AkitaBox

The Facility Safety and Security Plan Guide

WHAT'S INSIDE

INTRODUCTION

Facility teams are responsible for taking steps to provide a secure environment for occupants of a facility. Protecting people and assets from harm is essential to a safe and productive business. Physical security risks, workplace hazards and active threats are just a few of the most serious safety concerns a facility team may encounter. Unfortunately, security incidents can and will occur and are more likely to emerge in the absence of a prevention plan.

So, how can you improve your building's security and protect yourself, your organization and your employees? While it is nearly impossible to prevent all safety hazards in your facilities, there are many steps you can take to prepare for any situation that may occur.

In this guide, you will learn how to maximize safety and security not only in your facilities department, but also throughout your entire organization.

- **Understanding the Importance of Safety and Security**

  Learn the role facility teams play in promoting a safe work environment and explore hazards your facility may face.
  See page 2.

- **Getting to Know Building Codes**

  Gain insight on building codes, where to find them and who to talk to for help in this Q&A style chapter.
  See page 6.

- **Assessing Risks in Your Facility**

  Understand possible risks to your facility and how to protect yourself, others, and your business.
  See page 10.

- **Preparing for Emergencies**

  Prepare for the unexpected by anticipating disaster and creating a preparedness plan.
  See page 14.

- **New Technology Spotlight: VR for Facility Safety**

  Discover the power of virtual reality (VR) in mitigating risks in facilities.
  See page 19.

- **Implementing Your Facility's Security Plan**

  Draft and implement a comprehensive security plan that best suits your facility's individual needs.
  See page 20.

At the end of this guide, you also will find free tools and resources to help you succeed in future efforts to maintain safety in your facility.

Buildings have no one-size-fits-all solution when it comes to security. However, one thing is certain: developing a proactive approach towards safety is always well worth the time and effort.

1 — UNDERSTANDING THE IMPORTANCE OF SAFETY AND SECURITY

Every day, safety incidents happen in the buildings around us. According to a 2018 survey conducted by AkitaBox, nearly **70%** of facilities experienced one or more safety-related incidents in the past year. The most commonly reported incidents involved injuries (28% of facilities), flooding (21% of facilities,) and break-ins (20% of facilities.)[1]

But why are **only 30%** of facilities incident-free? The answer may lie within a facility's preparedness and planning, both of which are critical to workplace safety. Without a plan of action for incidents and emergencies, facilities can face loss of income, loss of business or even loss of life.

One of the best decisions a company can make is to implement a program that protects the safety and well-being of everyone within a facility. According to the Occupational Safety and Health Administration (OSHA), safe work environments have many benefits, including:[2]

- Prevention of workplace injuries and illness
- Improved compliance with laws and regulations
- Reduced costs (including significant reductions in workers' compensation premiums)
- Highly engaged workers
- Increased productivity
- Enhanced overall business operations

> *"Facility teams play a pivotal role in encouraging a culture of safety and security in their facilities. They prevent harm to employees and occupants and ensure that operations run smoothly. They protect the built environment and find joy in keeping the workplace free of hazards. They take a proactive approach towards safety by providing proper equipment, employee training and avenues for communication and trust. When systems in a facility work as expected, occupants are put at ease."*[3]
>
> **Todd Hoffmaster**, Co-Founder of AkitaBox

Facility teams also ensure that workplaces are protected against hazards and risks, including:

Physical hazards such as slippery floors, unsafe machinery, poor lighting, blocked exits, fires, electrical hazards, trips and falls.

Chemical hazards resulting from gases, dust, fumes, vapors, liquids and cleaning solutions.

Human-related hazards such as active threats, burglars, hackers and workplace violence.

When it comes to safety, facility teams have two main goals:

The first goal is to protect people. Facility teams have the power to prevent injuries and reduce employees' days spent away from work. Safe employees are more likely to be happy employees - and happy employees are up to 20% more productive than unhappy ones. [4]

The second goal is to protect property. For example, facility teams have the power to control access to a facility, prevent unnecessary interruptions, reduce theft and losses, and ensure that assets and equipment function properly.

Before investigating ways to improve safety and security, building managers must understand the gravity of workplace injuries and the toll incidents take on an organization's business. The Bureau of Labor Statistics offers vital statistics on injuries in the workplace.

Statistics on Building Safety

Did you know?

According to a 2021 report conducted by the Bureau of Labor Statistics:

Approximately **2.3 million people (globally)** have work-related accidents every year.[5]

The number of **nonfatal workplace injuries and illnesses** was **unchanged** in 2020 when compared to 2018.[5]

A total of **333,830 injuries and illnesses** required a visit to a medical facility such as an emergency room or **in-patient hospital**.

Workers in **manufacturing** who sustained occupational injuries and illnesses resulting in days away from work required a median of **8 days** to return to work.

In 2020, the **top cited OSHA violations** in general industry were:
1) Hazard Communication Standard (29 CFR 1910.1200)
2) Respiratory protection (29 CFR 1910.134)
3) Control of hazardous energy (lockout/tagout) (29 CFR 1910.147)

* (source: https://www.osha.gov/top10citedstandards)

Having safe and productive workers allows for smoother operations in a facility. But what happens when a worker gets hurt or an asset breaks? How should facility teams react to unexpected situations? Read on to learn why your reaction to issues is critical to a productive business model.

How Management Methods Impact Operations

In facility management, reactions to issues are unavoidable. Things can and will go wrong. However, facility teams can take steps to promote safety and reduce reactionary maintenance by taking a proactive approach towards fixes. Facility managers and directors should start by understanding the benefits of proactive facility management versus a reactive response.

What is reactive management?

A "reactive" approach to facility management requires something to go wrong or break before the issue gains attention. Facility teams who utilize the reactive approach may hold a "wait until it breaks" mentality. While this approach initially may work for some, facility teams can become overwhelmed as backlogged maintenance issues begin to pile up. When known issues go unaddressed, repair costs can multiply. For example, a relatively insignificant repair can quickly worsen when left unaddressed. As a result, total repair costs increase significantly.

REACTIVE

- Approach is crisis-based
- Chaotic execution of work responsibilities
- Frequent equipment failures
- Unplanned downtime due to equipment failure
- Delays in service and maintenance calls
- Increased costs due to broken building components
- Heavily people-dependent due to increased labor costs

What is proactive management?

Conversely, a "proactive" approach to facility management involves foresight and identifies a crisis before it happens. Real-time measurements are taken to predict system degradation and mechanical failure. As a result, negative consequences are kept to a minimum. For example, a proactive facility may have contingencies in place such as backup generators for power outages or spare parts for immediate asset repair. Machinery is actively maintained to ensure it functions as the manufacturer intended. Equipment life is extended, which reduces downtime and increases productivity.

PROACTIVE
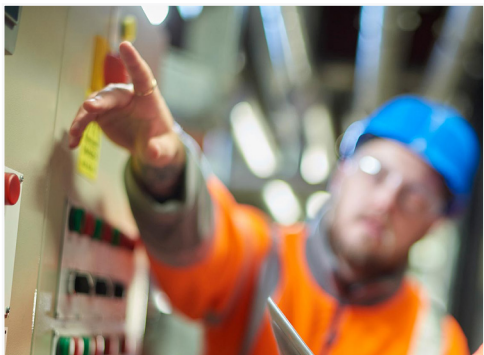
- Approach is preparation-based
- Organized execution of work responsibilities
- Fully functional equipment and building components
- Longer life expectancy of critical equipment
- Greater cost savings in maintenance
- Improved worker and environmental safety
- Faster response times to service and maintenance calls
- Upgraded facilities and improved preventative maintenance
- Detailed measuring/reporting of facility management metrics
- Utilizes a facility management software (FMS)

Keep yourself and occupants safe by identifying risks and acting upon them before a crisis occurs. Be proactive - your team (and your budget) will thank you!

Fostering Proactive Management in Your Facility

How does your team approach facility management? If your facility runs on a reactive approach to maintenance, it's never too late to shift towards a proactive approach. Follow these four steps to get a better gauge on your department's current strategy.

1. **Identify areas of weakness.** What equipment/systems are most critical to the operation of your building? What are the current conditions of these systems? What equipment in your facility is mandated to be maintained (i.e. fire extinguishers, fire alarm systems, fire suppression systems, elevators, backflow devices etc.)? Make preventative maintenance of these systems a priority. For additional help, schedule a survey or assessment with an inspector. The inspection will highlight equipment deterioration and repairs needed.

2. **Develop a step-by-step plan to improve deficiencies.** Which traits of "reactive" maintenance does your management method follow? How can those traits shift to a more "proactive" approach? Begin by collecting data on the most critical equipment in your facility. Take note of the brand, model, age, physical condition and necessary parts of all equipment. Make equipment data readily available to your team by storing information in a cloud-based facility management system.

3. **Revisit and re-evaluate improvements made.** Measure the results of your first six months. Which changes have worked well? Which changes require further improvement? Hold a meeting with your team, discuss improvements, encourage participation and seek input on how to further implement positive change. Set new, reasonable goals and expectations.

4. **Embrace change.** Encourage staff to embrace positive changes in the facility management process. Provide proper training to ensure that your team has all information, tools, equipment and supplies needed for success.

Embrace a culture of proactive safety in your facility. Be flexible, make informed decisions backed by data, learn from mistakes and learn how to bounce back when faced with the unexpected.

In the first chapter of this guide, statistics unveiled the importance of maintaining safety and security in buildings. However, some incidents happen unexpectedly, and facility teams are left to figure out ways to make sure an incident doesn't happen again. One of the best ways to promote safety is through adherence to building codes.

Building codes are sets of rules that regulate the design, construction, alteration and maintenance of structures. Codes also specify minimum requirements and standards that protect the safety, health and welfare of a facility's occupants. While we are relatively familiar with the concept of codes today, buildings weren't always held to such standards in the past.

The Great Chicago Fire

In 1871, the Great Chicago Fire burned for three days straight. The blaze destroyed 17,000 structures, killed more than 300 people and caused approximately $200 million in damage.[6]

A month after the fire, Chicago's mayor promised to institute stricter building and fire codes to keep occupants safe from future harm. Other large cities across the U.S. followed suit. Codes for lighting, ventilation, fire escapes, water supply, toilets, sanitation, stairs and railings were among the first codes to be implemented in densely populated cities across America.[6]

Since the 1800s, building codes have continued to develop into what they are today. While initial building codes aimed to reduce risk of fire, today's codes cover a much wider scope of safety concerns.

With codes playing such an important role in building safety, facility managers should feel confident in codes themselves or know an industry expert they can consult for help. However, according to a 2018 survey conducted by AkitaBox, only **12%** of facility managers identify themselves as being "extremely familiar" with building codes.

At first glance, building codes can seem complex and intimidating - but building codes don't have to be complicated. Armed with the right information, facility teams can feel educated and empowered, and make their buildings safer. To help you familiarize yourself with building codes, we've rounded up a number of the most frequently asked questions.

Building Codes 101

Why are building codes important?

Up-to-date building codes protect two things in a facility. First, building codes protect people by reducing cases of injury and death. Second, building codes protect assets by reducing property and financial losses. Facility and construction teams are responsible for understanding and applying building code requirements to attain proper approval from building code officials.

Implementing required building codes is important when executing construction projects. Failure to abide by building codes may result in a notice of violation, a hefty fine and, eventually, closure of a facility. Because of the negative consequences surrounding building code violations, issues with codes should be addressed as soon as possible. Fixing violations can be as simple as contacting the correct repair person, consulting a building official for help or completing the repair in time for a follow-up inspection.

> **Tip: When in doubt of the purpose or intent of a building code, ask yourself or your consultant the following questions:**
>
> **1.** What goals does this code accomplish?
> **2.** Why do we want to accomplish these goals?
> **3.** How can we actively accomplish these goals?

What are some examples of codes?

Facilities must comply with a variety of codes, a few of which include:

- Accessibility codes
- Construction codes
- Electrical codes
- Energy codes
- Exit and egress codes
- Fire codes

- Fuel, gas and ventilation codes
- Lighting codes
- Material codes
- Mechanical codes
- Occupancy codes
- Plumbing codes

- Sanitation codes
- Sewage disposal codes
- Structural codes
- Weatherproofing codes

Who uses building codes?

Building codes are utilized by facility teams, building engineers, construction workers, architects, interior designers, regulators and safety inspectors. Building codes also may be useful to subcontractors, insurance companies, product manufacturers and tenants of a building.

Who develops and enforces building codes?

The International Code Council (ICC) develops codes in collaboration with the Federal Emergency Management Agency (FEMA) and other federal, state, local and private authorities. Codes are adopted and enforced by state and local jurisdictions. Rather than create their own codes, many states and local jurisdictions adopt building codes maintained by the International Code Council (and amend them if needed.) Local building officials review design plans, inspect construction work and issue building and occupancy permits.

What's the difference between federal, state and local building codes?

Building codes are dependent upon the jurisdiction in which you live. States and local governments can choose to adopt national model codes, a modified version of the model code or their own state-specific code. Most codes are adopted at a state level. Depending on their form of government, cities adopt codes through their mayors, councils or committees. Once adopted, codes become part of the law within that particular state or local jurisdiction.[7]

Most communities in the United States have a system in place for building regulations. However, some rural areas in America still have not adopted a building code. In these areas, it is legal to design and construct structures using standards deemed appropriate by designers and builders.[8]

Do current building code requirements apply to historical buildings?

By virtue of their age, most older buildings today do not meet current standards for new construction. However, this does not necessarily mean that historical buildings are out of compliance. The code requirements for these buildings are those that were in effect when the facility was designed and constructed.

Therefore, obsolete buildings are not necessarily required to be renovated whenever building codes evolve. The one exception to this rule is when an older building is significantly renovated. Large alterations to a historical building may trigger an upgrade by the International Building Code (IBC) or the International Existing Building Code (IEBC).[7]

How can I make my older building safer?

There are a variety of ways you can make your older building safer. First, consult your local emergency management agency or permitting official. These individuals can help you gain insight on local hazards and risks, site characteristics and proposed improvements. Next, contact your local building department. The department may be able to provide you with basic information on retrofitting a building of a certain era.

Lastly, consult a general contractor, architect, and/or engineer. These individuals can inspect your property and provide you with specific recommendations for building improvement. The recommendations you receive may vary depending on the year in which your property was built, the jurisdiction in which you live and the hazards/risks in your community.[7]

Where do I find building codes for my community?

To determine building codes enforced in your community, contact your local building official. Request a customized report of building code enforcement from the Insurances Service Office (ISO).[9]

"Over the years, we've learned a lot about how to build safe and secure structures. That's why codes are important; they keep occupants safe and ensure that industry professionals are following best practices. Because building codes are constantly evolving, it's important to establish a network of resources you can call for help. Start by fostering relationships with building officials in your jurisdiction. These individuals are there for you as consultants. Knowing codes is great, but knowing the people who enforce them is even better."

Josh Lowe, Facility Innovator at AkitaBox

Going Forward

Familiarizing yourself with building codes is a good thing to do, but experts exist in this field to help guide you on best practices. For additional resources or help, reach out to the following organizations:

Local Help

- Consult a building code consultant, local emergency management agency, permitting official, general contractor, architect or engineer
- Consult your local and state building departments

FEMA Building Science Branch

- **Website:** https://www.fema.gov/building-science
- **Building Codes Webpage:** https://www.fema.gov/building-codes
- **Building Codes Toolkit:** https://www.fema.gov/building-codes-toolkit
- **Call Center:** (866) 927-2104
- **Email:** fema-buildingsciencehelp@fema.dhs.gov

The International Code Council (ICC)

- **Website:** www.iccsafe.org
- **Call Center:** (888) 422-7233 and press 0
- **Email:** carecenter@iccsafe.org

3 — ASSESSING RISKS IN YOUR FACILITY

After understanding the guidelines imposed on your buildings, it's important to take a look at the risk potential for each facility you manage. All facilities face potential risks which, left unchecked, can put workers, occupants and goals of a business in jeopardy. The entire facilities department and their teams are responsible for securing these risks and upholding safety in a facility.

Assessing risks within your facility starts with asking the following two critical questions:

What areas of my facility are most hazardous to occupants?

What situations could occur that would put occupants in danger?

If these questions aren't adequately answered, occupants are put at risk and accidents are more likely to occur. Accidents can happen for a variety of reasons. Below are just a few of the most common reasons:

1. Shortcuts

While taking shortcuts may get a job done faster, shortcuts also can put people and property in danger. Shortcuts that reduce safety also increase likelihood of injury.

2. Overconfidence

Confidence is great, but overconfidence can cause accidents. Having a "that can't happen to me" attitude can lead to reduced safety in your facility.

3. Distractions

Distractions pull focus away from safe work practices, increasing the likelihood of injury.

4. Lack of Proper Training

Employees need proper training to safely perform their jobs. Without proper instruction, workers may incorrectly guess on how to perform a task and risk their safety.

5. Poor Housekeeping

Poor housekeeping can create hazards of all types, including slips, trips, falls and similar injuries. Objects left in walking paths also can disrupt emergency exit routes.

6. Lack of Physical Security Measures

Facilities that lack physical security measures - such as security cameras, locked gates, badge access, security personnel and more - put occupant safety at risk.

When an accident occurs, it is important to take a step back and identify the root cause of the situation. Understanding potential vulnerabilities in your facility can help you make informed decisions regarding safety requirements, structural integrity and perimeter security.

Spotting dangerous situations sounds easy, but can be tricky. Hazards manifest in a variety of ways, so it's important to know how to properly identify a risk before an accident occurs. Vigilance can make the difference between safety and injury at work.

Common Risks and Hazards

Some risks in a facility are apparent, while others may be less obvious - particularly for teams that are stretched thin or are under tight deadlines. The nature and size of a facility also can make identifying hazards difficult. Mitigating risk starts with evaluating a building portfolio for weaknesses. Here is a list of some common risks and hazards to look out for in your facility.

Safety Hazards

- Tripping hazards in walkways
- Improper use of equipment
- Improperly secured tools
- Improperly stocked first aid kits
- Missing caps on emergency eyewash stations
- Damaged ladders
- Dysfunctional forklifts and machinery
- Mislabeled or unlabeled hazardous materials

Fire Hazards

- Obstructed walkways
- Blocked exits and stairways
- Dysfunctional fire alarms
- Obstructed access to fire extinguishers
- Damaged or leaking fire extinguishers
- Exit signs that have burned out
- Flammable materials stored next to fire hazards

Security Hazards

- Insufficient use of security cameras
- Unsecured access to a facility
- Security alarms that are turned off/not in use
- Dimly lit or unlit parking lots

Safety Hazards Continued

- Slippery or wet walking surfaces
- Lack of hand railings or guardrails
- Insufficient lighting in work areas
- Lack of ventilation
- Damaged storage racks
- Improper footwear, headwear, uniforms or gloves
- Flammable clothing

Electrical Hazards

- Damaged plugs
- Frayed cords
- Improper use of extension cords
- Defective wiring

Prioritizing Risks

After assessing a facility for risks, facility managers and directors often will end up with a long list of varying problems that need to be addressed. Some risks in your facility may be of higher priority and importance than others. This is where risk prioritization comes in.

When assessing a given risk, consider two factors: impact and probability.

Impact: How seriously does this risk affect my facility and its occupants?

Probability: How likely is it that this risk will turn into a hazardous situation (now or in the future)?

Next, use the following matrix to determine priority level of the risk. Plot a "point" on the matrix depending on the severity of each axis.

For example, a risk with low impact and low probability will have a plotted point in the "low risk" area of the matrix. This means that the risk will most likely be of lower priority to a facility manager.

A risk with high impact and high probability will have a plotted point in the "high risk" area of the matrix. This means that the risk should be a high priority to a facility manager and should be dealt with as soon as possible.

Facility Risk Matrix
Priority Level of a Risk

Impact ↑	LOW	MEDIUM	HIGH
	LOW	MEDIUM	MEDIUM
	LOW	LOW	LOW

Probability →

The risk matrix can be especially helpful when ranking and prioritizing risks. Action is taken in response to the gravity of each risk: the bigger the risk, the more immediate the response should be. Similarly, the more dangerous a risk, the more likely it should be addressed.

> **Tip: One of the biggest risks to your occupants? Unexpected breakdowns of facility assets.**
>
> Find out how AkitaBox Capital Management can help you track probability of failure on your strategic facility assets to deliver safer and healthier facilities.

Risk Assessments

Risk assessments survey situations that could present harm or loss. More importantly, these assessments mitigate or eliminate dangers that arise from risks.

Assessments are completed through observation, monitoring and testing of various areas in a facility. For example, a risk assessment may look at floor layouts, security of restricted areas, storage of sensitive information, emergency equipment or the effectiveness of current procedures. Risk assessments accomplish **two goals**: to identify workplace hazards and to lead the way for proper safety procedures. When risks are properly assessed, facility leaders gain a clearer perspective on workplace safety.

When conducting a risk assessment, facility teams should conduct an in-depth study of their entire facility. Areas of potential risks should be highlighted and incorporated into a safety program.

When conducting a risk assessment, start by looking at the following areas:

1. Workplace layout
2. Equipment and supplies
3. Egress plans
4. Assembly areas
5. Machinery

6. Furniture
7. Housekeeping procedures
8. Standards and practices
9. Storage areas
10. Security practices

> **Tip: In general, when conducting a risk assessment, ask yourself:**
>
> **1.** "What areas or items in my facility could put occupants in danger?"
> **2.** "What situations could present an emergency situation?"

Going Forward

In review, when identifying hazards for a risk assessment, facility teams should:

- Identify, report and control issues that arise
- Interview team members to discover potential hazards
- Rank risks according to importance
- Prioritize risks from low to high urgency
- Take proactive steps towards remedying the hazard
- Implement any necessary changes that will fix the issue
- Evaluate results and conduct a follow-up observation once solutions are put into place
- Implement any further changes or improvements needed

Staying in the loop is critical for facility leaders. There are a number of resources that building teams can use when assessing risks, including:

- AkitaBox Facility Inspection Preparation Checklist
- AkitaBox Facilities Hazard Identification Checklist
- Trade publications to stay up-to-date on the latest techniques in safety and security preparedness
- Emergency planning providers or an Occupational Health and Safety committee member who can give you advice on risk assessments
- The Federal Emergency Management Agency's (FEMA) vulnerability assessment checklist[11]

Conducting a risk assessment may seem like a long and tedious process. However, actively assessing risks guarantees a much safer environment for you, your team and occupants of a building. A risk-free workplace is a safer, more secure workplace!

For building teams, assessing risks is only half of the safety and security puzzle. Unfortunately, risks can lead to emergencies. Emergencies can happen anywhere and at any time. Severe weather, floods, power outages and active shootings are just a few emergencies a facility manager must plan for on a day-to-day basis. Facility leaders should be ready for any situation that may arise.

The Facility Teams's Role in Emergency Situations

Preparation is a facility leader's best friend. There are real benefits in being prepared for any situation that may occur: preparation reduces fear, anxiety and losses that accompany disaster. Facility leaders get involved with emergency planning in the following five ways:

1. Reduce Negative Impact on People and Assets

In preparation for an emergency, facility leaders have the power to inform and educate occupants and employees on how to react in dangerous situations. They also protect assets by planning for maintenance and emergency shutdown of operations. They ensure that assets are protected against damage or fixed before further damage occurs.

2. Institute Access Controls

Facility teams keep buildings secure by instituting access controls. Keys, passcodes, electronic badges, fences and security cameras are just a few ways to protect buildings against intruders. Security controls promote occupant safety and regulate who enters a facility.

3. Distribute Critical Items

Facility leader's distribute critical items and information like keys, floor plans, egress plans, facility personnel lists and telephone numbers to appropriate personnel. They also are in charge of servicing and distributing special devices, such as fire extinguishers and heart defibrillators. Sharing of these items facilitates safety and communication in emergencies.

4. Provide Electronic Floor Plans to Personnel

According to 2018 AkitaBox research, only 61% of facilities have accessible, digital, up-to-date floor plans. Electronic floor plans are important: they inform police, rescue officials and insurance providers of a building's layout before disasters occur. Compared to printed floor plans, electronic floor plans are more easily updated, accessible, shareable and resistant to physical damage. Electronic facility information should include building schematics, photos of assets and information on the facility's doors, windows, locks and access controls.

> **Tip: Need help getting your floor plans digital, accessible and up-to-date?**
> AkitaBox offers a centralized repository for building documentation and asset information in easily accessible facility management software. Learn more about AkitaBox or schedule a free software tour with an AkitaBox software expert.

5. Collaborate with other departments

Facility leaders collaborate with other departments in a facility to make sure that emergency plans are consistent throughout an organization.

Because emergency situations are often sudden and unexpected, preparation can seem difficult. Is it possible to create an emergency plan that accounts for all types of unique emergencies? The answer is yes! But first, it's important to understand different types of emergencies. Then, we can move on to create an emergency plan.

Let's take a look at possible threats your facility may face.

Types of Emergencies

An "emergency" is an unforeseen situation that threatens people in a facility. Emergencies also can cause damage to assets or threaten operations. Emergencies can include the following:

- Active shooters
- Arson and fires
- Bomb threats
- Burglars and break-ins
- Cyber terrorism
- Earthquakes
- Extreme heat
- Floods (internal and external)
- Gas leaks
- Hazardous material spills
- Hostage situations
- Hurricanes
- Power outages
- Snow storms
- Tornados
- Thunderstorms
- Lightning
- Wildfires
- Workplace violence

After brainstorming emergencies that may arise in your facility, you'll be ready to move on to the next step: creating an emergency plan.
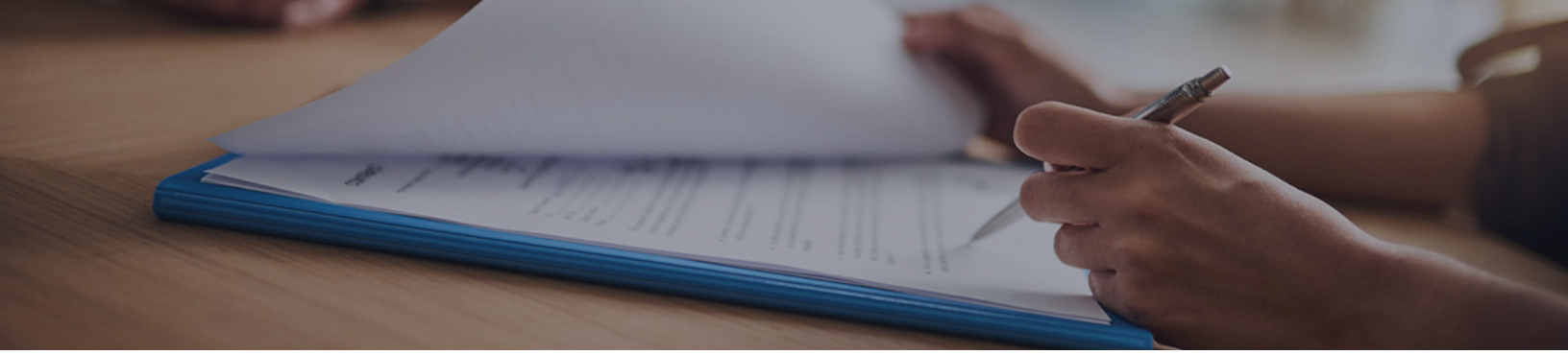
How to Develop an Emergency Plan (12 Steps)

Developing an emergency plan is a great way to protect yourself, your team and your business during an emergency. An effective emergency plan can help with preventing and recovering from disaster. Here are twelve easy steps to establishing a strong emergency action plan.[11]

1. **Organize** an Emergency Preparedness team. Your team should include representation from a wide variety of departments including Human Resources, Public Affairs, Financial Affairs, Legal Counsel, Information Technology, Purchasing, Engineering, Manufacturing, Production, Security, Risk Management, Environmental Health and Safety, etc.

2. **Appoint** a leader for your team.

3. **Develop** a mission statement and a desired outcome for the team.

4. **Outline** areas, functions and assets of the facility to be addressed.

5. **Conduct** a review of existing emergency protocols. Brainstorm ways current plans could be improved.

6. **Discuss** emergencies your facility has encountered in the past or may encounter in the future. Consider technological emergencies, equipment failures, active threats, severe weather and similar emergency situations. Analyze each type of emergency from a potential scenario or historical perspective.

7. **Conduct** a risk assessment.

8. **Create or update** egress plans.

9. **Identify** internal and external resources that could be useful.

10. **Establish** financial recommendations and a budget.

11. **Review** insurance requirements.

12. **Modify** your team's plan as needed.

Want to make emergency planning even easier?
Download AkitaBox's Emergency Plan Checklist, a printable version of the twelve-step guide to emergency planning.

How to Approach Active Threats

Emergency plans are useful in a variety of emergency situations, no matter how large or small. When you think of emergencies in your facility, what comes to mind?

Do active shooter situations make your list?

Active shooter situations can be uncomfortable to discuss. Many people assume that workplace shootings are rare and could never happen in their organization. But a report conducted by the Bureau of Labor Statistics revealed there were 439 workplace homicides in 2018.[12]

What if a shooting did occur in your facility? Would your organization have a response plan?

In the event of an active shooter situation, your facility team, occupants and organizational employees have to be ready. The "Run, Hide, Fight" method is a three-step procedure that is supported by the U.S. Department of Homeland Security.[13] The method describes ways to defend yourself when faced with an active shooter. The following graphic provides an at-a-glance view of the process.

Active Shooter Emergency Actions

The first and best way to protect yourself against an active shooter is to evacuate the facility. If you can get out, do so.

Run
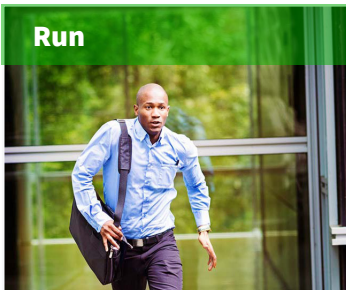
Remember to:
- Get yourself out of harm's way (your #1 priority)
- Have an escape route and plan in mind
- Leave your belongings behind
- Refrain from moving wounded people
- Prevent individuals from entering an area where the shooter may be
- Call 911 once you are in a safe location
- Stay in your safe location until police say it is okay to leave

If you cannot get out of the facility safely, find a place to hide.

Hide
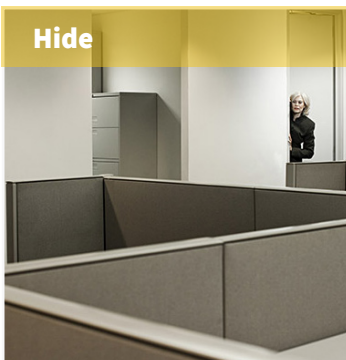
Remember to:
- Act quickly and quietly
- Secure your hiding place as best as you can
- Turn off the lights and lock the door
- Blockade doors with heavy furniture
- Conceal yourself behind a large object that can protect you
- Silence your cell phone
- Be out of the shooter's view
- Refrain from hiding yourself in a place that traps you or restricts movement
- Do your best to remain calm until police arrive

As a last resort - and only if your life is in imminent danger - fight the aggressor.

Fight

Remember to:
- Attempt to disrupt or incapacitate the shooter
- Act with aggression
- Use improvised weapons (i.e. chairs, tools or fire extinguishers)
- Try to disarm the shooter
- Commit to taking down the shooter, no matter what

You can survive an active shooter incident by remembering three important steps — run, hide, fight. While talking to your team about active shooters may be daunting and upsetting, employees should know how to save themselves and take action to save lives.

Looking for more information on active threat preparedness? AkitaBox offers a free, comprehensive report on active shooter and hostile events. Download the full report here.

Going Forward

As with any threat or hazard in a facility, the emergency planning team should establish goals, objectives and courses of action before disaster strikes. As courses of action are implemented, the emergency planning team should consider:

- How the facility will communicate to occupants and police that there is an active shooter on facility grounds

    ◦ Your plan of action should include how to communicate with those who have language barriers or disabilities. For example, your facility can implement accommodations such as visual signals, signs or flashing alarms to advise deaf individuals of emergency situations

- How to evacuate or lock down students, staff and visitors of a facility (including those who are in hallways, bathrooms or break rooms at the time of the attack)

- How to evacuate when the primary evacuation route is inaccessible

- How to select effective shelter-in-place locations

    ◦ Optimal locations have thick walls, solid doors with locks, minimal interior windows, first-aid emergency kits, communication devices and duress alarms

- How occupants will know when a building is declared safe

Together, you and your team can prepare for emergencies in your facility. Pre-planning for emergencies is the best way to avoid rapid decisions, shortage of time, lack of resources and overall chaos in a disaster situation. No matter what emergencies your facility may face, safety should always be a top priority.

Additional Resources

Learn more about staying safe during emergencies with the following resources:

- **Active Shooter Pocket Card Information by the U.S. Department of Homeland Security**
  https://www.dhs.gov/sites/default/files/publications/active_shooter_pocket_card_5

- **Guide for Developing High-Quality School Emergency Operations Plans by FEMA**
  https://rems.ed.gov/docs/REMS_K-12_Guide_508.pdf

- **How to Create an Egress Plan by AkitaBox**
  https://info.akitabox.com/how-to-create-an-egress-plan

NEW TECHNOLOGY SPOTLIGHT:
VR FOR FACILITY SAFETY

Technology in buildings is rapidly evolving. Virtual reality (or simply "VR") is just one example of cutting-edge safety technologies that facility leaders around the world have begun to embrace.

VR uses computer technology to create realistic, three-dimensional images and environments. Users can interact with these simulated environments as if they were real by using headsets, goggles, smartphones or desktop software. Unlike traditional user interfaces, VR fully immerses users in an interactive environment.

IrisVR, a New York-based software company, offers fully-immersive VR products that take facility management and design to the next level. According to IrisVR, virtual reality is an effective virtual design tool for construction teams, building designers, engineers, and virtual design and construction (VDC) teams.

> *"Virtual reality is an invaluable tool that instantly brings design concepts to life in a true-to-scale environment. With VR, individuals can view and explore a building exactly the way it is intended to be built. One benefit of VR is that it is more effective at communicating design intent than 2D or 3D models alone. The efficiency of VR can be especially useful to construction teams with varying skill sets."*
>
> **Shane Scranton**, CEO of IrisVR

Virtual reality tools have become more affordable, powerful and useful than ever before. VR can be used by construction crews, building owners and safety managers to mitigate facility risk:

- **Improve Quality Control and Quality Assurance:** VR technology allows for more frequent quality checks. As a result, construction teams are more likely to discover errors earlier in the construction process. Teams can address errors by developing strong solutions that minimize risk.

- **Link VR with Facility Management Software:** VR products, like Prospect and Scope by IrisVR, are able to integrate with 3D softwares that facilities may already use. Because of this, facility leaders may find VR helpful with internal design review.

- **Perform Virtual Facility Walkthroughs:** First, safety managers can use VR to perform virtual facility walkthroughs. Safety managers can use the time they save to focus on training, educating and increasing awareness of hazards on-site. Second, facility leaders can use VR to visualize building designs before construction begins. Virtual walkthroughs can give new facility team members the opportunity to learn a facility's layout and assess a building's assets prior to stepping foot inside a building.

As facilities and construction industries continue to move towards digital workflows, VR products are projected to make a significant impact on facility safety. Facility teams, alongside construction teams, can harness the power of VR to mitigate risk in facilities and keep occupants safe.

For more information on the capabilities of virtual reality in the buildings industry, visit IrisVR's website.

5 — IMPLEMENTING YOUR FACILITY'S SECURITY PLAN

Your facility needs two important plans: the first is an emergency preparedness plan (which we explored in chapter five of this guide) and the second is a **security plan**. Security plans control access to a facility, prevent interruptions and reduce likelihood of theft or other losses.

A 2018 survey conducted by AkitaBox revealed that 90% of facilities have some form of security plan in place. However, research also revealed that, despite having a security plan, 30% of facilities still experienced a violation of security (i.e. cyber hacking/threats, break-ins, terrorism and/or active shooters) in the last three years.

Why are security plans important? In short, security plans protect an organization's mission and people. Sabotage, vandalism, cyber hacking and burglaries are just a few security breaches an organization may face. Security threats like these can negatively impact employees, clients and occupants.

Don't put your facility's staff and assets at risk. Protect them by developing, implementing and strengthening your security plan.

Effective Security Plans: A Deeper Look

All facilities have security needs. Discovering these needs doesn't have to be difficult; a security plan is designed to show you the unique security needs your facility requires. Successful security plans assess the effectiveness of internal and external controls and how those controls pertain to deterrents, control points, authorization levels, hardware and security devices.[12]

Why do security plans matter?

First, security plans protect people and their safety. A great security plan requires screenings of individuals prior to employment and supports continued assessment of staff members. To promote continuous security, security plans should emphasize education and training programs for employees.

Second, security plans foster control in a facility. A strong security plan supports access restrictions, key usage, sign-in/sign-out procedures for guests, opening and closing procedures and surveillance system usage.

Third, security plans encourage open communication. A proper security plan allows for all security violations to be documented. Additionally, security plans develop and define written policies, like classifications and restrictions on handling sensitive information.

What benefits do security plans offer to a facility?

Security plans provide many benefits. They clarify security requirements and match them to the organization's mission. They also provide systematic, logical methods for implementing security requirements. Lastly, security plans offer points of reference for success, which help users establish goals and measure security plan effectiveness.

What components are involved in a security plan?

Comprehensive security plans consist of three components - physical security, operational security and technological security:[12]

- **Component #1: Physical Security**

  Focuses on physical obstacles and barriers (i.e. barricades, fencing, gates, walls, perimeter lighting, signage and locks)

- **Component #2: Operational Security**

  Focuses on people (i.e. staff involved in supporting security protocols, education and training of employees and procedures for managing contractors/vendors/visitors)

- **Component #3: Technological Security**

  Focuses on technical data and systems (i.e. integration of video surveillance and monitoring systems, alarm systems for intrusion detection, automation systems that control HVAC and lighting, fire alarm systems, communication systems like radios and emergency call boxes and access control)

A strong security plan values all three components of security. Failing to value one or more components can lead to decreased safety or loss of income. Work towards strengthening all three components of your security plan by conducting a risk assessment (see chapter three of this guide for help).

All of the above are important when it comes to security plans. But how does a facility team make it all happen?

Developing a Security Plan

All security plans start with planning and development. Facility leaders work with a variety of departments to develop blueprints for a great security plan.

Did you know?

According to a 2018 survey conducted by AkitaBox, facility leaders reported that administration (80% of respondents), building and grounds (75% of respondents), and operations (67% of respondents) are the top three departments most concerned with building safety and security.

In addition to the aforementioned departments, facility managers should work with their facility's safety manager, chief security officer, information technology manager and any other impacted stakeholders when developing a security plan.

Security plans have many components. When developing your security plan, ask yourself the following questions:

Does my security plan…

- ☐ Have clear egress plans for occupants in case of evacuation?
- ☐ Have well written, easy-to-understand policies and procedures?
- ☐ Require screening and background checks of new employees?
- ☐ Incorporate all inspections necessary for safety and security?
- ☐ Encourage security staff and employees to stay vigilant to security issues?
- ☐ Teach staff members how to properly operate security systems?
- ☐ Have a system in place to report security concerns or threats?
- ☐ Employ enough staff to perform security services required?
- ☐ Promote continuous education and training for employees?
- ☐ Value physical security measures (i.e. fencing, lighting, surveillance equipment?)
- ☐ Have a system in place to prevent unauthorized access to my facility?
- ☐ Require individuals to provide identification to enter my facility?
- ☐ Promote safeguarding of sensitive information?
- ☐ Control disposal efforts, including disposal of sensitive information?
- ☐ Implement software that protects against viruses, hackers and electronic security threats?
- ☐ Value best practices regarding internet usage and server security?

Because security programs cost money, it is important to be judicious when planning security protocols. Well-thought-out security plans lead to greater returns on investment.

After you've developed blueprints for a great security plan, you're ready to implement security protocols.

> **Need help?**
> AkitaBox offers a free guide on how to best manage your facility's egress plans. Learn how to verify floor plan accuracy, map out evacuation routes, format egress plans and more. Access the guide here or read AkitaBox's egress plan blog.

Implementing the Security Plan

Implementation of a security plan can be daunting. To reduce stress and frustration, your team may find it helpful to start small. Organize procedures into small, prioritized action plans. This way, implementation is more palatable and achievable.

Next, develop training for your team so they stay informed on policies and procedures. Implement technology (i.e. surveillance cameras, electronic badge access and cyber security programs) that combats security risks in your facility. Finally, initiate your facility plan's policies and procedures.

Depending on the intensity and cost of your security plan, the implementation process may need to be phased in over an extended period of time. Implementing too many new elements at once can be overwhelming, stressful and costly for an organization. Start by implementing simple and easy changes in the coming year. More complex and costly changes should be prioritized for implementation in the future.[12]

Steps to Take to Promote Security

Want to stay involved with your facility's security? Facility teams can take a variety of steps to support security in their facilities. Here are a few ways to get started:[12]

1. Brainstorm new, innovative ways to reduce risks in your facility.

2. Develop cost effective security solutions to meet upcoming facility requirements.

3. Ensure proper planning for and installation of your facility's physical security plans.

4. Identify problem areas that impact security design.

5. Develop an understanding of current physical security trends.

6. Coordinate physical security surveys with public safety offices.

7. Provide proper equipment and manpower to support security measures.

8. Ensure that backup power systems will function when needed.

9. Obtain computer training on integrated systems beyond basic skills needed.

Today, security is everyone's business. To meet the ever-changing security needs of a facility, facility teams must make security plans flexible and customizable. After all, facility teams know the day-to-day quirks and workings in a facility better than anyone else. They can provide insight and verification of what security measures should be taken in a facility.[12]

Great security plans offer a wide variety of benefits, including increased control and communication. However, the most important benefit of security plans is keeping people safe. Safety, when paired with high security, ultimately protects an entire organization.

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About AkitaBox

At AkitaBox, we are revolutionizing building operations and facility management by empowering our customers with fast, accurate, and actionable data. Our robust, visual platform helps drive performance across hundreds of organizations in the higher education, healthcare, commercial real estate, government, and manufacturing industries.

Our suite of cloud-based software solutions helps teams simplify their operations, reduce risk, and solve their complex facility challenges. With an easy implementation process, customers can get quickly get access to their entire data set and solution.

To learn more, visit AkitaBox.com.