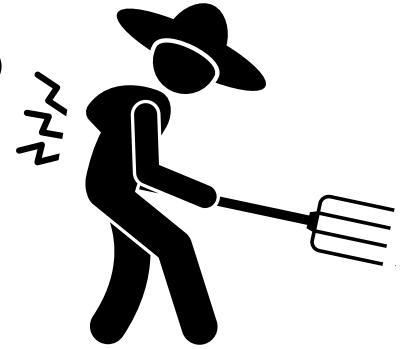


# Musculoskeletal Injuries & Low Back Pain Among Midwestern Crop Farmers

## The Problem

Musculoskeletal (muscles, bones, tendons, ligaments, joints, and cartilage) injuries and associated pain symptoms can result from repetitive, prolonged exposures to forceful impacts, movements, and awkward postures.

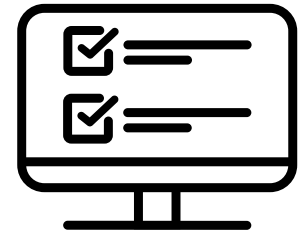


In the agriculture sector, crop farmers are at high risk of developing musculoskeletal injuries and pain, specifically in the lower back region due to the work tasks and physical demands required to carry out their essential job functions.



## UMASH's Role

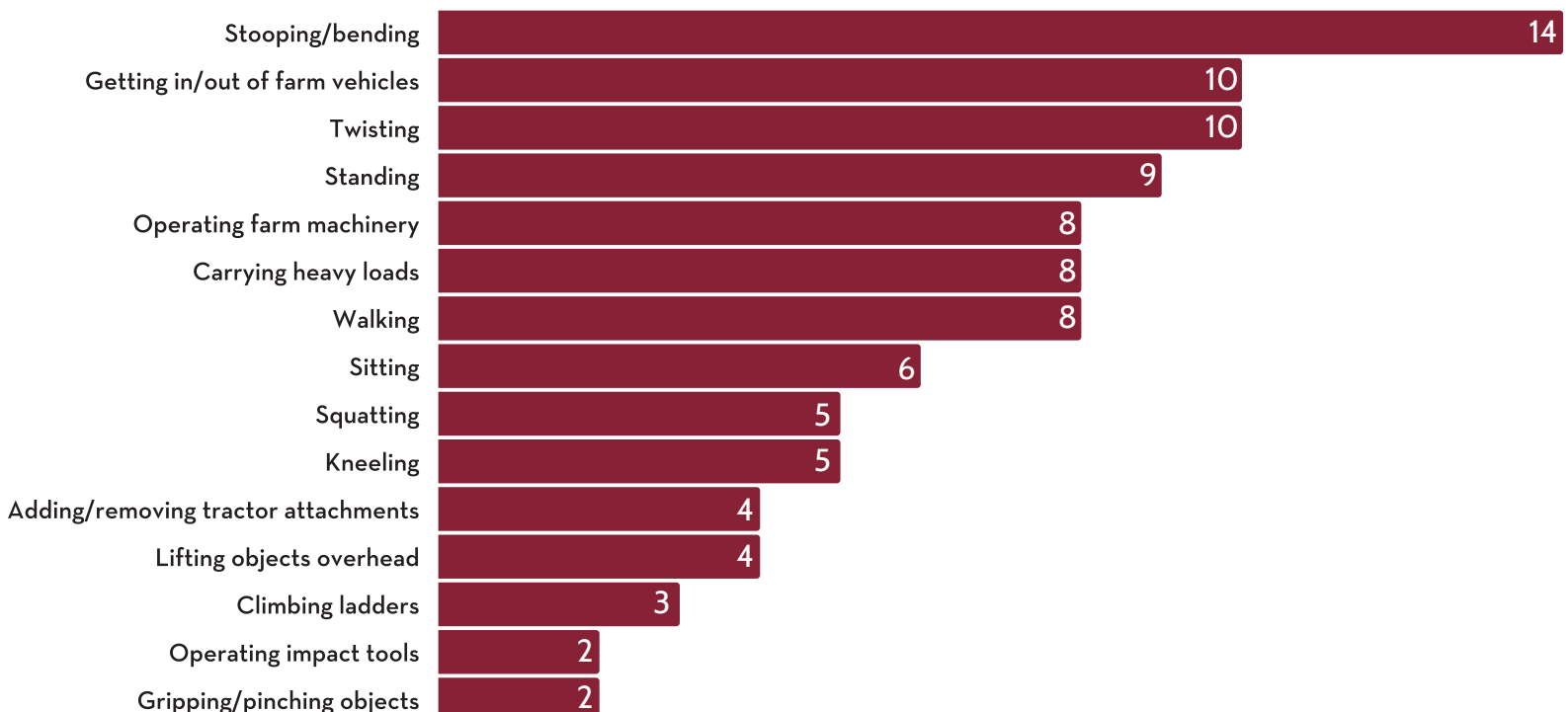
An **online survey** was created by UMASH in collaboration with a UMN occupational therapy student, Justine Bauer, to investigate the prevalence and potential causes of lower back pain (LBP) among Midwestern crop farmers.



**The survey results suggest the need for resources to prevent and reduce musculoskeletal injuries and pain among Midwestern crop farmers.**

**40%** reported trouble (ache, pain, discomfort, numbness) in the lower back in the last year      **68%** of those with back pain said it prevented them from doing their normal work

Work-related tasks associated with low back pain reported by survey respondents:



# Lower Back Pain Prevention & Management Recommendations

Musculoskeletal injuries and pain in the lower back can be prevented and managed by incorporating simple changes to your work practices or routine. Below are some quick tips you can try to reduce the repetitive strain and prolonged stress on your body while farming.

## To avoid stooping/bending

- Sit down on a chair or stool to take the strain off your back.
- Consider attaching longer handles to your tools (i.e., shovels) to avoid the need to stoop/bend.
- Keep frequently used tools stored at your waist or shoulder height instead of on the floor.

## When getting in/out of farming machinery

- Always climb from the lowest step to the ground one step at a time - never jump off of machinery.
- Try using a step stool or adding an extra step to machinery to avoid straining your back.

## While operating farming vehicles, machinery, or equipment

- Take periodic breaks to stand or stretch - more frequent, short breaks are preferred (i.e., 1-2 min every 30 min).
- Ensure your seats are positioned to easily reach hand and foot controls
- Be sure your back is fully supported in your seat - if there is a gap between your lower back and the seat use a cushion or rolled-up towel to fill the gap.
- Slow down over bumpy/uneven terrain to limit vibration & jarring motions.

## To avoid twisting

- Consider installing mirrors, and rearview cameras, or mount a swivel base on the seat to avoid twisting your neck/back to look rearward.
- Whenever possible, turn your entire body (turning your feet towards the desired direction) instead of twisting at the waist.

## To protect your back while standing

- Wear supportive soft-soled shoes or purchase a small, easy-to-move anti-fatigue mat to act as a cushion when you need to stand for prolonged periods.
- Find a small step stool, box, or bucket to place in front of you. Alternate propping one foot and then the other on it to help alleviate the pressure on your lower back



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