIA

(very low blood sugar)

Inability to swallow, seizure or convulsion, unconsciousness

Administer prescribed glucagon









### TREATMENT OF SEVERE HYPOGLYCEMIA

# GLUCAGON

### WHAT IS GLUCAGON?

- Glucagon is a hormone that raises blood glucose levels
- Only to be administered for severe hypoglycemia when a student is UNCONSCIOUS and not responsive <u>or</u> that cannot eat, drink, or swallowing safely
- Is a lifesaving treatment that will not harm the student if given prematurely
- Stored at room temperature
- Students advised to keep it in their purse or backpack

# HOW TO ADMINISTER TRADITIONAL GLUCAGON

### **How to Use Glucagon: 8 Steps**





### Step 1

Flip off the seal from the vial of Glucagon powder.



### Step 2

Remove the needle cover from the syringe. **DO NOT REMOVE THE PLASTIC CLIP FROM THE SYRINGE,** as this may allow the push rod to come out of the syringe.



### Step 3

Insert the needle into the rubber stopper on the vial, then inject the entire contents of the syringe into the vial of Glucagon powder.



#### Step 4

Remove the syringe from the vial, then gently swirl the vial until the liquid becomes clear. Glucagon should not be used unless the solution is clear and of a water-like consistency.

#### Manufacturer Alert!

This emergency kit will be DISCONTINUED starting December 31, 2022



### Step 5

Insert the same syringe into the vial and slowly withdraw all of the liquid. In children weighing less than 44 pounds, withdraw half the liquid (0.5 mark on the syringe).



### Step 6

Cleanse site on buttock, arm or thigh and inject Glucagon immediately after mixing. Inject the Glucagon and then withdraw the needle. Apply gentle pressure against the injection site.





### Step 7

Turn the person on his/her side. When an unconscious person awakens, he/she may vomit.

Call 911 immediately after administering Glucagon. If the person does not awaken within 15 minutes, you may administer a second dose of Glucagon, if previously instructed by your healthcare provider to do so.

As soon as the person is awake and able to swallow, give him/her a fast-acting source of sugar (such as fruit juice) followed by a snack or meal containing both protein and carbohydrates (such as cheese and crackers, or a peanut butter sandwich).

Manufacturer Alert!

This emergency kit will be DISCONTINUED starting December 31, 2022



#### Step 8

Discard any unused reconstituted Glucagon.



Source: http://www.lillyglucagon.com/how-to-use

### **GVOKE HYPO PEN**

- Is the first auto injector for severe hypoglycemia
- Premixed and ready-to-go, with no visible needle
- Store at room temperature



### **GVOKE HYPO PEN**









1 Pull red

cap off

2 Push yellow

end down on skin and hold 5 seconds. Window will turn red.

Administer into upper arm, stomach, or thigh.

https://www.gvokeglucagon.com/how-to-use-gvoke

### **BAQSIMI NASAL SPRAY**

- In August 2019, FDA approved a new form of Glucagon which can be given nasally
- More easily administered with less user error
- Not all insurances may cover





## PREPARING THE DOSE





\*Do NOT push the plunger until ready to give the dose

- Remove shrink wrap by pulling on red stripe
- 2. Open the lid and remove Baqsimi from the tube



## HOW TO ADMINISTER BAQSIMI



Hold device between fingers and thumb



Insert tip gently into one nostril until fingers touch to outside of the nose



Push plunger firmly until all the way in

- Dose is complete when the green line 
  Call 911 after giving dose disappears

  - Single dose, throw away



### THINGS TO REMEMBER...

- Stay with student, keeping them on their side until they regain consciousness or emergency personnel have arrived
- ▶ It may take 15-20 minutes for the student to regain consciousness
- Side effects include headache, nausea, and vomiting
- Dispose of sharps in the sharps container
- Document the incident
- Notify your school nurse



# SEIZURES AT SCHOOL

This program is made possible with funding from the Centers for Disease Control and Prevention (CDC) under grant number NU58DP006256-02-00, CFDA 93.850. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of THE CDC.



DID YOU KNOW...

- Students may NOT be aware they are having a seizure
- Epilepsy is NOT contagious
- A student can NOT swallow their tongue during a seizure
- Epilepsy IS a medical disease like asthma or diabetes
- EVERYONE can learn seizure first aid



### **SEIZURE TYPES**

### **Focal Onset Seizures**

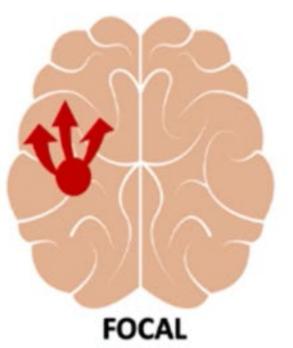
- Involve only part of the brain
- Common types focal aware and focal impaired awareness

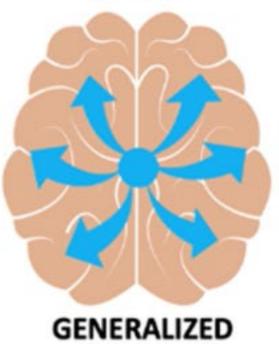
### **Generalized Onset Seizures**

- Involve both sides of the brain
- Common types absence and tonic-clonic

### Unknown

Where it starts is unknown









### **GENERALIZED TONIC CLONIC SEIZURES**

- A sudden, hoarse cry
- Loss of consciousness, person may fall
- Stiffening of arms and legs, then rhythmic jerking
- Shallow breathing and drooling may occur
- Possible loss of bowel or bladder control
- Occasionally skin, nails, lips may turn blue
- Often followed by confusion, headache, tired, sore, difficulty talking

Length: Usually lasts 1 to 3 minutes



# Seizure First Aid

How to help someone having a seizure



1

**STAY** with the person until they are awake and alert after the seizure.

✓ Time the seizure ✓ Remain calm ✓ Check for medical ID



2

Keep the person SAFE.

✓ Move or guide away from harm



3

Turn the person onto their **SIDE** if they are not awake and aware.

- √ Keep airway clear
- ✓ Loosen tight clothes around neck
- ✓ Put something small and soft under the head



Call **911** if...

- Seizure lasts longer than 5 minutes
- Person does not return to their usual state
- Person is injured, pregnant, or sick

- Repeated seizures
- First time seizure
- Difficulty breathing
- Seizure occurs in water

Do **NOT** 

- X Do NOT restrain.
- X Do **NOT** put any objects in their mouth.

✓ Rescue medicines can be given if prescribed by a health care professional \*Always refer to student's personalized SEIZURE ACTION PLAN if on file!





### WHEN TO CALL FOR EMERGENCY HELP

Generalized seizure lasts longer than 5 minutes

Repeated seizures

Difficulty breathing



Seizure occurs in water

Person is injured, pregnant or sick

Person does not return to their usual state

First time seizure

Always follow student's Seizure Action Plan for Instructions from Student's Health Care Provider



# SEIZURE ACTION PLANS

- Should be available for each student with epilepsy
- Teaches you about
  - Seizure first aid
  - Specific instructions for each student
  - When to give rescue therapy
  - When a seizure may be an emergency
  - · Who to call
  - What NOT to do

#### SEIZURE ACTION PLAN (SAP)





mergency Contact/Relationship		2 4 8	Phone:
Seizure Informatio	How Long It Lasts	How Often	What Happens
How to respond  First aid – Stay. Safe. Side Give rescue therapy accor	ding to SAP	☐ Notify	apply)  emergency contact at
First aid for any seizure  STAY calm, keep calm, begin timing seizure  Keep me SAFE – remove harmful objects, don't restrain, protect head  SIDE – turn on side if not awake, keep airway clear, don't put objects in mouth  STAY until recovered from seizure  Swipe magnet for VNS  Write down what happens  Other		Se no	en to call 911 izure with loss of consciousness longer than 5 minutes, t responding to rescue med if available peated seizures longer than 10 minutes, no recovery between, not responding to rescue med if available ficulty breathing after seizure rious injury occurs or suspected, seizure in water
		Wh	en to call your provider first ange in seizure type, number or pattern rson does not return to usual behavior (i.e., confused for a ing period)

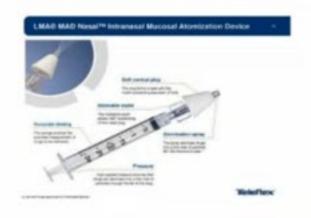
How much to give (dose)



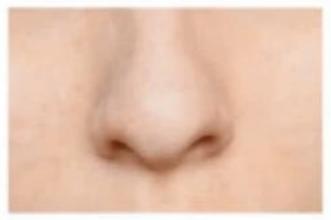
# RESCUE THERAPIES: WHAT ARE THEY?

- A therapy used "as needed" to stop seizures that are different or longer than usual or happen in a different pattern
- Prescribed by health care provider, given by non-medical people outside of the hospital, and exactly as prescribed
- Do not take the place of usual seizure medicines









Only designated trained staff may administer seizure rescue therapies.

Contact your District Nurse to request training!



### Naloxone in Schools

**Training for School Staff** 



## The Opioid Epidemic

Young adults (age 18 to 25) are the biggest abusers of prescription opioid pain relievers, ADHD stimulants, and anti-anxiety drugs

### Examples of Opioids include:

- Oxycodone (OxyContin, Roxicodone, Percocet)
- Hydrocodone (Vicodin, Norco, Lortab)
- Morphine (MS Contin and Kadian)
- Hydromorphone (Dilaudid)
- Fentanyl
- Heroin



(National Institute on Drug Abuse, National Institutes of Health, U.S. Department of Health and Human Services, 2016)



## The Opioid Epidemic in CA

- Emergency department visits related to non-fatal opioid overdoses in California's youth ages 10-19 years more than tripled from 2018 (379 total) to 2020 (1,222 total).
  - Most recent data: 2021 (1,237 total)
- Opioid-related overdose deaths in California's youth ages 10-19 years increased from 2018 (54 total) to 2020 (274 total), marking a 407% increase over two years, largely driven by fentanyl.
  - Most recent data: 2021 (245 total)
- Fentanyl-related overdose deaths in California's youth ages 10-19 years increased from 2018 (36 total) to 2020 (261 total), a 625% increase.
  - Most recent data: 2021 (239 total)

CA Overdose Surveillance Dashboard: <a href="https://skylab.cdph.ca.gov/ODdash/?tab=Home">https://skylab.cdph.ca.gov/ODdash/?tab=Home</a>



## The Opioid Epidemic

 A trend exists for adolescents using prescription opioid agents to substitute heroin because it is significantly cheaper than pills (approximately half of the cost) and is often more readily available

(Fogger & McGuinness, 2015)





## Opioid Overdose

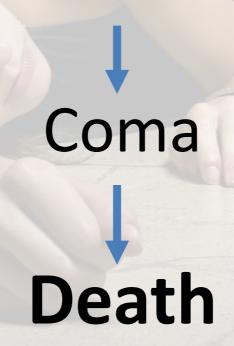
- Opioid drug attaches to brain receptors that affect breathing
- Person slows breathing and eventually stops breathing
- Oxygen starvation eventually stops other vital organs like the heart, then the brain

(National Institute on Drug Abuse, 2014)

## Overdose

Oxygen starvation leads to:

Unconsciousness



Within 3-5 minutes without oxygen, brain damage starts to occur, soon followed by death

(Harm Reduction Coalition, n.d.)



## High vs. Overdose

Opioid High	Opioid Overdose
Relaxed muscles	Pale, clammy skin
Speech slowed, slurred, breathing	Speech infrequent, not breathing, very shallow breathing
Appears sleepy, nodding off	Deep snorting or gurgling
Responds to stimuli	Unresponsive to stimuli (calling
NT 11 ./ 1	name, shaking, sternal rub)
Normal heart beat/pulse	Slowed heart beat/pulse
Normal skin color	Cyanotic skin coloration (blue
	lips, fingertips)
	Pinpoint pupils

(Adapted from Massachusetts Department of Public Health Opioid Overdose Education and Naloxone Distribution)



## The 4 Rs

Recognize

Respond

Reverse

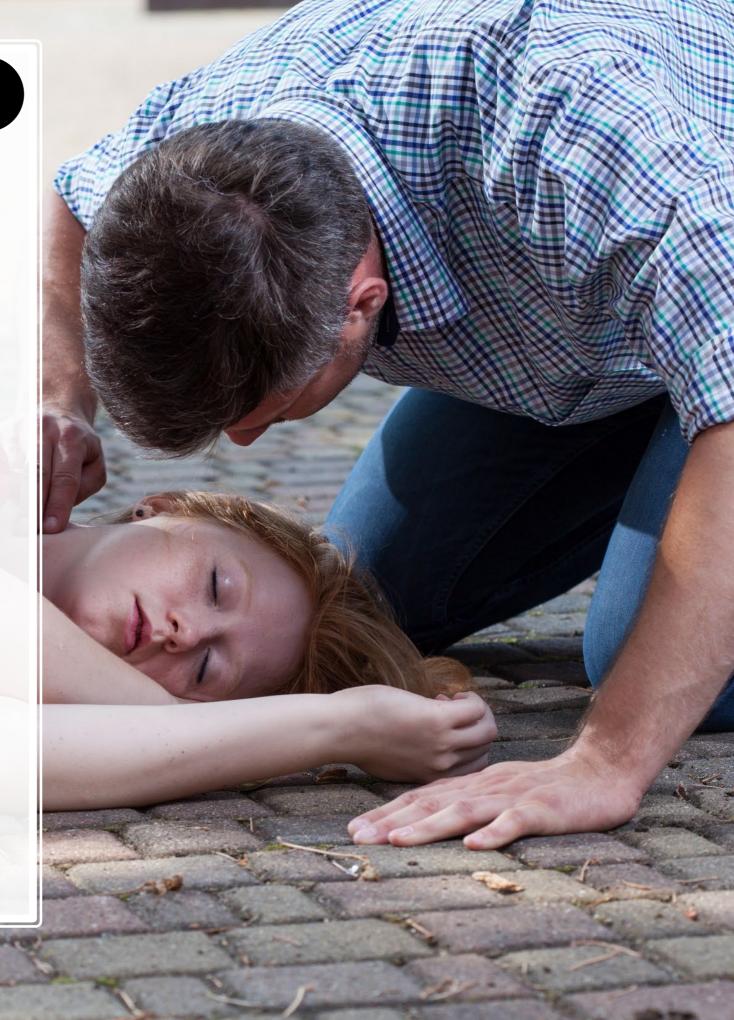
Refer



## Recognize

Observe individual for signs and symptoms of opioid overdose

- Suspected or confirmed opioid overdose consists of:
  - Respiratory depression evidenced by slow respirations or no breathing (apnea)
  - Unresponsiveness to stimuli (such as calling name, shaking, sternal rub)



2

## Respond

### **Immediately call for help**

- Call for help
  - Dial 911
  - Perform CPR
  - Get the AED



3

## Reverse

### **Administer Naloxone ASAP**

- Naloxone is a medication approved by the Food and Drug Administration (FDA) to prevent overdose by opioids such as heroin, morphine, and oxycodone
- Naloxone is the first line treatment for an opioid overdose
- 2 doses per box: If after 2 minutes the person is still unresponsive, you can give a 2nd dose in the alternate nostril using a new device





Photo source: Adapt Pharma, 2016

### Naloxone is sold as the brand name drug: Narcan



### How to Administer Narcan

Remove NARCAN Nasal Spray from the box.

Peel back the tab with the circle to open the NARCAN Nasal Spray.



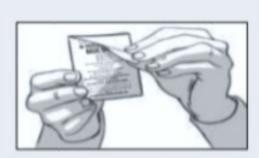
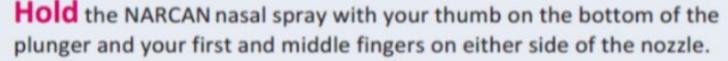








Photo source: Adapt Pharma, 2016



#### Gently insert the tip of the nozzle into either 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 your 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 from the nostril after giving the dose.

Graphic source: ADAPT Pharma, 2015



4

## Refer

- Have the individual transported to nearest medical facility, even if symptoms seem to get better
- Contact parent/guardians per school protocol



## Safety of Using Naloxone

- Naloxone is the first line treatment for opioid overdose
- Should be administered IMMEDIATELY
  - A delay in administering naloxone could result in death
- Parents & school administrators should not be concerned about adverse health effects of naloxone
  - If the person has not overdosed on an opioid, there is no effect on the body!

(Green, Heimer, & Grau, 2008)





- Know where Naloxone is kept at your school site
  - All building/den offices, SRO, some campus supervisors, district office (student services building)
  - Follow up with School Nurse to replace Narcan supply





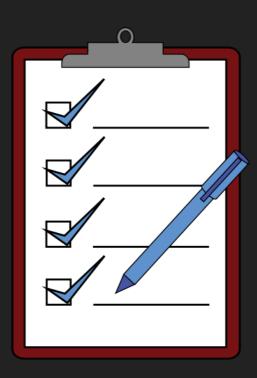
### UNDERSTANDING

# YOUR ROLE

### WHAT IS YOUR ROLE?

- Be aware of your student's pertinent health history as best as possible
- Recognize the signs and symptoms
- Attend annual refreshers
- If something doesn't seem right, it probably isn't

- Try to stay calm in the chaos
- The goal is student safety!



### **DISCLOSURE:**



As a staff member, you are not legally required to administer emergency or rescue medications. You must be a *willing* participant, however...

WHEN YOU CAN SAVE A LIFE, WHY HESITATE?

# FOR MORE INFORMATION...

- Visit the LUHSD Nursing Website
- District Home > Departments > Special Services > Nursing
- https://ca01001129.schoolwires.net/ Page/124



#### Information for Teachers & School Staff

\*Emergency First Aid Guidelines for California Schools\*

AED Location Maps by Site (updated 2023)

#### Allergies and Anaphylaxis

Epi Pen Training Handout

Managing Food Allergies in the Classroom

A Guide for School Staff - Allergy & Asthma

#### Asthma

Breathe Better at School Brochure

Asthma First Aid

A Guide for School Staff - Allergy & Asthma

#### Concussions

CDC Concussion Factsheet for Parents

Concussion Signs & Symptoms Check List

#### Diabetes

Hypoglycemia & Hyperglycemia

American Diabetes Association PPT Training

Baqsimi Administration

Glucagon Administration

Solutions for Common Concerns

Tips for Teachers

Emergency Training for School Personnel Administering Naloxone (Narcan) - YouTube

#### Health Clerks

CCHS Communicable Disease Guide for Schools and Child Care Settings

Dental Trauma Decision Tree

**New Medication Checklist** 

Medication Error Procedures

Medication Error Reporting Form

Health Office Report & School Exclusion Notice

Walk Through Handout

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