Background Information:

LIGHTNING

Lightning occurs when an electrical charge develops inside a storm cloud. There are positively charged atoms present in the storm cloud and also negatively charged ones. When the positively charged atoms go to the top of the cloud and negatively charged atoms go to the bottom and they become very dense, they "jump" to another part of the cloud, to a different cloud, or to the ground. This jump causes a spark of static electricity called lightning.

Lightning Facts and Myths

- 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 first-aid is applied **promptly**.
- 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.
- Average lightning bolts carry a current of 10,000 to 30,000 amps. An average radiator draws 10 amps.
- Lightning **can**, and often **does**, strike more than once in the same place.
- Worldwide, thunderstorms are producing approximately 6,000 lightning strikes every minute!

This information is derived from
State Emergency Service, Tasmania: http://www.ses.tas.gov.au/public_safety-advice/lightning_action_guide.htm
Australian Bureau of Meteorology, Protection against lightning strikes:
http://www.bom.gov.au/info/thunder/index.shtml#protection

Protection Against Lightning Strikes

Outdoors:

The distance (in kilometres) to a lightning flash may be estimated by dividing the time delay (in seconds) between the flash and the thunder by 3. If you hear thunder, find shelter urgently, 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** fly kites or model aeroplanes with control wires.
- **Don't** handle fishing rods, umbrellas or golf clubs etc.
- **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-bodied (hard top) vehicles or caravans but **don't** touch any metal sections.
- If swimming, surfing etc, **leave** the water **immediately**.
- If boating, **go ashore** to shelter as soon as possible.
- Be sure the mast and stays of a sailing boat are adequately 'grounded' to the water.

Indoors:

- Before the thunderstorm arrives, **disconnect** external aerial and power leads to radios and television sets. **Disconnect** computer modems and power leads.
- Draw all curtains and **keep clear** of windows, electrical appliances, pipes and other metal fixtures (e.g. **don't** use the bath, shower, hand basin or laundry/kitchen sinks).
- **Avoid** touching brick or concrete, or standing bare-footed on concrete or tiled floors.
- **Avoid** the use of fixed telephones. In emergencies, make calls brief.

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