

Testimony of the Hon. Douglas L. Parker  
U.S. House of Representatives Education and Workforce Committee Subcommittee on  
Workforce Protections Hearing on “Building an AI-Ready America: Safer Workplaces Through  
Smarter Technology”

February 11, 2026

Thank you, Chairman MacKenzie, Ranking Member Omar, and members of the Subcommittee on Workforce Protections, for the invitation to testify on the impact of artificial intelligence and other technologies on the health and safety of workers. For the last fifteen years I have served in a variety of roles working on behalf of U.S. workers to improve occupational safety and health. I served in several senior policy roles at the Mine Safety and Health Administration, as Chief of the California Division of Occupational Safety and Health, and in 2021 had the honor of being confirmed as Assistant Secretary of Labor for Occupational Safety and Health. I have closely tracked emerging technology trends from the perspective of a regulator, an enforcer of safety and health standards, and as a promoter of employer investment in safety and health.

Most recently, attention on new technology has been dominated by products enabled by artificial intelligence, or AI. AI is a powerful tool with great potential for reducing worker injuries and illnesses. However, if the use of AI is not grounded in fundamental health and safety principles and an ethical framework for use, it has the potential for introducing significant physical and psychological hazards into the workplace.

My testimony today will focus on three areas. The first is the direct application of new technologies to the practice of occupational health and safety, for example devices worn by employees to monitor for heat illness. The second is the impact on workers' health and safety when new technology enters the workplace for another business purpose, such as algorithmic

management of worker productivity. The third is the need for government agencies to build technical capacity to carry out their missions in light of new technologies.

### Incorporation of AI into Health and Safety Systems

I am an advocate for greater employer investment in safety and health. I support new technologies that enhance worker safety and health. As a senior official at the Mine Safety and Health Administration, I witnessed how active engagement between government and industry led to the development and implementation of technologies that markedly improve worker health and safety, such as proximity detection systems to protect miners from being struck by machinery, underground emergency communications networks, and real-time air quality monitoring to help prevent lung disease.

Machine learning and other advances in technology offer huge potential. Better technology could mean more real-time monitoring of chemical and noise exposure at the employee level, improved engineering to isolate workers from hazards, better evaluation of ergonomic hazards, better fitting, more comfortable PPE, and the means to incorporate predictive modeling into workplace health and safety management systems.

While these potential advances are exciting, some of the algorithmic tools in health and safety that are currently on the market tend to focus on training and modifying worker behavior, such as avoiding hazardous areas or lifting heavy objects correctly. While those applications provide a benefit, their use can conflict with best practices for risk management. A basic principle of occupational safety and health is the application of hierarchy of controls. The first question in addressing a hazard is whether it can be eliminated, and if not eliminated, isolated. For example, while a technology that monitors whether an employee on a production line is lifting correctly reduces some injuries, adequately reducing the risk of injury may require modifying the

work. The employer should evaluate whether the work can be performed without lifting, or whether the work area could be modified with a lifting aid, conveyors, or a different configuration to further reduce risk to the worker.

It is not helpful if technology creates a system in which hazards are tolerated. We want to avoid a scenario where the response to health and safety problems fits the new, cool technology rather than the hazard. Developers of AI-enabled safety and health products should have a deep understanding of safety and industrial hygiene principles and incorporate them into software development.

I support principles laid out by non-partisan safety organizations such as the American Society of Safety Professionals, which calls for ethical standards for the use of AI that are based on trust, transparency, equity, and privacy.<sup>1</sup> It is also critical that information obtained through safety and health-purposed technology is not generally used to discipline employees but instead for corrective purposes. Workers must be active participants in health and safety. If they fear

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<sup>1</sup> The ASSP position statement on AI: Given the opportunities and risks associated with AI, we affirm these fundamental principles that guide how we approach AI and its use in a responsible, ethical manner:

**Trust:** We believe that AI should enhance OSH professionals' skills, not replace human judgment and decision-making. OSH professionals should oversee AI-driven OSH solutions and hazard remediation to ensure decisions consider context, ethics and exposures.

**Transparency:** We believe workers, managers and leaders must be informed about the capabilities and limitations of AI technologies deployed in their work environments.

**Equity:** We are committed to ensuring that AI technologies do not aggravate existing disparities or introduce new forms of discrimination in practices related to workplace safety and health.

**Privacy:** We call on organizations to implement safeguards to prevent unauthorized access, misuse or exploitation of sensitive information collected by AI systems.

retaliation or discipline for speaking openly about health and safety matters, including when they make mistakes, it chills that participation and undermines safety.

### Incorporation of AI into Other Workplace Systems and Processes

A much greater health and safety challenge is the broader incorporation of new technologies in the workplace. In a workplace that is committed to worker health and safety, any incorporation of new machinery or processes starts with “prevention by design” to make sure the new technology is safe and does not introduce a new hazard into the workplace when it is incorporated. While this has traditionally meant things like ensuring new machinery is designed ergonomically, it maximizes passive protection from moving parts, and that its footprint does not create pinch points where workers might get trapped, “prevention by design” takes on a whole new meaning for products using trained algorithms.

Unfortunately, we do not have a clear understanding of how much prevention by design for worker health and safety occurs in the development and application of products using trained algorithms. What we do know is that the increased use of AI is introducing physical and psycho-social hazards into the workplace. Algorhythmic management tools used to optimize worker productivity cause workers to fear surveillance and loss of privacy, and lack transparency about how technology will be used. This creates anxiety and fear of job loss that impact mental health. This anxiety can lead to workers not taking needed water or bathroom breaks for fear of repercussions if they spend too much time “off task,” impacting their health, or cause them to increase their pace of work to unsafe levels that increase the risk of injury.

Through design, use and controls, these risks can be significantly reduced. The National Institute for Occupational Safety and Health has identified some practical strategies for keeping an AI-enabled workplace safe for workers. They include:

1. Ensuring users understand AI and that developers make it understandable to users so they can apply risk management;
2. Collaborative system evaluations by developers and safety and health professionals;
3. Transparency that enables AI system auditing against established consensus risk assessment;
4. A process for AI system certification; and
5. Developing effective approaches for health and safety practitioners to develop an evidence base to evaluate the safety implications of AI systems.<sup>2</sup>

All of these tools, however, require a willingness by employers to commit to health and safety in the application of AI-enabled technology. While AI may be a useful tool in analyzing data to evaluate risk based on scientific methods, setting the level of acceptable risk is fundamentally a policy decision made by humans.

### The Role of Government

There is an active debate about whether the government should regulate AI. I think the question is misplaced. If AI becomes integrated into daily life to the degree many futurists predict, it will be impossible for government agencies to carry out their mission without a deep capacity to understand and interact with the AI-enabled world in which they regulate.

In the case of OSHA, for example, there are safety standards that are too outdated to permit the incorporation of some AI-enabled technologies into industrial processes. OSHA should update its regulations. When it does, it will have a statutory obligation to evaluate the effectiveness of new technologies to determine if they will adequately protect workers.

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<sup>2</sup> John Howard, MD, and Paul A. Schulte, PdD, "Exploring Approaches to Keep an AI-Enabled Workplace Safe for Workers," NIOSH Science Blog, Sept. 9, 2024 (<https://www.cdc.gov/niosh/blogs/2024/ai-risk-management.html>)

Similarly, when OSHA inspects a workplace with AI-enabled technology and identifies a hazard related to AI, it must make a determination about employer knowledge before it can issue a citation. That determination will need to be informed by the AI system's data collection and analysis, and how the employer uses it.

I strongly encourage Congress to take concrete steps to enable government agencies to build capacity in understanding and interacting with AI, both as a customer and a regulator. An AI-ready America requires it.