

Georgian Triangle Lifelong Learning Institute

## Harmful Chemicals In and Around Us

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Today we explore “toxic chemicals” or “chemicals of concern” in and around us. Here are the main points that we’ll discuss:

- All Canadians, regardless of age and place, are exposed to numerous chemicals, some of which are or could be harmful to health (chemicals of concern).
- Chemicals of concern likely play a role in observed health trends such as increases in “neurodivergent” behaviour, obesity, immune system dysfunction, lower reproductive success and rates of some cancers.
- It is inevitable that we are all exposed to “chemicals of concern” for the following reasons:
  - Exposure is inevitable because of the fundamental laws of thermodynamics that govern how heat and chemicals move in systems.
  - We live in a “chemically intensive” world and thus are constantly exposed to numerous sources of chemicals of concern.
  - But some of us are more exposed than others such as those living in low income housing and toddlers
- Additional factors contribute to our exposures. We consider them with the goal of reducing exposures:
  - Uncontrolled increasing production and uses of chemicals.
  - Uncontrolled proliferation of the number of chemicals entering the market.
  - Inability of government agencies mandated with oversight to assess or control chemicals of concern.
  - Society is locked into using many and a lot of chemicals, including chemicals of concern (“lock-in” explains why societies continue with practices well known to be harmful).

- What can we do to reduce our exposure – harm reduction
  - Change the way we regulate chemicals from risk to hazard based (a very big ask!).
  - Get rid of the worst chemicals – “essential use” principle.
  - Work towards “chemical simplification” (another very big ask).
  - Break “lock-in” by understanding key drivers that maintain a harmful practice.
  - We can change our ways towards “sufficiency” (AKA “I’ve got enough stuff” and “my actions have good and bad consequences”)
  - Act with precaution - “an ounce of prevention is worth a pound of cure”.
  - More that we can do to work towards positive change, including holding on to hope and assuming the responsibility of leaving our children and grandchildren with a better world.

### **Popular Books on Toxic Chemical Exposure:**

“Slow Death by Rubber Duck, How the toxicity of everyday life affects our health” by Rick Smith and Bruce Lourie (Canadian authors). Random House. Updated edition 2019.

Several organizations provide information on “safer products” and opportunities for becoming involved:

- Fashion Takes Action (Canadian) <https://www.fashiontakesaction.com/about>
- Environmental Working Group (US) hosts the most comprehensive consumer guidance <https://www.ewg.org/>
- Green Science Policy Institute (US) also provides helpful guidance to reduce your exposure to toxics <https://greensciencepolicy.org/resources/consumer-resources/>