

First Aid for the Home Care Worker

**Satellite Conference
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Faculty

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Program Objectives

- **Identify an emergency or an immediate threat to life and know how to respond with first aid care.**
- **Be able to list the steps of care for a minor to moderate burn.**
- **Identify the health risks of a victim who has fallen.**

Program Objectives

- **List the steps of treating a painful or deformed extremity.**
- **List the steps to control external bleeding.**
- **Identify methods of preventing accidents.**

Overview

- **Introduction, background**
- **Purpose of first aid**
- **Goals/objectives**
- **Evaluation**

Introduction

- **Rebecca Burke**
 - **BS in Education**
 - **Nationally Registered Paramedic**
 - **14 years experience**

Purpose of First Aid

- Prevent harm
- Minimize injury/illness
- Provide care until advanced help arrives
- Support the client

Goals

- Identify an emergency
- Know who to call for help
- Know when to call for help
- Provide necessary treatment
- Prevent injury/illness

Identifying an Emergency

- Be aware of unusual
 - Sounds
 - Smells
 - Sights
 - “Sixth Sense”

Identifying an Emergency

- Motor vehicle collisions
- Hazards
 - Blood
 - Glass
 - Fuel
 - Angry drivers

Identifying an Emergency

- Unusual smells
 - Smoke
 - Body fluids
 - Food on the stove

Identifying an Emergency

- Sometimes its what you don't hear:
 - No TV
 - No radio
 - “Are you there?”

Identifying an Emergency

- Look for signs/symptoms
- Pain
- Redness
- Swelling
- Bleeding
- Decreased responsiveness

Scene Assessment

- Is the scene safe?
 - Broken glass
 - Blood
 - Power lines
 - Leaking gas (carbon monoxide)
 - Structures

Checking the Victim

- Level of responsiveness
 - Alert
 - Verbal
 - Pain
 - Unresponsive
- If you have a new onset unresponsive client, stop and call 911!

Unresponsive Victim

- Open the Airway
 - Head/tilt, Chin/lift (non-trauma)
 - Jaw-thrust (trauma)
- Breathing
 - Look, listen and feel for breathing
 - Note rate and quality
- If not breathing, begin rescue breathing

Unresponsive Victim

- Circulation:
 - Check a pulse
 - Is it Fast or Slow?
 - Is it Regular?
 - Check for heavy bleeding
 - Stop all significant bleeding
- If no pulse begin CPR

Unresponsive Victim

- If Breathing and Pulse is present and there are no signs of trauma:
 - Turn the victim on their side (recovery position)
- If you suspect trauma (falls, blow to head)
 - Leave the victim still. Monitor airway until help arrives

Airway Emergencies

- Everyone needs oxygen to survive
- Brain cells start to die within 4-6 minutes without oxygen
- Immediate treatment by bystanders is essential for the victim to survive

Airway Emergencies

- Respiratory distress-painful or difficulty breathing
- Signs/symptoms
 - Noisy breathing
 - Wheezes
 - Gurgling
 - Abnormal breathing
 - Slow/Fast
 - Too deep/Too shallow
 - Gasping

Airway Emergencies

- Skin changes
 - Moist, cool
 - Flushed, ashen, pale, blue color (cyanotic)
- The victim might feel
 - Short of breath
 - Dizzy
 - Pain, tightness in the chest
 - Tingling in hands, feet, lips
 - Anxious, scared

Airway Emergencies

- Underlying illness
 - Asthma
 - Narrowing of air passages, muscle spasms
 - Wheezing during exhalation
 - Asthma - treatments
 - Follow local guidelines
 - Assist with inhalers-if allowed
 - Be prepared for the client to get worse
- Call 911, if breathing is not able to be controlled

Airway Emergencies

- Anaphylactic shock
 - Severe allergic reaction
 - Air passages swell preventing air exchange
 - Blood pressure decreases - victim may faint or become dizzy
 - Life threatening!
- Call 911!

Airway Emergencies

- Treatment of respiratory distress
- When in doubt, call EMS
- Check for life threats
- Loosen restrictive clothing
- Assist victim to sit in chair/bed
- Assist with victim's inhaler
 - Get inhaler, if victim has one

Sudden Illness

- General guidelines
- Do no harm
- Monitor A, B, C's
- Reassure the victim
- Proper positioning
- Provide care as needed

Sudden Illness

- Note:
 - Onset of illness
 - Duration of symptoms
 - Changes during episode
 - Changes in mental status
 - Loss of bladder/bowel control

Sudden Illness

- Types of illness
 - Fainting
 - Diabetic
 - Seizures
 - Stroke

Diabetic

- Diabetes:
 - Inability to break down food into a useable form, usually from impaired insulin production
- Insulin:
 - Production by the pancreas
 - Breaks down food into glucose

Diabetic

- Diabetic emergency
- Type 1:
 - Insulin - dependent
 - Juvenile onset
 - Must receive insulin daily

Diabetic

- Type II: Non-insulin
 - Adult onset
 - More common
 - Controlled through diet and oral meds

Diabetic

- **Hyperglycemia:**
 - Increased blood sugar
 - **DKA: Ketoacidosis**
 - Flushed, hot, dry skin
 - Sweet, fruity breath
 - Diabetic coma: life threatening

Diabetic

- **Hypoglycemia:**
 - Decreased blood sugar
 - Insulin reaction
 - Insulin shock

Diabetic

- **Hypoglycemia - causes**
 - Takes too much insulin
 - Failure to eat
 - Increased exertion
 - Stress
 - Illness / injury

Diabetic

- **S/S**
 - Altered L.O.C.
 - Breathing, pulse, irregularities
 - Looks sick
- **Treatment**
 - If the victim can swallow: give sugar, juice, candy
 - If no improvement or they cannot swallow
 - Call 911!

Diabetic

- **Note:**
 - Onset of illness
 - Duration of symptoms
 - Change in mental status
 - Loss of bladder/bowel control

Seizures

- Irregular activity in the brain causing loss of body control
- **Types:**
 - Epilepsy - chronic illness
 - Febrile - most common in children

Seizures

- Epilepsy
 - Chronic condition
 - Medication to control activity
 - Often goes into remission and can be removed from medication

Seizures

- Decreased L.O.C.
- Tonic/clonic movements
 - Shaking all over
- Confusion
 - Victim is not aware of what is happening
- Loss of control of bladder/bowels

Seizures

- Febrile:
- Fever - sudden change in temperature
- Common in children
- Remove clothing
- Cool the infant with tepid water

Seizures

- Treatment during
 - Clear the area
 - Lower the victim to the floor
 - Loosen clothing
 - Place towel, blanket under head
- Do not put anything in their mouth!
- When activity stops - recovery position

Seizures

- After the activity stops
- Post ictal state
- Dazed, confused
- Check seizure protocol
- Call 911 if:
 - First seizure
 - Multiple seizure
 - Seizure lasting longer than 1 minute
 - Pregnant

Seizures

- Note:
 - Onset of illness
 - Duration of symptoms
 - Changes during episode
 - Changes in mental status
 - Loss of bladder/bowel control

Overview: Vagus Nerve Stimulation Therapy

- Form of treatment that may be tried when medications fail to stop seizures.
 - Adults and children over the age of 12

Overview: Vagus Nerve Stimulation Therapy

- Partial seizures not controlled by other methods.
- Prevents seizures by sending regular small pulses of electrical energy to the brain, via the vagus nerve in the neck.

Overview: Vagus Nerve Stimulation Therapy

- Battery
 - Flat, round battery, about the size of a silver dollar, which is surgically implanted in the chest wall.
- Wires under the skin around the vagus nerve.

Overview: Vagus Nerve Stimulation Therapy

- The battery is programmed by the health team
 - Sends a few seconds of electrical energy to the nerve
- If the patient feels a seizure coming on
 - Activate the impulse by passing a small magnet over the battery

Overview: Vagus Nerve Stimulation Therapy

- In some people, this stops the seizure
- It is also possible to turn the device off by holding the magnet over it

Overview: Vagus Nerve Stimulation Therapy

- Side effects
 - Hoarseness
 - Discomfort in the throat
 - Change in voice quality during the stimulation

Overview: Vagus Nerve Stimulation Therapy

- Complete seizure control is seldom achieved
- Experience fewer seizures
- Effectiveness increases with time
- Improved quality of life
- Continue anti-epileptic medication

DIASTAT®AcuDial™ (diazepam rectal gel)

- FDA-approved, acute at-home treatment for patients two years and older on stable anti-epileptic medications (AEDs) who experience bouts of increased seizure activity
- Designed for use with break through seizures for patients taking other anti-seizure medications

DIASTAT®AcuDial™ (diazepam rectal gel)

- Rapid absorption through the rectum
- Ease for caregiver to administer
- Minimizes trips to the emergency room
- Not currently approved for home health use

Fainting - Syncope

- Causes
 - Change in position
 - Stress
 - Pain
 - Shock
- S/S prior
 - Dizzy
 - Pale, sweaty
 - Vision changes
 - Tingling in fingers/toes

Fainting - Syncope

- Treatment
 - Place the victim on their back and elevate the legs about 12 inches
 - If the victim is seated, have them rest their head in their lap
 - If nauseated: place in the recovery position
 - Loosen clothing
 - Nothing to eat or drink

Fainting - Syncope

- Determine cause:
 - If unable to determine cause: contact physician or go to the emergency room
- Victims should recover within 5 minutes
- If they are not improving:
 - Call 911

Fainting - Syncope

- **Note:**
 - Onset of illness
 - Duration of symptoms
 - Changes during episode
 - Changes in mental status
 - Loss of bladder/bowel control

Stroke

- **Cerebrovascular accident (CVA)**
 - Disruption in blood flow to the brain
- **Causes**
 - Thrombus/embolus
 - Aneurysm
- **Transient ischemic attack**
 - Mini-stroke
 - Temporary loss of blood flow
 - Symptoms disappear within minutes

Stroke

- **Risk factors for stroke**
 - Uncontrolled high blood pressure
 - Smoking
 - Diet
 - Exercise
 - Heredity

Stroke

- **S/S of stroke**
 - Hemi paresis
 - One sided weakness
 - Facial drooping
 - Impaired speech
 - Impaired balance
 - Impaired vision
 - Severe headache

Stroke

- **Treatment for stroke**
 - Call 911
 - Protect the airway
 - Reassure the victim
 - Non-verbal communication

Stroke

- **Note:**
 - Onset of illness
 - Duration of symptoms
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Sudden Illness

- **General guidelines**
 - Do no harm
 - Monitor A, B, C's
 - Reassure the victim
 - Proper positioning
 - Provide care as needed

Falls

- **Without moving the victim check:**
 - Airway
 - Breathing
 - Circulation

Falls

- If the victim is not responding "normally", call 911
- Keep the head and neck in an inline position
- Make sure they are breathing
- Reassure the victim
- Do not get them up!

Falls

- **Dangers from falls**
 - Head injury - bleeding into the brain can lead to death
 - Broken hip - very painful can have internal bleeding
 - Other fractures: neck, back

Falls

- **Consider what caused the fall**
 - Dizziness
 - Tripping
 - Weakness
 - Heart attack
 - Stroke

Falls

- If the victim is responding "normally", contact your supervisor
- Do not move them without permission

Soft Tissue

- Epidermis
 - Outer layer, protection
- Dermis
 - Nerves, roots, blood vessels
- Hypodermis
 - Fatty tissue

Wounds

- Closed wounds - no break in the skin
- Open wounds - skin is broken, greater risk for infection
- Burns
- Soft tissue damaged from heat, chemicals, electricity or radiation

Closed Wounds

- Contusion - bruise
- Hematoma

Open Wounds

- Abrasions - scrape
- Lacerations - cuts
- Avulsions - part of soft tissue torn away
- Impaled object - an object that remains in the body

Open Wounds - Risk

- Infection
- Clean with soap and water
- Tetanus - lockjaw
- Booster every 10 years or when high risk of exposure

Signs/Symptoms of Infection

- Redness
- Swelling
- Discharge - pus
- Fever
- Red streaks

Treating Infection

- Wash - soap and water
- Elevate area
- Antibiotic ointment
- Streaks or fever - contact supervisor

Rules For Dressings

- Do not cover fingers or toes when possible
- If dressing becomes blood soaked, add more. Don't remove without permission - you could be removing clots

Major Open Wounds

- Call 911
- Control bleeding
- Dress and bandage wound
- Cover patient for warmth
- Use bulky dressings
- Treat for shock

Burns

- Severity depends on
 - Temperature
 - Time of exposure
 - Location of burn
 - Amount of area covered
 - Age, medical condition

Burns

- Superficial burns
- First degree
 - Skin: red, dry
 - Painful
 - Only involves epidermis

Burns

- Deep burns
- 2nd or 3rd degree
 - Epidermis and dermis
 - Blisters
 - Very painful - no pain
 - Scarring

Burns

- **Critical burns**
 - Any breathing problems
 - Large burns
 - Burns to hands, feet, face, genitals, head or neck
- Less than 5 years or greater than 60
- Pre-existing medical conditions
- Chemical, electrical or explosion related

Care For Burns

- **Stop the burning**
 - Water
 - Remove jewelry
 - Cover the burn
 - Treat for shock
- Contact your supervisor for minor burns
- Call 911 for major burns
- Do not apply:
 - Butter
 - Oil
 - Ointments

Chemical Burns

- Call 911
- Cut off contaminated clothing
- Brush off powders
- Flush for 20 minutes with water

Electrical Burns

- Call 911
- Cut-off power source
- Check responsiveness, breathing
- Entrance and exit wound
- Be prepared to do CPR

Bleeding

- **Blood**
- Volume = 5-6 liters
- Transports oxygen, nutrients, waste
- Produces antibodies to fight infection
- Maintain temperature

Types of Bleeding

- **Arterial**
 - Bright red
 - Spurting blood
 - Life threatening

Types of Bleeding

- **Venous**
 - Steady flow
 - Dark red
 - Can be life threatening
- **Capillary**
 - Slow, oozing
 - Not life threatening
 - Risk for infection

Treatment For Bleeding

- **Direct pressure**
- **Elevation**
- **Pressure bandage**
- **Pressure points**

Risks To Rescuer

- **Use gloves when possible**
- **Use large cloth to cover bleed**
- **Wash hands often**

Internal Bleeding

- **Mechanism of injury/illness**
 - Bruising
 - Pain
 - Weakness
 - Rapid pulse
 - Nausea/vomiting
 - Abdominal pain
 - Decreased responsiveness
 - Headache

Treatment For Internal Bleeding

- **Call 911 / contact your supervisor**
- **Keep the victim still**
- **Loosen restrictive clothing**
- **Cover to keep warm**

Shock

- **A condition in which the circulatory system fails to deliver sufficient oxygen rich blood to the vital organs/tissue**
- **Also know as:**
 - Hypo perfusion
 - Inadequate perfusion
 - Condition between homeostasis and death

Shock

- Circulatory system
 - Heart
 - Blood vessels
 - Blood
- Causes of shock
 - Blood loss
 - Cardiac arrest
 - Interference with blood vessels (rapid dilation)

Shock

- Signs / symptoms of shock
 - Restless
 - Tachycardia
 - Tachypnea
 - Cyanosis
 - Thirst
 - Nausea
 - Decreased level of consciousness

Shock

- Compensation
 - Initially:
 - Blood shunted to vital organs
 - Increased heart rate
 - Increased breathing
- Decompensation
 - Wastes are dumped into blood
 - Death of tissues not receiving blood
 - Death of organs
 - Death of person

Shock

- Treatment
 - Call 911
 - Check responsiveness
 - Check A, B, C's
 - Give rescue breathing or CPR as needed
 - Control bleeding
 - Cover - keep warm
 - Elevate legs
 - Monitor and reassure the victim

Prevention

- Keep a clear pathway
- Remove unneeded objects
- Secure loose rugs
- Minimize the use of extension cords

Prevention

- Follow physician instructions
- Healthy diet
- Exercise
- Cleanliness
- Take medications as prescribed
- Consult your supervisor for assistance