



Pylon Man's FAQs



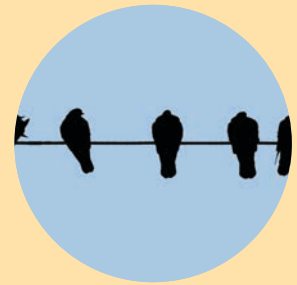
I've seen trees growing into overhead power lines but I don't get a shock when I touch the tree, why?

The conductivity of a tree depends on the amount of moisture in the wood. So a wet tree, during a time of year when there is a lot of sap in the tree, certain atmospheric conditions or any number of other conditions can cause a tree to become a conductor.

Don't assume that none of these conditions are present – stay away from trees growing into power lines. Call 105 and report it.

Why can birds sit on power lines and not get killed?

Electricity always wants to find a way to get to ground, and because birds aren't touching the ground or anything that is in contact with the ground, the electric won't flow through them. However, if they were to touch two (or more) of the wires at the same time with their wings, tail or feet, then they would get electrocuted because they would have made a complete circuit.



If I am in a car that is in contact with a live power line or cable, why don't I get shocked?

It is because you are just like the bird sitting on the wire, so you must always stay in the car and DO NOT attempt to get out. If there is a fire or another emergency that makes it unsafe to stay in the car, you can jump clear, landing on both feet and bunny hop away. But never touch the car and the ground at the same time because you will have made a complete circuit.

If someone was being shocked you could get them free using a stick!

NO, you must never do this. The stick may be dirty or wet, or contain resin from its sap. This would make the stick a good electricity conductor. Stay away and call 999 immediately. Always remember that electricity travels at the speed of light, and we are not that quick – not even Usain Bolt!



How can some people get struck by lightning but not killed?

This is because it is not the voltage that will kill you, but the electric current or the continuous flow of electricity.





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Why does electricity want to get to ground?

Electricity just wants to move from an area of higher voltage to an area of lower voltage if it's given a path to travel. The ground is the lowest voltage area, and when electricity goes into the ground, the earth absorbs its energy.

If pylons and towers are made of metal and metal is a conductor, why does the electricity not travel from the cable to the pylon or tower?

This is because insulators are used. These can be made out of porcelain or glass to support the overhead cables and to keep them away from the metal structures. Insulators do not conduct electric current.



Why does high voltage electricity not jump from the substation transformer to the metal substation fence?

Lots of calculations are completed to ensure the fences are at a safe distance from the live electricity inside. But never poke sticks or anything else through a substation fence. Remember, you don't have to touch anything inside to get hurt because high voltage electricity can jump gaps.

What should I do if I lose a ball or toy inside a sub station?

Never ignore the Danger signs.
Never try to get it out yourself. Ask a grown up to call 105 and we will get it for you.



What is the difference between an amp and a volt?

An amp is the measure of the amount of electricity (called current) in a circuit, while voltage is a measure of the force behind that electricity's motion.
Imagine a circuit as a garden hose. The current (measured in amps) would be the volume of water within the hose, and the voltage would be the pressure that pushes it (the power).

