

To remove confusion, we need to clarify that there are two different categories of Chemical Injury, acute and chronic.

1) The Acute Chemical Injury is what most people are familiar with. It occurs when people are exposed to toxic chemicals when they get splashed on a person's skin or exposed through something like a chemical spill. It can happen in the community or in the work place and is a common occupational hazard. The Hazmat Team or the first responders will immediately evacuate everyone out of the toxic zone where the accident happened and relocate them to an area of good air quality. That is broadly accepted as the first emergency measure step that must be taken before administering other medical aid. Typically, with appropriate medical aid, these people recover completely from the exposure. This type of Chemical Injury is familiar to almost everyone and is Acute Chemical Injury.

2) The Chronic Chemical Injury is differentiated from the Acute by its duration – its long-term effects. Chronic Chemical Injury occurs when the person develops Chemical Intolerance, which is evidenced by the person having toxic reactions (not allergic reactions) upon further exposures to even low levels of toxic chemicals. Chronic Chemical Injury occurs as a result of an accumulation of toxic chemicals becoming stored in the person's body, from toxic chemical exposures they have had from birth on up. It can come on very gradually or it can occur quite suddenly from an additional major exposure to a toxic chemical.

Toxic chemicals are poisons, and the constant, daily exposure to many different poisons result in the body very gradually becoming poisoned with many mixtures of poisons. These poison mixtures will eventually make the person sick. They can result in the person developing Chronic Chemical Injury or a variety of other diseases. These poison mixtures can disable, and can kill.

People with Chronic Chemical Injury have toxic reactions upon further exposures to toxic chemicals because their body is already in a poisoned state and any additional exposure to toxic chemicals will worsen that condition. The toxic reactions are informing the person that further chemical injury is occurring and that there is an urgent need to stop the toxic chemical exposure and leave the toxic environment before even greater injury occurs. The severity of the toxic reactions depend on how poisoned the person's body is at the time of exposure.

In simplified terms, the Chronic Chemically Injured are not always able to metabolize and eliminate toxic chemicals. This dilemma can be compared to a diabetic person who lacks sufficient insulin to metabolize sugar. Sugar is a safe product, but it is not safe for a diabetic person who lacks sufficient insulin. For the Chronic Chemically Injured person, some or all of the metabolic pathways that perform detoxification can become blocked at times, making it difficult and at times impossible to metabolize and eliminate the toxic chemicals. Therefore the toxic chemicals are not eliminated from the person's body, and instead, become stored in the tissues and organs of the person's body, causing the body to very gradually become poisoned.

Very rarely are there two patients alike. There is a wide variety in the symptoms and the manifestations of Chronic Chemical Injury. The reason is very simple. Each person is a unique individual, with their own life experiences. The variety of toxic chemicals daily encountered will probably be very different with each person, resulting in a wide variety of poison mixture exposures. Different chemicals have different characteristics when they enter the human body. They also have different target organs. For example, some bond rapidly with fat tissue, some with bone tissue, some with muscle and organ tissue, and so on.

Toxic Chemicals can be classified as:

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

Consequently, various combinations of organ systems may be negatively affected. This accounts for the wide variety of symptoms and manifestations of this health condition.

Chronic Chemical Injury can vary widely in the degree of severity, similar to physical injury. Physical Injury can vary from a small cut, to fractured bones, to multi-system trauma, and everything in-between. Likewise, Chronic Chemical Injury can vary from a headache, to painful muscles and joints, to multi-system trauma, to everything in-between.

However, the first medical step with both Acute and Chronic Chemical Injury is always avoidance. The person must be removed from the toxic environment and relocated to an area of good air quality. This step is crucial in order for the medical treatments to be effective. If this step cannot be achieved, the medical treatments will either not be effective at all or will be greatly reduced in their degree of effectiveness.

The two greatest medical needs of a Chronic Chemical Injured person are:

1) A Low-Toxicity Home

A safe place to call home – They need to live in a place free of toxic chemical exposure, where their health has opportunity to recover and where they can live, work, socialize and thrive without fear of further toxic chemical exposures.

2) Access to Low-Toxicity Medical Care

Access and accommodation in all aspects of the health care system – They need access to medical doctors and clinical toxicologists, who have been trained in diagnosing and treating Chronic Chemical Injury and its resulting Chemical Intolerance. They need access to the entire health care system, including but not limited to, doctors, specialists, nurses, personal support workers, physiotherapists, paramedics, ambulances, home care, hospitals, medical clinics, nursing homes, and so on.

Giving them access and accommodating them involves not exposing them to scent (on people's hair, skin or clothes), hand sanitizers, toxic chemical cleansers, toxic chemical disinfectants, and so on.

If these medical needs can be met, the Chronic Chemically Injured individual would have the opportunity for some degree of recovery from their Chemical Injury and Chemical Intolerance (maybe even full recovery), and the opportunity to go from surviving to thriving.