Beware of High Winds and Elevated Equipment

Among the many safety hazards you may need to protect your workers from are those posed by Mother Nature. For example, lightning can strike and kill workers outdoors during a thunderstorm. And high winds can cause equipment such as scaffolds and cranes to collapse, endangering workers and others.

A recent tragedy in New York City is a sad illustration of the dangers posed by high winds.

A crew in Lower Manhattan was using a crane, known as a crawler, to install generators and air-conditioning units on top of a building. The workers noted the wind gusts accompanying the falling snow and decided they should lower the crane to a secure level.

So they began to bring down its 565-foot-long boom. But the crane suddenly started to topple over before plunging into a free fall and crashing onto Worth Street.

No workers were injured. But a pedestrian walking on the street was killed and three other people were injured.

In the wake of this tragedy, the mayor of New York City announced new crane safety rules for high winds:

- All crawler cranes, defined as cranes with tracks, must now be secured when winds are forecast to consistently exceed 20 mph or when wind gusts are forecast to exceed 30 mph.
- The Department of Buildings, Department of Transportation, NYPD and FDNY have been tasked with ensuring that pedestrians don’t walk in areas where cranes are being secured.
- Residents and businesses will now be informed whenever cranes are being secured and when they’re being installed.

Unfortunately, this incident isn’t an aberration. The wind has played a role in many safety incidents in both the US and Canada:

- A family was walking down a street in Alberta when wind blew a bundle of

steel off the roof of a construction project, striking them. The three-year-old daughter died; the husband and son were injured.
- A 22-year-old worker in New York was part of a crew installing metal decking on the roof of a car dealership. As he tried to secure sheets of decking, he was blown off the roof by a wind gust and fell 24 feet to his death.
- A student at Notre Dame filming a football practice from a scissor lift was killed after the lift was toppled by strong winds.

Follow these safety tips if high winds or wind gusts could endanger workers or others:

- Pay attention to forecasts, especially wind speeds, and plan work activities accordingly.
- Don’t permit workers to work on scaffolding, elevated lifts, cranes, etc. in high winds. Also, ensure such equipment is secured properly so that it doesn’t blow over or collapse.
- Tie down or otherwise secure materials and tools to prevent them from blowing around or away. Particular attention should be paid to lighter materials such as sheets of insulation or vinyl and metal siding, which can easily become airborne.
- Inspect solid fencing, concrete formwork and false work, and vertical walls on incomplete buildings to ensure they can withstand high winds. Install additional supports or bracing if necessary.
- Inspect the worksite *after* the wind has died down to check the structural integrity of buildings, scaffolds, equipment, falsework and formwork, and ensure that any hazards created by the high winds are addressed before work resumes.
- Ensure workers wear appropriate PPE in windy conditions, including eye protection and safety headgear.