

Classic Lyme Disease Symptoms

(For a complete list of symptoms and co-infections, please see resources listed below)

A bdominal/stomach pain	J oint pain/stiffness/swelling
Absorbing new information difficulties	L ightheaded/Woozy/Vertigo
Allergies (increased)	M alaise
Anxiety, panic attacks	Menstrual irregularity (unexplained)
Attention: less, poor, short	Mood swings
B ladder/bowel dysfunction	Muscle pain/cramps
Brain Fog/Confusion	N ame blocking
Breast pain (unexplained)	Nausea
Burning/stabbing sensations	P elvic pain
C ardiac Impairment	Problem solving difficulties
Concentrating, thinking difficulties	R eadng difficulty
Confusion	Restless Leg Syndrome
D epression	Rheumatoid Arthritis
E ars: buzzing, ringing, ear pain, sound sensitivity	S ensitivity to heat and cold, light, sound, or smells
Emotions: over-emotional reactions	Sexual dysfunction/loss of libido
Eyes: doubled/blurred vision, floaters/light sensitivity, photophobia	Shooting pains
F acial paralysis (Bell's palsy)	Shortness of breath/cough
Fatigue, tiredness, poor stamina	Short-term memory loss
Fevers, sweats, chills, flushing (unexplained)	Skin hypersensitivity
Forgetfulness	Sweats, Sweating (unusual)
H eadaches/Migraines	T innitus (ringing in the ears)
Heart palpitations	Tremors
Hormonal Imbalance	Twitching of face/muscles
I mmune dysfunction	V ertigo
Insomnia	W eight loss/gain (unexplained)
Irritability	Writing difficulty

Be an Advocate!

For Donations go to:

www.lymelightfoundation.org www.lymedisease.org/lyme_store/donate.html
www.columbia-lyme.org/donate.html www.ilads.org/giving/donate_ilads.html

Let your voice be heard!

Write to your House & Senate Representatives, Attorney General(s) and **local papers** demanding that proper research, diagnosis, and treatment be provided for this disease.

Attorney Generals: www.naag.org **House:** www.house.gov **Senate:** www.senate.gov

See links listed below for **Sample Letters** & Info on current **Lyme Bills** and legislation.

Educational Resources and Links:

(For more information, please visit www.LivingLyme.com)

Information:

www.LymeDiseaseAssociation.org
www.LymeDisease.org
www.LymeInfo.net
www.Tick-borne Disease Alliance.org
www.ilads.org
www.TheHumanSideofLyme.net
www.TruthAboutLymeDisease.com
www.LymeInducedAutism.com

Support:

www.LymeNet.org
www.LymeFriends.org
www.Lymelight Foundation.org

Prevention:

www.TickEncounter.org
www.LymeDisease.org
www.StopTicks.org

Film: www.UnderOurSkin.com

Reading Material:

"**The Complexities of Lyme Disease**"*
by Thomas M. Grier
"**Advanced Topics in Lyme Disease**"
by Joseph J. Burrascano, Jr., MD
"**Cure Unknown**" by Pamela Weintraub
"**It's All In Your Head**" by PJ Langhoff

12 Lyme Disease Facts That You Probably Don't Know

- 1) You are over 10 times more likely to get Lyme disease than West Nile Virus.** You are most likely to be bitten in your own yard or home. **Exposure is not limited to endemic geographical areas.**
- 2) Lyme disease has surpassed HIV as the #1 infectious disease in the U.S.** Lyme spirochetes (bacteria) have been found in blood, tears, saliva, urine, breast milk, and semen. **It is proven to be passed in Utero and believed to be sexually transmitted (similar to syphilis).**
- 3) Ticks are not the only way you can get Lyme disease.** An increasing number of insects and arthropod vectors are known to be carriers including mosquitoes, biting flies, fleas, and mites. In addition to deer: birds, mammals, and rodents of all sizes can also be carriers of Lyme. **The white-footed mouse is the most common carrier.**
- 4) 50% to 75% of those with Lyme disease NEVER get a rash or see a tick. Only 10% of children diagnosed with Lyme disease have a history of the classic bulls-eye rash.**
- 5) All testing for Lyme disease is UNRELIABLE.** It is recommended that you have your blood tested through a tick borne specialty lab such as [IGeneX, Inc.](http://www.GeneX.Inc) although results may not be 100% accurate. **Even if your blood test comes back negative, it does NOT mean you do not have Lyme disease.**
- 6) Lyme disease can be fatal if not diagnosed and treated properly!** It can become chronic with multiple systemic (body wide) symptoms if not caught early and can negatively affect your central nervous system, brain, heart, kidneys, other organs, bones and cartilage, skin, teeth, eyes, and every collagenous tissue.
- 7) Lyme disease is one of the most commonly misdiagnosed diseases.** Lyme is "The Great Imitator." It mimics many common diseases and symptoms such as Fibromyalgia, Chronic fatigue syndrome, Migraine headaches, Insomnia, Anxiety, Depression, Dementia, Autism, ADHD, Multiple Sclerosis, Lupus, Rheumatoid arthritis, Parkinson's disease, Lou Gehrig's disease, Alzheimer's disease and hundreds more.
- 8) There are over 150 symptoms of Lyme disease.** Symptoms can be devastating and severely disabling or minor and go unnoticed. Every person has different symptoms and severities depending on the strain of Lyme, their genetic make-up, strength of their immune system, and the number and type of co-infections they may have.
- 9) People infected with the Lyme bacteria often have tick-borne co-infections** such as Babesia, Bartonella, Erlichiosis, Rocky Mtn. Spotted Fever, and many more. **If the co-infections are not also treated, symptoms may persist, causing permanent damage or death.**
- 10) The #1 cause of treatment failure and relapse is due to doctors and specialists remaining misinformed about Lyme disease.** Even though doctors may be aware of the CDC guidelines for diagnosis and treatment, only a Lyme Literate Medical Doctor (LLMD) can diagnose and treat Lyme properly. This information is not available through sources such as phone books or Insurance referral programs. **Contact the Lyme Disease Association for more information on Lyme doctor referrals.** www.LymeDiseaseAssociation.org
- 11) Treatment for Lyme disease cannot be constrained to one generic approach** as the CDC guidelines currently suggest (21-28 days of antibiotics). A minimum of 8-12 weeks of antibiotics are needed, even in early stages, due to the lifecycle of the Lyme spirochete. **Months or years of treatment may be needed; in some cases, it is not curable at all. Customized treatment is necessary for success.**
- 12) The #1 cause of death from Lyme disease is suicide.** It is responsible for many psychiatric illnesses due to the Lyme spirochete's affinity with colonizing in the brain.

Be Your Own Advocate!

No doctor knows everything. Learn to listen to & trust your body.

Please, educate yourself and inform everyone you know, including friends, family, colleagues, medical practitioners, and government representatives about the dangers and complications of Lyme disease.

Please see the back for resources and links or go to: www.LivingLyme.com

Prevention is KEY!

How does the Lyme Borrelia Spirochete Survive and Thrive?

“The spirochete that causes Lyme disease has three times more useful genes than Syphilis, and uses its evolutionary advantage to evade detection and survive destruction by both the immune system and antibiotics. It is both stealthy and insidious.” -Tom Grier*

(Please see the back page for resources used to create this document). Detailed information is available if you are interested in learning specifics and scientific explanations. **The paragraphs that follow are an attempt to explain in simple terms the basic functions of how this infection works and why standard treatments fail.**

Although Lyme disease can be transferred in many ways, ticks are a prime host for transfer to humans due to the amount of time they feed (typically for 1-3 days although infection can occur immediately). Tick feeding practices are also designed to counteract host immune responses. This gives the Lyme bacterium time to familiarize itself with the host's DNA and immune system; allowing it to travel within the bloodstream undetected.

The Lyme spirochete (Borrelia species) is a uniquely opportunistic bacterium with an unusual ability to self-preserve. It acts more like an exceptionally intelligent protozoan parasite than a common bacterium. It is highly motile, and can penetrate blood vessels easily. It uses the bloodstream to quickly find opportune sites to hide from immune responses and prefers to colonize in collagenous tissue such as the brain and central nervous system, joints, organs, etc....

Once initial infection occurs, the spirochete takes the opportunity to activate genes that will ensure its ability to survive and thrive within the new host. One way in which it does this is by altering the expression of surface proteins further confusing the host immune system. These surface proteins are what kick-starts the immune system into creating antibodies. Essentially, the host immune system can't keep up. **Once isolated within the brain it can divide and change many times into an undetectable strain that the peripheral immune system will simply ignore. The result is an infection that can quietly inhabit the brain and other tissues for years or decades.**

This is why blood tests are unreliable. If our immune system cannot detect the infection to create antibodies, or if the infection is in a non-active state, there is no way of finding a positive result in a blood sample. Therefore, it is especially difficult to find a positive test result in someone who is in late stage Lyme infection. **Clinical diagnosis remains the most important way of determining if someone is infected with the Lyme spirochete.** It is crucial once diagnosed with Lyme disease and treatment has begun, that treatment is not stopped prematurely. Relapses can be much more dangerous and difficult to eradicate than the initial treatment.

The division time and life cycle of Borrelia spirochetes is longer than typical bacteria, which is why standard treatments fail. The Lyme bacterium can become metabolically inactive for long periods of time making antibiotics ineffective as they can only kill bacteria when they divide. **No antibiotic can kill a bacterium that is metabolically inactive and spirochetes are well known to have mastered this form of survival.** Many naturally occurring simple bacteria, such as the bacteria that cause acne, successfully survive antibiotic treatment. Simultaneously killing all the surviving bacteria in late infection with short courses of antibiotics is impossible and may not even be possible with extended courses of antibiotics.

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In its basic form, the Lyme Spirochete is spiral shaped and can literally bore deep into tissues, hide, and colonize. When it senses “danger”, such as an immune response or antibiotics, it has the ability to change its structural identity into two different forms to ensure survival. The L-form occurs when it discards its cell wall and integrated surface proteins. This form often evades the immune system and many antibiotic treatments, and is capable of intracellular infection. **In some cases, it can trigger an auto-immune response which then attacks our own tissues.**

The cystic form creates new challenges for the immune system which can be ineffective against all various defense mechanisms of this bacterium. It mimics good cells in the host body so it can remain invisible, similar to putting on a costume. This form is resistant to antibiotics, does not present antigens to the immune system, and can shift into a reproductive state while encysted. **Quite simply, the Lyme spirochete is a survivor at all costs.**

Once conditions improve, the Lyme bacterium can change back into the spirochete form and “re-infect” the host. It can change forms within 1 minute of expression and survive up to 10 months before reconversion. The preferred form of the Lyme spirochete is dependent on its physical surroundings and environmental cues. **It can also survive both freezing and thawing and successfully infect the host 12 months of the year.**

This unique ability to shift forms and hide from our natural immune responses and antibiotics makes it difficult, if not impossible, for some to achieve full recovery. This is why relapse rates are so high in Lyme patients. It also explains why some people do not show symptoms right away, and may not show symptoms for weeks, months, or years after the initial infection. **The Lyme spirochete is a highly evolved pathogen with many mechanisms of evasion and survival. Believing this disease can be easily eradicated and cured is arrogant, unfounded, and dangerous.**

Candida & Lyme Disease

Candida is naturally occurring yeast that exists within the human digestive system. When a person takes antibiotics, all of the "good bacteria" is killed along with the bad. This creates an imbalance which allows Candida to thrive and turn into a pathogenic infection with symptoms that closely mimic Lyme disease symptoms (They share all of the symptoms listed on this flyer and more). It makes it difficult, if not impossible, to monitor the progress of Lyme treatment accurately if Candida overgrowth occurs. **Discuss taking Probiotics and eating a strict diet with your doctor while being treated with antibiotics in order to keep this in check and prevent infection.**

Candida infection can also occur due to a diet high in processed foods and sugar. This is why it is important to be properly diagnosed. It is possible to have a negative Lyme test, and based on symptoms, be diagnosed with Lyme disease when, in fact, your symptoms may be due to Candida infection, Vitamin deficiency, or other underlying conditions.

For more information, please go to www.LivingLyme.com

The CDC and IDSA do not currently recognize the facts about Lyme disease.

Most insurance companies will not pay for treatment. Most Lyme literate doctors do not accept insurance for this reason, causing extreme financial hardship to those in need of treatment. Imagine paying for cancer treatment out of pocket. Many doctors who treat Lyme disease prefer to remain anonymous, in fear of having their Medical licenses revoked (**PLEASE See the Story of Dr. Charles Ray Jones at www.lymedisease.org/news**). **However, finding a Lyme Literate Doctor (LLMD) to diagnose and treat this disease is as important as any other pathogenic disease.**

Your life may depend on it.