



THE TICK ENCOUNTER DECISION MATRIX

From Bite to Diagnosis | Trail Ready Solutions | trailreadysolutions.com



Too many people face a tick bite alone -- uncertain, panicked, and armed with outdated advice. This resource was built by people who lived that moment. It translates CDC and HHS guidance into three practical pillars anyone can use in the field -- no medical training required.

PILLAR 1 | THE BITE-POINT PROTOCOL -- What to Do in the First 10 Minutes

STEP	ACTION	WHY IT MATTERS
1. Grasp	Use fine-tipped tweezers. Grip as close to skin as possible.	Avoids squeezing the tick body, which can increase pathogen transfer.
2. Pull	Pull upward with steady, even pressure. Do not twist or jerk.	Twisting may cause mouthparts to break off and remain in the skin.
3. Clean	Clean bite area and hands with rubbing alcohol or soap and water.	Reduces secondary infection risk at the bite site.
4. Preserve	Place tick in sealed bag or container with a damp towel.	Enables species identification and optional tick testing if symptoms develop.
5. Document	Photograph the tick and note the date, body location and attachment time.	Provides information for any future clinical evaluation or prophylaxis decision.
6. Monitor	Begin 30-day symptom watch. See Pillar 3.	Lyme symptoms may appear 3-30 days post-bite. Early detection is critical.

DANGEROUS MYTHS TO AVOID: Do NOT use heat (matches, lighters,), petroleum jelly, nail polish, or essential oils to remove a tick. These may cause the tick to release more saliva, increasing infection risk. (Source CDC, 2024)

PILLAR 2 | TICK TESTING TRANSPARENCY -- What the Tests Actually Tell You

CLAIM	THE TRUTH
"Tick testing confirms if I have Lyme Disease"	Tests show what pathogens the tick carried -- NOT whether you were infected. A positive tick test does not mean you are safe.
"I can test my own blood right away"	Blood tests are unreliable in the first 4-6 weeks post-bite. Antibodies have not yet developed, so early testing often returns a false negative. (Source: CDC, 2024)
"If there's no bull's-eyes rash, I'm safe"	Up to 30% of Lyme disease cases never produce the classic rash. Absence of a rash does NOT rule out infection. (Source: CDC, 2024)
WHEN TO SEEK PROPHYLAXIS	A single dose of doxycycline may prevent Lyme if: (1) tick was a deer tick, (2) attached 36+ hours, (3) treatment starts within 72 hours of removal. Ask provider. (HHS, 2024)

PILLAR 3 | 30-DAY MONITORING FRAMEWORK -- Know When to Act

DAYS	WHAT TO WATCH FOR	ACTION
1-3	Redness, swelling at bite site	Normal. Clean daily. Document.
3-14	Expanding rash (any shape), fever, chills, fatigue, muscle or joint aches.	SEEK CARE IMMEDIATELY. Do not wait for bull's-eye shape.
14-30	Headaches, neck stiffness, facial palsy, heart palpitations, nerve pain.	SEEK CARE. These are signs of disseminated Lyme disease.
ANY	Severe headache, confusion, difficulty breathing.	EMERGENCY CARE. May indicate Powassan virus or severe co-infection.
30+	Persistent fatigue, joint pain, cognitive issues.	Discuss Post-Treatment Lyme Disease Syndrome with your provider.

QUICK REFERENCE | CO-INFECTION AWARENESS -- Not All Tick Bites Cause Lyme Disease

DISEASE	TICK	KEY EARLY SYMPTOMS	NOTES
Lyme Disease	DT	Rash (70%), fever, fatigue, joint pain.	Most common tick-borne disease in MN & WI.
Anaplasmosis	DT	High fever, headache, muscle aches (NO rash).	Onset 1-2 weeks. Requires antibiotic treatment.
Babesiosis	DT	Flu-like, fatigue, dark urine (some asymptomatic).	Serious risk for elderly or immunocompromised.
Powassan Virus	DT	Fever, headache, vomiting, neurological symptoms.	Rare but severe. No specific treatment.
Alpha-Gal Syndrome	LST	Allergic reaction to red meat (hours after eating)	Lifelong dietary impact possible. (Source: CDC)

*DT = DEER TICK / LST = LONE STAR TICK

WHAT TO TELL YOUR DOCTOR -- Use This Script at Your Appointment

TELL THEM	EXAMPLE LANGUAGE
Date & location of bite	"I found a tick attached on [date] at [body location]."
Estimated attachment time	"I believe it was attached for approximately [X] hours based on when I was last in tick habitat."
Tick species (if known)	"I photographed the tick. It appeared to be a [deer tick / dog tick / other]."
Removal method	"I removed it with fine-tipped tweezers using upward steady pressure."
Symptoms since bite	"Since removal I have noticed [list any symptoms] or no symptoms yet."
Testing request	"I would like to discuss whether prophylactic doxycycline is appropriate and when to test my blood."
Notes:	



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Sources: CDC Tick Removal & Prevention (2024); HHS Lyme Disease Resources (2024); Minnesota Dept. of Health Tickborne Disease Statistics (2024). This resource is for educational purposes only and does not constitute medical advice. Licensed under Creative Commons CC BY 4.0. Submission for LymeX Visible Voices Prize, 2026.