“People and forklifts don’t mix, but we have to make it work. Forklifts’ braking ability and limited maneuverability combine with poor visibility to pose frequent dangers to people who work around them. If a “slow” forklift hits a pedestrian, the impact can be worse than being struck by a car at 20 miles an hour. The accidents are sometimes fatal, and frequently cause serious injuries. Stopping these tragedies is the heart of what I do every day.”

— Susan, Employee-Owner Since 2010

**PRINCIPLES**

**Eliminate mixed zones**
Create areas that are “pedestrian-free” or “forklift-free” and strictly enforce those distinctions.

**Minimize, shorten, re-route**
Route pedestrian aisles in more protected areas. Shorten exposed areas; minimize number of crossings.

**Erect physical barriers**
Install guard rails, bollards, and other protective equipment to separate all traffic & pedestrian areas.

**Enhance with Automated/Manual Safety Systems**
Always guard danger & high-traffic zones with intelligent technologies.

**KNOWLEDGE**

**Read white papers, articles and safety reports**
Check our website for exclusive white papers, reports, articles, videos, and detailed information on forklift safety.

[www.cisco-eagle.com/whitepapers](http://www.cisco-eagle.com/whitepapers)

Topics from forklift/pedestrian traffic management to return on investment.

[www.cisco-eagle.com/blog/aislecop](http://www.cisco-eagle.com/blog/aislecop)

Unique articles and links to industrial safety thought leaders. It’s frequently updated.

**Exceptional service by employee-owners**
Studies show that employee-owned companies are more productive, stable, and service-oriented. Our empowered employee-owners make all the difference—let us show you how.
BUT WE CAN MAKE IT WORK

TRAINING IS MANDATORY, BUT NOT ENOUGH

Hits or near-misses are red flags
If workers complain—even in jest—about dodging forklifts, address that area with training, warnings and guarding systems.

Regulators focus on driver training
In fact, warning systems are rarely discussed, but they are critical. In Preventing Injuries and Deaths of Workers Who Operate or Work Near Forklifts, NIOSH recommends you “make every effort to alert workers when a forklift is nearby.”

The danger zones for pedestrians
Training alone doesn’t sufficiently protect people at blind corners, high-traffic aisles, work cells, staging areas or intersections where forklifts and pedestrians mingle. These areas are the places most injuries occur, and must be addressed more comprehensively.

WHAT TO GUARD—AND WHERE

• Pedestrian/lift crossings and intersections: Define crossing points, funnel foot traffic to them and then focus on safety at those spots. Analyze and guard all areas where pedestrians and forklifts coexist.

• Blind or low-visibility corners or doors: These exist in most every facility and are the source of many accidents. Identify them and work to reduce risks with alarms, gates and visibility systems that enhance training.

• High-Traffic Areas: Identify warehouse entry points, docks (particularly when trucks are loading/unloading), work cells, and rack aisles. Find ways to make them safer.

Scenarios of concern
1. Unguarded walkways: how can you manage forklifts and pedestrians in zones where they mingle?

2. Guarded walkways: if you have installed guarding around a walkway, how can you enhance safety?

3. End of aisles: How can you increase visibility?

4. Warehouse egress points: How can you increase visibility at these natural blind spots?

5. Open area walkways. What are the pitfalls?

6. Special areas/applications: How can you guard areas of operation where people and forklifts must coexist?
AISLECOP® FORKLIFT SAFETY

GUARDS AGAINST COLLISIONS IN DANGEROUS AREAS

www.cisco-eagle.com/aislecop

Forklifts are dangerous—especially to pedestrians

According to the Department of Labor, forklifts kill someone every three days and seriously injure many more every year. The AisleCop® system helps manage traffic to separate forklifts and pedestrians at critical points like high-traffic, low-visibility crossings.

Don’t wait for tragedy

AisleCop® systems help make intersections, blind or limited-visibility corners, entry doors, and busy forklift aisles safer for workers on foot. Work cells and docks are ideal for AisleCop® but any crossing or entry point can benefit.

How it works

The highly-configurable system manages traffic in conjunction with your traffic management and safety plans. You decide default gate positions, timing and traffic rules.

AisleCop® uses precision motion detection and intelligent controls to manage crossings. If forklifts are present when a pedestrian wants to cross, the gates won’t open; if the aisle is clear, the system deploys warning lights and audible alarms before opening. Once pedestrians are clear, the gates close behind.

You can also reverse this, and restrict forklifts by default, depending on your traffic patterns and needs.

Pedestrians in Peril

- Pedestrians struck by forklift: 20%
- Pedestrians crushed by forklift: 22%
- Fall from forklift: 9%
- Forklift overturns: 16%

Activation systems

AisleCop® systems operate based on motion detection, but can utilize alternative methods. Specify activation systems and configurations to suit your facility layout, traffic flow, and application.
DETECTS TRAFFIC AND MANAGES THE INTERSECTION

Limitless configurations for virtually any application

www.cisco-eagle.com/copconfigure

AisleCop® is configurable from standard components. Multiple gates can be synchronized in a wide array of applications, including:

- High-traffic crossing points
- Blind corners or low-visibility intersections
- Work cells and production machinery
- Loading docks and staging areas
- Facility entry/exit points
- Synchronized multiple gate applications tied to production machinery, high-speed doors and other equipment

Options & additions

These systems are highly-configurable and feature intelligent controls that can work with multiple devices and interfaces.

- **Wireless operation:** multiple-gate synchronization
- **Alternate interface:** pressure mats, buttons, pull cords, in-ground loops and more
- **Link to high-speed overhead doors:** synchronizes the system with high-speed overhead doors
- **Link to alarm systems:** when a fire or other emergency alarm is activated, AisleCop® gates open to allow free movement during emergencies
- **Card reader integration:** the gate reads magnetic strip identification cards to control access to specific work areas

“"It’s tricky to balance production and safety, but we can help you do it. Finding solutions that work within your processes, but guard people from hazards like forklift collisions is critical. We can help you automate forklift-pedestrian safety in ways that don’t significantly impact productivity and plant operations.”

—Alex, Employee-Owner
Since 1995

AisleCop® pedestrian gates feature bright, flashing LED lights to help alert drivers and foot traffic. Aisle gates can optionally add these lights.
FLOOR PROJECTION WARNING SYSTEMS

www.cisco-eagle.com/flooralert

System details

- Hanging sensor module covers an intersection or crossing point
- Includes adjustable motion sensors—2, 3 or 4 directions. 26’ range. Can be mounted separately
- Light strips mounted on the module for enhanced visibility
- Tested prior to shipment
- Can be integrated with other safety automation systems

Automated detection with astonishingly visible flashing floor light

Ceiling-mounted motion detection systems flash a warning light on the floor when traffic approaches from at least two directions. When the light is active, all traffic should proceed with caution.

The system engages only for converging traffic to reduce false positives and increase worker confidence. Once traffic has cleared the intersection, the warning light automatically deactivates.
DETECTION AND WARNING REDUCES ACCIDENTS

Manage intersections with motion detection & stoplights

www.cisco-eagle.com/trafficlight

Help make 4-way intersections safer with intelligent traffic light systems that detect motion and change lights from red to green based on your traffic management priorities.

Ceiling-hung sensor module detects motion and triggers a predetermined light sequence. Lights are mounted on pedestals at an easily seen height by forklift drivers and pedestrians.

Make your forklifts visible

www.cisco-eagle.com/bluelights

Warning lights precede a forklift up to 15’ to help warn pedestrians around corners, emerging from aisles, leaving truck trailers and other areas where visibility is needed. High-performance LEDs won’t fade over time. Industry-best LUX rating for brightness.

Side zone lights help reduce issues with rear swing or pedestrians standing too close to vehicles. Select red or green lights.

“People use floor-projected LED safety lights rather than flashing lights mounted on the forklift because the human eye naturally looks for movement on the ground. Flashing lights help people see the forklift is there; floor-level lights are true warning systems for moving vehicles. We use that concept with AisleAlert, which automates collision warnings at corners and intersections much better than lights at eye level.”

—Gary, Employee-Owner
Since 2013
Warning sensors help increase situational awareness

Blind spots, corners and intersections can lead to serious accidents between forklifts and pedestrians. Intelligent warning sensors help increase pedestrian and driver awareness of oncoming traffic at dangerous intersections. By setting off bright, flashing lights, safety sensors help warn people before an accident can happen.

Warehouse sensors see where forklift drivers and pedestrians can’t—around corners & down aisles

www.cisco-eagle.com/sensors

- Create awareness of oncoming traffic in hazardous areas; they scan 2, 3 or 4 directions
- Trigger bright, flashing lights to alert drivers and pedestrians
- Can be ordered with power cords or wired to facility power
- Mount on rack uprights, ceilings, walls, or corners

Anywhere collisions are possible

Prime areas include rack aisles, dock areas, pass-throughs, blind corners, traffic aisles and more. Sensors are great anywhere people and forklifts interact in a facility.

“The best forklift-pedestrian safety programs combine training with warning systems. You have to train people on the dangers of forklift traffic and the processes to avoid an accident. A sensor system, warning light or automated gate enhances and helps enforce that training.”

—Missy, Employee-Owner Since 2013
**Alert People and Drivers**

**360° Pedestrian Detection & Warning Zone**

www.cisco-eagle.com/zonesafe

**Applications**

- **Pedestrian protection:** pedestrians wear tags that activate the system, which warns forklift drivers with audiovisual alarms
- **Walkway alert systems:** warn at intersections and around blind corners to help prevent collisions
- **Asset protection:** transponders on safety cones alert drivers that valuable equipment and machinery is in the zone
- **Vehicle access control:** gates restrict all vehicles except those with authorized transponder tags

**ZoneSafe® detects pedestrians and warns drivers of their presence**

ZoneSafe® uses identification and detection technologies, audible alarms and flashing lights to help protect pedestrians from forklift accidents. This RFID-based system creates a 360° detection zone around equipped vehicles and alerts drivers when a pedestrian is detected. ZoneSafe® can also activate warning lights on walls, bollards, or other fixed locations.

**Automated sensor mirrors and signs increase visibility and awareness**

www.cisco-eagle.com/alertsafety

**Intelligent warning mirrors:** These mirrors have internal microwave sensors and LED warning messages that flash to help alert workers of traffic. Choose dome and convex styles with a variety of messages and arrow indicators. **Signs:** When sensors detect an object, special caution signs with directional arrows or strobe lights are triggered to warn workers and pedestrians.
Steel King guard rail for solid steel protection

Protects any area where forklifts operate near people. 
**Posts:** 4” x 4” x 1/4” structural steel tube posts with 10” x 10” x 5/8” base plates pre-punched for anchoring. **Rails:** corrugated (3-rib) 11-gauge high strength steel rails, 14” high x 2-1/2” deep with a 3-bolt connection on each rail end. **Finish:** High visibility powder coat safety yellow. **Lift out rails** let you access guarded areas without disassembling rails. Posts stay anchored in place, but rails can be removed for maintenance, etc.

“We offer steel and flexible poly systems, both of which have their applications. Rigid guardrails are less expensive, but may have higher maintenance and replacement costs. Flexible guardrails absorb more impact, protect the floor better, don’t need painting and reduce replacement costs, but are more expensive. What works for you is a matter of your facility, equipment, traffic and needs.”

—Brad, Employee-Owner
Since 2013

Flexible guard rails absorb and dissipate impacts

cisco-eagle.com/flexguard

Flexible guardrails are ideal for high-impact, critical zones or equipment. They absorb impacts and flex back to top shape while helping to protect the area, the forklift and the facility floor. They don’t require repainting when struck. From the ductile iron core with impact dampers to the flexible HDPE Barriers, the system helps protect your people and facility. Available in dual-rail, floor level and handrail configurations.
FALL PREVENTION & GATES

MEZZANINE & PICK MODULE FALL PROTECTION
www.cisco-eagle.com/mezzgate

RACK & CONVEYOR SAFETY NETS

Rack safety nets
www.cisco-eagle.com/racknet

Rack safety straps
www.cisco-eagle.com/rackstrap

Conveyor safety nets
www.cisco-eagle.com/conveynet

Help keep large, palletized, or shrink-wrapped items from pushing into flue space or falling into work areas.

DOCK AREA AND FALL PROTECTION SYSTEMS

Dock fall protection gates
www.cisco-eagle.com/dockgates
“We focus on interactions between forklifts and pedestrians because powered industrial trucks may be the most dangerous equipment in your facility, but we don’t stop there. Cisco-Eagle’s mission is to make your operation safer. We help with conveyor safety, machine guarding, storage areas, fall protection and other applications where people are at risk. I would love to share what we’ve learned—and how we can help you operate safer.”

—Donald, Employee-Owner Since 2000

MOBILE SAFETY INCIDENT REPORTING SOFTWARE

cisco-eagle.com/sospes

Fast. Easy. Paperless

Sospes software lets you report workplace incidents, close calls, or make suggestions from any mobile device or computer. Simplifies OSHA safety reports to help you document close calls, injuries and other issues.

Applications

- Safety management: mobile incident reporting
- EHS Analytics: Drill down into your safety and operations like never before
- Inspections and audits: create specific checklists and inspection forms for any purpose
- Certifications management: Helps ensure certifications & credentials

Automatic supervisor portal integration

Complete reports, open investigations and generate regulatory reporting to cut data entry time and slash paperwork. You get a complete incident report, and can instantly assign tasks. Because it automatically generates required OSHA reports, the Sospes supervisor portal reduces work and increases productivity.