



Division of Risk Management

Transcript for Webinar Series: Proactive Risk Management, Part 2: Risk Tolerance and Mitigation

Date: May 20, 2026

Speaker: Del Brady (DRM Loss Control Manager)

Introduction & Welcome

Well, good morning, everyone. Glad you could join us. I see we've got quite a few people logging in, so happy to have you all join us. You know, we've got some folks from our school districts, our state agencies, and loss control team, a few other groups. So, anyway, glad to have everyone join us. I hope today's webinar will be useful to you.

This quarter, if you'll remember, we're covering the topic of Proactive Risk Management. And last month we had Part 1, so today we're covering Part 2.

This webinar, as you heard, is being recorded and it'll be made available afterwards, just as we do with all the webinars. And then we'll also send out the monthly Risk Watch newsletter that will cover this material. So, if you have colleagues who weren't able to make it, stay tuned for those resources and you can share them with them.

Let's go ahead and jump right in.

Overview & Part 1 Review

Like I mentioned, today we're going to cover Risk Tolerance and Mitigation, which is Part 2 of our three-part series on proactive risk management. Last month we covered Part 1, Risk Identification & Analysis, and then next month we'll cover Part 3, Root Cause Analysis.

And I do want to mention, in each of these parts, we try to pull in real-world examples that are relevant to you and to help add some context to these concepts. So today we'll do the same thing, and at some point I'll invite your participation as well, so that hopefully we can talk about things that are pressing or on your mind and relevant to your day-to-day work.

So, please utilize the chat. If you have questions, drop them in the chat. Byungju and I will be monitoring that, and so we can address those questions as they come up. And then like I said, at some point I'll have you provide some input as we go through the webinar today.

During Part 1, we covered two simple tools that I hope are helping you make the shift from a reactive approach to risk management to a more proactive approach to risk management.

These are the two tools that we covered last month:

- The first one on the left is that four-square matrix to help you evaluate your workload and daily tasks, and then to be strategic about where you invest your time and effort.
- And then the matrix on the right is a risk analysis matrix to help you measure risks based on the *likelihood* of it happening, and then if it does happen, the *severity* of the consequences.

Today, you'll see that there is some overlap with these tools, and I'll introduce a third tool that hopefully will be useful to you in figuring out how to actually mitigate or neutralize or reduce the risks that you encounter.

Why Risk Tolerance & Mitigation?

But before we get into the technical part of this presentation, I want to talk about the why behind risk management. At the end of the day, risk management is about protecting people and resources. It's about helping our agencies and organizations continuing to deliver those critical services that we do. And it's also about maintaining public trust in our work as public servants.

In the public sector, a lot of our services that we deliver don't have an alternative that's accessible to most of the population. So in other words, we don't have customers who can just go to a competitor if we fail. We provide essential services like education, safety, infrastructure, social services—these are just a few examples. I put the logos of some of our insured clients up here, just to illustrate some of these critical services that you and I provide each day when we go to work.

So when we manage risk, we aren't just avoiding hassles or problems to make our work more difficult; we're actually making sure that critical things happen, like kids have a school to go to, that our roads are clear and safe, and that our employees are receiving their paychecks. So what you do has a significant impact.

Though I do realize that often our work as risk managers isn't always visible. We're often in the background, where few people see our work. But just know that what you do plays a critical role in helping your teams fulfill their missions.

Common Risks This Season

Okay, so we just talked about the conceptual "why" behind proactive risk management. Let's make this a little bit more tangible by bringing up some common risks that we see during this time of year.

So seasons are changing, and that's going to trigger new workflows, new services, and probably using equipment that hasn't been used for several months at least.

- Warmer weather: Could mean increased use of ice machines, and that in itself presents some unique risks. For example, in the past we've seen ice machines plugged in using extension cords. Well, that's going to create a new electrical fire hazard, maybe even a new trip hazard that hasn't been in the workplace for several months before. Also, it could introduce a risk of water damage if that ice machine starts to leak, as well as another slip/trip/fall hazard if the ground around the ice machine becomes wet.
- Hotter temperatures: Mean higher water usage, which means your sprinkler systems, your irrigation systems, culinary water—all of that usage is going to increase. In some cases, like with sprinkler systems, those have sat unused for several months, and so now it introduces a new risk where maybe some of those pipes broke over the winter months, maybe some of those sprinkler heads were ruined with snow shoveling or ice clearing—you know, those freeze-thaw type things.

So there are new risks that are happening in this change of seasons, and we'll talk about some of those.

Risk Tolerance & The Risk Matrix

Now as I bring up these examples, you might be thinking, *"Yeah, but how are we supposed to anticipate every risk? How are we supposed to know if a pressure relief valve is going to fail or a pipe is going to burst?"*

Well, the reality is you can't anticipate every risk, right? We know that there are risks that are unknown, and we don't know about them until something happens. But this is where understanding your organization's risk tolerance becomes critical.

Like we covered in Part 1 about prioritizing your day-to-day workload, understanding risk tolerance will help you know which risks need more attention than others.

One of the best ways to understand your organization's risk tolerance is to have an informed discussion with your leadership about where the risk tolerance is for your organization. Now an informed discussion is the key. You need to prepare for this conversation with details and information so that both you and your leadership have a common understanding of the risks and their consequences, and then can make informed decisions about them.

The tool that will help you do this is this same risk matrix that we reviewed in Part 1.

As you discuss the risks with your leadership, you can plot them on this matrix based on the two questions:

1. How likely is it going to happen?
2. If it does happen, how bad will those consequences be?

Now you'll see the color coding in this matrix:

- Green area: Risks within your organization's tolerance (low consequences, low impact). These types of risks, you monitor them, but may not necessarily be working on them on a day-to-day basis.
- Yellow/Orange/Red areas: As we move towards the top right corner, the colors change. The red at the top is where risks fall outside your organization's risk tolerance.

So if a risk lands there when you do your analysis, that tells you it's a risk that needs to be focused on and needs to be mitigated until the consequences are brought back into the green zone or altogether eliminated.

Now it's important to note that instead of reviewing individual risks with your leadership, you may need to instead focus on general risk categories.

For example, for educational institutions, student safety may be one of those broad risk categories that you discuss. For risks falling into that category, just think through: What's the general likelihood of a student being injured? If a student is injured, what's the severity? Well, an injured student may have catastrophic consequences to that student, the family, the institution, the community. So anything that is a risk to student safety may have consequences that put it in the orange or red zone of this matrix and therefore becomes a top priority for your focus.

One tip that I've found useful: If I'm ever feeling uneasy about a potential risk, I apply this matrix to see where it might fall. And if it's in the yellow, orange, or red, well then that triggers a conversation I need to have with leadership to understand, *"Hey, is this really something we need to prioritize and focus on mitigating?"*

Interestingly enough, I've found that in this yellow zone, that's where a lot of debate happens about risks—is it too severe, or is it not severe enough? That's where those discussions are going to happen, so it's important to be informed and have those discussions.

A reminder again: It's not your job to eliminate risks entirely; that's impossible. But your job is to ensure that risks taken or risks tolerated are within the green zone. And then risks that fall in the other zones, have that conversation, mitigate them, so that you can reduce the severity of the consequences.

Risk Mitigation & The Hierarchy of Controls

Now that we know how to clarify our organization's tolerance, how do we stay within the bounds of that tolerance? Well, we do that through risk mitigation.

And this is the second tool that I'll introduce today that will help you mitigate risks. It's called the Hierarchy of Controls. We'll use this hierarchy of controls to decide how to fix a risk.

Sorted by most effective to least:

Control Name	Control Description
Elimination	Physically remove the hazard
Substitution	Replace the hazard
Engineering	Isolate people from the hazard
Administrative	Change the way people work
PPE (Personal Protective Equipment)	Protect the worker

What it is, is it shows different risk mitigation strategies. And then to the left, you see a scale starting with Most Effective at the top down to Least Effective.

The top of the triangle is most effective because it relies the least on human effort. And then as you go down that triangle, the amount of human effort required for the solution begins to increase.

Let's talk through a few of these categories:

- **Elimination & Substitution:** The most effective because it removes the risk entirely.
 - **Example:** How many of you remember these [merry-go-rounds]? They were lots of fun, I remember playing on them a lot as a kid, and extremely dangerous. I remember one of my cousins broke his arm on one. How many of these do we see today? It was a risk to student safety, and so in most playgrounds, hopefully all, these have been removed. So that's Elimination.
- **Engineering Controls:** These are "set-it-and-forget-it" type solutions.
 - **Examples:** Digital firewalls as part of your cybersecurity strategy, or physical railings to keep people away from a cliff's edge or dangerous machinery. These solutions don't necessarily eliminate the risk, but they keep you and others away from it.
- **Administrative Controls & Personal Protective Equipment (PPE):** These are actually the most common strategies, but the least effective. Why are they the least effective? Because they rely on human behavior and human effort.
 - **Examples:** Administrative rules, HR policies, gloves, hard hats. If someone doesn't follow the policy or doesn't wear their PPE, then they're exposed to the risk. So it's dependent on those humans actually following the policy or wearing the PPE.

At this point, I want you to think about a risk that you encounter in your work where we could apply these tools. Drop them in the chat box, and I'll take us through another real-world example.

Practical Example 1: Irrigation & Sprinkler Boxes

Let's take a real-world example: Trip hazards in grassy areas – irrigation boxes (sports fields, parks, park strips, etc.).

This is particularly relevant at this time of year because the change of seasons means that people will be outdoors more, using grassy areas. This also means sprinkler systems and lawnmowers will be running. Now is a good time to have your teams inspect the sprinkler boxes and sprinklers in the grassy areas that you're responsible for. Not only can damaged or uneven sprinkler boxes create tripping hazards, but we've also seen broken irrigation lines and sprinkler heads near buildings cause significant water damage.

Sprinkler boxes flush and at grade are ideal. But over time—with foot traffic, ground settling, lawnmowers, etc.—boxes get damaged, lids go missing, or they sit above grade. If not maintained, you get broken plastic lids where someone running along could step in and sustain a major injury.

Risk Evaluation & Matrix Plotting

Let's assume these broken sprinkler boxes are on a high school or university sports field, where student safety and premises liability are top priorities (low risk tolerance).

- **Likelihood:** High foot traffic makes an injury Likely.
- **Severity:** Medically, it could be Significant; legally, it could be Major due to bodily injury and potential negligence claims.
- **Rating:** Lands in the Extreme / High category (outside risk tolerance).

Applying the Hierarchy of Controls

1. **Elimination:** Relocate sprinkler valves and boxes completely off the playing field/grassy area.
2. **Substitution:** Replace plastic sprinkler boxes with heavy-duty concrete boxes with bolted-down lids and concrete aprons.
3. **Engineering Controls:** Fence off the section containing irrigation boxes to prevent public access.
4. **Administrative Controls:** Post warning signs or rules restricting access to certain parts of the field.
5. **PPE:** Provide sturdy footwear (impractical/unrealistic for general public/students).

(Presenter checks chat comments highlighting how injury severity can vary based on individual health/age, e.g., a student's scraped knee vs. an elderly faculty member's broken hip).

Practical Example 2: Water Leak / PRV Failure

A few years ago, one of our insured properties experienced an ice machine leak on an upper floor. The water leaked through the floor, dripped into an equipment room beneath it, and destroyed a critical piece of equipment valued at over \$15,000.

In another case at a school, a Pressure Relief Valve (PRV) failed during a municipal water pressure spike. The surge burst three supply lines, flooding a large area of the facility and causing over \$30,000 in property damage while disrupting classes.

Applying the Hierarchy of Controls (PRV / Water Leak Scenario)

1. **Elimination:** Remove water supply lines entirely (unrealistic for a functional facility).
2. **Substitution:** Replace aging PRV valves with new, higher-rated valves.
3. **Engineering Controls:** Install automatic water shut-off devices or smart water detection sensors ("water pucks") around supply lines to detect leaks early.
4. **Administrative Controls:** Implement mandatory monthly/weekly inspection and maintenance schedules for all PRVs.
5. **PPE:** Not applicable in this context.

Key Takeaway: You don't have to choose just one control. Combining controls (e.g., replacing the valve and installing water detection pucks) creates the strongest risk mitigation strategy.

Conclusion & Support Resources

Hopefully, these two tools—the Risk Matrix and the Hierarchy of Controls—are helpful to you in your day-to-day work.

We are always here to support you. Please reach out to anyone on the Loss Control Team if you need assistance:

- Del Brady: delbrady@utah.gov
- Byungju Yoo: byoo@utah.gov
- Michelle Beus: mcbeus@utah.gov
- Karen Peterson: karenpeterson@utah.gov
- Ron Boshard: ronboshard@utah.gov
- Ed Rappleye: erappleye@utah.gov
- Ingrid Manning: imanning@utah.gov
- Wesley Whittington: wwhittington@utah.gov

Website Resources: risk.utah.gov/tools-resources/

Stay tuned for next month's webinar, which will be Part 3: Root Cause Analysis.

Thank you everyone for your time. Stay safe out there, and we'll see you next month! Bye-bye!