

John's Story



The dirty dozen was an early attempt to identify contributing factors to safety and performance, which were first used in the Canadian transport sector. We've adapted those 12 factors for the construction industry below.

The construction Industry is a high-risk industry that takes safety very seriously. However, awareness of these dirty dozen isn't enough; systemic issues that produce them often go unnoticed and serious accidents continue to occur.



“Failures are like mosquitoes. They can be swatted one by one, but they keep coming. The best remedies are ... to drain the swamps in which they breed”
(Reason, 2000, p.669).”



In this case, the swamps are the 7 systemic issues above that remain in the organisation to impact future builds and sub-contractors, even after the person who made the error is re-trained or redeployed.

OPTION 1 : SWAT MOSQUITOES

- Design a new lock mechanism on straps that forces secure closure but is difficult and time-consuming to employ.
- Retrain both John and Dave, then redeploy onto builds and work not requiring cranes.

These options can be tempting, and in some instances, required. However, they often do little to address the underlying conditions that allowed the failures to manifest. Those conditions will remain and likely allow other failures on future builds.



OPTION 2 : DRAIN THE SWAMP

- Pushback on unrealistic pressures citing objective risk data.
- Conduct initial Human Factors risk assessments on all projects focussing on bespoke/new methods and requirements.
- Provide Threat & Error Management training to address the perceived need to rush.
- Develop and sustain a just culture where people feel safe to speak up.
- Only bid on projects with realistic deadlines.
- Identify risk-based skill shortages and address with training before project start.
- Identify build/project-specific rules around min-max shifts and staff numbers.