



THUNDERSTORM WHILST KAYAKING



**Weather apps can be wrong and you may one day find yourself paddling a thunderstorm.
At least 24000 people die from lightning every year.**

Lightning can be powerful, dangerous and highly unpredictable – according to NASA, a single lightning strike can release power to the value of a trillion watts. T

While lightning usually strikes immediately below the cumulonimbus cloud, it sometimes travels horizontally over 10 miles before finding a “Strike Point” (my terminology). If the storm is moving toward you, the next strike will be closer, and could be within that 10 mile higher-danger zone. Since we can usually hear thunder only about 10 miles out, once we hear it, we are in danger. While a strike will most likely hit the tallest object, there are several cases where it has not.



If you are on open water in a kayak or canoe, your body is the tallest object in your area, and may become the Strike Point. To compound this, we are usually holding a carbon fibre paddle, an excellent lightning rod. Fishermen have been killed by lightning while waving carbon fibre poles (adding a whole new meaning to “getting a strike”). So what should we do as paddlers?




In case of lightning or thunderstorms while on the river, you should take the following steps:





Get off the water – A boat is the tallest object on the water making lightning strikes more likely. This is partially mitigated by the nearby bluffs but safety dictates getting off.


- If you are fishing or swimming, get out of the water and move away from the edge.

 **Seek shelter** – If possible, get in a vehicle and avoid touching metal parts. Otherwise, take shelter near a dense group of trees or shrubs. Don't stay near tall isolated objects like a single tree or in the open area of a sandbar. Tents do not provide protection from lightning.


 **Don't group together.**

 **Stay away from HIGH objects** In canals and rivers you are slightly safer than on the open sea. However, you shouldn't weigh yourself in a false sense of security and want to complete the trip as normal. The trees and high structures on land act as magnets for lightning. If lightning strikes nearby, the electric shock can reach you even on the water. The water is an excellent conductor of electricity, so you can still be injured at a distance of 100 metres from the point of impact. So it's best to wait for the thunderstorm on land. The rule of thumb is that after half an hour of no thundering you can continue the trip.


 **Shelter under a bridge** – if you cannot exit easily and a strike is imminent better to be under a bridge than in the open on the water.

 **If no shelter is available, crouch down**, feet close together with your head tucked down and your hands over your ears. Spread out, keeping people several yards apart (if a strike occurs, you want as few victims as possible). Minimize your contact with the ground.


- **Don't lie down.** Lightning causes electric currents along the top of the ground that can be deadly over 100 feet away. Crouching down is the best combination of being low and touching the ground as little as possible


 **Avoid objects that conduct electricity** such as graphite and metal, (paddles, tent poles, camp stoves, power lines, umbrellas, etc). **Keep paddle out of water and don't hold it.**

The [National Weather Service explains](#) that water, like metal, doesn't attract lightning, but it can conduct it. If you touch anything wet or are in water, you put yourself at a high risk of being shocked. Always remove yourself from the pool, lake, or any body of water during a thunderstorm.

 **Monitor the storm** – Lightning has been known to strike 10 miles away, although 3 – 5 miles is more common. Thunderstorms move swiftly. After you see lightning, count the seconds until you hear thunder. Every five seconds equals a mile in distance. If the time increases, the storm may be moving away.

- If you see lightning but don't hear thunder, the storm is probably 15 miles away.
- If you hear thunder, the storm is within 10 miles – lightning strike distance.
- If you see a blue glow around metal objects, smell ozone, hear buzzing, feel your scalp tingle or your hair stands on end – get to cover or crouch down. The movement of electricity, just before lightning strikes, creates these sensations.

 **Wait 30 minutes after thunder.** Never assume what a storm may do. It is critical that you wait the 30 minutes after the last sound of thunder to continue your activity. Don't assume you are safe if you are paddling on a river, with tall objects close by. If lightning hits a tree on the bank, the ground current can transfer to the water, and radiate out for some distance.

 **If a strike occurs, apply first aid to victims** – Call 999 or 112 for an *ambulance* immediately. Don't cause another casualty by exposing yourself to lightning. Wait until danger is past before helping victims. Remember: **people don't hold a charge, so touching them can't hurt you**; victims without a pulse can be revived with CPR; and, 80% of those struck by lightning survive.

Compiled by John Miles from various sources (© apply to some text and photos no doubt so don't use commercially but do circulate to individuals as could be useful)