

OSC 10
Ohio Safety Congress & Expo

Effective severe weather
safety for businesses
Session 174

Rob Dale – Skywatch Services

Tuesday, March 30, 2010 1 to 2 p.m.

Severe Weather Strategy Workshop for Industry

National Weather Service – Quad Cities IL
Rob Dale – Skywatch Services LLC

NOAA's National Weather Service

Why are we here?

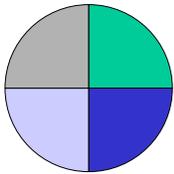




Why are we here?

Nobody wants to notify next of kin.

What makes an effective Severe Weather Plan?



Plan

- *Know the threats*
- *Construct an effective plan for those threats*

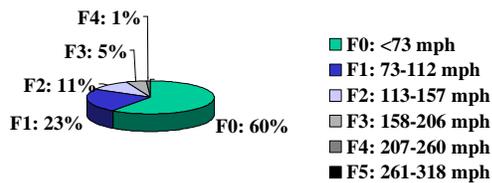
Plan: Threat Assessment

Tornado
Extreme wind
Flood
Flash Flood
Hail
Blizzard
Extreme Heat/Cold

Focus on Tornado/High Wind

- **Climatology of Tornadoes/High wind**
- **Strength**
- **Season**
- **Diurnal peaks**

Tornados: Strength



An Effective Severe Weather Plan answers these questions:

- **Who will monitor the weather?**
- **When will plan be enacted?**
- **How will action be initiated?**
- **Where will people go?**
- **How will you communicate an "all-clear"?**
- **When will you practice?**

Who will monitor the weather?

- **"Designated Weather Watcher"**
- **Available information: before, during, after**
- **Your eyes: the spotter network**
- **Two-way communication**

When will plan be enacted?

- **Establish criteria**
 - *Warning or sighted*
- **Consider how much time you need for people to reach shelter...**

Background: Available Weather Information

- **Hazardous Weather Outlook**
 - early each morning and as needed during the day
- **Watch**
 - 1 to 6 hours ahead
- **Warning**
 - Severe thunderstorm: average 20 minutes before
 - Tornado Warning: average 12 minutes before
- **Web sites**

Background: What can I expect from warnings?

- **Climatology**
- **Realistic expectations**
- **High wind wording**
- **Geography**

How will action be initiated?

- **Means of communication**
- **Backup plan**

Where will people go?

- **Appropriate shelter**
- **Enough space**
 - Visitors (esp. large groups)
 - People leading the group must have and know the plan
- **Enough time to get there**

Background: Tornado Shelters

- **Interior of building**
- **Without windows**
- **Roof tied to walls – walls tied to floor**
- **Avoid large-span (>30 ft) rooms**

- **An engineered Saferoom is best**
- **FEMA Saferoom guidelines**
- **New construction or retrofit**
- **Can be a working space (conference room, break room, storeroom, bathrooms, etc)**





Safe Rooms under construction in the Country Club Courts subdivision by The Core Inc., Wichita, KS. Photo by FEMA.

How will you communicate an “all-clear”?

- *Drills*
- *Shift to response/rescue mode*

Practice

- *Training meetings: Make sure everyone knows the plan*
- *In house drills: Practice the plan*
 - Evaluate time needed
 - Evaluate suitability of shelters
- *Severe Weather Awareness Week – tornado drill day for each state*

Act

- **Acting vs reacting**
- **Be proactive**
 - Outlook, watch, other warnings

Consider Van Wert, Ohio.

On Veteran's Day In 2002, an F4 tornado struck Van Wert, Ohio. 50 people were watching "Santa Clause 2". The movie theater was directly struck. No fatalities. No serious injuries. Why? The theater owner had heard the warning on Weather Radio and moved all the patrons into their restroom (shelter area).



Summary

Based on Parsons, VanWert, Oklahoma City, Utica, and numerous other tornado successes and failures – What works:

- ***Engineered Tornado shelters.***
- ***The Designated Weather Watcher.***
- ***Being proactive.***
- ***Practicing.***

Plan. Practice. Monitor. Act.