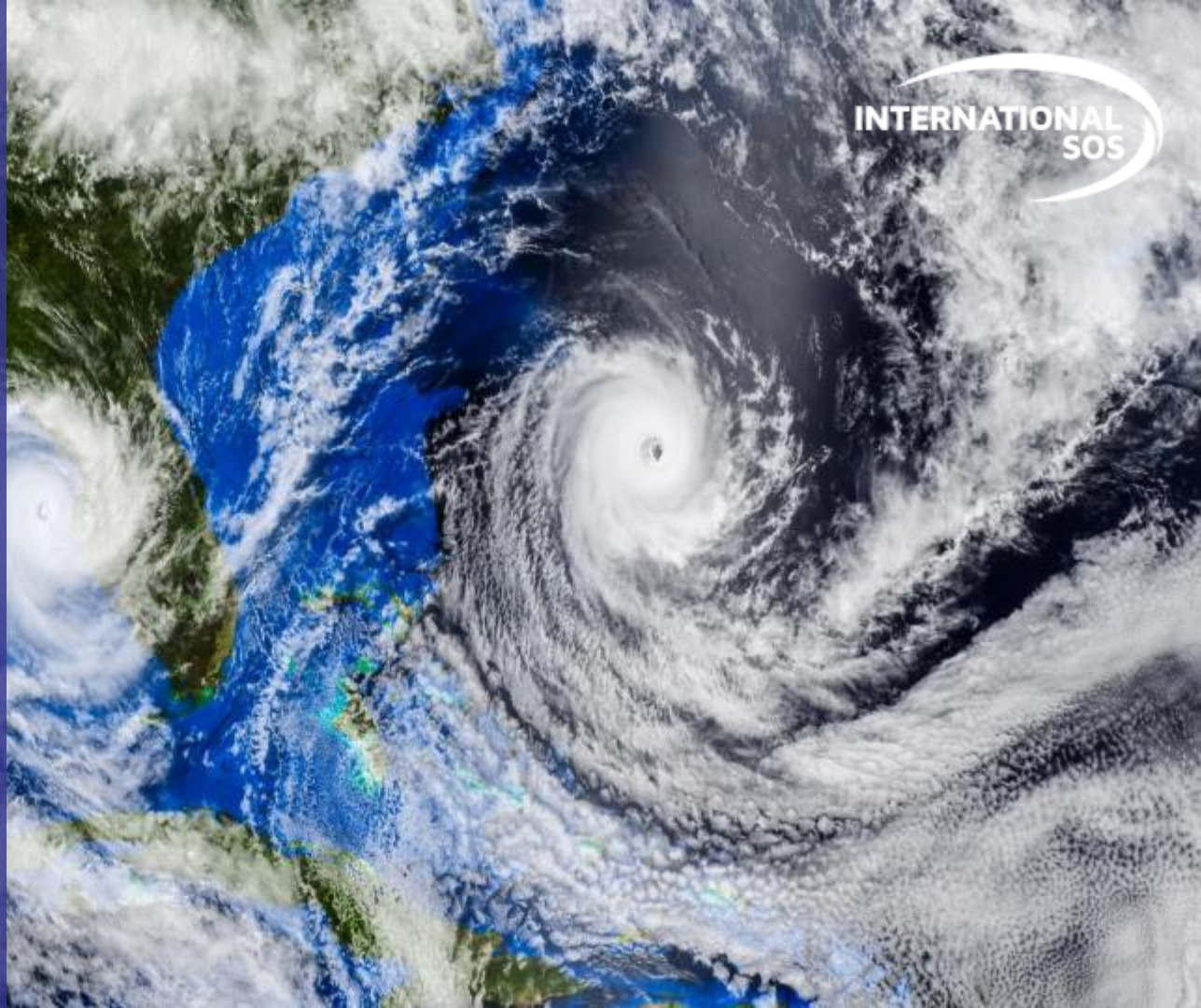
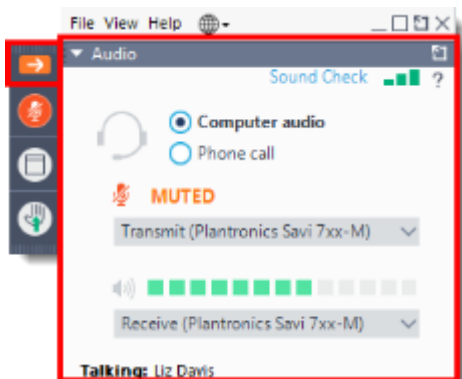


PREPARING & RESPONDING TO A HURRICANE DURING COVID-19

September 17, 2020



GOTOWEBINAR HOUSEKEEPING: ATTENDEE PARTICIPATION



Your Participation

Open and close your control panel

Join audio:

- Choose **Mic & Speakers** to use VoIP
- Choose **Telephone** and dial using the information provided

Submit your questions using the **questions** panel, we will answer as time allows.

Note: Today's presentation is being recorded and will be provided via email.

SPEAKERS



JEREMY PROUT

Regional Security Director
International SOS



JOSH DOZOR

General Manager, Assistance
Operations, Americas
International SOS



JEFFREY SHAMAN, PHD

Professor Environmental Health
Sciences
Director, of Climate and Health
Program
Columbia University

AGENDA



- New 2020 Hurricane Season Forecast
- COVID-19 Considerations
- Study Insights
- Support from International SOS

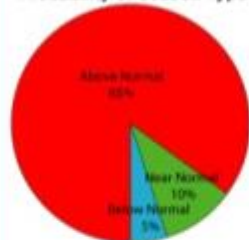
2020 HURRICANE FORECAST



NOAA's Updated 2020 Atlantic Hurricane Season Outlook

Updated Outlook

Above-Normal to Extremely Active
Probability of Season Type



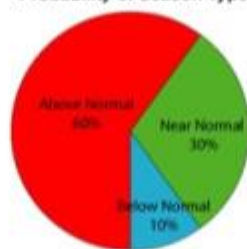
70% Probability For Each Range

August Update

Named Storms	19-25
Hurricanes	7-11
Major Hurricanes	3-6
ACE (% median)	140%-230%

Outlook Issued 21 May

Above-Normal Activity Most Likely
Probability of Season Type



70% Probability For Each Range

May Outlook

Named Storms	13-19
Hurricanes	6-10
Major Hurricanes	3-6
ACE (% median)	110%-190%

1981-2010 Averages

Named Storms	12
Hurricanes	6
Major Hurricanes	3
ACE (% median)	100%

(Left) An above-normal Atlantic hurricane season is now very likely (85% chance), and the potential for an extremely active season (ACE $\geq 165\%$ of median) has increased from the May outlook (Right)

STATUS



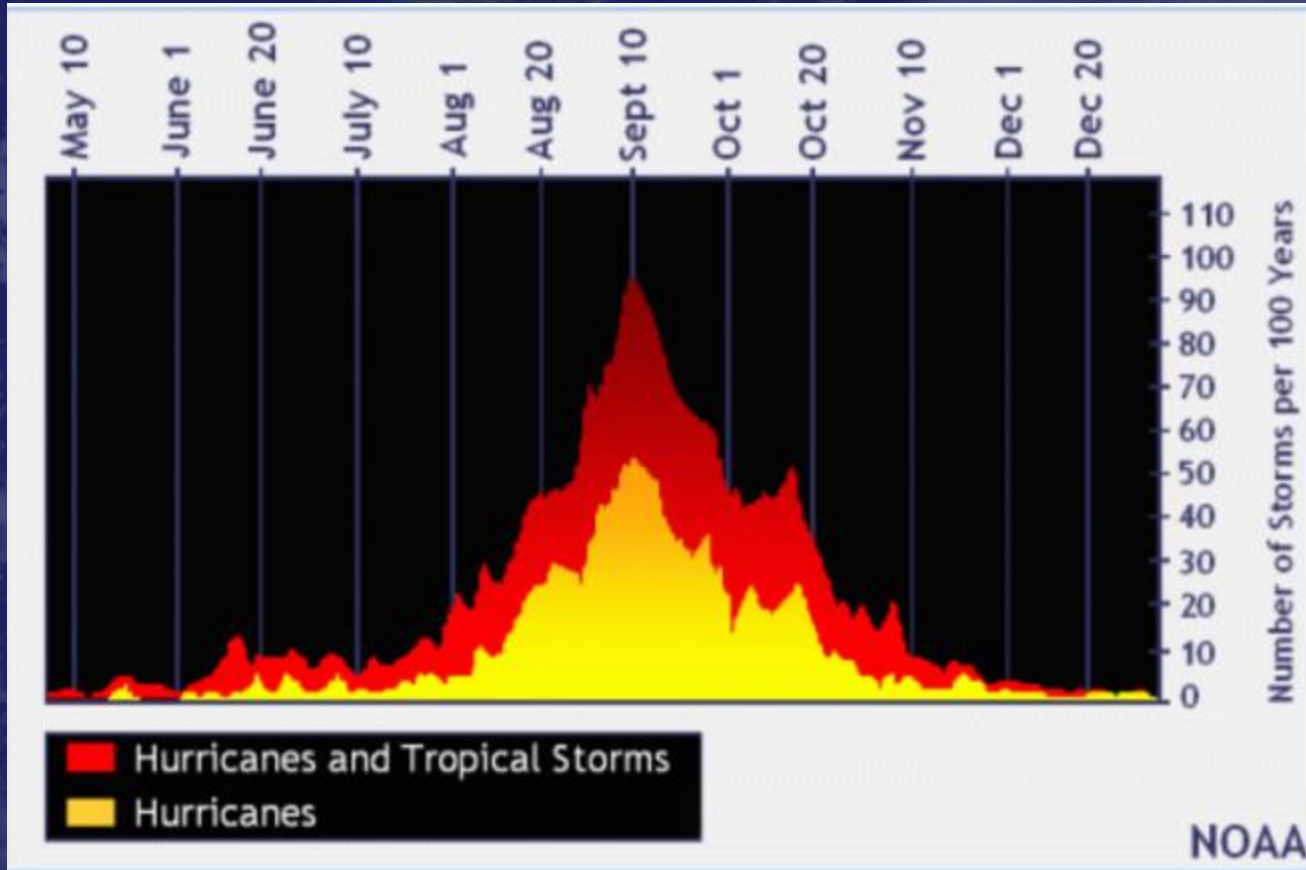
Atlantic

Arthur ✓
Bertha ✓
Cristobal ✓
Dolly ✓
Edouard ✓
Fay ✓
Gonzalo ✓
Hanna ✓
Isaias ✓
Josephine ✓
Kyle ✓
Laura ✓
Marco ✓
Nana ✓
Omar ✓
Paulette ✓
Rene ✓
Sally ✓
Teddy ✓
Vicky ✓
Wilfred

Eastern Pacific

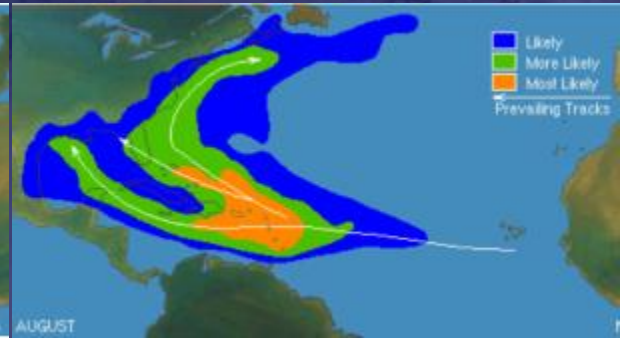
Amanda ✓
Boris ✓
Cristina ✓
Douglas ✓
Elida ✓
Fausto ✓
Genevieve ✓
Hernan ✓
Iselle ✓
Julio ✓
Karina ✓
Lowell
Marie
Norbert
Odalys
Polo
Rachel
Simon
Trudy
Vance
Winnie
Xavier
Yolada
Zeek

TROPICAL CYCLONES PAST 100 YEARS



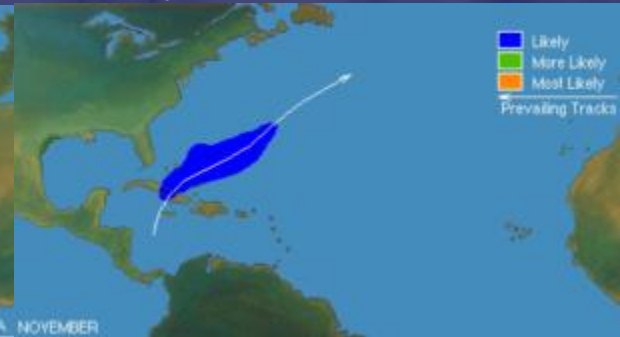
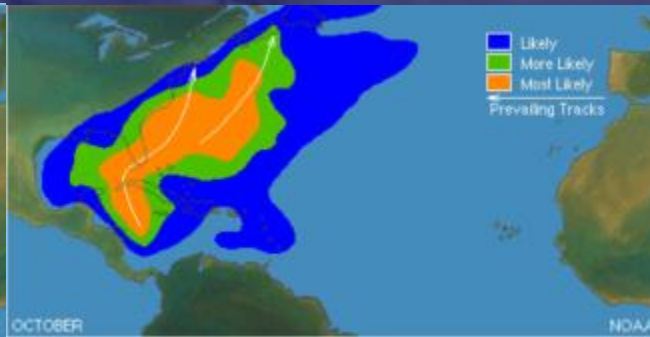
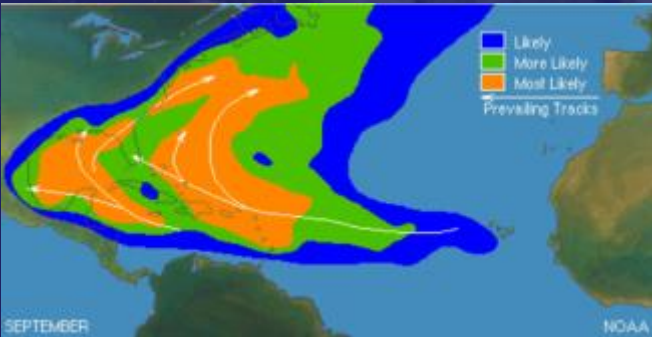
<https://www.nhc.noaa.gov/climo/images/peakofseason.gif>

CYCLONE AREAS OF ORIGIN BY MONTH



456456


Andrew, Charley, Gustav,
Harvey, Ike, Irene, Isaac



Irma, Hugo, Isabel,
Maria, Katrina, Rita

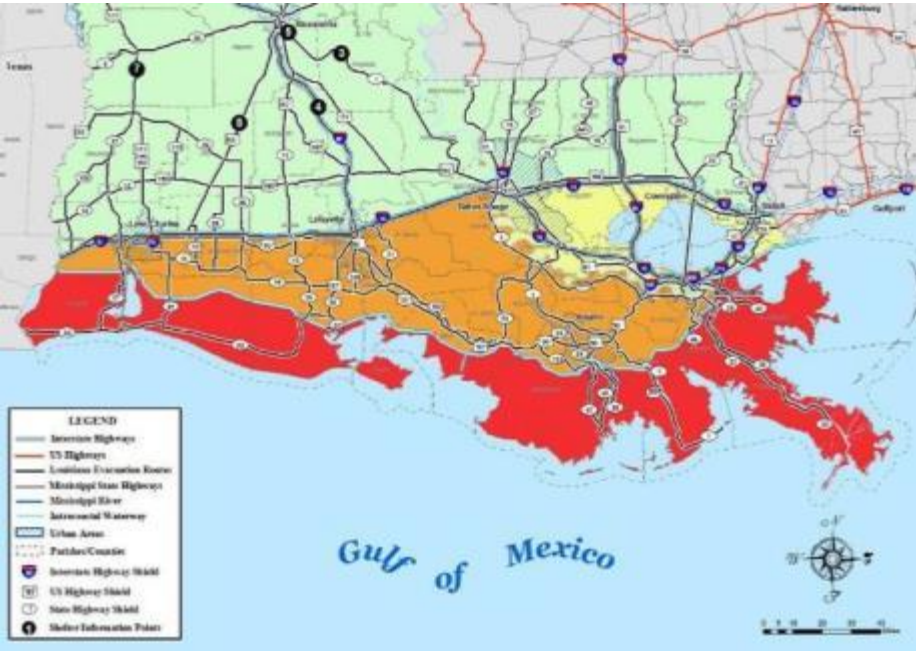
Michael, Sandy,
Wilma

INFRASTRUCTURE VULNERABILITY

(Sub)sector Generating the Service	(Sub)sector Receiving the Service				
	ONG	Electricity	Transportation	Water	Communication
ONG 		Fuel to operate power plant motors and generators	Fuel to operate transport vehicles	Fuel to operate pumps and treatment	Fuel to maintain temperatures for equipment; fuel for backup power
Electricity 	Electricity for extraction and transport (pumps, generators)		Power for overhead transit lines	Electric power to operate pumps and treatment	Energy to run cell towers and other transmission equipment
Transportation 	Delivery of supplies and workers	Delivery of supplies and workers		Delivery of supplies and workers	Delivery of supplies and workers
Water 	Production water	Cooling and production water	Water for vehicular operation; cleaning		Water for equipment and cleaning
Communication 	Breakage and leak detection and remote control of operations	Detection and maintenance of operations and electric transmission	Identification and location of disabled vehicles, rails and roads; the provision of user service information	Detection and control of water supply and quality	

COVID IMPLICATIONS:

ACCESS DISRUPTIONS



- Cross-border quarantines
- Loss of hotel availability across range of evacuation
- Inspection delays
- Supply Chain disruption
- Infrastructure restoration delays

COVID IMPLICATIONS: FIELD DEPLOYMENTS

- Increased communications to staff and clients (social media platforms, virtual townhalls, coordinated messaging)
- Ensure remote personnel have the most up-to-date policies and procedures via training
- Expand flexible deployment options
- Virtual personnel mobilization process
- Increase information technology support



COVID IMPLICATIONS: OPERATIONAL DESIGN

- Virtual operations to minimize traditional field deployments
- Ensure physical layouts accommodate CDC guidance and social distancing
- Protective equipment provisioning (PPE vs. cloth face coverings)
- Consider drive-through and 'touch-free' logistics



First Study to Quantify Potential COVID-19 Spread from Hurricane Evacuation:

Where Evacuees Go Matters



Jeffrey Shaman, PHD

Professor Environmental Health Sciences
Director, of Climate and Health Program
Columbia University

1. Could you tell us about your study on the impacts of hurricane evacuation on COVID-19 cases?
2. What should Emergency Managers look for in evacuation destination options?
3. How can evacuees protect themselves from infection?

LESSONS FROM EMERGENCY MANAGEMENT

- Challenge all assumptions
- You cannot make up for lost time
- Anticipate failures
- Go Fast, Go Big, Be Smart
- Question your Risk Tolerance
- Coordinate, Coordinate, Coordinate
- More information never hurts

KEY TAKEAWAYS



HURRICANES REMAIN A PRIMARY HAZARD

COVID + Hurricanes = managing layered risk

IT'S ALL ABOUT PREPARATION



RESILIENCE IS ABOUT FLEXIBILITY

**INFORMATION IS CRITICAL,
COMMUNICATION IS KEY**



**INTERNATIONAL SOS
IS YOUR PARTNER**



Q&A

**THANK YOU
FOR
ATTENDING**

Webinar recording and
materials will be emailed
within the next few hours.

