

Körber Supply Chain

# 15 ways to transform warehouse safety

Improving the safety of your team with industry best practices



## Introduction

In increasingly challenging supply chain environments, it is all too easy to overlook warehouse health and safety in the pursuit of efficiency. Even though demands vary by industry sector, business type and company size, staff safety is always paramount. Not only do companies have a moral obligation, they are also under pressure from regulatory bodies, stakeholders, customers and consumer groups to protect their team members.

Thankfully, techniques and technologies are available to help you improve your warehouse safety, while operating efficiently.

**About 1.8 million workers report back injuries and other musculoskeletal disorders each year, with around 600,000 of them needing to take time off work because of those injuries.<sup>1</sup>**

Occupational Safety and Health  
Administration

# Warehouse safety techniques

## 1. Make safety your culture

One of the most important techniques, but often the toughest to get right, is instilling a safety-first culture. For this to take root, all staff need to understand that safety is their responsibility.

This approach requires commitment and continuous effort. Led by warehouse managers, team members need to constantly review the impact that safety has on the business.

The first step is to set up a health and safety committee, who go on to plan safeguarding measures before feeding back to the rest of their teams. The more meetings and measures introduced, the more entrenched this new culture will become.

## 2. Sufficient training

Warehouses typically have large employee numbers and a high turnover, particularly during seasonal periods, which means the competency levels between team members can vary considerably. Regular, rigorous training is crucial to support both new and existing staff.

Frequent refreshers can improve awareness around certain hazards, such as reminding staff not to ignore a basic process in an effort to complete a job quickly. At the very least, all workers should be aware of the company's warehouse protocols, emergency procedures and the right protective equipment required for their role.

The onus is on warehouse managers to keep their ear to the ground for new regulatory requirements and new safety protocols for different equipment. They can then identify educational gaps within their teams and instigate additional specific training as required. Most importantly, managers need to see training as a continuous process.



## 3. Enforce the rules

Training staff on new procedures is pointless if the rules aren't enforced. Managers must make sure all team members are aware of their responsibilities, and that only appropriately skilled staff are allowed to operate the equipment.

Wherever safety procedures are ignored, there should be repercussions; otherwise your safety procedures will be significantly devalued.

## 4. Provide PPE

Arguably, the most essential safeguard against workplace injury is personal protective equipment (PPE). Your team should be provided with, and then constantly reminded to wear, hard hats, goggles, vests, earplugs and any other items necessary to do their job safely.

They should also be using the right lifting equipment for the task, such as forklifts or hydraulic dollies to lift heavy items.





## 5. Keep routes clear

Separating staff and vehicles using designated traffic routes is an obvious way to improve staff safety. Not only does it prevent collisions, it can improve productivity by reducing bottlenecks.

Floor tape or paint is a simple and cost-effective way to establish lanes: pedestrians one side, vehicles the other. As routes and layouts change to enhance safety and efficiency, the lanes can quickly be changed to suit. Where there is particularly heavy traffic, or greater potential for pedestrians and vehicles to come into contact, crash barriers may be necessary.

Regular tidying schedules are also key to keeping routes clear and accident-free. Merchandise, tools and packaging can soon clog up aisles, so it is important to make sure everything is put in its place as often as possible, with emergency exits and roof sprinklers always kept clear.

To help, use signage to tell staff where items should be stored after use. This will help new employees too, since they won't need to interrupt others with questions.

## 6. Add visual reminders

As well as marking out routes, it is important to highlight potential safety issues so they are easily identifiable. Draw attention to hazards, such as “electrical shock” by labeling them as per industry standards. Any safety messages should be positioned as close to relevant equipment as possible, to help remind staff of the dangers.

You should also use signage for specific handling requirements for any hazardous stock you may hold, such as combustibles or chemicals.

## 7. Maximize security

Making sure only trained personnel are allowed into your warehouse protects both your staff and your stock. You can discourage unauthorized access by placing “forbidden area” messaging around the site. Security passes and uniforms can also be used to help you immediately tell employees and non-employees apart.

# Warehouse safety technology



## 10. Introduce real-time location tracking

A real-time location system (RTLS) allows you to pinpoint and geo-locate people and objects at any given moment, providing an accurate picture of exactly where everything is in the warehouse. For example, if an employee needs help they can press a call button on their tag, and responders will be able to find them, even if they change location.

RTLS can also be used to prevent issues in the future. Using the data collected through the system, you can review the flow of traffic through the warehouse, make assessments on any accidents that occur, and identify and evidence any reckless behavior.

## 8. Go hands-free

To do their job efficiently, your team need access to computers, scanners and printers. However, if these tools are awkward or difficult to use, they can present health and safety issues by distracting employees and restricting their ability to carry products.

Introducing wearable devices that are lightweight and comfortable improves both safety and productivity. It also means that workers are no longer staring down at a screen, helping them remain more aware of their surroundings. By removing the need for walking to and from printers, wearable printing devices can cut warehouse accidents too.

## 9. Add proximity sensors

A radio frequency identification (RFID) sensor attached to a vehicle can help stop employees from stepping into its path by generating a proximity warning whenever they're within range. An antenna on the sensor relays information to a discreet wearable tag on the employee, triggering a warning light, an alarm, or – if necessary – shutting down the vehicle or equipment.

It can't detect the precise location or direction of the worker and other vehicles, but it provides basic safety coverage in situations where a worker's line of sight is obscured, for example.

## 11. Stay focused with voice

Rather than using barcode scanners, RFID devices or paper to pick items for packing, voice technology helps team members to confirm a pick and remove the item from the inventory using a microphone on their headset. This completely frees their hands so they can follow appropriate safe lifting and handling techniques. And since there is no need to look at a screen, staff can keep their eyes up to avoid hazards like forklifts and other machinery.

**“After implementing voice last year, we had the best year we’ve ever had for lowest number of recordable accidents in our facility.”**

**Matthew Comley**  
Project Manager, Regis



## 12. Call on robotic support

By relieving people of some of the dirtier and more dangerous tasks, robots are key to increasing warehouse safety. For example, they can lift and move heavy items over long distances, leaving workers to pick smaller items from the shelves. By carrying out more monotonous tasks, they can also cut down on repetitive injuries, such as muscle strain, and accidents associated with worker fatigue.

When integrated into a warehouse management system, robots can be programmed to recognize and avoid humans and other obstacles, boosting productivity as well as safety.

## 13. Eyes on camera technology

With warehouse rack heights increasing to boost capacity, it is becoming more difficult for pickers to calculate the distance from truck to pallet. A forklift operator may lift the wrong load, or even incorrectly and dangerously connect with it, due to poor visibility, for example.

Fitted to shelving and machinery, camera systems put “eyes” on hidden areas, helping workers pick loads safely and accurately.

## 14. Augment staff training

Now common in many industries, augmented reality (AR) and virtual reality (VR) are only recently being introduced to warehouses. VR has the power to immerse workers in a virtual environment, while AR overlays virtual components on the real world.

Both technologies are ideal for educating staff, both new and existing, providing the means for them to take part in training “inside the warehouse,” without the risks of the real warehouse environment.

## 15. Deploy warehouse drones

Perfect for unmanned, 24-hour warehouses, drones can be deployed to capture pallet barcodes and locations without someone needing to walk to an aisle or scale a ladder.

Drones reduce the risk of falls, especially where barcodes are difficult to reach. Though drones are not yet sophisticated enough to work side-by-side with humans, they can complete a job more quickly and more safely, all day and every day.

## Conclusion

Whatever the financial constraints or regulatory obligations, introducing just a few of these techniques and technologies can transform your warehouse safety, and more. The same tried-and-tested safety strategies often have an equally positive impact on productivity, overheads, and employee satisfaction, making it a win-win situation for everyone.

### For more information

From robotics to voice, see how Körber can improve both efficiency and safety across your warehouse operations.

Discover more about Voice:

[koerber-supplychain.com/supply-chain-solutions/supply-chain-voice-solutions](https://koerber-supplychain.com/supply-chain-solutions/supply-chain-voice-solutions)

Discover more about AMR:

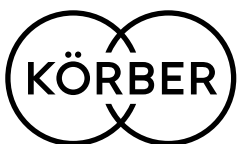
[koerber-supplychain.com/supply-chain-solutions/warehouse-robots/autonomous-mobile-robots](https://koerber-supplychain.com/supply-chain-solutions/warehouse-robots/autonomous-mobile-robots)

To find out more visit:

[koerber-supplychain.com](https://koerber-supplychain.com)

### Reference

1. Occupational Safety and Health Administration, U.S. Department of Labor – Ergonomics: An Overview.



Körper AG  
Anckelmannsplatz 1  
20537 Hamburg  
T +49 40 21107-01  
info@koerber.de  
**koerber-supplychain.com**