

## What if you come into contact with an underground cable?

### If you are sitting in a mechanical excavator

when a cable is damaged,

- **JUMP CLEAR**, rather than step off the vehicle.
- Jump as far away as you can, try to land on your feet, then **RUN** at least 10 metres away or stay in the vehicle until the line has been isolated.

### In all cases...

- **Keep others away**, immediately secure the excavation. **Remember** a damaged cable could remain live or be re-energised.
- **Do not touch** any machinery, tools or equipment which are in contact with a damaged cable.
- **Telephone the SP Energy Networks emergency telephone number** and provide an accurate location and contact telephone number.

## BE AWARE, KEEP CLEAR



**NEVER** touch damaged cables.

**Always assume power cables are LIVE.**

This leaflet should be used in conjunction with Health and Safety Executive (HSE) Guidance Note HS(G)47, 'Avoiding Danger from Underground Services'.

## Contact us

**General Network Matters including safety advice**

**0845 273 4444**

In an **emergency only**, call the appropriate number for your area:

**Central & Southern Scotland**

**0845 272 7999**

**Cheshire, Merseyside & North Wales**

**0845 272 2424**

Visit our safer Excavations website:  
[www.spenergynetworks.com/safety/saferexcavations](http://www.spenergynetworks.com/safety/saferexcavations)

## Further information

Comprehensive advice is available from the Health & Safety Executive (HSE) via [www.hsebooks.co.uk](http://www.hsebooks.co.uk) or by telephone **01787 881 165**

This leaflet should be used in conjunction with Health and Safety Executive (HSE) Guidance Note HS(G)47, 'Avoiding Danger from Underground Services'.

The Energy Networks Association produces a range of leaflets available at [www.energynetworks.org](http://www.energynetworks.org)



**SP ENERGY NETWORKS**

## Safety matters...



## ...when working near underground cables

This leaflet is aimed at anyone who excavates or penetrates ground. It is designed to provide information to help people stay safe.

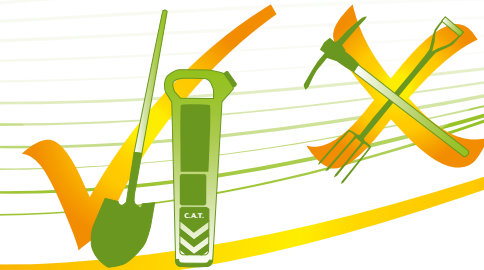
Over the past 10 years there have been over **1,000 recorded injuries** in the UK as a result of contact with underground electricity cables. Over a third of these incidents have been on construction or demolition sites with the remainder on public highways, footpaths, domestic premises and gardens.

Damage can result from excavation or penetration of the ground and can cause an explosion leading to severe burns and even death.

When excavating trial holes use a Cable Avoidance Tool (CAT) and a spade or shovel.

Ensure current cable records are on site.

**NEVER** use a pick, fork, pinch bar or power tool.



## General key points

- Houses, shops, offices, factories, street lighting and other street furniture all have underground electric cables or overhead power lines supplying them.
- Underground cables do not run in straight lines. They are flexible and change direction and depth.
- Supply cables associated with derelict buildings should be treated as **LIVE** until confirmed otherwise by SP Energy Networks.
- Not all cables are shown on plans.
- If a cable is buried in concrete do not attempt to break it out. Contact SP Energy Networks to ensure the cable is de-energised.
- Exercise extreme caution when using picks, forks, pinch bars, pins or any other pointed instruments to free lumps of stone or break up compacted ground.
- Never throw a pick or sharp instrument into the ground.
- Health and Safety Executive Guidance Note HS (G) 47 'Avoiding Danger from Underground Services' provides excellent detailed advice on staying safe from the hazard of underground services and it is strongly recommended that this is read carefully before commencing work on site.

## Check plans and look out

- Carry out a risk assessment in accordance with HSE Guidance Note HS(G)47, 'Avoiding Danger from Underground Services'.
- Ensure you have up-to-date plans of underground services in the area. SP Energy Networks will supply this information on request.
- Include the SP Energy Networks emergency telephone number on your farm map/site plans and in your list of telephone contacts. Encourage workers to save it in their mobile phones.
- Always scan the area that you intend to excavate using a Cable Avoidance Tool (CAT) and Genny prior to starting work.
- If emergency work is being carried out and plans are not readily available, excavate as though there are buried **LIVE** cables in the vicinity.
- Be aware that the actions of third parties could have altered cable depths or positions since the cables were laid.
- Service connection cables may not be shown on plans. Look around for indication of potential services, e.g. street furniture.
- Mark cable positions using waterproof road paint or other permanent marker.

**Visit:** [www.spenergynetworks.com/safety/safereexcavations](http://www.spenergynetworks.com/safety/safereexcavations)

We provide free information and advice on safe working practices and the precautions to take when working near underground cables.

## Excavate trial holes and proceed with caution

- Ensure staff are fully trained to excavate and use tools appropriately and safely.
- Hand-dig trial holes along the indicated route of the cable to confirm the position of services. Hand-dig as many holes as necessary, particularly if there are plastic pipes which cannot always be found by a Cable Avoidance Tool.
- Use a spade or shovel, NEVER a pick, fork, pinch bar or power tool.
- As work progresses, look out for marker tape, ducts or cable covers which indicate the presence of underground services.
- Do not use exposed cables as convenient steps or handholds.
- Do not operate a bulldozer, scraper, dragline or excavator unless you are satisfied that all buried services have been identified in the working area.
- Backfill around services with a fine material. Cover the cable with stone-free soil or with stone dust and replace any cable marker tiles, ducts and tape.