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Conflict of Interest Disclosure

I have no real or perceived vested interests that relate to this presentation nor do we have any relationships with pharmaceutical companies, biomedical device manufacturers and/or other corporations whose products or services are related to pertinent therapeutic areas.
Opioids and Pain
Injuries at Work: Ergonomics and Worker Safety
What are ergonomics?

| The science of designing job tasks, equipment, machinery and workplaces to fit the worker. | Lessen fatigue, increase productivity and reduce the number and severity of musculoskeletal injuries in the work place. |
What are musculoskeletal injuries?

....Injuries that affect the muscles, nerves, blood vessels, ligaments, tendons and bones.
What occupation are workers most at risk for musculoskeletal injuries?

Source: https://www.osha.gov/SLTC/ergonomics
What occupation are workers most at risk for musculoskeletal injuries?

✓ All types of occupations can potentially cause injuries; it depends on the risk factors.
✓ Workers in different industries and occupations may be exposed to risk factors at work.
✓ Lifting heavy objects, bending, reaching, pushing and pulling heavy loads, working in awkward positions and doing tasks repetitively.
✓ These injuries are preventable.
Examples of injuries:

- Carpal Tunnel Syndrome
- Tendonitis
- Shoulder injuries
- Knee injuries
- Trigger finger
- Muscle strain
- Lower back and back injuries
- Epicondylitis (elbow injury)
Where do we use ergonomics?

✓ At home:
  – Ergonomically correct door handles, trash bins and can openers
✓ At work
✓ Outdoors
Benefits of ergonomics

- Makes tasks easier
- Makes the work go faster
- Improves the quality of the work
- Reduces risk of injuries
- Reduces physical pain
- Reducing the risk for initiating opioid medication
Common causes

- Lifting
- Carrying
- Bending over
- Falling from ladders
- Reaching
Risk factors:

Overexertion
Risk factors:

Pushing heavy carts or objects

Lifting heavy objects
Risk factors:

Awkward or uncomfortable postures
Working on the factory line or in a meat-packing plant

- Sitting all the time
- Picking or packing fruit and vegetables
- Cleaning activities
Repetitive Motions
Being in the same position for long periods

- Standing
- Sitting
- Squatting
- Kneeling
Muscles do not rest during work

- They are used for many tasks
- Even the same arm or hand
- Working extra hours without breaks
- Long shifts
Slips, Trips, & Falls
Injuries

Inflammation of muscles and tendons
Acute injuries
• Incident occurs only one time

Cumulative injuries
• Occur after a long time-weeks, months, or years
  • Shoulder or neck pain
  • Wrist pain
  • Back pain
Back injuries can be...

The whole spine

The lumbar spine (the lower back)

Vertebrae
Bones that form and support the spine

Discs
“Shock absorbers” between vertebrae
Symptoms of possible cumulative injuries

- Reduced flexibility and rigid joints
- Tingling in the hands and/or fingers falling asleep
- No symptoms at all
Muscle pain that does not go away; Weakness or fatigue in muscles.
How can injuries be prevented?
Hierarchy of Controls

- Elimination: Physically remove the hazard
- Substitution: Replace the hazard
- Engineering Controls: Isolate people from the hazard
- Administrative Controls: Change the way people work
- PPE: Protect the worker with Personal Protective Equipment
Long-handled rake

Short-handled rake
When carrying heavy loads...

- Store the heaviest or most commonly used items at a height between the hips and chest.
- Push with both hands.
- Balance the load evenly.
Good Postures
Cleaning tasks

Making beds (Lifting the mattress and putting the edges of the sheets under the mattress)

**Good or bad?**

Why?

**Is this method better?**

Why? ... Why not?

Any ideas of how to do it better?

- Bending your body forward
- Twisting your back

- No bending
- You are closer to the bed
Wear the necessary protective equipment: Special belt for carrying loads
Stay healthy and prevent injuries

Do warm-up exercises

Before working stretch your muscles.
Do each stretch 2 times.
Count to ten each time.

KNEE TO CHEST STRETCH
BACK EXTENSION
HAMSTRING STRETCH
SIDE BEND

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Stay healthy and prevent injuries

Wear comfortable and protective shoes
Prevent Injuries

- Try to work in comfortable positions
- Take short breaks
- Relax muscles
- Use a dolly to move and lift heavy objects
- Use your legs to lift
Strategies

✓ Know the job tasks that can cause injuries
✓ Understand the tools and workplace practices that can help prevent injuries
✓ Learn to recognize signs of musculoskeletal injuries
✓ Know the process and requirements for reporting injuries that can happen at work
✓ Report and resolve the problems that cause injuries
Furthermore...

Recommend that your patients talk to their supervisor or co-workers about any unusual pain or discomfort or ways to make the job easier.
Remind your patients that...

• Certain tasks and work practices can put stress on our bodies and injure us
• There are ways in which work can be done differently to reduce any opportunity to hurt ourselves
• Knowing about ergonomics can help make work easier
• Knowing their rights and responsibilities as workers helps protect them and stay healthy
Safety and Ocupacional Act (OSHA 1910)

Workers’ Rights
Workers Compensation
• Medical treatment for injured patient
  – Immediate
  – Long term
  – Access to Specialty Care
• Wages
• Return to Work
• Prevention - Hazard Control
• Public Health
  – Surveillance
Workers’ Compensation?

• Requirements differ from state to state.
• To learn about the regulation and any state visit workerscomphub.org/navigating-system
How can you help?

- See the worker and refer them to appropriate medical treatment for the injury.
- Make sure the worker explains to the clinician that the injury occurred at work, and when, where and how the injury occurred.
- Even if the injury happened a long time ago.
Your role in promoting worker health and safety
Education

Knowledge Broker

Community Leader

Interpretation/Translation

Health System Navigator

Change Agent
How to train workers about health and safety

• Do your homework
  – Learn about their work
  – Search for appropriate or additional resources

• Use participatory education

• Build on the workers’ knowledge

• Demonstrate how to use PPE
## Migrant Clinicians Network - Lista de Recursos 2018

<table>
<thead>
<tr>
<th>Recursos de MCN sobre seguridad en el trabajo y los químicos</th>
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<tbody>
<tr>
<td><strong>Aunque Cerca... Sano: Manual de Entrenamiento sobre Pesticidas</strong></td>
</tr>
<tr>
<td><strong>Inglés:</strong> <a href="http://bit.ly/2q9Mn1v">http://bit.ly/2q9Mn1v</a></td>
</tr>
<tr>
<td><strong>Español:</strong> <a href="http://bit.ly/2tGqUzE">http://bit.ly/2tGqUzE</a></td>
</tr>
<tr>
<td><strong>Material educativo sobre pesticidas dirigido a los trabajadores comunitarios y a los padres de familia sobre diferentes formas de proteger a sus hijos de exposiciones a pesticidas.</strong></td>
</tr>
<tr>
<td><strong>Lo que bien empieza... bien acaba...</strong> <a href="http://bit.ly/1U3Lrkm">http://bit.ly/1U3Lrkm</a></td>
</tr>
<tr>
<td><strong>Libro cómic que busca reducir el riesgo a las exposiciones por pesticidas en mujeres en edad reproductiva.</strong></td>
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<td><strong>Safety and Health on the Farm</strong></td>
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<td><strong>Español:</strong> <a href="http://bit.ly/2nouJBe">http://bit.ly/2nouJBe</a></td>
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<tr>
<td><strong>Libro cómic bilingüe que presenta información sobre la compensación y los derechos y responsabilidades de los trabajadores inmigrantes que trabajan en las lecherías.</strong></td>
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<td><strong>Seguridad en Palabras</strong></td>
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<td><strong>Inglés:</strong> <a href="http://bit.ly/2wWtEik">http://bit.ly/2wWtEik</a></td>
</tr>
<tr>
<td><strong>Diccionario Gráfico Bilingüe de MCN, &quot;Seguridad en Palabras/Safety in Words&quot;, que ilustra los riesgos en el lugar de trabajo y las mejores prácticas de salud y seguridad en la agricultura.</strong></td>
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<tr>
<td><strong>Seguridad en las Lecherías</strong></td>
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</tr>
<tr>
<td><strong>Curriculo sobre la salud y la seguridad de los trabajadores inmigrantes en las lecherías con el objetivo de reducir los peligros en el lugar de trabajo y mejorar el conocimiento y las prácticas de los trabajadores.</strong></td>
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## Recursos de OSHA

<table>
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<tr>
<th>Ley de Seguridad y Salud Ocupacional 1910 (Ley OSH)</th>
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<td><a href="https://www.osha.gov/lees-regs.html">https://www.osha.gov/lees-regs.html</a></td>
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<tr>
<td><strong>Esta página contiene enlaces a todos los estándares actuales de la OSHA, información sobre el proceso de regulación utilizado para desarrollar normas de salud y seguridad en el trabajo, e incluye enlaces a todos los avisos del Registro Federal que están abiertas para hacer comentarios. Incluye enlaces a la Ley de Seguridad y Salud Ocupacional de 1970 (Ley OSH) y otras leyes pertinentes.</strong></td>
</tr>
<tr>
<td><strong>Derechos de los trabajadores</strong></td>
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</table>
| https://www.osha.gov/Publications/3473w
directors-rights-spanish.pdf |
| **Folleto en español que explica los derechos y responsabilidades de los trabajadores.** |
| **Hoja de Datos OSHA** |
| http://www.osha.gov/Don/DonDiets_Cien
der_Tachoppe-tachoppe-spanish.pdf |
| **Esta publicación provee un repaso general de los derechos de los trabajadores, conforme a la Ley de Seguridad y Salud Ocupacional.** |
Resources


• Ergonomics and comunication training for employees: Instructional material. Universidad de Puerto Rico, Recinto de Ciencias Médicas. Susan Harwood Training Grant SH-24925-13-60-F-72

• https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/OHB/Pages/Ergonomics.aspx
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Thank you for your participation!