

CITY OF MARSEILLES
SEVERE WEATHER PLAN
PREPARE, READY, INFORM, ALERT



The City of Marseilles Severe Weather Plan serves as a guide for emergency procedures. This severe weather plan serves as a guide for procedures, actions and early warning systems. This plan emphasizes the need to be informed, ready and alert during a severe weather event. It does not replace the need for individual citizens to establish their own plan, be informed, ready and alert in the event of a weather emergency.

Definitions

Tornado Watch: A tornado watch is issued when weather conditions are favorable for the development of severe thunderstorms that are capable of producing tornados. A tornado watch must not be confused with a tornado warning.

Tornado Warning: A tornado warning is an alert issued by weather services to warn that tornados are occurring or may be imminent. It can be issued after a tornado has been spotted by eye, or more commonly if there are radar indications of tornado formation.

Severe Thunderstorm Watch: A Severe Thunderstorm Watch is issued when weather conditions are favorable for the development of severe thunderstorms.

Severe Thunderstorm Warning: A Severe Thunderstorm Warning is issued when Doppler weather radar indicate that a thunderstorm is producing dangerously large hail or high winds, capable of causing significant damage.

Winter Weather Advisory: A combination of winter weather that presents a hazard, but does not meet warning criteria.

Winter Storm Warning: Seven inches or more of snow will fall within a 24 hour period.

Blizzard Warning: This is issued for a combination of strong winds averaging or frequently gusting to, or above, 35 miles an hour and very low visibility due to blowing or falling snow. These are the most dangerous winter storms and can be especially severe when combined with temperatures below 10 degrees

Resources:

www.weather.gov

www.noaa.gov

www.intellicast.com

www.ready.gov

Purpose:

To guide and assist emergency personnel in monitoring severe weather to aid in early warning to the citizens of Marseilles during a severe weather event. Severe weather events include Severe Thunderstorm Warning, Tornado Warning, Severe Snow Advisory, or any other weather event requiring response deemed necessary. A Snow Advisory will be evaluated on a case by case basis to determine response.

Procedure:

Once a severe weather notification is received by Central Dispatch, it will be broadcast to Emergency Service Personnel. Emergency Service Personnel include department heads, and city officials (fig 1). Broadcasts will include new and real time information to include weather spotter statements. Notification will be made to areas of interest either by Central Dispatch or Police Department Officer. (fig 2).

Action:

Once the severe weather notification is received, the situation will be monitored. Once the severity is determined, communications between emergency departments will be established, weather spotters will be deployed. Weather spotters will be deployed from on duty Police, EMS and Fire personnel. The Emergency Operations Center will be activated by the Police Chief, or ranking officer on duty. EOC will be staffed by The Chief of Police or his designee, a member of each emergency agency if available, to include at least one emergency department head. The severe weather event will be monitored by the EOC through outlets to include Central Dispatch, National Weather Service, Weather Radio, Media Networks, online weather radar resources and weather spotters, Communications with neighboring towns will be established that are in the path of the severe weather prior to Marseilles, if necessary. The weather event will be monitored to its conclusion.

Warning:

The early warning systems will be activated by the EOC at any time a tornado warning is issued for Marseilles/LaSalle County or a credible threat is determined from information gathered from weather spotters or neighboring communities. EOC has the authority to activate all available warning systems.

Early warning is established by weather sirens and Nixle.

Once it has been determined that the severe weather is a Tornado Warning, early warning to the citizens will be established. If a Tornado Warning broadcast includes Marseilles in the National Weather Service trapezoid, the weather sirens will be sounded. Weather sirens will also be sounded if there is detection by a weather spotter, surrounding towns to Marseilles that are in the path, or any other situation that may warrant early warning.

The Marseilles Text alert system (Nixle) will be activated. A wireless phone text blast will be put out which will state there is one of the following:

Tornado Watch
Tornado Warning
Severe Thunderstorm Watch
Severe Thunderstorm Warning
Winter Weather Advisory
Winter Storm Warning
Blizzard Warning

Conclusion:

At the conclusion of a threat, or once it has been determined that a threat no longer exists, it will be the discretion of the Police Chief to issue an all clear to citizens.

Conditions will be monitored for any pending weather events. It will be the discretion of the incident commander to inactivate the EOC and release personnel.

Assessment:

An assessment will be conducted for any injuries, damage, utility concerns, or flash flooding. Response will be according to the severity, using all available resources and agencies. Reports of damage and information regarding the event will be forwarded to the National Weather Service by EOC.

Procedure Notifications

Fig 1

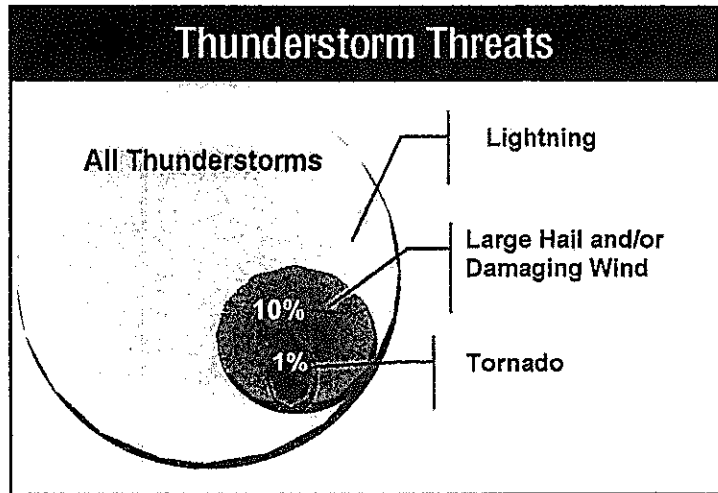
Police Department	Chief Brian Faber
Police Department	Captain Todd Gordon
Fire Department	Chief Mick Garrison
Fire Department	Deputy Chief
Public Works	Paul Rivett
Marseilles Ambulance	Chief Don Modeen
City of Marseilles	Mayor Jim Hollenbeck

Fig 2

Aperion Care Nursing Home
Marseilles Elementary School
Marseilles Public Library
Marseilles City Hall
Marseilles Municipal Pool
Marseilles Ball Diamonds

Areas of mass gatherings to be made in person;
Events in Knudson Park, on Main Street, block parties, organized Civic Events, etc.

Weather Hazard: Lightning, Thunderstorms, and Tornadoes



- Lightning occurs every month of the year and can happen anywhere.
- Lightning can strike as much as 10 miles from the parent thunderstorm.
- In the local area, we average 4 to 8 lightning strikes annually per km².
- **All thunderstorms produce lightning and thus are potentially fatal.**
- About 10% of storms will also produce large hail and/or damaging wind gusts. Only about 1% will produce a tornado
- Remain indoors for 30 minutes after the last lightning is seen or thunder is heard.

Threshold	Timing and Sources	Recommended Actions
<p>Potential for thunderstorms</p> <p><i>Forecast or Hazardous Weather Outlook: first mention of potential for storms</i></p>	<p>2-3 days ahead</p> <p><i>via web page, email, TV, Weather Radio</i></p>	<p>Communicate potential threat to decision makers and all staff (pre-notify)</p>
<p>Thunderstorms likely in the area in the next few hours</p> <p><i>Severe thunderstorm or tornado watch: 50% or greater chance for severe storms; Storms may have the potential to produce tornadoes</i></p>	<p>Typically a few hours before storms</p> <p><i>via Weather Radio, web page, email, text alert, TV</i></p>	<ul style="list-style-type: none"> • Communicate increased threat to all staff • Establish strong communication between weather watcher(s) and decision makers at all facilities • Ensure all staff understand sheltering plan • Consider postponing outdoor events • Monitor radar trends; focus on timing • Depending on timing, consider moving people out of vulnerable locations (temporary buildings, outdoors, etc.)
<p>Storms upstream and approaching</p> <p><i>as seen on radar, warnings issued for upstream locations</i></p>	<p>One hour or less</p> <p><i>Via web page, email, text alert, Weather Radio, TV</i></p>	<ul style="list-style-type: none"> • Monitor radar trends; focus on timing • Move people out of vulnerable locations (temporary buildings, outdoors, etc.) • Close any open windows and doors
<p>Storms moving in</p> <p><i>Storms within 10 miles, or visible lightning/audible thunder</i></p>	<p>30 minutes or less</p>	<ul style="list-style-type: none"> • Immediately suspend outdoor activities. • Move all people indoors • Remain indoors for 30 minutes after lightning ends.

<p>➔ Severe Thunderstorm Warning</p> <p><i>Thunderstorm with hail quarter size or larger and/or wind over 58 mph is imminent</i></p>	<p>0 to 40 minutes before storm (average is 22 minutes)</p> <p><i>via web page, email, text alert, Weather Radio, TV</i></p>	<ul style="list-style-type: none"> • Immediately move all people indoors • If wind 70+ mph, hail 1.75+ inches: also immediately move to shelter areas, closing all doors behind you. <p>For duration of storm:</p> <ul style="list-style-type: none"> • Remain indoors or in shelter • Monitor information sources for updates
<p>➔ Tornado Warning or tornado spotted nearby</p> <p><i>Tornado is likely or imminent</i></p>	<p>0 to 30 minutes before tornado (average is 11 minutes)</p> <p><i>via web page, email, text alert, Weather Radio, TV</i></p>	<ul style="list-style-type: none"> • Immediately move to designated shelters, closing all doors behind you. <p>While in shelter:</p> <ul style="list-style-type: none"> • Try to find a location that will protect you from debris. Monitor information sources for updates

General Considerations

- We strongly recommend everyone seek a safe location during imminent severe weather.
- When sheltering, staff should close any doors behind them.
- There is no official “all-clear” from the National Weather Service. Monitor radio, TV, and internet sources for updates on the storm to determine when it is safe to come out of shelter.

Special Considerations for Transportation

- Identify safe structures along routes where drivers may seek emergency shelter if severe storms suddenly hit.
- Train drivers on how to react during severe weather:
- If a tornado warning is issued or a tornado is sighted, go immediately to the nearest shelter.
- If shelter is not available, as a last resort, evacuate into the nearest ditch on the downwind side of the road away from power lines and trees. People should lie flat in a low place and cover their heads.
- If time allows, move the vehicle away from the area, radio the base station, and remove the first aid kit.

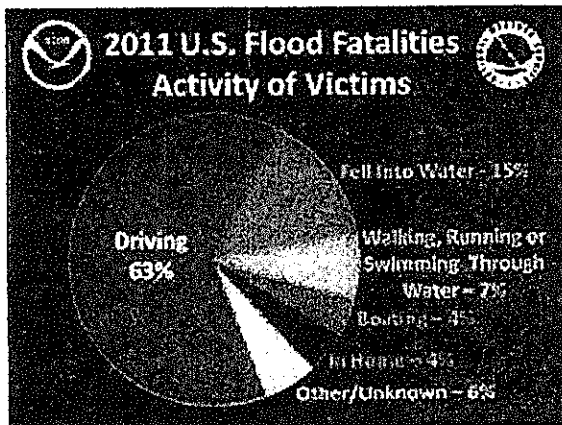
Special Considerations for Temporary Buildings

Temporary buildings offer no protection from extreme straight-line winds or tornadoes. Temporary buildings should be evacuated before severe weather moves into the area.

After the Storm

Once the storm has passed, stay alert for the possibility of additional storms. If your building sustains damage, shut off the gas and electricity. Do not attempt to evacuate through damaged areas, as downed power lines and debris pose grave danger.

Weather Hazard: Flash Flood



- Flash floods can occur within a few minutes or hours of excessive rainfall, a dam or levee failure, or a sudden release of water held by an ice jam.
- Flash floods often have a dangerous current of water and can carry much debris.
- Flash flooding can continue long after rain ends.
- Know the flood prone areas in advance, such as low-lying spots and locations of rivers or creeks.
- Establish alternate routes to avoid driving through water.
- For flood-prone facilities, consider where and how to evacuate to higher ground.

Threshold	Timing and Sources	Recommended Actions
<p>Potential for flooding exists</p> <p><i>Forecast or Hazardous Weather Outlook: first mention of potential for heavy rain or flooding</i></p>	<p>2-3 days ahead</p> <p><i>via web page, email, Weather Radio</i></p>	<p>Communicate potential threat to decision makers (pre-notify)</p>
<p>Flooding likely in the area</p> <p>➔ <i>Flood or Flash Flood Watch: Heavy rain is likely with a 50% or greater chance for flooding</i></p>	<p>Typically a few hours to one day before expected flooding</p> <p><i>via web page, email, text alert, Weather Radio, TV</i></p>	<ul style="list-style-type: none"> • Communicate increased threat to all staff • Establish strong communication between weather watcher(s) and decision makers • Ensure alternate transportation routes are accessible to avoid flood-prone spots • Ensure evacuation routes are available at flood-prone facilities
<p>Life-threatening flash flooding is ongoing or imminent</p> <p>➔ <i>Flash Flood Warning: Confident of life-threatening flash flooding</i></p> <p>➔ <i>Flash Flood Warning Update Statements: Updates on impacts of flooding, timing, location, creeks at risk, additional rainfall, status of warnings, etc.</i></p>	<p>Typically 30 to 60 minutes before flooding begins; updates issued throughout warning</p> <p><i>via web page, email, text alert, Weather Radio, TV</i></p>	<ul style="list-style-type: none"> • Read warnings and updates carefully for locations or creeks that may be under particular threat. • Monitor flood-prone facilities near creeks and other low-lying areas for potential rapid flooding and prepare to move to higher ground • Use alternate transportation routes to avoid flooded roads • Respond to specific impacts as necessary

Special Considerations for Transportation

- Establish an alternate plan for transportation routes that avoids flood-prone roads.
- **NEVER ATTEMPT TO DRIVE THROUGH FLOOD WATERS!**
 - If the water is too deep to see the road, **DO NOT CROSS**. The road may have been undermined or the water may be deep enough to stall the vehicle and place all of its occupants in danger.
 - Do not enter underpasses that are filling with water.
 - If the water appears to be flowing, do not enter. The vehicle will act as a barrier and the water will attempt to lift and move it.
 - If water is flooding over or around a bridge, do not cross it, it might collapse from the weight of the vehicle. The foundation of the bridge may have been compromised.
- If caught in flood waters, abandon the vehicle and seek higher ground immediately.

Weather Hazard: Heat

Heat Index Impacts

- As heat continues, people become even more susceptible to its effects.
- Heat Index is the effective temperature the body feels when heat and humidity are combined.
- Heat index assumes shady, light wind conditions. **Exposure to direct sun adds about 15°F.**

Heat Index

80 to 89° - Caution

90 to 104° - Extreme Caution

105 to 129° - Danger

130° or higher - Extreme Danger

General Effect on People

Fatigue possible with prolonged exposure and/or physical activity.

Sunstroke, heat cramps and heat exhaustion possible with prolonged exposure and/or physical activity.

Sunstroke, heat cramps or heat exhaustion likely; fatal heatstroke possible with prolonged exposure and/or physical activity.

Fatal heatstroke highly likely with prolonged exposure.

Threshold	Timing and Sources	Recommended Actions
Potential for Extreme Heat <i>Forecast or Hazardous Weather Outlook: First mention of extreme heat</i>	4-5 days ahead <i>via web page, email, Weather Radio</i>	Communicate potential threat to decision makers (pre-notify)
Dangerous Heat Likely <i>Excessive Heat Watch: Greater than 50% confidence of extreme heat lasting for more than 2 days</i>	Typically 48 hours before onset <i>via web page, email, text alert, Weather Radio, TV</i>	<ul style="list-style-type: none"> • Communicate threat to all staff • Refresh staff on identification of heat-related illness • Develop alternate plans for outdoor activities (e.g. move indoors or to cooler times of day)
Unusual Heat Imminent or Ongoing <i>Heat Advisory: High confidence of unusual heat (heat index >100°F)</i>	Typically 24 hours before onset <i>via web page, email, text alert, Weather Radio, TV</i>	<ul style="list-style-type: none"> • Communicate threat to all staff • Postpone outdoor activities or move them to cooler times of the day • Monitor closely for heat illness symptoms
Extended Period of Extreme Heat Imminent or Ongoing <i>Excessive Heat Warning: High confidence of dangerously high heat for more than 48 hours (heat index > 105°F)</i>	Typically 24 hours before onset <i>via web page, email, text alert, Weather Radio, TV</i>	<ul style="list-style-type: none"> • Communicate threat to all staff • Monitor people closely for heat illness symptoms • Monitor unairconditioned facilities for dangerously high temperatures

Additional Resources

Recognizing Heat Illnesses from the CDC emergency.cdc.gov/disasters/extremeheat
 Red Cross Heat Guidelines www.redcross.org/prepare/disaster/heat-wave

Weather Hazard: High Wind

High Wind Facts

- One third of high wind fatalities are caused by falling trees.
- About the same number of people die from non-thunderstorm wind as from severe thunderstorm wind.
- Most high wind fatalities occur in March, November, and December in that order.
- One half of high wind events in the Midwest occur in March and April.

Threshold	Timing and Sources	Recommended Actions
<p>Potential for high wind</p> <p><i>Forecast or Hazardous Weather Outlook: first mention of potential for high winds</i></p>	<p>3-4 days ahead</p> <p><i>via web page, email, Weather Radio</i></p>	<ul style="list-style-type: none"> • Inspect grounds for dead or dangling branches that could be more easily broken
<p>Dangerous Wind Likely</p> <p>➤ <i>High Wind Watch: More than 50% confidence of dangerously high wind (40+ mph sustained and/or 60+ mph gusts)</i></p>	<p>Typically 24-48 hours before onset</p> <p><i>via web page, email, Weather Radio</i></p>	<ul style="list-style-type: none"> • Communicate threat to decision makers (pre-notify) • Remove dead or dangling branches that could be easily broken.
<p>High wind is imminent or occurring</p> <p>➤ <i>Wind Advisory: High confidence of sustained winds of 30 mph+ and/or wind gusts of 45-55 mph</i></p>	<p>Typically 6-12 hours before onset</p> <p><i>via web page, email, text alert, Weather Radio, TV</i></p>	<ul style="list-style-type: none"> • Alert drivers of high-profile vehicles to increased headwind and cross-wind • Consider rescheduling roof maintenance or other elevated work/activities
<p>Dangerously high wind is imminent or occurring</p> <p>➤ <i>High Wind Warning: High confidence of damaging winds (40+ mph sustained and/or 60+ mph gusts)</i></p>	<p>Typically 6-12 hours before onset</p> <p><i>via web page, email, Weather Radio</i></p>	<ul style="list-style-type: none"> • Alert drivers of high-profile vehicles to increased headwind and cross-wind • Reschedule roof maintenance or other elevated work/activities.

Special Considerations for Transportation

Strong headwind may slow travel, and strong cross-wind can become a driving hazard.