So much mistrust in our field arises from a lack of well coordinated communication. In this light, our every day examples of miscommunication can be analyzed to improve communication between on air meteorologists, NWS, government and police and fire departments in order to provide the highest level of safety and information to the public.

When I worked in Upstate New York we hit a home run with the forecast track, strength and timing of Hurricane Irene. By the 11 AM advisory Thursday, August 25, 2011, the NHC locked in on a forecast - through Sunday it didn't deviate.The storm had devastating impacts on the Catskills.

Because of Irene's track, we did see significant upslope enhancement. Two storm reports from the NWS indicated over a foot of rain fell in both East Durham and East Jewett, which lined up well with the doppler radar estimates. The slope of the hills in the Schoharie Valley is steep ranging from 15 to 30%. The surface area adjacent to the Schoharie Creek is unusually small. These ingredients, the slope and small surface areas combined with the torrential rainfall totals and the unstable clay content of the soil in the Schoharie Valley all contributed to a devastating flash flood.

During my live reporting we received reports that the Gilboa Dam was compromised - so we went to Schoharie. When we arrived the town was desolate, and the sirens were sounding. We made our way to the evacuation center. There was much confusion - and it took several attempts for us to ascertain that officials were evacuating the evacuation center. Residents were also confused, and there were hurdles involved trying to move people with disabilities.

Irene's Post Storm Assessment (NWS, Albany, NY) gave accolades to the forecast track, timing and intensity. The assessment went on to say the Service “had issues working with broadcast media,” and there was a “need to improve partnerships with non-NOAA groups.”

In the NWS' research for the Weather Ready Nation program, they found that credible risk signals prompt people to take protective action. One way to accomplish that is to replace conventional warnings with “impact based warnings.” This will help “motivate proper response to warnings by distinguishing situational urgency”. It will “realign the warning message in terms of societal impacts,” and it will also “communicate recommended actions and precautions more precisely while distinguishing between low impact and high impact events.” When asked, people said they are more likely to take action when they see pictures or hear of actual damage occurring.

During a severe weather event July 18, 2015, a tornado watch was issued. Within an hour, severe thunderstorms developed in southeast Wisconsin. Quickly a bowing line segment developed with several individual cells in front of the primary line. There was a high wind threat with the line and an enhanced tornado threat accompanying the individual cells. Our DMA is situated so that our NWS office is located in the western most county, and our station is in the most eastern. As the line moved through Sullivan, the velocities supported damaging wind gusts; however, the NWS office had only

recorded a gust of 36 mph: a measurement taken prior to the storms increased intensity as it made its way eastward. It's our station's policy to cut in for every severe thunderstorm and flash flood warning issued. In the case of a tornado warning, we'd start wall-to-wall coverage. Radio frequency scanners were the standard source for media to receive information and damage reports during severe weather events because communications on these pre-digital scanners could be intercepted by Media outlets. Today's digital scanners connect government agencies ONLY.

We've found that when our assignment desk calls local first responders, law enforcement and dispatchers, they're often disconnected or are told “there is nothing.” I've also been told by NWS employees they sometimes encounter the same problems.

Each warning was “impact based,” but the “source” was “radar indicated.” There are examples of first responders who excel at releasing information in a timely manor. Over my two years in Milwaukee, I've developed a relationship with the Greenfield Fire Department. My contacts there have been very proactive with social media. I've explained the importance of receiving real-time information during a severe weather event.

On July 18, 2015 a severe thunderstorm warning was issued for Milwaukee county at 2:55 PM CDT valid until 3:30 PM CDT; the warning was extended with a new expiration time of 4:00 PM CDT. At 3:42 PM CDT the Greenfield Fire Department tweeted that they were handling several calls for trees and wires down. Looking at the archived radar imagery, the line of severe thunderstorms moved through Greenfield at 3:30 PM CDT. There was only a 12 minute lag time, and we were able to say that there was confirmed damage during our coverage. There was a 60% verification rate with the severe thunderstorm and tornado warnings issued. The only two reports we received during the event were the sub-severe wind gust in Sullivan from the NWS and the tweet from the Greenfield Fire Department.

After the thunderstorms passed, we received numerous severe weather reports from 911 Call Centers of “trees and wires down county wide”. Our assignment desk called each county during the event, and the county's representative either hung up or told us there were no reports.

In summary, it's important to build relationships with local law enforcement, first responders and dispatchers. It would be helpful if these agencies were given training as to what types of severe weather to report. Obviously, any timely information we can give the public always has the potential to save lives and keep our communities safe.