# Crane safety toolbox talk

29 CFR 1926.1424, 1926.1425, 1926.1419, 1926.1408, 1926.1412, 1926.1427

Date _____ Trainer _____ Location _____

**Opening question**

**If our crane swung all the way around right now, could it hit or pin anyone?**

## Why it matters

Cranes lift and swing heavy loads near workers and power lines, often on ground that can shift. When something goes wrong, it happens fast. The operator is not the only one at risk: riggers, signal persons, laborers and anyone walking by can be struck, crushed or caught under a load.

## Key points

### 1 Stay out of the swing radius

The turning upper part of a crane can strike you or pin you against another object. In construction, the employer must mark this hazard area with control lines, warning lines, railings or similar barriers. Do not cross the barrier unless your job requires it. Before you enter a spot in that area the operator cannot see, make sure the operator knows (29 CFR 1926.1424(a)(3)(i)).

29 CFR 1926.1424(a)(2)(ii)

### 2 Never stand under a load

The fall zone is wherever a load could fall if something fails, not just the spot below it. In construction, while a suspended load is not being moved, only workers hooking, unhooking or guiding it, making its first connection, or working a concrete hopper or bucket may be in the fall zone. When a load is being landed, only the workers needed to receive it may be there (29 CFR 1926.1425(d)). Everyone else walks around, never under.

29 CFR 1926.1425(b)

### 3 One signal person, but anyone can call stop

In construction, a signal person must be provided when the operator cannot fully see the load's path or landing spot (29 CFR 1926.1419(a)(1)). Only one person may give signals at a time, so leave signaling to the person assigned (29 CFR 1926.1419(h)). The exception is stop: anyone who sees a safety problem must give the stop or emergency stop signal, and the operator must obey it no matter who gives it (29 CFR 1926.1417(y)).

29 CFR 1926.1419(j)

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### 4 Treat every power line as live

In construction, power lines must be treated as energized unless the utility confirms they are deenergized and visibly grounded at the site (29 CFR 1926.1408(e)). If the crane, load line or load could get closer than 20 feet to a power line, the employer must have the line deenergized and grounded or keep a set clearance, using measures such as a warning line and a dedicated spotter (29 CFR 1926.1408(b)). If a crane ever touches a line, stay away from the machine and the load, and keep others back.

29 CFR 1926.1408(a)(2)

### 5 Check the crane every shift

In construction, a competent person must begin a visual inspection before each shift the crane will be used. It covers items such as controls, hooks and latches, wire rope, hydraulic lines, the ground under the outriggers and the safety devices. If the competent person finds a problem is a safety hazard, the crane must come out of service until it is fixed (29 CFR 1926.1412(d)(2)). If you spot a damaged latch, a frayed rope or soft ground near an outrigger, tell the operator.

29 CFR 1926.1412(d)(1)

### 6 Only qualified people run the crane

In construction, with a few exceptions, each operator must be trained, certified or licensed, and evaluated before running a crane. Until then, a worker may only operate as an operator-in-training, continuously monitored by a trainer (29 CFR 1926.1427(b)(2)). In general industry, only designated personnel may operate an overhead or gantry crane (29 CFR 1910.179(b)(8)). Never take the controls just because you have seen it done.

29 CFR 1926.1427(a)

## Scenario

Picture this: A mobile crane is setting roof trusses. The barricade behind the crane was moved for a delivery and never put back. A laborer cuts behind the crane to grab a tool, out of the operator's view, just as the operator starts to swing. Meanwhile, two workers are both waving signals at the operator. What should have happened, and who could have stopped it?

## Crew discussion

1. Where is the swing radius on our crane today, and is it barricaded?
2. Who is our signal person, and what does the emergency stop signal look like?
3. How close could our boom or load get to a power line today?
4. What would you do if you saw a frayed rope or soft ground near an outrigger?

**Bottom line** **Stay out of the swing radius and the fall zone, follow one signal person, and call stop the moment something looks wrong.**

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Topic / Tema Crane safety / Seguridad con grúas

Date / Fecha _____

Trainer / Instructor _____ Location / Lugar _____ Company / Empresa _____

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