

# NATIONAL LIGHTNING SAFETY AWARENESS WEEK

June 22<sup>nd</sup> to 28<sup>th</sup>, 2014



**NOAA's National Weather Service  
Binghamton NY**



# Lightning – Number 3 killer in the United States



Photo Courtesy of: Ray Hrabos  
Taken at Flagstaff Hill, North Park,  
Allegheny County, PA,  
June 22, 2006, 3:10 AM

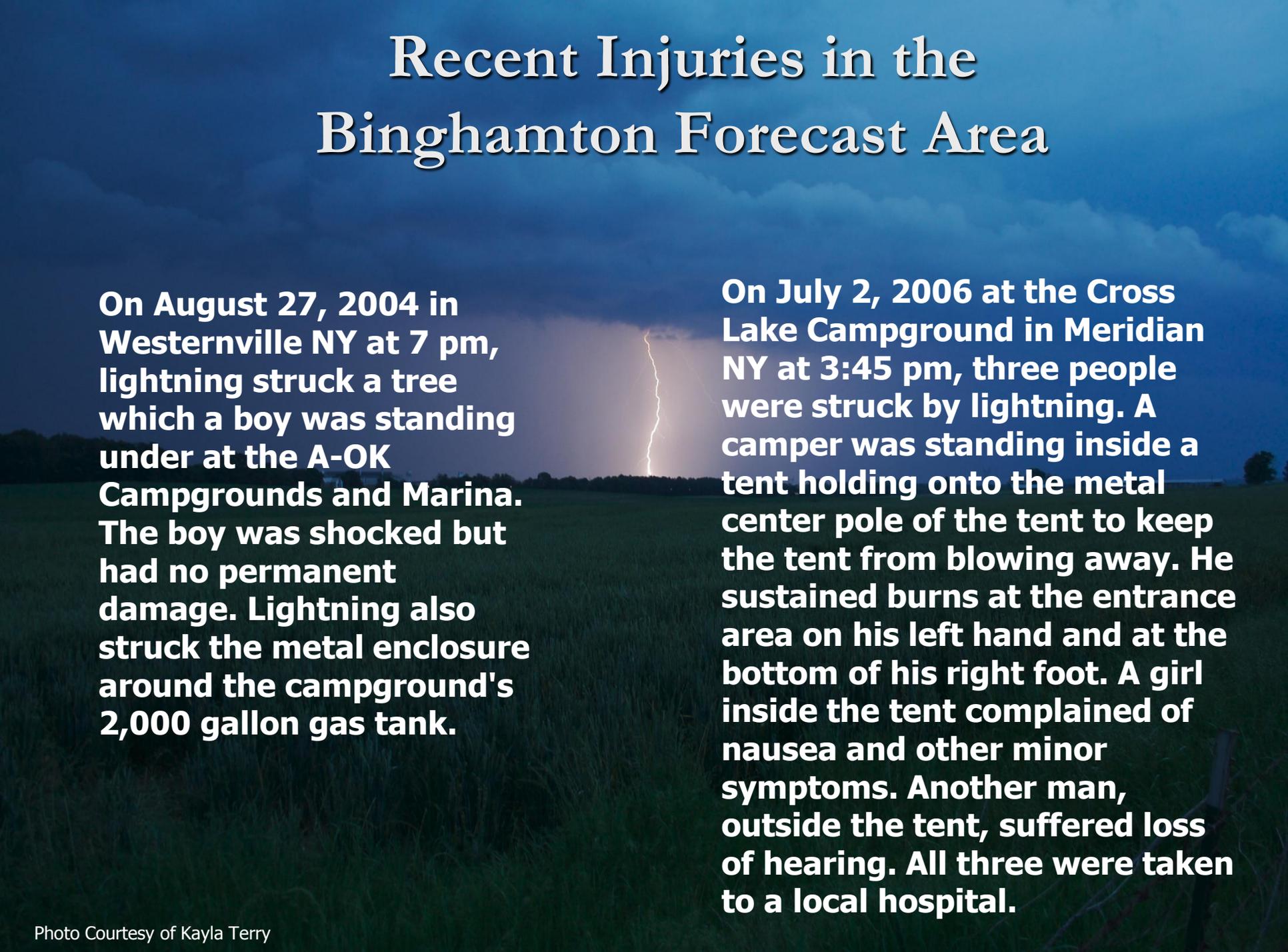


# Recent Deaths in the Binghamton Forecast Area

**On September 13, 2001  
in Springbrook Corners,  
PA (Lackawanna county)  
at 5:30 pm a man was  
struck and killed by  
lightning as he was  
cutting grass at a little  
league field during the  
onset of a thunderstorm.**

**On August 27, 2004 in  
Syracuse NY at 6:25 pm, a  
12-year-old boy was killed by  
lightning. His mother and a  
neighbor took shelter from a  
thunderstorm under a tree in  
Assumption Cemetery. Both  
the boy and his mother had  
bicycles with them. The  
neighbor was in a  
wheelchair. The mother and  
neighbor felt the lightning  
but were not injured.**

# Recent Injuries in the Binghamton Forecast Area



**On August 27, 2004 in Westernville NY at 7 pm, lightning struck a tree which a boy was standing under at the A-OK Campgrounds and Marina. The boy was shocked but had no permanent damage. Lightning also struck the metal enclosure around the campground's 2,000 gallon gas tank.**

**On July 2, 2006 at the Cross Lake Campground in Meridian NY at 3:45 pm, three people were struck by lightning. A camper was standing inside a tent holding onto the metal center pole of the tent to keep the tent from blowing away. He sustained burns at the entrance area on his left hand and at the bottom of his right foot. A girl inside the tent complained of nausea and other minor symptoms. Another man, outside the tent, suffered loss of hearing. All three were taken to a local hospital.**

# Recent Lightning Strikes in the Binghamton Forecast Area

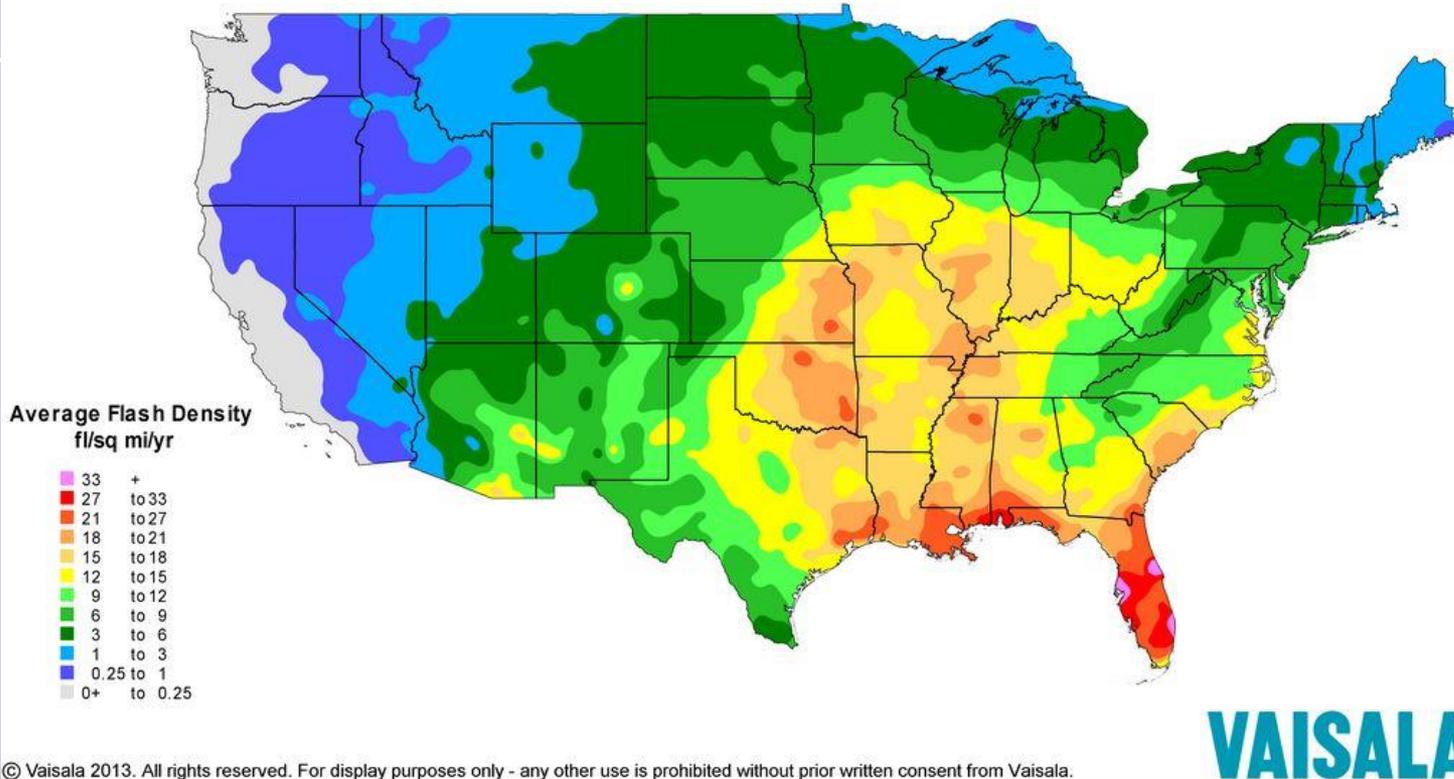
## Pennsylvania man survives two lightning strikes

- 
- First strike occurred on July 27, 1980
  - Lenox, PA – Susquehanna County PA
  - Driving a tractor-trailer
  - Antenna was struck by lightning
  - Left side of body was injured
  - Second strike occurred on July 27, 2007 – 17 years to the day of his first strike!
  - Hamlin, PA – Wayne County PA
  - Sought refuge under a shed before lightning struck the ground
  - Burned zipper off and burned pants pockets

# Lightning Distribution

Vaisala's National Lightning Detection Network® (NLDN®)

Cloud-to-Ground Lightning Incidence in the Continental U.S. (1997 - 2012)



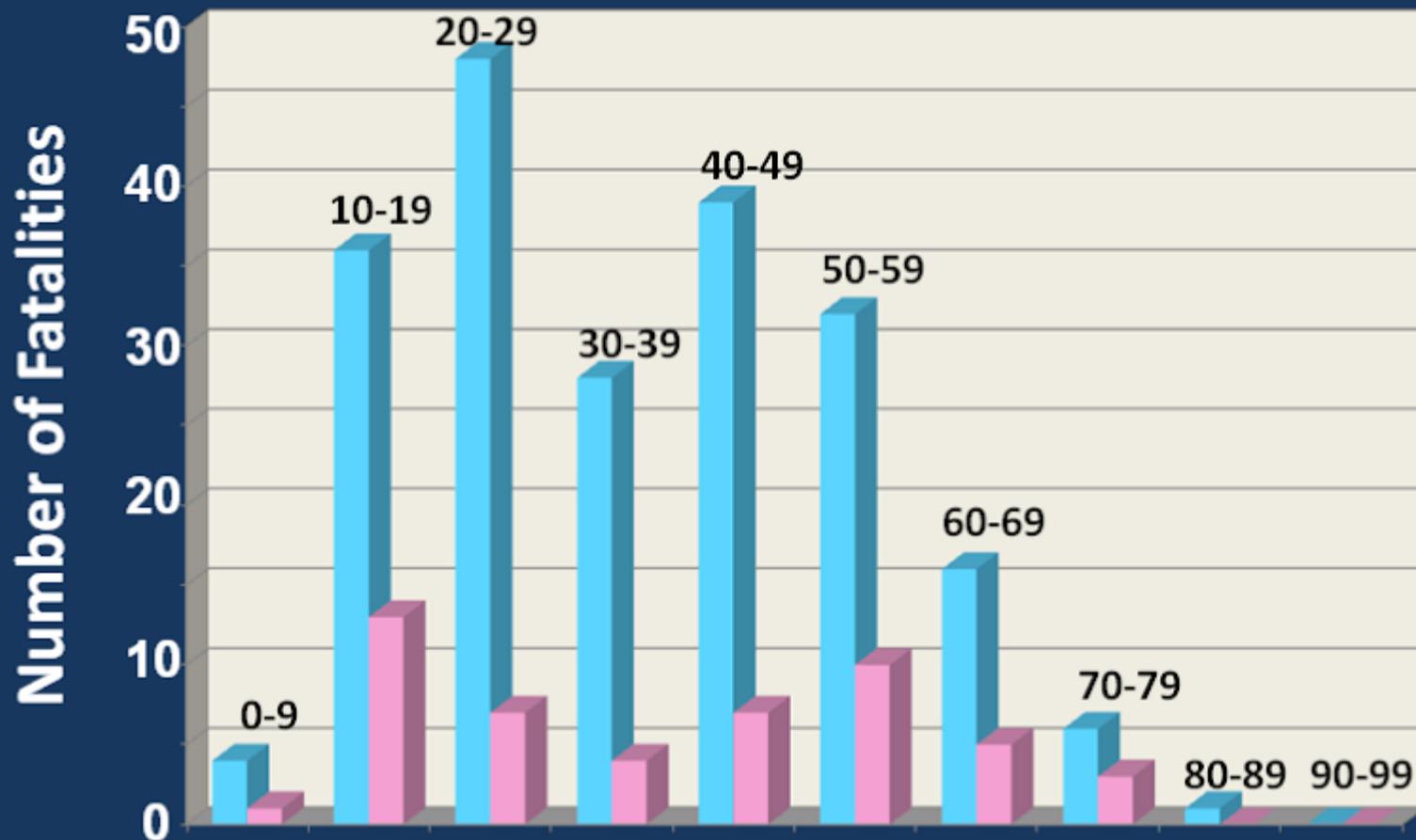
# Lightning's Impact

- For every person killed by lightning annually, 9 more are seriously injured.
- Lightning strike/electric shock injuries and symptoms can be permanent and severe.
- Survivor ailments range in severity from mild to extreme, with combinations of the following:
  - chronic fatigue, memory loss, headaches, irritability, loss of motor skills, radical personality changes, un-definable pain, uncontrollable muscle movement





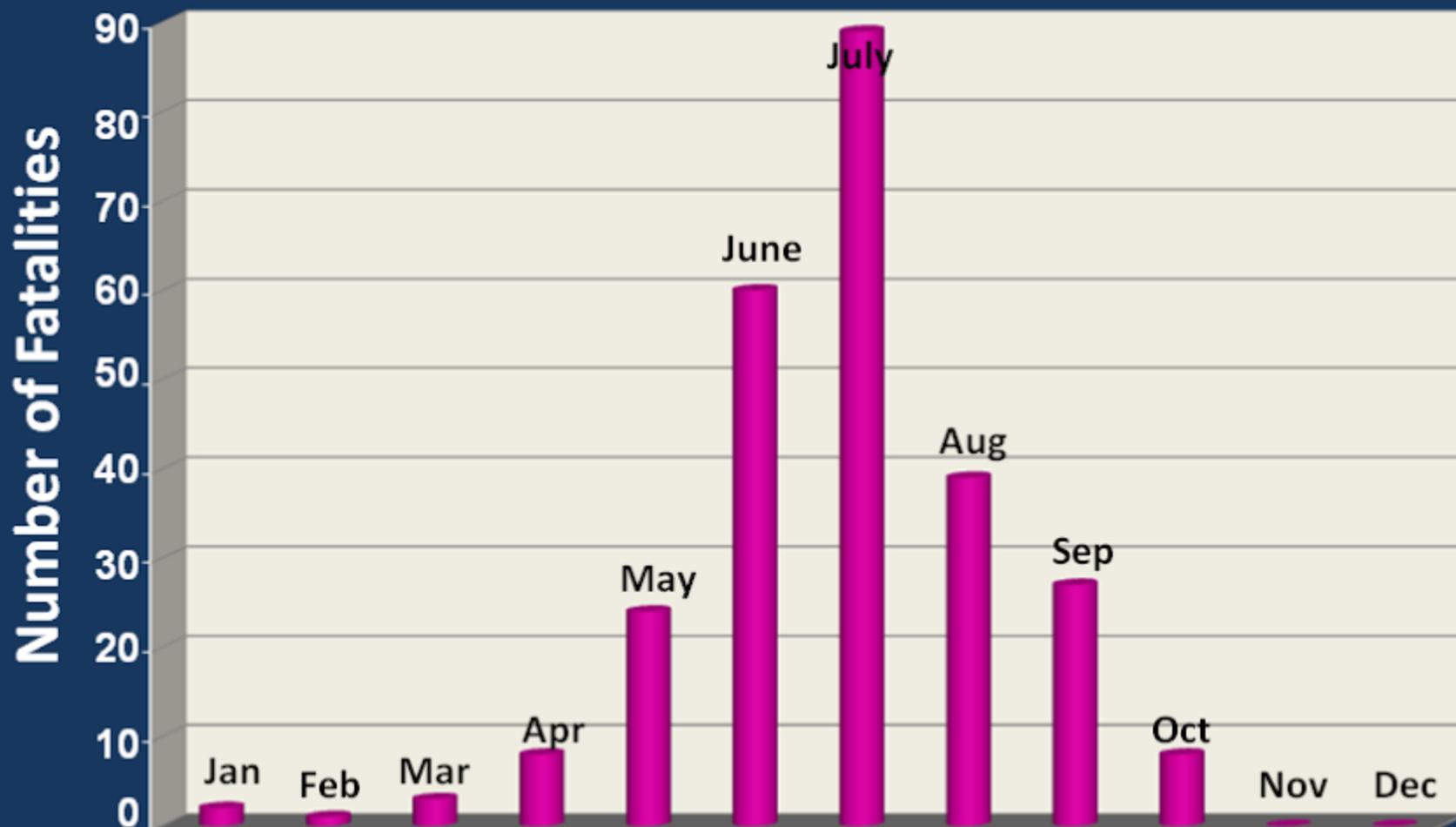
# Lightning Fatalities By Age and Gender



Based on 261 cases from 2006 through 2013



# Fatal Lightning Incidents By Month



Based on 261 cases from 2006 through 2013



# Lightning Fatalities

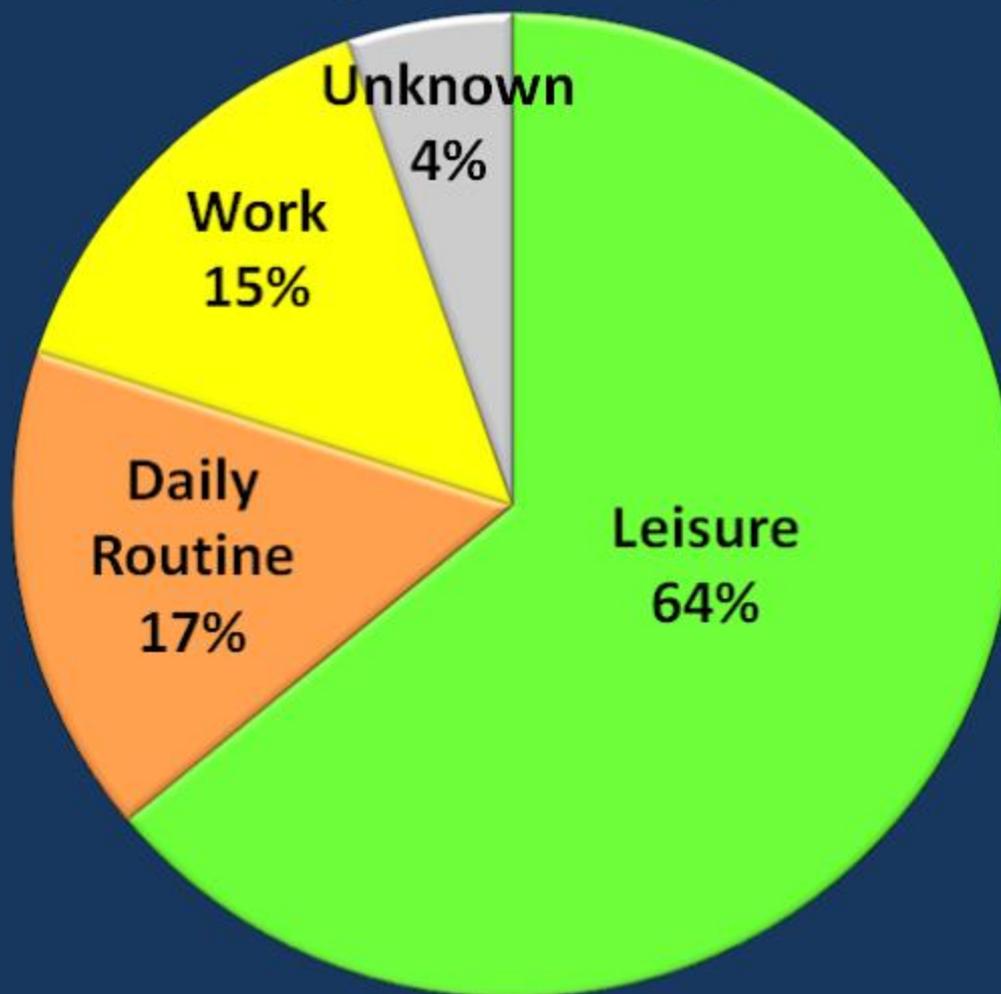
## Daily/Weekly Routine Activities



Based on 42 cases from 2006 through 2013



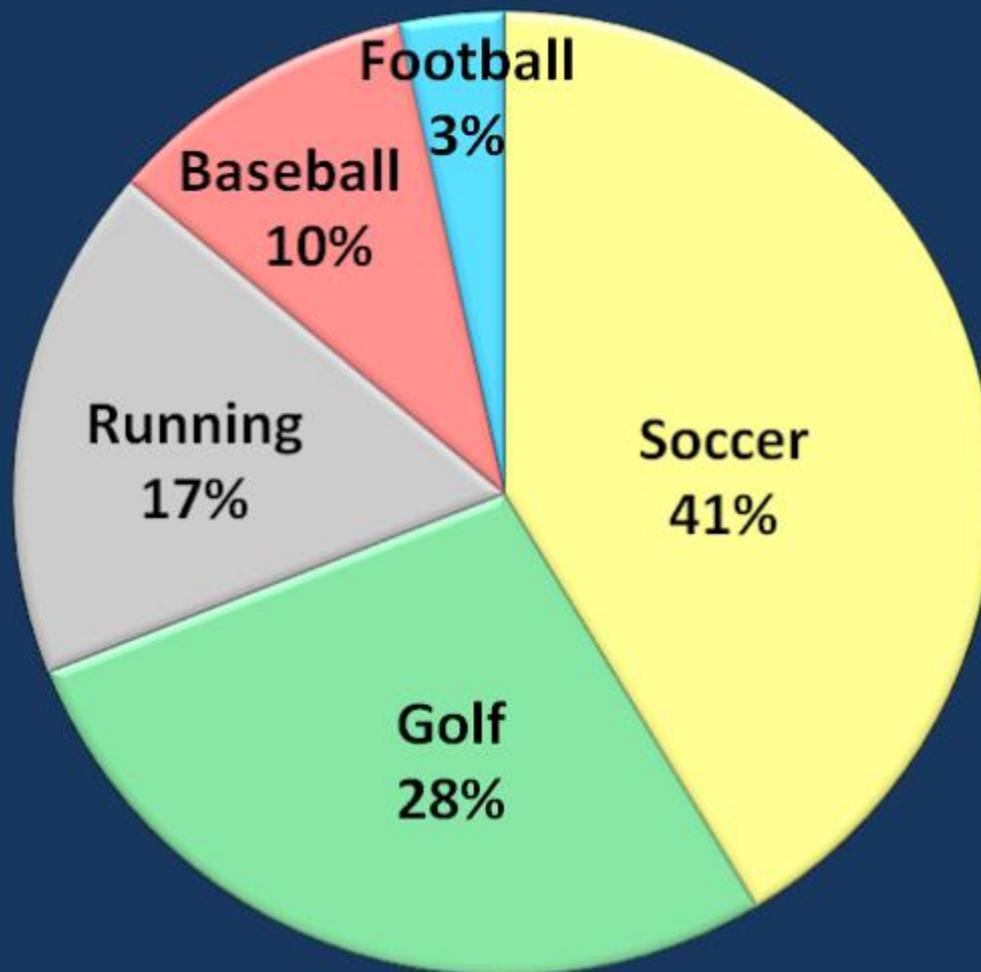
# Lightning Fatalities By Activity



Based on 261 cases from 2006 through 2013



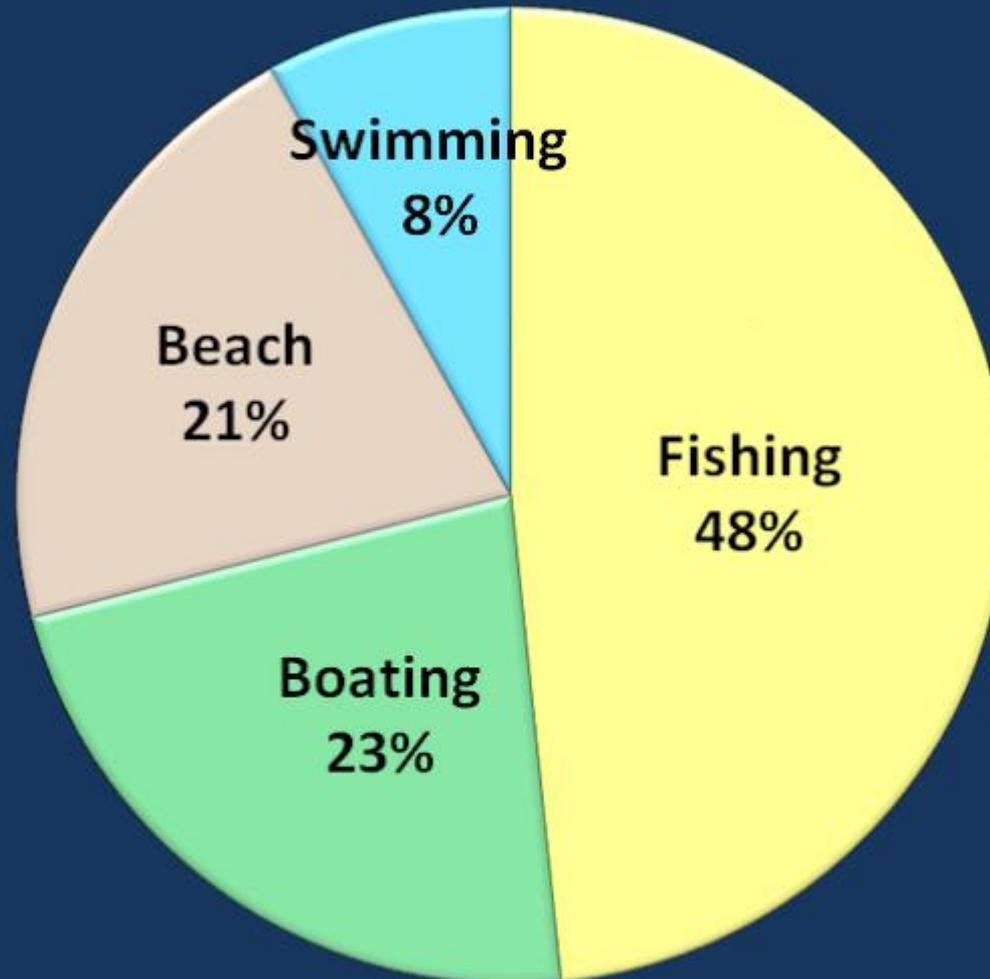
# Lightning Fatalities Sports-Related Activities



Based on 29 cases from 2006 through 2013



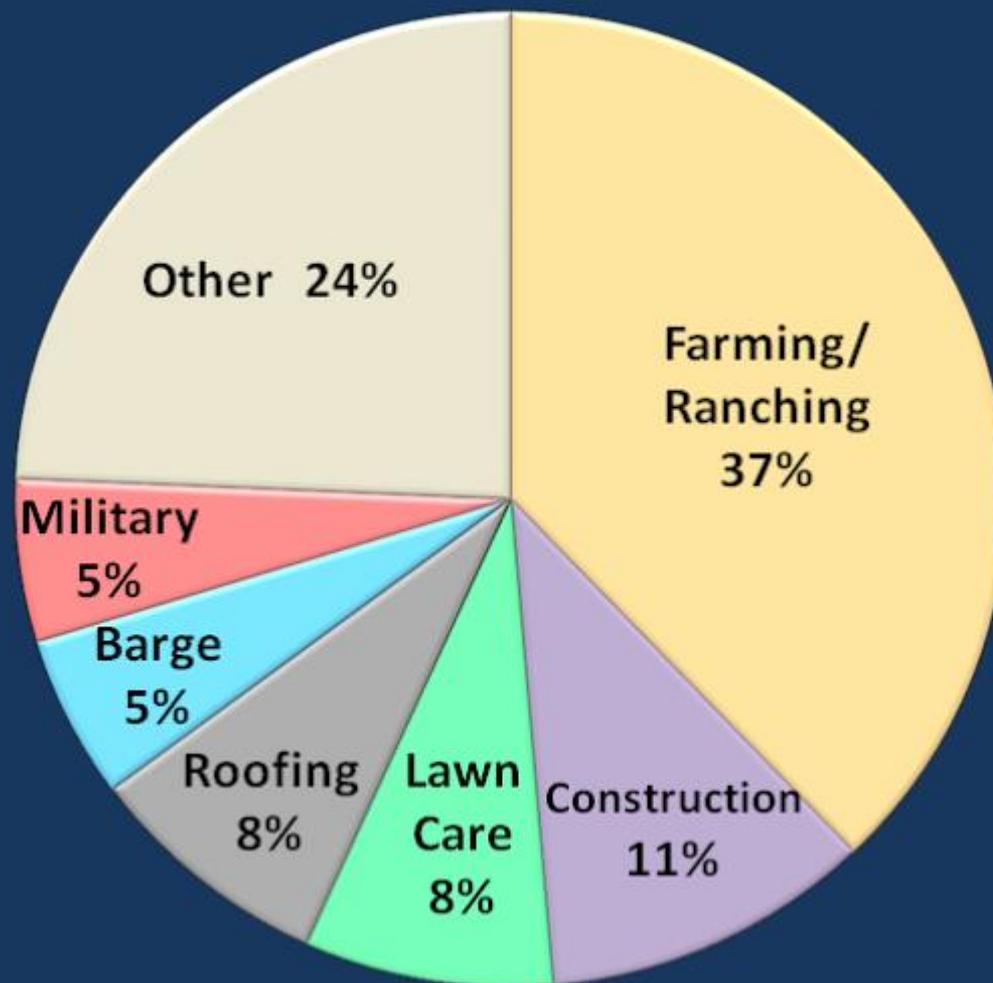
# Lightning Fatalities Water-Related Activities



Based on 62 cases from 2006 through 2013



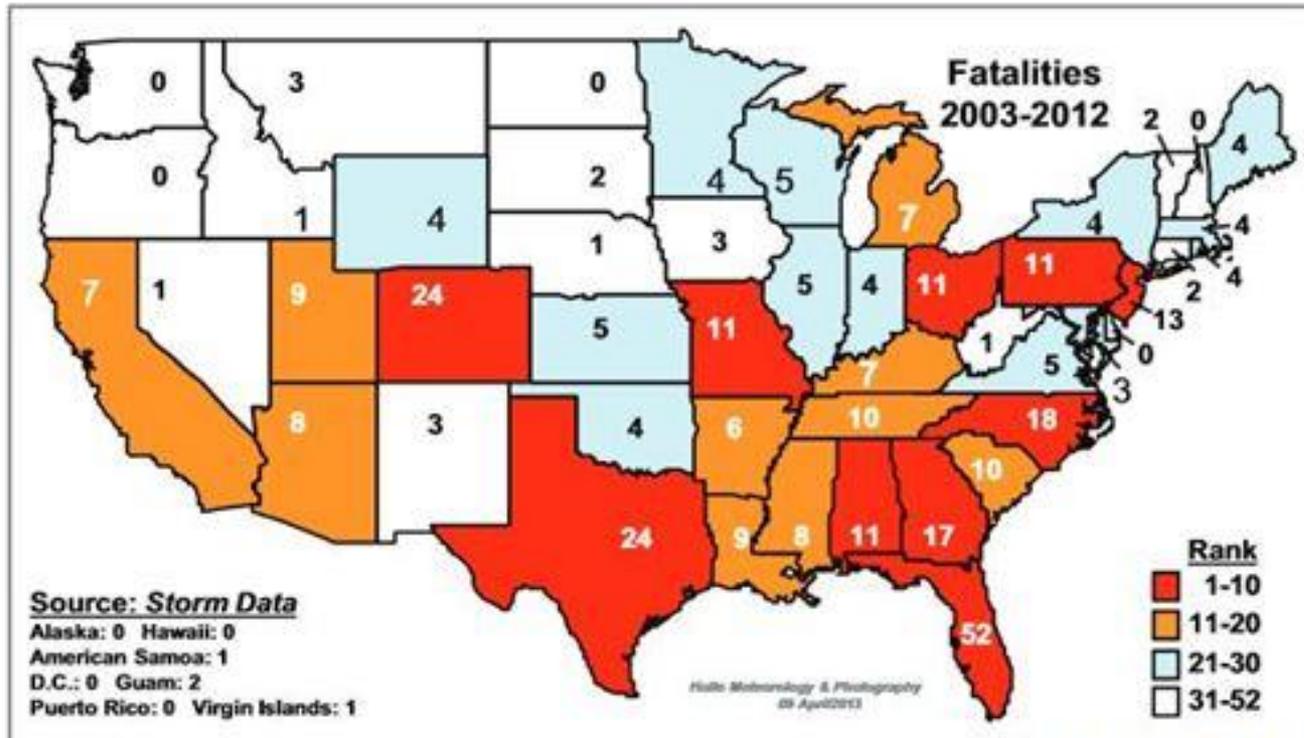
# Lightning Fatalities Work-Related Activities



Based on 38 cases from 2006 through 2013

# U.S. Lightning Facts

## Lightning Fatalities by State, 2003-2012

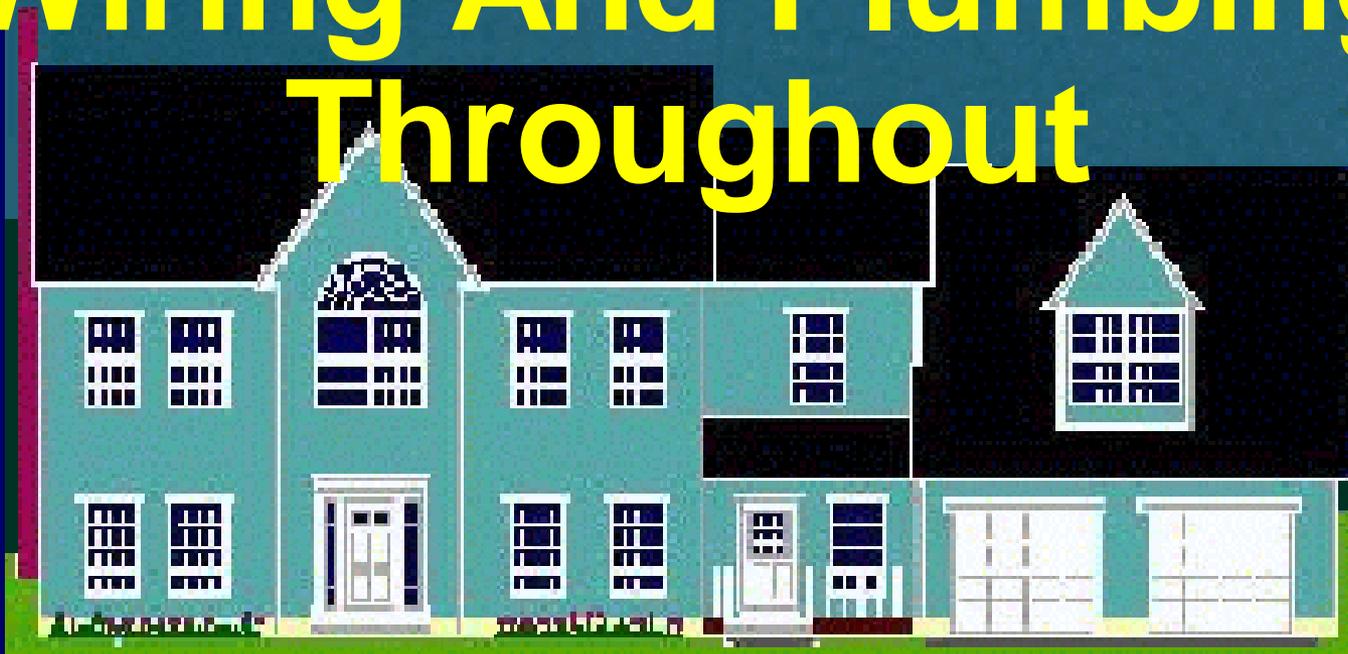


Courtesy of Vaisala



# SAFE SHELTERS

Substantial Buildings With  
Wiring And Plumbing  
Throughout



# SAFE SHELTERS

Schools Offer Good Protection



# SAFE SHELTERS

NO PLACE OUTSIDE  
IS SAFE!!!!

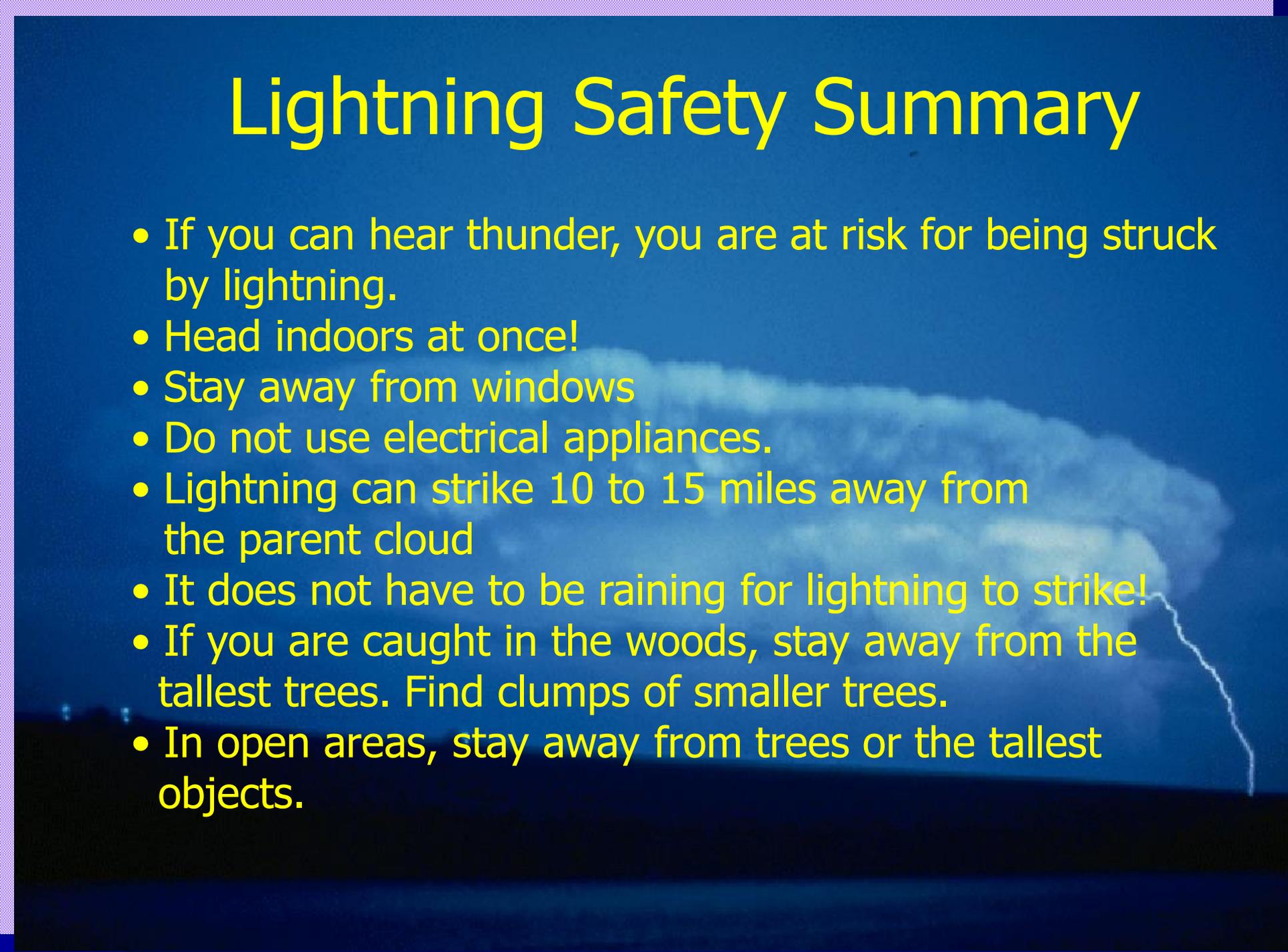


# If You Can't Get To A Substantial Shelter

A Hard-Topped Metal Vehicle With Closed Windows Will Provide Protection



# Lightning Safety Summary

- If you can hear thunder, you are at risk for being struck by lightning.
  - Head indoors at once!
  - Stay away from windows
  - Do not use electrical appliances.
  - Lightning can strike 10 to 15 miles away from the parent cloud
  - It does not have to be raining for lightning to strike!
  - If you are caught in the woods, stay away from the tallest trees. Find clumps of smaller trees.
  - In open areas, stay away from trees or the tallest objects.
- 

# REMEMBER

If you hear thunder,



then you are  
close enough to  
be struck by  
lightning.





# NWS Binghamton Contact

David Nicosia,  
Warning Coordination Meteorologist  
607-770-9531 x 223 (business hours)  
[david.nicosia@noaa.gov](mailto:david.nicosia@noaa.gov)

