



## Executive Summary 2022-2023 NWCOHS Evaluation Report

#### Overview

The Northwest Center for Occupational Health and Safety (NWCOHS) is a National Institute for Occupational Safety & Health-funded Education and Research Center (ERC). NWCOHS is housed in the University of Washington (UW) Department of Environmental & Occupational Health Sciences (DEOHS) and brings together faculty from the UW Schools of Public Health, Nursing and Medicine. NWCOHS is committed to ensuring high quality training, education, and outreach to prepare current and future generations of occupational health and safety professionals for the workforce.

This Executive Summary provides highlights from an 80+ page evaluation report that describes NWCOHS accomplishments and identifies areas for improvement from Year 3 (July 1, 2022 – June 30, 2023) of our current 5-year competing renewal cycle (July 1, 2020 - June 30, 2025). Year 3 of our evaluation program integrated evaluation efforts focused on our in-residence graduate programs, Continuing Education (CE) and Outreach programs.

Our evaluation, which will be conducted annually, is guided by our <u>strategic plan</u> and <u>logic</u> <u>model</u>. The annual evaluation seeks to address four overarching questions:

- 1. How is NWCOHS increasing awareness about occupational health and safety in Region X among practitioners, community partners<sup>1</sup>, underserved and underrepresented communities, and academia?
- 2. How does NWCOHS research contribute to the knowledge of Northwest worker safety and well-being?
- 3. How is NWCOHS preparing trainees and CE professionals to address regional occupational health and safety (OHS) needs?
- 4. What are the impacts of NWCOHS activities on Northwest occupational health and safety?

#### **Data Collection**

We leveraged a mixed methods approach to answer each of our evaluation questions, collecting and synthesizing information from Program Directors, trainees, and external partners, as well as secondary sources. Specific information sources included Program

 $<sup>^{1}</sup>$  In the 2022-2023 evaluation report, we have replaced the term "stakeholder" used in prior evaluation reports with "partner."

Director annual reporting forms, trainee feedback via annual surveys and a focus group, trainee activity summaries, six one-on-one partner interviews, three Program Director focus groups, enrollment reports, the NWCOHS's annual Research Performance Progress Report, External Advisory Board Annual Letter, social media analytics, and web analytics.

#### Findings and Discussion

We synthesized findings across data sources to address the evaluation questions, presented below. Due to the interconnected nature of the NWCOHS's goals and activities, some findings addressed multiple questions.

1) How is NWCOHS increasing awareness about occupational health and safety in Region X among practitioners, community partners, underserved and underrepresented communities, and academia?

#### **Occupational health nursing**

CE worked with representatives from UW Nursing School, WA State Nurses Association, Veterans Administration Puget Sound Health Care, state agency healthcare professionals and others to design a new online course that covers occupational health basics for nursing professionals.

The NWCOHS increased awareness of OHS research and training through 40 accepted publications and 49 presentations at conferences, workshops, and seminars authored or co-authored by Program Directors and trainees. Program Directors reported 21 media engagements (radio, digital, paper). NWCOHS crafted 132 social media posts. Program Directors consulted with 35 organizations including government agencies, policymakers, unions, and nonprofit/community groups.

Program Directors reported many examples of outreach activities via educational materials and applied/practice-relevant research grants. Program Directors shared various ways in which they and their program engaged in recruitment activities for potential trainees/students, including direct outreach to undergraduate programs, social media advertising, webinars, website advertising, and listsery dissemination.

NWCOHS supported six PTOP projects providing students and professionals the opportunity to expand their OHS knowledge. Finally, NWCOHS partners praised the depth and breadth of CE courses and the quality of CE instruction. However, NWCOHS partners also noted opportunities for increased engagement with industry and corporate partners and ensuring outreach and engagement in both Idaho and Alaska.

## 2) How does our research contribute to the regional knowledge of worker safety and well-being?

We synthesized information based on the number of publications and presentations shared by Program Directors and trainees, feedback from Program Director focus group and the NWCOHS External Advisory Board, and NWCOHS partner feedback regarding their knowledge and impressions of research coming out of the NWCOHS. Similarly to previous years, NWCOHS partners shared that they recognize that Center research is impactful and report positive impressions of the Center overall.

#### Occupational health in animal workers

When an outbreak occurred in a mink farm in Oregon, OHHAI faculty reached out to the Oregon Department of Agriculture to ensure that they had access to the Infectious Disease Prevention and Control on the Farm training modules (created by OHHAI faculty in conjunction with the NWCOHS's Continuing Education program, available here).

NWCOHS partners noted that they group research from the UW School of Public Health and DEOHS with NWCOHS research given the overlap in focus area and faculty. NWCOHS partners pointed to a few specific examples as strengths of NWCOHS research, including work in antimicrobial resistance and encouraged an emphasis on science communication/research translation.

#### 3) How has NWCOHS prepared trainees and CE professionals to address regional OHS needs?

"I am incredibly thankful for the opportunity to be an NWCOHS trainee and I wouldn't have gotten a degree in occupational health without [NWCOHS] support."

"The NWCOHS has forced me to get out of my box. I talk to people in disciplines or programs I might not interact with otherwise."

#### - NWCOHS trainees

The NWCOHS supported 26 trainees during the 2022-2023 academic year. These 26 trainees included one non-degree student, 14 master's students, 2 Doctor of Nursing Practice (DNP) students, and 9 PhD students. Trainees receive training and education through various mechanisms that aid in their preparation for the OHS workforce, including internships, coursework, and faculty mentorship.

Overall, trainees reported favorable impressions of their experiences during their time with the NWCOHS, highlighting the value of mentorship,

opportunities for professional networking, and opportunities for professional development. Beyond training UW graduate students, our CE program offered 51 courses and reached 1,464 participants who are practicing professionals that address regional OHS needs.

#### 4) What are the impacts of NWCOHS activities on Northwest OHS?

NWCOHS partner interviewees appreciated the education, outreach and service NWCOHS provides to the region. They acknowledged the importance of a training pipeline, especially for Washington State Labor and Industries (L&I). However, interviewees felt NWCOHS could improve its regional impact by establishing partnerships with nonprofit organizations and corporations and exploring new ways to disseminate NWCOHS impacts in addition to the NWCOHS website and blog.

Cascadia Symposium on Environmental,
Occupational and
Population Health
NWCOHS was the lead host for this cross-border conference attended by over 120 faculty, staff, and students in January 2023.
See blog post highlighting the legacy of this event.

While Program Directors highlighted the NWCOHS's success at highlighting occupational health at regional and national conferences and events, they acknowledged that many others outside of public health circles do not fully understand occupational health. NWCOHS could better tailor messaging to different audiences.

Our cumulative outputs also point to the impacts of NWCOHS activities on Northwest OHS. For example, over the past three years, NWCOHS trainees and Program Directors have reported 119 accepted publications and 149 conferences, workshops, and seminars presentations. In the next year of our evaluation program, we will conduct an alumni survey to assess the impact of NWCOHS training on the careers of NWCOHS alumni.

#### Recommendations

During the August 2023 evaluation retreat, program directors and staff reflected on the detailed recommendations provided by trainees, partners and the evaluation team. Following this retreat, the evaluation team consolidated the initial recommendations into feasible and actionable overarching recommendations provided below. Following these recommendations are highlights from initial or planned efforts to address them.

### Conduct additional efforts to connect students with industry and alumni, especially related to student efforts to secure internships, mentorship, research opportunities and external clinical rotations

NWCOHS leadership liaised with DEOHS Manager of Experiential Learning & Career Services to brainstorm ways to better connect NWCOHS trainees to existing resources and opportunities. The Occupational Medicine Residency will continue to connect residents with alumni at welcome and graduation events, encourage and support attendance at regional and national conferences to network, and promote corporate and NIOSH clinical rotations.

### Continue to evaluate outreach opportunities and relevancy of programming in Idaho and Alaska, as well as programming for non-English speaking populations

CE will promote the new Total Work Health course in Alaska. The CE/Outreach program will work with UFCW Local 300 to increase their members' expertise and knowledge of health and safety committees, specifically in Idaho. CE will promote its offerings at three Idaho Safety Fests (Boise State, North Idaho College and Pocatello) and explore a new relationship with Western Treasure Valley Resource Committee in Idaho. CE will continue to provide non-English programming for its infection control prevention and green cleaning courses.

### Continue to disseminate research and accomplishments supported by NWCOHS via the NWCOHS blog, social media, and conference presentations

NWCOHS will support and encourage trainees to the Cascadia Symposium, American College of Occupational and Environmental Medicine (ACOEM) regional conference, and the Northwest Occupational Health Conference. NWCOHS plans to leverage blog content produced by the DEOHS Communications team to highlight wildfire smoke, heat and disaster response and explore opportunities for new occupational health blog content with DEOHS or UW School of Public Health Communications teams.

### Provide training and opportunities for science communication and research translation among trainees and faculty

NWCOHS will promote opportunities for trainees to write a NWCOHS blog post and will encourage trainee and faculty participation in science communication workshops/trainings hosted by the UW Interdisciplinary Center for Exposures, Diseases, Genomics and the Environment (EDGE) and the Pacific Northwest Agricultural Safety and Health (PNASH) Center.

## Improve communication with trainees regarding the peer mentorship program; consider establishing guidance on how often mentors and mentees should meet and providing an example list of topics to discuss

NWCOHS will share information about the peer mentorship program via email and at NWCOHS Orientation, will suggest peer mentors host joint (cross-program) social events and invite select faculty, and will develop list of suggested topics for peer mentorship meetings.

## Improve communication about opportunities for trainee involvement in NWCOHS programs, including advertising opportunities with the NWCOHS Anti-Racism workgroup throughout the year

NWCOHS will invite trainees to join the anti-racism workgroup at NWCOHS Trainee Orientation and remind them quarterly about this opportunity throughout the year.

Expand opportunities for students to engage with industry, government and nonprofit/community-based organization partners, as well as NWCOHS alumni

NWCOHS will promote DEOHS employer roundtable events, promote CE courses that provide trainees opportunities to connect with industry, and continue to hold annual Career Panel with industry professionals and alumni.

# Further develop stand-alone hands-on and applied learning opportunities, and encourage integration of such opportunities into formal coursework where applicable and possible, particularly for trainees in the applied Industrial Hygiene track

NWCOHS will share this feedback with specialty course instructors and ask them to consider incorporating opportunities into their classes. NWCOHS has also organized a Boeing tour for November 2023.

### Continue to promote cross-program attendance at trainee thesis and defense presentations and include lightning presentations of trainee research at NWCOHS Orientation

NWCOHS will continue to promote cross-program attendance at trainee thesis and defense presentations via email and include lightning presentations of trainee research and internship experiences at NWCOHS Orientation.

### Continue to encourage up-to-date occupational health and safety content in DEOHS and SPH coursework when possible

NWCOHS will share this feedback with DEOHS course instructors, as well as department and School curriculum committees.

## Continue to collect evaluation data in Years 4 and 5 of the current NWCOHS funding cycle; conduct NWCOHS Alumni Survey in Year 4 to assess the impact of NWCOHS programs on trainee careers

NWCOHS will continue its planned evaluation activities in Years 4 and 5 of the current cycle, including the Year 4 alumni survey.

### Increase opportunities for outreach, including with local professional society sections throughout Region X

NWCOHS will continue to encourage use of NWCOHS travel funding for trainees and Program Directors to attend regional meetings and occupational health & safety-focused events.

## Identify opportunities to share NWCOHS-generated educational materials (e.g., case studies on climate change and precarious work) with other regional universities to promote access to occupational health and safety training

NWCOHS will explore faculty interest in creating short recordings to go with existing case study PowerPoints.

#### Contact Info

Evaluation report prepared by: Lindsay Pysson, MPA, Kathleen Moloney, MPH, and Nicole A. Errett, PhD, MSPH.

Northwest Center for Occupational Health and Safety nwcohs@uw.edu