

# NEW YORK STATE INSURANCE FUND

**NYSIF**<sup>®</sup>

## Partners In Safety



Safety Policy  
Safety Committees  
Safety Training  
Employee Cooperation  
Accident Reporting  
Accident Investigation  
First Aid  
Bloodborne Pathogens

Working Conditions  
Protective Equipment  
Materials Handling  
Ergonomics  
Air Quality  
Violence  
Emergency Planning  
Inspections



**nysif.com**

*Workers' Compensation & Disability Benefits Specialist since 1914*

**Then...Now...Always** <sup>™</sup>

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## A Message from NYSIF



New York enacted the Workers' Compensation Law in 1914 to protect workers and their families against the financial hardships of disabling workplace injuries.

The law created The New York State Insurance Fund to guarantee the availability of this vital form of insurance to any business seeking coverage. Since then, NYSIF has provided low cost insurance through vigilant support of loss control and effective safety services.

New York State recognizes its obligation to guarantee the safest possible working conditions. An effective safety program is the most important factor in lowering insurance costs and assuring the best possible protection for all employees. As a service to all New York State businesses, NYSIF provides this booklet to help you establish and maintain a safer workplace.

No one can afford to ignore safety in the workplace. Too much is at stake. Apart from humane considerations, workers' compensation insurance exacts a significant cost.

Insurance premiums are not the only major cost of industrial accidents. Loss cost analysis shows that lost production time, damage to plant and product, and hiring and training of new workers are significant factors that decrease profitability and place an unnecessary burden on all businesses.

An effective workplace safety program reduces these costs, and can improve employee morale, reduce turnover and increase productivity.

Few areas of employee relations offer such a cost effective return on an investment of time, effort and relatively little money.

Part of our mission is to "drive down the cost of workers' compensation insurance." NYSIF can help you implement a workplace safety program that, together with your cooperation, can drive down your workers' compensation costs.

## Safety Starts At The Top

As senior management goes, so goes the entire safety program. In other words, safety begins at the top. A full commitment by management and consistent dedication to the enforcement of safety procedures are the foundation blocks of an effective safety program.

If the chief executive's attitude toward safety is apathetic, then apathy will be found in supervisors and employees down the line. This principle applies equally to all businesses and institutions, no matter how large or small.

Department heads and supervisors reflect the image of their chief executive and a worker's attitude is usually the same as his or her supervisor's.

Your commitment to safety should be expressed in a clear, simple statement of policy to all employees. **The policy statement should be conspicuously posted, delivered to individual workers, and discussed with them at meetings.**

We recommend the simultaneous use of all three methods to communicate your policy statement.

For more than nine decades, The New York State Insurance Fund continues to provide our valued policyholders with unsurpassed safety services, security through guaranteed asset protection, and savings. We value our partnership with policyholders who embrace a savings-through-safety philosophy. It is our hope that this publication will help you plan and implement loss control techniques that contribute toward achieving these goals.



### 'Safety Culture' Is The Key

We cannot overstate the importance of creating a "safety culture" in the workplace as the key to an effective safety program. Our professional safety consultants will work with you to help you create a safety culture at your place of business.

**Armin Holdorf**  
NYSIF Field Services Director

## Management Commitment & Safety Policy

Management commitment and a written safety policy are effective tools in promoting a safe workplace.

- **The safety policy should state that all executive and supervisory personnel will be responsible for safety.**
- **It should further state that a safe workplace can be achieved by eliminating hazards and providing all employees with proper training in safe work practices.**
- **It should be made clear that policies and procedures will be established and enforced to insure the maintenance of a healthful and safe workplace.**

Management commitment and a written safety policy will support supervisors' safety efforts and encourage worker participation in the safety program.

Every business must shape its safety policy according to its needs. No one policy is suitable for all circumstances, but the purposes served are common to nearly all businesses.

**One individual must be responsible for the direction and control of an effective safety program in any organization.**

## The Safety Director

**One individual must be responsible for the direction and control of an effective safety program in any organization.** He or she should be a member of, or report directly to, top management.

In larger plants, this usually is the person in charge of industrial relations or personnel, who, in turn, may employ a safety director to directly supervise safety activities.

In smaller plants, suitable management or supervisory personnel may assume the role of safety director.

In very small organizations, the owner may find it necessary to add the safety program to his or her responsibilities. In other cases, a business owner may delegate the responsibility to a competent line supervisor, but this should be the lowest level considered.

# Safety Committees



**Along with creating a culture of safety, the vast majority of companies with successful safety programs have effective safety committees.**

These committees may conduct periodic inspections and identify hazards and unsafe working methods.

Safety committees meet to review accident and/or inspection reports, and make recommendations to management for the elimination of hazards or correction of unsafe work habits.

Committee meetings are also an opportunity to introduce and promote new safety training initiatives.

**The safety committee should be composed of management, as well as supervisors and representatives from other departments, such as maintenance.**

Larger organizations may require more than one committee. A management committee can decide matters of policy. Other committees serve specific functions, such as accident investigations and plant inspections. Labor management, supervisory or department head committees are often effective.

It is essential that a safety committee has authority. The level of authority will depend on committee membership, its role in the safety program and the extent of its responsibilities. **Committees that lack management support are worse than useless.**

## Meet Regularly

Safety committees must meet regularly, preferably not less than once a month because infrequent meetings lead to a loss of interest and deterioration of the safety program. Meetings should have an agenda. **Smaller committees, in which all members are able to participate, usually are most effective.**

Membership rotation is important because it makes the best use of knowledgeable and talented workers. By staggering tenure, the committee will always have some experienced members.

Safety committees should never become involved in labor-management matters unrelated to safety. This can be very destructive and the safety committee should concern itself only with safety matters.

Establishing a new safety committee or reactivating a dormant one may require some assistance from the outside. A NYSIF loss prevention specialist can assist

you in organizing your committee and provide safety service during the early, difficult stages.

Remember, however, that it will be your committee and it should never depend on any outsider for its continuing operation.

# Supervisor Training

**First-line supervisors are the key to the success of any safety program. They must receive thorough safety training and proper motivation.** Because they are ultimately responsible for safety in their departments their full cooperation is vital to the entire program.

First-line supervisors must assume full authority and responsibility for enforcing safety rules and regulations. They must understand that safe operations increase productivity by building workers' confidence and relieving their fear.

**It is extremely important for the supervisor to observe all safety rules.** A supervisor's acts do more to motivate employees than words. Supervisors who don't use protective clothing and equipment, or otherwise work unsafely, cannot expect their workers to work safely.

**If employers expect first-line supervisors to teach new employees to perform assigned tasks efficiently and safely, supervisors must receive ongoing education and training.**

It is difficult for supervisors with limited safety education to establish and maintain safe workplaces. Only through education and training can they develop the techniques necessary to teach safety and properly train employees. Complete on-the-job training includes accident prevention techniques, as well as what to do when an accident occurs.

**NYSIF loss prevention specialists can provide safety materials and lead discussions on the subject of safety training for supervisors. Safety resources are available at NYSIF's web site, [www.nysif.com](http://www.nysif.com).**



**When it comes to safety, a supervisor's actions speak louder than words.**



## Safety Training

Safe work habits and the elimination of unsafe acts are the result of education, training, continuous observation and feedback. The backbone of loss control is prevention of unsafe acts and unsafe conditions on a daily basis.

All businesses should plan, create and maintain safe working conditions. A safe operation depends upon a combination of safe working conditions,

safely-performed tasks and appropriate safety training.

Teach new workers (and experienced workers, when necessary) the safe way to perform their duties.

**Communication is vital. It's not enough to simply tell workers what to do. There must be follow-up and feedback to make sure workers understand and follow through on safe work practices.**

The "behavioral" approach of constant reinforcement is an effective way to reinforce safe work practices. The person most effective in this area is your first-line supervisor.

Supervisors must have sufficient training in safe work methods to provide adequate on-the-job training to workers.

**Frequent reminders with individuals or groups of two or three workers often provide more meaningful communication than large meetings.**

Effective safety training for employees may be simple, five-minute talks, demonstrations, and more detailed training if hazard exposure and accident experience warrant.

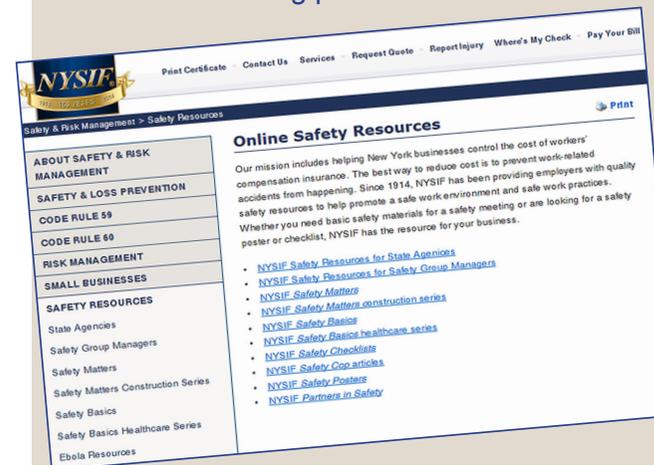
NYSIF has a wide selection of safety materials, articles and resources available online and in print. Contact your NYSIF loss prevention specialist or visit [nysif.com](http://nysif.com)>*Safety & Risk Management* for a full selection of safety resources.

**Safe work habits are the result of education, training, observation and communication.**



## Training Checklist

- ✓ Adapt training to operations or tasks being taught.
- ✓ Emphasize the need for constant awareness even when performing automated operations.
- ✓ Be sure all employees know when and how to use personal protective equipment.
- ✓ Post signs outlining operating procedures and hazard warnings.
- ✓ Instruct employees in use of portable fire extinguishers. Make sure each employee is familiar with your fire safety plan, evacuation procedures and any other disaster plans.
- ✓ Have at least one person, preferably more, trained in first aid on each shift.
- ✓ Be sure workers using motorized equipment are thoroughly instructed in its operation and potential hazards.
- ✓ Promote good housekeeping to reduce accidents and develop a sense of workplace pride.
- ✓ Teach safe lifting practices.



- ✓ Adhere to all applicable standards mandated by the Occupational Safety and Health Administration (OSHA).
- ✓ Document all training.

**NYSIF has a wide selection of safety materials, articles and resources available online and in print. Contact your NYSIF loss prevention specialist or visit [nysif.com](http://nysif.com)>*Safety & Risk Management* for a full selection of safety resources.**

## Employee Cooperation



Employee cooperation is vital to the success of your safety program.

The following measures can be powerful motivators to gain employee cooperation.

- **Management creates an atmosphere conducive to a good safety culture by establishing a safety policy and reinforcing it by maintaining a safe place to work.**

- The training methods you use have considerable bearing. **It's important to explain not only what to do and how to do it, but also why workers must do a job a certain way.** A helpful step in securing cooperation from your workers is to have them understand and accept the need for a rule or procedure.

- Safety posters pertinent to your operations and prominently displayed are very useful in reminding workers to act safely. "Keep Out" and "Caution" signs should explain further the reasons for the precautions. "Keep Out - High Voltage" or "Caution - Hard Hat Area" are more descriptive and informative.

- **The most effective means of securing worker interest is to involve them personally. Wherever possible, solicit suggestions from employees when making or revising safety rules.**

- Show your employees how working safely is in their own best interest. Explain how unsafe acts could cause pain, suffering, loss of income and a threat to their family's well-being.

- **Help workers channel their natural desire to excel toward accident prevention. Select employees for safety committees and first aid training based on their leadership ambitions and abilities.**

- Involve all workers in your safety program. Solicit and seriously consider their opinions. Welcome and discuss their suggestions. Encourage them to recommend ways to simplify operations or eliminate hazards.

**Show employees how unsafe acts could cause pain, suffering, loss of income and threaten their family's well-being.**

- Convince each worker that safety rules and regulations are designed specifically for his or her personal protection. Remember that while all people are different, they have the same basic concerns. This includes avoiding injury.

- **Supervisors and management must demonstrate that unsafe acts and conditions are unacceptable in all facets of the operation.**

- A line supervisor's relationship with workers has a major influence on securing their cooperation. A supervisor's personal attitude about safety is critical. Any deviation from safe practices by a supervisor will result in non-compliance by workers.

- **A supervisor who does not adhere to safety rules, or permits deviation from safe practices by a few workers, or otherwise shows favoritism, will not encourage an interest in safety.** The worker's respect and confidence in the supervisor's evenhanded fairness will secure the worker's cooperation in safety, as in other areas.



## Accident Reporting



It is a good rule to report and investigate all accidents and significant incidents promptly to determine the cause.

Every accident and near-accident — if properly reported, investigated and analyzed — provides an opportunity to prevent recurrence through corrective action. Maintain records for analysis to make further improvements if necessary.

**Employers should establish a fixed procedure requiring the reporting of every injury no matter how trivial.**

Supervisors and workers must know to report every accident or incident even when medical treatment isn't necessary. Today's bruised knuckles may become tomorrow's fractured hand without pinpointing and correcting the cause of the injury. **The same holds true of near-miss incidents.** For example, a falling tool might miss someone's head by inches. No injury occurred — this time — but why did the tool fall? And what will happen next time if the cause is not corrected?

Make an initial investigation of every accident or incident as soon as possible. Promptness is essential. Persons involved may very quickly forget important facts. Accidents involving complex factors may require additional investigation by the safety committee, safety director or appropriate technician. **A prompt investigation by the immediate supervisor has many advantages. It displays an interest in the welfare of employees, presents an opportunity for the supervisor to discuss safety with workers, assists in correcting unsafe acts and conditions, and increases knowledge of hazards and safety.**

**NYSIF eFROI® at [nysif.com](http://nysif.com) is the fastest, most convenient way to record and notify NYSIF of accidents, or file a claim.**



**Make an initial investigation of every accident or incident as soon as possible. Promptness is essential.**

## Accident Investigation

Conduct all accident investigations with tact and discretion. After the injured employee has received the necessary medical attention it is best to question the injured employee in a relaxed atmosphere away from the work area. The questioning should be free of blame, accusation or dispute. Explain that the purpose of the investigation is to help, not reprimand. **Your concern must be totally with determining the cause, or causes, of the accident and the avoidance of recurrence.**

Avoid using the word "carelessness." Using this word hinders searching for the real causes and providing for their correction.

Unsafe acts, alone or in combination with unsafe conditions, cause many accidents. If an unsafe act has caused or contributed to an accident, try to determine the precise nature of the unsafe act.

### *Common areas of human failure:*

1. Prescribed safe-work methods not followed
2. Proper protective equipment not worn
3. Rules or regulations violated
4. Properties of chemicals not known
5. Guards defective, inoperative
6. Horseplay or practical jokes
7. Heavy material lifted improperly
8. Wrong tool used for the job
9. Worker physically unfit for the job



**Cover the following in your accident investigation:**

**Who?** This includes the name, address, department, occupation and length of service of the injured person or persons. List anyone who may have caused or been involved in the accident, including any "missing person" whose presence might have prevented the accident, such as a helper, flagman or a partner in heavy lifting. Interview those who witnessed the accident or have knowledge of the condition or malfunction involved.

**When?** Time can be a significant factor. Hazardous tasks begun near the end of a workday may produce accidents due to weariness or haste.

**Where?** Location is most important, both for correcting conditions and noting areas of accident frequency.

**What?** This includes the task at the time of injury, the equipment being used and how the injury occurred. **Employment:** Exactly what task was the worker performing at the time of the accident? **Equipment:** Machine, tool, surface, etc., involved or associated with the accident. Identify specific parts of machines or equipment, such as gears, flywheels, blades, etc. **Type:** The manner in which the injury occurred – struck against, struck by, caught in, fell, etc.



**How? Unsafe condition:** What unsafe condition caused or contributed to the accident? Unsafe conditions may include “guard off machine,” “slippery floor,” “broken rung on ladder,” etc. **Unsafe act:** What specific act or behavior caused or contributed to the accident?

**Consequence:** Describe injury and injured body part.

**Correction:** Has corrective action been taken and, if so, what is the correction? If not, what is the required corrective action?

**Make copies of the injury and investigation reports, and give them to the designated person responsible for safety. This person must be sure an adequate investigation has taken place and corrective action has begun to prevent recurrence. The safety director or safety committee must follow up to make sure corrective actions have been taken.**



It is in your best interest to maintain and analyze records of all your accidents. Too many falls, for example, may indicate a need to study your floor surfaces or your housekeeping. A high incidence of eye injuries may indicate a need to require the wearing of protective goggles or eye shields. A number of unsafe acts in any one area requires a review of the safety training or supervision in that area.

**An analysis of your accident experience is a reliable way of revealing the weak spots in your safety program. Failure to act on these warnings eventually leads to costly accidents.**

## Medical Attention

**When an accident occurs it's important to act immediately to minimize the consequences. Rapid response is essential. Early treatment of any sudden injury or illness is crucial. First aid supplies must be readily available and all work shifts should have an adequately trained person designated to render first aid.**

Treat the injury properly. Injuries that require more than first aid should be referred to a medical doctor or a nearby emergency room.

(In New York State, an employer must honor an injured worker's free choice of physicians and medical facilities for emergency treatment. Continuing medical treatment is available through a large number of Workers' Compensation Board certified physicians and facilities.)

First aid training courses and materials are available through the American Red Cross and the National Safety Council. An approved first aid program staffed by properly trained workers is essential if your business lacks a qualified medical staff on premises, or is far from hospitals or clinics.

Supervisors and experienced employees who are dependable make good candidates for first aid training. Some employees may have already received training from former employers, auxiliary police or volunteer fire departments.

**First aid supplies should be readily available, and should be kept under the care of a supervisor or designated provider. Do not dispense first aid supplies for self-administration by workers.**

In all instances, first aid providers should be aware of what to do, and what not to do. In all injuries or illnesses that are beyond the scope of the first aid caregiver it is imperative to get prompt professional help.

## Bloodborne Pathogens

Designated first aid providers must follow the OSHA Bloodborne Pathogens standard to protect themselves and the patient when handling blood and body fluids. Personal protection (gloves, masks, breathing airways) must be furnished in the provider's first aid kit.



## Working Conditions



Although this safety booklet does not contain detailed information required to ensure the safety of specific workplaces, the following safety concerns are common to all businesses. **Attention to these areas could help your business lower its accident frequency.**

### Machine Guarding

Machinery is a frequent source of injuries. **Machine guarding can prevent injuries from contact with moving parts, mechanical and electrical failures, splashes and chips, and human error.** Two main areas require attention: point of operation and mechanical transmissions.

Automatic feed systems with totally enclosed moving parts provide maximum protection. The regulatory trend is to rely increasingly on original engineering rather than added devices. An original factory installed guard is better than one improvised later.

### Lockout/Tagout

This OSHA-mandated regulation is a life saver. Severe accidents can occur when an operator changes a die, oils a machine or otherwise adjusts a machine not completely deactivated, as when a mechanic tries to repair a machine still receiving energy.

**By placing machines into a “zero energy state” through a lockout device, you prevent the possibility of unexpected mechanical movement.** It requires that there be no electricity, oil, or air or water under pressure that might cause a machine to move unexpectedly, causing an accident.

### Housekeeping

**Obstructions in aisles, on stairs or other walkways cause many accidents.** Slips on grease or other liquids take their toll. All trash should be placed in containers, with oily rags in closed cans. Put materials and tools away when not in use. Do not use aisles for storage areas and do not block fire exits.

**Place machines in a ‘zero energy state’ with a lockout device to prevent accidental movement. This is a real life saver!**

**Obstructions in aisles, on stairs or walkways cause many accidents.**

### Lighting

Lighting should be adequate for the tasks performed in all work areas and in common areas. **Dim light and shadows are invitations to an accident.**

### Ventilation

**Proper ventilation is essential for both accident and health considerations.** Use appropriate ventilation and filtration systems where toxic gases, vapors, fumes or dust exists.

### Electrical

Cover electrical outlets, switches and junction boxes. Portable tools, unless double insulated, should have ground connections, and comply with regulations concerning ground fault interruptions.

### Flammable Liquids

Control all flammable liquids and use properly grounded storage tanks. Use only approved portable containers that, when being filled, remain grounded through a bonding wire to the storage tank. This includes plastic containers.

**Smoking must be prohibited.** Avoid accidental mixing of chemical substances that may lead to a possible toxic reaction or explosion. Use appropriate clothing and face shields designed to protect against flame, radiant heat and chemicals.

### Fire Extinguishers

Fire extinguishers should always be in sight and within reach. Inspect fire extinguishers regularly and always keep them fully charged.

**Use extinguishers appropriate for different types of fire hazards:** Class “A” for ordinary combustibles such as wood, paper and cloth, “B” for flammable liquids and grease fires, “C” for electrical fires, “D” for metals such as sodium and magnesium.

Multi-purpose “ABC” extinguishers cover a range of fire exposures in offices and general industrial operations. Provide ongoing training in their proper use. Emphasize safe exiting rather than firefighting.

### Safe walkways



**Sturdy handrails.  
Non-skid treads.**

Falling objects deserve attention even when they miss human targets.

### Elevations

Sturdy railings and toe boards on scaffolds and elevated platforms are a necessity. Keep ladders in good repair and have approved footings. **The use of chairs, boxes or other makeshift risers is an unsafe act and hazardous. Keep walking and work surfaces free of tripping hazards.** Industry-specific fall protection requirements by OSHA include safety gear such as harnesses and lifelines.

### HazCom Standard

OSHA's Hazard Communications Standard requires employers to educate workers about hazardous chemicals they work with and chemical exposures in the workplace. The law mandates that workers know the exact nature of all substances used in your products or processes, including maintenance supplies. The standard requires employers to promulgate a written program, train employees in proper work procedures, label chemical containers correctly, and provide material safety data sheets (MSDS). Your plan also must address safety for visitors at your work site.

### Overhead Objects

Protect workers from possible overhead falling objects. Overhead walkways should be guarded by railings and toe boards. Cross-stack storage piles to insure stability. Falling objects deserve attention even when no one is injured.

## Personal Protective Equipment

Personal protective equipment (PPE) must be provided to employees when these hazards or conditions exist:

### Hearing

When noise exceeds OSHA's allowable limits, you must provide and require use of properly fitted ear plugs or other OSHA approved devices. Be aware of excessive noise affecting workers. Engineering and administrative controls should be implemented to reduce exposure to noise.

### Skin

Exposure to chemicals or pollutants requires proper body protection.

### Vision

Eyes are particularly vulnerable. Many jobs require eye protection. One third of



all eye injuries occur to coworkers not engaged in hazardous work. Even minor injuries can result in sight loss. Appropriate eye protection should be provided to workers. Institute 100% compliance in areas where work requires safety glasses and/or goggles. Goggles should have side shields to protect against splashes and fragments. Provide face shields for jobs involving flying particles, exposure to chemicals, heat, molten metals or hot solutions.

### Face

Grinding and chipping operators, and employees exposed to many other hazards, require face shields.

### Head

Mandate approved hard hats for any work that has an overhead hazard. Don't use metallic hats near electric hazards.



### Hands

Handling heavy, rough or sharp materials requires gloves. Use nonconductor gloves for high voltage, metal mesh gloves for cutting and chemical-resistant gloves for a variety of industrial exposures.

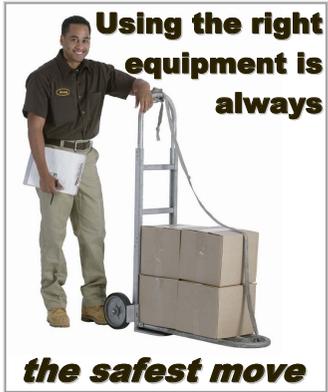
### Feet

Safety shoes suited to the hazard sharply reduce injuries to toes and feet. Where puncture wounds to the foot are a hazard, as in construction or demolition, use steel reinforced safety shoes. High heels, sneakers, open-toed or worn down shoes increase the incidence of accidents.

Employers must convince workers of the need for safety equipment, with supervisors setting the example. The following is very important in all situations requiring PPE:

- 1. Protection should be complete** – Provide the correct and necessary PPE based on the task/job being performed.
- 2. Durability** – Safety equipment that deteriorates during use is very dangerous.
- 3. Reliability of manufacturer** – Always consider when buying safety equipment.
- 4. Comfort** – At the very least, uncomfortable protective equipment reduces productivity. At worst, workers use every opportunity to avoid wearing it. Order proper sizes and test for fit.
- 5. Appearance** – Leads to the most important concern, acceptance.
- 6. Worker acceptance** – Obtained through proper training and enforcement.
- 7. Comply** with American National Standards Institute (ANSI) and OSHA standards for protective equipment when applicable.





## Materials Handling

### Guidelines for Safe Lifting, Carrying and Moving

Safe material handling can prevent many workplace injuries. Simple safety measures eliminate unsafe acts that cause back injuries, strains and cuts, as well as dropped and damaged items.

**1.** Plan the lift or move ahead of time. Know where you will place the item once it's lifted and

make sure that there's a clear path to that spot. Size up the object and determine how to best handle it. Wear gloves if necessary.

**2.** Know your limits and get help when needed. Understand that a back injury can last a lifetime. It's worth asking for assistance.

**3.** Use devices such as dollies, hand trucks and pallet jacks to avoid carrying and lifting.

**4.** Avoid over extending your back by keeping frequently-used items close at hand.

**5.** Use caution when carrying items on stairways and ladders. Do not exceed rated load capacity.

**6.** Rolling ladders should have wheel brakes that engage when stepped on.

### Safe Lifting

Use your legs when lifting! There is much power in leg muscles, but little in the back muscles. Keeping the back vertically straight, bending your knees, squat close to the item, grasp it firmly. Lift using the leg muscles, keeping the back straight. Do not twist your body to turn or change position—this can lead to a back injury.

### Forklifts

OSHA has a specific standard concerning the safe use of motorized fork lifts (29 CFR 1910.178). The standard includes training and skills evaluation, recordkeeping, usage guidelines and maintenance for forklifts and similar powered vehicles. There are numerous safety rules when operating fork lifts and similar devices. Proper training and enforcement of safe-operation rules is critical, because unsafe acts (human error) are the leading cause of forklift accidents.



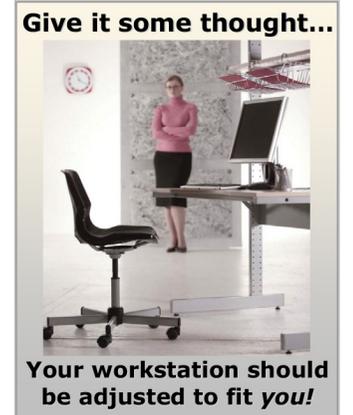
## Ergonomics

Ergonomics has become a common term when discussing work-related injuries caused by repetitive motion, twisting and improper lifting.

These cumulative trauma disorders (CTDs), also known as musculo-skeletal disorders (MSDs), injure workers in a variety of industries. The most widely known CTD is carpal tunnel syndrome. Preventing CTDs requires an examination of the tasks performed and the workplace itself to ensure a proper “fit” between job and worker.

Often, simple steps can successfully address ergonomic problems. Solutions include engineering and administrative controls, education, job redesign, new tools and replacement or adjustment of work stations.

Proper body mechanics and physical fitness can also help reduce MSD problems. For claims already filed, it is useful to perform a trend analysis looking for injury patterns. Then observe workers as they perform their task. See below.



### How To Reduce CTDs

A safety inspection at your facility is a good time to observe injury-causing conditions and acts that can lead to CTDs. Some key points:

- How do workers stand, hold a tool, reach over, lift or bend?
- Do they perform the same motion repeatedly?
- Are workers observed in awkward positions or postures?
- Are desks or workstations the proper height?
- Are employees reporting any MSD-related symptoms?
- If these injuries are common in your industry, what is done to address them?

By eliminating or mitigating each of the points mentioned above, you can dramatically reduce the risk of MSDs and CTDs in the workplace.

**CTDs injure workers in a variety of industries. Simple steps often can successfully address ergonomic problems.**



## Air Quality

Engineering is the preferred solution for respiratory problems resulting from fumes, gas, dust or other atmospheric contamination. If engineering isn't feasible, or during installation of engineering controls, use appropriate respirators. **OSHA's Respiratory Protection Standard (29 CFR1910.134) mandates use of protective equipment in various industrial settings.**

There are three major classes of respirators: air-purifying, air-supplied and self-contained breathing. The three types are not interchangeable. A commonly-used particulate filter mask, for example, is useless against solvent vapors, harmful gases or oxygen-deficient atmospheres.

Record all complaints about air quality in the workplace objectively and make note of exact symptoms. Ensure proper ventilation and maintenance of air-handling equipment and filters. **Inspect vents and intake air flow parts for air quality, mold and any other potential cause of what has commonly become known as "sick building syndrome."**

Take great care in using respirators of any type. Misuse of respiratory equipment can cause death — immediately or slowly over years. Proper fit is important. Follow manufacturers' recommendations and specifications for proper fit and fit-testing.

### Medical Status, Review

A pre-employment physical examination or questionnaire can protect persons who have respiratory conditions that might inhibit respirator use, from dangerous exposure. For the same reason, review annually the medical status of employees using respirators. All employees should have any pre-existing condition documented.

Consult an indoor environmental specialist if respiratory problems persist in the workplace. The American Industrial Hygiene Association ([www.aiha.org](http://www.aiha.org)) maintains a list of consultants with their specialties and a list of accredited laboratories. OSHA ([www.osha.gov](http://www.osha.gov)) provides information about its respirator standard.

Respirator manufacturers can provide technical help. Visit the National Institute for Occupational Safety & Health (NIOSH) for more information at [www.cdc.gov/niosh/topics/respirators/](http://www.cdc.gov/niosh/topics/respirators/)



## Workplace Violence

All workplaces are potential targets of violence, therefore all businesses should proactively manage the threat of workplace violence. Write a strong, clear policy of intolerance for violence, threats and abuse of any kind. Define acceptable behavior and consequences for non-compliance. Workplace violence includes robbery, coworker conflicts, employer-employee

conflict, supervisor-subordinate conflict and domestic violence spillover, among others things. Recognize your company's exposures and minimize them.

### Internal Threats

Employ sensitivity and precaution during emotionally charged times such as layoffs and firings, which can trigger violence. Train supervisors, security personnel and all staff to be aware of potentially violent situations and signs of troubled or disgruntled workers or customers. Employees who deal with hostile clients or who work in health care and custodial care are at high risk.

Recognize that violence is a constant threat, take appropriate precautions and have a response plan. Treat all threats, no matter what the context, seriously.

### External Threats

An effective prevention program distinguishes between robbery risks and internal conflict, as they require different strategies. Homicides are a major cause of workplace deaths. Most murders in the workplace result from robberies, not coworker or employer-employee conflicts.

Awareness is the key to crime prevention in businesses prone to robbery: retail stores, hotels, restaurants, jewelers, gas stations, cabs, car service, and others that handle cash.

**Encourage employees to report all suspicious or dangerous incidents, and take common-sense precautions:**

- Tell staff to cooperate during a robbery.
- Do a security survey. Change locks if necessary, avoid single-employee shifts, install cameras and alarm systems.
- Keep track of keys; use locks whose keys have restricted duplication.
- Use approved panic exit devices; some come with alarms to deter theft. Don't compromise fire safety; mark inaccessible exits clearly.
- Keep all areas well lit, especially entrances and parking areas.
- If safes operate on time-delay or employees can't open them, use highly visible signs that state this in languages suitable to your location.
- Screen new employees for criminal history, always investigate references. Pay attention to employment gaps.

# Emergency Planning, Evacuation

An emergency plan enables your organization to evaluate its risks and prepare for unexpected occurrences that could harm workers, damage facilities or disrupt operations.

## A well-designed emergency plan covers the following:

- Assesses likely emergencies, their causes and means of prevention
- Minimalizes injury and loss of life
- Defines a chain of command during emergencies
- Maintains proper communications throughout the crisis
- Preserves physical assets, property and cash flow
- Establishes contingency operation plans
- Provides rapid return to normal operations
- Prevents a total, irretrievable loss.

OSHA requires most businesses with 10 or more employees to have a written emergency plan. Top management must support the plan, periodically review and update the plan, and involve all employees in its execution.

## Creating A Plan

In your emergency plan, life safety is the prime consideration, followed by business continuity and organizational survival. Your organization can devise and implement a workable solution that protects lives and property. Creating a comprehensive plan involves an emergency coordinator and a response team. Gather key people and the necessary data to create the plan. Employee involvement is critical, especially when there is a need to document and implement complex shut-down or contingency procedures.

NYSIF loss prevention consultants can help you evaluate your risk exposure, the hazards of your operations and physical location, and what emergencies are likely to arise. Evaluate floor plans, exits, evacuation procedures, notification systems, medical facilities, staff training and overall emergency readiness. Honestly consider how effective your plans would be in dealing with risks your organization may face and modify them as necessary.

An “Emergency Management Guide for Business and Industry” is available from the Federal Emergency Management Agency web site, <http://www.fema.gov/business/guide/index.shtm>

**A good beginning is to review your fire safety and first aid plans. NYSIF risk-management professionals can assist you in identifying and addressing exposures.**

## Evacuations

The key to successful evacuation — and survival — is establishing safe, effective egress routes, communicating them to all employees, and holding practice drills to get occupants out quickly and calmly.

Egress routes should provide the most direct way out and bypass hazardous areas. They must have proper lighting and be wide enough to accommodate the number of persons expected to use them. **Clearly marked exits must be unobstructed (panic exit devices and alarm systems eliminate the need to double-lock critical fire exits).** Have evacuation routes evaluated objectively by someone outside your organization.

Escape route diagrams (with a “You are here” legend) placed at strategic points should show hallways and exits. Designated searchers and wardens should guide all visitors outside, and assist the disabled and non-English speakers.

Signs and battery-powered emergency lighting, required by many building codes, illuminate escape routes and guide occupants to exits in smoky conditions. Test these systems regularly.

## Practice Drills

Conduct practice drills regularly. Management and employees should not view these as an inconvenience. **Experience has shown the value of practice drills in getting occupants out alive during actual disasters.**

Assign specific safe gathering areas for personnel to report after an evacuation. Once outside, a coordinator should perform a head count of all employees and visitors. Those missing should be reported to the coordinator, but no one should go back inside to search without proper authorization.



## Safety Inspections

Supervisors should make regular detailed inspections of their areas to detect unsafe conditions, such as those arising from mishandling of materials, scrap accumulation, or wear and tear on machinery. Inspections should also observe employees for unsafe work acts.

Additional inspections can reveal hazards overlooked by first-line supervisors. These can be done by a safety director or other supervisor on a regular basis. Inspection committees of two or three supervisors are very effective. Where a safety committee exists, two or three members can make inspections before the committee's meetings. It's good practice to rotate this role among committee members.

**Make sure inspectors cover your entire operation, whether it takes one inspection or a series of inspections to obtain a complete survey.** For companies engaged in a continuous process, it's best to start at the beginning, with raw materials, and continue step-by-step through all production phases, to completion and delivery of the final product.

**Schedule inspections regularly — monthly, quarterly or at any suitable interval. The important point is to stick to your schedule.** Inspections of equipment required at specified intervals by local laws, such as fire extinguishing apparatus, pressure vessels, boilers and elevators, must be performed as required.

Use checklists to evaluate your inspection to ensure you haven't missed anything. Take accurate notes; record all unsafe conditions and unsafe acts.

**Inspectors must wear safety equipment and observe any required safety practices in areas they visit. They should not talk to workers without their supervisor's approval. Avoid criticisms; stick strictly to facts.**

Inspectors should complete written reports, recommending corrective action for any hazards or unsafe practices. Include target dates and names of those responsible for completion of hazard corrections.

It's more the intent to find things right, than how many things are wrong, and to find ways to reduce accident exposure.

**Stick to a regular inspection schedule. Keep records of all unsafe conditions and unsafe acts. Include target dates and names of those responsible for hazard correction.**

**Inspections should cover all areas of safety – plant, equipment, environment, procedures and practices.**

Inspections should cover all areas of safety including, but not limited to:

### Building Conditions

- **Structural safety** – walls, floors, elevators, stairways, railings
- **Housekeeping** – clear aisles, walking and working surfaces
- **Egress** – unobstructed exits
- **Fire Protection** – extinguishers, sprinkler systems, water tanks, storage of flammables
- **Electrical** – switchboxes, outlets, extension cords

### Machines/Tools/Equipment

- Guarding, wiring, power transmissions, shafting
- Condition of hand and power tools
- Chains, cables and ropes

### Health Hazards

- Atmospheric contaminants
- Noise levels

### Procedures, Practices

- Safe practices in all operations
- Adequate lighting

### Protective Clothing/ Equipment

- Use of required PPE
- Proper equipment suitable to the hazard
- Cleanliness/maintenance

### Employee Behavior

- Unsafe acts
- Not following rules
- Horseplay



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### Safety Checklist

**NURSING / CONVALESCENT HOME**

Supervisor: \_\_\_\_\_ Date: \_\_\_\_\_  
Department/Area : \_\_\_\_\_

Yes	No	Bloodborne Pathogens
		Written Exposure Control Plan developed
		Refresher training on bloodborne pathogens held at least annually
		Employees follow universal precautions by treating all blood and other body fluids as if they were infectious materials
		Hand protection worn when handling blood or other bodily fluids
		Broom and dust pan used to pick up broken glass
		Hand washing facilities easily accessible
		Employees wash their hands immediately after removing gloves or other personal protective equipment
		Employees use caution when reaching into refuse containers
		Employees alert to sharps when handling bed sheets and refuse bags
		Needles and infectious waste deposited in appropriate disposal containers
Fall Prevention		
		Work and storage areas kept clean, neat and organized
		Appropriate signage placed in areas of wet and slippery floors
		Aisles and passageways kept clear of obstructions
		Bathrooms equipped with grab bars and call buttons
		Hallways have handrails that are sturdy and contain no sharp edges
		Walking surfaces - floors, carpeting, outside grounds, etc. - in good condition
		Employees wear proper footwear
		Floor openings, such as drains in kitchens and maintenance areas, adequately covered
		Stepladders available in office and storage areas to retrieve items from shelves

New York State Insurance Fund  
www.nysif.com

Find checklists for many industries at [nysif.com>Safety & Risk Management](http://nysif.com>Safety & Risk Management)



# ✓ Safety Inspection Checklist

## 1. STAIRS, FLOORS, FLOOR OPENINGS, WALL AND HOISTWAY OPENINGS

- (a) Are stair treads secure and in good condition?
- (b) Are hand railings adequate and in good condition?
- (c) Is stairwell lighting adequate?
- (d) Are floor surfaces free from protruding nails, splinters, holes, loose boards, and other slip, trip and fall hazards?
- (e) Are floor openings properly guarded?
- (f) Is floor loading within proper limits?

## 2. ELEVATED RUNWAYS AND PLATFORMS

- (a) Are they clear of obstructions and provided with handrails and toeboards?
- (b) Is safe means of access and exit provided for employees?

## 3. ELEVATORS AND OTHER EQUIPMENT

- (a) Are shaftway gates or doors in good order? Are they properly used?
- (b) Is shaftway door hazard protection provided?
- (c) Do qualified persons operate equipment?
- (d) Is it possible to open shaftway doors when car or platform is not at that level?

✓ Y | N

- (e) Are safety interlocks properly functioning?

- (f) Is lighting adequate?

## 4. MACHINE HAZARDS

- (a) Are all guards in place and properly used?

- (b) Are all power transmissions, moving machine parts and points of operation adequately guarded?

- (c) Are there adjustable hoods and safety flanges on abrasive wheels?

- (d) Is exhaust equipment operating efficiently?

- (e) Are dust collectors cleaned frequently?

- (f) Are switches conveniently located so power will be shut off for oiling, repair or maintenance?

- (g) Is a Lockout/Tagout program in place?

- (h) Is Lockout/Tagout equipment available to all shifts?

## 5. ELECTRICAL EQUIPMENT

- (a) Are switchboards, transformers, control and operating apparatus in good condition?

- (b) Are they properly protected or isolated?

- (c) Are electrical floor mats placed at switchboards and circuit breaker boxes?

- (d) Are empty breaker slots covered with proper blank panel inserts?

✓ Y | N

✓ Y | N

## 6. PRESSURE APPARATUS

- (a) Are safety and relief valves in good operating order?

- (b) Has pressure apparatus been inspected as required?

## 7. FIRE HAZARDS

- (a) Are flammable materials properly handled and safely stored?

- (b) Is workplace free of excess flammable waste and rubbish?

- (c) Is flammable waste and rubbish kept in approved containers until removed from premises?

- (d) Are fire extinguishers appropriate for type of fire?

- (e) Are fire extinguishers regularly inspected and tagged?

- (f) Do employees know location of nearest fire exit and an alternate exit?

- (g) Are emergency exits plainly marked and unobstructed?

## 8. POWER TRAVELING (BRIDGE) CRANES

- (a) Are footwalks, railings, ladders and safety appliances in good condition?

- (b) Is limit of capacity posted and enforced?

- (c) Are cables, chains, hooks and wire slings inspected?

- (d) Are warning signals used and understood?

✓ Y | N

## 9. GENERAL CONDITIONS

- (a) Are medical facilities satisfactory?

- (b) Are there sufficient first aid kits and supplies?

- (c) Is appropriate personal protective equipment (PPE) available?

- (d) Is PPE used by employees?

- (e) Are passageways and aisles adequately wide and well defined?

- (f) Are all ladders in safe condition and inspected regularly?

- (g) Are all chemicals labeled, handled and stored safely?

- (h) Are portable power and hand tools maintained in safe condition?

- (i) Is there adequate light throughout the workplace?

- (j) Is material piled or stored in a safe manner?

- (k) Are hand and power trucks stored safely?

- (l) Is transportation equipment in good condition?

- (m) Are outside grounds safe—yards/parking lots/roadways?

## WRAP-UP

List other unsafe conditions or unsafe acts observed.

List safety suggestions.

Record names of safety survey team/safety committee members.

# NYSIF Offices

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Upper Manhattan (212) 312-0070 (Policies prefixed with "M")

Safety Group Office (212) 587-7358 (Policies prefixed with "G" and "Z")

Counties: Bronx Kings New York Queens Richmond

## Safety Resources

**NYSIF** nysif.com (Safety & Risk Management)

**Workers' Compensation Board** www.wcb.state.ny.us

**Occupational Safety and Health Administration** www.osha.gov

**NYS Emergency Management Office** www.semo.state.ny.us

**NYS Labor Dept. On-Site Consultation Program**

www.labor.state.ny.us