



## Ergonomics in Your Workspace

How to structure your workplace and workday for lasting physical health!

# Introduction

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- CCFS
- Husband & father



# Today's objective

- Understanding modern day ergonomics
- Discuss the specific injuries that impact both desk/office work and physical labor
- Review best practices for workstation set up
- Discuss programs for both office and field employees to improve their daily ergonomic practices



# Understanding Ergonomics

- Ergonomics is the science of designing tools, programming, and the workplace so people can reduce the risk of work-related injuries.
- Injury prevention programs look at the physical stress of a job as well as environmental factors that impact human comfort and health.







# Understanding Ergonomics

- We may think of desk work as “safe work”
- We may think of field work as “physical activity”
- Both are true however we need to take a deeper look of what specifically is going on in both workspaces..



# Office/Desk Work

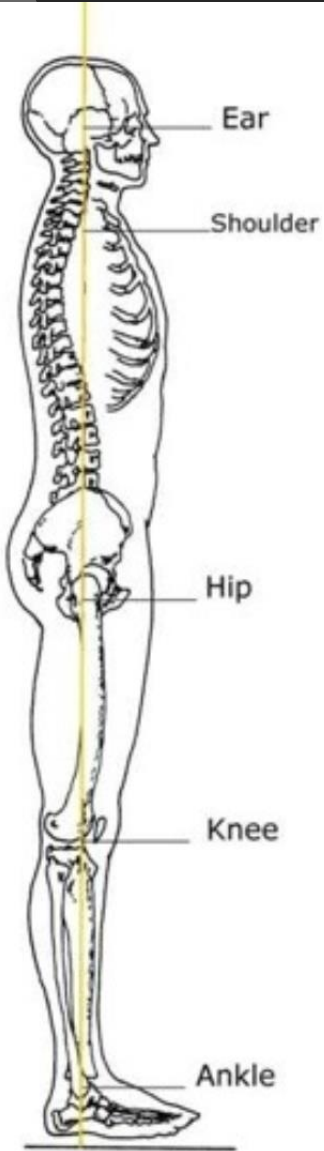
- Occupational injury statistics are showing increase in sedentary worker injuries over the past ten years.
- Common issues stems from awkward and improper body position.
- On-going overuse and underuse of certain muscles groups can lead to pain, fatigue, and injury.
- Repetitive movement injuries to keep workers away from work longer than all other occupational injuries or illness.
- Source: Bureau of Labor Statics, National Safety Council





# Field/Physical Work

- Most common physical work-related injuries include:
  - Overexertion, bodily reaction (31.4%)
  - Falls, slips, and trips (26.7%)
  - Contact with objects/equipment (26.2%)
- Additional injuries include transportation, harmful substances, fire and injury by persons or animals.
- Source: Bureau of Labor Statics, National Safety Council



# Musculoskeletal Disorders

- As you can see simply sitting at a desk or standing can impact neutral posture, and prolonged periods of time increase this impact.
- Without consistent intervention this can lead to chronic conditions such as Repetitive Motion Disorder or Overuse Syndrome.
- MSDs are a serious problem for employers. The economic burden, including workers' compensation costs, lost wages, and lost productivity, is estimated to be between \$45 and \$54 billion annually.
- Source: Bureau of Labor Statics, National Safety Council



# Stages of MSD

Stage	Symptoms
Early stage	Aching and tiredness of the affected area occur during the work shift but disappear at night and during days off work. There is no reduction of work performance.
Intermediate stage	Aching and tiredness occur early in the work shift and persist at night. The worker may have a reduced capacity for repetitive work.
Late stage	Aching, fatigue, and weakness persist even after resting. The worker experiences sleeplessness and is unable to perform light duties.

# Workstation Set Up



- **Head** - Should be level, not tilted or twisted
- **Shoulders** - Relaxed, elbows close to side
- **Back rest** - Should be tilted back 10 to 20 degrees
- **Lumbar** - Lower back should be supported by curve of chair
- **Armrests** - Should support forearms equally
- **Wrists** - Straight, in line with forearms
- **Hips** - Should fit comfortably into chair
- **Back of knees** - Small gap between knees and front of seat
- **Knees** - Level or slightly lower than hips
- **Feet** - Should be flat on floor or supported by footrest

# Workstation Key Action items



Avoid tight angles at each join



Be mindful of each joints “neutral position”



Elevate your eyes



Lower your keyboard



Adjust your chair



Support your feet

# Alternative Workstations

01

Standing workstations can increase calorie burn by 54 calories per day \*5lbs per year! (\$160-\$800)

02

Take it a step further (literally) walking workstation, calorie burn depends on usage (\$3k-\$4k ea.)

03

Pedal desk station can burn 144 calories per day when used for just 2 hours \*10lbs per year! (\$40-\$1300)



# The Stability Ball Chair

- Pub Med did a study....
- Minimal increase in muscle activation
- Zero increase in calorie burn
- Significant increase in discomfort
- If it is working for you, great! Most find discomfort over time

# Postures Role in Ergonomics

- Neutral Posture: the resting position of each joint, where there is no stress or tension present in the nerves, tendons, muscles, or bones.
- Muscles are not flexed or extended
- Examples: neck, wrist, elbow, back

# Improving Posture

Office/Desk worker  
approach:

Implement 30 mins of daily  
planned physical activity,  
implement daily  
mobility/stretch routine.

Field/manual labor approach:

Implement 15mins of  
recovery focused planned  
activity each day in  
conjunction with a pre and  
post shift routine.

# 30 min of Planned Physical Activity (office staff)



Brisk walk



Bike ride



Body weight exercises



Yoga



Zumba/Dance

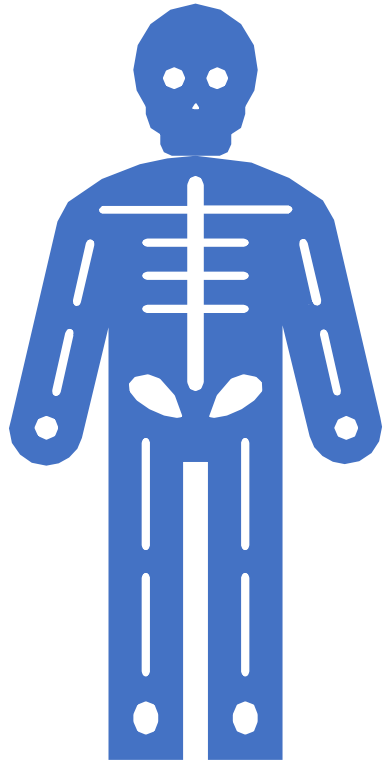


Resistance training



ACSM guidelines





## Daily Mobility/Stretch Routine

- Neck CAR
- Shoulder CAR
- Neck floss
- OH- reach and lean
- Chest openers
- Hip CAR
- Toe scoop
- Quad pull
- Hamstring floss




## Pre-shift Routine

- Focused on muscle and nervous system activation, pre-hab on key joints (shoulders, hips, knees)
- Reach and row
- Shoulder Y/T
- Hip hinge
- Glute compass

# Post Shift Routine

- Focused on restoring muscle length and relaxation
- Trap stretch
- OH reach and stretch
- Palms stretch
- Quad pull
- Cross leg touch toes

NAME	ALLEN.	NO.	307.
DATE	11/05.		
NAME	ANDREW.	NO.	359.
DATE	11/05.		
NAME	BEN.	NO.	308

A silhouette of a person in a yoga pose, specifically a standing split (Urdhva Dhanurasana), with arms raised and hands clasped above the head. The person is standing on a sandy beach. The background features a sunset or sunrise over a body of water, with mountains visible in the distance. The sky is filled with soft, golden light and scattered clouds. A large, semi-transparent white circle is overlaid on the left side of the image, containing the title and list.

## Fifteen Minutes of Planned Recovery

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- Yoga
- Passive stretching
- Self massage w/foam rollers etc
- Meditation
- Manual stretching



# Workshop Review

- Ergonomics: Ergonomics is the science of designing tools, programming, and the workplace so people can reduce the risk of work-related injuries.
- The needs of our staff are going to vary depending on their job duties, physical condition, and work environment.



# Office Staff



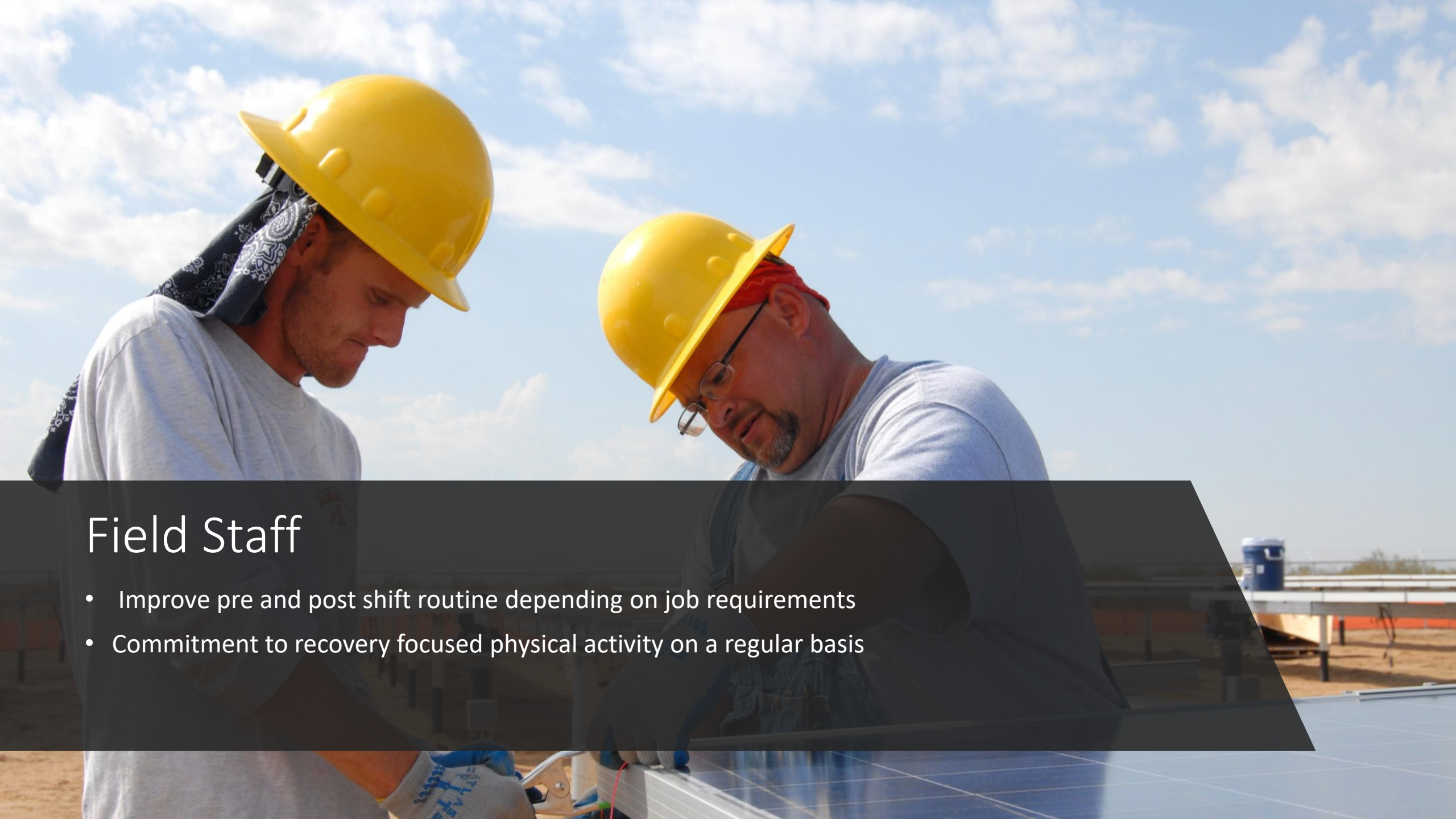
MINDFUL WORKSTATION  
SET UP



COMMITMENT TO DAILY  
EXERCISE



COMMITMENT TO DAILY  
MOVEMENT ROUTINE

A photograph of two men wearing yellow hard hats and safety glasses, working on solar panels. The man on the left is wearing a grey t-shirt and a blue bandana around his neck. The man on the right is wearing a grey t-shirt and a red bandana. They are both looking down at the solar panels. The background is a clear blue sky with some clouds. A semi-transparent dark grey box is overlaid on the bottom left of the image, containing the text 'Field Staff' and a bulleted list.

## Field Staff

- Improve pre and post shift routine depending on job requirements
- Commitment to recovery focused physical activity on a regular basis

# Next steps..

- Complimentary implementation call
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- TeamUpwellness.com
- Raffle
- Live Q & A

TEAMUP