



Know your Risk: Water & Wind

Consider Your Threats

While hurricanes pose the greatest threat to life and property, tropical storms and tropical depressions also can be devastating. The primary hazards from tropical cyclones (which include tropical depressions, tropical storms, and hurricanes) are storm surge flooding, inland flooding from heavy rains, destructive winds, tornadoes, and high surf and rip currents.

- **Storm surge** is water that is pushed toward the shore by winds swirling around the storm, and historically has caused the largest loss of life in hurricanes. This rise in water level can cause severe flooding in coastal areas, which can submerge entire areas, cause structural damage to buildings, and wash out roads. Storm surge can travel several miles inland, especially along bays, rivers, and estuaries.
- **Flooding** from the extreme amounts of rain a hurricane can bring has also proven to be very deadly, both over an extended period of time as well as very short-term flash flooding. Homes and businesses could flood, and flooded roads could make travel and evacuations difficult, as well as being a potentially deadly hazard to those in vehicles or on foot. Floodwaters can also contain harmful bacteria, chemicals, wildlife and other dangerous objects. Extreme rain from hurricanes can even flood areas that aren't normally prone to flooding. Flooding can happen hundreds of miles inland, and can persist for several days after a storm.
- **Hurricane-force winds** can cause damage to homes and other buildings, ranging from moderate to catastrophic depending on both wind speed and structural integrity. Wind damage can lead to large areas with power and communications outages, as well as uproot trees and make roads impassable due to debris. Signs, roofing material, and other items left outside can become flying missiles during hurricanes. Mobile homes are especially vulnerable to wind damage.
- **Hurricanes and tropical storms** can also produce tornadoes. These tornadoes most often occur in thunderstorms embedded in rain bands well away from the center of the hurricane; however, they can also occur near the eyewall.
- **Waves** from distant storms can produce deadly rip currents and rough surf on beaches very far away. Good weather at the beach itself does NOT mean the ocean is safe. Even storms more than 1,000 miles away can cause impacts.

Resources:

- [Floodsmart.gov: Understanding Flood Zones](#)
- [NOAA's Coastal Flood Exposure Mapper](#)
- [NHC Storm Surge Hazard Maps](#)



National Oceanic and Atmospheric
Administration



Somerset County, Maryland
Department of Emergency Services