



# Aware

Aware is published by NOAA's National Weather Service to enhance communications between NWS and the Emergency Management Community and other government and Private Sector Partners.

April 2016

## NWS Director Uccellini Defines Agency Direction During Iowa Visit

By [Kelsey Angle](#), WCM, NWS Des Moines, IA

NWS Director Dr. Louis Uccellini traveled to Iowa in late March for the 20th Annual Severe Storms and Doppler Radar Conference and for a NWS Town Hall with local, state and federal partners. More than 250 NWS employees, professors, students, broadcast meteorologists and weather enthusiasts attended the conference hosted by the National Weather Association Central Iowa Chapter.

Uccellini discussed evolving the NWS to build a Weather-Ready Nation (WRN). He highlighted that becoming a WRN is about building community resiliency in the face of increasing vulnerability to extreme weather, water and climate events. The goal of the NWS is to be ready, responsive and resilient. This requires the NWS to fully integrate its field structure to produce better forecasts and warnings, consistent products and services, and actionable environmental intelligence.

It is vital for the NWS to address the last mile that connects the forecast to critical national, state and local decisions. This goal can be achieved by providing Impact-Based Decision Support Services, delivered through multiple and reliable dissemination pathways, and by working with partners, including embedding NWS employees in Emergency Operation Centers and incorporating social science to gain the public's needed response. This strategic outcome involves the entire U.S. weather, water and climate enterprise working together to achieve far-reaching national preparedness for weather events.

Uccellini discussed how building a WRN will evolve the way the NWS works and the nature of its products. The NWS must grow and become more oriented toward earth system sciences. Social science must be used to ensure the message delivered equals the message received. We must understand decision makers and their shifting risk preferences before, during and after an event. Connections have to be made between observations, forecasts and warnings to key decision points in all service areas. Determining intrinsic value will be how success is measured.

Uccellini ended his visit by recognizing Iowa Homeland Security and Emergency Management as a StormReady® site and presenting a "We Are StormReady" sign.



*From left, Ken Harding, NWS Des Moines Meteorologist-in-Charge; Mark Schouten, Director, Iowa Homeland Security and Emergency Management (IHSEM); Kelsey Angle, NWS Warning Coordination Meteorologist; Joyce Flinn, IHSEM Operations Division Administrator; Dr. Louis Uccellini, NWS Director.*

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## Gender Mainstreaming and Emergency Management

By [Yankita Brown](#), [Dave Rowell](#), NWS Gender Mainstreaming Working Group, Silver Spring, MD

To build a Weather-Ready Nation, we must understand who our stakeholders are and how they use our products and services. Let's start with gender. The U.S. population is approximately equal: 50% male and female. Statistics show more men die than women each year due to almost all categories of weather. But women have unique weather-related vulnerabilities. Gender differences can directly cause inequalities and inadequacies in our ability to deal with the direct, indirect and longer-term effects of weather and climate-related hazards.

During high impact weather, such as heat waves, the elderly, of which the majority are female, is a group with one of the highest mortality rates. Women, on average, are also poorer than men, which may impact their ability to take protective actions against pending weather events.

In our society, the primary care-giving role still largely rests with women. Women who are responsible for family care have limited time and often are overburdened, which can be a distraction from risk. Also, in attending to others in times of disaster, women often put family members first and themselves last.

Men still typically have the power to make decisions within households. There's a sense for many men that they are responsible for the welfare of others and should step in and take control in a crisis. The NWS and its partners must be cognizant of such factors and the many other ways gender can influence weather event outcomes for men vs. women.

When we talk about knowing our community, we have to know what's needed by whom, when and where. We need to know both vulnerabilities and capabilities. We must understand socially assigned gender roles, communication practices, social relations, risk behaviors and more. All of these factors affect how weather and climate information are accessed and assimilated.

For example, men have been found to be more risk prone, and women more risk aware. Before and during a disaster, we want people to be highly attuned to risk. We would like them to listen to us about the need to prepare, to get flood insurance, to evacuate, to take protective action. It is our responsibility to target and tailor our messages to make them effective, to offer equitable solutions to mitigate weather and climate impacts for both men and women.

The NWS is instilling Gender Mainstreaming into its Impact Based Decision Support services, and WRN program. Gender Mainstreaming involves assessing the different implications for women and men of planned policy action, program design and education. Our goal is to provide more responsive and sensitive weather, hydrological, climate and related environmental services to both men and women.

To these ends, the NWS has established a Gender Mainstreaming Working Group to promote the concept within the organization as well as to consider ways in which the concept can be used to address external partner needs.



*Of those living in poverty in the United States, 55.6 percent of 45.3 million are female (American Community Survey, 2013).*

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## Tsunamis: Knowledge is Power When You Only Have Minutes

By [Audrey Rubel](#), Physical Scientist, NWS Alaska Region

On April 2, 2016, the National Tsunami Warning Center in Palmer, AK, partnered with Alaska's Division of Homeland Security and Emergency Management to increase tsunami preparedness through an open house event at the center. The event was attended by about 150 people.

The event is held annually as part of [Tsunami Preparedness Week](#). Guests met the scientists who stand watch and issue warnings, learned about tsunamis and how they propagate, investigated seismic observing equipment

and talked with emergency managers about community risk and preparedness. The state's simulator provided a virtual earthquake experience and center scientists used a wave tank to show visitors how tsunamis behave.

Center staff taught visitors how earthquakes are detected, what factors determine whether a tsunami warning is issued and when it is terminated. Staff also discussed seismic networks and how scientists monitor tsunamis by using buoys and tide gages. Visitors were taught tsunami behavior, with emphasis on the less known fact that a tsunami is a series of waves and the first wave may not be the largest. Guests learned which communities are at risk, where to access inundation maps and were told how they could sign up to receive alerts on their cell phones.

A large focus was placed on what to do in a tsunami risk situation. Key takeaways include:

- ◆ Learn evacuation routes.
- ◆ Know nature's warning signs.
- ◆ Understand how to respond to a possible tsunami.

If you are in a tsunami zone and feel intense shaking lasting more than 20 seconds such that standing is difficult, act immediately. Move to at least 100 feet above sea level or a mile inland, and if impossible, try to go up at least three stories in a reinforced concrete building. Once in a safe place, wait for the all clear from local officials.



Visitors tour the National Tsunami Warning Center in Palmer, AK, during Tsunami Preparedness Week Open House.

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## Relay Service Helps Include Deaf/Hard of Hearing Community in Safety Event

By [Krissy Hurley](#). WCM, NWS Nashville, TN

NWS Nashville, TN, in conjunction with the local Middle Tennessee Chapter of the National Weather Association, hosted its Annual Middle Tennessee Severe Weather Awareness Day in late February at Trevecca Nazarene University, a StormReady University. This event welcomed over 500 attendees from all across the region to sit in on several severe weather safety talks, including Basic and Advanced Spotter classes. In addition, local Nashville and Bowling Green TV meteorologists took part in a discussion panel in which they answered attendee questions, including the audience favorite: "What is the most embarrassing thing that's ever happened to you on live TV?"



NWS Nashville Meteorologist Josh Barnwell and WCM Krissy Hurley offer basic and advanced spotter classes during the severe weather preparedness event.

The keynote speaker this year for Severe Weather Awareness Day was James Spann, Chief Meteorologist from ABCTV33/40 in Birmingham, AL. Spann gave a dramatic presentation on his experiences during the historic April 27, 2011, Tornado Outbreak across the Southeast. Sumner County Emergency Manager Ken Weidner presented on his experiences during the April 6, 2006, Middle Tennessee Tornado Outbreak, which included a direct hit to the city of Gallatin, TN on his second day on the job as the official Emergency Manager

This event was further enhanced by Tennessee Relay Service, which generously donated services to provide closed captioning for all of the speakers so deaf and hard of hearing guests could get the most out of the event. The National Weather Association put together a Storify page for the event and shared it on its Facebook and Twitter accounts.



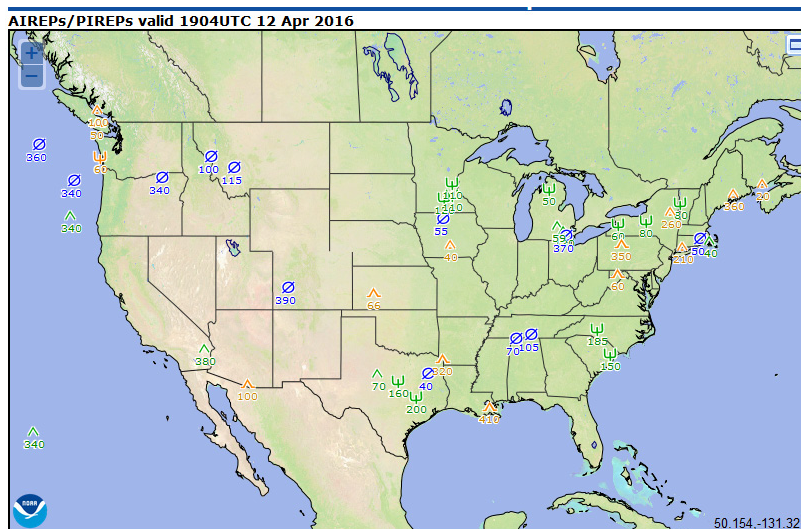
## NWS Testing Experimental Online Pilot Form

By [Mike Bettwy](#), WCM, Aviation Weather Center

The NWS Aviation Weather Center (AWC) is testing the use of an experimental Pilot Report (PIREP) Online Submission Form. This tool can be used by pilots, operators and dispatchers to submit pilot reports. Users will be required to register before accessing the site. Validation of accounts will consider the following:

- ◆ Pilot's license
- ◆ Email address ending in .gov or .mil
- ◆ Group id number for airlines

Pilot license information will be obtained from the FAA public registry at: <http://registry.faa.gov>



All other requests will be evaluated on a case-by-case basis.

The PIREP online submission form supplements the FAA Aeronautical Information System Replacement (AIS-R), the current means of collecting PIREPs.

The AWC PIREP form enables registered users to directly enter pertinent inflight weather information. AWC hopes this online system will increase the number of PIREPs available to the NWS, FAA and aviation community and provide reports more quickly. These reports help pilots, dispatchers and flight planners with flight plan preparation, situational awareness and operational decision making.

In addition, PIREPs are integrated into the NWS forecast production process to help improve the accuracy of the forecasts. PIREPs submitted via the website will be automatically formatted, distributed and displayed graphically on <http://www.AviationWeather.gov>.

The FAA, pursuant to Title 49 United States Code Section 44720, established requirements for this weather information and service necessary for the safe and efficient conduct of operations in the National Airspace System. NWS is accepting comments through June 6, 2016, via a NWS electronic survey. If you have questions regarding the online form, email [Mike Bettwy](#) or call Mike at 816-584-7239.

## National Preparathon Month Resources

By [NWS News Staff](#), Silver Spring, MD

April is national Preparathon month. You can find a host of resources to use this month and all year round at the NWS [Weather-Ready Nation](#) site and [FEMA's Preparathon](#) website. There are social media resources, posters, brochures and a variety of other tools to enhance your local safety program.

# Aware

NOAA's National Weather Service Analyze, Forecast and Support Office  
Managing Editor: [Melody Magnus](#), Editor: **Nancy Lee**  
Aware online: [www.weather.gov/os/Aware/](http://www.weather.gov/os/Aware/) ISSN 1936-8178  
Subscribe/Unsubscribe [www.weather.gov/os/Aware/awarelist.shtml](http://www.weather.gov/os/Aware/awarelist.shtml)