

Programs are open to all, regardless of insurance, unless otherwise noted\*

# **Musculoskeletal Health**

Musculoskeletal disorders (MSDs) are common and your risk of developing these is affected by age, occupation, activity level, lifestyle, and family history. Certain activities such as sitting, repetitive motions, lifting heavy objects, and poor posture can cause wear and tear on your musculoskeletal system, leading to MSDs. This kit is designed to help you learn about some common MSDs, the signs and symptoms of MSDs and what you can do to prevent these disorders or make them more manageable. Participate in these fun activities throughout the month to learn more!



## Activity #1 – Watch Move with a Doc: Back Health

Per the <u>CDC</u>, back symptoms are among the top 10 reasons for medical visits, and for 5-10% of patients, back pain becomes chronic. Are you or someone close to you in this statistic? This webinar covers the best way to build a stronger back, one that will prevent injuries and keep you active so you can enjoy your favorite activities. Click <u>here</u> to watch the "Physical: Back Health (Move with a Doc)" webinar. You're encouraged to be active while listening.

### Activity #2 – Guess the Musculoskeletal Disorder

Read through the four patient scenarios on page 3 and fill in the blank with the name of the musculoskeletal disorder that the patient may be experiencing.

## **Activity #3 – Workstation Ergonomics – Self-Assessment**

Perform a self-assessment of your workstation using the guide on page 4. If you require additional support in some areas to achieve a neutral posture, try equipment such as monitor/laptop riser, footrest, backrest, or external keyboard/mouse.

## Activity #4 - Back Health Daily Habit Plan (WebMD)\*

Take small steps to a healthier back. Visit your member webpage to access your Living Healthy WebMD Portal\* to start the back health Daily Habit plan. With this tool, you will set a plan to take part in simple flexibility and strengthening activities and learn how to maintain a healthy back.

## **Activity #5 – Prevention Tips & Resources**

Check out some helpful tips and resources on page 5 to prevent MSDs or make them more manageable.

For questions or more information, please email DHP.Health@deancare.com

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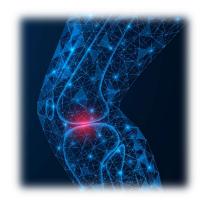
## **Musculoskeletal Disorders**

Musculoskeletal Disorders, or MSDs, are injuries or disorders that affect the human body's movement or musculoskeletal system (e.g., muscles, tendons, ligaments, nerves, discs, blood vessels). Common symptoms of MSDs can include stiff joints, recurring pain, swelling, or dull aches.

#### Four common musculoskeletal disorders

#### Osteoarthritis

Osteoarthritis (OA) is a common chronic joint disorder. OA is the same thing as Degenerative Joint Disease, sometimes called DJD. With OA, the cartilage that covers the ends of the bones breaks down, causing the bones within the joint to rub together. The most commonly affected areas include hands, fingers, shoulder, neck and lower back, knees and hips. Common symptoms include: stiffness (usually worse in mornings or after inactivity), noisy joints, loss of flexibility and range of motion. Some of the risk factors that increase your chances of developing OA include: having family with the condition (particularly parents), gender (women have higher rates than men), age (being at least 50 years old), poor posture, an occupation that involves kneeling, climbing and heavy lifting.



#### Tendinitis

Tendons connect muscles to bones and when they become irritated or inflamed, this results in tendinitis and cause acute pain and tenderness which makes it difficult to move the affected joint. Tendinitis can develop in any tendon, but more likely in the shoulder, knee, elbow or wrist. The most common cause of tendinitis is repetitive action and may develop if you frequently make with same motion while playing sports or working in an occupation that requires repetitive movements

#### Carpal Tunnel Syndrome

The carpal tunnel is a narrow canal in the wrist. Carpet tunnel syndrome happens when there is increased pressure on the median nerve on the palm side of hand. This can happen in one or both hands and symptoms may include pain, numbness, weakness and tingling. Wrist anatomy, underlying health conditions (diabetes, high blood pressure, thyroid dysfunction), and patterns of hand use can contribute to carpal tunnel syndrome. Repeated motion of your wrist contributes to swelling and compression of the median nerve which may be a result of the position of your wrists or repeated movement such as typing or playing the piano. Lifestyle changes, like rest, wrist splints, changes to your environment and surgery are possible treatments.



#### Rheumatoid arthritis

Rheumatoid arthritis (RA) is a chronic inflammatory disorder that can affect more than just your joints. In some people, the condition can damage a wide variety of body systems, including the skin, eyes, lungs, heart and blood vessels. An autoimmune disorder, rheumatoid arthritis occurs when your immune system mistakenly attacks your own body's tissues. Unlike the wear-and-tear damage of osteoarthritis, rheumatoid arthritis affects the lining of your joints, causing a painful swelling that can eventually result in bone erosion and joint deformity. Specific causes of RA are unknown, but age (onset is highest among adults in 50), gender (higher in females), genetics, smoking, and obesity are all factors that may increase risk of developing RA.

## **Guess the Musculoskeletal Disorder**

Read through the four patient scenarios and try to fill in the blank with the name of an MSD the patient might be experiencing.



#### Patient 1:

Jane is an administrative assistant in an office setting. As part of her job, she does a lot of typing and data entry. She has been experiencing numbness and tingling on the sides of both of her hands near the thumb.

This could be a sign of \_\_\_\_\_\_.



#### Patient 2:

Joe works at a manufacturing facility as a warehouse worker. As part of his job, he maintains inventory and ensures parts are stocked in the warehouse. He has been in this occupation for 20 years and has recently been experiencing a dull ache and increased pain in his shoulder and finds it difficult to move his shoulder when reaching overhead when stocking the inventory parts.

This could be a sign of \_\_\_\_\_.



#### Patient 3:

Mary is 51 and loves to garden. Kneeling and bending up/down to weed is becoming harder for her. She has recently been experiencing some aching pain, stiffness (worse in the morning), and a snapping noise in her right knee. Kneeling has not been a problem for her until now. Her mother experienced these same symptoms in her knees when she got older.

This could be a sign of \_\_\_\_\_.



#### Patient 4:

Tom is 35 years old. Over the last three months, he has been experiencing pain, swelling, redness of his knuckles on both hands, and worsening fatigue.

This could be a sign of .

Answer Key: Patient 1: Carpal Tunnel Patient 2: Tendinitis Patient 3: Osteoarthritis Patient 4: Rheumatoid arthritis

If you are experiencing any of the same symptoms as the patients in the above scenario, don't wait! Make an appointment with your primary care provider. You may also receive a referral to an orthopedic specialist. Treatment works best if these conditions are caught and diagnosed early. Many times, your pain can be treated successfully with more conservative treatments, such as medication and therapy, rather than surgery.

In addition, check out some of the prevention strategies and resources available on page 5 to prevent MSDs from developing or help make them more manageable.

# **Workstation Ergonomics**

#### **Neutral Posture:**

To achieve a neutral working posture, evaluate and readjust these seven areas, as needed:

- ☐ **Head/Neck**: Head in line with the torso, facing forward; chin parallel to the ground.
- ☐ Shoulders: Relaxed (not raised or lowered).
- □ Elbows: Upper arm and elbow tucked into sides, below the shoulder. Elbows bent at about 90 degrees.
- ☐ Forearms/Wrists: Forearms parallel to the ground; wrists aligned with forearms.
- **Back**: Fully supported by backrest; slightly reclined, between 95-115 degrees.
- ☐ Thighs/Knees: Thighs parallel to the floor; knees bent at about 90 degrees.
- ☐ **Feet**: Firmly planted on the ground (or a footrest).

#### Tip: Take regular eye and posture breaks!

- Remember to move! Get out of your chair at least once every hour.
- Follow the 20/20/20 rule. Every 20 minutes, look at something 20 feet away, for 20 seconds.

#### Your chair should:

- Allow feet to be on the ground with thighs parallel to the floor. Can use a footrest.
- Support the lower back. Can use an attachable and adjustable backrest.
- Fit the thigh (in length) with about 1 ½ inch between the chair and the back of the knee.

#### The keyboard should:

- Be directly in front of the body with relaxed shoulders; elbows bent, about 90 degrees, and close to the body. Can adjust chair height or use an under desk keyboard tray.
- Have zero tilt. Don't use the keyboard extender legs/kickstands.
- Place wrists in line with forearms, not bent up/down or sideways.

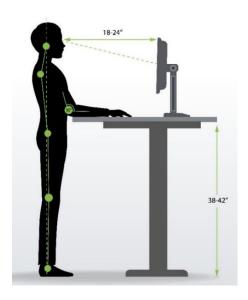
#### The mouse should:

- Be in front of the shoulder, at the same height as the keyboard.
- Place wrists in line with forearms, not bent up/down or sideways.

#### The monitor should be:

- At or slightly below eye level (top of the screen); chin parallel to the floor. *Can use monitor stand/riser.*
- Within one arm's length away from the body.
- Center in front of the body. With multiple monitors, the one used most (70% or more) should be center; if used equally, both should be center in a semi-circle.
- Tilted upwards, about 15 degrees.





# **Prevention Tips and Resources**

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These resources and strategies can help prevent and reduce the impact of common musculoskeletal disorders, so you can keep enjoying and doing the things you love.

#### Maintain your physical fitness:

Exercise and stretch regularly to keep bones, joints and muscles strong. Visit <u>deancare.com/wellness</u> for free resources and programs to help you with physical fitness.

- Our video library contains a variety of webinars (all listed under Physical):
  - o Flexibility and Balance
  - o Guided Beginners Yoga
  - Guided Desk Stretches
  - o Lower Back Stretches
  - o Kickstart Your Cardio
  - o Strength Training
- Set a REAL Goal:
  - o Increase Movement
  - o Strength training
  - o Improve Sleep
- Check out these Supplemental resources under the Physical Real Goal:
  - o Chair exercises
  - Stretching

#### **Safety Measures:**

Minimize repetitive motions, lift heavy objects carefully, and maintain good posture to prevent back pain.

#### Maintain a Healthy Lifestyle:

Stay hydrated by drinking plenty of water, eating healthy foods, getting enough rest and sleep, keeping inflammation down by reducing sugar and fat in your diet, taking breaks, and getting up and moving.