



## Farmer fatally electrocuted by overhead power line on family farm



### INCIDENT

A 43 year old farmer collapsed when running an electric fence tape out below 6.6kv power lines. The overhead power lines were at the bottom of a hill in the paddock. Initially it was thought he had a fatal heart attack because no one witnessed what had happened. Two hours later, while waiting for the police to arrive, a neighbour picked up the end of the electric fence tape to complete the fencing. He took half a dozen steps and collapsed on the ground.

There was a doctor and another neighbour on site when the second victim collapsed. They put him in the recovery position and monitored him until he came around a few minutes later.

When the victim woke up, he complained of a sore right hand. The doctor had a look and found an electrical burn. The Doctor then checked the first victim's hand which had an identical burn, then realized that the farmer had been electrocuted.

### CIRCUMSTANCES

The electric fence reel was placed at the bottom of the hill. The farmer walked out the tape and was a few meters from the top of the hill. The reel jammed causing the tape to tighten and lift off the ground connecting with the 6.6kv power lines.

#### Investigation

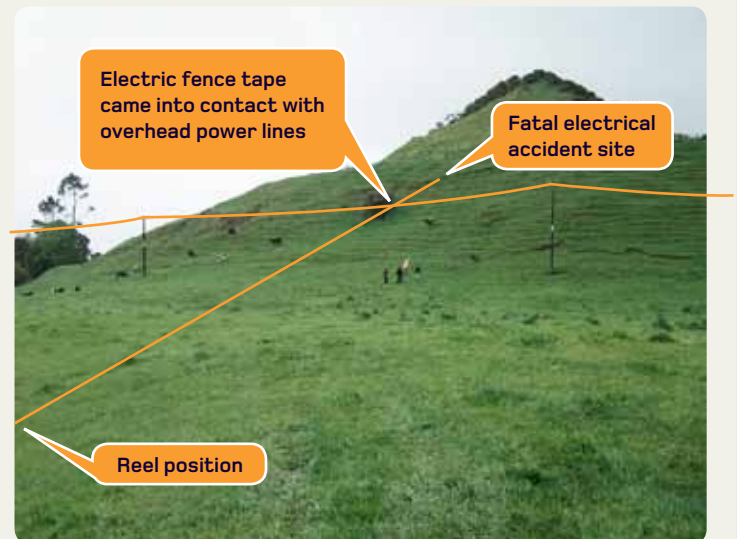
The Department of Labour investigation found that the overhead power lines were in sound condition and had been installed in 1972. The power lines were 8.9 meters above the ground in accordance with the New Zealand Electrical Code of Practice for Safe Distances.

No Hazard Identification System was in place before the incident.

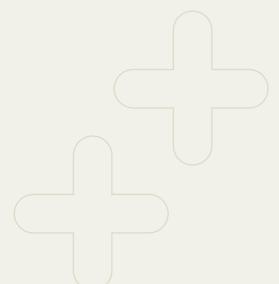
The farmer was experienced at putting up electric fences, and was aware of the overhead power line in this paddock. Contact with the overhead power lines was an unidentified hazard which resulted in loss of the farmer's life and a near fatal incident for the neighbour.

### DEPARTMENT OF LABOUR ADVICE

It is the Department's advice that employers identify overhead power lines as a hazard, and implement controls to manage this hazard effectively.



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These could include finding an alternative method of work so employees do not carry out work where they could come into contact with overhead power lines.

If working near an overhead power line cannot be avoided, there is a standard for Electrical installations-electric fences. A standard called "AS/NZS 3014:2003 – Electrical Installations – Electric Fences" is available from [www.standards.co.nz](http://www.standards.co.nz). This standard gives specific details on how to safely manage the installation of electric fences below power lines.

The safe working distance for working near an overhead power line is four meters as recommended by the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).

Remember that you don't have to connect with the line; electricity can arc and reach earth through you.

*Note: This material has been prepared using the best information available to the Department of Labour at the time of publication. Information may change over time and it may be necessary for you to obtain an update. This material is also only intended to provide general advice and does not constitute legal advice. You should make your own judgement about action you may need to take to ensure you have complied with your workplace health and safety obligations under the law.*

### WHICH INDUSTRIES/SECTORS OR MATTERS WILL THIS INFORMATION BE RELEVANT TO?

Agriculture, farming, horticulture.

