May 2019

- **Ergonomics**
- **Heat Stress**
- **Bloodborne Pathogens**

LOCATION NAME	PHYSICAL ADDRESS	NEARTEST CITY	STATE	ZIP

	PRINTED NAME (include company name if subcontractor) **NOMBRE EN LETRA IMPRENTA** (si es subcontratista, incluya el nombre de la compañía)	*Signature / Firma*
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use p.2 for additional participants

Check the following to indicate completion and identify any other activities or resources used or referenced.

- ☐ *Communicated the contents of the relevant sections of the company Safety Policy Manual on Manual Lifting, Fatigue Management, Heat Illness Prevention, and Bloodborne Pathogens. and where and how to access.*
- ☐ *Presented OR OSHA 4844 publications on Back, Neck & Shoulder, & Knee Protection.*
- ☐ *Presented OSHA 3431 poster on Heat Illnesses.*
- ☐ *Presented OSHA Fact Sheet on the Bloodborne Pathogens Standard.*
- ☐ *Directed smart phone users to OSHA NIOSH Heat Safety Tool app download (iPhone Apple Store or Google Play for Android users).*

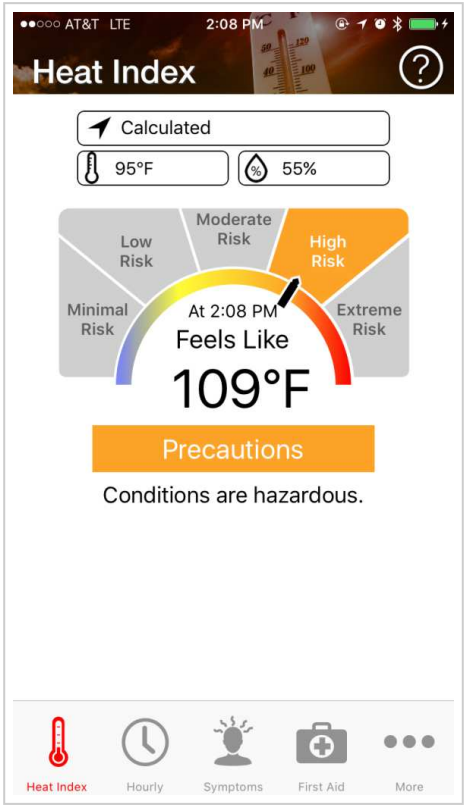
SUPERVISOR/FACILITATOR'S NAME *Signature* **DATE**

HI-SPEED INDUSTRIAL SERVICE

Heat Safety Tool

By U.S. Department of Labor (DOL), Occupational Safety and Health Administration (OSHA) and the Centers for Disease Control and Prevention (CDC), National Institute for Occupational Safety and Health (NIOSH)

Android iPhone



When you're working in the heat, safety comes first. With the OSHA-NIOSH Heat Safety Tool, you have vital safety information available whenever and wherever you need it - right on your mobile phone.

The App allows workers and supervisors to calculate the **heat index** for their worksite, and, based on the heat index, displays a **risk level** to outdoor workers. Then, with a simple "click," you can get reminders about the **protective measures** that should be taken at that risk level to protect workers from heat-related illness-reminders about drinking enough fluids, scheduling rest breaks, planning for and knowing what to do in an emergency, adjusting work operations, gradually building up the workload for new workers, training on heat illness signs and symptoms, and monitoring each other for signs and symptoms of heat-related illness.

Working in full sunlight can increase heat index values by 15 degrees Fahrenheit. Keep this in mind and plan additional precautions for working in these conditions.

The OSHA-NIOSH Heat Tool is available in English and Spanish for Android and iPhone devices. To access the Spanish version, set the phone language to Spanish.

Stay informed and safe in the heat, check your risk level.

For more information about safety while working in the heat, see OSHA's heat illness webpage, including online guidance about using the heat index to protect workers.

Health effects of heat

Two types of heat illness:

Heat Exhaustion


Dizziness

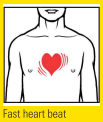

Headache


Sweaty skin


Weakness

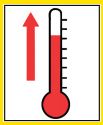

Cramps


Nausea, vomiting


Fast heart beat

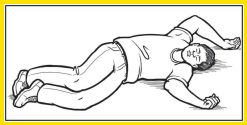
Heat Stroke

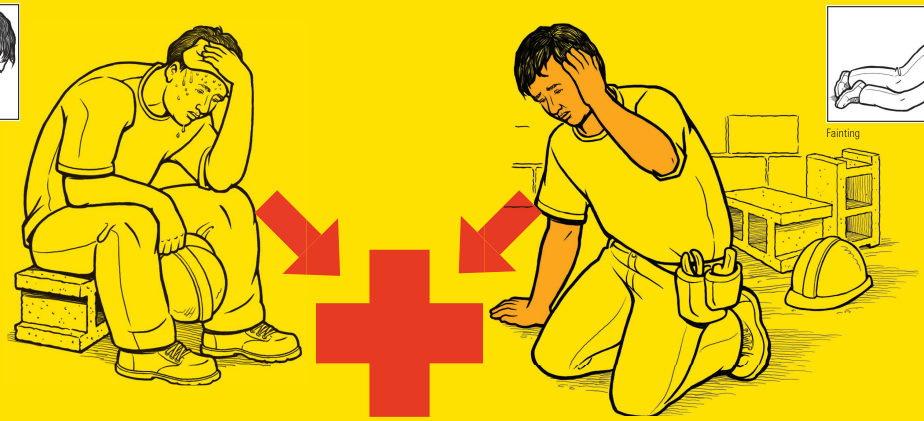

Red, hot, dry skin


High temperature


Confusion


Convulsions


Fainting



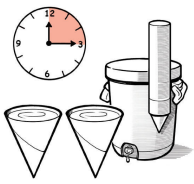
Watch out for early symptoms. You may need medical help.
People react differently — you may have just a few of these symptoms, or most of them.

1

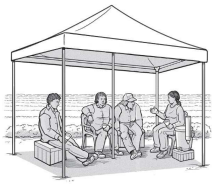
Stay safe and healthy!

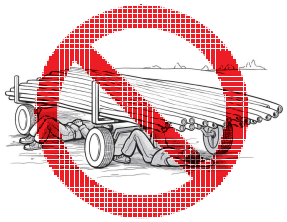
WATER. REST. SHADE. The work can't get done without them.

Drink water even if you aren't thirsty — every 15 minutes.



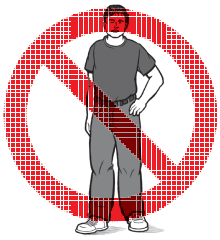
Rest in the shade.





Watch out for each other.

Wear hats and light-colored clothing.



"Easy does it" on your first days of work in the heat. You need to get used to it.
Rest in the shade – at least 5 minutes as needed to cool down.

2

Be prepared for an emergency

Heat kills -- get help right away!

If someone in your crew has symptoms:

1) Tell the person who has a radio/phone and can call the supervisor – you need medical help.

2) Start providing first aid while you wait for the ambulance to arrive.

3) Move the person to cool off in the shade.

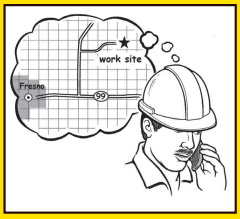
4) Little by little, give him water (as long as he is not vomiting).

5) Loosen his clothing.

6) Help cool him: fan him, put ice packs in groin and underarms, or soak his clothing with cool water.

When you call for help, you need to:

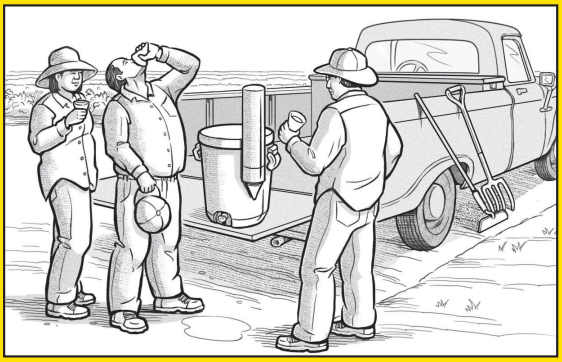
- Be prepared to describe the symptoms.
- Give specific and clear directions to your work site.



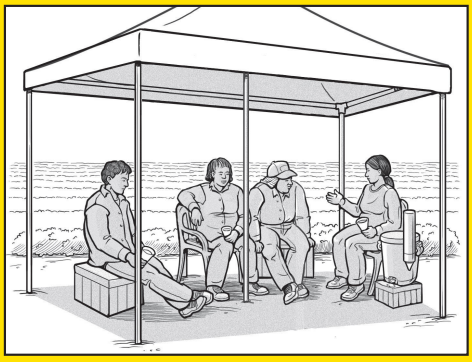
3

Heat illness can be prevented!

At our work site, we have:

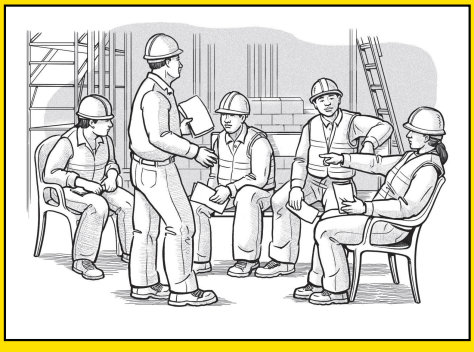


Water



Shade to rest and cool down

We are extra careful when there is a heat wave or temperature goes up. Then we may change our work hours, and we all need more water and rest.



Training and emergency plan

U.S. Department of Labor

OSHA® Occupational Safety and Health Administration
U.S. Department of Labor

Developed by CAL/OSHA

For more information:
1-800-321-OSHA (6742) • TTY 1-877-889-5627 • www.osha.gov

4

OSHA 3431-04N 2011

Solutions for preventing back injuries

Ergonomics means doing the work in a way that will reduce your risk of getting hurt by limiting and avoiding overexertion, awkward postures, and repetitive motions.

- How do you plan the job to include the use of equipment to move material instead of moving it yourself?

- Take micro breaks of 10 to 20 seconds to arch your back and stretch out the muscles. This will increase blood flow and decrease risk of injury.
- Maintain your tools, so they work well and your body doesn't have to work harder.

- How do you raise the work to waist height so your body is in its natural position while you work?

- Ask for help or take several trips to carry material instead of trying to carry it all at one time.

WORK SMARTER, NOT HARDER

Protect your back and your future

Construction Ergonomics

Back Injuries

Could this be you?

Kevin was a 31-year-old carpenter who was helping a co-worker move a column form weighing about 175 pounds and was brought to his knees by a sharp pain in his back. The years of working bent over had just caught up with him, leaving him in searing pain unable to move. The next day was no better, and when he finally made it to the doctor he was told he had overexerted his muscles and would need to be off work until it healed. For four months Kevin survived on the money workers' compensation paid, but it was far less than his normal salary. When he finally returned to work, it wasn't in his usual job and to this day he struggles with the possibility of re-injury if he's not careful.

How would an injury impact your home life?

- **Lower income**
- **Career change**
- **Loss of quality time with family**

What puts you at risk?

Overexertion of your muscles is the leading cause of time-loss injuries for construction workers. Overexertion occurs because the load being lifted, carried, pushed, pulled, or otherwise handled exceeds the limits of the body. Overexertion can cause tearing or stretching of the muscles, tendons, and ligaments.

Regardless of your physical condition, your back has limits as to how long it can be in a bent position and how much it can carry or lift for prolonged periods.

If you overexert your muscles frequently or for extended periods of time they will become fatigued and prone to injury.

Activities that increase muscle fatigue include

- **Force being exerted during the task**
- **Repetition of a task during the work day**
- **Awkward posture of your body during the task**

Bending overstretches the ligaments and squeezes the discs, causing them to press on different parts of the back, including the nerves. Repeated bending can cause trauma to the back that can lead to life-long pain and discomfort.

Overexertion occurs when muscles are fatigued. Lifting and carrying heavy objects, repeating the same motion over and over, or pushing and pulling heavy objects leads to overexertion. This photo (right) is an example of prolonged awkward posture, while applying considerable force.

If you work smarter while doing this	Your back will be healthy enough for you to enjoy this

So what can you do?

For technical support, call the Oregon OSHA central office:

Salem Central Office
350 Winter St. NE, Rm. 430
Salem, OR 97301-3882
Phone: **503-378-3272**

Toll-free number in English:
1-800-922-2689
Toll-free number in Spanish:
1-800-843-8086, option 3

For a free consultation, call the Oregon OSHA field office nearest you:

Portland	503-229-6193
Salem	503-373-7819
Eugene	541-686-7913
Medford	541-776-6016
Bend	541-388-6068
Pendleton	541-276-2353

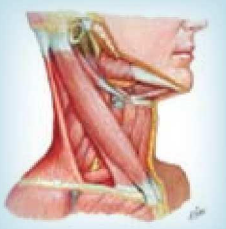
www.orosha.org

Oregon OSHA

DEPARTMENT OF CONSUMER & BUSINESS SERVICES

440-4844-A (10/09) OR-OSHA

Solutions for preventing shoulder and neck injuries



Ergonomics means new ways of doing the work, which will reduce your risk of getting hurt by limiting and avoiding overexertion, awkward postures, and repetitive motions.

What can you do to avoid extended periods of shoulder and neck stress? Can you rotate your work tasks, so your muscles can rest?

How can you change your work posture so your elbows are kept close to your body and at waist height? Can you add a neck support so your muscles aren't holding the full weight of your head?

Maintain your tools so they work well and you don't need as much force to get the job done.

If you can't avoid overhead work, can you suspend tools or choose ones that are lighter and easier to use in awkward positions?

Can you take micro breaks to stretch your muscles and allow them to briefly go back into a natural position?

WORK SMARTER, NOT HARDER

Protect your shoulders and neck and your future

Construction Ergonomics

Could this be you?

When Jim, a sheetmetal worker, bent over to move the 150-pound nitrogen bottle, he never imagined it would be the last time he'd have full strength in his hands. By the end of the week, the pain in his neck and shoulder was so bad he could only sleep on his back. He went to the doctor who found the 49-year-old's grip strength was that of a 70-year-old female. Bending over to move that bottle caused a disc to bulge, which pinched a nerve in his neck. Even today, after surgery on his neck, months of physical therapy, and six weeks of not working, Jim hasn't regained the full use of his right hand and never will.

How would an injury impact your home life?

- **Lower income**
- **Career change**
- **Loss of quality time with family**

What puts you at risk?

Overexertion is the leading cause of time-loss injuries for construction workers. Overexertion occurs because the load being lifted, carried, pushed, pulled, or otherwise handled exceeds the limits of the body. Overexertion can cause tearing or stretching of the muscles, tendons, or ligaments.

Working overhead is particularly risky because your neck is out of natural position and the full weight of your arms is being held in an awkward posture. This is especially hazardous if a lot of **force** is required to complete the task because you are putting excessive stress on your shoulder muscles.

Regardless of your physical condition, your shoulder and neck muscles have limits to how long they can be flexed in an awkward posture before you feel discomfort.

When you put excessive stress on your body by working in awkward positions, the tendons can become inflamed. Inflamed tendons take up more space, impede range of motion, and can eventually cause pain.

If you continue working through the discomfort, you may lose shoulder mobility and strength, and could be putting yourself at risk for a long-term injury.

If you work smarter while doing this	Your shoulder and neck will be healthy enough for you to enjoy this

So what can you do?

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www.orosha.org

Oregon OSHA

DEPARTMENT OF CONSUMER & BUSINESS SERVICES

440-4844-B (10/09) OR-OSHA

Solutions for preventing knee injuries

Ergonomics is adjusting the work to fit the worker. Raising the work off the ground, for example, will help you maintain the health of your knees by limiting kneeling, squatting, and contact stress.

Can you raise the work off the floor so you don't have to squat or kneel to reach it?

Can you plan your job so equipment is available to use, such as a power stretcher to lay carpet instead of a knee kicker?

Can you add an extension on your tool so you can work at waist height instead of kneeling?

If you do have to kneel, wear knee pads and take micro breaks of 10-20 seconds to extend your leg and allow the knee to return to resting position. These micro breaks will allow blood flow and decrease risk of injury.

WORK SMARTER, NOT HARDER

Protect your knees and your future

Construction Ergonomics

Knee Injury

Could this be you?

Twenty years ago, while working as a carpenter, Chris suddenly developed knee pain. Although he went to the doctor, he didn't think it was serious enough for the arthroscopic surgery the doctor ordered. Several years later, the pain returned. This time the doctor's visit revealed a tear in his meniscus, which had apparently been there all along. Chris finally had surgery to repair the tear, but a complication left him in worse pain than before. This led to total knee replacement and although he's now pain free, he has lost range of motion. Chris offers advice to his fellow construction workers: "Don't be the macho man; get your injuries treated timely and avoid complications later."

How could an injury impact your home life?

- **Lower income**
- **Loss of career**
- **Loss of quality time with family**
- **Chronic knee pain**
- **Reduced cash flow**

What puts you at risk?

Tasks that involve frequent stooping, kneeling, or squatting puts your knees at risk for injury.

The knee is made up of muscles that move the knee joints; tendons and ligaments that provide stability; cartilage to absorb shock; and the bursa, a small sac of fluid under the kneecap that lubricates your knee so it moves easily. *All of these are susceptible to injury through excessive wear and tear or continual stress.*

Activities that stress your knee

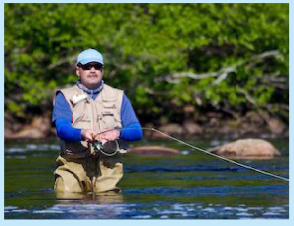
- Kneeling or squatting for long periods of time
- Repetitive kneeling or squatting
- Contact stress

Kneeling and squatting: Overstretches the ligaments and squeezes the bursa. Excessive kneeling or squatting can cause irritation, inflammation, and pain. If the ligaments in your knee become too unstable, your knee may give out when you pivot your foot to turn and walk.

Overexertion: Tendonitis, or inflammation of the tendon, is often a result of overuse or overexertion of the knee. Overexerting the muscles around your knee can also lead to tearing and pain. Continuing to use your knee while in pain will only delay healing and may lead to long-term damage.

Contact stress: Using your knee as a hammer or kneeling on a hard floor are both examples of contact stress. Excessive kneeling can cause the bursa to become irritated, leading to pain, inflammation, and limited range of motion.

If you work smarter while doing this	Your knees will be healthy enough for you to enjoy this



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Oregon OSHA

DEPARTMENT OF CONSUMER & BUSINESS SERVICES

440-4844-C (5/10) OR-OSHA

OSHA® FactSheet

OSHA's Bloodborne Pathogens Standard

Bloodborne pathogens are infectious microorganisms present in blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV), the virus that causes AIDS. Workers exposed to bloodborne pathogens are at risk for serious or life-threatening illnesses.

Protections Provided by OSHA's Bloodborne Pathogens Standard

All of the requirements of OSHA's Bloodborne Pathogens standard can be found in Title 29 of the Code of Federal Regulations at 29 CFR 1910.1030. The standard's requirements state what employers must do to protect workers who are occupationally exposed to blood or other potentially infectious materials (OPIM), as defined in the standard. That is, the standard protects workers who can reasonably be anticipated to come into contact with blood or OPIM as a result of doing their job duties.

In general, the standard requires employers to:

- **Establish an exposure control plan.** This is a written plan to eliminate or minimize occupational exposures. The employer must prepare an exposure determination that contains a list of job classifications in which all workers have occupational exposure and a list of job classifications in which some workers have occupational exposure, along with a list of the tasks and procedures performed by those workers that result in their exposure.
- **Employers must update the plan annually** to reflect changes in tasks, procedures, and positions that affect occupational exposure, and also technological changes that eliminate or reduce occupational exposure. In addition, employers must annually document in the plan that they have considered and begun using appropriate, commercially-available effective safer medical devices designed to eliminate or minimize occupational exposure. Employers must also document that they have solicited input from frontline workers in identifying, evaluating, and selecting effective engineering and work practice controls.
- **Implement the use of universal precautions** (treating all human blood and OPIM as if known to be infectious for bloodborne pathogens).
- **Identify and use engineering controls.** These are devices that isolate or remove the bloodborne pathogens hazard from the workplace. They include sharps disposal containers, self-sheathing needles, and safer medical devices, such as sharps with engineered sharps-injury protection and needleless systems.
- **Identify and ensure the use of work practice controls.** These are practices that reduce the possibility of exposure by changing the way a task is performed, such as appropriate practices for handling and disposing of contaminated sharps, handling specimens, handling laundry, and cleaning contaminated surfaces and items.
- **Provide personal protective equipment (PPE), such as gloves, gowns, eye protection, and masks.** Employers must clean, repair, and replace this equipment as needed. Provision, maintenance, repair and replacement are at no cost to the worker.
- **Make available hepatitis B vaccinations to all workers with occupational exposure.** This vaccination must be offered after the worker has received the required bloodborne pathogens training and within 10 days of initial assignment to a job with occupational exposure.
- **Make available post-exposure evaluation and follow-up to any occupationally exposed worker who experiences an exposure incident.** An exposure incident is a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or OPIM. This evaluation and follow-up must be at no cost to the worker and includes documenting the route(s) of exposure and the circumstances

under which the exposure incident occurred; identifying and testing the source individual for HBV and HIV infectivity, if the source individual consents or the law does not require consent; collecting and testing the exposed worker's blood, if the worker consents; offering post-exposure prophylaxis; offering counseling; and evaluating reported illnesses. The healthcare professional will provide a limited written opinion to the employer and all diagnoses must remain confidential.

- **Use labels and signs to communicate hazards.** Warning labels must be affixed to containers of regulated waste; containers of contaminated reusable sharps; refrigerators and freezers containing blood or OPIM; other containers used to store, transport, or ship blood or OPIM; contaminated equipment that is being shipped or serviced; and bags or containers of contaminated laundry, except as provided in the standard. Facilities may use red bags or red containers instead of labels. In HIV and HBV research laboratories and production facilities, signs must be posted at all access doors when OPIM or infected animals are present in the work area or containment module.
- **Provide information and training to workers.** Employers must ensure that their workers receive regular training that covers all elements of the standard including, but not limited to: information on bloodborne pathogens and diseases, methods used to control occupational exposure, hepatitis B vaccine, and medical evaluation and post-exposure follow-up procedures. Employers must offer this training on initial assignment, at least annually thereafter, and when new or modified tasks or procedures affect a worker's occupational exposure. Also, HIV and HBV laboratory and production facility workers must receive specialized initial training, in addition to the training provided to all workers with occupational exposure. Workers must have the opportunity to ask the trainer questions. Also, training must be presented at an educational level and in a language that workers understand.
- **Maintain worker medical and training records.** The employer also must maintain a sharps injury log, unless it is exempt under Part 1904 -- Recording and Reporting Occupational Injuries and Illnesses, in Title 29 of the Code of Federal Regulations.

Additional Information

For more information, go to OSHA's Bloodborne Pathogens and Needlestick Prevention Safety and Health Topics web page at: https://www.osha.gov/SLTC/bloodbornepathogens/index.html.

To file a complaint by phone, report an emergency, or get OSHA advice, assistance, or products, contact your nearest OSHA office under the "U.S. Department of Labor" listing in your phone book, or call us toll-free at **(800) 321-OSHA (6742)**.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; the teletypewriter (TTY) number is (877) 889-5627.

For assistance, contact us. We can help. It's confidential.

DSG 1/2011