What is BLAST?

BLAST is the easy to remember acronym which represents the 5 most effective prevention measures that YOU can take to avoid getting a tick-borne disease.
What are Tick-borne Diseases?

There are many diseases carried by different ticks. In Connecticut, we are most concerned with the illnesses spread by blacklegged ticks (a.k.a. Deer Ticks).

Our #1 concern is Lyme Disease
What is Lyme Disease?

- Lyme disease, the most common tick-borne illness in our state, is a bacterial infection that attacks various organ systems in the body:

  - Nervous System (*Bell’s palsy, meningitis, jabbing pain*)
  - Activity System (*arthritis, migratory, joint pain, swelling*)
  - Circulatory System (*heart block, rhythm abnormalities*)
What are the symptoms?

- Symptoms typically appear 2 – 30 days after the bite of an infected tick.

- Early symptoms:
  - Expanding "bull's-eye" rash
  - Flu-like Symptoms
  - Fever
  - Malaise
  - Fatigue
  - Headache
  - Muscle aches
  - Joint aches
A rash is very common

Examples of the characteristic "bull's-eye" rash:

*Photos provided by Pfizer*
More Lyme Disease Symptoms

Late symptoms of Lyme may include:

- Nerve damage
- Encephalopathy (brain disease)
- Meningitis symptoms
- Heart abnormalities
- Severe joint pain or swelling

Source: National Library of Medicine
How common is Lyme disease?

There are over 320,000 new cases of Lyme disease each year in the US.
And it’s on the rise…

Reported Cases of Lyme Disease by Year, United States, 1995-2015
When am I most likely to get bitten by a tick?

Confirmed Lyme disease cases by month of disease onset—United States, 2001-2015

![Histogram showing confirmed Lyme disease cases by month of disease onset](image)
What do Blacklegged Ticks Look Like?
It depends on their stage in the life cycle

- **Adult Female:** Reddish body size comparable to a sesame seed
- **Adult Male:** Slightly smaller than female, completely dark brown
- **Nymphs:** Size comparable to that of a poppy seed
- **Larva:** Size smaller than that of a pin head

**Larva cannot transmit Lyme Disease!**
The Tick Life Cycle

Year One
- Spring: eggs
- Summer: larvae
- Autumn: nymphs
- Winter: adults

Year Two
- Spring: adults mate, produce eggs & die
- Summer: eggs
- Autumn: larvae
- Winter: nymphs

Source: Center for Vector-Borne Disease, University of Rhode Island
Ticks filled with blood are “engorged”
How does a tick give you a disease?
Ticks attach with a unique mouthpart.
Tick Removal

- We recommend asking an adult for help.
- Use fine tipped tweezers.
- Grasp the tick by the mouthparts close to the skin.
- Pull straight back with a slow, steady force.
- Avoid crushing the tick’s body.
- Wash area and disinfect the bite site.
- Record the date and location of the bite.
- Watch for any early symptoms!
Tick Removal DON’Ts

• Don’t squeeze or rupture the tick.

• Don’t rub Vaseline or Petroleum Jelly on the tick.

• Don’t rub dish detergent on it.

• Don’t do ANYTHING that might otherwise traumatize the tick.
Bring the tick to your Health Department

- Health departments identify ticks and submit ticks for free testing.
- Results will be emailed to you.
- If a tick is infected, it **DOES NOT** mean that the person it was attached to has contracted disease.
- It **DOES** mean that you should watch for early symptoms and discuss the options with your doctor.
Where do ticks live?

Ticks thrive in shady, moist areas.
How do you avoid getting a tick bite?
Bathe or shower soon after coming indoors
Place clothes in a dryer to kill ticks

- **10 minutes** on high heat to kill ticks on **dry clothing**
- **60 minutes** on high heat to kill ticks on **wet clothing**
- Washing clothes alone doesn’t kill ticks.
BLAST
Look for ticks and rashes

- Tick bites are usually painless, therefore most people are unaware when they have a tick attached to them.

- Do a tick check every night!

- Ticks are very small, and may feed anywhere on the body so check thoroughly.
Apply repellents

**SKIN**
If you choose to use a tick repellent on your skin, the CDC recommends using a product that contains *DEET* at a concentration of > 20%.

**CLOTHING**
A *permethrin* based product is recommended for clothing and gear. It provides great protection against ticks! Spray when not wearing or buy factory treated clothing.
Dress for Success

1. Walk in the middle of trails, away from tall grass and bushes
2. Wear a long sleeved shirt
3. Wear white or light coloured clothing to make it easier to see ticks
4. Wear a hat
5. Spray repellent on clothes and shoes before entering the woods
6. Wear long pants tucked into high socks
7. Wear shoes: no bare feet or sandals

Picture courtesy of Parks Canada
Spray and maintain the yard

- Spray tick habitat areas
- Clear tall grasses and brush.
- Add a 3-ft wide barrier of wood chips or gravel between lawns and wooded areas.
- Mow the lawn frequently.
- Keep leaves raked.
- Stack wood neatly in a dry area.
- Keep playground equipment and patio furniture away from yard edges and in a sunny location.
- Choose deer resistant plants.
- Avoid feeding wild animals & birds.
Treat your pets

- Check your pets for ticks after coming indoors.

- Ask your vet what you can put on your pet to repel ticks.

- Don’t sleep with your pet because ticks on your pet may crawl onto you.

- Pet owners are more likely to get tick-borne diseases, so be extra careful when it comes to your own tick checks and prevention practices.
Quiz Time!
Be a LYME Fighter!

Teach your friends and family the BLAST message so they will avoid tick bites and the possibility of Lyme and other tick-borne diseases!
Information sources include:

- Centers for Disease Control and Prevention (CDC)
- CT Agricultural Experiment Station
  
  *Tick Management Handbook*

- CT Department of Public Health
- Westport/Weston Health District
- Yale School of Public Health

  *Peridomestic Lyme Disease Prevention:*
  
  *Results of a Population-Based Case–Control Study*

Questions? Contact the Ridgefield Health Department at 203-431-7006 or email blastlyme@ridgefieldct.org