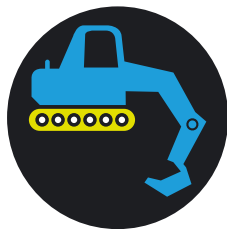


Hazards of working in excavation



Every year people are killed or seriously injured by collapses and falling materials while working in excavations.

They are at risk from:

- Excavations collapsing and burying or injuring people working in them;
- material falling from the sides into any excavation, and
- people or plant falling into excavations.

Remember:

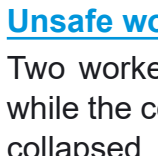
- No ground can be relied upon to stand unsupported in all circumstances.
- Depending on conditions, a cubic metre of soil can weigh in excess of 1.5 tonnes.
- Trenchless techniques should always be considered at the design stage as they replace the need for major excavations.

Here are some incidents that have happened to people during work in excavation:



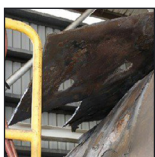
Shoring boxes should extend for the complete depth of the trench

Two workers were injured in separate incidents when the ground collapsed in the trenches they were working in. The shoring boxes were not the full depth of the trench.



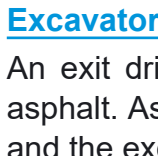
Unsafe working conditions during trenching

Two workers entered a trench to measure the depth of the excavation while the construction manager supervised the work from above. The wall collapsed, trapping them both underground. Both workers lost their lives.



Elastic spring-back in wear plates on excavator buckets

A coal mine worker received fatal injuries while removing a large wear plate from the bottom of a large excavator bucket.



Excavator hits overhead line during grading

An exit drive to a terminal was being graded in preparation for laying asphalt. As he travelled up the grade, the clearance height was reduced and the excavator boom damaged the overhead communication line.



Pilot accidentally knocks controls of remotely operated vehicle

A remotely operated vehicle (ROV) was being used for offshore trenching operations. The pilot accidentally knocked the joystick control, which operated the tool tilt function of the ROV, raising the tool depth.

