## Store it off the Floor





- **✓** Store infrequently used objects on the floor or at shoulder level
- Use tables, benches or stands to get your work of the floor
- Store things on shelves to decrease the number of times you need to bend in a day











For more info visit: cre-msd.uwaterloo.ca

## Store it off the Floor

#### Did you know...

The closer your hands are to the ground while lifting, the more likely you are to hurt your back

Lifting from the ground puts extra loads on your spine and also puts the spine in a weak position... a bad combination

Even bending to lift a pencil from the ground can overload your back

If you lift from the ground ...even if you "bend your knees" or "use your legs not your back", there is an increased risk for your back

#### Improve your workplace

Ask yourself and others, "why do I have to lift that object from the floor to do my job?" and keep asking "why" until you get a good answer!

Use these ideas for every lifting task at work (and home)

#### Ideas for a healthy back

Use lift assist devices, hand trucks, or handling devices to avoid actually lifting items by hand

Avoid working at floor level: use tables, benches or stands to keep items off the floor

Place commonly used and heavy items at waist height

Even under ideal conditions (load is waist high, close to your belly button and only lifted occasionally), loads should not be more than 23kg (50lb)

### Liftug strategies

Team lift: use a partner

Bend at your hips: butt out, "proud" chest, don't round your back

Keep the object close to your body or between your legs

Keep the work area clear of trip hazards

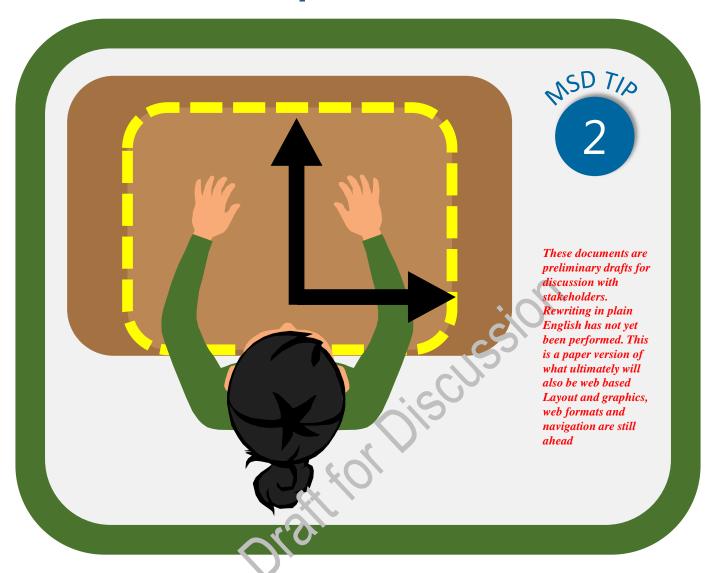
#### What are we going to do today to keep our backs healthy while working?

| 1) |   |
|----|---|
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# **Keep It Close**



- **✓** Perform work directly in front of your body without reaching too far
- ✓ Avoid reaches to the side that can twist your spine
- Perform more frequent tasks closer to your body
- Arrange your workstation so that rare tasks are out of the way and common tasks are easily reached









# **Keep it Close**

#### Did you know...

Long or frequent forward reaches can overload your back and shoulder muscles and increase your risk of injury

Sideways reaches or picking up a load to the side cause your back to twist. Twisting puts your spine in a weak position, increasing the risk of overloading your back.

If you are working with your arms stretched out in front of your body your shoulders fatigue quickly

#### Improve your workplace

Ask yourself and others, "why do I have to reach and twist to do my job?" and keep asking "why" until you get a good answer!

Use these ideas at work (and at home)

#### Ideas for a healthy body

Arrange your workspace so commonly used or heavier items are directly in front and close to your body

Take a minute when you start work to move things where you want them to be; everybody uses things differently

Even under ideal conditions (load is waist high, close to your belly button and only lifted occasionally), loads should not be more than 23kg (50lb)

Move unused items a way to create a clutterfree and easy-to-t se workspace

### Reaching strategies

Perform most frequent tasks closest to your body

Move your feet so your spine doesn't have to twist

Bend at your hips if you must reach something far away

## What are we going to do today to keep our backs and shoulders healthy while reaching?

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## **Hands Below Head**





- Use lighter tools and materials to reduce overhead work demands
- Add a bit extension shaft for drills or screw guns
- Investigate other tools or assists that can limit the amount of overhead work required









## **Hands Below Head**

#### Did you know...

Working with hands above shoulder height ("**overhead**") can quickly fatigue your shoulder muscles and lead to shoulder injury.

Holding a tool or object when working overhead makes the risk even higher

Your arms have shorter endurance, less accuracy, and decreased productivity when working overhead

If you have to look up when working overhead, it can quickly fatigue your neck area

#### Improve your workplace

Ask yourself and others, "why must I work overhead to do my job?" and keep asking "why" until you get a good answer!

Use these ideas to improve every overhead task at work (and home)

#### Ideas for healthy shoulders

Stand on a raised surface or platform to reduce the actual working height

Some tools can use extensions to do the reaching for you

Use temporary clamps or fasteners to hold objects in place and allow you to use both arms for your work

Light-weight tools will reduce the overall load on your shoulde s if you must work overhead

### Working strategies

XXX

XXX

Use the right (and light) tool for the job

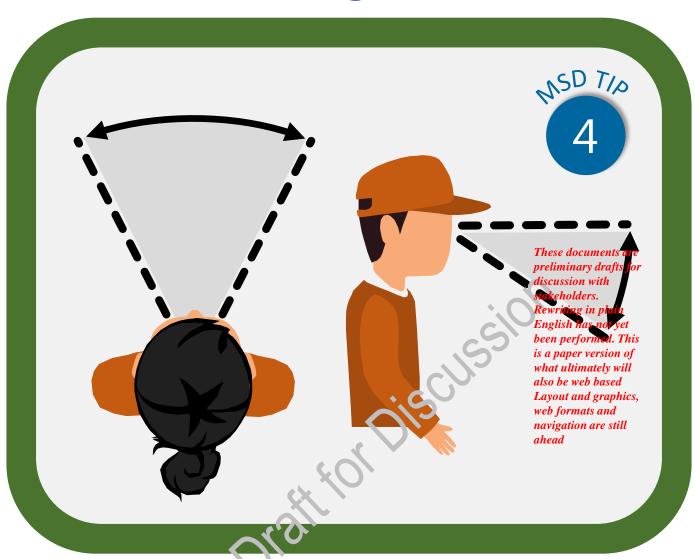
## What are we going to do today to keep our shoulders and necks healthy if the work is overhead?

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# **Look Straight Ahead**



- Adjust the position of your work and the equipment you are working on to keep your neck and head straight
- Place work requiring visual attention or computer displays below eye level to match your vision and the task to keep your neck straight
- Remember to give your neck a break
- Arrange your workspace so the most common items are centred on your body









# **Look Straight Ahead**

### Did you know...

Bending your neck forward (or backwards) on a regular basis and without pauses can overload its muscles and lead to fatigue or injury

Looking to one side and twisting your neck on a regular basis and without pauses triples your risk of neck injury compared to looking straight ahead

If workers can't see their work or a computer screen clearly, they tend to lean forward or bend and twist their neck. It's called a "pigeon neck" and can lead to fatigue and pain in the neck and shoulders

Poor workspace setup can contribute to sore eyes too

#### Improve your workplace

Ask yourself and others, "why do I have to bend and twist my neck to do my job?" and keep asking "why" until you get a good answer!

Use these ideas to improve for every task at work (and home)

#### Ideas for a healthy neck

Set up your workspace to "Look straight ahead"

Characters on a screen or graphics can be enlarged so you can easily see your work

Consider investigating corrective lenses matched to your work if your vision is making you lean forward or twist or bend your neck to work

Place work requiring visual attention or computer displays below eye level to match your vision and the task

To start, acliust the distance of your work or screen to be about an arms length from your eyes. Then move it to find the best distance for your vision and the task

#### Setup strategies

Arrange your workspace so the most common items are centred on your body

#### What are we going to do today to to keep our necks healthy?

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# Get a (Good) Grip



- Use your whole hand in a power grip for high force work and a pinch grip only for low force, precision work
- Choose a tool and grip that puts your wrist in a strong, natural posture
- Choose a tool with a good shape for the task with a size that fits your hand
- Power tools with the low vibration and no "kickback" are best









# Get a (Good) Grip

### Did you know...

Power grips (using the whole hand) are five times stronger than pinch grips (using only the fingers to hold the object)

Pinch grips work well for precision work, but fatigue very quickly during forceful work

Regular forceful pinch grips are the strongest predictor of hand and arm disorders

Awkward wrist postures while gripping can cause high loading and fatigue in the hand and wrist

A grip size that is too big or small for your hands increases the effort required to do the task and increases fatigue

#### Improve your workplace

Ask yourself and others, "why are the workspace and tools not right for the job" and keep asking "why" until you got a good answer!

Use these ideas to improve for every task at work (and home)

#### Ideas for a healthy hands

Avoid repeated, pinching tasks that can cause muscle fatigue and wrist disorders. This is especially important if the pinch grip is forceful

Arrange your work so your wrists are in a strong, natural position when performing gripping tasks or using tools

Choose a tool that matches the taskbend the handle, not the wrist

Replace or nodify tools that don't fit your hand, are slippery, vibrate or dig into your hand

#### **Gripping strategies**

Choose the right grip and tool for the job:

power for strength, pinch for precision

If a task requires forceful pinch grips, consider modifying it by using a tool or changing the task

Repair or replace tools that have strong vibration

#### What are we going to do today to keep our hands and arms healthy?

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# **Change It Up**





- Design work to provide "micro breaks", pauses or "working rests" that allow the body to recover and prevent fatigue
- Poor recovery can occur during longer duration efforts with few pauses as well as in repetitive tasks
- MSD hazards, with little chance for the body to recover, have a high priority for change







# Change It Up

#### Did you know...

Repeated or sustained work with little chance for the body to recover, can lead to muscle, tendon, or ligament disorders

Well-organized work can let one part of your body recover while another is performing a different task

To help assess a task, look at whether there is any recovery time or pauses built in, not only the production rate or repetitiveness

Variety is the spice of life and work, so *Change it Up* 

### Improve your workplace

Ask yourself and others, "v'hy does this job have little recovery time built in?" and keep asking "why" until you get a good answer!

Use these ideas to improve for every task at work (and home)

#### Ideas for improved recovery

Design work so that there are pauses, microbreaks and different activities built-in that allow the body to recover... these are called "working rests"

Even a seeming light task, like using a computer mouse, needs recovery time built-in

Organize your day to include a range of different tasks. Switch between tasks that load different parts of your body

Organize work so that workers have the flexibility to vary their activities to allow recovery when they need it

#### Recovery strategies

Explore the idea of moving between tasks on a regular basis within a group of workers – job rotation - but don't expose the group of workers to any tasks with high MSD hazards

Job rotation should not be used as the only fix for MSD hazards: work to eliminate or reduce the hazards themselves

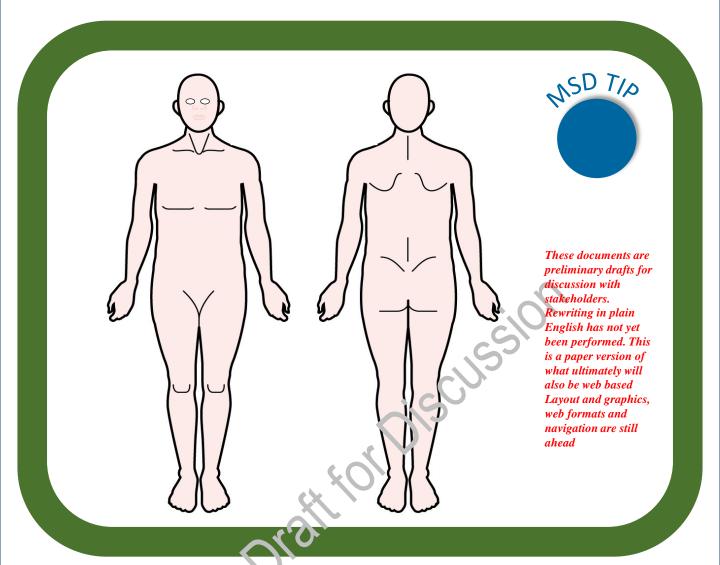
#### What are we going to do today to improve recovery time for our body?

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### Work Shouldn't Hurt



- We all suffer occasional pain and discomfort at work, but work shouldn't hurt regularly
- Workers should talk with their supervisor, manager or business owner about their pain at work
- After attending to their pain and discomfort, use workers' reports as a trigger to look for MSD hazards and act to control any found \_\_\_\_\_
- Use the diagram above to help map patterns of pain and discomfort









# Work Shouldn't Hurt

### Did you know...

MSD hazards can lead to discomfort, pain in muscles, tendons, nerves and ligaments and disability. These hazards can also make previous MSD problems worse

A job that overloads the body and doesn't allow allow it to recover and adapt, leads to discomfort, pain and disability after weeks, months or years

We all suffer occasional pain and discomfort, but work shouldn't hurt regularly

We all have different bodies. We shouldn't be surprised that some people develop pain and discomfort in a job with MSD hazards while another person may not

#### Improve your workplace

Ask yourself and others, "why do I hurt when! do this job or task?" and keep asking "why" until you get a good answer!

After attending to their pain, use workers' pain and discomfort as a trigger to look for MSD hazards and act to control them

### What to do if you have pain

Workers should talk with their supervisor, manager or business owner about their pain at work and possible causes

Pain that doesn't disappear before the start of work next day or continues over a weekend should lead you to speak up immediately

XXXXXX

xxxxxxx....

### Work Shouldn't Hurt Strategies

Use the discomfort diagrams with individuals or groups of workers to pinpoint areas in the body of concern

Work to eliminate or reduce the six hazards described in this introductory Guideline

## What are we going to do today to fix back pain, shoulder tendinitis, tennis elbow and other MSD at work?

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