

## Electricity Networks Association (ENA) research reveals “shocking” facts when digging in proximity to underground electricity cables



The Electricity Networks Association (ENA) has recently published some “shocking” information associated with work in proximity to buried electricity cables, particularly since the Coronavirus national lockdown ended. There is plenty of guidance available to anyone having to break ground where there is the potential for buried electricity cables to be present; not least [Health and Safety Executive \(HSE\) Guidance HSG47 ‘Avoiding danger from underground services’](#).

Some of the ENA research findings include:

- In the last five years, 354 people have suffered life changing injuries after striking a live underground electricity cable
- Since 2015, an average of 70 people a year are seriously injured as a result of contact with underground electricity cables.
- Construction workers identified as extreme risk with 4 out of 5 reported incidents involving a tradesperson
- Research reveals nearly a third (31%) of tradespeople do not always check for underground cables
- Incidents of cable strikes have increased by 46% since the national lockdown ended
- When surveyed, 93% of construction workers and industry professionals believe they always dig safely, yet almost a third (31%) admitted to not always checking for underground electricity cables before beginning work
- Despite the threat to life, the main reasons tradespeople fail to check for underground electricity cables is because they don’t believe it’s their responsibility (15%), or they don’t think they’ll dig deep enough to hit anything (24%)
- Almost one in six (15%) say if they uncovered an underground electricity cable encased in concrete, they would attempt to break them out, which could put them at immediate risk of life-threatening injuries.

Underground services are a hazard anytime ground is broken. A safe system of work (SSoW) must be planned and delivered by competent people who have proper education and cultural support to plan and deliver excavations that proactively prevent injuries and deaths.

What does good look like?

1. **Plan** - Always be mindful of what services lie below ground when digging or excavating. Ask utility companies for plans in advance. Commission surveys to produce plans
2. **Assess the risks** - Identify the dangers and hazards associated with excavations and implement a hierarchy of controls to manage them. Consider indications for the presence of electricity and controls such as issue of a permit to break ground
3. **Scan and locate** – Adopt safe digging techniques, always locate underground cables before digging with the use of ground-probing radar and cable avoidance tools.
4. **Positively identify** – Before using any electric or mechanical excavation tool, you must positively identify underground cables. Consider use of vacuum excavation or hand-digging trial holes to expose the services

5. **Always assume**, that underground cables are live even when damaged.
6. **Know who to call** - In case of an emergency dial 999 and tell them electricity is involved. Call 105 if you have a safety concern related to the electricity network or if you spot damage to underground cables and substations that could put you, or someone else, in danger.
7. **Think Before You Dig**

A SSoW is only as good as the people working with it! Working safely to excavate around buried cables requires competent people who are led by supervisors and managers to create a culture where people are trusted to work safely in compliance with agreed procedures and standards and this compliance is positively assured.

The following websites can be used as further reference points:

- ENA 'Watch Out, Cables About' safety advice: <https://www.energynetworks.org/watch-out-cables-about>
- Health & Safety Executive advice on avoiding dangers when working near underground utilities: <https://www.hse.gov.uk/pubns/books/hsg47.htm>
- Utility Strike Avoidance web site: <https://www.utilitystrikeavoidancegroup.org>
- Linesearch Before U Dig web site: <https://www.linesearchbeforeudig.co.uk/>

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*The content of this article is intended to provide a general guide to the subject matter. Specialist advice should be sought about your specific circumstances.*

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