

UNIVERSITY
OF MINNESOTA
Driven to Discover™



MIDWEST CENTER FOR OCCUPATIONAL HEALTH AND SAFETY

EDUCATION AND RESEARCH CENTER

Working to prevent work-related injuries and illnesses and train Occupational Health and Safety (OHS) professionals through **EDUCATION, RESEARCH, and OUTREACH**

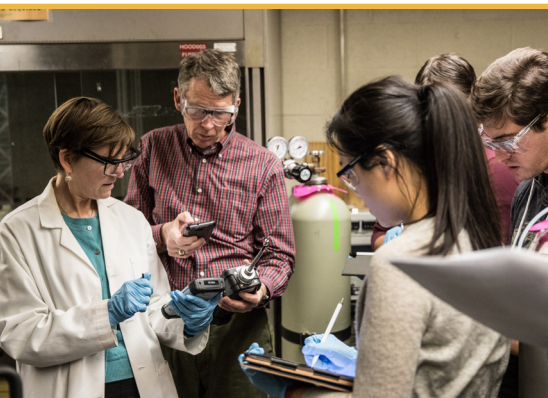
TUITION
ASSISTANCE



EDUCATION
AND OUTREACH



RESEARCH TO
PRACTICE



WHO ARE WE?

Since 1977, the **Midwest Center for Occupational Health and Safety (MCOHS) Education and Research Center** has served the Midwest by offering graduate training programs, continuing education, research-to-practice, and outreach in the field of occupational health and safety.

Our long-standing and committed partnerships with major industries, healthcare institutions, and one of the best state health departments in the country provide our students with invaluable on-the-ground experience, collaboration with experts in the field, and potential career opportunities.

An innovative administrative structure supports interdisciplinary research, education, and outreach, and strengthens diversity recruitment for the next generation of professionals.

THE MISSION OF MCOHS IS TO PROVIDE:

- » **Cutting-edge interdisciplinary academic and research training** to prepare exceptional leaders who make significant contributions to the field of occupational health and safety.
- » **Continuing education** to prepare professionals in the field to address current and emerging threats to the nation's health and safety.

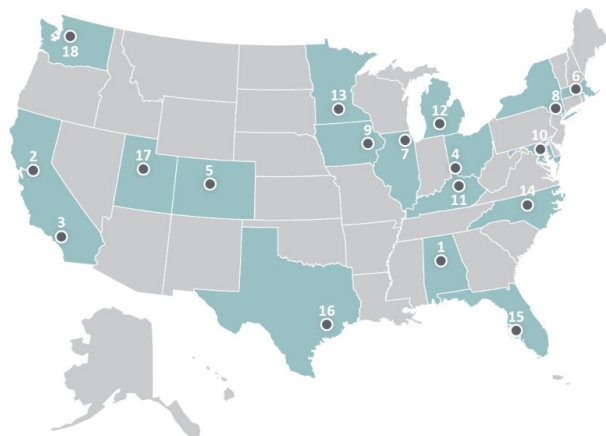


MCOHS is housed within the **Division of Environmental Health Sciences** at the **University of Minnesota School of Public Health**, one of the premier schools of public health in the world, consistently ranked among the top 10 schools of public health in the nation (*U.S. News & World Report*).

MCOHS is one of 18 Education and Research Centers (ERCs) funded by the National Institute for Occupational Health and Safety (NIOSH).

The purpose of the ERCs is to address the burden of occupational safety and health (OSH) in the United States by providing state-of-the-art interdisciplinary training for the next generation of OSH practitioners and researchers.

The NIOSH Education and Research centers play a significant role in preparing the future OSH workforce to respond to new challenges posed by the changing nature of work, to protect workers and ensure a healthier national workforce, and enhance the diversity of the workplace.



1. University of Alabama at Birmingham
2. University of California, Berkeley
3. University of California, Los Angeles
4. University of Cincinnati
5. University of Colorado Denver
6. Harvard University
7. University of Illinois at Chicago
8. Icahn Mount Sinai School of Medicine
9. University of Iowa
10. Johns Hopkins University
11. University of Kentucky
12. University of Michigan
13. University of Minnesota
14. University of North Carolina at Chapel Hill
15. University of South Florida
16. University of Texas Health and Science Center at Houston
17. University of Utah
18. University of Washington



ACADEMIC TRAINING PROGRAMS



Occupational and Environmental Epidemiology (OEE)

The OEE program provides support for training in the epidemiology of diseases related to the working or natural environment. Graduates of the program will have the knowledge and skills needed to identify the causes of occupational related diseases, and how to improve the overall health of working populations.

Degree Options: MS, MPH, PhD

Occupational and Environmental Health Nursing (OEHN)

The OEHN program prepares future leaders dedicated to the health and safety of workers, their families, and the community. MPH graduates work in business, industry, health care and public health to promote health and prevent injuries. PhD graduates educate future generations and conduct research.

Degree Options: MPH, PhD

Occupational and Environmental Medicine (OEM)

The goal of the Occupational and Environmental Medicine (OEM) Residency Training Program is to train physicians who will improve the health and safety of workers and be able to practice in a wide range of venues including government agencies, corporate health departments, clinical practice, or academia.

Degree Options: MPH

Occupational Injury Prevention (OIP)

The OIP program provides a multifaceted and interdisciplinary approach to advanced academic and research training, with a primary goal to prevent and control occupational injuries. Students will be engaged in course work and research in the general realm of injury epidemiology and control.

Degree Options: MS, MPH, PhD

Industrial Hygiene (IH)

The IH program focuses on the health and safety of people at work, the community at large, and the environment. Specific concerns are with the anticipation, recognition, evaluation and control of potential workplace hazards, including chemical, physical and biological agents; and the potential health threats to the community and the environment.

Degree Options: MS, MPH, PhD

Occupational Safety (OS)

The Occupational Safety (OS) training program builds on the rigorous one-year Master of Environmental Health and Safety (MEHS) training at the University of Minnesota Duluth (UMD) with courses, seminars, and field work to train and place occupational safety professionals needed to address work-related injury and illness.

Degree Options: MEHS

LEARN MORE @ mcohs.umn.edu/academic-programs

TUITION ASSISTANCE

The National Institute for Occupational Safety and Health (NIOSH) provides **stipend support and tuition reimbursement** for eligible students enrolled in full-time programs of study. *Students must be a U.S. citizen.* International students are not eligible for a traineeship unless they have been admitted for permanent residency. This financial support is determined annually based on federal budget appropriations.



CONTINUING EDUCATION

THE MIDWEST CENTER FOR OCCUPATIONAL HEALTH AND SAFETY CONTINUING EDUCATION (CE) PROGRAM MISSION IS:

“to improve occupational/environmental health and safety through the transmission of knowledge, skill and understanding to those responsible for workplace health and safety.”



To accomplish this mission, the MCOHS CE program:

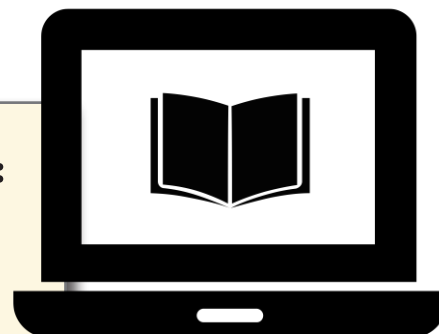
- » Conducts and accesses multifaceted local, regional and national needs assessments to determine continuing education needs of occupational safety and health (OSH) professionals;
- » Responds to needs of OSH professionals by developing/offering relevant courses;
- » Maintains high-quality course offerings as evidenced by course, instructor, and impact evaluations;
- » Maximizes resources by collaborating with internal and external individuals and groups; and
- » Increases the reach of face-to-face programs and online learning using innovative technology.



The MCOHS CE training program is committed to offer training in the core disciplines as well as interdisciplinary programs, covering a wide spectrum of interest and skill levels with introductory and advanced courses in hazard-specific and/or industry-specific topics, emerging OSH issues, and traditional, longstanding exam/practice review and update/refresher programs.

Training courses are offered in two formats:

- » **Face-to-face courses** for professional continuing education
- » **Free online modules** targeted at occupational health and safety professionals of all experience levels and industries.



***NEW** online modules under development!*

⇒ Learn more @ mcohs.umn.edu/continuing-education

OUTREACH

MCOHS faculty, staff and students are actively engaged in outreach activities that have a positive impact on worker safety and health, including reaching underserved and underrepresented groups, meeting a regional or local need, and evaluating the impact of these activities, including:

- » Partnering with universities and educational institutions to integrate occupational safety and health principles and concepts;
- » Providing curriculum materials and consultation for other institutions, including expansion of online offerings;
- » Presenting awareness seminars to undergraduate students;
- » Participating in Research-to-Practice activities;
- » Collaborating with professional and scientific associations;
- » Developing educational resources including fact sheets, videos, and infographics to communicate occupational health and safety information to a wide variety of audiences.



SELECTED OUTREACH EXAMPLES DEVELOPED BY MCOHS FACULTY, STUDENTS AND STAFF:

Youth in Construction Fact Sheet

Safe Patient Handling in Long-Term Care Fact Sheet

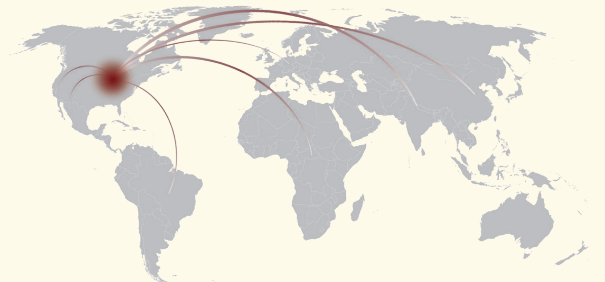
"Sleepers" Public Health Documentary: Addressing Occupational Sleep Apnea in American Truck Drivers



⇒ [Learn more @ mcohs.umn.edu/outreach](https://mcohs.umn.edu/outreach)

LOCAL, REGIONAL, AND GLOBAL IMPACT

This is a sampling of the **OVER 300** companies, institutions, and agencies the Midwest Center for Occupational Health and Safety has collaborated with.



- 3M
- Boston Scientific
- Cargill
- City of Fargo, North Dakota
- ConAgra Foods
- Fairview Health System
- Federal Aviation Administration
- Mayo Clinics
- Medtronic
- Minnesota Department of Health

- Minnesota Fire Department Association
- Target Corporation
- US Armed Forces (all branches)
- Veterans Affairs / VA Medical Center
- Wilmar Poultry Company - Willmar, Minnesota
- Workforce Occupational Health and Medical Services
- World Health Organization
- Wisconsin Division of Public Health

RESEARCH-TO-PRACTICE

research
practice

Research-to-Practice activities with other institutions, businesses, community groups and agencies located within the region and globally are an essential component of the Midwest Center for Occupational Health and Safety.

The goal of our Center is to address existing and emerging issues in occupational health and safety, and implement innovative strategies to meet the unique and diverse needs of our region.

- ✓ IDENTIFY research needs
- ✓ DESIGN & CONDUCT studies
- ✓ DISSEMINATE knowledge
- ✓ IMPLEMENT prevention strategies
- ✓ EVALUATE results



PILOT PROJECTS RESEARCH TRAINING PROGRAM

The **Pilot Projects Research Training Program** serves as an incubator for new research ideas, providing small grants to support students, post-doctoral researchers, and faculty at the University of Minnesota and educational institutions throughout our Midwest region. *Students in our academic programs have the opportunity to develop projects and apply for these grants, in collaboration with a faculty mentor.*

FUNDING PRIORITIES:

- » Projects that focus on occupational health and safety disparities and vulnerable workers
- » Supporting investigators in complementary or non-traditional disciplines who wish to become more actively involved in addressing occupational safety and health issues
- » Junior investigators needing initial support for innovative research areas who lack support from other sources
- » Doctoral students undertaking research required for their degree

LEARN MORE @ mcohs.umn.edu/pilot-projects

RESEARCH ACTIVITIES

Our students and faculty are actively engaged in multidisciplinary research and outreach to address **existing and emerging issues** in worker health and safety and implement **innovative strategies** to respond to the **unique and diverse needs of our region**.

Selected Research Examples of MCOHS Students and Faculty



MENTAL HEALTH RISK AMONG FIREFIGHTERS IN MINNESOTA

First responders face great mental health risks. MCOHS faculty, staff, and students partnered with the Minnesota State Fire Department Association to evaluate the risk of mental health and well-being of Minnesota firefighters as the first step of mental health promotion.



STRESS AMONG HEALTHCARE PROFESSIONALS DURING COVID-19

These interdisciplinary projects are aimed at understanding the impacts of COVID-19 among healthcare workers in Minnesota. Researchers are investigating stress and mental health, job and financial security, COVID-19 symptoms and diagnoses among healthcare professionals.



DIVERSITY, EQUITY, AND INCLUSION TRAINING MODULE FOR SCHOOL DISTRICTS

This training was developed by an Occupational Medicine Resident for educators in an urban school district to address diversity, equity, and inclusion. The training identifies the prevalence of health disparities among students of color.



USE OF OPIOIDS AND SUICIDAL BEHAVIORS AMONG ADOLESCENTS

This student-led study from the Occupational Injury Prevention program evaluated the association between non-medical use of prescription opioids in youth and a dramatic increase in suicidal ideation and attempts.



CHEMOTHERAPY DRUG EXPOSURE FOR VETERINARY WORKERS AND DOG OWNERS

The aim of this study was to evaluate potential exposure of veterinary workers and dog owners to hazardous drugs, particularly cancer chemotherapy. The findings are also relevant for human healthcare workers and caregivers of cancer patients.



MANURE PROCESSING METHODS AND AIR QUALITY ON DAIRY FARMS

This study from our Industrial Hygiene program analyzed exposure data from 29 dairy farms using four manure processing methods. The results showed significant differences in air quality between the various methods.

A MULTIDISCIPLINARY APPROACH

mul-ti-dis-ci-plin-ary

combining or involving several academic disciplines or professional specializations in an approach to a topic or problem.

MCOHS students, faculty, and staff work with a wide variety of partners in multiple industries and professions. Our research and outreach initiatives have included collaborations with academia in multiple disciplines, government, healthcare, business and industry, agriculture, emergency response, community leaders and non-profit organizations, public health, and other education and research centers... *just to name a few.*

BUILDING PARTNERSHIPS



Working together to create a safer and healthier workforce.



Addressing health disparities during the COVID-19 pandemic through research and outreach activities with **Urban Indian Health Organizations** and the local **Somali Community**.



Teaming up with **AgriSafe Network FarmResponse** and the **Upper Midwest Agricultural Safety and Health Center** to promote safety and health on the farm.



Evaluating work-related stress and mental health impacts on law enforcement and firefighters in partnership with the **MN State Fire Department Association**, and **Minneapolis and St. Paul Police**.

Research and fact sheets on the risks for youth in construction with the **Minnesota Department of Labor and Industry**.



DIVERSITY AND HEALTH EQUITY



“A community free from prejudice, discrimination, hatred and ignorance – an intellectually and culturally vibrant place of learning and leadership where all individuals are valued, respected, and unobstructed in their pursuit of excellence in their work and scholarship.”

Diversity, Equity, and Inclusion (DEI) is a core component of MCOHS and the University of Minnesota School of Public Health mission and vision. MCOHS is committed to encouraging and expanding the diversity of both the leadership and student composition of the center, and to incorporating diversity perspectives into the MCOHS research, training, and outreach activities. Our focus on diversity and equity expands beyond race and ethnicity, considering other disparity indicators including, but not limited to, geography, sexual orientation, gender identity, age, veteran status, religion, and socioeconomic status.

HEALTH EQUITY

A primary focus of MCOHS is on addressing the issue of health equity, or health disparities, in local, regional, and national communities.

Some recent MCOHS health equity initiatives include:

- » Created a Health Equity Advisor position on the MCOHS administrative team with expert faculty from the University of Minnesota Medical School.
- » Connected with local migrant communities to provide bilingual resources, and partner on health equity projects.
- » Incorporated health equity topics into coursework.
- » Developing a health equity seminar series.

“Health equity is achieved when every person has the opportunity to attain his or her full health potential and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances.”

Centers for Disease Control (CDC)

WHAT OUR STUDENTS ARE SAYING

A few words from MCOHS students and alumni...



The program, from beginning to end, was very supportive of students with diverse backgrounds and had an objective in turning me into the best public health professional that I can be. The program desires success for all its students and as a result, it presents opportunities for success by way of research and funding opportunities, support for conference attendance and presentations, and networking opportunities.

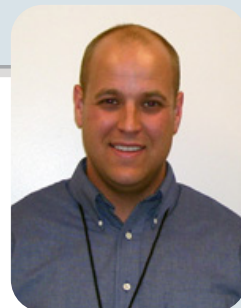
Christopher J. Drucker, PhD
Occupational Injury Prevention
Project/Program Manager III
Division of Emergency Medical Services
Seattle and King County Public Health



My experiences at the University of Minnesota were immeasurable, from classes to field research. My professors were instrumental in my academic and personal growth. They challenged me to perform my best with their support and encouragement. I gained in-depth expertise, not only from textbooks but also from activities outside of class.

Jooyeon Hwang, PhD
Industrial Hygiene
Assistant Professor

Occupational and Environmental Health
University of Oklahoma Health Sciences Center



I would not be in my current position if it was not for my University of Minnesota education experience. The program prepared me to transition into a career in occupational health. It also helped me to network with other occupational health professionals.

Bryan Topp, MPH, COHN-S

Occupational and Environmental Health Nursing
Occupational Health Specialist
3M Corporation



The OEE program is a great opportunity that provides excellent training, faculty mentorship, and research collaboration. Students are encouraged to develop and explore their individual research interests, while gaining valuable experience in communicating their work. Students can feel confident that upon graduation, they will have gained valuable skills that will allow them to be competitive in the job market.

Craig S. Meyer, PhD

Occupational and Environmental Epidemiology
Senior Data Scientist
Genentech

OUR ALUMNI

Leaders in the Field Protecting the Workforce

Our graduates are employed in leadership positions in a variety of industries including healthcare, manufacturing, State and Federal government, education, emergency management, agriculture and food production, mining, transportation, community and non-profit leadership, and private industry.



95%
EMPLOYMENT
RATE

CAREER PLACEMENT

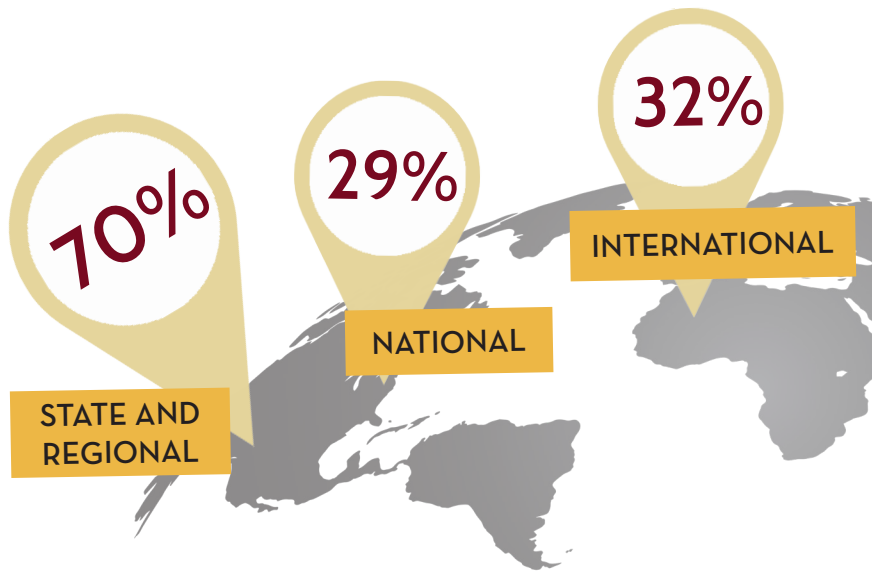
In a recent alumni survey, **95% of respondents reported securing employment** upon graduation, using the skills they gained in our programs.

Regional, national, and international reach

MCOHS graduates are employed in occupational health and safety positions around the globe.

In a recent survey, 51% of alumni reported working in state and regional roles, 29% national, and 32% international.

Respondents were able to select more than one response.



A sampling of where our alumni are making a difference...



CONTACT US TODAY

A NOTE FROM OUR DIRECTOR

According to the World Health Organization, a minimum of 1.7 million people across the world die on the job each year.¹

Keeping work environments safe from injuries and illnesses is a priority, especially in the midst of the covid-19 pandemic and related racial injustices. Trained occupational health and safety professionals are needed to keep communities and businesses thriving.

The Midwest Center for Occupational Health and Safety (MCOHS) offers rigorous academic training and research in occupational safety and health. Our faculty and business network are here to help you gain the skills in public health, epidemiology, occupational injury prevention and safety, industrial hygiene, occupational medicine and occupational nursing. The MCOHS offers MS, MPH and PhD programs as well as continuing education courses.

Please reach out to us to learn more, and consider a career in occupational safety and health.

1. www.who.int/occupational_health/mediacentre/pr280405/en/



OUR LEADERSHIP

Marizen Ramirez, PhD
Director

Susan Arnold, PhD, CIH
Deputy Director

VIEW ALL MCOHS FACULTY
AND STAFF PROFILES AT:

mcohs.umn.edu/faculty-and-staff



CONNECT WITH US

GET STARTED TODAY!

Request more information at:

mcohs.umn.edu/learnmore



**MIDWEST CENTER FOR
OCCUPATIONAL HEALTH AND SAFETY**
EDUCATION AND RESEARCH CENTER

Division of Environmental Health Sciences
University of Minnesota School of Public Health
1260 Mayo (MMC 807)
420 Delaware Street SE
Minneapolis, MN 55455

PHONE:
612-626-0900



mcohs.umn.edu



mcohs@umn.edu



@mcohs



@mcohs

*MCOHS is funded in part by the National Institute for Occupational Safety and Health (NIOSH).
Funding for eligible students may include stipend support, tuition reimbursement, and scholarships.*