Concrete Construction Safety Stats and Facts

FACTS

Overview Of the Noteworthy Hazards

1. Mixing risks. Concrete dust can cause breathing problems. Concrete is composed of small pieces of stone, called aggregate. When these stones are mixed with cement, the tiny particles of aggregate dust can be dispersed into the air and inhaled.
2. Pouring risks. Concrete can be slippery until it dries. If any bit of the wet mixture gets on a worker’s boots or the ground, it can cause the worker to slip and fall. Furthermore, the alkaline properties of wet cement can be caustic. If the cement splashes on the skin and isn’t removed quickly, the chemicals in the mixture can lead to third-degree burns.
3. Drying risks. Concrete slabs can weigh more than 800 pounds and are at risk for tipping, shifting, and falling on those around them.
4. Exposure to cement dust can irritate eyes, nose, throat and the upper respiratory system. Skin contact may result in moderate irritation to thickening/cracking of skin to severe skin damage from chemical burns. Silica exposure can lead to lung injuries including silicosis and lung cancer.
5. Exposure to wet concrete can result in skin irritation or even first-, second- or third-degree chemical burns. Compounds such as hexavalent chromium may also be harmful.

Concrete burns are the most common injury suffered when pouring wet cement. These injuries occur when wet concrete touches a worker’s skin for long periods of time, such as when concrete finishers kneel on fresh cement without knee protection.

STATS

- More than 250,000 people work in concrete manufacturing. Over 10 % of those workers – 28,000 – experienced a job-related injury or illness and 42 died in just one year.
- From the National Ready Mixed Concrete Association … Just-released U.S. Bureau of Labor Statistics 2018 workplace injury and illness data show a ready mixed concrete industry incident rate of 3.9 in 2018, unchanged from the prior year. Over the past decade, the injury- or illness-rooted lost work time benchmark among producers has ranged from the 2017-18 lows to 6.3 in 2016.
- Among construction subsectors, the highest injury rates from 2017 to 2019 were in framing (292.7 per 10,000 FTEs), poured concrete (155.1) and flooring (148.8).
- Construction and concrete work is dangerous. Of the 250,000 employees who work in concrete manufacturing, 10% of them have been injured.