



Selling Clean as Risk Management

Using ISSA's Value of Clean® Safety Tool





Value of Clean® Tools

- Value of Clean® Calculator 2.0
- Value of Clean® White Paper
- PowerPoint Presentation, Infographic, and Videos
- Customer Leave-behind Cards
- Library of Articles/Webinars

Member download: issa.com/value

Customer access: issa.com/valuetips



Objectives

- Define the value of cleanliness to facility executives or building service contractors
- Demonstrate how safety awareness, site-based audits, policies, and products create a safe work environment for occupants, visitors, and front line workers
- Verify how investments in safety products, proper matting, and documented cleaning programs can reduce potential hazards, slips, and falls in the workplace
- Review third-party studies, white papers, and insurance data demonstrating that a safe facility reduces potential risk and reduces cost
- Identify workplace hazards and potential injuries to frontline cleaning workers



Employer Responsibilities Under OSHA*

- Provide employees with work and workplaces that are safe and healthy
- Be aware of the hazards employees face on the job, train every worker about the specific hazards, and keep records of this training
- Correct any hazardous conditions that may result in serious injury to employees
- Comply with all applicable OSHA standards
- Notify the nearest OSHA office of any serious injury or any serious illness caused by the job
- Display OSHA's Safety and Health Protection on the Job poster so workers are aware of basic rights and responsibilities



Job Safety and Health
It's the law!

OSHA®
Occupational Safety and Health Administration
U.S. Department of Labor

EMPLOYEES:

- You have the right to notify your employer or OSHA about workplace hazards. You may ask OSHA to keep your name confidential.
- You have the right to request an OSHA inspection if you believe that there are unsafe and unhealthful conditions in your workplace. You or your representative may participate in that inspection.
- You can file a complaint with OSHA within 30 days of retaliation or discrimination by your employer for making safety and health complaints or for exercising your rights under the OSHA Act.
- You have the right to see OSHA citations issued to your employer. Your employer must post the citations at or near the place of the alleged violations.
- Your employer must correct workplace hazards by the date indicated on the citation and must certify that these hazards have been reduced or eliminated.
- You have the right to copies of your medical records and records of your exposures to toxic and harmful substances or conditions.
- Your employer must post this notice in your workplace.
- You must comply with all occupational safety and health standards issued under the OSHA Act that apply to your own actions and conduct on the job.

EMPLOYERS:

- You must furnish your employees a place of employment free from recognized hazards.
- You must comply with the occupational safety and health standards issued under the OSHA Act.

This free poster available from OSHA –
The Best Resource for Safety and Health

Free assistance in identifying and correcting hazards or complying with standards is available to employees, without citation or penalty, through OSHA-supported consultation programs in each state.

1-800-321-OSHA (6742)
www.osha.gov

OSHA 3090-102 (2016)



ISSA

EU Employer Responsibilities

The European Agency for Safety and Health at Work provides a Framework Directive 89/391/EEC and underlying directives apply to all businesses, including cleaning. Among them are:

- ☐ 89/654/EEC minimum safety and health requirements for workplaces
- ☐ 89/655/EEC the use of work equipment
- ☐ 89/656/EEC personal protective equipment
- ☐ 90/269/EEC manual handling of loads
- ☐ 2002/44/EEC physical agents such as vibrations
- ☐ 2003/10/EEC noise



European Agency
for Safety and Health
at Work

ISSA

https://osha.europa.eu/en/publications/literature_reviews/cleaning_workers_and_OSH

The Financial Incentive to Improve Safety

- More than 4.1 million U.S. workers suffer a serious job-related injury or illness
- The cost paid by American employers for workers' compensation is \$74 Billion annually. Additional hidden costs involve real expenditures of time and budget dollars
- An injury and illness prevention program and a “safety culture” reduce work related injuries
- Prevention programs are less expensive than the total cost related to workplace injuries
- Employers that implement workplace safety programs reduce workers' compensation premiums and enhance their overall business operation
- Typically, for most European Union countries, the costs of accidents at work and occupational ill health range from 2.6% to 3.8% of GDP

<https://www.osha.gov/dsg/topics/safetyhealth/OSHAwhite-paper-january2012sm.pdf>
https://osha.europa.eu/en/topics/good-osh-is-good-for-business/index_html



Quality Cleaning Can Reduce Safety Risks

Floor Safety

- ❑ Slips, trips, and falls can be reduced and prevented with a comprehensive risk assessment
- ❑ Proper cleaning procedures, best practices, and effective cleaning products reduce the potential for slip, trip, and fall incidents
- ❑ Scientific instrumentation and standards verify risk and validate the opportunity to implement cost effective solutions to floor safety

Workplace Safety

- ❑ Third-party studies, regulatory compliance, and safety standards substantiate the need for a policy, technical training, and a commitment to workplace safety
- ❑ Workplace safety reduces cost and potential risk associated with job related injuries
- ❑ Insurance premiums and fines can be reduced with a workplace safety audit and the guidance for custodial operations



Financial Impact of Safety Programs

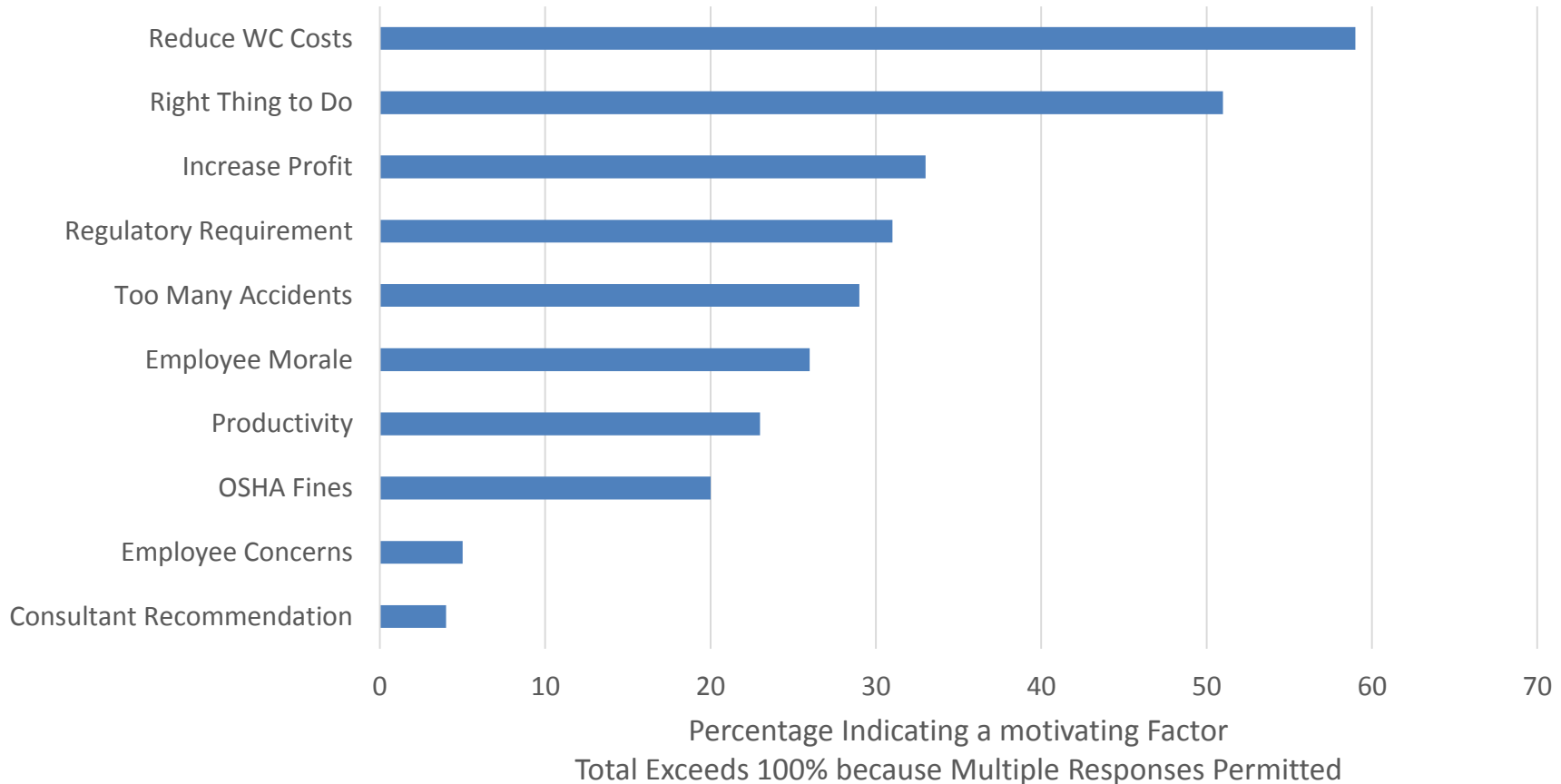
- OSHA estimates that implementation of an injury/illness prevention program reduces a firm's workplace injuries by 15% to 35% compared to firms that have not implemented a program
- ServiceMaster reduced its workers' compensation costs by \$2.4 million over a two-year period following improvements to its safety and health program
- The American Society of Safety Engineers reports that one company's fall protection program reduced its costs by 96% (from \$4.25 to \$0.18 per labor hour)
- A Liberty Mutual survey found that every dollar spent on workplace safety returns \$4.41 in savings
- European studies estimate for every euro invested in occupational safety and health, there is a return of 2.2 euros



http://www.asse.org/professionalaaffairs_new/positions/roi.php

International Social Security Association Final Report 2013 Calculating the international return on prevention for companies:
Costs and benefits of investments in occupational safety and health.

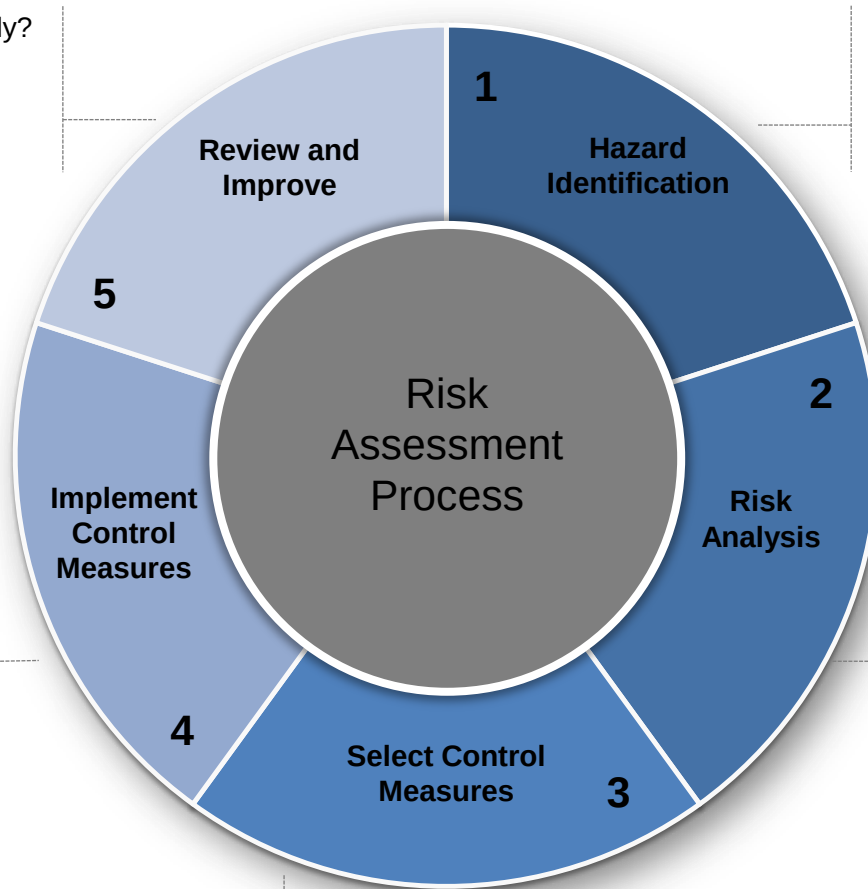
Business Executive Top Reasons to Adopt a Safety Program



White Paper on Return of Safety Investment. American Society of Safety Engineers (ASSE), (June, 2002)

How to Evaluate Workplace Risks

- Is the process working effectively?
- Have the control measures eliminated or reduce the risks?
- Is new information available?





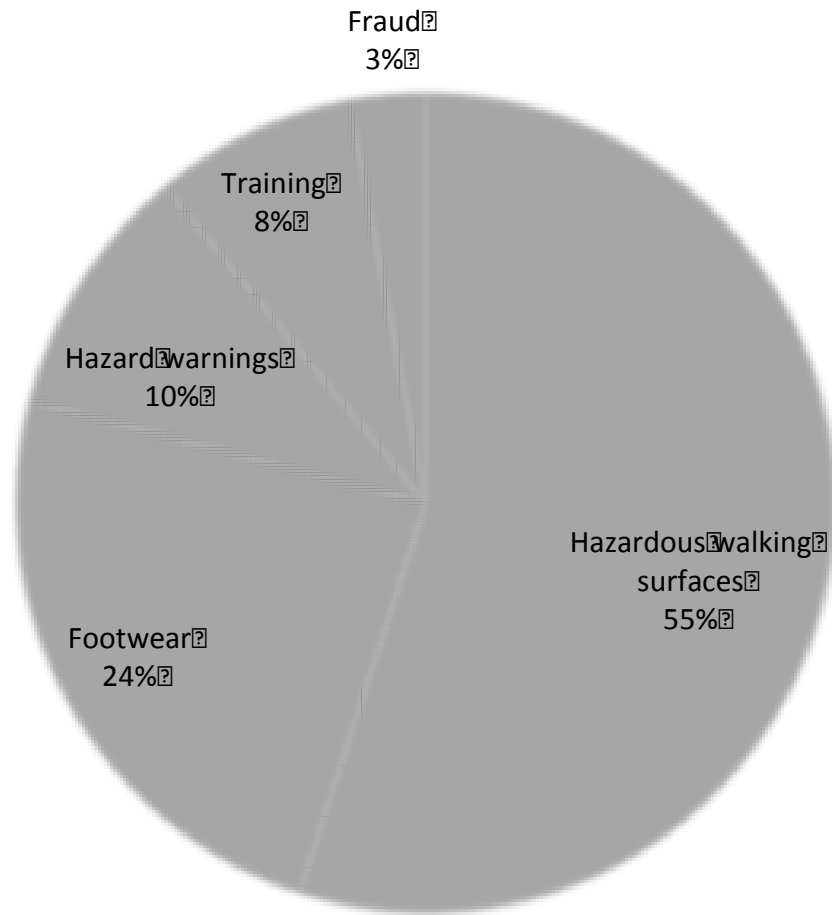
Floor Safety

U.S. Slip and Fall Statistics

- ❑ Slips and falls are the leading cause of worker's compensation claims
- ❑ Floors and flooring materials contribute directly to more than 2 million fall injuries each year
- ❑ 85% of worker's compensation claims are attributed to employees slipping on slick floors
- ❑ 22% of slip & fall incidents resulted in more than 31 days away from work for each injured worker
- ❑ 65% of all lost workdays are due to slip/fall accidents
- ❑ Slips and falls account for over 1 million hospital emergency room visits



Causes of Slips, Trips, and Falls

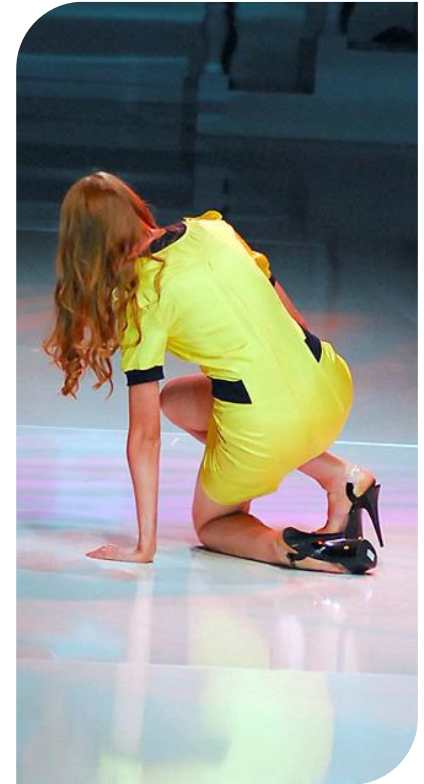


- Research, based on insurance claims data, reveals 5 major causes responsible for slips, trips, and falls
- Slip-and-fall injuries continue to be the leading source of general liability claims incurred by CNA commercial insurance policyholders in the real estate sector
- A property owner's slip and fall prevention strategy should focus on an approach that addresses all 5 causes



Top 10 Slip and Fall Hazards

1. Contaminants on the floor: water, grease, oil, and fluids
2. Poor drainage: pipes and drains
3. Damaged, warped, buckled or uneven flooring surfaces
4. Outdoor walking surface irregularities
5. Weather conditions: ice and snow
6. Inadequate lighting
7. Stairs and handrails
8. Stepstools and ladders
9. Tripping hazards: clutter, cords, hoses, and wires
10. Improper use of floor mats and runners



Costs of Slips and Falls

- ❑ Compensation and medical costs associated with employee slip & falls total ~\$70B / yr.
- ❑ Average cost of litigation now exceeds \$61,000
- ❑ Average slip and fall settlement is \$24,000
- ❑ Average jury award tops \$100,000
- ❑ Loss of productivity and business
- ❑ Increased industrial insurance premiums
- ❑ Costs associated with training a replacement worker
- ❑ Since 1980, personal injury lawsuits have risen by more than 300%
- ❑ Slip, trip, and fall injuries costs in the U.K. are nearly 1 billion pounds per year



http://www.nfsi.org/the_costs.php
<http://www.slipstripsandfalls.org.uk/slip-trip-and-fall-statistics>

ANSI Floor Safety Standards

- B101.0 Walkway Surface Auditing Procedure for the Measurement of Walkway Slip Resistance
- B101.1 Test Method for Measuring Wet SCOF of Common Hard-surface Floor Materials
- B101.2 Test Method for Determining the Impact on Wet Dynamic Coefficient of Friction of Various Chemical or Physical Walkway Surface Treatments
- B101.3 Test Method for Measuring Wet DCOF of Common Hard-surface Floor Materials (Including Action and Limit Thresholds for the Suitable Assessment of the Measured Values)
- B101.5 Standard Guide for Uniform Labeling Method for Identifying The Wet Static Coefficient of Friction (Traction) of Floor Coverings, Floor Coverings with Coatings, and Treated Floor Coverings
- B101.6 Standard Guide for Commercial Entrance Matting in Reducing Slips, Trips, and Falls

Checklist for Recognizing Slip, Trip and Fall Hazards

Work Area: _____ Date: _____

ITEM

1. General Work Environment	OK?	CORRECTIVE ACTIONS
• Documented, functioning housekeeping program in place	_____	_____
• All workstations clean, sanitary and orderly	_____	_____
• Adequately lit	_____	_____
• Work surfaces kept dry	_____	_____
• Spills cleaned up immediately according to proper procedures	_____	_____
• Combustible scrap, debris and waste stored safely and removed from worksite properly	_____	_____
• Regulated waste discarded according to federal, state and local regulations	_____	_____
• Accumulations of combustible dust routinely removed from elevated surfaces	_____	_____
• Oily and paint-soaked waste disposed in metal waste cans	_____	_____
• Other: _____	_____	_____
• Other: _____	_____	_____
• Other: _____	_____	_____

Notes: _____

National Safety Council Checklist for Recognizing Slip, Trip, and Fall (STF) Hazards

*This valuable tool can be used for
a site-based facility audit*



This material is provided courtesy of the National Safety Council and produced under the Susan Harwood Grant from the Occupational Safety and Health Administration, U.S. Department of Labor. © 2006 National Safety Council. All rights reserved.



Cleaning Recommendations

- ☐ Inspect walkways frequently for potential slip and, fall hazards
- ☐ Ensure that staff is trained in slip, trip and fall prevention
- ☐ Ensure that floor cleaning products are properly used
- ☐ Ensure that permanently installed features, like carpet runners and entrance matting, are included in the maintenance and housekeeping program
- ☐ Remove walkway hazards immediately once they are identified
- ☐ When a spill is identified, employees are to remain with the spill until removal is completed
- ☐ Barricade traffic aisles or single entrance rooms when cleaning is in progress and until floors are dry
- ☐ Wear resistant shoes





Slips and trips: The importance of floor cleaning

Slips and Trips 2

Introduction

Slips and trips are the most common cause of major injuries at work. Around 90% of these are broken bones. The costs to industry are substantial (over £500 million per year) and there is incalculable human cost and suffering to those injured. Floor cleaning is significant in causing slip and trip accidents, both to cleaning staff and others.

Legal actions following an injury can be extremely damaging to business, especially where the public is involved. Insurance only covers a small part of the cost.

Effective solutions are often simple, inexpensive and can lead to other benefits.

The most effective approach is to ensure that slips and trips hazards are designed out of a building. Consulting with the cleaners during refurbishment for example, can provide valuable information on the suitability of proposed flooring types and storage facilities for cleaning equipment.

This information sheet provides guidance on reducing slips and trips from cleaning activities and will be useful to those who:

- employ or supervise cleaners;
- manage cleaning contracts;
- manage premises where cleaning takes place (either in-house or contracted out);
- are involved in workplace health and safety, for example safety representatives.

Case study: Woman loses leg following two slip accidents

Alison was an occupational therapist in a large hospital when she had two slip accidents at work.

The first happened in 1986. Alison slipped on rotting leaves on the concrete steps of the hospital on her way in. The leaves were supposed to be cleared on a daily basis, but had not been because of staff shortages. She fell heavily on her right knee and was still in pain three months later, when she was told she needed surgery.

In 1992 she slipped again, this time on a wet vinyl floor. Someone had mopped the floor and failed to

dry it or put out any barriers or warning signs. She slipped and fell directly onto her right ankle. Over the next few years she faced 30 operations. Eventually she was told that the only solution was to have her foot amputated. Recently Alison had a 32nd operation when her leg was amputated at the knee.

As anyone can imagine, these easily avoidable accidents have had a horrendous effect on Alison's life. She was an active 21 year old who enjoyed dancing, aerobics and jogging. She cannot do any of these activities now and spends a lot of her time in a wheelchair.

Although she received extensive compensation, she has lost her job and will never work again because of ongoing problems. Alison said no amount of money can compensate for what happened to her.



Health and Safety Executive (HSE) is the national independent watchdog for work-related health, safety, and illness in the U.K.

Floor Cleaning information sheet: detail safety precautions, monitoring systems, and cleaning recommendations for facility service providers and property managers.

Control measures to prevent slip and falls

- ☐ Management systems
- ☐ Contamination control
 - Preventing contamination, choose the right cleaning method
 - Make sure cleaning does not introduce an additional slip risk
 - Obstacle removal

Floor Sign Recommendations

- Employees should be trained to post signs when a hazard is present and remove them promptly when the hazard no longer exists
- Be at least 28" tall and be visible from 360 Degrees
- Have a large stable base to contain hazards
- Be stored close to all entrances and be easy to locate



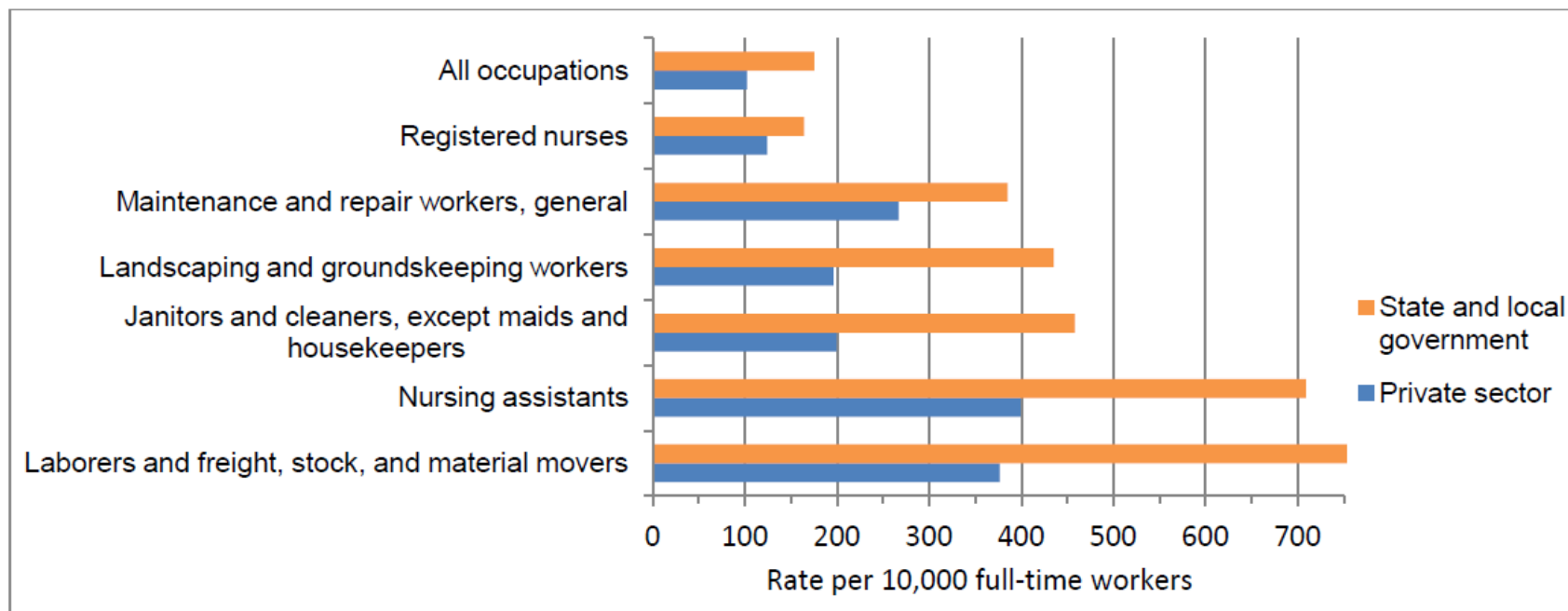


Frontline Worker Safety



Incidence Rates with Days Away from Work

Chart A. Rates for selected occupations¹ with high case counts, by ownership, 2012

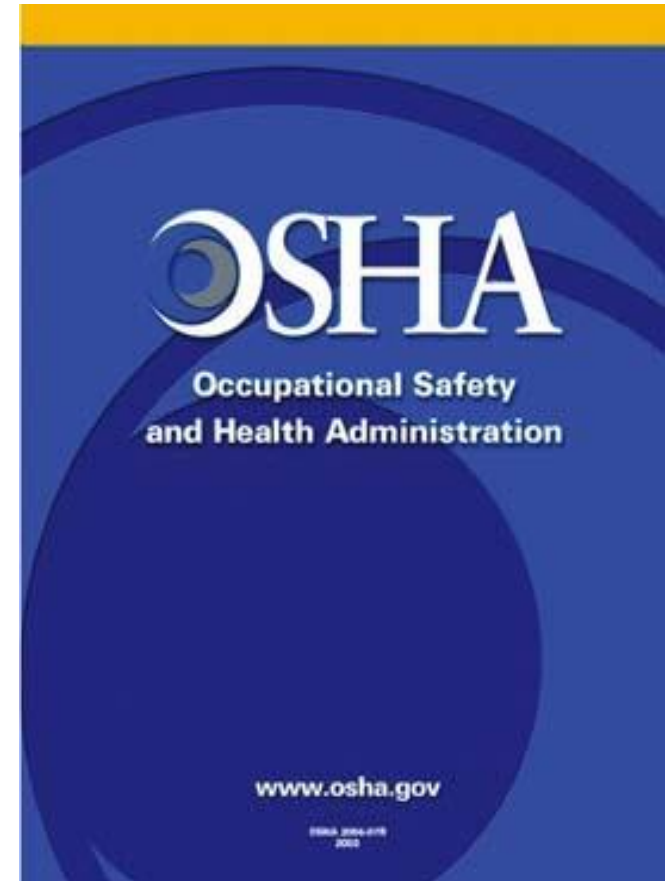


¹ These occupations had at least one percent of the days-away-from-work cases in the respective ownerships.

Most Frequent OSHA Citations for Cleaning Operations

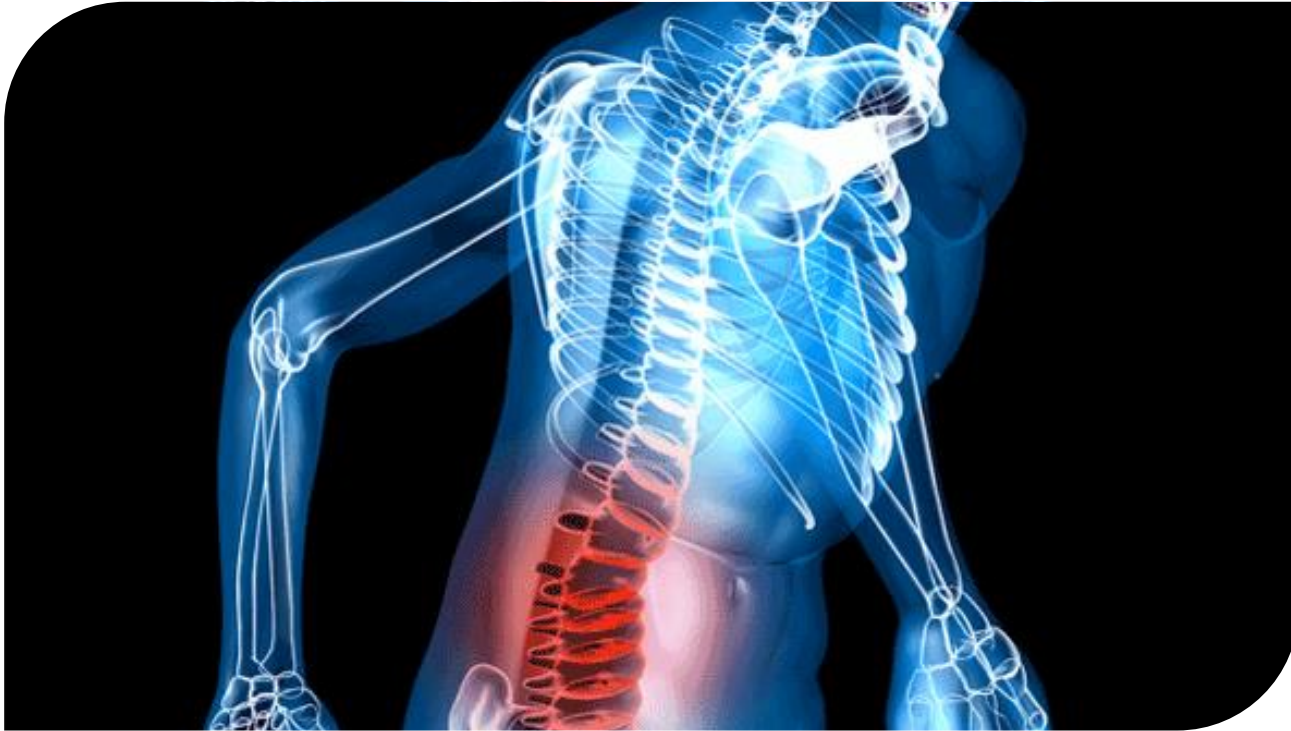
Federal 7349 SIC Codes

- ☐ Bloodborne pathogens
- ☐ Hazard communication
- ☐ Eye and face protection
- ☐ Hand protection
- ☐ Air contaminants
- ☐ Fixed ladder



Tasks, Risks, and Potential Solutions

Task	Risk Factors	Potential Solutions
Dusting and Scrubbing	Reaching Bent back Squatting Kneeling Bent wrists Hand force Repetitive motions Loose-fitting gloves	Long-handled tools Angled tools Lightweight cleaning heads Squeegees for cleaning glass Battery-powered scrubbers Appropriately sized gloves
Vacuuming	Pushing and pulling forces Lifting Repetitive motions Grip force Bent wrists Bent back	Lightweight canister vacuums Backpack vacuums Self-propelled upright vacuums Height-adjustable floor handles Wide area vacuums
Mopping	Lifting Carrying Hand force Repetitive motions Bent back Elevated shoulders	Hose-to-fill bucket at ground level Bottom-draining buckets Lightweight mop heads Adjustable length handles Microfiber mops, vapor steam cleaners No-touch cleaning systems
Stripping and Buffing	Hand force Bent wrists Repetitive motions Pushing and pulling Vibration	Ride-on or walk-behind floor machines Equipment maintenance programs
Handling Trash	Lifting Added force to overcome trash can suction Carrying Pushing and pulling	Smaller trash bags Vent holes or channels in trash cans Side opening trash containers Locating dumpsters underneath loading docks Mechanical trash dumpers
Moving furniture	Lifting Carrying Push and pull forces to fold cafeteria tables	Lightweight and/or wheeled furniture Wheeled lifting devices Friction reducing aids Spring-assisted folding cafeteria tables



Work-related Musculoskeletal Disorders (WMSD)

Caring for cleaners

Guidance and case studies on how to prevent musculoskeletal disorders



This is a free-to-download, web-friendly version of HSG234 (First edition, published 2003). This version has been adapted for online use from HSE's current printed version.

You can buy the book at www.hsebooks.co.uk and most good bookshops.

ISBN 978 0 7176 2682 3
Price £9.50

This publication is designed for all those involved in the management of health and safety in the cleaning industry. It will be useful for employers, managers/supervisors, health and safety personnel, trainers, safety and union representatives and cleaners themselves.

Guidance is provided on recognising and controlling the manual handling and upper limb risks faced by cleaners at work. A number of case studies are also provided, focusing on how organisations have reached a solution.

Many of the solutions suggested are simple cost-effective measures that were developed through co-operation between supervisors, managers, safety representatives and cleaners. By applying the guidance in this book, work-related ill health and injuries suffered by cleaners can be significantly reduced.

This publication is designed for all those involved in the management of health and safety in the U.K. cleaning industry.

Many of the solutions suggested are simple, cost-effective measures that were developed through cooperation between supervisors, managers, safety representatives, and cleaning workers.

By applying the guidance in this book, work related ill health and injuries suffered by cleaning workers can be significantly reduced.

Cleaning Worker Activities

- ☐ Vacuuming
- ☐ Mopping – lifting buckets – wringing mops
- ☐ Floor buffing – swing machine
- ☐ Trash removal
- ☐ Equipment transport – carry machine
- ☐ Moving objects
- ☐ Lifting furniture
- ☐ Reaching, stooping, and bending
- ☐ Pushing, pulling, and jerking



Cleaning Worker Risk

- ❑ Cleaning tasks are labor intensive
- ❑ Repetitive motion tasks
- ❑ Equipment may cause vibration
- ❑ Lack of proper training
- ❑ Poor lifting methods
- ❑ Heavy physical work
- ❑ Bending, twisting, reaching or crouching
- ❑ High workload and time restraints
- ❑ Rapid hand movements
- ❑ Unsuitable work heights

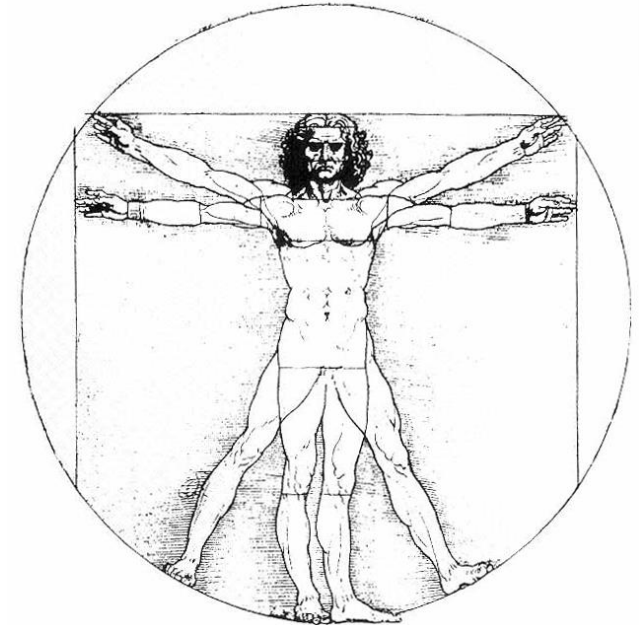




Safety Tips and Recommendations

Effective Ergonomic and Safety Programs

- Management commitment and employee participation
- Job hazard analysis
- Control ergonomic risks
- WMSD management systems
 - Record keeping
 - Assessment
 - Solutions
- Ongoing training and education



General Ergonomics Cleaning Tips

- ☐ Bend at the knees
- ☐ Relax grip on tools
- ☐ Avoid bending wrist as much as possible
- ☐ Minimize wringing mops and cloths by hand
- ☐ Switch hands and arms periodically
- ☐ Remove trash without lifting - set can on liner
- ☐ Do not compact trash in waste receptacles with your hands
- ☐ Do not “hammer throw” trash bags into dumpster
- ☐ Provide tilt carts to remove heavy trash bags



Ergonomic Machine Tips

- ❑ Low-vibration machines
- ❑ Floor machines with 2-3 finger controls
- ❑ Low handle weight – padded handle – adjustable handles
- ❑ Machines that are brush or motor propelled
- ❑ Quiet-machines 70 dBA or less
- ❑ Lower start torque, low running torque
- ❑ Good visibility
- ❑ Lower center of gravity for ride-on equipment
- ❑ No bending; use good posture
- ❑ Light-weight machines – easy to control



Ergonomic Mopping Tips

- ❑ Low-profile floor drains to empty buckets
- ❑ Workers move feet side to side when they mop
- ❑ Use smaller / lighter-weight mop heads
- ❑ Adjustable light-weight aluminum mop handles
- ❑ High-profile wringer - easy to press wringer handle – lightweight buckets
- ❑ Flat mops / aluminum handles
- ❑ Use systematic, overlapping passes; avoid push / pull action
- ❑ Do not cross midline with arms; no extreme twisting
- ❑ Stand upright
- ❑ Take breaks to look up and stretch neck



ISSA

Technical Training - Outcome

- Trained workers have less job-related injuries
- Trained workers are more productive
- Trained workers cause less asset damage
- Trained workers experience fewer occupant complaints
- Trained workers reduce and contain insurance premiums



Want This for Your Team?

Complimentary when
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membership for 2015.

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