#### KNOW YOUR TICKS & TBD's

Colorado is home to nearly 30 species of ticks and hundreds occur worldwide! Ticks transmit pathogens (sometimes multiple) that may make humans, pets or wildlife sick from just a single bite! Many tick-borne diseases (TBD's) present initially with mild to severe flu-like symptoms that may include fever, headache, sweats, chills, fatigue, muscle/joint pain, nausea, diarrhea, vomiting and/or variable rashes. The EM (bull's eye) rash associated with Lyme disease develops in less than 50% of cases. Because symptoms can be vague, diagnosis may be difficult.

Becoming familiar with ticks and the diseases they may transmit will help in prevention of bites and early recognition of illness. Some of the more common ticks and TBD's that you may encounter within Colorado or through travel throughout the US include:

Rocky Mountain wood tick(Dermacentor andersonii): Found throughout the Rocky Mountain States and SW Canada. Transmits Colorado tick fever (the most commonly reported TBD in Colorado), Rocky Mountain spotted fever (RMSF), Tularemia, Q fever and Tick paralysis.

American dog tick(*D. variabilis*): Found
Nationwide.Transmits Rocky Mountain spotted fever,
Tularemia, Anaplasmosis, Ehrlichiosis and Tick paralysis.
Brown dog tick(*Rhipicephalus sanguineus*): Found
Nationwide. Transmits Rocky Mountain spotted fever,
Tularemia, Tick paralysis and others.

"Soft ticks" (Ornithodoros hermisi, parkeri, or turacatae): Transmit Tick-Borne Relapsing Fever. Most often encountered while sleeping in rustic rodent infested lodging in western states. Unlike hard ticks, they feed briefly and do not remain attached to their host.

Lone star tick(Ablyomma americanum): Found primarily throughout the eastern half of US. Transmits STARI, Ehrlichiosis, Tularemia and implicated in transmission of Heartland virus, Bourbon virus, Borrelia Lyme-like illnesses, Q fever, Rickettsiosis, Tick paralysis, meat allergy and others. Black legged "Deer" tick(Ixodes scapularis): Most prevalent in the Northeast and Upper Midwestern States within US; and Canada. Transmits Lyme (the most commonly reported TBD in the US), Babesiosis, Anaplasmosis, Powassan virus, Tick paralysis, Tularemia, Bartonellosis, Ehrlichiosis (muris-like). Western black legged tick(I. pacificus): Found in Western States.Lyme, Babesiosis, Anaplasmosis, Tick paralysis, Bartonellosis, Ehrlichiosis/muris-like).

Pacific Coast tick(*D. occidentalis*): Found in Pacific Coast states; and Mexico. Transmits Pacific Coast Fever (*Rickettsia phillipi* (364D)), RMSF, Tularemia and Tick paralysis. **Gulf Coast tick**(*A. maculatum*): Found primarily in the eastern and southern US coastal states. Transmits *Rickettsia parkeri* Rickettsiosis.

#### WHO WE ARE

Colorado Tick-Borne Disease Awarenesss Association (COTBDAA) is a 501(c)3 all volunteer operated non-profit organization (EIN# 81-3611916) and an affiliate (LDANet) member of the national non-profit, Lyme Disease Association, Inc. COTBDAA established to ELEVATE awareness of Lyme and other tick-borne diseases for Coloradans through education, prevention, research and advocacy, as well as providing patient support. Ticks and the diseases they transmit are becoming an increasing threat to the health of people, pets and wildlife within Colorado, nationwide and globally. Support COTBDAA's continuing efforts through a tax deductible donation! Visit our webpage to learn more.



COTBDAA

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# www.coloradoticks.org

#### **Additional Resources:**

Lyme Disease Association, Inc (LDA) www.LymeDiseaseAssociation.org

**LymeDisease.Org** www.LymeDisease.Org

TICKNOLOGY tick testing laboratory: www.Ticknology.org

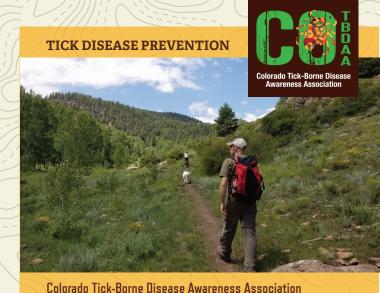
Insect Shield-Permethrin clothing & gear www.InsectShield.com

TickEase www.tickease.com

International Lyme & Associated Diseases Society (ILADS)
www.ILADS.org

IGeneX Reference labs www.IGeneX.com

# COLORADO Tick Check!



501(c)3 Non-profit EIN #81-3611916

www.coloradoticks.org

Education-Prevention-Research-Advocacy

BITING BACK ELEVATING TICK AWARENESS IN COLORADO"



### WHAT IS A TICK?

Ticks are tiny parasites that feed exclusively on blood to complete their life cycle. Though primary hosts are wildlife, ticks will feed opportunistically on humans, pets and livestock. Ticks both acquire and transmit pathogens during these blood meals which can cause a variety of diseases and illness in their host. Exposure to ticks can occur while working or recreating in the outdoors, through travel, interaction with pets or even in your own backyard.

#### PREVENTION TIPS...

- ✓ Wear permethrin treated clothing, boots and gear to kill ticks on contact. Never apply to skin!
- ✓ Use repellents on exposed skin that are labeled for ticks. Check DEET, Picaridin, IR3535 and Lemon Eucalyptus oil products. Use as labeled.
- ✓ Wear light colored clothing to more easily spot questing ticks. Tuck long pants into socks and shirt (long-sleeved) into pants to minimize access to skin for questing ticks.
- ✓ Stay to the center of hiking trails & avoiding tall grass and bushy areas. Ticks sense body heat, carbon dioxide, vibrations and odors and often quest in areas of high human or wildlife traffic.
- ✓ Avoid sitting on logs or against trees; resting near rodent burrows/nests or sleeping in rodent infested buildings. Use a blanket or tarp when resting on ground.
- ✓ **Protect your pets too!** Dogs, cats and livestock are susceptible to tick-borne diseases. Pets may also transport ticks into your home, increasing your risk of exposure.
- ✓ Control small mammal populations and habitat around your home. These animals can act as reservoir hosts for disease and may increase your exposure to ticks and TBD's.

# DO A TICK CHECK!

- ✓ Conduct frequent tick checks on yourself and children if you live, work or recreate in tick habitat! Check along hairline, nape of neck, inside & behind ears, armpits, groin, behind the knees, inside belly button and between toes. Some ticks are as small as a poppy seed. Check thoroughly!
- ✓ Check your pets and gear too! Ticks can hitchhike on fabric or fur, increasing exposure to others in vehicles, homes or workplace!
- ✓ Place outdoor exposed clothing directly into dryer on high heat for 10-20 minutes to kill ticks that may be clinging to the fabric.
- ✓ Shower as soon as possible after spending time in tick habitat.

## DNE BITE CAN CHANGE A LIFE!

Over 20 tick-borne diseases (TBD's) occur in the US alone! Risk of exposure to ticks and TBD's varies regionally throughout the United States and the world; and the prevalence and distribution of ticks and TBD's is growing. According to the CDC, Lyme disease is the fasted growing vector-borne infectious disease in the US!

Lyme and many other TBD's can be debilitating or even deadly, especially if not diagnosed and treated early. Many people that acquire Lyme or other TBD's do not recall a tick bite. Ticks capable of transmitting diseases may be very small and bites may go unnoticed. Children and those that work in the outdoors are at an increased risk.

Early spring and summer is typically referred to as "tick season", though ticks may be active throughout the year. Practicing tick safety year-round, especially in more mild or temperate climates, is key to reducing exposure to tick bites.

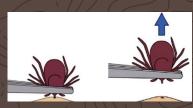
Whether you live, work or recreate within Colorado or elsewhere...the BEST way to avoid the problem of Lyme and other TBD's is to PREVENT a tick-bite!



If prevention fails, the sooner a tick is properly removed the less opportunity there is for the tick to transmit diasease...

### PROPER TICK REMOVAL

- ✓ Always use fine-tipped tweezers or tool that does not twist the tick and firmly grasp the tick as close to the skin as possible.
- ✓ With a steady motion, pull straight up! DO NOT twist, crush or jerk the tick as this may agitate the tick and increase the chance of disease transmission.



- ✓ **SAVE THE TICK!** Place the tick in a small airtight container or sealable bag. Identification and testing of tick may aid in early diagnosis. Contact the individual laboratories for their specific requirements for storage and shipping. Visit www.coloradoticks.org for tick testing options.
- ✓ Thoroughly wash hands and the bite area with soap and water or an alcohol based sanitizer. Sanitize tweezers as well!

NEVER use bare fingers, petroleum jelly, hot match, nail polish, essential oils or other topical products to remove a tick! These methods may increase the risk of disease transmission!

\*It is recommended that you consult with a physician regarding a known or suspected tick bite.

#### WHY TEST A TICK?

Human testing for Lyme and other TBD's is limited and often unreliable. Initial symptoms may be mild or vague, often making TBD's difficult to diagnose. Tick testing detects the presence of pathogens. Though testing cannot determine if pathogens have been transmitted through a bite, identification of tick species and pathogens may aid in healthcare decisions after a bite. The earlier diseases are diagnosed and treated, the better the outcome. Tick ID and testing also contributes to surveillance of both species and pathogens in Colorado! Visit www.coloradoticks.org for more on tick testing laboratories.



\*An individual should never wait on test results before consulting a physician if any symptoms of tick-borne disease develop following a tick exposure.