



"Safety Comes First"

Case Western Reserve University Environmental Health and Safety

**March-April
2024**

2220 Circle Drive, Service Building, 1st Floor

Phone: (216) 368-2906/2907

FAX: (216) 368-2236

Website: case.edu/ehs

In this issue:

March Is National Ladder Safety Month

National Ladder Safety Month	1	<p>Almost every home in the United States has one, and chances are you have used one personally either at work or at home. From changing out a lightbulb to getting on top of a roof, ladders are a common piece of equipment used in almost every home or building and appear to be harmless — and yet according to Injury Facts, thousands of people are killed due to falls from a ladder or scaffolding work. In fact, falls are the second leading cause of death next to highway crashes.</p> <p>Understanding the different types of ladders as well as safe ladder practices are key to preventing falls and other potential injuries.</p>
Respiratory Syncytial Virus Infection (RSV)	2	<p>Here are some helpful tips to always keep in mind when using a ladder provided by OSHA:</p> <ul style="list-style-type: none"> • Read and follow all labels/markings on the ladder. • Avoid electrical hazards! – Look for overhead power lines before handling a ladder. Avoid using a metal ladder near power lines or exposed energized electrical equipment.
Eye Protection- Impact hazards	5	<ul style="list-style-type: none"> • Always inspect the ladder prior to using it. If the ladder is damaged, it must be removed from service and tagged until repaired or discarded. • Always maintain a 3-point (two hands and a foot, or two feet and a hand) contact on the ladder when climbing. Keep your body near the middle of the step and always face the ladder while climbing (see diagram).
Chemical Spotlight: Isoprene	7	<ul style="list-style-type: none"> • Only use ladders and appropriate accessories (ladder levelers, jacks or hooks) for their designed purposes. • Ladders must be free of any slippery material on the rungs, steps or feet. • Do not use a self-supporting ladder (e.g., step ladder) as a single ladder or in a partially closed position.
Fun Page	8	
Staff	9	
2024-2		

(Continued on page 6)

Respiratory Syncytial Virus Infection (RSV)



“...symptoms usually appear in stages and not all at once.”

Respiratory syncytial (sin-SISH-uhl) virus, or RSV, is a **common respiratory virus that usually causes mild, cold-like symptoms**. Most people recover in a week or two, but RSV can be serious. Infants and older adults are more likely to develop severe RSV and need hospitalization. If you are age 60 or older, a vaccine is available to protect you from severe RSV. Talk to your healthcare provider to see if it’s right for you. If you are pregnant, you can get an RSV vaccine between 32–36 weeks of pregnancy to protect your infant after birth, or a preventive antibody can be given to your baby after birth.

Symptoms

People infected with RSV usually show symptoms within 4 to 6 days after getting infected. Symptoms of RSV infection usually include

- Runny nose
- Decrease in appetite
- Coughing
- Sneezing
- Fever
- Wheezing

These symptoms usually appear in stages and not all at once. In very young infants with RSV, the only symptoms may be irritability, decreased activity, and breathing difficulties.

Almost all children will have had an RSV infection by their second birthday.

Care

Antiviral medication is not routinely recommended to fight infection. Most RSV infections go away on their own in a week or two. However, RSV can cause severe illness in some people.

Take steps to relieve symptoms

- **Manage fever and pain** with over-the-counter fever reducers and pain relievers, such as acetaminophen or ibuprofen. (Never give aspirin to children.)
 - **Drink enough fluids.** It is important for people with RSV infection to drink enough fluids to prevent dehydration (loss of body fluids).
 - **Talk to your healthcare provider** before giving your child nonprescription cold medicines. Some medicines contain ingredients that are not good for children.
- RSV can cause more serious health problems

Infants, young children and older adults are at increased risk of severe RSV. RSV can also cause more severe infections such as bronchiolitis, an inflammation of the small airways in the lung, and pneumonia, an infection of the lungs. It is the most common cause of bronchiolitis and pneumonia in children younger than 1 year of age.

Healthy adults and infants infected with RSV do not usually need to be hospitalized. But some people with RSV infection, especially older adults and infants younger than 6 months of age, may need to be hospitalized if they are having trouble breathing or are dehydrated. In the most severe cases, a person may require additional oxygen, or IV fluids (if they can’t eat or drink enough), or intubation (have a breathing tube inserted through the mouth and down to the airway) with mechanical ventilation (a

Respiratory Syncytial Virus Infection (RSV), Cont.

(Continued from page 2)

machine to help a person breathe). In most of these cases, hospitalization only lasts a few days.

Protection

How to Protect Yourself and Others

Healthcare providers are encouraged to administer nirsevimab to protect infants against severe RSV. Do not save doses for later in the season. More nirsevimab is expected in early 2024. Neither Pfizer Abrysvo nor GSK Arexvy RSV vaccines are recommended for use in young children. For healthcare settings with limited nirsevimab supply, learn more about prioritizing doses.

RSV immunizations are recommended only for these groups:

Adults ages 60 and older: Two RSV vaccines (Arexvy by GSK and Abrysvo by Pfizer) have been licensed by FDA and recommended by CDC for adults ages 60 and older, using shared clinical decision-making.

Pregnant women: One RSV vaccine (Abrysvo by Pfizer) has been licensed and recommended during weeks 32 through 36 of pregnancy to protect infants.

Infants and some young children: An RSV preventive antibody has been licensed and recommended for infants and some young children.

For others who are less likely to get a severe RSV illness, everyday preventive actions can reduce the likelihood of spreading RSV.

RSV vaccines help protect adults 60 years and older from severe RSV illness. Older adults are at greater risk than young adults for serious complications from RSV because immune systems weaken with age. In addition, certain underlying medical conditions may increase the risk of getting very sick from RSV. Older adults with these conditions may especially benefit from getting RSV vaccine. If you are 60 years and older, talk to your healthcare provider to see if RSV vaccination is right for you.

There are two ways to protect your baby from getting very sick with RSV. One is an RSV vaccine given during pregnancy. The other is an RSV immunization that provides antibodies to your baby after birth. If you receive RSV vaccine while pregnant, your baby will have protection and, in most cases, should not need an RSV immunization later.

The two options to protect your baby are:

Getting an RSV vaccine if you are 32-36 weeks pregnant during RSV season. This vaccine is recommended during September through January for most of the United States because RSV is typically a fall and winter virus. The seasonality of RSV season may vary depending on where you live, and state, local, or territorial health departments may recommend different timing for administration for their area.

Getting an RSV antibody immunization for your baby if they are younger than 8 months and born during, or entering, their first RSV season. In rare cases, a healthcare provider may determine an RSV immunization is needed for an infant even though the mother received an RSV vaccine.



“...certain underlying medical conditions may increase the risk of getting very sick from RSV.”

(Continued on page 4)

Respiratory Syncytial Virus Infection (RSV), Cont.

“People infected with RSV are usually contagious for 3 to 8 days ...”

(Continued from page 3)

A dose of RSV antibody is also recommended for children between the ages of 8 and 19 months entering their second RSV season who are in at least one of these groups:

- Children who have chronic lung disease from being born prematurely
- Children who are severely immunocompromised
- Children with cystic fibrosis who have severe disease
- American Indian and Alaska Native children

Spread

RSV can spread when:

- An infected person coughs or sneezes
- You get virus droplets from a cough or sneeze in your eyes, nose, or mouth
- You have direct contact with the virus, like kissing the face of a child with RSV
- You touch a surface that has the virus on it, like a doorknob, and then touch your face before washing your hands

People are typically infected with RSV for the first time as an infant or toddler and nearly all children are infected before their second birthday. However, repeat infections may occur throughout life, and people of any age can be infected.

Infants, young children and older adults are at increased risk of severe RSV. Learn about preventive options.

People infected with RSV are usually contagious for 3 to 8 days and may become contagious a day or two before they start showing signs of illness. However, some infants, and people with weakened immune systems, can continue to spread the virus even after they stop showing symptoms, for as long as 4 weeks. Children are often exposed to and infected with RSV outside the home, such as in school or childcare centers. They can then transmit the virus to other members of the family.

RSV can survive for many hours on hard surfaces such as tables and crib rails. It typically lives on soft surfaces such as tissues and hands for shorter amounts of time. In most regions of the United States and other areas with similar climates, RSV season generally starts during fall and peaks in the winter. The timing and severity of RSV season in a given community can vary from year to year.

Prevent

- Stay home when sick.
- Cover your coughs and sneezes with a tissue or your shirt sleeve, not your hands.
- Wash your hands often with soap and water for at least 20 seconds.
- Avoid touching your face with unwashed hands.
- Avoid close contact with others, such as kissing, shaking hands, and sharing cups and eating utensils.
- Clean frequently touched surfaces such as doorknobs and mobile devices.

Source: CDC



Eye protection – Impact hazards

It's important to know the best type of eye protection to wear to protect against impact hazards and how to properly care for and maintain it.

Impact hazards. The majority of impact injuries are caused by flying or falling objects, such as large chips, fragments, particles, sand, or dirt, or by sparks striking the eye. Most of these objects are smaller than the head of a pin and can cause serious injuries such as punctures, scratches, and bruises.

Impact hazards can result from many types of work operations, including chipping, grinding, masonry, riveting, woodworking, sawing, drilling, chiseling, and sanding.

To protect against impact injuries to your eyes in hazardous work areas, always wear safety glasses with side shields or goggles, even when wearing a face shield. A face shield alone won't protect you from impact hazards!

Safety glasses. Safety glasses are designed to shield the eyes from a variety of impact hazards and provide frontal protection to the wearer's eyes. Side shields provide angular protection. Non-side shield glasses aren't acceptable eye protection for impact hazards.

Frames can be fitted with either corrective or Plano impact-resistant lenses. Plano lenses should be used by workers who don't require vision correction, and prescription corrective lenses should be used by workers who do.

Safety goggles. Safety goggles are designed to shield the eyes against flying fragments, objects, large chips, and particles. Goggles fit the face and form a protective seal around the eyes. This prevents objects from entering under or around the goggles. The frame must fit properly to your face to form the correct seal.

Safety goggle lenses are designed and tested to resist moderate impact and may be removable or may incorporate prescription lenses mounted behind protective lenses if you need vision correction. Goggles are also available with different levels of ventilation.

Though your employer will provide you with suitable personal protective equipment (PPE) that complies with industry standards, different types may be available for different tasks. Before you begin a job that exposes you to impact hazards, take the time to consider which type of eye protection will provide your eyes with the best defense.

Care and maintenance. To make sure the form of eye protection you choose remains effective, clean and disinfect it regularly. To do this, disassemble the goggles or glasses, and thoroughly clean all parts with soap and warm water. Rinse all traces of soap, and replace any defective parts with new ones. Swab the PPE thoroughly, and immerse all parts for 10 minutes in a disinfectant solution. Remove the parts from the solution, and let them air-dry in a clean place at room temperature or with heated air. Do not rinse after removing the parts from the solution because this will remove the germicidal residue that remains effective after drying. Replace the lenses if they become pitted or scratched.

Replace any headband if it becomes slack, worn out, soaked with sweat, or twisted to the point where the elasticity is reduced.

To store eye protection properly, keep it in a clean, dust-proof container, such as a box, bag, plastic envelope, or storage case.

"...take the time to consider which type of eye protection will provide your eyes with the best defense."

National Ladder Safety Month, Cont.

National
Ladder
Safety
Month

“Do not exceed the maximum load rating of a ladder.”

(Continued from page 1)

- Do not use the top step/rung of a ladder as a step/rung unless it was designed for that purpose.
- Use a ladder only on a stable and level surface, unless it has been secured (top or bottom) to prevent displacement.
- Do not place a ladder on boxes, barrels or other unstable bases to obtain additional height.
- Do not move or shift a ladder while a person or equipment is on the ladder.
- An extension or straight ladder used to access an elevated surface must extend at least 3 feet above the point of support (see diagram). Do not stand on the three top rungs of a straight, single or extension ladder.
- The proper angle for setting up a ladder is to place its base a quarter of the working length of the ladder from the wall or other vertical surface (see diagram).
- A ladder placed in any location where it can be displaced by other work activities must be secured to prevent displacement or a barricade must be erected to keep traffic away from the ladder.
- Be sure that all locks on an extension ladder are properly engaged.
- Do not exceed the maximum load rating of a ladder. Be aware of the ladder's load rating and of the weight it is supporting, including the weight of any tools or equipment.

While some of these dos and don'ts may seem obvious, it's important to keep things in perspective. According to [National Ladder Safety Month](#), every year over 100 people die in ladder-related accidents, and thousands suffer disabling injuries.

The good news, however, is that ladder safety is becoming a key safety topic among employees in the construction industry. Don't miss the [2018 Stats](#) as reported by National Ladder Safety Month for spreading the news about the safety dangers ladders can create and how to work safely both on and around ladders.

While falls from ladders are a growing concern, it's also reassuring and important to remember that ladder-related injuries and fatalities are completely preventable.

Source: oshaeducationcenter.com

Chemical Spotlight: Isoprene

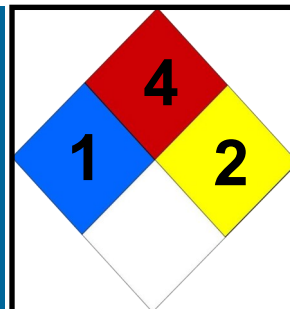
Isoprene is a colorless liquid with a mild odor. It's used in the manufacture of synthetic and butyl rubbers, in elastomer plastics, and as a chemical intermediate.

Isoprene isn't compatible with oxidizing agents, strong acids, reducing agents, oxygen, alkali metals, strong bases, ammonia, chlorinated solvents, alcohols, acid chlorides, acid anhydrides, amines, ethers, and phenols.

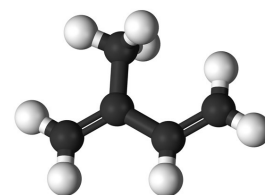
Store isoprene in tightly closed containers in a cool, well-ventilated area away from heat, and prevent electrostatic discharge. Sources of ignition are prohibited where the chemical is used, handled, or stored. Metal containers involving the transfer of isoprene should be grounded and bonded. Only use nonsparking tools and equipment when handling the chemical. Isoprene should contain an inhibitor to prevent self-polymerization.

If isoprene 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. Absorb liquids in vermiculate, dry sand, earth or a similar material, and deposit in sealed containers. Ventilate and wash the area after cleanup is complete. It may be necessary to contain and dispose of isoprene as a hazardous waste. Contact the federal Environmental Protection Agency (EPA) and local environmental regulatory agency for specific recommendations.



“Isoprene should contain an inhibitor to prevent self-polymerization.”



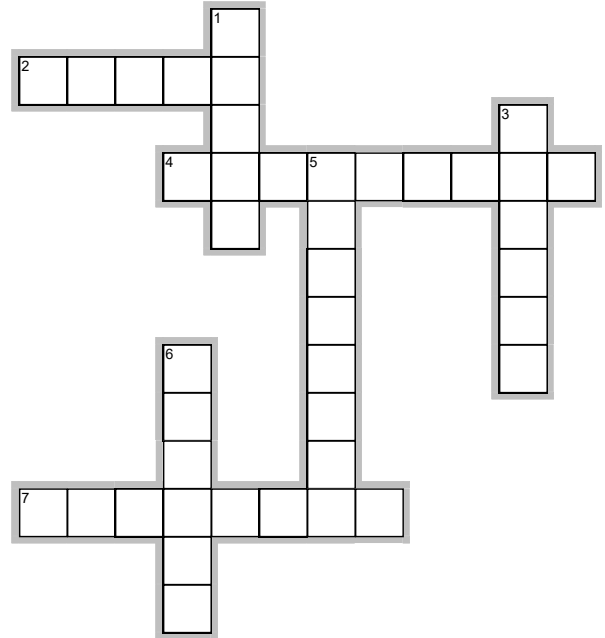
Fun Page

F
U
N

P
A
G
E

Across

- Avoid using a _____ ladder near power lines or exposed energized electrical equipment.
- _____ medication is not routinely recommended to fight (RSV) infection.
- If you receive RSV vaccine while _____, your baby



Down

- _____ lenses should be used by workers who don't require vision correction.
- Be sure that all locks on an extension _____ are properly engaged.
- If isoprene is spilled or leaked, remove all sources of _____.
- RSV can spread when an infected person _____ or sneezes.

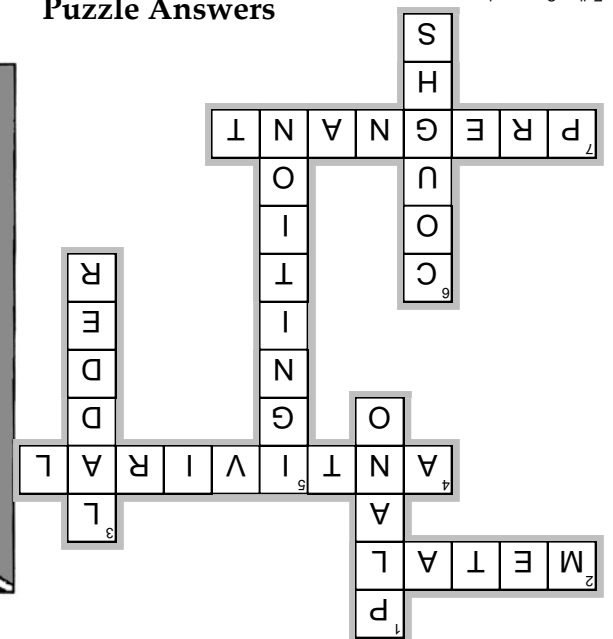
EclipseCrossword.com

Funny Corner



The safety-conscious bride-to-be.

Puzzle Answers



EclipseCrossword.com

Environmental Health and Safety Staff

Naomi BOLES (neb51), Department Assistant II
Howard CASH, PhD (hac70), Safety Services Specialist I
Brad FYE (jxf308), Asbestos and Lead Specialist I
Brandon KIRK (bxk230), Assistant Director of Campus & Facilities Compliance
Todd KOLVA (txk603), Facilities Safety Specialist II
Kumudu KULASEKERE (kck40), Health Physics Specialist II
Andrew MALAK (apm95), Safety Services Specialist I
Tom L. MERK (tlm8), EHS Assistant Director of Safety Services, CSO
Bhagya NALLAPERUMA (bxn178), Safety Services Specialist I
Jeffrey NEISTADT (jxn393), Health Physics Specialist II
Yelena NEYMAN (yxt13), Health Physics Specialist II
Joe NIKSTENAS (jen), EHS Assistant Director of Radiation Safety, ARSO
Daniel O'CONNELL (dxo128), Fire Safety Specialist I
Marc RUBIN (mdr6), EHS Executive Director
Mary Ellen SCOTT, PhD (mas35), Safety Services Specialist II
Gayle STARLING-MELVIN (ges83), Clerk III
Felice THORNTON-PORTER (fst2), EHS Associate Director, CWRU RSO
Andrew YOUNG (aby3), CWRU Biosafety Officer



Safety Quotes

*To learn
about
eye
protec-
tion, ask
someone
who has
one.*

*~Author
Unknown*

All back issues of the EHS Newsletter can be found online at

case.edu/ehs/about/newsletters

Environmental Health and Safety
Case Western Reserve University
(216) 368-2906/2907 _____ FAX: (216) 368-2236
(email) cwruehs@gmail.com
(website) case.edu/ehs