The National Oceanic and Atmospheric Administration (NOAA) originally predicted that June through November 2020 would be a busier than average Atlantic hurricane season, with 13 to 19 storms predicted. Six to 10 storms are predicted to reach hurricane force. Three to six of these storms are expected to become Category 3–Category 5 major hurricanes. In early August, NOAA updated the 2020 hurricane forecast to "extremely active." They are now predicting 19 to 25 storms, with 7 to 11 becoming hurricanes. Until now, NOAA has never predicted up to 25 storms in a season.

Additionally, summertime heat and drought conditions heighten wildfire risk in various U.S. locations.

Concurrently, coronavirus cases are rising across the country, necessitating public health measures, such as social distancing, sanitizing/disinfecting and mask-wearing. Adjustments in disaster planning and response will need to accommodate these protocols.

The 2020 disaster season will require alterations in readiness practices, such as packing additional personal protective equipment (PPE) in disaster kits, preparing for health screening protocols at shelters and planning multiple evacuation routes.

Cities are exploring alternative evacuee meal planning, sheltering, and transportation arrangements to accommodate social distancing protocols.

Consumers are not the only group affected by the impact of COVID-19 and natural disasters. Local governments are adapting their disaster response strategies, while disaster relief organizations, city firefighters and the Federal Emergency Management Agency (FEMA) are working with reduced labor forces during an extraordinary crisis.
Academic Articles

- **Disaster Resiliency of U.S. Local Governments: Insights to Strengthen Local Response and Recovery from the COVID-19 Pandemic (Public Administration Review, July/August 2020)**
  - Local government officials are innovating “on the fly,” reorganizing, repurposing and re-budgeting, while adapting public communication strategies.
  - Establishing key relationships with local, state and federal agencies before a crisis strikes is crucial to efficient disaster management planning. This can help save time and streamline communications when an event occurs.
  - The pandemic has highlighted fiscal disparities and social inequities among governments of various sizes, especially smaller ones with limited resources.

  - There are several existing vulnerabilities in the public health infrastructure that may hinder the ability to respond effectively to disasters amid the COVID-19 pandemic. These include relying on outdated technologies for data collection and analysis, a shrinking public health work force, and resistance to collaboration and data sharing with public health departments in other countries.

Government Agency Publications

- **COVID-19 Pandemic Operational Guidance for the 2020 Hurricane Season (FEMA, May 2020)**
  - To maintain safe levels of social distancing, FEMA suggests local and state governments use non-congregate sheltering (locations where each individual or household has private living spaces) for evacuees. Hotels, motels and dormitories are considered appropriate non-congregate shelter areas.
  - FEMA is working with local and state governments to: make sure adequate cleaning/disinfection supplies are available at shelters; ensure sufficient PPE equipment is available for staff and evacuees; develop strategies for intake health screenings; and adjust meal planning (i.e., individual meals instead of buffets).

- **COVID-19: FEMA’s Role in the Responses and Related Challenges (U.S. Government Accountability Office [GAO], July 14, 2020)**
  - During the pandemic, 57 major disaster declarations were simultaneously issued for all U.S. states, the District of Columbia and U.S. territories—the first time in history this has occurred.
  - GAO reported on FEMA and other disaster management staffing shortages in its May 4, 2020 report. The large numbers of declared coronavirus disaster areas combined with the hurricane and wildfire seasons will prove challenging to manage with a smaller workforce.
News Highlights

• COVID-19 Adds New Layer to Hurricane Preparedness Planning (June 25, 2020, Northwest Florida Daily News)
  – Capacity limits may be enforced at local shelters to maintain physical distancing.
  – Evacuating before a hurricane hits is the best strategy.
  – Advance preparation is critical. In addition to other emergency supplies, residents should prepare disaster kits with at least two face masks per person, hand sanitizer and soap. Prepare kits well in advance of a weather event, and have a plan for pets.

• Hurricane Hanna Hits Texas Region Struggling with Coronavirus (July 26, 2020, The New York Times)
  – In San Antonio, emergency management officials are using Freeman Coliseum, an event venue used to host rodeos and concerts, as a reception center for evacuees to pick up hotel vouchers.
  – In Webb County, which serves as an evacuation area for people fleeing the Texas coastlines, officials will initiate health protocols for evacuees, including temperature checks and separating those displaying virus symptoms from those who do not.

• This Disaster Season, ‘Everything is Complicated by COVID-19’ (June 21, 2020, The Daily News)
  – Floridians may use an app to find available hotel rooms instead of going to storm shelters, where social distancing is more challenging to maintain. College dormitories may serve as alternative shelters. California, Hawaii and Louisiana officials are also investigating sheltering options.
  – Florida officials are exploring alternatives to bus evacuation transportation options for residents with limited resources, including prepaid fuel cards or using ride-sharing services such as Uber.
  – Evacuees will receive prepackaged individual meals instead of dining buffet-style.

• Prepare Now for Active Hurricane Season Complicated by Pandemic (June 12, 2020, Florida Times-Union)
  – According to an AAA survey, nearly one-third of Floridians (31%) are more concerned about this hurricane season; 42% say they are less likely to evacuate this year for fear of the coronavirus.
  – The pandemic is straining federal and state government resources. Residents should take precautions now for hurricanes/flooding, including purchasing flood insurance, preparing evacuation routes, stocking a disaster kit and conducting a home inventory for insurance purposes.

• Survey Reveals COVID-19 Effect on Hurricane Readiness, Experts Offer Virtual Prep Options as June 1 Nears (April 27, 2020, Federal Alliance for Safe Homes [FLASH])
  – FLASH commissioned a survey of 500 residents in 10 hurricane-prone states to gauge consumer attitudes as they balance Centers for Disease Control and Prevention (CDC) COVID guidelines with the need to prepare before the beginning of hurricane season.
  – Key findings include:
  • A 7% increase in those who intend to prepare in 2020 vs. 2019 (59% vs. 52%).
  • 66% report that they are more likely to prepare in 2020 due to COVID-19.
• 57% of respondents are motivated to prepare because of COVID-19 social distancing protocols.
• Other recurring themes in the survey included affordability, supply availability and time to prepare.

• Technology Will Drive 2020 Hurricane Readiness and Response (July 14, 2020, GCN.com)
  – To help prevent the spread of COVID-19, agencies have hastened their migration to cloud-based computer-aided dispatch or backup computer-aided design (CAD) systems to minimize the amount of people involved in emergency response.
  – CAD systems allow non-essential employees to support recovery efforts from remote locations. This can include command center software, mounted video cameras and drones.

• Temperature Checks and Hotels: Newsom Details New Precautions for Wildfire Evacuations (July 9, 2020, Los Angeles Times)
  – Evacuation protocols for California wildfires will include health screenings upon entry to a shelter, cleaning staff, prepackaged meals, separation of sick evacuees, and the presence of medical and mental health professionals at shelter sites (which could include hotels, college dorms, Airbnb homes, fairgrounds and campgrounds).
  – Governor Gavin Newsom authorized $72.4 million in emergency wildfire funds to hire 858 more firefighters and six California Conservation Corps (CCC) crews.
  – Firefighters will follow social distancing protocols and alternate shifts to reduce the chance of infection.

• Emergency Managers Working Nonstop to Prep Gulf Coast for Hurricanes Amid Coronavirus (May 13, 2020, Sun Herald)
  – Shelters are often located in schools or civic centers, but more spaces will need to open to accommodate physical distancing. One Florida county usually opens eight shelters but will need to open 29 to house evacuees safely.
  – New Orleans emergency staff will conduct health screenings on people waiting for public transportation during a disaster, which will require earlier evacuation issuances.
  – Emergency management employees are under pressure as they coordinate multiple disaster tasks compounded by COVID-19 concerns, such as distributing PPE, coordinating mobile testing centers, checking local food pantry stocks and sharing COVID-19 information on social media. The American Red Cross is also preparing for a shortage in volunteers, who are often older and more susceptible to the coronavirus.

• House Leaders Urge White House to Enhance Disaster Preparedness (July 20, 2020, Transport Topics)
  – Legislators claim that the government must guarantee residents and emergency workers that it can distribute supplies and PPE without depleting supplies needed by the medical sector for COVID-19.
  – The pandemic has already forced state officials to request assistance, and natural disasters that stop freight and transportation typically lead to a surge in PPE needs.
• **A Hurricane During the Pandemic Would be Bad. The Economic Crisis Will Make Things Worse** (May 29, 2020, Tampa Bay Times)
  - The economic crisis caused by the COVID-19 pandemic is making hurricane prep difficult for those impacted. Record unemployment and slow distribution of unemployment benefits will leave people without adequate funds to buy supplies to last the recommended seven days. Consumers may also be unable to prepare their homes for potential storm damage.
  - Emergency officials are asking residents who can avoid going to a shelter while staying safe at home or with others to do so to avoid overcrowding shelters.

• **Disaster Season Is Upon Us. The Pandemic Changes Everything** (May 26, 2020, The Washington Post)
  - The country is not prepared to handle a natural disaster and a pandemic at the same time. Public health departments and hospital disaster preparedness programs have been chronically underfunded for the past decade, and recently, the federally maintained stockpile of emergency equipment and supplies failed to meet the high demand of the pandemic.
  - Emergency evacuation and shelters contradict pandemic infection control measures. Michigan evacuees from a dam break opted to sleep in their cars instead of emergency shelters.
  - State and local governments have stepped up to cover a lack of leadership and direction from the federal government. The pandemic has highlighted a need for structural reform for emergency response agencies and disaster recovery.
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| CT    | Yes                    | Press Release | Preparing for Hurricane Season During a Pandemic: What’s in Your ‘Go-Bag’? (June 5, 2020) | • Keep a list of shelters because some are not open.  
• Pack masks and hand sanitizers. |
| DC    | Yes                    | Press Release | 2020 Hurricane Season Preparedness | • Do not let COVID-19 stop you from seeking shelter.  
• Add face coverings and disinfectants to your kit. |
| MD    | Yes                    | Press Release | Don’t wait, Prepare Now for Hurricane Season (June 1, 2020) | • Find alternative shelter plans in case of evacuation since some shelters may be closed. |
| MS    | Yes                    | Press Release | Don’t wait, Prepare Now for Hurricane Season (May 4, 2020) | • Add PPE (masks, sanitizer) to your “Go Bag.”  
• Plan an evacuation strategy (“Storm shelters are practicing social distancing”). |
| SC    | Yes                    | Press Release | SCDOI Helps Consumers Prepare with Free Emergency Starter Kits (June 20, 2020) | • In partnership with Home Depot, the South Carolina Department of Insurance (SCDOI) gave out 200 free starter emergency kits, which included pandemic PPE gear such as masks, sanitizer and gloves. |
| VA    | Yes                    | Press Release | Virginia SCC’s Bureau of Insurance: Don’t Wait to Prepare for Hurricane Season (May 26, 2020) | • Anticipate complications stemming from the COVID-19 pandemic, including emergency shelter shut-downs, travel restrictions, face shield requirements, a scarcity of emergency supplies, social distancing recommendations and more. |
Appendix A

3. Coronavirus Complicates Efforts to Fight California Wildfires (July 14, 2020, The San Diego Union-Tribune)
4. COVID-19 Adds New Layer to Hurricane Planning (June 25, 2020, nwfdailynews.com)
5. COVID-19 Clouds Preparation for Incoming Hurricane Season (May 6, 2020, Victoria Advocate)
8. Emergency Managers Working Nonstop to Prepare Gulf Coast for Hurricanes Amid Coronavirus (May 13, 2020, Sun Herald)
9. Here’s How to Get Ready for Hurricane Season (June 4, 2020, Houston Chronicle)
11. Hurricane Preparedness Meets Coronavirus Caution as Cristobal Bears Down (June 6, 2020, The Washington Post)
12. Imagine Hurricane Katrina During a Pandemic. The U.S. Needs to Prepare for That – Now (May 27, 2020, Vox)
15. Pandemic Adds Another Hazard for California Officials’ Wildfire Preparations (July 14, 2020, SNL Insurance Daily)
16. Prepare Now for Active Hurricane Season Affected by Pandemic (June 12, 2020, insurancenewsnet.com)
17. Preparing for Hurricanes During the COVID-19 Pandemic (Centers for Disease Control & Prevention)
18. Technology Will Drive 2020 Hurricane Readiness and Response (July 14, 2020, GCN.com)
20. They Were Waiting for the Big One. Then the Coronavirus Arrived (April 15, 2020, MIT Technology Review)
21. This Disaster Season, ‘Everything is Complicated by COVID-19’ (May 28, 2020, Stateline.org)
22. This Hurricane Season is Expected to be Busy. How COVID-19 Is Changing Preparation (July 6, 2020, PBS.org)
23. What Could Happen If the Pandemic and a Major Hurricane Collide? (July 23, 2020, Northcarolinahealthnews.org)