

Employee Health & Safety Risk

From Art to Audit

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Marsh Advisory

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Today's Discussion Points

EHS & Common Risks

Using a Lessons Learned
Approach

Internal Review

What Does EHS Do Anyway?

- Safety Meetings & Training
- Safety Programs
- Policies & Procedures
- Goal Setting
- Advising Leadership
- Reviewing Incident Reports
- Incident Investigations
- Faculty & Staff Advisement
- Chemical Disposal
- Regulatory Compliance Activities
- Safety Inspections
- Safety Equipment Procurement
- Contractor Management
- Emergency Response

...as a start

Common Risk Areas



Walking Surfaces



Science & Mechanical Labs



Art Classes



Mechanical/Storage Rooms



Chemical Storage



Contractors



Walking Surfaces

MARSH SERIOUS EVENTS IN HIGHER EDUCATION REPORT - 2022

Year	Incident	Settlement
2020	Claimant fell due to defective conditions – uneven grate	Settled for \$160,000 in 2021
2018	Fall on broken sidewalk	Settled for \$160,000 in 2021
2017	Fall on defective sidewalk	Settled for \$375,000 in 2020
2017	Claimant slipped in 100% leased building	Settled for \$125,000 in 2020

Walkways

Changes in
Elevation

Kitchen & Lab
Floors

Poorly Lit
Areas

Ladders

Stairs

Cluttered
Areas

Areas With
Loose Mats

Cords

Floors Where
Traction Level
Changes



Science & Mechanical Labs

- Thea Ekins-Coward **lost one of her arms** in a hydrogen-oxygen gas mixture explosion at the University of Hawaii at Manoa in 2016.
- Postdoctoral researcher Meng Xiangjian **died** in a hydrogen explosion at Tsinghua University in 2015.
- Graduate student Preston Brown **lost three fingers and damaged his eyes** in a nickel hydrazine perchlorate explosion at Texas Tech University in 2010.

Lab Hazards

- Fire & Explosions
- Chemicals
- Equipment, Especially Powered Equipment
- Electrical Hazards
- Lifting
- Radiation
- Lasers
- Sharp Objects & Glass



Art Classes

“The fire is at the Chief’s house!”

Art Class Hazards

- Chemicals
- Equipment
- Electrical Hazards
- Fire
- Repetitive Motion
- Lifting
- Radiation



All Labs

EHS	Faculty	Students
<ul style="list-style-type: none">• Assist in hazard assessments• Provide guidance on policies, procedures and training• Evaluate chemicals as requested• Conduct assessments• Assist in emergency situations	<ul style="list-style-type: none">• Identify and work to mitigate risks as they arise• Ensure students complete safety training• Assure students understand the hazards of the chemicals, equipment and practices used• Explain and reinforce safe practices and procedures, acting as a safety role model• Provide appropriate equipment and supplies• Monitor students to ensure they work safely	<ul style="list-style-type: none">• Successfully complete training• Follow procedures and practices• Alert faculty of any issues• Report all accidents, near misses, and potential chemical exposures



Mechanical/Storage Rooms



Mechanical/Storage Room Hazards

- Equipment, Especially Powered Equipment
- Chemicals
- Bad Housekeeping
- Storage Issues
- Fire
- Electrical Hazards
- Lifting
- Lockout/Tagout Issues
- Slippery Floors



Chemical Storage



Chemical Storage Hazards

- Fire & Explosions
- Leaking Containers
- Unsecured Cylinders
- Lifting
- Unlabeled Containers
- Incompatible Chemicals Stored Together
- Damaged or Rusted Containers
- No/Damaged PPE
- More Chemicals Than Needed



Contractors



Loss History



Reference Checks



Prior History on Your Campus



Contractor's Safety Program



OSHA Compliance History

Using a Lessons Learned Approach – 5 Whys

There was water on the floor from snow brought in on boots which melted

Why?

Floor grate at entrance didn't capture the snow from boots

Why?

Floor grate is full of dirt and debris

Why?

Floor grates aren't being cleaned as often as needed

Why?

Staffing shortage reduced cleaning schedule

Now, what will be done to prevent the next fall?

Contractor's - OSHA's Stance on "Host Employers" & Contractors

When employees of an outside contractor come onto your campus, both your organization (what the OSHA calls the "host" employer) and the contractor share responsibility for the safety of the contractor's employees. The dividing line between areas of responsibility is not always clear, but consider the following "rule of thumb" as a starting point:

1. The contractor is responsible for making sure that its employees know how to do their jobs safely.
2. The host employer is responsible for informing the contractor of any hazardous conditions that are specific to the host's workplace and stipulating any special controls or work practices that the contractor must follow to protect all workers.

Contractors - Avoid Multi-Employer Duty Issues

More than one employer can be cited by OSHA on construction sites. As the owner, the institution needs to be sure they did not:

- Create the hazard
- Expose institution employees to the hazard
- Assume responsibility for correcting the hazard
- Control non-institution employees on the site



Using a Lessons Learned Approach – Lessons From Losses



MUSIC Quarterly Closed Claims Lesson from Losses Bulletin August 2022

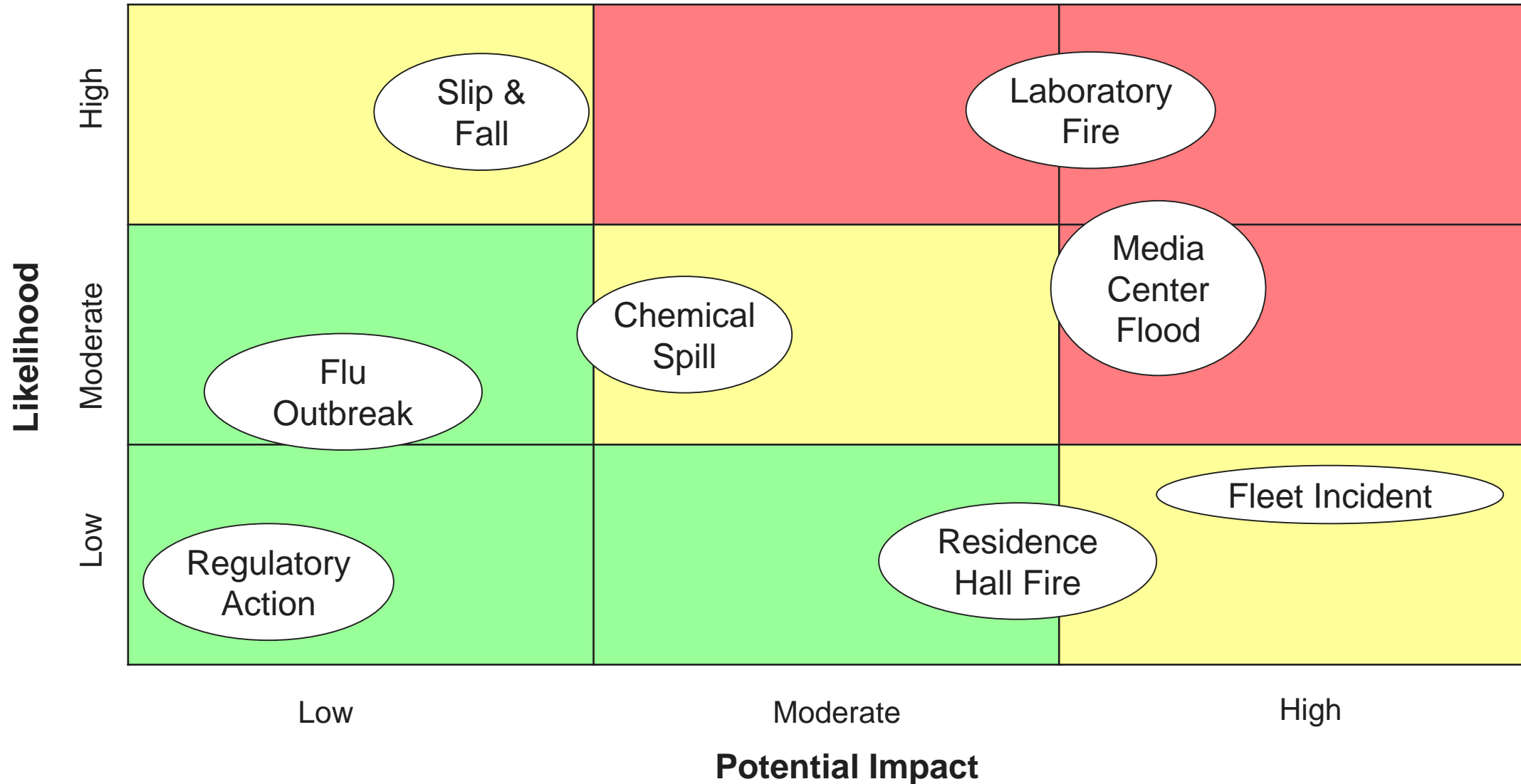
ASU Group Claim Number:
GL 2017 6/17/18, MUO

Brief Claim Summary:
On 6-17 and 18, 2018 historic rains fell in Houghton, Michigan. (7 inches of rain in 9 hours - a

*M.U.S.I.C. lessons from losses,
available on the M.U.S.I.C.
website*

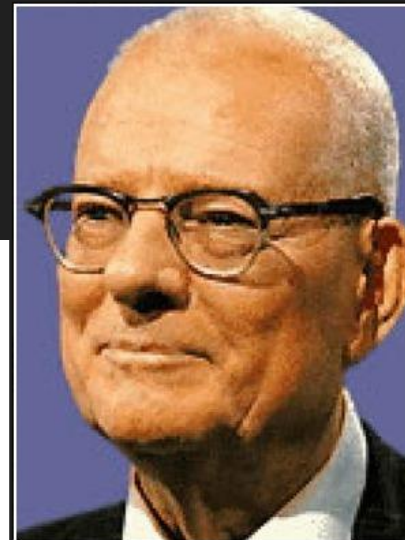


Internal Review – Risk Mapping



Internal Review – Assessments

- ✓ Comprehensive audits
- ✓ Scored to see trends and identify problem areas
- ✓ Response to recommendations tracked to completion
- ✓ Department self-assessment



You can expect what you inspect.

— W. Edwards Deming —

AZ QUOTES

EHS Support

EHS must have a seat at the table.

Good communication is key, especially with RM, peers, regulators, and external stakeholders.

Identifying and prioritizing EH&S issues, developing practical solutions.
Persistence and patience pays off.

Ensure others know non-compliance can have short- and long-term impacts.

Resources

- Jyllian Kensley, 10 Years After Sheri Sangji's Death, are Academic Labs Any Safer?, c&en, [10 years after Sheri Sangji's death, are academic labs any safer? \(acs.org\)](#), December 28, 2018
- Marsh Serious Events in Higher Education - 2022
- M.U.S.I.C. Quarterly Closed Claim Lessons from Losses Bulletin, M.U.S.I.C. SharePoint Site
- N1926.16 - OSHA Safety and Health Regulations for Construction – [Rules of construction. | Occupational Safety and Health Administration \(osha.gov\)](#)
- National Safety Council Keeping Contractors Safe, [Five Ways to Keep Contractors Safe -- Occupational Health & Safety \(ohsonline.com\)](#)
- United Educators Large Loss Report 2020, [UE Large Loss Report 2020](#)
- Thomas Ouimet, CIH, CSP, Safety Guide for Art Students, United Educators, [Safety Guide for Art Studios \(uncsa.edu\)](#), 2000.





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