

Tick Research Lab of Pennsylvania

in partnership with East Stroudsburg University

www.TickLab.org

@PATickLab

Nicole Chinnici – Laboratory Director

Lyme disease in PA

- Nationally ranked for highest reported cases of Lyme disease annually since 2011
- 33% of cases in the U.S are reported from PA
- PA reporting on confirmed cases is based on CDC case definition
 - Bull-eyes rash + Positive Lab testing = Confirmed case
- CDC Two Tier test is:
 - Less than 50% accurate on first screening
 - Less than 80% accurate on second screening

CDC's Recommended Two-Tier Test



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People™

Key points to remember

- Most Lyme disease tests are designed to detect antibodies made by the body in response to infection.
- Antibodies can take several weeks to develop, so patients may test negative if infected only recently.
- Antibodies normally persist in the blood for months or even years after the infection is gone; therefore, the test cannot be used to determine cure.
- Infection with other diseases, including some tickborne diseases, or some viral, bacterial, or autoimmune diseases, can result in false positive test results.
- Some tests give results for two types of antibody, IgM and IgG. Positive IgM results should be disregarded if the patient has been ill for more than 30 days.

PA Tick Research Lab Free Tick Testing



Started April 1, 2019



Total funding spent \$1.5million



Total funding \$1.5million through June 2021

PA Tick Research Lab Free Tick Testing



Total Free Tick Test = 33,000



Cost per Free Test (4 diseases) = \$42.00

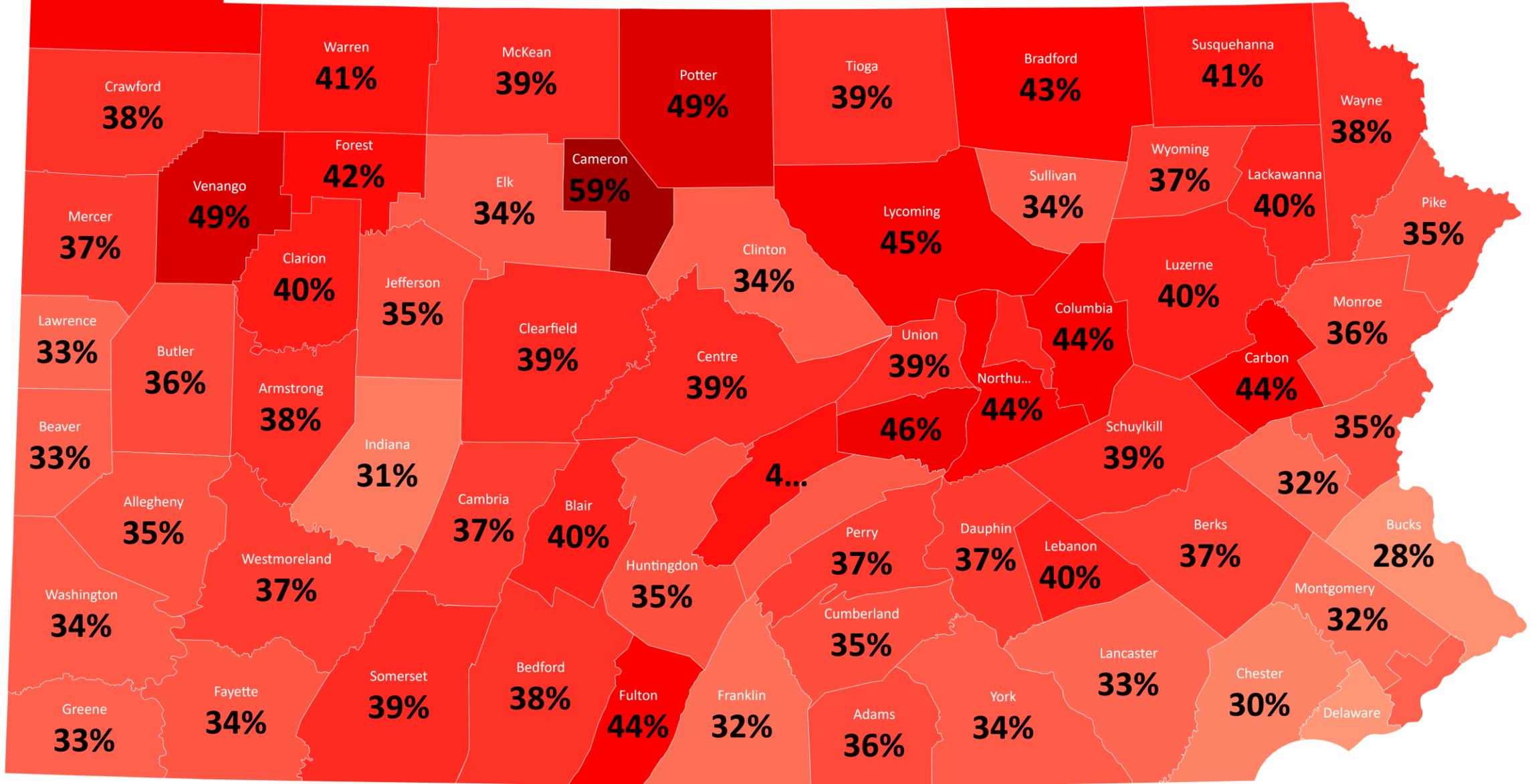


Average Testing Time 31.5 hours

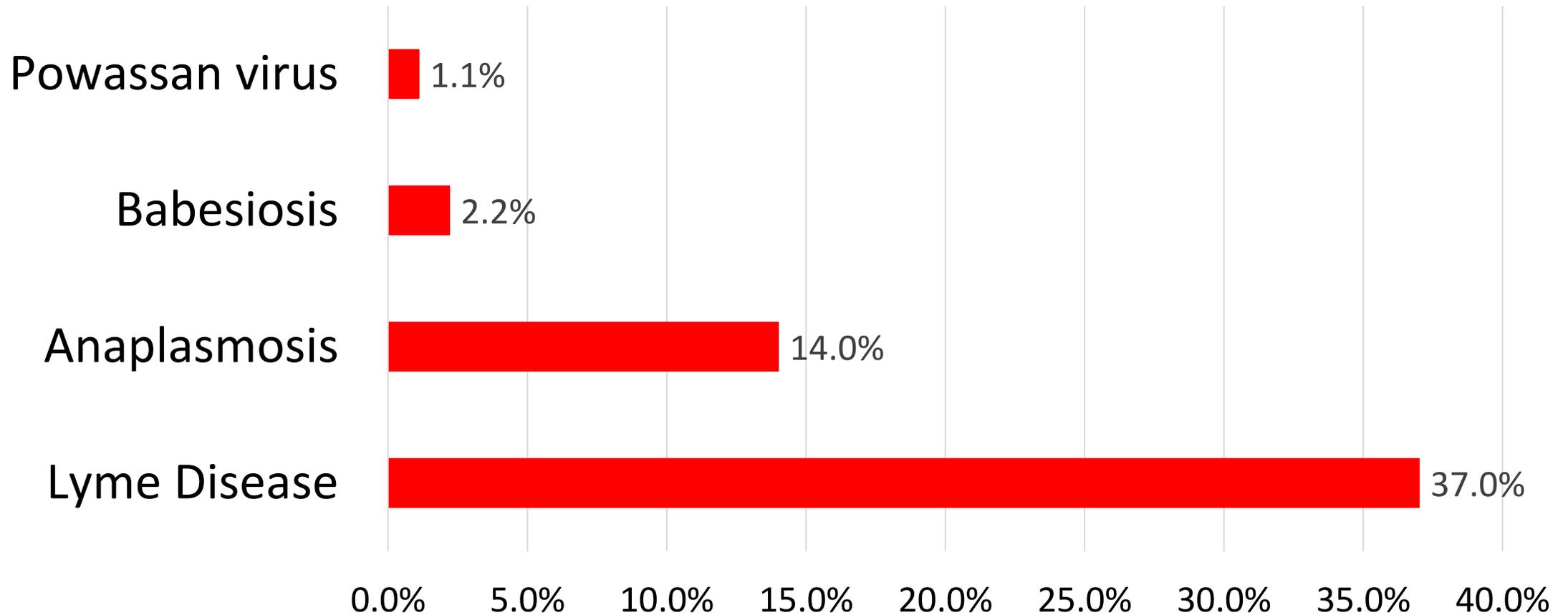
Prevalence of Lyme Disease in Blacklegged Ticks

April 2019 – April 2021

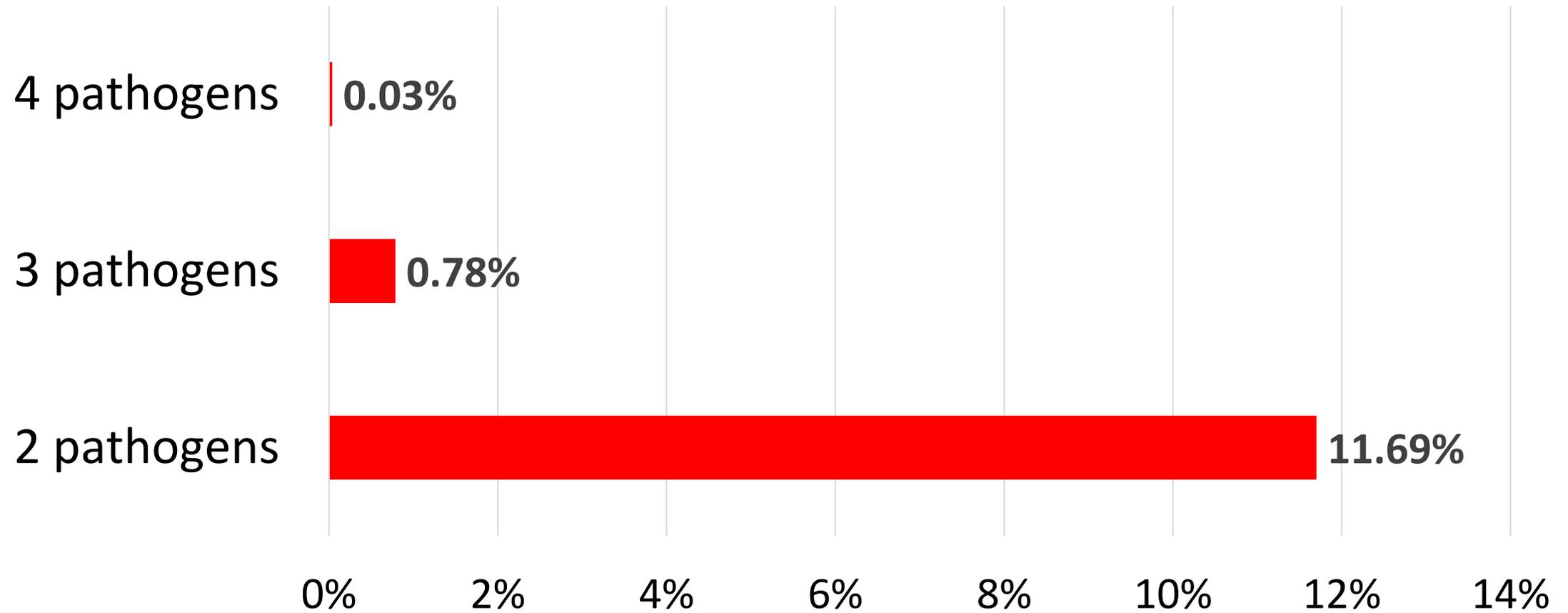
Sample Size – 19,096 (avg. per County = 287 ticks)



Prevalence of Tickborne Diseases in Blacklegged Ticks of PA



Co-Infection in Blacklegged Ticks



PA Tick Research Lab Education



Started April 2020



Total funding spent \$34,500



Weekly Newsletters and Monthly Blog

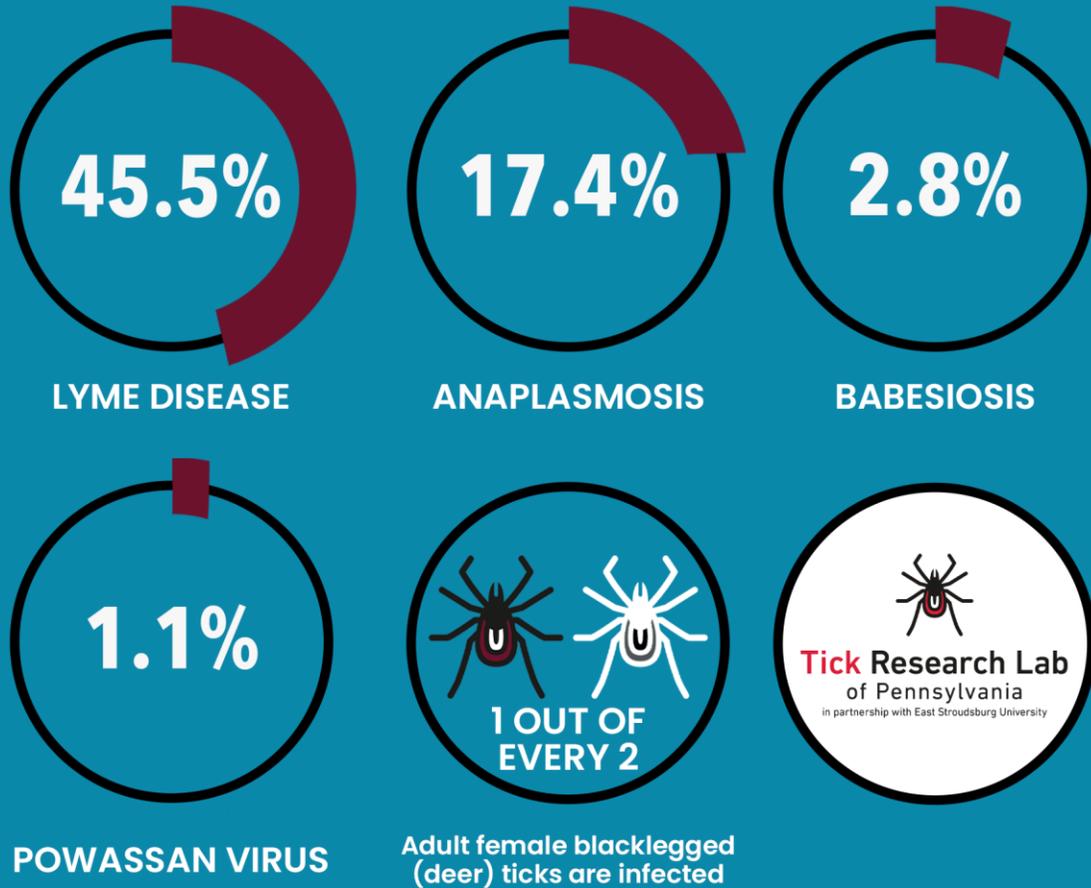


103 Unique Social Post (4/week)



Grew Facebook followers from 0 to 15,908

ADULT FEMALE BLACKLEGGED (DEER) TICK INFECTION RATES OF PENNSYLVANIA



WEEKLY TICK REPORT

GET OUTSIDE. STAY SAFE.

APR 23 - 30



BLACKLEGGED (DEER) TICKS - HIGH RISK

ADULT FEMALE BLACKLEGGED TICKS



AMERICAN DOG TICKS - HIGH RISK

ADULT AMERICAN DOG TICKS



LONE STAR TICKS - MILD RISK

NYMPH AND LARVAL LONE STAR TICKS



BLACKLEGGED (DEER) TICKS - MILD RISK

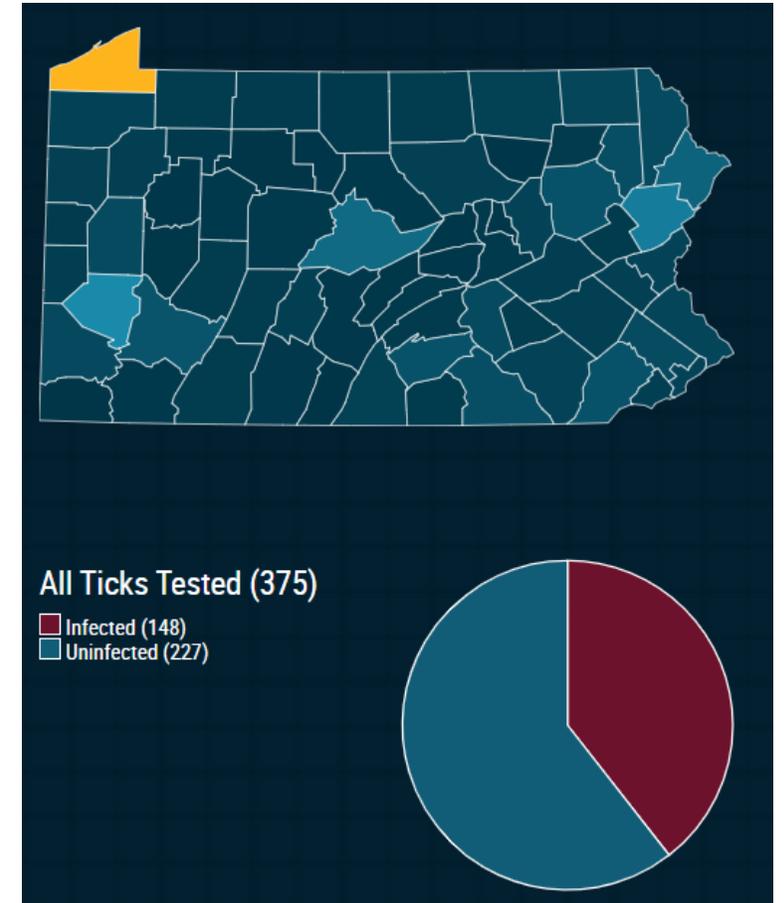
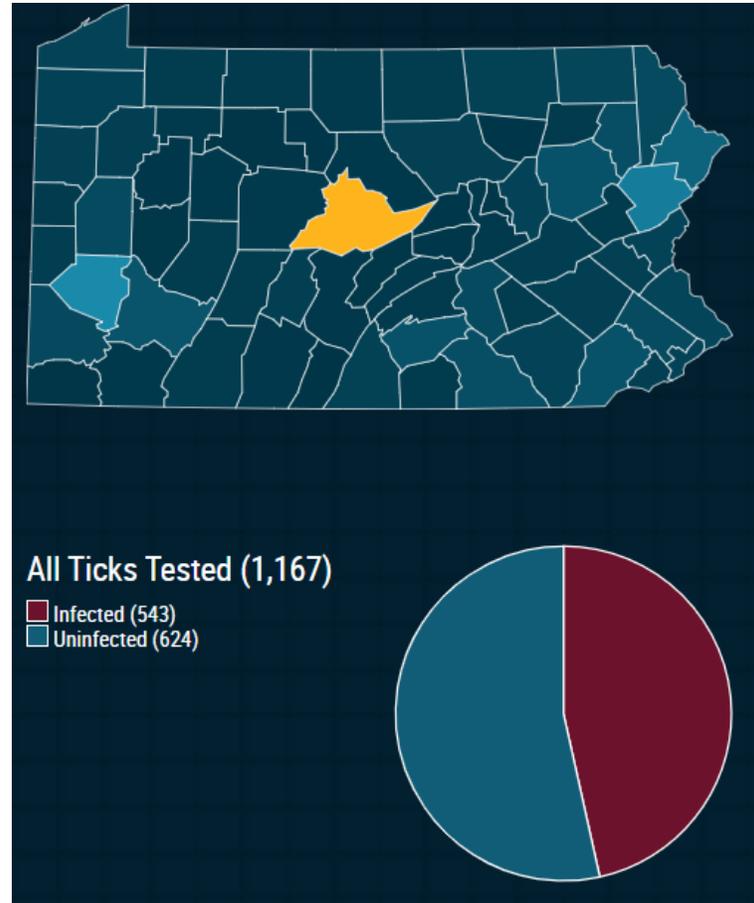
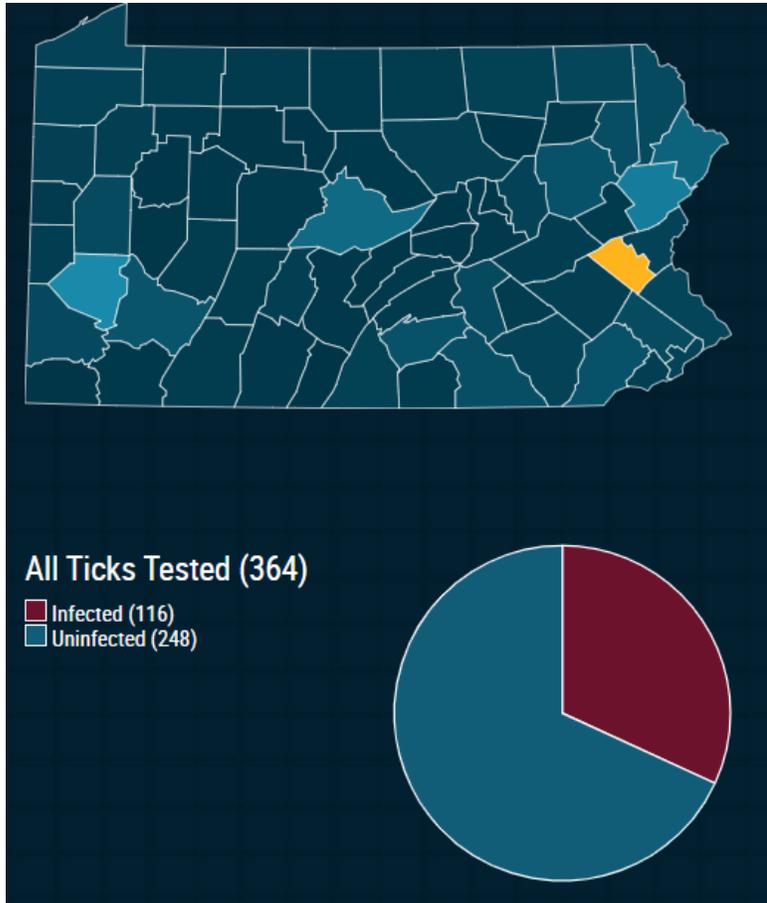
NYMPH BLACKLEGGED TICKS

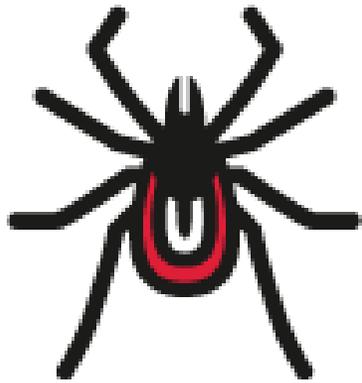


Tick Research Lab
of Pennsylvania

in partnership with East Stroudsburg University

Live Tracking of Infection Rates on Website





Tick Research Lab of Pennsylvania

in partnership with East Stroudsburg University

www.TickLab.org

@PATickLab