The physical risk factors in a workplace that can contribute to the development of musculoskeletal injuries and disorders can be both numerous and complicated. However, there are several basic principles and “best practices” that should be considered when attempting to eliminate or reduce these physical risk factors. If you have jobs that have more than one of these risk factors occurring at the same time (combination exposures), these should be your first priority for improvement. You should also consider involving workers in brainstorming solutions if physical risk factors are found.

**Awkward Postures:**
Avoid holding the body in the same position for long periods of time (static postures).
- Try to move from that posture, even if for a short period of time.
- Use a machine to do the task (if possible).
- Keep the body moving (dynamic movements) -- vary the levels or distance in which the work is performed.

Avoid working with the limbs far from the torso.
- Adjust (lower) the height of the work to below shoulder level.
- Frequently performed activities should be performed directly in front of the body.

Avoid hand tools or the orientation of objects that cause the wrist to bend up (extension) or down (flexion) or to the side (wrist deviation).
- Use tools with bent handles.
- Use jigs or work surfaces that can orient the object into a position that keeps the wrist straight.

Avoid working with the back bent forward (back flexion) for long periods of time.
- Raise the work to at least waist level.
- Alternate with work that is performed standing up straight.

**High Hand Forces:**
When grasping an object with any kind of force, avoid using a pinch grip (grasping with the tips of the fingers). A power grip (holding the object with the fingers wrapped around it) can generate more force.
- Use a tool such as a vise or a jig to hold the object that requires a power grip.

**Repetitive Motions:**
Avoid having to perform quick motions repeatedly over an extended period of time.
- See if it is possible to use a machine instead.
- Alternate the performance of repetitive tasks with less repetitive ones.

**Heavy, Awkward and Frequent Lifting:**
Avoid lifting objects that:
- can’t be lifted close to the body,
- require twisting during the lift,
- are too big or of a shape that doesn’t allow a good hold by the hands,
- require the start and end of the lift to be below knee level or above shoulder level, if the object is heavy.
- Use a machine to do the lifting (if possible).
- Arrange space so that heavier objects are kept between knee and shoulder height.
- Store less used, lighter, smaller objects below knee level or above shoulder level if there are no other alternatives.
Decision-Making and Safer Outcomes

By some estimates, the average adult makes upward of 35,000 decisions a day. Many decisions are relatively low risk, even trivial – what to wear to work or how to respond to a social request. But the potential outcomes of some decisions can have serious, even life-threatening effects. Just think that if only 1% of your decisions are RISKY, then you put yourself in danger 350 times per day. Studies have further shown that we make 21 RISKY decisions per hour we are awake which equates to 1 RISKY decision every 3 minutes. So, if you have 100 drivers, 300 risky decisions are being made every 3 minutes. How much risk can you take on or afford?

Consider the stakes of:

- A truck driver who sees an oncoming vehicle in his lane and must make a split-second decision.
- An employee who must decide whether to continue to work with a missing guard.
- A manager/supervisor deciding whether to continue operating a piece of equipment with safety devices bypassed or compromised.
- A new employee who sees a crucial safety step overlooked and must decide whether to speak up to his more experienced co-worker or driver manager.

Poor decisions can be made with good intentions yet are still poor decisions. Humans tend to choose the best they know how. It’s up to company leaders to provide drivers/employees with the knowledge, skills, tools and environment to consistently make the choice/decision that reduces exposure for themselves and others.

OSHA Recordkeeping Requirements

- Remember that your OSHA log 300A, which summarizes job-related injuries and illnesses logged during 2016 must remain displayed through April in a common area where notices to employees are usually posted. Business with 10 or fewer employees and those in certain low-hazard industries are exempt from OSHA recordkeeping and posting requirements. Also, note that OSHA is not accepting electronic submissions of injury and illness logs at this time. Additional updates on electronic submission will be posted to the recordkeeping webpage (https://www.osha.gov/recordkeeping/index.html).