# Safety Accountability Plan

**Guidance**

(Updated June 29, 2021)

## Scope

The LRSC has oversight responsibility for academic and research activities that involve potentially hazardous materials or equipment, occurring in laboratories, shops, or studios affiliated with the Ann Arbor campus. All units that have such spaces are expected to submit a plan and will play a role in strengthening the culture of safety at U-M.

## Intent

This guidance provides the basis for the Safety Accountability Lead (SAL) appointed for each University of Michigan Unit Safety Committee (USC) recognized by the Laboratory and Research Safety Committee (LRSC) to develop research safety education and accountability plans for their unit. The SAL should work with the dean and USC chair to develop an approved strategy for success in their unit. The strategy should include the required elements as outlined in this guidance and reinforce a sustained positive and proactive culture of safety.

## Overview of Responsibilities

See below and refer to [U-M Academic Laboratory and Research Safety Policy](#) for further detail and information on responsibilities for other units such as EHS and LRSC. The intent is that units, EHS and the LRSC are working cooperatively together toward the same goals of creating an inspection ready safety culture across campus. This plan could be constructed following best practices set by other existing compliance entities across campus.

### University Leadership Responsibilities:

The university has an overall responsibility for maintaining safety as a core institutional value and ensuring work environments are safe across campus. University leaders work to provide resources that support and strengthen the safety culture across campus. They also monitor safety trends, hold units accountable for safety in their research and educational activities and for addressing issues, and provide direction on compliance issues that extend beyond individual schools, colleges, institutes, and UMOR units.

### Unit Responsibilities:

Each unit has an overall responsibility to foster an environment where safety is prioritized and to ensure expectations regarding maintaining a safe work environment are known. Each unit is also responsible for establishing an inspection-ready culture and a system for accountability in safety compliance, and for providing resources that support safety related needs. Each unit is expected to resolve the vast majority of safety compliance issues within their unit.
**Faculty Responsibilities:** Each faculty member is responsible for the safety of all individuals that work or learn within the areas they oversee. Each faculty member is expected to ensure the training and monitoring of these individuals and a safe working environment. Each faculty member is expected to lead by example to promote a culture that prioritizes and makes safety visible through everyday actions (e.g., wearing appropriate safety glasses and PPE, not consuming food and drink in lab spaces, encouraging safety-related discussions, incorporating safety education in trainee mentorship plans, working with EHS to proactively resolve potential safety concerns). When safety concerns are identified, each faculty member is expected to correct these issues in a timely manner drawing on help within their unit as necessary, and to ensure the corrections are sustained.

**Safety Accountability Lead (SAL) Responsibilities:** Each SAL, who is designated by the dean(s) of their unit, will serve as the main contact for issues regarding implementation of their unit accountability plan. In conjunction with the dean, the SAL is responsible for the following:

1. Monitoring quarterly Unit Scorecards provided by EHS, and developing action plans to move their unit toward a sustainable inspection-ready safety culture.
2. Working with the LRSC to promote campus-wide consistency with safety requirements, including consequences for unresolved issues.
3. Serving as a resource and advocate for faculty on resolving compliance concerns.
4. Administering an effective unit safety committee with ongoing review of performance.
5. Ensuring there is an adequate mechanism in place for safety concerns or suggestions to be reported locally and that this is known to your community.
6. Promoting professionalism in the workplace into unit activities (promotions, reviews, faculty development) that include safety as a key element.

**NOTE:** The SAL can appoint a co-lead to assist in the day to day operational aspects of this responsibility. This is a successful model seen in larger units.

**Resources:**
EHS is available to assist in providing resources or to answer questions to assist in development of your plan.
## College of Engineering Safety Accountability Plan

(Updated February 29, 2024)

### Instructions: Please document the following information and submit to LRSCAdmin@umich.edu by February 29, 2024

<table>
<thead>
<tr>
<th>Unit</th>
<th>College of Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Accountability Lead (SAL)</td>
<td>Andre Boehman, Chair for CoE Safety Committee</td>
</tr>
<tr>
<td>Co - Safety Accountability Lead (SAL)</td>
<td>Amie Frank, CoE Safety Manager</td>
</tr>
</tbody>
</table>
| Dean(s) with Oversight Role for Plan | Mingyan Liu, Associate Dean for Academic Affairs  
Éric Michielssen, Associate Dean for Research  
Steven Ceccio, Interim Dean for CoE |

This plan should be completed by the SAL and Co-SAL in coordination with the CoE Safety Committee Chair and CoE Safety Manager with final approval by the Dean and Associate Dean(s). This plan will contribute to establishing the approach for ensuring safety is a core institutional value and for moving the University of Michigan toward a sustainable inspection-ready safety culture. Submitted plan should include an email (or cover letter) stating that the plan was developed collaboratively among the Dean, Associate Dean(s), SAL, Co-SAL, CoE Safety Committee Chair, CoE Safety Manager and approved by all parties.

### Local Accountability Plan Elements:

1. Provide an overview of your unit-level Research Safety Accountability Plan for reporting, communicating, overseeing and monitoring progress in improving the culture of safety.

The Safety Accountability Plan outlines the structure and responsibilities for maintaining safety within the College of Engineering (CoE) at the University of Michigan. This plan establishes a clear framework to ensure a safe and accountable working environment within CoE, aligning roles and responsibilities to maintain high safety standards.

### CoE Safety Committee

- Serves as the primary body for implementing the CoE Laboratory and Research Safety Accountability Plan.
- Includes Safety Chairs from each department and unit who meet quarterly with key stakeholders.
● Provides a structure and venue for reporting safety deficiencies, incidents/near-misses and statistics; in addition to evaluating community receptivity and implementation strategies of safety culture initiatives and programs.

CoE Department/Unit Safety Chair

● Addresses and resolves overdue safety inspection deficiencies.
● Reviews illnesses/incidents/near-misses.
● Participates in all CoE Safety Committee Meetings
  ○ Reports departmental safety issues to the CoE Safety Committee.
● Holds regularly scheduled Safety Meetings for their department or unit.
  ○ Requests at least 1 Safety Meeting per quarter
  ○ Topics include safety information from the CoE Safety Committee Meetings in addition to any other safety information/concerns/issues that are specific to their department or unit.
  ○ Requests that each research lab has at least 1 member (Faculty or Lab Safety Representative) represented.
● Maintains a list of all their labs that includes the Faculty or Staff responsible for the lab and their Lab Safety Representative.

Appointment and Governance

● Appointed by the Department Chair or Unit Director.
● A CoE Department/Unit Safety Chair Delegate can be appointed to assist the CoE Department/Unit Safety Chair.
  ○ Responsibilities between the CoE Department/Unit Safety Chair and CoE Department/Unit Safety Chair Delegate need to be clearly stated and agreed upon.
● The terms for the CoE Department/Unit Safety Chair and CoE Department/Unit Safety Chair Delegate are 1 year with the ability to renew. The terms begin in August/September.

CoE Safety Committee Chair

● Ensures each CoE Department/Unit Safety Chair is attending the CoE Safety Committee Meetings, holding their Department/Unit Safety Meetings, enforcing overdue safety inspections, and following up on safety incidents/near-misses.
● Assists each CoE Department/Unit Safety Chair with complex or sensitive safety issues.
● Organizes, in consultation with the CoE Safety Manager, the CoE Safety Committee Meetings
● Participates on the CoE Emergency Planning and Response Team (EPART).

Appointment and Governance

● Appointed by the CoE leadership.
● The term for the CoE Safety Committee Chair is 2 years with the ability to renew.

CoE Safety Manager

● Organizes, in consultation with the CoE Safety Committee Chair, the CoE Safety Committee Meetings.
Prepares and reviews safety deficiencies, incidents and statistics in addition to providing safety culture initiatives and programs.

- Participates on the CoE Emergency Planning and Response Team (EPART).
- Acts as the liaison between CoE Faculty/Staff/Students, CoE Leadership, CoE FMO and UM F&O to resolve complex or sensitive safety issues.

Executive Secretary for the Associate Dean for Academic Affairs

- Maintains the MCommunity Group for the CoESafe Committee, coe-safety-committee@umich.edu.
- Ensures the CoESafe Committee is approved by the Executive Committee.
- Schedules CoE Safety Committee Meetings quarterly and takes CoE Safety Committee Meeting notes.

EHS Representatives and DPSS Representatives

- Provides additional safety information and answers questions from the CoE Safety Committee.

Emergency Planning and Response Team (EPART)

- Manages comprehensive safety and security planning, with a broader focus beyond lab safety.

2. Training, Education and Communication

a. Training Plan: Outline approaches to improve training plans aimed at promoting a positive culture of safety and ensuring expectations about research safety are understood.

- The CoE Safety Committee Meetings are held quarterly to provide a structure and venue for reporting safety deficiencies, incidents/near-misses and statistics.
  - Training/onboarding for new CoE Department/Unit Safety Chairs will be provided by the CoE Safety Committee Chair and the CoE Safety Manager when necessary.
- Individual Department/Unit Safety Meetings are requested to be held at least quarterly to make sure the information discussed at the quarterly CoE Safety Committee Meetings is passed along to our research community in a timely manner.
  - Training in MI Safety Portal (MISP) for anyone in CoE will be offered by the CoE Safety Manager and EHS.
- Lab specific training is outlined and documented within the Lab’s Chemical Hygiene Plan, that includes all Standard Operating Procedures (SOPs).

b. Communication Plan: Units will be expected to hold regular local events, at a minimum annually, but preferable more frequently, as appropriate for unit size. The Laboratory Research Safety Committee (LRSC) may develop expectations for such events as a way to obtain input from stakeholders on
outreach or safety promotion topics. Units may also use these events as opportunities for general feedback from constituents that can be shared with the LRSC on issues such as major concerns regarding regulatory or compliance issues, impact on productivity and burden, and barriers to being compliant.

- The CoE Safety Committee plans to hold one to two events per year that promote community interaction and safety visibility. Please note that the events are subject to change based on accommodating all parties and stakeholders involved. Events may include, but are not limited to, the following:
  - Prescription Safety Glasses Event in Collaboration with EHS and SVS Vision.
  - Lab Safety Awareness Week (February)
    - Additional details will be dependent on the contest and award availability set forth by RASC.

3. Safety Data and Metrics
   a. Develop processes to improve metrics regarding the number of deficiencies and timely correction for both announced and unannounced safety audits provided on quarterly safety scorecards. Develop processes for investigating and addressing the top deficiencies cited on the scorecards. The focus of responsibility should be clearly stated for all processes.

Process to Improve the Number of Deficiencies:
   i. All labs, specifically the Lab Safety Representative, will be encouraged to attend their Department/Unit Safety Meetings. Reminders will be provided. This includes, but is not limited to, EHS monthly self-inspections, updating chemical inventories and reporting safety issues.
   ii. Inspection preparation assistance is available by contacting either the CoE Safety Manager or the EHS Representative.

Process to Improve the Timely Correction of Announced and Unannounced Safety Inspections – Escalation Path Overview:

*EHS and CoE Initial Expectations Post-Inspection*
   i. The CoE Safety Manager requests EHS to send a copy of the safety inspection report to the lab (Lab Director, Lab Safety Representative and Person Accompanied during the safety audit), Staff Representatives (Facility Representatives for Departments and Directors/Managers for Units) and CoE Safety Manager.
   ii. The CoE Safety Manager will send a calendar invitation with notification on both days 23 and 30 post-inspection to the above parties.

*30-Day Reminder Notification*
   iii. On day 23 post-inspection (if the safety inspection is not already closed), the CoE Safety Manager will send a reminder email to the lab and offer assistance in closing out the safety
deficiencies before the 30 post-inspection date. The above parties in addition to the CoE Safety Committee Chair and Department/Unit Safety Chair will be cc’d on the email. *The assistance offered by the CoE Safety Manager may include, but is not limited to, helping define corrective actions for safety deficiencies and helping close out their safety deficiencies within MISP once the corrective actions are agreed upon.

**37-Day Final Reminder Notification - FINAL NOTIFICATION**

iv. On day 30 post-inspection (if the safety inspection is not already closed), the CoE Safety Manager will send a follow up email to the lab and request immediate action on completing any outstanding safety deficiencies within the next 7 days. The above parties in addition to the Department/Unit Chair/Director and Unit Administrator will be cc’d on the email.

**38-Day CoE Leadership Notification**

v. On day 38 post-inspection (if the safety inspection is not already closed), the CoE Safety Manager will notify the ADAA and ADR of the noncompliance issues at hand. The noncompliance issues will also be addressed during the following CoE Safety Committee Meeting. Depending on the severity of these noncompliance issues not being handled appropriately, the next steps will be managed by the CoE Safety Committee Chair, CoE Safety Manager, SAL, Co-SAL, ADAA and ADR. If necessary, the RASC may be asked by the College to step in and help resolve the noncompliance issues following the [Research and Academic Safety Resolution Policy](#). Ideally, the safety inspection should be closed by day 60 post-inspection.

**Process for Investigating and Addressing the Top Deficiencies Cited on the Scorecards:**

i. The CoE Safety Committee will review the top deficiencies cited on the scorecards. This review will be conducted by breaking down the scorecards by Department/Unit and EHS Representative. Root Cause Analysis (RCA) techniques will be utilized to investigate and address the reason for the top deficiencies. Appropriate and effective corrective actions will be discussed among the CoE Safety Committee to reduce the top deficiencies.

**4. Safety Data and Metrics**

a. Units are encouraged to build on what is learned from the scorecard and to probe into other safety metrics germane to the hazards in their units. *Expected level of detail:* Define safety-data review processes, including details on the process for downloading data, analyzing, trending and monitoring data. Define which data are actionable and incorporated into the escalation plan (see 5).

See above (3.a.). In addition to breaking down the scorecards by Department/Unit and EHS Representative, the following reports will be downloaded from MISP for enhanced RCA to investigate and address the reason for the top deficiencies.
i. **Inspection Status Summary_with_Locations** - Utilized to determine open audits for each Department/Unit and/or EHS Representative

ii. **Open_Deficiencies_111521** - Utilized to determine specifically the types of open deficiencies and to develop root cause to why they are open

iii. **ALL_Deficiency_Details_UPDATED** - Utilized to determine specifically the types of deficiencies for each Department/Unit and/or EHS Representative

iv. **Open_Facility_Deficiencies_060723** - Utilized to determine specifically the types of facilities deficiencies and to develop root cause to why they are open

v. **F&O Work Order Deficiencies_EN** - Utilized to determine specifically the types of deficiencies for each building

vi. **Repeat_Deficiencies_060623** - Utilized to determine why some deficiencies are at risk for being repeated as opposed to others and to develop root cause to why they are being repeated

---

5. **Establish a safety non-compliance escalation plan for your unit that would enable timely and sustainable corrections to safety deficiencies.** Define the routing of information, beginning with notification of deficiencies by Environment Health & Safety (EHS) and ending with confirmation of deficiency corrections, to ensure deficiencies are corrected in a timely and sustainable manner. For situations that cannot be resolved at the local level, define the process for escalating the situation to the Laboratory and Research Safety Committee (LRSC). Describe how you intend to implement this plan for your unit including roles and responsibilities of the SAL and USC. Attach or provide an overview of the plan.

See above (3.a.).

---

6. **Define strategy to engage and support department efforts to promote safety and compliance throughout the unit, including expectations of faculty leaders.** Some questions to consider:

   a. **What level of planning is expected at the department level?**

   b. **How are Department/Unit Safety Chairs empowered to facilitate resolution of issues and safety education plans?**

   c. **How are Department/Unit Safety Chairs involved in the unit’s escalation plan?**

To answer 6.a., please refer to 1. and read the CoE Department/Unit Safety Chair description.

To answer 6.b., please refer to 1. and read the CoE Department/Unit Safety Chair description in addition to the CoE Safety Committee description. Each CoE Department/Unit Safety Chair is empowered to facilitate resolution of issues and safety education plans via their Department/Unit Safety Meetings and/or CoESafe Committee Meetings.

To answer 6.c., please refer to 3.a. and 5.