




STRETCHING FOR THE INDUSTRIAL ATHLETE



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TERMINOLOGY

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MSDS BACKGROUND

Musculoskeletal disorders (MSDs) these are injuries/disorders of muscle, nerve, tendon, joint, cartilage and spinal discs.

Various types of MSDs: sprain/strain, muscle rupture, tendonitis, epicondylitis, De Quervain's tenosynovitis, trigger finger, rotator cuff, nerve entrapment, carpal tunnel, Thoracic outlet syndrome, back pain, herniated disc, hand arm vibration syndrome, hernia, etc.

Work related risk factors:
High force, awkward/sustained posture, excessive repetition, contact stress, vibration and extreme temperature

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COMMON BODY PARTS AFFECTED

- Back
- Trunk
- Arms
- Hands
- Legs
- Feet


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WHY DO WE STRETCH?

Musculoskeletal disorders are associated with high cost to employers.

MSD economic burden equates to \$45-54 billion annually from compensation cost, lost wages and lost productivity.



According to the U.S. Bureau of Labor Statistics, musculoskeletal disorders account for more than 600,000 injuries and illnesses and 34 percent of all lost workdays.

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WHY DO WE STRETCH?

-  Additional administrative control.
-  Beneficial for increasing the joint/muscle flexibility.
-  Increase company moral between management and workers.

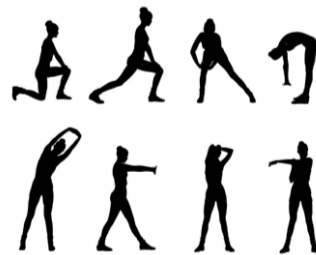


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TYPES OF STRETCHING

- Dynamic
- Static
- Ballistic
- Isometric
- PNF



BEFORE WE STRETCH THINGS TO REMEMBER:

1. The idea is to increase flexibility and increase blood flow to a body part.
2. Stretch slowly but do not bounce.
3. Do not stretch until you are in pain, stay within your limits.
4. Should be part of a daily routine.
5. Have underlying conditions professionally assessed.

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LETS GET UP AND TRY IT

- Remember 10 seconds each
- Do not bounce
- Do what you are comfortable with



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DYNAMIC STRETCH TIME

- Butt kicks
- Open close hands
- Wrist circles figure 8's
- Alt reverse lunge
- Ankle rolls or stinky leg
- Self hug lumbar rotations
- Butt kicks



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HOW DO I TEACH STRETCHING?

- “Don't just YouTube it”
- Recommend seeking outside consultation from an injury prevention specialist, Athletic trainer, Physical therapist, etc.
- Create tailored program based off of the physical demand of the task
- Have appropriate instructors trained in the stretches that are tailored for the workers

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MICRO STRETCHING

- Stretching should happen once every hour
- If your employee is sitting in a prolonged position or holding a static pose should stretch every 30-45 minutes
- Jobs that have repetition and frequency can benefit from micro stretching through out shift
- Micro stretching should take 1-3 minutes
- Target the area that has been held in the prolonged position or an area that may have had a lot of repetition.

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FACTORS THAT INCREASE MSDS RISK

- Lack or limited frequency for breaks (in a repetitive task)
- Long durations
- Long exposure to risk factor
- Combination of risk factors on a job task (exertion and repetition)



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LETS MICROSTRETCH

- Target a body part being used frequently during the day
- Pick one of the dynamic stretches
- Hold 10 seconds



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Implementing a stretch program at your site

- Establish buy in with stakeholders
- What program works for your team
- Communication
Employee feedback
- Training
- Management/leadership
- Stretch leaders
- The entire team
- Re-evaluate and improve

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- For effectiveness, workers must participate at least 2 to 3 days per week, for 5 to 10 minutes.
- Partnering a stretch program with an ergonomic program can help reduce MSDs.
- Identify ROI through MSD metrics, employee feedback and productivity.

EFFECTIVE STRETCH PROGRAMS

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STRETCHING AND METRICS

Example: Manufacturing facility completed an employee survey after implementing a stretch program and stretch leader training.

- Metrics:
 - Decreased LTIR
 - 50% reduction of MSD related cases(OSHA recordable and first aids)
- Employee survey feedback was positive (survey was 1-10), average score was 7.5-8.2



- 75% of participants felt like stretching could occur twice per shift
- 50% of participants performed at least one of the group stretches during shift
- Indicated change in safety behavior in the work culture

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ADDITIONAL EQUIPMENT

Having a stretch area or stretch zone with tools to utilize to target muscle groups they could not get with stretching.

- Foam roller
- Lacross ball
- Stretch cage
- Theracane
- Massage stick
- Yoga mat



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WHAT IF THEY DON'T WANT TO STRETCH?

Ask	Ask why? There maybe a work related injury, personal injury or prior trauma.
Suggest	Suggest they stretch what they feel needs extra attention.
Discuss	If your company is a union based company, discuss with the union prior to stretch program implementation.



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WHEN NOT TO STRETCH

- Prior injury/trauma
- Discomfort participating
- Doctor's restrictions

Solution: Have them participate in the stretches they feel comfortable doing. Not everyone is the same.

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LETS GET UP AND TRY IT!

Hold 10 seconds each.
Do not bounce.
If your feeling discomfort or unable to do the exercise do what you are comfortable with.



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LETS COOL DOWN! STATIC STRETCH TIME

- Hand flexion/extension stretch
- Arm across body
- Neck stretches
- Legs- Alt. side lunge
- Calves- Alt. calf holds
- Overhead arm reach



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LETS WRAP IT UP

Stretching can be beneficial for a moral booster, an extra administrative control for assisting with MSD reduction

A stretch program can make a greater impact when paired with an ergonomic plan

Make sure to train your stretch leaders not from YouTube but from a trained professional

Dynamic and Static stretching for the industrial athlete is best!

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