

## Infectious Rates in *Ixodes scapularis* in PA – Mike Hutchinson

- a) Why look?
  - 1) 2001 – Powassan virus case
  - 2) PA is consistently in the top 3 for Lyme Diseases cases
  - 3) Legislation pending regarding tick surveillance
    - (i) Senate Bill 177
    - (ii) Create task force to draft recommendations for TBD prevention
- b) Goal
  - 1) Tick surveillance
  - 2) Disseminate information to citizens and physicians
- c) Surveillance – J Med Ent 2015 (<http://jme.oxfordjournals.org/content/52/4/693>)
  - 1) Methods
    - (i) Drags
    - (ii) Dry ice traps
    - (iii) Collection from hosts
  - 2) Results
    - (i) Collected from 2012-2014
    - (ii) ~45,000 ticks collected
    - (iii) 5 species
    - (iv) Collected in every county
  - 3) Testing
    - (i) Looked at infection rates in 2013
    - (ii) Tested adult *Ixodes scapularis*
      - (a) *Borrelia burgdorferi* – 47.4%
      - (b) 2 other disease organisms
  - 4) Confirmed presence of *I scapularis* in every county
    - (i) None had been found in the 1960s
    - (ii) *B burgdorferi* found in ticks in every county
- d) Final report submitted in Sept 2015
- e) 2015
  - 1) Saw an increase in infection rates between 2014 and 2015
  - 2) No longer have funding