I-TICK Passive Surveillance

What is I-TICK?

I-TICK, (Illinois Tick Inventory Collaboration network), is a passive surveillance program to gather information about ticks of public health concern in Illinois. The purpose is to develop a network of volunteers whose work or leisure take them outdoors, and are likely to encounter ticks, to take part in data and tick collection. Volunteers submit ticks and location data to the UIUC for mapping and analysis.

Who can participate?

Anyone whose work or hobbies take them outdoors anywhere in Illinois.

When does it occur?

Any 5 days between April 1 and December 31. It is best, but not necessary, if the 5 collection days are within a 2-week period, but the 5 days do not need to be consecutive. People are welcome to participate for more than one 5-day period.

Where does it occur?

Anywhere outdoors in Illinois where a person works, travels, or relaxes: hiking in natural areas, recreation in a city park, working, walking their dog, etc.

Why would I want to take part and why is it important?

Ticks can carry a number of diseases that affect people and other animals in Illinois. The data and ticks collected help identify where and when a tick species comes in contact with people, pets, and livestock. These data then allow us to focus surveillance methods to determine the risk of disease.

How do I participate?

Anyone is welcome to participate, either as an individual, or as an I-Tick Hub. (Hubs collect completed kits and forward them to the UIUC). If interested, please contact Peg Gronemeyer at mag6@illinois.edu.

How does it work for an individual participant?

Find a hub near you where you can pick up a “tick kit”. Pick 5 days when you will be going outdoors, ideally within a 2-week period, to designate as tick collection days. Each day, you do not need to do anything differently. IF you find any ticks, place them in a vial. If you do NOT find any ticks, record that day as “no ticks”. (This is still important information).

At the end of the day, record where you were outdoors that day. It is especially important that you record the county or counties where you traveled and where (if) you found a tick. If you traveled to multiple counties and are not sure in which county a tick was found, please provide your best guess.

There is no cost other than the time required to put the tick(s) in a vial and record a few critical pieces of information. Everything needed to collect data and ticks is provided, as well as safety tips.
Each participant picks up a kit at a nearby Hub. Each kit contains:

1. Instructions on what information to record and submit
2. Data sheet for all 5 days
3. Five small vials with ethanol, disposable tweezers, and a small pencil
4. Instructions on how to remove ticks and tick safety measures

For each of the 5 days within a 2-week period, participants:

- Record a few pieces of critical information on form provided:
  1. Date of tick collection
  2. Approximate location(s) visited. For example: the county, city, park, or a description such as “2 miles south of Springfield”. A GPS point from a cell phone or GPS is also fine.
  3. If there were ticks, how they were found? Were they crawling? Attached to a person or pet? On inanimate object/clothing in laundry? Or did you not find any ticks when outdoors?
  4. Name of participant. You will only be contacted if we have questions, and your identification information will never be shared.

- Important! Place all ticks found that day in 1 vial, no matter how many or what type - one vial/day. OR if ticks are collected at a completely different location or county, please use a separate vial.
- When the 5 days are over, participants drop the datasheets and vials (with or without ticks) at any I-TICK Hub. Even if no ticks were found, the data collected are still valuable.

How it works as a Hub:

- You or your office, e.g. a county health department, will receive several tick kits, pre-printed return mailing labels, and postage paid return envelopes. (You are not responsible for finding people to participate – you are simply a location for pick up and drop off of kits).
- If you know of a group of people interested in participating, you may serve as a ‘private’ hub. We will send kits directly to you, and you distribute, collect, and return kits like any other hub. However, the private hub’s contact information and location will NOT be shared.
- Each kit will contain everything needed to collect and preserve a tick and record necessary data.
- As participants complete their data and tick collection, they will drop off ‘completed’ kits at any hub.
- A hub will mail completed kits back to UIUC for analysis, (using envelopes and labels provided).
- The hub is not responsible for finding people to participate
- To minimize shipping costs, we ask that hubs return at least 5 kits in one envelope.

Program Information:

The I-TICK program is funded through the Illinois Department of Public Health (IDPH) and the Upper Midwest Center of Excellence in Vector-Borne Disease, a consortium of Midwestern universities established in 2017 by the Centers for Disease Control and Prevention and headquartered at the University of Wisconsin, Madison. Program leaders at the University of Illinois Urbana-Champaign are Dr. Rebecca L. Smith, at the College of Veterinary Medicine, Dr. Nohra Mateus-Pinilla Director of the Wildlife Veterinary Epidemiology Laboratory at the Illinois Natural History Survey, and Dr. Chris Stone, director of the Medical Entomology Laboratory at the Illinois Natural History Survey. The tick surveillance program is one example of the center’s efforts to improve predictions of disease emergence and outbreaks and to optimize surveillance networks and pathogen detection.