

Mar/Apr 2021

*In this issue:* 

#### "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

# Respirator Inspections and Repairs If you use your respirator for routine work, inspect it before each use

If you use your respirator for routine work, inspect it before each use and during cleaning. If you have a respirator for use during emergencies, inspect it before and after each use and at least monthly according to the manufacturer's recommendations. Inspect emergency escape-only respirators before carrying them into the workplace for use.

To inspect your respirator, check for:

- Proper function;
- Tight connections;
- Good condition of the parts, including the facepiece; head straps; valves; connecting tube; and cartridges, canisters, or filters; and
- Pliability and signs of deterioration in all flexible parts.

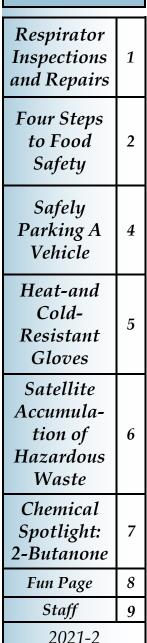
Additionally, because filtering facepiece respirators cannot be cleaned or disinfected, inspect them for cleanliness and damage before each use. For respirators that use filters to clean the air, replace the filters whenever they are damaged or dirty or make it hard to breathe.

If you use a SCBA, inspect air and oxygen cylinders monthly to make sure they are fully charged, and recharge them when pressure falls to 90% of the manufacturer's recommended pressure level. Also check that the regulator and warning devices function properly.

If you inspect emergency respirators, document the date the inspection is performed, your name or signature, the findings of the inspection, any required corrective action, and the serial number or other way of identifying the respirator. Provide this information on a tag attached to the storage compartment.

If your respirator fails an inspection or you find it to be defective in some way, remove it from service and either throw it away or have it repaired.

Source: Safety.BLR



#### Four Steps to Food Safety: Clean, Separate, Cook, Chill



Following four simple steps at home—Clean, Separate, Cook, and Chill—can help protect you and your loved ones from food poisoning.

Clean: Wash Your Hands And Surfaces Often



- Germs that cause food poisoning can survive in many places and spread around your kitchen.
- Wash hands for 20 seconds with soap and water before, during, and after preparing food and before eating.
- Wash your utensils, cutting boards, and countertops with hot, soapy water.
- Rinse fresh fruits and vegetables under running water.

"Wash hands for 20 seconds with soap and water before, during, and after preparing food and before eating."

#### **Separate: Don't Cross-Contaminate**



- Raw meat, poultry, seafood, and eggs can spread germs to ready-to-eat foods—unless you keep them separate.
  - o Use separate cutting boards and plates for raw meat, poultry, and seafood.
  - o When grocery shopping, keep raw meat, poultry, seafood, and their juices away from other foods.
  - o Keep raw meat, poultry, seafood, and eggs separate from all other foods in the fridge.

(Continued on page 3)



#### Four Steps to Food Safety:, cont.

#### **Cook: To The Right Temperature**



- Food is safely cooked when the internal temperature gets high enough to kill germs that can make you sick. The only way to tell if food is safely cooked is to use a food thermometer. You can't tell if food is safely cooked by checking its color and texture.
- Use a food thermometer to ensure foods are cooked to a safe internal temperature.
  - o 145°F for whole cuts of beef, pork, veal, and lamb (then allow the meat to rest for 3 minutes before carving or eating).
  - o 160°F for ground meats, such as beef and pork
  - o 165°F for all poultry, including ground chicken and turkey
  - o 165°F for leftovers and casseroles
  - o 145°F for fresh ham (raw)
  - o 145°F for fin fish or cook until flesh is opaque

**Chill: Refrigerate Promptly** 



Bacteria can multiply rapidly if left at room temperature or in the "Danger Zone" between 40°F and 140°F. Never leave perishable food out for more than 2 hours (or 1 hour if it's hotter than 90°F outside).

- Keep your refrigerator at 40°F or below and know when to throw food out.
- Refrigerate perishable food within 2 hours. (If outdoor temperature is above 90°F, refrigerate within 1 hour).
- Thaw frozen food safely in the refrigerator, in cold water, or in the microwave. Never thaw foods on the counter, because bacteria multiply quickly in the parts of the food that reach room temperature.

"Keep your re-frigerator at 40°F or below and know when to throw food out."





CLEAN







Source: Safety BLR

#### Safely Parking A Vehicle



Parking lot collisions are one of the most common types of vehicle accidents. Crowded lots and tight corners make it hard to see; combine that with vehicles backing out of parking spaces, distracted drivers, and pedestrians, and it is easy to understand why so many accidents occur in parking areas.

As you enter and drive around the parking area:

- Drive slowly, and obey the parking lot speed limits. Planning ahead and giving yourself enough time will help you avoid being in a rush to get parked.
- Always use your directional signals to communicate your intended path to other drivers and pedestrians.
- Follow lane designations in the proper direction, and do not cut diagonally across the lot.
- Obey all stop signs, no-parking signs, and all other posted signs.
- Avoid distractions. Do not talk on the phone, text, or eat while you are trying to park.
- Be alert to pedestrians walking to and from vehicles. Use extra caution if you are in a parking garage, as it tends to be darker and more difficult to see.
- Watch out for other vehicles, especially vehicles backing out of parking spaces.
- Scan the area to find a parking spot. It is always best to park near the building in a visible, well-lit area or near the parking area attendant, if there is one.

When you locate a parking spot, pull through or back in if possible, unless otherwise instructed by a parking lot attendant. This allows you to pull forward out of the parking spot when you leave. You have much better visibility when pulling forward out of a parking spot than when backing out, which will lessen the likelihood of an accident.

Always make sure your vehicle is within the designated lines of the parking spot and is not interfering with the flow of traffic. Once parked, put the transmission in "park" and turn off the vehicle, or, if it is a manual transmission, set the parking brake, turn off the vehicle, and leave the vehicle in gear. Always keep your seatbelt fastened until the car is safely parked.

If you are parking on the street:

- Obey all parking signs and restrictions.
- Park as close to the curb as possible, and make sure your vehicle is out of the flow of traffic.
- If you are on a hill, turn your wheels toward the curb.
- Check for traffic before opening the door to exit the vehicle, and shut the door as soon as possible after getting out.

As you are leaving the parking space, your eyes should be scanning left and right to ensure no pedestrians or other vehicles are entering your path. If you have to back out of the parking spot, don't rely solely on your vehicle's backup camera and sensors. Always use the vehicle's mirrors, and turn and look over one shoulder and then the other to ensure your path is clear. And always be mindful of the clearance between your vehicle and the vehicles parked beside you as you leave the parking spot.

Source: Safety BLR

"Be alert to pedestrians walking to and from vehicles."

#### Heat-and Cold-Resistant Gloves

Heat- and cold-resistant gloves come in many materials, each of which has unique protective qualities. A few common materials include:

- Canvas. Thick canvas gloves can protect against sustained heat and cold and also offer some protection against dirt, metal, or wood slivers; chafing; and abrasions.
- Leather. Thick leather gloves can also provide protection against sustained heat or cold. Gauntlet-style leather gloves in particular can be used when welding because they resist sparks and moderate heat. In addition to thermal protection, leather gloves offer some cut resistance and can protect against abrasions and punctures from chips or metal shavings.
- Aluminized gloves. Aluminized gloves are recommended for work with extreme heat, such as in welding, furnace, or foundry work, as they provide reflective and insulating protection and protect against sparks, contact heat, and molten metal splashes.
- **Kevlar**®. Kevlar gloves provide protection against both heat and cold and also protect against cuts, abrasions, and punctures.
- Aramid fiber. Aramid fiber gloves also offer protection against heat and cold. In particular, they protect against conductive and radiant heat and offer excellent flame and abrasion resistance. They also resist cuts and abrasions and are fairly durable.
- Neoprene. Insulated neoprene gloves protect against cold, are resistant to both water and hazardous liquids, and can provide good grip and dexterity.
- Wool, polypropylene, or Thinsulate linings. Gloves lined with wool, polypropylene, or Thinsulate provide additional protection against cold.

When selecting gloves to protect against heat or cold, you will need to balance your needs for thermal protection, water resistance, and dexterity. Because some gloves designed for hot and cold conditions have multiple layers and are often insulated, a bulkier glove and less dexterity can result. Leather gloves can be less bulky and offer good dexterity but are less water-resistant. Gloves made from synthetic materials dry more quickly than those made from leather but may be slippery unless they have a PVC coating. Consider your tasks and the type of hand protection you'll need when choosing the right glove for the job.

It's important that you wear and care for your gloves properly. Always follow the manufacturer's use and maintenance instructions to ensure the highest level of protection, and keep the following guidelines in mind.

- Check that your gloves fit comfortably. Gloves should not be too tight, which would restrict your hand movement, or too loose, which would create snagging hazards and limit your ability to grip and feel properly.
- Inspect your gloves for damage before each use. Heat- and cold-resistant gloves should not have abrasions on the outer surface or damage to the inner linings. Dispose of gloves that are damaged or show signs of wear or degradation.
- Keep gloves clean and dry between uses by storing them right-side out with the cuffs unfolded in a cool, dark, dry place.



"It's important
that you
wear and
care for
your
gloves
properly."

Source: Safety BLR

## Satellite Accumulation of Hazardous Waste



A satellite accumulation area (SAA) is the designated area where hazardous waste is initially accumulated in containers before moving it to the central accumulation area or sending it off-site. SAAs are typically located where the hazardous waste is generated or very close to where it is generated.

There are limits on the amount of hazardous waste that can accumulate at an SAA. A facility can accumulate as much as 55 gal of nonacute hazardous waste or, alternatively, either 1 quart of liquid acute hazardous waste or 2.2 pounds (1 kilogram) of solid acute hazardous waste at each SAA.

The operator that is responsible for the process that generates the waste cannot allow others, including employees or visitors, to have access to the waste. The operator must control entry to the area, building, or room that the SAA is in by utilizing access cards, keys, or lock boxes. The operator must also keep accumulated waste in a locked cabinet, and control access to the key.

**Container Condition** 

- Only use containers that are in good condition and suited to the hazardous waste being accumulated.
- Examine containers for any defects.
- Verify that containers and liners are compatible with the wastes being accumulated.
- Don't put different wastes in the same container if they will negatively react with each other.
- Never put waste in an unwashed container that previously held a waste that will negatively react with the waste you are putting in the container now.
- Use any practical means to separate or protect hazardous waste containers from other waste containers or materials that might cause a negative reaction.

Keep each hazardous waste container closed during accumulation, except:

- When you add, remove, or consolidate waste, or
- When you need to temporarily vent a container for proper operation of equipment *or to* prevent a dangerous situation, such as buildup of extreme pressure.

Mark or label containers in an SAA with the words "Hazardous Waste," and indicate the hazards (e.g. "ignitable," "corrosive," "reactive," or "toxic") of the contents:

- Use labels or placards consistent with Department of Transportation (DOT) requirements.
- Use a hazard statement or pictogram consistent with the Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard.
- Use a chemical hazard label consistent with the National Fire Protection Association code 704.

When the accumulated hazardous waste reaches the SAA volume or weight capacity accumulation limit, mark that container with the date the accumulation limit was reached. A facility then has 3 consecutive calendar days to transfer the container from the SAA to:

- Its central accumulation area for hazardous waste;
- A permitted on-site hazardous waste treatment, storage, or disposal facility (TSDF); or
- A designated off-site TSDF or recycling facility.

"Verify that containers and liners are compatible with the wastes being accumu-

lated."

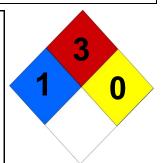
#### Chemical Spotlight: 2-Butanone

2-Butanone is a colorless liquid with a sharp, sweet odor and is also known as methyl ethyl ketone (MEK). 2-Butanone is produced in large quantities. Nearly half of its use is in paints and other coatings because it will quickly evaporate into the air and dissolves many substances. It is also used in glues and as a cleaning agent.

Store 2-Butanone in tightly closed locked containers in a cool, dry, and well-ventilated area. Only use 2-Butanone outdoors or in a well-ventilated area. Take precautionary measures against static discharges, ground and bond all equipment containing the material, and avoid all possible sources of ignition. Use explosion-proof electrical, ventilating, and lighting equipment.

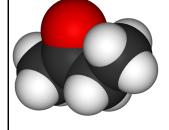
If 2-Butanone is spilled, avoid breathing vapors, mist, or gas, and ensure adequate ventilation. Remove all sources of ignition, and evacuate personnel to safe areas. Use personal protective equipment (PPE), including goggles or safety glasses, gloves, flame-retardant protective clothing, and respiratory 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 in an inert absorbent material (e.g., vermiculite, sand, or earth). Place the spillage in a sealed container for disposal according to federal and local regulations.



"Store 2Butanone
in tightly
closed
locked
containers in a
cool, dry,
and wellventilated
area."





Source: Safety.BLR

# Fun Page

run ruge		
	Across	2 3
	1. Inspect filtering facepiece for cleanliness and damage before each use.	4
F	4. When selecting protective gloves, balance your needs for thermal protection, water resistance, and	
U	5. 2-Butanone is also known as methyl ethyl (MEK).	5
N	6. When not adding or venting material, all hazardous waste containers must be kep	ipseCrossword.com
	Down	
	2. As you drive around a parking	area, be alert to and from vehicles.
$oldsymbol{P}$		_ to ensure foods are cooked to a
$oldsymbol{A}$	Funny Corner	Puzzle Answers
$\boldsymbol{G}$		C
E		О Т Я П
		D E X I E B I I A
	7 18	1 D H 3
Page 8	"Goals, Richard. I said it's important to have goals."	R E S P I R A T O R S

### 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

Marc RUBIN (mdr6), Senior Director of Safety Services

Andrew SAMOSON (axs2098), Fire and Life Safety Specialist I

**Dr. Mary Ellen SCOTT** (mas35), Safety Services Specialist II

Dr. W. David SEDWICK (wds), Director of Radiation Safety, RSO

Gayle STARLING-MELVIN (ges83), Clerk III

Felice THORNTON-PORTER (fst2), Assistant Director of Radiation Safety, ARSO

Bo WYSZYNSKI (lxw547), Facilities Safety Specialist I

All back issues of the EHS Newsletter can be found online at <a href="mailto:case.edu/ehs">case.edu/ehs</a>. Click on the "Newsletter" link at the bottom of each page.

Environmental Health and Safety

Case Western Reserve University

(216) 368-2906/2907 FAX: (216) 368-2236

(email) cwruehs@gmail.com (www) case.edu/ehs



Safety Quotes

Safety means first aid to the uninjured.

> ~Author Unknown