

INDIANA LABORATORY SYSTEM MONTHLY PARTNER WEBCAST

Thank you for joining us.
The webcast will begin shortly.

7/16/2026



AGENCY PRIORITIES

1. Promote Maternal and Infant Health Outcomes
2. Prevent Chronic Disease
3. Improve Data Quality and Transparency





Indiana
Department
of
Health

INDIANA LABORATORY SYSTEM MONTHLY PARTNER WEBCAST

MARK GLAZIER
DEPUTY LABORATORY DIRECTOR

7/16/2026

Agenda

- 1. Welcome and laboratory updates** – Mark Glazier, deputy laboratory director
- 2. TB shipping updates** – Lauren Franco, PhD, D(ABMM), clinical microbiology division director
- 3. Mosquitoes and ticks of Indiana** – Lee Green, senior medical entomologist
- 4. Q & A** – IDOHL webcast team



Updates and Reminders



Indiana
Department
of
Health

IDOH Laboratory

Three ways to stay in the know:

1. Email us at IDOH-Lab-Info@health.in.gov
2. Sign up for IHAN – Indiana Health Alert Network
<https://www.in.gov/health/emergency-preparedness/indiana-health-alert-network-ihan/>
3. Update your laboratory's contact information [here](#)



APHL Infectious Diseases Webinars

Previously recorded Association of Public Health Laboratories (APHL) webinars.

- **From Detection to Decision: The Impact of On-Site Carbapenemase Testing on Patient Management and Infection Control**
[Recorded Webinar](#)
- **Advancing Mycobacterium tuberculosis Drug Susceptibility Testing with Targeted Next Generation Sequencing**
[Recorded Webinar](#)

For more information about these webinars, email infectious.diseases@aphl.org.

APHL Fall Infectious Diseases Webinars

APHL is excited to announce its fall infectious diseases webinar lineup. While enrollment for all webinars is not open, we encourage you to save the dates. For more information about these webinars, email infectious.diseases@aphl.org.

- **Legionella on the Rise: Latest Trends and Laboratory Tools**

Sept. 16, 2026 | 2:00 p.m. ET

- **From Clinical Detection to Public Health Action: The Influenza Laboratory Surveillance Continuum**

Oct. 7, 2026 | 2:00 p.m. ET

- **From the Soil to the Sickbed: Candida Auria, Aspergillus and Beyond**

Oct. 27, 2026 | 2:00 p.m. ET

- **Snot Just a Gut Bug Anymore: Integrating Enterovirus into your Respiratory Workflows**

Nov. 3, 2026 | 3:00 p.m. ET

- **Every Drop Counts: Moving Beyond Phlebotomy for HIV and Hepatitis Testing**

Nov. 17, 2026 | 2:00 p.m. ET

- **The Fun Guy Nobody Wanted: TMVII Clusters Linked to Sexual Contact**

Dec. 15, 2026 | 2:00 p.m. ET

APHL ID Lab Con 2027

Save the Dates: APHL ID Lab Con 2027

March 15–18, 2027 | Atlanta, GA

ID Lab Con is APHL's biennial forum to discuss the latest developments on detection and characterization of infectious diseases of public health concern. Join public health laboratory professionals, clinical laboratorians, epidemiologists, leading researchers and diagnostics manufacturers to share the latest findings, technologies and developments and to generate solutions to infectious disease challenges.

Registration opens September 2026. A call for session and poster abstracts will be forthcoming in August.

2026 ILS Webcast Updates

- ILS webcasts will generally be held from 10:30-11 a.m. EST on the second **Thursday** each month
- Webcasts will require registration via the links provided:
 - August 13 – [Link](#)

Recordings will be sent to the email provided during registration following the conclusion of the webcast



Indiana
Department
of
Health

UPDATES TO SHIPPING GUIDANCE FOR TUBERCULOSIS SPECIMENS

LAUREN FRANCO, PHD, D(ABMM)

DIRECTOR, CLINICAL MICROBIOLOGY DIVISION

07/16/2026

Change from UPS to Fedex

- IDOHL TB Lab will switch shipping carriers from UPS to Fedex
 - Fedex service pilot phase with several sites has been successful
 - Applies to specimens for TB smear and culture as well as blood for IGRA/QFT
- FedEx Priority Overnight labels will be provided with all kit orders (for sites outside of Marion County) beginning 8/1/26
- FedEx has many drop-off locations spread throughout the state, including Dollar General, Walgreen's, and FedEx Office locations
 - Find a site convenient for you at <https://local.fedex.com/en/search>
 - Make sure that the timeframe that packages can be dropped off in order for the package to leave town same day will work for your facility
 - If there are no convenient drop-off locations, you may be able to arrange a pick-up

Larger QFT Shippers for Summer

- IDOHL will begin phasing in larger shipping containers and ice packs for QuantiFERON testing this summer to ensure specimens maintain refrigerated during shipping
- Smaller shipping boxes can still be used in cooler times of the year



Questions?

Jessica Gentry

Mycobacteriology Supervisor

317-921-5858

jgentry@health.in.gov

Lauren Franco, PhD

Clinical Microbiology Division Director

317-233-1610

lfranco@health.in.gov





Indiana
Department
of
Health

MOSQUITOES AND TICKS OF INDIANA

LEE GREEN

SENIOR MEDICAL ENTOMOLOGIST

7/16/2026

Mosquitoes of Indiana

~60 species of mosquitoes in Indiana

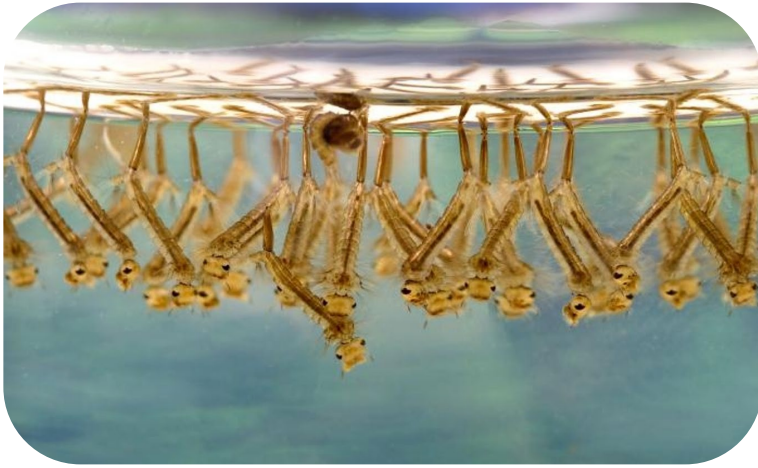
-Different breeding habitats, active periods, host preferences, vector capacities, etc.



Mosquitoes of Indiana

~60 species of mosquitoes in Indiana

- **Different breeding habitats**, active periods, host preferences, vector capacities, etc.



Mosquitoes of Indiana

~60 species of mosquitoes in Indiana

- **Different breeding habitats**, active periods, host preferences, vector capacities, etc.



Mosquitoes of Indiana

~60 species of mosquitoes in Indiana

-Different breeding habitats, **active periods**, **host preferences**, vector capacities, etc.

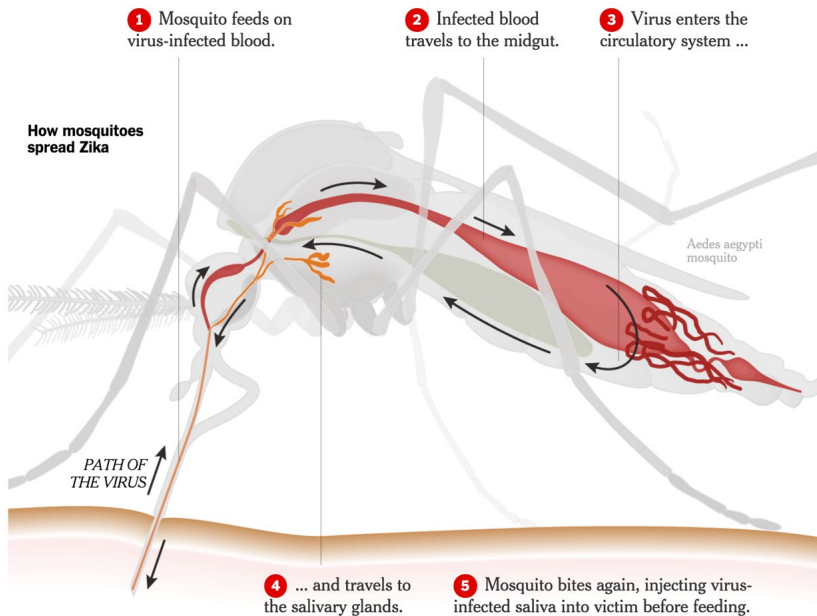


	<i>Culex pipiens</i>	<i>Aedes albopictus</i>	<i>Aedes vexans</i>	<i>Aedes triseriatus</i>	<i>Toxorhynchites rutilus</i>	<i>Uranotaenia sapphirina</i>	<i>Anopheles quadrimaculatus</i>
Active Hours	Crepuscular	Daytime	Evening	Daytime	Evening	Nocturnal	Evening
Host	Birds/Mammals	Cosmo	Mammals	Mammals	NONE	Earthworms	Mammals
Flight Range	1300 m	200 m	15 miles	200 m	1 mile	0.5 miles	1 mile
Breeding Habitat	Containers, organic	Containers, natural	Floodwater	Treeholes	Treeholes	Clean water, duckweed	Fresh water
Resting Sites	Endophilic/exophilic	Endophilic/exophilic	Exophilic	Exophilic	Exophilic	Exophilic	Endophilic
Disease Vector	WNV, SLE	WNV?	Heartworm	LaCrosse	NONE	NONE	Malaria

Mosquitoes of Indiana

~60 species of mosquitoes in Indiana

-Different breeding habitats, active periods, host preferences, **vector capacities**, etc.



	St. Louis Encephalitis	West Nile Virus	Eastern Equine Encephalitis	LaCrosse Encephalitis
Mosquito Vector				
Where mosquito Breeds				
Reservoir Host				
How Virus Overwinters				

Mosquitoes of Indiana

~60 species of mosquitoes in Indiana

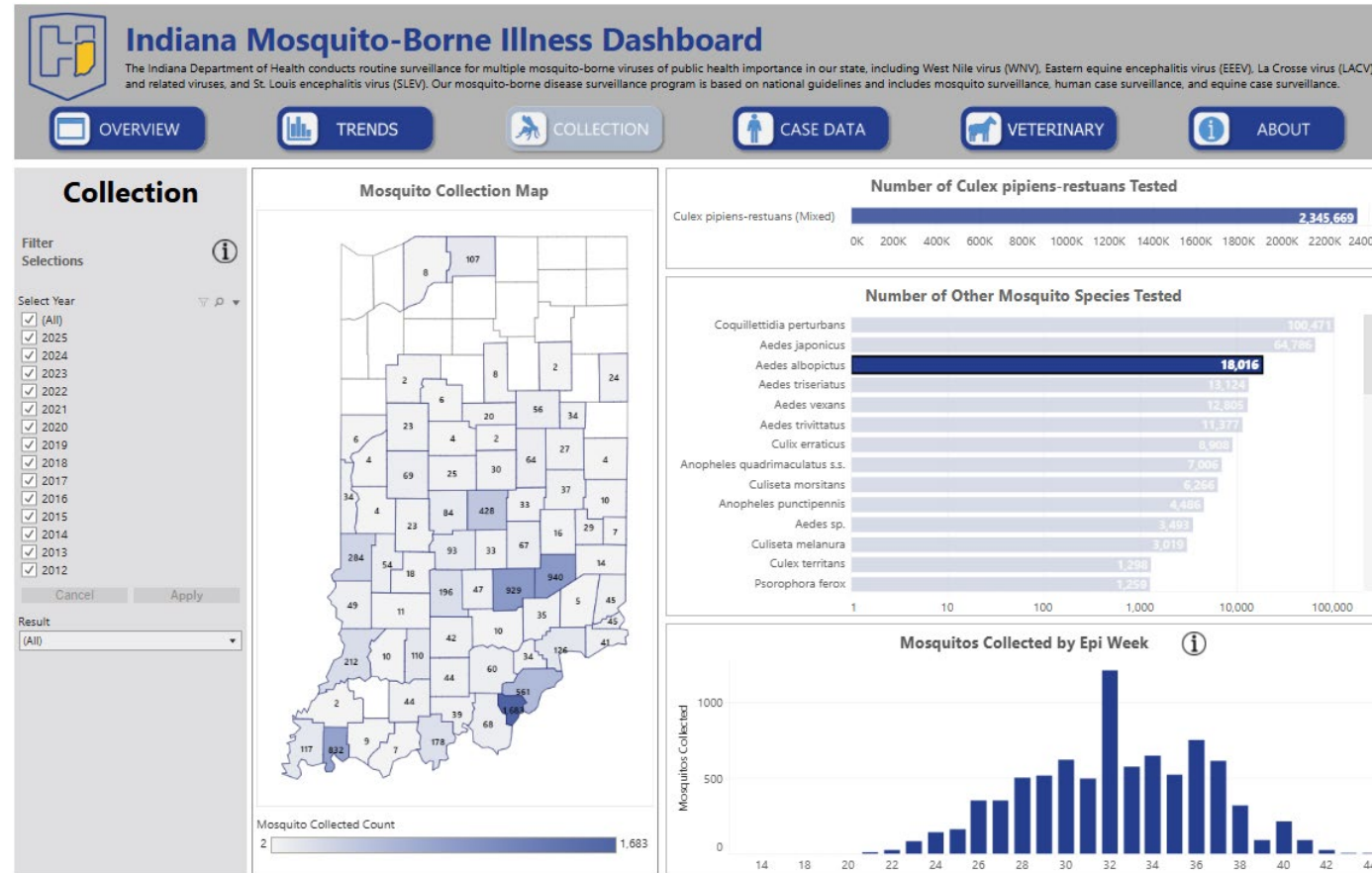
-Different breeding habitats, active periods, host preferences, vector capacities, etc.



Mosquitoes of Indiana

~60 species of mosquitoes in Indiana

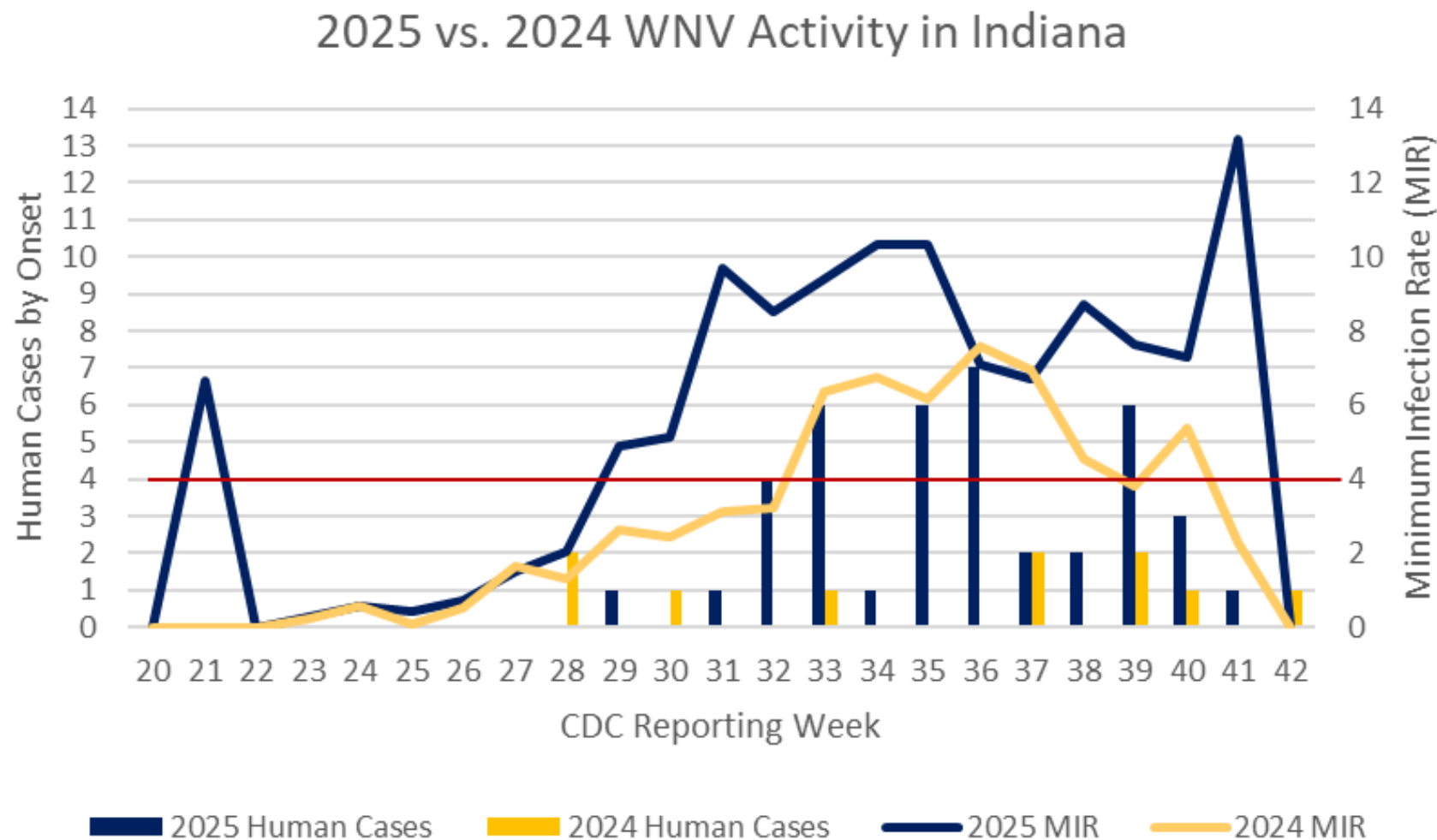
-Different breeding habitats, active periods, host preferences, vector capacities, etc.



2025 WNV Positive Mosquito Pools



No Positive Pools Positive Pools

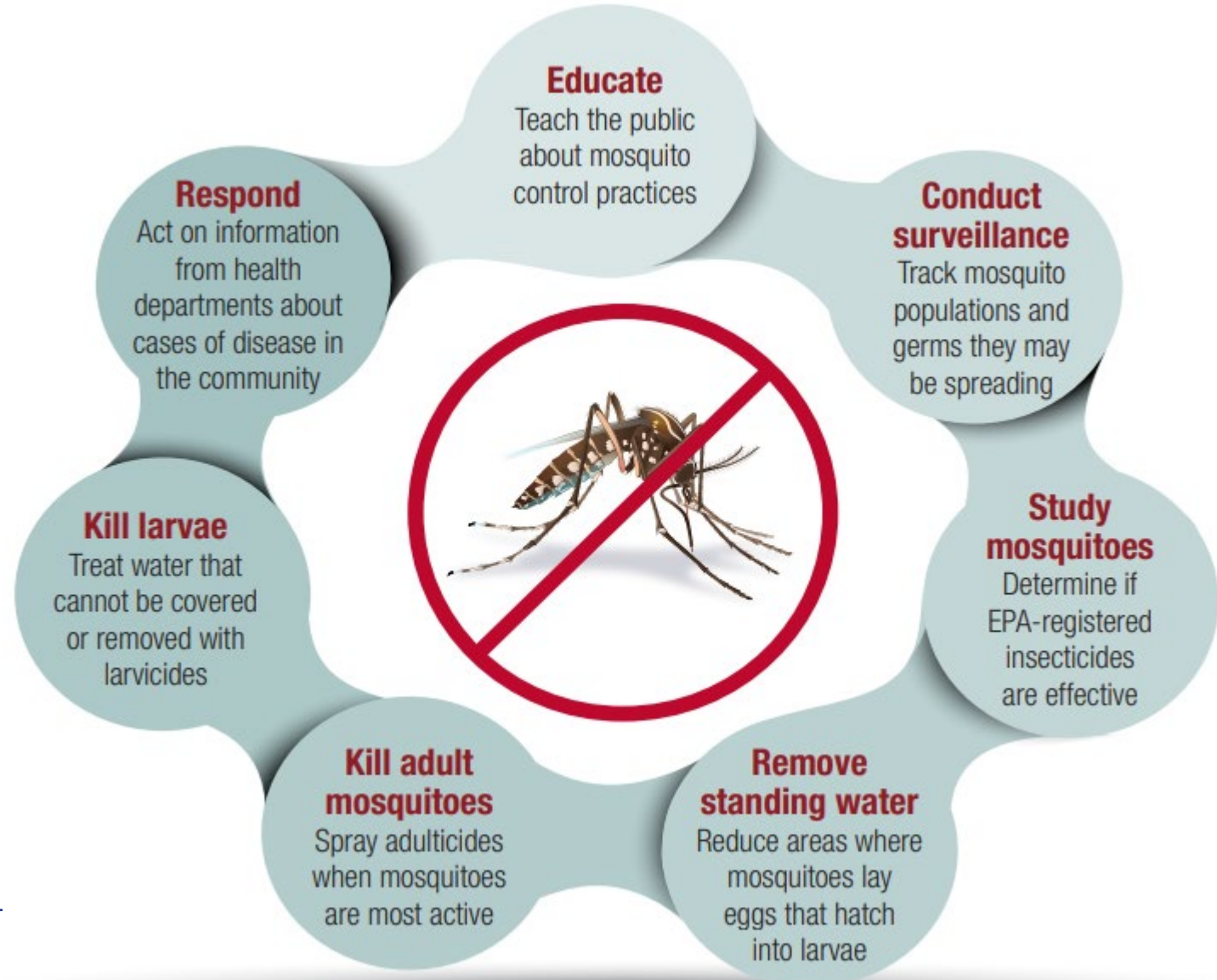


M.I.R. = # + Pools/ # Mosquitoes Tested X 1,000

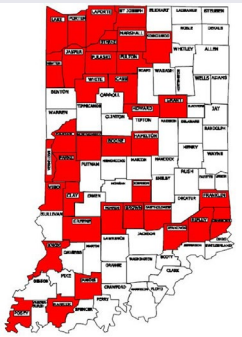
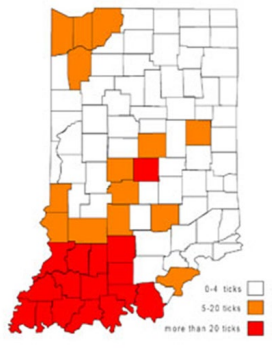
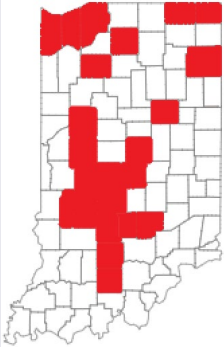
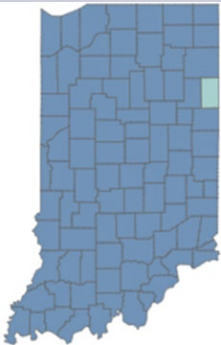
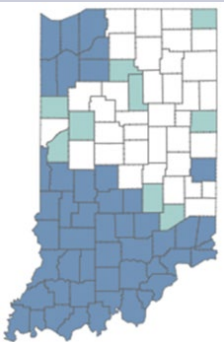
Integrated Mosquito Management

IMM according to the CDC

- Surveillance
- Source reduction
- Control of larvae and pupae
- Control of Adult Mosquitoes
- Monitor Control Programs

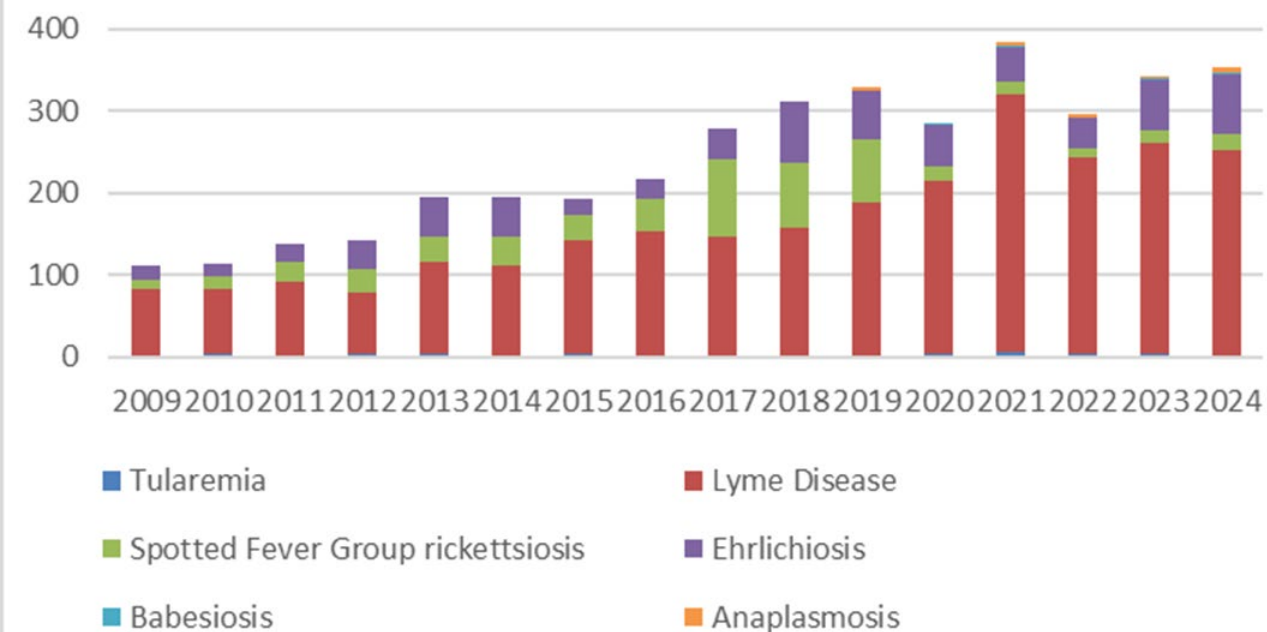


Ticks of Medical Importance - Indiana

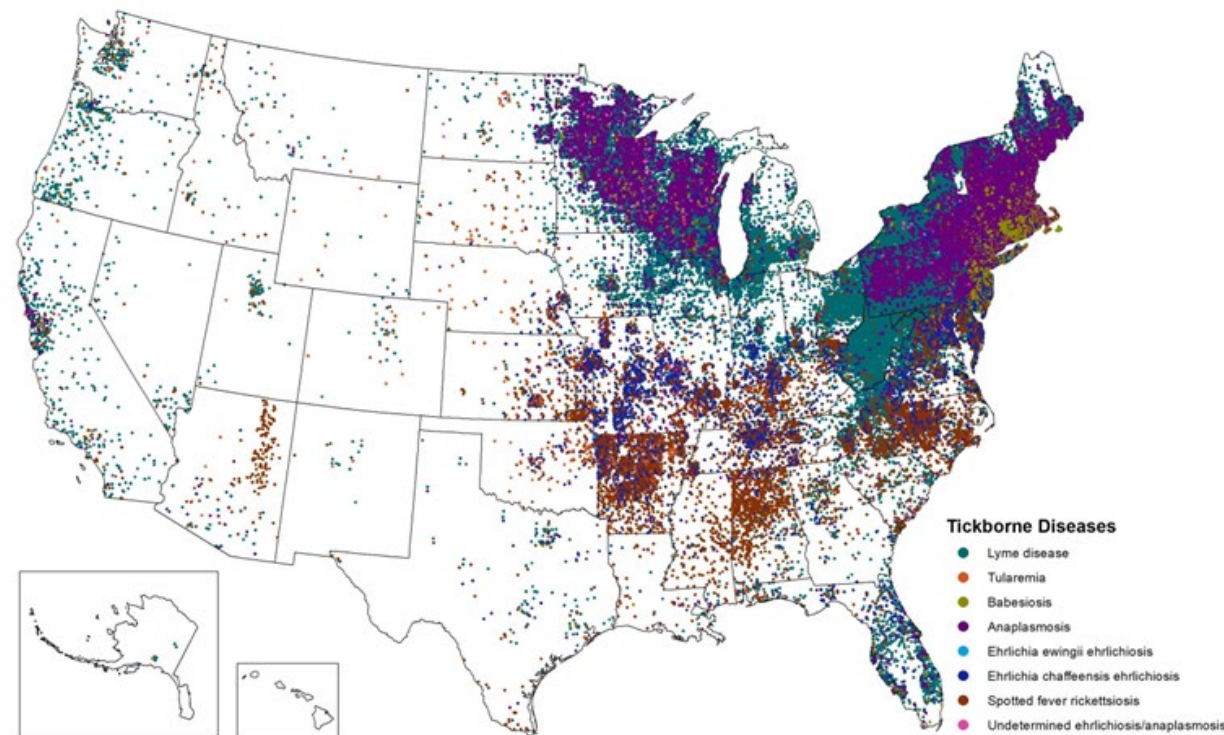
	Blacklegged Tick	Lone Star Tick	American Dog Tick	Gulf Coast Tick	Asian Longhorned Tick
					
2016					
2025					

Tick-Borne Disease in Indiana

Tick-borne Disease Cases in Indiana



Reported Cases of Tickborne Diseases - United States, 2019-2022

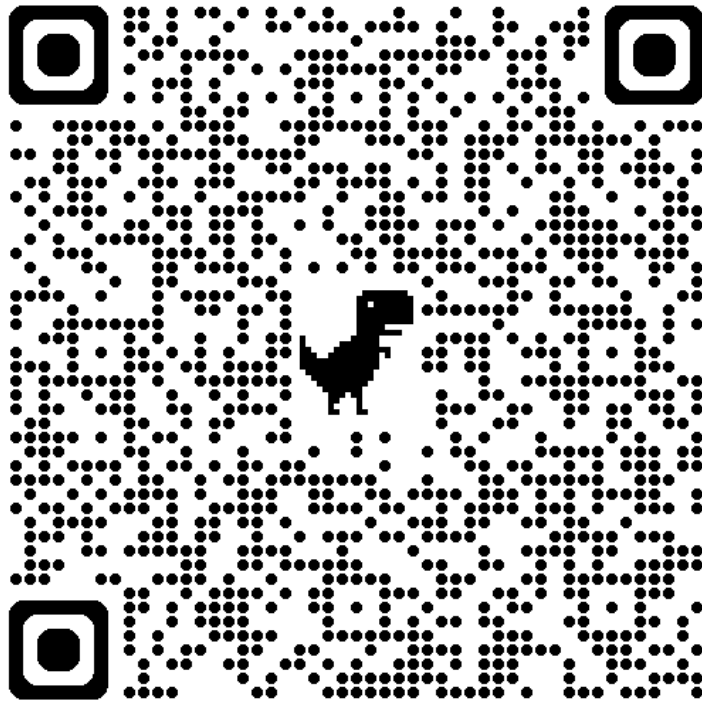


Note: Powassan data not represented on the map. Babesiosis data incomplete for years shown.

Tick-borne Disease on the Rise

- Reforestation
- Increases in deer and other hosts
- Increase in tick populations and distribution
- Urban sprawl
- Increase in tick-borne pathogens
- Increase in tick species

New Tick Dashboard



Indiana Tick-borne Disease Surveillance

Tick surveillance data last updated 4/23/2025.
Case surveillance data last updated 5/1/2025.

Start with filter selections below, which apply to everything on this page

For best results, clear all filter selections before selecting a new disease (refresh the webpage or hover over a multi-select filter and find the "Click to Show All Values" option: a funnel icon with a red x)

Select Disease: Select Pathogen(s): Select Tick Type(s):

TICK SURVEILLANCE AND TESTING

Lyme Disease is Selected

Lyme disease is a tick-borne disease caused by the bacteria *Borrelia burgdorferi* and *Borrelia mayonii* and transmitted by the blacklegged tick (*Ixodes scapularis*). Most reported cases are due to *B. burgdorferi*.

TICK SURVEILLANCE

The blacklegged tick life cycle has four stages (egg, larva, nymph, and adult); both nymph and adult ticks can transmit human pathogens.

The "Tick Distribution" map shows where blacklegged ticks are found. "Established" means that 26 ticks of the same life stage or >1 tick life stage have been collected in the county within a calendar year. "Reported" means that no more than 5 ticks of the same life stage have been collected in the county within a calendar year.

The "Infected Nymph Ticks" and "Infected Adult Ticks" statistics and maps show the percentage of blacklegged ticks collected since 2017 that were carrying the bacterium that cause Lyme disease.

The "Tick Activity by Month" chart shows the times of year when blacklegged nymph and adult ticks are expected to be most active.

Counties with Ticks Tested 2017 — Present

91

Infected Nymph Ticks 2017 — Present

11.77%

Total tested: 3,007

Infected Adult Ticks 2017 — Present

33.06%

Total tested: 4,842

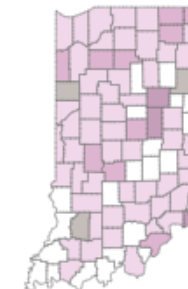
Tick Distribution

Blacklegged Tick



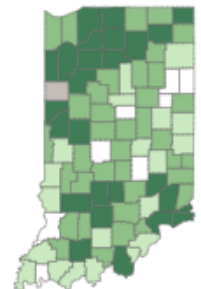
Current County Status
■ Reported
■ Established

Infected Nymph Ticks



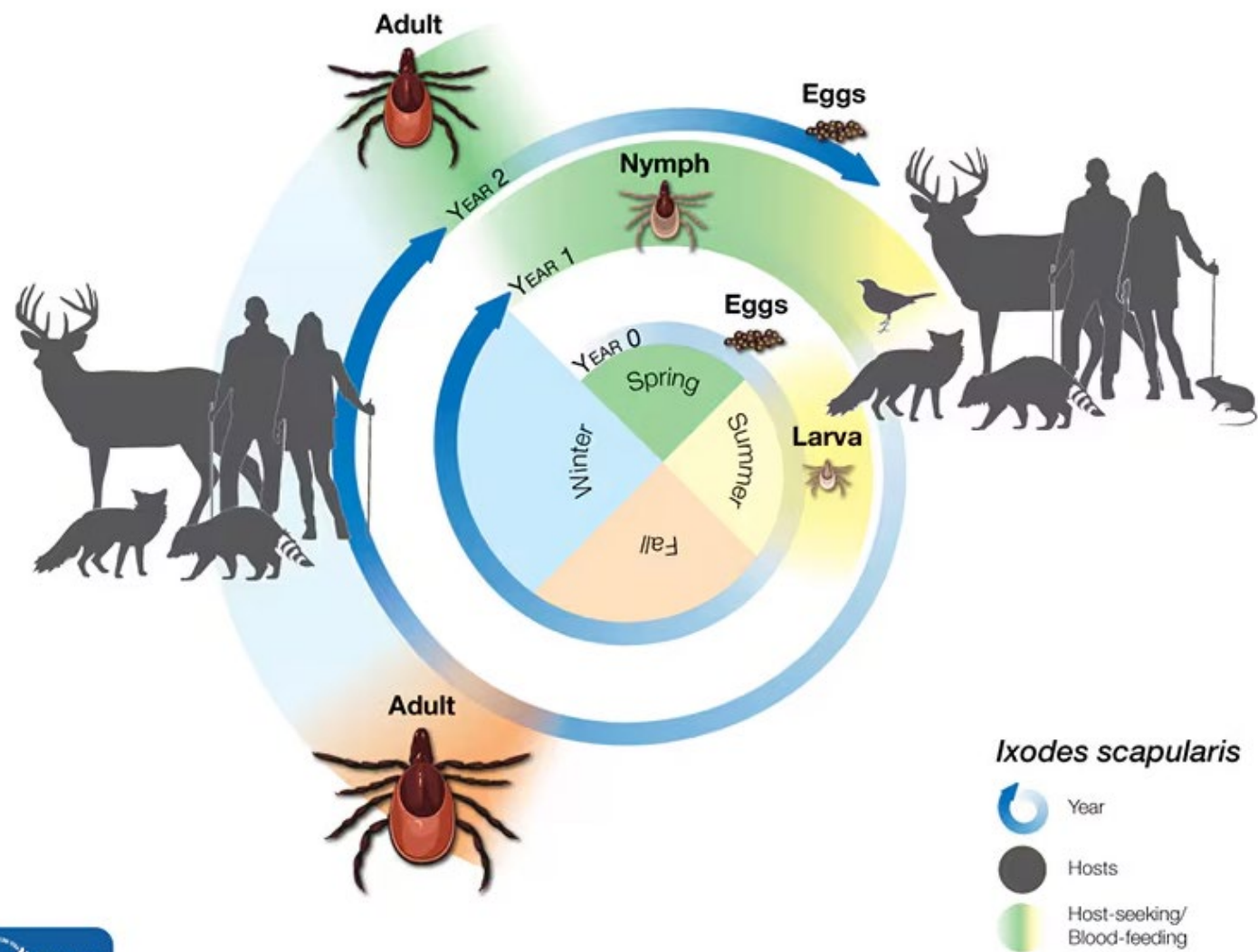
Infected Nymph Ticks
■ No Tests
■ 0%
■ 0.01—20%
■ 20.01—40%
■ >40%

Infected Adult Ticks



Infected Adult Ticks
■ No Tests
■ 0%
■ 0.01—20%
■ 20.01—40%
■ >40%

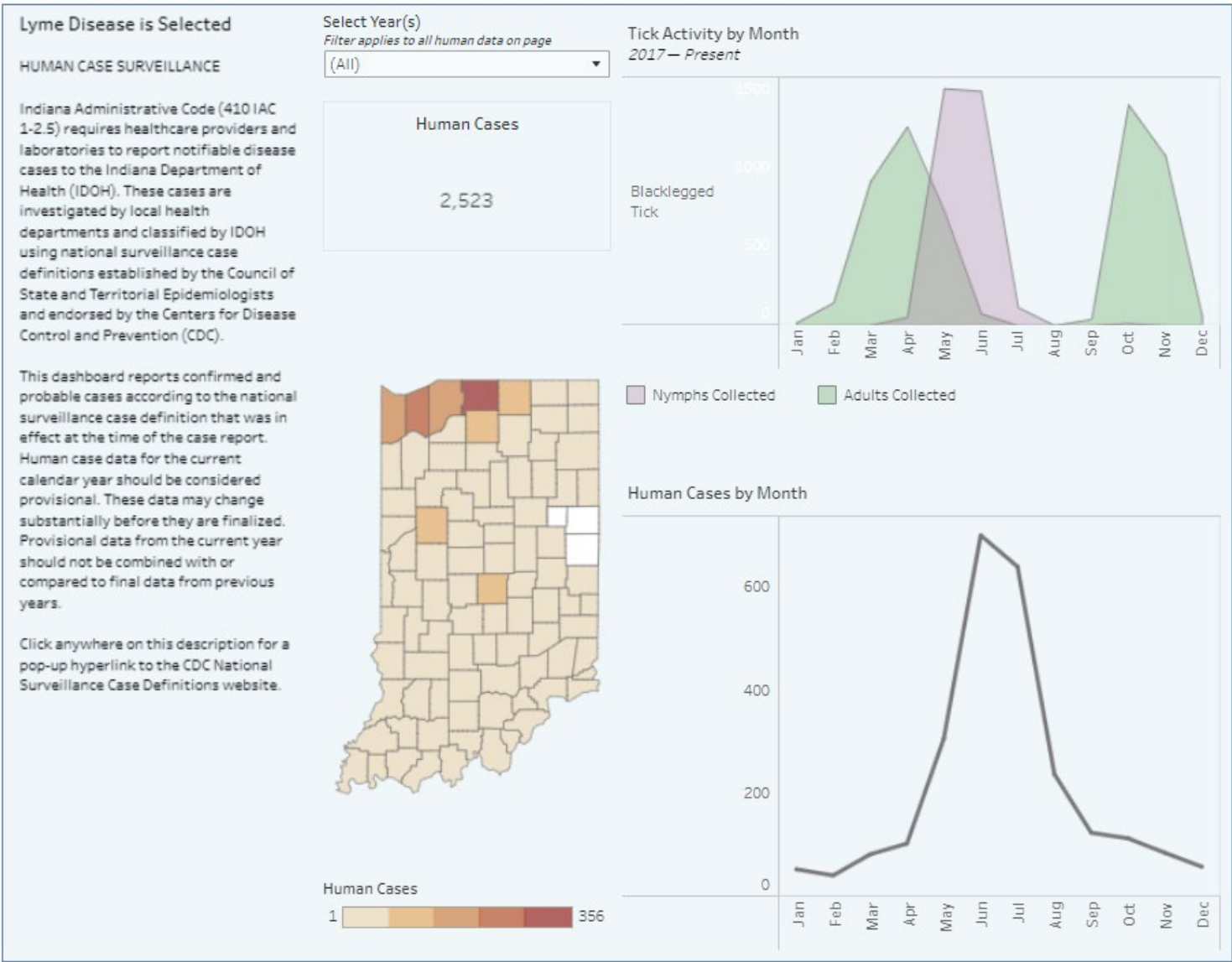
Biology of Blacklegged Ticks



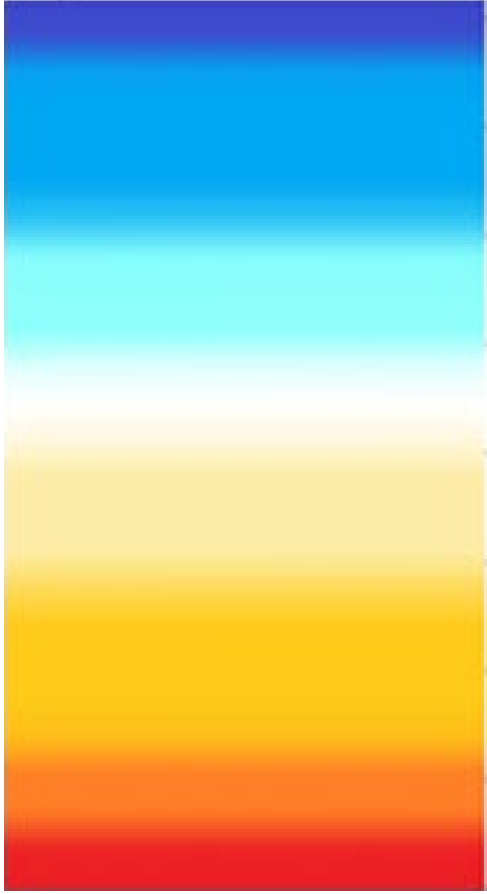
Blacklegged Ticks and Lyme Disease



HUMAN CASE SURVEILLANCE



Tick Desiccation



	Species	%/hr
Hydrophilic	<i>I. scapularis</i>	0.67
	<i>A. americanum</i>	0.28
	<i>D. albipictus</i>	0.24
	<i>D. variabilis</i>	0.21
	<i>R. sanguineus</i>	0.15
	<i>A. maculatum</i>	0.14
	<i>D. andersoni</i>	0.11
Xerophilic	<i>A. cajennense</i>	0.06

Tick Habitat

Blacklegged tick habitat



Lone Star tick habitat



American Dog tick and Gulf Coast habitat



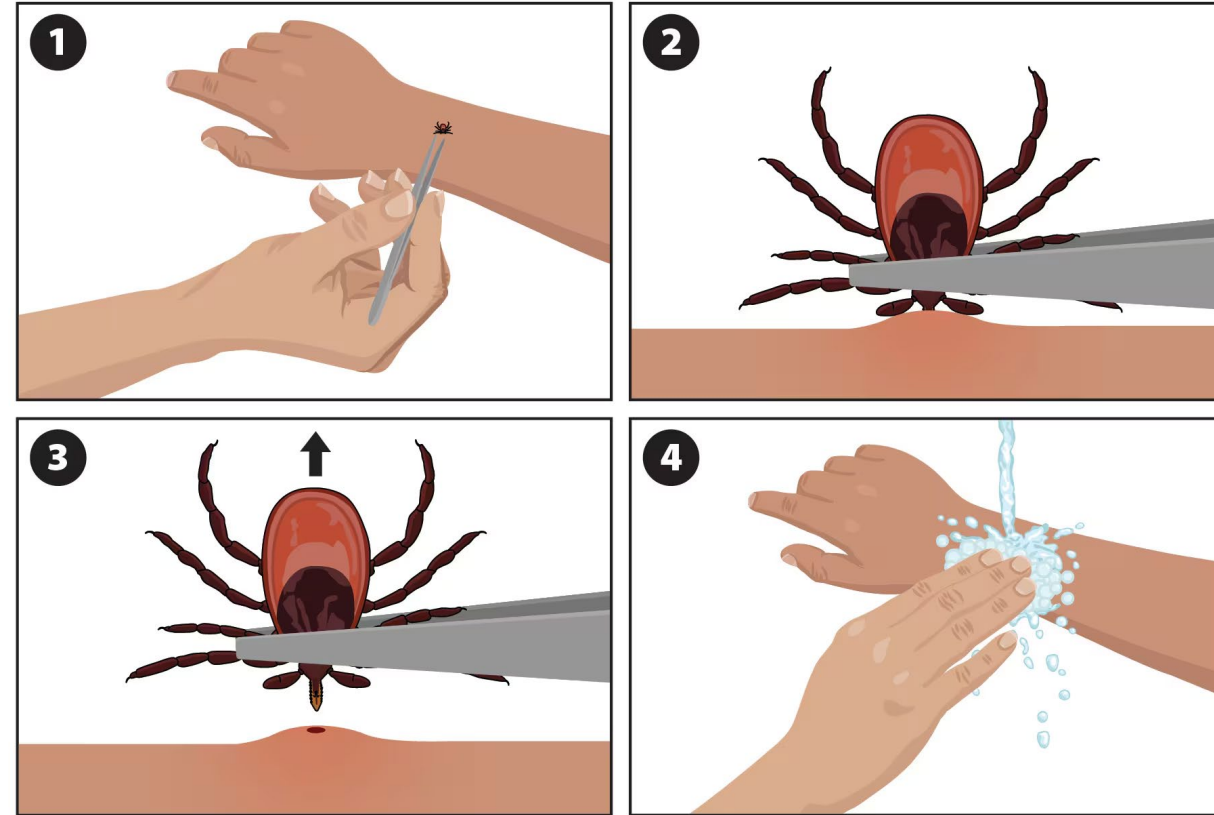
Personal Protection Measures

- AVOID TICK AREAS
- Protective clothing
- Repellent
 - DEET, Picaridin, OLE, IR3535 on skin
 - Permethrin on clothing
- TICK CHECKS!
- Prompt, proper tick removal

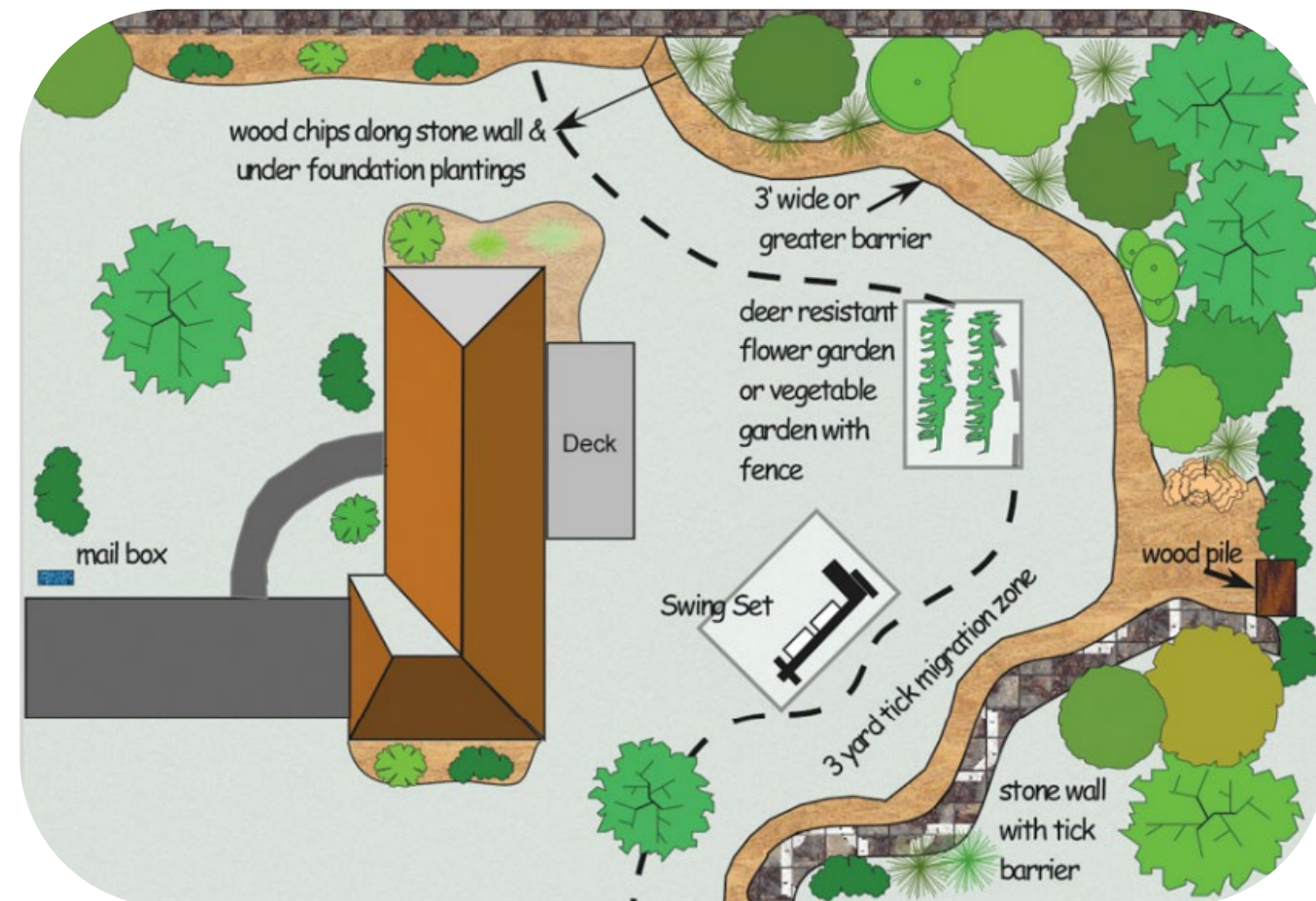


Proper Tick Removal

- If you find a tick attached to your skin, simply remove the tick as soon as possible
- There are several tick removal devices on the market, but a plain set of fine-tipped tweezers works very well
- If you develop a rash or fever within several days to weeks after removing a tick, see your doctor



Create a Tick Safe Zone



CAES Tick Management Handbook

Landscape Modification



Integrated Tick Management Toolbox

Personal Protection Measures	Landscape Modification	Killing host-seeking ticks	Rodent-targeted approaches	Deer-targeted approaches
Avoid tick habitat Awareness	Xeroscaping/ hardscaping	Synthetic chemical acaricides	Tick tubes	4-poster feeding station
Protective clothing	Short grass	25b products	Acaricide bait boxes	Deer reduction
Repellents and permethrin-treated clothing	Remove leaf litter and brush	Nootkatone	Oral lyme disease vaccine	Exclusions
Tick check and prompt removal	Remove rodent harborage	Met 52	Oral baits	Oral baits

Questions?

Lee Green

Senior Medical Entomologist, IDOH

Legreen@health.in.gov

Scan the QR code

OR

<https://redcap.isdh.in.gov/surveys/>

Code: **X L L J N W P 3 J**

Session Evaluation

Date: 7/13/2026

Title: Mosquitoes and Ticks

Speaker: Lee Green





Question & Answer Session



Indiana
Department
of
Health

Next Webcast

The next Indiana Laboratory System webcast is scheduled for:

Date: Thursday, August 13

Time: 10:30 – 11 a.m. EST

[Registration Link](#)





Indiana
Department
of
Health



**THANK YOU FOR JOINING
THE WEBCAST!**

- IDOH Laboratory Team