

## The Valentine's Day "Blizzard" of 2015: Effective Communication in a High-impact, Low-accumulation Event

*Amos Dodson & Megan Dodson, NOAA/NWS Northern Indiana Syracuse, IN*

An arctic front produced near-blizzard conditions across the County Warning Area (CWA) of the National Weather Service (NWS) in Northern Indiana on February 14, 2015. New snowfall amounts were generally only 1-3," but deep boundary layer mixing produced maximum wind gusts of 40-50 mph. True blizzard criteria (defined as wind speeds greater than 35 mph and visibilities below ¼ mile persisting for three or more consecutive hours) was never measured across the CWA but nevertheless, the impacts were substantial. Several multicar pileups involving up to 20 vehicles were reported on major roads in the area, along with countless smaller accidents. Two fatalities and dozens of injuries occurred during the event. Several interstates and US highways saw traffic restrictions or were closed entirely and numerous counties issued travel warnings, restricting travel to emergency vehicles only.

A local case review of this event produced several best practices and lessons-learned related to both science and service. This case highlighted the role of steep low level lapse rates and isentropic descent (cold air advection) in non-convective high wind events. The unique combination of high winds, low snowfall amounts, and bitterly cold wind chill values during arctic frontal passages also makes effective messaging difficult and presents a particular challenge to the current winter weather headline paradigm of the NWS. An inconsistent approach to headline decisions across NWS offices and regions muddles the message and use of the winter weather advisory headline does not appear to adequately convey the threat. Being overly-focused on snow accumulation and the associated headline can also lead to complacency and "missing" some high impact events. Furthermore, it is theorized that certain vague and overused terminology in the text of the winter weather message can lead to complacency. It will also be shown that effective leveraging of social media, using pictures and well-designed graphics instead of words, can go much farther in eliciting the desired response from the public during these rare, high-impact events. The goal of this presentation is to highlight best (and worst) practices for communicating to the public and our partners during high impact events.

