

A CISCO-EAGLE WHITE PAPER:

# JUSTIFYING AN AISLECOP® FORKLIFT SAFETY SYSTEM: HELP REDUCE THE CHANCE OF A FORKLIFT ACCIDENT



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# AISLECOP® FORKLIFT SAFETY GATE SYSTEMS: RETURN ON INVESTMENT CONSIDERATIONS



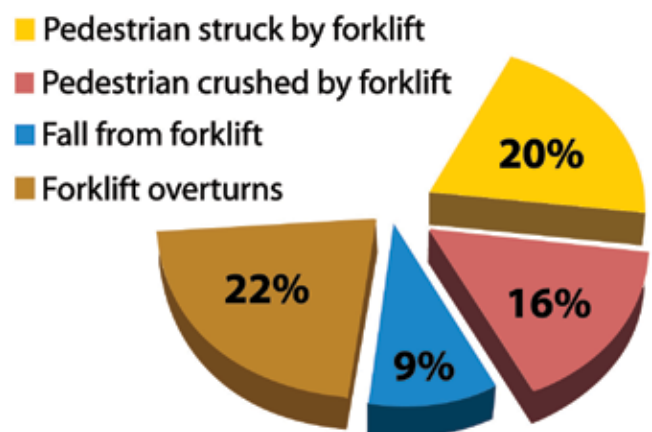
According to the U.S. Department of Labor, about 100 workers are killed and another 20,000 are injured by forklifts in the United States every year.

That's about one death every three days.

It's why any operation with that utilizes forklifts must consider alternative technologies to enhance safety—particularly in high-traffic, difficult, blind corners, or limited visibility areas.

But all decisions require a cost analysis. This paper was created to provide you with the various ROI factors for the AisleCop® system.

## Pedestrians in Peril





# WHY ARE FORKLIFTS SO DANGEROUS TO PEDESTRIANS?

In a word: mass



A 5,000-pound forklift moving through a warehouse at ten miles per hour with a 4,000-pound load has a potential destructive force of 135,000-foot pounds of energy. That's equivalent to a large car driving at 20 miles per hour. Even at very low speeds, forklift collisions are devastating—or fatal—to pedestrians. Forklifts are take an incredible toll on equipment and buildings when they collide with storage racks, building columns, machinery — or each other.

**Almost all forklift accidents that involve pedestrians are serious**

Forklifts, when they hit people, are frightfully damaging. With the high injury rates and fatalities they can cause, preventing just one accident can help mitigate human suffering and significant costs.

AisleCop® can help prevent pedestrian accidents when forklifts and other vehicles are present. Its ROI hinges primarily on preventing accidents and their associated costs.

**AisleCop® Return on Investment Factors:**

## REDUCTION OF WORKPLACE INJURIES AND RELATED COSTS

According to consultants, *The Safety Management Group*, the indirect costs of a serious injury are four times the direct costs. Forklift-pedestrian accidents are almost always significant, so these costs tend to be high.

- **Direct costs:** Emergency room costs, doctor visits, medical bills, rehabilitation costs.
- **Indirect costs:** administrative time dealing with the injury and medical care, insurance rate increases, lost hours, replacing employees, loss of reputation and employee confidence, potential lost clients, facility downtime, and negative media attention. *Does not include litigation or workers' compensation costs.*

## REDUCTION OF POTENTIAL WORKPLACE FATALITIES

Forklifts are usually the most dangerous equipment in any facility that utilizes them. Aside from the terrible human tragedy of a workplace fatality, these incidents also impose financial costs, which can include:

- Litigation. *(See below)*

- **Liability and Workers' Compensation.** These costs are tied directly to major accidents. *(See below.)*
- **Insurance and direct payments.** Life insurance payouts can increase group rates, and sustained compensation to family of a deceased employee can be significant.
- **Administrative and HR costs.** Replacing a deceased employee can be very expensive, as well as compliance with state and federal investigations. These issues can consume significant time and resources.
- **Operational downtime.** Typically there will be days (and perhaps longer) of downtime after a lethal accident due to investigations, cleanup, and other activities.
- **Worker morale.** In the aftermath of a death or serious accident, there can also be devastating morale and workplace efficiency issues. This can cascade into more missed days, poor performance, and resignations. It may become necessary to employ counselors and incur other related expenses.
- **Negative media attention.** These kinds of incidents are frequently covered in local, regional, or national news. This kind of coverage can significantly damage employers' reputation and potentially create boycotts, protests, or result in lost clients.
- **Regulatory Attention.** OSHA regulations require employers to report workplace deaths within eight hours. The agency investigates the circumstances, usually on-site, to determine the cause, and whether OSH Act violations are involved. This can result in extensive downtime and significant fines. This investigation can last six months, and can result in steep civil fines, and in some cases, criminal prosecution.



- If this happens, count on invasive investigations into other parts of your operations – regulators will search for a pattern of unsafe operations.
- Aside from fines, the potential for extensive work stoppage and administrative issues is significant during long-term investigations.
- **Funeral costs.** In many cases, the employer will cover funeral costs for the deceased employee, from \$5,000 up to \$15,000 for modest arrangements.

## REDUCTION OF POTENTIAL LITIGATION AND LEGAL COSTS

When a worker is seriously injured or killed, litigation is likely. AisleCop® systems can help reduce forklift-pedestrian accidents, and potentially mitigate costs if an incident does occur by demonstrating an investment in safety, and a culture of safer operations.

- **Settlements & Judgments:** Direct monetary payment to injured parties. Because forklifts tend to cause severe injury and death when they hit pedestrians, settlements and judgments are steep. Some examples:



- A 66-year old truck driver's foot was crushed in a 2010 accident. The settlement was over \$1 million. <http://www.lubinandmeyer.com/cases/fork-lift-injury.html>
- A man struck by a forklift suffered a spleen accident, resulting in a \$150,000 settlement along with full workers' compensation. <http://www.whitmanlaw.com/verdicts/#forklift>
- A Pennsylvania woman was awarded \$1.8 million after losing her leg in a forklift collision. [http://www.munley.com/newsreleases/woman\\_awarded\\_1.htm](http://www.munley.com/newsreleases/woman_awarded_1.htm)
- Thousands of instances of forklift/pedestrian accidents exist to demonstrate the sheer cost of even one accident.
- Court costs and legal fees: Due to the history of high-dollar settlements and judgments, plaintiffs' attorneys aggressively pursue forklift accident actions. Since defending these actions is very expensive, systems that reduce the chances of such accidents are worthwhile.
- Punitive damages: Aside from replacing lost wages and staggering medical bills, a serious forklift accident can result in punitive damages for the victim and his or her family.

### AisleCop® systems help demonstrate a culture of safety

In the event of an incident, AisleCop® systems may help reduce damages, in particular if the plaintiff bypassed the system and your traffic rules. Especially when the system is partnered with OSHA-mandated training, frequent refresher courses, and a defined traffic management plan.



## Reduction of Potential OSHA or state/local penalties, fines or other sanctions

OSHA fines can be as high as \$70,000 *per violation* for willful violations pertaining to mechanical lift trucks.

- OSHA 1910.178(l)(3)(ii) states “*Pedestrian traffic in areas where the vehicle will be operated*”. AisleCop® systems cannot prevent fines – nor can they absolve an operation of failed training or other requirements, but the system and its inherent traffic management rules may help you demonstrate a culture of compliance and steps taken to encourage safer operations in the event of a safety inspection, on-site audit, or accident.
- OSHA also states that “Forklift traffic should be separated from other workers and pedestrians where possible.” AisleCop® may help directly address that issue, in particular for blind or limited vision crossings, high traffic areas, warehouse entry doors, and other dangerous situations. This is what the system is designed to do, and is doing for a number of safety-conscious operations.
- State or local regulations may be more extensive, and can carry their own fines, penalties, or more invasive inspections.
- Note that regulations outside the United States may differ, and fines may be greater or lesser, but all countries tend to have forklift safety regulations and systems of penalty, due to the dangerous nature of the equipment.
- In extreme instances, company executives may be subject to criminal prosecution.

## Potential reduction of worker compensation and liability premiums

Because accidents directly and dramatically modify worker compensation rates, and because serious accidents modify them more, it's

paramount to take every necessary step to reduce the chances for a forklift accident. AisleCop® can help you do that by providing pedestrian/forklift traffic regulation tools at the most critical, limited-visibility and high-traffic areas.

- *Your Experience Modification Rate significantly depends on incidents.* An EMR of 1.0 will be neutral; a rate less than 1.0 will reduce your costs, and a rate above 1.0 will increase them. It is a multiple, so if your payment were \$100, an EMR of 1.25 would modify it to \$125.

## AisleCop® may help reduce rates two ways



First, by helping to prevent accidents, it impacts the most critical aspect of the EMR. Secondly, insurance companies may offer discounts to companies with who take defined steps to operate with greater safety.



## POTENTIAL REDUCTION OF OPERATIONAL DOWNTIME

Accidents, in particular accidents that involve serious injuries or fatalities, can shut down an operation completely or in part for days or weeks while equipment is repaired, inspections are completed, and investigations are conducted. AisleCop® may help you avoid this type of reduced productivity, lost orders, and operational disruption.

## POTENTIAL TRAFFIC MANAGEMENT

## IMPROVEMENTS

Traffic management is often overlooked, but is an important part of any forklift safety program

Have you established right-of-way rules? Are those rules honored on the floor? If you don't know, the answer is no. An effective traffic management plan would include defined pathways, steel barriers, pedestrian/forklift exclusion zones, containment fences, guard rails, speed limits, visibility mirrors, and more.

AisleCop® can help enforce the traffic rules you specify. Because the system can be configured to meet your specific rules and situation, it can be a good traffic management tool. Everyone should know what is expected of them at a crossing that is equipped with AisleCop® technology.

# POTENTIAL REDUCTION IN EQUIPMENT AND INVENTORY DAMAGE

During forklift accidents, it's possible that storage racking, machinery, or a forklift load may be damaged. These costs can spiral into tens of thousands of dollars in equipment damage alone for a single collision.

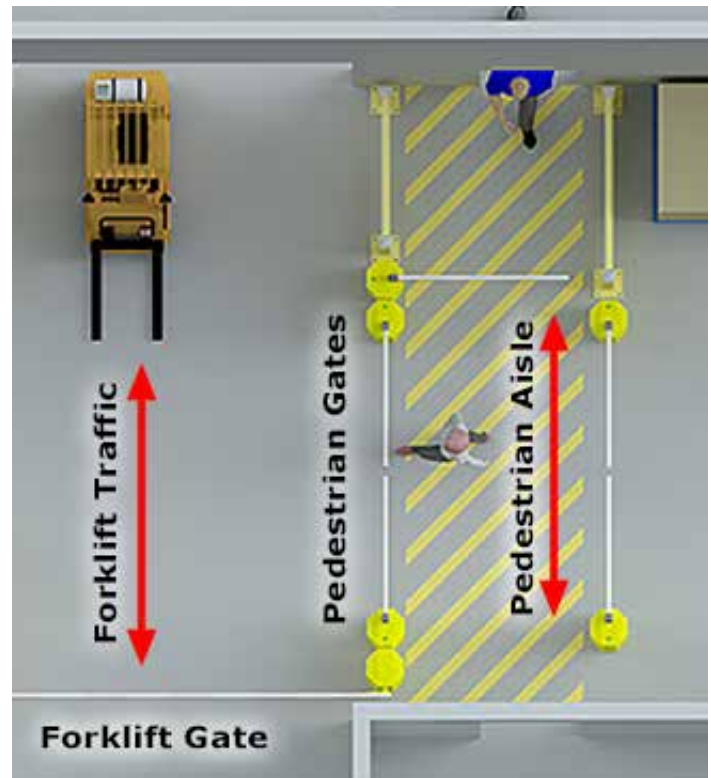
By potentially reducing the chances for a collision, AisleCop® can help avoid these costs. In a clearly defined system where traffic is controlled, where exclusion zones are defined, and where safety is enhanced, drivers are less likely to make critical errors that result in load dumping, colliding with racks or nearby machinery.

## SUMMARY

AisleCop® can potentially help save you money, but **its true goal is to help save lives and to help prevent the misery of forklift/pedestrian accidents.** It is only a tool, and must be correctly implemented, maintained, and adhered to by plant personnel. Safety challenges exist with or without any safety system. Safer operations are worth pursuing in every operation where forklifts are utilized, whether or not you choose to implement an AisleCop® system.

Let AisleCop® monitor your aisles and help you create a safer work place, where the risks of these tragedies can be reduced.

For more information, please contact Cisco-Eagle today, at 888-877-3861 toll-free.



## USEFUL WEB LINKS: FORKLIFT SAFETY

- Understanding the Workplace: Forklifts & Pedestrians (OSHA): <http://www.osha.gov/dcsp/products/etools/pit/workplacehazards/pedestriantraffic.html>
- Forklift & Pedestrian Safety (AisleCop.com): [http://www.aislecop.com/forklift\\_safety.aspx](http://www.aislecop.com/forklift_safety.aspx)
- Forklift Safety By Design: <http://www.safety-engineer.com/forklift.shtml>
- Safety Management Group: <http://www.safetymanagementgroup.com/injury-cost-calculator.aspx>





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for expert assistance