



# Strain Surveys

## “The Painful Truth”

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RISK ADMINISTRATION SERVICES, INC.



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?

Does your District provide strain injury prevention or ergonomics intervention?

**a. Yes**

**b. No**

**c. Unsure**

**The Reason**  
**We Do This.**

# Top Exposures Or Risks of Injury



1. Strains/Sprains
2. Slip & Falls
3. Cuts & Burns

# Musculoskeletal Injury Stages

Symptoms only while working

Symptoms that last for a short while after work.

Symptom recovery by the following morning.

Symptom recovery with a few days off.

No symptom recovery.

**Regional fatigue is a warning sign for musculoskeletal injury!**





# Early Identification is Key

**Encourage employees to take responsibility for their health and work environment.**

- Ask them to report discomfort before it gets so bad that medical attention is needed.
- Ask them to report potential injury causes before they occur.
- Have supervisors ask, *"What's the most difficult things you do during the day?"* or *"Do you go home with fatigue in any muscle groups?"*
- Do a hazard assessment – or strain survey.

## Food Service Strain Survey - Primary Location-\_\_\_\_\_

Instructions: Please assign a level of **physical** strain/fatigue for each duty on a scale from 0-10. Please offer any additional comments.

Name: _____ Date: _____	No Strain			Moderate							Maximum			n/a	Comments How often? Describe how.
	0	1	2	3	4	5	6	7	8	9	10				
<b>Job duties</b>															
Lifting: boxes, containers, oven racks, pans, dishes, trays, etc.															
Carrying: boxes, containers, pans, buckets, etc.															
Pushing/Pulling: carts, boxes, etc.															
Climbing stepstools															
Bending/Squatting: wipe lower prep tables, carts, ovens, warmers, equipment, etc.															
Floor cleaning/sweeping															
cutting															
Scooping food															
Cleaning/Sanititation of equipment															
Cleaning/Sanititation of work areas															
Lifting garbage bag(s)															
Taking garbage out to dumpster															
Use pallet jack or hand truck															
Load/unload van															
Prepare food: main dish, vegetables, sauces, gravies, snacks															
Keep production Records															
Standing/walking															
Unloading food deliveries															
Obtaining items from shelves															

# Strain Survey Process

- Identify a department.
- Work with Director/Supervisors
- Modify survey as needed.
- Deploy Surveys.
- Results are tabulated to rank the tasks based on strain exposure.
- Customize safety training.
- Follow-up.



# Results



RISK ADMINISTRATION SERVICES, INC.

## Food Service Strain Survey

Unified School District of De Pere October 2022

**Instructions:** Please enter the scores for each response. The total, number of responses, and average will automatically calculate. After all responses are entered, highlight all the data (currently row 7 to row 37) and sort by the "Average" column.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
7	Job tasks	Total	Number of Responses	Average	Range	Staff 1	Staff 2	Staff 3	Staff 4	Staff 5	Staff 6	Staff 7	Staff 8	Staff 9	Staff 10	Staff 11	Staff 12	Staff 13	Staff 14	Staff 15	Staff 16	Staff 17	Staff 18	Staff 19	Score 20	Score 21	Score 22	
8	Unloading food deliveries	147	29	5.068966		8	9	10	10	9	10	7	2	3	4	5	8	2	3	na	9	3	6	1	7	6	na	
9	Lifting: boxes, containers, oven racks, pans, dishes, trays, etc.	153	32	4.78125		6	10	10	10	6	10	7	5	5	9	6	8	5	1	0	9	6	5	1	5	5	3	
10	Carrying: boxes, containers, pans, buckets, etc.	133	32	4.15625		6	10	8	10	6	10	7	4	5	8	5	5	5	1	0	9	5	4	1	3	3	1	
11	Load/unload van	71	18	3.944444		4	9	4	10	6	9	na	na	na	4	na	na	na	2	na	4	na	na	1	7	4	na	
12	Lifting garbage bag(s)	113	31	3.645161		8	8	7	10	7	7	7	5	3	1	6	5	5	3	0	4	na	4	0	3	3	1	
13	Pushing/Pulling: carts, boxes, etc.	100	32	3.125		3	8	9	10	4	10	3	3	3	8	1	5	3	0	0	8	2	0	0	1	2	0	
14	Obtaining items from shelves	97	32	3.03125		3	7	10	10	8	3	4	2	4	1	5	3	2	2	0	3	1	1	0	8	7	1	
15	Bending/Squatting: wipe lower prep tables,	83	30	2.766667		2	7	6	8	4	3	2	5	5	4	6	3	3	0		8	1	5	1		4	0	
16	Taking garbage out to dumpster	66	25	2.64		3	na	na	10	8	0	7	5	1	1	7	na	na	3		na	3	1	0	na	3	1	
17	Scooping food	58	29	2		2	3	8	8	4	0	0		1	4	3			2	0	0	8	0	0	0	1	0	0
18	Cleaning/Sanitization of equipment	63	32	1.96875		1	3	6	8	5	3	0	5	5	4	4	3	2	0	0	5	0	0	1	1	2	1	
19	Floor cleaning/sweeping	62	32	1.9375		0	5	6	7	4	4	1	3	3	5	6	3	2	0	0	6	1	0	0	1	2	0	
20	Prepare food: main dish, vegetables, sauces,	50	26	1.923077		na	8	10	10	na	0	3	na	4	1	0	na	2	0	na	8	0	0	0		2	0	
21	Use pallet jack or hand truck	14	8	1.75		7	na	na	na	na	na	na	na	na	1	na	na	na	na	na	5	na	na	1	na	na	na	
22	Cleaning/Sanitization of work areas	50	31	1.612903		0	3	4	8	5	3	0	1	3	4	4	3	2		0	5	0	0	0	1	0	0	
23	Standing/walking	45	31	1.451613		0	8	8	5	4	3	0	2	0		0	3	2	0	0	7	1	0	0	1	0	0	
24	Climbing Stepstools	37	28	1.321429		3	7	na	7	na	3	0	1	1	2	0	na	na	0	0	3	2	3	0	1	2	0	
25	cutting	37	31	1.193548		2	3	2	7	4	4	0	1	1	1	0	3	2		0	3	0	0	1	1	0	0	
26	Keep production Records	29	29	1		0	7	3	3	4	na	0	1	na	1	0	1	2	0	na	7	0	0	0	0	0	0	

# Stretch for Wellness

## "ERGO BREAK"

**Note:** If you have had any recent health problems, injury, or surgery, or if any of these actions cause you any pain, consult a health professional before starting this program.

### Finger and Wrist Flexor Stretch



1.



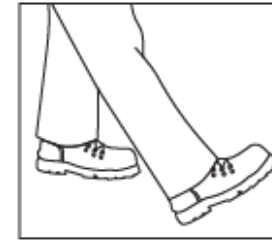
2.



3.

1. Straighten your elbow with palm up.
2. Point your fingers toward floor.
3. Use your other hand to gently pull down on your palm and fingers.
4. Hold for 10 - 15 seconds. You should feel a mild pulling sensation. If you experience discomfort, then perform the stretch more gently or go back to the previous step.

### Hamstring Stretch



1.



2.

1. Place your heel on ground in front of you with knee straight. You may wish to stand next to something for balance.
2. Keep your back straight, look up at the ceiling, and bend forward at your hips.
3. Hold for 10 - 15 seconds. You should feel a mild pulling sensation. If you experience discomfort, then perform the stretch more gently or with your foot on the floor.

The Back School

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[www.thebackschool.net](http://www.thebackschool.net)



# Nutrition Services

- Unloading Food Deliveries
- Lifting: boxes, containers, pans, dishes, trays, etc.
- Carrying: boxes, containers, pans, trays, etc.
- Lifting Garbage Bags
- Pushing/Pulling: carts, boxes, etc.
- Obtaining items from shelves
- Bending/Squatting

# Tips for Best Posture



# Avoid the "C" Shaped Spine

- Weak and Stressful position for the spine.



# Keep Weight Close



Reaching increases stress on the back and shoulders

Avoid pushing and pulling with out-stretched arms

# Work Smarter



# Equipment

- Convertible Hand Truck
- Stepstool
- Cart



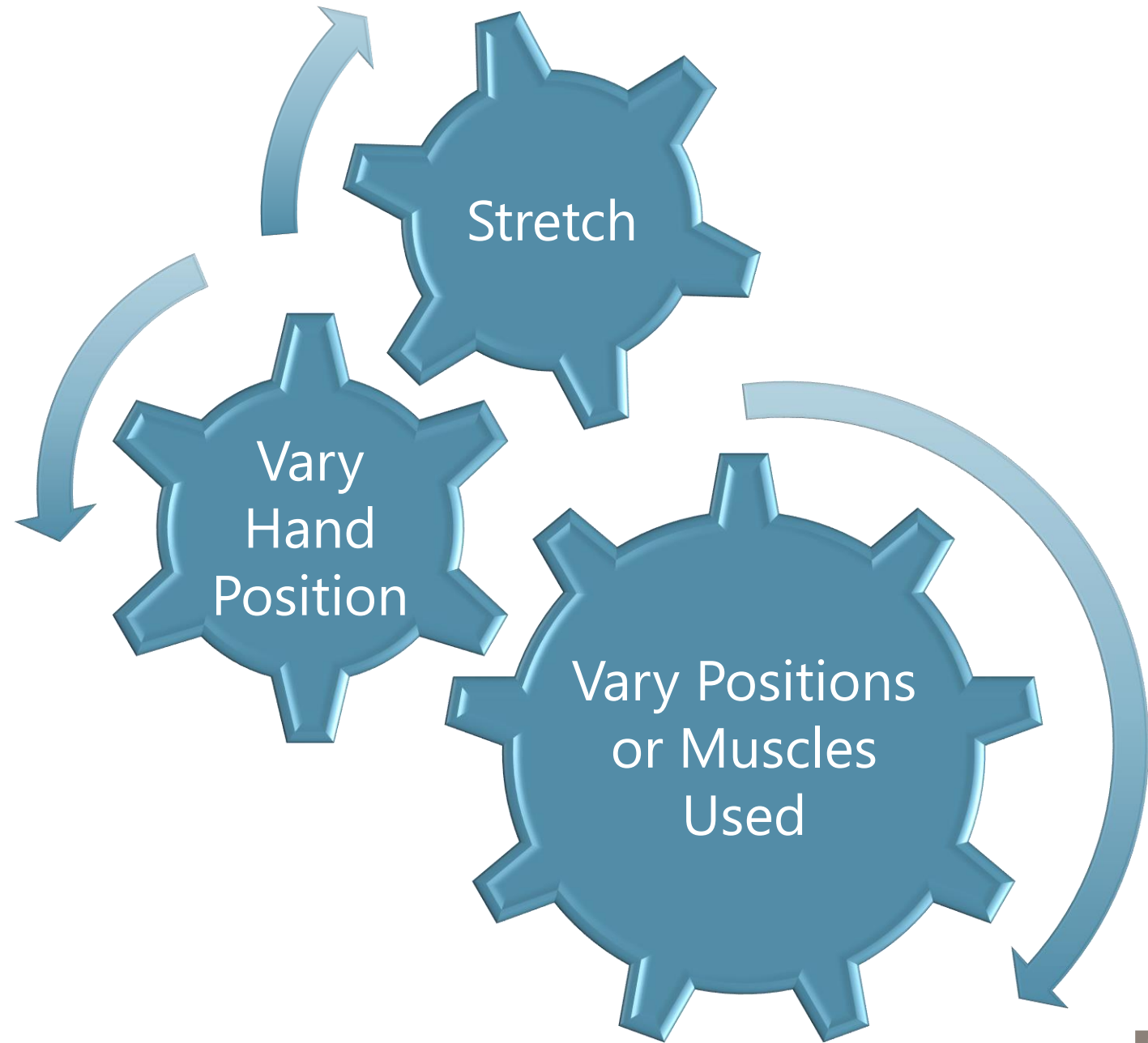
<https://www.uline.com/Product/AdvSearchResult?KeywordTyped=convertible%20&keywords=Convertible%20Hand%20Truck>

<https://www.uline.com/Product/AdvSearchResult?keywords=food%20service%20cart>

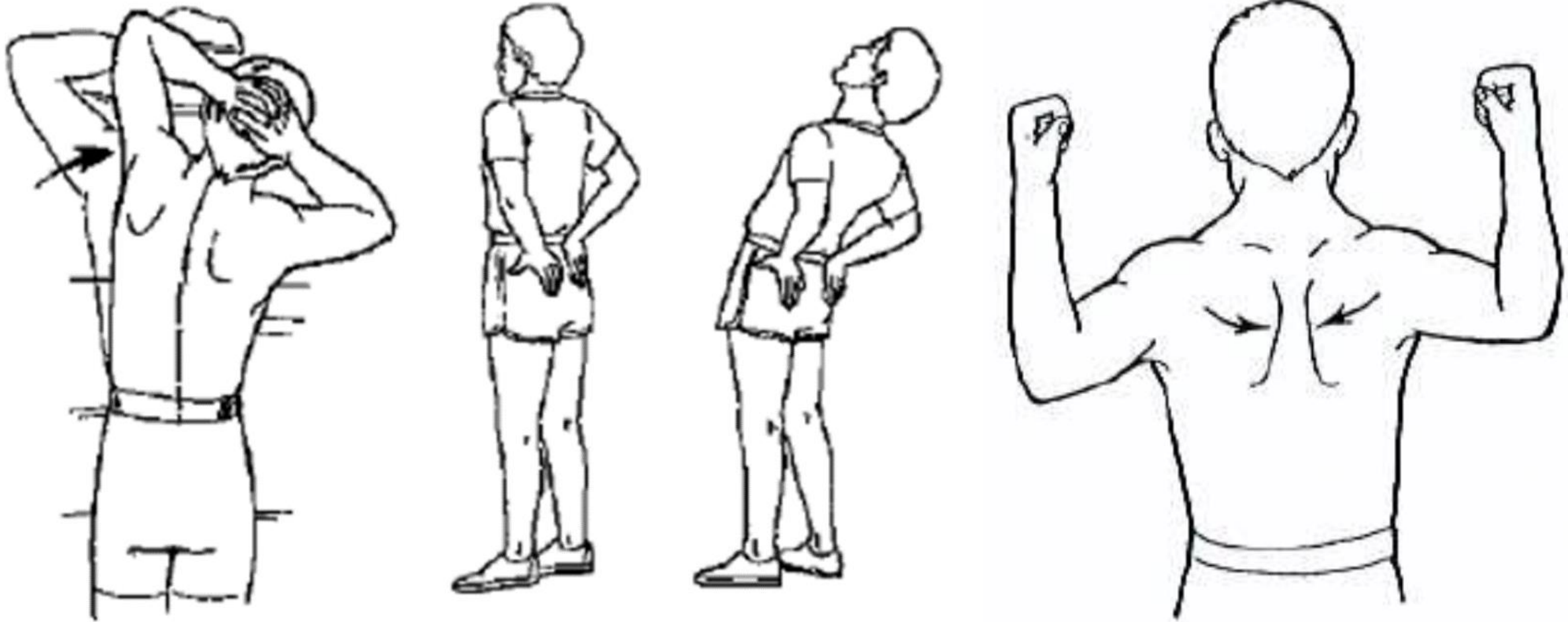
<https://www.littlegiantladders.com/collections/stepstools>



# Fight Fatigue and Repetition



# Remember to Stretch for Wellness



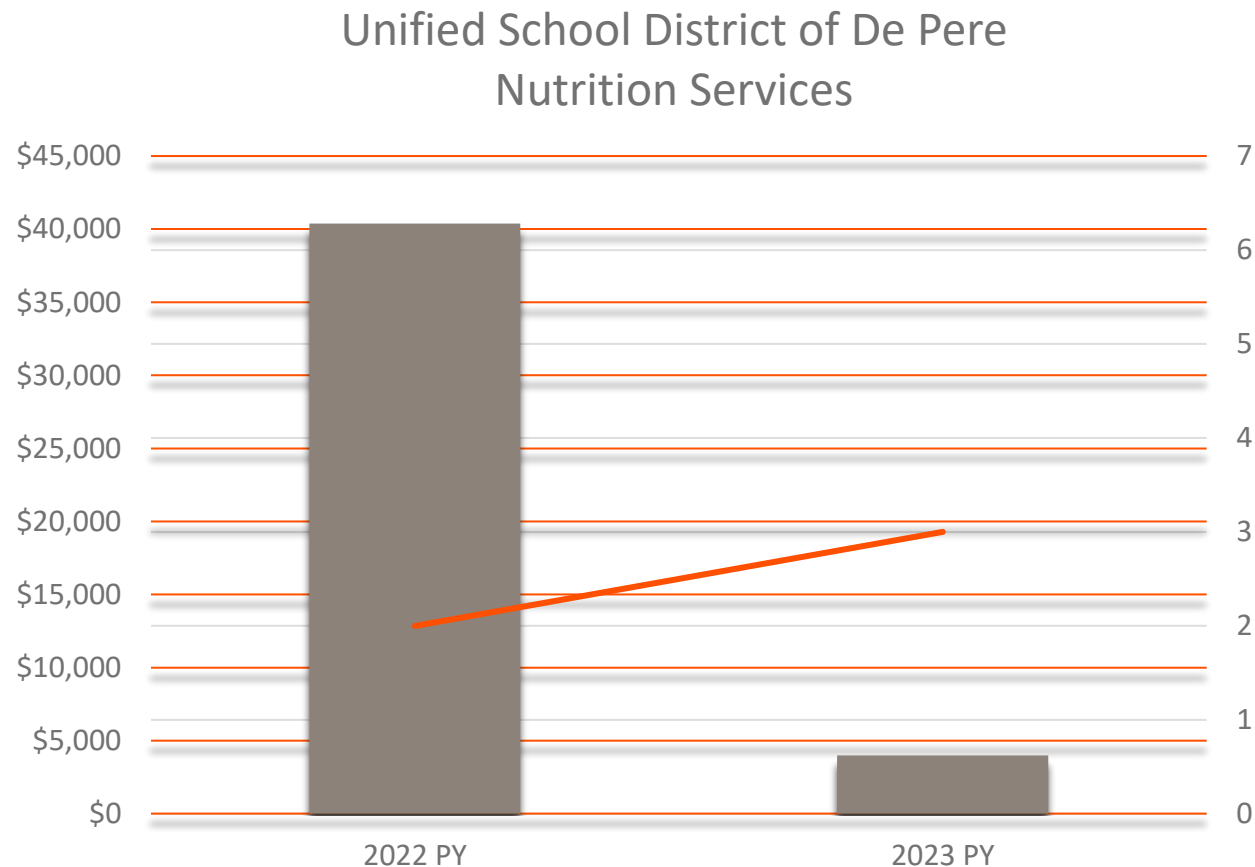
# Follow Up

- 6-9 Month – re-survey
- Safety Committee
- Annual Training (Utilize surveys to customize training)



# What came out of it?

- Awareness
- Increase in Morale
- Improvement in Processes/Equipment
- Employee Buy-in



■ Claim Cost    — Claim Count

# The WHY ... Prevention = Cost Savings!

**INJURY #1** - Nutrition Services Employee – cumulative trauma injury to the right wrist, elbow, shoulder due to packing boxes of fruits, vegetables to other buildings.

Claim closed with GTI of \$285K

**Injury #2** - Nutrition Services Employee - cumulative trauma injury to bilateral arms due to packing items, serving items, and lifting/handling items repetitively.

Claim Closed with GTI of \$22K.

\*Examples are not from the Unified School District of De Pere

# Take-Aways for Employees

- Use the best posture possible (ears over shoulder/hips/knees)
- No "C" Spine
- Use – power squat, 1/2 kneel, golfer's bend, "nose & toes" face the same direction (no twisting)
- The *Next* posture is the *Best* posture (movement and task rotation)
- Provide and use equipment
- Stretch
- Stay in good physical and emotional health

# Take-Aways for Supervisors

## Strain Prevention

- Do you know how & where strains are occurring?
- Do you have a strain reduction program?
- Do your policies support strain reduction?
- Are you enforcing Policies and procedures?
- Train on Best Practices at the time of hire
- Talk about Best Practices during departmental meetings.
- Accident Investigation and Re-Creation to determine root cause
- Encourage equipment use
- Contact your insurance agency or workers' compensation carrier for ergonomics assistance for employee safety and health



Questions