

Chemical Emergency

Personal Decontamination

Some kinds of chemical accidents or releases (liquid, vapor or gas, or solid form) may cause a person to come in contact with dangerous chemicals. Coming in contact with a dangerous chemical may make it necessary to quickly remove and dispose of clothing and then shower. Removing clothing and washing the body will help reduce or remove the chemical so that it is no longer a hazard. This process is called decontamination.

People need to be decontaminated for two primary reasons:



1. To prevent the chemical from being further absorbed by the body or from spreading on the body
2. To prevent the chemical from contaminating other people, including responders, who must handle or come in contact with the person who is contaminated with the chemical.

Most chemical agents can penetrate clothing and are absorbed rapidly through the skin. Therefore, the most important and most effective decontamination for any chemical exposure is decontamination done within the first minute or two after exposure!

In most cases, local emergency officials will notify the community if a dangerous chemical has been released and give instructions on what to do: (1) Shelter in place (2) Evacuate (3) Personal protection instructions.

In general, contact exposure to a chemical in its liquid or solid form may require removal of clothing and thorough washing of exposed skin. Exposure to a chemical in its vapor (gas) form generally requires a person to only remove clothing and the source of the toxic vapor.

If potentially exposed to a chemical release, but have not heard from official information, follow the washing and clothing disposal advice in the next section.

For immediate assistance, call the Poison Control Center Hotline: 1-800-222-1222.

What to do

Act quickly! Every situation can be different, so monitor local news for special instructions to follow. **The three most important things to do if exposed to a potentially dangerous chemical are to (1) quickly remove clothing, (2) wash, and (3) dispose of clothing.**

Removing clothing:

- § Quickly take off clothing that may have a chemical on it. **Any clothing that has to be pulled over the head should be cut off instead of being pulled over head.**
- § If helping another person remove clothing, try to avoid touching any contaminated areas of clothing, and remove the clothing as quickly as possible.
- § Put all clothing items in a plastic bag if it is immediately available; otherwise go directly to washing or showering.

Washing:

- § As quickly as possible, wash any chemicals from the skin with large amounts of soap and water. Washing with soap and water will help protect from any chemicals on the body. Do not scrub the skin harshly and avoid excessive hot water.
- § If the eyes are burning or vision is blurred, rinse the eyes with plain water for 10 to 15 minutes. If wearing contacts, remove them and put them with the contaminated clothing. Do not put the contacts back into the eyes (even if they are not disposable contacts). If wearing eyeglasses, wash them with soap and water. It is okay to put eyeglasses back on after washing them.

Disposing of clothes:

- § After washing, place clothing inside a plastic bag. Avoid touching contaminated areas of the clothing with the hands, wear rubber gloves, use tongs, tool handles, sticks, or similar objects. Anything that touches the contaminated clothing should also be placed in the bag. If wearing eye contacts, put them in the plastic bag, too.
- § Double bag! Seal the bag, and then seal that bag inside another plastic bag.
- § When emergency personnel arrive, tell them what happened and what was done with the clothing, they will arrange for further disposal of the contaminated items.



Avoid coming in contact with other people or areas that may have been exposed but who have not yet been decontaminated. Follow up with a local medical clinic or family physician for further treatment.



For more sources of information on this topic visit:

ST. CLAIR COUNTY HEALTH DEPARTMENT www.scchealth.co

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES www.michigan.gov/mdhhs

CENTERS FOR DISEASE CONTROL AND PREVENTION www.cdc.gov

MICHIGAN DEPARTMENT OF COMMUNITY HEALTH TOXICS AND HEALTH HOTLINE: 1-800-648-6942

MICHIGAN OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION (MIOSHA): 517-322-1814

AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY: www.atsr.cdc.gov 1-888-422-8737