Snow Squall Warnings: An Overview

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Why Worry About Snow Squalls?

There is a long history of deadly accidents associated with snow squalls. Snow squalls can cause localized extreme impacts to the traveling public and to commerce for brief periods of time.

The rapid onset of whiteout conditions, combined with gusty winds and falling temperatures can cause extremely dangerous conditions for motorists.

Annual highway fatalities from these events can exceed fatalities from tornadoes and floods combined for portions of the U.S.
What Is A Snow Squall?

- Intense short-lived burst of heavy snowfall (15 minutes or more).
- Quick reduction in visibilities (typically less than ¼ mile) and is often accompanied by gusty winds in excess of 30 mph.
- Similar to blizzard conditions, but localized and shorter in duration.
- Quick snow accumulations in excess of 0.5 inch possible over very short time durations.
Other Snow Squall Features

- Typically occur during the daytime hours.
- Often causes chain-reaction accidents resulting in injuries and deaths.
- Can be accompanied by flash-freeze road conditions.
- Speed and volume of traffic a factor:
  - Pile-ups more likely with vehicles traveling at higher speeds.
  - Less traffic volume at night limits potential accidents vs. daytime.
Snow Squall Warning Facts

- Implemented on January 16, 2018
- "Short-fused" in nature
- Issued for smaller geographic areas for up to 60 minutes
  * Across 1-3 county area
- Lead time will generally be 20 to 30 minutes or longer
  * Typically issued between 5am – 11pm
- Issued by WarnGen in a Polygon Format
  * Maroon/burgundy color
- Similar in format to Severe Thunderstorm Warnings

*So far, none have been issued for southeast Michigan*
Special Considerations

Snow squalls are a unique hazard for motorists, especially on highways and interstates, and during higher traffic volumes.

EAS
Emergency Alert System

- Available on NOAA Weather Radio
- Currently, not available on EAS. However, SE MI broadcasters encouraged to treat as a “base” Severe T-Storm Warning (60 mph winds)
- WEA (cell phones) after May 2019

- Lean toward a Special Weather Statement in most situations between 11pm – 5am.
- Discretion made based on traffic, highways impacted, etc.

How Snow Squall Warnings are treated with other winter weather hazards in effect...

- Not issued if a Winter Storm Warning is in effect
- If conditions warrant, may be issued if a Winter Weather Advisory is in effect
Snow Squall Warning Example

Webpage

Point and Click Webpage

Text Product

Social Media (Twitter)

- Text product will list important highways and mile markers
Snow Squall Preparedness Tips

• Remain alert to the latest forecast and travel conditions. Consider avoiding or delaying travel until the snow squall passes your location.

• Leave extra time if you must travel during snow squalls.

• Reduce your speed and turn on headlights!

• Don’t slam on brakes!
Ways To Receive
Snow Squall Warnings

• NOAA Weather Radio
• Website: http://weather.gov
• Mobile: http://mobile.weather.gov
• iNWS: https://inws.ncep.noaa.gov (Public Safety Officials only)
• NWSChat: https://nwschat.weather.gov
• Twitter
• Other local and state dissemination systems
• State DOT Variable Message Signs (VMS) in some areas
• Future: Emergency Alert System (EAS)
• Future: Cell Phone Wireless Emergency Alerts (WEA)
Questions?