

SAFETY & LOSS PREVENTION

OUTLOOK

From Compliance *to* Commitment

How management style can influence and inspire a culture of safety in the workplace

Also Inside:

- Making Your Safety Message Stick
- Preventing Falls in the Workplace
- Improving Indoor Air Quality





Falls Top OSHA's “Fatal Four” List

Outlook wraps up its four-part feature on the deadliest types of construction accidents with a focus on falls, which account for about one-third of all fatalities in the industry.

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From Compliance to Commitment

How management style can influence and inspire a culture of safety in the workplace

The success of any safety program, even one with rigorous rules and meticulous systems in place, will be affected and ultimately determined by the workplace culture in which it exists. Simply put, your safety program is only as good as the employees' willingness to follow it. Beyond requiring arbitrary compliance to policies, a positive safety culture encourages workers to embrace them.

On the other hand, a negative workplace culture can lead to an unsafe environment full of hazard exposures. Workers who feel that managers and supervisors aren't concerned about safety will be less inclined to concern themselves with it. When people feel pressured to bend safety rules to meet production goals or worry about retribution for reporting hazards, they are more likely to put themselves and others at risk.

Building and maintaining a positive workplace culture will not only make your safety program more effective — it can also increase productivity, profits, and morale, resulting in a happier and healthier workforce. A recent Glassdoor survey found that 65% of participants put workplace culture at the top of their employment priorities, with 56% ranking it even above compensation; and over 70% would look for work elsewhere if their current workplace culture deteriorated.

MAKE SAFETY A CORE VALUE

Priorities can change over time — core values remain constant. Paul O'Neill, former CEO of Alcoa puts it this way: "Safety should never be a priority. It should be a precondition. Safety should be like breathing." Inspire commitment to maintaining a safe workplace by tapping into people's guiding principles of integrity, caring, and mutual respect.



Encourage employees to participate in creating and revising the safety program to fit their individual needs. Psychologists have found that people are more accountable and motivated to succeed when they have a say in the process.

TAKE A POSITIVE AND PROACTIVE APPROACH

The most effective workplace safety programs take a comprehensive approach, not just addressing individual incidents, but also identifying the exposures that allowed such incidents to occur. Focus on achieving a safe workplace rather than simply preventing future accidents — for example, hang a sign touting the "Number of Safe Days" rather than the "Number of Days Without an Injury". Trade commands for language that more positively conveys the goal — "opportunity to improve" rather than "requirement to change"; "peer support" rather than "peer pressure"; "fulfilling our mission of safety" rather than "meeting compliance standards."

People are more willing to comply with rules and regulations if they understand why they exist — be sure to communicate what each rule is intended to do (e.g., a rule about not storing boxes in hallways is to prevent a trip hazard; lockout/tagout procedures are in place to prevent electrical injuries; etc.).

LEAD BY EXAMPLE

The responsibility of creating a positive safety culture belongs to all members of an organization, regardless of job title or pay grade. However, an organization's leadership has an obligation to its employees not only to determine and encourage safe behaviors, but to model them as well. Managers and supervisors must also demonstrate their commitment to safety by being present, making themselves available and responding to concerns and suggestions quickly.

BUILD TRUST BY ESTABLISHING CONNECTIONS

A foundation of trust is essential to workplace safety. Employees who have authentic connections with each other feel more invested in the quality of their work and in keeping others safe. Go out of your way to interact with your team. Physical distancing has made daily interactions challenging, so reaching out and making yourself available to others is even more crucial than ever to maintain those working relationships.

Remember that trust goes both ways — employees who feel trusted tend to be more trusting of their supervisors, as well as being more productive and engaged and having higher job satisfaction.

OPEN HIGHWAYS OF COMMUNICATION

Once trust is established, workers will be willing to confide in their supervisors about safety concerns. Be sure to clear the path by providing multiple means for communication, such as suggestion boxes, emails, and open-door policies allowing workers to report hazards immediately. Periodic meetings and safety presentations give people an opportunity to share their ideas and concerns.

Workers who believe they will be punished for causing an unsafe situation or getting hurt will be inclined to withhold information about hazards. Encourage employees to report safety violations, even their own, without risk of reprisal. The purpose of rules is to create a safer work environment, not to place blame.

Relying too heavily on memos and posters instead of face-to-face contact can result in messages being misinterpreted or missed completely. Make sure newly enacted or revised safety policies are explained in person, whether in a presentation or a one-on-one conversation.

REINFORCE THE RIGHT THINGS

Your safety program may be filled with rules and procedures intended to keep workers safe, but words and actions by management may undermine their effectiveness. Even a casual comment about meeting a deadline might be misinterpreted as a suggestion to speed up or cut corners. Remember the power of the language you use, as well as what your behavior says to others.

Offering extra incentives for productivity can have the unfortunate side effect of encouraging workers to put safety aside. Instead, acknowledge and reward safe behavior. Giving workers positive reinforcement encourages them to repeat those actions, turning them into habits.

CHANGE WITH THE TIMES

If the COVID-19 pandemic taught us anything, it's that workplace hazards can change in an instant, and your safety program must adapt with them. Keep in mind that upgrades in technology or equipment meant to increase productivity can sometimes create new exposures.



The DFS Division of Risk Management offers the **Interagency Advisory Council on Loss Prevention Excellence Award for Occupational Safety & Loss Prevention** in as a way to recognize state of Florida employees, agents, and volunteers who make exceptional contributions to the reduction and control of employment-related accidents. Recipients will be presented with an award and will be recognized at the quarterly meeting and in the Safety & Loss Prevention Outlook newsletter.

Visit <https://www.myfloridacfo.com/division/risk/loss-prevention/loss-prevention-awards> for more information.

How Strong Is Your Safety Culture?

Measuring the strength of your safety culture as a whole can be challenging, but examining each piece of the puzzle can help you determine what's working and what needs work in your workplace.

1. Can workers, managers, and senior leaders freely communicate their concerns to each other without fear of reprisal?
2. Do workers know all safety procedures and believe that they are important and necessary?
3. Can safety leaders and other managers cooperate on the same goals without tension or competing interests?
4. Do leaders invest in equipment repairs, PPE, and necessary safety technologies?
5. Are workers, managers, or senior leaders willing to invest the needed time, money, or energy into achieving the company's safety objectives?
6. Do senior leaders and managers regularly discuss new opportunities to improve safety?
7. Are safety and productivity goals mutually beneficial?
8. Do managers and leaders take full responsibility when incidents happen?
9. Do workers have the power and autonomy to find and address safety problems daily?
10. Do leaders take the time to educate, train, motivate, clarify, and remind workers of the organization's safety goals?



HALF THE BATTLE

Nine Ways to Make the Message of Your Presentation Stick

You've worked hard to develop a well-planned, detailed safety program for your organization. But having rules and regulations on paper are only meaningful if employees follow them, and that can take some convincing. So how do you get the message through in an instructive, memorable way, one that inspires not only compliance but commitment? Time for a safety presentation!

No doubt you've been in a class or a meeting where the teacher or lecturer's dry, lifeless lesson left listeners struggling to focus (or maybe even stay awake). Even an interesting topic can be made boring if the presentation doesn't grab the attention of the audience — and an audience that isn't listening isn't learning.

On the other hand, a stirring, energetic speaker can transform an otherwise dull subject into a gripping speech that engages the listeners — and engaged listeners are more inclined to remember the lessons learned and implement them in their daily lives.

Here are some tips for how to make your presentation more effective:

Look confident. Body language and vocal tone can transform even a nervous speaker into one that exudes confidence. A speaker who appears confident is not only better able to connect with the crowd, but also more likely to be trusted as an authority on the subject. Fear public speaking? Fake it 'til you make it! Psychologists claim mimicking the body language of a powerful, successful person can actually make you feel more confident, causing others to react differently toward you, which then reinforces your confidence.

Stand tall with shoulders open. Allow yourself to take up space. Pay attention to how your voice sounds. Nervous people tend to talk too quickly and raise the pitch of their voice -- speaking in a lower pitch makes it easier to control and project your voice. Be careful not to trail off, add “vocal fry”, or raise the pitch at the end of a sentence, which can make a statement sound like a question. And don't forget to smile!

Be prepared. Know your topic inside and out, organize your materials well ahead of time, and practice — run through the entire presentation several times, with any notes, props, or audio/visual aids you intend to use. Experts suggest practicing on camera so you can review your performance and make adjustments as needed.

Know your audience. Speak as if you are having a conversation with peers on their level rather than lecturing or talking “at” them. Relate to the group as a whole and as individuals. Use concrete examples and analogies that the audience will relate to and understand. Respond to their reactions in real time (“I see some of you nodding out there” or “It looks like some of you might disagree”). Make direct eye contact with people rather than just looking at your notes or glancing over the crowd.

Share a story. Stories take abstract concepts like “safety” and turn them into concrete examples. Stories encourage empathy by turning statistics into real people. Incorporating the data into a relatable tale will grab their attention and make a more lasting impression than presenting a spreadsheet or reading a list of dos and don'ts.

Make it personal. Incorporate your personality into your presentation. Revealing details about yourself that others in the room may not know builds trust and respect, and it encourages others to share details about themselves. Mention individuals in the room by name and talk directly to them or about them (but keep it positive – don’t embarrass or take anyone to task in front of others). Using people the audience knows in your examples makes them more invested in the outcome of a situation, even a hypothetical one.

Make it interactive. Including photos or objects relating to your topic helps engage the senses by giving people something to look at and touch. Plus, a printed copy of PowerPoint slides, a handy infographic, or a list of resources can extend the reach of your words beyond the space and time of your presentation by giving people something tangible. Get listeners to participate by asking questions and have them answer with a show of hands, or try using a digital polling tool that lets people respond via smartphone or laptop and shows results in real time. Ask audience members to split into groups and work together on a task.

Make them laugh. A joke can disarm both you and the audience, and people will listen more closely in anticipation for the next laugh. Use lighthearted humor, being careful not to offend or make fun of anyone (though self-deprecating jokes often work well).

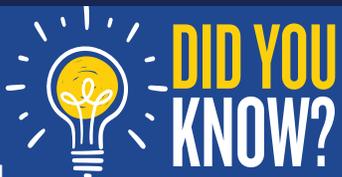
Be interesting by being interested. An audience can tell when a presenter is just “phoning it in.” Taking a genuine interest in your subject will make your message more convincing. Bring your energy.

Take out the guess work. Offer information in a clear, concise format. Define unfamiliar terms, round off big numbers, and interpret numerical data. When presenting statistics, explain what they mean. Don’t leave it to your audience to “get it” — do the work for them by explicitly showing how your examples and analogies relate to their unique workplace situations.

For more on how to use storytelling to inspire safe behaviors, check out these articles in Safety + Health:

[Tell them a story](#) by Kevin Druley, August 23, 2020

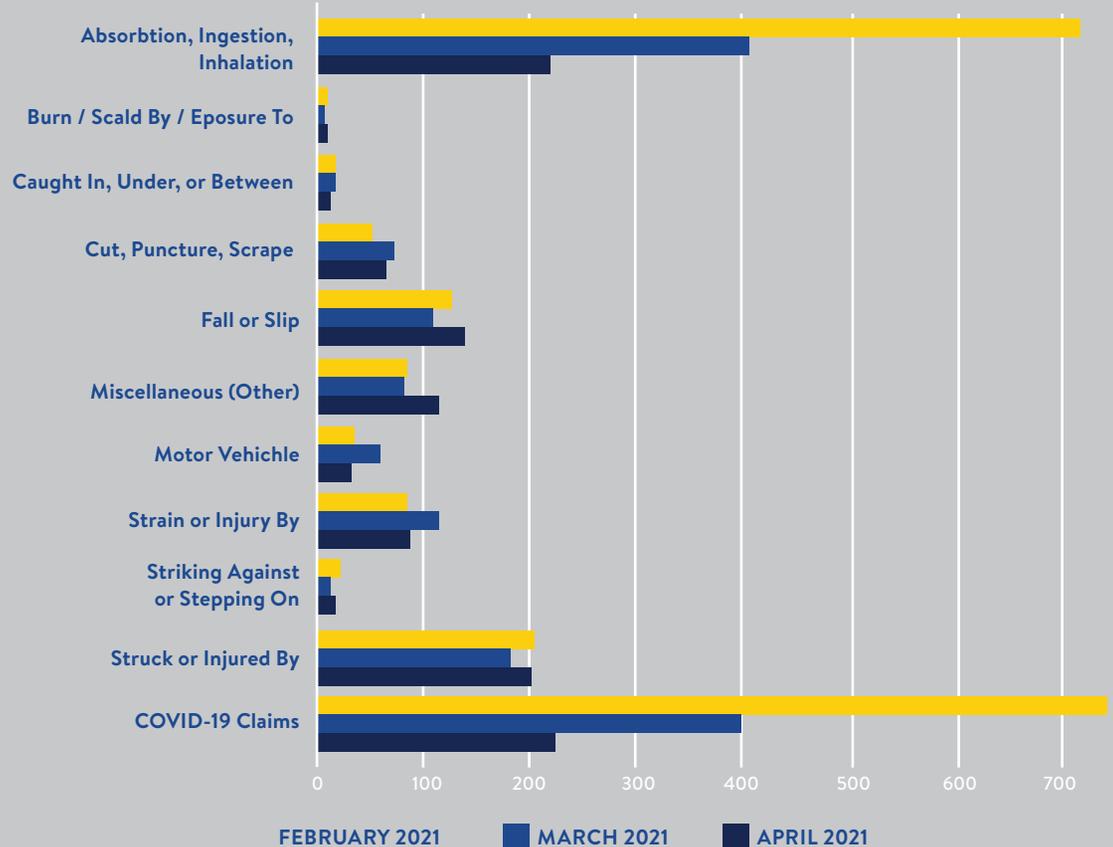
[All About You: Let me tell you a story: How good storytelling can move people to action](#) by Richard Hawk, February 4, 2019



According to the 2018 Liberty Mutual Workplace Safety Index, U.S. businesses lose more than \$1 billion per week due to work-related injuries.

OUTLOOK SNAPSHOT – WORKERS’ COMP Three Months of State of Florida Employee Claims

STATE OF FLORIDA WORKERS’ COMPENSATION CLAIMS BY CAUSE



- The category “ABSORPTION/INGESTION/INHALATION” has the highest claim numbers overall, with 740 claims in February alone. Most claims in this category can be attributed to COVID-19; as infection rates drop nationwide, a drop in claims can also be expected.
- “STRUCK OR INJURED BY” is the second most common, with claim numbers staying fairly consistent over the three-month period. The subset “FELLOW WORKER/PATIENT” makes up the majority of injuries in this category.
- Third on the list is “FALL/SLIP”, with just over 19% of total claims (disregarding COVID-19 claims), which aligns with OSHA’s statistics stating more than 17% of all disabling occupational injuries nationwide result from falls.

* COVID-19 claims are spread across categories including “inhalation,” “natural disasters,” and “other,” and are included in the claim counts for “ABSORPTION/INGESTION/INHALATION” and “MISC OTHER.”

PREVENTING FALLS

Utilizing protective equipment and eliminating workplace hazards to prevent fall-related injuries

Every year, falls in the workplace are responsible for hundreds of thousands of injuries, and the numbers are increasing. In 2019, falls were the second leading cause of both fatal and non-fatal workplace injuries.

Construction has had more workplace deaths per year — seven times more — than any other industry, and over 36% of those deaths can be attributed to falls, making it number one of the “Fatal Four”, OSHA’s list of the deadliest types of construction accidents (followed by [struck-by injuries](#), [electrocutions](#), and [caught-in-between injuries](#)).

The risk of falls isn’t limited to those working at heights — the National Safety Council reports that same-level falls (typically slips or trips) make up more than 27% of disabling workplace injuries, second only to overexertion. Workers in healthcare and the service industry have the highest number of nonfatal fall injuries.

Injuries sustained from falls are also expensive — though they account for only 16% of all workers’ compensation claims, they make up 26% of all costs related to these injuries, estimated at \$70 billion annually nationwide (per the Bureau of Labor Statistics Survey of Occupational Injuries and Illnesses). Injuries from same-level falls result in more lost work days than any other occupational injury.

While no workplace is immune from the risk of falls, fall injuries can almost always be prevented when care is taken to work safely, use the right equipment, and eliminate hazards.

FALLS FROM HEIGHTS

Though construction workers are most at risk, any workplace with multilevel open spaces presents a danger of falls, and employers are responsible for providing adequate fall protection. In determining whether fall protection

is needed, OSHA suggests using the “six-foot rule” — any workspace where workers are at a height of six feet or greater. This includes ramps, raised walkways, scaffolding, on roofs, or at the edge of excavations.

Planning ahead by providing the proper equipment and training workers to use it correctly every time is essential to preventing falls from heights. The type of fall protection that should be used depends upon the workspace and the type of work being done. Fall protection can be active, such as fall restraints, or passive, such as guardrails and safety nets.

Guardrail systems are placed on upper level workspaces to prevent falls to lower levels. OSHA has a specific set of standards for guardrails, such as: top rails between 39-45 inches above the working level, with screens or midrails between the top rail and the working level, and no openings more than 19 inches wide.

Safety nets work as backup to catch workers should the other fall protection methods fail. Like guardrails, safety nets must be installed within specific standards: as close as possible under the work surface, never more than 30 feet below, and with sufficient clearance underneath.

Fall arrest systems work by catching workers who fall. This system consists of an anchor, connectors, and a body harness, and may also include a lanyard, deceleration device, or a lifeline. A fall arrest system should only be used when the work cannot be completed without putting the worker at risk of falling. *Note: Body belts are no longer considered safe as fall arrest devices and are prohibited under OSHA guidelines.*

A fall restraint system is similar to a fall arrest system, but the worker is tethered in a way that will not allow

a fall of any distance. Because the worker is secured to one spot, fall restraint systems are safer than fall arrest systems and should be considered first when choosing personal fall protection equipment.

Be aware of the indirect fall hazards that could put a worker at risk, even when these safety systems are in place — a slippery surface or a gust of wind that can cause a person to lose their balance, for example — and account for these as well.



NIOSH Ladder Safety App Download for Free

To prevent extension and step ladder-related fall injuries and deaths, download and use NIOSH's award-winning Ladder Safety app.



LADDER FALLS

Ladders are commonly used by many types of workers, but not all are trained to use them safely and correctly. Each year in the U.S., more than 500,000 injuries and more than 300 deaths are caused by falls from ladders, with resulting financial losses of \$24 billion.

The number one cause of ladder falls (about 40%) is setting the ladder at the wrong angle. Extension ladders should be positioned as close to 75° as possible. Using a ladder that is not suited for the job is another common error — the chart on this page can help determine the right one to choose. Even the right ladder can be a hazard when used improperly or carelessly — overreaching, slipping, mis-stepping, and carrying too many objects also frequently result in falls from ladders.

More ladder safety tips:

- Check the ladder for damage before use.
- Always set up the ladder on flat, level ground.
- Be sure that stepladders are locked open when in use to prevent collapse.
- For extension ladders: Always keep two hands and one foot, or one hand and two feet on the ladder at all times.
- Wear slip-resistant shoes.
- Never stand on the top of a step ladder or above the third rung from the top of an extension ladder.

Get the app from:



HOW TO CHOOSE THE RIGHT TOOL FOR THE JOB

Determining which type of stool or ladder to use means familiarizing yourself with different options and their uses:



STEP STOOL: The smallest of the climbing tools, with 1-3 steps. Self-standing (does not need to be leaned against any type of support to be used). Many can be folded flat. Mostly used indoors to reach items on tall cabinets and shelves.



STEP LADDER: Larger, heavier, more sturdy, and better for more demanding tasks than step stools. Good for reaching higher areas anywhere in a room for a short period of time (e.g., changing a lightbulb, cleaning a tall piece of furniture, etc.). Self-standing and typically foldable. Can be used indoors or outdoors. Can have rungs on one side or both sides.



PLATFORM LADDER: Similar to a step ladder, but with a platform and a guard rail at the top. Better for extended periods of time and jobs that require two hands, as it provides a comfortable work area on which to stand, or even turn around. Good for tasks like painting, wiring, construction, etc.



EXTENSION OR "STRAIGHT" LADDER: Consists of two parts — the "base," which must be planted firmly on the ground, and the "fly," which can extend to make the ladder's reach taller. They are without support and must be leaned against something to be used. Used primarily outdoors for reaching second story windows, roofs, or trees. Be sure the ladder is tall enough to extend at least 3 feet above the point of support and to be set at the proper angle (one quarter of the working length of the ladder from the vertical surface).



MULTI-PURPOSE LADDER: A combination ladder that can be folded into different positions depending on the task. Can be folded into a step ladder, extended into a straight ladder, or even used to make scaffolding for planks or platforms.

SAME-LEVEL FALLS

These occur when workers fall and hit an object or the floor on the same level in which they are working, rather than falling from an upper level to a lower level, the most common being slips and trips. Though not as deadly, same-level falls happen much more frequently than falls from heights, as every person in every workplace is at risk. Unfortunately, injuries from same-level falls have been on an upward trend since 2016, so there is a great deal of room for improvement here.

Slips are caused by a loss of traction due to a slippery surface, slippery shoes, or a combination of the two. A recently mopped floor, a spilled beverage, or even water tracked in on a rainy day can all pose slip hazards. Shoes with high heels or smooth leather soles provide very little traction and can cause a person to slip, even on a clean, dry floor.



The most effective slip hazard control measures address both floors and footwear:

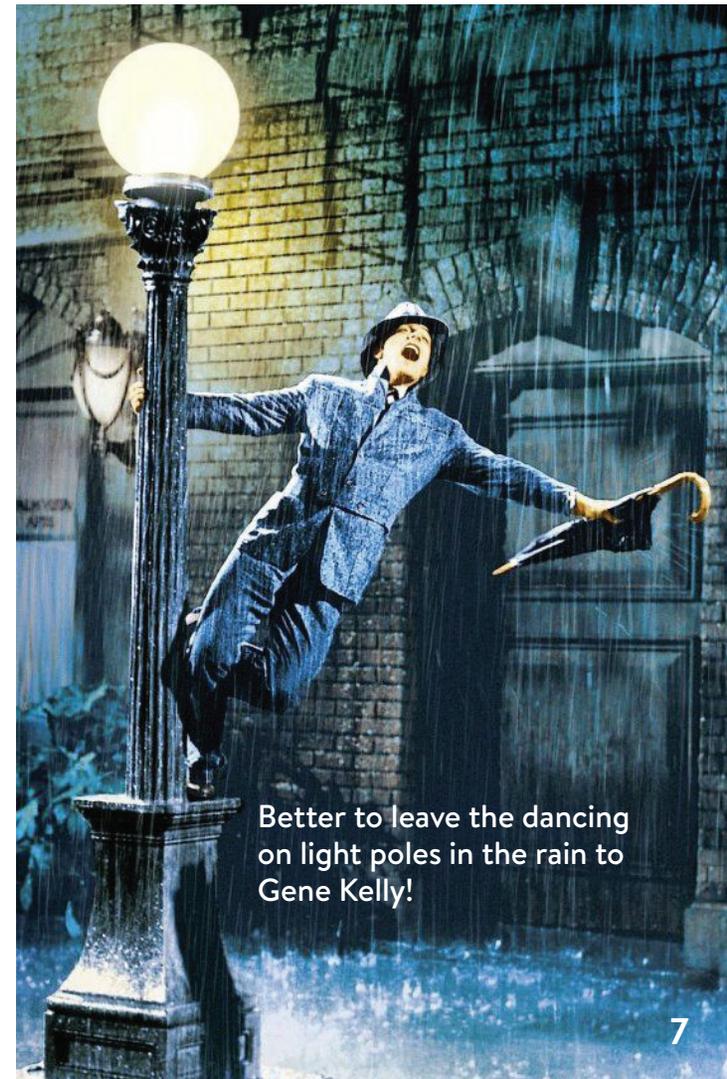
- Provide slip-resistant walking and working surfaces — add non-skid strips, floor coatings, or slip-resistant mats to problem areas.
- Keep floors clean and dry — stop leaks, sweep up messes, and clean up spills as soon as possible. Place caution signs in areas with wet, oily, or icy floors.
- Make sure employees wear the right type of footwear for their workplace and job duties. Slip-resistant soles can help offset the risks of a slippery floor. Those whose workplaces have low-traction surfaces (such as hospitals or outdoors) should choose shoes with soft rubber soles. Work boots with cleated soft soles and small heels have a very high traction rating, which is why they are the first choice of workers in construction and agriculture.

A **trip** occurs when a worker's foot comes into contact with an object or an uneven surface, causing their upper body to be thrown forward. A rise in elevation of even 3/8" can cause a person to trip. Common causes of trip injuries include:

- Building design and condition— ramps, curbs, and steps can be difficult to see if not properly marked with floor markers or signs. Cracked pavement or tiles should be cordoned off until repairs can be made.
- Poor housekeeping -- walkways obstructed by boxes or other items, file cabinets left open, tools left on the floor, etc. Injuries that result from hazards such as these are 100% preventable if every worker takes the time to keep workspaces clear by putting objects in their proper place, clearing floors of debris, and keeping cabinet doors closed when not in use.
- Poor cord management — cables and wires such as extension cords, phone lines, and even headphones can create trip hazards. Plug in equipment as close to the power source as possible, and avoid stringing cords across rooms or walkways. Use floor cord covers and ties if necessary. Restrict access to areas where temporary trailing cables are unavoidable.
- Rugs and mats — overly-worn mats with fraying or curled edges should be removed or replaced as soon as possible.
- Poor lighting — Inadequately lit areas can allow obstructions or surface changes to go unnoticed, while direct lighting can cause shadows that can make navigating distances difficult. Be sure all work areas are well-lit with diffuse lighting, which can cut down on glare and reduce shadows. Report burned out bulbs immediately so they can be replaced as soon as possible. Take off sunglasses when indoors, especially after being outside in bright sunlight.
- Obstructed vision — Never carry objects that are too large to see the path ahead of you, especially on stairs or uneven surfaces.

- Walking carelessly or recklessly — Running through halls or speeding around corners won't allow enough time to react if an unexpected obstacle is in the way. Take your time and walk carefully, scanning the path for hazards. Never walk while reading or looking at your cellphone.

Workplace culture can have a big impact on whether or not employees make a consistent effort to prevent fall hazards. Managers and supervisors can set a good example by following safety rules and encouraging others to follow suit. See [page 1](#) for more information about how to establish a culture of safety in the workplace.



Better to leave the dancing on light poles in the rain to Gene Kelly!



IMPROVING INDOOR AIR QUALITY TO LOWER THE RISK OF COVID-19 AND OTHER AIRBORNE PATHOGENS

The History of Indoor Ventilation for Better Health

- **1631:** King Charles decreed that all buildings in England must have ceilings at least 10 feet high and tall windows to allow ventilation.
- **1752:** British scientist Stephen Hales convinced the governors of Newgate Prison to install ventilation holes in cell walls and install a giant bellows to force fresh air inside. After proving successful in improving the health of inmates, other prisons, ships, troop barracks, and hospitals began trying to bring outside air indoors.
- **1859:** Florence Nightingale highlighted the importance of ventilation in healthcare in her book, *Notes on Nursing*: “Cleanliness and fresh air from open windows with unremitting attention to the patient are the only defense a true nurse either asks or needs.”
- **1880s:** Rooms were often designed to have high ceilings to allow for large windows which could be opened at the top for ventilation.
- **1919:** Hospitals enhanced ventilation during the flu pandemic by opening windows and often even placing patients’ beds outside.

The COVID-19 pandemic caused us to reevaluate the safety of the space we share with others, including the air we breathe. The Environmental Protection Agency (EPA) reported in November 2020 that respiratory aerosols infected with the virus pose a more serious risk than was first known. In May 2021 the Centers for Disease Control and Prevention (CDC) **revised their public guidance** to confirm that COVID-19 primarily spreads via airborne respiratory fluids. Both the EPA and the CDC now state that infected aerosols can remain suspended in the air for up to three hours and travel 20 feet or more. The concentration of these aerosols increases the longer an infected person remains in an indoor space — and the higher the concentration, the greater the risk of transmission. This new information will mean widening the scope of prevention efforts to include larger spaces and distances beyond the recommended six feet.

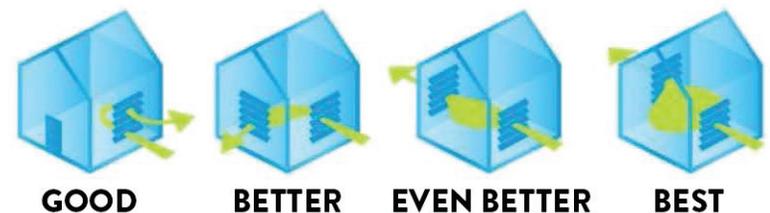
Beyond physical distancing (specifically, decreasing the number of people in one space), the keys to lowering the concentration of viruses in indoor spaces are **ventilation** and **filtration**. Airtight buildings designed to keep conditioned air indoors trade efficiency for poor air quality by keeping pathogens trapped inside. Some COVID-19

studies have suggested that ceiling fans and air conditioning systems in poorly ventilated spaces can actually **increase the risk** of spreading the virus by blowing infectious aerosols around the room. The greater the exchange of indoor and outdoor air, the lower the risk of airborne transmission of viruses such as COVID-19. Upgrading ventilation and filtration indoors to mitigate the risk of COVID-19 will also help prevent the spread of other airborne viruses, such as influenza, tuberculosis, measles, and chicken pox.

VENTILATION

Recent studies have shown that poorly ventilated indoor areas are among the highest risk venues for spreading airborne diseases. The enhanced cleaning and disinfecting techniques recommended to keep surfaces free of the COVID-19 virus often exacerbate the problem, as some cleaning products can cause potentially dangerous breathing issues when used in enclosed spaces, making proper ventilation especially critical.

The simplest way to improve ventilation is by opening doors (both internal and external) and windows — as many as possible, as wide as possible, for as long as possible. Open windows at opposite sides of the room / building to create a cross breeze. In multistory buildings, open a window in the highest level and one in the lowest level.



Sometimes the weather is too hot or too cold to want to keep windows open. Even small openings or short periods of time can reduce the risk of airborne transmission by more than 70%. Try opening a window just an inch or two, or opening them fully for 10-15 minutes at regular intervals several times a day.

Adding fans can help increase airflow and disperse airborne particles. Face a window fan outward to blow stale air outside. Add a second window fan in another window facing in to help pull fresh air inside. Avoid positioning fans so that they blow air from one person to another. Bathrooms and kitchens usually have exhaust fans that draw in and expel air, which is especially important in small rooms with no windows – run these as much as possible.

Ceiling fans and attic fans can also improve airflow when combined with open windows and doors. Turning ceiling fans to “winter mode” (typically counter-clockwise) helps draw stagnant room air up and dilute it with cleaner air near the ceiling.

FILTRATION

Masks, especially those with filters, give one level of air quality protection by containing many airborne pathogens, as well as filtering out pathogens that might be inhaled (see article regarding mask efficiency).

Most buildings and homes have a heating, ventilation, and air conditioning (HVAC) system that circulates indoor air and sends it through a filter. Many HVAC systems can be set to run the fan without heating or cooling, which can help with ventilation in mild weather. The system should be equipped with a high efficiency particulate air (HEPA) filter, which can capture air particles as small as 0.01 micron (for reference, the COVID-19 virus is approximately 0.125 micron). Be sure the filter is the right size for the system, and that it is installed properly.

Portable air cleaners and purifiers use HEPA filters to improve air quality in a single room. Place them in areas where the most people spend the most amount of time, and change the filters according to the manufacturer’s instructions.

*NOTE: The most **recent study** by the U.S. Department of Homeland Security determined that environmental conditions such as heat, sunlight, and humidity do not appear to significantly impact transmission of COVID-19 as previously suggested.*

NIOSH researchers test the efficacy of facemasks, neck gaiters, and faceshields

Washington — Faceshields are ineffective at blocking small (0 to 7 microns) airborne particles caused by coughing, results of a recent NIOSH study show.

To gauge the effectiveness of facemasks, neck gaiters and faceshields as a source control and in reducing the spread of COVID-19, researchers used a device that simulates coughs to propel small aerosol particles through the different face coverings, which were placed on a manikin head, lead study author William Lindsley, a biomedical research engineer at NIOSH, said in the March issue of the agency’s eNews newsletter.

“We tested how well face coverings stopped cough aerosols from being expelled into the air,” he added.

“We did not test these devices as personal protective equipment to prevent aerosols in the environment from being inhaled by the wearer.”

Results show that a three-ply cotton facemask blocked 51% of aerosol particles. A polyester neck gaiter blocked 47% of aerosol particles when used as a single layer and 60% when folded into a double layer. Faceshields blocked only 2% of the particles.

Lindsley noted the agency is testing other face coverings.

He added: “Our results indicate that any face covering is better than no covering, as also specified by CDC guidelines.”

The study was published online Jan. 7 in the journal *Aerosol Science and Technology*.

Safety+Health
an nsc publication

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Council publication





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An email blast will be sent from the State Loss Prevention Program prior to each of these webinars with registration information.

UPCOMING TRAINING WEBINARS:

7/7

PROMOTING EMPLOYEE SAFETY AWARENESS

7/14

ACCIDENT INVESTIGATIONS

8/11

JOB SAFETY ANALYSIS

9/8

SAFETY COORDINATOR ORIENTATION

9/22

HOW TO GET THE MOST VALUE OUT OF YOUR SAFETY COMMITTEE

All webinars will be offered on each date through GoToMeeting at both 10:00 am and 2:00 pm (Eastern Time).

For questions, contact Juana Powell in the Division of Risk Management / Loss Prevention:
Juana.Powell@myfloridacfo.com

REFERENCES AND RESOURCES

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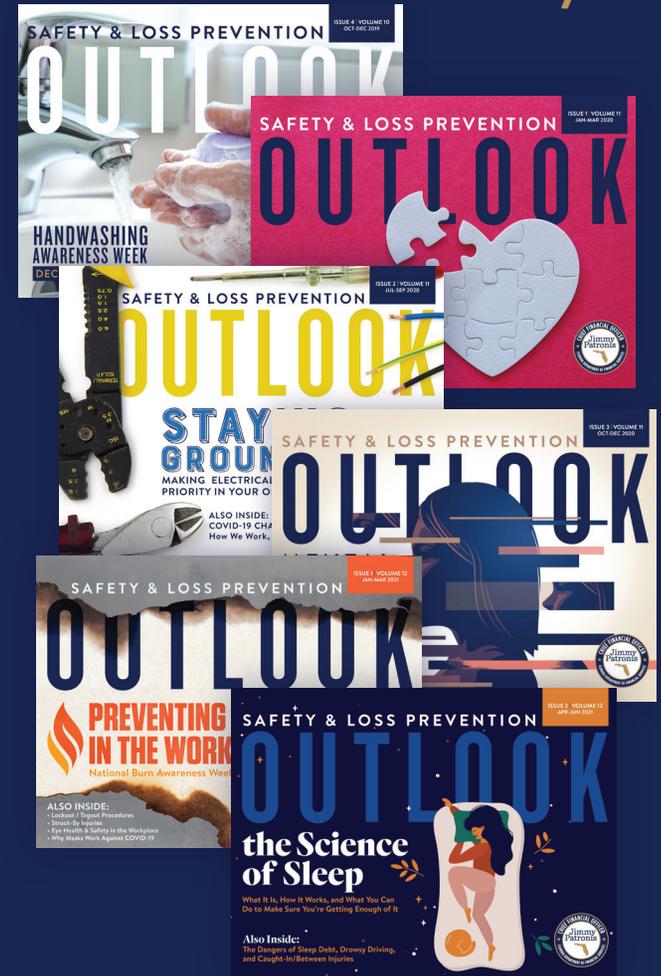
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