



Rapid Response

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Rapid Response Service

Toxins in a Drop-In Kid Care Environment

Requestor: Fautleroy YMCA, Seattle, Washington

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Request

Can you tell us what toxins to avoid in a drop-in kid care facility?

Background

The question relates to a drop-in day care situation where parents can temporarily drop off children while exercising at the facility. The activities in this situation consist of: a mat zone (for jumping and tumbling), a snack area, general toys and books, an arts and craft area, and periodic trips to the outdoor playground.

This program is separate from the infant care room, which would have some different toxics concerns.

The facility is wondering what their top priorities and alternatives should be for minimizing toxic exposure to the visiting children in this setting.

Key Findings

The following list of tips and suggestions is intended to be a starter list for reducing toxicity in a drop-in child care facility.

CLEANERS

Most facility/janitorial cleaners do not list ingredients, leaving users blissfully unaware of the contents. Regulations do require, as applicable, that cleaners are labeled with Danger, Poison, Caution, or Warning, based on regulatory definitions of these terms. The highest hazard label is DANGER or POISON, moderate hazard is caution or warning, and safest has none of the above terms on the label.

"Signal Words" (required by law if applicable), are defined by the amount of the product that "may be fatal or harmful if swallowed, inhaled or absorbed through the skin by an adult 180-pound man" (*not an 8 to 40 pound baby or child*).

Caution - An ounce to a pint **Warning** - A teaspoon to an ounce **Danger** - A taste to a teaspoon

Tips for Cleaners:

- Check online for MSDS sheet (search on the product name and MSDS) to get a list of actual ingredients. Contact info@pprc.org if further assistance is needed in this area. Also see other cautions/suggestions and ingredients/products to avoid at <http://womenandenvironment.org/campaignsandprograms/SafeCleaning/index.html>.
- Avoid synthetic fragrances in all cleaning products (e.g., Swiffer pads). Synthetic fragrances often contain phthalates – an endocrine disruptor – and may, (or may not) be listed on an ingredient label as parfum, fragrance, or perfume.
- Hand cleaners – best and most effective is plain old soap and warm water. Avoid antibacterial soaps as these are washing aquatic toxins down the drain, and inhibiting children's natural immune development. Sanitizers may be ok intermittently, in a pinch, but they do not get rid of dirt, and the alcohol and

fragrances in sanitizers can absorb into kids' permeable skin. Use cleaning products when kids are not present.

- Absolutely avoid aerosols (e.g., Lysol disinfectant – fine airborne particles can go deep into little lungs).
- Store all cleaners OUT OF REACH of children. Additional suggestions for safe use of bleach, from King County (Washington) are included in Additional Resources below.

LEAD

- If you have chipping or dusty paint anywhere on the facility or play structures – or kids who might chew on ledges/windowsills, TEST for LEAD.
- If kids play in the dirt (or on artificial turf) outdoors, and/or on painted play structures, wipe feet and wash hands after coming in from outdoors. (DVD)
- Avoid polyvinyl chloride (PVC) products of any kind – toys, shower curtains, blinds, tablecloths, aprons, bibs, which can release lead and phthalates. PVC toys are typically pliable plastic, and may have resin identification code #3 somewhere on the product.
- Purge the facility of painted toys, and don't buy or accept donations of any painted toys, especially if made in China.
- Question about a toy? See www.healthytoys.org and/or www.cpsc.gov/cpsc/pub/prerel/category/toy.html
- ART: Avoid buying cheap metal trinkets for art. Always buy non-toxic paints, certified to AP label. (See additional art suggestions below).
- Kids may bring vinyl lunch boxes – good to ask parents if they've checked for lead-free.

PLASTICS

- Avoid PVC (See suggestions under lead above). PVC may sometimes be labeled with #3 resin identification code.
- Avoid polycarbonate (#7 resin identification code) drinking bottles or other plastic items. #7 likely contains bisphenol-A.
- Avoid styrofoam/expanded polystyrene. Styrene – although probably not the type encapsulated in a drinking cup – is carcinogenic.

MERCURY

- Fluorescent bulbs contain mercury. If a bulb breaks within a play zone, open windows, and evacuate the children for a minimum of 20 minutes to let the mercury dissipate.
- Avoid buying cheap metal trinkets for art.
- (See snacks**)

MAGNETS

- Avoid any magnets or magnetic toys that have magnets even remotely small enough to ingest.

SNACKS

- ALWAYS check allergy list on the sign-in sheet or kid profile cards.
- When buying snacks, avoid ingredients such as:
 - hydrogenated (trans fats);
 - artificial food preservatives (e.g., BHT, MSG, BHA);
 - artificial colors and dyes (Yellow #5, Red #40) –these may be associated with ADHD or other health problems;
 - artificial sweeteners (NutraSweet, aspartame, splenda, saccharin, etc.); and,
 - **high fructose corn syrup (HFCS) – some products containing HFCS are contaminated with mercury from the production process.

- Water is better than juice. If juice is provided, organic is best if the juice is made from apple, pear, berry, or others fruits or vegetables listed on the “dirty dozen” produce items. The dirty dozen list advises avoiding these products, unless organic, due to pesticide types and levels found in these conventionally grown products. (See <http://www.foodnews.org/walletguide.php>).

ART PROJECTS:

- Although this type of drop-in program only has time for brief and simple art projects, there may be issues with certain paints, glues, drawing supplies, plastics, chalk, uncooked red kidney beans, white board markers (even if they say low odor, non-toxic), metallic items, aprons and smocks made of PVC, polymer-based clays (such as Fimo™), and painted items such as Easter eggs, beads, and other materials.
- When purchasing art supplies, check for the Art & Creative Materials Institute’s (ACMI) Approved Product Seal (AP), which means the item has been certified to AMCI and pose no immediate or long-term health hazards and are nontoxic. Visit www.acminet.org and go to their certification page to search a database of the thousands of products the group has evaluated.
- Another good resource is www.watoxics.org/safer-products/choosing-safer-products-art-and-craft-supplies.

PEST MANAGEMENT

- Contact management for pest control issues. Feel free to contact info@pprc.org for any additional suggestions. Parents may want to know about recent pesticide applications around the facility.
- After playing outdoors, especially on preserved wood play structures, in the dirt, have the children wipe their feet on a dedicated door mat, and wash their hands.

Conclusions

Children are more vulnerable to toxins than adults, as their skin is more permeable, they eat and breathe more than adults per pound of body weight. It is important to minimize exposure to chemicals at schools, daycares, and in their daily lives.

Additional Resources

1. Art and Craft Safety Guide U. S. Consumer Product Safety Commission
www.cpsc.gov/cpscpub/pubs/5015.pdf
2. Choosing a Healthy Childcare Facility, Washington Toxics Coalition
<http://www.watoxics.org/safer-products/choosing-a-healthy-childcare-facility>
3. Eco-Healthy Child Care Checklist, Oregon Environmental Council
<http://www.oeconline.org/our-work/kidshealth/ehcc/EHCCChecklist>
4. Tips on Use of Bleach in Child Care, King County (Washington)
 - a. *Never* mix substances containing chlorine and ammonia. This mixture will make a toxic gas. Look for DO NOT MIX on the label!
 - b. When disinfecting, don’t **overuse** chlorine bleach. Handle it carefully; it is corrosive and toxic. It is usually labeled DANGER. Your cheapest and most effective disinfecting choice is to use a chlorine bleach and water solution.
 - **For countertops, food preparation surfaces, utensils and toys:** 1 teaspoon of bleach per gallon of cool water.
 - **For diapering surfaces, toilet seats, and hand washing sinks:** 1/4-cup (4 tablespoons) chlorine bleach per gallon of cool water.
 - c. Mix a new bleach solution daily because it weakens over time and won’t be strong enough to get rid of germs.

- d. Do not use any bleach that has other additives, like fragrances.
- e. Do not use bleach solution directly on skin.
- f. Read and follow the label! Wear protective equipment like goggles

For more information on hazardous home products, call the Seattle-King County Department of Public Health Hazards Line, 206-296-4692 or 1-888-TOXIC-ED