Poisoning

- Identify the general guidelines for care for any poisoning emergency.
- Understand when to call the Poison Control Center and when to call 9-1-1 or the local emergency number.
- List the four ways poisons enter the body.
- Identify the signals of each type of poisoning.
- Describe how to care for a person based on the type of poisoning.
- Identify the signals and care of anaphylaxis.
- List the ways to prevent poisoning.

Introduction

- A poison is any substance that can cause injury, illness or death when introduced into the body.
- Poisoning is considered a sudden illness.
- In 2008, 2.4 million calls came from people who had contact with poisons.
- More than 93% of all poisonings take place in the home.

Signals of Poisoning

- Headache.
- Dizziness.
- Weakness.
- Irregular pupil size.
- Burning or tearing eyes.
- Abnormal skin color.
- Burn injuries around the lips or tongue.
- Nausea or vomiting.
- Diarrhea.
- Chest or abdominal pain.
- Trouble breathing.
- Sweating.
- Changes in consciousness.
- Seizures.
Poisoning

- Poisonings can be accidental or intentional
- The severity of a poisoning depends on:
  - The type and amount of the substance.
  - The time that elapsed since the poison entered the body.
  - The person’s size (build), weight, medical condition and age.

Checking the Scene

- Often, the scene itself is the best clue that a poisoning may have occurred. Factors to notice include—
  - Unusual odors.
  - Flames or smoke.
  - An open medicine cabinet.
  - Open or spilled containers.
  - Overturned or damaged plants.
  - Drug paraphernalia or empty containers.

General Care for Poisoning

- General guidelines of care for any poisoning emergency:
  - Check the scene.
  - Check for life-threatening conditions. Call 9-1-1 or the local emergency number if the victim is unconscious or is having trouble breathing.
  - If the victim is conscious, ask questions.
    - What type of poison did the victim ingest, inhale, inject or come into contact with?
    - How much poison did the victim ingest, inhale, inject or come into contact with?
    - When did the poisoning take place (approximate time)?
Care for Poisoning

- Call the National Poison Control Center at (800) 222-1222 or 9-1-1 or the local emergency number for life-threatening emergencies first.
- Give care as directed by Poison Control Center personnel or the EMS call taker.

Poisoning

- How poisons enter the body:
  - Ingestion
  - Inhalation
  - Absorption
  - Injection

Ingested Poisons

- The U.S. Centers for Disease Control and Prevention (CDC) estimates that 76 million people suffer food-borne illnesses each year in the United States.
- Ingested poisons are those that are swallowed and include items such as foods, drugs, medications, and household items.
Ingested Poisons

- Young children tend to put almost everything in their mouths, so they are at a higher risk of ingesting poisons.
- Seniors may make medication errors if they are prone to forgetfulness or have difficulty reading the small print on medicine container labels.
- Two of the most common categories of food poisoning are bacterial food poisoning and chemical food poisoning.
  - *Salmonella* is the most common type of food poisoning.
  - *Botulism* is the most deadly type of food poisoning.

Care for Ingested Poisons

- In some cases of ingested poisoning, the National Poison Control Center may instruct you to induce vomiting.
- Do Not give the victim anything to eat or drink unless medical professionals tell you to do so.
- Only induce vomiting if instructed to do so by a medical professional.
Inhaled Poisons

- Poisoning by inhalation occurs when a person breathes in toxic fumes.
- The danger associated with inhaled poisons makes checking the safety of the scene important.
- Notice clues at the scene:
  - Unusual odors
  - Strong smell of fuel
  - Hissing sound
- Call 9-1-1 or the local emergency number from a different location.

Inhaled Poisons

- A commonly inhaled poison is carbon monoxide. It is a colorless, odorless gas.
  - Carbon monoxide exposure can cause death.
- Pale or bluish skin color indicates lack of oxygen, which may indicate exposure.

Care for Inhaled Poisons

- All victims of inhaled poison need oxygen as soon as possible.
- Help a conscious victim by getting him or her to fresh air.
- If you find an unconscious victim—
  - Remove him or her from the scene if it is safe to do so.
  - Call 9-1-1 or the local emergency number.
  - Give care for any other life-threatening conditions.
- Call 9-1-1 or the local emergency number if you suspect that toxic fumes are present.
Absorbed Poisons

- An absorbed poison enters the body after it comes in contact with the skin or mucus membrane in the eye, mouth, or nose.
- Absorbed poisons come from plants such as poison ivy, poison oak and poison sumac, as well as from fertilizers and pesticides used in lawn and plant care.

Absorbed Poisons

- Some medications, such as topical medications or transdermal patches, can also be absorbed through the skin.
- Some of the signals of absorbed poisons include:
  - Traces of the liquid, powder or chemical on the person’s skin.
  - Skin that looks burned, irritated, red or swollen.
  - Blisters that may ooze fluid, or a rash.
  - Itchy skin.

Care for Absorbed Poisons

- To care for a victim who has come into contact with a poisonous plant:
  - Immediately rinse the affected area.
  - If a rash or weeping lesion (oozing sore) develops, seek advice from a pharmacist or physician.
  - If a victim’s condition worsens, seek a physician.
- To care for a victim who has come into contact with chemicals—
  - If chemical is dry, brush off the chemicals using a glove hand before flushing with running tap water.
  - If chemical is wet, flush with large amounts of cool running tap water at least 20 minutes or until EMS personnel arrives.
  - Call 9-1-1 or the local emergency number.
Injected Poisons

- Injected poisons enter the body through the bites or stings of certain insects, spiders and scorpions, ticks, marine life, animals and snakes or as drugs or misused medications injected with a hypodermic needle.
- Insect and animal bites and stings are the most common sources of injected poisons.
- Care for injected drug poisoning can be found in chapter 18.

Some of the signals of injected poisons include:
- Bite or sting mark at the point of entry.
- A stinger, tentacle or venom sac in or near the entry site.
- Redness, pain, tenderness or swelling around the entry site.
- Signs of allergic reaction, including localized itching, hives or rash.
- Signs of a severe allergic reaction (anaphylaxis), including weakness, nausea, dizziness, swelling of the throat or tongue, constricted airway or trouble breathing.

Care for Injected Poisons

- When caring for an injected poison, check the person for life-threatening conditions and care for any found.
- If none are present, apply an ice pack or cold pack to reduce pain and swelling in the affected area.
- Call 9-1-1 or the local emergency number if the person has signals of anaphylaxis.
Anaphylaxis

- Severe allergic reactions to poisons are rare. But when one occurs, it is a life-threatening medical emergency. This reaction is called **anaphylaxis**.
  - This condition is a form of shock.
- It can be caused by insect bites or stings or contact with certain drugs, medications, foods and chemicals, resulting from any of the four modes of poisoning.
- Anaphylaxis usually occurs suddenly, within seconds or minutes after the person comes into contact with the poisonous substance.

The skin or area of the body that came in contact with the substance usually swells and turns red.

Other signals include:
- Trouble breathing, wheezing or shortness of breath.
- Tight feeling in the chest and throat.
- Swelling of the face, throat or tongue.
- Weakness, dizziness or confusion.
- Rash or hives.
- Low blood pressure.
- Shock.

Care for Anaphylaxis

- Call 9-1-1 or the local emergency number.
- Place the victim in a position of comfort for breathing.
- Comfort and reassure the victim.
- People who know they are extremely allergic to certain substances may carry an anaphylaxis kit or epinephrine auto-injector.
- The kit contains a dose of epinephrine that can be injected into the body to counteract the anaphylactic reaction.
- In some cases, you may need to assist the victim in using his or her prescribed medication.
Preventing Poisoning

By following these guidelines you will be able to prevent most poisoning emergencies:

- Keep the household products and medications out of the reach of children.
- Use childproof safety caps on containers of medications and other potentially dangerous substances.
- Use special latches and clamps to keep children from opening cabinets.
- Keep products in their original containers.
- Use poison symbols to identify dangerous substances.

Preventing Poisoning (continued)

- Dispose of outdated medications and household products.
- Use chemicals only in well-ventilated areas.
- Wear proper clothing.
- Immediately wash those areas of the body that may have come in contact with a poison.

Closing

- Poisoning can occur in any one of four ways: inhalation, ingestion, absorption and injection.
- For suspected poisoning call the National Poison Control Center, 9-1-1 or the local emergency number if the person has a life-threatening emergency.
- Follow the directions of Poison Control Center personnel or the EMS call taker.
- Questions?