



# MSK HEALTH IQ REPORT

## EXAMPLE

**Report Date:** 01/01/2022

---

### CONTACT

---

#### Kinesics LLC

440 North 3<sup>rd</sup> Street  
Suite 201-A  
Baton Rouge, LA 70802

Phone: 225-800-2177  
Email: [info@kinesicshms.com](mailto:info@kinesicshms.com)  
Website: [kinesicshealth.com](http://kinesicshealth.com)

---

## MSK QUESTIONNAIRE | AGGREGATE

### About the MSK Questionnaire

This Condensed Nordic MSK Questionnaire is based on reports of pain and discomfort that pertain to trouble with motion and movement to complete normal daily activities. The questionnaire is focused on answering three questions for each major joint region in the body. The answers are not intended to diagnose an injury or disease.

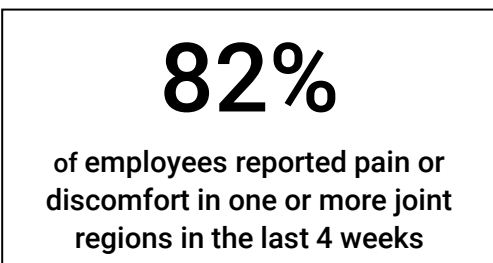
Joint Regions:

Neck, Shoulders, Mid Back, Elbows, Wrists/Hands, Low Back, Hips/Pelvis, Knees, Ankles/Feet

Questions:

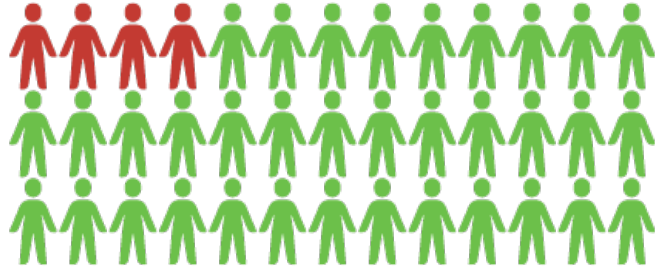
1. Do you currently have pain or discomfort?
2. Have you had pain or discomfort in the past 4 weeks?
3. Have you seen a physician or other professional to treat the area because of pain or discomfort in the past year?

### Questionnaire Results



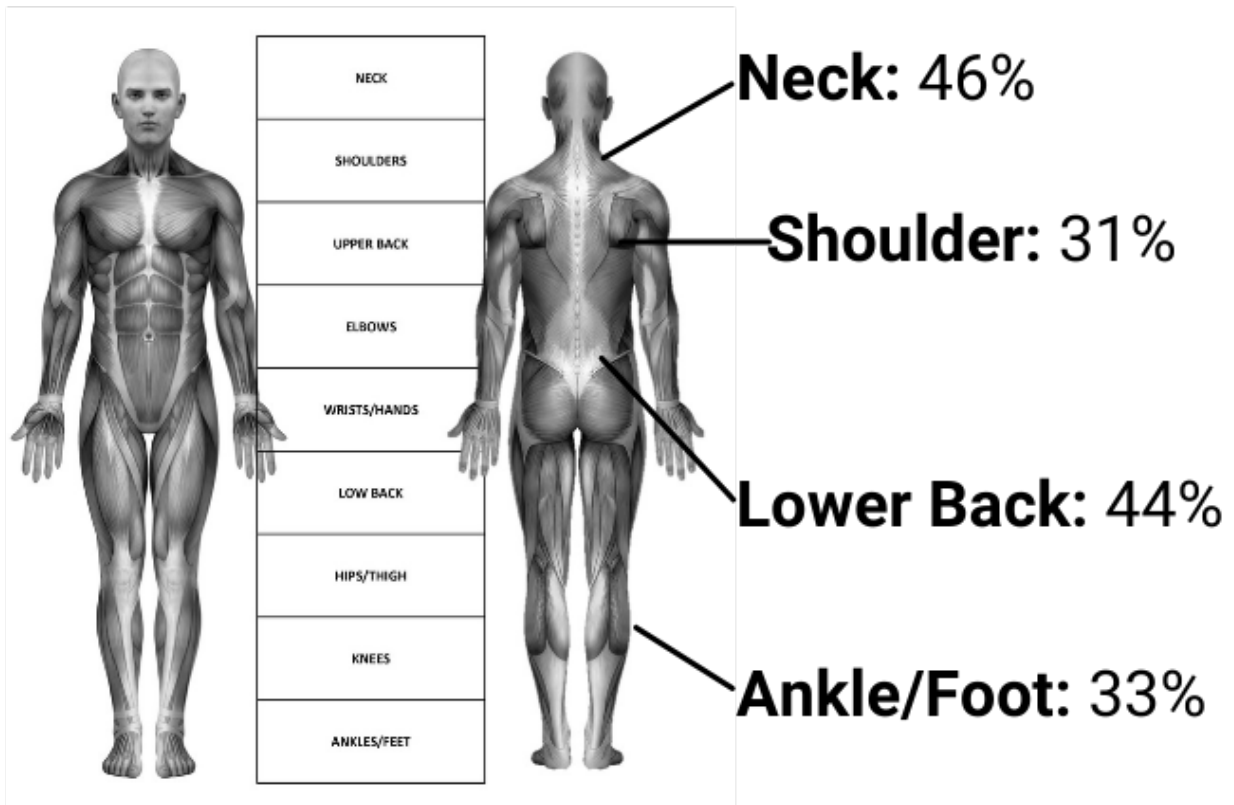
Questionnaire Results (continued)

**10%**  
of employees sought treatment for  
their pain or discomfort



Most Commonly Reported Joint Regions with ACTIVE Pain or Discomfort

\*Measured in percent of population reporting pain

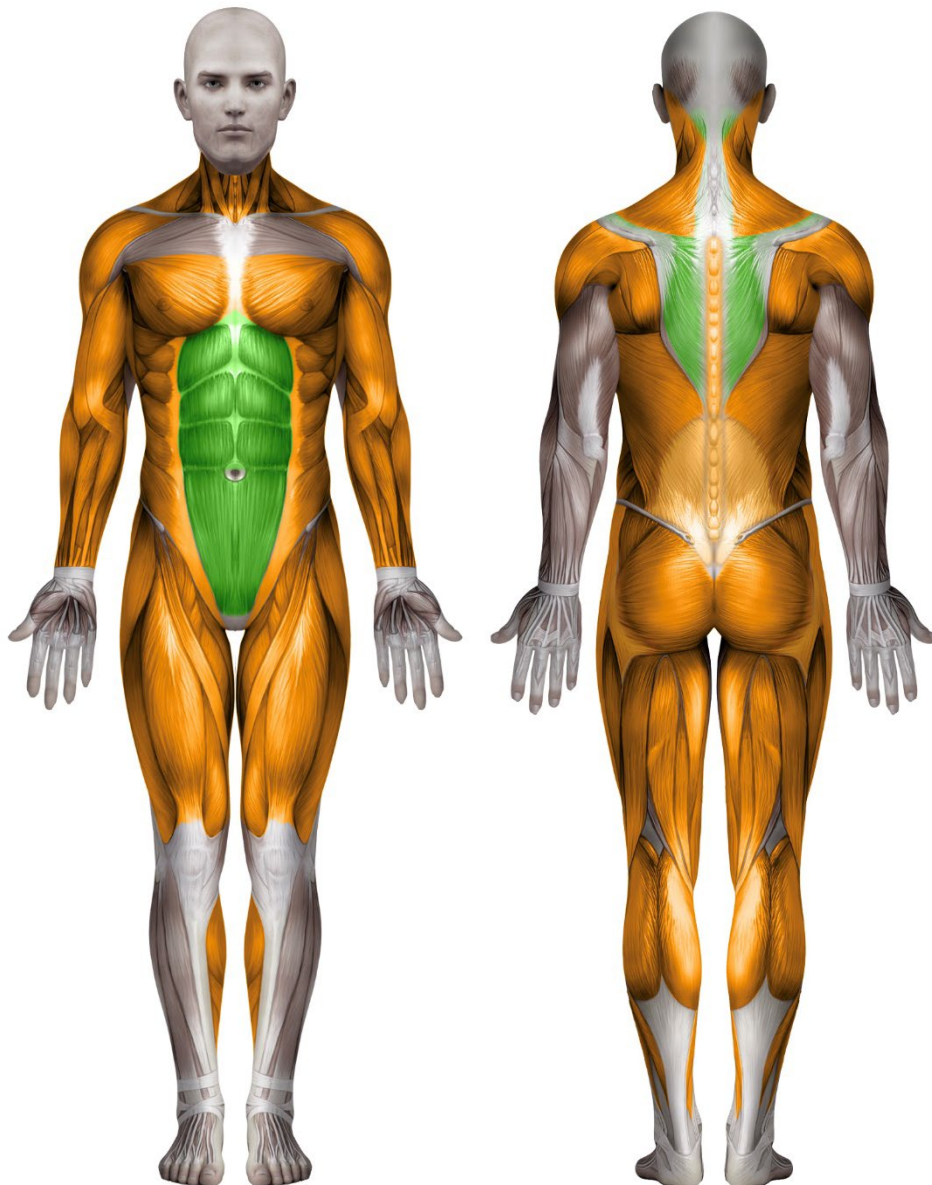


MSK MEASUREMENT DATA | AGGREGATE

Overall Function of the Group



The Ideal, Moderate, and Severe classifications were developed using industry-standard normative ranges which are considered to have the least restrictions and vulnerability for injury.



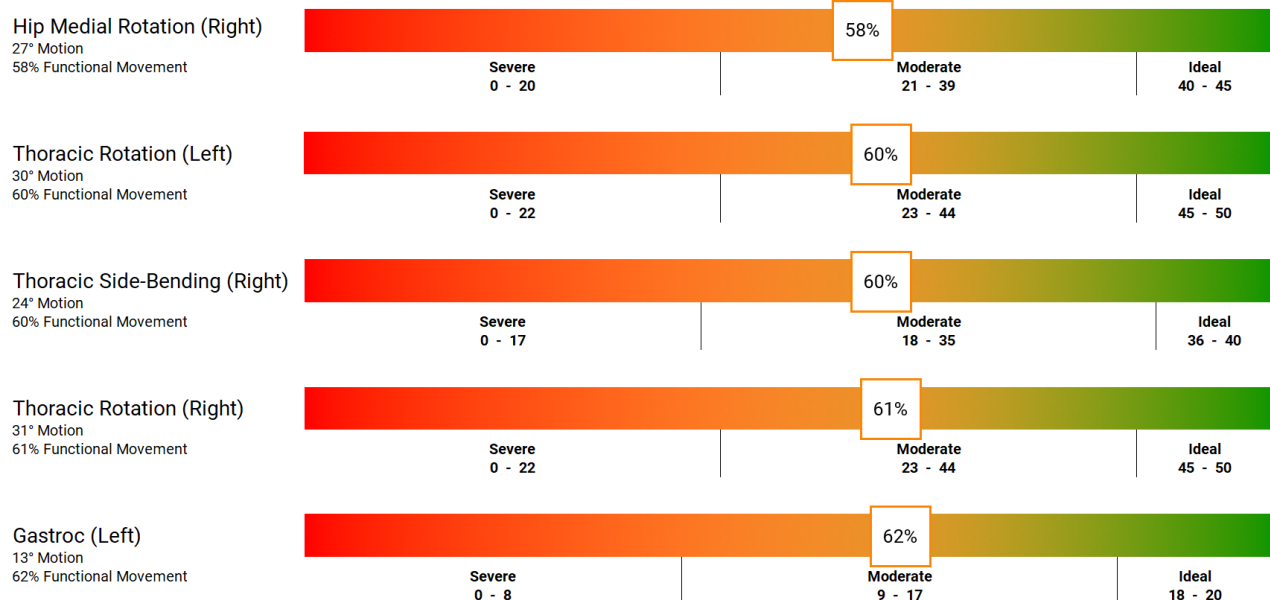


### Breakdown of All Measurements | The Heat Map

Comparing all individuals by measurement allows us to understand the most at-risk movements within the total population. This data can then be used by Kinesics or other professionals treating the members to strategically focus treatment and interventions on individual members and the population as a whole

Measurements		Overall Function
Right A-Hip Medial Rotation		58%
Left A-Thoracic Rotation		60%
Right A-Thoracic Side-Bending		60%
Right A-Thoracic Rotation		61%
Left A-Gastroc		62%
Left A-Thoracic Side-Bending		63%
Right A-Lumbar Side-Bending		64%
Left A-Hip Medial Rotation		65%
Left A-Hip External Rotation		66%
Right A-Gastroc		67%
Bilateral A-Thoracic Flexion		67%
Left A-Lumbar Side-Bending		68%
Right A-Hip External Rotation		68%
Left A-Shoulder Extension		69%
Left A-Soleus		73%
Right A-Shoulder Extension		73%
Bilateral A-Lumbar Flexion		74%
Bilateral Thoracic Curve		75%
Left A-Hip Adduction		79%
Right A-Hip Adduction		80%
Right A-Straight Leg Hamstring		80%
Bilateral Lumbar Curve		80%
Left A-Straight Leg Hamstring		80%
Right A-Hip Abduction		81%
Bilateral A-Thoracic Extension		81%
Left A-Hip Abduction		81%
Left A-Shoulder External Rotation		81%
Right A-Shoulder External Rotation		82%
Left A-Shoulder Flexion		82%
Left Cervical Rotation		82%
Left A-Shoulder Medial Rotation		83%
Left A-Knee Flexion		83%
Right A-Shoulder Flexion		83%
Right A-Knee Flexion		83%
Right A-Soleus		84%
Right A-Shoulder Medial Rotation		84%
Right Cervical Rotation		86%
Bilateral Cervical Extension		86%
Left Cervical Side-Bending		86%
Right Cervical Side-Bending		87%
Bilateral A-Lumbar Extension		94%
Left A-Lumbar Rotation		95%
Bilateral Cervical Flexion		95%
Right A-Lumbar Rotation		95%

## Top 5 Commonly Restricted Measurements



### Hip Medial Rotation

The muscles in the leg region and hip complex associated with the Hip Medial Rotation measurement span across the back side of the hip at the outer-glute layers and travel through the inside of the leg to connect the hip at the thigh. These six muscles deep within the hip are responsible for stabilizing the hip and leg. The muscle tracks in this region run across the front and back side of the torso, and down the opposite side of the body to connect the shoulder girdle to the opposite hip region. Together as one unit, they rotate the hip, pull the leg in toward the body, and provide the stability for the larger glutes to extend the hip and leg in lower body movements like squatting, walking, running, and most lower body movements that involve bending the knee.

**Movement compensations with muscle tension in this region may:**

- Limit the ability to flex the hip and bring the knee in to the chest, pulling the pelvis and lower leg into medial (internal) rotation, and increasing pressure at the inside of the knee with walking, running, ascending stairs, and most lower-body movements involving bending at the hip or knee.
- Decrease range of motion when bending (flexing) the knee and straightening (extending) the leg and hip, resulting from an inability to achieve proper alignment in these positions and increasing tension in the lower back, hip, and knee with most lower body movements like squatting, walking, and running

**Postural compensations with muscle tension in this region:**

- Pelvic elevation; pulling the pelvis higher to one side.
- Rotational misalignment of the knee; collapsing or shifting inward toward mid-line of the body, or outward away from midline of the body with standing and seated postures.
- Pronation (rolling inward) of the foot as a compensation for excessive knee rotation.



### **Thoracic Rotation**

The mid back muscles associated with the Thoracic Rotation measurement, while multiple layers deep, are primarily influenced by the larger outer muscles of the abdominal region that connect the front side of the lower pelvis / hips with the opposite side of the rib cage and shoulder region. These muscles form an "Intra Abdominal X." The muscle tracks span throughout the spine, from the mid back above, wrapping around the back-side and front-side of the abdominals to connect one side of the ribs to the opposite hip. When restricted, they directly limit the body's ability to rotate the torso forward and backwards around the hips / pelvis.

#### **Movement compensations with muscle tension in this region may:**

- Limit the ability to rotate the spinal segments, individually or as a whole, resulting in increased tension in the mid- and lower-back regions, as well as the abdominal and hip regions.
- Limit the ability to rotate the spine around the hips and pelvis, resulting in or from asymmetrical tension from one side of the spine to the other.
- Increase compensations throughout the joint regions in the legs, as the hips, knees and ankles rotate more to allow desired torso rotation.
- Cause excessive side-bending to assist restricted opposite-side rotation, increasing tension on the outside of the body into the hips
- and lower back regions.

#### **Postural compensations with muscle tension in this region:**

- Postural imbalance; an imbalance of the body from right to left with standing and walking.
- Excessive torso side-bending; elevating shoulder and/or hips toward or away from restricted side.
- Asymmetrical arm positions; one arm hanging in front of the body more than the other in neutral standing postures.
- Excessive torso rotation; asymmetrical tension on one side of the spine pulls the spine out of alignment, causing the torso to twist in static standing and seated postures.
- Shoulder and upper-torso rotation; misalignments in the ribs and hips increase tension and pulls the torso into rotation to the opposite side.

## RISK ANALYSIS | INDIVIDUALS

### Two Criteria for Risk of Injury

1. Identified restriction in a specific joint region with active pain or discomfort in that joint region  
**7 individuals with 10 at-risk joint regions for Criteria 1**
2. Identified restriction in a specific joint region with active pain in any joint regions  
**20 individuals with 33 at-risk joint regions for Criteria 2**

### TOP JOINT RESTRICTIONS

#### Hips/Pelvis

**Measurements Included:** Hip Abduction, Hip Adduction, Hip External Rotation, Hip Medial Rotation, Prone Quadricep

#### **Complications and Restrictions:**

- Primary
  - Since one-third of the muscles in the hip are also connected to the knees and lower back, restrictions in this region can result in misalignments in the lower back, hips, knees, ankles, and feet causing pain and discomfort with standing and daily activities.
  - Misalignments in these regions are often accompanied by a decrease in flexibility within the hip complex causing various functional limitations which include difficulty with walking, sitting, lifting loads, ascending and descending stairs, squatting, bending at the waist, and most activities involving the trunk and lower body.
  - Decreased hip mobility results in a decrease in knee and lower back stability, placing undue stress on the joints in the legs and lower back and contributing to structural damage, instability, wear and tear, and loss of strength in these regions over time.
- Secondary
  - Restricted flexibility and mobility in the hip region creates unnecessary strain and tension in the lower back which can alter pelvic and/or joint positions of the knees, ankles and feet and decrease their ability to support the body in standing, walking, and lower-body dependent activities.
  - A loss of hip mobility can result in corresponding losses of (1) opposite-shoulder engagement, (2) spinal rotation, (3) glute function, and (4) lower back stability.



#### **Benefits of achieving proper mobility in this region lead to:**

- Direct improvements in hip mobility and lower back and knee stability
- Freedom of movement of the hip and protection of the hip, lower back, and knees joints
- Optimal spinal and lower-leg alignment and functional strength

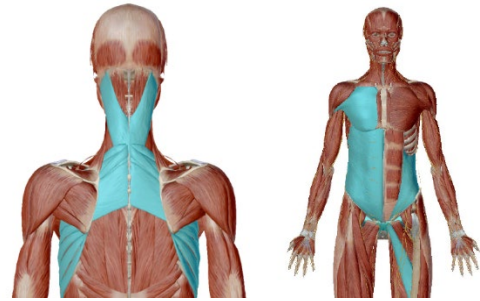


### Thoracic Spine (Mid Back)

**Measurements Included:** Thoracic Flexion, Thoracic Extension, Thoracic Rotation, Thoracic Side-Bending

**Complications and Restrictions:**

- Primary:
  - The mid back region must have the ability to flex (bend forward), extend (bend backward), side-bend, and rotate freely. Without this freedom of movement, the neck and lower-back regions move excessively to compensate.
  - Restricted mid-back mobility leads to decreased shoulder stability and increased rigidity in the rotator cuff and lower-back structures and may limit the ability to equally activate the core muscles necessary for proper movement and stability of the torso.
- Secondary:
  - Decreased mid back mobility and flexibility alters body positions in the lower spine and pelvis, causing the arms and legs to be pushed and/or pulled out of alignment.
  - Misalignment in this region results in unequal movement patterns of the arms and legs, places undue tension in the neck through the mid-back and increases stress on the muscles and joints in this region.



**Benefits of achieving proper mobility in this region lead to:**

- Overall postural improvements in alignment of the spine
- Increased neck and shoulder range of motion
- Freedom of movement for the joints in the upper arms to perform movements such as pushing, pulling, lifting, twisting, turning.

## NEXT STEPS

### Navigating Individuals



Enroll individuals in programs based on risk stratification.

Program	Impact (# individuals)	Suggested Navigation
Prevention	38	Kinesics Programming
Risk Management (C2)	20	Secondary Medical Evaluation (PCP)
Risk Management (C1)	7	Direct to Care (PT/OT)

Through our criteria for Critical Risk, Kinesics has identified **7 individuals** at an elevated risk for musculoskeletal pain and/or injury (MSDs). Individuals with decreased mobility and active reported pain should be referred for secondary medical evaluation and treatment by a medical provider.

#### Suggested Next Steps:

1. All individuals to complete Custom Mobility Programs in Kinesics App.
2. Group to complete Team Mobility Programs from online database.
3. Employer to identify preferred in-network providers for referral and further care.

**Access Team Mobility Program Here:**

<https://www.kinesicsmove.com/group-example>