

# Severe Weather Tonight/Wednesday

### **Key Messages**

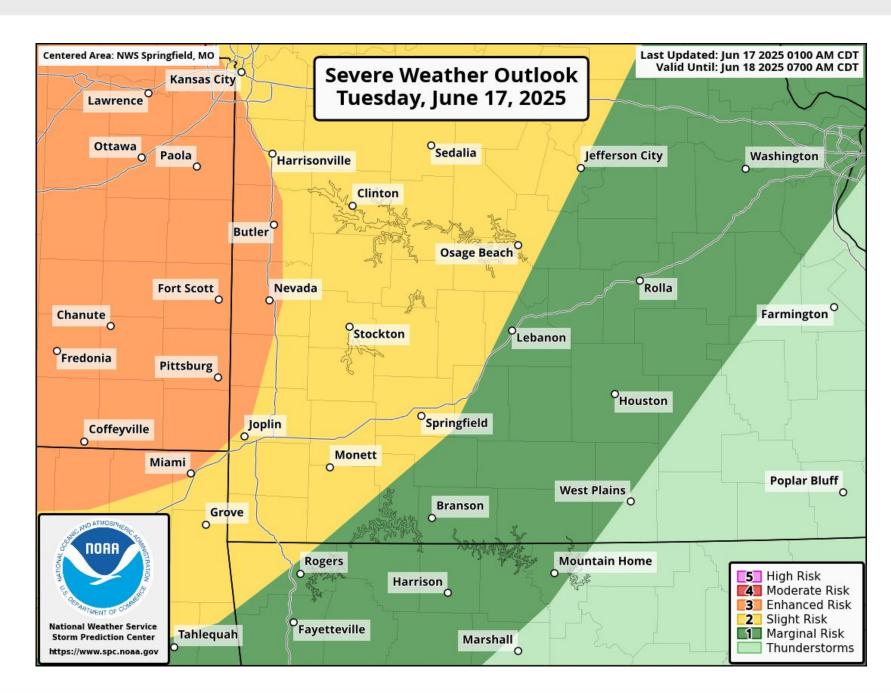
- → First round of severe risk comes late Tuesday night with an Enhanced (level 3 of 5) risk of severe weather in eastern Kansas and part of western Missouri.
- → Second round of severe risk Wednesday afternoon/evening, with a widespread Slight (level 2 of 5) risk across the Ozarks and enhanced risk over the eastern Ozarks.
- → Localized flooding potential where heavy rainfall occurs.
- Heating up this weekend, with very muggy conditions causing apparent temperatures to approach Heat Advisory conditions.

### **NEW Important Updates**

→ Upgraded day 2 outlook to enhanced (3 of 5)

### **Next Scheduled Briefing**

→ By 7 PM Tuesday





# **Severe Outlook Late Tonight**

**Highest severe risk furthest west** 

### **Timing**



Late tonight into early Wednesday morning

### Threats 4







# Large Hail Size of quarter



### **Few Tornadoes**

Very conditional threat for short, weak spin-ups



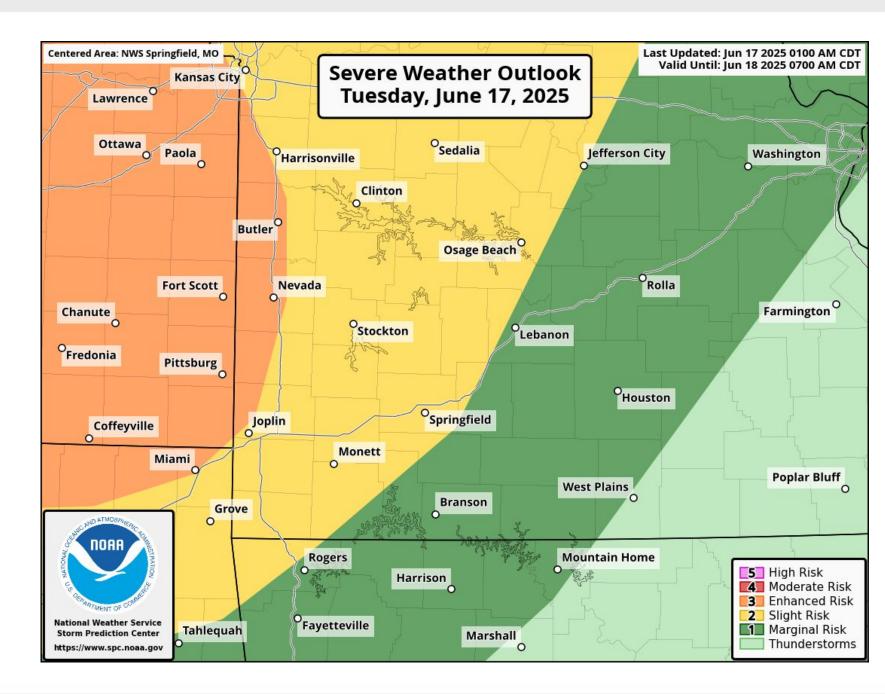
### **Frequent Lightning**

Cloud-to-ground strikes



### **Heavy Rainfall**

Downpours could lead to localized flooding



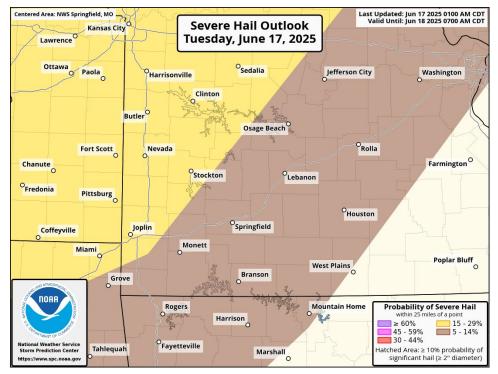


### Hazard Probabilities Tonight/Wednesday Morning

#### Greatest threat is winds up to 70 mph

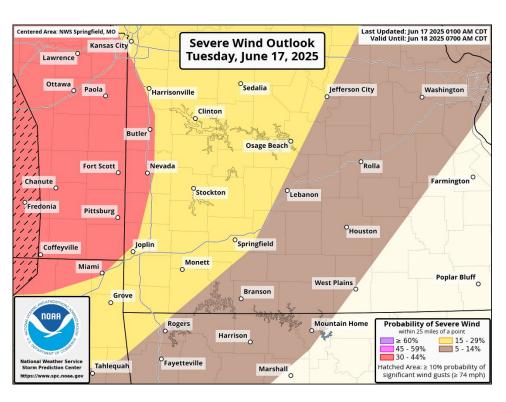


### **Hail Probability**



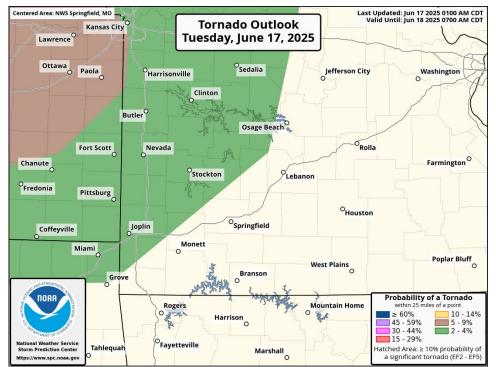


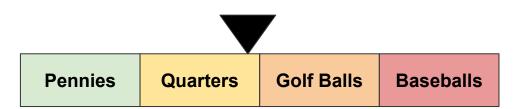
#### **Wind Probability**

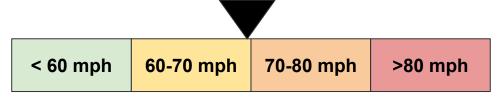


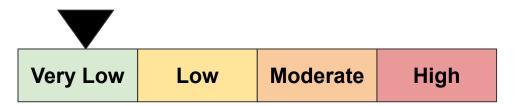


### **Tornado Probability**











# Wednesday Severe Outlook

### Wednesday afternoon into Wednesday evening

### What

→ There is an enhanced (level 3 of 5) Risk for severe weather associated with a cluster of thunderstorms on Wednesday. All modes of severe storms will be possible.

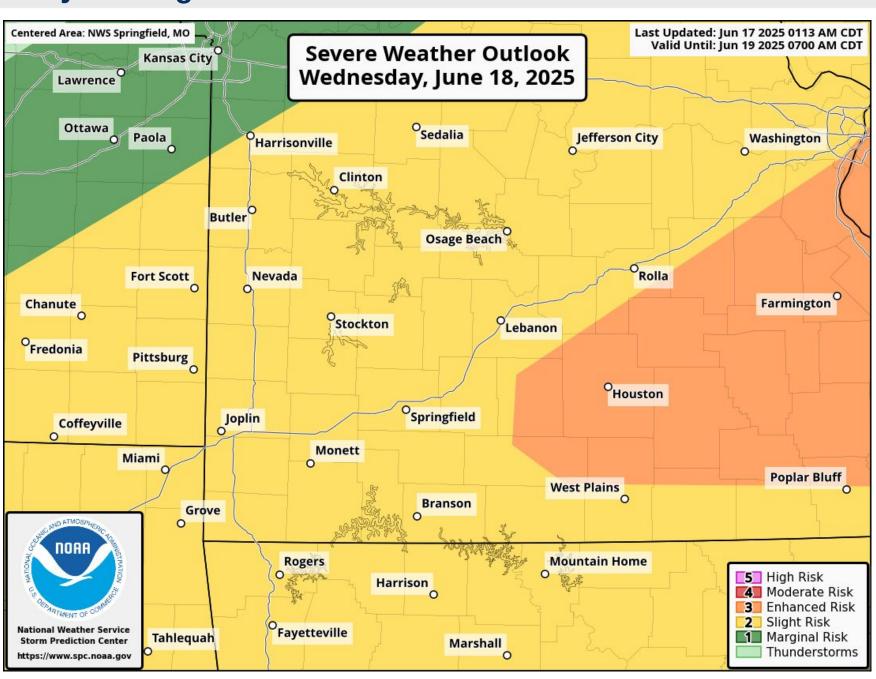
#### **Where**

- → Area of highest severe risk will likely be over the eastern Ozarks, however all of the area is in at least a slight risk of severe storms.
- → More widespread coverage is expected with this line of storms.

### When

→ Wednesday afternoon into Wednesday







# **Confidence Levels**

Higher confidence in how first round of storms plays out, with highest uncertainty Wed. afternoon

### Location Medium High Low **Timing** High Low Medium **Severe Hazard Type** Medium High Low **Flooding** Medium High Low

#### **Confidence Details**

- → Main uncertainty Tuesday night/Wednesday morning is in eastward extent, with questions about how far east it'll get.
- → Higher confidence in widespread coverage of severe weather on Wednesday afternoon.
- → Lower confidence in hazard types and storm modes Wednesday afternoon.

#### **Alternate Scenarios**

- → A convective vortex within the larger storm complex could form Tuesday, with sub-severe thunderstorms but efficient rainfall rates, which would increase flooding potential.
- → A convective vortex within the larger storm complex could also form Wednesday, which would increase rainfall residence time and flooding potential on Wednesday.
- → Additional wind shear on Wednesday would increase hail and tornado risk, with initial storm development potentially supercellular Wednesday afternoon/evening.
- → Multicells/line segments greatly lower tornado potential.





# NWS Springfield Heat Headline Criteria

The difference between advisory, watch, and warning for heat products

# **Heat Advisory**

### **Use Caution**

Hazardous heat will occur for at least 24 hours.

Heat index ≥ 105°F

and/or

Heat index 100-104°F for 4+ consecutive days

### **Extreme Heat Watch**

### **Be Prepared**

Dangerous heat is possible in the next 24 hours.

<u>Issued 24-48 hours before:</u>

Heat index ≥ 110°F

and/or

Heat index ≥ 105°F for 4+ days

### **Extreme Heat Warning**

### **Take Action!**

Dangerous heat is occurring or expected to occur for 48+ hours.

Heat index ≥ 110°F

and/or

Heat index ≥ 105°F for 4+ consecutive days

with consideration of nighttime temperatures around 75°F or higher

due to accentuated impacts from elevated nighttime temperatures

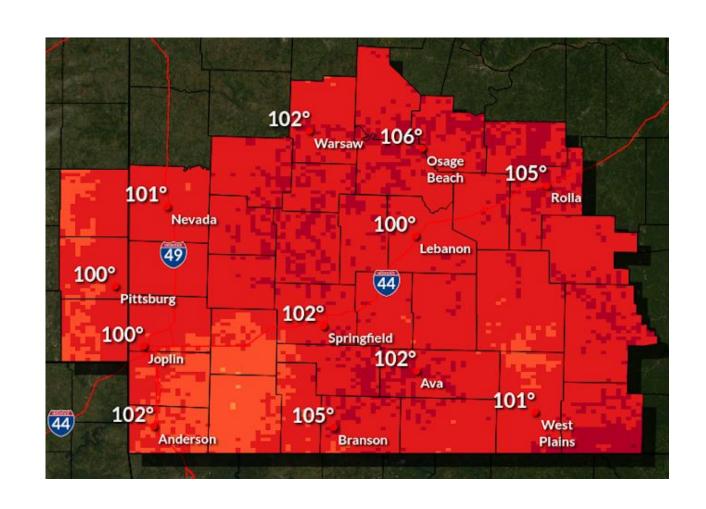


# **Apparent Temperature Forecast This Weekend**

#### **Apparent Temperature Friday**

#### 101° Apparent Temperature (F) -103° Warsaw -105° Osage 100° Beach 101° Nevada 98° Lebanon 49 102° 44 Pittsburg 102° 102° Springfield Joplin Ava 96° 102° 103° 44) Anderson Branson **Plains**

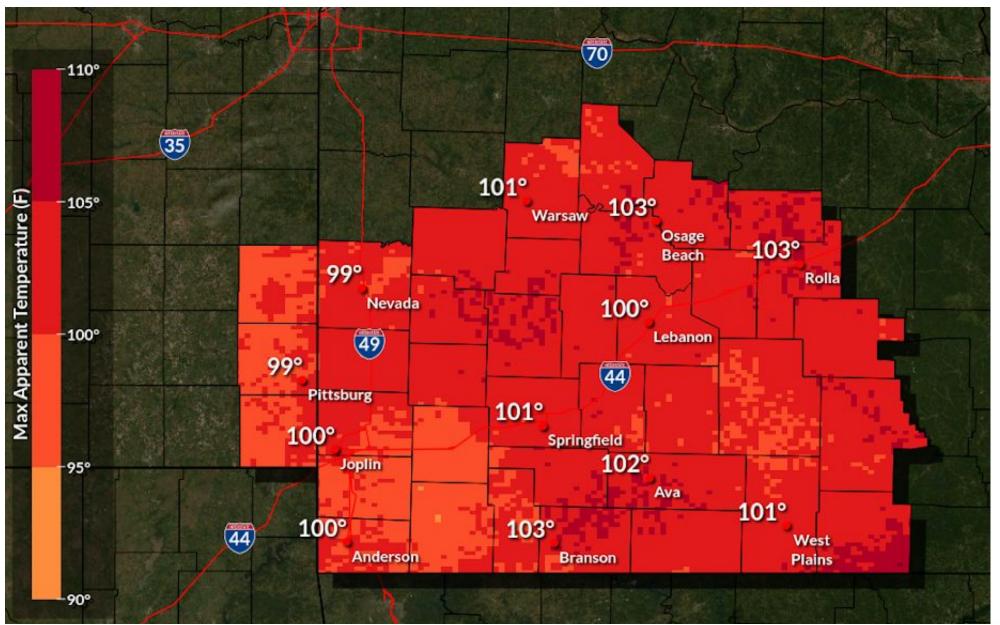
### **Apparent Temperature Saturday**





# **Apparent Temperature Forecast This Weekend**

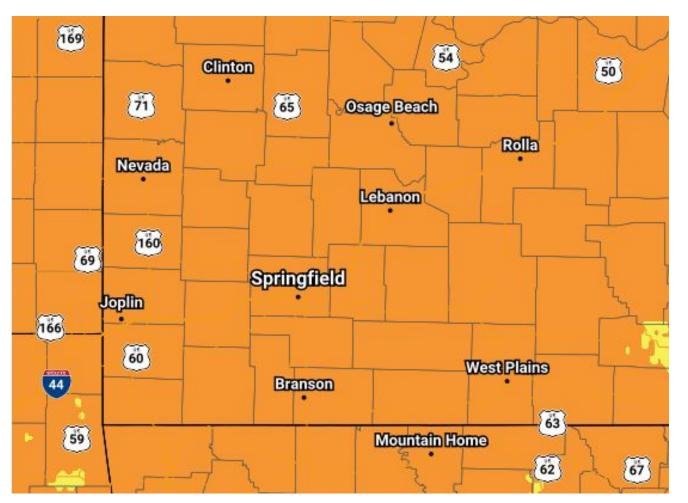
### **Apparent Temperature Sunday**



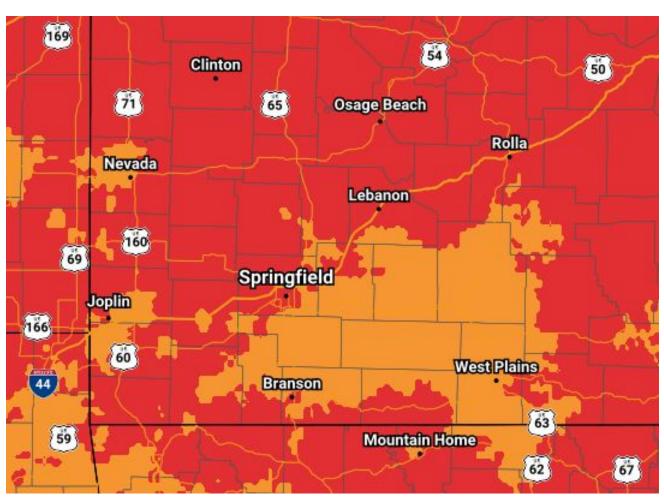




### **HeatRisk Friday**



### **HeatRisk Saturday**



HeatRisk: Potential Heat Impacts

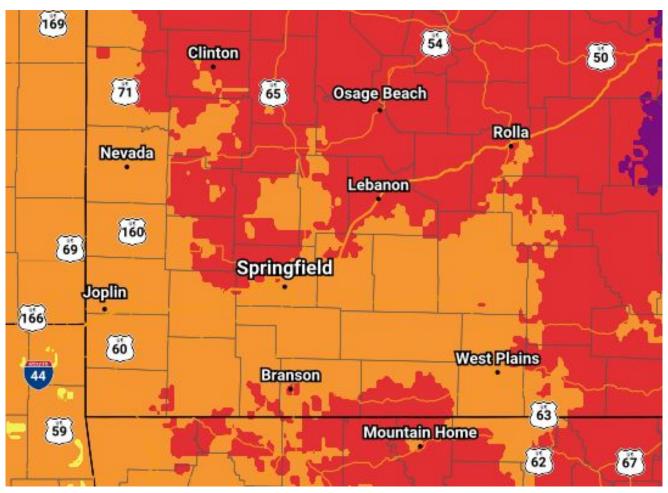
Little/None Minor Moderate Major Extreme





### **NWS HeatRisk Forecast This Weekend**

### **HeatRisk Sunday**



HeatRisk: Potential Heat Impacts

Little/None Minor Moderate Major Extreme





# **Understanding NWS HeatRisk**

NWS HeatRisk		
Category		Risk of Heat-Related Impacts
0	Low/None	Little to no risk from expected heat.
1	Minor	Primarily affects individuals extremely sensitive to heat, especially when outdoors without effective cooling and/or adequate hydration.
2	Moderate	Affects most individuals sensitive to heat, especially when outdoors without effective cooling and/or adequate hydration. Impacts possible in some health systems and in heat-sensitive industries.
3	Major	Affects anyone without effective cooling and/or adequate hydration. Impacts likely in some health systems, heat-sensitive industries, and infrastructure.
4	Extreme	Rare and/or long duration extreme heat with little to no overnight relief. Affects anyone without effective cooling and/or adequate hydration. Impacts likely in most health systems, heat-sensitive industries, and infrastructure.

The NWS HeatRisk is an experimental color-numeric-based index that provides a forecast risk of heat-related impacts to occur over a 24-hour period. HeatRisk takes into consideration: How unusual the heat is for the time of the year. The duration of the heat including both daytime and nighttime temperatures. If those temperatures pose an elevated risk of heat-related impacts based on data from the CDC.





# **Additional Resources**

### **For Additional Information**

**NWS Springfield Webpage** 

Week 2 Global Probabilistic Extreme Forecast Tool

- **NWS Heat Tools Reference Sheet**
- Wet Bulb Globe Temperature and Heat Index Information









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