

Growing Up Healthy Guide



Contents

Why We Became A Healthy Campus	3
Children's Environmental Health	4
Children's Routes of Bodily Intake	5
Kitchen + Dining	6
Air Quality	10
Building Construction	16
Furniture + Naptime	23
Cleaning Practices	26
Toys + Art Supplies	31
Decor	36
Project Partners	38





Why We Became A Healthy Campus

In 2014, Grayson, a two-year old attending our program, was diagnosed with Leukemia. It was determined that it was not hereditary. Could this be linked to exposure to toxins in everyday products? As we were heading into the design of our new campus, the question created pause.

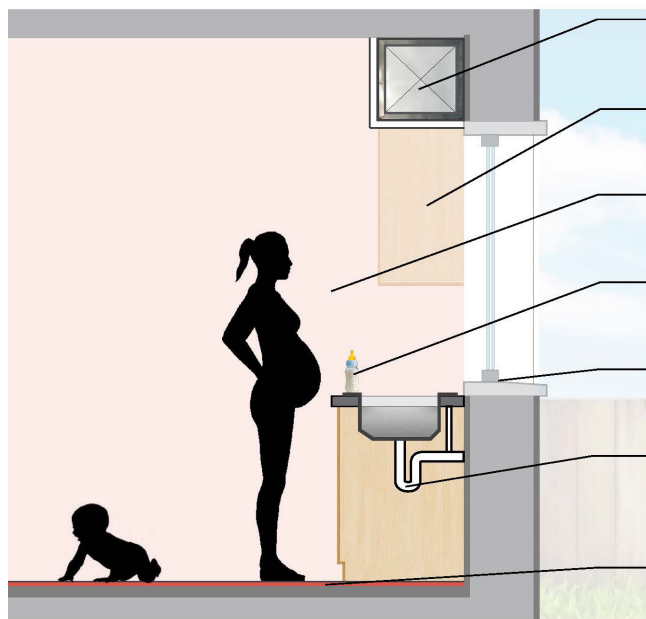
Toxins are in a majority of the products we use every day and in building materials, and most chemicals on the market are not regulated. Armed with this information, it was time to design a first of its kind: a healthy campus. An environment focused on eliminating toxins and chemicals for the health of young children.

As you look at this guide, the information will likely be overwhelming. We know that it's not practical to build a new house and buy all new products at once, but we hope you use this information to make informed and healthy choices next time you need to buy a sippy cup, replace your carpet, or buy household cleaners.

Together we can make a difference for our children!

Children's Environmental Health

The Arkansas Department of Health recently launched the Children's Environmental Health Initiative in an effort to improve the health conditions of Arkansas's childcare facilities. This campaign looked at factors such as indoor air quality and chemicals found in building materials in order to understand environmental impact on different diseases and disorders affecting children.



Sudden Infant Death Syndrome (SIDS): Linked to air pollution, which can be worsened by mold and inadequate ventilation.

Asthma: Adhesives and finishes that off-gas affect indoor air quality.

Premature Birth: High VOC paint can off-gas, affecting mothers and fetuses.

Autism Spectrum Disorder: Plastic bottles and dish-ware contain chemicals linked to autism.

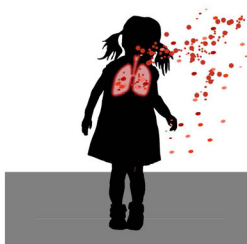
Obesity: Sealants, grout, silicon, and caulk can contain endocrine disruptors, linked to obesity.

Immunodeficiency Disorders: PVC contains known carcinogens and chemicals that can interfere with immune, reproductive, and endocrine systems.

Attention Deficit Hyperactivity Disorder : Flexible Vinyl Flooring containing phthalates is linked to behavioral disorders.

Children's Routes of Bodily Intake

While adults may be exposed through inhalation, ingestion, or dermal absorption, children face the added risks of being exposed to hazardous substances through maternal transfer of toxics, in addition to their own pathways for bodily intake.



Inhalation

Respiration of particles in the air and dust consumption (young children may consume as much as 60 mg of dust per day).



Ingestion

Eating or drinking contaminated food or water supplies and hand-to-mouth activity throughout the day.



Dermal Absorption

Absorption of toxics through oils in the skin and hair follicles.



Placental Transfer

Chemical compounds are able to pass through the placental membrane, transferring hazardous toxins to the fetus.



Breastfeeding

Maternal transfer of toxics to infants through breast milk.



Kitchen + Dining



Kitchen + Dining

TOXIN: Bisphenols (such as BPA and BPS)

SPOT IT: In the lining of most canned food and drinks, food processor bowls, and 'shatterproof' plastic cups and pitchers. BPA is no longer used in US baby bottles or sippy cups, but some replacement plastics are suspect.

HEALTH CONCERN: Bisphenols can harm hormone systems. It leaches from materials when heated, scratched, or exposed to acidic food. Even low levels of BPA can lead to prostate and breast cancer, reproductive problems, diabetes, and obesity.

OUR COMMITMENT: We use only fresh or frozen foods. We use child-sized stainless steel plates, bowls, cups and silverware. Sippy cups have silicon lids.

SOLUTIONS AT HOME: Consume more fresh foods and use less canned foods. Allow your child to use regular dishes. Try ceramic or stainless steel plates and glass or stainless steel cups when possible.

TOXIN: Phthalates

SPOT IT: Plastic wrap and food film, clear flexible plastic containers, and highly processed foods.

HEALTH CONCERN: Pronounced “thal-ates,” these chemicals are commonly added to PVC to make it flexible and are used in fragrances. Phthalates can act like hormones, leading to a variety of reproductive problems, especially in baby boys.

OUR COMMITMENT: We do not use plastic wrap. We will use child-sized stainless steel plates, bowls, cups and silverware. Sippy cups have silicon lids.

SOLUTIONS AT HOME: If you use plastic wrap, look for PVC free. Avoid plastic tableware, including melamine. Try ceramic or stainless steel plates. Use glass or stainless steel cups when possible and safe.





Kitchen + Dining

TOXIN: Lead

SPOT IT: Pipes and solder (used at joints) may be dull gray and appear shiny when scratched. The only way to know for sure is to have your water tested at the tap.

HEALTH CONCERN: Even small amounts of lead exposure can lower IQ, reduce learning abilities, and cause behavior problems. Older homes may contain lead water pipes, and builders commonly used leaded solder until the 1980s. Brass fittings for water pipes may contain 8% lead.

OUR COMMITMENT: The building is constructed with lead-free pipes and solder, and we use only cold water for cooking and drinking.

SOLUTIONS AT HOME: Flush pipes by running water until it is cold before drinking or mixing baby formula if faucet is unused for 6 or more hours. Use only cold water for cooking, formula and drinking. If you suspect your water may contain lead, call the Safe Drinking Water Hotline, 1-800-426-4791, for local EPA-accredited testing labs.



Air Quality

TOXIN: Irritants from Vehicle Exhaust

HEALTH CONCERN: Exposure to air pollution is linked to higher rates of respiratory and developmental problems.

OUR COMMITMENT: There is a No-Idle Zone on campus. Staff have signed a no-idle pledge and turn off their vehicle engine when parked on campus. All families, guests, staff and delivery trucks must turn off their vehicles during drop off and pick up times.

SOLUTIONS AT HOME: Sign our no-idle pledge and turn off your vehicle engine when you park on campus. Don't let your car run idle in the garage, even when the garage door is up.

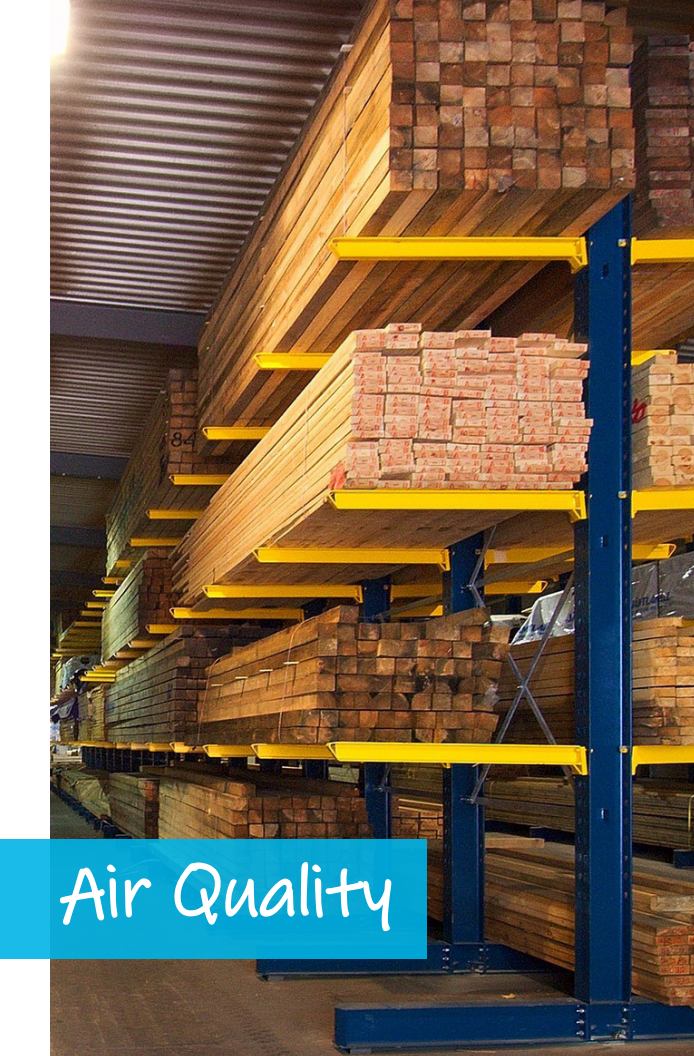
TOXIN: Smoking and Tobacco Smoke

HEALTH CONCERN: Second-hand smoke increases the risk for sudden infant death syndrome. It also causes lower-respiratory and middle-ear infections, severe asthma and can lead to slowed lung growth.

OUR COMMITMENT: We have a smoke-free campus to include e-cigarettes. We also encourage staff to change if smoke is detected on their clothing and encourage smoking-cessation among staff.

SOLUTIONS AT HOME: If someone in your household smokes, encourage a smoking-cessation program. You can also create a smoke-free zone in the home and vehicle.





Air Quality

TOXIN: Volatile Organic Compounds (VOCs)

HEALTH CONCERN: Asthma, respiratory symptoms, headaches and fatigue, cancer and neurological problems.

SPOT IT: Building materials such as plywood, insulation, carpet, vinyl and paint.

OUR COMMITMENT: We use a mineral based paint and VOC free building materials. Every room is well ventilated with screened windows, outdoor classroom and ceiling fans. All furnishings are Indoor Advantage GOLD certified. We eliminated air fresheners and scented soaps and detergents. We ask staff not to wear perfumes and other scented care products.

SOLUTIONS AT HOME: Use scent free soaps and detergents. Don't use plug-in devices that continually omit fragrance. When purchasing new furniture or carpets, choose products that emit fewer VOCs.

TOXIN: Irritants Such as Dust and Dirt

HEALTH CONCERN: Linked to asthma and respiratory symptoms.

OUR COMMITMENT: Our HVAC systems are serviced quarterly to maintain air intakes, cleanliness of the system and exhaust, and replace air filters.

SOLUTIONS AT HOME: Replace air filters regularly. Have your HVAC system serviced at least twice a year.



TOXIN: Carbon Monoxide

HEALTH CONCERN: Headache, dizziness, vomiting, nausea, and prolonged exposure can lead to heart disease or death.

OUR COMMITMENT: Carbon monoxide detectors are installed in classrooms and kitchen spaces. Kitchen equipment is well ventilated to the outdoors.

SOLUTIONS AT HOME: Install carbon monoxide detectors in your home.



Air Quality



Building Construction

A vertical background image showing several parallel wooden planks with a natural wood grain pattern, ranging from light tan to dark brown.

Building Construction

TOXIN: Formaldehyde

SPOT IT: Used in glues and adhesives for particle board and plywood and flooring adhesive.

HEALTH CONCERN: Carcinogen (can lead to cancer), allergies, and asthma. Additionally, it is highly flammable.

OUR COMMITMENT: Helen R. Walton Children's Enrichment Center uses solid wood or wood finishes with no added formaldehyde (NAF). Flooring adhesives are NAF certified.

SOLUTIONS AT HOME: When buying new furniture or cabinets, choose solid wood or NAF products. Avoid products made of particleboard.

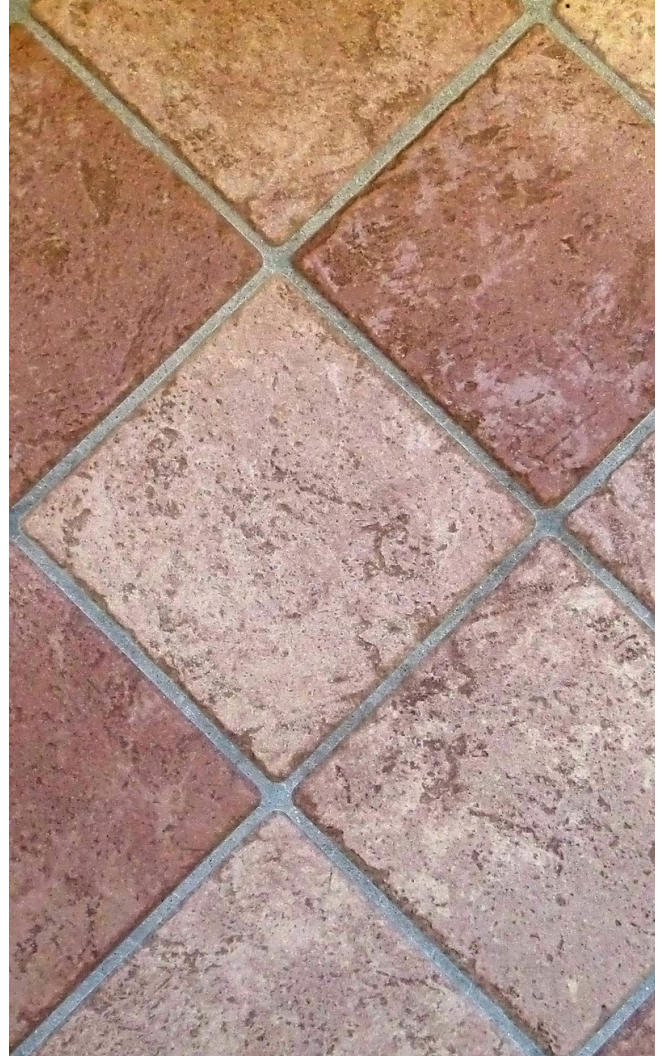
TOXIN: Phthalates

SPOT IT: Vinyl flooring, tiles, wallpaper, and synthetic carpet.

HEALTH CONCERN: Leads to reproductive problems, especially in baby boys. Allergies and asthma attacks can occur.

OUR COMMITMENT: Helen R. Walton Children's Enrichment Center uses linoleum, concrete and GreenGuard Gold carpeting.

SOLUTIONS AT HOME: Eliminate wallpaper and utilize flooring such as hardwood, concrete, cork, bamboo, or linoleum.





TOXIN: Perfluorinated Compounds (PFCs)

SPOT IT: Anything labeled stain-repellent, stain-resistant, water-resistant, or flame-retardant.

HEALTH CONCERN: PFCs build up in the environment and do not break down naturally. PFCs can cause cancer and may cause liver or kidney damage.

OUR COMMITMENT: Helen R. Walton Children's Enrichment Center does not use carpet padding which eliminates a common source of flame-retardant chemicals. Our carpet is not pre-treated and will be GreenGuard Gold certified.

SOLUTIONS AT HOME: Decline optional stain or waterproof treatments. Look for GreenGuard Gold carpet or reduce the use of carpeting in your home.

Building Construction

TOXIN: Lead

SPOT IT: We all know paint is no longer manufactured with lead. However, lead is in small parts of the earth's crust and is in the air and soil. Additionally, it can be found in ceramics, plumbing, and even cosmetics.

HEALTH CONCERN: Lead can lower IQ, cause liver, bone and kidney damage and can impair childhood development.

OUR COMMITMENT: Plumbing, to include solder, is lead free. We use doormats to reduce the amount of lead that can enter the building.

SOLUTIONS AT HOME: Use doormats or remove shoes before entering the house. Have your plumbing tested to ensure your child isn't being exposed to lead.



TOXIN: Radon

SPOT IT: Naturally occurring gas released from soil and bedrock, typically in areas with rock formations of granite and shale.

HEALTH CONCERN: Exposure to radon can cause lung cancer.

OUR COMMITMENT: Helen R. Walton Children's Enrichment Center tested the soil on the campus. There were no significant findings.

SOLUTIONS AT HOME: Conduct a radon test in your home by purchasing a radon testing kit from local hardware stores.



Building Construction

TOXIN: Mercury and Polychlorinated Biphenols (PCBs)

SPOT IT: Fluorescent light fixtures, some light bulbs, and mercury thermometers.

HEALTH CONCERN: Long-term exposure can lead to cancer and effects on the immune system, reproductive system, nervous system and endocrine system.

OUR COMMITMENT: Helen R. Walton Children's Enrichment Center uses LED fixtures throughout the new campus. Additionally, we use electronic thermometers.

SOLUTIONS AT HOME: Replace old fluorescent light fixtures with LED which will create energy savings.





Furniture + Naptime

TOXIN: Formaldehyde

SPOT IT: Used to add permanent-press qualities to fabrics, glues in particle-board furniture and a preservative in some paints. Off-gassing is highest from furniture for the first five years after production.

HEALTH CONCERN: Carcinogen (can lead to cancer) and allergies, and asthma. Also, it is suspected to be a neurological, reproductive and liver toxin.

OUR COMMITMENT: Helen R. Walton Children's Enrichment Center use solid wood furniture, materials with natural/organic fibers, and mineral-based paint.

SOLUTIONS AT HOME: When buying new furniture or cabinets choose solid wood or NAF products. Avoid products made of particleboard.





Furniture + Naptime

TOXIN: Polybrominated Diphenyl Ethers (PBDEs)

SPOT IT: Flame retardants used on furniture foam, carpet padding, TVs, plastics, crib mattresses and naptime mats. 80% of PBDE exposure is from household dust.

HEALTH CONCERN: PBDEs are toxic to the liver, can contribute to cancer, learning disabilities, and infertility. Infants/toddlers who are highly exposed to PBDEs may suffer damage to their developing nervous systems.

OUR COMMITMENT: We eliminated/reduced use of all materials with flame retardants and use products with polyester, wool or cotton which are unlikely to contain retardants. We ventilate classrooms, use microfiber dust cloths, HEPA filter vacuum cleaners, and doormats.

SOLUTIONS AT HOME: Use crib mattresses/sleep mats/ changing pads without polyurethane foam. Consider wooden shades instead of curtains. Remove electronics from children's rooms, dust frequently, and use a HEPA vacuum.



Cleaning Practices

Cleaning Practices



TOXIN: Cleaning Chemicals

SPOT IT: Chemicals that are used for cleaning, sanitizing and disinfecting can affect human health. Indoor air is up to 10 times more polluted than outdoor air.

HEALTH CONCERN: Eye, skin or respiratory irritation, cause or trigger asthma, be endocrine disruptors and can affect the developing brain and nervous system. Years of exposure can lead to cancer and heart disease.

OUR COMMITMENT: We use cleaning, sanitizing & disinfecting materials that are organic & approved by Green Seal. We have a closed loop dilution system used to mix products that come as a concentrate. We use microfiber cloths & mops. Each classroom has windows & doors that open for fresh air.

SOLUTIONS AT HOME: Look for cleaning products marked by Green Seal, EcoLogo, or Design for the Environment Safer Choice Program (notated on the front of cleaning solution bottles). Use microfiber mops versus cotton & open windows while cleaning.

TOXIN: Aerosols and Perfumes

SPOT IT: Deodorants, hair sprays, carpet cleaners, furniture polish and air fresheners.

HEALTH CONCERN: The invisible droplets are inhaled by children and can trigger asthma and allergy symptoms.

OUR COMMITMENT: Helen R. Walton Children's Enrichment Center does not use aerosol products or any product with added perfume fragrances.

SOLUTIONS AT HOME: Eliminate aerosol products and look for soaps and laundry soaps free of dyes and perfumes.





Cleaning Practices

TOXIN: Cleaning Chemicals Used by Outside Vendors

SPOT IT: Chemicals that are used for cleaning, sanitizing and disinfecting can affect human health. Indoor air is up to 10 times more polluted than outdoor air.

HEALTH CONCERN: Eye, skin or respiratory irritation, cause or trigger asthma, be endocrine disruptors and can affect the developing brain and nervous system. Years of exposure can lead to cancer and heart disease.

OUR COMMITMENT: Our two janitorial vendors have provided SDS sheets on each product used on our campus; all Green Seal certified. Finally, janitorial firms are required to sign a Model Green Cleaning, Sanitizing and Disinfecting Policy.

SOLUTIONS AT HOME: When utilizing a company to clean your home or carpets, ask if their products are Green Seal certified.

TOXIN: Pesticides

SPOT IT: Any substance used inside or outside to prevent, control, repel, or kill insects, plants, fungi, and other pests.

HEALTH CONCERN: Acute poisoning can cause breathing difficulty, chest tightness, vomiting, cramping, diarrhea, blurred vision, sweating, headaches, and more. Long-term exposure can lead to asthma, cancer, reproductive harm, kidney/liver damage, birth defects, nerve tissue damage and neurobehavioral problems.

OUR COMMITMENT: We use an integrated pest management system, bait traps and when necessary organic sprays. Such organic sprays will be applied 12 hours before children use the treated spaces.

SOLUTIONS AT HOME: Consider an integrated pest management system. For information, visit our website at <http://hwcec.org/parents/growing-up-healthy/>

A close-up photograph of a red ladybug with black spots on its back, resting on a bright yellow flower petal. The background is a soft, out-of-focus green.

Cleaning Practices



Toys + Art Supplies

TOXIN: Lead, Asbestos, Organic Solvents

SPOT IT: Art supplies that enhance pigmentation, preserve art product and improve application. Scented markers, oil-based paints, some paints, spray paint, dyes, instant papier-mache, and permanent markers.

HEALTH CONCERN: Asthma, allergies, headaches and nausea, especially if used in a poorly ventilated area.

OUR COMMITMENT: We use non-toxic art supplies approved by the Art and Creative Materials Institute (ACMI). We use art supplies in well-ventilated spaces with windows and/or fans. Children wear protective smocks and wash their hands after using art materials. We avoid adult materials like shaving cream for sensory play and borax for play dough.

SOLUTIONS AT HOME: Look for products marked with “AP” (ACMI non-toxic seal). Use art materials in a well-ventilated space and wash hands after use.



TOXIN: Polycarbonate (BPA)

SPOT IT: Often labeled as number 7 or PC in a recycling logo. “Shatterproof” items, toys, and children’s tableware.

HEALTH CONCERN: BPA has been linked to prostate and breast cancer, reproductive problems, diabetes, and obesity.

OUR COMMITMENT: Helen R. Walton Children’s Enrichment Center avoids plastic toys and focuses on products made from natural materials such as wood, cotton, wool, cork, rubber and metal.

SOLUTIONS AT HOME: Look for number 7 or PC in a recycling logo on all plastic toys. Avoid toys or items labeled as “shatterproof”. When possible, avoid plastic toys.



Toys + Art Supplies

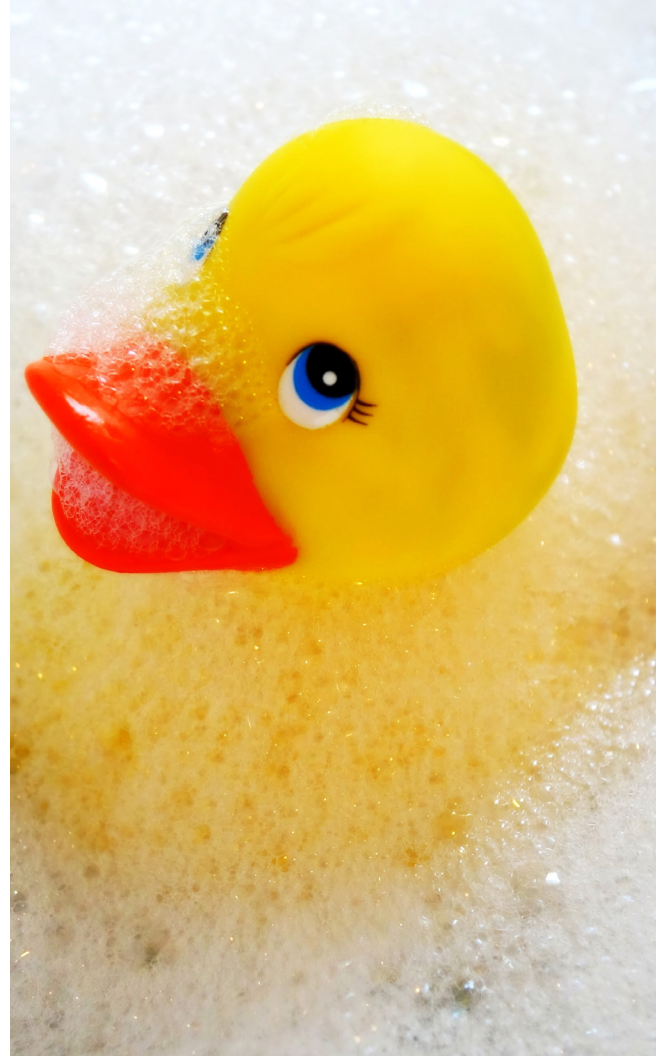
TOXIN: Polyvinylchloride (PVC) or Vinyl

SPOT IT: Soft plastic toys made with PVC, bibs, doll clothes, teethingers, and vinyl fabrics.

HEALTH CONCERN: Phthalates act like hormones, which can lead to a variety of reproductive problems.

OUR COMMITMENT: Helen R. Walton Children's Enrichment Center uses organic rubber for teethingers and ice packs and organic cotton bibs. We avoid plastic toys and focus on equipment made of natural materials.

SOLUTIONS AT HOME: Look for products that use organic rubber and avoid plastics. "Numbers 7, 6 and 3 are NOT for me!"





Toys + Art Supplies

TOXIN: Flame Retardants

SPOT IT: Toys filled with polyurethane foam or padding and padded books.

HEALTH CONCERN: Can harm hormones and result in developmental delays or lead to cancer.

OUR COMMITMENT: We avoid plastic toys and focus on products made from natural materials. Padded furniture items are polyester filled or flame retardant free.

SOLUTIONS AT HOME: Choose children's toys that are labeled "phthalate-free" and "PVC-free". Use non-plastic alternatives like wood or cloth.



Decor

TOXIN: Phthalates, VOCs and heavy metals like lead

SPOT IT: Fabric window coverings, oil-based paints, wallpaper.

HEALTH CONCERN: Hormone disruption, developmental and reproductive problems, asthma, preterm birth, undescended testes, premature puberty.

OUR COMMITMENT: Helen R. Walton Children's Enrichment Center uses a mineral based paint through-out the facility. We also limit decor that will attract dust such as artificial plants.

SOLUTIONS AT HOME: Use wood blinds or ensure the fabric treatments are void of fire retardant chemicals. Use Zero-VOC paint or mineral based paints.

Thanks to Our Partners







hwcec.org

