Weekly Safety Briefings

Week 35 – Monday, August 24 – Friday, August 28

Fatal Four Part Three: Caught-In or Between

Introduction – Fatal Four Part Three: Caught-In or Between

Introduction for Leaders:

We have covered struck-by hazards and falls. This week we move to the third of OSHA's Fatal Four: caught-in or between. In a manufacturing environment, this category is everywhere. It lives in the machines your team runs every day, in the equipment they maintain, in the pinch points they walk past on every shift. It is one of the most severe hazard categories in any production setting because contact does not produce a warning. It produces an outcome.

The caught-in or between category includes any incident where a person's body or a part of it is caught, compressed, or crushed by equipment, machinery, or objects. The injuries are almost always catastrophic: amputations, crush injuries, degloving, and fatalities. And they happen consistently to experienced team members who know their equipment well, which is the part we are going to spend real time on this week.

How to Frame This Week:

- Connect every day to the specific equipment in your facility. Name the machines, name the pinch points, name the procedures. Generic caught-in conversations do not land the same way as ones tied to the press your team runs every morning.
- Monday carries the weekly challenge. Revisit it mid-week and bring it back on Friday.
- Be direct about severity. There is no minor caught-in incident. If contact happens with most of the equipment we will discuss this week, the injury is serious. The team deserves to hear that plainly.

Workplace Learning System

Weekly Safety Briefings

Week 35 – Monday, August 24 – Friday, August 28

Fatal Four Part Three: Caught-In or Between

Monday – What Caught-In or Between Actually Means on a Production Floor

Discussion:

Caught-in or between hazards exist wherever machinery moves, wherever two surfaces come together, and wherever equipment is large enough and powerful enough that a person caught in its path cannot resist the force involved. On the manufacturing floor, that description applies to a significant portion of the equipment your team interacts with every day.

The main caught-in or between scenarios on a manufacturing floor:

Point of operation contact. The point where a machine performs its work, a press die, a cutting blade, a forming tool, a welding fixture, is the most dangerous location on any machine. It is where the most force is concentrated, where the movement is most rapid, and where the consequences of contact are most severe. Guarding at the point of operation is not optional. It is the primary barrier between the team member and a catastrophic outcome.

In-running nip points. Wherever two surfaces move toward each other, rollers, gears, conveyor belts meeting a pulley, a chain meeting a sprocket, a nip point is created. These points grab and pull with enormous force and almost no warning. Loose clothing, a glove, a rag, or a hand gets drawn in faster than any reflex can respond.

Caught between moving and fixed parts. A team member positioned between a moving machine component and a fixed structure, wall, frame, or piece of equipment can be pinned or crushed when the component travels in an unexpected direction or travels farther than anticipated. This happens during maintenance, during jam clearing, and during equipment adjustments.

Collapse and shifting loads. Material stacks, dies, fixtures, and tooling that shift or collapse can pin or crush a team member who is in the wrong position when the movement happens. This is especially common during die changes and equipment setups on heavy machinery.

Weekly Challenge:

This week, each person identifies one machine or piece of equipment in their area and walks through it mentally: where is the point of operation, where are the nip points, where could a person be caught between a moving and fixed part. You do not need to document it. Just think through it. On Friday we will hear what people noticed when they looked at familiar equipment through that lens.

Weekly Safety Briefings

Week 35 – Monday, August 24 – Friday, August 28

Fatal Four Part Three: Caught-In or Between

Tuesday – Machine Guarding: The First Line That Cannot Be Removed

Discussion:

The most common reasons guards are removed in manufacturing, and why none of them justify it:

Jam clearing. Reaching into a machine to clear a jam with the machine energized and the guard removed is one of the leading causes of amputation in manufacturing. The correct procedure is lockout/tagout before any part of a person enters the machine. Every time. Without exception.

Setup and adjustment. Many operators adjust machines with guards removed because it is faster and easier to see what is happening. The correct approach is to de-energize, adjust, re-guard, then run. The few minutes saved by adjusting on the fly is not a trade worth making.

Visibility and monitoring. Team members sometimes remove guards to watch a process more closely. Transparent guarding, cameras, and inspection windows exist to solve this problem without removing the barrier. If none of those options are available, that is a conversation to have with maintenance or engineering, not a reason to pull the guard off.

Production pressure. When a machine is down and the schedule is tight, the instinct is to get it running as quickly as possible. A missing guard feels like a minor issue compared to a production stoppage. It is not. The production loss from a guard being replaced is measured in minutes. The production loss from a serious caught-in injury is measured in months.

A real world example:

A press operator at a stamping facility had been running the same part for three weeks. The guard on the point of operation had been removed during a die change two weeks earlier and not replaced because the replacement took longer than expected and the line needed to run. The operator had been trained to keep her hands clear of the die area during the stroke. On a Friday afternoon near the end of a long week, she reached in to reposition a part that had not seated correctly. The press cycled on a double stroke. She lost three fingers. The guard had been missing for fourteen days. Four supervisors and at least six other operators had worked around that machine during those fourteen days. Nobody had formally flagged it for repair. The press ran 400 cycles a day. The guard was missing for 5,600 of them before the incident happened.

Team member engagement:

"Are there any machines in our area right now that are missing a guard, have a guard that has been modified, or have a guard that gets routinely removed as part of how we run the job?"

"Has anyone ever felt pressure to keep a machine running with a guard off because stopping to fix it felt like too big a delay? What was that situation?"

"If you saw a guard missing on a machine tomorrow morning, what would you do? What would actually happen?"

Weekly Safety Briefings

Week 35 – Monday, August 24 – Friday, August 28

Fatal Four Part Three: Caught-In or Between

Wednesday – Situational Awareness: The Warning Signs Before Contact

Discussion:

Most caught-in incidents are not sudden surprises. They are preceded by small signals that get noticed and dismissed in the same instant: a sound that is slightly off, a body that has drifted closer to a moving part than it needs to be, a decision to keep going because stopping feels like more trouble than it is worth. Awareness is the skill of catching that signal before contact instead of explaining it after.

Six warning signs that show up before most caught-in incidents:

- Rushing to finish a task before a break, a shift change, or a deadline.
- Reaching or standing inside the path of a moving part, even briefly, because it is faster than going around.
- Noticing something is not quite right, an odd sound, a vibration, a hesitation, and deciding to keep going anyway.
- Doing a task differently than trained because that is simply how it has always been done here.
- Skipping the mental check before working near a machine because the task feels too familiar to be risky.
- Brushing off a near miss because nothing happened, instead of asking why it almost did.

What loss of awareness looks like on a production floor:

A team member who has run the same line for years stops consciously checking where their hands, sleeves, and body are relative to moving parts. They still know the hazards exist in theory, but the moment-to-moment scanning that used to happen automatically has worn away. Awareness has to be rebuilt on purpose, because it does not maintain itself.

A real world example:

A material handler at a distribution center had walked past the same palletizer wrap arm hundreds of times a shift for two years. One afternoon the arm began cycling slightly out of sequence, a change he noticed and mentioned to no one because the line was behind schedule and nothing had actually gone wrong yet. Twenty minutes later, reaching past the arm to clear a fallen box, he misjudged its swing by inches. He was not injured, but the near miss shook him enough to report it. When maintenance investigated, they found a failing sensor that would have caused a full stop within the hour, in a much less forgiving position. The warning had been there the entire time. He just was not in the habit of listening for it.

Team member engagement:

"Has a machine ever felt so familiar that you stopped consciously watching where your hands and body were around it? What brought your attention back?"

"Can you think of a small warning sign, a sound, a vibration, a near miss, that got noticed but not acted on around here? What happened to it?"

"What is one habit that would help you stay aware around equipment you know extremely well?"

Weekly Safety Briefings

Week 35 – Monday, August 24 – Friday, August 28

Fatal Four Part Three: Caught-In or Between

Thursday – The Tasks Where It Happens Most

Discussion:

Most caught-in incidents in manufacturing do not happen during normal production runs with all controls in place. They happen during the tasks that sit at the edges of normal operations: the quick fix, the end-of-shift cleanup, the workaround that has become routine, the maintenance task done under time pressure. These are the moments when attention is divided, procedure feels like overhead, and the instinct to just get it done is at its strongest.

The highest-risk task categories in manufacturing caught-in incidents:

Jam clearing. The single most common context for caught-in injuries on production equipment. A part mis-feeds, a product jams, a sensor trips, and the instinct is to reach in and fix it quickly, often without stopping the machine and almost always without full LOTO. The machine clears the jam at the same time the hand does.

Cleaning and housekeeping around running equipment. Wiping down a machine, clearing scrap, or cleaning the area around a conveyor or press while it is running puts hands and clothing close to nip points and moving components. Cleaning tasks are often not treated as high-hazard activities. The equipment does not know it is cleanup time.

Reaching across or into a machine to retrieve a part or tool. A dropped part, a misplaced tool, a product that bounced into the wrong place. The reach to retrieve it bypasses the guard, brings the hand into proximity with the point of operation, and takes place while the machine may still be energized.

A real world example:

A line operator at a metal fabrication shop was running a roll forming line at the end of a shift. A small piece of scrap metal had gotten lodged in the rollers and was causing a slight surface defect on the finished product. Rather than stopping the line, she used a screwdriver to try to dislodge the scrap while the rollers were running, something she had done with similar pieces before. The screwdriver was grabbed by the rollers. Her hand followed. She lost two fingers and sustained significant soft tissue damage to her hand. The fix with the line stopped would have taken less than two minutes. She had worked at that facility for seven years. She knew the equipment. She knew the procedure. She made a decision in a moment of pressure that she would not have made if she had stopped for ten seconds to think through what she was about to do.

Team member engagement:

"Which of the task categories we just talked about is most common in our area? Which one do you think gets the least attention relative to how often it creates a hazard?"

"Has anyone here ever reached into a running machine or used a tool to clear something without stopping the equipment? What was the situation and what were you thinking?"

"How is your weekly challenge going? When you walked through your machine mentally, which hazard type stood out most?"

Weekly Safety Briefings

Week 35 – Monday, August 24 – Friday, August 28

Fatal Four Part Three: Caught-In or Between

Friday – Week Wrap-Up

Discussion:

This week we covered caught-in or between, one of the most severe hazard categories on the floor. We defined the four main scenarios, went deep on machine guarding and how guards disappear gradually without a formal decision to remove them, built situational awareness around the small signals that precede most incidents, and identified the task categories, jam clearing, cleanup, and quick reaches, where caught-in injuries happen most.

Familiarity is not protection. A team member who has performed a task 200 times without incident has not reduced the risk of the 201st. Caught-in incidents are not random; they are the predictable result of a hazard meeting an unguarded moment.

Weekly Challenge Report-Back:

Each person picked one machine and walked through it mentally: point of operation, nip points, caught-between scenarios. Let's hear what people noticed.

"What machine did you choose, and what stood out when you looked at it through that lens?"

"Did anything come up this week that needs to be formally addressed before we walk away today?"

Closing question:

"If a new operator started on your line next Monday, what would you tell them about caught-in hazards here that they would not figure out just by watching the job?"