WEEK 32 AUGUST, PEAK HEAT · ~5 MIN READ · ONTARIO CONSTRUCTION

Heat + PPE: Staying Protected Without Overheating

In a heat wave the gear feels like a trap — hard hat baking, vest soaked, respirator stifling. But shedding PPE to cool off just trades one hazard for another, because the thing it was protecting you from hasn't gone anywhere. The answer is a plan that accounts for the gear, not a worker deciding what to take off.

The hazard

PPE holds heat in. Coveralls, harnesses, and respirators stop sweat from doing its job, so your core temperature climbs faster than the air temperature suggests. Some gear makes that worse than others — heavy or low-breathability clothing, and anything required for arc-flash or hot work that you can't simply peel off, is harder on you than a vest. **How much harder depends on the specific garment system, the workload, and the conditions**, which is exactly why it belongs in the assessment rather than in a rule of thumb.

The dangerous move is tearing off a hard hat, glasses, respirator, or fall gear to get relief on the work face. That's swapping a heat risk you can manage for an impact, eye, airborne, or fall risk you can't.

What to do

- **The heat assessment has to account for the gear.** Temperature alone doesn't describe the load: humidity, radiant heat, air movement, how hard the work is, what people are wearing, and who's still acclimatizing all change it. Work/rest cycles and cooling come from your employer's heat plan on that basis — and the plan should be adjusting through the day, not set at 7 a.m.
- **Drink to the plan, not to a slogan.** About a cup every 15–20 minutes suits moderate work over a shorter stretch; longer or heavier work, or heat-trapping gear, means more, and hours of hard sweating call for electrolytes rather than water alone. Anyone with a medical condition or on medication follows their clinician's advice, not the crew average.
- **Take breaks somewhere genuinely cool, and take PPE off there** — in the rest area, where it's safe to do it, not at the work face.
- **Wear light, breathable layers under the gear**, and use cooling towels or vests where you have them — but the high-vis still goes on top. Don't swap a compliant hi-vis garment for a plain t-shirt to stay cool near traffic or mobile equipment.
- **Rotate the hot, heavy-PPE jobs as part of the plan.** Sharing a job around only helps if it's scheduled — done informally it can just spread the exposure across more people instead of reducing anyone's.
- **Build up over days if you're new or back from time off**, on the schedule the supervisor sets. Adjustment to heat is real, but it fades after time away.

Watch out for

- **The emergency signs are about the brain, not the skin:** confusion, strange behaviour, slurred speech, stumbling, or collapse. **Skin may be dry or soaked** — a worker in heat stroke is often still sweating heavily, so "he's still sweating" rules nothing out. Call 911 and start cooling.
- Earlier signs — headache, dizziness, cramps, nausea, weakness — as the cue to stop, cool, and stay with that person.

- Anyone stripping off a respirator, harness, or hard hat on the work area to cool down.
- A new or returning worker pushing hard before they've built up.

Talk it over

- Where's our shade and cool water today, and is it close enough that people will actually use it?
- Which job here is the hottest in the gear it needs — and is the rotation for it actually scheduled, or just hoped for?
- If someone here got confused and stumbled this afternoon, what would we do in the first two minutes?

A SIGNATURE PROVES ATTENDANCE. DASHPOT PROVES UNDERSTANDING.

Get a new toolbox talk every week — free.

Dashpot Safety turns the morning talk into a per-worker record of what each crew member actually understood, by SMS in about five minutes.

SCAN FOR THE FULL LIBRARY → DASHPOTSAFETY.COM/TOOLBOX-TALKS

This toolbox talk is general safety information for Ontario construction — not legal advice, and not a substitute for your own site-specific hazard assessment, worker training, and health-and-safety program. Follow the current Occupational Health and Safety Act and its regulations, manufacturer instructions, and your employer's procedures. Provided as-is, without warranty — you use it at your own risk.