

Poison Prevention-Keeping Children Safe



Target Audience:

Young parents (or soon-to-be parents)

Utah State Core Curriculum for Health Education-Grades 9-12

Safety and Injury

- *Standard 5: Students determine how individual and group behaviors impact personal and community health and safety.*

Consumer Health

- *Standard 7: Students evaluate health information needed to advocate for personal, peer, family, community, and environmental health.*

Goal:

To educate young parents with small children on different types of poisons, how children can get poisoned, how to prevent potential poisonings, and how to get help if a poisoning occurs.

Learning Objectives:

Participants will be able to:

- list at least 1 potential poison in each of the five listed rooms of the home.
- identify 2 poison prevention strategies.
- practice calling the Utah Poison Control Center (UPCC).
- relate 2 reasons why children under the age of 6 are at an increased risk for poisonings.
- explain the difference between “child-resistant” and “child-proof” as it relates to poisonings.

Timeline:

This lesson is designed to be a 60 minute session.

Materials:

- Power Point Presentation or overhead slides (Optional). Note: The Power Point slides can be found at www.utahpoisoncontrol.org (select Education and Prevention on the menu).
- 5 large pieces of paper or poster board
- Several markers or other writing utensils
- White board or chalkboard for drawing Tic Tac Toe grid (see appendix D)

- Prizes for the Tic Tac Toe game (optional)
- UPCC magnets and telephone stickers-available by calling 1-800-222-1222 or by ordering on the UPCC website www.utahpoisoncontrol.org
- Look-alike products such as blue window cleaner and blue sports drink, pine floor cleaner and apple juice, medicine and candy etc. Note: A look-alike drug/candy display can be borrowed from the UPCC. Call 1-800-222-1222 for more information.
- *Household Guide to Poison Control* handout for each participant. This is located in appendix B.
- *Pre-test/post-test* (optional) located in appendix E.

Description:

In Utah, approximately 60% of poisonings occur in children under the age of 6 years. Therefore, educating parents of these children is a key element in preventing a poison exposure. While most people are aware that potential poisons need to be kept away from small children, many parents are unaware of when poisonings occur, and which products pose the greatest risk of poisoning young children.

Content:

The lesson content is presented in a brief outline for easy reference. This is followed by detailed content which includes all learning activities, methods, materials list, and information needed to facilitate the session.

Content Outline:

1. Introduction

- a. Introduce self
- b. Pre-test (optional)
- c. Explain purpose

2. Ice Breaker Activity/Pretest

- a. Round Robin Activity

3. Utah Poison Control Center (UPCC)

- a. Mission Statement
- b. UPCC Help

4. Definitions and Statistics

- a. What is a Poison?
- b. Utah’s poison problem
- c. Age distribution

5. Common Substances

- a. Children under age 6
- b. All ages

6. When Do Poisonings Occur?

- a. When product is in use
- b. Peak age

7. What Are These Poisons and What Should We Do About Them?

- a. Medicines and Vitamins
- b. Deadly in a Dose
- c. Household Products
- d. Cosmetics and Personal Care Products
- e. Topicals
- f. Pesticides and Car Care Products
- g. Miscellaneous Poisons
- h. Prevention Strategies

8. Why Are Children More Likely to be Poisoned?

- a. Stages of development
- b. Risk factors

9. How Do We Respond to a Poisoning?

- a. Emergency action first aid tips
- b. Calling the UPCC/Role-Play Activity

10. Game/Posttest

- a. Tic Tac Toe Game

11. Conclusion

- a. Poison prevention
- b. Contact the UPCC
- c. Post-test (optional)

Poison Prevention Lesson

1. Introduction

- a. **Introduce yourself**
- b. **If desired administer the pre-test at this time.** See appendix E
- c. **Explain purpose:** To learn different types of poisons, how children can get poisoned, how to prevent potential poisonings, and how to get help if a poisoning occurs.

2. Ice Breaker Activity

- a. **Round Robin:** Before the lesson begins prepare for this activity by putting up 5 large pieces of paper or poster board on the walls. Have markers or other writing utensils available for them to use. Print headings on each of the 5 posters as follows:
 1. Kitchen
 2. Bathroom
 3. Bedroom
 4. Garage/Basement/Storage Area
 5. Laundry Room

Direct the class members to go around to each of the 5 posters, and write on them any poison dangers they can think of for that room of the home. Allow them enough time to go around to each poster. After they finish, read each poster out loud to the group and comment or discuss briefly.

3. Utah Poison Control (UPCC)

Present the following information to the class: You may use the slides located in appendix A as transparencies, or to access electronically visit the UPCC website at: www.utahpoisoncontrol.org

- a. **Mission Statement:** To prevent and minimize adverse effects from a poison exposure through education, service, and research.
- b. **UPCC Help:** Staff consists of: registered nurses, registered pharmacists, medical doctors and health educators. UPCC is a 24 hours a day, 7 days a week hotline. Help is free, expert, and confidential. UPCC helps people of all ages, in all types of situation.

4. Definitions and Statistics

Present the following information to the class:

- a. **What is a Poison:** Anything someone eats, breathes, gets in the eyes or on the skin, which can cause sickness or death if it gets into or on the body. Poisons come in different forms; solid, liquid or gas/spray.
- b. **Utah's Poison Problem:**
 - Over 50,000 calls each year
 - Over 90% occur in the home
 - Nearly 80% are managed on-site with telephone follow-up

c. Average Age Distribution

- 60% of human exposures involved children less than 6 years of age
- 20% of human exposures are people age 20-59 years of age
- 5% of human exposures involve children ages 13-19 years
- 5% of human exposures involve children ages 6-12
- 5% of human exposures are people age 60 or more

5. Common Substances

Briefly present the following information to the class. They will be discussed in greater detail later in the lesson:

a. Most common poisonings in children under 6 years of age: (Note: the rank order of this list changes slightly from year to year, but the categories stay the same).

- Cosmetics and Personal Care Products
- Household Cleaners
- Analgesics (pain medicine)
- Vitamins and Minerals
- Topicals (diaper rash ointment)
- Foreign Bodies (coins)
- Gastrointestinal Preparations
- Antihistamines
- Cough and Cold Preparations
- Pesticides

b. Most common poisonings in people of all ages: (Note: the rank order of this list changes slightly from year to year, but the categories stay the same).

- Analgesics (Pain Medicine)
- Household cleaners
- Cosmetics and Personal Care Products
- Vitamins and Minerals
- Topicals (cortisone cream, diaper rash ointment)
- Sedatives/Hypnotics/Antipsychotic (Xanax®, Compazine®)
- Foreign Bodies
- Antihistamines
- Cough and Cold Preparations
- Antidepressants (Prozac®, Lexapro®)

6. When Do Poisonings Occur?

- a. When Product is in Use:** Explain the scenario of a mother who normally has all the cleaning chemicals locked up high in a cupboard, but must get them out to do the cleaning. While she is cleaning, the doorbell rings and the cleaning products are left unattended. That is when the child is at a high risk for a poisoning.
- b. Peak Age:** Explain to the class that the peak age for poisonings is 18 months old.

7. What are These Poisons and What Should We Do About Them?

Explain the various poisons and discuss with the class ways to prevent a child from being poisoned by the product. Prevention strategies are outlined below.

- a. **Medicines and Vitamins:** pains relievers (ibuprofen, acetaminophen, aspirin), cough and cold preparations (decongestants, antihistamines, cough suppressants), vitamins (especially iron).
- b. **Deadly in a Dose:** antidepressants, narcotics, heart medicine, high blood pressure medicine, and diabetic medicine.
- c. **Household Products:** bleach, drain & toilet bowl cleaner, laundry products, ammonia cleaners, dish detergent, oven cleaners. Many household products and medicines look similar to food/drink or candy. Show the participants the look-alike products (ideas include; blue window cleaner/blue drink, medicine/candy, pine cleaner/apple juice) to demonstrate the confusion that can be caused with products that look the same. Many household products are colorful and very enticing to young children.
- d. **Cosmetics and Personal Care Products:** mouthwash, toothpaste, nail products, shampoo, perfume, talcum powder, lotion, make-up
- e. **Topicals:** acne preparations, diaper products, cortisone cream, athletic rub
- f. **Pesticides and Car Care Products:** gasoline, motor oil, kerosene, windshield wiper fluid, pest killers, anti-freeze, fertilizer
- g. **Miscellaneous Poisons:** plants, foreign bodies (coins, button batteries, hearing aids), food products (cooking temperature insufficient, storing and thawing foods improperly, cross contaminating)
- h. **Prevention Strategies:** The following prevention strategies should be discussed.
 - **Put it Up, Lock it Up:** Keep poisons out of the reach of children. Follow instructions for product use. Do not mix cleaning products. Store products in original containers. Use cleaning products in well-ventilated areas. Never leave open products unattended.
 - **Locks, Lids, and Latches:** Note: If possible, have a variety of different safety devices to show the class. There are many different types available. Choose what works best for you. **Child Resistant** does **NOT** mean **Child Proof**. It simply gives you a few more minutes to catch them in the act.
 - **Medicines:** Follow dosing instructions carefully. Be aware of multiple ingredients. Close the lid tightly after using a medicine. Never call medicine “candy”. Don’t take your own medicine when children are watching.
 - **Household Checklist:** Reflect on the Round Robin activity where they considered the poison dangers in various rooms. Hand out a copy of the *Household Guide to Poison Control* to each participant. Compare the possible dangers on this list with the ones they created in the Round Robin activity. Be sure to review the “What You Should Do” boxes on the guide. Note: *Household Guide to Poison Control* can be found in appendix B.

8. Why Are Children More Likely to Be Poisoned?

- a. **Stages of Development:** Discuss the following stages as they relate to poisonings.
- **Infants (0-6 months):** Children in this age group are usually not very mobile therefore most poisonings occur as a result of adult error such as administering the wrong dose or the wrong medicine.
 - **Crawlers (6 months-1½ years):** Children this age are usually mobile and begin exploring their environment. Putting things in the mouth is a primary method of learning. Poisonings can occur as a result of this natural behavior.
 - **Toddlers and Preschoolers (1½ years-3 years):** Children in this age group are very mobile. They are usually very curious. They can usually climb and reach higher. Products that look alike are very deceiving to children of this age. Nothing is child-proof. Show the participants the look-alike products (ideas include; Windex/blue Gatorade, Sudafed/Red Hots, Pine-Sol/apple juice, mothballs/marshmallows, etc) explain the confusion that can be caused with products that look the same. Many household products are colorful and very enticing to young children.
- b. **Risk Factors and What to do About Them:**
- **Child's Curious Nature:** Explore, taste and touch
 - **Improper Storage:** Use prevention methods—Lock it up, keep out of reach
 - **Adult Distractions:** Telephone call, doorbell, meal preparation etc. Most poisonings occur when the product is in use.

9. How Do We Respond To a Poisoning?

- a. **Emergency Action First Aid Tips:** Explain what to do for each type of poisoning. Emphasize the importance of calling the poison center.
- **Swallowed poison:** Do not give anything, call the poison control center
 - **Inhaled poison:** Get victim to fresh air, call poison control center
 - **Poison on skin:** Remove contaminated clothing and rinse skin with water for 10 minutes, call the poison control center
 - **Poison in eye:** Flush eye for 15 minutes using a large cup filled with lukewarm water held 2-4 inches from eye, call the poison control center
 - **Other Important Tips:** Remain calm, don't wait for the victim to become sick since some symptoms are delayed and waiting can be a serious mistake. If the victim is unconscious call 911. Do not use Syrup of Ipecac unless instructed to do so by your doctor.
- b. **Calling the UPPC:** If desired have volunteers from the class participate in the Role-Play Activity which can be found in the appendix. If not, discuss the following questions that will be asked when calling the poison center. Emphasize that they should not be afraid to call. Only the people who help them will know their name. all information is confidential and free of charge:
- How is the person feeling or acting right now?

- What is the age, name, and approximate weight of the person?
- What product or item was the person exposed to? Have the container with you when you call.
- How much of the product do you think the person had?
- When did it happen?
- What is your name and phone number? It is important to give this information so the nurse or pharmacist can call back and check on the child.

Note: Role-Play Activity can be found in Appendix C.

10. Game/Post test

- Tic Tac Toe Game:** This game reviews parts of the lesson. Instructions and materials can be found in Appendix D. If desired, prizes/treats could be given out to all participants.

11. Conclusion

- Poison Prevention:** Explain that we come in contact with poisons everyday. Awareness and simple prevention strategies like those discussed in this lesson can help keep us and our children safe. Take action to prevent poisonings in your home. Suggest that they use the *Household Guide to Poison Control* handout home and take action to safeguard children.
- Contact the UPCC:** Don't hesitate to call the Poison Center in the event of a poisoning **WHEN YOU CALL THEY KNOW YOU CARE**. Services are **FREE**, and **CONFIDENTIAL**. Note: If possible distribute magnets and telephone stickers obtained by contacting the UPCC at 1-800-222-1222.
- Administer the Post-test if desired.** See appendix E



Appendix

HOUSEHOLD GUIDE TO POISON CONTROL



This checklist is designed to help parents identify potential hazards in the home. Take some time to go through it and learn what you should do to prevent poisonings.

Poison Safety Checklist for Poison-Proofing Your Home

Complete the following checklist. See if your home is safe from potential poisons. Check that all poisons are safely stored out of reach of children and pets.

Check the kitchen: Household cleaning products are the cause of over 10% of poisonings in children under the age of six.

Be aware of these products:

- Cleaners – carpet/upholstery cleaners, furniture polish, soap/detergents
- Corrosives – automatic dishwashing detergent, drain cleaners, ammonia, metal cleaners, oven cleaners
- Medicines – pain relievers (aspirin and acetaminophen), diet aids, vitamin/iron pills, pet medications

What you should know:

- Remove medicines from countertops, window sills, and open areas.
- Put safety latches on all drawers and cabinets where harmful products are stored (Applies throughout the home).
- Store household products away from food.

Check the bathroom: Medicines are the cause of over 40% of all poisonings.

Be aware of these products:

- Medicines
- Mouthwashes
- Fluoride Rinses
- Deodorizers
- Hair Products
- Aftershaves
- Cleaners
- Drain Openers
- Hair Removers
- Cosmetics – nail polish/removers, baby powder, perfumes

What you should know:

- Make sure that all medicines are in child-resistant containers and labeled properly.
- Dispose of old medicines properly

Check the bedroom: Cosmetics and personal care products are the cause of 12% of poisonings in children under six.

Be aware of these products:

- Jewelry
- Medicines
- House plants – philodendron, dumbcane, pathos

What you should know:

- Remove all medicines from the dresser or bedside table.
- Keep all perfumes, cosmetics, and powders out of reach.

Check the laundry area: Bleaches are the most common household cleaning product swallowed by young children.

Be aware of these products:

- Bleach
- Laundry detergent
- Disinfectants



What you should know:

- Keep all products in original containers.
- Keep bleach, stain removers, detergents, and fabric softener out of reach or in a locked cabinet.

Check the garage/basement/storage areas: Household chemicals and insecticides are among the most common products that poison adults.

Be aware of these products:

- Antifreeze
- Lighter fluid
- Weed killer
- Pesticides
- Mothballs
- Gasoline/kerosene
- Paint remover/thinner/stripper

What you should know:

- Keep all products in their original containers.
- Keep insect sprays and weed killers in locked storage.
- Keep turpentine, paints, and rust removers in locked storage.



This information was provided by:

Utah Poison Control Center

585 Komas Dr., Suite 200

Salt Lake City, UT 84108

www.utahpoisoncontrol.org

(800) 222-1222 Toll Free

Poison Control Specialists available 24 hours, 7 days a week

Call the Poison Control Center

Role-Play Activity

PCC Specialist: Poison Control Center. My name is Richard. How can I help you?

Sally: (very frightened) My baby boy just drank some bleach.

PCC Specialist: How old is the child?

Sally: 2 years old.

PCC Specialist: Do you know how much he weighs?

Sally: I think about 30 pounds.

PCC Specialist: When did this happen?

Sally: Just now.

PCC Specialist: How is he feeling right now?

Sally: He seems fine, but he keeps spitting.

PCC Specialist: Give him a small amount of his favorite drink. What is his name?

Sally: Jimmy Smith

PCC Specialist: What is your name?

Sally: Sally Smith

PCC Specialist: I think Jimmy will be fine, but I will call you back in an hour. If he gets sick, call me back immediately. What is your phone number?

Sally: 123-4567

PCC Specialist: Don't worry, Jimmy will be fine. I will check back with you in about an hour.



Utah Poison Control Center

Tic Tac Toe Game.

Procedure: Break the class into 2 groups—one will be X and other one O. When the team answers the question correctly, they win that spot and can place an X or O on the grid. Questions could be written on pieces of paper and placed in a Tic Tac Toe grid on the board or a wall. Turn papers so the questions do not show. When a team chooses a square, turn the paper around and ask the question. If the answer is correct, draw the teams' symbol on the paper or board. Turn then goes to the other team.

Questions

1. True or false? Symptoms from a poisoning are always present within 2 hours of the ingestion.
2. True or false? If you use safety locks or latches on cupboards and drawers, and have child resistant caps on medicine and other dangerous products, then children will not be able to get into them.
3. True or false? The UPCC manages the majority of all calls “on-site” without having to send the patient to the hospital.
4. Fill in the Blank: Never refer to medicine as _____, otherwise children may think it is fine to eat as many as they want.
5. How do most poisonings in infants under 6 months of age usually occur?
6. Ingestion of which of the following substances is potentially deadly in a toddler?
 - a. 100 Hyland's® teething tablets
 - b. 2 clonidine tablets
 - c. mouthful of chlorine bleach
 - d. mouthful of hydrogen peroxide
7. What is the peak age for poisonings?
8. Name 2 poison prevention strategies for household products.
9. Name 3 poisonous products that may be found in the garage/storage area.

Answers

1. False (sometimes symptoms occur several hours or even days later. Don't wait...call poison control right away).
2. False
3. True
4. Candy
5. Adult error (wrong dose, wrong medicine)
6. b. 2 clonidine tablets (The point here is that you don't want to guess which is more dangerous...call poison control to be sure!)
7. 18 months
8. Possible answers:
 - Put it up—Lock it up (keep out of reach)
 - Follow instructions for use
 - Do not mix products
 - Store products in original containers
 - Use products in well-ventilated area
 - Never leave product unattended
9. Possible answers:
 - Gasoline
 - Windshield Washer Fluid
 - Antifreeze
 - Motor Oil
 - Fertilizers



Tic Tac Toe Questions

<p>True or false?</p> <p>Symptoms from a poisoning are always present within 2 hours of the ingestion.</p>	<p>True or false?</p> <p>“Child resistant” and “child proof” have the same meaning.</p>	<p>True or false?</p> <p>The UPCC manages the majority of all calls “on-site” without having to send the patient to the hospital.</p>
<p>Fill in the Blank</p> <p>Never refer to medicine as _____, otherwise children may think it is fine to pop as many as they want into their mouths.</p>	<p>How do most poisonings in small infants usually occur?</p>	<p>Ingestion of which of the following substances is potentially deadly in a toddler?</p> <ul style="list-style-type: none">a. 100 Hyland’s[®] teething tabletsb. 2 clonidine tabletsc. mouthful of chorine bleachd. mouthful of hydrogen peroxide
<p>What is the peak age for poisonings?</p>	<p>Name 2 poison prevention strategies for household products.</p>	<p>Name 3 poisonous products that might be found in the garage or storage area.</p>

Tic Tac Toe Answers

<p style="text-align: center;">False</p> <p>(sometimes symptoms occur several hours or even days later. Don't wait...call poison control right away).</p>	<p style="text-align: center;">False</p> <p>Child resistant does not mean child proof.</p>	<p style="text-align: center;">True</p> <p>About 80% of calls are handled without sending the patient to a health care facility.</p>
<p style="text-align: center;">Candy</p>	<p>Adult error (The wrong dose The wrong medicine)</p>	<p>b. 2 clonidine tablets (The point here is that you don't want to guess which is more dangerous...call poison control to be sure!)</p>
<p style="text-align: center;">18 Months</p>	<p>Possible answers:</p> <ul style="list-style-type: none"> -Put it up—Lock it up (keep out of reach) -Follow instructions for use -Do not mix products -Store products in original containers -Use products in well-ventilated area Never leave product unattended 	<p>Possible answers:</p> <ul style="list-style-type: none"> -Gasoline -Windshield Washer Fluid -Antifreeze -Motor Oil -kerosene -Fertilizers

Poison Prevention Pre-test/Post-test

1. Syrup of Ipecac is no longer recommended as a treatment for poisoning.
a. True b. False
2. If a child swallows a caustic product, such as toilet bowl cleaner or dishwasher detergent, you should induce vomiting.
a. True b. False
3. Mixing bleach with products containing ammonia can cause poisonous gas.
a. True b. False
4. What are the most common type of substances poisoning children under the age of six?
a. Pesticides
b. Antidepressants
c. Cosmetics and Personal Care Products
d. Cough and Cold Preparations
5. What is the peak age for poisonings?
a. 6 months
b. 18 months
c. 3 years
d. 4 years
6. The Utah Poison Control Center manages the majority of all calls “on-site” without having to send the patient to the hospital.
a. True b. False
7. In young infants ages 0-6 months, most poisonings occur because:
a. They can get into tall cupboards
b. An adult makes a mistake (gives wrong dose or wrong medicine)
c. They are fooled by look-alike products
d. All of the above
8. What type of products can be potentially deadly to a small child in just one dose?
a. Narcotics
b. Heart Medicine
c. Antidepressants
d. Diabetic Medicine
e. All of the above
9. “Child resistant” does NOT mean the same as “child proof”.
a. True b. False
10. Services of the Utah Poison Control Center are free and confidential.
a. True b. False

Please answer the following survey questions:

1. Have you ever called the Utah Poison Control Center? Yes No
2. What is your race/ethnicity? African-American Caucasian Hispanic/Latino Native American
 Other _____

Poison Prevention Answer Key

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2. If a child swallows a caustic product, such as toilet bowl cleaner or dishwasher detergent, you should induce vomiting.
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