

SAFETY & LOSS PREVENTION

ISSUE 3 | VOLUME 15  
JULY—SEPTEMBER 2024

# OUTLOOK

## SITUATIONAL AWARENESS

Preparing for and preventing potential hazards can be as simple as paying attention

ALSO INSIDE:

The Psychology of Safety

Keeping Workers Safe in High Temps with Heat Acclimatization

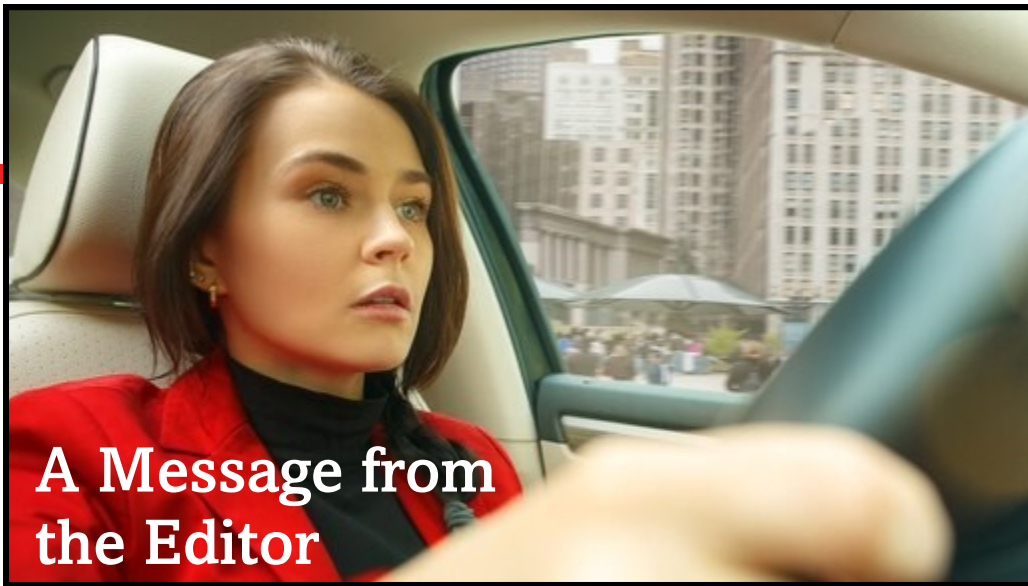
Preventing Illnesses Caused By Digital Devices

Workers' Comp Claim Trends for Fiscal Year 23-24

DRM's eLearning System



# IN THIS ISSUE



## A Message from the Editor

As I'm getting ready for work in the morning, I tend to go into autopilot. Often while I'm brushing my teeth, my mind is running through a list of tasks I need to get done that day, and before I realize it, my electric toothbrush has completed its two-minute cycle — and I've barely even brushed a single tooth.

Ever get in the car, driven all the way to your destination, and realize you can't remember driving at all? Just about everyone has experienced this phenomenon, known as "highway hypnosis." It occurs when we find ourselves thinking about something other than the act of driving, especially when we are tired, stressed, or busy. Even the monotony of taking the same route every day can cause us to go into autopilot, allowing us to drive even with our brains not fully engaged in the task — that is, until something out of the ordinary happens, like a road closure, a pedestrian crossing against the light, or an erratic driver.

A timed-out toothbrush is hardly a crisis. But so many other things we do every day — driving, using electrical equipment, even just walking — can become dangerous if we aren't paying attention to our surroundings.

In this issue, we'll discuss the importance of situational awareness, particularly in the workplace, and how to encourage the habit in ourselves and our coworkers.

*Lori G. Taylor*

**Lori G. Taylor** | Managing Editor  
Lori.Taylor@myfloridacfo.com

- 1 **Situational Awareness in Risk Management**
- 2 **4 Steps of Situational Awareness**
- 3 **Fostering, Encouraging, & Improving Situational Awareness in Your Employees**
- 4 **The Psychology of Safety: How the Brain Tricks Us Into Ignoring the Most Common Everyday Dangers (and How You Can Outsmart It)**
- 7 **Next-Level Thinking**
- 8 **National Safety Council articles re. Extreme Temperatures & Heat-Related Illnesses**
- 9 **Heat Stress Acclimatization**
- 11 **Digital Dangers: Injuries Caused by Cellphones & Other Electronic Devices**
- 14 **OUTLOOK Snapshot: State of Florida Workers' Compensation Claim Trends**
- 15 **SLP OUTLOOK Online Library / eLearning System**
- 16 **Credits**
- 17 **References & Resources**

# SITUATIONAL AWARENESS IN RISK MANAGEMENT



Creating a totally safe environment where no one ever gets hurt just by adding a few caution signs may only be fantasy, but there are other risk management techniques that can improve safety in very real ways; one of these is **situational awareness**.

Situational awareness (SA) is the practice of actively monitoring one's surroundings in order to identify potential threats and prepare for incidents before they occur. It involves making a conscious effort to be "in the moment" and paying attention to where we are and what we are doing at any given time. People who practice SA make more informed decisions, respond more quickly to threats, and have fewer accidents, which can lower an organization's overall rates of injuries and the associated costs.

Situational awareness can help in spotting and avoiding many types of risks:

- Physical risks such as fire hazards (noticing faulty wiring, chemical buildup, etc.) or tripping hazards (items in walkways, loose flooring, etc.) are easily overlooked by someone not paying attention.
- Cybersecurity risks like phishing attacks or ransomware often rely on a careless mouse click by an employee — a bad actor can infect an entire network with malware in a matter of seconds, just because someone wasn't paying attention.
- Psychosocial risks — that is, threats from other people, whether strangers, acquaintances, or well-known coworkers or family members. Workplace violence incidents are not always preceded by direct threats, but disgruntled or agitated individuals often give indirect clues to their mental state that can be detected by their attentive peers, allowing time to de-escalate a situation or prevent someone from committing a violent act.

Being situationally aware looks a little different for everyone, depending on the situation, industry, and worksite.

Once upon a time, in a workplace far away, a worker slipped on a wet floor. Realizing that wet floors create a dangerous hazard and wanting to warn others, the worker created a sign reading "CAUTION: WET FLOOR" and placed it on the wet floor.



Like magic, the hazard was immediately eliminated, and no one ever slipped on a wet floor again, and everyone lived (and worked) happily ever after. THE END.

**Sound like a fairy tale? That's because it is — those of us in risk management know that slip and fall accidents continue to cause workplace injuries, more than any other category.**

People make mistakes, like forgetting to put out a wet floor sign when they mop a floor. Even when they remember the sign, it's only as good as the person who reads it — or doesn't. Many people will walk right by a caution sign and ignore it completely (whether purposefully or carelessly), typically because they aren't paying attention to their surroundings.

In construction, SA might mean examining a job site for physical hazards or tracking weather patterns that could put outdoor workers in danger. Healthcare workers track viral outbreaks, seasonal weather events (hurricanes, extreme heat, etc.), and holidays (when more injuries tend to occur) in order to anticipate the need for additional staff. Law enforcement officials must be on alert for people behaving erratically, especially during special events (parades, sporting events, etc.) and when alcohol is involved, as well as knowing how to de-escalate situations to keep themselves and others safe.

Of course, being situationally aware can benefit anyone in any organization.

- No matter where you work, and even at home, take time every day to look around your space for hazards.
- Think about where you park your car: Is the area well-lit? Will it be dark when you leave? Try to avoid secluded areas where people could potentially hide. Stay alert when walking to and from your car (not nose-down in your phone), and be aware of those around you.
- When driving, avoid distractions and continually scan the road for hazards. Be aware of traffic and weather conditions, as well as your own mood — if you are tired, frustrated, or impatient, acknowledging that before getting behind the wheel may help you make better driving decisions.
- When in public spaces, limit distractions such as texting, talking on the phone, or listening to headphones that block outside sounds, which can prevent you from noticing what's going on around you and leave you more vulnerable.
- When you enter a new location, scan the room for additional exits and areas to hide in the case of an emergency situation (such as an active shooter). Trust your gut, and if you feel uneasy, remove yourself from the situation.

Being situationally aware means being tuned in to the world around you, which allows us to practice **next-level thinking**.

# 4 STEPS OF SITUATIONAL AWARENESS

## STEP 1

### OBSERVATION

Use your senses to notice your surroundings, including the objects and people in it. A dark hallway, a pile of boxes stacked too high, a door that could open unexpectedly, a person in your path not watching where they are going — any of these can create a hazard. Pay attention to what you see, hear, smell, or even “sense” — our bodies sometimes alert us to dangers by giving us the feeling that something is “off.”

**Risk Managers:** Observe the workplace throughout the day to recognize potential risks, in addition to completing a full risk assessment to uncover unseen safety hazards.

## STEP 2

### ORIENTATION / COMPREHENSION

Use your knowledge of previous experiences to understand how the potential hazards you observe might affect you and those around you. This means knowing *why* that stack of boxes or blind corner could be dangerous.

**Risk Managers:** Understand the impact on employees and the organization as a whole if a particular incident occurs.

## STEP 3

### DECISION

Weigh your options and decide whether and how to adjust your behavior to avoid a potential hazard. Example: choosing whether you can take care enough to safely walk across a wet floor, or taking a different route, if possible.

**Risk Managers:** Decide what action needs to be taken regarding the potential risk, if any, including communicating the risk to others and making environmental changes.

## STEP 4

### ACTION

Follow through on any decisions made in the previous step to change your behavior and/or take action to keep yourself and others safe. Examples: reporting hazards to management, removing a hazard from an area, adjusting your route to avoid a known hazard until it is resolved.

**Risk Managers:** Take whatever action is needed to mitigate the risk and/or remove the hazard.

Situational awareness is an integral part of safety management. It is a skill that can be cultivated like any other, and it grows and strengthens over time. Here are some ways to incorporate it into your safety program:

- **EDUCATION & COMMUNICATION** — Make employees “aware of being aware” by communicating the importance of situational awareness with them. Teach your staff how to notice their surroundings, pay attention to those around them, and practice imagining scenarios and predicting outcomes. Remind them of potential risks and how to avoid them with frequent messaging to reduce complacency.
- **TRAINING & PRACTICE** — Walking employees through hypothetical scenarios can bring risks that might otherwise be ignored to the forefront. Try challenging your team members with games and exercises that help them hone their observational skills.
- **REMINDERS & NUDGING** — Post signs on and around workspaces that require employees’ full attention in order to stay safe. Change them out regularly to avoid having them become “part of the scenery” and ignored. The brain prioritizes threats based on past experience, including other people’s retelling of real-life scenarios. Use photos or videos of previous incidents to drive areas that need more focus into the forefront of memory.
- **DISCOURAGE MULTITASKING & LIMIT DISTRACTIONS** — Make sure teams are adequately staffed so that people can focus on one task at a time. Too many interruptions or too much stimuli can prevent workers from being able to practice SA; ask employees for feedback on what’s distracting them and provide support.

### OBSERVATIONAL AWARENESS GAME

Have your team members look at objects laid out on a table (or a photograph of objects) for a set amount of time; cover up or remove the items and challenge them to list as many things as they can remember.

### USE NUDGING TO REMIND PEOPLE OF THE POTENTIAL CONSEQUENCES OF THEIR UNSAFE BEHAVIOR

One company placed a chalk outline at the bottom of their stairwell to remind their employees to use the handrail. Dramatic? Yes, but it worked — three months after being implemented, they observed an increase in handrail usage of more than 10%.



### OTHER THINGS TO CONSIDER

- Safety measures are more effective the less visible they are — just as people who feel safer take more risks, those who feel less safe behave in safer ways (examples: during icy conditions, accidents are more common but less serious because drivers take more care)
- Providing incentives for prudent behavior is more effective in reducing risky behavior than more punitive measures (example: lower insurance premiums for careful drivers that induce people to make positive changes to their driving behavior have been found to work better than strict driving laws in reducing crashes).
- Combat risk compensation by implementing rules that correspond with safety changes (example: when the adoption of helmets made football players feel more inclined to hit harder, the NFL created new tackling rules).



# THE PSYCHOLOGY OF SAFETY

HOW THE BRAIN TRICKS US INTO IGNORING THE MOST COMMON EVERYDAY DANGERS (AND HOW YOU CAN OUTSMART IT)

MODE OF TRANSPORTATION	AVG. DEATHS PER 100 MILLION MILES
PASSENGER VEHICLES	24,195
BUSES	18
RAILROAD / TRAINS	22
COMMERCIAL AIRLINES	4
PEDESTRIANS	6,534

Fig. A

As humans, we like to think of ourselves as intelligent, rational creatures, but our brains have some irrational processes that can be a struggle to override. One of these is our tendency to estimate the probability of an event based on how easily we can recollect examples of it. This can depend upon the impact of witnessing or experiencing a certain event, the frequency in which we witness or experience a certain event, or both.

## WE TEND TO MEASURE THREATS BY IMPACT, NOT BY PROBABILITY

The daily news is dramatic for a reason — so you'll pay attention to it. Depictions of horrible disasters and deadly encounters, such as plane crashes, shark attacks, and collapsed bridges, make a big impression. Our brains use whatever information we take in to make a judgment about how probable an event is, and whether true or not, we tend to perceive the most memorable events as the most likely to happen. For example, most people are more fearful of flying than they are of eating greasy fast food, even though a poor diet is the far more dangerous of the two — nearly one million Americans die of heart disease every year, while the odds of dying in a plane crash is one in 11 million.

Even positive outcomes, such as winning the lottery, seem more probable to us after seeing photos of the latest mega millions winner being handed a giant check. What we don't see on the news (and therefore don't take into consideration) are all the planes that arrive safely, the people who go swimming without being bitten by sharks, all the bridges that remain intact — or all of the people who bought losing lottery tickets.

## FAMILIARITY FOOLS US INTO FORGETTING THE RISKS OF EVERYDAY ACTIVITIES

It's not that shark attacks and plane crashes are of zero concern — they do happen occasionally — but while we worry over less likely threats, we tend to overlook familiar and far more likely dangers. The more commonplace and routine an activity, the safer we believe it is. For example, people will question the safety of airplanes or buses but won't hesitate to get into their own cars every day. The statistics tell the real story. Take a look at the table above (*Fig. A*); as you can see, it's not even close.

Naturally, the more often we participate in an action, the more chances we have to be injured, but it isn't just the frequency that makes something more dangerous — after all, frequent practice can improve our skills and make us safer (like when we are first learning to drive). But experience can also lead to complacency — doing things day after day can make it easy to forget the risks and get careless. Even the simplest tasks, like using doors, climbing stairs, or even just walking, injure thousands of people every day.

## THE PARADOX OF SAFETY FEATURES AND THE ILLUSION OF CONTROL

Our brains are wired to want to solve problems and control situations. We are biased toward intervention, but sometimes interventions can feel like solutions when in reality they only shift the problem (or worse — create new problems).

Surveys find most Americans prefer driving their own cars over other forms of transportation, for many valid reasons (comfort, convenience, flexibility, etc.), but many believe (erroneously) that driving is the safest choice as well (see *Figs. B & C*). Drivers enjoy a feeling of control, which gives them the illusion of safety (which explains why most people say they would not feel safe in a self-driving vehicle). Paradoxically, this increases the danger of driving, due to a phenomenon known as **risk compensation** — when we feel safer, we behave less safely.

Unfortunately, interventions designed to prevent or reduce injuries can also decrease people’s perception of risk, making them feel that they have some “wiggly room” to engage in more risky behavior.

In FY 2023-24, Florida’s state agencies and universities saw more than **275 workers’ compensation claims** from employees injured by **doors** (categorized as “caught in/under/between,” “cut/puncture/scrape,” “striking against,” or “struck by” incidents).

The National Safety Council reports that in 2022, more than **400,000 serious injuries and 700 deaths** were caused by same-level falls at workplaces in the U.S.

**Falls on stairs** are particularly dangerous, resulting in over **one million injuries and 12,000 fatalities each year**, making it the second leading cause of injury in the U.S., according to the NSC (motor vehicle accidents are #1).

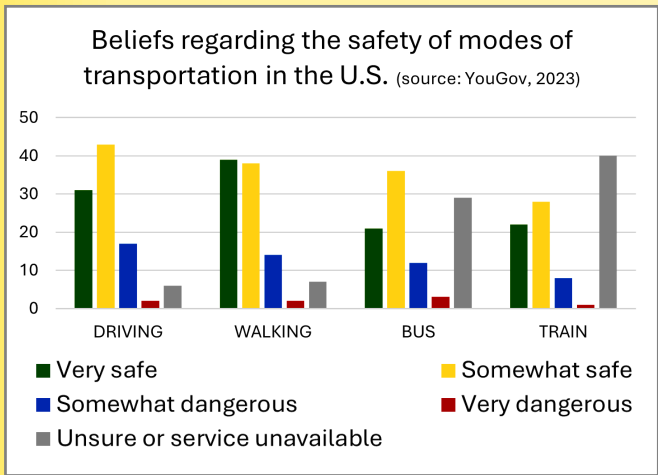


Fig. B

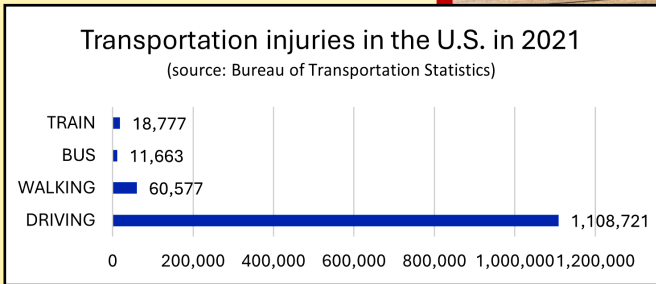


Fig. C

The Highway Safety Act of 1966 sought to mitigate the growing problem of traffic injuries and deaths by requiring auto manufacturers to institute safety standards, including new features such as seatbelts, collapsible steering columns, and shatterproof windshields, as well as improvements to roadways, guardrails, and traffic signals. Economic professor Dr. Sam Peltzman believed that these initiatives might be counterproductive, suggesting that all mandatory safety interventions amplify people's level of risk compensation and encourage them to be less careful and take more risks — a theory later dubbed “the Peltzman Effect.” His 1975 traffic safety study found that although the likelihood of dying in an auto accident had decreased on average, the number of crashes had increased, resulting in no drop in the number of deaths and an increase in pedestrian deaths. It was more than a decade before the number of roadway deaths decreased as a result of the new safety standards.

This phenomenon doesn't only apply to transportation. Protective gear makes athletes take more risks. Hikers who believe they can be easily rescued are less cautious and more willing to go off the trail. People will keep or even increase unhealthy habits (like eating a poor diet) because they believe it can be “offset” with healthy behaviors (like exercising).

It's not that safety features are not beneficial in risk mitigation and loss prevention — quite the contrary (seatbelts, for example, have saved countless lives) — but psychological factors such as risk compensation must also be taken into account when implementing them.

## CASE STUDIES

- A 1984 study suggested that the FDA's requirement for child-resistant caps on medications regulation may have had the opposite of its intended effect, as many parents, believing the bottles would prevent children from having access to the medications, had stopped storing them out of reach, or worse, found the new lids frustrating and inconvenient and left them off entirely.
- A 1993 study reported that drivers in vehicles with antilock brakes had more crashes than those without, as they tended to accelerate faster and stop harder than those without.
- An article published in the Journal of Occupational Accidents in 1984 found that loggers who used personal protective equipment had a decrease in injuries to protected body parts, but an increase in near-misses and injuries to unprotected body parts due to increased risk-taking.
- A 2010 study of NASCAR wrecks found that mandating the use of head-and-neck restraints had almost completely eliminated serious driver injury while simultaneously increasing the number of crashes per race.





## NEXT-LEVEL

# THINKING

Our [bias towards action](#) can lead us to jump to a quick solution in order to feel like we are doing something to solve it. But what seems like a good solution could have another problem hidden inside of it — an unintended consequence that may make a situation worse, sometimes without even solving the original problem. Often, unintended consequences are just unanticipated results, the outcome of failing to consider the multiple levels of complexity in a situation, the cost of not following it through to its conclusion.

Next-level thinking is a way of examining the potential consequences of an action — not just in the short term, but across time. Sometimes referred to as “second-level” or “second-order” thinking, next-level thinking is more deliberate and complex than just looking on the surface of a problem (i.e., first-level thinking). First-level thinking may find a solution; next-level thinking takes that solution and follows it down the road, looking at the consequences of that solution — then taking it a step further and asking, “and then what?” “and then what?” “and then what?”

### EXAMPLES OF UNINTENDED CONSEQUENCES CAUSED BY FIRST-LEVEL THINKING

- In 1949, South Africa introduced five cats to Marion Island as a method of pest control for mice. By 1977, the island had around 3,400 cats, endangering the local bird population.
- In the 1970s, power plants began installing taller smoke stacks as a way of reducing air pollution; in reality, the tall stacks only spread emissions over a larger area.
- The prohibition of alcohol in the U.S. (1920-33) brought on a myriad of next-level problems: the use of more dangerous drugs or “bathtub gin” as a replacement, an increase in organized crime, and the removal of a significant source of tax revenue, all during a period of increased government spending. And the supposed goal of the law was not even achieved — businesses saw no gains in productivity or reduced absenteeism.

Considering what could happen in every situation allows time to decide the best course of action should an incident occur. By considering what might happen at any given moment, we can create a potential plan for similar future incidents.

### AVOIDING COMMON PROBLEM-SOLVING PITFALLS BY USING NEXT-LEVEL THINKING TECHNIQUES

#### **Invert your thinking.**

Focus on avoiding the worst consequences and work backwards toward the intended goal. Actively search out evidence that goes against your personal confirmation biases.

#### **Be willing to let evidence change your mind.**

We tend to look for findings that support our beliefs and reject ones that don't, and we stubbornly hold onto beliefs long after they have been proven wrong.

#### **Remember that consequences compound over time.**

Sometimes a solution will work to solve a problem once but will cause future problems if implemented every time that problem arises. For example, eating a candy bar will “solve” your hunger, but eating a candy bar every time you are hungry will cause a myriad of health issues down the line.

...and then what?

...and then what?

...and then what?

...and then what?

...and then what?

# Extreme temps not the only factor in construction worker heat illness: study March 20, 2024

Albuquerque, NM — Even moderate outdoor temperatures may put construction workers at increased risk of heat-related illness, a [recent study](#) led by a University of New Mexico researcher suggests.

Construction workers are 13 times more likely to suffer fatalities related to [heat-related illness](#) than those in the general population, the researchers say. For their study, the researchers analyzed the body temperatures of 32 construction workers over three days in July at a jobsite in Kansas City, MO. Participants ingested a pill that monitored their body temperatures.

Although the outdoor temperature averaged a “relatively moderate” 88° F over the three days,

43% of the workers’ body temperatures reached 100.4° F. NIOSH considers this the threshold for elevated risk of heat stress, a UNM press release states.

Additionally, more than 60% of the workers arrived at the worksite dehydrated.

“The safety of workers depends on the environmental temperature, the intensity of the work, and the clothing and equipment worn,” lead study author Fabiano Amorim, professor of exercise science at UNM, said in the release. “If you are engaged in the hardest job, you produce more heat, and then your body temperature will increase while still getting heat from the environment.”



Photo: Arizona Department of Transportation

“If you have this combination, your body temperature is going to increase to very, very high values. This is a problem.”

# Does excessive heat raise the risk of work-related injuries? May 14, 2024

Waltham, MA — The higher outdoor temperatures climb, the more likely it is that a worker will be injured, according to a recent study from the Workers Compensation Research Institute.

Researchers looked at 2016-2021 workers’ comp claims data and weather data from across 24 states. They found that on days when the high temperature was 85-90° F, the chance of a work-related injury was an estimated 4.3% greater than on days when temps were between 65° F and 70° F.

The probability rose to 5.3% when the daily high temperature hit 90-95° F, and around 6% when temps were 95° F or above.

“Also, the effect of excessive heat is greater on traumatic injuries, including fractures, dislocations, contusions and lacerations,” WCRI

President and CEO Ramona Tanabe said in a press release.

In the construction industry, the chance of an injury was 14% higher when the daily high temperature was 90-95° F, compared with when it was 65-70° F. The likelihood of an injury was 20% greater when the thermometer reached a high of 95-100° F.

Perhaps not surprisingly, workers in the South exhibited a higher risk of injury under higher temperatures. The Northeast, however, experienced an 8% rise in injuries when the daily high temperature was 90-100° F compared with when it was 65-70° F.

WCRI says the study’s findings “can inform public policy debates on the importance of preventing the effects of excessive heat.”



Photo: Virginia Department of Transportation/Flickr

Articles originally published in **Safety+Health** A publication from nsc

# HEAT STRESS ACCLIMATIZATION

New employees are at the highest risk for heat illness. Acclimatization is crucial to working in hot conditions.

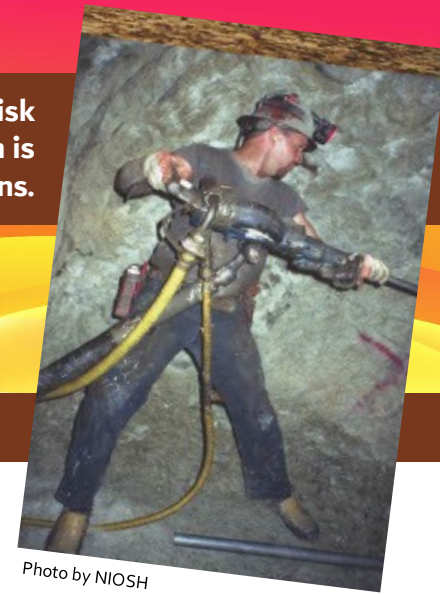


Photo by NIOSH

## Things to know

Heat acclimatization is the improvement in heat tolerance that comes from gradually increasing the intensity or duration of work performed in a hot setting.

The best way to acclimatize yourself to the heat is to increase the workload performed in a hot setting gradually over a period of 1-2 weeks.

Acclimatization starts to wane after about a week away from working in the heat.

## What are the benefits of heat acclimatization?

- Gradual heat exposure prepares the heart and other vital organs, causing them to be less strained during physical work.
- Sweating improves (higher volume, earlier onset), which cools the body more quickly. Acclimatized workers need more water — not less — due to increased sweating.
- Workers increase their ability to comfortably perform physical tasks in the heat.

## How is acclimatization achieved?

- Best results will come from gradually increasing work time in hot conditions over a period of 7 to 14 days, while cooling off and fully rehydrating between shifts.
- **Pushing to the point of heat exhaustion will hurt, not help, your heat tolerance.**
- Typically, acclimatization requires at least two hours of heat exposure per day (which can be broken into two 1-hour periods).
- The body will acclimatize to the level of work demanded of it. Simply being in a hot place is not sufficient. Doing light or brief physical work in the heat will acclimatize you **ONLY** to light, brief work. More strenuous or longer tasks require more acclimatization.
- Eating regular meals aids acclimatization. Food replaces electrolytes lost in sweat, especially during the first few days of acclimatization, when you lose the most salt in sweat.
- Physical fitness aids acclimatization.

## How quickly does the body lose heat tolerance after acclimatization?

- Acclimatization will be maintained for a few days after heat exposure stops, but will begin to be lost after about one week away from working in the heat.
- After one month away from working in the heat, most people's heat tolerance will have returned to baseline.
- Working 1-2 days in cooler conditions or taking breaks in air conditioning will not hurt acclimatization.

# HEAT STRESS ACCLIMATIZATION

## Sample Acclimatization Schedule

- Managers should have a formal acclimatization plan for employees working in the heat. Starting new employees at full intensity is not safe.
- Adjustments to the acclimatization schedule may be needed depending on the worksite's situation and on individual factors.
- **Most workers should be able to safely handle a full workload after 4 days of gradual increase, even though they will usually not be fully acclimatized yet. Most people will continue to see beneficial improvements in heat tolerance for up to two weeks after exposure starts.**
- Sudden shifts in work intensity or sudden increases in environmental temperature can increase the risk of heat illness even for acclimatized workers.

### NIOSH recommendations

#### For New Workers

Day 1: 20% usual work duration  
Day 2: 40% usual work duration  
Day 3: 60% usual work duration  
Day 4: 80% usual work duration  
Day 5: 100% usual work duration

#### For Workers with Experience in the Same Job

Day 1: 50% usual work duration  
Day 2: 60% usual work duration  
Day 3: 80% usual work duration  
Day 4: 100% usual work duration

## Case Study: Hazards of Not Acclimatizing Workers

A 41-year-old construction worker was sawing boards in 93° F heat. At 5 pm, the worker collapsed in the parking lot. He was found by another employee. His body temperature was recorded at 108° F when he was admitted to the hospital. He died the next day. At the time of the incident, the employee had been working for the company for one day. The company had no formal heat stress policy or acclimatization plan.

### Lessons learned:

- Heat casualties often occur with new or less experienced employees.
- Deaths from heat stress often occur during the first few days on the job.
- Employers should have heat stress policies and should implement acclimatization plans.



### SOURCES:

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Centers for Disease Control and Prevention  
National Institute for Occupational Safety and Health

DHHS (NIOSH) Publication No. 2017-124



# DIGITAL DANGERS

Arguably the most significant invention in our lifetime, the cellphone has allowed incredible advances in communication, education, and scientific research. It's also given us a big pain in the neck (and back, and shoulders, and hands ...). Digital devices such as cellphones are a great example of how technological innovations can

end up causing unintended problems.



GUARDIAN GRAPHIC SOURCE: SURGICAL TECHNOLOGY INTERNATIONAL  
Effective weight on the spine as forward tilt increases

0° 12lb	15° 27lb	30° 40lb	45° 49lb	60° 60lb
------------	-------------	-------------	-------------	-------------

For most of us, cellphone use has become unavoidable in our daily lives. Results of a recent online survey showed that adults reportedly spend an average of 4.5 hours on their phones every day — *not even counting time spent talking on the phone*. No wonder doctors and other health care providers are seeing an explosion of patients presenting with pain and soft tissue injuries of the fingers, wrists, elbows, neck, shoulders, and back — all consistent with too much smartphone use.

## INJURIES CAUSED BY CELLPHONES & OTHER ELECTRONIC DEVICES



**VISION PROBLEMS** — Staring at a screen for too long can cause eye muscles to become fatigued or weakened from overuse. Digital screens generate heat, and those who use them tend to blink less, which can add to eye dryness. The effects can be serious and long term, leading to a condition called Smartphone Vision Syndrome (SVS), especially when using a lit screen for hours in the dark.

**Symptoms:** Tired, itchy, and dry eyes, headaches, blurred or double vision, floaters, flashes of lights, zigzag lines, vision loss.

**Solutions:** Limit screen time to less than 2 hours per day; use of blue light filters; use eye drops (prescription or over-the-counter) to keep eyes from drying out. Remember the 20-20-20 rule: Look away from the screen at something 20 feet away for 20 seconds every 20 minutes. Avoid using digital screens in dark rooms.



**NECK & BACK PAIN** — Bending the head and neck at more than a 45 degree angle (typical while texting) exerts 45-60 pounds of force on the spine, putting strain on neck ligaments, muscles, and bones. Poor posture while using digital devices can also cause back and shoulder pain.

**Symptoms:** Neck pain and weakness, shoulder pain, back pain, stiffness, headache.

**Solutions:** Perform exercises and stretches to strengthen and increase flexibility in the neck and back. Use good posture when using smartphones or other mobile devices (this applies to physical media such as books as well) — chin tucked in and shoulders back, with body aligned in a neutral position. Raise the device closer to eye level to avoid tilting the head forward. Take frequent breaks from looking at handheld devices.



**CARPAL TUNNEL SYNDROME** — Until recently, this injury was seen most often in people who frequently use a computer mouse, but technology has upgraded the style of mice to reduce this risk. Often nowadays smartphones and other touch screen devices are the cause. Repetitive motions like scrolling, swiping, and tapping can increase pressure on the median nerve.

**Symptoms:** Numbness or tingling in fingers; pain in the hand, wrist, or forearm; weakness when gripping objects.

**Solutions:** Take frequent breaks to rest the hands; avoid activities that make symptoms worse; use cold packs to reduce swelling. Wrist splint can be used to immobilize the hand and help relieve symptoms. Anti-inflammatory medications can help with pain and swelling in the short term. Corticosteroid injections or surgery may be needed for serious cases.



**CUBITAL TUNNEL SYNDROME** (cellphone elbow) — Similar to carpal tunnel syndrome, but in this case the ulnar nerve is pinched behind the elbow (once referred to as “tennis elbow”). Flexing the elbow for long periods of time (as when using a phone) can cause decreased blood flow, inflammation, and increased pressure on and compression of the ulnar nerve (lower arm).

**Symptoms:** Same as carpal tunnel syndrome, especially when elbow is bent; aching or shooting pain on the inside of the elbow that radiates into the forearm, hand, and fingers; can lead to permanent motor deficits if not treated.

**Solutions:** See CARPAL TUNNEL SYNDROME.



**DE QUERVAIN'S SYNDROME** (“BlackBerry thumb”) — Any activity that relies on repetitive hand or wrist movement can cause the tendons on the thumb side of the wrist to swell and become painful; texting is a common culprit of these ailments. If gone untreated, it can spread into the thumb, forearm, or both.

**Symptoms:** Pain and swelling near the base of the thumb, difficulty moving the thumb and wrist when grasping or pinching, a “sticking” or “stop-and-go” sensation in the thumb when moving it .

**Solutions:** Resting the wrist — pain and inflammation will otherwise continue and could cause serious damage to the tendons. Apply cold compression for 10-20 minutes at least 3x a day for at least 3 days. A wrist brace can be used to immobilize the thumb and wrist to prevent further injury and to stimulate blood flow to the area for healing. Anti-inflammatory medications can help relieve pain and swelling. Corticosteroid injections or surgery may be needed for serious cases.

*Finkelstein's Test can help diagnose De Quervain's Syndrome*

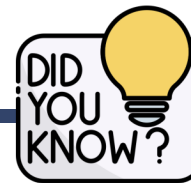


**OTHER INJURIES** — Believe it or not, the most common cellphone-related injuries are the bumps, bruises, scrapes, and lacerations caused by falls and collisions with objects while using the device and not paying attention. Some injuries are caused by the devices themselves being thrown at or dropped on body parts. (Ever fallen asleep while looking at your phone and dropped it on your face? It happens.) In a recent survey, 14% of respondents said at least one accident had occurred at their workplace because an employee was distracted by their cellphone, and half of those accidents resulted in an injury or death.

## PREVENTING DIGITAL DEVICE INJURIES: AN OVERVIEW

The most important way to avoid any of the ailments mentioned here is to **reduce your use** of the devices, and change your positioning when you do use them. Cellphone & tablet stands, external keyboards, styluses, and hands-free headsets can help. Pay attention to how long you are looking at a screen each day. Never use your phone in the dark for prolonged periods, as this will lead to serious vision problems.

**Stretching and strengthening exercises** can help prepare your body for periods of digital device use and also ease the pain associated with overuse (as with any repetitive use injury). The following page contains a list of exercises you can do throughout the day. Strengthening your core muscles has been shown to reduce back pain and help maintain proper posture, which can help prevent many of the injuries mentioned here. *Note: Check with your doctor before starting any exercise routine.*



**Employees who report experiencing psychological stress at work are more likely to develop work-related repetitive strain injuries.**

## UPPER BODY & BACK EXERCISES

**Chin tucks:** Sit or stand with shoulders relaxed and spine straight. Gently draw your chin to your chest by pulling your neck back, keeping your chin parallel to the floor. Hold for a few seconds and release. Repeat several times.

**Neck rolls:** Maintain a straight spine while sitting or standing. Slowly lower your chin to your chest, then tilt head to the left, bringing your ear to your shoulder. Hold for a few seconds, then roll back to the center. Repeat on the right side. Do several repetitions.

**Shoulder shrugs/rolls:** Stand with feet hip-width apart, arms relaxed. Gently raise shoulders towards ears, keeping neck relaxed. Hold briefly, then lower; repeat 5 times. Or if you prefer a more dynamic stretch, roll shoulders backward 5 times, then forward 5 times; Repeat this sequence 2 or 3 times until you feel a proper stretch has been achieved.

**Arm circles:** Stand with arms out at your sides, parallel to the floor, palms facing down. Slowly make 10 small circles forward, then 10 large circles forward. Reverse and do 10 small and 10 large circles backward.

**Butterfly:** With arms in front of you, place palms on opposite elbows (like a genie pose). Slide your hands up to your shoulders and draw your elbows together. Hold for 10-20 seconds, then release. Repeat 3-5 times.

**Upper trapezius stretch:** Sit or stand tall with shoulders relaxed. Draw your head back into a chin tuck position. Place one hand behind your back and the other hand on your head; gently stretch your head away from the arm behind your back. Hold 30 seconds. Repeat 2-3 times on each side.

**Levator scapulae stretch:** Stand straight or sit in a chair. Turn your neck 45° to the left and bend your neck downward (imagine you are looking into a shirt pocket). Use your left hand to pull your head for a greater stretch. Hold for 10-15 seconds. Repeat on the other side.



## WRIST & HAND EXERCISES

**Warm-up:** Move wrists in circular movements. Complete 12-15 circles in each direction as needed.

**Wrist extension:** Stretch your arm out straight, palm facing down. Use the other hand to gently pull the palm and wrist up toward your face; hold for 15-30 seconds & repeat up to 3 times. Repeat with other wrist.

**Wrist flexion:** Same as extension, but this time push the back of your hand down toward the ground into a bent wrist position.

**Thumb lifts:** Hold your hand with a flat palm, pinky down and thumb facing up (as if shaking hands). Lift your thumb away from your palm & hold for 5 seconds. Repeat 10 times. Repeat with other hand.



**Finkelstein stretch:** Hold your hand with a flat palm, thumb facing up (as with previous exercise). Bend your thumb toward your palm. Use your other hand to gently stretch your thumb and wrist downward until you feel a stretch on the thumb side of the wrist. Hold for 15-30 seconds. Repeat 2-4 times. Repeat with other wrist.



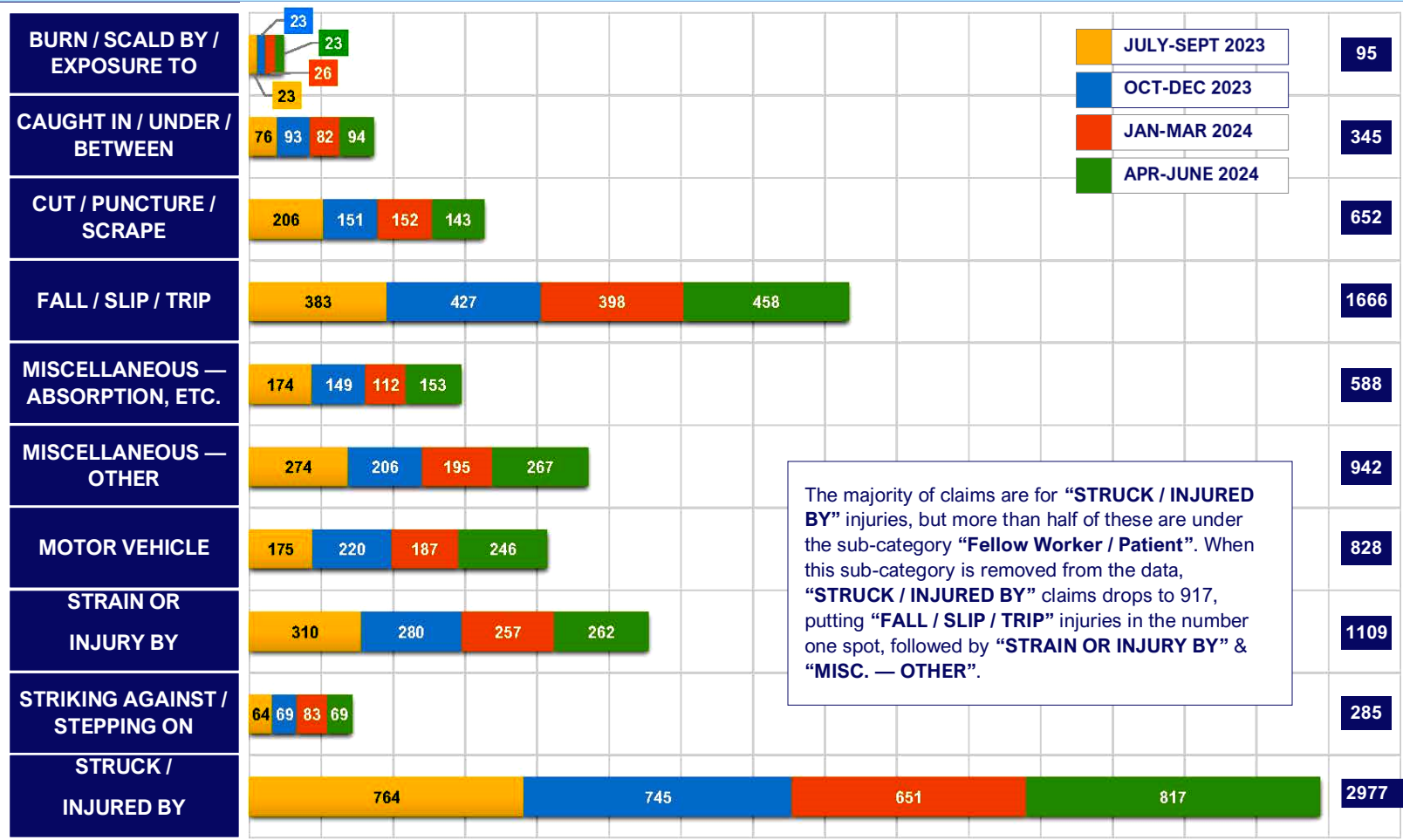
**Radial & ulnar deviation:** Hold your hands in the flat palm position, thumbs facing up. With arms extended, bend the wrists up (thumbs coming toward your face) and hold for 5 seconds; then bend the wrists down (pinky fingers coming toward your body) and hold for 5 seconds. Alternate back and forth 10-20 times.

**Forearm pronation & supination:** With arms at your sides, flex your elbows 90°. Make a fist with each hand and turn your palm upward and pause for 5 seconds. Turn your palm downward and pause for 5 seconds. Be sure to maintain your arm position throughout the exercise. A weight can be added once the exercise becomes pain-free.

# OUTLOOK SNAPSHOT:

## STATE OF FLORIDA WORKERS' COMPENSATION CLAIM TRENDS

**FISCAL YEAR 2023-24  
QUARTERLY OVERVIEW**



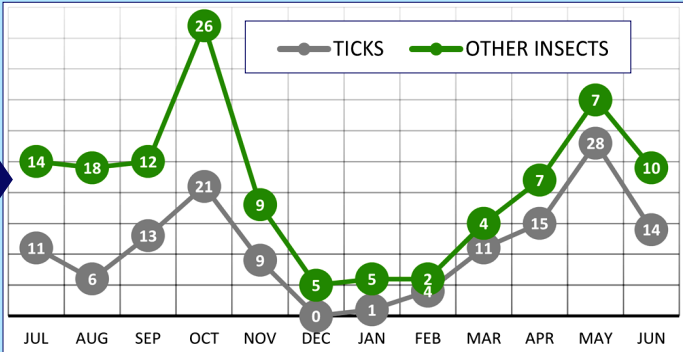
**NOTE:** Claim data for each month refers to claims filed in the previous month (e.g., Jan 2024 data shows incidents that occurred in Dec 2023, April 2024 shows March 2024 incidents, etc.).

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 removed from the data, “STRUCK / INJURED BY” claims drops to 917, putting “FALL / SLIP / TRIP” injuries in the number one spot, followed by “STRAIN OR INJURY BY” & “MISC. — OTHER”.

Animal or Insect	462
Explosion or Flare Back	3
Falling or Flying Object	142
Fellow Worker / Patient	2060
Hand Tool or Machine In Use	33
Motor Vehicle	34
Moving Parts of a Machine	3
Object Being Lifted / Handled	107
Object Being Handled By Others	28
NOC	105

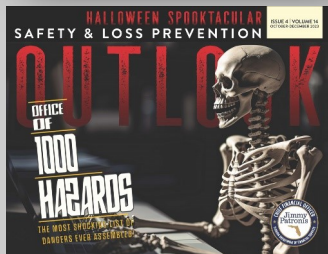


The second most common type of “STRUCK / INJURED BY” claim is “Animal or Insect” — insect bites made up the majority of these, particularly in the spring and fall months, with claims surging in May and again in October.





# Miss a previous issue? Browse the OUTLOOK Online Library



For the complete collection visit:

<https://www.myfloridacfo.com/division/risk/risk-financing-loss-prevention/loss-prevention-section/safety-loss-prevention-outlook>



The safety training required per section 284.50, F.S. for all newly-appointed safety and alternate safety coordinators is now being provided through online training modules available at your convenience.

**NEW** NOW AVAILABLE:  
**BASIC SAFETY TRAINING**

## PEOPLE FIRST USERS

**CLICK HERE**

to login to  
**PEOPLE FIRST**

Go to **TALENT MANAGEMENT** →  
**LEARNING** → **FIND LEARNING**

Type “**DFS\_RM**” into the search bar  
for a list of current courses

Click “**START COURSE**” on the  
module of your choice

## ALL OTHER USERS

**CLICK HERE**

to register  
directly on  
the **DRM**  
**website**

Submit your information to register  
for access to the **PEOPLE FIRST**  
**LEARNING MANAGEMENT SYSTEM**

Registration will allow access to all  
current and future trainings

# SAFETY & LOSS PREVENTION OUTLOOK TEAM

**Lori Taylor**

Managing Editor  
Writer  
Graphic Designer

**Wendy McSwain**

Staff Editor

**Eston Crew**

Creative Director

To submit comments, story ideas, articles, or other suggestions — or to be added to our distribution list — click here to contact us via email. We appreciate your feedback!

[StateLossPreventionProgram@myfloridacfo.com](mailto:StateLossPreventionProgram@myfloridacfo.com)

Click here to visit the Division of Risk Management website:

[www.myfloridacfo.com/division/risk/](http://www.myfloridacfo.com/division/risk/)

*The Safety and Loss Prevention Outlook newsletter is for informational purposes only. The Department of Financial Services does not endorse or support any websites, products, brands, or services referenced herein.*

**Molly Merry, CPA**

Division Director

**Kelly Fitton**

Assistant Division Director

**Jeffrey W. Cagle**

Chief of Risk Financing & Loss Prevention

**Wendy McSwain, MSA**

Loss Prevention Section Administrator

Office of the Director

(850) 413-4700

State of Florida Loss Prevention Section

(850) 413-3121

Bureau of State Liability & Property Claims

(850) 413-3122

Bureau of State Employee Workers' Compensation Claims

(850) 413-3123

Safety Coordinator Appointment Form

(850) 413-3121



# REFERENCES & RESOURCES

- Safety & Security Blog. (2022, Jul 7). Situational Awareness in the Workplace: How to Inspire Employee Vigilance. Alert Media. <https://www.alertmedia.com/blog/situational-awareness-workplace/>
- Safety & Security Blog. (2022, Jul 28). How to Improve Risk Awareness in the Workplace With Practice and Communication. Alert Media. <https://www.alertmedia.com/blog/risk-awareness/>
- Knowledge Hub Article. (2024, June 1). What is Situational Awareness (SA)? Isarsoft. <https://www.isarsoft.com/knowledge-hub/sa>
- Guardian Travel. (2021, Mar 10). How To Practice Situational Awareness Everywhere. Advanced Tactical Resources. <https://atr-ltd.co.uk/news/everyday-situational-awareness/>
- Rubin Jen. (2012, Oct 23). How to increase risk awareness. Project Management Institute. <https://www.pmi.org/learning/library/increase-risk-awareness-6067>
- Eli McKown-Dawson, Contributor. (2024, Feb 28). How do Americans feel about walking, driving, and other ways they get around? YouGov. <https://today.yougov.com/travel/articles/48782-how-americans-feel-about-walking-driving-and-other-transit>
- Bureau of Transportation Statistics. (2022). Injured Persons by Transportation Mode. United States Department of Transportation. <https://www.bts.gov/content/injured-persons-transportation-mode>
- Matthew Chambers, Bureau of Transportation Statistics. (2013, Mar 7). Transportation Safety by the Numbers. United States Department of Transportation. <https://www.bts.gov/archive/publications/by-the-numbers/transportation-safety/index>
- Tapio Klen, Seppo Vaayrynen, Kuopio Regional Institute of Occupational Health. (1984, Oct). The role of personal protection in the prevention of accidental injuries in logging work. Journal of Occupational Accidents, Volume 6, Issue 4, 1984, Pages 263-275, ISSN 0376-6349. <https://www.sciencedirect.com/science/article/abs/pii/0376634984900154>
- Thinking Blog. (2024). When Safety Proves Dangerous. Farnam Street Media Inc. <https://fs.blog/safety-proves-dangerous/>
- Anthony D. Branch. (2018, Mar 16). National Traffic and Motor Vehicle Safety Act. Encyclopedia Britannica. <https://www.britannica.com/topic/National-Traffic-and-Motor-Vehicle-Safety-Act>
- Dave G. Curry, the CLM Magazine. (2007, Oct 11). Behavioral Adaptation: Why safety features don't always increase safety. Claims and Litigation Management Alliance. <https://www.theclm.org/Magazine/articles/behavioral-adaptation/119>
- Gordon Hard, Consumer Reports News. (2009, Aug 28). Government study confirms ABS effectiveness, but mysteries linger. Consumer Reports. <https://www.consumerreports.org/cro/news/2009/08/government-study-confirms-abs-effectiveness-but-mysteries-linger/index.htm>
- Tony Jones, RN, COHN, OHST, WCP. Safety Net Blog. (2017, Jun 9). Risk Compensation and the Peltzman Effect. MEMIC. <https://www.memic.com/workplace-safety/safety-net-blog/2017/june/risk-compensation-and-the-peltzman-effect>
- Psychologs World. (2024, Mar 20). What is the Peltzman Effect? Psychologs Magazine. <https://www.psychologs.com/what-is-the-peltzman-effect/>
- YouGov Survey: Methods of Transportation Poll Results. (2023, Nov 17-20). YouGov. [https://ygo-assets-websites-editorial-emea.yougov.net/documents/Methods\\_of\\_Transportation\\_poll\\_results\\_20231117.pdf](https://ygo-assets-websites-editorial-emea.yougov.net/documents/Methods_of_Transportation_poll_results_20231117.pdf)
- David Zipper. (2022, Feb 8). The Incredibly Obvious Way to Reduce Road Deaths That Goes Ignored. Slate. <https://slate.com/business/2022/02/car-safety-department-of-transportation-transit-a-plea.html>
- Sam Peltzman, Journal of Political Economy. (1975, Aug). The Effects of Automobile Safety Regulation. The University of Chicago Press. <https://www.journals.uchicago.edu/doi/abs/10.1086/260352>
- W. Kip Viscusi, AEA Papers and Proceedings, Faculty Publications. (1984). The Lulling Effect: The Impact of Child-Resistant Packaging on Aspirin and Analgesic Ingestions. Vanderbilt Law School. <https://scholarship.law.vanderbilt.edu/faculty-publications/130/>
- Jeff Rossen and Josh Davis, Health & Wellness. (2015, Apr 9). Are child safety caps enough to keep kids out? TODAY. <https://www.today.com/health/child-safety-caps-do-they-really-protect-your-kids-t14111>
- Janet Lubman Rathner. (n/d). Cars Are Safer Than Ever, So Why Are More People Dying? Laborers' Health & Safety Fund of North America. <https://lhsfna.org/cars-are-safer-than-ever-so-why-are-more-people-dying/>
- Jennifer Read. (2022, Nov 30). Globally, Nearly Two Thirds Of People Would Not Feel Safe In Self-Driving Cars. EMSNow. <https://www.emsnow.com/globally-nearly-two-thirds-of-people-would-not-feel-safe-in-self-driving-cars/>
- The News Guard. (2020, Mar 7). Research finds only 12 percent of drivers would feel safe riding in a self-driving car. Lincoln County Leader. [https://www.thenewsguard.com/news\\_paid/research-finds-only-12-percent-of-drivers-would-feel-safe-riding-in-a-self-driving-article\\_d8181952-5fdf-11ea-90e2-5382a340d934.html](https://www.thenewsguard.com/news_paid/research-finds-only-12-percent-of-drivers-would-feel-safe-riding-in-a-self-driving-article_d8181952-5fdf-11ea-90e2-5382a340d934.html)
- Blog. (n/d). The Problem of Self-Driving Cars: Feeling Safe vs Being Safe. Walton Telken Injury Attorneys. <https://waltontelken.com/problem-self-driving-cars-feeling-safe-vs-safe/>
- Jesus M. de la Garza, E. Scott Geller, and Sogand Hasanzadeh; Clemson News. (2023, Jan 11). The safer you feel, the less safely you might behave. The University of Clemson. <https://news.clemson.edu/the-safer-you-feel-the-less-safely-you-might-behave/>
- Blog. (2020 Jul 9). "Here in my car, I feel safest of all," say US consumers in pandemic era. Consulting.us. <https://www.consulting.us/news/4485/here-in-my-car-i-feel-safest-of-all-say-us-consumers-in-pandemic-era>
- Blog. (2023 Nov 13). Chances of a Plane Crash. Family Travel Genie. <https://familytravelgenie.com/chances-of-a-plane-crash/>
- Dr. Ron Frederick. (2024). Why your brain is on the lookout for danger. The Center for Courageous Living. <https://www.cfcliving.com/brain-threat-detector/>
- Sukjae J. Kang, et al. (2022, Aug 16). A central alarm system that gates multi-sensory innate threat cues to the amygdala. Cell Reports, Volume 40, Issue 7, 111222. Cell Press. [https://www.cell.com/cell-reports/fulltext/S2211-1247\(22\)01039-7](https://www.cell.com/cell-reports/fulltext/S2211-1247(22)01039-7)

- Salk News. (2022, Aug 16). How the brain gathers threat cues and turns them into fear. The Salk Institute for Biological Studies. <https://www.salk.edu/news-release/how-the-brain-gathers-threat-cues-and-turns-them-into-fear/>
- Orlando Fernandes, Jr., et al. (2019, Aug 24). How do you perceive threat? It's all in your pattern of brain activity. *Brain Imaging Behavior*, Volume 14, Issue 6, Dec 2020, pages 2251-2266. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7648008/>
- Kimberly Drake. (2022, Aug 16). How the brain's "central alarm system" gathers threats and turns them into fear. *Medical News Today*. <https://www.medicalnewstoday.com/articles/323492>
- Mental Models Blog. (2024). Second-Order Thinking: What Smart People Use to Outperform. Farnam Street Media Inc. <https://fs.blog/second-order-thinking/>
- Mental Models Blog. (2024). The Law of Unintended Consequences: Shakespeare, Cobra Breeding, and a Tower in Pisa. Farnam Street Media, Inc. <https://fs.blog/unintended-consequences/>
- Mark Thornton, Assistant Professor of Economics, Auburn University. (1991, Jul 17). Alcohol Prohibition Was a Failure. *The Cato Institute*. <https://www.cato.org/policy-analysis/alcohol-prohibition-was-failure#notes>
- Weekly Safety Blog. (2024). Complacency At Work Is Dangerous And Can Lead To Injuries. *Weekly Safety*. <https://weeklysafety.com/blog/complacency-is-a-workplace-safety-hazard>
- Sharon Lipinski. (2019, Dec 13). The Antidote to Complacency and Familiarity. *Incident Prevention*. <https://incident-prevention.com/blog/the-antidote-to-complacency-and-familiarity/>
- National Highway Traffic Safety Administration 2021 Data. (2023, Jun). *Traffic Safety Facts*. U.S. Department of Transportation. <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813458>
- Fatality Facts 2022. (2024, Jun). Pedestrians. *Insurance Institute for Highway Safety*. <https://www.iihs.org/topics/fatality-statistics/detail/pedestrians#:~:text=A%20total%20of%207%2C388%20pedestrian.their%20lowest%20point%20in%202009>
- Juliana Kim, National Blog. (2023, Jun 26). U.S. pedestrian deaths reach a 40-year high. *National Public Radio*. <https://www.npr.org/2023/06/26/1184034017/us-pedestrian-deaths-high-traffic-car>
- Injury Facts. (n/d). Airplane Crashes. *National Safety Council*. <https://injuryfacts.nsc.org/home-and-community/safety-topics/airplane-crashes/>
- Injury Facts. (n/d). Deaths by Transportation Mode. *National Safety Council*. <https://injuryfacts.nsc.org/home-and-community/safety-topics/deaths-by-transportation-mode/>
- USA Facts Team. (2023, Dec 19). Is flying safer than driving? *USA Facts*. <https://usafacts.org/articles/is-flying-safer-than-driving/>
- iNudgeyou Blog. (2019, Oct 29). Applying Behavioural Science to ensure stairway safety – A closer look at fall prevention and occupational stairway behaviour. *iNudgeyou – The Applied Behavioural Science Centre*. <https://inudgeyou.com/en/applying-behavioural-science-to-ensure-stairway-safety/>
- Brad Spicer, Security Management. (2022, Sep 1). How to Improve Your Situational Awareness. *ASIS International*. <https://www.asisonline.org/security-management-magazine/articles/2022/09/how-to-improve-your-situational-awareness/>
- Rich Gasaway. (n/d). What Does It Mean To Be Situationally Aware? *Situational Awareness Matters*. <https://www.samatters.com/what-does-it-mean-to-be-situationally-aware/>
- Eric S. Toner, MD., white paper. (2010). *Creating Situational Awareness: A Systems Approach*. *Medical Surge Capacity: Workshop Summary*. US Institute of Medicine Forum on Medical and Public Health Preparedness for Catastrophic Events. *National Academies Press*. <https://www.ncbi.nlm.nih.gov/books/NBK32848/>
- Kevin P. Madore, Ph.D. and Anthony D. Wagner, Ph.D. (2019, Mar-Apr). Multicosts of Multitasking. *Cerebrum*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7075496/>
- Crystal Raypole, Destination: Wellness. (2020, Jul 2). Planning a Road Trip? Watch Out for Highway Hypnosis. *Healthline*. <https://www.healthline.com/health/highway-hypnosis>
- Alex Naoumidis, Matter. (2020, Jun 25). Highway Hypnosis: What is it and what does it tell us about ourselves? *Mindset Health*. <https://www.mindsethealth.com/matter/highway-hypnosis>
- Tom Waterton, Curious. (2020, Oct 5). The danger of being too safe. *Medium*. <https://medium.com/curious/the-danger-of-being-too-safe-8266babc3c0c>
- Christo, Blog. (n/d). Cultivating a Risk Aware Culture. *AwareGo Security Awareness & Compliance Training*. <https://www.riskmanagementstudio.com/risk-aware-culture/>
- Melinda Wenner Moyer, Well. (2022, Apr 28). Text Neck, Pinkie Pain and Other Ways Phones Can Wreck Our Bodies. *The New York Times*. <https://www.nytimes.com/2022/04/28/well/live/neck-joint-pain-phone.html>
- Kavitha Ukkirapandian, et al. (2024 Mar 16). Ulnar Nerve Entrapment Among Cell Phone Users: Cell Phone Elbow (Cubital Tunnel Syndrome). *Cureus*, volume 15, issue 3, March 2024. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10990069/>
- Joanne Cavanaugh Simpson, Health & Science. (2016, Jun 13). Digital disabilities – text neck, cellphone elbow – are painful and growing. *The Washington Post*. [https://www.washingtonpost.com/national/health-science/digital-disabilities--text-neck-cellphone-elbow--are-painful-and-growing/2016/06/13/df070c7c-0afd-11e6-a6b6-2e6de3695b0e\\_story.html](https://www.washingtonpost.com/national/health-science/digital-disabilities--text-neck-cellphone-elbow--are-painful-and-growing/2016/06/13/df070c7c-0afd-11e6-a6b6-2e6de3695b0e_story.html)
- Fred Hosier, Manufacturing, Safety News Alert. (2009, Jun 4). Move over carpal tunnel: Now there's cell phone elbow. *Success Fuel*. <https://www.safetynewsalert.com/move-over-carpal-tunnel-now-theres-cell-phone-elbow/>
- Michael Darowish, M.D., et al., One Minute Consult. (2009, May). What is cell phone elbow, and what should we tell our patients? *Cleveland Clinic Journal of Medicine*, Volume 76, number 5, May 2009. <https://www.ccm.org/content/ccjom/76/5/306.full.pdf>
- Blog. (2022, Oct 19). Top 5 Most Common Cell Phone Injuries. *Denver Sports Recovery*. <https://www.denversportsrecovery.com/blog/top-5-most-common-cell-phone-injuries>
- HealthU. (2021, Aug 31). Are All Of My Devices Giving Me Wrist Pain? *Hackensack Meridian Health*. <https://www.hackensackmeridianhealth.org/en/healthu/2021/08/31/are-all-of-my-devices-giving-me-wrist-pain>
- Blog. (2023, Jun 26). How Smartphones Can Trigger A Repetitive Strain Injury. *Integrated Rehabilitation Services*. <https://integrehab.com/blog/injuries/smartphone-repetitive-strain/>
- Blog, Dr. Sahai. (2020 Apr 13). Spending Too Much Time on Your Smartphone Can Cause Wrist Problems. *South Florida Hand Center*. <https://sofiohandcenter.com/too-much-smartphone-use/>

Blog. (2024, Feb 22). 5 Ways to Reduce Finger and Hand Pain From Phone Use. Hartford HealthCare. <https://www.thocc.org/about/news-press/news-detail?articleId=54186&pubId=395>

Roger Powell, M.D., Physician Articles. (n/d). Effects of Smartphones on our Fingers, Hands and Elbows. The Orthopaedic Institute. <https://www.toi-health.com/physician-articles/effects-smartphones-fingers-hands-elbows/>

William M. McLaughlin, M.D., et al. (2023, Feb 8). An Epidemiological Study of Cell Phone-Related Injuries of the Hand and Wrist Reported in United States Emergency Departments From 2011 to 2020. Journal of Hand Surgery Global Online, Volume 5, Issue 2, Pages 184-188. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10039299/>

Blog, Dr. Nidhi, Physio. (2022, Jun 14). Wrist Exercises: Health Benefits, How to do ?-Variation. Mobile Physical Therapy. <https://mobilephysiotherapyclinic.in/wrist-exercises-health-benefits-how-to-do/>

Fatima Amjad, et al. (2020, May-Jun). Frequency of wrist pain and its associated risk factors in students using mobile phones. The Pakistan Journal of Medical Sciences, Volume 36, Issue 4, May-Jun 2020. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7260896/>

Kanu Goyal, M.D., Orthopedic surgeon, Associate Professor, Ohio State Wexner Medical Center. Health & Discovery. (2023, Jun 21). Can smartphones cause carpal tunnel syndrome? The Ohio State University. <https://health.osu.edu/health/general-health/carpal-tunnel-and-smartphones>

Markham Heid, Well. (2024, Jan 23). Walking and Using a Phone Is Bad for Your Health. The New York Times. <https://www.nytimes.com/2024/01/23/well/smartphone-walking-posture-mood.html?smid=url-share>

Federica Laricchia, Telecommunications. (2023, Dec 6). Time spent with nonvoice activities on mobile phones every day in the United States from 2019 to 2024. Statista. <https://www.statista.com/statistics/1045353/mobile-device-daily-usage-time-in-the-us/>

Dr. Nikita Toshi, Lifestyle Blog. (2024, May 7). Is Smartphone Vision Syndrome The Real Cause For Vision Loss? PharmEasy. <https://pharmeasy.in/blog/is-smartphone-vision-syndrome-the-real-cause-for-vision-loss/>

David DeWitt, M.D., Orthopedic Surgeon. (2018, Oct 26). Text Neck Treatment and Prevention. Spine Health. Knowledge from Veritas. <https://www.spine-health.com/conditions/neck-pain/text-neck-treatment-and-prevention>

Lindsey Tanner, The Associated Press. (2019, Dec 5). Cellphone-related injuries are on the rise, study shows. Global News. <https://globalnews.ca/news/6259142/cellphone-injuries-face-study/>

Mayo Clinic Website. (n/d). Carpal tunnel syndrome. Mayo Clinic. <https://www.mayoclinic.org/diseases-conditions/carpal-tunnel-syndrome/diagnosis-treatment/drc-20355608>

Mayo Clinic Website. (n/d). De Quervain tenosynovitis. Mayo Clinic. <https://www.mayoclinic.org/diseases-conditions/de-quervain-tenosynovitis/symptoms-causes/syc-20371332>

Nicole Davis and Katey Davidson, MScFN, RD, CPT. (2024, Mar 13). 19 Exercises to Relieve Upper Back Pain, Neck Pain, and More. Healthline. <https://www.healthline.com/health/fitness-exercise/upper-back-pain-exercises#video-routine>

EHS Today Staff, Health. (2020, Sep 3). Digital Distraction In Industrial Settings Causing Accidents. EHS Today. <https://www.ehstoday.com/health/article/21140731/digital-distraction-in-industrial-settings-causing-accidents>

Lindsey Bever, Morning Mix. (2014, Nov 20). "Text neck" is becoming an "epidemic" and could wreck your spine. The Washington Post. <https://www.washingtonpost.com/news/morning-mix/wp/2014/11/20/text-neck-is-becoming-an-epidemic-and-could-wreck-your-spine/>

Safety + Health. (2024, Jun 7). Heat-related illness prevention: New resources from OSHA. National Safety Council. <https://www.safetyandhealthmagazine.com/articles/25525-heat-related-illness-prevention-new-resources-from-osha>

Risk Management Blog. (2023, Nov 6). How to Improve Situational Awareness in Your Workforce. Carrier Chronicles. <https://carrierchronicles.com/how-to-improve-situational-awareness-in-your-workforce/>

Blog. (2022, Jul 7). A Quick, Easy Guide to Situational Awareness. EMR Safety & Health. <https://www.emrsafetyandhealth.com/a-quick-easy-guide-to-situational-awareness/>

Nina Agrawal. (2024, May 24). How to Stay Safe in Extreme Heat. The New York Times. <https://www.nytimes.com/2024/05/24/well/live/excessive-heat-wave-weather-health.html>

## IMAGE ATTRIBUTION

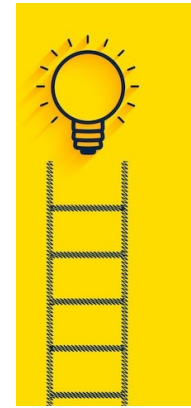
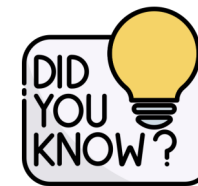


Image by starline on Freepik



Icon by freepik



Image by vector corp on Freepik



Image by master 1305 on Freepik

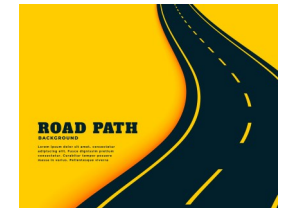


Image by starline on Freepik

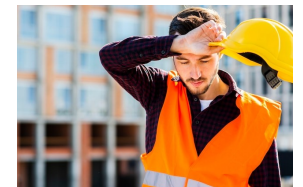


Image by Freepik



Image by Freepik



Image by starline on Freepik

All other images created by DFS or used with permission.