

Preventing Chemical Injury – A Daunting Health Challenge

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There is a growing awareness that toxic chemicals in our environment can negatively affect human health and life. Frequently, the focus is on the big global picture, which require governments to be the ones who need to take action in order to protect human health. Therefore, you are often left with the impression that there is very little you can do to protect your own health.

In reality, this is not the case. There are a lot of things each person can do to protect their own health, and to encourage and promote change for the improvement of everyone's health.

It requires learning how toxic chemicals can negatively impact a person's health, and then becoming more aware of the wide variety of toxic chemicals that is in your own air space – in the air you will be breathing throughout the day. Next, you need to learn how to reduce the amount of toxic chemicals in that same air space. Finally, you need to have the inner courage, strength and willingness to make the necessary changes to reduce the amount of toxic chemicals in your own air space.

Change is never easy, but there are times when it is necessary. Protecting your health from exposure to toxic chemicals is one of those times when change is necessary.

Step # 1

The first step is to educate yourself on the harmful health effects of exposures to toxic chemicals. In society, we often become jaded to the terms: toxic chemicals, air pollution, smog, and so on. However, these words are synonymous with the word "poison". So if you insert the word "Poison" in their place, you will no longer view them as "Safe" or "Benign".

Toxic Chemicals (Poisons) can be classified as:

- Carcinogens (Causes cancer)
- Cardiovascular or Blood Toxicants
- Developmental Toxicants
- Endocrine Toxicants
- Fetotoxicants (Causes injury or death of the unborn baby)
- Gastrointestinal or Liver Toxicants
- Immunotoxicants
- Kidney Toxicants
- Musculoskeletal Toxicants
- Mutagenic (Causes genetic damage)
- Neurotoxicants
- Reproductive Toxicants
- Respiratory Toxicants
- Skin or Sense Organ Toxicants
- Teratogenic (Causes birth defects)

Toxic chemicals, that are in the air we breathe, can enter our bloodstream and can be carried to the various tissues and organs of our body. Toxic chemicals have different characteristics when they enter

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the human body. They also have different target organs. For example, some toxic chemicals will bond rapidly with bone tissue, some with various organs, and so on. Consequently, various combinations of organ systems may be negatively affected.

Toxic chemicals, that are in the air we breathe, can also bypass the bloodstream and be carried directly to our brain and our entire nervous system through the neural pathways in the nose. Inhaling neurotoxins (chemicals that are poison to the nervous system) will successfully deliver these poisons directly to their intended target – the brain and the entire nervous system.

Once these toxic chemicals (poisons) enter our bodies, they can be stored in the tissues and organs of our body. Over time, they will accumulate causing the body to become increasingly poisoned. This slow poisoning might go completely unnoticed with no symptoms until the body hits its toxic threshold. When the toxic threshold is crossed, health problems begin showing up.

There is such a wide variety of health problems that can show up. It primarily depends on the inherent characteristics of the chemicals to which a person is exposed. (see toxic chemical classifications above) For some people, only one system of the body will be negatively affected. For others, a wide variety of body systems may become negatively affected.

When health problems are a result of toxic chemical exposure, the health condition is called Chemical Injury. This is a health condition that is more commonly known by its key symptom of Chemical Sensitivity, which is in fact Chemical Intolerance. The reactions that a chemically injured person experiences upon exposure to toxic chemicals are toxic reactions, not allergic reactions.

This is a health condition that is growing at a very rapid rate. The Canadian Community Health Survey - done by the Ontario Ministry of Health together with Statistics Canada – is partially monitoring it in Ontario. Their 2014 statistics stated that there were 250,500 people in Ontario diagnosed with Chemical Sensitivity. Their 2016 statistics stated that there were 404,207 people in Ontario diagnosed with Chemical Sensitivity. That is an increase of 61.3% in just two years!

For the Chemically Injured, their greatest need is a safe place to call home. They require low-toxicity housing for both health recovery and survival. Low-toxicity houses are homes in which the indoor air toxins are almost non-existent, in a locality in which the outdoor air toxins are reduced to very low levels. Their next greatest need is access to safe, low-toxicity medical care.

However, this is a global health problem and globally all governments are failing to provide adequate medical assistance to the Chemically Injured. In many countries, there is no medical help of any kind. In Canada, the Chemically Injured person falls through the cracks of the Universal Health Care system, resulting in very little medical help available to them.

This is a preventable health condition, but no governments are taking action to prevent people from acquiring it; and they are doing almost nothing to meet the chemically injured person's medical needs.

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The reason is simply this: Chemical Injury is a health condition that is in direct conflict with the interests of the chemical industry. Sadly, governments are choosing to put the interests of industry over protecting and providing for the health of their citizens. Therefore, we need to take action to protect our own health.

Step # 2

The second step is to make a determination to take action to prevent yourself from becoming Chemically Injured. To begin this process, you must first become aware of the toxic chemicals to which you are exposed.

Here are some questions to ask yourself:

- 1) What are the toxic chemicals on my skin, hair and clothes that I will be breathing?
- 2) What are the toxic chemicals on the skin, hair and clothes, of those who live with me, that I will be breathing?
- 3) What are the toxic chemicals in my home that I will be breathing?
- 4) What are the toxic chemicals in my vehicles that I will be breathing?
- 5) What are the toxic chemicals in my school, office or work place that I will be breathing?
- 6) What are the toxic chemicals in my community centres that I will be breathing?
- 7) What are the toxic chemicals in my place of worship that I will be breathing?
- 8) What are the toxic chemicals in my outdoor community that I will be breathing?
- 9) What are the toxic chemicals in my places of recreation that I will be breathing?
- 10) What are the toxic chemicals in the stores I visit that I will be breathing?
- 11) What are the toxic chemicals in (fill in the blank) that I will be breathing?

This examination is a difficult exercise to do, but a necessary one. Much of the day to day smells that you will encounter and that you view as normal are made up from a wide variety of toxic chemicals. This examination enables you to get a tiny glimpse into the huge amount of a wide variety of toxic chemicals you are breathing 24 hours a day, 7 days a week. Remember that these toxic chemicals are poisons that, over time, will probably negatively impact your health.

To help you try to figure out where you are exposed to toxic chemicals, here are some helpful tips:

- ◆ cigarette smoke is made up of a lot of toxic chemicals
- ◆ scent is made up of a lot of toxic chemicals
- ◆ air fresheners are made up of a lot of toxic chemicals
- ◆ the “new clothing smell” is often formaldehyde
- ◆ the “new vehicle smell” is made up of a lot of toxic chemicals, including formaldehyde
- ◆ furniture sometimes is treated with fire retardants, which are made from toxic chemicals
- ◆ most carpets contain a lot of toxic chemicals
- ◆ plastics are made up from a lot of toxic chemicals
- ◆ many modern house building products, such as chipboard, contain toxic chemicals
- ◆ many cleaning products contain potent toxic chemicals – both household and industrial
- ◆ most disinfectants contain toxic chemicals, including neurotoxins

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- ◆ most golf courses regularly apply a variety of pesticides (toxic chemicals designed to kill life) to their greens – many pesticides contain neurotoxins
- ◆ most insecticides contain neurotoxins

Step # 3

Third, in order to protect your health, make a determination to get rid of as many toxic chemicals as possible from your air space. Some things you can change and some things will be out of your control to change.

At this stage, you might be feeling overwhelmed and seeing change as a very daunting task. However, just begin by focusing on the areas that you can change and slowly work on making those changes. Go at your own pace. Sometimes radical changes are hard to maintain. If you make slow, steady changes, then you are more likely to succeed at maintaining the changes.

Ask yourself what toxic chemicals can you get rid of or at least reduce. To do this, you will need to learn non-toxic substitutes.

Begin with changes to your personal care products and laundry products, getting rid of toxic chemicals on your skin, hair and clothes. Scent is composed of thousands of toxic chemicals. Consequently, by changing your skin care products, your hair care products and your laundry products to be totally scent-free, you will be taking a huge step forward in protecting your health and the health of those around you.

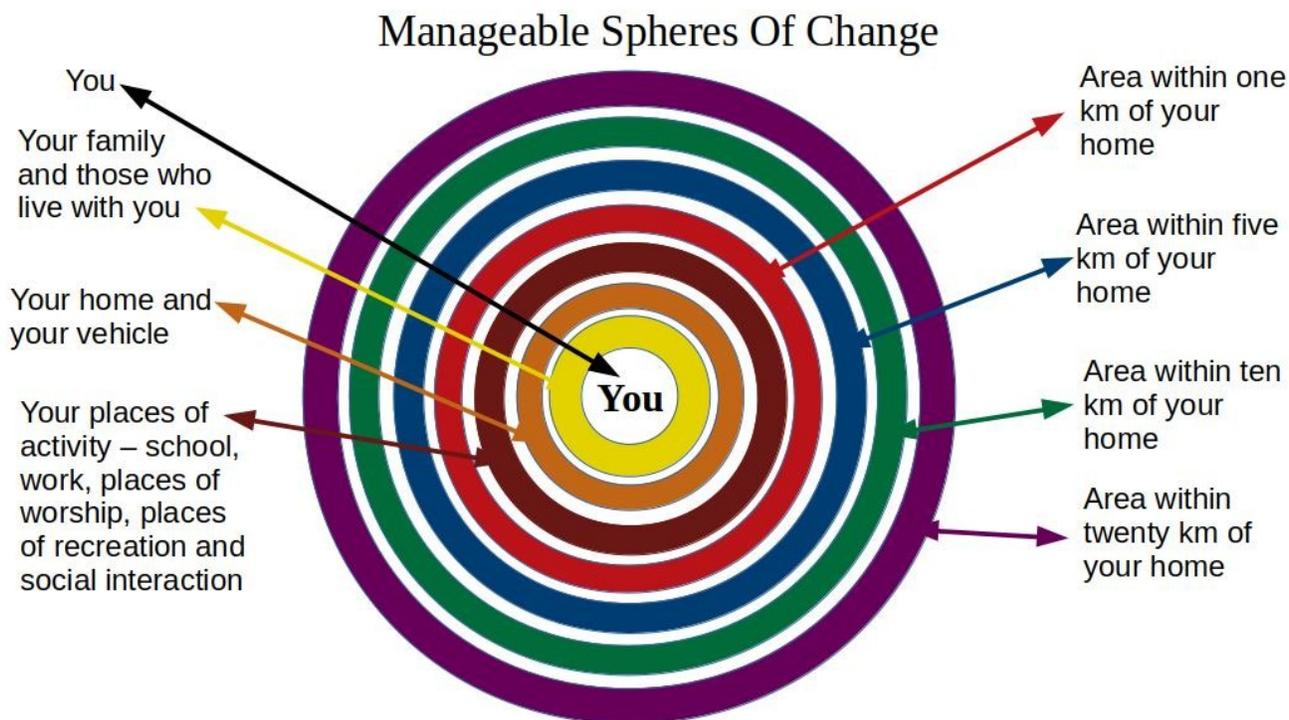
Then, since you will be breathing the toxic chemicals that are on the skin, hair and clothes of the people who live with you in your home, encourage them to make the same kind of changes that you did. If they are reluctant to change their products, patiently work with them and help them to understand the reasons for the needed change.

Next consider your home, in particular your bedroom as you spend a good portion of your day sleeping. Sleep is when the body is trying to heal and rejuvenate itself. So the bedroom is a key place to ensure there is good air quality, void of toxic chemicals.

Examine both your home and your vehicle and make changes wherever possible. Huge steps forward include getting rid of the air fresheners and changing all the cleaning products to non-toxic products. This might require using a little more elbow grease to get things clean. Consider adding an air purifier to your home. Reducing toxic chemicals in the home might involve evaluating many things in the home and the activities in and around the home.

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As the diagram indicates, move from your home outwards to places that you frequently visit. Then continue moving outwards to areas around your home. The wind can carry toxic chemicals a great distance. So toxic chemicals in the air twenty km away can still affect you, if the wind carries it to you.

Learn what activities are happening that put toxic chemicals into the air. Then, try to find ways to reduce your toxic chemical exposure. Sometimes this will be easy, and other times it will be very difficult or impossible. There will definitely be times when getting rid of the toxic chemicals from your air space will be outside of your control.

In these situations, change will only come about as you educate those who have the power and authority to make changes, and then try to influence them to change to non-toxic or less toxic products. This involves informing them of the potential health dangers of the currently used toxic chemical products and suggesting non-toxic product substitutes.

In Conclusion

Since Chemical Injury is a preventable health condition, you can take action to protect your own health.

This may be a very daunting and overwhelming health challenge, but it is possible to do it. Knowing you are protecting your own health and the health of those around you, will make it all worth while.