

NIOSH eNews



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From the Director's Desk

John Howard, M.D. Director, NIOSH

Join Us for the 8th Year of Safety Stand-Downs to Prevent Falls in Construction

Construction falls are preventable. Yet in 2019, falls were the leading cause of death in construction and were at their highest levels since 2011. Falls can happen when construction workers lack the right safety equipment or knowledge and training to prevent them. Roofers, Hispanics, and older workers, as well as those working for small contractors, are most affected.

Join the effort to prevent falls May 3–7, when employers and workers take a break from work to participate in the [2021 National Safety Stand-Down to Prevent Falls in Construction](#). It's not too late for you to host a safety stand-down this year and contribute to what has become an increasingly successful effort to prevent falls in construction. Your involvement can be as simple as sharing some of our resources at your worksite.

The Safety Stand-Down was launched in 2012 by the NIOSH [National Occupational Research Agenda \(NORA\) Construction Sector Council](#) with OSHA and CPWR—The Center for Construction Research and Training. Each year, the



NATIONAL SAFETY STAND-DOWN TO PREVENT FALLS IN CONSTRUCTION
MAY 3-7, 2021

Stop Falls Stand-Down

- Plan a toolbox talk or other safety activity
- Take a break to talk about how to prevent falls
- Provide training for all workers

For more information:
www.osha.gov/StopFallsStandDown
#StandDown4Safety
1-800-321-OSHA (6742) • TTY 1-877-889-5627

Logos for OSHA, CDC, NIOSH, and CPWR are visible at the bottom of the poster.

Image credit OSHA

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campaign brings the industry together for a week of intense focus on how we can all prevent falls in construction.

Throughout the week of the Safety Stand-Down, employers are invited to host individual safety stand-downs to educate workers on preventing construction falls through toolbox talks, demonstrations, and trainings. The Safety Stand-Down is an opportunity for employers and employees to have a conversation about training, job hazards, protective methods, speaking up about unsafe conditions, and the company's safety policies, goals, and expectations.

To better understand and prevent falls, more information is needed about the root causes. We are asking you to tell us about a fall incident or incidents that you experienced, witnessed, or investigated. Complete CPWR's [survey](#) to help fill some information gaps on common underlying causes of falls from heights.

This year, Safety Stand-Downs will take place virtually or at physically-distanced events. The following resources and tools are available to help you participate in or host a Safety Stand-Down:

- [Stop Construction Falls](#) and [One Stop Stand-Down Shop](#) —Toolbox talks, infographics, training materials, and other free Stand-Down resources (in English and Spanish), plus a [planner](#) with ready-to-go activities for each day
- [National Safety Stand-Down to Prevent Falls in Construction](#) — Additional resources, including an events page—share your free and open-to-the-public events here and find events to join
- [Small Contractors: Plan. Provide. Train.](#) —Free tools and resources for small businesses
- [Video and On-Demand Webinars](#), [CPWR Fall Hazards & Prevention YouTube Playlist](#), and [CDC NIOSH Construction Safety & Health YouTube Playlist](#)—A selection of videos for sharing at virtual and in-person stand-downs
- [Planificar. Proporcionar. Capacitar](#) and [La Seguridad Paga, las Caidas Cuestan, En Español](#) —Materiales gratuitas en Espanol/Stand-Down resources in Spanish

Since the [Safety Stand-Downs](#) began seven years ago, thousands of employers have participated, reaching millions of workers across all 50 states and internationally. Industry and business leaders, universities, labor organizations, and community groups have all participated.

Join me this year at our official [kick-off event](#) for the 2021 National Safety Stand-Down to Prevent Falls in Construction on May 3, at 1 p.m. EDT.

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Research Rounds

For the NIOSH 50th Anniversary, please enjoy this limited time series of “NIOSH Now” and “NIOSH Then” where we look back at research efforts inside & outside of NIOSH from the past 50 years.

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NIOSH Now:


School Kitchen Workers Possibly at Risk for Heat-related Illness

While the dangers of heat-related illness from working in extreme heat are well documented, little is known about heat exposure among school kitchen workers. These workers can have close and lengthy contact with hot equipment, work in crowded spaces with poor ventilation, and lack enough rest breaks—all potential causes of heat stress, which can lead to heat-related illness, such as heat exhaustion and heat stroke.

Accordingly, a study by the NIOSH-funded New York and New Jersey Education and Research Center looked at the risk for heat stress, heat-related illness, and short-term injury among kitchen workers in 10 schools identified out of 1,900 New York City schools based on workers' heat-related complaints. Using standard methods from the Occupational Safety and Health Administration, researchers assessed the risk for heat stress during heavy, moderate, and light work intensity during a full shift. They compared these data to standard heat stress exposure limits—American Conference of Governmental Industrial Hygienist's (ACGIH) Action Limits and Threshold Limit Values (TLV). They also calculated recommended temperatures to prevent heat stress and employee schedules for work and rest based on various work intensity.

The average kitchen temperature was 25°C, or 77°F, according to the study published in the *Journal of Occupational and Environmental Hygiene* [↗](#). Eighty percent of the kitchens exceeded the recommended ACGIH Action Limits for heavy work intensity, while around 60 percent surpassed the limit for moderate work intensity, and 10 percent for light work intensity. Thirty percent of the kitchens exceeded TLV limits for heavy work intensity, but none of the kitchens exceeded limits for light to moderate intensity. Intensity varied during shifts, possibly increasing heat-exposure risk. While the researchers recommend longer studies with more schools, these findings highlight the need for prevention strategies to decrease excessive heat exposure among kitchen workers. These strategies include proper work-rest schedules, air conditioners and dehumidifiers, ventilation, and training.

More information is available:

- [NIOSH | Education and Research Centers](#)
- [NIOSH | Heat Stress: Work/Rest Schedules](#) 
- [New York and New Jersey Education and Research Center](#) [↗](#)

NIOSH Then:

Landmark Study of Benzene Risk Improved Worker Safety and Health

Highlights

Benzene's health risks were observed as early as the 1890s. In 1977, NIOSH researchers studied the risk of death from leukemia among workers who used benzene to produce rubber hydrochloride, a product mainly used as a moisture-proof plastic wrap. The researchers found an elevated risk of leukemia death among these workers even at levels of benzene exposure below the Occupational Safety and Health Administration (OSHA) exposure limit (10 parts per million [ppm], over an 8-hour shift).

As part of NIOSH's efforts to keep our stakeholders up to date on the CDC and NIOSH COVID-19 response, here is a summary of new information available.

The 1977 study prompted OSHA to announce a 1 ppm emergency temporary standard [2].

The supply and availability of NIOSH-approved respirators has increased significantly over the last several months. With the action in 1980, the Supreme Court set aside the standard, ruling that supply increasing and a better understanding of SARS-CoV-2, updates were made to clarify changes in conventional, contingent, and crisis capacity strategies. OSHA had not shown that it would substantially reduce leukemia risk. This ruling raised the bar for evidence required for OSHA regulatory efforts.

- [Strategies for Optimizing the Supply of N95 Respirators \(Update\)](#)
- [Summary for Healthcare Facilities: Strategies for Optimizing the Supply of N95 Respirators during Shortages \(Update\)](#)

NIOSH researchers addressed this challenge by revisiting the information available about the rubber hydrochloride workers. The researchers used job histories and benzene sampling results to estimate each worker's benzene exposure. This approach revealed that the risk of leukemia death

Show COVID-19 Materials in the State-based Occupational Health Surveillance Clearinghouse

NIOSH created the [Markuspaari Health Surveillance Clearinghouse](#) to provide easy access to workplace safety and health materials produced by state health departments. States can add materials (e.g., reports, posters, videos) and search for materials readily accessible to the public that address occupational health issues, including COVID-19.

ppm standard. Because the 1987 study showed an increased risk of death

Label for Alternative Sharps Disposal Containers

A [benz](#) is now available to be printed and applied to alternative sharps disposal containers when FDA-cleared sharps disposal containers are scarce. [Learn more about alternative sharps disposal containers.](#)

Although the 10-year delay in lowering the benzene standard resulted in

NIOSH Director Releases Workers Memorial Day Statement

unnecessary illnesses and deaths, the 1987 study led to reduced benzene occupational exposure limits and greatly advanced the field of risk assessment. Today, the study serves as a classic teaching tool in epidemiology, public health, and environmental law. Each year on April 28, [Workers Memorial Day](#) commemorates workers who have died or become ill or injured due to hazardous exposures in the workplace. Read more on the NIOSH commemoration in NIOSH Director Dr. John Howard's [annual statement.](#)

More information is available:

Register Now for Upcoming Webinar: Celebrating 50 Years of NIOSH Science

- [Leukemia in Benzene Workers \[2\]](#)
- [Benzene and Leukemia: An Epidemiologic Risk Assessment \[2\]](#)

Join us May 11, 2:00–3:30 p.m. (EDT), for the presentation “Looking Back: The Important Role of Science in Fulfilling the Occupational Safety and Health Act.” This webinar will feature current and past NIOSH leaders discussing key scientific accomplishments during their tenure. You must [register in advance \[2\]](#) for this Zoom webinar. The Webinar Series will continue through the end of the year and



will include a variety of presentations from current and former NIOSH staff and partners. See the [NIOSH 50th Anniversary webpage](#) for a list of other NIOSH 50th activities.

2021 NIOSH Bibliography Features Special Insert on the NIOSH 50th

The [NIOSH Bibliography highlights](#) the institute's accomplishments in 2020 but the 2021 edition also celebrates its progress over the first 50 years, from its publication of the *NIOSH Pocket Guide to Chemical Hazards* and evaluations of firefighter and other worker deaths to its administration of the World Trade Center Health Program and support of responder and workforce safety in crises such as the Deepwater Horizon oil spill, Ebola outbreak, and COVID-19 pandemic.

New Study Examines the Cost of Work-related Musculoskeletal Disorders

The recently published *MMWR* article [Workers' Compensation Claim Rates and Costs for Musculoskeletal Disorders Related to Overexertion Among Construction Workers—Ohio, 2007–2017](#) examined the rate and cost of work-related musculoskeletal disorder (WMSD) claims from overexertion among Ohio construction workers during 2007–2017. Although workers aged 35–44 years had the highest rate of workers' compensation claims, claims among workers aged 45–54 years and 55–64 years were more costly and resulted in more days away from work.

Save the Date & Call for Abstracts: Expanded Focus for OSH Conference

The [Expanded Focus for Occupational Safety and Health \(Ex4OSH\) International Conference](#) will take place December 9-11 in Houston, Texas. The conference, partially supported by NIOSH and organized by the University of Texas School of Public Health, will address the need for an expanded focus for occupational safety and health in the future of work. The [call for abstracts](#) to explore the conference theme along four domains of personal risk factors, social and economic risk factors, working life continuum, and well-being, and develop recommendations for the future of OSH research, training, and policy is open through June 21.

CDC to Renovate and Expand NIOSH Pittsburgh Laboratory

CDC recently announced plans to renovate and expand the NIOSH [National Personal Protective Technology Laboratory \(NPPTL\)](#) in Pittsburgh. The U.S. Department of Health and Human Services will invest \$14 million for the lab expansion to upgrade infrastructure, facilities, and information technology needs. CDC will begin developing design plans for the renovation in fall 2021 and aims to begin construction in summer 2022. Occupancy of the new lab space is anticipated for late fall 2023.

2021 NIOSH Science and Service Awards Presented at Virtual Event

In a virtual ceremony on April 29, NIOSH recognized researchers, staff, and partners for their significant contributions to the field of occupational safety and health. [Read more.](#)

Monthly Features

New Communication Products & Reports

Face Reports

- [Dump Truck Driver Dies in Multi-vehicle Collision After Truck Overturns—Kentucky](#)

Firefighter Fatality Investigation and Prevention Program Report

- [Firefighter Trainee Suffers Sudden Cardiac Death During Physical Fitness Exercise—California](#)
- [Career Firefighter Dies After Becoming Disoriented in a Three-Story Apartment Building—Massachusetts](#)
- [50-Year-Old Firefighter Suffers Fatal Heart Attack After Fighting Two Commercial Fires—Michigan](#)
- [31-Year-Old Fire Fighter Suffers a Seizure at Fire Department Training and Dies of Sudden Cardiac Arrest—New Jersey](#)

Health Hazard Evaluation Report

- [Exposure to Lead During Residential Water Line Replacement Activities](#) 

Program Performance One-Pagers (PPOP)

- [Center for Workers' Compensation Studies](#)
- [Personal Protective Technology Program](#)

NIOSH Science Blog

- [Stand-Down for Falls in Its 8th Year: Continuing Need to Prevent Falls in Construction in the U.S. and Internationally](#)
- [Suicides Among First Responders: A Call to Action](#)
- [Taking It to the Streets... and the Mines](#)
- [Preventing Struck-by Injuries in Construction: Lift Zone Safety](#)
- [Improving Our Understanding of Nonfatal Occupational Injuries](#)
- [NIOSH 50th Anniversary Honored by National Toxicology Program](#)
- [Overview of the ASTM F3502-21 Barrier Face Covering Standard](#)
- [Recent News about Night Shift Work and Cancer: What Does it Mean for Workers?](#)
- [Workers Memorial Day 2021: Recognizing NIOSH's First 50 Years](#)

Federal Register Notice

Proposed Data Collection Submitted for Public Comment and Recommendations: Proposed Project—Lighting Interventions for Improving the Health, Safety, and Well-Being of Underground Mineworkers

The [notice](#) was posted on March 19. Comments must be received by May 18.

Board of Scientific Counselors, National Institute for Occupational Safety and Health (BSC, NIOSH)

The [notice](#) was posted on April 5. The meeting will be held on May 19 from 10 a.m.–4 p.m. EDT.

Advisory Board on Radiation and Worker Health (ABRWH), Subcommittee on Dose Reconstruction Review (SDRR), National Institute for Occupational Safety and Health (NIOSH)

The [notice](#) was posted on April 23. Comments must be received by June 9. The meeting will be held on June 16 from 10:30 a.m.–2:30 p.m. EDT.

Mine Safety and Health Research Advisory Committee Meeting

The [notice](#) was posted on April 23. The meeting will be held on June 21 from 10:00 am–2:30 pm EDT.

NORA

NORA Perfluoroalkyl and Polyfluoroalkyl Substances Meeting

The Public Safety Sector Council will hold a meeting titled *State of Research and Practice for Per- and Polyfluoroalkyl Substances (PFAS)* May 19 from 1:00–3:45 p.m. (EDT). This meeting will host presentations from a diverse group of researchers, stakeholders, and partners to raise awareness, facilitate partnership opportunities, and identify research gaps around PFAS in the public safety sector. Please reach out to [Tyler Quinn](#) for more information.

News from Our Partners

Partners and the NIOSH 50th Anniversary

Check out the news from our partners who are recognizing the NIOSH 50th anniversary by celebrating their accomplishments from partnering with our institute on the [NIOSH 50th anniversary webpage](#). Contact [Donjanea Williams](#) if you are a current or former NIOSH partner and would like to join NIOSH in recognizing five decades of improving the occupational safety and health of workers and transferring new knowledge into practice.

Washington State Law Protects Temporary Agency Workers

The Washington State Legislature recently passed a [new law](#) that has been signed by the Governor to protect workers employed through temporary staffing agencies. This new legislation is based on NIOSH-funded [research](#) from Washington's [State-based Occupational Safety and Health Surveillance Program](#). The research showed that temporary workers were more likely to be injured on the job than permanent workers but were less likely to get the training needed to recognize and protect themselves from job hazards. The new law requires construction and manufacturing employers to work with temporary staffing agencies to make sure these workers are informed of job hazards and receive safety training.

New Video Featuring Pacific Northwest Agricultural Safety and Health Center

Check out this new [video](#) on the Pacific Northwest Agricultural Safety and Health Center (PNASH)! Learn how the center conducts research and promotes effective safety and health practices for producers, workers, and communities in

farming, fishing, and forestry within the Northwestern U.S. region. PNASH is 1 of 11 [Centers for Agricultural Safety and Health \(Ag Centers\)](#).

New Training Materials for Heat-related Illness Prevention

The Western Center for Agricultural Health and Safety (WCAHS) recently developed heat-related illness (HRI) prevention training materials in [English](#) and [Spanish](#) that cover the California Occupational Safety and Health Administration (Cal/OSHA) Heat Standard training requirements. The training materials complement a recently released [video](#) on the benefits of workplace heat illness prevention programs. WCAHS developed these materials as part of the [California Heat Illness Prevention Study](#), a NIOSH-funded research and outreach effort. WCAHS is a [Center for Agricultural Safety and Health \(Ag Center\)](#).

Webinar Looks at the Study of Ethics for OSH Professionals

In this April 15 [webinar on ethics](#), Jan K. Wachter, professor in the Safety Sciences department at Indiana University of Pennsylvania, explains the basics of ethics within Occupational Safety and Health (OSH) professions. He discusses ethics as a necessary area of study for the OSH professional, and how to educate OSH students and professionals on ethics. He explores the use of varying situational context and student participation for understanding and applying various approaches to professional ethical decision-making. The webinar was hosted by the [American Society of Safety Professionals \(ASSP\)](#).

The Occupational Safety & Environmental Health Program Marks 40 Years at Millersville University

Millersville University held an online event April 28 to celebrate the 40th anniversary of its Occupational Safety & Environmental Health Program—a program that is 1 of the 28 recipients of the NIOSH-funded Training Project Grant. The day-long program, which was recorded, featured presentations by leading safety professionals, as well as panel discussions, breakout sessions, tours, and interactions with current students. The program also recognized its partnership with NIOSH during this milestone event. You can read information about it on the [Millersville University website](#).

SaferNano Virtual Training

The European Scientific Institute (ESI) is [hosting a virtual training program](#) May 19–28 on safer nanomaterials. The program, ESI SaferNano 2021 Beyond Global Health, aims to accelerate nanotech innovations through a safer-by-design approach. SaferNano brings together students and faculty from all over the world and across different disciplines to work together solving global challenges to public health through the use of nanotechnology and nano-enabled applications of nanoscience. For more information, please contact [Dr. Ilise Feitshans](#).

Call for Abstracts:

- *Ex4OSH 2021 Call for Abstracts*: The deadline to [submit](#) abstracts is June 18.
- *National Occupational Injury Research Symposium*: The deadline to [submit](#) abstracts and proposals for sessions is October 1.

Conferences, Meetings, Webinars, & Events

This page provides a list of publicly available occupational safety and health-related [conferences, meetings, webinars, and events](#) sponsored by NIOSH as well as other government agencies, and nongovernment agencies, such as universities, professional societies, and organizations.

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