

r2p in Construction: Resources & Tools to Advance Safety and Health

Eileen Betit, Director, Research to Practice

Western States Occupational Network
11th Annual Meeting

Denver Colorado, September 14, 2018



Who We Are

- Non-profit dedicated to reducing injuries, illnesses, and fatalities in the construction industry.
- Activity areas: training, service, and research,
- Serve as NIOSH's National Construction Center

2008 National Academies

Finding: Significant research on effective interventions
but slow adoption

Questions to Address:

- How can the program get vital information to the worker?
- How does the program persuade contractors and workers to effectively use the interventions developed through the research?

r2p Challenges

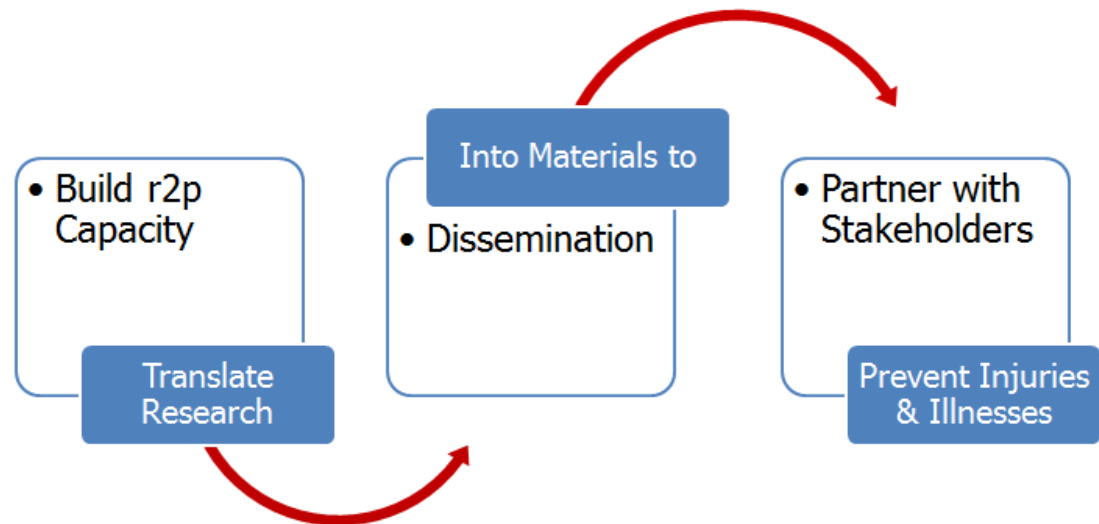
Industry

- ✓ Decentralized industry – no fixed worksites
- ✓ Small, often isolated and under-resourced contractors
- ✓ Diverse workforce

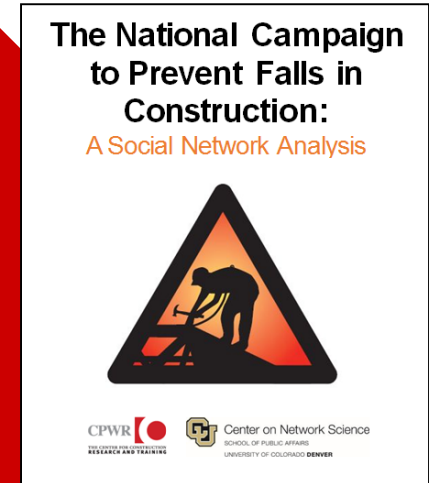
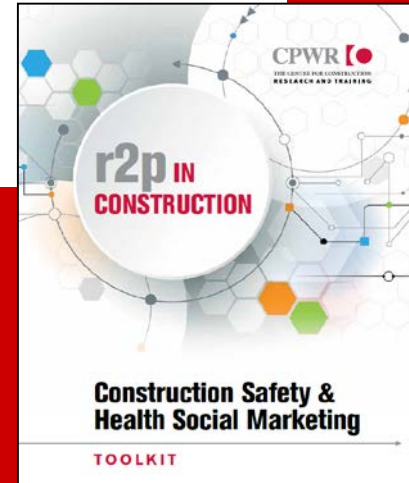
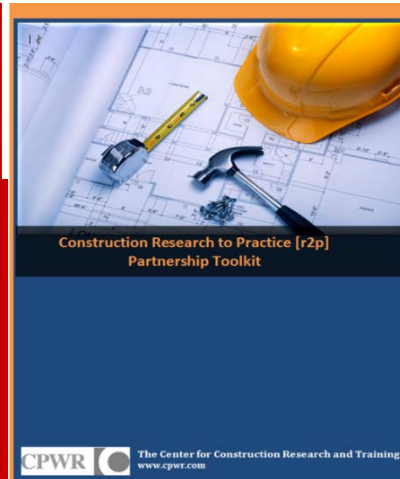
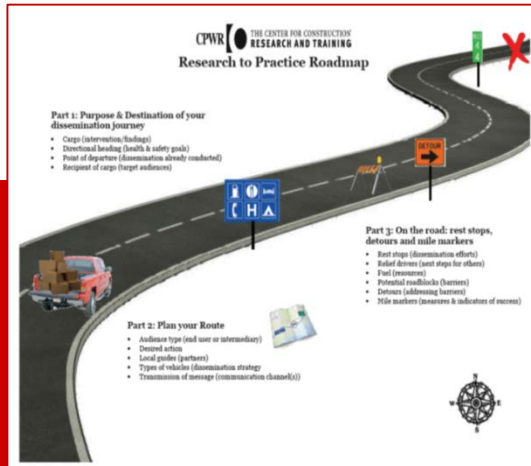
Dissemination

- ✓ Changing platforms and mechanisms for finding, receiving, sharing and **BLOCKING** information

✓ *Moved from finding the best approach to finding the best mix of approaches*



r2p Capacity



r2p Tool Library

R2p Seminar & Partnership Workshop

Research Translation

CPWR
IMPACT

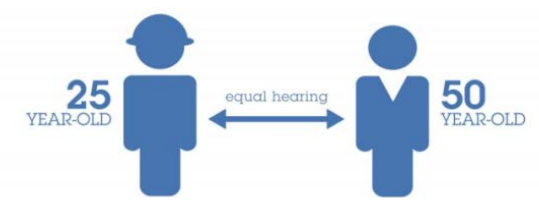


Sounding the Alarm on Dangerous Nail Guns

Research sparks



It's common for construction workers to have the hearing of workers twice their age.



CPWR TOOLBOX TALK

Opioid Deaths in Construction

CPWR – The Center for Construction Research and Training

Home Videos Playlists Channels Discussion About

Safety Lessons and Demonstrations

- Drift Rig Health and Safety Outreach Video
- Don't Fall For It – Detailed training on safe ladder use
- Construction Work That's Out of Control

Lessons to Go Home Safe

- True Stories of Hazards on the Job
- No New Year – Trench Collapse
- Look Up and Live – Overhead Power Line
- A Simple Task – Fatal Ladder Fall

AERIAL LIFTS can prevent fatal falls, but only if you...

- Follow the manufacturer's instructions
- Use proper fall protection
- Watch out for uneven ground, potholes, bumps, and debris that could cause the lift to tip over
- Close lift-platform chains or doors, and check guardrails
- Do not climb on or lean over guardrails
- Do not exceed the load limits
- Avoid contact with overhead hazards

During 2011-2014, 1,380 workers were injured and 87 died while operating an aerial lift.

Test your knowledge and download the NIOSH Aerial Lift Hazard Recognition Simulator!

Disclaimer: Using the Simulator is not a substitute for required training to operate an aerial lift.

CPWR CHARLA

Muertes por Opioides en la Construcción

Report hazard
If you're injured
Need help with Call this center

El trabajo de construcción puede provocar lesiones dolorosas que a veces se relacionan con opioides recetados. Una de cada cuatro personas a las que se recetan opioides para el dolor a largo plazo se vuelven adictas y las muertes relacionadas con los opioides van en aumento.

La historia de Chris

Chris se lastimó la espalda después de levantar materiales pesados. Tras ignorar el dolor, pero no se sanaba. Chris fue al médico y le recetaron un opioide para tratar el dolor. Los pastillos redujeron el dolor, pero su espalda nunca mejoró. Chris descubrió que necesitaba las píldoras para sobrevivir el día. Finalmente, su médico se negó a darle más píldoras. Chris fue a otro doctor y obtuvo una nueva receta. Con el tiempo, su desempeño laboral y su vida en familia comenzaron a sufrir. Chris volvió a su médico y pidió ayuda. Su médico lo ayudó a buscar tratamiento para su adicción a los opioides. Chris ahora se encuentra en recuperación y usa un tratamiento no adictivo para su dolor.

¿Has conocido a alguien adicto a los opioides?

Si un trabajador se lastima y necesita dolor, ¿qué debería el or el día hacer para evitar convertirse en adicto a los opioides?

Recuerde esto:

- Si su empleador debe proporcionar un ambiente de trabajo seguro para evitar lesiones. Si ve un peligro en el trabajo, repórtele a su supervisor o capacitador.
- Siempre practique el trabajo seguro para evitar lesiones, tal como obtener ayuda al levantar materiales pesados.
- Si está usando, hable con su médico sobre medicamentos no adictivos o terapia física para tratar el dolor.
- Los opioides deben ser la última opción, y si se prescriben se deben usar durante el menor tiempo posible.
- La adicción es una enfermedad que puede tratarse. Obtenga ayuda si decide que es dependiente de analgésicos para poder el día.
- Consulte con su sindicato o empleador para averiguar si tienen un programa de ayuda, como un programa de asistencia para empleados (EAP) o un programa de asistencia para miembros (MAP).
- Llame a esta línea directa nacional confidencial para conocer las opciones de tratamiento cerca de usted: 1-800-462-HELP (4357) o visite el sitio web en www.resources.lacountyednet.org

¿Cómo podemos estar seguros hoy?

¿Qué haremos en el lugar de trabajo para evitar una lesión?

- _____
- _____

HAZARD ALERT

WORKING IN HOT WEATHER

Am I in danger?

OSHA says that each year, thousands of workers get sick from heat exhaustion or heat stroke. **Some even die.**

You are at risk if you:

- Work in hot and humid conditions;
- Do heavy physical labor; and
- Don't drink enough water.

This risk is greater for workers who are not used to the heat.


But you can protect yourself and feel better as you work by choosing for hot conditions and taking frequent breaks for water and shade.

PROTECT YOURSELF!


- 1 Dress for hot conditions**
Wear clothes that are:
 - Light-colored (white, etc.)
 - Loose-fitting
 - Lightweight
 Wearing heavy protective clothing or personal protective equipment may increase your risk—you may need more frequent breaks for rest and water.
- 2 Drink Water**
Drink water every 15 minutes when working in hot conditions.
DO NOT wait until you are thirsty to drink water.
DO NOT drink alcohol and **AVOID** caffeine.
- 3 Take Breaks**
Take frequent rest breaks in shaded, cooled or air-conditioned areas.
If you see a co-worker with symptoms of **Heat Exhaustion**, speak up.
If you see a co-worker with symptoms of **Heat Stroke**, seek medical attention immediately!

Dissemination

www.cpwrconstructionsolutions.org


 Designed for owners, contractors, & workers, Construction Solutions is a database of work hazards, & practical control measures to reduce or eliminate hazards.

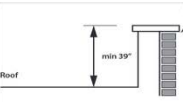
Find a safety option by:



Guardrail Clamp System

A guardrail clamp system enable guardrails to be erected onto building structures without drilling.

[View Solution](#)



Considering Roof Parapets During the Design Phase

Considering roof parapets with specific requirements address worker exposure to fall hazard during the design stages of a project.

[View Solution](#)

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www.safecalc.org



 Register | Forgot Password?


The ROI Calculator helps evaluate the financial impact of new equipment introduced to improve safety. Materials and work practices can also be evaluated. [Click here to see a demonstration of the Calculator.](#)

- Enter costs for equipment, materials, training, productivity and injuries
- View total costs
- Enter data per project or annually
- Compare cost assumptions
- Click on the  for guidance
- Register to save results

[Click to Begin](#)

[About](#) | [Contact](#) | [Construction Solutions](#) | [Silica Safe](#) | [Feedback](#) | [Privacy Policy](#) | [Disclaimer](#)
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 THE CENTER FOR CONSTRUCTION RESEARCH AND TRAINING



THE CONSTRUCTION CHART BOOK

THE U.S. CONSTRUCTION INDUSTRY AND ITS WORKERS

SIXTH EDITION eChart Book 2018

Foundations for Safety Leadership

Introduction	Cover Up!	It's Too Hot!	To Check
			
Common Sense	The Right Tool	Do you Have To?	FDL's Shortcut
			

S - Safety Climate Assessment Tool

[WHAT IS SAFETY CLIMATE](#) | [WHAT IS THE S-CAT](#) | [TAKE THE S-CAT](#) | [IMPROVING JOBSITE SAFETY CLIMATE](#)

...completing the S-CAT at our company has illuminated specific areas for improvement through the use of objective analytics.

Dimitris Construction Company
Corporate Safety Director

Safety Climate Assessment Tool (S-CAT)

The Safety Climate Assessment Tool (S-CAT) is a free tool available to any construction contractor or safety and health professional who wants tailored and actionable information to improve the safety of every worker at every job-site. The S-CAT allows a company to obtain information regarding employee **safety perceptions**. These safety perceptions provide a snapshot view of the company's **jobsite safety climate**. A strong jobsite safety climate has a positive impact on a company's **overall safety culture**, just as a strong safety culture positively affects jobsite safety climate.

Feedback is provided on 8 leading indicators of safety climate that have been shown to be predictive of employee injury rates. With just a few clicks, company employees or an individual can answer questions about each indicator and then receive a personalized feedback report with benchmarking and comparative information indicating their current areas of success and areas for making improvements. Companies can have their employees take the S-CAT periodically to track their progress at improving their jobsite safety climate.

<p>What is Jobsite Safety Climate?</p> <p>The safety climate on a construction worksite refers to management's and workers' shared perceptions about the extent to which safety is rewarded, expected, valued and reinforced.</p> <p>Learn More</p>	<p>What is the S-CAT?</p> <p>The S-CAT is a new tool construction companies can use to self-assess their safety climate across eight research-based leading indicators. Results can prepare areas of success and areas for future improvement.</p> <p>Learn More</p>	<p>Improve Jobsite Safety Climate</p> <p>After completing the S-CAT and receiving your safety climate report, you may need ideas and tips for moving along the path to achieving an exemplary safety climate.</p> <p>Learn More</p>
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Dissemination



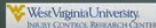
THE CENTER FOR



Search

Safe Students, Safe Workers: Construction Safety Programs in Career Technical Education

DIANE BUSH, U.C. BERKELEY LABOR OCCUPATIONAL HEALTH PROGRAM
ANDY WERMES, CONSULTANT FOR SKILLED & TECHNICAL SCIENCES, IOWA DEPT. OF ED.



KIMBERLY RAUSCHER, SCD, MA DOUGLAS MYERS, SCD, MA CHARLOTTE CHANG, DRPH
KELSI SPRIGGS, MPH



Leveraging an Evidence-based Approach to Communicate Safety and Health Information to Small Employers and their Employees

Eileen P. Betit
Director, Research to Practice
CPWR-The Center for Construction Research and Training

Safety News

United Association

Rock and Concrete Drilling: Can a new drill bit reduce hazards and increase productivity?

Research shows sharp drill bits mean less dust, noise, vibration & faster drilling

Concrete drilling is dusty, loud, and exhausting work. If you've spent time drilling holes with a hammer drill in order to hang ductwork, pipes or conduit, you know how grueling this can be. You probably already know that a sharp new drill bit makes the work easier – but did you know it can also make the work safer and faster?

That's the takeaway from important new research by Dr. David Rempel and his team at the University of California's Center for Occupational and Environmental Health.

creases substantially as a bit wears down from continued use.

Over the last several years, Dr. Rempel's team has earned recognition by designing drill jigs that reduce force and vibration and the risk for musculoskeletal injuries (e.g., back, shoulder, etc.) for workers engaged in concrete and rock drilling. Telpro, an equipment manufacturer, adopted Rempel's overhead drill jig design for a commercial product (DrillRite™). Engineer Alan Barr, a Rempel colleague, has begun production of a universal drill jig (ErgoMek) suitable for drilling at any angle.

The team has now designed a test bench system (pictured at right) that allows the researchers to test for and measure potential exposures to several hazards generated by different hammer drills – information that can help contractors and

ment to measure a worker's potential exposure to silica dust, noise, and the force and vibration that can lead to musculoskeletal injuries. The test bench also measures productivity – that is, how quickly the drill penetrates the concrete.

In their experiments, the team used a common hammer drill and carbide-tipped bit, isolating the effect of wear on the drill bit. As expected, heavily worn bits took much more time to penetrate the concrete than new ones, adding up to 60% to the time required to drill a 5" deep hole. Moreover, the worn bit increased the risk for illness and injury, generating about twice as much airborne silica dust, was almost two decibels (dBA) louder, and produced a small but significant increase in handle vibration. Combined, that means that a worker using a worn drill bit is exposed to more dust, noise and vibration, and for a longer period of time. These results underscore the importance of replacing worn bits.

In a separate study, the team found that the best measures of wear on a carbide-tipped bit were reduced width of the tip and rounding of the tip shoulders. Contractors and workers can check the condition of a bit by following these wear patterns.

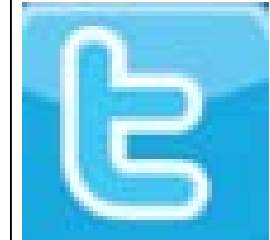
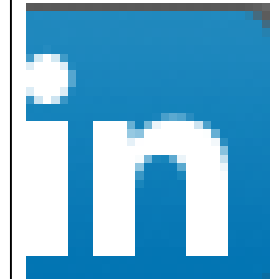
While vacuums to control the dust and hearing protection will still be needed, the increase in productivity along with the reduced exposure to silica dust, noise, and vibration makes a strong safety and business case for regularly replacing worn drill bits. ■

Source: CPWR - The Center for Construction Research and Training



In three experiments, the research team showed that a worker's exposure to noise, tool vibration and airborne silica dust in-

workers select and purchase safer tools. The test bench uses a mannequin torso attached to a slide mounted with equip-



Dissemination



The screenshot shows the CPWR website with a navigation menu on the left containing 'research', 'training', and 'service'. The main content area features a video player and text about methylene chloride. A red box highlights the URL www.cpwr.com.

www.cpwr.com

Resources to Protect Workers from Methylene Chloride (Paint Strippers)

Many liquid paint strippers and solvents contain a toxic chemical called methylene chloride. Exposure can lead to death or serious illness. Workers are at risk when they inhale methylene chloride vapors and when it comes in contact with their skin. The following links contain additional information about the dangers of methylene chloride and safer alternatives.

Video: Toxic Paint Removers: Safer Alternatives

Video also available in [Spanish](#).

Other Resources:

- [Methylene Chloride Hazard Alert – Stripping Paint, Risk of Exposure to Methylene Chloride](#), also available in [Spanish](#)
- [Construction Solutions Hazard Analysis – Interaction with paint-related solvents](#) Describes the risks associated with using solvents in construction.
- [Construction Solutions – Safer Alternatives to Paint Removers Containing the Solvent Methylene Chloride](#) Offers refinishing, including the brand name and chemical content.
- [OSHA Safety & Health Topic: Methylene Chloride](#) Contains resources for workers, employers, and small businesses regarding methylene chloride.
- [California Department of Public Health – Preventing Worker Deaths from Paint Strippers Containing Methylene Chloride](#) Includes such as hazard alerts, posters and guides, and additional methylene chloride resources.
- [NIOSH Workplace Safety & Health Topics – Methylene Chloride](#) Provides links to methylene chloride resources including first aid information, a summary of the chemical's health and safety information, and detailed toxicity information.



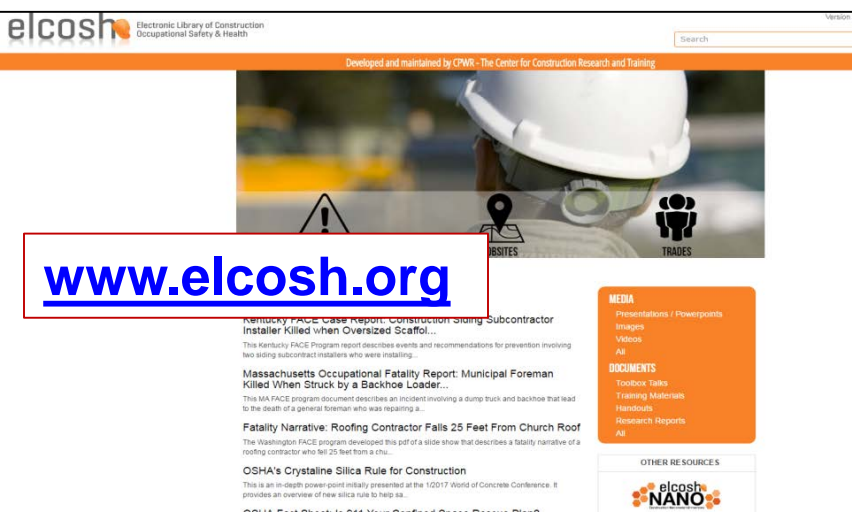
The screenshot shows the Choose Hand Safety website with a navigation menu containing 'Choosing Hand Tools', 'Choosing Gloves', 'Safety & Health', and 'Training & More'. The main content area features a video player and text about hand safety. A red box highlights the URL www.choosehandsafety.org.

www.choosehandsafety.org

Choose Hand Safety

Hand injuries including cuts, strained muscles and tendons, damaged nerves, skin disorders, and burns can impact the quality of work, productivity – and even end careers. Understand the risks. Learn how to what to look for when using hand tools and gloves.

Resources to Protect Workers from Methylene Chloride (Paint Strippers)



The screenshot shows the elcosh website with a navigation menu containing 'About', 'Fatality Map 2016', 'Training & Resources', and 'Updates'. The main content area features a map of the United States and text about construction fatalities. A red box highlights the URL www.elcosh.org.

www.elcosh.org

Construction Fatalities

www.stopconstructionfalls.com



The screenshot shows the Stop Construction Falls website with a navigation menu containing 'About', 'Fatality Map 2016', 'Training & Resources', and 'Updates'. The main content area features a map of the United States and text about construction fatalities. A red box highlights the URL www.stopconstructionfalls.com.

www.stopconstructionfalls.com

Construction Fatalities

Engage Intermediaries

Positioned to:

- Help with dissemination
- Identify barriers and facilitators for r2p
- Influence outcomes
- Support research and identify research needs

Early and ongoing engagement will facilitate & accelerate adoption of research findings and solutions

Networks:

Trainers and Researchers United Network (TRU-Net)

Construction Noise & Hearing Loss Prevention Program

What causes hearing loss?

- Exposure to loud noise
- Certain drugs and chemicals
- Aging
- Heredity
- Head injury
- Headphone use
- Childhood illness



Are You Talking to Me?

What it's like to lose your hearing

"Buy Quiet" Now, Hear Later

Repeated exposures to noise above 85 decibels OR one exposure above 140 decibels can lead to irreversible hearing loss.



Buying a tool just 3 decibels lower will cut the noise energy reaching your ear in half!

Effects of Hearing Loss

- Temporary hearing loss
- Difficulty hearing warning signals on the job
- Increase the risk of falling
- Contribute to loneliness and depression
- Increase stress, blood pressure, hypertension and cardiovascular disease
- Lead to nervousness, sleeplessness fatigue



Sound Level Meter Apps

NIOSH SLM for iPhones



<https://itunes.apple.com/us/app/niosh-slm/id1096545820?mt=8&iphoneapp>

Sound Meter for Android

<https://play.google.com/store/apps/details?id=com.gamebasic.decibel>



Networks: SafeConstructionNetwork.org

CONSTRUCTION SAFETY & HEALTH NETWORK [CREATE PROFILE](#) [LOGIN](#) [SHARE CONTENT](#)  

[Home](#) [Content](#) [Network Directory](#) [About the Network](#) [Resources](#) [Contact Us](#)

CONSTRUCTION SAFETY & HEALTH NETWORK

Safer Construction Begins Here

search

Find and easily share the latest research findings, new tools, solutions and programs with your members, colleagues and others who could benefit.

collaborate


Connect with other industry stakeholders, researchers, and experts on specific hazards through the Network Directory.

share

Send us construction safety and health research findings, products, materials & other resources you want to share with a broader stakeholder audience.


Share and discover the latest in construction safety & health

Featured Content




WEBINARS

Webinar: Tools for a Successful Workplace Safety & Health Program



NEWS ARTICLES

OSHA's Safe Workplace + Sound Business Campaign Enters Year Two



TRAINING RESOURCES & HANDOUTS

New Report: Safety Management in the Construction Industry 2017

r2p in Action: CPWR's Monthly Webinar Series

CPWR hosts free monthly webinars on a variety of topics including current research, new efforts and trends in occupational safety & health, and training programs. For upcoming events and past recordings click below.

LEARN MORE

[Home](#) [Content](#) [Network Directory](#) [About the Network](#) [Resources](#) [Contact Us](#)

Content

All content shared by Network members can be found in this searchable database. We invite you to explore and share the content with your own network.

All Content Types ▼

All Topics ▼

Keyword (e.g. ladders, strains, silica, etc.)

SEARCH

Share






Send us research findings, products, training materials & other content you'd like to share with a broader audience.


[Submit content.](#)

CONTENTS

NIOSH Sound Level Meter App






The NIOSH Sound Level Meter mobile application is a tool to measure sound levels in the workplace and provide noise exposure parameters to help reduce occupational noise-induced hearing loss.










Webinar: Tools for a Successful Workplace Safety & Health Program

Wednesday, February 21st at 2:00pm EST Presented by: Safe+Sound - Andrew Levinson, Deputy Director, OSHA Directorate of Standards & Guidance FSL - Linda Goldenhar, Director, Evaluation & Research, CPWR S-CATsc - Tom Shanahan, Vice President of Enterprise Risk Management, National Roofing Contractors Association, and Keith J. Vitkovich, Executive Director, Roofers & Waterproofer Research and Education Joint [...]



Industry r2p Partnerships: Masonry r2p Partnership (BAC, ICE, IMI)

- Support for new Research (p2r)
- ChooseHandSafety website
- Contractor & Worker Surveys

OHS&S
OCCUPATIONAL HEALTH & SAFETY

Hand tools: What's the right size for you?
January 28, 2018 No Comments

New Hand Safety Website Launch

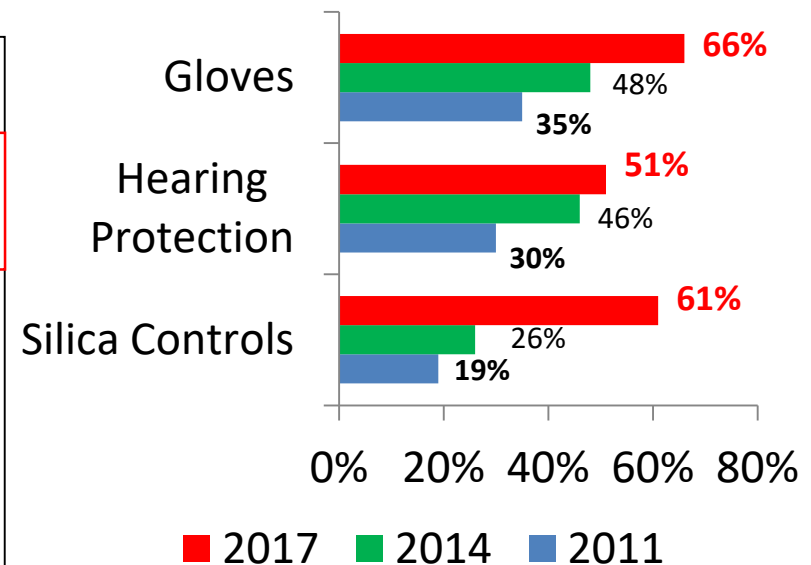
Lend a Hand
At CPWR: The Center for Construction Research & Training, it's a...
OSHA's fall-prevention campaign, recently launched a program on hand protection. "In the building trades, our hands are our livelihood," executive director Pete Stafford said in a recent CPWR newsletter. "A cut or a burn - not to mention tendinitis or carpal tunnel syndrome - can mean lost time and lost wages."

Remodeling -
http://www.remodeling.hw.net/business/construction/get-a-grip-on-new-safety-efforts_o

Lauren Hunter is chief editor of products for Hanley Wood. You can find her on Twitter at @ProductsHunter.

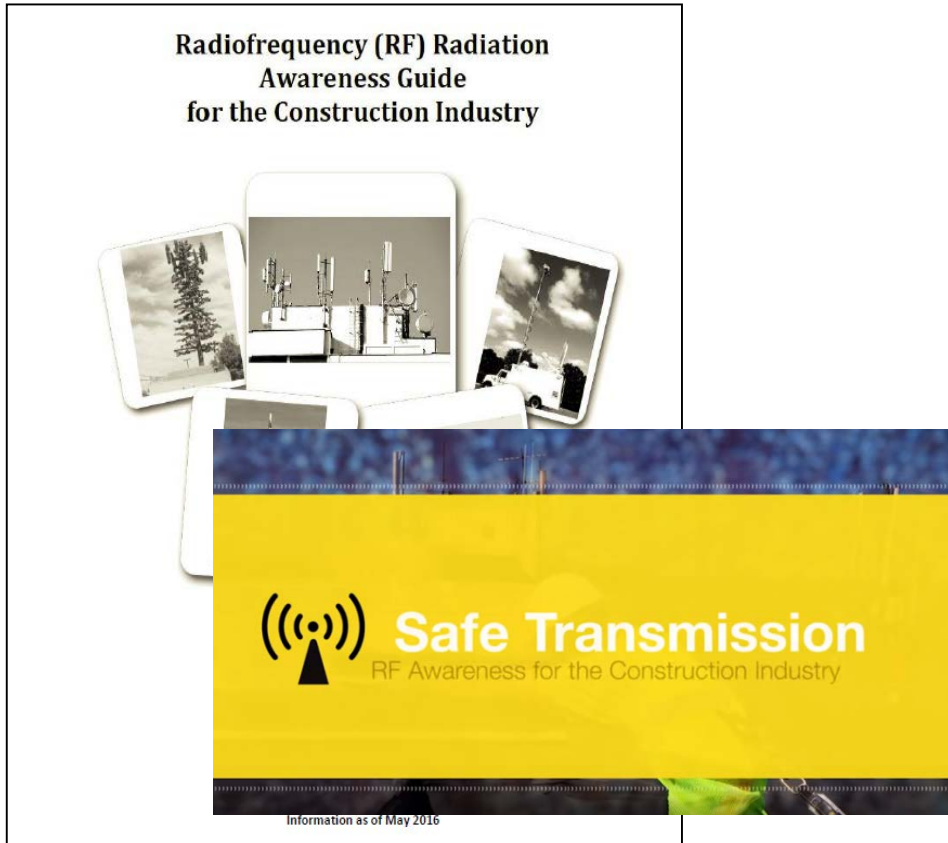
"Using the right size handle can reduce fatigue and increase productivity, improve the quality of your work, and reduce the risk for hand and wrist problems."

"Always" Use



Industry r2 Partnerships: Roofing r2p Partnership (NRCA, UURWAW)

- RF Radiation Awareness Program
- S-CAT^{sc}
- **#RoofSafety365 Campaign**



Safety Climate Assessment Tool(S-CAT^{sc})
for Small Contractors

A network diagram with 10 nodes (circles) connected by lines. The nodes are arranged in a roughly circular pattern with lines connecting them in a complex, interconnected manner. The nodes are colored in various colors: yellow, green, blue, and orange.

www.cpwr.com/research/s-cat-sc-small-contractors

2017

OSHA-NIOSH CPWR r2p Working Group

www.silica-safe.org

Work Safely with Silica

A ONE-STOP SOURCE OF INFORMATION ON HOW TO PREVENT A SILICA HAZARD AND PROTECT WORKERS

About • Know the Hazard • Regulations & Requirements • What's New • Create-A-Plan

Search

Know the Hazard

Workers may be exposed to dangerous levels of silica dust when cutting, drilling, grinding, or otherwise disturbing materials that contain silica. These materials and tasks are common on construction jobs. Breathing that dust can lead to serious, often fatal illnesses. This section contains information that workers – and contractors – need to know to recognize the hazard, understand the risk factors, and work safely with silica.

Control the Dust

There are ways contractors can reduce the dust and reduce the hazard. This easy to use planning tool takes you step-by-step through conducting a job hazard analysis for silica, selecting appropriate controls, and creating a job-specific plan to eliminate or reduce silica hazards. You can save as a pdf, print and/or email your plan.

[CREATE-A-PLAN](#)

Step 2. How do you plan to control the dust?

Select the type of equipment and dust control method.

Not Sure - Perform Air Monitoring. To find the exposure control methods in OSHA's use of controls [click here](#). To give users the go for uncommon combinations or those not yet

1 Concrete - Drilling/coring





Select the Equipment/Control:

[Click here](#) for examples of commercially available controls.

- Core Drill with Water (Table 1 Entry)
- Dowel Drilling with Dust Collection (Table 1 Entry)
- Drill Press with Hand-Held Drill and Vacuum (Table 1 Entry)
- Hand-Held Drill with Dust Extraction (Table 1 Entry)
- Hand-Held Drill with Vacuum (Table 1 Entry)
- Other

Drill Press with Hand-Held Drill and Vacuum (Table 1 Entry)

1. Telpro Inc. Drillrite w/ Hilti TE 7 Rotary Hammer Drill & Vacuum

-  See how it works
-  Manufacturer: Telpro Overhead Concrete Drill Press
-  Manufacturer: Hilti Drill
-  Manufacturer: Hilti VC 40-U KEPA Vacuum

-  Learn More: Table 1 - Equipment Names and Best Practice Tips
-  Learn More: University of California
-  Learn More: Telpro Vacuum System

2. EngoMek LLC DrillBoss

-  See how it works
-  Manufacturer: EngoMek LLC
-  Manufacturer: Hilti Combiboss
-  Manufacturer: Hilti Vacuum

Work Safely with Silica

A ONE-STOP SOURCE OF INFORMATION ON HOW TO PREVENT A SILICA HAZARD AND PROTECT WORKERS

About • Know the Hazard • Regulations & Requirements • What's New • Create-A-Plan



Search

Create-A-Plan to Control the Dust

[Option 3 - Studies and Data on Silica Exposure and the Use of Dust Controls](#)

Table 1 - Equipment Names and Best Practice Tips

- Includes equipment terms commonly used by different trades and geographic areas
- "Best practice" tips are intended to help employers and their employees operate the equipment-control options effectively and are based on 1) OSHA's Small Entity Compliance Guide for the Respirable Crystalline Silica Standard for Construction; 2) manufacturer specifications; and/or 3) craft worker/contractor input based on experience in the field.

Equipment/Control	Photo	Names	Best Practice Tips
(1) Stationary masonry saws		Table saw	OSHA requires the employer to ensure that: <ul style="list-style-type: none"> The saw is equipped with an integrated water delivery system (commercially developed specifically for the type of tool in use) An adequate supply of water for dust suppression The spray nozzle is working properly to apply water at the point of dust generation The spray nozzle is not clogged or damaged All hoses and connections are intact
MASONRY CONTROL: water		Brick/block saw	

MEDICAL MONITORING UNDER THE OSHA SILICA STANDARD FOR THE CONSTRUCTION INDUSTRY GUIDE FOR EMPLOYERS

This guide is intended to help employers in the OSHA silica standard for the construction industry to implement the program for their employees.

Physicians' Alert: Occupational Silicosis and Silica-Related Illnesses among Construction Workers

Which employees are covered by the silica standard?

This Alert was developed to help ensure that all construction workers who engage in work that involves the use of developing occupational silica are protected.

You must have a written compliance plan required to if the stan

CPWR RESEARCH AND TRAINING **RESPIRABLE CRYSTALLINE SILICA** Objective Data Collection Form

DATE: _____

Name: _____

Company: _____

Email: _____

Phone: _____

Site Name: _____ State: _____ Country: _____

Number of workers/Company Size: _____

Type of work: Active worksite Simulated worksite Laboratory

Project Type: Renovation Demolition New Construction

Comments: _____

SAMPLING ENVIRONMENT

Outdoor Partial Enclosure Indoor Confined Space

Temperature (F): _____ Relative Humidity (%): _____ Wind Direction: _____ Wind Speed (mph): _____

Upwind Downwind Crosswind

Comments: _____ Other Ventilation Sources: _____

WORK CONDITIONS

Trade/Occupation (i.e. bricklayer, laborer): _____

Task (i.e. cutting, grinding): _____

Material Disturbed (i.e. block, brick, concrete): _____

Decontamination procedure: _____

Comments: _____

EQUIPMENT INFORMATION

Tool: _____ Control: _____

Water LEV Combination (Water + LEV)

Enclosed Cab Other

Manufacturer: _____

Model: _____

Wheel Diameter (If Applicable): _____ Measured CFM (If Applicable): _____

Power (hp/rpm): _____ Measured Water Flow Rate (If Applicable): _____

Good Working Order: Yes No Yes No

Tool Comments: _____ Control Comments: _____

Respiratory Protection

Used: Yes No Type: Filtering face respirator (N95) Half-face air-purifying respirator Other

Comments (Other PPE): _____

use in your medical records.

prevent occupational silica

to suppress dust when engaging workers.

OSHA permissible exposure level

ing or shortness of breath.

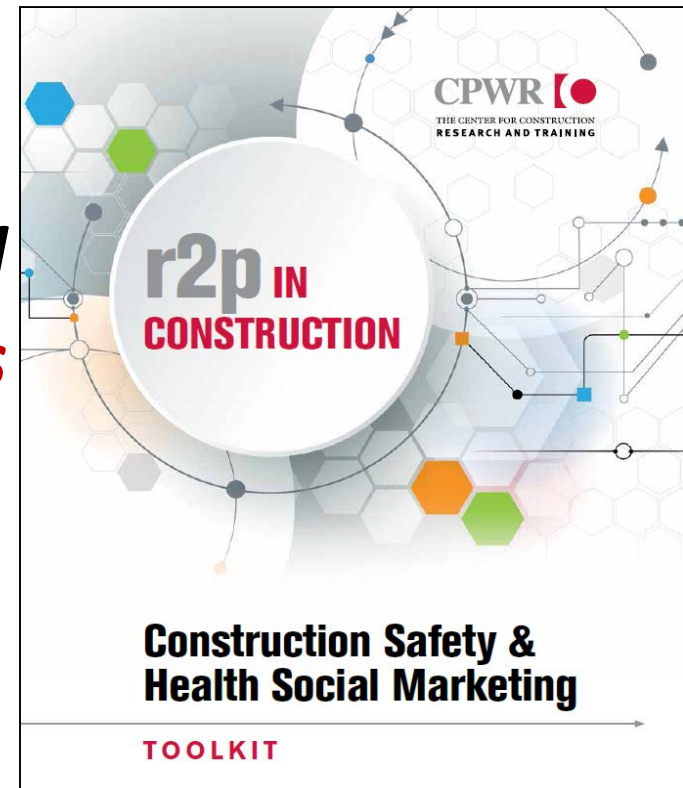
Community of Practice: Ergonomics

Members:

CPWR Consortium Researchers,
Insurance, Industry Stakeholders
& Trainers

*If we know there's a problem and
have solutions... why are workers
still being injured?*

Focus: manual materials handling



ADVERTENCIA DE PELIGRO **LESIONES EN LA ESPALDA**
SUS RIESGOS

¿Sufre de dolores en la espalda?

Las lesiones en la espalda son las lesiones más comunes en la construcción.
 • Las labores de la construcción se quejan de dolores en la espalda con más frecuencia que todos los demás oficios combinados.
 • Las lesiones en la espalda son la causa principal de discapacidad entre los trabajadores de la construcción de mediana edad.
 • El largo tiempo de recuperación y los problemas crónicos pueden hacer que tengas que dejar de trabajar en la construcción.

La mayoría de las lesiones en la espalda son causadas por:

- Levantar
- Acercarse
- Doblar por la cintura
- Empujar y jalar

Un calculador de lesiones que incluye un promedio de 200 libras duras -cada uno de 38 lib de peso- por hora.
 1 Day: 3.8 horas
 1 Week: 13 horas
 1 Year: 850 horas

¿Juegas más sobre los peligros en la construcción. ¿Juegas? Descarga más de este sitio de trabajo de salud y seguridad en línea gratis. Llámame al 301-878-8500

Play the Game!

CPWR TOOLBOX TALK **Lifting and Carrying Materials**

- Use mechanical equipment like a dolly to lift heavy objects, if at all possible.
- Never try to lift an item weighing over 50 pounds by yourself.
- Plan your lifts, make sure the path is clear prior to lifting.

GG

LIFT COACH
PLAN YOUR LIFT

Start
Language
Credits

Strain

Straighten Up.
Swipe up to align your neck and back.

GG

LIFT COACH
PLAN YOUR ROUTE

0.0

Tap the ground to move.
Tap the box to inspect and slide up to lift.
Then tap the goal X to deliver your box.

30.0

r2p in Construction: Resources & Tools to Advance Safety and Health

Questions?



ebetit@cpwr.com

