Sudden Illness

- Recognize the signals of a sudden illness.
- List the general guidelines for giving care to a person with a sudden illness.
- Describe how to care for a person who faints.
- Describe how to care for a person having a diabetic emergency.
- Describe how to care for a person having a seizure.
- Describe how to care for a person having a stroke.
- Identify ways to reduce the risk of a stroke or transient ischemic attack (TIA).

Introduction

- Some illnesses develop over time, whereas others can strike without a moment's notice.
- By knowing the signals of sudden illness and paying careful attention to details at the emergency scene, you can determine how best to help a victim of sudden illness.
- You do not need to know the exact cause of the illness to give appropriate care.
- Always follow the emergency action steps: CHECK—CALL—CARE.

Responding to a Medical Emergency

- Sudden illnesses often show the following signals:
  - Change in a person’s level of consciousness
  - Feeling lightheaded, dizzy or weak
  - Nausea or vomiting
  - Changes in breathing, circulation, skin temperature, color or moisture
  - Signs of a heart attack or stroke
  - Abdominal pain or pressure
    - Diarrhea, bloating, doubling pain
  - Seizures
Specific Sudden Illness

- Sudden illness can be—
  - Acute.
  - Chronic.
- General guidelines of care for sudden illnesses include—
  - Do no further harm.
  - Monitor breathing and consciousness.
  - Help the victim rest in the most comfortable position.
  - Keep the victim from getting chilled or overheated.
  - Reassure the victim.
  - Give any specific care needed.

Fainting

- Fainting (syncope) is a common sudden illness characterized by a partial or complete loss of consciousness.
- Fainting is caused by a temporary reduction of blood flow to the brain.
- The victim will commonly display shock-like signals, such as—
  - Cool, pale or moist skin.
  - Nausea and sweating
  - Numbness or tingling in the fingers and toes.
  - Double or Dimming vision

Care for Fainting

- Position the victim on his or her back on a flat surface.
- Loosen any restrictive clothing.
- Check for any other life-threatening and non-life-threatening conditions.
- Do not give the victim anything to eat or drink.
- Do not splash the victim with water or slap his or her face.
- As long as the fainting victim recovers quickly and has no lasting signals, you may or may not need to call 9-1-1 or the local emergency number.
Diabetic Emergencies

- The condition in which the body does not produce enough insulin or does not use insulin effectively is called diabetes mellitus.
  - 23.6 million American currently have diabetes
  - www.diabetes.org
- In the digestive process, the body breaks down food into simple sugars such as glucose.
- Insulin is a hormone that helps sugar (glucose) pass from the bloodstream into the cells.
- Without a proper balance of sugar and insulin, cells will starve and the body will not function properly.

- There are two major types of diabetes:
  - In **Type I** diabetes the body produces little or no insulin.
    - Most people who have Type I diabetes have to inject insulin into their bodies daily.
  - In **Type II** diabetes the body produces insulin, but either the cells do not use the insulin effectively or not enough insulin is produced.
    - Controlled by diet and does not require regular insulin shots
    - More common to have Type II than Type I

- A situation in which a victim becomes ill because of an imbalance of insulin and sugar in the bloodstream is called a diabetic emergency.
- There are two types of diabetic emergencies:
  - Hyperglycemia: a condition where the insulin level in the body is too low (glucose is too high)
    - Cells revert to burning fats which produces ketoacidosis
      - An acidic condition indicated by flushed hot dry skin and a fruity breath odor.
      - If continued, diabetic coma results
Diabetic Emergencies

- Hypoglycemia: a condition where the insulin level in the body is too high. (glucose is too low)
- Caused by stress, taking too much insulin, over-exercises, or does not eat correctly
- Not enough sugar is available for brain function which leads to insulin shock

Diabetic Emergencies

Hyperglycemia and hypoglycemia are different conditions, but their primary signals are similar. These include—
- Changes in the level of consciousness.
- Changes in mood.
- Irregular breathing.
- Feeling or looking ill.
- Abnormal skin appearance.
- Dizziness and headache.
- Confusion.

Care for a Diabetic Emergency

- Check and care for any life-threatening conditions.
- If the victim is conscious, check for non-life-threatening conditions.
- Look for a medical alert tag or ask the victim if he or she has diabetes.
Care for a Diabetic Emergency

- If the victim is conscious and able to swallow, give him or her sugar in the form of:
  - several glucose tablets or glucose paste
  - a 12-ounce serving of fruit juice, milk, or non-diet soft drink
  - table sugar dissolved in a glass of water.
- If the victim is unconscious—
  - Call 9-1-1 or the local emergency number immediately.
  - Do not give the victim anything by mouth.
  - Monitor signs of life.
  - Keep him or her from getting overheated or chilled.

Seizures

- When the normal functions of the brain are disrupted by injury, disease, fever, infection, metabolic disturbances or conditions causing a decreased oxygen level, a seizure may occur.
- A seizure is a result of abnormal electrical activity in the brain and causes temporary involuntary changes in body movement, function, sensation, awareness or behavior.
- Before a seizure occurs, the victim may experience an aura.
- Seizures can range from mild blackouts to sudden, uncontrolled muscular contractions that can last several minutes.

Types of Seizures

- Generalized tonic-clonic seizures, also called grand mal seizures that affect both halves of the brain, are characterized by four phases:
  - Aura phase: person senses something unusual
  - Tonic phase: unconsciousness and then muscle rigidity
  - Clonic phase: uncontrollable muscular contractions (convulsions)
  - Post-ictal phase: diminished responsiveness with gradual recovery and confusion
- Partial seizures affecting only a very small area of one hemisphere of the brain:
  - Simple partial seizures: involuntary muscle contraction in one area of the body; person usually remains aware
  - Complex partial seizures: often with a blank stare followed by random movements such as lip smacking or chewing
- Absence seizures or petit mal seizures: brief sudden loss of awareness or conscious activity that may be mistaken for daydreaming
- Febrile seizures: those brought on by a rapid increase in body temperature, most commonly in children under the age of 5
Types of Seizures

- Epilepsy is not a specific disease but a term used to describe a group of disorders in which the individual experiences recurrent seizures as the main symptom.
- When caring for someone experiencing an epileptic seizure, it is important to protect the person from injury and manage the airway by doing the following:
  - Do not put anything, including your fingers, in the person’s mouth.
  - Make sure that the environment is as safe as possible
  - After the seizure passes, position the person on his or her side in a modified H.A.I.N.E.S position

Care for a Seizure

- Call 9-1-1 or the local emergency number for any of the following situations:
  - The seizure lasts more than 5 minutes or the person has repeated seizures with no signs of slowing down (status epilepticus).
  - The person appears to be injured.
  - You are uncertain about the cause of the seizure.
  - The person is pregnant.
  - The person is known to have diabetes.
  - The person is a child or an infant
  - The seizure takes place in water.
  - The person fails to regain consciousness after the seizure.
  - The person is a young child or an infant who experienced a febrile seizure brought on by a high fever.
  - The person is elderly and could have suffered a stroke.
  - This is the person’s first seizure.

Stroke

- A stroke, also called a cerebrovascular accident (CVA) or brain attack, is a disruption of blood flow to a part of the brain, causing permanent damage to brain tissue.
Stroke

• Stroke is commonly caused by a blood clot, called a thrombus or embolus, an aneurysm or atherosclerosis.
• A transient ischemic attack (TIA) is a temporary episode that is similar to a stroke and is sometimes called a “mini-stroke.”
• Ways to reduce the risk of a stroke or TIA include the following:
  - Controlling blood pressure
  - Not smoking
  - Eating a healthy diet
  - Exercising regularly
  - Controlling diabetes

A victim of stroke may exhibit or experience some or all of the following signals:

- Facial droop or drooling.
- Weakness or numbness of the face, arm or leg, usually on only one side of the body.
- Trouble with speech, such as trouble talking, getting words out or being understood when speaking and possibly trouble understanding.
- Loss of vision or disturbed (blurred or dimmed) vision in one or both eyes.
- The pupils may be of unequal size.
- Sudden severe headache, often described as “the worst headache ever.”
- Dizziness, confusion, agitation, loss of consciousness or other severe altered mental status.
- Loss of balance or coordination, trouble walking or ringing in the ears.
- Incontinence.

For a stroke, think F.A.S.T. —

- **Face** — Weakness on one side of the face. (Ask the person to smile and note any weakness or drooping of the mouth.)
- **Arm** — Weakness or numbness in one arm. (Ask the person to raise both arms and note any non-symmetry of the arms.)
- **Speech** — Slurred speech or trouble speaking. (Ask the person to repeat a simple sentence such as, “I have the lunch orders ready” and note any slurring or difficulty speaking.)
- **Time** — Time to call 9-1-1 if you see any of these signals. (Note the time that the signals began.)
Care for a Stroke

- Note the time of onset of signals and report it to the emergency medical dispatcher or EMS personnel when they arrive.
- If the person is unconscious, make sure that he or she has an open airway and care for any life-threatening conditions.
  - If fluid or vomit is in the person’s mouth, position him or her in a modified H.A.I.N.E.S position.
  - You may have to remove some fluids or vomit from the mouth by using one of your fingers.
  - Stay with the person and monitor his or her breathing and changes in his or her condition.
- If the person is conscious, check for non-life-threatening conditions.
  - Offer comfort and reassurance as a stroke can make the person fearful and anxious. Often, he or she does not understand what has happened.
  - Have the person rest in a comfortable position.
  - Do not give him or her anything to eat or drink.

Closing

- Sudden illness can strike anyone, at any time. Even if you do not know the cause of the illness, you can still give proper care.
- Knowing the signals of sudden illness, such as changes in consciousness, profuse sweating, confusion and weakness, will help you determine the necessary care to give the victim until EMS personnel arrive.

Questions?