



# Lightning Safety

By 21<sup>st</sup> Space Wing Safety Office



**MYTH:** If Trapped Outside And Lightning Is About To Strike, Lie Flat On The Ground

**TRUTH:** This advice is decades out of date. Better advice is to use the 'Lightning Crouch': put your feet together, squat low, tuck your head, and cover your ears. Lightning induces electric currents along the top of the ground that can be deadly over 100 feet away. While lying flat on the ground gets you as low as possible, which is good, it increases your chance of being hit by a ground current, which is bad. The best combination of being low and touching the ground as little as possible is the 'Lightning Crouch'. But the 'Lightning Crouch' should be used only as a last resort. Much better would be to plan outdoor activities around the weather to avoid thunderstorm exposure and to have proper shelter available.



## Lightning Facts

- All thunderstorms produce lightning and are dangerous
- Lightning often strikes outside the area of heavy rain and may strike as far as 10 miles from any rainfall
- If you hear thunder, you are in danger
- Lightning leaves many victims with permanent disabilities

## Avoid the Lightning Threat

- **Plan ahead** – have a safety plan before doing outside activities
- **Postpone Activities** when severe weather is forecasted
- **Monitor the Weather** – look for darkening skies flashes of lightning, or increasing winds
- **Get to a Safe Place** – If you hear thunder, suspend your activity immediately. Substantial buildings provide the best protection. Avoid sheds, small or open shelters, dugouts, bleachers, or grandstands

## What are the statistics associated with lightning?

- In the United States, an average of 62 people are killed each year by lightning
- Already in 2008, 16 people have died due to lightning strikes
- In 2007, 45 people were stuck and killed in the U.S.; hundreds of others were injured
- Of the victims who were killed:
  - 98% were outside
  - 89% were male
  - 30% were male between 20-25
  - 25% were standing under a tree
  - 25% occurred on or near water



## What make lightning so hazardous?

There are 100,000 thunder storms in the U.S. each year, producing over twenty million lightning strikes

- A single stroke of lightning has 125,000,000 volts of electricity
- That is enough electricity to power a 30 watt light bulb for three months



**MYTH:** I'm In A House, I'm Safe From Lightning

**TRUTH:** While a house is a good place for lightning safety, just going inside isn't enough. You must avoid any conducting path leading outside, such as corded telephones, electrical appliances, wires, TV cables, plumbing (including plastic pipes with water in them), metal doors or window frames, etc. Don't stand near a window to watch the lightning. An inside room is generally best.

