

ACS Guidelines for Protection Against Lightning Strikes

Source and excerpts from Bureau of Meteorology and Emergency Management Australia

In Australia, lightning accounts for 5 to 10 deaths and over 100 injuries annually. Of the many lightning strike injuries each year, about 80 result from people using fixed telephones during thunderstorms when the phone system may be highly charged near where lightning is striking. Related injuries may include hearing damage, burns or even electrocution.

a) If Caught Outdoors

The distance (in km) to lightning can be estimated by dividing the time delay (in seconds) between the flash and the thunder by 3. If you hear thunder, find shelter immediately, especially if the time delay is less than 30 seconds. Try to remain sheltered for at least 30 minutes after the last sound of thunder.

- Seek shelter in a hard-top (metal-bodied) vehicle or solid building but **avoid** small open structures or fabric tents
- **Never** shelter under small groups of (or single) trees
- If far from shelter, crouch alone, feet together, preferably in a hollow. Remove metal objects from head/body. **Don't** lie down flat but avoid being the highest object in the vicinity
- If your hair stands on end or you hear 'buzzing' from nearby rocks, fences, etc, move **immediately**. At night a blue glow may show if an object is about to be struck (St Elmo's fire)
- **Don't** handle, fishing rods, umbrellas or golf clubs
- **Stay away** from metal poles, fences, clothes lines etc
- **Don't** ride horses, bicycles or travel in open vehicles
- If driving, slow down or park away from trees, power lines etc. Stay inside metal-bodies (hard top) vehicles or caravans but **don't** touch any metal sections.
- If swimming, surfing etc, **leave** the water **immediately**.

b) Lightning Facts

- If your clothes are wet, you are less likely to be seriously injured if struck, as most of the charge will conduct through the wet clothes rather than your body.
- Lightning **can** and often **does**, strike more than once in the same place.
- When struck, people do **not** glow or 'fry to a crisp' but the heart and breathing are often affected.
- Only about 30% of people struck actually die, and the incidence of long term disability is low, particularly when appropriate first aid is applied **promptly**.

c) First Aid

- Apply **immediate** heart massage and mouth-to-mouth resuscitation (CPR) to lightning victims until medical help arrives and they will have a good chance of survival. (You won't receive a shock from the victim.)