

The West Nile Weekly

What does this week look like historically?

Historically, around 3% of total cases are transmitted in the week beginning July 1st, and around 7% of total cases for the year, about 1 in 14, have been transmitted by the end of this week.

What to expect?

Our current estimates of statewide risk still indicate that 2018 will be an above-average year for WNV in SD. Temperatures have returned to normal, but this is still quite warm, and the environment is perfectly suited for mosquitoes. Humidity is still above normal and this will increase mosquito activity and therefore risk.

We are nearing the height of the season (Fig. 1). This should be one of the worst weeks of the season for transmission, and the peak of risk will occur soon.

All counties remain at above-average risk for this point in the year (Fig. 2). We expect that around twelve counties will have at least one human case during this week.

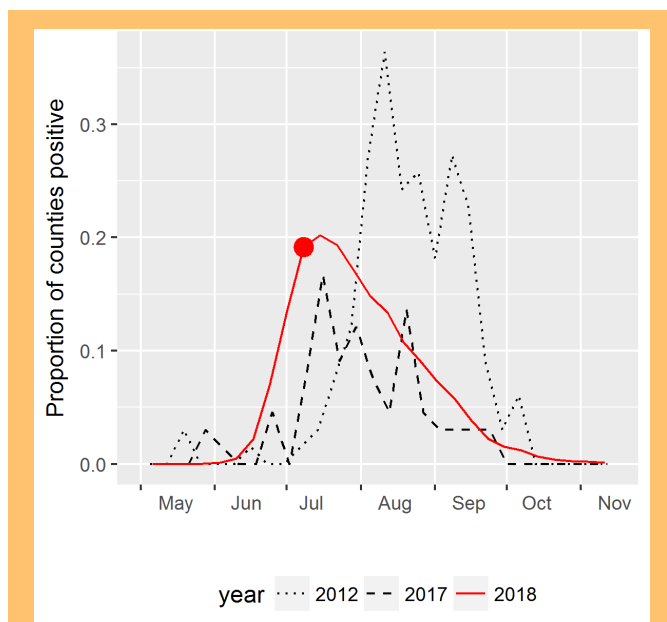


Figure 1: Estimated risk in 2018 with the week beginning 07-08 emphasized by a dot. This year is compared to observations in 2012 and 2017.

How are the mosquitoes?

With 396 pools tested, we have 8 (2.0%) of *Culex tarsalis* pools positive. This is still slightly above average for this point in the year.

There are five times as many pools than were tested last week, so we are far more certain this week: mosquito infections in 2018 are more common than the average year.

The mosquito infection rate this year is still best compared to the rate in 2016, in which there were more than 150 cases. Rates in 2018 are still lower than rates in 2007, in which there were 220+ cases. All evidence points to a high-risk year, and we cannot find a single US state predicting a lower-than-average year.

Current recommendations?

This is the height of the season in an above-average WNV year, and there is no reason to hold back on any method of preventing human infections. Mosquito control and public education are essential.

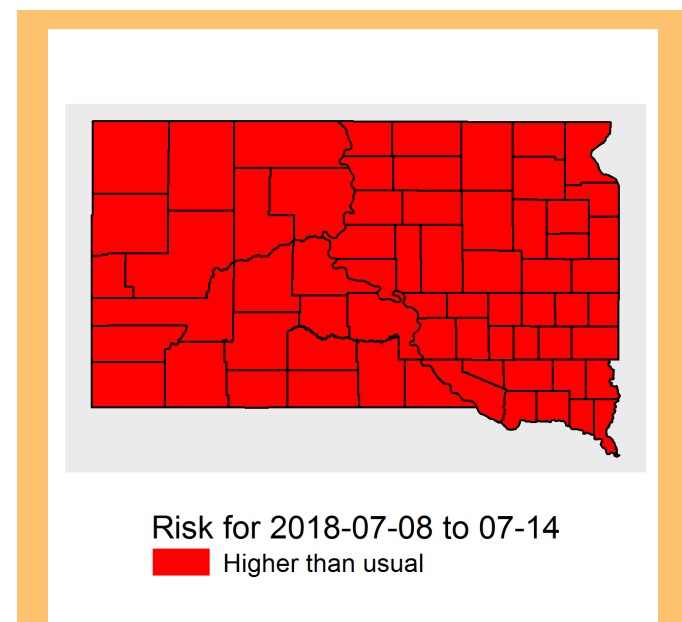


Figure 2: Risk for this week, compared to risk in this county, this week, in the average WNV year.