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

12 wks
reinforce safety practices
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 &
Topics 2–11
90 min
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:

- 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)
Dissemination

Be Super!
In Construction

PACIFIC NORTHWEST AGRICULTURAL SAFETY AND HEALTH CENTER
Effective Work Supervision

Phase 1 - Building your Team

Building your Team

A big part of being a supervisor is providing consistent and timely support. There are many kinds of support, depending on the situation, but the most important by far is probably the superimposed support. It is clear that the supervisor who knows the job best is probably the best person to provide superimposed support.

But there is more to it than that. The key to making sure that you have a high-performing team is to provide the right kind of support at the right times. And that means providing support that is... in order to do things faster and better.

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
**Card Topics**

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

**WEEK 1**
- Complete cTRAIN Part 1: Tracking Behavior (30 min)
- Begin tracking behavior with HABITRAK (5 min/day)

**WEEK 3**
- Complete cTRAIN Part 2: Effective Supervision
  - Training Applications
  - The Project (90 min)
- Increase interactions

**WEEK 28**
- Apply to safety
- Apply to healthy lifestyles

**EFFICIENT SUPERVISOR TRAINING**
- Begin WEEKLY GROUP DISCUSSIONS (40 min) using Get Healthier and Wellbeing Cards

**GET HEALTHIER & WELLBEING EDUCATION**

**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)  

- **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 %

Gayle Goshcie: As a 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?

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 (fee 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 here

   Measurables and Evaluation Components

4. 'Get Healthier Knowledge' 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!
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.
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

**toolkits**

Available in Spanish & English with User Guides in English (only)

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

### Available Resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>Occupational Safety &amp; Health</th>
<th>Employee Well-Being</th>
<th>Safety &amp; Health plus Well-Being</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR-FACE Toolbox Talks</td>
<td>×</td>
<td></td>
<td></td>
<td>Guided group discussions on safety hazards and preventive action plans. Use in conjunction with the Health Impacts Safety Guides for an integrated effort.</td>
</tr>
<tr>
<td>Health Impacts Safety Guides</td>
<td>×</td>
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<td></td>
<td>Guided group discussions on safety and health hazards with preventive action plans. Use in conjunction with OR-FACE Toolbox Talks for an integrated effort.</td>
</tr>
<tr>
<td>Start the Conversation Activities**</td>
<td></td>
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<td>×</td>
<td>Scripted supervisor led team discussions on safety and well-being topics for young workers</td>
</tr>
<tr>
<td>Get Healthier Lifestyle Education Cards** ****</td>
<td></td>
<td></td>
<td>×</td>
<td>Scripted peer led team discussions on health and wellness topics</td>
</tr>
</tbody>
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*Oregon and the Workplace*

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