

# TICK-BORNE DISEASE PREVENTION



# Personal Protection Strategies

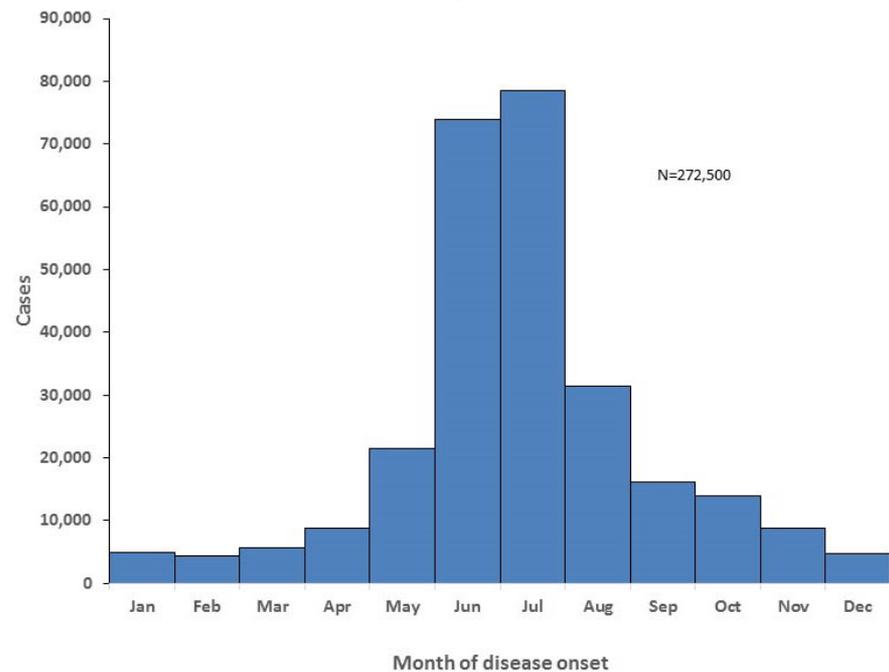
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- Know the high risk season.
- Avoid the places ticks live (when possible).
- Wear protective clothing.
- Use repellents.
- Check for ticks frequently.
- Remove attached ticks quickly and correctly.
- Recognize disease early.

# When is the high risk season?

- Most cases of tick-borne disease occur during the late spring and early summer.
- Risk is greatest in June and July, and lowest from December through March.

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



Lyme disease patients are most likely to have illness onset in June, July, or August and less likely to have illness onset from December through March.

# Avoid the Places Ticks Live?

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- Know the high risk places.
- Walk in lower risk places when possible.
- Don't give up outdoor activities, make sensible choices!



# Where do ticks live?

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Density of ticks in order from highest to lowest:

1. Woods
2. Border between woods and yard
3. Brush piles
4. Tall grass
5. Gardens
6. Mowed grass



# Where are the ticks?

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Ticks stay close to the ground:

- In leaf litter
- On fallen logs or stumps
- On low bushes
- They don't fall from the trees!



# Where should you walk?

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# Protective Clothing

- Wear Light colored clothing
- Tuck pants into socks

Is this outfit practical?  
What is the next best option?



# Wear clothes treated with Permethrin

- Buy pretreated clothing or send your clothing to insect shield for treatment:  
<https://www.insectshield.com/>
- Treat existing clothes and gear yourself
- Lasts through numerous washings
- Biggest bang for your buck: wear treated shoes and socks.



# Use insect repellent

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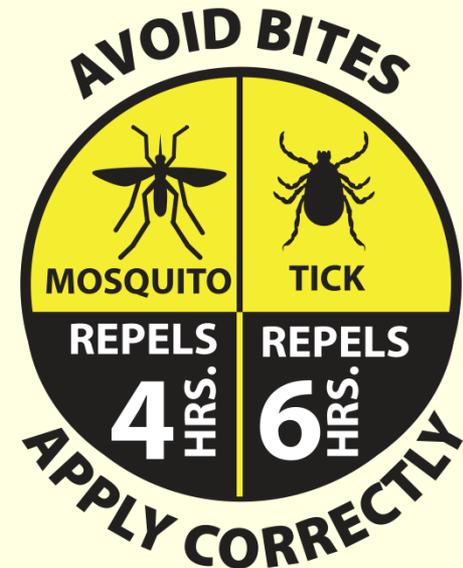
- Repellents reduce the risk of tick bites.
- The CDC recommends:

“Use repellents that contain 20 to 30% DEET on exposed skin and clothing for protection that lasts up to several hours. Always follow product instructions. Parents should apply this product to their children, avoiding hands, eyes, and mouth.”
- CDC recommended alternatives to DEET include products containing the active ingredients picaridin or IR3535.

# Choosing an Insect Repellent

- Use an EPA registered product for assurance of safety and efficacy
  - EPA approved products have to display registration # on label
- Look for the graphic
- Use the EPA web tool to find a repellent that fits your needs:

<https://www.epa.gov/insect-repellents/find-insect-repellent-right-you>



# What about natural botanical repellents?

- Natural doesn't equal safe, and man-made doesn't equal unsafe.
- If a product is not EPA registered, it has not had to undergo any testing for effectiveness.



- Will this stuff work????

**TICK REPELLENT RECIPE**

20 Drops Lemongrass Essential Oil  
20 Drops Eucalyptus Essential Oil  
4 oz. of Water

Add all ingredients in a spray bottle...  
Shake Well!

Spray on shoes, socks, and pant cuffs

SAFE FOR HUMANS  
AND DOGS



rawforbes.com

# Natural alternatives

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- Plant derived active ingredients are in some products registered by EPA for tick bite prevention, but they tend to have a shorter duration of activity:
  - Oil of Lemon Eucalyptus
  - 2-undecanone
  - Citronella

# When you come indoors

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- Clothes dryer
  - 10 minutes on high heat if dry
  - 60 minutes on high heat if wet
  - 90 minutes on low heat
- Shower
  - Within 2 hours
- Tick Checks



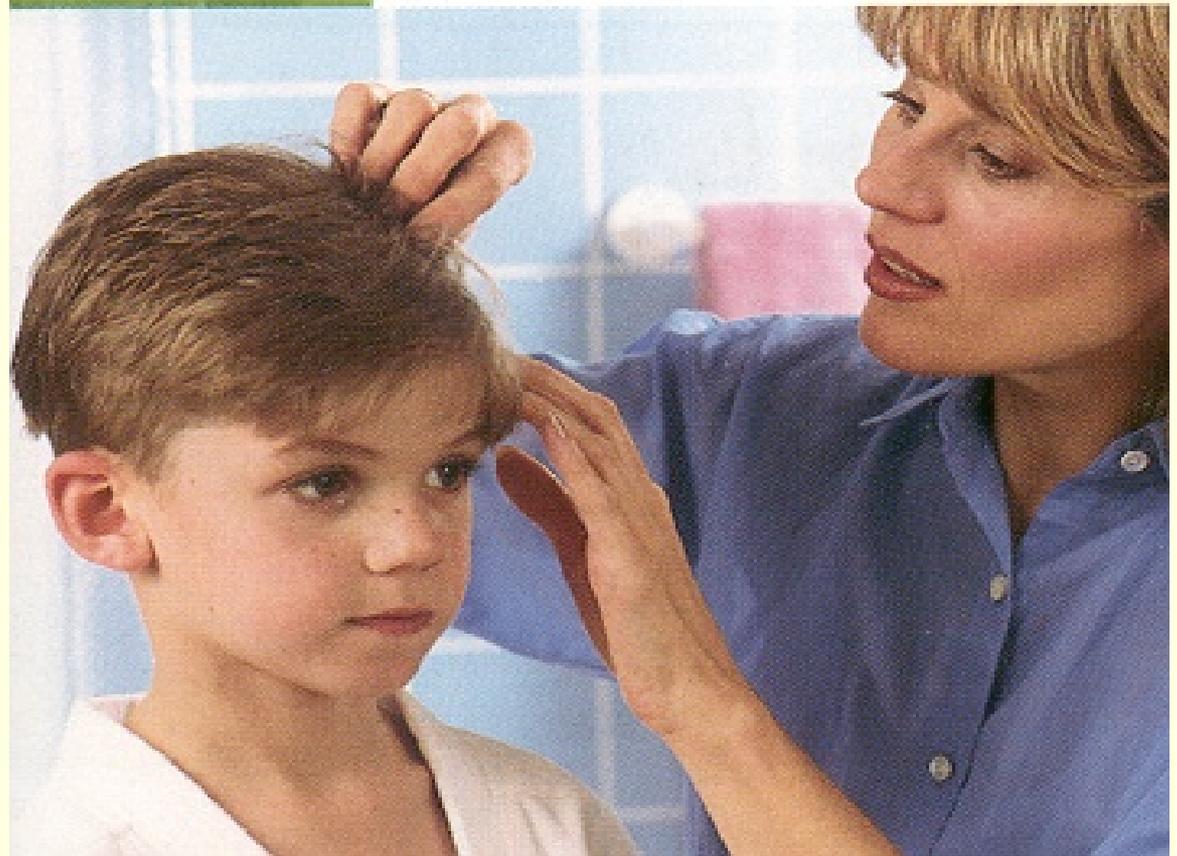
# Tick Checks

A photograph of two monkeys in a natural, outdoor setting. One monkey is in the foreground, looking towards the camera, while another is slightly behind and to the right, looking down. The background is a blurred forest with green foliage and a tree trunk.

The sooner you remove a tick, the less likely it is to transmit disease.

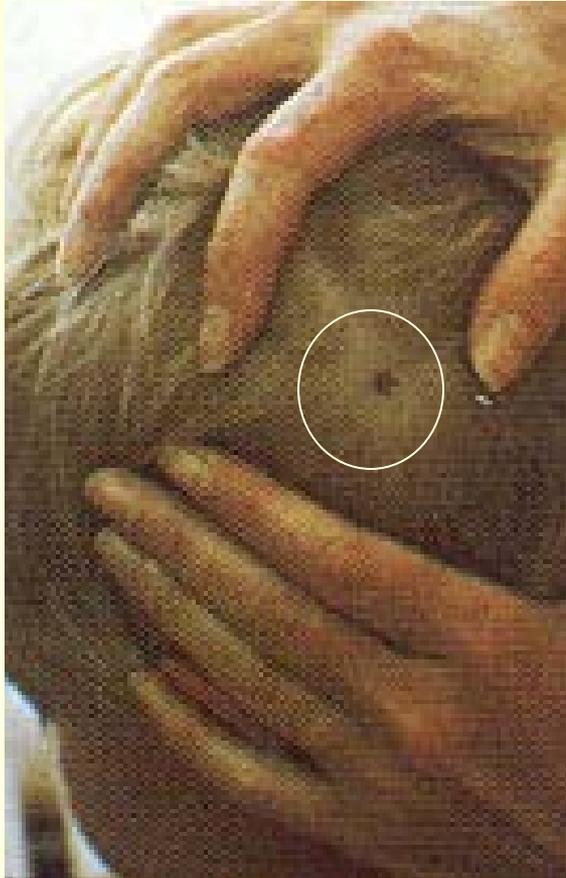
# Checking For Ticks

- Check daily, especially **after outdoor** activity
- Have someone else check those areas that are hard to see
- Use a full length mirror
- Use touch and sight



# Do not use these methods to remove an attached tick

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- Vasoline
- Fingers
- Kerosene, lighter fluid or any other chemical
- Fire
- Twirling with a wet Q-tip

# Proper Tick Removal

- Use fine-tipped tweezers
- Grab the tick as close to the skin as possible
- Pull straight out (firmly)
- Clean the area with alcohol after removal
- Record date and location of bite
- If rash or flu-like symptoms occur contact your health care provider immediately



# Recognize early signs of disease

- Rash
- Fatigue
- Chills
- Fever
- Headache
- Muscle and joint aches
- Swollen lymph nodes



# BULL'S EYE! (Sometimes)

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Expanding rash with central crust



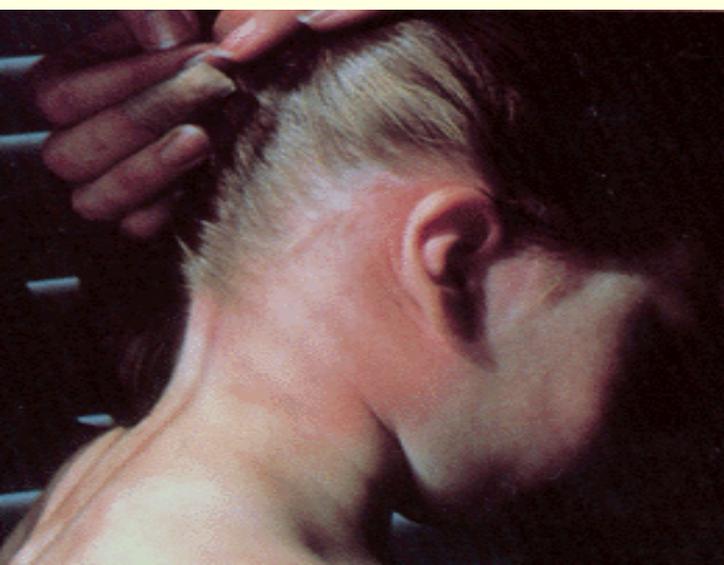
© Bernard Cohen, Dermatlas: <http://www.dermatlas.org>

Red, oval plaque on trunk



© Alison Young, Dermatlas: <http://www.dermatlas.org>

# Other Lyme disease Rashes



Red-blue lesion with central clearing



© Robin Stevenson, Dermatlas: <http://www.dermatlas.org>



Multiple rashes  
from a single bite



Dogs and horses are also commonly diagnosed with tick-borne diseases.



- Remember to do tick checks on household pets too! Pets can bring ticks into the house.
- Use a long acting tick-control product recommended by your veterinarian. For example, the Seresto collar provides 8 months of flea and tick protection.

# What DBCH is doing: The CHIP

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**C**ommunity

**H**ealth

**I**mprovement

**P**lan

- CHIP- a long-term systematic effort to address public health problems based on the results of community health assessment activities

- Reducing the burden of tick-borne disease is one of 3 focus areas in the Dutchess County CHIP

- 3 CHIP strategies:

1. Form a workgroup to develop collaborative TBD prevention activities
2. Promote knowledge of TBD and prevention strategies, especially in high risk and underserved communities
3. Leverage new technologies and data resources to improve surveillance of TBD

# What DBCH is doing: Working with community partners

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HEALTHQUEST



THE TICK  
PROJECT

 healthlinkny

DUTCHESS COUNTY TICK TASK FORCE



# Thank you for your attention!



With ticks out in full force and concerned about Lyme disease, Shelly always shrink-wrapped the kids before they went out.

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## More Resources:

- Tick-borne Disease Information Line: 845-486-3407

- [www.dutchessny.gov/Ticks](http://www.dutchessny.gov/Ticks)