

Health Impacts of Hurricanes

More Than Just Property Damage

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2018 Hurricane Season Forecasts

- **Activity for 2018 is predicted to be similar in intensity to 2017.**
- **A total of 14 named storms, seven hurricanes and three major hurricanes are expected this season per the Colorado State University prediction center.**
- **Do not count on the weather getting the memo.**
- **Prepare for the worst, then you will only have GOOD surprises.**

Preparedness for 2018 Season

- **Do not rely on 120 hour warning model!**
- **Preparing self/family will enable you to prepare for your job.**
- **A direct storm impact is not required to have personal and professional impacts from a hurricane.**
- **Some of the worst historical damage is from slow moving or stalled tropical storms, not hurricanes.**

Medical Services Compromised

- **Dialysis clinics**
- **Oxygen concentrators**
- **Home IV therapy**
- **Power loss at medical service companies**
- **Hospitals have limited fuel storage for generators**
- **Extremely limited radio communications backup at medical facilities**
- **Loss of medical refrigeration starts clock ticking on medication shelf life at home, pharmacy, hospital, clinics**
- **Loss of security systems and lighting will require most facilities/stores to close**

Discussion

How have past hurricanes affected access to medical services for your clients?

Direct Citizen Impacts

- **Loss of home lighting and refrigeration**
- **Loss of news sources (radio, TV, internet)**
- **Outages will eventually impact landlines**
- **Loss of cell phone charging capability**
- **Loss of thermostability due to heating/air conditioning failure**
- **Many hotel companies have a policy to force evacuation if power is not available, to limit liability.**

Risk of Electric Shock

- **Fallen power lines**

- Stay clear of fallen power lines. Call the electric company to report them.
- Watch out for power lines overhead.

- **Flooded homes**

- Turn off power to the home if you can stand in a dry place to do it.
- Otherwise, have an electrician turn off power to the home.
- Never turn power on or off, or use an electric tool or appliance, while standing in water.

- **Water-damaged power tools**

- Never use an electrical device if it got wet.
- If it's still plugged in, turn off the power at the main breaker.
- Wait for an electrician to check the device before using it.

Discussion

Electric shock is also a risk for response workers. Please describe the advice you would give your employees and volunteers to avoid electrocution during post-hurricane response work.

Spoiled or Contaminated Food

- **Spoiled or contaminated food and water can make people sick.**
- **If they get sick, they may have limited access to medical care.**
- **Encourage people to do the following:**
 - Stockpile canned food ahead of time.
 - Keep food fresh.
 - Throw out spoiled food.
 - Clean off canned food.
 - Use bottled water if possible, boiled water if necessary, especially for infant formula. Only use treated water (disinfected or purified) if bottled and boiled water are not available.

Carbon Monoxide Poisoning

- **Carbon monoxide (CO) is an odorless, colorless gas that can cause sudden illness and death if inhaled.**
- **People might use generators and other power sources if their electricity is out.**
- **The use of alternative sources of fuel or electricity for heating or cooking can cause CO to build up in a home, garage, or camper and to poison the people and animals inside.**

Carbon Monoxide Poisoning: Advice for the Public

- **Never use gas or coal-burning equipment inside your home, basement, or garage. Keep it outside and at least 20 feet from any window, door, or vent.**
- **Use a battery-operated or battery backup CO detector any time you use a generator or anything else that burns fuel.**
- **Never run a car or truck inside a garage attached to your home, even with the garage door open.**
- **Never heat your home with a gas oven.**
- **If you have a carbon monoxide detector and it starts beeping, leave your home right away and call 911.**

Other Health Risks

- **Driving through flood waters**
- **Animals and pests**
- **Psychological harm**
- **Injuries during cleanup**
- **Mold**
- **Hyperthermia and hypothermia**

CDC Hurricane Resources

- <https://www.cdc.gov/disasters/hurricanes/>
- <https://www.nhc.noaa.gov/prepare/ready.php>
- <https://www.ready.gov/hurricanes>
- <http://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/hurricane>
- <http://spaghettimodels.com/>

For more information, contact NCEH/ATSDR
1-800-CDC-INFO (232-4636)

TTY: 1-888-232-6348 www.atsdr.cdc.gov www.cdc.gov

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry.

