



Executive Summary: **Results and Recommendations based on the 2014 University-wide Lab Safety Survey**

I. Background:

At the start of the 2014-2015 academic year, the University-wide Laboratory Safety Committee (the “Lab Safety Committee” or the “Committee”), together with the Office of the Vice Provost for Research (OVPR), developed and distributed a university-wide lab safety survey to PIs, students, graduate students, post-doctoral fellows, research assistants and lab staff across the University. The Lab Safety Survey was designed primarily to collect baseline data on the perceptions and practices of lab safety across the University. To this end, the questions were broad-ranging, covering topics such as lab safety training, personal protective equipment (“PPE”) usage, lab safety incident reporting and general perceptions of safety. The Committee selected a wide range of questions to elicit data that would provide a comprehensive overview of the safety culture at Harvard University. The link to the confidential survey was distributed via email to the **over 6,000** individuals listed on the Environmental Health & Safety lab safety training rosters. **1,293** surveys were completed, resulting in a **19%** completion rate overall. The individuals who completed lab safety surveys comprised a wide range of stakeholders across the University, representing all the various schools and institutes at Harvard, and across roles, lab activities, years of experience, lab types and lab size.

II. About the University Lab Safety Committee:

The Laboratory Safety Committee (“Committee”) is the governing body primarily empowered to promulgate policies, rules and procedures for laboratory safety across the University and is responsible for advising on all aspects of laboratory safety. The Committee is comprised of faculty PIs and safety officers from across the University who are knowledgeable in laboratory science and/or safety and its membership represents the spectrum of laboratory activities across the University. The Committee’s determination to collect data on lab safety practices and perceptions across Harvard and to issue a report and set of recommendations fell within the scope of the role of the Committee, as established in its charter, particularly the following:

- Evaluating and identifying potential hazards associated with research and teaching activities in the laboratory environment,
- Making recommendations to the University Administration on risk management issues related to Laboratory Safety.

III. Highlights from the Survey Data:

The results of the University-wide survey were largely positive, with over **97%** of respondents reporting that they felt that their lab is a safe place to work. Additional high-level data revealed equally positive results, including:



- 84% of respondents reported that their supervisor considers safety a “strong priority” in their lab.
- 98% reported that they follow all safety guidelines in their day-to-day work, at least most of the time.
- 95% reported that they wear the appropriate personal protective equipment (“PPE”) required for every task they perform in the lab, at least most of the time.
- 93% reported that they feel comfortable reporting major injuries, minor injuries or safety incidents, at least most of the time.
- 65% reported they had never sustained an injury as a result of their work in the lab.

IV. Key Findings:

In many areas, the sections of the survey that allowed for open commentary yielded some of the most useful contextual information for understanding the contours of individual perceptions and practices around safety. Over 170 separate comments were received, ranging in length from several sentences to several paragraphs. Below, are some of the key findings grouped into “common themes.”

- Need for a Rational Balance:** A common theme among respondents was a concern that, as an institution, we not allow the commitment to compliance upset the reasonable balance between safety and the research to be conducted in our labs. In drafting its recommendations, the Committee was mindful of maintaining this sense of balance.
- The Central Role of the Principal Investigator (“PI”):** Survey respondents identified the important role PIs play in determining and setting the tone for lab safety culture within their labs. To this end, respondents seemed largely in agreement that PIs must be provided the authority and the resources to make their labs safe and productive.
- Need for a Dynamic Approach to Training:** Many commentators raised concerns regarding the generalized nature of lab safety training. As lab hazards differ from one lab to the next, these commenters stressed the importance of targeted training for ensuring safe practices and appreciation of inherent risks.
- Providing Appropriate Resources:** The need to be cognizant of the resource needs of the lab researcher and employee community was a theme that emerged in comments on adherence to PPE requirements, access to safety equipment beyond PPE, and the relation of facilities management to lab safety. These comments point to the need for continued partnership with procurement and the various facilities management entities across the University.



e. **Improving Communication/Information Dissemination:** A number of comments identified the need for greater communication regarding how to report incidents and how to access safety-related resources. As one commenter stated, safety information must be made “accessible and easy to digest.”

V. Recommendations:

While the data received from the survey are promising, the Committee determined that Harvard’s overall safety program can benefit from further improvements. This determination was largely based on the specific feedback provided through survey respondent comments, which identify areas for improvement and refinement. The Committee determined that these improvements and refinements will significantly assist the institution in attaining its goal of maintaining a safe and healthy work environment for its faculty, staff, students and visitors. To this end, the Committee makes the following recommendations:

- A. **Facilitating the PI’s Role in Setting the Tone for a Culture of Safety:** Conduct outreach among PIs to determine resource needs and/or safety concerns. Seek to design resources that facilitate making labs safe and productive.
- B. **Lessening the Risks Associated with Lone Working:** Take a risk-based approach to lessening the frequency of lone working, thus lessening the potential for, and the impact of, lab safety incidents or injuries resulting from lone working. Develop guidance to emphasize the importance of not carrying out particularly dangerous while working alone.
- C. **Making Lab Safety Training More Applicable:** Determine who works with which hazards in each lab and use that information to offer targeted training modules and/or in-person trainings more directly oriented to specific labs and specific risks.
- D. **Ensuring adequate PPE resources:** Conduct risk-based outreach to labs to determine if PPE is adequate and appropriate and available for the work being conducted. If not, work with the labs and the procurement office to examine possible ways to address such concerns.
- E. **Improving Information Dissemination and Training:** Track safety incidents; determine trends across the University and incorporate safety information discovered when safety incidents happen into safety alerts, on-line training modules and annual training refreshers.
- F. **Facilitating Safety Incident Reporting:** Take steps to improve awareness regarding emergency contact information for lab accidents and how to report safety concerns, lab incidents and accidents. Examine ways to facilitate improvements in the reporting of those cases where a lab member might fear negative repercussions from colleagues or superiors.

Efforts by the Committee in conjunction with EH&S are already underway to address some of the key findings of the Lab Safety Survey and to implement the recommendations outlined above. Please reference the full report for more details on these efforts.