



Keeping it Clean and Green

Did you know that the air inside your home can be two to five times more polluted than outdoor air according to the Environmental Protection Agency (EPA)? Products such as air fresheners, chemicals from harsh cleaners, scented art supplies, and certain plastics can pollute indoor air. These environmental hazards can be especially harmful to young children, disrupting normal growth and development. The brain and vital organs are developing rapidly, especially for children under age 5, putting young children at risk from long term exposure, and having lifelong effects on health. According to the Western States Pediatric Environmental Health Specialty Unit, approximately 30% of childhood asthma can be attributed to chemical exposures. Furthermore, the World Health Organization reports that 17% of cancer in children under five years of age can be linked to environmental causes.

Removing germs, pests, dust, and dirt through regular cleaning, sanitizing and disinfecting is important for keeping your child healthy and safe. You can do so in the least harmful ways by:

- using alternatives to pesticides that are sprayed in and around the house;
- checking for lead in the drinking water and around the home; and
- using the least toxic methods for cleaning, sanitizing, and disinfecting.

In conjunction with these, it is important to reduce exposure through preventative methods. This newsletter will present information that will help you make the best choices for your home. We will highlight information about:



- chemical fragrances
- plastics and plastic toys
- tools for cleaning, sanitizing, and disinfecting

This newsletter includes:

- Age-specific information and suggestions about activities to do with your infant, toddler, or preschooler,
- Featured activities for each age group,
- How This Helps: a summary of your child's development by doing these activities together,
- Resources: for more information about this topic, and
- Suggested Books: a list of books to read with your child.



Infants

Your baby's lungs are still developing after birth and will continue to develop well into his third year of life. This is why it is so important to protect your baby from harmful airborne substances such as second-hand smoke and air pollution. Air pollution is much more than just outdoor toxins such as car exhaust and fertilizers. Your indoor environment is filled with household scented products as well. Air **fresheners** are often used to make indoor areas smell better, but fragrances do not clean the air. They disquise the smells by adding more chemicals called phthalates into the air, which are absorbed through the skin or inhaled into the lungs. Research shows that *phthalates* increase the risk of allergies and asthma. This chemical can also affect children's neurodevelopment and thyroid function. *Cleaning* **products** also contain fragrances that can irritate the lungs and trigger asthma, headaches, and allergic reactions.

You can ensure that the air indoors is free from harmful chemicals by using open air ventilation (e.g., opening windows, doors) or using an air filter instead of air fresheners and choosing:



- third-party certified products that are labeled unscented or "free and clear" (search products at https://www.epa.gov/saferchoice/products);
- products that do not have "fragrance" listed as an ingredient;
- products that do not have strong smells;
- items marked "phthalate-free."

According to experts at *Babycenter*, the best scents for your baby are natural and familiar scents. Your scent and the scent of favorite places are comforting to your baby. When leaving your baby with a new caregiver, try leaving him with a favorite familiar scent...you!

Activity for Infants: My Favorite Scent

What You Need:

Mom or Dad's pillowcase or T-shirt

What to Do:

- 1. Place a pillowcase or T-shirt that mom or dad has worn to bed near the baby's nose as you hold him during his alert and active times (e.g., feeding).
- 2. When leaving baby with a new caregiver, it is helpful to leave the pillowcase/T-shirt with him. This will give him a sense of comfort from your scent.
- 3. After you launder the pillowcase/T-shirt in "free and clear" detergent, be sure to wear it to bed again before your baby's next transition.

(See page 5 for information on how doing these kinds of activities with your child helps his development and school readiness.)







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Toddlers

Your developing toddler is particularly vulnerable to toxic chemicals in certain plastics because he is more likely to put plastic objects into his mouth. Bottles, cups, and toys are often made with *phthalates* and *Bisphenol A (BPA)*. Research increasingly shows that these chemicals mimic or suppress hormones, disrupting normal development and growth.

According to *Caring for Our Children*, here are seven tips to reduce exposure to toxic chemicals in plastics:

- 1. Avoid plastics with recycling code #3 (phthalates), #7 (bisphenols) and #6 (styrene).
- Use glass, porcelain or stainless-steel containers when serving or storing hot food or liquids.
- 3. Avoid microwaving food or drink in plastic containers. Use a paper towel instead of plastic wrap to cover food when heating.
- 4. Avoid canned foods when possible, as many are lined with BPA.
- 5. Do not place plastics in the dishwasher. If labeled dishwasher-safe, most baby bottles can be safely placed in the dishwasher. In 2012, the



- FDA banned the use of BPA in the manufacture of baby bottles and sippy cups.
- 6. Due to mouthing of toys, look for new plastic toys that are labeled "phthalate –free," "PVC-free," and/or "BPA-free."
- 7. Look for toys certified by the *Toy Safety* Certification Program (TSCP) or American National Standards Institute (ANSI).

Activity for Toddlers: Ball Drop

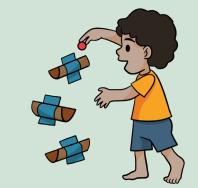
What You Need:

Paint-safe tape 3 or more paper towel rolls Ball (look for phthalate-free or PVC-free) Scissors

What to Do:

- 1. Cut the paper towel roll in half lengthwise to create a "U" shaped trough.
- 2. Tape the half rolls to a wall to create a track with alternating angles for the ball to roll down.
- 3. Have your toddler test the design by dropping the ball from the top of the track to the bottom.
- 4. Repeat the activity using other balls of various safe materials. Discuss and describe what happens to the balls. Does it go faster/slower?
- 5. Try building two tracks and experimenting with which one goes the fastest.

(See page 5 for information on how doing these kinds of activities with your child helps his development and school readiness.)





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Preschoolers

You can help reduce the toxic load that your child is exposed to by using the least toxic methods for cleaning, sanitizing, and disinfecting. You can also reduce the chances of young children inhaling harmful chemicals by ensuring that there is adequate ventilation and your child is not within close proximity.

Cleaning removes most germs, dirt, and impurities from surfaces by washing with water and soap. This is the first step that must be done before sanitizing and disinfecting. Cleaning is important in reducing lead exposure, which affects the central nervous system and can cause permanent damage to a child's brain. Tools for cleaning include:

- Walk-off mats- Look for good quality scraper mats with rubber backings placed at the entryway. They act as a great first line of defense against many hazards that can enter your home.
- Microfiber Cloths- Effective with soap and water
- Vacuums- HEPA or high filtration vacuums filter out more dirt and germs



Sanitizing reduces germs, while Disinfecting kills most germs through chemicals or devices (e.g., dishwashers). Tools for sanitizing and disinfecting include:

- Microfiber Cloths- Useful for spreading sanitizers on surfaces. These sanitizers must sit on the surface and be wiped dry or air dried after the recommended wait time indicated on the product.
- Microfiber Mops- more effective than cotton mops
- Devices- Uses water-based technology rather than chemicals (e.g., steam cleaners, electrolyzed water)

Activity for Preschoolers: Mop It Up

What You Need:

Microfiber Mop or Microfiber cloth 1/2 Cup White Vinegar 1 Gallon of Water

What to Do:

- 1. Mix ½ cup of white vinegar with 1 gallon of water.
- 2. Dip the microfiber mop or cloth into the water.
- 3. If the mop is adjustable, twist the handle to a shorter length for your child.
- 4. Play some music and ask your preschooler to join you in a mopping dance as you clean the floors.
- 5. Alternatively, have your child use the microfiber cloth to wipe down counters and toys. Thank him for all his help!

(See page 5 for information on how doing these kinds of activities with your child helps his development and school readiness.)







How This Helps

The activities suggested in this newsletter help promote many different aspects of development:

Physical Development

- Learn to use his body with intention
- Develop eye-hand coordination

Social and Emotional Development

- Learn to interact with others
- Develop a close bond with you

Language and Literacy Development

- Build verbal skills, vocabulary, and use of descriptive language
- Learn to ask and answer questions

Cognitive Development

- Increase his observation, listening, and understanding skills
- Develop his thinking and problem-solving skills



Kids in the Kitchen

Cooking teaches valuable lessons such as math (quantities, measurement), science (how matter changes), fine motor (stirring, pouring), and literacy (print awareness). As you make this recipe with your child, talk about kitchen safety. Show him how to handle items safely and allow him to do as much as he is capable of. Praise his efforts, and ask questions throughout the process to encourage his thinking skills. Most of all, have fun!

Kiddy Corn Chowder

Adapted from Weelicious.com https://weelicious.com/kiddy-corn-chowder-1/Ingredients:

2 Tbsp. butter

1 small onion, (2 stalks celery, optional) diced 1-1/2 Tsp. kosher salt

1 clove garlic, minced

4 ears fresh corn, cut off the cob 1-1/2 Cups chicken or vegetable stock

1-1/2 Cups milk

1 potato, (1 carrot, optional) peeled and cut into a small dice

Directions:

- 1. Place the butter in a stock pot over medium heat and sauté the onions (and celery and carrots) with the salt for 5 minutes.
- 2. Add the garlic and continue to cook for an additional minute.
- 3. Add the corn kernels, corn cobs (for additional flavor and thickener), stock, milk and potatoes to the pot and bring to a
- 4. Reduce to a simmer and cook for 20 minutes.
- 5. Remove the corn cobs from the soup and discard.

*If you want a thicker chowder, puree half of the finished soup in a blender until smooth and creamy.







Resources

Homemade Cleaners

https://www.johnson.k-state.edu/docs/home-family/Homemade%20Cleaners.pdf
This guide will help you start creating an eco-friendly household with proven recipes and suggestions. Make everything from all-purpose cleaners to oven cleaners with simple ingredients and instructions for an easy and safe alternative

Safer Choice Program

https://www.epa.gov/saferchoice/products)
The Environmental Protection Agency (EPA)
manages the Safer Choice Program which certifies
cleaning products.



Suggested Books

Discover these books and more at the **Hawai'i State Public Library** www.librarieshawaii.org.

Infants and Toddlers

Wash, Wash! by Pamela Chanko

Sing along to the tune of *Row, Row, Row Your Boat* in this cute board book while learning how to wash hands.

Maisy Cleans Up by Lucy Cousins

Cleaning up can be fun! Charley helps Maisy pick up some toys and wash the windows as they wait for their special treat.

Preschoolers

I Can Help by David Costello

A little duckling is lost, so a monkey offers to help. But as the monkey is helping, he starts to fall off a tree and a giraffe helps to catch him. This tale shows how each of us has something special that we can use to help others in need.

No More Plastic In the Ocean by Lavinia Currier

Join He'e the octopus as she strives to save her beautiful ocean home from plastic trash. This storybook will teach about the impact of plastic on our oceans and island life



Learning to Grow is a project of the University of Hawai'i, Windward Community College, with funding from the Hawai'i Department of Human Services. Visit our website at www.learningtogrowhawaii.org or visit us on Facebook at www.facebook.com/learningtogrowhawaii

