

# International Society for Occupational Ergonomics & Safety

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INSIDE

Letter From the Past President (1)

Interdisciplinary Thinking (2)

What's new with ANSI Z535? (3)

**New York's Injury Reduction Program (4)** 

Minnesota's Injury Reduction Program (5)

**NIOSH PtD Award Nomination (7)** 

**ISOES Member Accomplishments (7)** 

# **ISOES Elections & Survey**

ISOES invites you to take part in the 2025/2026 Executive Committee Elections (Ballot closes Dec. 15):



Scan the QR Code or VOTE HERE

Please take a moment to complete our 2025 survey:



Scan the QR Code or TAKE THE SURVEY HERE



### Letter from the Past President

- George Page, MSE, CPE

Dear ISOES Community!

Well, here we are! We are pleased to announce the success of the 37<sup>th</sup> Annual Conference on July 24<sup>th</sup> and 25<sup>th</sup> in Orlando, Florida. Our conference piggy-backed onto the Annual Conference of ASSP, which was also in Orlando, Florida from the 22<sup>nd</sup> to the 24<sup>th</sup> of July.

This year's Annual Conference of ISOES was a blockbuster, with our special guest speaker, Christopher Reid, from Boeing. Chris gave a presentation on the history of ergonomics at Boeing. Over one hundred years of growth!

Our conference also had over 30 scientific presentations from around the world—meeting our commitment to being a truly international society. Look for additional details on the success of the conference and our exhibit at the ASSP Expo in the winter newsletter.

As always, I thank our Executive Committee members for organizing this year's conference. Their commitment to excellence is much appreciated.

I look forward to seeing you all at the next Annual Conference and beyond!

Sincerely,

# The Power of Interdisciplinary Thinking in Ergonomics and Safety

- Gabriel Ibarra-Mejia, MD, PhD

#### **Breaking boundaries to Build Better Solutions**

In a world that often demands specialization, there is remarkable power in embracing a multidisciplinary approach. My journey from medicine to ergonomics to environmental science has taught me that being "all over the place" is not a weakness - it is my greatest strength.

#### Where Diverse Pespectives Meet Innovation

My path began as a physician in Mexico, then led to specializations in occupational medicine and ergonomics in Sweden before earning a PhD in environmental science and engineering. This unique combination allows me to see workplace challenges through multiple lenses simultaneously.

The most challenging problems in ergonomics rarely exist in isolation. They sit at the intersection of human factors, engineering, psychology, biomechanics, and organizational management. When we limit ourselves to a single discipline, we miss the connections that often lead to breakthrough solutions.

My approach with students at all levels - from undergraduates to doctoral candidates- emphasizes cross-pollinations of ideas. Rather than teaching them to think within the confines of traditional ergonomics principles, I encourage them to draw conclusions across medicine, engineering, environmental science, and public health.

#### **Real-World Impact**

This interdisciplinary mindset has transformed how my research team tackles complex challenges. We have investigated from how dust storms affect hospitalization rates to how construction workers from different cultral backgrounds perceive workplace risks. We have studied inflammatory biomarkers in tendonitis and developed monitoring systems for international border crossings.

The beauty of this approach is that it creates solutions that address multiple dimensions of a problem simultaneously. Environmental health is not separate from occupational safety; biomechanics is not disconnected from physiology. By weaving these perspectives together, we develop interventions that are both more effective and more sustainable.

#### **Building T-Shaped Professionals**

I often tell my students that our field needs more "T-shaped" professionals - individuals with deep expertise in ergonomics (the vertical bar on the T) combined with broad knowledge across multiple disciplines (the horizontal bar).

This preparation serves them well. My former students now work across diverse settings - from healthcare to manufacturing, academic research to government agencies - bringing their unique interdisciplinary lens to each environment. The doctoral students I have mentored have gone on to become researchers and professors who continue to cross boundaries in their own work.



#### **Embracing the Journey**

Perhaps you, like me, have occasionally felt that your diverse interest and experiences make you something of an academic or professional outlier. I encourage you to reframe that narrative. In ergonomics and safety - fields fundamentally concerned with human wellbeing across countless contexts - your varied perspectives are not just valuable, they are essential.

As we face increasingly complex workplace challenges, it will be the boundary-crossers, the connectors, and the interdisciplinary thinkers who develop the most effective and sustainable solutions for the future of work.

Gabriel Ibarra-Mejia, MD, PhD, MSErg, is an Associate Professor in the College of Health Sciences at The University of Texas at El Paso. His work spans ergonomics, occupational health, environmental science, and public health. Through his teaching and research, he has mentored dozens of undergraduate, graduate, and doctoral students and worked with organizations across healthcare, manufacturing, and construction industries to implement human-centered safety and ergonomics solutions.



- Raina Shah, MSE, CPSM, CPE (Member, ANSI Z535.4 Subcommittee)

# Warnings Standards Update: What's New With ANSI Z535?

The ANSI Z535 Committee on Safety Signs and Colors met this April in Arlington, Virginia. This was the Committee's first meeting since the September 2024 approval and publication of the newest Z535 standard, ANSI Z535.7: Product Safety Information in Electronic Media. This meeting, falling in the post-publication portion of the revision cycle, focused on the history of and potential future directions for the standards. Committee membership and balance were also discussed.

For those not familiar, the ANSI Z535 series of standards addresses the design and use of safety signs, labels, colors, symbols, and other safety information, with the intention of increasing the uniformity of graphic design used to communicate safety information in various media. The series consists of:

- ANSI Z535.1 Safety Colors (current revision published 2022)
- ANSI Z535.2 Environmental and Facility Safety Signs (current revision published 2023)
- ANSI Z535.3 Criteria for Safety Symbols (current revision published 2022)
- ANSI Z535.4 Product Safety Signs and Labels (current revision published 2023)
- ANSI Z535.5 Safety Tags and Barricade Tapes (for Temporary Hazards) (current revision published 2022)
- ANSI Z535.6 Product Safety Information in Product Manuals, Instructions, and Other Collateral Materials (current revision published 2023)
- ANSI Z535.7 Product Safety Information in Electronic Media (new in 2024)

The standards are typically reviewed and revised or reaffirmed on a cycle of approximately 5 years. The current revisions of the pre-existing standards were published in 2022 (ANSI Z535.1, Z535.3, Z535.5) and 2023 (ANSI Z535.2, Z535.4, Z535.6), with change proposals due this past June . Publication of revisions or reaffirmations of ANSI Z535.1 through .6 is currently targeted for late 2027.

For this cycle only, ANSI Z535.7 is on a different schedule, with change proposals for that standard not due until June 30, 2027, with publication of the next revision or reaffirmation expected in late 2029.

Those interested in the communication of safety information in occupational and consumer settings are welcome to participate in the standards development process by joining a subcommittee or submitting proposals for changes to the standards. Change proposal forms, along with submission information, can be found at the back of each standard in the series.

We'll continue to follow this topic in the winter newsletter. Please check back for updates.



- Judi Isaacson, MSE, CPSM (Vice Chair, ANSI Z535 Committee)

# New York State Ergonomics Update

On February 14, 2025, Governor Kathy Hochul signed into law amendments to the <u>Warehouse Worker Injury Reduction Program</u>, that went into effect on June 1<sup>st</sup>, 2025. The law requires warehouse employers in New York State who meet a specific criterion to prepare, develop, and implement formal injury reduction programs to mitigate and address the risks of musculoskeletal injuries to their workers. The amendments provide expanded definitions along with more specific guidance for employers.

#### **Key definitions**

- Musculoskeletal injuries: "Work-related musculoskeletal disorders" that:
  - o "Are caused by sudden or sustained physical exertion", or
  - o "Are not the result of any instantaneous non-exertion event, such as slips, trips, or falls."



- Jim Vachon, MS, ARM, AIC



- Richard Wyatt Ph.D, PE, CPE, CSP, CQE

Competent Person: individual "capable of performing a job hazard assessment to identify and assess
existing and predictable ergonomic risk factors." It includes ergonomists, industrial hygienists, safety
professionals, or other health & safety professionals who are qualified, trained and experienced in managing
workplace injury risks.

#### To whom does this law apply?

• All employers who directly or indirectly employ at least 100 employees at a single warehouse distribution center or at least 1,000 employees at one or more warehouse distribution centers in New York State.

#### What are the employer's responsibilities?

Covered employers must include the following five components in their injury reduction program:

#### Worksite Evaluation

- Evaluate and document each job, process or operation (or a representative number of such) that can pose a risk for developing musculoskeletal disorders.
- Evaluations must include risk factors for musculoskeletal disorders and determine whether an
  employee who is exposed to such risk factors is subject to adverse action from an employer's use of
  quotas to determine employee assignments.
- o Incorporate worker input "either directly or through and employee-led workplace safety committee".
- Evaluations must be completed within 30 days of incorporating a new process or operation and reviewed and updated annually.
- Physical copies of the evaluation must be made available to employees at no cost, within one business day from the date the employee requested it.

#### Control of Exposures

- o All corrective actions must be documented, and employers must consider all options for mitigating ergonomic hazards (i.e., engineering controls, administrative controls).
- The employer must correct risks within 30 days from when it was identified. If that is not possible, the employer must provide a schedule for such corrections.

#### • Employee Training:

- o Employees and their supervisors must be trained during normal working hours.
- o Training must be in a language the employee can understand and repeated annually.

#### Medical & First-Aid Practices:

- o Employees retain the right to be treated by a licensed physician of their choice.
- o If on-site medical or first aid stations are available, they must be staffed according to NY State medical supervision requirements and proceed within their legal scope of practice.
- o The employer must consult with a NY State licensed and board-certified physician in Occupational Medicine.

#### • Employee Involvement:

 Employers must provide opportunities for employees and their representatives to be consulted during the development and implementation of the program.

# Minnesota Ergonomics Update

Minnesota has implemented a similar ergonomics standard which became law on January 1, 2024, covering warehouses, health care facilities, and meatpacking facilities.

- Warehouse Distribution Center with 100 or more employees in Minnesota and a NAICS code of 493110, 423110 to 423990, 424110 to 424990, 454110 or 492110.
- Health Care Facilities:
  - o A hospital (NAICS codes 622110, 622210, or 62231.
  - o An outpatient surgical center (NAICS code of 621493).
  - o A nursing home (NAICS code 623110).

• Meatpacking site or poultry processing site with 100 or more employees in Minnesota AND a NAICS code of 311611 to 311615, except 311613.

Step one in implementing the ergonomics standard is to create a written ergonomics plan.

#### • The Ergonomics Program shall include:

- o An assessment to identify and reduce musculoskeletal disorder risk factors in the facility
- o An initial and ongoing training of employees on ergonomics and its benefits, including the importance of reporting early symptoms of musculoskeletal disorders
- A procedure to ensure early reporting of musculoskeletal disorders to prevent or reduce the progression of symptoms, the development of serious injuries, and lost-time claims
- A process for employees to provide possible solutions that may be implemented to reduce, control, or eliminate workplace musculoskeletal disorders
- Procedures to ensure that physical plant modifications and major construction projects are consistent with program goals
- O Annual evaluations of the ergonomics program and whenever a change to the work process occurs.
- Annual evaluation of program required. There must be an established procedure to annually assess the
  effectiveness of the ergonomics program, including evaluation of the process to mitigatework-related risk
  factors in response to reporting of symptoms of musculoskeletal disorders by employees. The annual
  assessment shall determine the success of the implemented ergonomic solutions and whether goals set by
  the ergonomics program have been met.
- **Employee Training**: An employer subject to this section must train all employees on the following:
  - o The name of each individual on the employer's safety committee
  - o The facility's ergonomic program
  - o The early signs and symptoms of musculoskeletal injuries and the procedures for reporting them
  - o The procedures for reporting injuries and other hazards
  - Any administrative or engineering controls related to ergonomic hazards that are in place or will be implemented for their positions
- **Employee Involvement**: The safety committee must be directly involved in ergonomics worksite assessments and participate in the annual program evaluation.

Note that there are other requirements around recordkeeping and injury illness record retention and other requirements. For larger organizations with certain NAICS codes, The Workplace Accident and Injury Reduction Program (AWAIR) may also have to include some or all of the ergonomics program. The bullet points above are intended to outline the major points in establishing an ergonomics program, evaluating jobs and training employees.

#### • Other Helpful Resources:

- o Workplace Accident and injury Reduction Program (AWAIR)
  https://www.dli.mn.gov/business/workplace-safety-and-health/mnosha-compliance-awair-program
- o Minnesota Ergonomics (download the Statute 182.77 here) Sec. 182.677 MN Statutes
- MNOSHA Compliance Assistance: <u>MNOSHA Compliance: Ergonomics | Minnesota Department of Labor and Industry</u>

# NIOSH Prevention Through Design Award Nomination

- Jim Borchardt, Construction Ergonomics LLC

Sang D. Choi, ISOES' 29th President (2028-19), was nominated for NIOSH's 2025 Prevention through Design (PtD) Award in partnership with American Industrial Hygiene Association (AIHA), American Society of Safety Professionals (ASSP), National Safety Council (NSC) and National Institute of Occupational Safety and Health (NIOSH). All nominees were honored, and the winner, Bruce Lyon was announced at ASSP's Leadership Conference in Orlando, FL on Monday July 21, 2025 during ASSP's Safety25 Conference and Expo.



Dr. Sang D. Choi ISOES Past President (2018-2019)



Sang is currently the Professor of Global and Community Health at George Mason University, Fairfax, VA. In support of NIOSH's goal of Research to Practice (RtP) to become reality, he designed the Research to Practice, Practice to Research (RtPtR) model (shown at left). This model's stated objective is to bridge the long-standing gap between academic Safety, Health and Ergonomic (SH&E) researchers and industry practitioners. This model provides an effective roadmap of continuous collaboration for SH&E Professionals to achieve enhanced Prevention through Design (PtD) solutions of industry's safety and health problems. Since 2008, he has presented this model in numerous national & international journals and conferences such as the Journal of Occupational Medicine-Oxford, Vol. 74, Issue Supplement 1 July 2024.

# **ISOES Member Accomplishments**

Our highly-qualified members are well-known among the ergonomics and health & safety community. ISOES academics and practitioners are regular contributers to the field and to the mission of ISOES: To promote through research, education and sound professional practice of ergonomics and safety, the creation of safer, healthier and more productive working environments around the world. We would like to recognize the following members for their outstanding achievements:

- Jim Borchardt (ISOES Past Secretary) was recommended for the U.S. Department of Labor's Advisory
  Committee on Construction Safety and health (ACCSH) and the ASSP provided a strong recommendation
  on his behalf. For more information, check out the <u>U.S. Department of Labor ACCSH webpage</u>.
- Murray Gibson (ISOES International Member at Large) was named the 2025 Applied Ergonomics
  Conference Practitioner of the Year for his work titled: "Beyond Single-task Models: Rethinking Ergonomic
  Assessment."
- Udemba Chiemezie Anthony "Tony" (ISOES International Member at Large) has accepted the role of Senior Associate, EHS at Pfizer in McPherson, KS.

If you or a colleague has an accomplishment to share with the ISOES community, send an email to ISOESinfo@gmail.com to let us know about it. We would love to feature you in the next newsletter.