

The West Nile Weekly

What does this week look like historically?

Historically, around 1.5% of total cases are transmitted in the week beginning July 1st, and around 4% of total cases for the year, about 1 in 25, have been transmitted by July 7th.

What to expect?

Our current estimates of statewide risk indicate that 2018 will be an above-average year for WNV in SD. After several dry weeks, a series of weather systems have increased moisture in the air, and this will increase mosquito abundance and activity.

All our data point to higher-than-average statewide risk in the beginning of the season (Fig. 1). Previously, a handful of counties in northeast SD had been just at average risk, but our current predictions indicate that all counties are now at above-average risk for this point in the year (Fig. 2).

We expect that six to nine counties will report cases this week. This is especially likely because of the July

4th holiday. Dry weather, followed by wet weather, combined with a holiday that brings the state's population outdoors, especially at the end of the day to watch fireworks, is the perfect recipe for high risk.

How are the mosquitoes?

With 70 pools tested, we have 5 (1.7%) of *Culex tarsalis* pools positive. This is slightly above average for this point in the year. Notably, there has also been one positive *Culex pipiens* pool. Our estimates depend heavily on mosquito data and will continue to be revised as more data are received.

Current recommendations?

Spraying will have a large impact on human risk, especially if it can be directed to areas where large numbers of people will gather for July 4th festivities.

The public should be warned that the virus is circulating and that precautions must be taken during the holiday. If every party has a single can of spray, we suspect that a large number of infections can be avoided.

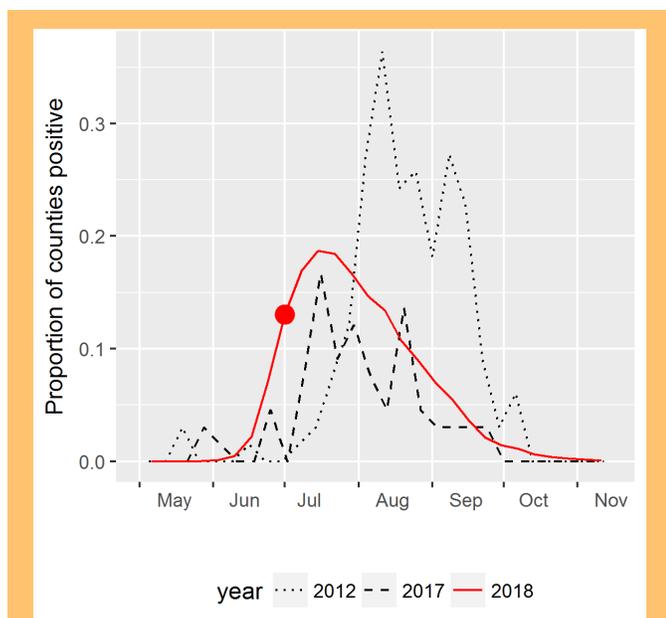


Figure 1: Estimated risk in 2018 with the week beginning 07-01 emphasized by a dot. This year is compared to observations in 2012 and 2017.

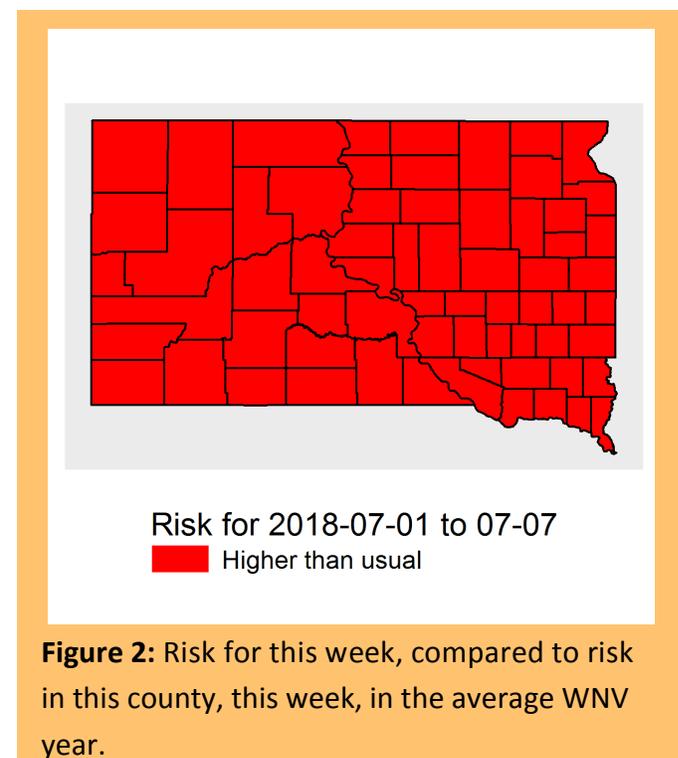


Figure 2: Risk for this week, compared to risk in this county, this week, in the average WNV year.