



BOARD WORKING GROUP REPORT

The Role of AI in the Future of Work and Safety

Executive Summary

Background and Purpose of the AI Working Group

According to the National Institute for Occupational Safety and Health, AI (AI) is in the process of transforming almost all aspects of society. AI is fueling improvements in productivity and will likely be a significant influencer on the future of work. AI offers both the promise to improve the safety and health of workers, and the possibility of placing workers at risk in both traditional and non-traditional ways.

Recognizing this workplace transformation, the ASSP Board of Directors held a foresight session and created a working group to understand how AI impacts the workplace, the workforce, members, and the Society's role as a trusted source on occupational safety and health.

The purpose of the AI working group is to gauge the depth of knowledge that ASSP members possess and help frame ASSP's role in supporting its members as AI advances and continues to reshape workplace safety.

The outcome of the working group will inform how the Board will build a strategy to increase knowledge, proficiency and understanding of AI, with a goal to encourage safe AI practices within the organization and the membership.

For the past four months, the working group has deployed a plan of action and solicit member input.

Workplan Overview

- Enhanced Literature Review on AI and safety.
- Developed a research and key terms summary to frame discussions with stakeholders.
- Engaged Advisory Group members to understand the current impact of AI on safety in the workplace.
- Engaged Executive Safety Forum participants to understand the current impact of AI in driving business and safety strategy.
- Based on inputs, drafted an AI Policy.
- Based on inputs, produced recommendations.

Workplan: Summary of High-Level Activities

1. Literature Reviews

The working group did a literature review to understand the current role of AI and impact on safety, ASSP's membership, and OSH performance overall. The literature review indicates there is a significant amount of information addressing implementation and use of AI in occupational safety and health. There also appears to be a gap addressing the ethical use of AI in OSH.

In addition, a literature review was conducted by students of the spring 2024 semester of the Occupational Hazard Management graduate level course for the Safety Sciences department of the University of Central Missouri College of Health, Science, and Technology. Findings indicate the integration of AI into occupational safety and health practices offers significant opportunities to enhance workplace safety, improve hazard detection, and streamline risk management processes. However, these benefits can only be fully realized if AI is implemented ethically and responsibly.

Consistent across research is the ethical implications of AI in safety.





2. OSH Engagement: High-Level Themes

The working group dedicated significant time and resources to gathering data and information addressing AI. Inputs include the literature review, a pulse survey and focus group with ASSP's Advisory Group, facilitated discussions with ASSP's Executive Safety Forum participants, a standards survey, and data collected from a technology survey conducted under Grainger's sponsorship contract with ASSP.

Interested reviewers can review the detailed inputs below to understand the depth and breadth of the data and information supporting the recommended actions in this paper.

General Overall Insights and Observations

- **ASSP's Leadership:** Research and interviews indicate that OSH professionals expect ASSP to take a leadership role with OSH and AI. Professionals believe ASSP understands and appreciates the impact AI will have on occupational safety and health now and in the future and that this issue is too large and diverse for one organization to be the primary leader. Organizational partnerships and collaboration will be of critical importance. Participants did not agree to a specific impact timeframe[s].
- **Impact on professions and jobs:** Participants agree AI has the potential to change job roles and require change management, including identifying necessary skills and providing training. The role of safety professionals remains crucial despite the use of AI. It was noted that the importance of human interaction and the limitations of relying solely on AI for tasks that require human expertise and decision-making needs to be considered. This includes human/machine interactions and systems reliability.
- **Lack of Awareness:** Research indicates people lack knowledge about AI and its implications, and there is a need for education and awareness on the topic.
- **Training and guidance:** Research indicates professionals require training on intermediate-level AI, best practices, and ethical implementation. They also need guidance on verifying information, changing questioning techniques, and containing the body of knowledge. Professionals believe there is a need for guidance materials, which could include articles, case studies, technical implementation materials and benchmarking.
- **Ethical implications:** Research indicates concerns with the use of AI, particularly regarding biases and the impact on professional obligations and certifications. Members indicate there is interest in having a document addressing ethical use and implementation of AI and OSH. This could be a white paper, detailed article in Professional Safety Journal, or perhaps a different technical document.
- **Privacy and Data:** Participants indicated AI raises concerns about privacy and data protection.
- **AI Standard:** Members do not support the development of a standard. The most significant concern is that AI is an evolving issue that cannot be realistically standardized. There is some interest in potentially writing an ANSI registered technical report. The issue of AI in standards development will need to be reviewed by ASSP Board of Directors.

3. Policy Draft

One of the consensus decisions of the working group was the need to create a policy and position statement addressing AI and OSH.

ASSP is the community that protects people, property, and the environment. The working group noted that like any emerging/new technology, AI is a tool that has the potential to improve workplace safety and promote healthier work environments that enhance worker well-being overall. At the same time, the working group felt it was critical for ASSP to recognize that AI also has the potential to introduce new hazards that endanger workers, as well as new concerns about privacy.





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Board Approved Action

Based on the inputs from the research and OSH engagement, the working group recommends the following actions:

1. Accept the Working Group report as presented and establish a time-limited Task Force with requested funding to review initial themes and develop an ASSP recommended action plan on AI that would inform focus and investment.
2. Adopt and release the ASSP Position Statement



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