Wind Damage

Damaging Winds Basics - from the National Severe Storms Laboratory (NSSL)

Read more about NSSL's research into damaging winds here.

What are damaging winds?

- Damaging winds are often called “straight-line” winds to differentiate the damage they cause from tornado damage. Strong thunderstorm winds can come from a number of different processes. Most thunderstorm winds that cause damage at the ground are a result of outflow generated by a thunderstorm downdraft. Damaging winds are classified as those exceeding 50-60 mph.

Are damaging winds really a big deal?

- Damage from severe thunderstorm winds account for half of all severe reports in the lower 48 states and is more common than damage from tornadoes. Wind speeds can reach up to 100 mph and can produce a damage path extending for hundreds of miles.

Who is at risk from damaging winds?

- Since most thunderstorms produce some straight-line winds as a result of outflow generated by the thunderstorm downdraft, anyone living in thunderstorm-prone areas of the world is at risk for experiencing this hazard.
- People living in mobile homes are especially at risk for injury and death. Even anchored mobile homes can be seriously damaged when winds gust over 80 mph.

Additional resources are available https://www.weather.gov/safety/wind.

Wind Safety Links

Federal Emergency Management Agency
Ready.gov
American Red Cross
NOAA Storm Prediction Center
NOAA National Hurricane Center
NWS Warnings and Forecasts