

5. The Fallacy of “Human Error” as Cause

“For every complex problem, there is a solution that is clear, simple, and wrong.”

—H. L. Mencken

“Workers don’t make bad choices, they have bad choices.”

—Todd Conklin

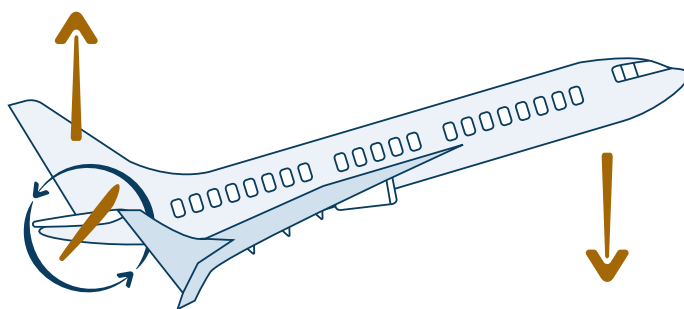
Despite many decades with an exceptional safety record (“If it ain’t Boeing, we’re not going!”) Boeing has had its share of significant safety issues over the past decade—but the “cause” of these issues was not immediately acknowledged. When a Boeing 737-MAX plane crashed back in October of 2018, the initial review by the National Transportation Safety Board (NTSB) indicated that the crash was *caused by pilot error*. Human error is frequently the scapegoat, a convenient explanation for bigger problems within complex systems. Five months later, in March of 2019, a second plane crashed in a similar manner, which was *also* initially ascribed to pilot error by both Boeing and the NTSB.

As we now know, there’s much more to this story than pilot error. Between the two crashes, there were no less than *eleven* anonymous reports* from other pilots about challenges they were having with new equipment and new software that had been installed in the 737-MAX, without any training requirements or guidance to the pilots. Going back to the plane’s design, the 737-MAX was intended to be more fuel-efficient than its predecessor, the 737 NG, but they opted to add a much larger engine to the original body. “Boeing chose to upgrade the 737 instead of designing a new aircraft to replace it. The upgrade was done to minimize short-term costs and maximize short-term earnings.”¹

Tests revealed that the new, heavier engine changed how the plane handled during takeoff, which engineers attempted to compensate for with new technology, known as an MCAS (Maneuvering Characteristics Augmentation System). MCAS was meant to help pilots avoid stalls by pushing the nose of the plane down when taking off at too steep of an angle, but the MCAS relied on a single sensor for its information—with tragic consequences when that single sensor failed and sent inaccurate information that led to the planes crashing to the ground, killing everyone on board.

* Aviation Safety Reporting System—an anonymous, public database of aviation safety concerns reported by frontline personnel such as pilots, air traffic control, etc.

737 Max



It's simplistic to say that “the MCAS system caused the planes to crash”—there were many factors involved—but it certainly contributed directly to the pilots' inability to regain control of a plane that continuously and automatically pointed the nose downwards while trying to take off, resulting in the two tragic crashes (plus at least the eleven known near-misses).

Much like the Space Shuttle stories from earlier in this book, there were a myriad of organizational and system-driven factors that combined to make these crashes occur, but in this instance, as is commonly the case, investigators looked through a binary lens: Failures like this must be either (a) mechanical or (b) human error. Since the equipment seemingly worked as designed, they ruled out mechanical errors so *human error was the only remaining possibility*. Of course, a systems-thinking perspective would not see it as humans OR equipment but humans working WITH equipment. It's interesting to note that as I was putting the finishing touches on this book, another Boeing plane crashed—the Air India flight on June 12, 2025—and that, too, is now being blamed on pilot error in this early stage of the investigation. It will be interesting to see how that story unfolds.

When we look at an incident after the fact, with the gift (or burden) of hindsight, and we apply simplistic models to complex stories, we arrive at simple answers. As a train-crash investigator, Anthony Hidden, said, “There is almost no human action or decision that cannot be made to look more flawed and less sensible in the misleading light of hindsight.”² An analysis conducted by Holden (2009) on 27 major aviation accidents revealed that in 26 out of 27 cases (96%), pilots or flight crew were deemed to be the main causes of the failures.³ Additionally, the worse the outcome an event has, the greater are we inclined (biased) to want to find an equally sizable cause, the greater the need to identify someone to blame—a human tendency known as symmetry bias). In the words of Erich Fromm, “The quest for certainty blocks the search for meaning.”⁴

The Mangatepopo gorge incident provides a clear example of how it might be easy (and tempting) to blame individuals, such as the instructor who led the group into the gorge, despite her being new to the program, and relatively inexperienced at that stage of her career as an outdoor educator. In the wake of such an emotionally devastating event, it's understandable and common that survivors might feel incomplete, unresolved, like someone must be held accountable for their loss. Interviews with survivors of the event, including the victims' families, did in fact show that some blamed the instructor for the incident.

We can always find human error in any incident investigation, but if we stop looking when we find it, we are likely missing the deeper story. Blaming incidents and near-misses on human error is an easy story, but as the next section will outline, errors are much more commonplace than we are taught to believe.

Errors are Normal

“If you look for human error, you will find it 100% of the time.” —Todd Conklin

Errors are actually happening all the time. Some studies show 1-15 errors per hour in the workplace, while other studies show averages of 50 workplace errors a day.⁵ Undoubtedly, variables such as workplace conditions, worker experience, training and supervision, etc. all contribute to influencing the prevalence of errors, but the larger point here is that errors are not unique, unusual events—they are routine and commonplace.

When we assume that errors are rare or unusual, this contributes to a mindset—much like Heinrich’s Dominos—in which we need to focus our primary risk management strategies around *preventing* or *correcting* errors—which usually consists of blaming, shaming, retraining, or firing the offender. Ironically, this can end up making our programs less safe as a result, as we are either suppressing incident reporting, pursuing optics rather than quality, and ultimately choosing blaming instead of learning.



Why Do We Say “Error is Normal?” by Ron Gantt⁶

There is no psychological trait, condition, or feature that is an ‘error’. There is nothing that a human does that is always wrong or always broken. Everything we do is adaptable in some context and not in others. If that’s true, error is a mismatch between a given strategy and a given situation.

Error is normal because it is embedded in normal processes for how humans operate successfully in the world. And this is why attacking errors by dealing with the individuals who ‘commit’ the errors is so problematic. First, it doesn’t exist in the individual so you’re focusing on the wrong thing (it’s like fixing a romantic relationship by only focusing on one partner). Second, even if you were to ‘fix it’ you just eliminated a source of success in other contexts. So you just created a new ‘error’ you’ll have to solve later.

What You Look For is What You Find⁷

Erik Hollnagel coined a useful (if perhaps hard to phonetically pronounce) acronym of WYLFWYF—“what you look for is what you find.” When we go looking for something, in an incident investigation, we can usually find it. Often, the something we go looking for is human error.

Todd Conklin reminds us, “when investigating an accident, don’t limit yourself to human error or non-compliance—you will always find both.” Error is normal, and so commonplace that it’s actually present not only in the small number of events that go catastrophically wrong, but it’s present in almost all of the other ones too, as the following case study from the medical field illustrates.

Prosecuting a Nurse for a Medical Error

Radonda Vaught was a Registered Nurse (RN) at the Vanderbilt University Medical Center in Nashville, Tennessee in 2017 when she committed a medical error that resulted in the death of Charlene Murphey, a 75-year old patient admitted to the hospital for a subdural hematoma (blood pooling within the brain, which can occur in the setting of traumatic brain injury).

Vanderbilt is a teaching hospital, meaning Vaught was responsible not just for treating her patients, but also for orienting nursing students and new nurses, which she was doing when the incident occurred. She was also working within a hospital that was having ongoing technology issues due to a recent software “upgrade” which prevented normal communication between electronic health records, medication dispensing cabinets, and the hospital’s pharmacy. This malfunction caused delays in routine accessing of needed medications, leading the hospital to enact a hospital-wide short-term workaround that directed nurses to override the safeguards on the medicine cabinets to access medications more quickly, as their time-sensitive job requires them to be able to do. According to Vaught’s testimony, “overriding was something we did as a part of our practice every day. You couldn’t get a bag of saline fluids for a patient without using an override function.” Furthermore, she was working that day in a sort of multi-purpose support capacity between three different departments, being called upon to go wherever she was needed. Additionally, the hospital had previously identified certain areas as “no-talk zones” to reduce the likelihood of distractions in crucial situations—however, no such signs were posted in the area where Vaught was performing these critical steps. Within that context, the timeline⁸ of events is as follows:

December 26, 2017—The incident

A 75-year old female patient was scheduled to undergo a PET scan in the Neuro ICU due to some neurological symptoms. She was anxious about her ability to tolerate being in the confined quarters of the PET scan machine due to claustrophobia, and asked for something to help her be less anxious. The doctor ordered 2 mg of **Versed**, a drug commonly used to help patients relax or sleep before a procedure—which was almost immediately approved and confirmed by the pharmacy staff, as a matter of routine. It is important to know that medications have both a brand name and a generic name—in

this case, the brand name medication “Versed” is also referred to routinely as “Midazolam” (and the terms are often used interchangeably).

Nurse Vaught had never been to the PET scan section of the hospital before, so she had to ask for instructions on how to find it while also talking with a newly hired nurse that she was orienting to Vanderbilt. Still talking with the orientee, Vaught was multi-tasking and attempted to withdraw Versed from the automated medicine cabinet (Versed is the brand name, not the generic name, of the medication). She searched for “Versed” under the patient’s record in the automated system (which lists medicines that have been prescribed and approved by the pharmacy), but “Versed” did not appear as an option, as that’s actually the brand name. To find it in the system, Vaught would have needed to know, and to search by its generic name, *Midazolam*.

Still searching for the brand name medication while multitasking, Vaught typed “VERSED” into the dispensing machine, and chose the first option that popped up, which was *Vecuronium*, not *Versed*. Vecuronium is a powerful paralytic, even in small doses. She withdrew the medication from the dispensing cabinet as a medication override. Unlike Versed, Vecuronium comes in a powder form that needs to be “reconstituted” by adding water, a step that Vaught performed. Nurse Vaught administered the paralytic medication to her patient in what would end up being a lethal dose. According to Vaught, it was common for prescription drugs to be widely varying due to supply chain issues happening at the time, so the same drug might be in the hospital system in various forms, like liquid AND reconstituted, at the same time.⁹ The Vecuronium stopped her patient’s ability to breath or to alert anyone to her distress. The patient remained in the PET scanner for 20 minutes and was eventually found to be unresponsive and without a pulse. An attempt at resuscitation was performed but irreversible damage was done.

Vaught immediately reported the error that she had made to the hospital.

December 27, 2017—Fatality and organizational cover-up

The patient was found to have suffered severe brain injury due to a lack of oxygen during the event and life support was withdrawn.

Vanderbilt officials obscured the fatal medication error from the government and the public. The error was not reported to state or federal officials, as was required by law. The patient’s death was documented (by two separate doctors at Vanderbilt) as having occurred due to “natural causes.” Medical examiners typically don’t get involved in death by natural causes, as this appeared to be, so there was no independent investigation.

January, 2018—Settlement with family, and termination of Vaught

Vanderbilt negotiated an out-of-court settlement with the patient’s family that requires them not to speak publicly about the death or the medication error.

The hospital terminated Vaught after an internal investigation.

Oct. 3, 2018—An anonymous tip to state and federal officials

An anonymous tip alerts state and federal health officials to the unreported medication

error, triggering an investigation. Upon learning of the error, the health department notified the Tennessee Bureau of Investigation (TBI).

Oct. 23, 2018—Department of Health absolves Vaught of any wrongdoing

The Tennessee Department of Health, which is responsible for licensing and investigating medical professionals, decides not to pursue disciplinary action against Vaught. In a letter to Vanderbilt, the agency's investigations director says Vaught's case "did not constitute a violation of the statutes and/or rules governing the profession." Vaught is sent a letter saying "this matter did not merit further action."¹⁰

Feb 4, 2019—Vaught is arrested and charged with multiple crimes

Vaught is arrested and indicted with reckless homicide and impaired adult abuse, charges which could mean up to 12 years in prison.

Feb 5, 2019—Board absolves hospital of any wrongdoing

Vanderbilt executives testify during a meeting of the Tennessee Board of Licensing Health Care Facilities, which is responsible for disciplining hospitals. Vanderbilt's CEO admits the death wasn't reported to state regulators and described the hospital's response as "too limited." Vanderbilt also confirmed for the first time that they had negotiated a settlement with the victim's family.

The board takes no disciplinary action against Vanderbilt.

March 21, 2022—Criminal court case begins

Vaught's court case begins. The state must prove not only that she killed the patient, but she did so with a reckless, conscious disregard of the risks of her actions. Prosecutors say she should have known the risks, as a trained nurse who was not new to her role. Vaught's defense argues that although Murphey's death is tragic, the outsized consequence of her error does not make Vaught's mistake a conscious, criminal act of homicide.

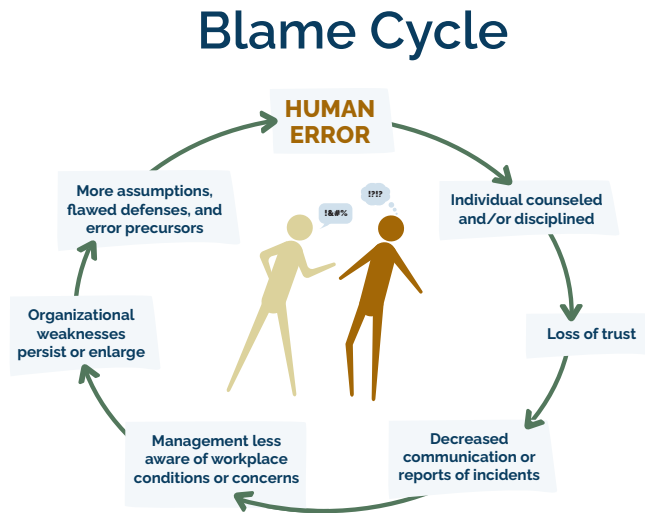
As the case is being deliberated, nurses and nursing associations voice their support for Vaught, and their concern that a conviction could set a dangerous new precedent that would make reporting medical errors harder in the future, or have a negative influence on people's willingness to work as nurses at all. "The trial happening at all has already caused a lot of healthcare workers and nurses to question their career choices," one Knoxville-based nurse said.¹¹

March 25, 2022—Vaught is found to be guilty of all charges

Vaught is convicted in court of criminally negligent homicide and abuse of an impaired adult. As researchers Connor Lusk et al have stated, "The conception of accidents as being easily avoided through greater attention, trying harder, or adherence to rules, is a naive reductionist concept, serving only immediate purposes, and is still the dominant view of safety. There is not just a legal problem, but a wider systemic failure to understand and embrace what we know about safety within complex systems."¹² In Vaught's own words, she was a healthcare worker within a healthcare system. Blaming a single individual for system-induced error(s) leads us to the next concept: The Blame Cycle.

The Blame Cycle

James Reason—the author behind the Swiss Cheese Model of Incident Causation—describes a destructive cycle that organizations and people can find themselves in: The Blame Cycle.¹³



The irony of the Blame Cycle is that, in an effort to foster accountability and minimize risk to the organization, the organization goes about it in a way that leaves itself more exposed to risk as a result. But it's even more confusing than that—we can convince ourselves that we've done something good, that we've taken a strong stance, that we've learned our lesson and are turning the ship around. This is where the world view which Heinrich gave us (in earlier chapters of this book) comes powerfully into play. In other words, blame makes errors, a *choice* people make, a *moral* failing. A more contemporary view would be to see an error as the beginning of a conversation about how something happened, not the conclusion of an investigation.

In the Vanderbilt nurse case study, we can see elements of the Blame Cycle¹⁴ Reason cautioned about. Beyond the harm to the nurse, potential harm to the hospital itself included the following:

- By making the story about the individual nurse rather than about the workplace, hospital leadership displaced actual learning about the systems that made Vaught's error likely to recur; In Vaught's own words, "If something like this can happen to me, it can and will happen to someone else."¹⁵
- By punishing Vaught for self-reporting her error, they made it less likely for others to report errors in the future. This is the essence of the Blame Cycle in action.

- They also diminished staff morale and made healthcare workers question if their careers were worth the possibility of going to jail, during the COVID-19 pandemic when healthcare workers were already under tremendous pressure and they needed every nurse available.¹⁶

In addition to potential harm to the hospital itself, the case rippled widely throughout the entire healthcare industry. Robyn Begley, DNP, RN, chief nursing officer of the American Hospital Association and CEO of the American Organization for Nursing Leadership stated: “The verdict in this tragic case will have a chilling effect on the culture of safety in health care. We cannot punish our way to safer medical practices. We must instead encourage nurses and physicians to report errors so we can identify strategies to make sure they don’t happen again. Criminal prosecutions for unintentional acts are the wrong approach. They discourage health caregivers from coming forward with their mistakes, and will complicate efforts to retain and recruit more people into nursing and other health care professions that are already understaffed and strained by years of caring for patients during the pandemic.”¹⁷

Vaught’s peers in the nursing profession used this case to try to advocate for a better approach. Janie Harvey Garner is a St. Louis registered nurse and founder of [Show Me Your Stethoscope](#), a nurses’ group with more than 600,000 members. “In response to a story like this one, there are two kinds of nurses,” Garner said. “You have the nurses who assume they would never make a mistake like that, and usually it’s because they don’t realize they could. And the second kind are the ones who know this could happen, any day, no matter how careful they are. This could be me. I could be RaDonda.”¹⁸

How Does the Blame Cycle Show Up in O/EE Programs?

Over the past several decades, I have had the opportunity to work with a wide range of O/EE programs, from outdoor education to camps, schools, therapy, and conservation corps and more. The Blame Cycle can be found in practical, routine examples from many of them. The following are hypothetical examples.

- A wilderness therapy field guide is driving a van to a trailhead and slides off the steep, muddy BLM road. The first thing the office does, upon hearing of this report, is require the field guide to be tested for drugs or alcohol use. The assumption is that someone must be guilty until proven innocent. The “us versus them” dynamic created by a presumption of guilt made it hard for field staff to self-report when minor incidents occurred. Sometime later, office staff begin noticing dings, dents, or other new damage to vehicles that were never reported to them, due to fear by field staff.
- A summer camp reports incident data at the end of each summer season to the leadership and board of directors, and has to submit that data and trends to maintain accreditation status each year. A first year counselor submits a “near-miss” report after almost tipping over in a canoe and is subsequently asked to stand up in a staff meeting to talk about the mistakes they made, what policies weren’t followed, and describe how they will try harder in the future. This person is unlikely to submit another near-miss report again.

- A conservation corps leader uses inappropriate, sexually explicit language and humor around the corps members and offends many of them. This is brought up by the program director to the HR department, who terminates the leader immediately and issues an organization-wide memo that there is “zero-tolerance for any kind of sexual misconduct or harassment.” As a result, leaders and administrators are reluctant to report future occurrences, for fear of retaliation against the offender in question. The HR department believes that the memo worked as intended, preventing repeat occurrences, as the number of reported incidents remains low.
- A 20-year old female outdoor educator is sexually propositioned by her new staff trainer, a 35-year old male, during her new staff training. Not wanting to draw any attention to herself, or to create any complications for herself going forward, she laughs it off and carries on with the training. Later, she does bring it up with her co-instructor on a program she is working on, and is told that the male trainer is “actually a great guy” and a “real leader at the organization,” with a long history and excellent reputation. She feels unheard, withdraws, and ultimately leaves the organization altogether, mid-season. The 35-year old male trainer continues working there, his behavior unchanged and never addressed.
- A university outdoor education program has a sign prominently displayed in their equipment warehouse: 237 days since our last on-the-job injury. A logistics coordinator is working in the warehouse all alone, and stacks a few plastic storage bins on top of each other and climbs on top to change a light bulb that has burned out. The boxes give way under his weight and he badly sprains his wrist as he falls to the ground. No one sees the incident happen, and he’s afraid he’ll get in trouble if he reports it. The next day, the sign reads “238 days since our last on-the-job injury.” (Who wants to be the one who makes the sign reset to zero?)
- A conservation corps has a requirement from their HR department (and land management agency partner) to fill out certain forms every time someone gets hurt at work, no matter how small the incident. If a crew has too many incidents, they may be reprimanded or have to retake basic orientation and training, regardless of their experience. Over the years, the more savvy and experienced program leaders have learned to carry their own first-aid kit in a fanny pack around their waist, so they can quickly “take care” of any injuries that occur, without having to crack into the official first aid kit (which are issued in shrink-wrapped plastic* so the administrators know if anyone has used anything from the kit) or fill out any forms.
- In her speech announcing that she’s stepping down from her CEO role, the outgoing CEO explains that she has a hard job, and that it was made harder by

* The author once worked for an outdoor program that issued all first aid kits in shrink-wrapped, vacuum-sealed plastic so it would be obvious if anyone used anything from the kit. While this plan was meant to save time on the logistical steps of restocking first aid kits at the end of each program, it created a disincentive to use the first aid kit during the program itself.

getting calls in the middle of the night from the safety director to notify her when critical incidents occurred. This was shocking to the safety director as they were following the organization's long standing procedures, and to the staff in the room who felt like they were also being blamed for the incidents that occurred, or for reporting them at least.

When a media-worthy incident occurs, the O/EE community can respond in a few different ways. One way that the Blame Cycle can show up here is for the community to attack / shame / blame the program or people involved in the incident itself, in an attempt to distance themselves from the perceived errors or factors that contributed to the event. Sometimes, this cycle can begin before the facts of the incident are even known. Whenever we see the O/EE community attacking / shaming / blaming another program, especially before the incident facts are even known, this is the blame cycle in action—it can make it harder for other programs to come forward, report their incidents and near-misses, and share their lessons learned. It drives learning underground for the greater O/EE community.

As we have seen in multiple examples throughout this book, the easiest thing in the world to do, with the lens (or burden) of hindsight after an incident has occurred, is to find and blame human error. In fact, the worse the outcome, the greater the tendency can be to search for an equally sizeable cause (the aforementioned *symmetry bias*¹⁹). It's tempting to settle for that simple story—and it's convenient (even comforting) for us to be able to say that we have analyzed and identified the problem, and corrected it. But the binary, mechanistic world view in which an incident is caused either by an equipment malfunction or user error is, itself, a construct, a way we simplify the complex world in which we live and work. When we settle for the simple story of blaming human error, we rob ourselves of the opportunity to look deeper within the organization, to understand how close we may have come to that incident happening before, and taking the steps needed to change the workplace conditions that made the incident possible or likely to begin with.

As Todd Conklin says, “when we look for human error, we will find it 100% of the time.” But that's like blaming a climbing fall on gravity. It's certainly part of the story, and maybe the fall wouldn't have happened without it, but it's not “the cause” of the fall.

Replacing the Blame Cycle with the Trust Loop

Psychologist Clive Lloyd offers a useful counterpoint to the Blame Cycle, a virtuous cycle which he calls the Trust Loop,²⁰ shown on the adjacent page.

Hypothetical examples of the Trust Loop working within an O/EE context follow:

- A wilderness therapy field guide is driving a van to a trailhead and slides off the steep, muddy BLM road. They are able to extract themselves from the situation unharmed, and report the incident to their supervisor, whose first questions are “Are you okay?” and “Will you help me understand what happened so we can keep this from happening again to anyone else?” They enter into a discussion of the challenges and pressures which the field guide was facing on this

Trust Loop



particular day, with an eye towards fixing the workplace rather than fixing the worker. The field guide left feeling supported and heard, and encouraged to speak up again in the future.

- A summer camp reports incident data at the end of each summer season to the leadership and board of directors, and has to submit that data and trends to maintain accreditation status each year. A first year counselor submits a “near-miss” report after almost tipping over in a canoe and is recognized in the next all-staff meeting as having contributed to the camp’s culture of safety and continuous improvement. The program director reminds everyone that near-misses are “cheap lessons,” opportunities to learn and improve without having to suffer any injuries or damage (while acknowledging that even near-misses can potentially carry psychological trauma). The first year counselor feels proud of their contributions to the camp’s risk management culture while also identifies some key learning from the near-miss about the best ways to load the canoe and handle the canoe in high winds.
- A conservation corps crew leader uses inappropriate, sexually explicit language and humor around the corps members and offends many of them. This is brought up by the program director to the HR department, who looks into the situation and hears it from all sides before having a conversation with the crew leader to revisit what is appropriate behavior. The leader immediately recognizes what they did wrong, sincerely apologizes, and commits to learning from this experience. The crew leader meets with those offended by the jokes and takes responsibility for their actions, apologizes, and asks them what is needed to repair the relationship. As a result, healing is able to occur and the conservation corps is able to retain their valuable, experienced crew leader, while maintaining a safe space for people to speak up again in the future without fear of overreaction by the HR department.

- An outdoor education program director instills the idea that errors are normal human occurrences and to be expected, but that *error correction* is an essential expectation of the program as well. When staff make an error of any sort, rather than being blamed and shamed for the error, they are celebrated and recognized for the *error correction*. As an example, when a new instructor misreads their topo map and leads a group many miles up what turns out to be the wrong valley, they decide to turn this into a lesson in leadership and humility, shifting the planned peak climb to the following day, while role modeling good judgment with their student group.
- In her speech announcing that she was stepping down from her CEO role, the outgoing CEO acknowledges the hard work that the frontline workers were doing every day, and how proud she was that over her time in a leadership role, that the reported number of near-misses and minor incidents actually increased, indicating a safe space for reporting, learning, and continuous improvement. At the same time, she thanks the safety director for leading these efforts, and for helping the organization be prepared to respond when incidents occur.

The Trust Loop model comes with some caveats, however. Building a culture of trust is not easy to accomplish, and it takes time. Once that culture is built, it can be fractured easily when people break the Trust Loop—especially if those people are in leadership roles, or people that should be in positions where trust is elemental to effectiveness. It's especially harmful when the very people who are responsible for upholding the Trust Loop are the ones who break the trust. While an organization benefits greatly from pursuing and enacting a Trust Loop culture, it cannot be in concept or in name only—it must be actively maintained and role modeled, especially by staff in leadership roles. Organizational attention (or pressure) to attend to legal risks or insurance requirements may also eat away at trust, which we will address more thoroughly in the next chapter.

Chris Bartram offers the following example of maintaining and role modeling humility to build trust: “New O/EE staff will often perceive individual positions of power such as supervisors or staff trainers as infallible, immediately setting an internal expectation that errors are wrong. I found the best way to combat this bias is by demonstrating vulnerability throughout staff training. I often do this by discussing personal experiences and mistakes that I made in my career and personal life while teaching risk management and decision making. I believe that this helps to break down barriers created by power dynamics and demonstrate that incidents happen to everyone. Thus assisting in de-stigmatizing errors, role modeling error correction/learning, and increasing supervisor approachability when staff inevitably make an error or have an incident.”²¹

Action Steps for O/EE Programs:

- Determine if staff know what happens when an incident report is submitted, who reviews them, and how. Do they understand the range of ways in which the information in the report will be analyzed and what could happen to them as a result? Ask your staff if they know the answers to these questions, and if their answers align with your answers.
- Assess your policies and procedures for post-incident steps that may amplify the tendency to look for or to find human error (for example, drug testing a driver automatically after any reported incident).
- Look for places where you may have a “zero tolerance” for a behavior, which may counter-intuitively allow that behavior to go unreported.
- Look for places where you may be pursuing the unattainable goal of “zero incidents,” and consider how that might contribute to Reason’s Blame Cycle.
- Aggressively monitor for any factors that put downward pressure on people’s willingness to speak up, ask questions, or report incidents or near-misses, and strive for a workplace of trust and psychological safety.
- Strive to foster an O/EE community, and seek out larger associations / conferences / communities of practice, that resist the blame cycle and respond to incidents with learning and continuous improvement in mind. Social media and online comments are often antithetical to the kind of community that seeks to learn rather than to blame.

My own story about the Aasgard Pass glissading incident is a personal example of how the blame cycle can function—when a fear of getting shamed and blamed can suppress learning and potentially leave us less safe as a result. Social media can be a place where we see individuals and organizations pouncing on each other in the wake of some tragic event, often jumping to judgments and assigning blame before the facts are even known about an event.

On the other hand, I have seen entire communities built around the humble, vulnerable sharing of learning from incidents and near-misses, such as the Wilderness Risk Management Conference. Over the three decades of the conference, many organizations have stepped forward to share the details and lessons learned from their incidents and near-misses, even when doing so with “competitors.” When NOLS* had a lightning incident in 2022, they presented their analysis and findings from that incident the following year at the 2023 WRMC²²—in a remarkable example of humility, vulnerability, and grace, fostering learning and healing from a tragic event.

* The National Outdoor Leadership School, based in Lander, Wyoming

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