



Safe Use of Art Products

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Participation in a variety of visual and performing art activities is an important part of the best developmental programs for children. Plus, it's lots of FUN! Art activity occurs in many preschool child care centers as an ongoing part of the daily schedule. As school begins in September, many school-aged children also acquire a box of art supplies to use in their art classes. So glues, paints, ink and other art products are a part of the normal school, home and child care environments.

These art products are mixtures of chemicals which should be handled correctly so that children are able to safely enjoy art activities. Young children are very likely to taste pretty, colorful art products. Even older children may be exposed to them if some is splashed into eyes, or spilled onto skin. Poison centers receive many calls about exposures to art products. Most of these cases will result in no effect at all, or only minor effects. Very few require treatment by a doctor.

Some of the art products which are commonly involved in poisonings include:

- **Chalk:** Contains a form of calcium, and one-time ingestion typically does not cause poisoning. More serious problems can occur if the piece of chalk lodges in the esophagus causing pain or trouble swallowing, drooling or increased salivation. Although rare, chalk and other foreign bodies such as erasers, small pencil sharpeners, mechanical pen and pencil parts, etc., can be *aspirated* into the windpipe. This can block the airway, causing a cough, difficulty breathing, or wheezing.
- **Pencils:** Pencil "lead" contains graphite, **not lead**, and is completely harmless to swallow.
- **Ballpoint Pens:** Generally not poisonous due to the low concentration and very small amount of the liquid inks in these items.
- **Markers:** "Water-soluble" markers are not expected to cause harm. It is also not expected for most other felt-tip markers to cause any toxicity if small amounts of the ink are ingested. A few markers may contain aniline dyestuffs, which, in a very large ingestion, can cause toxicity.
- **Erasers:** Not considered poisonous but could cause blockage or injury if lodged in the esophagus or aspirated into the windpipe.
- **Glues:** School type glues (such as Elmers®) are generally considered nontoxic. "Super glues" (such as Krazy Glue®) do not cause poisoning, or throat or esophageal adhesions when ingested. They can cause mucous membranes and skin surfaces to stick together instantly. Eye exposure rapidly seals eyelids together. Corneal abrasions, loss of lashes, eyelid skin injury or conjunctival inflammation may occur.
- **Paints:** Water based paints, including latex, tempera and poster paints may be very mild irritants to the skin and mucous membranes, but poisoning is not expected. Ingestion of very large amounts may cause nausea and vomiting. Some latex paints contain measurable amounts (5 to 10%) of glycols. Potential glycol poisoning should be assessed in those patients who ingest very large amounts of these paints. Oil-based paints may contain solvents such as toluene, xylene, light petroleum spirits, methyl ethyl ketone, ethanol, acetone, ethyl butyl acetate or isopropanol. These solvent-based paints can cause acute poisoning. Poisoning is most often associated with chronic inhalation from occupational exposures.



Participation in art is an entertaining and vital part of early childhood education programs. Here are some common-sense safety guidelines to follow when children are using art products :

- Read the label carefully, and follow all instructions for safe use and disposal.
- Discard products that have passed their expiration date.
- Do not eat or drink while using art products.
- Wash up—skin, equipment and environment-- after use.
- Never use products for skin painting or food decoration unless the product is specifically labeled for that use.
- Store art products in their original containers.
- Handle art products in accordance with your program’s guidelines for safe chemical use and storage.

When choosing art supplies for use in child care centers and schools, the product certification should be considered. Many school art supplies are imprinted with the seals of the Arts and Crafts Materials Institute (ACMI). Since 1999, ACMI has used two certification seals to rate arts and crafts materials. Products bearing the AP (Approved Product) seal are certified in a toxicological evaluation “to contain no materials in sufficient quantities to be toxic or injurious to humans, including children, or to cause acute or chronic health problems.” These products are best for use with young children. Products bearing the CL (Cautionary Label) Seal are certified “to be properly labeled for any known health risks and with information on the safe and proper use of these materials.” This seal appears on only 15 per cent of the adult art materials in ACMI’s certification program and on none of the children’s materials.

If a young artist does chew on a crayon, or eat some glue, or splash paint into eyes, help is just a phone call away. **Always call the Poison Center right away if you think that someone may have touched or swallowed any chemical product.** An immediate call to the Virginia Poison Center will put you in touch with experts who can instruct you in the correct first aid actions. The poison center staff can also tell you whether a trip to the doctor is needed—it’s not likely. **Call (800) 222-1222 to be connected to the poison control center that serves your local area in Virginia.** This is a toll-free call, and confidential emergency help is always available free, twenty-four hours daily.

For more information about the safety of art products, contact the ACMI at 1280 Main Street, 2nd Floor, Hanson, MA 02341. Or go to their Web site at acminet.org

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