

SAFETY AND THE MANAGER

Why Safety Is Important

Safety and accident prevention concern managers for several reasons, one of which is the staggering number of workplace accidents. While accident rates are falling, in one recent year 4,551 U.S. workers died in workplace incidents.² Workplace accidents in the United States cause over 3.8 million occupational injuries and illnesses per year—roughly 3.6 cases per 100 equivalent full-time workers.³ Such figures may actually underestimate the real number of injuries and illnesses by two or three times.⁴ More than 80% of the workers in one survey ranked workplace safety as more important than minimum wages, sick days, and maternity leave.⁵

Injuries aren't just a problem in dangerous industries like construction. For example, new computers contribute to airtight “sick building” symptoms like headaches and sniffles. And office work is susceptible to things like repetitive trauma injuries related to computer use.

THE HIDDEN STORY But even facts like these don't show the human suffering incurred by the injured workers and their families or the real economic costs incurred by employers.⁶ For example, the direct injury costs of a forklift accident might be \$4,500. However, the indirect costs for things like lost production time, maintenance time, and emergency supplies could raise that to \$18,000 or more.⁷

Management's Role in Safety

On the next few pages, we'll see that reducing accidents often boils down to reducing accident-causing conditions and accident-causing acts. However, safety always starts at the top. Telling supervisors to “watch for spills” and employees to “work safely” is futile unless everyone knows management is serious about safety.⁸

Historically, for instance, DuPont's accident rate has been much lower than that of the chemical industry as a whole. This good safety record is partly due to an organizational commitment to safety, which is evident in the following description:

One of the best examples I know of in setting the highest possible priority for safety takes place at a DuPont Plant in Germany. Each morning at the DuPont Polyester and Nylon Plant, the director and his assistants meet at 8:45 to review the past 24 hours. The first matter they discuss is not production, but safety. Only after they have examined reports of accidents and near misses and satisfied themselves that corrective action has been taken do they move on to look at output, quality, and cost matters.⁹

What Top Management Can Do

Policies like these start at the top.¹⁰ The employer should institutionalize top management's commitment with a safety policy, and publicize it. It should give safety matters high priority in meetings: Louisiana-Pacific Corp., which makes building products, starts all meetings with a brief safety message.¹¹ Georgia-Pacific reduced its workers' compensation costs by requiring managers to halve accidents or forfeit 30% of their bonuses. The accompanying Strategic Context feature provides another example.

THE STRATEGIC CONTEXT

Deepwater Horizon

To many critics of BP's safety practices, the Deepwater Horizon disaster in the Gulf wasn't just due to a malfunctioning blowout preventer. To them, rightly or wrongly, the accident reflected the fact that BP's corporate strategy had long emphasized cost cutting and profitability at the expense of safety. For example, 5 years earlier, a report by the Chemical Safety Board blamed a huge blast at BP's Texas City, Texas, oil refinery on cost cutting, and on a safety strategy that aimed to reduce accidents but left

in place “unsafe and antiquated equipment.” To the Board and to some others who studied BP’s safety practices, Deepwater was another example of how encouraging safe employee behavior must start at the top, and how top management’s strategy can trump even earnest efforts to improve employee safety behaviors.¹²

Safety is not just a case of legality or humanitarianism. One study concluded that safety activities paid for themselves by a ratio of 10 to 1, just in direct savings of workers’ compensation expenses over 4 years.¹³

- 1 Explain the supervisor’s role in safety.

The Supervisor’s Role in Safety

After inspecting a work site where workers were installing pipes in a 4-foot trench, an OSHA inspector cited an employer for violating the rule requiring employers to have a “stairway, ladder, ramp, or other safe means of egress” in deep trench excavations.¹⁴ In the event the trench caved in, workers needed a quick way out. As in most such cases, the employer had the primary responsibility for safety, and the local supervisor was responsible for the day-to-day inspections. In this case the supervisor did not properly inspect for safety. The trench collapsed, injuring several employees.

The moral is that safety inspections should always be part of the supervisor’s daily routine. For example, “a daily walk-through of your workplace—whether you are working in outdoor construction, indoor manufacturing, or any place that poses safety challenges—is an essential part of your work.”¹⁵ What to look for depends on the situation. However, in general you can use a checklist of unsafe conditions such as the one in Figure 16-5 (page 541) to spot problems.

- 2 Explain the basic facts about safety law and OSHA.

OCCUPATIONAL SAFETY LAW

Congress passed the Occupational Safety and Health Act of 1970 “to assure so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources.”¹⁶ The only employers it doesn’t cover are self-employed persons, farms in which only immediate members of the employer’s family work, and some workplaces already protected by other federal agencies or under other statutes. The act covers federal agencies, but usually not state and local governments.

The act created the Occupational Safety and Health Administration (OSHA) within the Department of Labor. OSHA’s basic purpose is to administer the act and to set and enforce the safety and health standards that apply to almost all workers in the United States. The Department of Labor enforces the standards, and OSHA has inspectors working out of branch offices to ensure compliance.

OSHA Standards and Record Keeping

OSHA operates under the “general” standard clause that each employer:

... shall furnish to each of his [or her] employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his [or her] employees.

Occupational Safety and Health Act of 1970

The law passed by Congress in 1970 “to assure so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources.”

Occupational Safety and Health Administration (OSHA)

The agency created within the Department of Labor to set safety and health standards for almost all workers in the United States.

FIGURE 16-1 OSHA Standards Example

Source: www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=9720&p_table=STANDARDS, accessed June 1, 2011.

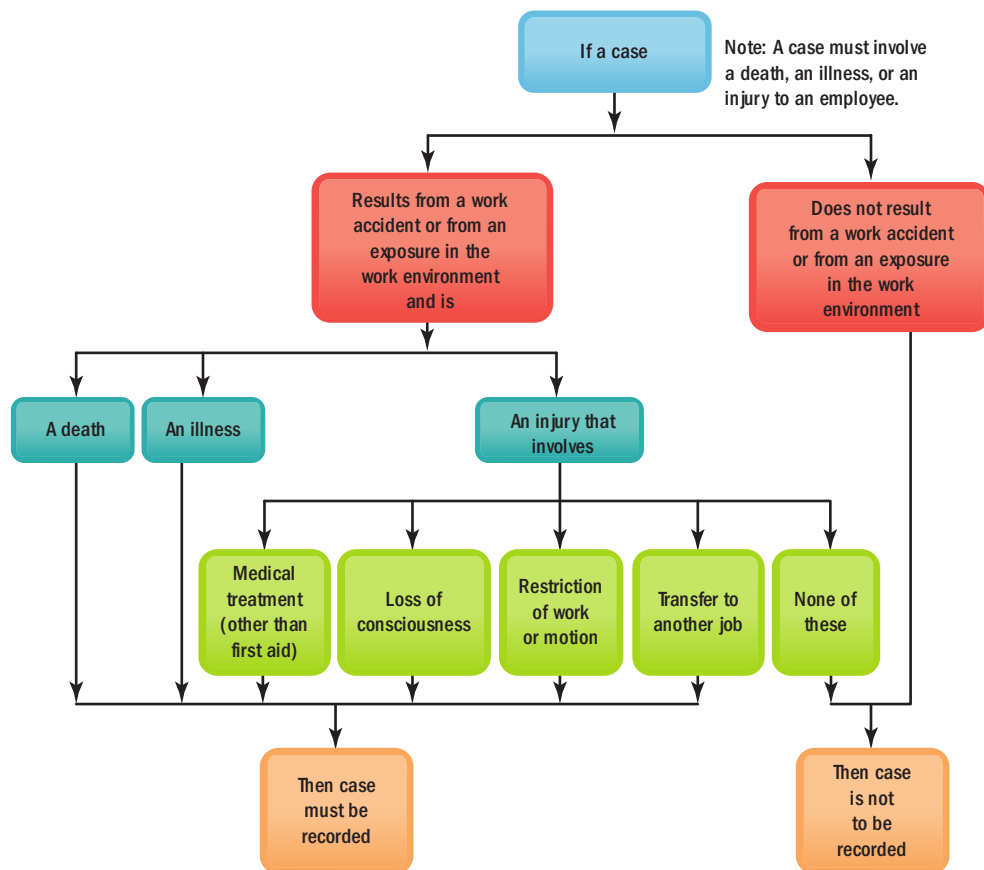
Guardrails not less than 2" × 4" or the equivalent and not less than 36" or more than 42" high, with a midrail, when required, of a 1" × 4" lumber or equivalent, and toeboards, shall be installed at all open sides on all scaffolds more than 10 feet above the ground or floor. Toeboards shall be a minimum of 4" in height. Wire mesh shall be installed in accordance with paragraph [a] (17) of this section.

To carry out this basic mission, OSHA is responsible for promulgating legally enforceable standards. These are contained in five volumes covering general industry standards, maritime standards, construction standards, other regulations and procedures, and a field operations manual.

The standards are very complete, covering in detail just about every conceivable hazard. (Figure 16-1 presents a small part of the standard governing guardrails for scaffolds.) The regulations don't just list standards to which employers should adhere. They also lay out "how." For example, OSHA's respiratory protection standard also covers employee training.

Under OSHA, employers with 11 or more employees must maintain records of and report certain occupational injuries and occupational illnesses. An **occupational illness** is any abnormal condition or disorder caused by exposure to environmental factors associated with employment. This includes acute and chronic illnesses caused by inhalation, absorption, ingestion, or direct contact with toxic substances or harmful agents.

WHAT THE EMPLOYER MUST REPORT As summarized in Figure 16-2, employers must report all occupational illnesses.¹⁷ They must also report most occupational injuries, specifically those that result in medical treatment (other than first aid), loss

FIGURE 16-2 What Accidents Must Be Reported Under the Occupational Safety and Health Act?

of consciousness, restriction of work (one or more lost workdays), restriction of motion, or transfer to another job.¹⁸ If an on-the-job accident results in the death of an employee or in the hospitalization of five or more employees, all employers, regardless of size, must report the accident to the nearest OSHA office.

OSHA's current record-keeping rules allow the employer to conclude that an event needn't be reported if the facts so warrant—such as if a worker breaks an ankle after catching his foot on his car's seat belt when not at work and parked on the company lot.¹⁹

However, OSHA's record-keeping requirements are still broader than you might expect.²⁰ Examples of recordable conditions include food poisoning suffered by an employee after eating in the employer's cafeteria and ankle sprains that occur during voluntary participation in a company softball game at a picnic the employee was required to attend. Figure 16-3 shows the OSHA form for reporting occupational injuries or illness.

Inspections and Citations

OSHA enforces its standards through inspections and (if necessary) citations. The inspection is usually unannounced. OSHA may not conduct warrantless inspections without an employer's consent. However, it may inspect after acquiring an authorized search warrant or its equivalent.²¹ With a limited number of inspectors, OSHA recently has focused on “fair and effective enforcement,” combined with outreach, education and compliance assistance, and various OSHA–employer cooperative programs (such as its “Voluntary Protection Programs”).²²

INSPECTION PRIORITIES OSHA takes a “worst-first” approach in setting inspection priorities. Priorities include, from highest to lowest, imminent dangers, catastrophes and fatal accidents, employee complaints, high-hazard industries inspections, and follow-up inspections.²³ In one recent year, OSHA conducted just over 39,000 inspections. Referrals prompted about 8,000 of these.²⁴

Under its priority system, OSHA conducts an inspection within 24 hours when a complaint indicates an immediate danger, and within 3 working days when a serious hazard exists. For a “nonserious” complaint filed in writing by a worker or a union, OSHA will respond within 20 working days. OSHA handles other nonserious complaints by writing to the employer and requesting corrective action.

THE INSPECTION The inspection begins when the OSHA officer arrives at the workplace.²⁵ He or she displays credentials and asks to meet an employer representative. (Always insist on seeing the credentials, which include photograph and serial number.) The officer explains the visit's purpose, the scope of the inspection, and the standards that apply. An authorized employee representative accompanies the officer during the inspection. The inspector can also stop and question workers (in private, if necessary). The act protects each employee from discrimination for exercising his or her disclosure rights.²⁶

OSHA inspectors look for all types of violations, but some potential problem areas grab more attention. The five most frequent OSHA inspection violation areas are scaffolding, fall protection, hazard communication, lockout/tagout (electrical disengagement), and respiratory problems.

Finally, after checking the premises and employer's records, the inspector holds a closing conference with the employer's representative. Here the inspector discusses apparent violations for which OSHA may issue or recommend a citation and penalty. At this point, the employer can produce records to show compliance efforts. In one recent year, inadequate scaffolding/fall protection was one frequently cited hazard.

occupational illness
Any abnormal condition or disorder caused
by exposure to environmental factors
associated with employment.

citation
Summons informing employers and
employees of the regulations and standards
that have been violated in the workplace.

PENALTIES OSHA can impose penalties. These generally range from \$5,000 up to \$150,000 for willful or repeat serious violations. However, penalties can be far higher—\$1.5 million after a tragedy at Ford's Rouge Michigan plant, for instance.²⁷ The parties settle many OSHA cases before litigation, in "precipitation settlements."²⁸ Non-serious violations may carry no penalties.

In general, OSHA calculates penalties based on the gravity of the violation and usually takes into consideration factors like the size of the business, the firm's compliance history, and the employer's good faith.²⁹ In practice, OSHA must have a final order from the independent Occupational Safety and Health Review Commission (OSHRC) to enforce a penalty.³⁰ An employer who files a notice of contest can drag out an appeal for years. Many employers do appeal, at least to the OSHA district office.³¹

To the chagrin of some employers, OSHA is publicizing its inspection results online. For example, OSHA's Web site (www.osha.gov) gives you easy access to your company's (or your competitors') OSHA enforcement history.³²

MANAGERS' INSPECTION GUIDELINES What should you do when OSHA inspectors unexpectedly show up? Guidelines include the following:

Initial Contact

- Restrict admittance until the manager in charge is on site.³³
- Check the inspector's credentials.
- Ask the inspector why he or she is inspecting your workplace. Is it complaints? A scheduled visit?
- If the inspection stems from a complaint, you are entitled to know whether the person is a current employee, though not the person's name.
- Notify your counsel, who should review all documents and information.

Opening Conference

- Establish the focus and scope of the planned inspection.
- Discuss the procedures for protecting trade secret areas.
- Show the inspector you have safety programs in place. He or she may not even go to the work floor if your paperwork is complete and up to date.

Walk-Around Inspection

- Accompany the inspector and take detailed notes.
- If the inspector takes a photo or video, you should, too.
- Ask for duplicates of all physical samples and copies of all test results.
- Be helpful and cooperative, but don't volunteer information.
- To the extent possible, immediately correct any violation the inspector identifies.³⁴

One survey asked 12 safety experts to identify the "10 best ways" to get into trouble with OSHA.³⁵ The top three were:

1. Ignore or retaliate against employees who raise safety issues.
2. Antagonize or lie to OSHA during an inspection.
3. Keep inaccurate OSHA logs and have disorganized safety files.

OSHA'S FREE ON-SITE INSPECTIONS OSHA provides free on-site safety and health services for small businesses.³⁶ Employers can contact their nearest OSHA area office to speak to the compliance assistance specialist. According to OSHA, it issues no citations or penalties based on these inspections.

There is an opening conference with an OSHA safety expert, a walk-through, and a closing conference to discuss the expert's findings. The expert then sends a detailed report explaining the findings. The employer's only obligation is to commit to correcting serious job safety and health hazards in a timely manner.

Source: Dmitry Kalinovsky/Shutterstock.



Employees have rights and responsibilities under OSHA standards, such as to wear their hard hats, but OSHA can't cite them if they violate their responsibilities.

Responsibilities and Rights of Employers and Employees

Both employers and employees have responsibilities and rights under the Occupational Safety Health Act. Employers are responsible for providing “a workplace free from recognized hazards,” for being familiar with mandatory OSHA standards, and for examining workplace conditions to make sure they conform to OSHA standards. Employers have the right to seek advice and off-site consultation from OSHA, request and receive proper identification of the OSHA compliance officer before inspection, and to be advised by the compliance officer of the reason for an inspection.

Employees also have rights and responsibilities, but OSHA can't cite them for violations of their responsibilities. Employees are responsible, for example, for complying with all applicable OSHA standards, for following all employer safety and health rules and regulations, and for reporting hazardous conditions to the supervisor. Employees have a right to demand safety and health on the job without fear of punishment. The act prohibits employers from punishing or discriminating against workers who complain to OSHA about job safety and health hazards. (See the accompanying OSHA safety poster in Figure 16-4.)

FIGURE 16-4 OSHA Safety Poster

You Have a Right to a Safe and Healthful Workplace.

IT'S THE LAW!

- 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 the inspection.
- You can file a complaint with OSHA within 30 days of discrimination by your employer for making safety and health complaints or for exercising your rights under the OSH Act.
- You have a right to see OSHA citations issued to your employer. Your employer must post the citations at or near the place of the alleged violation.
- 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 or records of your exposure to toxic and harmful substances or conditions.
- Your employer must post this notice in your workplace.

The Occupational Safety and Health Act of 1970 (OSH Act), P.L. 91-596, assures safe and healthful working conditions for working men and women throughout the Nation. The Occupational Safety and Health Administration, in the U.S. Department of Labor, has the primary responsibility for administering the OSH Act. The rights listed here may vary depending on the particular circumstances. To file a complaint, report an emergency, or seek OSHA advice, assistance, or products, call 1-800-321-OSHA or your nearest OSHA office: Atlanta (404) 562-2300 • Boston (617) 565-9860 • Chicago (312) 353-2220 • Dallas (214) 767-4731 • Denver (303) 844-1600 • Kansas City (816) 426-5861 • New York (212) 337-2378 • Philadelphia (215) 861-4900 • San Francisco (415) 975-4310 • Seattle (206) 553-5930. Teletypewriter (TTY) number is 1-877-889-5627. To file a complaint online or obtain more information on OSHA federal and state programs, visit OSHA's website at www.osha.gov. If your workplace is in a state operating under an OSHA-approved plan, your employer must post the required state equivalent of this poster.

1-800-321-OSHA

www.osha.gov

U.S. Department of Labor • Occupational Safety and Health Administration • OSHA 3165

DEALING WITH EMPLOYEE RESISTANCE Although employees have a responsibility to comply with OSHA standards, they often resist; the employer usually remains liable for any penalties. The refusal of some workers to wear hard hats typifies this problem.

Employers have attempted to defend themselves by citing worker intransigence. In most cases, courts still hold employers liable for workplace safety violations.

Yet employers can reduce their liability, since “courts have recognized that it is impossible to totally eliminate all hazardous conduct by employees.”³⁷ In the event of a problem, the courts may consider whether the employer’s safety procedures were adequate; whether the training gave employees the skills required to perform their duties safely; and whether the employer required employees to follow the procedures. The employer can bargain with its union for the right to discipline any employee who disobeys OSHA standards.³⁸ A formal employer–employee safety arbitration process and discussing with employees the reasons for their resistance are other options.

The independent three-member Occupational Safety and Health Review Commission that reviews OSHA decisions says employers must make “a diligent effort to discourage, by discipline if necessary, violations of safety rules by employees.”³⁹ However, the only surefire way to eliminate liability is to make sure that no accidents occur.

WHAT CAUSES ACCIDENTS?

There are three basic causes of workplace accidents: chance occurrences, unsafe conditions, and employees’ unsafe acts. Chance occurrences (such as walking past a window just as someone hits a ball through it) are more or less beyond management’s control. We will therefore focus on unsafe conditions and unsafe acts.

What Causes Unsafe Conditions and Other Work-Related Safety Problems?

Unsafe conditions are a main cause of accidents. They include:

- Improperly guarded equipment
- Defective equipment
- Hazardous procedures in, on, or around machines or equipment
- Unsafe storage—congestion, overloading
- Improper illumination—glare, insufficient light
- Improper ventilation—insufficient air change, impure air source⁴⁰

The solution here is to identify and eliminate the unsafe conditions. The main aim of the OSHA standards is to address these mechanical and physical accident-causing conditions. The employer’s safety department (if any), and its human resource managers and top managers should take responsibility for identifying unsafe conditions.

3 Answer the question, “What causes accidents?”

DANGER ZONES While accidents can happen anywhere, there are some high-danger zones. About one-third of industrial accidents occur around forklift trucks, wheelbarrows, and other handling and lifting areas. The most serious accidents usually occur by metal and woodworking machines and saws, or around transmission machinery like gears, pulleys, and flywheels. Falls on stairs, ladders, walkways, and scaffolds are the third most common cause of industrial accidents. Hand tools (like chisels and screwdrivers) and electrical equipment (extension cords, electric droplights, and so on) are other major causes of accidents.⁴¹

Certain jobs are inherently more dangerous. For example, the job of crane operator results in about three times more hospital visits than does the job of supervisor.⁴²

Work schedules and fatigue also affect accident rates. Accident rates usually don't increase too noticeably during the first 5 or 6 hours of the workday. But after that, the accident rate increases faster. This is due partly to fatigue and partly to the fact that accidents occur more often during night shifts. In part due to reduced headcount and more people with second jobs, employee fatigue is a growing problem today.⁴³ Many employers are therefore taking steps to reduce employee fatigue, such as banning mandatory overtime.

Some of the most important working-condition-related causes of accidents involve workplace "climate" or psychology. One researcher reviewed the official hearings regarding the fatal accidents offshore oil workers suffered in the British North Sea.⁴⁴ A strong pressure to complete the work as quickly as possible, employees who are under stress, and a poor safety climate—for instance, supervisors who never mention safety—were some of the psychological conditions leading to accidents. Similarly, accidents occur more frequently in plants with high seasonal layoff rates, hostility among employees, many garnished wages, and blighted living conditions.

What Causes Unsafe Acts? (A Second Basic Cause of Accidents)

Unsafe employee acts can undo even the best attempts to reduce unsafe conditions. The problem is that there are no easy answers to the question of what causes people to act recklessly.

It may seem obvious that some people are simply accident prone, but the research isn't clear.⁴⁵ On closer inspection it turns out some "accident repeaters" were just unlucky, or may have been more meticulous about reporting their accidents.⁴⁶ However, there is growing evidence that people with specific traits may indeed be accident prone. For example, people who are impulsive, sensation seeking, extremely extroverted, and less conscientious (in terms of being less fastidious and dependable) are more likely to have accidents.⁴⁷

Furthermore, the person who is accident prone on one job may not be so on another. Driving is one example. Personality traits that correlate with filing vehicular insurance claims include entitlement ("think there's no reason they should not speed"), impatience ("were 'always in a hurry'"), aggressiveness ("the first to move when the light turns green"), and distractibility ("frequently distracted by cell phones, eating, and so on").⁴⁸

We'll turn to how employers can reduce unsafe acts and conditions next.

- 4 List and explain five ways to prevent accidents.

HOW TO PREVENT ACCIDENTS

In practice, accident prevention boils down to two basic activities: (1) reducing unsafe conditions and (2) reducing unsafe acts. In large firms, the chief safety officer (often called the "Environmental Health and Safety Officer") is responsible for this.⁴⁹ In smaller firms, managers, including those from human resources, plant management, and first-line managers, share these responsibilities.

Reducing Unsafe Conditions

Reducing unsafe conditions is always an employer's first line of defense in accident prevention. Safety engineers should design jobs to remove or reduce physical hazards. In addition, we saw that supervisors and managers play a role. Checklists like those in Figures 16-5 and 16-6, or the self-inspection checklist in Figure 16-8 (pages 566–569), can help identify and remove potential hazards.

Employers increasingly use computerized tools to design safer equipment. For example, Designsafe (from Designsafe Engineering, Ann Arbor, Michigan) helps automate the tasks of hazard analysis, risk assessment, and identifying safety options. Designsafe helps the safety designer choose the most appropriate safety control device for keeping the worker safe, such as adjustable enclosures, presence-sensing devices, and personal protective equipment.⁵⁰

protective casing, and changes made to ensure that the lathe can't spin unless the student takes action via a foot pedal to keep the lathe power on.

OPERATIONAL SAFETY REVIEWS After the Fukushima nuclear power plant in northern Japan exploded in 2011, many wondered if the International Atomic Energy Agency (IAEA) had conducted the necessary operational safety reviews. Operational safety reviews (or safety operations reviews) are conducted by agencies to ascertain whether units under their jurisdiction are complying with all the applicable safety laws, regulations, orders, and rules. For example, under IAEA's Operational Safety Review Program, "international teams of experts conduct in-depth reviews of operational safety performance at a nuclear power plant."⁵⁵

PERSONAL PROTECTIVE EQUIPMENT Getting employees to wear personal protective equipment (PPE) is a famously difficult chore.⁵⁶ Wearability is important. In addition to providing reliable protection, protective gear should fit properly; be easy to care for, maintain, and repair; be flexible and lightweight; provide comfort and reduce heat stress; have rugged construction; be relatively easy to put on and take off; and be easy to clean, dispose of, and recycle.⁵⁷ Many employers, such as Kimberly-Clark and MCR Safety, are tapping into the new fibers and fabrics used by runners, skiers, and NASCAR drivers to design easier wearing high-tech solutions.⁵⁸ Including employees in planning the safety program and addressing comfort issues contribute to employees' willingness to use the protective gear.⁵⁹

Of course, it makes sense to require wearing the personal protective equipment before the accident, rather than after it. For example, a combustible dust explosion at a sugar refinery killed 14 employees and burned many others. The employer subsequently required that all employees wear fire resistant clothing, unfortunately too late for the victims.⁶⁰

MANAGING THE NEW WORKFORCE

Protecting Vulnerable Workers

In designing safe and healthy environments, employers should pay special attention to vulnerable workers. Among others, these may include young, immigrant, aging, and women workers.⁶¹ (The Fair Labor Standards Act strictly limits young people's exposure to dangerous jobs, but about 64 workers under age 18 died from work-related injuries in one recent year.⁶²) For example, as the CEO of one safety engineering company said, "For decades, women essentially were ignored when it came to designing eye and face protection." Today, more products are available in smaller sizes.⁶³

Similarly, with more workers postponing retirement, older workers are doing more manufacturing jobs.⁶⁴ They can do these jobs very effectively. However, there are numerous potential physical changes associated with aging, including loss of strength, loss of muscular flexibility, and reduced reaction time.⁶⁵ This means that employers should make special provisions such as designing jobs to reduce heavy lifting, and boosting lighting levels.⁶⁶ The fatality rate for older workers is about three times that of younger workers.⁶⁷

But again, reducing unsafe conditions (such as enclosing noisy equipment) is always the first line of defense. Then use administrative controls (such as job rotation to reduce long-term exposure to the hazard). Only then should you turn to PPE.⁶⁸

Reducing unsafe acts—by emphasizing safety and through screening, training, or incentive programs, for example—is the second basic way to reduce accidents. Let's look at how to do this.

Source: iStockphoto.com.



Emergency stop devices, such as buttons, override other machine controls to remove power from hazardous machine motion.

Reducing Unsafe Acts

Although reducing unsafe conditions is the first line of defense, human misbehavior can short-circuit even the best safety efforts. Sometimes the misbehavior is intentional, but often it's not.⁶⁹ In one accident, a maintenance worker obeyed the plant's lockout/tagout procedure, by calling the control room to have them shut off the roof exhaust fan he was about to work on. When he arrived on the roof, he noticed the fan was still turning, and assumed that the wind was turning the blades. After waiting several minutes, he wrapped a rag around his hand and tried to stop the blade with his hand, causing serious injury. He had obeyed the procedure by calling the control room. But the employer should have emphasized in its training that the point of the procedure was not to disconnect the power, but "to make sure that the fan is not turning before you touch it."⁷⁰

For machinery, employees can use emergency stop devices like the one in the accompanying photo to cut power to hazardous machines.⁷¹ But ironically, "making a job safer with machine guards or PPE lowers people's risk perceptions and thus can lead to an increase in at-risk behavior."⁷²

As mentioned earlier, the manager plays a central role in reducing unsafe acts. For example, supervisors should:

- Praise employees when they choose safe behaviors;
- Listen when employees offer safety suggestions, concerns, or complaints; and
- Be a good example, for instance, by following every safety rule and procedure.⁷³

Unfortunately, praising employees is usually not enough to banish unsafe acts. Instead, it requires a process. First, identify and try to eliminate potential risks, such as unguarded equipment. Next, reduce potential distractions, such as noise, heat, and stress. Then, carefully screen, train, and motivate employees, as we explain next.

5 Minimize unsafe acts by employees.

Reducing Unsafe Acts through Selection and Placement

Proper employee screening and placement reduces unsafe acts. Here, the employer's aim is to identify the traits that might predict accidents on the job in question, and then screen candidates for this trait. For example, the Employee Reliability Index (ERI) (see <http://www.ramsaycorp.com/catalog/view/?productid=208>) measures reliability dimensions such as emotional maturity, conscientiousness, and safe job performance.⁷⁴ Though not definitive, using the ERI in selection did seem to be associated with reductions in work-related accidents in one study. Others use job simulation tests (which attempt to measure the applicant by simulating physically demanding work activities) and physical capabilities tests (which measure muscle strength and motion) to predict who will have more accidents.⁷⁵

Similarly, behavioral interview questions can be revealing. For example, ask, "What would you do if you saw another employee working in an unsafe way?" and "What would you do if your supervisor gave you a task, but didn't provide any training on how to perform it safely?"⁷⁶

Under the Americans with Disabilities Act (ADA) it is unlawful to inquire (prior to hiring) about an applicant's workers' compensation injuries and claims. You also cannot ask applicants whether they have a disability, or about taking prescription drugs or require them to take tests that tend to screen out those with disabilities. However, you can usually ask, "Do you know of any reason why you would not be able to perform the various functions of the job you are seeking?"⁷⁷

Reducing Unsafe Acts through Training

Safety training reduces unsafe acts, especially for new employees. You should instruct employees in safe practices and procedures, warn them of potential hazards, and work on developing a safety-conscious attitude. OSHA's standards require more than training. Employees must demonstrate that they actually learned what to do. (For example,

OSHA's respiratory standard requires that each employee demonstrate how to inspect, put on, and remove respirator seals.⁷⁸ OSHA has two booklets, "Training Requirements under OSHA" and "Teaching Safety and Health in the Workplace.")

However, note that the main aim of safety training is not to meet OSHA training standards. Rather, it is to impart the knowledge and skills required to reduce accidents. OSHA, the National Institute for Occupational Safety and Health (NIOSH), and numerous private vendors provide online safety training solutions.⁷⁹

The nature of the safety training is important. Although lectures and online learning may be efficient, one study found that the most effective safety training demanded high employee engagement.⁸⁰ In this study, the "least engaging" programs included lectures, films, reading materials, and video-based training. Moderately engaging programs included computer interface instruction with feedback. The most engaging included behavioral modeling, simulation, and hands-on training.

MANAGING THE NEW WORKFORCE

Safety Training for Hispanic Workers

With increasing numbers of Spanish-speaking workers in the United States, experts are focusing more closely on their safety.⁸¹ For example, many construction companies are offering specialized training programs for Hispanic workers. One example is a 40-hour training course at the Dallas–Fort Worth airport. Based on this program's apparent success, there are several useful conclusions one can draw about what a program like this should look like.

- First, the program should *"speak the workers' language."*
- Second, the employer should also *recruit instructors who are from the ethnic groups they are training.*
- Third, provide for some *multilingual cross-training* for specific phrases. For example, the course teaches non-Hispanic trainees to say "peligro" (danger) or "cuidado" (be careful).⁸²
- Fourth, *don't skimp on training.* Because of the added cultural and multilingual aspects, experts contend that a 24-hour course is the absolute minimum. The 40-hour course at the Dallas–Fort Worth airport cost about \$500 tuition per student (not counting the workers' wages).

Employers also turn to the Web to support their safety training programs.⁸³ For example, PureSafety (www.puresafety.com) enables firms to create their own training Web sites, complete with a "message from the safety director." Once an employer installs the PureSafety Web site, it can populate the site with courses from companies that supply health and safety courses via that site. The courses themselves are available in various formats, including digital versions of videotape training, and PowerPoint presentations.⁸⁴

CREATING A SUPPORTIVE ENVIRONMENT Although safety training is a key safety preventive method, a recent study suggests that creating a supportive supervisory environment is more important. "Organizations can develop a supportive environment by training supervisors to be better leaders, emphasizing the importance of teamwork and social support, and establishing the value of safety."⁸⁵

Reducing Unsafe Acts through Motivation: Posters, Incentives, and Positive Reinforcement

Employers also use various tools to motivate workers to work safely. Safety posters are one. However, although safety posters can increase safe behavior, they are no substitute for a comprehensive safety program. Employers should combine them with other techniques (like screening and training) to reduce unsafe conditions and acts, and change the posters often.



One way to motivate and encourage safety in a factory is to tell employees how much management values it: This safety poster on an exterior factory wall tells employees how well they are doing.

Incentive programs are also useful.⁸⁶ Management at Tesoro Corporation's Golden Eagle refinery in California instituted one such plan. Employees earn "WINGS" (an acronym for Willing Involvement Nurtures Greater Safety) points for engaging in one or more specific safety activities, such as taking emergency response training. Employees can each earn up to \$20 per month by accumulating points.⁸⁷

Some contend that safety incentive programs are misguided. OSHA has argued, for instance, that such programs don't cut down on actual injuries or illnesses, but only on injury and illness reporting. One expert argues that by encouraging habitual behavior they can lull employees into letting their guard down.⁸⁸ One option is to emphasize nontraditional incentives, like recognition. For instance, recognize employees for identifying hazards.⁸⁹ In any case, the incentive program needs to be part of a comprehensive safety program.⁹⁰

RESEARCH INSIGHT: POSITIVE REINFORCEMENT Many employers successfully use positive reinforcement programs to improve safety. Such programs provide workers with continuing positive feedback, usually in the form of graphical performance reports and supervisory support, to shape the workers' safety-related behavior.

Researchers introduced one program in a wholesale bakery.⁹¹ The new safety program included training and positive reinforcement. The researchers set and communicated a reasonable safety goal (in terms of observed incidents performed safely). Next, employees participated in a 30-minute training session by viewing pairs of slides depicting scenes that the researchers staged in the plant. One slide, for example, showed the supervisor climbing over a conveyor; the parallel slide showed the supervisor walking around the conveyor. After viewing an unsafe act, employees had to describe, "What's unsafe here?" Then the researchers demonstrated the same incident again but performed in a safe manner, and explicitly stated the safe-conduct rule ("go around, not over or under, conveyors").

At the conclusion of the training phase, supervisors showed employees a graph with their pretraining safety record (in terms of observed incidents performed safely) plotted. Supervisors then encouraged workers to consider increasing their performance to the new safety goal for their own protection, to decrease costs, and to help the plant get out of its last place safety ranking. Then the researchers posted the graph and a list of safety rules.

Whenever observers walked through the plant collecting safety data, they posted on the graph the percentage of incidents they had seen performed safely by the group as a whole, thus providing the workers with positive feedback. Workers could compare their current safety performance with both their previous performance and their assigned goal. In addition, supervisors praised workers when they performed selected incidents safely. Safety in the plant subsequently improved markedly.

Reducing Unsafe Acts through Behavior-Based Safety

Behavior-based safety means identifying the worker behaviors that contribute to accidents and then training workers to avoid these behaviors. Tenneco Corporation (which manufactures Monroe brand suspensions) implemented a behavior-based safety program. The firm selected internal consultants from among its quality managers, training managers, engineers, and production workers. After training, the internal consultants identified five critical behaviors for Tenneco's first safety program, such as, Eyes on task: Does the employee watch his or her hands while performing a task? The consultants made observations and collected data regarding the behaviors. Then they instituted training programs to get employees to perform these five behaviors properly.⁹²

Reducing Unsafe Acts through Employee Participation

Employees are often your best source of ideas about what the safety problems are and how to solve them. For example, when the International Truck and Engine Corp.

FIGURE 16-7 Employee Safety Responsibilities Checklist

Source: Reprinted from www.HR.BLR.com with permission of the publisher *Business and Legal Resources, Inc.*, 141 Mill Rock Road East, Old Saybrook, CT © 2004. BLR® (Business and Legal Resources, Inc.).

Employee Safety Responsibilities Checklist
☐ Know what constitutes a safety hazard.
☐ Be constantly on the lookout for safety hazards.
☐ Correct or report safety hazards immediately.
☐ Know and use safe work procedures.
☐ Avoid unsafe acts.
☐ Keep the work area clean and uncluttered.
☐ Report accidents, injuries, illnesses, exposures to hazardous substances, and near misses immediately.
☐ Report acts and conditions that don't seem right even if you aren't sure if they're hazards.
☐ Cooperate with internal inspections and job hazard analyses.
☐ Follow company safety rules.
☐ Look for ways to make the job safer.
☐ Participate actively in safety training.
☐ Treat safety as one of your most important job responsibilities.

began designing its new robot-based plant in Springfield, Ohio, management chose to involve employees in designing the new facility.⁹³

Management appointed joint labor–management safety teams for each department. These worked with project engineers to start designing safeguards for the robot equipment. The company even sent one safety team to Japan to watch the robot machines in action, and to identify items that the safety teams needed to address. Back in Ohio, this team worked with employees to identify possible hazards and to develop new devices (such as color-coded locks) to protect the employees.⁹⁴

Once they are committed to the idea of safety, a checklist such as the one shown in Figure 16-7 can provide employees with a useful reminder.

Reducing Unsafe Acts by Conducting Safety and Health Audits and Inspections

Reducing unsafe acts is no substitute for eliminating hazards. Managers should therefore routinely inspect for problems using safety audit/checklists (as in Figures 16-6 and 16-7) as aids. Also, investigate all accidents and “near misses.” Set up employee safety committees to evaluate safety adequacy, conduct and monitor safety audits, and suggest ways for improving safety.⁹⁵ Managers expedite safety audits by using personal digital assistants (PDAs).⁹⁶ For example, Process and Performance Measurement (PPM) is a Windows application for designing and completing safety audit questionnaires. To use this application, the manager gives the safety audit a name, enters the audit questions, and lists possible answers. Typical questions for a fire extinguisher audit might include, “Are fire extinguishers clearly identified and accessible?” and “Are only approved fire extinguishers used in the workplace?”⁹⁷ The supervisor or employee then uses his or her PDA to record the audit and transmit it to the firm’s safety office.

With respect to safety and health, evidence-based management means identifying crucial metrics and then monitoring them. Metrics might include, for instance, the percent conformance to safety critical behaviors and processes, the level of exposure present in the workplace as measured through valid samples, and the rate of adverse outcomes such as injury rates.⁹⁸

SAFETY AWARENESS PROGRAMS Employers also use safety awareness programs to improve employee safety behavior. A safety awareness program enables

behavior-based safety
Identifying the worker behaviors that contribute to accidents and then training workers to avoid these behaviors.

safety awareness program
Program that enables trained supervisors to orient new workers arriving at a job site regarding common safety hazards and simple prevention methods.



trained supervisors to orient new workers arriving at a job site regarding common safety hazards and simple prevention methods. For example, the Roadway Safety Awareness Program covers trucker safety issues such as stopping distances required at various speeds (see the accompanying screen grab).

Table 16-1 summarizes suggestions for reducing unsafe conditions and acts.⁹⁹

Controlling Workers' Compensation Costs

In the event an accident does occur, the employee may turn to the employer's workers' compensation insurance to cover his or her expenses and losses.¹⁰⁰ We addressed workers' compensation in Chapter 13 (Benefits), but address several safety-related points here.

BEFORE THE ACCIDENT The time to start "controlling" workers' compensation claims is before the accident happens.¹⁰¹ For example, LKL Associates, Inc., of Orem, Utah, cut its workers' compensation premiums in half by communicating written safety and substance abuse policies to workers and then strictly enforcing those policies.¹⁰²

TABLE 16-1 Reducing Unsafe Conditions and Acts: A Summary

- Reduce Unsafe Conditions
 - Identify and eliminate unsafe conditions.
 - Use administrative means, such as job rotation.
 - Use personal protective equipment.
- Reduce Unsafe Acts
 - Emphasize top management commitment.
 - Emphasize safety.
 - Establish a safety policy.
 - Reduce unsafe acts through selection.
 - Provide safety training.
 - Use posters and other propaganda.
 - Use positive reinforcement.
 - Use behavior-based safety programs.
 - Encourage worker participation.
 - Conduct safety and health inspections regularly.

AFTER THE ACCIDENT The injury can be traumatic for the employee, and how the employer handles it is important. As noted in Chapter 13 (Benefits), moving aggressively to support the injured employee and to get him or her back to work quickly is important. The involvement of an attorney and the duration of the claim both influence the workers claim cost.¹⁰³

It is important to be supportive and proactive. Provide first aid, and make sure the worker gets quick medical attention; make it clear that you are interested in the injured worker; document the accident; file required accident reports; and encourage a speedy return to work.¹⁰⁴ The HR as a Profit Center feature illustrates other steps HR can take.

HR AS A PROFIT CENTER

Reducing Workers Compensation Claims

Claims-tracking software helps employers understand and reduce their workers' compensation claims. For example, a health services agency in Bangor, Maine, purchased CompWatch, a workers' compensation claims management and tracking program. The agency entered all its previous claims, and used CompWatch to analyze trends. The agency discovered some of its auto accidents were apparently due to its drivers' need for training, so the agency introduced a driver safety program. In one department, this apparently led to a 42% reduction in auto accidents from one year to the next.¹⁰⁵

- 6 List five workplace health hazards and how to deal with them.

WORKPLACE HEALTH HAZARDS: PROBLEMS AND REMEDIES

Most workplace hazards aren't as obvious as unguarded equipment or slippery floors. Many are unseen hazards (such as mold) that the company inadvertently produces as part of its production processes. Other problems, such as drug abuse, employees may create for themselves. Both such hazards can be as or more dangerous to workers' health and safety than are obvious hazards like slippery floors. Typical workplace exposure hazards include chemicals and other hazardous materials, temperature extremes, biohazards (including those that are naturally occurring, such as mold, and man-made, such as anthrax), and ergonomic hazards (such as uncomfortable equipment).¹⁰⁶

Exposure to asbestos is a major potential source of occupational respiratory disease. This worker wears protective clothing and a respirator to remove asbestos from ceiling panels in a classroom.



Source: Stefan Hard/AP Images.

TABLE 16-2 OSHA Substance-Specific Health Standards

Substance	Permissible Exposure Limits*
Asbestos	.1001
Vinyl chloride	.1017
Inorganic arsenic	.1018
Lead	.1025
Cadmium	.1027
Benzene	.1028
Coke oven emissions	.1029
Cotton dust	.1043
1,2-Dibromo-3-chloropropane	.1044
Acrylonitrile	.1045
Ethylene oxide	.1047
Formaldehyde	.1048
4,4'-Methylenedianiline	.1050
Methylene chloride	.1051

*The actual measurement yardstick is substance-specific. For example, the yardstick for asbestos is Permissible Fiber per cubic centimeter, and for formaldehyde it is Parts formaldehyde per million parts of air

Source: John F. Rekus, "If You Thought Air Sampling Was Too Difficult to Handle, This Guide Can Help You Tackle Routine Sampling with Confidence, Part I," *Occupational Hazards*, May 2003, p. 43. See also www.osha.gov/SLTC/pel/, accessed June 30, 2011.

The Basic Industrial Hygiene Program

OSHA standards list exposure limits for about 600 chemicals. Table 16-2 lists some OSHA substance-specific health standards. Hazardous substances like these require air sampling and other preventive and precautionary measures.

Managing such exposure hazards comes under the area of industrial hygiene and involves recognition, evaluation, and control. First, the facility's health and safety officers (possibly working with teams of supervisors and employees) must recognize possible exposure hazards. This typically involves conducting plant/facility walk-around surveys, employee interviews, records reviews, and reviews of government (OSHA) and nongovernmental standards.

Having identified a possible hazard, evaluation involves determining how severe the hazard is. This requires measuring the exposure, comparing the measured exposure to some benchmark (as in Table 16-2), and determining whether the risk is within tolerances.¹⁰⁷

Finally, hazard control involves eliminating or reducing the hazard. Note that personal protective gear is generally the last option for dealing with such problems. The employer must first install engineering controls (such as process enclosures or ventilation) and administrative controls (including training and improved housekeeping).

Asbestos Exposure at Work

There are four major sources of occupational respiratory diseases: asbestos, silica, lead, and carbon dioxide. Of these, asbestos is a major concern, in part because of publicity surrounding asbestos in buildings constructed before the mid-1970s. Major efforts are still underway to rid these buildings of the substance.

OSHA standards require several actions with respect to asbestos. Employers must monitor the air whenever they expect the level of asbestos to rise to one-half the allowable limit (which is 0.1 fibers per cubic centimeter). Engineering controls—walls, special filters, and so forth—are required to maintain an asbestos level that complies with OSHA standards. Only then can employers use respirators if additional efforts are required to achieve compliance.

Infectious Diseases

With many employees traveling to and from international destinations, monitoring and controlling infectious diseases has become an important safety issue.

Employers can take steps to prevent the entry or spread of infectious diseases into their workplaces. These steps include:¹⁰⁸

1. Closely monitor Centers for Disease Control and Prevention (CDC) travel alerts about health concerns. Access this information at www.cdc.gov.
2. Provide daily medical screenings for employees returning from infected areas.
3. Deny access to your facility for 10 days to employees or visitors returning from affected areas.
4. Tell employees to stay home if they have a fever or respiratory system symptoms.
5. Clean work areas and surfaces regularly.
6. Stagger breaks. Offer several lunch periods to reduce overcrowding.
7. Emphasize the importance of frequent hand washing and make hand sanitizers easily available.

Air Quality

One of the downsides of opting for environmentally “green” office buildings is that sealed buildings can produce illnesses such as itchy eyes and trouble breathing, a phenomenon some call “sick building syndrome.” The problem is that emissions from printers and photocopiers and other chemical pollutants, left unmonitored, can dramatically reduce air quality.¹⁰⁹ The solution is to institute continuous monitoring systems.

Alcoholism and Substance Abuse

Alcoholism and substance abuse are problems at work. About two-thirds of people with an alcohol disorder work full-time.¹¹⁰ Some studies estimate that almost 13 million workers use drugs illicitly.¹¹¹ About 15% of the U.S. workforce (just over 19 million workers) “has either been hung over at work, been drinking shortly before showing up for work, or been drinking or impaired while on the job at least once during the previous year.”¹¹² Employee alcoholism may cost U.S. employers about \$226 billion per year, for instance, in higher absenteeism and accidents.¹¹³ (Increasingly, it’s not intoxicated drivers but “intoxicated” employees causing the problem. Studies indicate that cell phone activity probably contributes to over 636,000 motor vehicle crashes per year. Many businesses are therefore banning cell phone use and texting activities among their drivers.)¹¹⁴

EFFECTS OF ALCOHOL ABUSE The effects of alcoholism on the worker and work are severe.¹¹⁵ Both the quality and quantity of the work decline in the face of a sort of on-the-job absenteeism. The alcoholic’s on-the-job accidents usually don’t increase significantly, apparently, because he or she becomes much more cautious. However, the off-the-job accident rate is higher. Morale of other workers drops, as they have to shoulder the alcoholic’s burdens.

Recognizing the alcoholic on the job is a problem. Early symptoms such as tardiness are similar to those of other problems and thus hard to classify. The supervisor is not a psychiatrist, and without specialized training, identifying—and dealing with—the alcoholic is difficult.

As you can see in Table 16-3, alcohol-related problems range from tardiness in the earliest stages of alcohol abuse to prolonged absences in its later stages.

SUPERVISOR TRAINING Training supervisors to identify alcoholics or drug abusers and the problems they create is advisable. However, supervisors are in a tricky position: They should be the company’s first line of defense in combating workplace

TABLE 16-3 Observable Behavior Patterns Indicating Possible Alcohol-Related Problems

Alcoholism Stage	Some Possible Signs of Alcoholism Problems	Some Possible Alcoholism Performance Issues
Early	Arrives at work late Untrue statements Leaves work early	Reduced job efficiency Misses deadlines
Middle	Frequent absences, especially Mondays Colleagues mentioning erratic behavior Mood swings Anxiety Late returning from lunch Frequent multi-day absences	Accidents Warnings from boss Noticeably reduced performance
Advanced	Personal neglect Unsteady gait Violent outbursts Blackouts and frequent forgetfulness Possible drinking on job	Frequent falls, accidents Strong disciplinary actions Basically incompetent performance

Sources: Gopal Patel and John Adkins Jr., "The Employer's Role in Alcoholism Assistance," *Personnel Journal* 62, no. 7 (July 1983), p. 570; Mary-Anne Enoch and David Goldman, "Problem Drinking and Alcoholism: Diagnosis and Treatment," *American Family Physician*, February 1, 2002, www.aafp.org/afp/20020201/441.html, accessed July 20, 2008; and Ken Pidd et al., "Alcohol and Work: Patterns of Use, Workplace Culture, and Safety," www.nisu.flinders.edu.au/pubs/reports/2006/injcat82.pdf, accessed July 20, 2008.

drug abuse, but should avoid becoming detectives or diagnosticians. Guidelines supervisors should follow include the following:

- If an employee appears to be under the influence of drugs or alcohol, ask how the employee feels and look for signs of impairment such as slurred speech. (See Table 16-3.) Send an employee judged unfit home.
- Make a written record of your observations and follow up each incident. In addition, inform workers of the number of warnings the company will tolerate before requiring termination.
- Refer troubled employees to the company's employee assistance program.

DEALING WITH SUBSTANCE ABUSE For many employers, dealing with alcohol and substance abuse begins with substance abuse testing. As we saw in Chapter 6, it's unusual to find employers who don't at least test job candidates for substance abuse before hiring them. And many states are instituting mandatory random drug testing for high-hazard workers, such as electrical workers.¹¹⁶ Several states also have laws making drug-test fraud a crime.¹¹⁷

Preemployment tests pick up only about half the workplace drug users, so ongoing random testing is advisable. One study concluded that preemployment drug testing had little effect on workplace accidents. However, a combination of preemployment and random ongoing testing was associated with a significant reduction in workplace accidents.¹¹⁸ Preemployment drug testing also discourages those on drugs from applying for work or going to work for employers who test.¹¹⁹

Disciplining, discharge, in-house counseling, and referral to an outside agency are the four traditional prescriptions when a current employee tests positive. Most professionals seem to counsel treatment rather than outright dismissal, at least initially. Employers often make available employee assistance programs (EAPs) to provide the counseling necessary to support employees with alcohol or drug abuse problems.

SUBSTANCE ABUSE POLICIES The employers should establish and communicate a substance abuse policy. This policy should state management's position on alcohol and drug abuse and on the use and possession of illegal drugs on company premises. It should also list the methods (such as urinalysis) used to determine the causes of poor performance; state the company's views on rehabilitation, including workplace counseling; and specify penalties for policy violations. Additional steps employers take include conducting workplace inspections (searching employees for illegal substances) and using undercover agents.

Whether the alcohol abuse reflects a "disability" under the ADA depends on several things, including whether the person is alcohol dependent.¹²⁰ In general, employers can hold alcohol dependent employees to the same performance standards as they hold nonalcoholics. However, there are other legal risks. Employees have sued for invasion of privacy, wrongful discharge, defamation, and illegal searches. Therefore, before implementing a drug control program employers should use employee handbooks, bulletin board/intranet postings, and the like to publicize their substance abuse plans, and to explain the conditions under which testing might occur and what accommodations you make for employees who voluntarily seek treatment.

Stress, Burnout, and Depression

Problems such as alcoholism and drug abuse sometimes reflect underlying psychological causes such as stress and depression. In turn, a variety of workplace factors can lead to stress. These include work schedule, pace of work, job security, route to and from work, workplace noise, poor supervision, and the number and nature of customers or clients.¹²¹

Personal factors also influence stress. For example, Type A personalities—people who are workaholics and who feel driven to be on time and meet deadlines—normally place themselves under greater stress than do others. Add to job stress the stress caused by nonjob problems like divorce, and many workers are problems waiting to happen.

Job stress has serious consequences for both employer and employee. Human consequences include anxiety, depression, anger, cardiovascular disease, headaches, accidents, and even early onset Alzheimer's disease.¹²² A Danish study recently found that nurses working under excessive pressure had double the risk for heart attacks.¹²³

For the employer, consequences include diminished performance, and increased absenteeism and turnover. A study of 46,000 employees concluded that high-stress workers' health care costs were 46% higher than those of their less-stressed coworkers.¹²⁴ Yet only 5% of surveyed U.S. employers say they're addressing workplace stress.¹²⁵

REDUCING JOB STRESS There are a number of ways to alleviate dysfunctional stress. These range from commonsense remedies (such as getting more sleep) to remedies like biofeedback and meditation. Finding a more suitable job, getting counseling, and planning and organizing each day's activities are other sensible responses.¹²⁶ In his book *Stress and the Manager*, Dr. Karl Albrecht suggests the following ways for a person to reduce job stress:¹²⁷

- Build rewarding, pleasant, cooperative relationships with colleagues and employees.
- Don't bite off more than you can chew.
- Build an especially effective and supportive relationship with your boss.
- Negotiate with your boss for realistic deadlines on important projects.
- Learn as much as you can about upcoming events and get as much lead time as you can to prepare for them.
- Find time every day for detachment and relaxation.
- Take a walk around the office to keep your body refreshed and alert.
- Find ways to reduce unnecessary noise.
- Reduce the amount of trivia in your job; delegate routine work when possible.
- Limit interruptions.

- Don't put off dealing with distasteful problems.
- Make a constructive “worry list” that includes solutions for each problem.
- Get more and better quality sleep.¹²⁸

Meditation is another option. Choose a quiet place with soft light and sit comfortably. Then meditate by focusing your thoughts (for example, count breaths or visualize a calming location such as a beach). When your mind wanders, bring it back to focusing your thoughts on your breathing or the beach.¹²⁹

The employer and its human resource team and supervisors also play a role in reducing stress. Supportive supervisors and fair treatment are two obvious steps. Other steps include reducing personal conflicts on the job and encouraging open communication between management and employees. Huntington Hospital in Pasadena, California, introduced an on-site concierge service to help its employees reduce work-related stress. It takes care of tasks like making vacation plans for the employees.¹³⁰ Some employers use “resilience training” to help employees deal with stress. As one example, “participants consider previous stressful situations in their lives that they have overcome and identify factors that made the situations manageable.”¹³¹

One British firm has a three-tiered employee stress-reduction program.¹³² First is primary prevention. This focuses on ensuring that things like job designs and workflows are correct. Second is intervention. This includes individual employee assessment, attitude surveys to find sources of stress, and supervisory intervention. Third is rehabilitation, which includes employee assistance programs and counseling.

BURNOUT Burnout is a phenomenon closely associated with job stress. Experts define burnout as the total depletion of physical and mental resources caused by excessive striving to reach an unrealistic work-related goal. Burnout builds gradually, manifesting itself in symptoms such as irritability, discouragement, exhaustion, cynicism, entrapment, and resentment.¹³³

Employers can head off burnout, for instance, by monitoring employees in potentially high-pressure jobs.¹³⁴ What can a burnout candidate do? In his book *How to Beat the High Cost of Success*, Dr. Herbert Freudenberger suggests:

- Break your patterns. First, are you doing a variety of things or the same one repeatedly? The more well-rounded your life is, the better protected you are against burnout.
- Get away from it all periodically. Schedule occasional periods of introspection during which you can get away from your usual routine.
- Reassess your goals in terms of their intrinsic worth. Are the goals you've set for yourself attainable? Are they really worth the sacrifices?
- Think about your work. Could you do as good a job without being so intense?

RESEARCH INSIGHTS If you're thinking of taking a vacation to reduce your burnout, you might as well save your money, according to one classic study.¹³⁵ In this study, 76 clerks in the headquarters of an electronics firm in Israel completed questionnaires measuring job stress and burnout twice before a vacation, once during the vacation, and twice after the vacation.

The clerks' burnout did decline during the vacation. The problem was the burnout quickly returned. Burnout moved partway back toward its pre-vacation level by 3 days after the vacation, and all the way by 3 weeks after they returned to work.¹³⁶ One implication, as these researchers point out, is that mini vacations during the workday—“such as time off for physical exercise, meditation, power naps, and reflective thinking”—might help reduce stress and burnout. A later study concluded that the quality of a vacation—for instance, in terms of relaxation and nonwork hassles—affected the vacation's fade-out effects.¹³⁷

One way to reduce burnout is to forget about your job once you go home. In one study, researchers measured psychological detachment from work during nonwork time with items such as “during after-work hours, I forget about work.”¹³⁸ Lack of psychological detachment from work while off the job predicted higher emotional

exhaustion one year later. The bottom line seems to be to leave your job behind once you go home (and to provide more time-off benefits for employees).

EMPLOYEE DEPRESSION Employee depression is a serious problem at work. Experts estimate that depression results in more than 200 million lost workdays in the United States annually, and may cost U.S. businesses \$24 billion or more per year just in absenteeism and lost productivity.¹³⁹ Depressed people also tend to have worse safety records.¹⁴⁰

Employers need to work harder to ensure that depressed employees utilize available support services. One survey found that while about two-thirds of large firms offered employee assistance programs covering depression, only about 14% of employees with depression said they ever used one.¹⁴¹

Employers therefore need to train supervisors to identify depression's warning signs and to counsel those who may need such services to use the firm's employee assistance program.¹⁴² Depression is a disease. It does no more good to tell a depressed person to "snap out of it" than it would to tell someone with a heart condition to stop acting tired. Typical depression warning signs (if they last for more than 2 weeks) include persistent sad, anxious, or "empty" moods; sleeping too little; reduced appetite; loss of interest in activities once enjoyed; restlessness or irritability; and difficulty concentrating.¹⁴³

Solving Computer-Related Ergonomic Problems

Although many workers use computers at work, OSHA has no specific standards that apply to computer workstations. It does have general standards that might apply, regarding, for instance, radiation, noise, and electrical hazards.¹⁴⁴

NIOSH provided general recommendations regarding computer screens. Most relate to ergonomics or design of the worker–equipment interface. These include:

- Employees should take a 3–5 minute break from working at the computer every 20–40 minutes, and use the time for other tasks, like making copies.
- Design maximum flexibility into the workstation so it can be adapted to the individual operator. For example, use adjustable chairs with midback supports. Don't stay in one position for long periods.
- Reduce glare with devices such as shades over windows and recessed or indirect lighting.
- Give workers a complete preplacement vision exam to ensure properly corrected vision for reduced visual strain.¹⁴⁵
- Allow the user to position his or her wrists at the same level as the elbow.
- Put the screen at or just below eye level, at a distance of 18 to 30 inches from the eyes.
- Let the wrists rest lightly on a pad for support.
- Put the feet flat on the floor or on a footrest.¹⁴⁶

Repetitive Motion Disorders

According to the U.S. National Institutes of Health, repetitive motion disorders include disorders such as carpal tunnel syndrome, bursitis, and tendonitis, and result from too many uninterrupted repetitions of an activity or motion, or from unnatural motions such as twisting the arm or wrist, or incorrect posture. It usually affects people who perform repetitive tasks such as assembly line or computer work. Employers can reduce the problem, for instance, with programs to help workers adjust their pace of work.¹⁴⁷

burnout

The total depletion of physical and mental resources caused by excessive striving to reach an unrealistic work-related goal.

Workplace Smoking

Smoking is a serious health and cost problem for both employees and employers. For employers, these costs derive from higher health and fire insurance, increased absenteeism, and reduced productivity (as when a smoker takes a 10-minute break behind the store). The California Environmental Protection Agency estimated that each year in the United States, secondhand smoke causes 3,000 deaths due to lung cancer and 35,000 to 62,000 illnesses due to heart problems (not all work related).¹⁴⁸

WHAT YOU CAN AND CANNOT DO In general, you can probably deny a job to a smoker as long as you don't use smoking as a surrogate for some other kind of discrimination.¹⁴⁹ A "no-smokers-hired" policy does not, according to one expert, violate the Americans with Disabilities Act (since smoking is not considered a disability), and in general "employers' adoption of a no-smokers-hired policy is not illegal under federal law." Most employers these days ban indoor smoking, often designating small outdoor areas where smoking is permitted. Many states and municipalities now ban indoor smoking in public areas (see http://en.wikipedia.org/wiki/List_of_smoking_bans#United_States for a list).

Some firms take a hard-line approach. WEYCO Inc., a benefits services company in Michigan, first gave employees 15 months' warning and offered smoking secession assistance. Then they began firing or forcing out all its workers who smoke, including those who do so in the privacy of their homes.¹⁵⁰

WELLNESS PROGRAMS We discussed wellness programs in Chapter 13 (Benefits), but for many employers, wellness is part of their safety and health initiatives. Wegman's food markets Inc. has various health and fitness campaigns, and, for instance, encourages its employees to eat 5 cups of fruit and vegetables and walk 10,000 steps each day.¹⁵¹ The accompanying HR as a Profit Center feature illustrates one program's advantages.

HR AS A PROFIT CENTER

Wellness Pays

The payback for wellness programs isn't theoretical. For example, over the past 20 or so years, the percentage of employees at Johnson & Johnson who smoke has dropped by more than two-thirds, in part thanks to J&J's comprehensive wellness effort. It's been reported that the company's leaders estimate that such wellness programs have saved the company about \$250 million on health care costs from 2002 to 2008, a return of about \$2.71 for every dollar spent on the wellness programs.¹⁵²

Violence at Work

Violence against employees is an enormous problem at work. Homicide is the second biggest cause of fatal workplace injuries. Surveys by NIOSH found that nonfatal workplace assaults resulted in more than 1 million lost workdays in one recent year. While robbery was the main motive for homicide at work, a coworker or personal associate committed roughly one of seven workplace homicides.¹⁵³ In one survey, over half of human resource or security executives reported that disgruntled employees had threatened senior managers in the past 12 months.¹⁵⁴ Sadly, much of this violence involves acts by one intimate partner against another. For example, the U.S. Centers for Disease Control reported almost 5 million such attacks against women (and 3 million against men) recently (not all at work).¹⁵⁵ Women (and men) should have access to domestic crisis hotlines, such as www.ndvh.org, and to the employer's employee assistance programs.

WHO IS AT RISK? Violence is associated with some jobs more than others. In one study, researchers constructed a "risk for violence scale." Jobs with a high likelihood for violence include those jobs that involve physical care of others or decisions that influence other people's lives, handling guns, security functions, physical control over others, interacting with frustrated individuals, and handling weapons other than guns.¹⁵⁶

Although men have more fatal occupational injuries than do women, the proportion of women who are victims of assault is much higher. The Gender-Motivated Violence Act imposes significant liabilities on employers whose women employees become victims.¹⁵⁷ Most women (many working in retail establishments) murdered at work were victims of random criminal violence by an assailant unknown to the victim, as during a robbery. Coworkers, family members, or previous friends or acquaintances carried out the remaining homicides.

You can predict and avoid many workplace incidents. Risk Management magazine estimates that about 86% of past workplace violence incidents were apparent earlier to coworkers, who had brought them to management's attention. Yet, in most cases, management did little or nothing.¹⁵⁸ Employers can take several steps to reduce workplace violence. Let's look at them.

HEIGHTENED SECURITY MEASURES Heightened security measures are an employer's first line of defense. NIOSH suggests the following: Improve external lighting, use drop safes to minimize cash on hand and post signs noting that only a limited amount of cash is on hand, install silent alarms and surveillance cameras, increase the number of staff on duty, provide staff training in conflict resolution and nonviolent response, and close establishments during high-risk hours late at night.¹⁵⁹ Employers can also issue a weapons policy, for instance, barring firearms and other dangerous weapons.

Because about half of workplace homicides occur in the retail industry, OSHA issued voluntary recommendations aimed at reducing homicides and injuries in such establishments. The suggestions include the following: Install mirrors and improved lighting, provide silent and personal alarms, reduce store hours during high-risk periods, install drop safes and signs that indicate little cash is kept on hand, erect bullet-resistance enclosures, and increase staffing during high-risk hours.¹⁶⁰ Adopt a workplace violence policy that outlines unacceptable employee behavior and a zero-tolerance policy toward workplace violence.¹⁶¹

IMPROVED EMPLOYEE SCREENING That testing can screen out workplace aggressors is clear. In one study, researchers concluded that measurable individual differences like "attitude toward revenge" "account for more than 60% of the variance in our measure of the incidence of workplace aggression."¹⁶² (We discussed bullying in Chapter 14, Ethics.)

At a minimum, carefully check references. Obtain a detailed employment application. Verify the applicant's employment history, educational background, and references. A personal interview, personnel testing, and a review and verification of all information should also be included. Sample interview questions might include, "What frustrates you?" and "Who was your worst supervisor and why?" Remember that certain questions, for instance concerning arrest records may violate one or more equal employment laws.¹⁶³

Certain background facts suggest the need for a more in-depth background investigation (but note that the EEOC is preparing new guidelines for evidence-based violence background checks, to replace what are often checks made on "untested assumptions"):¹⁶⁴

- An unexplained gap in employment
- Incomplete or false information on the résumé or application
- A negative, unfavorable, or false reference
- Prior insubordinate or violent behavior on the job
- A criminal history involving harassing or violent behavior
- A prior termination for cause with a suspicious (or no) explanation
- A history of significant psychiatric problems
- A history of drug or alcohol abuse
- Strong indications of instability in the individual's work or personal life, for example, frequent job changes or geographic moves
- Lapsed or lost licenses or accreditations¹⁶⁵

Workplace Violence Supervisory Training

Employers should also train supervisors to identify the clues that typically precede violent incidents. These include:¹⁶⁶

- Typical profiles. The typical perpetrator is male, between the ages of 25 and 40, and exhibits an inability to handle stress, manipulative behavior, and steady complaining. Of course, many nonviolent people exhibit such traits, too. However, perpetrators also tend to exhibit behaviors such as the following.
- Verbal threats. They harbor grudges and often talk about what they may do, such as, “That propane tank in the back could blow up easily.”
- Physical actions. Troubled employees may try to intimidate others, gain access to places where they do not belong, or flash a concealed weapon.
- Frustration. Most cases involve an employee who has a frustrated sense of entitlement to a promotion, for example.
- Obsession. An employee may hold a grudge against a coworker or supervisor, and some cases stem from romantic interest.¹⁶⁷

Vendors offer video violence training programs. These explain what workplace violence is, identify its causes and signs, and offer tips to supervisors on how to prevent it and what to do when it occurs.

Specific behaviors to watch out for include:

- An act of violence on or off the job
- Erratic behavior evidencing a loss of awareness of actions
- Overly defensive, obsessive, or paranoid tendencies
- Overly confrontational or antisocial behavior
- Sexually aggressive behavior
- Isolationist or loner tendencies
- Insubordinate behavior with a suggestion of violence
- Tendency to overreact to criticism
- Exaggerated interest in war, guns, violence, catastrophes
- The commission of a serious breach of security
- Possession of weapons, guns, knives at the workplace¹⁶⁸
- Violation of privacy rights of others, such as searching desks or stalking
- Chronic complaining and frequent, unreasonable grievances
- A retribution-oriented or get-even attitude¹⁶⁹

ORGANIZATIONAL JUSTICE At work, violence often occurs in response to a perceived personal affront.¹⁷⁰ Consider one executive suspected of sabotaging his former employer’s computer system, thus causing about \$20 million in damage. He’d been earning \$186,000 a year. A note he wrote anonymously to the president said this:

I have been loyal to the Company in good and bad times for over thirty years. . . . What is most upsetting is the manner in which you chose to end our employment. I was expecting a member of top management to come down from his ivory tower to face us directly with a layoff announcement, rather than sending the kitchen supervisor with guards to escort us off the premises like criminals. . . . We will not wait for God to punish you—we will take measures into our own hands.¹⁷¹

DEALING WITH ANGRY EMPLOYEES What do you do when confronted by an angry, potentially explosive employee? Here are some suggestions:¹⁷²

- Make eye contact.
- Stop what you are doing and give your full attention.

- Speak in a calm voice and create a relaxed environment.
- Be open and honest.
- Let the person have his or her say.
- Ask for specific examples of what the person is upset about.
- Be careful to define the problem.
- Ask open-ended questions and explore all sides of the issue.
- Listen: As one expert says, “Often, angry people simply want to be listened to. They need a supportive, empathic ear from someone they can trust.”¹⁷³

DISMISSING VIOLENT EMPLOYEES You should use caution when firing or disciplining potentially violent employees.

In dismissing potentially violent employees:

- Analyze and anticipate, based on the person’s history, what kind of aggressive behavior to expect.
- Have a security guard nearby when the dismissal takes place.
- Clear away furniture and things the person might throw.
- Don’t wear loose clothing that the person might grab.
- Don’t make it sound as if you’re accusing the employee; instead, say that according to company policy, you’re required to take action.
- Maintain the person’s dignity and try to emphasize something good about the employee.
- Provide job counseling for terminated employees, to help get the employee over the traumatic post-dismissal adjustment.¹⁷⁴
- Consider obtaining restraining orders against those who have exhibited a tendency to act violently in the workplace.¹⁷⁵

LEGAL ISSUES IN REDUCING WORKPLACE VIOLENCE It is sensible to try to screen out potentially violent employees, but doing so incurs legal risks. For example, courts have interpreted Title VII of the Civil Rights Act of 1964 as restricting employers from making employment decisions based on arrest records, which may be discriminatory.

Aside from federal law, most states prohibit discrimination under any circumstances based on arrest records and on prior convictions unless a direct relationship exists between the prior conviction and the job, or the employment presents an unreasonable risk.¹⁷⁶ And developing a “violent employee” profile could end up merely describing a mental impairment and violate the Americans with Disabilities Act.¹⁷⁷

7 Discuss the prerequisites for a security plan and how to set up a basic security program.

OCCUPATIONAL SECURITY AND SAFETY

A majority of employers have security arrangements.¹⁷⁸ A SHRM survey found that about 85% of responding organizations now have some type of formal disaster plan.¹⁷⁹ Many firms have also instituted special handling procedures for suspicious mail packages and hold regular emergency evacuation drills.

Many of these actions stemmed from employers’ heightened focus on risk management in the past few years. Identifying security and other corporate risks falls within the domain of enterprise risk management, which means identifying risks, and planning to mitigate and actually mitigating these risks. Thus, as part of its risk management, Walmart asks questions such as, “What are the risks? And what are we going to do about these risks?”¹⁸⁰ Eliminating crime and enhancing facility security are two important issues here.

Basic Prerequisites for a Crime Prevention Plan

As one corporate security summary put it, “workplace security involves more than keeping track of who comes in a window, installing an alarm system, or employing guards for an after-hours watch. Organizations that are truly security conscious plan and implement policies and programs that involve employees in protecting against identified risks and threats.”¹⁸¹

Ideally, a comprehensive corporate anticrime program should start with the following:

1. Company philosophy and policy on crime—In particular, make sure employees understand that no crime is acceptable and that the employer has a zero-tolerance policy with respect to workers who commit crimes.
2. Investigations of job applicants—Conduct full background checks as part of your selection process for every position.
3. Crime awareness training—Make it clear, during training and orientation, that the employer takes a tough approach to workplace crime.
4. Crisis management—Establish and communicate the procedures employees should follow in the event of a bomb threat, fire, or other emergency.

Setting Up a Basic Security Program

In simplest terms, instituting a basic facility security program requires four steps: analyzing the current level of risk, and then installing mechanical, natural, and organizational security systems.¹⁸² Many organizations establish cross-functional threat assessment teams to monitor and address potential threats. At one university, for instance, “The team meets regularly to discuss issues relating to violence, security and potential threats directed at students, faculty and staff at the Metropolitan Campus.”¹⁸³

Security programs ideally start with an analysis of the facility’s current level of risk. The employer, preferably with security experts, should assess the company’s exposure. Here, start with the obvious. For example, what is the neighborhood like? Does your

Many employers install video security cameras to monitor areas in and around their premises.

facility (such as the office building you’re in) house other businesses or individuals (such as law enforcement agencies) that might bring unsafe activities to your doorstep? As part of this initial threat assessment, also review these six matters:

1. Access to the reception area, including number of access points, and need for a “panic button” for contacting emergency personnel;
2. Interior security, including possible need for key cards, secure restrooms, and better identification of exits;
3. Authorities’ involvement, in particular emergency procedures developed with local law enforcement authorities;
4. Mail handling, including how employees screen and open mail and where it enters the building;
5. Evacuation, including a full review of evacuation procedures and training; and
6. Backup systems, such as those that let the company store data off site if disaster strikes.

Having assessed the potential current level of risk, the employer then turns its attention to assessing and improving natural, mechanical, and organizational security.¹⁸⁴

NATURAL SECURITY Natural security means capitalizing on the facility’s natural or architectural features in order to minimize security



problems. For example, does having too many entrances mean it is difficult to control facility access?

MECHANICAL SECURITY Mechanical security is the utilization of security systems such as locks, intrusion alarms, access control systems, and surveillance systems to reduce the need for continuous human surveillance.¹⁸⁵ Technological advances are making this easier. Many mail rooms now use scanners to check the safety of incoming mail. And for access security, biometric scanners that read thumb or palm prints or retina or vocal patterns make it easier to enforce plant security.¹⁸⁶

ORGANIZATIONAL SECURITY Finally, organizational security means using good management to improve security. For example, it means properly training and motivating security staff and lobby attendants. Also ensure that the security staff has written orders that define their duties, especially in situations such as fire, elevator entrapment, hazardous materials spills, medical emergencies, hostile intrusions, suspicious packages, civil disturbances, and workplace violence.¹⁸⁷ Other questions to ask include: Are you properly investigating the backgrounds of new hires? Are you requiring the same types of background checks for the contractors who supply security and other personnel to your facility? And, do you provide new employees with security orientations?

Evacuation Plans

The possibility of emergencies prompted by fires, explosions, and similar issues means that employers need facility notification and evacuation plans.¹⁸⁸ Such plans should cover early detection of a problem, methods for communicating the emergency externally, and communications plans for initiating an evacuation and for providing information to those the employer wants to evacuate. Ideally, an initial alarm should come first. The employer should then follow the initial alarm with an announcement providing specific information about the emergency and letting employees know what action they should take next. Most use social networks or text messaging.¹⁸⁹

Company Security and Employee Privacy

Security programs have been accompanied by a significant rise in the monitoring of employee communications and workplace activities; this has prompted many to ask, are employee privacy rights being violated?

As noted in earlier in this book, employers must consider employee privacy when using monitoring to control or investigate possible employee security breaches. Ideally, employers should get employees' consent for monitoring. But the employer may also monitor if it's clear from the firm's existing policies and notices that employees should have known monitoring might take place.

The employer can take steps to make it easier to legally investigate employees for potential security breaches. These include:¹⁹⁰

1. Distribute a policy that (a) says the company reserves the right to inspect and search employees as well as their personal property, electronic media, and files; and (b) emphasizes that company-provided conveniences such as lockers and desks remain the property of the company and are subject to its control and search.
2. Train investigators to focus on the facts and avoid making accusations.
3. Remember that employees can request that an employee representative be present during the investigative interview.
4. Make sure all investigations and searches are evenhanded and nondiscriminatory.