

Tornadoes

Do you remember the tornado in the movie, *The Wizard of Oz*? The movie showed how frightening these twisters can be and how much damage they can cause. In *The Wizard of Oz*, the twister that launched Dorothy on her trip to find the Wizard occurred in the state of Kansas. Kansas is one of the states located in *Tornado Alley*. Tornado Alley is a geographic path that is located in the mid-section of the United States. It is where the majority of American tornadoes are born. Tornado Alley includes most of the Midwestern states: Illinois, Indiana, Iowa, Kansas, Missouri, Nebraska, South Dakota, and Wisconsin.

Tornado Alley has so many tornadoes because of its geography. Strong jet streams flow from the mountains of the West and meet warm moist air heading north from the Gulf of Mexico. The two weather systems frequently clash over the Midwest, bringing violent thunderstorms that spawn tornadoes. These tornadoes can affect nearby states like Oklahoma and Texas, as well.

Tornadoes form inside powerful thunderstorms. Twisters can strike any time of the day. They are most common in the afternoon and evening after the heat of the day produces the hot air that is an integral part of a tornadic thunderstorm. Tornadoes form when moist warm air gets trapped beneath a stable layer of cold dry air by an intervening layer of warm dry air. This “air sandwich” is called “inversion.”

If a disturbance occurs in the upper atmosphere, the warm moist air can rise and punch through the stable layer of cold air that was holding it down. When that happens, the warm air will form an upward spiral that gains velocity from different winds at different levels of the atmosphere. That rotating spiral eventually gains enough velocity to be classified as a tornado.

Twisters also occur in the southern states of Alabama, Arkansas, Georgia, Florida, Louisiana, and Mississippi. They actually strike throughout the world but

