



- Localized impact part of the County
- Limited duration event (Minutes Hours Days?)
- Usually involves physical destruction (wind damage, floods, utility outages)
- May involve injuries or follow-on illness
- Lead County Agency in the field: Fire Department
- Responders or hospitals not usually in danger
- Heavy use of volunteers
- May have significant financial impact to some
- May require Long Term Recovery Plan (Weeks Months)

## What makes this different?

- Impacts around the globe to your own family
- Unknown duration event (Months? Years?)
- No direct physical destruction
- Novel: new, unknown illness without a vaccine
- Interrupts every part of our normal lives
- Long-term mandatory Public Safety Orders never done before
- Lead County Agency: Health Department
- Responders and hospitals are in danger themselves
- Selective use of volunteers
- Widespread, catastrophic financial impact
- Long Term Recovery (Months-Years)

COVID-19

## COVID PANDEMIC = COMPLEX DISASTER





## "WHOLE COMMUNITY" RESPONSE AND RECOVERY

"Engage the full capacity of the private and nonprofit sectors, including businesses, faith-based and disability organizations, and the general public, in conjunction with local, state and federal government partners."





Anne Arundel County Office of Emergency Management

## PANDEMIC "SILVER LINING"



**Reassess Priorities** 

**Novel Procedures** 

**Creative Solutions** 

**Unexpected Partnerships** 

**New Coalitions** 

**Increased Resilience** 



## SEVERE WEATHER IN MARYLAND

- Heat Waves
- Severe Thunderstorms
  - High Winds
  - Flash/ Area Flooding
  - Dangerous Lightning
  - Trees and Wires Down
  - Tornadoes/Waterspouts
- Tidal/Coastal Flooding
- Tropical Storms/Hurricanes
- Enhanced Fire Threat
- Dense Fog
- Non Thunderstorm Winds
- Winter Weather



## **UNDERSTANDING WEATHER TERMINOLOGY**

<u>Outlooks</u> – A broad discussion of the weather pattern expected across any given area, generally confined to forecast periods beyond 48 hours.

<u>Advisories</u> – A weather hazard that will cause an inconvenience, but is not life threatening if proper precautions are taken.

<u>Watch</u> – Severe weather is <u>possible</u>. Stay tuned to your weather information source for later forecasts.

Warning – Severe weather is <u>likely</u> or already occurring, possibly life threatening.

## SEVERE WEATHER OUTLOOK

## Understanding Severe Thunderstorm Risk Categories

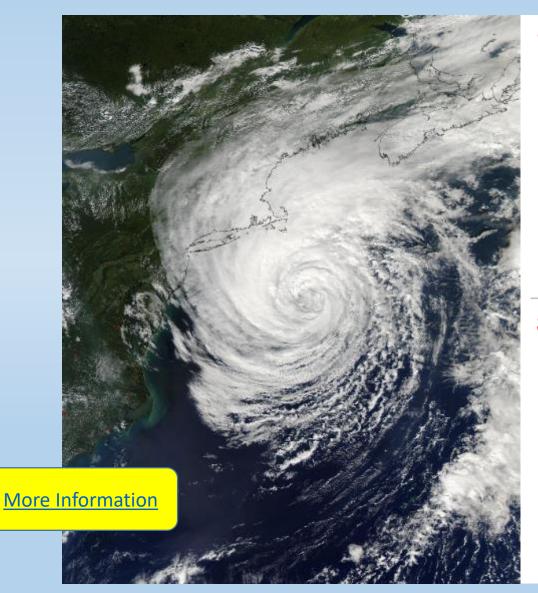


#### **SEVERE THUNDERSTORM**

WIND GUSTS >58 MPH and/or HAIL > 1" DIAM and/or TORNADO IMPLIES DANGEROUS LIGHTNING and POTENTIAL FOR FLOODING

**More Information** 

## **TROPICAL STORMS & HURRICANES**



#### 1 Tropical wave

Low pressure spawns showers and storms.



#### 3 Tropical storm

Sustained surface winds 39+ mph.



#### 2 Tropical depression

Sustained surface winds less than 39 mph.



#### **4** Hurricane

Sustained surface winds 74+ mph.





# **2020** Atlantic Hurricane Season Outlook



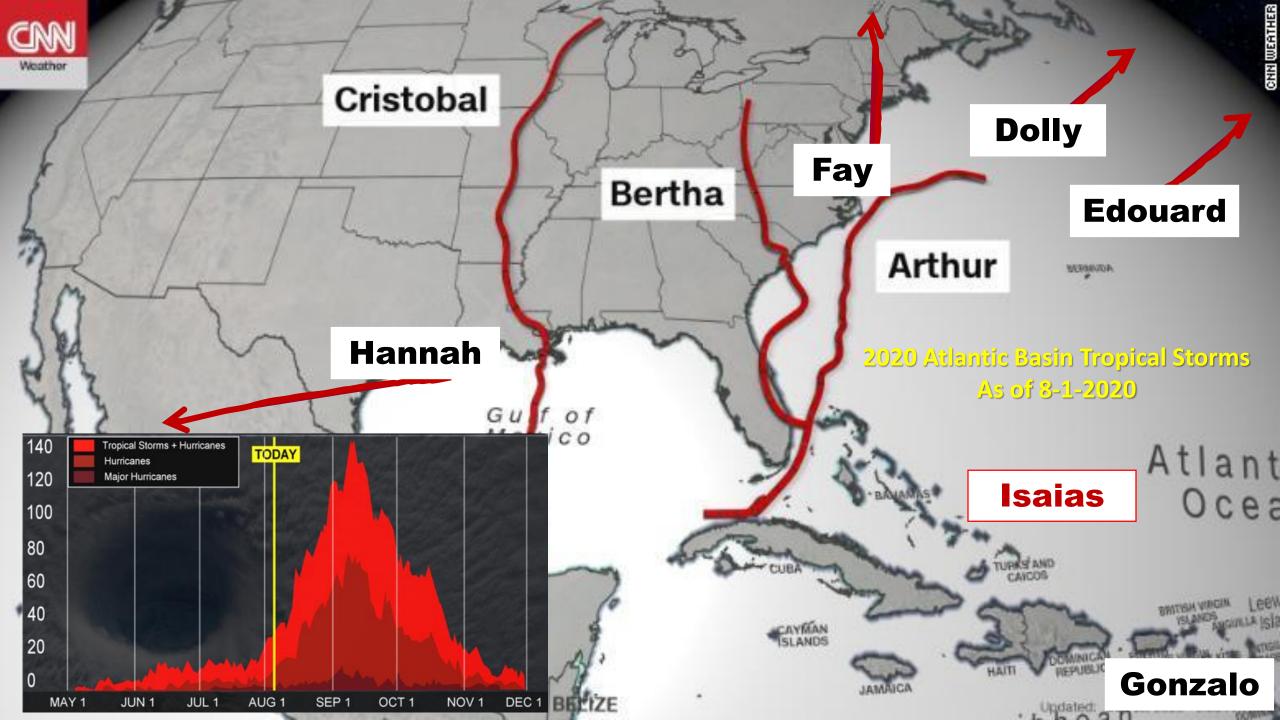


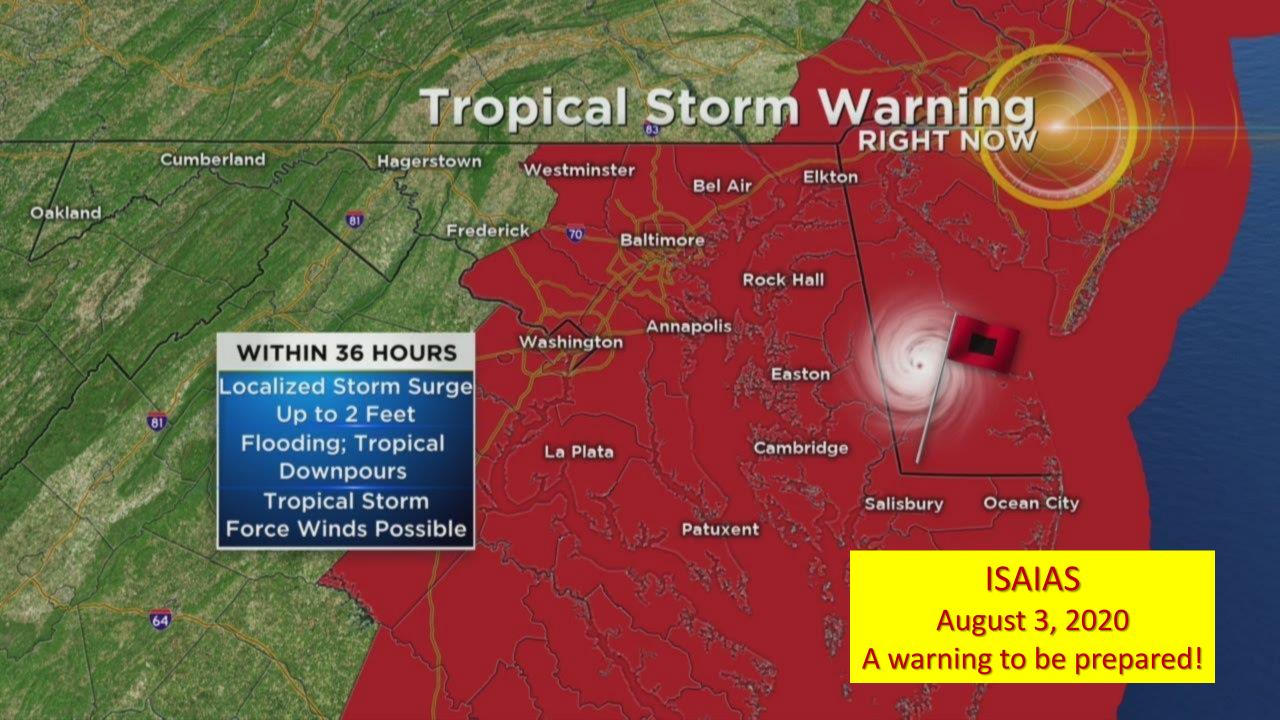
# **2020** Atlantic Tropical Cyclone Names\*

caine Laura Marco Nana

**Omar Paulette** Rene Teddy **Vicky** Wilfred

\*Names provided by the World Meteorological Organization





## HURRICANE HAZARDS



Storm surge is water pushed ashore by the winds of a tropical cyclone. It has caused more fatalities than any other hurricane hazard.





Winds from a hurricane are 74 mph or greater and can cause massive damage to buildings and structures in its path.





Inland flooding is the most frequent cause of tropical cyclone fatalities. It can occur far from the coast and long after landfall.





Tornadoes are commonly spawned by a hurricane and can cause damage far away from the center of the hurricane.





Rip currents and waves along and near the coast can be deadly even if the center of the storm passes well offshore.





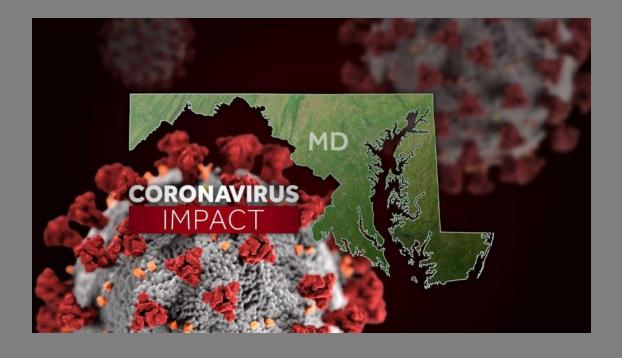
For more Hurricane Safety Information, visit weather.gov/hurricanesafety



## "CASCADING EFFECTS"

- Area flooding 10+ ft
- Closed bridges/Impassable roads
- Downed trees/power lines
- Rescue/evacuation difficulties
- Widespread power outages
- Mudslides
- Isolated communities
- Hospital access limited
- Hospitals overwhelmed
- Hospital closures
- Limited communications
- Water & sewer issues
- Standing water health hazards
- Heat illness health hazards
- Food insecurity
- Farm & wild animal problems





# REALITY CHECK: CONDITIONS YOU CAN'T CONTROL

In making an emergency plan, you should assume:	
	The Covid-19 Pandemic will continue through 2020
	Emergency services and hospitals may be overwhelmed
	No power
	No water
	No heating or cooling
	Difficult communications including phone, Internet, Wi-Fi
	Limited or no access to money using credit cards or ATMs
	Limited or no access to retail: including pharmacies, grocery stores, and gas stations
	Limited or no access to suppliers and repair companies
	No mail or package delivery
	No trash or recycling service
	No outside help

Your basic assumption: Prepare to be self-sufficient for two weeks or longer

## FIRST THINGS FIRST







First protect YOURSELF

Then secure your FAMILY

Then check your NEIGHBORS

Then serve your COMMUNITY

## **COVID ERA SELF-CHECK**

Have you been exposed to Covid-positive individuals?

Are you feeling ill?
Do you have Covid-19 symptoms?
Have you been tested?

Are you over age 60?

Do you have a chronic health condition?

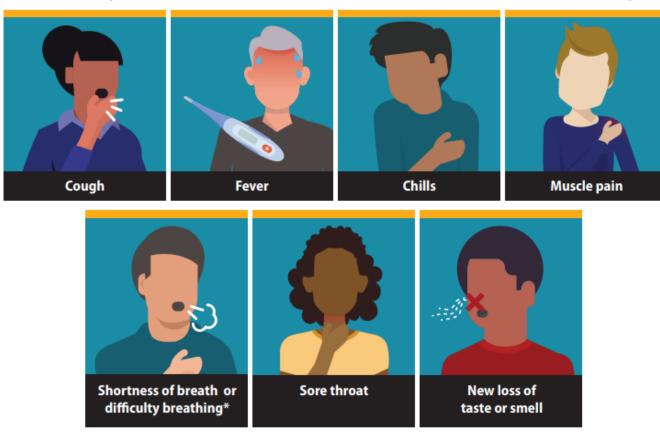
- Heart condition
- Respiratory condition
- Diabetes
- Cancer
- Immuno-compromised

Are you helping to slow the spread?

Are you prepared to support your family?

Are you willing to support your neighbors?

#### Know the symptoms of COVID-19, which can include the following:



Symptoms can range from mild to severe illness, and appear 2-14 days after you are exposed to the virus that causes COVID-19.

## **HELP SLOW THE SPREAD!**



**GET TESTED** if symptomatic or exposed

Get a seasonal FLU SHOT in the Fall

**COVID-19 Health Line** 

410-222-7256

Monday - Friday 8:00 a.m. - 6:00 p.m.
Saturday 10 a.m. - 4 p.m.
Sunday CLOSED
Email covid19info@aacounty.org



Stay at least 6 feet (about 2 arms' length) from other people.





When in public, wear a cloth face covering over your nose and mouth.



Clean and disinfect frequently touched objects and surfaces.



Stay home when you are sick, except to get medical care.



Wash your hands often with soap and water for at least 20 seconds.

## **HELP SLOW THE SPREAD!**











## **COVID-19 WEAR A MASK OR FACE COVERING** IT'S A PUBLIC SAFETY ORDER!

#### WHY YOU SHOULD WEAR A FACE MASK:

- COVID-19 can be spread by people who are not showing symptoms; face coverings (with physical distancing and hand washing) can prevent the spread of the virus.
- Covering your face is about helping others. By covering your face, you are helping to slow the spread of COVID-19.

PLEASE BE RESPECTFUL OF YOUR FELLOW RESIDENTS!

#### WHO SHOULD NOT WEAR a MASK:

Children under age 2 People with disabilities who are unable to wear a mask are provided reasonable accommodations per the Americans with Disabilities Act

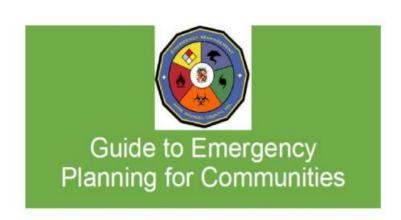
#### WHEN TO WEAR A FACE COVERING:

- ✓ In retail or business establishments
- In public for activities outside of your home
- Around family if you aren't feeling well
- On public transit
- If you are caring for someone with symptoms of COVID

#### FACE COVERINGS SHOULD:

- fit snugly but comfortably against the face
- include multiple layers of fabric
- allow for breathing without restriction
- cloth face masks should be washed regularly

## **COMMUNITY EMERGENCY PLANNING**





Anne Arundel County Office of Emergency Management

#### Appendix A

Guide to Emergency
Planning for Communities:
Household and Pet
Emergency Plan Templates



Anne Arundel County Office of Emergency M

#### Appendix B

Guide to Emergency
Planning for Communities:
Community Survey
Appendix C



Anne Arundel County Office of Emergency Manage



Guide to Emergency
Planning for Communities:
Community Emergency

Plan Template

Anne Arundel County Office of Emergency Management

CLICK <u>HERE</u> TO LEARN MORE

## FIRST IDENTIFY THE POTENTIAL HAZARDS

# Medical Safety Cyber Barrar Criminal Active

Fire Medical Safety Cyber Power Outage Criminal Active Shooter Floods Epidemic

## "ALL-HAZARDS" PLANNING

# PROBABILITY VS IMPACT

#### POTENTIAL HAZARDS TO OUR COUNTY MAN-MADE HAZARDS NATURAL HAZARDS INTENTIONAL **TECHNOLOGICAL** ✓ Hazardous Materials ✓ Earthquake ✓ Active Assailant **Fixed Nuclear Facilities Biological Attack** ✓ Epidemic/Pandemic √ Flood Chemical Attack Infrastructure Failure ✓ Major Structural Fire ✓ Civil Unrest ✓ Hurricane/Tropical ✓ Utility Disruption ✓ Cyber Attack Storm √ Transportation Hazards √ Explosions ✓ Lightning ✓ Severe Winter Storm **Nuclear Blast** ✓ Tornado/Wind Storm Radiological Attack

## THEN IDENTIFY THE <u>RISKS</u> TO <u>YOUR</u> COMMUNITY

What risks does your community face? How likely they are to occur? If they occur, what would their impact be?

Focus on risks which: Are most likely to impact your community and you can do something about.

#### **ENVIRONMENTAL RISKS**

- Areas that are subject to flooding and/or flood regularly
- Frequently isolated by snow events
- Subject to mudslides
- Sites of environmental and/or historic importance which may be impacted

#### INFRASTRUCTURE RISKS

- Peninsulas with single access roads
- Bridges or main roads which are frequently damaged, subject to flooding, and/or closure
- Major transportation facility (such as a train station) in the immediate area
- Large industrial facilities in the area
- Hazardous materials plants in the area
- Dams or lakes in the area



PROBABILITY VS IMPACT

## **IDENTIFY THE RISKS TO YOUR COMMUNITY**

#### **SOCIAL RISKS**

Known vulnerable community members/groups in your community:

- Live alone, such as older adults
- Recovering from a recent operation
- Without access to transportation
- Access and functional needs: limited mobility, sight/hearing impairment, developmental disability, or chronic illness
- Reliant on regular medication or medical treatments (i.e. dialysis or chemotherapy) or medical equipment
- Language or cognitive barriers who may have trouble understanding emergency alerts, messaging, and guidance
- Commercial or nonprofit group-residences in your community
- Community members/groups who do not live in the area full-time?
- Pockets of high criminal activity
- Live at or below the poverty line
- Experiencing homelessness







#### FORM AN EMERGENCY PLANNING TEAM

- **✓** Designate a Planning Team Leader = Community Emergency Manager
- ✓ Seek knowledgeable volunteers
  - First Responders (Police, Fire, EMS, Public Works)
  - Medical Professionals (Doctor, Nurse, PA, Paramedic)
  - Military Members (Active Duty, Retired, Reserve, National Guard)
  - Property Insurance Specialists
  - Engineers/Facility Managers
  - Local Historians
  - IT Specialists/Webmasters
  - Building Contractors and Skilled Trades
  - Attorneys
  - Foreign Language Speakers
  - Trained Weather Spotters/ Weather Buffs
  - Amateur Radio Operators
- ✓ Does your community have disaster relief organization support (Church, CERT, Red Cross, etc)?
- ✓ Coordinate with County Agencies (Emergency Management, Police, Fire, Health Department)



## **GET PREPARED**

KNOW THE RISKS natural disasters, manmade emergencies, Covid-19 pandemic

**STAY INFORMED** 

PREPARE YOUR HOME

FAMILY SPECIAL NEEDS

**SHELTER-IN-PLACE** for at least three days...up to two weeks

**SAFETY IN NUMBERS** do not face the storm alone

FAMILY COMMUNICATIONS PLAN

**EMERGENCY FINANCIAL FIRST AID KIT** 

**ARE YOU IN AN <u>EVACUATION ZONE</u>?** 

**EVACUATION ROUTES and DESTINATIONS** 

**EMERGENCY NETWORK** family, neighbors, etc

**PETS** 



WHO IS IN CHARGE WHEN YOU ARE NOT HOME?

# Staying Ahead of the Storms

**Staying Informed** 

## LOCAL NEWS AND WEATHER

#### **Television**

- WBAL
- WMAR
- WJZ
- WBFF
- AACo Community TV



#### Radio

- WBAL 1090 AM
- WNAV 1430 AM
- WYRE 810 AM
- WYPR 88.1 FM
- WTOP 103.5 FM
- WFSI EI Zol 107.9 FM

## SOCIAL MEDIA

**OEM Website:** www.aacounty.org/OEM

Health Website: www.aahealth.org/covid19/

<u>Facebook</u>: Anne Arundel County Office of Emergency Management



- Twitter: aaco\_oem
- Instagram: annearundel\_oem



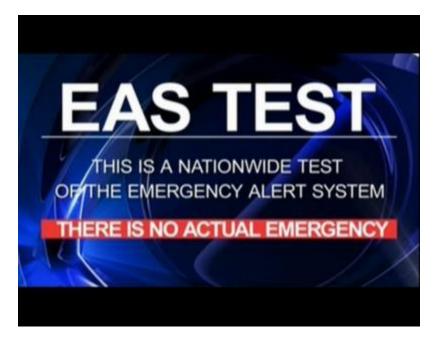




# INTEGRATED PUBLIC ALERT & WARNING SYSTEM (IPAWS)

#### **Emergency Alert System (EAS)**

- The national public warning system
- Also used by state & local authorities to deliver important emergency information
- Alerts to radio, TV, cable, satellite broadcasters, NOAA Weather Radio



#### **Wireless Emergency Alerts (WEA)**

- Sent via the cellular system
- Mostly used by the State
- Look like text messages, but are designed to get your attention & alert you with a unique sound & vibration
- Issued for three categories



## NOAA WEATHER RADIO

- Managed by National Weather Service
- Current weather conditions broadcast 24/7
- Alert features for Watches and Warnings
- Used as part of State and Federal Emergency Alert System (EAS)
- Can be triggered only for Anne Arundel County
  - Specific Area Messaging Encoding (S.A.M.E.)
  - 162,400 MHz SAME Code 024003
- Inexpensive receivers readily available
- Assistive technology available

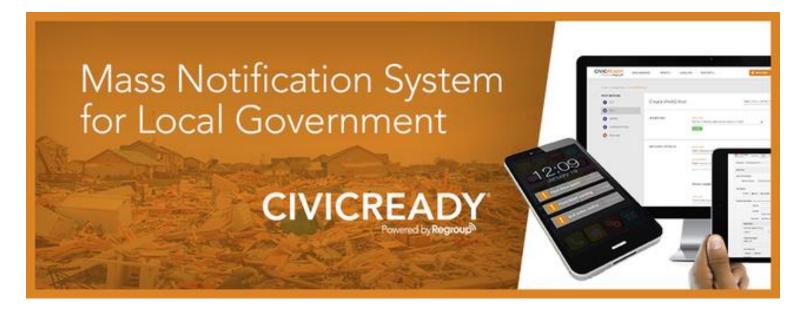
Learn more <u>here</u>



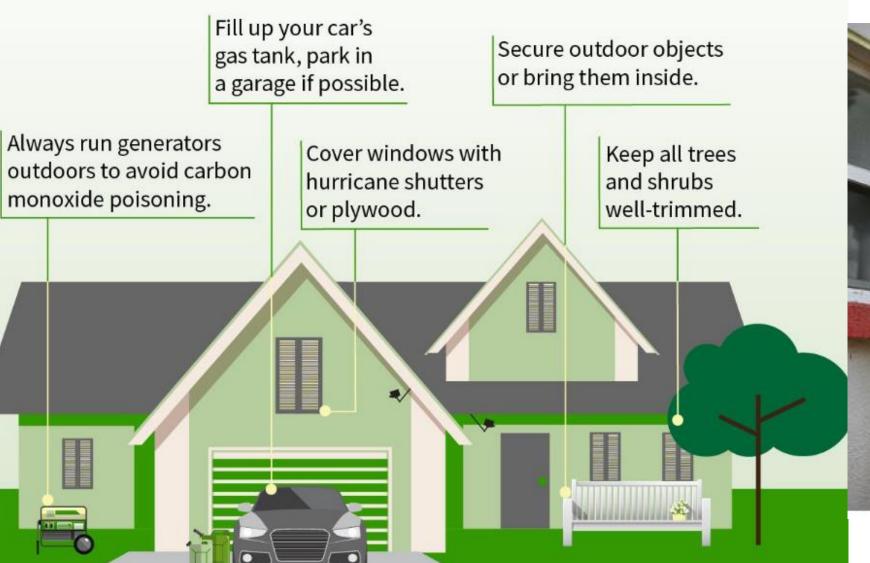
### **CIVICREADY® MASS NOTIFICATION SYSTEM**

- Alert Anne Arundel
- Designed to send general and/or emergency notifications
- Sends notifications via text messages, emails, and landlines
- Multiple options, including several languages
- Sign up by visiting, <a href="http://alertannearundel.civicready.com/">http://alertannearundel.civicready.com/</a>





## PREPARE YOUR HOME





CLICK HERE
TO LEARN MORE

# PLAN AHEAD OF THE STORM FOR YOUR FAMILY'S SPECIAL NEEDS

- Plan ahead with your family, friend, or caregiver
- People with chronic illness may be at greater risk of COVID-19
- People with disabilities must plan carefully and early
- Do not shelter alone have a support network
- Home healthcare services my be interrupted
- Have a month of prescription medications on hand
- Have spare medical devices available hearing aids, glasses, walker, etc
- If you use electrical powered medical devices have a generator or relocate
- Have additional supplemental oxygen, if needed
- Have assistive technology if needed with spare batteries
- Call head about urgent scheduled medical appointments dialysis/chemotherapy
- Special transportation needs, including evacuation
- Plan for your Service Animal





## **FAMILY COMMUNICATIONS PLAN**

## Make a Written Communications Plan

- Family
- Trusted Friends
- Trusted Neighbors
- Work and School Contacts
- Other Important Numbers

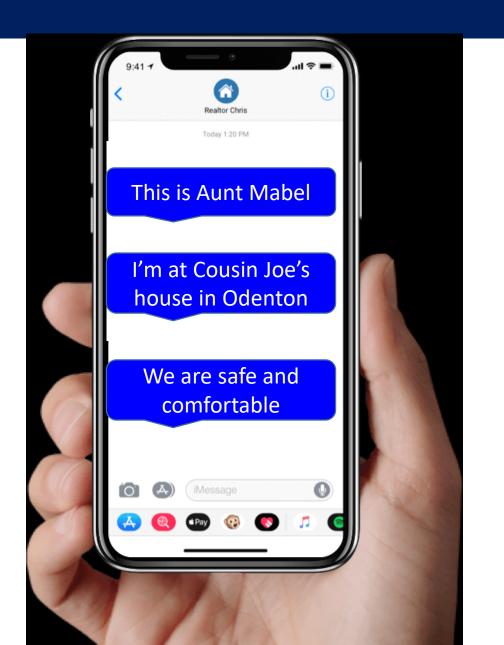
## Out of Area (or State) "Family Switchboard Operator"

- Relative
- Trusted Friend

### Text is more reliable

- 1. Who you are
- 2. Where you are
- 3. Status

CLICK <u>HERE</u> TO LEARN MORE



# **COMMUNITY CONTACT LIST**



- Email
- Social Media
- Telephone/Text
- Walkie Talkie
- Amateur (Ham) Radio
- Runners/Bicycle

#### YOUR COMMUNITY COMMUNICATIONS PLAN

- > Pass information or instructions
- Coordinate training
- Coordinate response
- Coordinate recovery

#### **INCLUDES**

- Emergency Committee
- Residents
- Volunteers
- Outside Agencies

WHAT is happening and/or required

WHO is involved or needs assistance

WHEN did the incident happen or date/time the group will meet

WHERE did the incident happen or location the group will meet; and provide

SPECIFIC INSTRUCTIONS such as resource needs, tools, personal protective equipment (PPE), etc

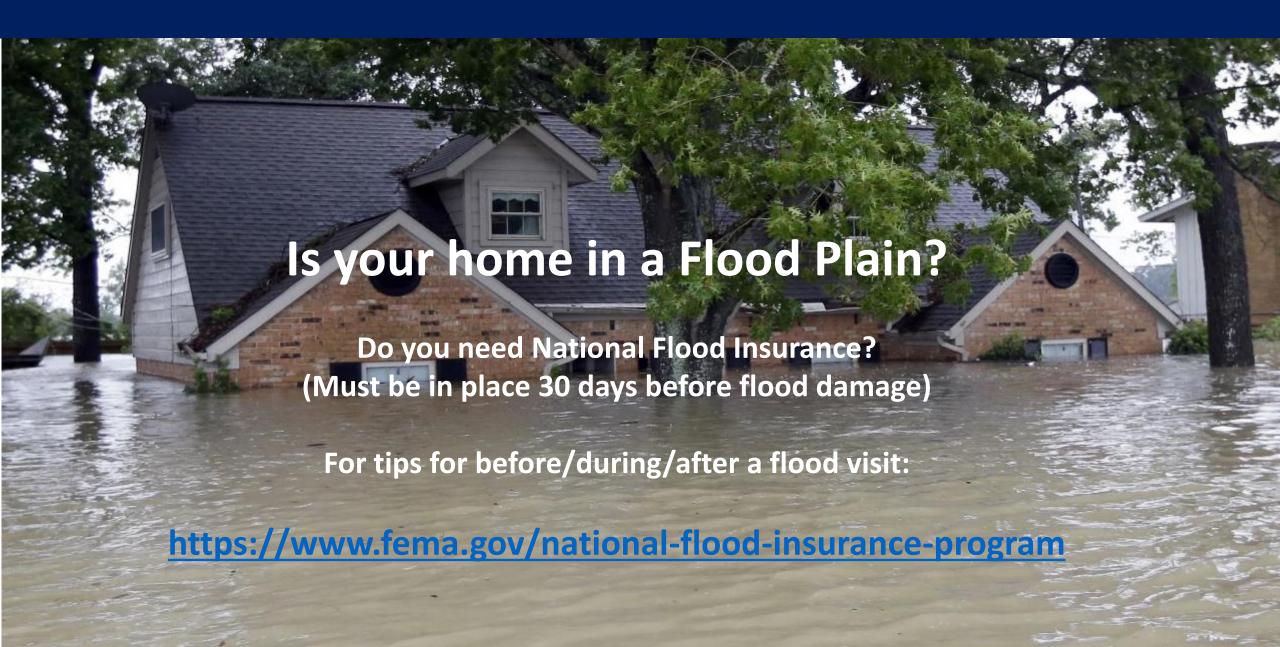
# FINANCIAL PREPAREDNESS

- ✓ Gather financial and critical personal, household, and medical information Secure the information physically and digitally
- ✓ Consider saving money in an emergency savings account that could be used in any crisis Keep a small amount of cash at home in a safe place ATMs and credit cards may not work during a disaster
- ✓ Obtain property, health, and life insurance if you do not have them Review your policy amount and types of coverage You may need to purchase flood insurance from the <u>National Flood Insurance Program</u> Inventory and take pictures of your property before an emergency
- ✓ Download the **Emergency Financial First Aid Kit** (EFFAK) to get started planning today
- ✓ Download the Maryland Insurance Administration Natural Disaster Preparedness Guide





## NATIONAL FLOOD INSURANCE PROGRAM



# **EVACUATION CONSIDERATIONS**

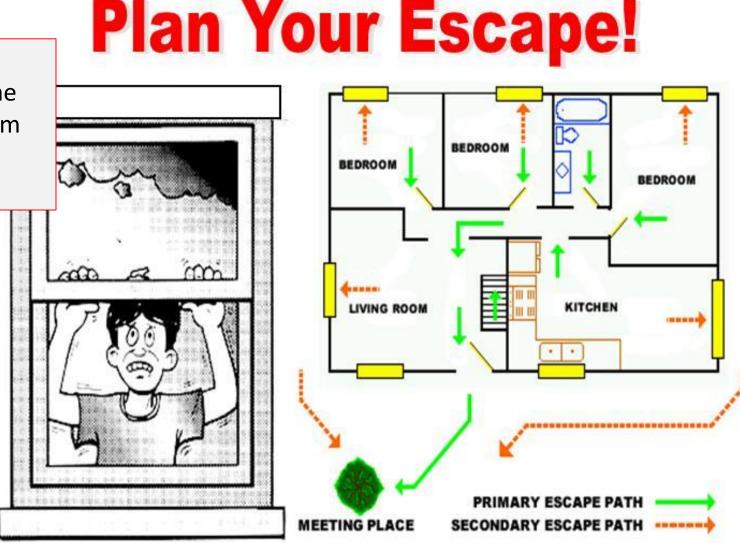


# **EVACUATION PLANNING BEGINS AT HOME**

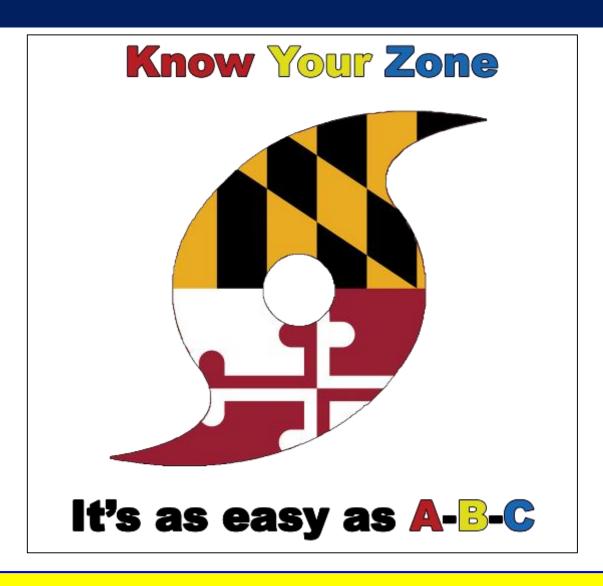
- 1. Sleep with bedroom doors closed
- 2. At least two smoke detectors in your home
- 3. Have a plan for two exits out of every room
- 4. Have an outside meeting place
- 5. Practice. Practice. Practice.

Plan for any access or functional needs!

CLICK HERE
TO LEARN MORE



## **KNOW YOUR POTENTIAL EVACUATION ZONE!**



#### What Is It?

New color-coded interactive map you can use to determine which **potential storm evacuation zone** your home or business may be in based on your street address.

## **How Will It Help You?**

Knowing your zone will help you avoid unnecessary evacuation travel, thereby reducing highway congestion, easing overcrowding at local storm shelters, and boosting public safety.

#### How Do You Use It?

Simply enter your address and view a color-coded map showing the evacuation zone (A or B for Anne Arundel County).

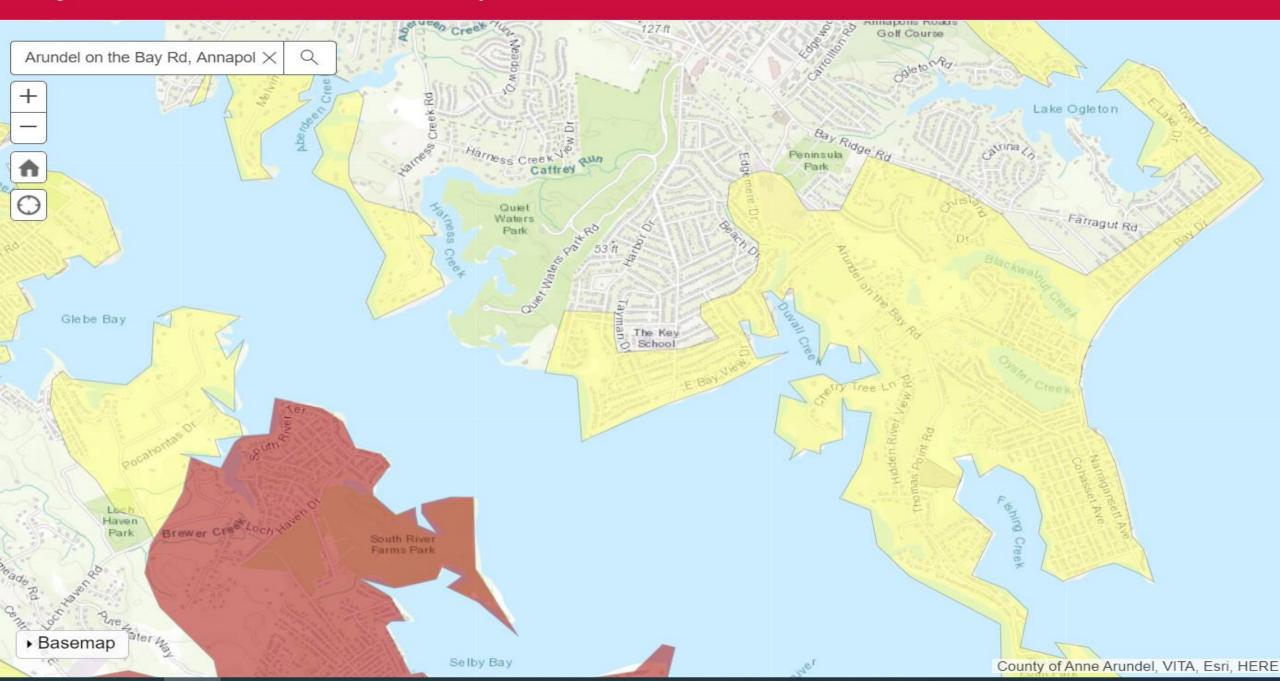
OEM will notify residents of impacted zones what they should do to stay safe, depending on expected storm conditions.

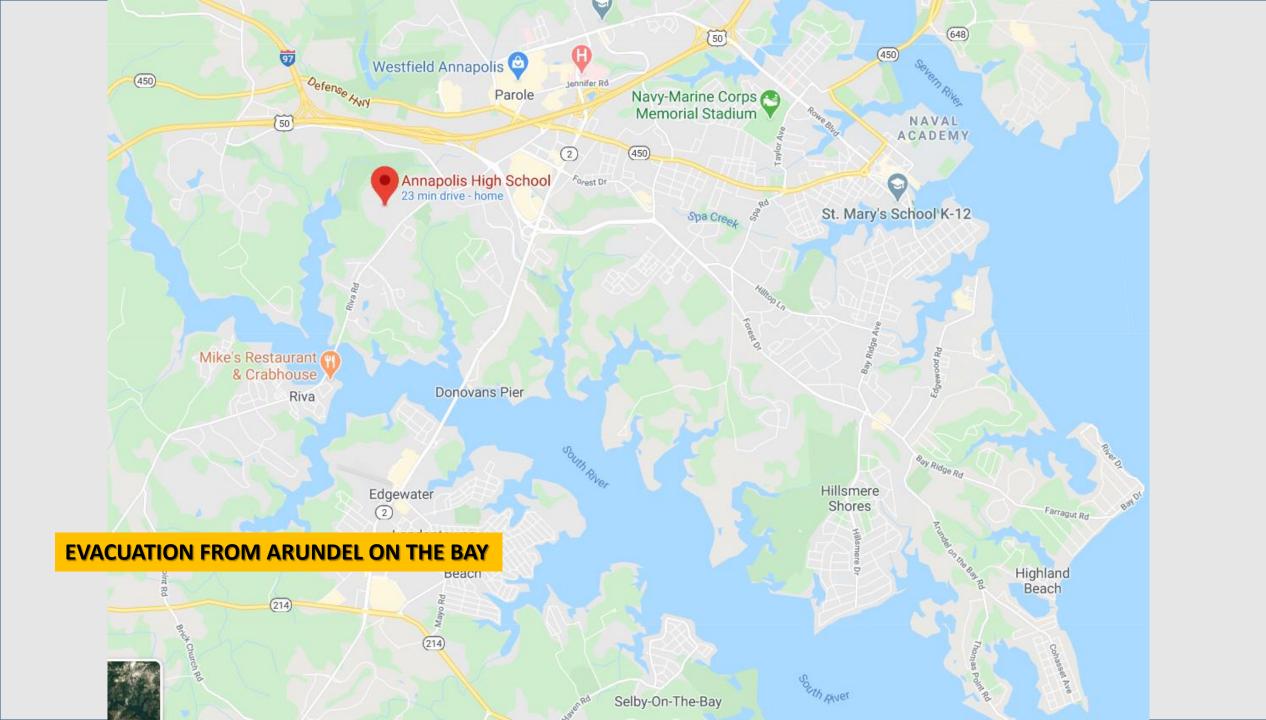
## What if you aren't in a Zone?

If your address is not in a potential evacuation zone, you are not expected to be evacuated during tropical storms. Stay informed by radio, TV, and social media.

# www.KnowYourZoneMd.com

## Maryland Hurricane Evacuation Lookup Tool





## SHELTER-IN-PLACE OR EVACUATE?

- Know whether you are in a designated Evacuation Zone <u>KnowYourZoneMd</u>
- Follow evacuation guidance (areas, timelines, routes) from local officials
- Plan for your entire household, including pets
- Keep your gas tank at least half full
- Pack a "Go Bag" of evacuation supplies and critical documents
- Travel during daylight hours if possible
- Have an out-of-state emergency contact
- Have an idea as to where you will evacuate along designated emergency routes
- Confirm your destination (or shelter) will accept pets
- Know where you will meet up with family members or trusted friends
- Special considerations for COVID-19 quarantine or isolation

Once tropical storm winds have arrived it is generally safer to shelter-in-place!



CLICK <u>HERE</u> TO LEARN MORE

## **EVACUATION CONSIDERATIONS**

- Plan for <u>early voluntary evacuation</u> if you
  - ✓ Live alone and have a disability or chronic illness
  - ✓ Use electrically-powered lifesaving equipment and have no generator
  - ✓ Live in a mobile home or prefabricated structure
  - ✓ Live on a low-lying peninsula, especially with only a single route out

Some communities may only have two realistic options:

Leave early or weather the storm

## Considerations for residents with special needs:

- Medical or assistive devices
- When they should leave
- What do they bring
- Where to they go
- How do they travel
- With whom do they travel





# FAMILY EMERGENCY KIT

✓ Water: One gallon of water per person per day for at least three days

✓ Food: At least a three-day supply of non-perishable food (including pets)

✓ Baby/infant supplied and food, if applicable

- ✓ Battery-powered or hand-crank radio and extra batteries
- ✓ Flashlight or headlamp with extra batteries
- √ Family First Aid Kit
- √ Face Coverings (two surgical or cloth masks); surgical gloves
- ✓ Personal Hygiene/Sanitization items, garbage bags; extra TP
- ✓ Prescription Medicine (one month's worth)
- ✓ Medical devices (glasses, hearing aids, etc)
- ✓ Photo identification; Important family documents in waterproof bag
- √ Whistle to signal for help
- ✓ Cell phone with charger
- ✓ Manual can opener for canned food
- √ Wrench or pliers to turn off utilities, if required
- ✓ Paper local road maps for evacuation
- √ Cash or Travelers Checks



## PET PREPAREDNESS

# What is in your Pet Preparedness Kit

A significant number of families have pets and they need to be ready for a disaster too. Below are items to have ready to go in your pet emergency kit.

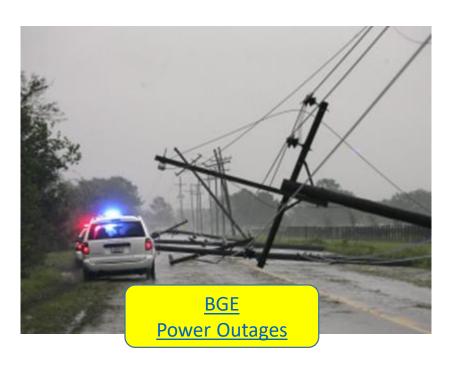
## What Goes in Your Pet Emergency Kit:





# WHEN THE POWER GOES OUT

- Notify BGE of neighborhood outage: 877-888-2222
- Use flashlights (or battery powered lanterns) extra batteries
  - Do not use candles creates an additional hazard
- Charge cell phones and a radio with rechargeable batteries
- Refrigerators/freezers at maximum cold; keep doors closed
  - Perishable food in closed refrigerator = 4 hours
  - Perishable food in closed freezer = 2 days
- Plan ahead for electrically-powered medical equipment
- Never burn charcoal, use gasoline machinery, or propane-powered stoves your home
- Home Generator: properly installed, fueled, and located in an area safe to operate
- When power is restored, wait several minutes before turning on appliances and electronics
- Keep your car's gas tank full...gas station pumps may not operate in an outage



# INSURANCE CONSIDERATIONS: AFTER A DISASTER

- If you have evacuated, do not return home until authorities have declared the area safe!
- Make your own property damage assessment
- Contact your insurer if you have property or auto damage
  - If you have temporarily relocated, provide address and contact information
- Take photos/video of damaged property to support your claim
  - When you can, make a detailed inventory of damaged property
- Before removing damaged property, have an insurance claims adjuster assessment
  - If possible, be present during the assessment
- Make only temporary repairs to prevent further damage
  - Save all receipts for repairs and temporary living expenses
- Beware of unscrupulous insurance or repair scams
- You may be eligible for FEMA Individual Assistance in a declared emergency
- For more information for home or business owners:
  - <u>www.insurance.md.gov</u> Insurance Preparedness Guide for Natural Disasters
  - Maryland insurance fraud/complaint line: 410-468-2340 or toll free at 800-492-6116, ext 2340



# GET INVOLVED

- Get involved in your community...even during the pandemic!
- Ways to get involved include:
  - Request a virtual preparedness presentation for your community group
  - Get Community Emergency Response Team (CERT) Training
  - Volunteer for a community service activity
  - Safely keep a watchful eye on your neighbors
  - Set the example by observing COVID precautions
  - Set the example by being prepared!









# **COMMUNITY EMERGENCY PLAN**

- Keep it simple
- Relevant to your community
- Practical
- Realistic
- Practice it!





Anne Arundel County Office of Emergency Management

# FOR MORE INFORMATION

## **Anne Arundel County Office of Emergency Management**

410-222-0600 <u>oem@aacounty.org</u>

www.aacounty.org/OEM Citizens Guide to Emergencies

## **Anne Arundel County Department of Health**

410-222-7256 <a href="mailto:covid19info@aacounty.org">covid19info@aacounty.org</a>

www.aahealth.org/covid19/ COVID-19 and You

## **Maryland Hurricane Evacuation Guide**

https://mema.maryland.gov/Documents/MDHurricaneEvacGuide.pdf

**National Weather Service: Hurricane Safety Tips** 

https://www.weather.gov/safety/hurricane

**FEMA: Plan Ahead for All Disasters** 

https://www.ready.gov/

