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SAFETY & LOSS PREVENTION OUTLOOK

LIVING WITH LITHIUM

HOW MODERN PORTABLE DEVICES BRING US BETTER POWER — AND BIGGER RISKS

ALSO INSIDE:

CHIEF FINANCIAL OFFICER Jimmy Patronis FLORIDA DEPARTMENT OF FINANCIAL SERVICES

A Message from the Editor

OUT WITH THE OLD, IN WITH THE NEW … ELECTRONIC DEVICES

Believe it or not, the holidays are upon us, and for many of us, that means gift-giving. Every retailer will be vying for our business with advertisements, sales, and promises of the latest technological gadgets. It can be tempting to go for the cheapest options in order to save money, but remember the old saying, "You get what you pay for." Sometimes spending a little more on quality also buys you safety and peace of mind.

Many online sellers will offer cheap alternatives to their more expensive counterparts — refurbished phones, knockoff iPads, chargers and USB cords, etc. — but low prices often mean low quality, and that can mean more risks, especially when it comes to wireless electronic devices. If it doesn't need to be plugged in or can be recharged, chances are it is powered by a lithium battery. The biggest risk with these types of batteries is that of fire, and unfortunately, cheaply-made batteries, chargers, and devices increase that risk. When shopping this season, make sure the tech you purchase has been safety-tested and comes from a reliable source.

Also, the old batteries and gadgets you replace with new ones? Please handle them safely and responsibly — NEVER throw them into your household trash or recycling.

Stay safe and enjoy everything the holiday season has to offer. See you in 2025!

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Lori G. Taylor

GIFT GIVING: Lithium-Ion Battery Safety

Purchase devices that are listed by a qualified testing laboratory.

Always follow the manufacturer instructions.

Only use batteries and charging cords designed for the device.

Charge in a flat, dry area away from children, sunlight, and exits.

Remove charger once device is fully charged.

Keep batteries at room temperature and store them away from flammable objects.

www.nfpa.org/lithiumionsafety

IN THIS ISSUE

AVOIDING HAZARDS ASSOCIATED WITH LITHIUM BATTERIES AND THEIR DEVICES

Lithium batteries are everywhere — and so are the risks

Thanks to their lightweight design, higher load capacity, and long-lasting shelf life, lithium batteries have replaced their alkaline counterparts in nearly every modern electric device that uses a battery. For the most part, lithium batteries are safe, but only when used correctly and handled responsibly. Lithium battery cells that are damaged, overcharged, exposed to extreme temperatures or direct sunlight, or are otherwise defective can be dangerous.

THERMAL RUNAWAY: Faulty lithium batteries can spontaneously release their stored energy by generating heat at a rate several times faster than it can dissipate it — a process known as **thermal runaway.** A battery in this state can reach temperatures above 570°F, at which point it will release gas and electrolytes — Thermal runaway can occur even when the battery is not in use. It can also cause extinguished battery fires to reignite.

RISK OF EXPLOSION: Lithium batteries contain extremely flammable gases and electrolytes that are released during thermal runaway and can ignite and/or explode.

RELEASE OF TOXIC SUBSTANCES: Damaged batteries can leak corrosive liquids that cause chemical burns to the skin and toxic gases that can lead to damage to internal organs if inhaled (including hydrogen, fluoride, chloride, cyanide, carbon monoxide, and methane, among others).

RISK OF ELECTRIC SHOCK: Lithium batteries have high-voltage components that can be exposed when the batteries are damaged, posing the risk of electric shock.

WASTE FIRES: Lithium batteries that are thrown away with household trash & recycling and not disposed of properly are at risk of being damaged or exposed to conditions that cause thermal runaway to occur, igniting all surrounding flammable materials.

TYPES OF LITHIUM BATTERIES

Lithium (Li)	Lithium Ion (Li-ion)
Non-rechargeable, intended for single use	Rechargeable, multiple use cycles
Ideal for low-power devices that do not need recharging	Best for high-power devices that need recharging
10-12 year shelf life	2-3 year shelf life
Heavy, bulky	Light, compact
Cost less per unit, but need to be replaced when out of power	Higher upfront cost, but can be recharged
Safer in some applications, less prone to thermal runaway	More prone to thermal runaway due to the recharging process
Commonly found in: cameras, watches, car keys & remotes, smoke detectors, hearing aids, AEDs, disposable vape pens & e-cigarettes	Commonly found in: cellphones, laptops, wireless headphones, power tools, appliances, electric vehicles, portable power banks

NOTE: For the purpose of this article, the term “lithium battery” may be used to refer to both lithium and lithium ion batteries, as both types pose similar risks. The term “lithium ion” or “Li-ion” will be used when referring specifically to rechargeable batteries.

It only takes one lithium battery incident to cause a catastrophic chain reaction for your organization:

COMBUSTION — A lithium battery overheats or is damaged or faulty and catches fire

FIRE SPREADS QUICKLY — Flammable fumes & materials fuel the flames, causing extensive damage to the building and equipment, and putting lives at risk

TOXIC EMISSIONS — Damaged batteries release hazardous substances & toxic fumes, posing a serious health risk to employees & first responders

DOWNTIME — Cleanup & fire investigations mean disruption of normal operations, resulting in productivity and revenue losses

FINANCIAL LOSS — Lengthy insurance claims processes, potential for higher premiums, more financial burden for the organization

The NFPA estimates an average of 5,000 lithium battery fires per year in the U.S., with estimated revenue losses around $15.9 billion.

Lithium batteries will sometimes let you know when they are ready to go.

WARNING SIGNS OF LITHIUM BATTERY FAILURE	
HEAT	All batteries generate some heat, but if your battery or device feels extremely hot to the touch, it may be defective and at risk of starting a fire.
SWELLING	If your battery or device appears swollen or misshapen, has a lump or bulge, or is leaking fluid, stop using it immediately.
NOISE	Lithium batteries have been known to make hissing or cracking sounds when they are failing.
ODOR	Any strong or unusual odors can signal imminent battery failure.
SMOKE	If your device is smoking, a fire has already started.

If any of these signs appear, MOVE THE DEVICE AWAY FROM FLAMMABLE MATERIALS, OUTDOORS, AND INTO A FIREPROOF CONTAINER IF POSSIBLE.

NEVER attempt to extinguish the fire yourself.

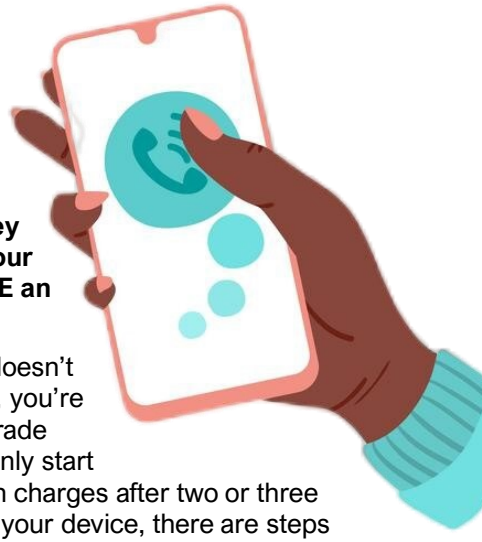
The National Fire Prevention Association (NFPA) warns that Li-ion battery fires can become serious "within a matter of moments, putting people in true danger" and reminds us that "personal items and homes can be replaced; people can't."

USING & HANDLING LITHIUM BATTERIES SAFELY

- ✓ Make sure workers understand the risks and know how to use lithium-powered devices safely
- ✓ Purchase and use only high-quality batteries, devices, and chargers from a reputable source (look for the mark of certification — CSA, ETL, or UL)
- ✓ Refer to the battery manufacturers' safe work practices and Material Safety Data Sheet on how to use their products safely
- ✓ Regularly check the condition of batteries in use and remove damaged batteries & devices from service
- ✓ Use only replacement batteries and chargers recommended by the manufacturer (aftermarket chargers have been known to overheat)
- ✓ Remove devices from their chargers once they reach 100%
- ✓ Store batteries and devices within manufacturer-recommended temperatures
- ✓ Immediately stop charging & disconnect a battery if it changes shape, swells up, becomes extremely hot, or starts smoking
- ✓ Store and dispose of used Li-on batteries and devices properly

- × Leave fully-charged devices connected to chargers
- × Leave batteries to charge overnight or unattended
- × Charge batteries on or near heat sources or flammable objects (e.g. stacks of books or papers, beds, couches, etc.)
- × Expose batteries or devices to heat or direct sunlight
- × Leave batteries or devices inside vehicles
- × Use batteries that show signs of damage or are not functioning properly
- × Store batteries where the terminals can come in contact with other batteries or metal objects, such as coins or keys
- × Try to remove batteries that are incorporated into their devices
- × Throw used lithium batteries or their devices in the household trash or recycling

HOW TO SQUEEZE MORE OUT OF YOUR AGING PHONE BATTERY



Having a means of communication is crucial in a crisis, but devices only work if they have power. Know how to keep your phone powered up longer BEFORE an emergency occurs.

If you find your cellphone or tablet doesn't hold a charge as long as it once did, you're not alone. Lithium-ion batteries degrade over time and use, and they commonly start experiencing shorter spans between charges after two or three years. If you aren't ready to replace your device, there are steps you can take to keep a charge longer.

CHECK YOUR ENERGY CONSUMPTION

The ways we use our devices can have a huge impact on the amount of energy being spent. Setting the phone to Airplane Mode, avoiding processor-intensive games and other apps, turning down the screen brightness, and even keeping the phone cool can help.

CHECK YOUR SETTINGS

Check your manufacturer's instructions for your specific type of phone. Both Android & iOS (Apple) phones have a power-saving mode, which will change certain settings to pause background activities and automatic downloads, as well as reducing the processor speed. You can set it to switch to power-saving mode automatically when your battery reaches a certain level.

Some phones even have an "extreme" power-saving mode, which limits activities to the bare bones. **This is especially helpful during an emergency, when the power has gone out, and you have no idea when you will have access to the means to charge your phone.**

CHECK YOUR BATTERY HEALTH

The battery settings on most phones include diagnostic tools, reports of which apps drain the battery the fastest, and other information regarding the health of your battery.

Our world runs on devices powered by lithium batteries. How many do you use every day?

TECH DEVICES:
- Cell phones & wireless chargers
- Laptops & wireless printers
- Tablets & e-readers
- Watches & fitness trackers
- Digital cameras
- Calculators & remotes
- Smart TVs
- Portable speakers
- Wireless headphones & microphones
- Smart speakers (Amazon Echo, Google Home, etc.)
- USB power banks
- Emergency power backup batteries
- Battery/solar-powered generators
- Surveillance & alarm systems
- Wireless doorbells
- Garage door openers

YARD & GARDEN:
- Electric lawnmowers
- Cordless yard tools (leaf blowers, weed & hedge trimmers, etc.)
- Solar-powered lights
- Timed sprinkler & lighting systems
- Wireless holiday lights & decorations
- Cordless tools (drills, saws, etc.)
- Headlamps & work lights

HOUSEHOLD GADGETS:
- Wireless thermostats
- Cordless/robotic vacuums
- Flashlights & reading lights
- Wireless lamps & string lights
- Cordless fans & heaters
- Cordless tools (drills, stud finders, etc.)
- Smoke/heat/CO detectors
- Cordless blenders, mixers, & food processors
- Cordless coffee grinders
- Meat & candy thermometers
- Digital timers & clocks

VEHICLES & RECREATION:
- Drones & RC vehicles
- Hoverboards & powered skateboards
- Electric scooters & bikes
- Electric cars & trucks (both plug-in & hybrid)
- Golf carts & trolleys
- Marine vehicles (boats, jet skis, etc.)
- Wireless key fobs
- Electric air pumps

HEALTH & MEDICAL DEVICES:
- Electric toothbrushes
- Electric shavers
- Electronic weight scales
- Electric wheelchairs & mobility devices
- Oxygen tanks
- Digital thermometers
- Blood pressure cuffs
- Hearing aids
- Pacemakers & drug pumps
- Neurostimulators
- Glucose monitors

TOYS, DÉCOR, & MORE:
- Handheld video games
- Wireless controllers
- Smart glasses & headsets
- Toys & games with lights & sounds
- Electric candles
- Wireless string lights
- Light-up holiday décor
- Light-up costumes & jewelry
- Greeting cards with sound
- Vapes & e-cigarettes
- Electric lighters
- Rechargeable batteries

AT HOME

IN THE OFFICE:
- Cell phones & wireless chargers
- Wireless headsets
- Laptops & tablets
- Battery backups for computers
- Retired tech devices (old laptops & phones, etc.), often stored together
- Gadgets brought from home
- AEDs

IN MANUFACTURING / WAREHOUSES:
- Handheld scanners
- Forklifts & electric carts
- Floor sweepers
- Robotic equipment
- Cordless tools (drills, saws, nail guns, etc.)
- Headlamps & work lights

AT THE WORKPLACE

LITHIUM BATTERY FIRES POSE SPECIAL RISKS FOR RESPONDERS

EASY TO IGNITE, DIFFICULT TO EXTINGUISH

The primary risk of lithium-ion batteries is that of thermal runaway, a phenomenon in which the cell enters an uncontrollable self-heating state. Once the process of thermal runaway starts, it cannot be stopped. Once a lithium-ion battery ignites, it can take less than a minute for the cell to discharge toxic and highly combustible vapors, compounding the problem.

Because lithium battery fires generate their own oxygen, they can prove very difficult to extinguish, and can even reignite after the fire was supposedly put out. This creates a special challenge to firefighters and other first responders, who now must consider the possibility of lithium-ion battery explosions when responding to a fire — particularly at a facility where large numbers of batteries are used or stored, or when an electric vehicle is involved in a serious accident.

The presence of lithium-ion batteries isn't always obvious — when people toss their old electronic devices into their household trash, it becomes a hazard for anyone handling it. Old batteries are unknowingly thrown into trash compactors in garbage trucks and recycling facilities, which can damage them and start a fire.

MITIGATING THE RISKS WITH PROACTIVE PREPARATION

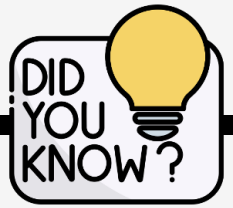
Have an Emergency Response Plan specific to lithium battery fires, detailing potential hazards, fire protection and safety systems, response recommendations (including the firefighting philosophy, e.g. whether to suppress the fire or let it burn out safely), Safety Data Sheets, and required PPE. Include lithium-ion battery fire response when training all responders.

Personal Protective Equipment must be available at the ready, and workers should be trained in how to use it properly. Drench showers should be available for post-contamination.

RESPONDING TO A LITHIUM-ION BATTERY FIRE

- Responders should arrive with full PPE, full-face self-contained breathing apparatus (SCBA), and chemical-resistant boots. Protective clothing for arc flash and shock hazards should be worn by anyone operating within the arc-flash boundary. Jewelry and other metallic items should be removed.
- First responders will need to assess the scene and determine what type of action is needed, which will depend on the type and condition of the battery, its location, and any risks to life or property. Specific hazards must be communicated to all other responders.
- Evacuate the area — 150 feet in all directions is the recommended standard.
- Douse the fire with water at a 45° angle from 40 feet away.
- Look for flaring and off-gassing (white smoke even after being extinguished). After extinguishing the fire, check battery temperature with a temp gun; look for indications of thermal runaway, which indicate the potential for a secondary fire / reignition.
- Flammable and toxic gases continue to be released even after the fire is extinguished; PPE should not be removed until air quality is measured to be at a safe level.
- All batteries involved in a fire, whatever their perceived condition, should be treated as fully charged with respect to arc flash and electric shock hazards; limit contact to the battery (or the vehicle, in the case of a vehicle fire).

NOTE: Water is the most efficient medium for cooling battery cells but has its own hazards. Spraying water on a burning battery can spread toxic smoke and vapor and contaminated runoff similar to that of plastic fires. This is one reason responders might decide to allow a battery to burn in a controlled manner rather than extinguishing it. Water can be used to spray adjacent exposures to prevent the fire from spreading.



BIGGER BATTERY, BIGGER RISK: The severity and scope of the risks presented by lithium-ion batteries is directly tied to the size and level of charge of the battery.

LOWER QUALITY, HIGHER RISK: Many aftermarket chargers are unregulated and uncertified, and their poor quality makes them more prone to malfunction, overheating, and combustion.

DON'T FORGET!

HURRICANE SEASON ISN'T OVER UNTIL NOVEMBER 30.

The forecast for the 2024 hurricane season has been updated with fewer storms than originally predicted, but with 2-4 direct impacts to the U.S. still expected. It only takes one powerful storm to cause devastation. Don't let your guard down.

Hurricane Isabel
Sept. 15, 2003

SHOULD YOU STAY OR SHOULD YOU GO?

The path and intensity of hurricanes can be unpredictable, making preparation challenging. By the time landfall is a certainty, those in its path have little time to decide whether to ride it out or evacuate. Determining the best course of action for you will depend on many factors specific to the forecast in your area, as well as your unique circumstances. Use all the information you have available to you to make the best judgment call — no one knows your needs as well as you do. However, some emergencies require evacuation, so be ready before the need arises.

PLANNING TO STAY — PREPARE YOUR HOME INSIDE AND OUT

Secure the outside. If there is a risk of damage to windows or glass doors, cover them with plywood, or use storm shutters if you have them installed. Move outdoor furniture and other items such as trash cans, plants, yard décor, etc. inside or securely anchor them so they cannot fly around.

Have a "shelter in place" kit. Use a weatherproof plastic container with a locking lid, and keep it packed with supplies, including non-perishable foods, a can opener, scissors, disposable dishes & utensils (helpful when doing dishes would be difficult), long matches and/or a lighter (to light gas stoves, NOT candles), first aid and hygiene supplies, medications, face masks & heavy duty gloves to deal with dust and debris, duct & electrical tape, flashlights & lanterns, cordless fans, extra batteries & portable power banks, cooling towels, and a small toolbox. During the storm, take it with you to the room in which you will be sheltering.

Find a safe room to ride out the storm. It should be on the first floor, away from doors and windows. Stock it with comfort items such as pillows & blankets, water bottles, snacks, and your "shelter in place" kit.

Generate your own power. Some gas-powered generators are powerful enough to run all essential devices, including the a.c., but can only be used outdoors. Portable power stations are great for running medical devices (like CPAP machines) and some appliances and recharging portable devices like phones, lanterns, fans, etc. A solar charger or a DC-to-AC converter in your car can be used to charge small USB battery packs, which can then be taken inside to charge other devices.

Have water at the ready. No need to run out and buy bottled water — fill bottles and other plastic containers with water and pack them into your fridge and freezer — not only will you have a supply of potable water, filling the gaps with cold liquid and ice will keep everything cold longer. If you have a septic tank or a well, fill your tub with water in case you need it to flush the toilet.

Be ready to go. Keep your car tank half full at all times and a "go bag" at the ready.

PLANNING TO GO — HAVE AN EVACUATION PLAN IN PLACE BEFORE THE STORM HITS

Decide under what conditions you will evacuate. If you are in an evacuation zone or other flood-prone area, follow orders of local authorities. Make sure you allow time to leave without putting yourself in harm's way.

Plan your destination and how you will get there. Depending on the hurricane's path and intensity, this could be another town, another state, or a friend or relative's house that is better built or in a safer area. Plan routes for each location and scenario. If you don't have a vehicle, contact local officials to see what transportation options they may have available. If your family is traveling separately in multiple vehicles, plan a meeting place in advance in case of phone outages.

Have important documents ready to take with you in a sealed, easy-to-carry container. Include contact info of individuals and organizations you will need to contact (family members, insurance agents, etc.), medical information (prescriptions, health insurance ID cards, vaccination records), insurance information (policies, info on filing claims), financial information (bank statements, mortgage & loan documents, credit card account numbers), emergency funds (see below), and copies of legal documents (birth certificates, SS cards, wills, passports). Store important documents on portable hard drives or thumb drives.

Have a "go bag" with supplies for the whole family. This includes water bottles, snacks, medications, first aid and hygiene supplies, flashlights, portable power banks, emergency sleeping bags, small tools, etc. Keep a credit card with enough credit for several days' worth of expenses, and a stash of cash — many businesses can't take cards if the power is out.

Pay your bills before evacuating, if possible, even if they are not yet due. Pay online or via phone to avoid possible mail delays.

Make a plan for your pets. Have a list of potential refuges where you can leave them during a disaster (pet shelters, veterinary clinics, friends or relatives' homes). If they will travel with you, whether your destination is a shelter, a hotel, or a friends' home, make sure they can accommodate your pets.

WHEN THE POWER GOES OUT

- Set refrigerator & freezer to the lowest setting and keep them closed as much as possible.
- Eat perishable foods first, starting with the fridge and pantry. Foods in a well-insulated, closed freezer should remain safe to eat for two days.
- Keep a thermometer in your fridge and throw away any food that has been exposed to temperatures of 40 degrees or higher for longer than two hours or has an unusual odor, color, or texture. DO NOT eat anything of questionable quality.
- Use a generator safely — gas-powered generators should be used ONLY outdoors and away from windows.
- Never use a gas stove or oven to heat the building.
- Disconnect appliances & electronics to avoid damage from electrical surges.
- Portable generators (basically giant batteries that can be used to power and charge devices) are a great investment, especially if you need to keep medications cold or to power medical devices such as CPAP machines, oxygen tanks, etc.
- Reducing physical activity, staying hydrated, and using cooling towels and cordless fans can help keep you cool when the a.c. isn't running.
- A hand-crank weather radio can keep you connected when your other devices aren't.

AFTER THE STORM — WATCH OUT FOR SCAMS

Insurance sales fraud

Most insurance companies in Florida cease binding new or additional homeowners or renters' insurance coverage during a tropical storm watch or warning until 72 hours after it has been lifted. That means, anyone contacting you claiming to represent an insurance company and offering to sell or increase insurance policies right before a storm is probably attempting to defraud you.

- Be leery of unsolicited calls from anyone requesting personal information or asking you to verify details of your insurance coverage. Do not trust the caller ID.
- Make insurance purchases and changes by contacting a licensed insurance agent or your insurance company directly.

Unlicensed contractors

After a disaster hits, fraudulent contractors attempt to represent themselves as licensed, bonded, and insured contractors, when in reality they are not. Unlicensed work is illegal and can put you at risk of receiving subpar repairs, which could cause more issues in the future or even injuries.

- Verify the contractor's license with the state of Florida Department of Business and Professional Regulation by visiting www.MyFloridaLicense.com, or calling 850-487-1395.
- Verify that contractors have proper liability and workers' compensation insurance coverage by contacting the DFS Division of Workers' Compensation at www.MyFloridaCFO.com/Division/WC or calling 850-413-1609.

If you suspect insurance fraud or other scams, contact the Department of Financial Services' **Insurance Fraud Hotline** at **1-800-378-0045** or visit **www.FraudFreeFlorida.com**.

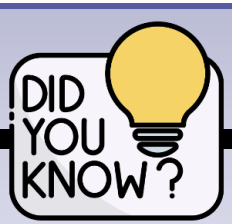
HELPFUL RESOURCES

FloridaDisaster.org — Florida Division of Emergency Management's State Recovery Team website contains resources for Floridians, including active volunteer organizations providing assistance to affected residents and businesses. Click here for emergency management websites for each Florida county.

PrepareFL.com — DFS's Division of Consumer Services website can help you financially prepare for and recover from a disaster with information to help you organize your documents, make sure your property is adequately covered, and know how to file a claim.

DFS Consumer Services — Here you will find a wealth of information to help guide you through the insurance claims process, as well as answers to common questions before, during, or after a claim.

My Safe FL Home
Stronger Homes. Safer Florida.



Gastrointestinal illnesses and infected wounds are extremely common in the aftermath of hurricanes and other disasters, at a time when medical care may not be easy to access.

At least five deaths have be attributed to infections from otherwise-minor wounds or abrasions that occurred during Hurricane Katrina in 2005.

DO YOU KNOW THE DIFFERENCE BETWEEN A WATCH AND A WARNING?

ISSUED WHEN CONDITIONS ARE	POSSIBLE	EXPECTED
SEVERE THUNDERSTORM	Atmospheric **conditions are favorable** for the development of a severe thunderstorm (capable of hail exceeding 1" in diameter and/or wind gusts of 58+ mph).	A severe thunderstorm (hail exceeding 1" in diameter and/or wind gusts of 58+ mph) is **imminent or already occurring** in the area. Seek shelter immediately.
TROPICAL STORM	Tropical storm conditions (sustained winds of 39-73 mph) are **possible within 48 hours** in the specified area.	Tropical storm conditions (sustained winds of 39-73 mph) are **expected within 36 hours** in the specified area.
HURRICANE	Hurricane conditions (sustained winds of 74+ mph) are **possible** within the specified area — issued 48 hours before tropical storm-force winds are expected.	Hurricane conditions (sustained winds of 74+ mph) are **expected within 48 hours** in the specified area.
TORNADO	Atmospheric **conditions are favorable** for tornado development in and near the watch area. Stay alert and be ready to take shelter if a warning is issued.	A tornado has been **confirmed** by a human spotter or indicated by doppler weather radar. Take shelter immediately.
FLOOD / FLASH FLOOD	**Conditions are favorable** for flooding in the area. Be ready to act quickly if a warning is issued, especially if you live in a flood-prone area.	Flooding is **imminent or occurring** in the area. A flash flood can develop within minutes. Those in flood-prone areas should move to higher ground immediately.

VS

Living in Florida means knowing how to deal with storms, but there are some things you may not know about hurricanes and other extreme weather events.

What is the difference between a hurricane and a typhoon?

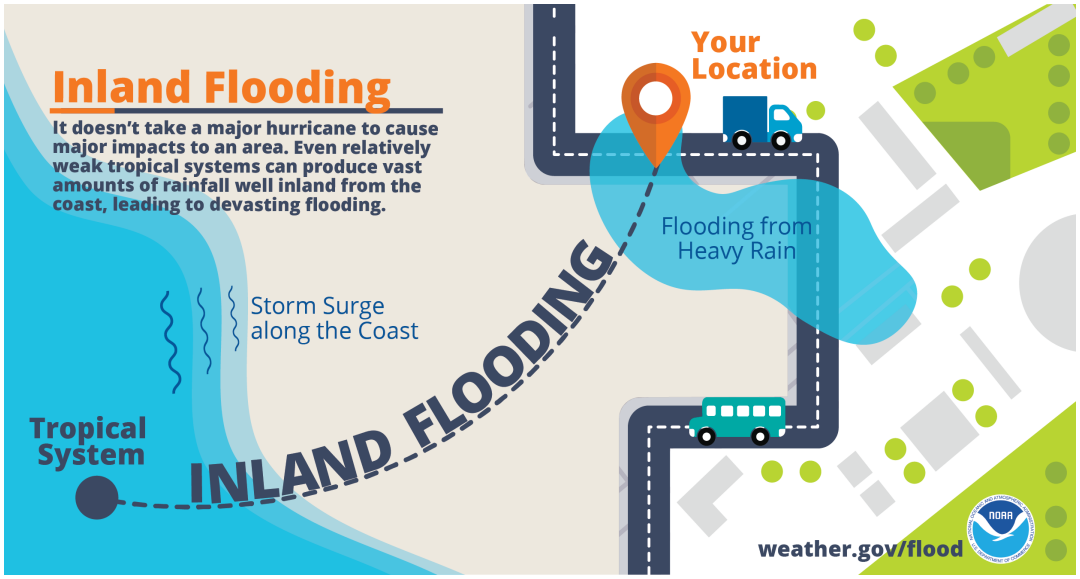
Both are tropical cyclones — a generic term used by meteorologists. The only difference between a hurricane and a typhoon is its location. The term *hurricane* is used in the North Atlantic, central North Pacific, and eastern North Pacific. In the Northwest Pacific, it's called a *typhoon*. In the South Pacific and Indian Ocean, the generic term *tropical cyclone* is used, regardless of the strength of the wind.

Why does a hurricane have an "eye"?

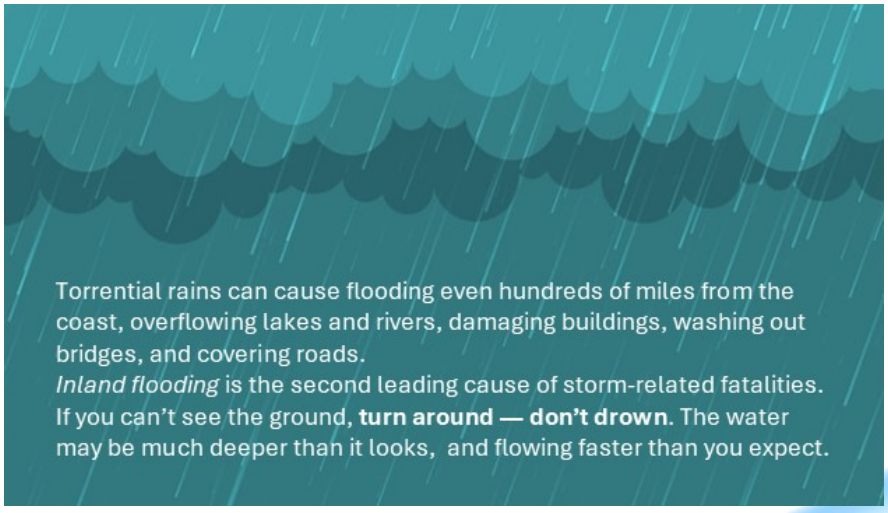
The "eye" of the storm is the area of low pressure around which the storm forms. The lower the pressure, the more organization and wind speed is possible. Air spirals toward the center (counter-clockwise in the northern hemisphere, clockwise in the southern hemisphere) and out the top in the opposite direction, creating the familiar cyclone shape. The air in the center sinks, forming a cloud-free area we call the eye.

What is the most dangerous hurricane hazard?

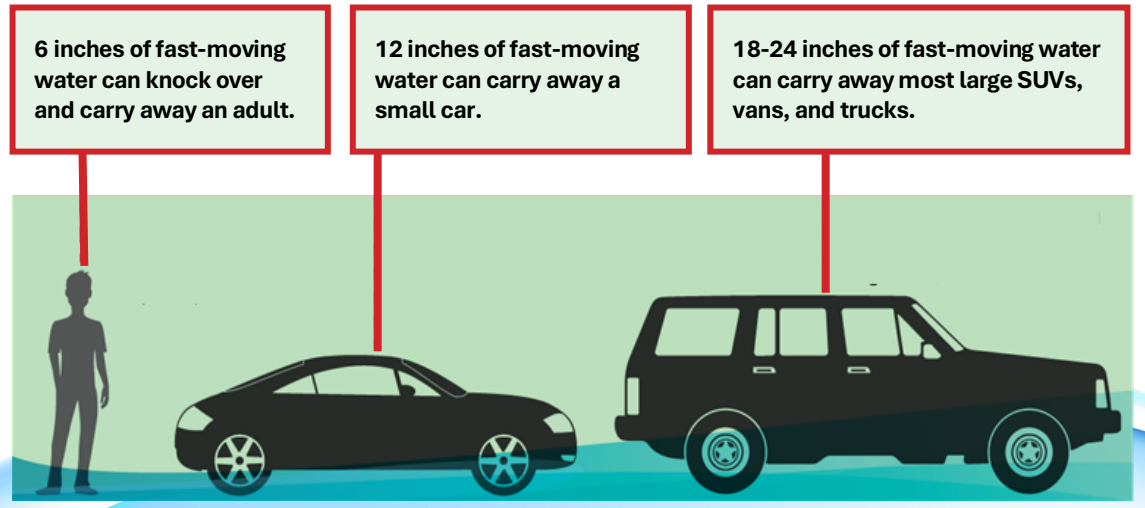
No, it isn't high winds or flying debris — it's **storm surge**. A storm's winds can push water inland, generating large and powerful waves, flooding large areas, causing structural damage to buildings, washing out roads and bridges, and carrying away anything in the water's path. Storm surge is the leading cause of hurricane-related deaths in the United States. If you are on the coast and in the path of a major hurricane, take it seriously and evacuate well before the storm hits.



HURRICANE WIND DAMAGE: What To Expect		
CAT 1	74-95 mph	**SOME DAMAGE:** minor exterior building damage; snapped branches & uprooted trees; extensive damage to power lines & poles; outages lasting several days
CAT 2	96-110 mph	**EXTENSIVE DAMAGE:** major roof & siding damage; many snapped & uprooted trees; debris blocking many roads; extensive power outages that could last days /weeks
CAT 3 (major)	111-129 mph	**DEVASTATING DAMAGE:** major damage to buildings, including windows & roofs; many snapped & uprooted trees, debris blocking many roads; power/water outages for several days/weeks
CAT 4 (major)	130-156 mph	**CATASTROPHIC DAMAGE:** severe damage to roofs & exterior walls; most trees snapped or uprooted; most power poles downed; some areas isolated, many uninhabitable for weeks; power outages could last weeks/months
CAT 5 (major)	> 157 mph	**CATASTROPHIC DAMAGE:** large percentage of buildings with roof failure & collapsed walls; debris isolating many areas; expect most areas to be uninhabitable and power to be out for weeks or months



Torrential rains can cause flooding even hundreds of miles from the coast, overflowing lakes and rivers, damaging buildings, washing out bridges, and covering roads.
Inland flooding is the second leading cause of storm-related fatalities. If you can't see the ground, **turn around — don't drown**. The water may be much deeper than it looks, and flowing faster than you expect.



THE LIFE CYCLE OF A TROPICAL SYSTEM

TROPICAL WAVE
An area of low pressure moving east to west across the tropics with the potential to organize

TROPICAL DISTURBANCE
A tropical weather system with organized convection for at least 24 hours

TROPICAL DEPRESSION
A system with maximum sustained winds of < 38 mph

TROPICAL STORM
A system with maximum sustained winds of 39-73 mph

HURRICANE
A system with maximum sustained winds of 74+ mph, classified as Category 1 or 2 (Saffir-Simpson Wind Scale)

MAJOR HURRICANE
A system with maximum sustained winds of 111+ mph, classified as Category 3, 4, or 5 (Saffir-Simpson Wind Scale)

Watch for **RAPID INTENSIFICATION:** An increase in maximum sustained winds of at least 34 mph in a 24-hour period

NATIONAL DEPRESSION & HEALTH SCREENING MONTH

OCTOBER 7: NATIONAL DEPRESSION SCREENING DAY

FIRST WEEK OF OCTOBER: MENTAL ILLNESS AWARENESS WEEK

OCTOBER 10, 2024: NATIONAL DEPRESSION SCREENING DAY

OCTOBER 10 (YEARLY): WORLD MENTAL HEALTH DAY

Mental health conditions, such as depression and anxiety, are real, common, and treatable. These observances hope to bring awareness to the need for accessible and affordable mental health screenings and care, and to destigmatize mental illness and improve knowledge and support.

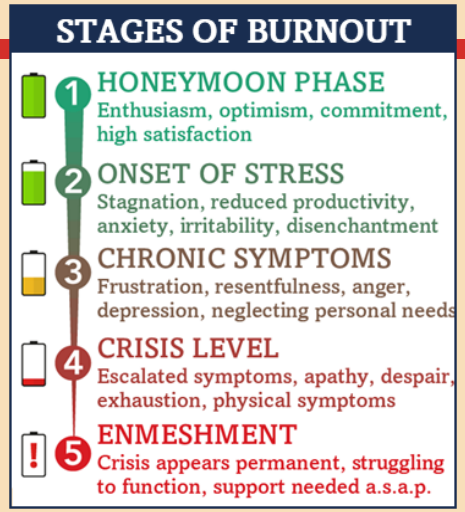
An estimated 25% of adults in the U.S. are affected by diagnosable mental health disorders, nearly half of whom may suffer from two or more disorders.

How is employees' mental health relevant to managers & safety professionals?

The role of safety professionals should include training workers to identify and respond to all potential hazards. A worker's physical ailments can present challenges for certain tasks — someone with vertigo is advised to avoid using ladders, for example. Likewise, mental illnesses can cause safety hazards at work.

Risk management relies heavily on data, and the data on mental health supports the idea that both the physical AND mental health status of employees impacts safety on the job, and that providing support for mental health challenges can decrease the risk of injuries and illnesses, both on the job and away from work.

Recent research has found that mental health issues can be exacerbated by, or even stem from, the workplace itself. The World Health Organization describes burnout as "a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed," suggesting the problem lies deeper than the employees themselves. Workplace expert Jennifer Moss lists six main causes of burnout: unsustainable workloads, perceived lack of control, insufficient rewards for effort, lack of a supportive community, lack of fairness, and mismatched values and skills.



What can safety professionals & managers do to help support mental health & prevent burnout in the workplace?

Stress causes the most damage when it is allowed to accumulate — studies have shown regular pauses are the key to breaking the cycle. Employees who take opportunities to "unplug" are more likely to remain effective and focused. In fact, a 2019 NIH study found that short breaks help the brain learn new skills and remember new information. Managers "on the front lines" in the workplace can step in and offer a break to an employee they sense might need it.

Employees need to feel comfortable sharing their struggles with their mental health in the same way they would with their physical health — open communication gives employers a better idea of how to support an employee who might be struggling, and it normalizes the experience for others. Lead by example, and make sure your employees feel they have a safe space to discuss their mental health.

Provide employees with information on how to utilize mental health support resources, including EAP services, local services, and national programs specializing in mental health issues. Use multiple means of communication, such as emails, posters, infographics, social media, etc. to educate workers on how to better protect themselves from the impacts of stress. Focus on developing a workplace culture focused on the wellbeing of its workers.

Electrical vehicle fires: Best practices and free training for first responders

February 27, 2024

Photo: Thomas Lambui/iStockphoto

College Station, TX — New resources from the Texas A&M Engineering Extension Service are intended to help first responders safely confront fires and other emergencies resulting from electric vehicles and energy storage systems.

"Although EVs are less likely to ignite than fossil fuel-powered or hybrid vehicles, the intense heat, high-voltage cables, and hazardous materials make EV and ESS fires uniquely challenging for first responders," a TEEX press release states. "Currently, no extinguishing agent is fully effective on these fires, and reignition is a threat for hours or even days after the initial event. These issues are compounded by the increasing prevalence of lithium-ion batteries in EVs, micromobility devices and ESSs."

Lithium-ion battery hazards include overheating, electrical shock, fire and chemical exposure. Fires associated with the batteries can reach temperatures of 3,000° to 4,000° F, so significant damage can occur to structures such as parking garages and underpasses.

Because li-ion battery technology is relatively new, many departments, first responders and policymakers have limited knowledge of and experience with this battery technology and the related incidents that can occur," Gordon Lohmeyer, division director of TEEX Fire and Emergency Services, said in the release. "We have created a repository of information and training resources located on the TEEX website where first responders can obtain the latest information and learn about our agency's training on preparing for and responding to an EV/ESS fire.

"We are also working on destructive battery testing with federal partners and research labs, and the results will quantify the types of contaminants first responders may encounter during EV/ESS emergencies."

Job stress may contribute to A-fib development

February 27, 2024

Photo: Witthaya Prasongsin/Getty Images

Quebec City — Work-related stress may heighten the risk of developing atrial fibrillation later in life, results of a recent study out of Canada indicate.

A-fib causes the heart to beat irregularly and can lead to stroke, heart failure or other cardiovascular complications, an American Heart Association press release states.

Researchers looked at 18 years' worth of medical records for nearly 6,000 white-collar workers. They found that:

- Participants who reported "high job strain" had an 83% greater risk of developing A-fib compared with those unaffected by the stressors.
- The workers who perceived an effort-reward imbalance had a 44% greater risk, compared with the participants who didn't report this imbalance.
- The combination of high job strain and an effort-reward imbalance was linked to a 97% increased risk of A-fib.

More than 12 million people in the United States are projected to have A-fib by 2030, according to AHA's heart disease and stroke statistics.

"Our study suggests that work-related stressors may be relevant factors to include in preventive strategies," senior study author Xavier Trudel, an occupational and cardiovascular epidemiologist and associate professor at Laval University, said in the release. "Recognizing and addressing psychosocial stressors at work are required to foster healthy work environments that benefit both individuals and the organizations where they work."

The study was published online in the *Journal of the American Heart Association*.

Assessing lithium battery risks

What can be done to make facilities safe when lithium batteries are present?

May 17, 2024

Responding is Mandy Marxen, commercial marketing manager, U.S. Chemical Storage, Wilkesboro, NC.

Power tools, material handling equipment, computer hardware, drones, robots, communication devices.

When you start to add up the number of rechargeable devices at your facility, you may be surprised. Fire risk assessments aren't uncommon for most workplaces, but many haven't included lithium batteries as a fire risk. Although the risk of a fire occurrence is low, the damage to life and property is often high.

An updated lithium battery risk assessment should:

Educate. Teach the dangers and unique risks of lithium batteries and what makes lithium battery fires unique. Teach employees the recommended charging requirements and show them the designated chargers and cords to use.

Evaluate. Record all the lithium batteries at your facility. Note how many batteries need to be charged at any given time for optimal work performance. Evaluate where the batteries are used versus where they need to be stored or charged.

Isolate. Pay attention to how close lithium-ion batteries are to people and combustible materials. Remember: Violent explosions are a part of the lithium battery thermal runaway process, so where you isolate the batteries overnight or while unattended is vital.

Communicate. Do you have processes in place to report when a battery is suspect? Swelling, high heat, water damage, freezing, incompatible chargers and other variables should be communicated to a designated person and noted in a standard operating procedure. Make sure employees are comfortable reporting when a battery is dropped without negative repercussions.

Secondly, some major codes were updated in 2024. Specifically, progress has been made on two critical safety codes to address the storage of lithium-ion batteries.

NFPA 855: Storage of Lithium Metal or Lithium-Ion Batteries 2023 edition provides comprehensive requirements for storage facilities — both inside and out — for lithium batteries. Among the requirements:

- Two-hour minimum fire-rated design
- Automatic water sprinkler systems
- Smoke/heat detectors, climate control & ventilation
- Explosion protection options
- Construction placement and distances

National Fire Code NFC/ICC Section 320 is a widely adopted fire code that incorporates fire safety regulations for various occupancies, including storage facilities. Sections within the NFS address:

- Requirement of a fire safety plan in accordance with Section 404
- Fire protection systems for fire, smoke & sprinklers
- Storage specs with locations & distances
- Explosion control options

These codes are similar, and your local authority may use one or both. Following these codes can significantly reduce the risk of fire incidents during lithium-ion battery storage. Although implementing these codes in existing facilities is possible, it can often be expensive and time-consuming. This is one of the reasons both codes allow for prefabricated portable structures.

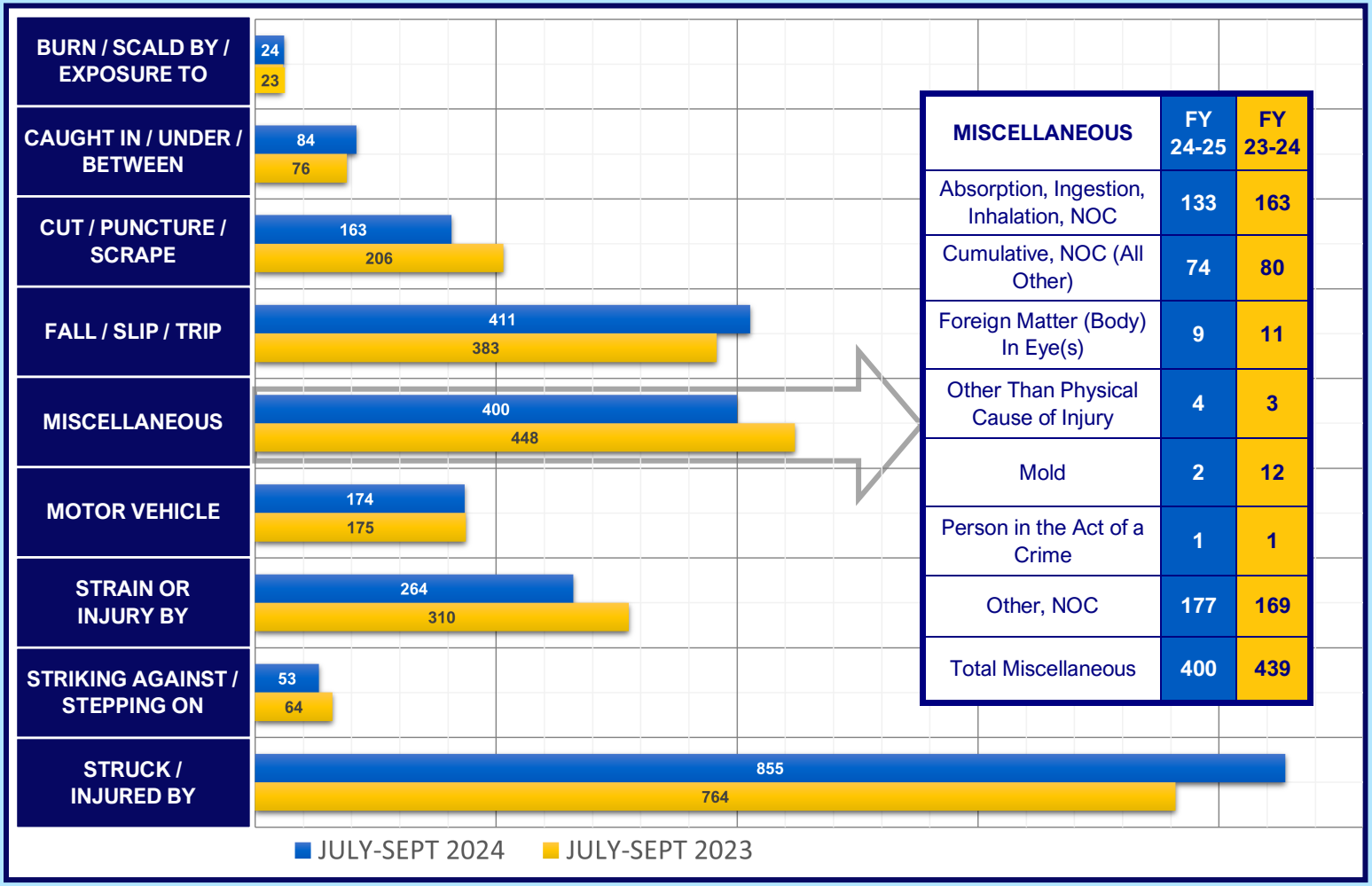
As you create your risk assessment, remember these codes for the future as you grow, move or update your facilities. These codes only get stronger with every update as more lithium-battery fire events occur. You're charged with keeping your facility's lithium battery inventory safe.

Editor's note: This article represents the independent views of the author and should not be considered a National Safety Council endorsement.

OUTLOOK SNAPSHOT:

STATE OF FLORIDA WORKERS' COMPENSATION CLAIM TRENDS

FY 2023-24 & 2024-25 Q1 (JULY-SEPT) COMPARISON



MISCELLANEOUS	FY 24-25	FY 23-24
Absorption, Ingestion, Inhalation, NOC	133	163
Cumulative, NOC (All Other)	74	80
Foreign Matter (Body) In Eye(s)	9	11
Other Than Physical Cause of Injury	4	3
Mold	2	12
Person in the Act of a Crime	1	1
Other, NOC	177	169
Total Miscellaneous	400	439

NOTE: Claim data for each month refers to claims filed in the previous month (e.g., Jan 2024 data shows incidents that occurred in Dec 2023, April 2024 shows March 2024 incidents, etc.).

The majority of claims are for **"STRUCK / INJURED BY"** injuries, but more than half of these are under the sub-category **"Fellow Worker / Patient"**. When this sub-category is excluded from the data, the total number of **"STRUCK / INJURED BY"** claims drops significantly, putting **"FALL / SLIP / TRIP"** claims in the number one spot, followed by **"MISC."** & **STRAIN OR INJURY BY"**.

The data table on the graph shows the number of **"MISC."** claims for each cause code.

Blue bars show claims reported in **Q1 of FY2024-25**. **Gold bars** show claims reported in **Q1 of FY2023-24**.

Compared with the same time period the previous year, **July-Sept 2024** saw slight increases in the categories of **"CAUGHT IN / UNDER / BETWEEN" (+8)** & **"FALL / SLIP / TRIP" (+28)** and a more significant increase **(+91)** in **"STRUCK / INJURED BY"** claims. There were decreases in claims for **"CUT / PUNCTURE / SCRAPE" (-43)**, **"MISCELLANEOUS" (-48)**, **"STRAIN OR INJURY BY" (-46)**, & **"STRIKING AGAINST / STEPPING ON" (-11)** claims.

The number of overall claims during the first quarter changed very little between the two years, with **2,449 in FY23-24** & **2,428 in FY24-25 (-21).**

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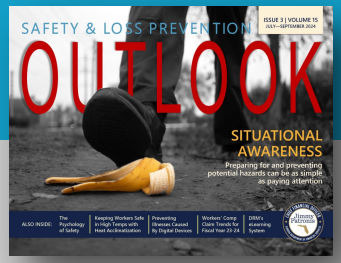

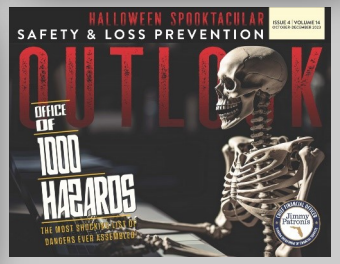

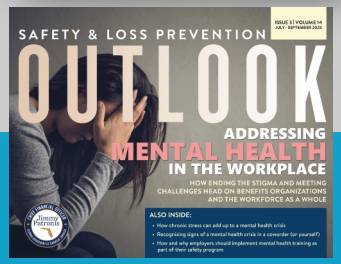

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REFERENCES & RESOURCES

Fact Sheet. (2023, Aug). Know the Facts: Lithium-Ion Batteries. U.S. Environmental Protection Agency. https://www.epa.gov/system/files/documents/2023-09/Lithium-Ion-Batteries-Fact-Sheet-8-2023.pdf

Home Fire Safety. (2024). Lithium-Ion Battery Safety. National Fire Protection Association. https://www.nfpa.org/education-and-research/home-fire-safety/lithium-ion-batteries

FDNY Fire Safety Tips. (n/a). Dangers of Lithium-Ion Batteries. New York City Fire Department. https://www.nyc.gov/assets/fdny/downloads/pdf/codes/dangers-of-lithium-ion-batteries.pdf

The Editorial Team. (2023, Nov 10). Gard: Lithium batteries fire hazards in EVs pose critical challenges. Safety4Sea. https://safety4sea.com/gard-lithium-batteries-fire-hazards-in-evs-pose-critical-challenges/

Alex Schraiber, et al. (2023, Dec 4). Considerations for Fire Service Response to Residential Battery Energy Storage System Incidents. UL Fire Safety Research Institute. https://www.iaff.org/wp-content/uploads/IAFF_DOE_ResidentialESSConsiderations_Final.pdf

Frank Leeb. (2023, Jan 9). First Due: Operational Considerations for Fires that Involve Lithium-ion Batteries. Firehouse Magazine. https://www.firehouse.com/operations-training/article/21288860/firefighting-considerations-for-fires-that-involve-lithium-ion-batteries

Electrochemical Safety Research Institute. (2021, Aug 24). What Is Thermal Runaway? UL Research Institutes. https://ul.org/research/electrochemical-safety/getting-started-electrochemical-safety/what-thermal-runaway

Battery University. (n/d). BU-304a: Safety Concerns with Li-ion. https://batteryuniversity.com/article/bu-304a-safety-concerns-with-li-ion#:~

Safety Report NTSB/SR-20/01 PB2020-101011. (2020, Nov 13.) Safety Risks to Emergency Responders from Lithium-Ion Battery Fires in Electric Vehicles. National Transportation Safety Board. https://www.ntsb.gov/safety/safety-studies/Documents/SR2001.pdf

Josh Gauntt. (2024, Aug 28). Electric vehicle fires pose new challenges for firefighters. WBRC 6 News. https://www.wbrc.com/2024/08/28/electric-vehicle-fires-pose-new-challenges-firefighters/

J.D. Biersdorfer. (2024, Aug 28). How to Squeeze More Time Out of a Failing Phone Battery. The New York Times. https://www.nytimes.com/2024/08/28/technology/personaltech/smartphone-battery-life.html

Safety + Health Magazine. (2023, Apr 23). Work safely with lithium batteries. National Safety Council. https://www.safetyandhealthmagazine.com/articles/23855-work-safely-with-lithium-batteries

Alan Ferguson, Safety + Health Magazine. (2024, Feb 13). Lithium-ion batteries. National Safety Council. https://www.safetyandhealthmagazine.com/articles/25011-lithium-ion-batteries

Advice & Guidance Articles. (2023, Jul 10). Why Do Lithium-Ion Batteries Catch Fire? Fire Protection Association. https://www.thefpa.co.uk/advice-and-guidance/advice-and-guidance-articles/why-do-lithium-ion-batteries-catch-fire-#:~

Environmental Fact Sheet. (2020, Dec). Safe Management of Household Lithium Batteries. Vermont Agency of National Resources, Department of Environmental Conservation, Waste Management & Prevention Division. https://dec.vermont.gov/sites/dec/files/wmp/SolidWaste/Documents/lithium-basedBatteryManagementFactSheet.pdf

Alaina D'Altorio. (2021, Mar 9). Your 2023 Guide to Lithium Battery Labels. Smith Corona. https://www.smithcorona.com/blog/2023-guide-to-lithium-battery-labels/

Dave Murden. (2023, Aug 2). What are the different types of batteries used in the medical industry? Eco Tree Lithium. https://ecotreelithium.co.uk/news/medical-batteries-types/#:~

Lee Kaiser. (2021, Oct 18). Lithium Ion Batteries in Data Center UPS Systems, Part 2: NFPA 855 Requirements for Fire Detection, Fire Sprinklers, Suppression, and Using Rack Mounted UPS Batteries in the Data Center. ORR Protection. https://www.orrprotection.com/mcfp/lithium-ion-batteries-in-data-centers-part-2

General Update. (2024, Mar 8). Medical Devices Powered by Lithium-ion Batteries: Safety Considerations. https://berkleyls.com/news/medical-devices-powered-by-lithium-ion-batteries-safety-considerations/

Dave Murden. (2023, Oct 2). What are the 14 most popular applications & uses of lithium batteries? Eco Tree Lithium. https://ecotreelithium.co.uk/news/lithium-batteries-uses-and-applications/#:~

Article. (n/d). Enhance Workplace Lithium-ion Battery Safety. UL Solutions. https://www.ul.com/insights/enhance-workplace-lithium-ion-battery-safety

Blog. (n/d). Safely using batteries in the office: 5 rules to follow. Mensura. https://www.mensura.be/en/blog/batteries-safety-office

Safety Sheet. (n/d). Storing Lithium-ion batteries in the workplace. British Safety Council. https://contact.britsafe.org/rs/638-XEH-487/images/MC243_Battery-storage-guide-v3.pdf?version=0

Bulletin. (n/d). Safe use of lithium-ion batteries at home and in the workplace. NT Work Safe. https://worksafe.nt.gov.au/forms-and-resources/bulletins/safe-use-of-lithium-ion-batteries-at-home-and-in-the-workplace

Jason M. Ostapeic; Business. (n/d). Lithium-ion Batteries in the Workplace: Safety and Storage. Unica Insurance. https://www.unicainsurance.com/news/lithium-ion-batteries-in-the-workplace-safety-and-storage/

Samantha Murphy Kelly. (2023, Mar 9). Lithium-ion battery fires are happening more often. Here's how to prevent them. CNN Business. https://www.cnn.com/2023/03/09/tech/lithium-ion-battery-fires/index.html

Safety and Health Information Bulletin. (2019, Jun 20). Preventing Fire and/or Explosion Injury from Small and Wearable Lithium Battery Powered Devices. Occupational Safety and Health Administration. https://www.osha.gov/sites/default/files/publications/shib011819.pdf

Home Fire Safety. (n/d). Lithium-Ion Battery Safety. National Fire Protection Association. https://www.nfpa.org/education-and-research/home-fire-safety/lithium-ion-batteries

Yaima Crespo. (2024, Mar 11). Why lithium batteries are a growing problem for trash and recycling services. NBC South Florida 6. https://www.nbcmiami.com/responds/why-lithium-batteries-are-a-growing-problem-for-trash-and-recycling-services/3256144/

Marissa Heffernan. (2024, Jan 23). Study finds rising risk of lithium-ion fires. Resource Recycling. https://resource-recycling.com/recycling/2024/01/22/study-finds-rising-risk-of-lithium-ion-fires/

NWRA Staff. (2024, Jan 10). NWRA and RRS Release Report on Threat of Lithium Batteries to Waste and Recycling Infrastructure. National Waste & Recycling Association. https://wasterecycling.org/press_releases/nwra-and-rrs-release-report-on-threat-of-lithium-batteries-to-waste-and-recycling-infrastructure/

Ash-har Quraishi, et al. (2023, Aug 15). Lithium-ion battery fires from electric cars, bikes and scooters are on the rise. Are firefighters ready? CBS News. https://www.cbsnews.com/news/lithium-ion-battery-fires-electric-cars-bikes-scooters-firefighters/

Blog. (2023, Nov 27). Lithium-Ion Battery Fire Safety. USA Fire Protection. https://www.usafireprotectioninc.com/lithium-ion-battery-fire-safety/

Fact Sheet. (n/d). Lithium-Ion Battery: A Consumer Safety Guide. New York Department of State, homeland Security and Emergency Services. https://www.dhses.ny.gov/system/files/documents/2024/07/li_batteryconsumersafetyguide.pdf

AJ Kenny, Tech. (2023, Sep 27). It's not just exploding cell phones and EVs: This is why consumers, retailers, and regulators need to know which products use lithium-ion batteries. Fast Company. https://www.fastcompany.com/90957437/a-host-of-surprising-products-rely-on-lithium-ion-batteries-this-is-why-you-need-to-know

Safety + Health Magazine. (2024, Jul 9). First responders need training on EV-related emergencies, lawmaker says. National Safety Council. https://www.safetyandhealthmagazine.com/articles/25648-first-responders-need-training-on-ev-related-emergencies-lawmaker-says

Ready.gov website. (n/d). Evacuation. U.S. Department of Homeland Security. https://www.ready.gov/evacuation

Emergency Preparedness and Response. (n/d). Stay Put — Learn How to Shelter in Place. Centers for Disease Control and Prevention. https://www.emergency.cdc.gov/shelterinplace.asp

Hurricanestrong.org. (2023, Aug 28). Find Your Evacuation Zone. Federal Alliance for Safe Homes, Inc. https://hurricanestrong.org/wp-content/uploads/2023/08/8-28-23-Find-Your-Evacuation-Zone-Final.pdf

Ashley Williams. (n/d). How to safely shelter in place if you ran out of time to evacuate before severe weather strikes. AccuWeather. https://www.accuweather.com/en/weather-news/how-to-safely-shelter-in-place-if-you-ran-out-of-time-to-evacuate-before-severe-weather-strikes/342947

Kevin Byrne. (n/d). Why you should evacuate ahead of a hurricane. AccuWeather. https://www.accuweather.com/en/accuweather-ready/why-you-should-evacuate-ahead-of-a-hurricane/433577

2023 Firefighter Safety Stand Down. (n/d). Firefighting Operations with Lithium-Ion Batteries. https://www.safetystanddown.org/wp-content/uploads/2023/06/Training-Sheet-Day-2-Firefighting-Operations.pdf

American Clean Power. (2023, Jul). First Responders Guide to Lithium-ion Battery Energy Storage System Incidents. https://cleanpower.org/wp-content/uploads/gateway/2023/07/ACP-ES-Product-7-First-Responders-Guide-to-BESS-Incidents-6.28.23.pdf

Neil Dalus. (2023, July 9). Fire not the only danger with lithium-ion batteries. TT Club. https://www.ttclub.com/news-and-resources/news/press-releases/2023/fire-not-the-only-danger-with-lithium-ion-batteries

National Ocean Service. (n/d). What is the difference between a hurricane and a typhoon? National Oceanic and Atmospheric Administration. https://oceanservice.noaa.gov/facts/cyclone.html

National Weather Service. (n/d). Hurricane and Tropical Storm Watches, Warnings, Advisories and Outlooks. National Oceanic and Atmospheric Administration. https://www.weather.gov/safety/hurricane-ww

National Ocean Service. (n/d). What is the difference between a hurricane watch and a warning? National Oceanic and Atmospheric Administration. https://oceanservice.noaa.gov/facts/watch-warning.html

National Weather Service. (n/d). Tropical Definitions. https://www.weather.gov/mob/tropical_definitions

Tom Bayles, WGCU. (2024, Sep 4). Top hurricane forecasters say stay vigilant: Huge storm season still incoming. NPR News. https://www.wusf.org/weather/2024-09-04/top-hurricane-forecasters-say-stay-vigilant-huge-storm-season-still-incoming

Fact Sheet. (2022, Jun 13). Tips to Prepare Your Home for Hurricane Season. Federal Emergency Management Agency, U.S. Department of Homeland Security. https://www.fema.gov/fact-sheet/tips-prepare-your-home-hurricane-season

Fact Sheet. (n/d). Hurricane Safety for You and Your Family. National Weather Service, National Oceanic and Atmospheric Association. https://www.weather.gov/media/owlie/HurricaneSafety-OnePager-07-03-18.pdf

Emily Schmidt. (n/d). Hurricane Preparation Checklist: Everything You Need to Stay Safe. American Platinum Property and Casualty Insurance Company. https://americanplatinumpcic.com/hurricane-preparation-checklist/

Jarrod Heil. (n/d). 15 Steps on How to Prepare Your House for a Hurricane. American Platinum Property and Casualty Insurance Company. https://americanplatinumpcic.com/how-to-prepare-house-for-hurricane/

Evacuations and Shelters. (n/d). Should you go or should you stay? State Emergency Response Team, Florida Division of Emergency Management. https://www.floridadisaster.org/planprepare/disability/evacuations-and-shelters/

Florida Department of Financial Services. (n/d). Emergency Financial Preparedness Toolkit. https://myfloridacfo.com/docs-sf/consumer-services-libraries/consumerservices-documents/understanding-coverage/consumer-guides/english---emergency-financial-preparedness-toolkit.pdf?sfvrsn=7ae6507b_16

WIC Works Resource System. (n/d). Mental Illness Awareness Week and National Depression Screening Day. U.S. Department of Agriculture. https://wicworks.fns.usda.gov/topic/health-observances/mental-illness-awareness-week-and-national-depression-screening-day

Edwige Tiwa Diffo, MSc, et al. (2024, Aug 14). Physchosocial Stressors at Work and Atrial Fibrillation Incidence: An 18-Year Prospective Study. Journal of the American Heart Association. https://www.ahajournals.org/doi/10.1161/JAHA.123.032414

Mayo Clinic Staff. (n/d). Job burnout: How to spot it and take action. Mayo Clinic. https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/burnout/art-20046642

MHA's Workplace Mental Health Resources. (n/d). Mental Health America. https://www.nsc.org/getmedia/c9f99972-ec4d-4ef0-8a58-22e65f4c820f/mha-resources.pdf

Prioritizing Employee Mental Health. (n/d). National Safety Council. https://www.nsc.org/workplace/safety-topics/employee-mental-health

Spill Team. (2024, Feb 8). 53 workplace mental health statistics you can't ignore in 2024). Spill. https://www.spill.chat/mental-health-statistics/workplace-mental-health-statistics

Emily Kirby, BPH and L. Casey Chosewood, MD, MPH. NIOSH Science Blog. (2024, Apr 15). Supporting Mental Health in the Workplace. Centers for Disease Control and Prevention. https://blogs.cdc.gov/niosh-science-blog/2024/04/15/workplace-mental-health-resources/

Jennifer Moss. (2021, Feb 10). Beyond Burned Out. Harvard Business Review. https://hbr.org/2021/02/beyond-burned-out

Sam Silverman. (2023, Apr 26). Late Hours, Lack of Leave Can Be Damaging to Your Mental health, CDC Study Says. Entrepreneur. https://www.entrepreneur.com/business-news/poor-working-conditions-can-impact-your-mental-health/450455

Bernie Wong & Kelly Greenwood. (2023, Oct 10). The Future of Mental Health at Work Is Safety, Community, and a Healthy Organizational Culture. Harvard Business Review. https://hbr.org/2023/10/the-future-of-mental-health-at-work-is-safety-community-and-a-healthy-organizational-culture

National Depression Screening Day. (n/d). Mental Health America. https://www.mhanational.org/national-depression-screening-day

Safety + Health Magazine. (2024, Aug 2). Workers' comp study looks at the benefits of a robust psychosocial safety climate. National Safety Council. https://www.safetyandhealthmagazine.com/articles/25744-workers-comp-study-looks-at-the-benefits-of-a-robust-psychosocial-safety-climate

Health Blog. (2024, Aug 30). Mental Health Affects Workers' Abilities. EHSToday. https://www.ehstoday.com/health/article/55136712/mental-health-affects-workers-abilities

Safety + Health Magazine. (2024, Aug 21). 'Touching base' on mental health can lead to significant improvements: study. National Safety Council. https://www.safetyandhealthmagazine.com/articles/25854-touching-base-on-mental-health-can-lead-to-significant-improvements-study

Deanna Cuadra. (2024, Aug 22). Mental health leaves of absence are surging in 2024. Employee Benefit News. https://www.benefitnews.com/news/mental-health-leaves-of-absence-are-increasing-in-2024

Lee Hafner. (2024, Aug 9). Weight loss, election anxiety and addiction: Employees need multi-tiered support. Employee Benefit News. https://www.benefitnews.com/news/weight-loss-election-anxiety-and-addiction-employees-need-multi-tiered-support

Safety + Health Magazine. (2024, Jul 16). Feeling burned out at work? Get moving, researchers say. National Safety Council. https://www.safetyandhealthmagazine.com/articles/25684-feeling-burned-out-at-work-get-moving-researchers-say

Safety + Health Magazine. (2022, Mar 11). Are remote workers burned out? Check their emoji use, researchers say. National Safety Council. https://www.safetyandhealthmagazine.com/articles/22346-are-remote-workers-burned-out-check-their-emoji-use-researchers-say

Mental Health America. (n/d). Take a Mental Health Test. https://screening.mhanational.org/screening-tools/

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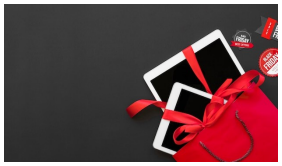

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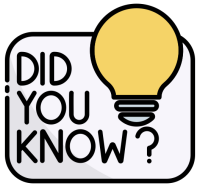

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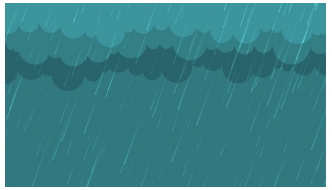

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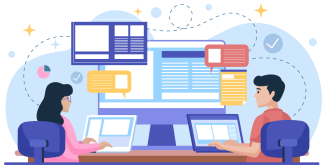

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