

A GUIDE TO ERGONOMICS & INJURY PREVENTION IN GROCERY STORES

Health Mats Co.



INTRODUCTION

Grocery stores present an environment where employees are lifting, carrying, and pushing heavy items; additionally, this industry has workers standing on their feet for hours on end as well preparing food. With heavy lifting, standing, and close contact with hazardous food processing machinery, employees in this industry are put a greater risk for suffering an injury or illness. With food processing, customer service, and other store areas, bringing their own distinct hazards, managers and employees alike should be made aware of all the safety measures that should be taken to reduce the chances of injuries. Ergonomic techniques and natural positioning can help employees reduce their chances of developing a musculoskeletal disorder (MSDs). In this guide, readers will learn of the most common grocery store injuries and illnesses, MSDs, top risks for grocery stores, and the ergonomic posture changes and safety products needed to make the workplace safer. After reading this guide, users will have a better understanding of the hazards that the grocery stores have as well as their consequences on health, wellness, and productivity.

GROCERY STORE INJURIES & ILLNESSES

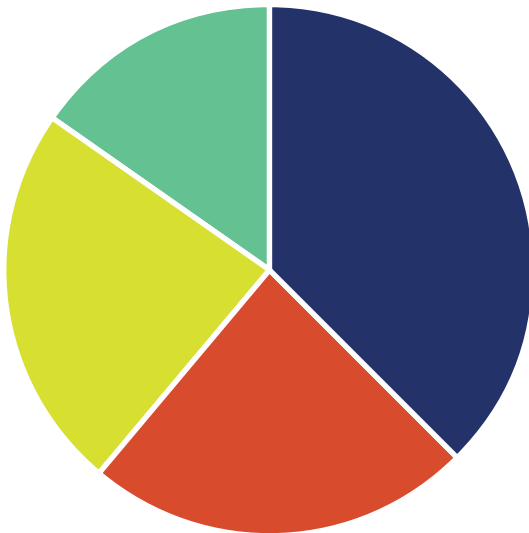


Injuries are common in grocery stores and managers should implement effective safety measures to reduce the chances that accidents will take place. According to the Bureau of Labor Statistics, grocery stores were ranked as one of the top nine industries having 100,000 or more cases of injuries and illnesses.¹ In 2000, 86,000 cases were reported: of these cases 55,000 equated to workers having to miss work for one or more days; 31,000 required employees to adjust their work, lifting lighter items, or having to shorten their shifts.² These statistics illustrate the

staggering threat that grocery store environments pose to the health and safety of workers.

Based on the same Bureau of Labor Statistics study, trauma injuries include carpal tunnel syndrome and motion related incidents, impacting the hands, wrists, elbows, or shoulders.³ More often than not, grocery store workers stand on their feet for hours on end, lift heavy items, face slippery floors, and much more that can impact their bodies and increase the chance of an injury. It is also important to recognize the source of injuries.⁴

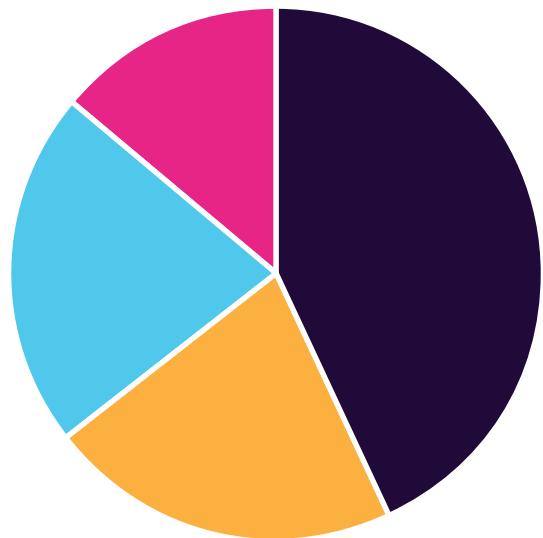
MAJOR SOURCES



■ BOXES=27% OF CASES ■ EMPLOYEE MOTION/POSITION=17%

■ FLOORING=17% ■ MACHINERY=11%

EVENT SOURCES



■ OVEREXERTION IN LIFTING: 28% OF CASES ■ FALL ON SAME LEVEL: 14%

■ INJURY BY AN OBJECT: 14% ■ INJURY AGAINST AN OBJECT: 9%

MUSCULOSKELETAL DISORDERS



Injuries or illnesses resulting in sprains, tears, back pain, muscle soreness, hernias, and more are classified as musculoskeletal disorders or MSDs.⁵ In 2000, there were 20,778 reported MSDs cases, causing employees to miss work.⁶ Adding safety measures such as commercial mats can reduce the amount of muscle soreness and pain grocery store workers experience throughout the workday.

^{5,6} <http://www.bls.gov/opub/mlr/cwc/workplace-injuries-and-illnesses-in-grocery-stores.pdf>

MAJOR GROCERY STORE RISK FACTORS



According to the Occupational Safety and Health Administration (OSHA), these factors include force, repetition, awkward postures, and contact stress.⁷ Force includes physical strains, such as heavy lifting, pushing, pulling, and using equipment.⁸ Repetition comes in the form of continually performing the same series of motions, such as typing on a cash register.⁹ Awkward postures outline when stress is placed on the body by reaching high, squatting low, or leaning over a counter.¹⁰ Finally, contact stress is when the body is pressed, such as the hand against something hard, like

a hammer.¹¹ Acknowledging these common grocery store risk factors can educate managers on what compromises the health and wellness of their staff.

ERGONOMIC IMPROVEMENTS

Anti-Fatigue Mats



Anti-fatigue mats can be utilized to reduce muscle soreness, leg stress, back stress, and fatigue for employees. OSHA recognizes the importance of using ergonomic and neutral working postures throughout grocery stores to reduce the chances of injuries.¹² To protect one's feet and legs, anti-fatigue mats come into play: anti-fatigue mats should be used to reduce back and leg exhaustion.¹³ Incorporating anti-fatigue mats into cashier and bakery areas, promotes comfort.¹⁴ Anti-fatigue mats can also be placed in deli, meat, produce, backroom, and entrance areas of grocery stores.

Give employees a bit of relief from stress and exhaustion with the addition of these safety and comfort measures.

Anti-fatigue mats must be serviced on a regular basis to be effective in grocery store applications. Making sure old, worn out mats are not in service is critical in protecting grocery store personnel. Mats also must be cleaned on a regular basis to extend the life of use. Be on the look out for mats that are cracked, tearing, worn, or dry-rotting.

General Posture Adjustments



Aside from commercial mats and other safety equipment, it is important to learn of the simple changes that can be made to better adjust to the body's natural posture. When standing, grocery employees should try their best to keep the back straight, without bending, leaning, or twisting.¹⁵ When working in a chair, ergonomic back rests can be provided to alleviate strains and stress.¹⁶ Consider repositioning your hands, keeping them straight and lined up with the forearms; additionally, it is a good idea to not lean wrists against hard, uncomfortable surfaces.¹⁷

Focus on your head and neck, ensuring you don't twist or bend.¹⁸ Making these easy, simple, and cost-effective adjustments can help your staff feel more comfortable, improving morale and productivity.

GROCERY STORE AREAS & ERGONOMIC IMPROVEMENTS

Front End: Checkout, Bagging, & Carry Out



The front-end area of grocery stores is an important area to consider for ergonomics and injury prevention. As previously mentioned, cashiers should be provided anti-fatigue matting to reduce muscle soreness and pain.¹⁹ Utilizing power conveyor belts is also a necessity to avoid employees twisting and leaning over to reach the items.²⁰ Covering or removing hard edges on the cashier station and machinery can also help to reduce musculoskeletal disorders.²¹ Providing a safe and comfortable space for employees is critical when reducing injuries and MSDs.

Stocking Areas



Stocking areas present several hazards including lifting heavy boxes, leaking liquids, and many more. Simple improvements to processes can greatly reduce the chance of injuries. Utilizing push carts for products is key to avoid pushing heavier items, resulting in a strain.²² Creating a rotating schedule for these tasks is also important to avoid employees kneeling, squatting, or reaching for too long.²³ Make sure that flooring underneath cases is clean and dry to reduce the chance of a slip and fall accident.²⁴

Utilizing commercial mats in these spaces can also safeguard employees from slip and fall injuries. For pushing, pulling, reaching, and other activities, ergonomic techniques should be used to prevent injuries.

Bakery



The bakery area is another section of the grocery store that involves lifting items and standing for long working hours. Simple tips include using smaller bags of ingredients to reduce the weight that needs to be carried.²⁵ For workers that are standing for hours on end, commercial anti-fatigue mats are also recommended for this area and should be used as protective barriers between the user's feet and the hard flooring surface.²⁶ Implement adjustable height tables for baking cakes or holding turntables so users are not leaning forward or bending down.²⁷ Also, ensure that baking supplies,

like spoons and spatulas, fit the user's hands and are not slippery.²⁸ In food production areas, such as the bakery, the need for ergonomic techniques and safety measures is necessary to safeguard employees.

GROCERY STORE AREAS & ERGONOMIC IMPROVEMENTS

Meat & Deli Areas



The meat and deli areas not only present threats of MSDs, but also more serious injuries that can be life threatening. Employees work hard with meat processing machines, sharp knives, and other dangerous equipment. The easiest ergonomic and safety measure in this area of the grocery store is to keep knives, grinders, cutters, and other equipment well maintained to avoid injury.²⁹ Employees should be given stools to take a break in between servicing customers to give some relief to their backs and legs.³⁰ Make sure scales are not too high or low for employees; additionally, ensure that they are at a comfortable position to avoid twisting or leaning down.³¹ Use commercial mats in these areas to give employees relief from hard flooring surfaces as well as to reduce exhaustion.

Produce



Product department employees are tasked with heavy-duty lifting, cutting, and other tasks. When lifting melons, large potatoes, bananas, and other produce items, these employees should carry items close to their body to avoid back strains.³² When transporting ice, it is advisable to move it in portable cases to avoid leaks and over lifting.³³ The main objective in this department is to ensure that employees are not pulling or straining their backs due to over lifting produce items. The other objective is to streamline the process of transporting ice and product products to cases in the simplest and safest manner possible.

PROJECT AZALEA



Acme Markets awarded Health Mats with a plaque to recognize their contributions during Acme's Project Azalea. The project was an initiative during which Acme converted 71 A&P, Pathmark, and Super Fresh locations throughout Pennsylvania, Delaware, New Jersey, New York, Connecticut, and Maryland. Health Mats is a supplier to Acme of walkway safety solutions and ergonomic mats for commercial buildings. The use of Health Mats' products will be used to promote health and safety throughout Acme locations.

CONCLUSION

Grocery stores present their own unique risks, hazards, and injuries that threaten the productivity and wellness of the workplace. Musculoskeletal disorders including carpal tunnel syndrome, hernias, back pain, and more are experienced by grocery store employees across the county. By making simple improvements such as utilizing commercial mats and implementing ergonomic best practices in front end, stockrooms, deli, produce, bakery, and entrance areas, business owners can reduce the amount of injuries that take place. In conclusion, grocery store industry personnel should be made aware of all the necessary safety measures and ergonomic techniques to reduce the likelihood that an injury will happen.

WORKS CITED

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