Poisoning Spans a Lifetime

Adult Poison Prevention Curriculum

*Created by North Carolina Poison Control*

**OBJECTIVES:**

- Provide educators with poison prevention curriculum to educate their communities.
- Support educators with free online resources and public education materials.

**Teacher’s Narrative:** In this session, you will learn: (1) what a poison is, (2) how to avoid a poisoning, (3) what to do in the event of a poisoning, (4) how to contact the poison center, and (5) how to keep your home poison-safe.

**PROGRAM OUTLINE:**

I. Principles of Adult Learning
II. What is a Poisoning?/Types of Poisonings
III. Case Studies/Review
IV. Taking Action
V. About the Poison Control Center
VI. Group Exercise
VII. Poison Proofing Your Home Checklist
VIII. List of Potentially Dangerous Substances
IX. Evaluation

**I. Principals of Adult Learning** (for facilitator review before facilitation—not to be used as part of class instruction)

Adults have different learning styles and paces. This section is designed to help you facilitate group discussions with further insight on various adult learning styles. *Poisoning Spans a Lifetime* incorporates opportunities to reach four learning styles.
**Analytic Learners:** Value expert opinion, think abstractly, integrate observations with facts

**Common Sense Learners:** Get to the point, combine theory with practice

**Dynamic Learners:** Learn by trial and error, like risk-taking, don’t mind change

**Imaginative Learners:** Are reflective, see many sides of a problem, seek personal involvement

Keep these learning strategies in mind...

- Information that is foreign to adults is usually acquired slowly.
- Adults are motivated to learn as they experience new needs and interests.
- The more life changes adults experience (marriage, divorce, parenthood), the more likely they are to seek out education/training.
- Adults’ richest resource is experience.
- Adults have the need to be self directed.
- Adults are time conscious and must feel that their time is valued and not wasted.
- Increasing a learner’s self-esteem is a strong motivator for learning.

**II. What is a poison?** (This section begins the class facilitation)

**Teacher’s Narrative:** What is a poison? A poison is anything that is taken in the wrong amount, in the wrong way, or by the wrong person. Many people think poisons will be clearly marked, like with a skull and crossbones. However, an everyday product can be a poison if it’s used in the wrong way. Remember, a poison can be just about any substance that’s used improperly.

**ASK participants to mention what they think some common poisons might be.** The list might include:

- cleaning products
- pesticides
- alcohol and nicotine
- carbon monoxide

**Talk about some lesser known potential poisons:**

- personal care products
- prescription/non-prescription medicines
snakes and spiders
plants
garage liquids—gasoline, antifreeze

Types of poisonings/exposures:

<table>
<thead>
<tr>
<th>Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhaled</td>
<td>Carbon monoxide</td>
</tr>
<tr>
<td>On the skin</td>
<td>Gasoline</td>
</tr>
<tr>
<td>Swallowed</td>
<td>Medicines</td>
</tr>
<tr>
<td>In the eye</td>
<td>Spray Deodorizer</td>
</tr>
</tbody>
</table>

**Teacher’s Narrative:** Later in the class, we will talk more about taking action within your own home and how to eliminate potential poisoning threats around where you live.

**III. Case Studies/Review**

Read the following cases, or have a participant read the case, and discuss what might be contributing factors, preventive measures, and appropriate resolutions.

1. The uncle of a family was mixing some carpet cleaning solution and placed it in an old milk carton in the refrigerator. Without knowing that the carton did not contain milk, another family member poured it on her cereal and suffered burns to her throat after eating it.

2. Alice is depressed. She’s lost her job, and on top of that, one of her teenage sons has been in trouble at school lately. Recently, Alice had back surgery and was prescribed hydrocodone to relieve the pain. She’s only taken the prescribed amount when she needed it for her back, but with everything going on, she could use a break. She takes several hydrocodone to help numb the stress.

3. Sylvia and Henry are looking at ways to save on their heating costs. They buy a space heater and want to use it along with their thermostat to help regulate the temperature. They
only plan to run it occasionally.

4. Mike and Steve have been ready for the big game all week. As part of their tailgating ritual, they dress in team colors and paint their faces. Unfortunately, they've run out of their normal face paint, so they head to the garage to look for something else that will do. Mike runs across some car touch-up paint that's exactly the color they need. The friends hi-five and start to rub it on. However, the paint contains solvents and hydrocarbons, compounds often used for fuel, that can cause skin irritation and can be harmful if swallowed.

5. A family decides to take a camping trip and plans to explore different species of plants on a hike. After collecting several leaves, the mother grabs an interesting species that, unknown to her, is Poison Ivy. She takes the plant back to the family, and they pass it around to evaluate.

Case Review
Points to supplement case discussion:

1. It is very important to keep all products in their original containers. Never put toxic substances in milk cartons, soda bottles, or any other container. Lock up chemicals in a high place. Toxins never belong in a refrigerator or pantry with food where they can be mistaken for something to eat or drink. Keep chemicals and other cleaning products separate from food and drink products! Remember that poisonings can occur more frequently in a hectic family environment, when normal routines are broken, or when good communication is not in place.

2. You can put your health at risk by taking more than the prescribed amount of any medicine, including pain killers. In fact, poisonings are only surpassed by car accidents as the leading cause of unintentional injury deaths for adults. In 2016 and 2017, 60% of calls had to do with a pharmaceutical substance. Don’t ever take more medicine than you are prescribed. Talk to a health professional about healthy ways to cope with difficult situations. Also, make sure ALL of your healthcare providers, including your pharmacist, are aware of ALL of the medicines you are taking, whether prescription or over-the-counter. Medicines can have harmful side-effects when they interact.
3. Space heaters, furnaces, fireplaces, stoves, and other fuel-burning appliances like these are not meant to be used as a primary heating source—even for a short time period. This can cause carbon monoxide (CO) poisoning. Carbon monoxide is produced when any fuel such as gas, kerosene, oil, wood, or charcoal is burned. If fuel-burning appliances are used as they should be and properly maintained, the amount of carbon monoxide produced is not usually hazardous. However, if appliances are not used correctly or are in poor working condition, dangerous levels of CO can occur. **This can lead to death!** Carbon monoxide is called the silent killer because you cannot see, taste, or smell it. Only run fuel-burning appliances for a limited time. Never use a grill indoors. Don’t run generators in enclosed spaces. Don’t use a gas oven to heat a home. Read all fuel-burning appliance manuals carefully before you use the appliance. Install carbon monoxide detectors outside the sleeping areas of your home, on each level, and near any fuel-burning source.

4. Not all paints are created equally. Face and body paints are made with ingredients that won't harm the skin. Hydrocarbons can be found in some paints. Gasoline and kerosene are examples of types of hydrocarbons. Paint thinners, furniture polish, and lamp oil also contain hydrocarbons. Many hydrocarbons can cause burns if left on the skin. It is important to read the ingredients before applying anything to the skin.

5. Poison Ivy can be avoided in most cases by knowing what it looks like. Each Poison Ivy leaf has 3 oval leaflets 2-4 inches long (picture included in participant pack). Touching the Poison Ivy plant causes a painful rash on the skin from a toxic oil within the plant. Exposure to Poison Ivy can occur from **direct contact** or **indirect contact**. Indirect contact means that you can be exposed if you touch anything that the Poison Ivy has touched. The rash can last up to two weeks. Burning Poison Ivy can also be harmful to the lungs. If Poison Ivy gets on the skin, immediately wash the exposed area thoroughly with soap and water. Wash all clothing that you think may have come in contact with the Poison Ivy. Unfortunately, recurrent exposures to Poison Ivy are worse than the first exposure.

*In all scenarios, call North Carolina Poison Control at 1-800-222-1222 or chat with the center at www.NC PoisonControl.org for treatment instructions or for more information.*

**IV. Taking Action**

**Teacher's Narrative:** Once you think a poisoning has occurred, call North Carolina Poison Control right away. Don’t wait for symptoms. Emergency first aid tips are listed below:
1. Stay calm. Call 911 if the person is not breathing or is having seizures.

2. Check the mouth and remove any particles.

3. Have the product in hand.


5. Be prepared to give the name of the product, explain the type of exposure, and give the approximate amounts involved. Review the types of exposures listed in Part II: What is a Poison?

6. If poison was ingested, don’t make the person vomit. It is okay to give a sip of water, but don’t give anything else unless instructed to do so by the poison control center.

7. Remain calm. The nurse or pharmacist will help guide you step by step.

So what about Activated Charcoal and Ipecac Syrup?

North Carolina Poison Control only recommends Ipecac Syrup in some situations when a child accidentally eats a mushroom. Ipecac Syrup is a substance used to make someone vomit. However, inducing the child to vomit does not necessarily guarantee that the child won’t get sick from the poison. It may even cause harm to induce vomiting in some situations due to throat swelling or burning which may lead to further complications. Vomit can also be inhaled into the lungs. This can impair breathing and be very dangerous.

Activated Charcoal powder is recommended more often now. Activated Charcoal is a fine powder that binds toxins. This can prevent the absorption of poisons into the blood stream. Ask your pharmacist or child’s pediatrician if they have Activated Charcoal powder. Keep a bottle of Activated Charcoal (not Activated Charcoal tablets) on hand, but always call the poison control center first before giving it.

OPTIONAL: Watch downloaded copy of Poison Control in Action (approx. 13 minutes)

V. About the Poison Control Center
Teacher’s Narrative: There are three main messages to remember about the poison control center: it is **FREE, CONFIDENTIAL, and NEVER CLOSES**. You can call with a poison emergency or you can call for information or questions about a poison. Here are a few more key points:

- The number to North Carolina Poison Control is **1-800-222-1222**.
- The people answering the phones are trained nurses and pharmacists who specialize in poisons.
- Around 70% of our calls are handled at home (or from wherever the person is contacting us from).
- COSMETICS, PERSONAL CARE PRODUCTS, and CLEANING PRODUCTS are the leading causes of *non-drug-related* poisonings.
- PAIN RELIEVERS are the main cause of *drug-related* poisonings.
- North Carolina Poison Control is certified by the American Association of Poison Control Centers (AAPCC). This means the center meets outstanding patient care and continuing education standards.

VI. Group Exercise

Distribute the "My Action Plan" assignment sheet (included in participant pack). Divide participants into small groups of 4-8 people. Ask participants to complete their Action Plan individually first, then discuss the problem areas in their own homes and the solutions they determine with their group members. Allot 10 minutes for this assignment. Ask 1 or 2 participants from each group to share some of the problem areas in their homes with the whole group. This may get other participants thinking about areas of their homes they had not previously acknowledged as potentially dangerous. Ask participants to share their schedule of implementing solutions with an "accountability buddy."

VII. Poison Proofing Your Home Checklist

Distribute the "Poison Proofing My Home" checklist (included in participant pack). Invite participants to complete the checklist individually. Allot 5 minutes for this assignment. Based on any new hazards the checklist may bring to light, ask participants if they would like to update the Action Plan they just completed in group exercise.
VIII. List of Potentially Dangerous Substances

Distribute list of Potentially Dangerous Substances which highlights potential dangers in rooms of the home (included in participant pack). Let participants know that North Carolina Poison Control’s website can provide more information about poisonings. The website address is www.NCPoisonControl.org. The website has poison prevention tip sheets available for download and specific information on types of poisonings.

*If ordered, pass out poison control center magnets or stickers.*

IX. Evaluation

Distribute evaluation form (included in participant pack), collect, and return to North Carolina Poison Control, PO Box 32861, Charlotte, NC 28232. The evaluation of the curriculum lets us know how it’s working and how to appropriately revise it. Once you submit your evaluation forms, you will be eligible to receive additional North Carolina Poison Control material for future classes.