EMPLOYEE SAFETY NEWSLETTER

August 2021

Raking safety—Choosing a rake

The important features in choosing a rake include its weight, the rake's handle type, and shaft length. The weight of the material being moved must also be considered.

- Use a rake that is comfortable for your height and strength. A sturdy, medium-sized rake (approximately 24 inches) is best for most people.
- Because your sweat may interfere with your grip when raking in hot weather, use a rake with a nonslip handle, which will decrease the force needed to hold it.
- A padded rake handle can help avoid pain from gripping too tightly.
- A leaf rake has a long, fan-shaped set of typically plastic tines and is designed for raking leaves.
- A lawn rake is similar to a leaf rake in its fan-shaped tines design, but has long, slender, flexible metal tines that are well suited to raking up garden debris such as gravel, sand, and soil.
- A landscape rake has a wide head with many short metal tines and is designed to complete large jobs quickly and used in leveling soil or sand over a large area.
- A garden rake, also known as a bow rake, typically has a long, straight handle with a stiff, wide head at a right angle to the handle and many short rigid tines. These are used for breaking up compacted soil and leveling soil or sand, as well as raking up mulch.
- A stone or gravel rake is designed for heavy-duty jobs and will typically have a wider head than a garden rake, with widely spaced chunky tines made from strong metal.

Monster E / Shutterstock.com

Preventing occupational skin disease—Indoor environment

Chemicals are the primary cause of occupational skin disorders. Chemical irritants may cause a reaction upon direct contact with your skin. Chemicals can also be sensitizers, which may not cause an immediate reaction, but repeated exposure may cause an allergic reaction.

The most common occupational skin disease is contact dermatitis, which is an inflammation of the skin resulting from exposure to a hazardous substance. It is often itchy or painful. Acute dermatitis may appear red, swollen, or blistered, while those with chronic dermatitis may have skin that is dry or cracked.

- Irritant contact dermatitis typically appears at the point of exposure. Chronic dermatitis can occur due to prolonged or recurring exposure to mild irritants such as solvents, detergents, or other cleaning agents. More severe irritants, such as acid, oxidizing agents, or heavy metals, can cause a more severe acute reaction.
- Allergic contact dermatitis is an immune system response triggered by skin contact with an allergen to which a worker had been previously exposed and sensitized. The response can be a rash at the point of contact, but it is often systemic and not limited to the site of contact. Typical causes include industrial chemicals.

Other common occupational skin diseases include:

- Folliculitis, which is more commonly referred to as occupational acne or oil acne, which appears as small red bumps or pustules. It often develops due to prolonged contact with oil or being exposed to oil-soaked clothing. It is commonly seen in workers exposed to cutting oils in machining operations or mechanics exposed to grease and other lubricants.
- Skin cancer, which can develop from exposure to certain chemicals. However, symptoms may not appear for years or even decades after exposure.

If you are working with chemicals, review the label and the safety data sheet (SDS). They will provide you with information on the hazards associated with the chemical and appropriate precautions to take to avoid exposure, including necessary personal protective equipment (PPE) such as gloves, aprons, footwear, and shields. The SDS will also tell you what actions to take in the event the chemical contacts your skin. In addition, the following pictograms on a label may indicate the potential to cause skin disease:

- The exclamation mark pictogram indicates that the chemical may be a skin sensitizer or skin irritant.
- The corrosion pictogram indicates that the chemical may have more severe, irreversible effects on the skin and may cause burns.

Other things you can do to protect your skin include:

- Using barrier creams to protect against mild irritants such as oils and greases;
- Washing your work clothes frequently; *and*
- Maintaining proper hygiene and washing your hands. Gently scrub hands or other areas exposed to hazardous substances with soap and warm water for 20 seconds. Dry your hands thoroughly, and use lotion to prevent dry, cracked skin that is more susceptible to infection.

Finally, be aware that some of the things you use to protect your skin may actually irritate it. For example, your skin may be sensitive to certain soaps, or you may be sensitive or allergic to latex, which can be found in gloves and other types of PPE.

Raking safety—Using a rake

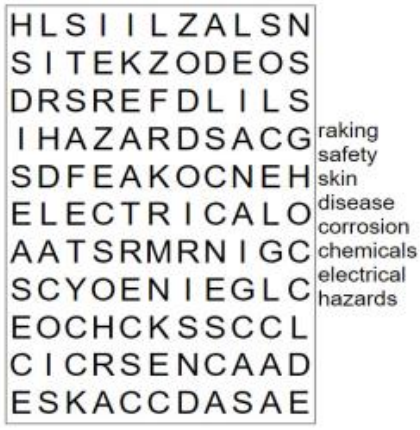
Every year, thousands of people are treated in emergency rooms, clinics, and doctors' offices for raking-related injuries. Common injuries include sprains and strains to the wrists, back, and shoulders; less common injuries are lacerations caused by stepping on a rake.

It can be strenuous to rake, so if you have a history of back or heart problems, it might be best to avoid this task. Even if you are physically fit, it's a good idea to do some flexing and stretching exercises to warm and loosen your muscles before you rake. Wear gloves that protect your hands and improve your grip, and wear sturdy, nonslip footwear with good arch support.

Follow these tips when raking:

- Stand upright, and use the rake to pull leaves, dirt, or other materials toward you.
- Bend your knees when picking up leaves or debris for disposal.
- Instead of twisting your trunk, always keep your feet, hips, and body moving toward the work.
- Try to avoid bending at the waist when raking.
- When raking for long periods, vary your arm and leg positions and movements.
- Never lay a garden or stone rake down with the teeth pointing up. The teeth should always be pointing down.

Finally, when you've finished raking, remember that it's a good practice to repeat your stretching exercises.



Preventing fires—Electrical hazards in the workplace: QUIZ

1. Smoking in the wrong location at a workplace is the most typical cause of fires. TRUE or FALSE.

2. You should report malfunctioning electrical or other equipment to your supervisor or appropriate person. TRUE or FALSE.

3. Which of the following conditions can lead to fires?

A. Overloaded electrical outlets or circuits

B. Insulation on wires and cords

C. Sparking machinery

D. Electrical plugs

4. Which of the following housekeeping tips can help avoid a fire due to an electrical malfunction?

A. Keep your work area clean and clear of combustible materials.

B. Place oily rags and other flammable waste in closed metal containers

C. Overload electrical outlets or circuits

D. Immediately report any equipment problems

ANSWERS

1. **FALSE.** 2. **TRUE.** 3. **A & C.** 4. **A & B.**

Preventing fires—Electrical hazards in the workplace

Fires are the most common type of emergency at any workplace, with electrical fires being the most typical cause of fires. Other factors, such as smoking in the wrong location or sparking machinery, can also lead to fires. It's important to recognize electrical hazards that have the potential to cause fires and learn the steps you can take to prevent these occurrences.

Conditions that can lead to fires

The following conditions can lead to fires:

- Overloaded electrical outlets or circuits;
- Damaged insulation on wires and cords;
- Damaged plugs;
- Malfunctioning electrical equipment;
- Overheated, poorly maintained, or sparking machinery; *and*
- Static electricity or sparks caused by friction from tools, machinery, or welding and cutting equipment.

Work practices

Regarding electrical equipment, the following safe work practices can help prevent fires:

- Do be aware of damaged wires, cords, and plugs;
- Do report malfunctioning electrical or other equipment; *and*
- Don't overload electrical outlets or circuits.

The following housekeeping tips can help avoid a fire due to an electrical malfunction:

- Do keep your work area clean and clear of combustible materials;
- Do place oily rags and other flammable waste in closed metal containers;
- Do report immediately any equipment problems, such as overheating, leaks, sparks, or carbon buildup corrosion; *and*
- Do smoke only in designated areas.

Waste management—Managing solvent-contaminated wipes

Wipes contaminated with hazardous waste solvents don't have to be managed as hazardous waste as long as very specific requirements are followed. However, it does matter what types of solvents are used. Only certain hazardous waste solvents can be used when following management procedures.

The only wipes that can be managed using these standards are those that:

- Contain one or more F001 to F005 listed solvents, or the corresponding P- or U-listed solvents;
- Exhibit a hazardous waste characteristic resulting from use of a listed solvent; *or*
- Exhibit only the hazardous waste characteristic of ignitability due to the presence of solvents that are not listed.

Wipes that must be managed as hazardous wastes are:

- Wipes contaminated with listed hazardous wastes that are not solvents; *and*
- Wipes that only exhibit the hazardous waste characteristic of toxicity, corrosivity, or reactivity, due to either nonlisted solvents or contaminants other than solvents.

The solvent-contaminated wipes must be properly managed at the facility before sent for cleaning or disposal. Here's what you must do:

- Store and transport the wipes in nonleaking, closed containers. This means there is complete contact between the fitted lid and the rim, except when adding or removing wipes.
- Make sure the container is labeled with these words: "Excluded Solvent-Contaminated Wipes."
- Securely close the container lids and openings when the container is full, when wipes will no longer be added to the container, and before transporting the containers.
- Make sure the container can contain free liquids, should they occur. "Free liquids" means liquids that are visible in the container or unabsorbed by the wipes.
- Accumulate the wipes for no longer than 180 days from the first date a wipe is stored in the container.
- Manage free liquids as follows:
    - Be sure there is no free liquid in the container holding the wipes when they are sent for cleaning or disposal;
    - Be sure the wipes themselves contain no free liquids before being sent for cleaning or disposal; *and*
    - Manage any free liquids removed from the wipes or wipes container as a hazardous waste.

Solvent-contaminated wipes must be sent to specific facilities:

- Wipes to be laundered or dry-cleaned can only go to facilities whose discharges are regulated by the Clean Water Act (CWA) (which could be your facility).
- Wipes to be thrown out can only go to a Resource Conservation and Recovery Act (RCRA)-permitted municipal solid waste landfill, hazardous waste landfill, hazardous waste combustor, hazardous waste boiler, or hazardous waste furnace.

Be sure that you document:

- The name and address of the laundry, dry cleaner, landfill, or combustor to which you're sending the wipes;
- That the 180-day storage limit is being met; *and*
- The process being used to meet the "no free liquids" requirement.

Hazard Communication—The health hazard pictogram

Containers of hazardous chemicals are all labeled in the same way and contain the same categories of information. Each label contains one or more pictograms, which are red diamonds with black pictures on a white background. Pictograms are meant to help you quickly identify the hazards associated with a chemical. There are nine different pictograms that represent different hazards. The "health hazard" pictogram is a red diamond, and inside the diamond is a silhouette of a person's head and upper body with a white star shape on the chest.

If you see this pictogram on a chemical label, it means that exposure to the chemical may lead to cancer or may alter your DNA and lead to defects in future children. It can cause fertility problems in women and men and impact your ability to conceive healthy children. It may cause you to become hypersensitive to the chemical and have severe reactions any time you are exposed to the chemical in the future. It can cause a specific organ in your body to no longer function as it should, or it may get into your lungs and because what is referred to as chemical pneumonia.

When you see this pictogram, be cautious and follow the precautionary statements on the label. More specific information on the hazards of a chemical is listed in the hazard statement on the label and in the safety data sheet (SDS) for the chemical. The SDS will also give you information on what personal protective equipment (PPE) to use and what to do if you or a coworker is exposed to the chemical.

Chemical spotlight: Anisole

Anisole is a straw-colored to colorless liquid with a spicy-sweet odor. It is used in perfumes, as well as a flavoring in food and in the manufacture of other chemicals.

Anisole reacts violently with oxidizing agents, such as peroxides, chlorine, and bromine. Store anisole in tightly closed containers in a cool, well-ventilated area away from heat or flame. Avoid all sources of ignition where anisole is used, handled, or stored. Use only non-sparking tools and equipment, especially when opening and closing containers of anisole.

If anisole is spilled or leaked, avoid breathing vapors, mist, or gas, and ensure adequate ventilation. Remove all sources of ignition and evacuate personnel to safe areas. Use personal protective equipment (PPE), including goggles or safety glasses, gloves, flame-retardant protective clothing, and respiratory protection.

Prevent further leakage or spillage if safe to do so, and do not let the product enter drains, sewers, underground or confined spaces, groundwater, or waterways or discharge into the environment. Contain the spillage, and then absorb it with vermiculite, dry sand, or earth. Place the spillage in a sealed container for disposal according to federal and local regulations.