

## **GUIDELINES - Camping and Thunderstorms**

#### Campers with caravans or motor homes

A "faraday cage" is generally safe. If lightning strikes a metal cage, it runs through the cage without harming the passenger. Closed vehicles such as camping vehicles which have a driver's cab (motorhome) are therefore fairly safe (safety cage). It is important, however, to retract the antenna and keep the windows and doors closed. It is not advised to shower or do the dishes during a thunderstorm. To avoid surges, the 230-V cable should be unplugged. Here is an overview of the guidelines of the ADAC:

- The driver's cab is a safe place if metallic
- Avoid alcoves
- Close windows, doors, elevating and convertible roofs
- Do not let your head touch the roof
- Do not touch metallic parts
- Do not wash the dishes or take a shower
- Unplug the outer 230-V cable (risk of overvoltage)

Staying in a motorhome with no metallic structure is just as dangerous as being outside. Also, it is not safe to stay or sleep under the elevating roof of motorhomes. Their material is synthetic, which makes it dangerous: lightning could pass through the human body on its way to the ground. Motorhomes without a driver's cab (e.g. caravans) are less safe. If there is a thunderstorm, it is recommended to find shelter in a common room e.g. of the camp site.

#### **Camping in tents**

Lightning presents a greater danger to people outside or in a tent. The following applies to the camper: A tent will not prevent you from being struck by lightning. The step voltage on the surface of the ground as well as the electricity running through the poles can harm the people inside. In the event of a thunderstorm, campers should find shelter in a building on the camp site (alternatively in a driver's cab). Please be aware: The all-clear can only be given 30 minutes after the last instance of thunder is heard (source: ECOCAMPING e.V.) If evasion is not possible, the ADAC recommends the following:

- Do not touch the walls or poles of the tent
- Crouch in the middle of the tent as far away as possible from the poles
- Do not sit on the bare floor (under no circumstances!), but on a dry air mat or a camping bed with metal feet, if possible. However, do not touch the metal or the floor.
- If necessary, pull the cable running into the tent
- Remove plastic or rubber bits on the end of the poles to allow better grounding

Generally, it is wise to choose a camping spot carefully. Exposed areas such as hills, crests and shores should be avoided. The tent should also not be build up on forest edges or under a single tree. There should be enough space between the tent and the tree.

Getting caught in a thunderstorm while swimming, doing sports or being engaged in other leisure activities

No matter if you are swimming in a pool, lake or the sea: Get out the water as quickly as you can when a thunderstorm is approaching. Swimmers are at a higher risk, as a distant lightning strikes may harm swimmers due to the water. Also, the head is the highest point over the surface of the water. Lightening is more life-threatening in water than on land. Only a short period of unconsciousness can cause you to drown.

If you are caught in a thunderstorm while hiking, doing sports or engaged in other leisure activities, do not stay too close to trees, poles or other high objects where lightning is more likely to strike. If you are riding a bike or horse, dismount in order to not become an elevated target yourself.

The correct thing to do is to crouch on the ground at a distance from other people. It is essential to keep the feet together. Also, the feet are the only point of the body that should touch the ground. Otherwise step voltage might occur: A close lightning strike may cause injuries due to voltage differences on the surface of the earth when the feet are not together. It is not advised to lay down on the ground. In fact, it is important to have minimal contact with the ground. When hiking, a hut may provide good shelter.

#### First aid

Electricity leaves the body after a maximum of 2 seconds. This means you can use first aid on yourself. However, there is not much you can do when you have been struck by lightning. This is what the ADAC recommends:

- Leave the danger zone
- Call the emergency number immediately. However, do not leave the victim unattended.
- Make sure the victim stays warm and conscious
- Cool the body parts where lightning struck and left the body

# **Sources**

# Allgemeiner Deutscher Automobil-Club e.V. ADAC

"ADAC-Infos zu Blitzschutz am PKW; Cabrio und Wohnmobil" www.adac.de/infotestrat/ratgeber-verkehr/sicher-unterwegs/blitzschlag/default.aspx

## **ECOCAMPING e.V.**

Friedrich Haupt; Ulrich Jacoby (August 2011) "Gewitter und Unwetter" www.ecocamping.net

Internet sources:

### www.unwetter.de

"Verhalten bei Gewittern" www.unwetter.de/pages/verhalten\_gewitter.php?back=verhaltenshinweise

These guidelines have been researched thoroughly. However, their correctness cannot be guaranteed.