Handling, Storing and Disposing of Hazardous Materials in Childcare.

Children are much more vulnerable than adults to exposures of hazardous materials because their bodies are developing; they eat more, drink more, and breathe more in proportion to their body size; and their behavior, such as crawling and hand-to-mouth activity, can expose them more to chemicals and infectious diseases. Many types of infectious germs may be contained in human waste (urine, feces) and body fluids (saliva, nasal discharge, tissue and injury discharges, eye discharges, blood, and vomit). It is your job as a child care provider to ensure that your children do not have access to hazardous materials.

There are more than two million human poison exposures reported to poison centers every year. Children younger than 6 years' account for more than half of those potential poisonings. The substances most commonly involved in children's poison exposures are cosmetics and personal care products, cleaning substances, and medications. In childcare, can you guess where these types of products come from? These items are brought into the childcare center by teachers and office staff. Think for a moment what items are in your purse or teacher bag. Aspirin, scissors, and makeup can all be poisonous to a child. The most dangerous place in the childcare center can often be the Directors office

because this is where the staff purses can be found, and this is the room where teachers and staff let their guards down.

The best place for teacher belongings is in a locked storage locker or in the staff's car.

Exposure to a toxic substance can occur if certain chemicals are inhaled or ingested or contact the skin. The phone number 1-800-222-1222, the universal number for all 55 Poison Control Centers in the United States, should be posted in readily visible locations near telephones and added to teachers' cell phones in the event an accidental poisoning occurs.

Take a moment and memorize the number: 800-222-1222

Carbon monoxide is a deadly, colorless, odorless, poisonous gas; you cannot see, taste, or smell it. Young children are especially vulnerable to the effects of carbon monoxide because of their smaller bodies. Children process carbon monoxide differently than adults, may be more severely affected by it, and may show signs of poisoning sooner. In 2009, poison control centers reported more than 3,551 cases of carbon monoxide exposure in children 19 years and younger. Carbon monoxide is produced by the incomplete burning of various fuels, including coal, wood, charcoal, oil, kerosene, propane, and natural gas. Using a carbon monoxide detector is the only way to identify whether this substance is at a dangerous level. Many states have laws that require childcare centers to conduct Carbon Monoxide drills. When you conduct this drill, make sure that you use the sound that the children will hear if the detector were to go off. React the same way that you would for a fire drill. Children should get down low so that they can breathe cleaner air, and get out of the building as quickly as possible. Programs should meet state or local laws regarding carbon monoxide detectors, including circumstances when detectors are necessary. Detectors should be tested monthly, and testing should be documented. Batteries should be changed at least yearly. Detectors should be replaced per the manufacturer's instructions

Lead is a neurotoxin. Even at low levels of exposure, lead can cause reduction in a child's IQ and attention span, and result in reading and learning disabilities, hyperactivity, and behavioral difficulties. Lead poisoning has no cure. These effects cannot be reversed once the damage is done, affecting a child's ability to

learn, succeed in school, and function later in life. Other symptoms of low levels of lead in a child's body are subtle behavioral changes, irritability, low appetite, weight loss, sleep disturbances, and shortened attention span. The sources of lead can be any of the following: The sources of lead can be any of the following: water impacted by pipes that are made of lead or copper, soil, flaking paint chips, car keys and toys.

Lead poisoning is almost never a single event in which a child ingests harmful quantities of lead, gets sick, and must be rushed to the hospital. Instead, lead poisoning is an insidious, month-by-month accumulation of lead in a child's body.

That's why lead-painted toys can be such a problem.

If a child just touches and plays with a lead painted toy, it is not a problem. But if that child sits and chews on it for weeks and months and absorbs lead -- that becomes a risk.

The ultimate effects of lead on children include:

- **Loss of IQ points**
- **Impairments in language fluency or communication**
- **Memory problems**
- **Trouble paying attention**
- **Lack of concentration**
- **Poor fine-motor skills**
- **Difficulty with planning and organization**
- **Difficulty forming abstract concepts**
- **Poor cognitive flexibility (trying something else if the first thing you try doesn't solve a problem).**

There are two things that you can do as a child care provider to make sure that your center does not have toys that contain lead. First, you can purchase a lead test kit at any hardware store. These are very inexpensive and can be used on multiple items. Second, sign up for automatic recall notifications with the National Recall center.

If you find a toy or other item that contains lead, discard it right away. Other place to search for lead are:

- **Interior painted areas— Examine walls and interior surfaces to see if the paint is cracking, chipping, or peeling, and check areas on doors or windows where painted surfaces may rub together.**
- **Exterior painted areas— Check exterior paint as well; it can flake off and contaminate nearby soil where children may play.**
- **Surrounding areas— Be sure there are no large structures nearby with peeling or flaking paint that could contaminate the soil around play areas.**
- **Cleaning practices— Make sure the staff washes any pacifiers, toys, or bottles that fall on the floor. Also, make sure the staff has the children wash their hands thoroughly after playing outside and before eating or sleeping.**
- **Play areas— Look to see if areas where children play are dust-free and clean. Outside, check for bare soil and test for lead.**
- **Playground equipment— Older equipment can contain lead-based paint.**
- **Painted toys and furniture— Make sure the paint is not cracking, chipping, or peeling.**
- **Also, ask about testing all of the drinking water outlets in the facility and on the playground, especially those that provide water for drinking, cooking, and preparing juice and infant formula. Read more about drinking water in schools and child care facilities.**

Many times, hazardous materials such as bleach or other cleaning supplies or germs are transferred to the children through hand contact. All staff, volunteers, and children should abide by the following procedures for hand washing, as defined by the U.S. Centers for Disease Control and Prevention (CDC):

a. **Upon arrival for the day, after breaks, or when moving from one group to another. b. Before and after:**
b. **• Preparing food or beverages;**
c. **• Eating, handling food, or feeding a child;**
d. **• Brushing or helping a child brush teeth; Giving medication or applying a medical ointment or cream in which a break in the skin (e.g., sores, cuts, or scrapes) may be encountered;**
e. **• Playing in water (including swimming) that is used by more than one person; and**

f. • Diapering.
g. After: • Using the toilet or helping a child use a toilet;
h. • Handling bodily fluid (mucus, blood, vomit);
i. • Handling animals or cleaning up animal waste;
j. • Playing in sand, on wooden play sets, and outdoors;
k. and • Cleaning or handling the garbage.

Situations or times that children and staff should perform hand hygiene should be posted in all food preparation, diapering, and toileting areas.

Staff should also take Universal Precautions to prevent exposure to blood and body fluids.

Gloves should be worn at all times to prevent exposure to blood and other potentially infectious fluids. Gloves should be changed between each child. Any surface that comes into contact with blood or other potentially infectious fluids should be disinfected using the 4-step sanitation process.

1. **Rinse with clear water.**
2. **Wash with soapy water.**
3. **Use a disinfectant and leave for 2 minutes.**
4. **Rinse with clear water and allow to air dry.**

Routine Cleaning, Sanitizing, and Disinfecting

Programs should follow a routine schedule of cleaning, sanitizing, and disinfecting. Cleaning, sanitizing, and disinfecting products should not be used in close proximity to children, and adequate ventilation should be maintained during use.

Environmental Audit of Site Location

An environmental audit should be conducted before construction of a new building; renovation or occupation of an older building; or after a natural disaster to properly evaluate and, where necessary, remediate or avoid sites where children's health could be compromised. A written report that includes any remedial action taken should be kept on file. The audit should include assessments of:

a) Potential air, soil, and water contamination on program sites and outdoor play spaces;

b) Potential toxic or hazardous materials in building construction, such as lead and asbestos; and

c) Potential safety hazards in the community surrounding the site.

Integrated Pest Management

Programs should adopt an integrated pest management program to ensure long-term, environmentally sound pest suppression through a range of practices including pest exclusion, sanitation and clutter control, and elimination of conditions that are conducive to pest infestations.

Use and Storage of Toxic Substances

All toxic substances should be inaccessible to children and should not be used when children are present. Toxic substances should be used as recommended by the manufacturer and stored in the original labeled containers. Food containers should NEVER be used to store toxic materials. The telephone number for the poison control center should be posted and readily accessible in emergency situations.

Sometimes the toxic substance may not be so obvious. Hand sanitizer, hand soap, and shaving cream can all be toxic to a child if ingested in large doses.

To receive credit for this training, you will need to walk around your school and make a list of all of the toxic substances that you see.

Once you have completed that list, simply attach it to the certificate that you will receive after you take your quiz.

To take the quiz go to:

http://www.proprofs.com/quiz-school/story.php?title=handling-storing-and-disposing-of-hazardous-materials-in-childcare

If this link does not work, please email: ticktocktraining@yahoo.com