

PROTECTION IN PREGNANCY

KEEPING EVERYDAY
TOXICANTS FROM
HARMING YOU AND
YOUR BABY

WHAT DOES THE SCIENCE SAY?

Since 2007, the PROTECT Center has been studying the relationship between **environmental contamination** and **preterm birth rates** in Puerto Rico.

Equip yourself with the latest scientific findings on environmental toxicants in Puerto Rico and their impacts on pregnancy outcomes and child development.





Taking steps to
avoid harmful
chemicals during
pregnancy

can
*positively &
permanently*
impact your
child's health

Exposure to even small amounts of harmful chemicals, **especially during pregnancy**, can permanently affect the health of you and your baby.

In this brochure, we provide guidance for **minimizing exposure** to these harmful chemicals during pregnancy – a period in which you and your developing baby are especially at risk.

The Data:

Environmental Exposure in

The U.S.A. vs. Puerto Rico

Phthalates



Health Effects: Early puberty in girls, preterm birth, evidence of adverse health effects on male reproductive organs.

Butyl-Parabens



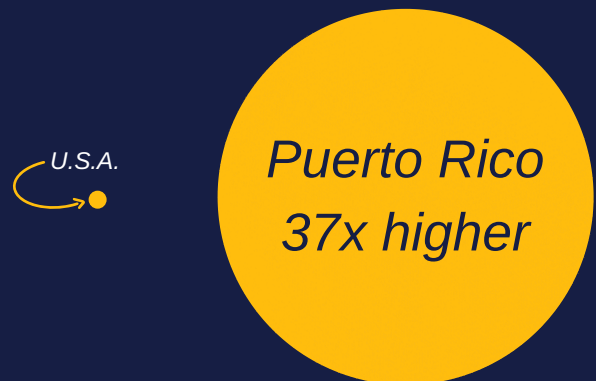
Health Effects: Disrupts proper functioning of the endocrine system, which can have harmful effects on a baby's development.

Triclosan



Health Effects: Disrupts proper functioning of the endocrine system, increases risk of low infant birth weight, & increases risk of asthma and allergies.

Triclocarban



Health Effects: Disrupts proper functioning of the endocrine system, which can have harmful effects on a baby's development & gestational length.

These chemicals disrupt proper functioning of the endocrine system, which regulates the body's hormones. This can have harmful effects on a baby's development. These chemicals are often found in personal care products, food, common household items, and pharmaceuticals.

PROTECT yourself and your baby by
closely reading product labels!



IN PERSONAL CARE PRODUCTS



From perfume to sunscreen, many everyday products contain chemicals that could interfere with your baby's development. PROTECT researchers have pinpointed some of the products known to contain these chemicals.

DO



DON'T



SUN PROTECTION



Wear wide-brimmed hats and long sleeved clothing (best option) OR mineral-based sunscreen with non-nano zinc oxide or titanium dioxide. If possible, select sunscreen with organic inactive ingredients.

DON'T use spray-on sunscreen or sunscreen with "benzophenone-3" written on the product label.

SCENTED PRODUCTS



Select products that have "fragrance-free" and/or "no synthetic fragrances" on their labels. Check which brands are available in your local store at <http://www.goodguide.com/>.

DON'T use artificially scented perfumes, colognes, lotions, or soaps, especially during pregnancy.

DENTAL CARE



Use toothpaste and mouthwash labeled "triclosan-free."

DON'T use mouthwash or toothpaste containing Triclosan (TCS)* and avoid dental gloss that contains Per- and polyfluoroalkyl substances (PFAS)

*TCS can also be found in antibacterial soaps (check the label).

Many personal care products do not accurately or completely disclose ingredients. Additionally, these products can be a source of harmful chemicals and can negatively impact the health of you and your baby. Pregnant women should do everything in their power to reduce the number of beauty products they use.

PERSONAL CARE PRODUCTS (CONT.)



DO



DON'T



SOAPS



Reduce or avoid your use of anti-bacterial soaps.

DON'T use anti-bacterial liquid or bar soaps with triclosan or triclocarban listed as ingredients. Recently, triclosan has been banned in soaps by the FDA.

COSMETICS



Reduce or avoid your use of makeup during pregnancy.

DON'T use pigmented makeup and/or makeup labeled with ingredients ending in "paraben" like ethylparaben and butylparaben.

NAIL POLISH



Reduce or avoid nail treatments during pregnancy.

DON'T use nail polish containing formaldehyde, toluene, and/or dibutyl-phthalate (check the label).

HAIR DYE



Create your own natural hair dyes by using items such as lemon juice, beets or coffee.

DON'T use store-bought or salon hair dye during pregnancy.

SHAVING PRODUCTS



Use naturally scented or "fragrance-free" soaps.

DON'T use foaming shaving cream.

If you are unsure about the safety of a product, check its health ranking and/or find a list of alternatives on this website: <http://www.safecosmetics.org/>

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closely reading product labels!



IN FOOD AND BEVERAGES



DO



DON'T



REHEATING/ STORAGE



Use microwave-safe glass or ceramic containers and/or steel containers when heating foods and beverages.

DON'T use Styrofoam or plastic containers, especially for heating or reheating food and beverages. Avoid microwave popcorn, because it contains high levels of PFAS.

COOKING TOOLS



Purchase steel clad, enameled, cast iron or aluminum pots/pans.

DON'T use pots/pans with *non-stick* coatings (Teflon).

PACKAGING



Buy vegetables that are fresh, if available, or frozen.

DON'T buy food in plastic packaging, in grease-resistant packaging, or in cans.

FOOD AND BEVERAGES (CONT.)



The PROTECT research team investigates the association between compounds found in plastics used to package meats and high fat dairy (e.g., cream or ice cream) and gestational length. For the health of yourself and your baby, consider replacing the following products with safer alternatives.

DO 

DON'T 

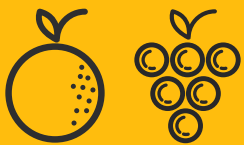
FISH & MEAT



Try to reduce meat consumption. Best options to eat include shrimp, salmon, pollock, and catfish, lowfat meats, or meats with fat trimmed off.

DON'T consume swordfish, tuna, king mackerel, tilefish, or meats with lots of fat because these items can accumulate harmful heavy metals such as mercury.

PRODUCE



Eat organically grown produce, if available, or produce with low pesticide levels such as onions, frozen peas, cabbage, pineapples, frozen corn and avocados. Thoroughly wash all produce before eating and peel non-organic produce.

DON'T Eat high pesticide, conventionally grown produce such as apples, strawberries, grapes, celery, peaches, spinach, bell peppers, and nectarines. If organic produce isn't available, thoroughly wash and peel non-organic produce before eating.

GRAINS



Consume a variety of grains during pregnancy (rice, wheat, oats, and barley).

DON'T cook rice w/o adding excess water (~8:1 ratio) and draining. This process will reduce arsenic exposure.

If you are unsure about the safety of a food item, check its health ranking and/or find a list of alternatives on the Environmental Working Group's website: <http://www.ewg.org/foodscores>

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closely reading product labels!



IN YOUR HOME

DO



DON'T



CHILDREN'S SLEEPWEAR



Buy pajamas made of cotton, linen, wool, silk or polyester that are snug fitting and not labeled to be "flame resistant" - these pajamas meet flammability standards without harmful flame retardants.

DON'T buy pajamas with added flame-retardant chemicals (check the label). Pajamas with flame retardants come with a care label that explains how to preserve the item's flame-resistance.

FABRICS/FIBERS



Buy home goods/furniture with labels stating "TB 117-2013" AND "contains NO flame retardant chemicals." Buy goods made of natural fibers such as wool, cotton, and hemp.

DON'T buy home goods or furniture with labels stating "TB 117" or "technical bulletin 117" as this means toxic flame-retardant chemicals are present in fabric. Avoid spray-on stain resistant products as they contain PFAS.

GAUGING TEMP



Purchase a digital thermometer for your home.

DON'T use mercury thermometers (contact your local health department for disposal).

IN YOUR HOME (CONT.)

For the health of yourself and your baby, consider replacing the following products with safer alternatives.

DO



DON'T



DRY-CLEAN CLOTHING



Hand wash your clothes (even if "dry-clean only"). The dry-cleaning process uses toxic chemicals. If dry-cleaning is absolutely necessary, ask dry cleaner for "wet clean."

DON'T dry-clean clothing in a traditional manner.

BUILDING MATERIALS



Try to avoid major home renovations or construction sites during pregnancy. If home repairs are necessary, choose low- or no-VOC products (like paints, stains, and sealants) and only use them in well-ventilated areas.

DON'T expose yourself to building materials containing VOCs (check the label).

Some homes, especially those built before 1978, still have lead paint. Call the National Lead Information Center for information about how to prevent exposure to lead at: [800-424-LEAD](tel:800-424-LEAD).



SPECIFIC CHEMICALS TO AVOID

Parabens: Used in cosmetics and personal care products such as deodorants, shampoos, conditioners, hair styling gels, shaving gels, and lotions, these compounds can disrupt your body's endocrine processes.

Phthalates: Used in products such as fragrances, makeup, liquid soap, toys, flooring materials, this plasticizing chemical causes early puberty in girls, preterm birth, and adverse effects on the development of male reproductive systems.

Triclosan: Used in products such as toothpaste, soaps, detergents, toys, and surgical cleaning treatments, this chemical interferes with the body's thyroid hormone metabolism and may be an endocrine disruptor. Children exposed to antibacterial compounds at an early age have an increased chance of developing allergies, asthma, and eczema.

Methyl-mercury: found in seafood and mercury thermometers, this chemical can be very dangerous to developing babies.

Pesticides: Found on non-organic produce and as active ingredients in pest control products, pesticides disrupt endocrine processes and neurological development.

Vinyl chloride (VC): Found in containers with PVC or polyvinyl chloride (No. 3 and 6), this chemical can cause cancer.

Triclocarban: Used in soaps because of its anti-bacterial properties. This chemical may interfere with reproductive and thyroid hormones, and has been associated with adverse birth outcomes such as reduced length of pregnancy.



SPECIFIC CHEMICALS TO AVOID

Arsenic: found frequently in rice, this toxin can lead to adverse pregnancy outcomes and infant developmental defects.

Styrene: Used in the production of Styrofoam, plastic packaging, disposable cups, and other containers, this chemical is a suspected carcinogen.

Per- & Polyfluoroalkyl substances (PFAS): Used in food packaging, nonstick pots and pans, and stain- and water-resistant coatings for clothing, upholstery, and carpeting. This chemical causes low infant birth weight, negative immune system effects, cancer, and hormone disruption.

Bisphenol A (BPA): Used as an additive in plastic and food can linings, this chemical disrupts the endocrine system and causes cancer, egg chromosome abnormalities, obesity, altered onset of puberty, altered prostate development, decreased semen quality, hormonal changes, and recurrent miscarriage.

Lead: Found in house paint made before 1978, dust, and garden soil, this chemical can adversely affect neurological development.

Volatile organic compounds (VOCs): These compounds are found in many building materials and products (e.g., paint) and cause pollution of both indoor and outdoor air. Some VOCs are used for dry cleaning. Many VOCs are known to cause cancer in humans and animals.

Flame retardants: Found in furniture and some clothes, these chemicals disrupt endocrine thyroid hormones. Learn about buying flame retardant free furniture at <http://greensciencepolicy.org/>.

OTHER RESOURCES

Whether you're expecting, already a parent, or happily childless, environmental toxicants impact us all.

You can find recommendations on how to minimize exposure to toxic chemicals in your everyday life in our brochure series detailing how to PROTECT yourself:

In Your Home

In Childcare

In Your Garden

When Choosing Clothes for You and Your Family

In your Drinks and Food

In Personal Care Products

To view these brochures online, visit:

www.northeastern.edu/protect/for-the-public-the-media/resource-center/



For more information also visit: Silent Spring's Too Close to Home page:
<https://silentspring.org/detox-me-app-tips-healthier-living>