

AIHA National Update

YPSW 45th Annual Meeting

Kathy Murphy, AIHA President 2019-20

Larry Sloan, AIHA CEO (2016-present)

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2019-21 AIHA Strategic Plan

Our Mission - Empowering those who apply scientific knowledge to protect all workers from occupational hazards

Our Vision – A world where all workers are healthy and safe

2019-21 AIHA Strategic Plan

1. Community
2. Awareness
3. Advancement / Dissemination of Knowledge
4. Integrity of IH Practice
5. Advocacy

Content Portfolio Advisory Group (CPAG)

New Project Ideas: **Evaluation Process**

**Recommend
Content Priorities
to the Board &
facilitate their
implementation.**

**Ensure projects
align with content
priorities or fill gaps.**

Existing Materials: **Portfolio Analysis**

**Review existing
content & make
product lifecycle
recommendations.**

**Solicit proposals
for new products
to fill identified
portfolio gaps.**

Environmental Scanning: **New Content**

**Shepherd content
development in
existing priority
areas.**

**Scan IH profession
& develop new
content based on
future trends &
challenges.**

Future Trends Impacting I.H. (2019 Environmental Scan)

Rejection of Expertise

- Growing skepticism of expertise (including scientific)

Anticipatory Intelligence

- Predictive analytics will be used to anticipate needs, opportunities and threats in the environment

Dark Data

- Rapidly accumulated data that is rarely used (IBM estimates that 90% of sensor data accumulated is never used)

Fast Data

- Emphasis on real time decision; processing and acting on the data with speed creates value

Personalized AI

- Increasing proliferation of sensor technology, wearables and human-machine hybrid work

More Human Humans

- Accelerating speed of change and continual needs for retraining, adapting to new technologies, relating to people

CPAG

Current Content Priorities (2020–2025)

1. Exposure Banding
2. Big Data and Sensor Technology
3. Total Exposure Health
4. Serving the Changing Workforce
5. Communicating IH Concepts

1. Exposure Banding

Why?

The continued addition of chemicals & other exposure hazards impacting the community & workplace far exceeds the capacity of the environmental health community to develop exposure level guidelines.

Exposure Banding

How does it impact the IH profession?

IH's are often left with few resources to help evaluate exposures & make appropriate risk management decisions using current/traditional methods.

Focus of Content Priority

This priority focuses on educating IH's on how to apply banding concepts in evaluating exposures & controls across environments, & on exploring how they relate to technological advancements involving integrated decision-making.

2. Big Data and Sensor Technology

Why?

New applications of sensor technologies are allowing for the faster collection & communication of data across a broader set of agents. In addition, advancements in data analysis & Artificial Intelligence (AI) are combining formerly disparate data sets and automating decision-making.

Big Data & Sensor Technology

How does it impact the IH profession?

Technological advancements & developments will fundamentally alter the role of health & safety professionals

Focus of Content Priority.

This priority focuses on helping IH professionals leverage cutting-edge technologies for collecting & integrating data to inform risk assessment & management decisions, & to stay relevant in the face of transformative change.

3. Total Exposure Health

Why?

Human health outcomes are being recognized as the result of complex interaction of factors including exposure to environmental agents, socioeconomic stressors, personal behaviors, & individual genomics.

Total Exposure Health

How does it impact the IH profession?

Advancements in science & technology are allowing for more robust collection & integration of exposure to environmental agents, socioeconomic stressors, personal behaviors, & individual genomics to inform interventions & decision-making.

Focus of Content Priority.

This priority focuses on ensuring IH professionals are positioned to be valued participants in this discourse (e.g., Total Worker Health, Exposomics). We are recognized as pre-eminent experts in the anticipation, recognition, evaluation, & control of exposures to environmental agents in the workplace, home & community.

4. Serving the Changing Workforce

Why?

People are increasingly engaging in non-traditional work arrangements such as gig work, contract work, telecommuting & working for multiple employers. In addition, the workforce is aging, raising issues around health, chronic disease, & information processing; Coupled with global economic shifts & migration.

Serving the Changing Workforce

How does it impact the IH profession?

Changes in the engagement in non-traditional work arrangements shows that these changes will significantly impact the evolution of occupational & environmental health concerns & how they are managed.

Focus of Content Priority.

This priority focuses on educating IH's on the circumstances driving these changes, the implications they will have, & how the IH community can respond to protect human health in the workplace & community.

5. Communicating IH Concepts

Why?

There is an increasing growth & diversification in information sources & communication channels is continuing to dilute the influence of science-based expertise.

At the same time, public skepticism toward traditional experts is growing in the face of unresolved concerns & perceived biases as various advocacy groups leverage scientific systems for their benefit.

Communicating IH Concepts

How does it impact the IH profession?

Trends coupled with technological advances around data analysis & Artificial Intelligence in the IH profession where the challenge is to further diminish the reliance on scientific expertise.

Focus of Content Priority.

This priority focuses on developing the “soft skills” of IHs to listen, relate, communicate & collaborate effectively with a broad spectrum of stakeholders in order to promote the influence & value of the IH profession in the modern social-technological landscape.



Technology Initiatives

- Identify current / scan for new OHS technology tools
- Drive development of e-tool advanced web platform, mobile device apps for OHS professionals
- Drive development of OHS tools utilizing digital assistants (e.g. Siri, Alexa)
- Drive increased awareness, acceptance, and use of technological tools related to Big Data, Machine Learning, and Artificial Intelligence
- Improve use of technology to open new avenues of delivery for AIHA created content

International Advisory Group: *Criteria for Targeted Regions*

Primary:

1. Region is developing/emerging economy (as defined by World Bank standards)
2. An in-region IH/OH organization exists that AIHA could collaborate with to identify unmet technical educational needs (can also work with established university programs)
3. In-region AIHA members exist (working through companies to help us identify unmet educational needs)
4. Ability to ‘relatively easily’ deploy AIHA sponsored education (note: different regions may have different needs for level of education)

Secondary:

- Ability to increase number of professionals earning their CIH over next 3 to 5 years (more of a BGC driven mission)

Targeted Regions



India



Mexico



Brazil



Colombia



Puerto Rico



China

AIHA & Developing Economies

- International Affairs Committee's Ambassador Program
- 80% off discounted prices for selected ePublications
- Emerging Economy Micro-grants Program
- Virtual section community (national membership not required)
 - Catalyst online community
 - Digital access to *Synergist* family of products
 - Mentoring opportunities



**Thank You for
Listening!**