

# Demonstration of BeSuper toolkit for supervisors in construction

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OHSU and Dr. Anger have a significant financial interest in Northwest Education Training and Assessment [or NwETA], a company that may have a commercial interest in the results of this research and technology. This potential individual and institutional conflict of interest has been reviewed and managed by OHSU.



# Background

Construction workers experience 3 times more fatal injuries, and over 5 times more illnesses and injuries requiring days away from work than the all-industry average (BLS, 2015).

They have higher:

- BMIs
- systolic & diastolic blood pressure
- rates of obesity

than national adult male averages (Bodner et al., 2014).



# Strategy/Approach

Based on prior study, partially (Austin)

- Org change via supervisor training
  - Increase contact frequency
  - Reinforce safety and healthy behaviors
- Indiv change via training & sup reinf
  - Scripted training (healthy lifestyles) in small group/team meetings



# Supervisor Training

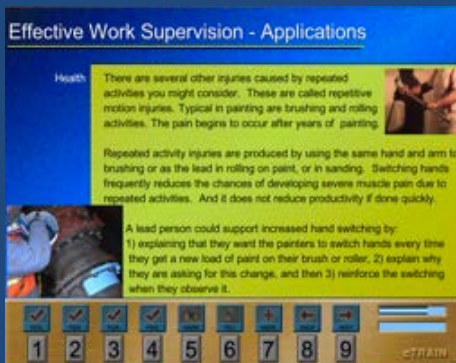
## Tracking Behavior



2 wks  
contact  
frequency  
5min/day

## Effective Supervision, reinforce behaviors

90 min



reinforce  
safety  
practices

12 wks

reinforce  
healthy  
behaviors



## Work Crew 'Get Healthier' Education

1. Get healthier (goals, pedometer)
2. Sleep
3. Calories
4. Liquids & calories
5. Basic nutrition/labels)
6. Snacks
7. Sugar
8. Exercise
9. Strength
10. Flexibility
11. Stress
12. Moving forward (health goals)

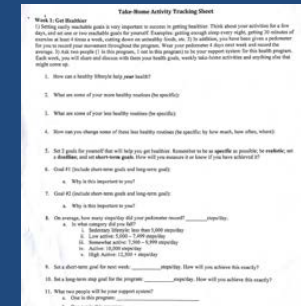
Surveys &  
Topic 1  
90 min



Topics 2-  
11  
40 min/week



Topic 12  
& Surveys  
90 min





# Participant Sample

- 4 construction companies
- conducted in Portland, Eugene, Prineville
- $n = 35$  (mostly supervisors)

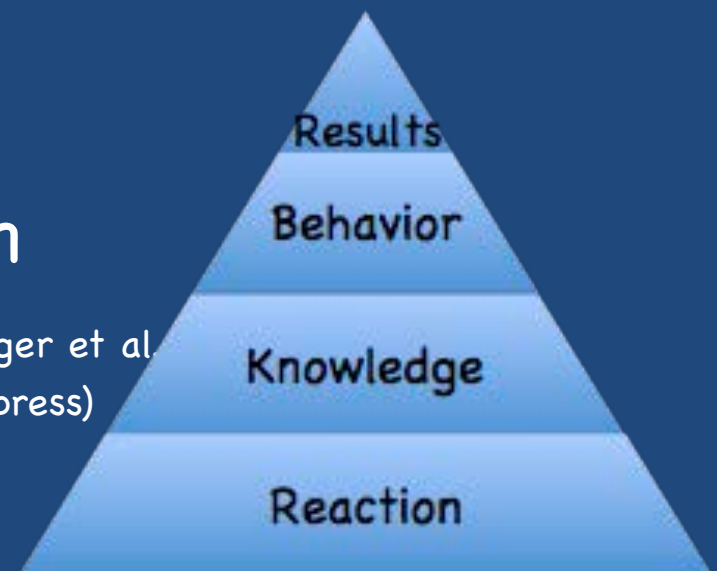


# Kirkpatrick's 4 levels (construc)

- **Reaction** ratings of "good," "excellent"
- **Knowledge improved**: Substantial knowledge gains in supervisor training and Get Healthier cards
- **Behavior**: Increased targeted comments to workers, sleep duration, exercising.  
Reduced sugary snacks, drinks
- **Results**: Systolic blood pressure improved (reduced)  
Increased team cohesion

Luis Arechiga, InLine commercial construction  
"...My communication with my subcontractors and co-workers has significantly increased not only on the professional aspect but personal as well ...."

(Anger et al  
in press)

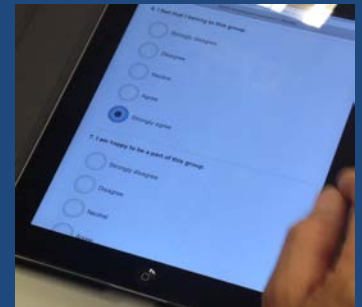


# Results (@ end of intervention)

significant ( $p < .05$ ) improvements in:

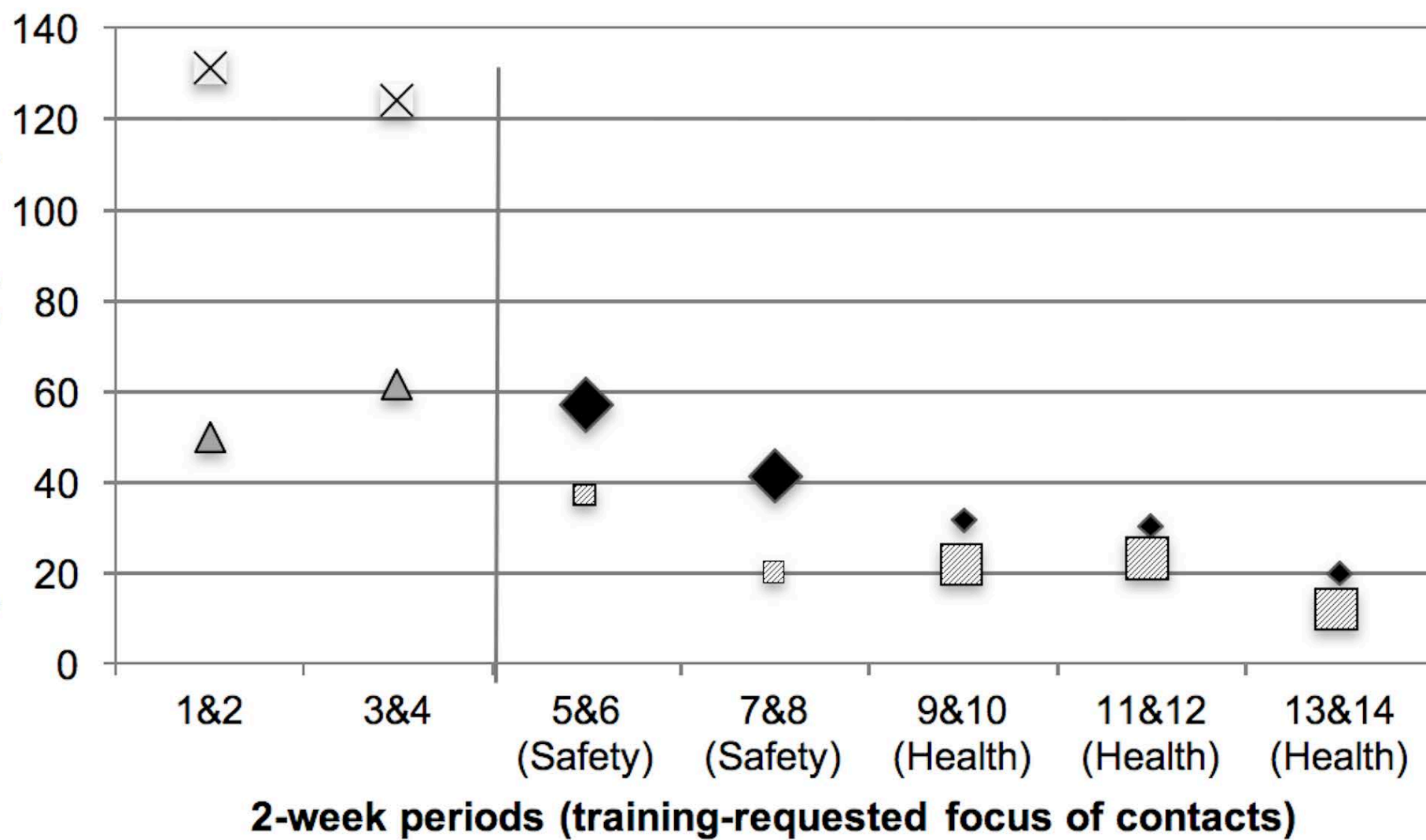
Pilot Study: N=35

- family-supportive supervisory behaviors ( $d=0.72$ )
- team cohesion ( $d=0.38$ )
- frequency of exercising 30 minutes/day ( $d=0.50$ )
- frequency of muscle toning exercise ( $d=0.59$ )
- sugary snacks and drinks ( $d=0.46$  &  $0.46$ )
- sleep duration ( $d=0.38$ )
- co-worker healthy diet support ( $d=0.59$ )
- family healthy diet support ( $d=0.53$ )
- systolic blood pressure ( $d=0.27$ )



Mean Number of Habitrak Contacts  
(Per 10 workday period)

◆ SAFETY    ▨ HEALTH    ▲ Family-Related    × Job





# Dissemination

**Be Super!  
In Construction**



DEPARTMENT OF ENVIRONMENTAL & OCCUPATIONAL HEALTH SCIENCES

**PACIFIC NORTHWEST AGRICULTURAL  
SAFETY AND HEALTH CENTER**

# Effective Work Supervision

## Phase 1 - Building your Team



### Building your Team

A big  
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prov

But  
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you  
and



support. There are many  
y know best is  
job done.



You can do this by having discussions with your crew members about the importance of work, safety and home life, as described previously.

- These discussions should go back and forth with crew members
- This shows crew members that you care about their well-being and it creates a feeling of mutual respect in the crew



1

2

3

4

5

6

7

8

9

cTRAIN

3.0.3



## EDUCATION CARD TOPICS

### Get Healthier Cards:

- ♦ Introduction & Get Healthier
- ♦ Sleep
- ♦ Calories
- ♦ Liquid & Calories
- ♦ Basic Nutrition
- ♦ Snacks
- ♦ Sugar
- ♦ Cardiovascular exercise
- ♦ Strength Training
- ♦ Flexibility
- ♦ Moving forward

### Wellbeing Cards:

- ♦ Adjusting to a new culture
- ♦ Stress
- ♦ Stress and the Ulysses Syndrome
- ♦ Relaxation techniques
- ♦ Public Assistance Programs
- ♦ Health Care and Insurance
- ♦ Taxes
- ♦ Pesticides
- ♦ Heat Stress
- ♦ UV Radiation
- ♦ Respiratory Hazards
- ♦ Ergonomics
- ♦ Time management
- ♦ Finances
- ♦ Interpersonal Communication (I and II)
- ♦ Other resources for you and your family

## TEMAS DE LAS TARJETAS DE EDUCACIÓN

### Tarjetas de Hágase Más Saludable:

- ♦ Introducción & Hágase Más Saludable
- ♦ El sueño
- ♦ Las calorías
- ♦ Los líquidos y las calorías
- ♦ La nutrición básica
- ♦ Los bocadillos
- ♦ El azúcar
- ♦ El ejercicio cardiovascular
- ♦ El ejercicio de fuerza
- ♦ La flexibilidad
- ♦ Siguiendo adelante

### Tarjetas de Bienestar:

- ♦ La adaptación a una nueva cultura
- ♦ El estrés
- ♦ El estrés y el Síndrome de Ulises
- ♦ Las técnicas de relación
- ♦ Los programas de asistencia pública
- ♦ El cuidado de salud y seguro médico
- ♦ Los impuestos
- ♦ Los pesticidas
- ♦ El estrés por calor
- ♦ La radiación UV
- ♦ Los peligros respiratorios
- ♦ La ergonomía
- ♦ La gestión de tiempo
- ♦ Las finanzas
- ♦ La comunicación interpersonal (I y II)
- ♦ Otros recursos para usted y su familia

# Card Topics



## HEALTH CARE AND INSURANCE pg. 1

Occ. Health Sci. & PNASH Leader Card - Health Care

**LEADER INSTRUCTIONS** (do not read out loud). Leader instructions for you are in red – do not read them out loud. Read to your group everything else on this card starting with #1, then #2, and so on. When you see a question in purple, give your group enough time to talk about the information. Encourage everyone to participate by asking questions like *What does everyone else think?* or *Does anyone have any other ideas?* Before reading information underlined in blue, encourage your group to guess the answer (on the other cards, it is a blank space). After reading this Wellbeing Card, complete this week's Take-Home Activity and receive a gift card.

### 1. Let's brush up. Do you remember the following?

- What do you call someone born in the US?  
United States Citizen
- What do you call someone who is a permanent resident?  
Qualified immigrant
- What do you call someone who is not a citizen or qualified immigrant?  
Non-qualified immigrant
- How many years do qualified immigrants have to wait to receive public benefits?  
5 years

### 2. Due to job demands, living conditions, and other life circumstances, farmworkers are more vulnerable to injuries, illnesses, and other health-related conditions. If

### 3. AFFORDABLE HEALTH CARE ACT

What do you already know about the Affordable Health Care Act? Discuss this with the group.

The Affordable Health Care Act (also known as the ACA or *Obamacare*) is a health care reform that was meant to make health care in the United States more accessible and more affordable. As a result, most Americans, as well as lawfully present immigrants (such as legal permanent residents and H-2A temporary workers), are now required to have health insurance. This new requirement is called the *individual mandate*. People who do not get health insurance might have to pay a fine when they file their taxes.



The ACA allows you to choose a private health insurance plan from the state marketplace, (also called the exchange) which is a collection of different healthcare plans. Insurance from the marketplace has a cost, but you may qualify for financial aid, or tax credits to help pay the cost of the insurance. You may pay less than \$25 per month (this is lower than the cost of some unexpected medical expenses).

For more information, go to <https://www.healthcare.gov/>.

### 4. INSURANCE THROUGH YOUR EMPLOYER

When employees get health insurance through their job, it is called employer-sponsored insurance. How common do you think this type of insurance is? This is how most Americans get coverage. Before signing up for health insurance, make sure your employer does not offer it.

### 5. MEDICAID

Medicaid is a federal program that provides health care services to financially needy individuals. The Medicaid program in Oregon is called OHP (Oregon Health Plan). People who have this program pay little to nothing for their health care services. Like most other federal programs, most qualified immigrants are eligible only after living in the country for five years. Non-qualified immigrants and H-2A workers do not qualify.



However, if you are an undocumented immigrant, you can still apply for Medicaid (OHP). You may be able to get *Citizen Alien Waived Emergent Medical (CAWEM)*. This program covers medical emergencies for non-citizens in addition to health care for pregnant women. Babies born to mothers on CAWEM automatically receive OHP benefits for one year. You can apply for CAWEM at any time at <http://www.oregonhealthcare.gov/> or by calling 1-800-699-9075.

# IMPACT OF A TOTAL WORKER HEALTH® INTERVENTION ON WORKPLACE STRESS IN FARMWORKERS

WEEK 1

WEEK 3

WEEK 28

EFFECTIVE  
SUPERVISOR  
TRAINING

Complete **cTRAIN Part 1:**

- *Tracking Behavior* (30 min)

Complete **cTRAIN Part 2:**

- *Effective Supervision*
- *Training Applications*
- *The Project* (90 min)



Begin tracking behavior with **HABITRAK** (5 min/day)



Increase interactions

Apply to safety

Apply to healthy lifestyles

GET HEALTHIER  
& WELLBEING  
EDUCATION

Begin **WEEKLY GROUP DISCUSSIONS** (40 min) using *Get Healthier* and *Wellbeing Cards*



SURVEYS &  
HEALTH  
MEASURES

**PRE-INTERVENTION:**

Complete **SURVEYS** (2 hrs) & **HEALTH MEASURES** (15 min)



**POST-INTERVENTION:**

Repeat **SURVEYS** (2 hrs) & **HEALTH MEASURES** (15 min)



# Kirkpatrick's 4 levels (Ag) <sup>N=7)</sup>

- **Reaction** ratings of "good," "excellent"
- **Knowledge improved**: Knowledge gains in supervisor training and Get Healthier cards
- **Behavior**: Increased eating fruits & veggies, drinking water, exercising, stress management, techniques to reduce food cravings, family support  
Reduced sugary drinks, waking at night
- **Results**: Improved (reduced) BMI, Systolic & Diastolic blood pressure, fat %ag

Gayle Gossett, HR Business Owner, I enjoyed the information they [Latino employees] gained and gladly shared with the employees they supervise ... expanded the knowledge base beyond my expectations.



# Accessing the Interventions

How do you access the interventions to implement them in your workplace?

- TWH Review: 17 in 2014\*; 37 in 2017
- Extrapolate from the methods sections?
- Call the author...
  - Get their field research protocols
  - Tailor the methods for your unit/organization
- **Aaargh**—We developed standalone [we think] tools and toolkits – BeSuper is one of these

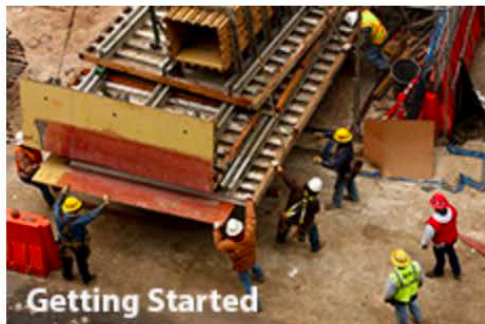
\* Anger WK, Rameshbabu A, Olson R, Bodner T, Hurtado DA, Parker K, Wan W, Wipfli B, Rohlman DS. Effectiveness of Total Worker Health® Interventions, in the edited book on Total Worker Health by NIOSH (summer 2018)

# What is a Toolkit?






Be Super! Introduction Video

Our Be Super! toolkit has everything you need to effectively implement the program in your organization. Click on the image below to learn how to implement this toolkit in your construction company, get access to user guides, data management tools and educational materials (in English and Spanish). In addition, find links to our computer-based training (free to access the training in English or Spanish) and instructional videos that will help you improve the safety, health, and well-being of your organization. You will need computers or iPads to run the supervisor training and implement other components of the toolkit.





# Program Components

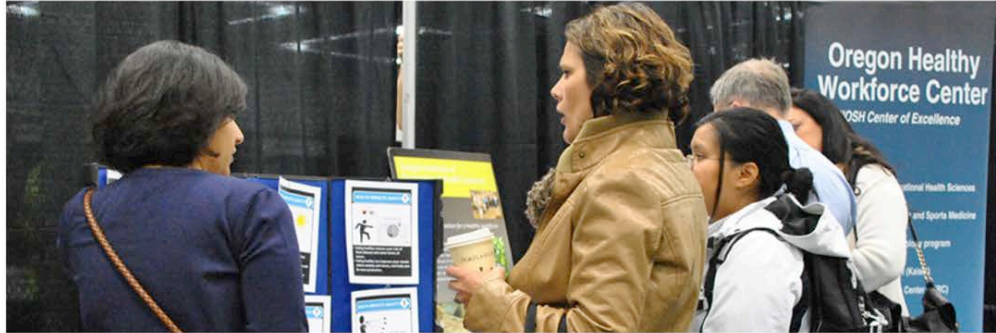
1. **User Guides:**  Download the User Guide, the Data Management Guide, and the Facilitator Script (FREE)
2. **Computer Based Supervisor Training:** \* Download the Computer Based Supervisors in Construction Training (available in English and Spanish) and find the license that works for your organization (\$).
3. **Behavior Tracking Cards:**  Download the Behavior Tracking Cards with daily positive interaction cards and a weekly graphing sheet to track your supervisors progress. [Click](#)

## her Measurables and Evaluation Components

4. **'Get Healthier' Cards:** For organizations interested in evaluating how much progress from pre-program to post-program (as well as at 6-month and 12-month follow-up measurements) they are making in the areas of safety, health, and well-being, we have developed the following tools from our evidence-based intervention programs for use by non-academics:
  1. **Surveys:** Learn how to implement the pre-program, post-program, and 'Get Healthier Knowledge' surveys, and email the research lab to receive a unique survey tool.
  2. **Automated Data Management Spreadsheet & Report Form:** Feel like a research pro with our pre-programmed spreadsheet and report forms. Learn how to enter raw data and interpret the results without breaking a sweat!



# Toolkit Kiosk



At the Oregon Healthy Workforce Center, we design programs for [Total Worker Health \(TWH\)](#), a strategic approach directed at improving *both* worker safety and well-being through organizational change. Emerging from "gold-standard" research methodology, our toolkits have demonstrated positive changes in learning and behavior (i.e., evidence-based), and have been rated favorably by those who have used them.

Click on the images below to access do-it-yourself Toolkits.



# How can you get your hands on these toolkits?

[What's special about these toolkits?](#)



[How do these toolkits apply to me?](#)



[How can these toolkits impact my organization?](#)



[Are these toolkits free?](#)



[Are these toolkits quick and easy to implement?](#)



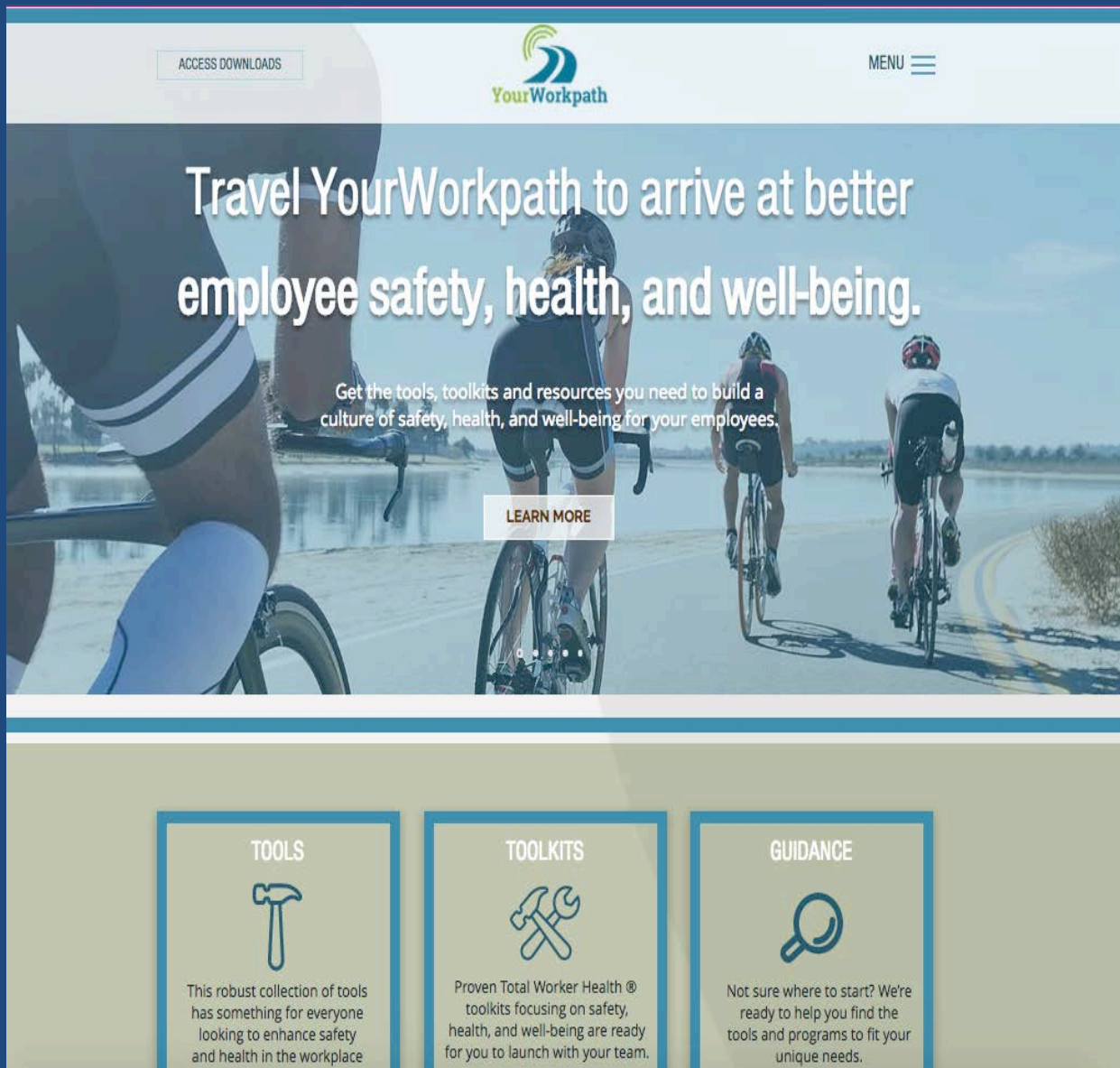
[Are there other TWH evidence-based resources?](#)



# Dissemination Strategies and Plans

- Key message
  - Multi-level targeting
  - Tailoring
  - Evaluation
  - Dissemination liaison
- 
- Dissemination Channels
    - High visibility networks
      - Professional associations, trade organizations, non-profits, and government agencies

# Dissemination Website (go live in May)



- ❖ User friendly & engaging website with lay audience-friendly language
- ❖ Outside University
- ❖ Sustainable & effective dissemination platform
- ❖ Metrics on tool and toolkit access & downloads

# Dissemination

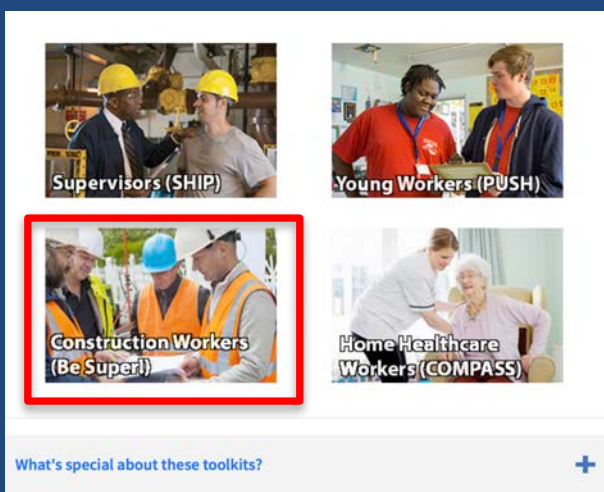
[www.ohsu.edu/ohwc](http://www.ohsu.edu/ohwc)

toolkits

tools

Available  
in Spanish  
& English

with User  
Guides  
in English  
(only)



Resource	Occupational Safety & Health	Employee Well-Being	Safety & Health <i>plus</i> Well-Being	Description
<a href="#">OR-FACE Toolbox Talks</a>	X			Guided group discussions on safety hazards and preventive action plans. Use in conjunction with the <i>Health Impacts Safety Guides</i> for an integrated effort.
<a href="#">Health Impacts Safety Guides</a>	X	X		Guided group discussions on safety and health hazards with preventive action plans. Use in conjunction with <i>OR-FACE Toolbox Talks</i> for an integrated effort.
<a href="#">Start the Conversation Activities**</a>			X	Scripted supervisor led team discussions on safety and well-being topics for young workers
<a href="#">Get Healthier Lifestyle Education Cards** ***</a>		X		Scripted peer led team discussions on health and wellness topics



# Partners and Authors

IUPAT – IBEW

InLine – General Sheet Metal

Fortis – Mortenson

Ag: Anonymous – Goschie Farms

Katie Vaughn, Jason Kyler-Yano,  
Brad Wipfli, Ryan Olson,  
Magali Blanco

Anger WK, Kyler-Yano J, Vaughn K, Wipfli B, Olson R, Blanco M. Total Worker Health® Intervention for Construction Workers Alters Safety, Health, Well-being Measures. Journal of Occupational and Environmental Medicine, 2018, Jan 31. doi: 10.1097/JOM.0000000000001290. [Epub ahead of print]

