Health Impacts of Hurricanes

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COMMUNICATING ABOUT HURRICANES – EXAMPLES FROM 2017 SEASON
2017 Hurricane Season At-A-Glance

- Unusually active hurricane season
  - Frequency and intensity of storms have been greater than usual
  - 7 of the 13 named storms this year developed into hurricanes
  - Just two more storms by end of 2017 would have put this year in the top 15 since 1851

- Hurricane Harvey hit the east coast of Texas as a Category 4 hurricane
- Hurricane Irma made landfall in the USVI as a Category 3 hurricane and passes north of Puerto Rico
- Hurricane Irma made landfall in Florida as a Category 3 hurricane
- Hurricane Maria made landfall in Puerto Rico and USVI as a Category 5 storm
- Hurricane Jose downgraded to a tropical storm but brought heavy winds to the coast of New England
2017 Hurricane Season – Major Impacts

- Drowning
- Carbon monoxide poisoning
- Displaced persons
- Power loss
- Contaminated drinking water
- Damaged/destroyed infrastructure
- Non-functional clinics and hospitals
- Affected medical and public health staff
- Mold in homes and buildings
Communication Channels

How do you get messages out with no internet and no power?

A scene of damage in St. Croix in October, 2017. The island suffered 100 percent power outages and extensive infrastructure damage due to back-to-back hurricanes Irma and Maria. Photo by Myron Douglas/CDC
CDC and USVI DOH collaborated to create a one-page flyer with priority health and safety information. With assistance of CDC Foundation, Office Max, USPS, and USPIS, the flyer was distributed to all 51,000 households and PO boxes in the territory.
USVI DOH Communications Director Nykole Tyson, right, shares health messages on Straight Talk with Redfield radio show, WVVI 93.5, with hosts Holland Redfield and Cassandra Dunn. Jonny Andia, Nathan Huebner and Vivi Siegel assist. Photo by Myron Douglas/CDC
Communication team member Myron Douglas, right, with USVI DOH epidemiologist Monifa Corillo with table of health information materials at Plessen Health Fair, St. Croix, USVI, Oct. 14, 2017. Photo by Vivi Siegel/CDC
Home improvement store mold cleanup display. These materials show people the equipment and supplies they need to safely clean mold.
Natural Disasters and Severe Weather

Hurricane Maria: How to Help Loved Ones in Puerto Rico and the US Virgin Islands

If you have friends, family, or other loved ones in Puerto Rico, the US Virgin Islands, or other hurricane-affected areas, you can help ensure they stay safe by sending them health and safety information. This toolkit offers different messages in both English and Spanish, you can send via text message, email, or social media. Even if you do not personally know anyone in the affected areas, you can still help spread these important messages.

Post on social media

Post these messages on Twitter or Facebook and tag your friends and family in Puerto Rico, the US Virgin Islands, or other areas affected by hurricanes.
Mold

https://www.youtube.com/watch?v=siaHy9yBuEA
Mental Health

Children may not say how they are feeling during a crisis.

Talk to them. Answer questions. Make sure they feel loved.

Call SAMHSA’s Disaster Counseling Helpline at 1-800-985-5990
Text “TalkWithUs” for English or “Hablamos” for Spanish to 66746

Water

Cómo desinfectar el agua

Después de un desastre natural, es posible que el agua no sea apta para el consumo.

Con un poco de cloro se puede hacer que el agua se pueda utilizar en forma segura.

Si el agua de la llave es clara:
- Use cloro en forma líquida de uso doméstico si es de 5-6%, agrega un poco menos de 1/8 de cucharadita (g) por galón (8 litros) de agua.
- Use cloro líquido de uso doméstico si es de 8.25%, agrega un poco menos de 1/4 de cucharadita (g) por galón (8 litros) de agua.
- Mezcle bien y espere al menos 30 minutos o más antes de usar el agua.

Si el agua de la llave es turbia:
- Use cloro en forma líquida de uso doméstico si es de 5-6%, agrega un poco menos de 1/4 de cucharadita (g) por galón (8 litros) de agua.
- Use cloro líquido de uso doméstico si es de 8.25%, agrega 1/2 cucharadita (g) por galón (8 litros) de agua.
- Mezcle bien y espere al menos 30 minutos o más antes de usar el agua.

Recuerde que puede ser necesario desinfectar los recipientes antes de utilizarlos para guardar el agua limpia:
1. Use cloro que no tenga otros colores (como limón).
2. Agregue 1 cucharadita (g) por galón (8 litros) de cloro líquido de uso doméstico en un recipiente de galón (8 litros), agítelo bien y deje reposar durante 1 hora.
3. Vierta la solución en un recipiente limpio, añada agua y agarre el recipiente, viértalo y déjelo reposar durante 24 horas.
4. Lave bien y enjuague con agua limpia el recipiente que se va a utilizar.
5. Cuando utilice cloro, abra puertas y ventanas para que el lugar se ventile.

Para obtener más información sobre cómo hacer que el agua sea segura después de un desastre natural, visite: www.cdc.gov/disasters/emergency/drinking-water-safe.html
Carbon Monoxide

**Portable back-up generators produce the poisonous gas carbon monoxide (CO), an odorless, colorless gas that kills without warning. Keep your family safe by following these steps:**

- **Never use a generator inside your home or garage,** even if doors and windows are open.
- **Only use generators outside,** more than 20 feet away from your home, doors, and windows.
- **Install battery-operated CO detectors near every sleeping area in your home.**
- **Check CO detectors regularly** to be sure they are functioning properly.

**Carbon Monoxide (CO) Poisoning**

- Can’t be seen
- Can’t be smelled
- Can’t be heard
- Can be stopped
Drowning

Your National Weather Service Says,

Turn Around Don’t Drown

Be safe when it comes to flooding. For important, life-saving safety rules, go to www.srh.weather.gov
Stressed? Sad? You are not alone.

Call 1-800-749-COPE
(1-800-749-2673)
1-800-273-TALK
(1-800-273-8255)
1-866-326-9393
Find missing friends and family

Some stress is normal. You may cry a lot, feel cranky or frustrated, not think clearly, have trouble sleeping or feel tired all the time.
You have family and friends. You can help each other through this. Watch for friends and family who seem very sad. Let them know you care.
Ask them to get help.

¿Estresado? ¿Triste? Usted no está solo.

1-800-749-COPE
(1-800-749-2673)
1-800-273-TALK
(1-800-273-8255)
1-866-326-9393
Para buscar amigos y familiares perdidos

Es normal sentir un poco de estrés. Puede que lløre mucho, esté malhumorado o se sienta frustrado, no logre tener las ideas claras, tenga problemas para dormir o se sienta siempre cansado.
Usted tiene a su familia y a sus amigos. Pueden salir de esta situación si se ayudan el uno al otro. Esté pendiente de aquellos amigos o familiares que parecen estar muy tristes. Hágalos saber que quiere ayudarlos. Sugéreales que busquen ayuda.
COORDINATING MESSAGING
Phase-Based Messaging

- Developed during response to Hurricane Katrina and used since
- Messages are planned in advance to anticipate and meet needs at different stages of a response
- Uses risk communication principles
- Adaptable as needed
# Phase-Based Messages for a Hurricane

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<th>Phase</th>
<th>Readiness and preparation</th>
<th>Returning home</th>
<th>Environmental hazards</th>
<th>Short-term recovery</th>
<th>Long-term recovery and resilience</th>
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<td>Phase 1</td>
<td>Immediately preceding landfall – 24 hrs post-storm</td>
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<td>• Vector control</td>
<td>• Coping with trauma, Mold</td>
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<td>Phase 2</td>
<td>1-3 days post-storm</td>
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<td>Phase 3</td>
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<td>• Medication storage guidance</td>
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<td>Phase 5</td>
<td>1 month post-storm, later</td>
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<td></td>
<td>• Coping with trauma</td>
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</tr>
</tbody>
</table>
Coordinating Phase-Based Messaging

- Clear and share in advance with all relevant organizations
- Allow suggestions and comments – iron out any disagreements
- Decide who leads on each type of message
- During the response, stay in sync through constant contact
CDC Hurricane Resources

**Hurricanes:**

- Before a Hurricane: [https://www.cdc.gov/disasters/hurricanes/before.html](https://www.cdc.gov/disasters/hurricanes/before.html)
- After a Hurricane: [https://www.cdc.gov/disasters/hurricanes/after.html](https://www.cdc.gov/disasters/hurricanes/after.html)
- Information for Professionals and Response Workers: [https://www.cdc.gov/disasters/hurricanes/info-hcp-workers.html](https://www.cdc.gov/disasters/hurricanes/info-hcp-workers.html)
- Public Service Announcements: [https://www.cdc.gov/disasters/hurricanes/psa.html](https://www.cdc.gov/disasters/hurricanes/psa.html)
- How to help loved ones: [https://www.cdc.gov/disasters/hurricanes/diaspora_toolkit.html](https://www.cdc.gov/disasters/hurricanes/diaspora_toolkit.html)

**Flooding:**

- Key Facts About Flood Readiness: [https://www.cdc.gov/disasters/floods/readiness.html](https://www.cdc.gov/disasters/floods/readiness.html)
- Worker Safety: [https://www.cdc.gov/disasters/floods/workersafety.html](https://www.cdc.gov/disasters/floods/workersafety.html)