

## Cancer Risk Reduction at Home

### Clean Your Home and Personal Items

Your home isn't safe or clean if you pollute the air inside with harsh chemicals. These can be found in household cleaning supplies.

Below are a few tips to reduce your risk while cleaning.

1. Less is More
  - Follow instructions on cleaning supplies in order to dilute. Only use what's needed to get the job done.
2. Ventilate
  - Open windows when you clean so you don't trap air pollution inside.
  - If you dry clean your clothes, you can leave them outside uncovered for a few hours to help release chemicals.
3. Use Gloves
  - Gloves protect you from harsh chemicals that may harm or burn the skin or eyes.
4. Do not Mix
  - Deadly gases are produced when you mix cleaners and/or chemicals.

### Cell Phones

Electromagnetic waves are produced by the motion of electrically charged particles. Radiofrequency (RF) is a form of electromagnetic radiation. Research shows that RF energy from cell phones held closely to the head may affect the brain and other tissues.

The World Health Organization (WHO) has stated that some radiation may be linked to brain cancer. Studies have linked altered brain mechanisms, sleep disturbances and behavioral changes in children to too much cell phone use. Although there have been some concerns that RF energy from cell phones held closely to the head may affect the brain and other tissues, there is no evidence from studies of cells, animals or humans that it can cause cancer. More research is needed to determine long term effects of cell phone use.

In the meantime, you can reduce your exposure by:

# Patient Education

- Use a headset or speaker
  - At a distance of 4 inches away from the body, the amplitude of the electromagnetic field is 4 times weaker. At 3 feet away it is 50 times weaker. Hands-free kits reduce the amount of RF energy exposure to the head because the antenna, which is the source of energy, is not placed against the head.
- Text more, talk less (when possible)
  - This limits the time of exposure. The phone gives off less radiation when a text is sent.
  - Texting also keeps radiation away from your head.
- Limit Children's Use
  - Organs in children and fetuses are most sensitive to electromagnetic field

## Cooking

Chemicals such as Bisphenol A (BPA) or Phthalate (DEHP) are often found in plastics and have been known to leak into foods and beverages from packaging. BPA and DEHP exposure have been linked to heart disease, diabetes, learning disabilities, obesity and increased risk of cancer.

Dietary intake is a major source of BPA and DEHP exposure.

Reduce your risk by doing the following, when possible:

- Use glass instead of plastic containers when you heat foods
- Use a glass pitcher for juice or filtered water instead of plastic
- Use parchment paper to bake and wrap food instead of cellophane
- Choose frozen over canned foods which use BPA on the packaging or choose BPA free canned food
- Try to limit the use of Teflon, aluminum or other non-stick pots and pans. Stainless steel or cast iron is recommended.

## Chemicals Found in Food Containers and Cookware

Chemical	Where found/Why harmful
Polyvinyl chloride (PVC)	Plastic #3. Considered the most dangerous plastic and contains phthalates. A known carcinogen.
Polystyrene (Styrofoam)	Known as Plastic #6. A known carcinogen, leaching into food increased when contents of Styrofoam are hot, oily or acidic.
Bisphenol A (BPA)	Found in hard plastics (water bottles, canned foods, cash register receipts). High exposure linked to behavioral disorders, diabetes, and cancers of the reproductive system.
Polytetrafluoroethylene (PTFE)	Non-stick coating. Releases toxic fumes that can produce flu like symptoms.
Perfluorooctanoic Acid (PFOA)	Used in manufacture of Teflon. High exposure linked to mesothelioma, diabetes mellitus and chronic renal disease.