

RESOURCES

All Clean and Healthy New York (CHNY) resources are available here: www.cleanhealthyny.org/#!additional-resources/c11p5

All Children's Environmental Health Network (CEHN) resources are available here: www.cehn.org/our-work/eco-healthy-child-care/ehcc-factsheets/

Building Construction

- ⇒ CEHN Fact Sheet, "The Built Environment"
- ⇒ Healthy Building Network www.healthybuilding.net

Furniture and Nap Time

- ⇒ CHNY's Fact Sheet, "Healthy Furnishings for Safer Child Care"

Decorating

- ⇒ CHNY's Fact Sheet, "Healthy Furnishings for Safer Child Care"

Kitchen and Dining

- ⇒ CHNY's Fact Sheet, "Healthy Kitchens for Safer Child Care"

Cleaning

- ⇒ CHNY's Healthy Cleaning for Safer Child Care
- ⇒ Informed Green Solution's green cleaning toolkit www.informedgreensolutions.org/?q=publications/green-cleaning-toolkit

Toys

- ⇒ CHNY's fact sheet, "Healthy Toys for Safer Child Care"

Art Supplies

- ⇒ ACMI certified products are listed here: www.acminet.org/index.php?option=com_certifiedproducts
- ⇒ CEHN Fact Sheet, "Art Supplies"

THE SCIENCE

1. *Volatile Organic Compounds in Your Home*, Minnesota Department of Health. www.health.state.mn.us/divs/eh/indoorair/voc/ (as of 12/2015)

2. *Hand-Me-Down Hazard: Flame Retardants in Discarded Foam Products*. Kellyn S. Betts. March 2015. Environmental Health Perspectives. www.ncbi.nlm.nih.gov/pmc/articles/PMC4348733/

3. *Endocrine Disruptors* National Institute of Health Tox Town (Accessed 12/2015) toxtown.nlm.nih.gov/text_version/chemicals.php?id=65

4. *Perfluorinated Chemical (PFC) Research* U.S. Environmental Protection Agency. (Updated 10/26/2015) www.epa.gov/chemical-research/perfluorinated-chemical-pfc-research

5. and 6. *Principles of Pediatric Environmental Health Why Are Children Often Especially Susceptible to the Ad-*

verse Effects of Environmental Toxicants? Agency for Toxic Substances and Disease Registry (Accessed 12/28/2015) www.atsdr.cdc.gov/csem/csem.asp?csem=27&po=3

Additional Information

Polyvinyl Chloride National Institute of Health Tox Town (Accessed 12/2015) toxtown.nlm.nih.gov/text_version/chemicals.php?id=84

Formaldehyde National Institute of Health Tox Town (Accessed 12/2015) toxtown.nlm.nih.gov/text_version/chemicals.php?id=14

Preventing Asthma and Death from Diisocyanate Exposure DHHS, National Institute for Occupational Safety and Health Publication No. 96-111 (Published in 1996) www.cdc.gov/niosh/docs/96-111/

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ABOUT CLEAN AND HEALTHY NEW YORK

Clean and Healthy New York is an environmental health education and advocacy organization that promotes safer chemicals, a sustainable economy, and a healthier world by seeking strong policies, transforming the marketplace, and educating the public.

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Getting it right from the start

A checklist for new child care providers to avoid common sources of toxic chemicals in the



Making the child care environment safer and healthier

There is a lot to think about when you start a child care program. Location, staff, program development, health and safety requirements, and layout of rooms all come into play. Embedded in this process are many decisions about what materials to use—to paint the walls, to cover the floors, to hold toys and other materials, to prepare and serve food. Then there are the toys, art supplies, nap mats, and other objects the children will directly touch, mouth, or handle.

This checklist is designed to help those who are setting up new child care programs to make smart materials choices that avoid toxic chemicals. It should also be useful to current providers who are looking to renovate or make significant changes. Use this guide in concert with other best practices for program design, curriculum, and government mandated requirements to help you create a safe, healthy, dynamic program for young children in your community.

THE PROBLEM

The presence of toxic chemicals is rarely obvious and almost never available on product labels. At most you may see a warning that a product component contains chemicals known to the State of California to cause certain health problems, or statements that a product is free of a specific chemical. Unlike food, ordinary materials are not

required to come with ingredient labels.

However, chemicals that can harm human health and the environment are legal and commonly used in everyday items. Paints, furniture, and carpets can contain volatile organic compounds (VOCs) which can cause respiratory problems, cancer, and damage kidneys, liver, and the central nervous system.¹

Carpet padding, foam pads, electronics, and upholstered furniture can contain toxic flame retardants, which can leach from the product into homes and our bodies. They can cause health problems from infertility to cancer to loss of IQ and other developmental problems.² Phthalates in vinyl flooring, wall paper, shelf paper, and window blinds can trigger asthma attacks and disrupt hormones.³ Non-stick coatings on carpets, upholstery, and pots and pans can cause developmental problems.⁴

Young children are more vulnerable, as their developing bodies are sensitive to outside chemicals during "critical windows of development."⁵ They also come into contact with more of their environment—because they eat, breathe, and drink more than adults, pound for pound; they are closer to the ground, where chemicals in dust accumulate; and they put everything—including their hands—into their mouths.⁶

BUILDING CONSTRUCTION

Why worry? Building materials can contain volatile organic chemicals (VOCs) in finishes, phthalates in vinyl flooring. Pefluorinated compounds (PFCs) can be used on carpets, and carpet padding can contain flame retardants (FR) from recycled foam. Spray foam insulation is made with a carcinogen mixed on site, and contains added FR chemicals.

Avoid

- ⊗ PVC or vinyl siding
- ⊗ Vinyl flooring
- ⊗ Carpet padding
- ⊗ Stain resistant treatments on carpets or furniture

Questions to ask about an existing facility:

- ? Are there leaks which could lead to mold?
- ? Is there lead paint on the property?
- ? Is there asbestos in the facility?
- ? Have there been radon tests and remediation?
- ? Is there a history pest infestations and treatment?
- ? Are there pollution sources on or near this site?

Choose

- ✓ Solid wood floors
- ✓ Wood or cement board siding, and if painted, with lead-free and low- or no-VOC paint
- ✓ Area rugs of natural materials where desired

FURNITURE AND NAPTME

Why worry? Manufactured wood can contain formaldehyde and other VOCs in the glues. Padded furniture, including crib mattresses, nap mats and changing pads, may contain flame retardant chemicals. Vinyl surfaces may contain phthalates.

Avoid

- ⊗ Manufactured wood—if it is not labeled low-formaldehyde or formaldehyde-free
- ⊗ Vinyl covered products
- ⊗ Foam products labeled as meeting CA flammability standard “Technical Bulletin 117”

Choose

- ✓ Solid wood furniture
- ✓ Padded products without flame retardants, ideally with natural materials or polyester fiberfill, and without polyurethane (Look for checkbox label for items like sofa)
- ✓ If you use manufactured wood “press board” or “MDF” - set up in well-ventilated area, allow to sit before installing
- ✓ Vinyl-free products

DECORATING

Why worry? The materials you choose to cover walls and windows can contain phthalates, VOCs, and heavy metals like lead. Fabric window coverings in non-residential settings may be treated with flame retardant chemicals. Some of these chemicals are known to cause health problems, some may be relatively benign, but many have not been fully studied. Home-based programs may not need to meet flammability standards that drive chemical flame retardant use. Talk with your licenser.

Avoid

- ⊗ Oil-based paints
- ⊗ Vinyl wallpaper
- ⊗ Vinyl blinds for windows
- ⊗ Fabric drapes that must be treated with chemical flame retardants
- ⊗ Vinyl decorative decals

Choose

- ✓ Zero-VOC paint—available at many stores
- ✓ Wooden blinds or no window coverings
- ✓ Vinyl-free wallpaper
- ✓ Inherently flame-resistant drapes, if drapes are desired

KITCHEN AND DINING

Why worry? Materials in cookware and table settings can contain cancer-causing formaldehyde, cancer-causing and reproduction-disrupting perfluorinated compounds (PFCs), hormone disrupting bisphenols and phthalates, and development disrupting lead and cadmium. Plastics can contain additives that leach.

Avoid

- ⊗ Non-stick coated pans and pots
- ⊗ Polycarbonate cups
- ⊗ Plastic baby bottles
- ⊗ Plastic coated baby spoons
- ⊗ Ceramics with surface decorations (over the glaze)
- ⊗ Straws
- ⊗ Heating or storing food in plastic of any kind
- ⊗ Plastic wrap

Choose

- ✓ Stainless steel or cast iron pots and pans
- ✓ Glass or stainless steel baby bottles, cups
- ✓ Ceramic or stainless steel plates
- ✓ Stainless steel silverware
- ✓ Glass baking dishes
- ✓ Glass or stainless steel storage dishes

CLEANING

Why worry? Conventional cleaners can include ammonia, which can irritate eyes and lungs and cause liver and kidney problems. Chlorine bleach irritates eyes, skin, and lungs, nonylphenol ethoxylates (NPEs- appear with ingredients of “nonyl” or “ethoxy”) that harm aquatic life, phthalates that disrupt hormones. Fragrances can be irritants.

Avoid

- ⊗ Ammonia
- ⊗ Chlorine
- ⊗ Scented products, including candles and air-fresheners

Choose

- ✓ “Green Seal” approved cleaners
- ✓ Bleach-free EPA-approved disinfectants
- ✓ Microfiber cloths and water can clean most dirt
- ✓ Make-your-own basic spot cleaners
- ✓ A cleaning supply company that will provide certified “green” cleaning products and disclose ingredients

TOYS

Why worry? Aside from choke hazards, toys can harbor toxic metals, and inexpensive plastic beads can contain flame retardants from recycled material. Clear, hard plastic toys can be made with bisphenols, even though BPA was banned in drink containers. Toys or padded books with polyurethane foam can contain flame retardant chemicals. Vinyl toys meant for older children can contain phthalates banned for younger kids. Powder for “detective kits” can contain asbestos. Pressed wood can contain formaldehyde. Adult products, like house or car keys, contain toxic metals. Adult costume jewelry often contains lead and should not be used for dress-up.

Avoid

- ⊗ Toys that are not labeled as complying with ASTM F963
- ⊗ Unlabeled or #7 clear plastic toys (likely polycarbonate, made with BPA)
- ⊗ Vinyl products (note: vinyl products like shower curtains, shelf liner, boots, backpacks, binders, and raincoats can contain phthalates banned in young kids’ toys)
- ⊗ Inexpensive plastic beads (“mardi gras” beads)
- ⊗ Adult products (like real keys) unless you know all ingredients are non-toxic (like washcloths or spoons).

Choose

- ✓ Natural materials—wood, cotton, wool
- ✓ Padded items with polyester instead of foam
- ✓ Products labeled for the target age group or younger

ART SUPPLIES

Why worry? VOCs, heavy metals, even asbestos can be found in art supplies. Materials resourced from common adult items like shaving cream and vinyl products can contain hormone-disrupting and asthma-triggering phthalates. Art supplies can also generate significant waste.

Avoid

- ⊗ Adult materials—whether intended as art supply or not - unless you know and have screened all ingredients
- ⊗ Solvent-based products
- ⊗ Products with lead and other heavy metals (some paints, glazes, enamels)
- ⊗ Instant papier-mâché mix
- ⊗ Using dry/powdered ingredients around children
- ⊗ Products without certification as non-toxic
- ⊗ Labeled as not for young children (often presented as a choke hazard) when there are no small parts

Choose

- ✓ Products approved by AMCI — look for the “AP” logo (ASTM standard does not mean products are non-toxic)
- ✓ Natural materials like wood, plant-based colors
- ✓ Products made and intended for young children
- ✓ Projects that have several steps, to extend the time with a set of materials and reduce how much you use.
- ✓ Durable items that can be used to create and then disassembled or wiped clean
- ✓ Document children’s creativity with photos of temporary creations, and consider group projects that can be displayed in your location to limit material use (and waste).

SETTING POLICIES

Why worry? Setting policies for the families you serve can make it easier to continue down a path of a healthy environment, and lower contact with toxic chemicals. Idling cars release carbon dioxide (greenhouse gas), cancer-causing benzene, and other pollutants that contribute to asthma and other respiratory problems. Older toys can contain high levels of lead and phthalates.

Avoid

- ⊗ Accepting donations of toys and other older materials.

Choose

- ✓ No idling. Exhaust fumes can get pulled into indoor air. This is good news for parents, too: idling for more than 10 seconds wastes fuel, and restarting cars adds less wear and tear than idling. Two minutes of idling uses the same gas as a mile of driving.