

***Total Worker Health*[®] Annual Report**

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SECTION I: *Total Worker Health* Summary and Major Goals

Summary

The purpose of the Center for Health, Work & Environment is to advance the overall safety, health, and well-being of workers in Federal Health Region 8 and the nation. We do this through transdisciplinary intervention research, innovative dissemination strategies, and *Total Worker Health* (TWH) capacity building, as well as rigorous evaluation that informs improvements in all the above.

The Center addresses the need for research on TWH interventions, focusing on the large number of workers and workplaces at highest risk of occupational fatality, injury, and illness and in keeping with National Occupational Research Agenda (NORA) priorities. Specifically, the Center's research builds on the team's experience in creating innovative, evidence-based TWH interventions for small and medium sized businesses and other high-risk sectors, including healthcare, agriculture and education. Because of this focus, we will contribute to research and interventions that address the needs of our region's workers who have been less well addressed by the TWH field to date, including low wage, rural, Latinx, Native American, and contingent workers, among others.

The Center has 6 primary goals:

- 1) Provide leadership and expertise in research and practice to integrate the protection from work-related safety and health hazards with the promotion of injury and illness prevention efforts to advance worker well-being. (Leadership/Expertise)
- 2) Extend the research evidence base regarding the integration of protection and promotion of worker-related safety, physical and mental health, and well-being. (Research)
- 3) Increase awareness, adoption, and implementation of *Total Worker Health* best practices, programs, and policies across the region through communication and dissemination, education, and implementation that is evidence based, accessible, feasible, effective, and culturally appropriate. (Practice/Outreach)
- 4) Advance the adoption of policies that improve work-related safety, health, and well-being at local, state, and federal levels. (Policy)
- 5) Build *Total Worker Health* workforce capacity in public and private sectors, in academia and practice, through education and strategic partnerships. (Capacity)
- 6) Improve Center impact through a rigorous evaluation program. (Evaluation)

Public Health Relevance

The Center for Health, Work & Environment achieves high public health impact by addressing the regional and national needs for healthy and safe worksites and workers through its program of research, r2p, education/training, partnerships and other dissemination activities. It will advance scientific knowledge by establishing new, innovative worksite programs to benefit both workers and employers, test relevant theoretical models, and emphasize helping those working in small enterprises, and in other high-risk industries, including education and agriculture, among other sectors with high need.

Center for Health, Work & Environment Web Link:

<https://coloradosph.cuanschutz.edu/research-and-practice/centers-programs/chwe>

SECTION II: Program Highlights of High Impact

Research Core

WeCanWork Study - The Intersection of Oncology Care and Worker Well-being

For cancer patients and their families, concerns about job security and financial stability are often front and center. In the U.S., nearly 18 million people are cancer survivors, and around 8.5 million of them are of working age (20 to 64 years old). Many of these individuals wish to stay in the workforce, yet a significant number—roughly half—find themselves needing to adjust their work schedules, change job roles, or leave work entirely due to their illness and treatment. Despite these challenges, health care systems remain underutilized in applying *Total Worker Health* (TWH) interventions in a clinical setting to benefit patients while reducing provider burden. Interventions have the potential to improve employment outcomes, financial stability, and overall well-being for cancer survivors and their families. The Well-Being and Cancer at Work (WeCanWork) study is a 5-year, two-phase longitudinal intervention study that assesses employment, financial, and well-being status of primarily employed men and some employed women treated for newly diagnosed solid tumors in community- and academic-based oncology settings. Phase 1 of the WeCanWork study enrolled 134 employed cancer patients. We screened new patient visits to identify a convenience sample of employed men, aged 21 to 70, newly diagnosed with a malignant solid tumor and receiving adjuvant treatment at a National Cancer Institute (NCI) designated academic comprehensive cancer center. We are currently analyzing data and preparing manuscripts. Preliminary findings suggest that some men, especially those employed in physically demanding jobs, may benefit from connection to support services to help navigate work and treatment. Studies are ongoing to evaluate the benefits of services provided by an occupational medicine physician to assist with obtaining workforce accommodations

As part of Phase 2, we conducted focus groups to identify roles and perceptions of employment supports in practice among social workers, patient navigators, psychologists, oncologists and occupational medicine physicians. Our research identified that oncology care teams often feel unequipped to guide patients with work-related concerns. To bridge this gap, we designed a TWH-based intervention addressing gaps in return-to-work for cancer survivors. The intervention consists of a novel referral pathway enabling cancer patients to receive up to three free consultations with an occupational medicine physician. These physicians specialize in providing tailored guidance on workplace accommodations to safely manage work responsibilities during treatment, empowering patients to maintain their professional roles when appropriate. A manuscript, titled *Engaging oncology and occupational medicine to inform design of a Total Worker Health intervention to address employment, financial, and well-being outcomes in cancer survivors* was published in the Journal of Occupational and Environmental Medicine in 2024 (https://journals.lww.com/joem/abstract/9900/engaging_oncology_and_occupational_medicine_t_o.633.aspx).

Our efforts to enhance return-to-work support have led to several tangible outputs, including the development of key resources: an Oncology Recruitment Packet, an overview PowerPoint presentation, a WeCanWork Intake Script, a Tip Sheet to navigate the referral pathway in EPIC, and a flyer to promote the service. To support the successful adoption of this referral pathway, we held eight meetings with oncology team members, including nurse navigators, social workers, and oncologists, to review eligibility criteria, refine the referral process, and introduce the resources in the Oncology Recruitment Packet. The new referral pathway became operational on June 11th, 2024, within the UHealth EPIC system, allowing oncology care team members to connect cancer patients with occupational medicine services.

Between June 11 to August 31, 2024, the intervention has resulted in 12 referrals, 5 scheduled appointments, and 3 completed occupational medicine consultations. During this free appointment the occupational medicine physician discusses appropriate work accommodations and completes employment forms (e.g., FMLA). Patients are provided with return-to-work paperwork for their employer and oncology team to review.

These early outcomes reflect promising engagement, and we continue to utilize implementation science frameworks to make improvements to our outreach strategy and referral system to expand its reach and impact. For example, during a mid-August meeting with oncology providers, feedback indicated that the referral process in EPIC involved too many steps. We responded immediately by submitting an urgent request to the EPIC IT team to streamline the referral function. By making the process more efficient, we aim to increase referrals and improve access to these vital services.

Mental Health Integrated Emergency Preparedness for the Public School Workforce

The research aspects of this project were complete in 2023 and a manuscript highlighting the results of this research study is currently under review. Coordination and collaboration with the Outreach Core are ongoing. During the current reporting period, we adapted and evaluated the workforce mental health integrated intervention into school emergency preparedness via shared leadership and peer support. We have also undertaken work to disseminate the curriculum. First, we posted our curriculum on our website and almost 40 individuals from around the United States downloaded the material. Second, we partnered with the University of Michigan National School Safety Resource Center to deliver a train-the-trainer webinar. We had about 80 individuals from school districts around the country participate. The webinar will be available for on-demand training in Fall 2024. Finally, our work has been featured in Colorado Public Radio as well as EdWeek.com.

Outreach Core

Program Highlights

Marketing and Communications

Our TWH Center continues to be very active with marketing and communications to disseminate TWH information and outputs. Our digital dissemination strategies (websites, email, social media) to promote TWH outreach activities resulted in **9,700 unique website visits on average every month** (3,064 for CHWE, 6,636 for Health Links). Top webpages across our sites have been the CHWE homepage, Colorado Recovery Friendly Workplace Initiative, Online Continuing Education, our newsroom articles, Health Links homepage, and the admin user dashboard for Health Links organizations. Our social media sites reach a total of 1,869 followers across YouTube and LinkedIn. This number decreased from years previous as we sunset our X (formerly Twitter) profiles across all programs. We continue to produce and publish two electronic newsletters: the monthly CHWE newsletter reaches 6,778 contacts and the monthly Health Links newsletter reaches 10,074 contacts. We also promote monthly TWH webinars and courses to the Certified Health Education Specialists (CHES®) network with 15,405 contacts. Our 2023 annual report (<https://indd.adobe.com/view/0a477701-c96d-4e9b-9716-7a49d45b211c>) has 874 views since its online publication in February 2024. We continue to manage the Society for Total Worker Health™ website (with 12,702 total website views), LinkedIn profile (with 883 followers), and email audience for event marketing emails to 281 members.

Society for Total Worker Health

We continue to provide leadership and administrative support for the **Society for Total Worker Health™**, a place for professionals and students to unite and engage across *all* disciplines to

advance the field of TWH. Since the Society launched in 2022, 281 members have joined. This includes 62 early career members, 170 full members, and 49 student members. Members of the Board of Directors include our team's Lili Tenney (elected President) and David Shapiro (Treasurer). We conducted key activities to transition the interim Board of Directors with the first elected Board of Directors, held the Society's first annual meeting, drafted a code of ethics, and organized four member events. We hosted the first in-person networking event in Denver in August 2024 at the ASSP Safety Conference in partnership with Society members. Our Center is continuing to serve serving as the fiscal and program partner for the Society. Learn more and join here: <https://twhsociety.org>.

Colorado's Recovery Friendly Workplace Initiative

The Colorado Recovery Friendly Workplace Initiative™ (RFW) has seen significant participation through its efforts to foster supportive workplace environments. Notably, this past year we helped lead the passing of new state of Colorado legislation championed by the work of our Center in establishing the Recovery Friendly Workplace Initiative. Specifically, the legislation will support the Center's efforts to establish Recovery Friendly Workplaces (RFW) and implement a voluntary employer participation and certification program to support individuals recovering from addiction and coping with other mental and behavioral health challenges. Currently, 110 individuals representing 89 unique organizations have taken the Recovery Friendly Workplace Pledge, demonstrating their commitment to recovery-supportive practices. Additionally, the Recovery Friendly Workplace Workgroup has grown to include 136 individuals representing 95 unique organizations. This collective effort highlights the strong interest and dedication among employers to promote recovery and well-being in Colorado workplaces. In addition to the growing participation, RFW has been featured at several notable presentations in 2024. These include the Recovery Leadership Summit hosted by Faces & Voices of Recovery (June 4), the opening keynote at the Colorado Peer Recovery Conference (August 1), a presentation to the National Academies of Sciences, Engineering and Medicine - Alcohol at Sea Committee (September 12), and a session at the White House hosted by the Office of National Drug Control Policy (ONDCP) on September 18. These events highlight the widespread interest and recognition of the initiative's impact at both the state and national levels.

Delivering TWH through Proven Intervention Health Links®

We continued to implement Health Links as a TWH intervention to provide organizations with the Healthy Workplace Assessment, Healthy Workplace Certification™ and advising that provides guidance for adopting evidence-based TWH best-practices. We conducted 108 advising sessions with organizations on TWH, chronic disease prevention and management, workplace mental health, and recovery friendly workplace policies and practices. We have had significant impact in delivering TWH through Health Links.

Food@Work. This project, in partnership with Colorado Department of Public Health & Environment supports the State Physical Activity and Nutrition Program by promoting healthier food options at worksites through the adoption of Food Service Guidelines. The project involves developing a nutrition module within the Health Links' platform, recruiting worksites to assess their food offerings by conducting a survey, offering technical assistance to participating organizations, and reporting on guideline adoption within those organizations. Health Links assists employers in identifying gaps and opportunities in promoting nutritious food and beverage options and provides evidence-based recommendations and goal setting for improvement. The Health Care and Social Assistance industry particularly benefits from this work as they serve food in various venues to both the public and patients. By partnering with nine employers representing 18,154 employees, we are contributing to a broader effort to create healthier food environments at worksites, improving overall nutrition and well-being. Notable engagement includes work with Denver

Health, who has implemented a comprehensive food and beverage policy that acts as an umbrella for several healthy guidelines including policies around sugar sweetened beverages and food and beverage at meeting/events.

Engaging Employers in Chronic Disease Prevention and Management. In the past year, we worked to expand access to the National Diabetes Prevention Program (National DPP) for employees and their dependents at high risk for type 2 diabetes in industries and geographic areas with high diabetes prevalence. We collaborated with community partners, conducted employer outreach, provided guidance, shared resources, and evaluated activities. The focus is on increasing National DPP coverage across urban and rural Colorado, benefiting at-risk workers and reducing type 2 diabetes cases. We implemented this work through Health Links to engage with employers to identify gaps and opportunities in chronic disease prevention and management, build the business case for implementing chronic disease prevention and management programs, connect employers with appropriate providers, and support the marketing and promotion of programs. We conducted a landscape assessment to assess high-risk populations in Colorado. With over 1.5 million adults in Colorado at risk, expanding National DPP access will lead to healthier outcomes statewide. We engaged 10 unique organizations representing 20,595 employees in a range of business size and industry. We published a new paper on this work, *Employer Engagement Strategies to Promote and Add Evidence-Based Chronic Disease Prevention and Management Programs as a Covered Benefit*, in *Occupational Health Science* (<https://doi.org/10.1007/s41542-024-00185-z>), which highlights our work in engaging employers in chronic disease prevention and management (CDPMP) in Colorado. The paper provides key recommendations and actional steps for implementation and adoption of these programs.

Connecting the Healthcare Workforce with Mental Health Resources. In partnership with the CO-CARES program started by the Colorado Department of Public Health and Environment (CDPHE), we have assisted 24 healthcare facilities representing 24,601 workers to reduce burnout, support mental health, and ensure that healthcare workers have the resources they need to maintain their well-being, which is essential for the sustainability of the healthcare system itself. We delivered our Mental Health Module to provide an organizational assessment benchmarking workplace policies and programs aimed at promoting mental well-being.

TWH Leadership Training for Hispanic and Latino Business Owners & Workforces. Our outreach to Hispanic and Latino business owners and workforces has significantly grown through partnerships with chambers of commerce, enabling us to train Spanish-speaking professionals. In collaboration with the Latino Research & Policy Center at the Colorado School of Public Health and various chambers of commerce, we conducted six trainings over the past year. We developed and delivered Spanish-language safety and health trainings in partnership with Federal Region 8 OSHA, workers' compensation insurers, and our Mountain and Plains Education and Research Center (MAP ERC). Additionally, we engaged with the community at events like the Tamale Fest, hosted by the Latino Chamber of Commerce of Boulder County, where we gathered insights on the training needs of Latino workers and business owners.

4th International Symposium to Advance *Total Worker Health*

In partnership with NIOSH and the Society for Total Worker Health, we are leading the planning and organizing of the next TWH Symposium. We have convened the planning committee, consisting of 23 members representing NIOSH, all 10 TWH Centers of Excellence, TWH Affiliates, and the TWH Society. The 4th International Symposium to Advance *Total Worker Health* will examine opportunities to make workplaces safer and improve the health and well-being of the global workforce. This conference emphasizes applied learning and will be held in Bethesda, Maryland, and virtually, on October 21-24, 2025. The symposium will center around the themes

of Empower, Engage, and Excel, highlighting the importance of empowering individuals with the tools and knowledge to improve worker health, fostering collaboration and active participation among stakeholders, and striving for excellence through continuous improvement and innovation in TWH strategies (<https://www.twhsymposium.org/event/2025/summary>).

Training

Over the past year, our Health Links webinar series has attracted significant attendance and high satisfaction ratings. The *Women's Health and Well-being: Strategies for the Modern Workplace* webinar (10/18/2023) drew 762 attendees, with an overall rating of 4.8/5.0 and 64% of participants intending to implement changes in their workplace based on the content of the webinar. Similarly, the *Health@Work: Supporting Workers with Chronic Conditions* event (11/16/2023) had 378 attendees, with a 4.8/5.0 overall rating and 63% intending to make workplace changes. The *Psychological Preparedness for Emergencies in the Workplace* session (2/21/2024) saw 583 attendees and a 4.7/5.0 rating, with 59% intending to apply the insights shared. *The State of Workplace Mental Health: 2024* (5/15/2024) drew 702 attendees, earning a 4.7/5.0 rating and 66% of respondents intending to make workplace changes. The *Antiracism in the Workplace: 2024* event (6/20/2024) had 498 attendees, with a 4.6/5.0 rating and 72% planning changes. Finally, the *Recovery Friendly Workplaces* session (8/29/2024) attracted 386 attendees and earned a 4.8/5 rating, with 57% intending to implement changes.

Centers for Health, Work & Environment

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The Centers for Health, Work & Environment is an academic center within the Colorado School of Public Health. The Centers house one of 10 Centers of Excellence for Total Worker Health® and the Mountain and Plains Education and Research Center (MAP ERC), one of 18 centers of its kind supported by the National Institute for Occupational Safety and Health (NIOSH).