



# Weekly Safety Meeting

---

## Handling Toxic Materials

If you look up the word 'toxic' in most any dictionary, you'll find that it means "poisonous." Most people want nothing to do with poisonous materials, but many people work with them every day. In fact, toxic materials have thousands of uses in industry. Many of the benefits we enjoy, such as safe water and food, medicine, transportation, and communications are made possible through the use of toxic materials. Here we'll explore toxic materials, their hazards, and how to work with them safely.

Toxicity is a material's ability to harm living things. Some toxic materials, or toxins, may irritate the nose, eyes, and skin. Others may damage the body's internal organs. Other toxins may cause suffocation, sterility, cancer, or other diseases. Some can be immediately fatal. Some materials don't appear toxic at all to adults, but can seriously damage an unborn child, and others may cause cell mutations, creating abnormalities in future generations. Two things determine a material's toxicity: the amount of the material necessary to cause harm and the possible extent of the damage.

The potential negative health effects sound awful; and indeed, many of them are. But don't forget that thousands of toxic materials are used safely every day. Toxicity research has been done for years and exposure limits for many toxic materials have been developed. In order for a toxic material to do harm, the body must be exposed to it. Exposure to a toxic material can occur in many ways. The material can be inhaled or ingested, make contact with the skin, or be absorbed through the skin or eyes. Slight exposure does not necessarily mean minimal damage -- the more highly toxic a material, the lower the permitted exposure.

There are many ways to control exposure to toxic materials. The most common ways are the use of ventilation controls and personal protective equipment (PPE), such as gloves and respirators. Companies are required to make sure exposures to toxic materials are kept below established exposure limits. They're also required to inform you of the hazards of the materials you work with, and to inform you of exposure monitoring results. If you work with toxic materials, make sure you know exactly what you're working with.

Follow the instructions of your company's policies and the respective Safety Data Sheets (SDS) for use, storage, and disposal of toxic materials. Make sure you know what PPE is appropriate and use it faithfully. If you use toxic materials, always practice common sense hygiene by washing your hands before you eat. You may be required to wear special clothes or shower after your shift. All of these procedures are designed to help keep you healthy, so be sure you follow the requirements. Of course, if you do have any problems with a toxic material you are using, report it immediately.

## Handling Toxic Materials Safely:

Safe handling and work procedures are crucial for workplaces where individuals use toxic materials. It is vital that people working with hazardous materials such as toxics are properly trained regarding the potential hazards. Remember, if, at any time an individual is unsure or has questions about working with a toxic material, he or she should always talk with the supervisor.

## In General, When Handling Toxic Materials:

- Use only the smallest amount necessary to do the job;
- Prevent the release of toxic vapors, dusts, mists, or gases into the workplace air;
- Wear appropriate personal protective equipment (if necessary) to avoid exposure (eye, respiratory or skin) or contact with contaminated equipment/surfaces;
- Be aware of the typical symptoms of poisoning and first aid procedures. Report any signs of illness or overexposure immediately to the supervisor. Depending on the material, medical attention for an exposure may be required even if the exposure did not seem excessive. With some materials, symptoms of a severe exposure can be delayed;
- Do not return contaminated or unused material to the original container;
- Ensure containers are clearly labeled and inspect containers for leaks or damage before handling;
- Keep containers tightly closed when not in use;
- Ensure suitable emergency equipment for fires, spills, and leaks are readily available;
- Ensure emergency eyewash/shower stations are readily available and are tested regularly;
- To prevent spillage, use proper tools to open containers and to transfer material;
- Pour toxic liquids carefully from the container to avoid splashing and spurting;
- Avoid any welding, cutting, soldering, or other hot work on an empty container or piping until all toxic liquid and vapors have been cleared; and
- Maintain good housekeeping (e.g. clean surfaces, no accumulation of dust).

Toxic materials can be used safely for many beneficial purposes, but they demand an attitude of healthy respect. You need not fear the toxic effects if you know how to control them properly. Don't learn about toxic material hazards the hard way! Take the time to learn about the hazards of the materials you work with now, and how to protect yourself and others from the danger.

***TURN YOUR ATTENTION TO ACCIDENT PREVENTION!***

