

Taken March 7, 2014 from <http://kneb.com/index.php?more=ggm2mnc8>:

Rabies outbreak soars in Goshen County

A USDA wildlife disease biologist warns area resident the levels of positive test for rabies in Goshen County have soared since an earlier warning was issued in January. Mike Pipas in Casper tells KNEB News since February 7th of this year, out of 19 dead skunks collected, 16 tested positive for rabies. They also had 1 red fox test positive for the disease.

Pipas says Ken Mills at the Wyoming state veterinary testing lab told him he was shocked at the percentage of animals tested that are coming back positive for rabies. Pipas says Mills will be retiring next month and has been at the lab since 1984 and has never seen, even in an outbreak situation, this high of a percentage rate of positive samples at 89.5%.

Wildlife biologist Craig Acres continues to warn residents to be alert for strange behavior in skunks, raccoons, bats and other animals. Acres says the incidents are going to be even more commonplace as we move into Spring and Summer. Acres says if you or one of your pets have had contact with a possible rabid animal or if you have observed or dispatched a possible rabid animal please call Central Dispatch at 307-532-7001. Acres cautions not to take a rabies sample yourself.



U.S. Rabies map source:

http://www.cdc.gov/rabies/location/usa/surveillance/wild_animals.html

<http://avmajournals.avma.org/doi/pdf/10.2460/javma.239.6.773>

We want to determine what the maximum percentage of skunks testing positive for rabies would be before the USDA would release a warning.

1. What is the parameter of interest?
2. How should we structure our hypotheses?
3. What significance test should we use?
4. Determine the maximum value of the parameter for which we reject the null hypothesis.
5. What is a Type I error in this setting? What is a Type II error in this setting? Which has more dire consequences?