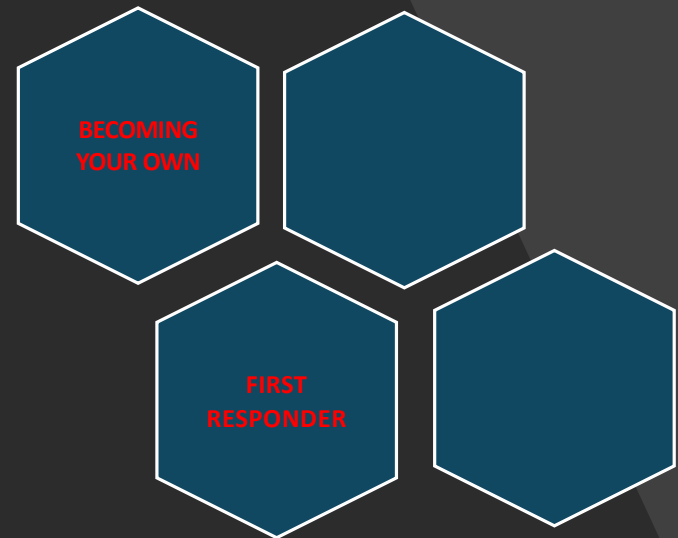


# DISASTER PREPAREDNESS

Presented by CE-Bar Fire Department  
Travis County Emergency Services District #10

[This is an editable template for Texas ESDs]



# Who We Are

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Travis County ESD  
#10



10 Square Miles



Service 8000  
Residents



600 Calls / Year



Various Call Types



4.5 Minute  
Response Time





# Travis County

- Divided into 13 ESDs surrounding the City of Austin
- Neighboring departments – Westlake (ESD 9), Lake Travis (ESD 6), Oak Hill (ESD 3), AFD
- Auto-aid partnership and response (4-5 agencies for high priority incidents)
- Box Alarm – 4 Engines, 2 Trucks, 2 Bat Chiefs
- Brush Alarm– 4 Brush Trucks, 2 Engines, 1 Tender, 2 Bat Chiefs
- WUI Task Force – 4 Engines, 1 Aerial



# ARBC Facility

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- Restrooms
- Water
- Breaks
- Questions
- Emergency Evacuation
- Incident Action Plan

# Why We're Here

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- **Urge** YOU to be your own first responder.
- **Help** you prepare for local disasters
- **Reduce** physical, psychological & financial impact of a disaster on our community
- **Reduce** reliance on emergency services when resources are diminished
- **Reduce** the strain on the emergency response system
- **Better outcome** for YOU.





# Overview

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- Preparedness Mindset
- Get Home Bags
- Recent disasters and considerations specific to each
- Individual & family preparedness
- Medical supplies for airway & bleeding control
- Q & A

# Objectives



- Understand local emergency service providers and the service they provide
- Understand importance of disaster preparation at the individual level, and the need to promote preparedness throughout their communities
- Understand how to effectively plan and prepare for various types of disasters & mitigating the negative impact on you, your family, your neighbors and the community



# Preparedness Mindset

## THREATS

### NATURAL

- 1 Flood
- 2 Wind
- 3 Fire
- 4 Tornado
- 5 Drought
- 6 Freeze
- 7 Heat
- 8 Plague/Pandemics
- 9 Hurricane
- 10 Solar Flare/EMP

### NON-NATURAL

- 1 Nuclear Fallout/Biological
- 2 Civil Unrest
- 3 Wild Animals
- 4 Cyber Attack/EMP
- 5 Financial Collapse
- 6 Fuel Supply Disruption
- 7 Terrorism
- 8 War
- 9 Crime
- 10 Water Supply Disruption
- 11 Vehicle Accidents/Break down

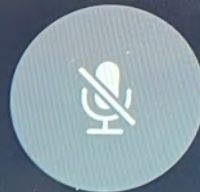


911

Emergency Call — 19:44



End



Mute



Keypad



Add Call



# **EMERGENCY WATER BANK**

BATHTUB WATER STORAGE KIT

Use during hurricanes, disasters, or water shortages  
to maintain an emergency water supply.

# **EMERGENCY WATER BANK**

BATH TUB WATER STORAGE KIT

HOLDS 65 GALLONS OF EMERGENCY DRINKING WATER

**ALEXAPURE®**

# RECENT DISASTERS

A thick, orange, wavy horizontal line that spans the width of the text above it, serving as a decorative underline.





# Winter Storms

# Winter Storms

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## Hazards

- Icy roads
- Loss of power
- Broken water pipes
- Frigid temps / hypothermia
- Lack of emergency services / access
- Lack of retail / food services
- Carbon monoxide poisoning
- Residential fires



# Winter Storms

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## Preparation

- Wrap pipes, drip faucets, shut off water
- Water shut off tool *at the box!*
- Maintain generator – serviced, fuel, proper cords, output; Kill A Watt
- Adequate blankets & clothing
- Stockpile firewood
- Emergency kits
- Tire chains
- Salt / sand entrances







# Winter Storms

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## During the Event

- Avoid driving if possible
- Travel during day. Have emergency kit in vehicle.
- Notify emergency contacts before departing
- Inventory emergency supplies
- Prevent carbon monoxide poisoning!
- Fire extinguishers



# Power Outages





# Power Outages

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- Hazards
  - Extreme temperatures
  - Lack of food, water, utilities, information
  - Carbon monoxide poisoning
  - Electrical fires when power turns back on
  - Traffic hazards
  - Chimney fires (winter)



# Power Outages

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## Preparation

- Emergency supplies kit
- Generator
  - Transfer switch vs. direct supply
  - Maintenance
  - Stabilized fuel
- Makeshift ice blocks
- Season appropriate equipment
  - Winter – blankets, firewood, indoor space heaters
  - Summer – fans, portable a/c units
- Chimney serviced and cleaned
- Battery powered carbon monoxide detector



# Power Outages

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## During the Event

- Extend food supplies
  - Eat perishable food first
  - Closed fridge – 4 hours, full freezer – 48 hours, deep freezer – 72+
  - Rotating appliances (generator)
- Prevent carbon monoxide poisoning
  - Use generators in well ventilated areas
  - Place CO detector in common area near where generator is
- Decide when to stay and go based on safety, comfort, and health







**Extreme Heat**



# Extreme Heat

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## Hazards

- Dehydration, heat exhaustion, heat stroke
- Elderly and young populations at higher risk
- Children or pets left in vehicles
- Sunburn
- Wildfire



# Extreme Heat

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## Preparation

### Individual

- Drink extra fluids (H<sub>2</sub>O) w/ electrolytes
- Wear moisture wicking garments
- Plan strenuous outdoor activities to avoid peak temperatures
- Take frequent breaks when working outside
- Know the signs of heat emergencies:
- Heat exhaustion – sweating, cramping, weakness, dizziness, nausea, vomiting, headache
- Heat stroke – high body temp, hot dry skin, headache, confusion

### Home

- Have A/C serviced before summer; clean/vacuum drain lines
- Box fans if you have a power source
- Screen material for open doors & windows

# Extreme Heat

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## During the Event

### Heat emergencies

- Call for emergency services
- Move person inside or to shaded area
- Remove clothes and cool as best as possible
- Cold water immersion is most effective treatment

### Home

- Have a back-up plan if A/C malfunctions
- Never leave people or pets in a closed vehicle
- Cooling centers available

Heat Exhaustion	Heat Stroke
<b>ACT FAST</b> <ul style="list-style-type: none"><li>• Move to a cooler area</li><li>• Loosen clothing</li><li>• Sip cool water</li><li>• Seek medical help if symptoms don't improve</li></ul>	<b>ACT FAST</b> <b>CALL 911</b> <ul style="list-style-type: none"><li>• Move person to a cooler area</li><li>• Loosen clothing and remove extra layers</li><li>• Cool with water or ice</li></ul>
<i>Dizziness</i> <i>Thirst</i> <i>Heavy Sweating</i> <i>Nausea</i> <i>Weakness</i>	<i>Confusion</i> <i>Dizziness</i> <i>Becomes Unconscious</i>

*Heat exhaustion can lead to heat stroke.*

*Heat stroke can cause death or permanent disability if emergency treatment is not given.*

Stay Cool, Stay Hydrated, Stay Informed!

# Wildfire





# Wildfire

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## Texas 2022

- 12,411 Wildfires
- 650,712 Acres

## Travis County 2022

- 6,725 Acres
- 202 Homes destroyed



# Wildfire

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## Preparation (individual)

- Video all personal property
- 300+ photos; Cloud storage
- List impt things to take
- Prioritize it
- Emergency kit for your vehicle
- Create a family meet/comm plan
- Register with alert systems
- Know evacuation routes
- Evacuate; don't delay
- Notify your emergency contact when leaving





# Wildfire

## Preparation (home)

- Mitigation programs – ReadySetGo, Firewise, TexasWildFireRisk.com
- Watch Duty wildfire app
- How you prepare impacts FD ability to defend your home
- Defensible space, trees, roofs, gutters, building materials, propane tanks, access





# Wildfire

## During the Event

- Continuously monitor disaster updates
- Evacuate when directed to by emergency personnel
- Notify your emergency contact that you are leaving
- Do not leave sprinkler systems running
- Anticipate evacuation problems

An aerial photograph of a city skyline, likely Pittsburgh, with a wide river in the foreground. The sky is dark and overcast, suggesting an approaching storm. The text "Severe Storms & Flooding" is overlaid in white. The river is brown and turbulent, indicating flooding. The city skyline includes several tall buildings, and the foreground shows green trees and a park area.

# Severe Storms & Flooding



# Severe Storms & Flooding

## Hazards

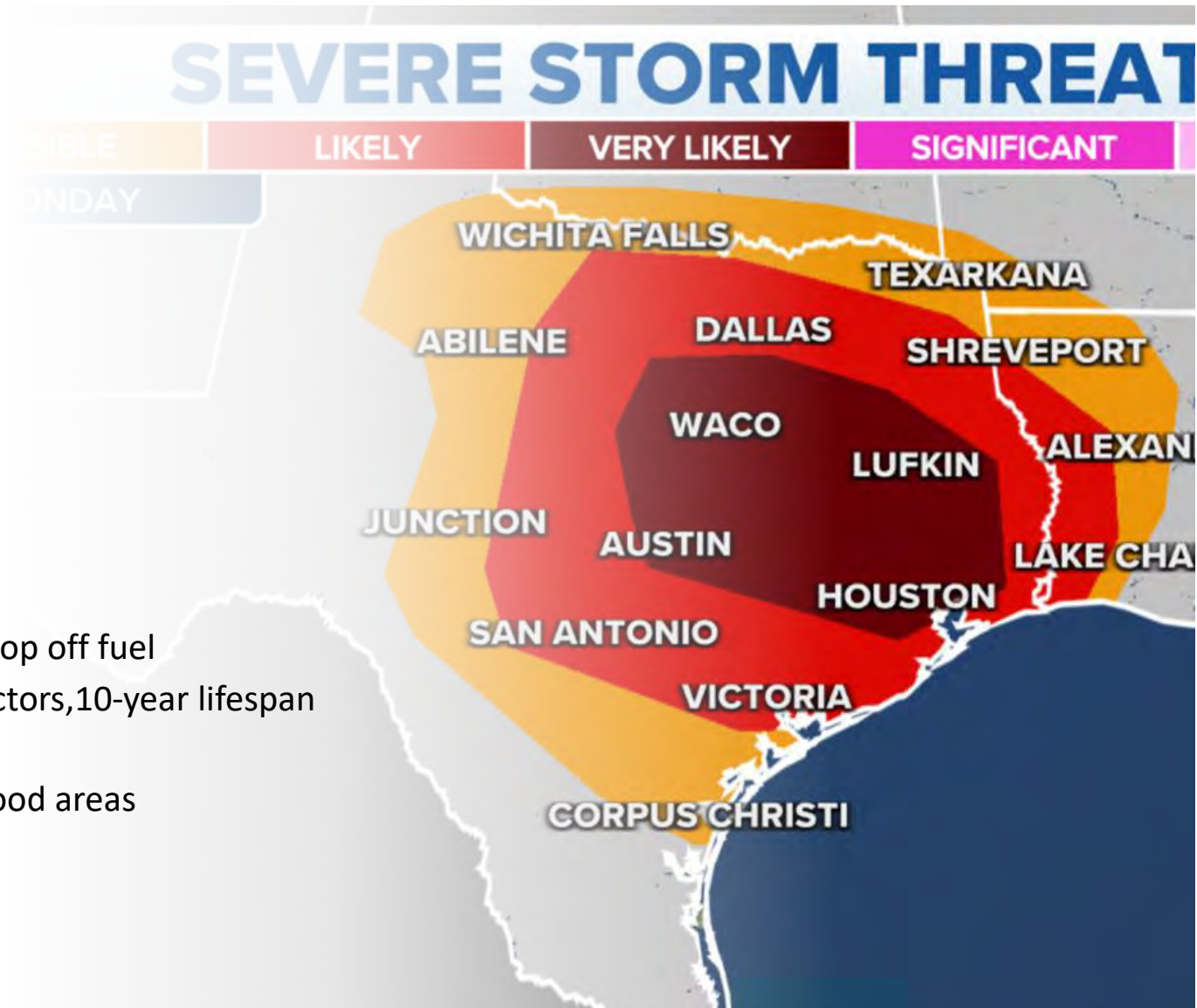
- Often underestimated
- Flood water is fast & powerful!
- High winds often lead to down trees
- Blocked roadways
- Lighting strikes and residential fires



## Severe Storms & Flooding

### Preparation

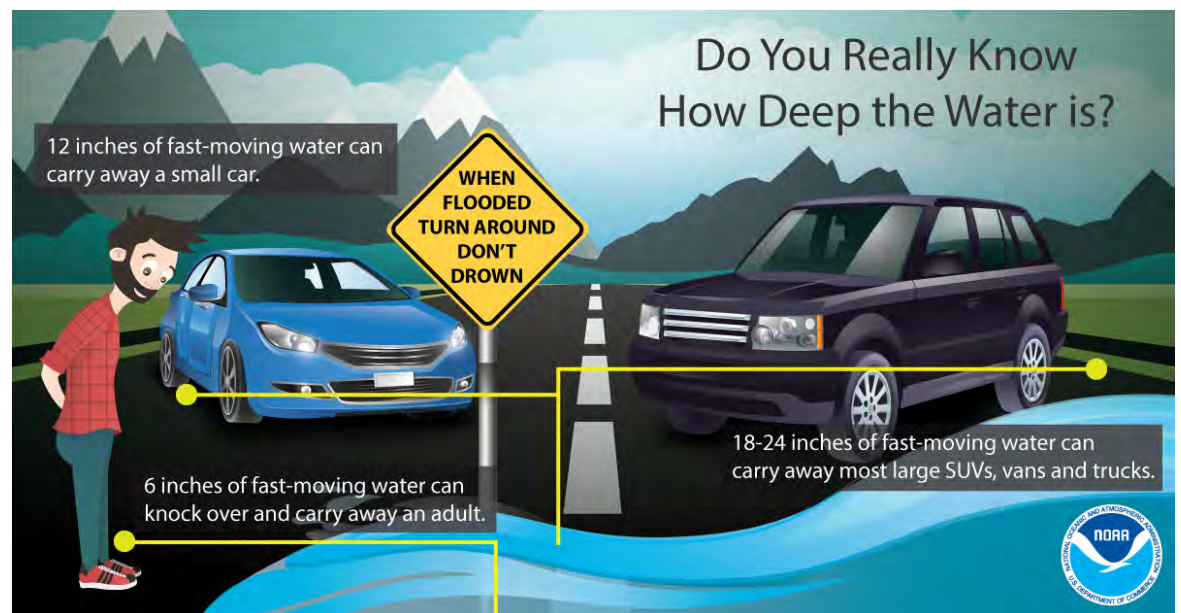
- Maintain trees on property
- Clean drains and gutters
- Maintain your generator & top off fuel
- Install / inspect smoke detectors, 10-year lifespan
- Have an emergency kit
- Know your neighborhood flood areas
- Monitor weather forecasts



# Severe Storms & Flooding

## During the Event

- Stay indoors
- Avoid driving if possible
- Check [ATXflood.com](http://ATXflood.com) for flood map
- Do not cross roads with water over it
- Do not drive over or handle any down lines





# Residential Fires



# Residential Fires

## 2022 National Statistics

- 3,000 deaths
- 10,000 injuries
- \$10B in damage
- 375,000 house fires = 1/90 seconds
- 70% of deaths are in residential structures
- Leading cause = 47% cooking



# **Ignition to Flashover**

## **Natural vs Synthetic Furnishings**

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<https://youtu.be/87hAnxuh1g8>





# Residential Fires

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## Preparation

- Install detectors outside every living space on every floor, in attic & garage
- Change batteries in detectors every 6 months (time change)
- Avoid using open flame candles
- Ensure children do not have access to matches / lighters
- Clean chimney at least every 10 years\*
- Have multiple fire extinguishers, mounted. Know how to use them.
- Develop a family fire safety plan & meeting place (mailbox?)
- Practice fire drills regularly





# Residential Fires

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## During the event

- Call 9-1-1 immediately
- Use extinguishers for small fires only
- Do not use water on kitchen / grease fires
- When in doubt, get out
- Stay low and go
- If unable to get out, shut and seal door and move to the window
- Flagger by road
- Report accountability of occupants to FD immediately



# **PERSONAL & FAMILY PREPAREDNESS**





# Make a Plan

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## Family Communications

- Family phone numbers, addresses, socials & medical info
- Emergency contacts in case of separation or loss of phone – local & out-of-town
- Important phone numbers – doctors, schools, employers, etc
- Family code words: (a) I'm ok "daytime" or (b) I'm in distress "nighttime"

## Meeting Place

- Select a meeting place for at home, local & out-of-town
- Establish meeting places in two directions
- Save locations to map ahead of time



# Make a Plan

---

## Evacuation / Shelter In Place

- Charge phones, fill fuel tank ahead of time, load gear
- Plan what situations you'll stay and for how long
- Realistic expectations based on supplies and conditions – weather, utilities, comfort & health
- Risk vs Benefit – 911 may be strained
- Set triggers. Avoid indecision.
- Plan 2 ways out
- Leave early. Don't delay.
- Share your evacuation plan with emergency contacts
- Follow instructions from emergency services



# Build an Emergency Kit

Get home bag, Go bag, Bug out bag, etc.



Build kits before the season



Build kits for both sheltering and evacuating



Ensure kits are season appropriate



Have a pre-made list for quick packing during evacuations



Tailor to your family's needs



Inspect kits every 6 months and replace items as needed



# Build an Emergency Kit

---

## Sheltering in Place (7 days supply)

- Water – 1 gallon per person per day
- Fill bathtub: WaterBob, Aquapod, Alexapure. Gifts!
- Nonperishable, canned, freeze-dried food
- Baby items – milk, formula, bottles, diapers, wipes, rash ointment
- Pet supplies – food, medications, leash
- First aid kit
- Rx medications
- Hearing or vision products
- Flashlights w/ extra batteries
- Battery powered or hand crank radio; AM/FM w earphones



# Build an Emergency Kit

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## Shelter in Place (continued)

- Hand sanitizer
- Plain bleach; check date
- P&G Purifier of Water packets
- Whistle
- ABC extinguisher
- Lighter or matches
- Cash; it's free!
- Firewood & starters (winter)
- Sleeping bags or warm blankets (winter)
- Tire chains & cables (winter)





# Build an Emergency Kit

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## Evacuating by Car

- Fuel tank FULL
- Water
- Potty; Pullups?
- Nonperishable food; can opener
- Baby supplies
- Pet supplies
- First aid kit; Rx medications
- Phones & chargers
- Hearing or vision products
- Flashlights w/ extra batteries





# Build an Emergency Kit

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## Evacuating by Car (continued)

- Cash
- Whistle
- Road maps
- Spare clothes (season appropriate)
- Essential toiletries
- Documents – DL, passport, SSN, birth certificate, legal docs, family photos, insurance cards, prescriptions & dosages
- Blankets (winter)
- Roadside equipment – jumper cables, jack, spare tire



# Know Your Neighbors

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- Identify at risk population that may go unnoticed
- Encourage others to prepare and seek help when needed
- Reduces strain on emergency services
- Bystander aid is often faster than responders
- You are the first responder until help arrives!
- Community ties, build a network & improve mental health





# Stay Informed

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## Public Alerting Systems

- WarnCentralTexas.org – must register
- STEAR – State of Texas Emergency Assistance Registry – must register
- Accessible Hazard Alert System (AHAS) – deaf, blind, hard of hearing
- KLBJ 590 AM / 99.7 FM Broadcast EAS
- FEMA - Integrated Public Alert & Warning System (IPAWS)

## Mobile Apps

- FEMA
- National: Ready.gov
- City of Austin: ReadyCentralTexas





# Stay Informed

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## Media

- [Facebook.com/TravisCoEmergencyServices](https://www.facebook.com/TravisCoEmergencyServices)
- [211texas.org](https://www.211texas.org) – emergency updates & health and human services
- [ATXfloods.com](https://www.atxfloods.com) – flood map
- [tfswildfires.com](https://www.tfswildfires.com) – wildfire map
- Watch Duty - wildfire tracking app
- [Drivetexas.org](https://www.drivetexas.org) – road closure map



# Medical Supplies

For Airway and Bleeding Control

# Airway Overview

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- Foreign Body Airway Obstructions
- Opioid OD; NARCAN



# Airway Obstructions

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## Things to Know For a Foreign Body Airway Obstruction

- Usually little kids, people that don't fully chew food, those with swallowing difficulties
- Laughter while eating
- What to do if the person is **STILL MOVING AIR?**
- NO BLIND FINGER SWEEPS
- 4-6 mins of no O2 before brain injuries occur

## Treatments

- Abdominal thrust/ Back Blows
- Life Vac
- Call 911

# Life Vac Home Kit: For Choking

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- Creates a Negative Pressure to “vacuum” a foreign object out of the air
- Comes with an adult mask, adult practice mask, and pediatric mask
- <https://youtu.be/ENdY2j2xlbI>

# Directions

- Connect Mask to device
- Place on face with a good seal covering the mouth and nose
- Push handle towards face
- Pull handle towards the ceiling while maintaining a good mask seal



# **Opioid OD**

## **(Fentanyl, Heroin, Pain Meds)**

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The patient will be breathing slowly or not at all

- If not breathing check for a pulse, if no pulse start CPR

Opioid Triad

- Constricted pupils, unconscious, slow or absent breathing

Treatment

- Narcan
- Call 911

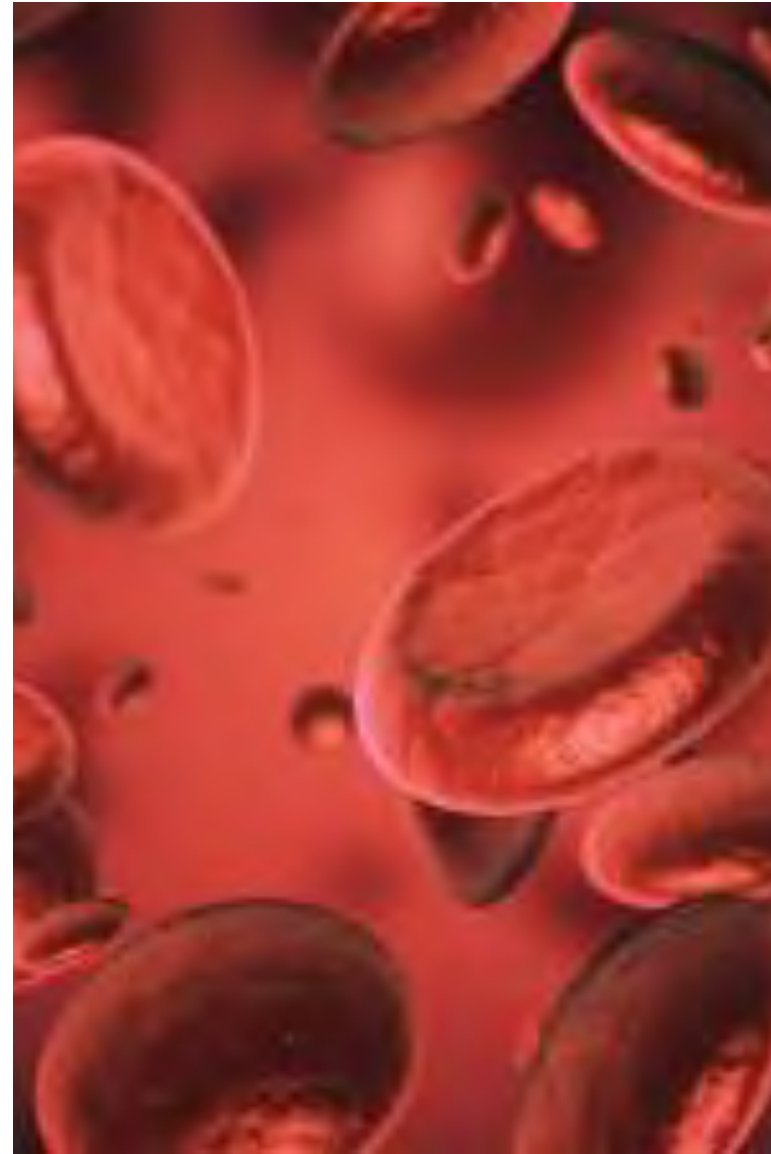




# Bleeding Control Overview

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- Normal bleeding is stopped by **5 mins** of direct pressure.
- 5 mins of pressure will not work when the bleeding is:
  - Arterial – Bright RED and squirting
  - Deep Venous Bleeds – requires more intense pressure or a hemostatic agent (QuikClot)



# Bleeding Control Tools When More than Direct Pressure is needed

- Tourniquet
- Israeli Pressure Bandage
- QuikClot



# Tourniquet



# Tourniquet

---

## When to Use

- Squirting blood – Don't hesitate
- Direct pressure is not working
- An amputation
- You are overwhelmed with the amount of blood

## When NOT to use

- When the bleeding is not on an extremity
- When direct pressure is working



# How To Apply

- 
- High and tight
  - Prior to tightening the windlass, only one finger should be allowed to fit between the tourniquet and the limb
  - Tighten the windlass until blood is no longer flowing, squirting, or limb is pulseless
  - Secure the windlass in the slot
  - Call 911
  - <https://youtu.be/1izlp-v6WSk>

# Israeli Pressure Bandage

## Uses

- Stab wounds
- Junctional wounds (near shoulders and groin)
- Deep venous bleeds (dark, oozing blood) that do not need a tourniquet
- To hold pressure while attending to other injuries
- \*Not interchangeable with tourniquet \*



# How To Use an Israeli Pressure Bandage



**1** Place pad on wound & wrap the elastic bandage around limb or body part



**2** Insert elastic bandage into pressure bar



**3** Tighten elastic bandage



**4** Pull back – forcing pressure bar down onto pad



**5** Wrap elastic bandage tightly over pressure bar and wrap over all edges of pad



**6** Secure hooking ends of closure bar into elastic bandage

# QuikClot

## Advantages

- Accelerates clotting
- Controls bleeding faster
- Strengthens clot formation

## Cautions

- Not used in place of tourniquet
- Not for internal use unless properly trained

## How to use

- Wipe off blood on surface of bleeding area
- Place on bleed
- Hold pressure for 5 mins or wrap it with roller gauze or Israeli Bandage
- Call 911





# Summary

- Preparedness mindset
- Get Home Bag
- Disaster considerations; Discuss “What if...”
- Personal and family preparedness
- Medical supplies for airway & bleeding control

# DISASTER PREPAREDNESS

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Travis County Emergency Services District #10

