"Safety Comes First"

Case Western Reserve University

Environmental Health and Safety

2220 Circle Drive, Service Building, 1st Floor
Phone: (216) 368-2906/2907
FAX: (216) 368-2236
Website: case.edu/ehs

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Avoiding Overexertion

Often, employees experience workplace injuries from overexertion, which is when you strain yourself from pushing your body too hard. This can happen by lifting, pushing, or pulling something too heavy for you.

Overexertion can lead to a "musculoskeletal disorder," which can include these symptoms: swelling, numbness, stiffness, chronic pain, or the permanent loss of mobility in muscles, tendons, ligaments, and joints.

Overexertion can lead to long-term consequences for health, so preventing overexertion is important and can be accomplished by simple practices:

- Use correct lifting techniques when lifting a heavy object. For example, when you lift, face the load with your feet shoulder-width apart and your back straight, squat by bending at the hips and knees, and then use your leg and stomach muscles to power the lift.
- Use material-handling aides, like a cart or hand truck, to lift and carry heavy or awkward objects.
- Ask for help instead of trying to "muscle" your way through a job alone.
- Don't add an extra package or box to an already full load; instead, make an extra trip or ask someone to help.
- Don't overextend or reach to grab that item on a shelf; climb down the ladder, reposition it, and climb again.
- Arrange your work and your workstation to minimize reaching, bending, twisting, and awkward postures.
- Take short breaks when doing strenuous tasks so that you can stretch and relax tense muscles, giving them a chance to recover.

Source: Safety.BLR

Radiation Therapy Basics-Part 2

"Certain chemo drugs help radiation work better by making cancer cells more sensitive to radiation."

What are the goals of radiation therapy?

Most types of radiation therapy don't reach all parts of the body, which means they're not helpful in treating cancer that has spread to many places within the body. Still, radiation therapy can be used to treat many types of cancer either alone or in combination with other treatments. Here are some of the reasons radiation therapy may be used:

To cure or shrink early-stage cancer

Some cancers are very sensitive to radiation. Radiation may be used by itself in these cases to make the cancer shrink or completely go away. In some cases, a few cycles of chemotherapy may be given first. For other cancers, radiation may be used before surgery to shrink the tumor (this is called **pre-operative therapy** or **neoadjuvant therapy**), or after surgery to help keep the cancer from coming back (called **adjuvant therapy**).

For certain cancers that can be cured either by radiation or by surgery, radiation may be the preferred treatment. This is because radiation can cause less damage and the organ may be more likely to work the way it should after treatment.

For some types of cancer, radiation and chemotherapy might be used together. Certain chemo drugs (called radiosensitizers) help radiation work better by making cancer cells more sensitive to radiation. The drawback of getting chemo and radiation together is that side effects are often worse.

If you'll need more than one kind of cancer treatment, your cancer care team will work with you to plan your treatment.

To stop cancer from coming back (recurring) somewhere else

Cancer can spread from where it started to other body parts. Doctors often assume that a few cancer cells might already have spread even when they can't be seen on imaging scans like CT scans or MRIs. In some cases, the area where the cancer most often spreads to may be treated with radiation to kill any cancer cells before they grow into tumors. For instance, people with certain kinds of lung cancer may get preventive (prophylactic) radiation to the head because their type of lung cancer often spreads to the brain. Sometimes, radiation to prevent future cancer can be given at the same time radiation is given to treat existing cancer, especially if the area the cancer might spread is close to the tumor itself.

(Continued on page 3)

Radiation Therapy Basics-Part 2, cont.

(Continued from page 2)

To treat symptoms caused by advanced cancer

Sometimes cancer has spread too much to be cured. But some of these tumors can still be treated to make them smaller so that the person can feel better. Radiation might help relieve problems like pain, trouble swallowing or breathing, or bowel blockages that can be caused by advanced cancer. This is often called **palliative radiation**.

To treat cancer that has returned (recurred)

If a person's cancer has returned (recurred), radiation might be used to treat the cancer or to treat symptoms caused by advanced cancer. Whether radiation will be used after recurrence depends on many factors. For instance, if the cancer has come back in a part of the body that has already been treated with radiation, it might not be possible to give more radiation in the same place. It depends on the amount of radiation that was used before. In other instances, radiation might be used in the same area of the body or a different area. Some tumors do not respond as well to radiation and for these cancers radiation might not be used to treat recurrence.

How is radiation therapy given?

Radiation therapy can be given in 3 ways:

External radiation (or external beam radiation): uses a machine that directs high-energy rays from outside the body into the tumor. Most people get external radiation therapy over many weeks. It's done during outpatient visits to a hospital or treatment center.

Internal radiation: Internal radiation is also called brachytherapy. A radioactive source is put inside the body into or near the tumor.

Systemic radiation: Radioactive drugs given by mouth or put into a vein are used to treat certain types of cancer. These drugs then travel throughout the body.

The type of radiation you might get depends on the kind of cancer you have and where it is. In some cases, more than one type is used.

"Internal radiation is also called brachytherapy."

Be Aware of Pinch Points

A pinch point is a place where a part of your body can get caught between two objects. Pinch point injuries can range from minor pain to lacerations, fractures, amputations, or even death. To avoid injury, it is important that you perform a prework inspection to make yourself aware of the potential pinch points around you, even if they are not labeled or guarded. Always ensure that you are properly trained on the machinery you are operating, and maintain alertness while operating it—never take shortcuts. The pinch point situations covered by OSHA regulations include the following:

- Between moving machine parts
- Between moving and stationary parts

Between moving machine parts and the materials being processed

On many types of machinery, you will find OSHA-required guards that act as barriers between you and pinch points. These are installed for your safety; never remove or disable these guards.

While the consequences may not be as severe as pinch point injuries from industrial machinery, many pinch points are lurking around your home. These can include:

- Slamming fingers in doors (including sliding closet doors, shower doors, and vehicle doors), drawers, or cupboards.
- Placing heavy items on a shelf or floor. Take care to slide the items in place so as not to drop them on your hands or feet. For the heaviest items, have someone assist you.

Pinch points are all around you, so take care to identify them and exercise caution. Note that while pinch points refer to places your body can get caught, items on your body such as clothing, jewelry, and hair can also get tangled in a pinch point.

Source: Safety.BLR

"Pinch points are all around you, so take care to identify them and exercise caution."

Measles in 2019

Today, CDC is reporting 971 cases of measles in the United States thus far in 2019. This is the greatest number of cases reported in the U.S. since 1994, when 963 cases were reported for the entire year.

CDC continues to work with affected state and local health departments to get ongoing outbreaks under control.

"Measles is preventable and the way to end this outbreak is to ensure that all children and adults who can get vaccinated, do get vaccinated. Again, I want to reassure parents that vaccines are safe, they do not cause autism. The greater danger is the disease the vaccination prevents," said CDC Director Dr. Robert Redfield, M.D. "Your decision to vaccinate will protect your family's health and your community's well-being. CDC will continue working with public health responders across our nation to bring this outbreak to an end."

Outbreaks in New York City and Rockland County, New York have continued for nearly 8 months. If these outbreaks continue through summer and fall, the United States may lose its measles elimination status. That loss would be a huge blow for the nation and erase the hard work done by all levels of public health. The measles elimination goal, first announced in 1966 and accomplished in 2000, was a monumental task. Before widespread use of the measles vaccine, an estimated 3 to 4 million people got measles each year in the United States, along with an estimated 400 to 500 deaths and 48,000 hospitalizations.

We were able to eliminate measles in the United States for two main reasons:

1. Availability and widespread use of a safe and highly effective measles vaccine, and
2. Strong public health infrastructure to detect and contain measles

CDC encourages parents with questions about measles vaccine to consult with their child's pediatrician, who know the children and community, and want to help parents better understand how vaccines can protect their children. Concerns based on misinformation about the vaccine safety and effectiveness, as well as disease severity, may lead parents to delay or refuse vaccines. All parents want to make sure their children are healthy and are interested in information to protect them. We have to work to ensure that the information they are receiving to make health decisions for their children is accurate and credible. Everyone 6 months and older should be protected against measles before traveling internationally. Babies 6 to 11 months old need one dose of measles vaccine before traveling. Everyone 12 months and older needs two doses. International travelers unsure of their vaccination status should consult with their healthcare provider before traveling. Information can be found at http://www.cdc.gov/travel.

"CDC encourages parents with questions about measles vaccine to consult with their child's pediatrician ..."

Taking a look at 'Styrofoam' bans

"...the low density of PF containers... take up a lot of space in landfills, even if they only account for a small percentage of the total weight of trash."

You've probably had a cup of coffee or a takeout meal served in a polystyrene foam (PF) container (this material is commonly, but incorrectly, referred to as Styrofoam®). PF has long been a popular packaging for food due to its cheap cost and ability to insulate food, keeping it either cold or hot for long durations. However, the research on the impact of this single-use packaging on the environment, as well as on human health, is troubling lawmakers and environmental groups.

Maryland recently became the first state to ban the sale of food and beverages in PF containers. This ban includes restaurants, cafeterias in schools and government facilities, and other food service providers but excludes products that have been prepackaged outside of the state such as instant ramen noodles.

Environmental impact: PF containers, which are actually plastic, easily break into small particles that are lightweight and float. These particles are readily carried down storm drains and into water bodies or the ocean, where they are destructive to marine life and water quality. In addition, the low density of PF means that these containers take up a lot of space in landfills, even if they only account for a small percentage of the total weight of trash.

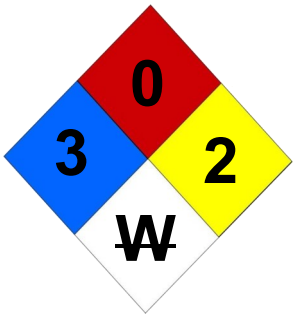
Human health impact: As with all packaging, certain substances within the material can migrate in small amounts into the food and beverages the container holds. Styrene, the chemical that seeps out of PF, is a neurotoxin and possible human carcinogen and has been associated with increased risk for leukemia and lymphoma.

What you can do: If your city or state allows the sale of PF, you can try not to use it by eating from food and beverage establishments that use other packing such as paper or plant-based materials (like Greenware). At your home or workplace, always use reusable cups, mugs, plates, and bowls instead of PF.

Source: Safety.BLR

Chemical Spotlight: Sulfuric Acid

Sulfuric acid is a clear, odorless, water-soluble liquid with a pH of less than 0.03. The appearance of pure sulfuric acid is sometimes described as "syrupy" or "oily." Sulfuric acid is widely used in industry, notably in the production of other chemicals such as phosphoric acid for use in fertilizers. There are also several household uses of sulfuric acid, including in drain cleaners and car batteries.

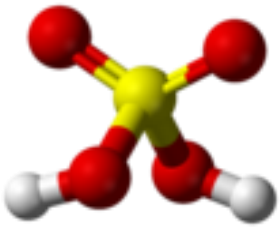


Sulfuric acid has different uses, depending on how diluted it is. If you are diluting sulfuric acid for any reason, it should be done with extreme care. It is very important to add the acid to water, rather than water to the acid, due to the heat released during the reaction.

Sulfuric acid is nonreactive and stable under normal conditions. However, it is highly corrosive to metals and should be stored away from any material that it is incompatible with such as carbides, reducing and oxidizing agents, and nitrates. When sulfuric acid is stored improperly, hydrogen gas can form, posing a risk for an explosion in closed containers.

Sulfuric acid will cause severe skin burns and serious eye damage. However, the effects and severity of injury will vary depending on its strength (i.e., how dilute it is). Protective eyewear and clothing should be worn when working with the chemical. Work should be done in a well-ventilated area and nearby an eyewash station and safety shower. In case of contact, eyes or skin should be flushed for at least 20 minutes. The inhalation of any vapors or aerosols can cause serious lung damage—and great care should be taken to ensure the vapor concentration is below the National Institute for Occupational Safety and Health (NIOSH) and Occupational Safety and Health Administration (OSHA) -defined exposure limit (1 mg/m3).

"Sulfuric acid will cause severe skin burns and serious eye damage."

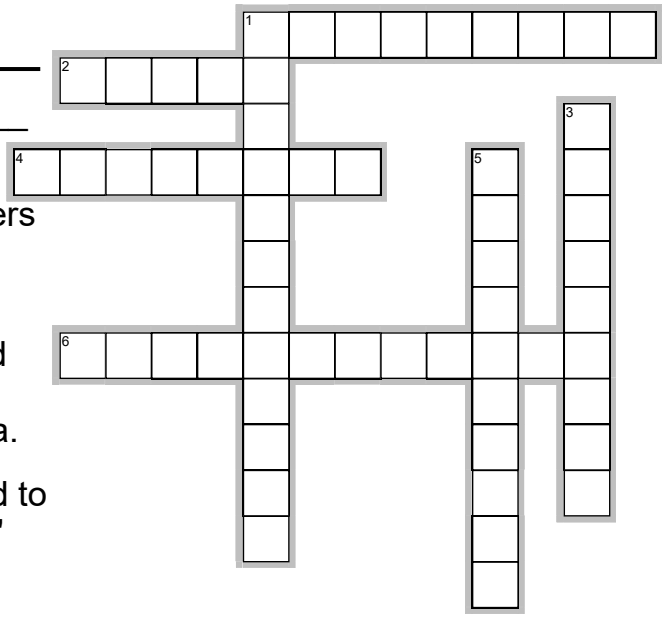


Fun Page

FUN PAGE

Across

1. Sulfuric acid is highly _____ to skin and metals.
2. Machine guards act as barriers between you and _____ points.
4. Styrene has been associated with increased risk for _____ and lymphoma.
6. _____ can lead to a “musculoskeletal disorder."

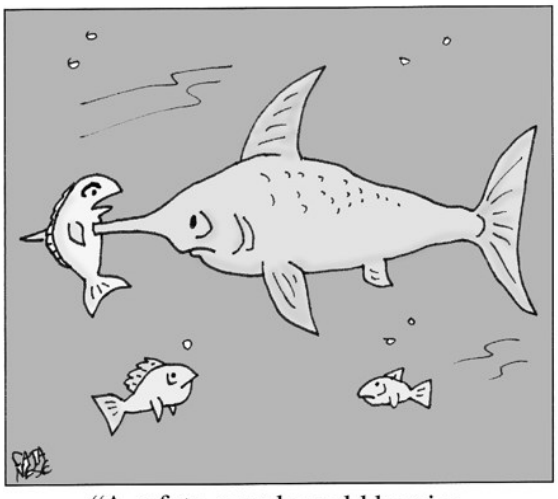


EclipseCrossword.com

Down

1. For some types of cancer, radiation and _____ might be used together.
3. “Your decision to _____ will protect your family’s health and your community’s well-being (from measles).
5. Radiation used to relieve symptoms like pain or trouble breathing is called _____ radiation.

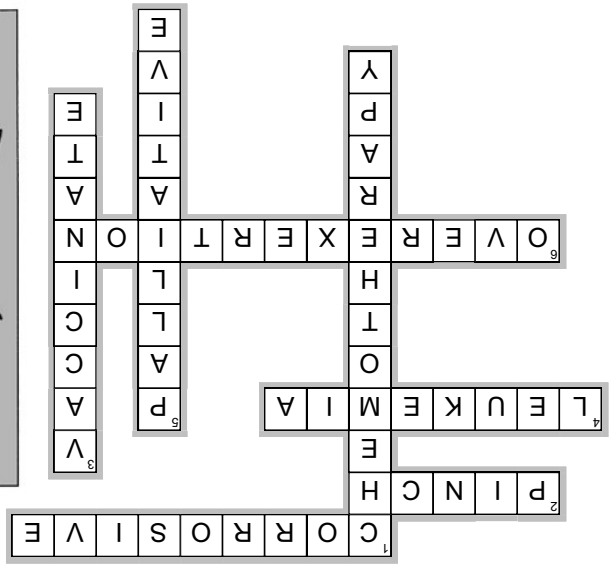
Funny Corner



“A safety guard would be nice. That’s all I’m saying.”

Puzzle Answers

EclipseCrossword.com



Environmental Health and Safety Staff

Naomi BOLES (neb51), Department Assistant II
Derek CONTI (djc182), Safety Services Specialist I
Victoria COOK (vmr6), Health Physics Specialist II
Brad FYE (jxf308), Asbestos and Lead Specialist I
Brandon KIRK (bxk230), Assistant Director, Construction, Facilities, Fire-Life Safety
Kumudu KULASEKERE (kck40), Health Physics Specialist II
Robert LATSCH (rnl2), Safety Services Specialist II
Becca MANNING (rdm124), Safety Services Specialist I
Tom L. MERK (tlm8), Assistant Director of Safety Services, CSO
Yelena NEYMAN (yxt13), Health Physics Specialist II
Joe NIKSTENAS (jen), Safety Specialist II and LSO
Debra NUNN (dxn174), Department Assistant II
Heidi PAGE (hep14), Assistant Director of Biosafety, BSO
Marc RUBIN (mdr6), Senior Director of Safety Services
Dr. Mary Ellen SCOTT (mas35), Safety Services Specialist II
Dr. W. David SEDWICK (wds), Director of Radiation Safety, RSO
Gayle STARLING-MELVIN (ges83), Department Assistant
Felice THORNTON-PORTER (fst2), Assistant Director of Radiation Safety, ARSO
Kaden WORTMAN (kxw411), Fire and Life Safety Specialist I
Bo WYSZYNSKI (lxw547), Facilities Safety Specialist I

Safety Quotes

Better a thousand times careful than once dead. ~Proverb

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Case Western Reserve University
(216) 368-2906/2907 FAX: (216) 368-2236
(email) cwruehs@gmail.com (www) case.edu/ehs