



Hurricane Preparedness Week 2012

Tuesday: Hurricane Hazards – Destructive Winds

High Winds: The intensity of a land-falling hurricane is expressed in terms of categories that relate wind speeds and potential damage. According to the Saffir-Simpson Hurricane Scale, a Category 1 hurricane has lighter winds compared to storms in higher categories. A Category 4 hurricane would have winds between 130 and 156 mph and, on the average, would usually be expected to cause 100 times the damage of the Category 1 storm. Depending on circumstances, less intense storms may still be strong enough to produce damage, particularly in areas that have not prepared in advance.

Tropical storm-force winds are strong enough to be dangerous to those caught in them. For this reason, emergency managers plan on having their evacuations complete and their personnel sheltered before the onset of tropical storm-force winds, not hurricane-force winds.

Hurricane-force winds can easily destroy poorly constructed buildings and mobile homes. Debris such as signs, roofing material, and small items left outside become flying missiles in hurricanes. Extensive damage to trees, towers, water and underground utility lines (from uprooted trees), and fallen poles cause considerable disruption.

High-rise buildings are also vulnerable to hurricane-force winds, particularly at the higher levels since wind speed tends to increase with height. Recent research suggests you should stay below the tenth floor, but still above any floors at risk for flooding

The strongest winds usually occur in the right side of the eyewall of the hurricane. Wind speed usually decreases significantly within 12 hours after landfall. Nonetheless, winds can stay above hurricane strength well inland. Hurricane Hugo (1989), for example, battered Charlotte, North Carolina (which is 175 miles inland) with gusts to nearly 100 mph.

HIGH WIND SAFETY ACTIONS - *as a hurricane approaches*

- Most mobile / manufactured homes are not built to withstand hurricane force winds. Residents of homes not meeting that level of safety should relocate to a nearby safer structure once local officials issue a hurricane evacuation order for their community.
- Once a hurricane warning is issued, install your window shutters or plywood panels.
- When a hurricane warning is issued for your community, secure or bring inside all lawn furniture and other outside objects that could become a projectile in high winds.
- Listen carefully for safety instructions from local officials, and go to your designated "Safe Room" when directed to do so.
- Monitor [NOAA Weather Radio](#).
- Do not leave your "Safe Room" until directed to do so by local officials, even if it appears that the winds calmed. Remember that there is little to no wind in the eye of a hurricane.