

TOOLBOX TALK #49

WORKER SAFETY IN EXTREME COLD

In the construction industry, where deadlines are strict and the demand is high, extreme weather conditions may not phase some project managers. While working in -40°F is out of the question, that doesn't stop some companies from demanding attendance in more tolerable, albeit still sub-zero temperatures. So when should workers report to the jobsite during frigid winters? And what measures should they take to prevent frostbite or hypothermia?



During some record-breaking polar vortexes, government agencies advise people not to stay outside for longer than two minutes. If you are scheduled to report to an outdoor construction project during a government advisory, you are entitled to exercise your rights. Most companies won't want to risk an OSHA investigation or a workers' comp case for a few hours' worth of progress. OSHA standards generally advise that when temperatures hit -30° to -34°F or below with more than 10-20 mph winds, non-emergency construction should cease. You can find a table with temperature and wind chill standards on the OSHA website. Construction workers should keep this table handy, particularly during rough weather events like blizzards and polar vortexes.

Any temperatures below zero, particularly where a wind chill is involved, should be taken seriously. If required to work, construction workers must take the following precautions – and companies should enforce them:

- **Wear the right gear-** Lined hard hats, thermal-lined gloves, waterproof boots, layered socks, and fleece-lined bomber jackets are absolutely necessary. Frostbite almost always begins at the extremities, so keeping these parts warm is crucial. Everyone is vulnerable to cold stress, and it can occur in temperatures as low as 50°F.
- **Monitor and prioritize work.** In extreme cold, surfaces will be icy. It's important to note and label icy areas, and avoid work on rooftops or upper levels in these conditions. Otherwise, workers are vulnerable to slips and falls, which could be deadly from an elevated surface.
- **Encourage teamwork.** The “buddy system” is something most of us were taught in primary school, and is relevant throughout our entire lives. Working in pairs on the construction site will allow workers to tackle cold hazards together, and make note of one another's weakening condition should any form of cold stress set in.
- **Encourage frequent breaks.** Once temperatures hit below -25°F and winds are present, the maximum work periods become shorter. The American Conference of Governmental Industrial Hygienists recommends more frequent breaks. Workers should use these breaks to rest, warm up, and change out of any wet clothing.
- **Schedule work accordingly.** OSHA suggests scheduling work for the afternoon during periods of extreme cold. This is when the winds are most likely to ease up, and temperatures are most likely to be warmer.

Awareness and preparedness are half the work of enduring construction work in cold temperatures. Chances are, if temperatures are reaching record lows, construction work should come to a halt.