

Pediatric Environmental Health Questionnaire

ASSESSING THE TOP TEN TOXIC EXPOSURES IN CHILDREN

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The *Pediatric Environmental Health Questionnaire* is a tool for practitioners and parents to aid in assessing children at risk of harm due to environmental toxicants. It is not meant to be all-inclusive but a screening aid to identify at-risk children and create awareness regarding a prominent and overlooked contributor to chronic health issues.

The questions below evaluate the ten most likely sources of childhood environmental toxicants and should be included as part of a complete intake in all pediatric patients. It is of primary importance to reduce exposure and toxic load. Children have increased susceptibility and toxicity from exposures far greater than adults due to their size, childhood behaviors (i.e., exploring their world hand-to-mouth), and lowered detoxification abilities as compared to adults. Clinical practice recommendations are addressed at the end of the caretaker survey. Suspect risk of health issues from toxicants in the following circumstances:

1. Exposure to harmful chemicals throughout pregnancy
2. Known nutritional deficiencies or genetic predispositions that affect detoxification and/or excretion
3. An allergic-type reaction such as atopic dermatitis, asthma, hives, and/or allergies

Pediatric Environmental Health Questionnaire (PEHQ)

I. Indicators of Poor Metabolizers

Does the child experience symptoms from environmental allergens such as cigarettes, dust, pollen, mold, cleaning supplies, exhaust, etc.?

Yes ___ No ___

II. Allergens

Does the child develop any of the following symptoms when exposed to specific foods/food groups: Stuffy nose, cough, wheezing, rashes, tummy complaints, mood changes/difficulty concentrating?

Yes ___ No ___

III. Solvents/VOCs

Is the child exposed to the following types of chemicals: Dry cleaning, attached garage, wood stove, busy streets, hobbies with chemicals, home remodeling, standard cleaning products, etc.?

Yes ___ No ___

IV. Pesticides

Does the child have exposure to any of the following: Conventional diet, US public school meals, golf courses, vineyards, farms, pets treated with chemicals, etc.?

Yes ___ No ___

V. Metals

Does the child have any of the following types of exposures: Broken mercury thermometer, fluorescent bulbs, silver amalgams, regular fish consumption, living in an old home built before 1978, etc.?

Yes___ No ___

VI. Mold

Has the child been exposed to visible mold or water damage at home or school, or been symptomatic when exposed to central air or heat, etc.?

Yes___ No ___

VII. Plastics

Does the child have exposure to any of the following: Canned/plastic-wrapped food (especially microwaved), plastic orthodontic devices, plastic water bottles, pacifiers, etc.?

Yes___ No ___

VIII. Personal Care Products

Is your child exposed to any of the following personal care products: Fabric softener sheets, fluoridated toothpaste, scented products, hair products/dyes, make-up, sunblock, etc.?

Yes___ No ___

IX. Persistent Organic Pollutants (POPS)

Has your child been exposed to any of the following: Dump or Super Fund sites, an industrial plant, non-stick cookware (Teflon), flame retardants (pajamas), etc.?

Yes___ No ___

X. Electromagnetic Frequencies (EMFs)

Is your child exposed to any of the following at home or school: Power stations, Smart Meters, cell towers, dimmer switches, Wi-Fi/routers, cell phones, an Alexa-type voice assistant, smart watches, baby monitors, etc.?

Yes___ No ___

Each "YES" checkmark is 1 point

TOTAL SCORE _____

0-4: The child has a low toxicant load, but steps should be taken to lower future risks

4-7: The child has a moderate toxicant load which could be a significant obstacle to healing

7-10: The child has a very high toxicant load and steps should be taken quickly to decrease their overall toxic load and improve their health

Basic Lifestyle Recommendations to Reduce Toxic Load

The primary goal in the management of childhood environmental toxicity is to reduce the toxic load from the main sources of exposure. Reducing toxicants allows the body to address stored toxins, and often restores balance innately. Thus, minimal supplemental interventions may be required, but this is determined on an individual basis.

- Food
- Water
- Air
- EMFs
- House dust
- Shoes
- Pets

These simple recommendations are a great place to start and address the majority of toxic exposures.

1. **Organic food whenever possible!** If not organic, avoid genetically modified organisms (GMOs) and wash fruit and vegetables thoroughly. Avoid buying meat and other foods in plastic whenever possible.
2. **Avoid school lunches.** Send your child to school with lunch from home.
3. **Avoid processed foods.** They are full of pesticides and preservatives.
4. **Eliminate the microwave.** If used, do not heat food in plastic.
5. **Use a water filter.** Be sure to replace refrigerator filters every six months.
6. **Use an air filter.** Choose a HEPA filter if possible, particularly if you live on a busy urban street. Clean the air ducts of your home every year or biannually. Replace the heater filter quarterly (depending on whether you live in an area with a lot of particulate matter pollution).
7. **Reduce exposure to Wi-Fi.** Shut off the router at night. Hardwire your home whenever possible. Check the location of any 4G or 5G cell towers near your home.
8. **Take off shoes at the door.** Many toxicants are tracked into the home on shoes.
9. **Use non-toxic products on pets.** Eliminate toxic flea collars and other chemical pesticides used with pets.
10. **Prioritize environmental health.** Make it fun by involving the whole family!