A Program to Reduce the Risk for Overexertion Injuries

Eileen P. Betit
Director, Research to Practice

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2:30 – 3:30
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Inaugural Research and Innovation Summit
Indianapolis, In.
Problem

Overexertion Injuries:

➢ A leading cause of disabling injuries in the U.S.
➢ Result in days away from work and lost productivity
➢ Create a financial burden for contractors and injured workers

Significant research exists about the causes of injuries & solutions

➢ But contractors’ adoption of solutions has been slow
If we know there’s a problem and have solutions...

... then what do we need to do to increase use of solutions and prevent injuries?
1. **Built a team** of researchers, insurance & industry

2. **Consolidated resource** online at Construction Ergonomic Research & Solutions

3. **Decided to focus on** Manual Materials Handling (MMH)

4. **Decided to use a** social marketing approach:
   ✓ **Social marketing** is *not* social media and *not* health communications
   ✓ **Social Marketing** *is the use of marketing principles to influence decisions & practice* by identifying and addressing potential barriers:
     ▪ Does the target audience know about the solution?
     ▪ Is it readily available in their market?
     ▪ Is the price right?
     ▪ Does it fit their operation or work?

   **BECAUSE:** *If they don’t know about the solution, it’s not available, it’s too expensive, or doesn’t fit their operation or type of work – the target audience won’t use it!**
Use of MMH practices:

- Limited planning for materials handling
- Least often cited strategies to manage MMH:
  - Setting weight limits for lifting
  - Storing materials between knee and waist height

Barriers to adopting safer MMH practices:

- Lack of awareness of the risks, solutions, and benefits of safer practices
- Lack of time to find and access to material weights and lifting and storage options
- Lack of organization and experience for planning
 Interviews with contractors engaging in safe practices...

Positive practices:

➢ Plan to address risks (including equipment, practices, and procedures for material handling)
➢ Frequent communication to employees and suppliers
➢ Engage employees (meetings, recognitions, daily cues and prompts on work practices)

Motivators:

➢ Prevent injuries
➢ Control insurance costs
➢ Improve productivity and meet schedules
➢ Win work and retain employees
Apply Social Marketing Principles: 4 P’s

**Product strategy – something for everyone:**
- Planning resources
- Training program to reinforce safe practices

**Price strategy:**
- Make the **business case** to save money, improve business outcomes
- Provide **free access** to program materials

**Place strategy:**
- Provide **easy access**

**Promotion strategy:**
- Develop a **unifying brand**

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Brand Testing

I like the tagline set as a foundation under a line at the bottom. I like the "Build Safety Into Every Job" - it speaks to the bottom line $$.

Logo D is straight to the point, infers what great design is all about, great people and companies working together for success!

Clean refers. Tag Line sounds Joy interest Build Safety into every Job Disconnected Trust Shape Anticipation, trying Bottom Line wins Strong Confused

Plan Safe & Prosper

Best Built Plans

Build Safety into Every Job
Promotion – A unifying brand

Brand & Message:
- Cited as best fit brand for MMH program
- Ability to extend to a broader construction safety brand
- *Positions safety as a core pillar of business success* – linked to quality and productivity

Program:
- Includes *something for everyone*
- Is *free and easy to access*
BEST BUILT PLANS: Preventing Injury & Improving Productivity by Reducing Manual Materials Handling

Manually lifting and moving heavy materials on job sites can result in strain, sprain, and related soft tissue injuries. These types of injuries cost businesses billions of dollars and are a leading cause of disabling injuries in the construction industry. Best Built Plans provides contractors and workers with practical tools and information to plan for safe materials handling while staying productive and profitable. (See article "It’s Time to Stop the Pain: Preventing Overexertion Injuries" CEFMA Building Profits - The Magazine for Construction Financial Professionals.)

What’s Available?

- Site Planning Tool: Tailored for use at each stage of a project, from preparing a bid to project completion, includes pre-set spreadsheets, material weights, storage and lifting options, daily checklists, training materials, hazard alert cards, toolbox talks, and related micromessages.
- Training Resources: Interactive exercises with narration to increase a worker’s understanding of the need to plan lifts, and to introduce equipment, work practices and lifting techniques that can help reduce the risk for injury.
- Coaching: Interactive exercises that introduce warm-up activities and the fundamentals of lifting practices and allows users to test their knowledge.

- Click here to access the Site Planning Tool online.
- Download the PC-based Site Planning Tool and Interactive Training and Coaching Resources by clicking HERE and following the prompts.
- Need it on the go? Download our new free app to access the whole program on your phone or tablet! It’s available for both iOS and Android users. You can download it by clicking HERE.
- Find infographics and posters to reinforce safer materials handling practices HERE. You can post them on job sites, or use them in printed materials, presentations, on your website, or social media.
- As a new program, we want to learn from users what’s working, what needs to be improved, and what other resources are needed. Please take a few minutes to share your feedback by taking this brief anonymous survey (Click HERE).
Help Contractors...

A Planning Tool

➢ Information on the business benefits of planning

➢ Key Questions & Resources to address barriers at each project stage: project bid, before job starts, during construction, when the job ends
1. Bidding

Get Ready.
Now is the time to PLAN for how materials will be delivered, stored and moved so that you can work productively and avoid costly injuries.

"Planning starts pretty much when we’re bidding on a job, we look at all the materials that are required... We take a look at the ease of installation, packaging and storage. If at all possible, we’ll have the suppliers store the materials so that we don’t have to handle it..." (CPWR Contractor Interview, January 2017)

Materials Handling Questions to Consider & Helpful Resources

1. What types of materials do you plan to use on the project?
2. What quantity of each material will you need?
3. When do you plan to use each material?
4. How heavy are the units of material that you will need to move? Are there lower weight options? Will the materials be marked with the unit weight? Want more information?
5. How will the materials be delivered and stored? Can they be stored off the ground to minimize bending and lifting? Want more information?
6. What lifting equipment or staff assistance will be used to lift and move heavy materials (for example, units that weigh 50 pounds or more)? Want more information?
7. Need help keeping track of the materials, weights, storage options, lifting equipment and assistance, and the cost of these items for your bid? Download planning worksheet.
1. Bidding

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"Planning starts pretty much when we're bidding on a job, we look at all the materials that are required... We take a look at the ease of installation, packaging and storage. If at all possible, we'll have the suppliers store the materials so that we don't have to handle it..."
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Materials Handling Questions to Consider & Helpful Resources

1. What types of materials do you plan to use on the project?
2. What quantity of each material will you need?
3. When do you plan to use each material?
4. How heavy are the units of material that you will need to move? Are there lower weight options? Will the materials be marked with the unit weight? Want more information?
5. How will the materials be delivered and stored off the ground to minimize bending and back strain? Want more information?
6. What lifting equipment or staff assistance will be needed to move heavy materials (for example, units that weigh 50 pounds or more)? Want more information?
7. Need help keeping track of the materials, weight options, lifting equipment and assistance, and other items for your bid? Download planning worksheet.

Download the spreadsheet to find weights of common building materials and examples of lower weight options.

Excel

Remember, heavy materials, for example those that weigh 50 pounds or more, should ideally be lifted with the help of lifting equipment, but may be lifted by a team.
### Material Weights

**Examples of Weights of Common Building Materials**

(For more information, see [this link](https://www.cpwr.com/manual-materials-handling-planning-tool-and-resources).)

<table>
<thead>
<tr>
<th>Category of Material</th>
<th>Construction Material</th>
<th>Size or Coverage</th>
<th>Units</th>
<th>Weight per Unit (lbs)</th>
<th>Total Weight (lbs)</th>
<th>Source</th>
<th>Other Resources/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrasive blasting</td>
<td>Abrasive blaster</td>
<td>90 lb capacity unit</td>
<td>1</td>
<td>53</td>
<td>53</td>
<td><a href="http://www.northerntool.com/shop/tools/product_7960/">http://www.northerntool.com/shop/tools/product_7960/</a></td>
<td>Will be heavier when filled with blast media</td>
</tr>
</tbody>
</table>

### Storage Options

**Examples of Materials Storage Equipment (to reduce manual materials handling on the jobsite, the warehouse or yard)**

(For more information, see [this link](https://www.cpwr.com/manual-materials-handling-planning-tool-and-resources).)

<table>
<thead>
<tr>
<th>Material Stored</th>
<th>Type of Storage Equipment/Option</th>
<th>Commercial Examples</th>
<th>Example Photo</th>
<th>Links</th>
<th>Comments</th>
<th>Rental Option</th>
</tr>
</thead>
</table>

### Lifting & Moving Equipment

**Examples of Lifting & Moving Equipment to Reduce Manual Materials Handling (MMH)**

(For more information, see [this link](https://www.cpwr.com/manual-materials-handling-planning-tool-and-resources).)

<table>
<thead>
<tr>
<th>Material</th>
<th>Type of Equipment/Option</th>
<th>Commercial Examples</th>
<th>Example Photo</th>
<th>Links</th>
<th>Comments</th>
<th>Construction Solutions Link</th>
<th>Rental Option</th>
</tr>
</thead>
</table>
The Manual Materials Handling Workbook contains worksheets for each stage of a project to help you plan for and keep track of how materials will be handled and moved. Once you download and save this workbook on your computer, you can use one or all of the worksheets. Each worksheet builds on the previous one. Click on the project stage to access the appropriate worksheet. Remember to use a new filename that reflects the project your are planning for when you save the workbook.

### Bidding Worksheet

The bidding worksheet can be used to help you plan for and cost out the materials that will be used, how they will be stored, and for when they will be lifted and moved on the project. The information developed in your bidding spreadsheet can then be used in your bid. Selected information entered on this worksheet will automatically populate your pre-job worksheet. Remember to save your file when you add information.

### Pre-job Worksheet

The pre-job worksheet helps to define your materials handling plan for the project. You do not need to have used the bidding worksheet to use this worksheet. However, if you used the bidding worksheet, portions of this worksheet will already be populated. Remember to save your file when you add information.

### On-the-Job Worksheet

The on-the-job worksheet will help ensure that your plan to reduce manual materials handling is being implemented. You do not need to have used the pre-job worksheet to use this one.

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**Bidding - Materials & Equipment Handling Summary Worksheet**

<table>
<thead>
<tr>
<th>Materials: Type, Quantity, Weight, Cost</th>
<th>Storage: Equipment, Quantity, Cost</th>
<th>Lifting &amp; Moving: Equipment, Extra Labor, Quantity, Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concrete mix</strong></td>
<td><strong>Storing Materials</strong>: Quantity: 30.00, Weight (used to mix): 50.00</td>
<td><strong>Lifting &amp; Moving Equipment</strong>: Quantity: 2.00, Equipment: handtruck, Quantity: 1.00</td>
</tr>
<tr>
<td><strong>Plastic Damage Rank</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>($3,000.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>$24,000.00 (2).0.00 Plastic Damage Rank</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Lifting &amp; Moving Equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>($117.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Materials + MHRM Cost</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>($3,000.00)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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### Pre-Job Manual Materials Handling Worksheet

- Date when it will be used (example: 1/3/18)
- Concrete mix Quantity: 30.00, Weight (used to mix): 50.00
- Storing Materials Quantity: 2.00, Equipment: handtruck, Quantity: 1.00
- Lifting & Moving Equipment Quantity: 2.00, Equipment: handtruck, Quantity: 1.00
- Who will be responsible for manual materials handling (storage, movement, worker training, oversight on job site)?
  - John Smith
- Who will perform the lifting?
  - John Smith
- Equipment required: SCAFFOLDING, DOLLIES, Handtruck, 1/2" EYELETS
- When & where will training take place?
  - 3-hour before work starts at the trailer - toolbox talk will be held.
2. Pre-Job

Congratulations! You won the bid! Now's the time to revisit how materials will be delivered, stored, lifted, moved and used on the jobsite to avoid downtime, damaged materials, and injuries from manual materials handling.

“‘We’ve made a capital investment in racks or in those carts or products that move materials to the job in large, gross fashion, to where they’re offloading off a forklift avoiding strain and then moved into the jobsite on wheels and consumed almost immediately... [That way] you’ve minimized that field risk and all of that handling...’”

(CPWR Contractor Interview, December 2016)

Key Steps, Questions to Consider & Helpful Resources

At the start of the job:
Review how materials will be delivered, stored, lifted, moved and used on the job with:
- The project owner and/or general contractor
- Material and equipment suppliers
- Your employees

Questions to consider:
1. Are there any changes to the materials to be used, or how they will be stored, lifted or moved? Want more information?
2. Which of your employees will be responsible for coordinating when and where materials will be delivered and stored?
3. Do your supervisory personnel (foremen, etc.) need training on use of lifting equipment or safe work practices?
   Download free training materials.
4. Who will be responsible for ensuring workers are trained on the use of equipment and work practices to minimize manual materials handling? What training will be needed? What materials will be needed for the training? When and where will it take place?
5. Need help keeping track of the materials handling activities and assignments? Download planning worksheet.
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You may have already downloaded these resources when preparing your bid. If not:
- Find weights of common building materials
- Find examples of site storage options
- Find examples of lifting equipment

Training Resources:
- Supervisor/Foreman Training
- Toolbox Talk – English
- Toolbox Talk – Español
- Hazard Alert Card – English
- Hazard Alert Card – Español
- Lift Coach Games

Also visit the Training Resources and Coaching Section of this application. Find more free toolbox and other training resources at
https://www.cpwr.com/research/construction-ergonomic-research-solutions
3. On-the-Job

Daily planning and frequent communication keep everyone focused on quality, safety, and productivity. Execution and troubleshooting becomes everyone’s responsibility.

“We do a daily planning with the workers. Every morning we get the crew together and they plan what they’re going to do for the day. It’s in writing. They discuss the type of work that's going to be performed, what kind of materials handling, the whole nine yards for the day. And they sign off at the end of the day that they were successful.”

(CPWR Contractor Interview, January 2017)

Key Steps & Helpful Resources

1. At the beginning and end of each day review materials handling tasks, responsibilities, schedules, and equipment for the current day and the next to ensure that all employees – supervisors, foremen, and workers – know:
   - Where the materials will be delivered and/or stored
   - How the materials will be moved to reduce manual handling
   - The location and availability of equipment that will be used to move and handle materials
   - How the team will respond to materials handling risks that are identified. Download free training materials.

2. Ask your employees for their ideas on how to improve manual materials handling to avoid injury and improve productivity.

3. Share your plan with the GC and other contractors in the area to avoid conflicting schedules that could slow down your work and theirs.

4. Monitor your plan to be sure it is being implemented correctly. Download planning worksheet and checklist.
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The Manual Materials Handling Workbook contains worksheets to help you plan for and keep track of manual materials handling for each stage of your project.

- The 3rd worksheet “On-the-Job Materials Handling” builds on the information contained in the earlier planning worksheets.
- Or use the stand-alone “Daily Materials Handling Checklist” to identify and prevent manual materials handling risks.

REMINDER: If you already downloaded the Workbook and used it for Pre-Job planning, you do not need to download a new copy of the Workbook. Simply retrieve your saved copy of the Workbook and click on the On-the-Job worksheet.

Key information from your Stage 2-Pre-Job worksheet will automatically appear in the Stage 3- On-the-Job worksheet. Remember, you can use one or all of the worksheets. If you have not yet downloaded the workbook, you can do so now.
Daily Materials Handling Checklist

Date: __/__/__  Project/Site: _______________________  Stage of work: _______________________
General contractor: _______________________  Sub-contractor: _______________________
Individual completing the checklist: _______________________  _______________________
Individual who is responsible for manual materials handling: _______________________  _______________________
(material delivery, storage and movement, worker training provided and oversight)

BEGINNING OF SHIFT

<table>
<thead>
<tr>
<th>Material</th>
<th>Location delivered/stored</th>
<th>Location to be used</th>
<th>Quantity</th>
<th>Equipment for moving</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Please use the space on the back of this form for additional materials:

Are the materials located (delivered/stored) as planned?  Yes  No
If not, is there corrective action being taken?  Yes  No

Have steps been taken to ensure:
1. The required equipment is available to move the materials (e.g., forklift, cart, dolly, 2-person lifting team)?  Yes  No
2. Materials will be moved over the shortest distance possible?  Yes  No
3. The pathway is clear to move the materials?  Yes  No
4. All workers involved in lifting or moving materials have been trained on safe materials handling (when to use lifting equipment or get assistance and safe lifting practices)?  Yes  No

Will materials handling training take place today?  Yes  No
If yes, how?  Toolbox talk  Other ______________________

END OF SHIFT

Were materials moved as planned?  Yes  No
If not, why?  ____________________________________________
__________________________________________________________________________
__________________________________________________________________________
4. Look Back

You're Almost Done!
Consider this last step the first step in planning for and winning your next project.

Why Now?
Right after you finish a project is the best time to capture your experience of what worked well or not quite as planned to minimize manual materials handling. You may not get it 100% right the first time, but the more you learn, the better positioned you will be to successfully bid on future projects.

Key Steps & Questions to Consider

1. Using your planning documents, compare your plan for manual materials handling with what actually took place on the jobsite. **REMINDER:** If you used the Materials Handling Workbook and worksheets, you will have the documentation you need to conduct this review.

   - Identify what changed on the jobsite from what was planned and why.
   - Did the changes have a positive or negative outcome?

2. If you did not already capture it during your daily meetings, meet with your employees to get their input on what helped or did not help to minimize manual materials handling, and what equipment, work practices, or actions they’d recommend for future projects.

3. Use what you learn to minimize manual materials handling on future projects.
Leverage Training ...

Interactive Training Resources

- Site planning
- Equipment
- Lifting
- Work Practices
- Coaching
Welcome to the Manual Materials Handling Training Resources!

In construction, strain and sprain injuries (also referred to as overexertion, musculoskeletal disorders (MSDs), or soft tissue injuries) are often caused or made worse by:

- lifting heavy materials (50 pounds or more),
- lifting materials from the ground or above waist height,
- or from lifting and carrying materials while in awkward postures (forward bending, twisting upper body, etc.).

This training resource will increase your understanding of the need to plan your lifts, and introduce equipment, work practices and lifting techniques that can help reduce your risk for injury.

This presentation contains narration. Please adjust your speakers or headphones accordingly now in order to listen and follow along.
Site Planning

Plans for how materials will be safely stored, lifted and moved starts when your employer is preparing their bid and should continue on a daily basis for the entire project. Your employer should have planned the site to reduce your risk for injury from lifting and moving materials by:

- delivering materials close to where they will be used
- storing materials on surfaces that are stable and firm
- identifying the weight of each item without help
- providing equipment to lift heavy objects
- making sure they are used correctly

When planned properly and followed, these measures will help prevent injury and the time away from work. For information about each section, click on featured images and read the text. When you are finished, and other types of information is available.

Press the "Arrow" button to learn more about them.

**TIPS**

Select items in the scene to learn more about them.

Storing materials off the ground will:

- Require less bending.
- Reduce the risk for back and other strain injuries.
- Protect materials from damage.

**Planning Items**

- Delivery
- Storage
- Material Weight
- Equipment
- Clear Pathways
Equipment Identification

Safe manual materials handling starts before you begin lifting. Identify the equipment you have on-hand to help with lifts. For example:

- Hand Truck
- Wheelbarrow
- Welding Cart
- Power Buggy
- Power Dolly
- Rough Terrain Forklift

Used properly, this and other equipment will help you do your job safely and efficiently.

Press the "Arrow" button to begin.

TIPS
Select items in the scene to learn more about them

Hand Truck

- Check the load capacity - do not overload hand trucks.
- Check frame for broken or bent areas.
- Check tires for proper air pressure. If hard tires, check for "chipped tires."
- Load hand trucks to ensure good balance and load stability.
- Position the load forward over the axles so the hand truck, not the handles, carries the weight.
- Stack objects only to a height that you can see over while walking.
Most lifting injuries aren't caused by a single incident. They are usually caused by years of manually lifting and moving heavy loads and working in awkward postures that weaken the body. A sudden movement can lead to injury.

To reduce stress and strain on your body and to stay healthy, it is important to avoid lifting materials that weigh 50 pounds or more without lifting equipment or help, and to use safe lifting practices.
Lifting

Stance

The position of your feet while lifting is very important. With your feet together, you can easily become unbalanced.

With your feet shoulder-width apart and a bit staggered, you create a wide base of support so you can shift your weight with your legs, not your back.

Lifting

Bend At The Knees

Bending at the waist forces you to lift the weight of your upper body plus the weight of the item. This puts extra strain on your lower back.

Move your feet and bend your knees to get close to the item you’re going to lift. Lift with your legs to reduce the strain on your back.

Lifting

Move Your Feet First

Twisting while lifting puts stress on your back.

Moving your feet first gets you closer to the load and reduces the risk of straining your back.

Lifting

Get It Close

Don’t overreach or climb to get an item.

Get the item as close to your body as possible and keep it close as you lift it.
Try it now!
Choose a Close Stance or a Staggered Stance.
Choose Lift With Legs or Lift With Back.
Choose Turn and Step or Twist.

Remember, do not lift with your feet together. Always use a staggered stance.
**TIPS**

Choose the best item to lift.

Reposition your body to avoid overreaching.

Build a bridge if you must reach.
HOW TO WARM UP

CHOOSE A WARM UP:

Shoulder  Hamstring  Calf  Side  Upper Arm  Lower Back

Periodically performing simple warm ups can help to reduce physical discomfort from stress and fatigue and increase
Place your opposite hand, palm up, on your triceps.

Shoulder Warm Up
Areas affected: shoulder, upper arm, and back

Interactive Demo

Click and follow the on-screen gestures to practice warming up. You will earn stars based on how well you:

- Move in a slow, controlled motion.
- Complete the full range of the warm up.
- Hold the warm up position for the correct amount of time.

Press the "Arrow" button to begin.
Connect with Workers...
Microgames

Lift Coach: Plan Your Route / Entrenador de Levantamiento: Planifique Su Ruta
- Amazon: https://www.amazon.com/dp/B0769Z71JD/

Lift Coach: Plan Your Lift / Entrenador de Levantamiento: Planifique Su Levantamiento
- Amazon: https://www.amazon.com/dp/B076FFL8CJ/
Promote the Message...

HAVING A SAFETY PROGRAM MAKES A DIFFERENCE. CONTRACTORS SAY SO THEMSELVES.

76% Said it increased ability to win new work
71% Said it improved project quality
64% Said it helped retain staff


If it's over ____ lbs, find a safer workaround.

Any materials that weigh more should be moved with equipment or a team lift.

Talk through your work plan every morning. Leave safe every night.

Your job site check-ins are the best times to flag heavy material lifts or moves that could lead to injury. Make a plan now so everybody gets home safe later.

Best Built Plans has resources to help contractors reduce manual materials handling in every stage of their projects, and see better returns as a result.

GET TOOLS AND SEE SIMPLE STEPS YOU CAN TAKE AT BESTBUILTPLANS.ORG.
Public launch

- **Webinar July 25, 2018**
  - 182 participants – 144+ views since

**Visits to Best Built Plans Site – 3,400+**

- **Downloads –**
  - PC & App version of program – 600+
  - Workbook/worksheets – 900+
  - Infographics – 1,000+
  - Games – 2,500+
  - Toolbox Talk – 8,000+
  - Hazard Alert Card – 6,000+
Pilot:

11+ contractors/projects:
✓ Using some or all materials with one or more projects

New items:

- Now in Spanish:
  ✓ All planning resources
  ✓ Infographics/posters

- Video (English & Spanish)

- App version of Program

- Comprehensive Ergonomics Training Program - connects preventing pain with preventing opioid use and addiction
  ✓ Worker program – May, 2019
  ✓ Train-the-trainer – August, 2019
  ✓ Contractor – August 2019; January 2020
Company-level Ergonomic Program

IDEAL STARTING POINT

Many start here

Plan

Do

Act

Check

Pre-Bid

On the Job

Bid (Plan)

Look back

Because of this

• Injury alert

Because of this

• DO something else (no real plan)

Project-level ergonomic activities (i.e. Best Built Plans – Reduce material handling injuries)

Include equipment & labor to store & move materials

Implement your Plan – equipment & labor; train staff

Washington University in St. Louis: Interventions to Improve Safety Climate and Ergonomics in Construction Small and Medium Sized Contractor Enterprises
➢ Are solutions readily available, affordable, practical?
➢ Are there intermediaries and key stakeholders willing to help?
➢ Do you have the time and resources?
Ergonomics Community of Practice

CPWR/Research
- Eileen Betit
- Gary Gustafson
- Dr. David Rempel
- Dr. Ann Marie Dale
- Alan Barr
- John Strand
- Grace Barlet

Insurance/Industry
- Kristy L. Schultz (SCIF -
  Jon Vonder Haar )
- Travis Parsons &
- April Dorsey (LHSF)
- Dan Hopwood (Sompo Int’I)
- John Moore *(McGriff,
  Seibels & Williams, Inc)*