AIHA
Protecting Worker Health

Public Policy Agenda
2019 – 2020

- Big Data
- Cannabis Industry Health and Safety
- Disaster Planning, Response, and Recovery
- Hazard Banding/OEL Process
- Hearing Protection
- Opioids in the Workplace
- Professional Title Protection

- Sensors
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Big Data

The future of industrial hygiene, and worker health and safety more broadly, lies in turning mountains of data into useful knowledge to protect workers like never before.

Progress in this area will be dependent upon the speed with which research can be conducted, data standardization and interpretation, the development of training programs, and technological innovation.

To support and accelerate the transformation of big data into worker protection action, AIHA will take the following actions in 2019 – 2020:

- Support government funding for research.

- Support public-private collaboration on data standardization and interpretation.

- Seek increased government funding for grants to develop and deploy training programs.

- Support government funding for technological innovation.

- Encourage government programs to explore the application of block chain technologies to worker health and safety.

- Support government funding that leads to advances in the understanding and use of big data, and concepts such as Total Worker Health® and Total Worker Exposure.

Cannabis Industry Health and Safety

Throughout the United States and Canada, the cannabis industry is rapidly expanding, posing new challenges for workers, employers, and industrial hygienists. These challenges arise both from potential exposure to hazards in the cannabis industry, as well as from employees in safety sensitive occupations who may be impaired while on the job as a result of cannabis use. To address these concerns, AIHA will take the following actions in 2019 – 2020:

- Support government-funded research and related efforts to identify hazards within the cannabis industry and support the dissemination of best practices for mitigating or controlling these hazards.

- Champion employer-employee education outreach programs with State and Federal partners to raise awareness of the hazards that exist in the cannabis industry and how to mitigate or control them.

- Support programs that educate employers and employees on existing standards and regulations related to worker health and safety.

- Support research to further understand and define "impairment".

- Encourage all employers (including governments in their capacities as employers) to voluntarily prohibit the use of cannabis by workers in "safety sensitive" occupations at least until "impairment" is better understood and defined.

- Promote cannabis laboratory testing policies that require labs which identify, handle, and conduct analytical testing on cannabis samples to possess a certificate of accreditation from an accreditation body that complies with the current versions of ISO/IEC 17025 and ISO/IEC 17011, and is a signatory to the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement (ILAC MRA) for Testing.

Disaster Planning, Response, and Recovery

Natural and manmade disasters present a labyrinth of hazards to residents, workers, aid volunteers, and governments. While progress has been made, knowledge of the specific hazards that exist, and what can be done to mitigate them, is often limited in the chaotic environment after an incident has occurred.

Industrial hygienists have specialized knowledge to help stakeholders navigate through all phases of disaster planning, response, and recovery, providing a wide range of services to identify, manage, and ultimately control the risks associated with natural disaster, hazardous material accidents, and terrorism events[1]. By helping to advance research, developing and providing

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[1] American Industrial Hygiene Association. "Industrial Hygienists' Role and Responsibilities In Emergency Preparedness and Response". https://www.aiha.org/get-involved/VolunteerGroups/Documents/IPRWG-EPRWhitePaper_Final.pdf.

training, and prioritizing hazard response, industrial hygienists can help protect people, property, and pets before, during, and after a disaster has occurred.

To help protect communities from disaster hazards, AIHA will take the following actions in 2019 – 2020:

- Support government funding of research to better predict hazards and understand their impacts.

- Support government funding of research to better understand how exposure to hazards during and after disasters impact workers, volunteers, and other community members.

- Encourage government entities to use AIHA's Emergency Response Planning Guidelines (ERPGs™).

- Seek government funding for personal protective equipment and related resources for emergency workers, including during the longer-term recovery phrase.

- Establish closer relationships with NGOs and government entities to share technical expertise and expand awareness of disaster hazards and how to mitigate them, including the unique roles that industrial hygienists play.

- Expand awareness among AIHA members regarding disaster response frameworks and how industrial hygienists can assist with disaster planning, response, and recovery.

Hazard Banding/OEL Process

An occupational exposure limit is an upper limit on the acceptable concentration of a hazardous substance in workplace air for a particular material or class of materials. It is typically set by competent national authorities and enforced by legislation to protect occupational safety and health. It is an important tool in risk assessment and in the management of activities involving the handling of dangerous substances. There are many dangerous substances for which there are no formal occupational exposure limits. In these cases, hazard banding or control banding strategies can be used to ensure safe handling[2].

To address the need for better information on the upper concentration limits for hazardous substances in workplaces, AIHA will take the following actions in 2019 – 2020:

- Closely monitor implementation of the Frank R. Lautenberg Chemical Safety for the 21st Century Act which amended the Toxic Substances Control Act (TSCA).

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[2] American Industrial Hygiene Association. "Occupational Exposure Limits". https://www.aiha.org/publications-and-resources/TopicsofInterest/Topics/Pages/Occupational-Exposure-Limits.aspx.

- Seek increased Federal funding for research, publication, and dissemination of the following, among others:
    - Acute Exposure Guidance Levels (AEGLs) – US Environmental Protection Agency (EPA)
    - Emergency Response Planning Guidelines (ERPGs) – American Industrial Hygiene Association (AIHA)
    - Immediately Dangerous to Life or Health (IDLH) values – National Institute for Occupational Safety and Health (NIOSH)
    - Levels of Concern (LOCs) – US Environmental Protection Agency (EPA)
    - Permissible Exposure Limits (PELs) – US Occupational Safety and Health Administration (OSHA)
    - Recommended Exposure Limits (RELs) – National Institute for Occupational Safety and Health (NIOSH)
    - Temporary Emergency Exposure Limits (TEELs) – US Department of Energy (DOE)
    - Threshold Limit Values (TLVs®) – American Conference of Governmental Industrial Hygienists (ACGIH®)

- Encourage Members of Congress to introduce legislation creating a commission to study and provide recommendations for improving the process by which OELs are created, updated, and disseminated to stakeholders. Required members of the commission would include representatives from DOE, EPA, US Department of Labor, NIOSH, occupational health and safety professional organizations, unions, employers, and others.

Hearing Protection

Occupational hearing loss is preventable, yet it is one of the most common occupational illnesses in the United States. Each year, approximately 22 million Americans are exposed to hazardous noise levels at work[3]. To address this problem, in 2019 – 2020, AIHA will take the following actions:

- Encourage State and Federal legislators and regulators to align with NIOSH's Recommended Exposure Limit (REL) for occupational noise exposure to 85 decibels (dB) as an 8-hour time-weighted average, using a 3-dB exchange rate[4].
    - This work will primarily be done with the Occupational Hearing Protection Coalition.

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[3] National Institute for Occupational Safety and Health. "Noise and Hearing Loss Prevention".
https://www.cdc.gov/niosh/topics/noise/default.html.
[4] This exposure level is aligned with the American Conference of Governmental Industrial Hygienists® (ACGIH) Noise Threshold Limit Value® (TLV).

Opioids in the Workplace

More than 49,000 Americans died from opioids in 2017 alone[5], and many more suffered a non-fatal overdose. According to the US Surgeon General and research from the National Safety Council, approximately 21 million Americans have some form of substance abuse disorder, three-fourths of whom are employed[6]. The opioid epidemic and the abuse of other substances are not just problems that occur somewhere in society – they represent significant workplace hazards that must be addressed on multiple fronts, including:

- Workplace impairment.

- Occupational exposure to opioids.

- Occupational injuries, which result in a prescription for pain relievers that may lead to misuse.

In response to the need for action, AIHA will take the following actions in 2019 – 2020:

- Urge Members of Congress to increase funding for the Substance Abuse and Mental Health Services Administration's (SAMHSA) State Opioid Response Grants Program[7].

- Urge State legislators to introduce legislation requiring professional cleanup of property following a suspected opioid-related incident, and to develop, revise or adopt, and then implement applicable property cleanup standards.

- Support for the development of education and training programs to expand awareness regarding the impacts of opioids in the workplace, and what employers and workers can do to reduce their risks of exposure, and what they should do if an exposure occurs.

- Call attention to the relationship between workplace injuries and illnesses and the opioid epidemic. In particular, workplace injuries and illnesses may lead to opioid prescriptions. In addition, workers who are improperly using opioids may be more likely to suffer injuries and illnesses while on the job.

- Advocate for additional government funding to subsidize the purchase of opioid overdose reversal drugs.

- Advocate for additional government funding for law enforcement officers to purchase technologies that detect opioids in the mail.

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[5] National Institute on Drug Abuse. "Overdose Death Rates." https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates.

[6] National Safety Council. "Drugs at Work: What Employers Need to Know". https://www.nsc.org/work-safety/safety-topics/drugs-at-work.

[7] https://www.samhsa.gov/grants/grant-announcements/ti-18-015

- Support reducing the total quantity of opioids in the US through prescription drug takebacks, and drug interdiction efforts.

- Encourage employers to ensure that their drug panel tests include opioids and synthetic opioid analogues.

- Support employer and employee training to identify the signs of impairment and drug misuse.

- Support policies that encourage and reward employers who provide support for employees with substance abuse disorders.

Professional Title Protection

Throughout the nation, there is a wave of policies being proposed that would eliminate or limit protections for professional certifications. These well-intended policies are often reactions to what some policymakers see as overly burdensome regulations that they claim constrain job growth and opportunity. However, the reality is that professional certifications, such as the Certified Industrial Hygienist (CIH)[8] and Certified Safety Professional (CSP)[9], provide critical protections to workers and the public, serving important roles in society.

In addition to protecting the public, the CIH and CSP play central roles in a well-functioning supply and demand marketplace, as they assist professionals who seek to stand out and clearly convey their enhanced value to businesses, governments and consumers.

Based upon the critical role that professional certifications play in society, AIHA strongly believes they should be protected, and will take the following actions in 2019 – 2020:

- Encourage State and Federal policymakers to maintain or strengthen protections for professional certifications, such as the CIH and CSP. AIHA will push back against attempts to weaken protections.

- Educate policymakers on the many benefits of professional certifications through the Professional Certification Coalition.

Sensors

Sensors represent an opportunity to expand our awareness of what people are exposed to at work, and what happens to workers as a result of those exposures. This has the potential to revolutionize worker protection through better standards, practices, and more effectively targeted

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[8] For additional information on the Certified Industrial Hygienist program, please visit http://www.abih.org/about-abih/cih-caih.

[9] For additional information on the Certified Safety Professional program, please visit https://www.bcsp.org/CSP.

regulations and incentives. However, before we can reach this new level of understanding, several challenges stand in our way.

Despite the seeming ubiquity of cell phone-powered photo and recording technologies in society, the use of sensors in the workforce is often quite limited. According to a study conducted by AIHA[10], over half of respondents said they are monitoring less than 20% of their workforce. Often, only large, for-profit corporations consistently indicate high rates of workforce monitoring. Furthermore, a gulf exists in what is being monitored. According to the same study, chemical hazards are the most commonly-monitored hazard type, with physical and particulate hazard monitoring as also common. It was uncommon for biological or radiological hazards to be monitored. High degrees of variation also exist for the methods of hazard monitoring and the types of sensors used (e.g., portable, wearable, fixed, lab/research, fixed stationary, or distributed).

To accelerate the research, development, deployment, and effective use of sensors to help transform worker health and safety, AIHA will take the following actions in 2019 – 2020:

- Advocate for significantly increased government funding for sensor research and development to, among other things, help:
  - increase sensor accuracy and reliability;
  - detect specific agents in complex backgrounds;
  - accurately monitor multiple agents;
  - integrate sensors with other sensors and systems, including integrating video with other sensor types; and
  - provide feedback to workers.

- Support government funding that leads to advances in the understanding and use of big data, and concepts such as Total Worker Health® and Total Worker Exposure.

- Establish a coalition that includes government agencies, such as OSHA, EPA, NIOSH, DOE, nonprofit organizations, and equipment manufacturers to explore the certification of sensors to ensure that the citizen scientist is getting quality sensors for monitoring use. This should also include providing training materials for public sensor users.

Teen Workplace Safety

Each year, approximately 60,000 kids under the age of 18 are rushed to the emergency room for job-related injuries. Approximately 40 of these young workers die on the job[11]. We simply cannot have teenagers die on the job – these deaths and injuries are preventable, and AIHA is taking action. In 2019 – 2020, AIHA will:

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[10] American Industrial Hygiene Association. "The Future of Sensors: Protecting Worker Health Through Sensor Technologies". April 2016. https://www.aiha.org/get-involved/AIHAGuidelineFoundation/Documents/AIHA_Future%20of%20Sensors_web_updated.pdf

[11] American Industrial Hygiene Association. "Safety Matters Center". https://www.aiha.org/get-involved/SafetyMattersCenter/Pages/default.aspx

- Encourage State and local policymakers to require the *Youth@Work – Talking Safety* model curriculum[12] in schools for grades 7 through 12.

- Encourage Members of Congress to introduce and enact legislation providing competitive grants to schools that adopt and implement the *Youth@Work – Talking Safety* model curriculum.

- Encourage Members of Congress and State legislators to introduce and enact legislation providing competitive grants to institutions of higher education or nongovernmental organizations that provide teacher preparation and training that addresses teen workplace safety.

- Encourage AIHA members to speak to students using the *Safety Matters* program, which raises awareness among young people about workplace safety and health, and provides an understanding of the skills young workers need to become active participants in creating safe and healthy work environments[13].

- Advocate for additional government funding to create or expand collaborations with schools, employers, and teens that raise awareness of workplace hazards and what to do to avoid or minimize them.

Temporary and Contract Workers

More than 15 million Americans work as temporary or contract workers[14]. These workers may be placed in hazardous jobs without adequate health and safety training and may fear retaliation if they voice concerns over working conditions, making them particularly vulnerable to workplace hazards[15]. The risk of injury, illness, or even death of temporary workers is heightened by confusion over who has responsibility for ensuring a safe working environment. This confusion stems in part from the joint responsibility shared by staffing agencies and host employers. Without clear plans for hazard communication, training, providing any needed personal protective equipment, recordkeeping, and other elements, then workplace risks may be increased.

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[12] *Youth@Work – Talking Safety* is a 100% model curriculum for grades 7 through 12 that is customized for each State, Washington, DC, Puerto Rico, and the US Virgin Islands. The curriculum was created by the National Institute for Occupational Safety and Health (NIOSH), of the Centers for Disease Control and Prevention (CDC), with the input of educators and occupational safety and health experts. For additional information, including model State curricula, please visit https://www.cdc.gov/niosh/talkingsafety/default.html.

[13] For additional information on the *Safety Matters* program, including how to download this free model program, please visit https://www.aiha.org/get-involved/SafetyMattersCenter/Pages/default.aspx.

[14] American Staffing Association. "Staffing Industry Statistics." https://americanstaffing.net/staffing-research-data/fact-sheets-analysis-staffing-industry-trends/staffing-industry-statistics/.

[15] Occupational Safety and Health Administration. "Protecting Temporary Workers." https://www.osha.gov/temp_workers/.

Responding to the need to protect millions of vulnerable American workers, AIHA will take the following actions in 2019 – 2020:

- Seek increased funding for OSHA's Susan Harwood Training Grant Program.

- Work with NGOs, government entities, and employers to raise awareness of best practices, definitions, responsibilities, requirements, guidance materials, and other resources for protecting temporary and contract workers.

Total Worker Exposure

Workers are exposed to many hazards, both in and outside of the workplace. These exposures, combined with activities outside of work, have complex, sometimes synergistic interactions that affect their health – including work-related illnesses and injuries. While we know that these interactions occur, at present, we do not fully understand these relationships or how, by focusing on job-related factors, worker health and well-being can be advanced, while rates of work-related injuries, illnesses and deaths are decreased.

To address this knowledge gap and more fully target the root causes of workplace injuries, illnesses, and deaths, AIHA will take the following actions in 2019 – 2020:

- Urge Congress to double funding for CDC's Total Worker Health Program®, which is administered by the National Institute for Occupational Safety and Health (NIOSH).

- Support implementation of the research, practice, policy, and capacity-building recommendations contained in NIOSH's *National Occupational Research Agenda: National Total Worker Health Agenda (2016 – 2026).*

- Continue as an active member of NIOSH's Total Worker Health Affiliate Program.

Transportation Safety

More workers die from transportation-related incidents than any other event, accounting for about one-fourth of all fatal workplace injuries and standing as the sixth leading cause of non-fatal injuries resulting in days away from work[16,17]. These incidents have numerous causes, including distraction, impairment, fatigue, a lack of proper training, and equipment failure, among others.

Reducing – and even totally eliminating the number of transportation-related deaths requires a comprehensive approach that addresses the many factors leading to each incident. In pursuit of increased transportation safety for all workers, AIHA will take the following actions in 2019 – 2020:

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[16] Bureau of Labor Statistics. "Fatal occupational injuries by major event, 2016". https://www.bls.gov/iif/oshwc/cfoi/cfch0015.pdf.
[17] National Safety Council. "Roadway Incidents Involving Motorized Land Vehicles". https://injuryfacts.nsc.org/work/safety-topics/roadway-incidents/.

- Continue serving as an active member of the Road to Zero Coalition, and assist in implementing, where appropriate, the recommendations of the Coalition's report, "The Road to Zero: A Vision for Achieving Zero Roadway Deaths by 2050"[18].

- Urging policymakers to help accelerate advanced transportation safety technologies.

- Encouraging policymakers and others to support and expand transportation safety education, awareness, and training programs.

Worker Fatigue

It's time for America to wake up to a silent problem that reaches into every workplace: Fatigue at work. Research from the National Institute for Occupational Safety and Health (NIOSH) indicates that more than one-third of US workers get less than seven hours of sleep each night. Most adults need at least seven hours of sleep per night to help maximize their health and productivity[19]. This fatigue has serious consequences for workers and those around them. Studies have revealed the existence of significantly higher rates of injuries, illnesses, and deaths for workers on evening, night, and swing shifts[20].

Contrary to the myth that longer hours and fewer rest breaks increases productivity, fatigue is actually a drag on the US economy, costing more than $136.4 billion each year from decreased productivity and related health care costs[21].

To address the serious threat that fatigue represents in the workplace, AIHA will take the following actions in 2019 – 2020:

- Encourage NIOSH's Total Worker Health® program to maintain a focus on worker fatigue.

- Encourage policymakers to incentivize employer development, adoption, and use of comprehensive fatigue risk management systems.

- Support the adoption and implementation of ANSI/API RP 755, Fatigue Risk Management Systems for Personnel in the Refining and Petrochemical Industries.

- Encourage staffing agencies to help ensure that temporary workers have sufficient rest time between shifts at the same or multiple jobs.

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[18] National Safety Council. "The Road to Zero: A Vision for Achieving Zero Roadway Deaths by 2050". https://www.nsc.org/road-safety/get-involved/road-to-zero.

[19] American Academy of Sleep Medicine. "Healthy Sleep Basics". http://sleepeducation.org/healthysleep/healthy-sleep-basics/.

[20] US Occupational Safety and Health Administration. "Long Work Hours, Extended or Irregular Shifts, and Worker Fatigue". https://www.osha.gov/SLTC/workerfatigue/hazards.html.

[21] Ibid.

- Support requirements for employers to provide paid time off and paid sick time off for their employees.

Workforce Development

Protecting workers from occupational injuries, illnesses, and death is the calling of occupational and environmental health and safety (OEHS) professionals. Despite this crucial underpinning role, the nation is currently experiencing a shortage of these professionals[22]. This gap is expected to widen in the near future, as current professionals retire. In order to address the need for more OEHS professionals to help keep America's workers healthy and safe, AIHA will take the following actions in 2019 – 2020:

- Urge policymakers to significantly increase funding for the National Institute for Occupational Safety and Health's (NIOSH) Education and Research Centers (ERCs), which play a key role in supplying the next generation of OEHS professionals.

- Encouraging middle and secondary school career counselors, teachers, and other personnel to make students aware of exciting career opportunities in OEHS.

- Supporting programs that introduce elementary, middle-level, and secondary school students to OEHS principals and careers.

Workplace Violence

Workplace violence continues to be a serious problem in the United States. Research by the National Institute for Occupational Safety and Health (NIOSH) and the US Department of Justice revealed that workplace violence is the second leading cause of traumatic injury death on the job for men, the leading cause of traumatic injury death on the job for women, and accounts for some two million non-fatal injuries per year in the United States[23].

Industrial hygienists are concerned with the anticipation, recognition, evaluation, and control of all occupational hazards. Although prevention of workplace violence has not been a major focus of industrial hygiene in the past, AIHA promotes the involvement of industrial hygienists in responding to new and emerging hazards such as this one. AIHA believes that industrial hygienists should collaborate with other workplace professionals, employers, labor unions, government, and researchers in the development and implementation of workplace violence prevention programs. Industrial hygienists have special expertise in developing safety and health programs that may be brought to bear in establishing workplace violence prevention programs. In particular, industrial hygienists have training and skills in evaluating and controlling

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[22] National Institute for Occupational Safety and Health. "National Assessment of the Occupational Safety and Health Workforce". https://www.cdc.gov/niosh/oshworkforce/default.html.

[23] American Industrial Hygiene Association. "White Paper on Prevention of Workplace Violence". https://www.aiha.org/government-affairs/PositionStatements/whitepaper00_PreventionWorkplaceViolence.pdf.

environmental hazards and in designing and administering health and safety programs that should be adapted to workplace violence prevention.

AIHA recognizes the destructive impact that workplace violence places on industry, government, labor, and the human pain and suffering of the affected employees. Therefore, AIHA recommends that the following actions be taken in 2019 – 2020:

- The Occupational Safety and Health Administration (OSHA) should conduct stakeholder meetings to review current approaches to the prevention of employee injury due to workplace violence and to get stakeholder views on the need for, proposed scope, and provisions of an OSHA Standard to protect employees from injury due to workplace violence.

- Occupational safety and health professionals should actively contribute to developing intervention programs, standards, and research efforts geared towards preventing homicide and assault in the workplace.

- The development and implementation of facility specific, written Workplace Violence Prevention programs to protect all personnel from exposure to occupational violence. Industrial hygienists should be included in an interdisciplinary team that develops and implements workplace violence prevention programs.

- The application of the industrial hygiene control strategy should be used as the most comprehensive method for protecting workers from exposure to workplace violence. In applying the hierarchy of engineering controls and administrative controls, and personal protective equipment, it may be necessary to consider a combination of controls to prevent or minimize exposure.

- Given that type I (robbery and crime) and II (customer, client, patient, etc.) are the categories that correlate with the greatest incidents of fatal and non-fatal violence and are more highly associated with occupational safety and health intervention strategies, occupational safety and health professionals should concentrate their efforts on these types. Worker-on-worker and domestic violence issues are more appropriately addressed by EAP, human resources, mental health, and organizational behavior specialists.

- Continued corporate, academic, and governmental funding to support workplace violence prevention research in the areas of:
  o Characterizing environmental, organizational, and personal factors for workplace violence in particular industrial sectors.
  o Analysis of injury rates, lost work time, and costs associated with workplace violence.
  o Evaluating the effectiveness of controls such as security hardware, alarms, workplace re-design, emergency systems, training programs, written prevention programs, and trauma response.

- o Testing intervention strategies for effectiveness.
- o Program evaluation.

- Encourage NIOSH's Total Worker Health® program to maintain a focus on workplace violence.