



## Lyme Disease - Myths versus Fact

Myth	Fact	Evidence
<p>There are no benefits associated with long term antibiotic use</p>	<p>Numerous studies document the benefits of long term antibiotic treatment</p>	<p><a href="http://www.ncbi.nlm.nih.gov/pubmed/17578772?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_Discovery_RA&amp;linkpos=1&amp;log\$=relatedreviews&amp;logdbfrom=pubmed">http://www.ncbi.nlm.nih.gov/pubmed/17578772?ordinalpos=1&amp;itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DiscoveryPanel.Pubmed_Discovery_RA&amp;linkpos=1&amp;log\$=relatedreviews&amp;logdbfrom=pubmed</a> long-term antibiotic therapy improves persistent symptoms associated with Lyme disease</p> <p><a href="http://www.ncbi.nlm.nih.gov/pubmed/19268485?ordinalpos=3&amp;itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/19268485?ordinalpos=3&amp;itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum</a> there is insufficient evidence to deny antibiotic treatment to chronic Lyme disease patients</p>
<p>It takes 24-48 hours for a tick to transmit Lyme disease</p>	<p>Ticks can spread disease within hours of a bite. Some co-infections transmit very quickly.</p>	<p><a href="http://campother.blogspot.co.uk/2013/10/24-hours-of-attachment-is-estimate-not.html">http://campother.blogspot.co.uk/2013/10/24-hours-of-attachment-is-estimate-not.html</a> transmission when attached for less than 24 hours</p> <p><a href="http://www.ncbi.nlm.nih.gov/pubmed/22104184">http://www.ncbi.nlm.nih.gov/pubmed/22104184</a> - Clinical evidence for rapid transmission of Lyme disease</p> <p><a href="http://wwwnc.cdc.gov/eid/article/8/2/01-0198_article">http://wwwnc.cdc.gov/eid/article/8/2/01-0198_article</a> - relapsing fever spirochetes are efficiently transmitted in saliva by fast-feeding argasid ticks within minutes of their attachment to a mammalian host</p> <p><a href="http://lymedisease.org/news/hardscienceonlyme/hard-science-on-lyme-ticks-can-transmit-infection-the-first-day.html">http://lymedisease.org/news/hardscienceonlyme/hard-science-on-lyme-ticks-can-transmit-infection-the-first-day.html</a> - Researchers Patmas and Remora reported on a case of Lyme disease that was transmitted after only 6 hours of attachment by a deer tick.</p>
<p>Short term antibiotic use eradicates Lyme.</p> <p>There is no such thing as chronic Lyme disease.</p>	<p>Lyme disease (<i>Borrelia burgdorferi</i>) can persist long after antibiotic treatments stop.</p>	<p><a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2876246/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2876246/</a> proof chronic Lyme exists</p> <p><a href="http://www.lymedisease.org/resources/persistence%20confirmed.pdf">http://www.lymedisease.org/resources/persistence%20confirmed.pdf</a> Evidence of persistent infection notwithstanding previous antibiotic treatment is strong</p> <p><a href="http://www.ncbi.nlm.nih.gov/pubmed/1980573?dopt=Abstract">http://www.ncbi.nlm.nih.gov/pubmed/1980573?dopt=Abstract</a> Active cases of Lyme disease show clinical relapse following antibiotic therapy</p> <p><a href="http://lookingatlyme.blogspot.com/2010/09/case-for-chronic-infection.html">http://lookingatlyme.blogspot.com/2010/09/case-for-chronic-infection.html</a> <i>Borrelia Burgdorferi</i> can persist within specific body tissues and cells of various mammals despite antibiotic therapy</p> <p><a href="http://www.nature.com/emi/journal/v3/n7/full/emi201453a.html">http://www.nature.com/emi/journal/v3/n7/full/emi201453a.html</a> <i>Borrelia burgdorferi</i> persists after using FDA approved drugs</p> <p><a href="http://lymedisease.org/news/hardscienceonlyme/621.html">http://lymedisease.org/news/hardscienceonlyme/621.html</a> Lyme Bacteria survives antibiotic treatment</p>

		<p><a href="http://www.hcplive.com/articles/New-Study-Provides-Hope-for-Chronic-Lyme-Disease-Sufferers">http://www.hcplive.com/articles/New-Study-Provides-Hope-for-Chronic-Lyme-Disease-Sufferers</a> Some studies estimate up to 20% of Lyme patients suffer long-term symptoms after initial antibiotic treatment is done</p> <p><a href="http://www.hopkinsmedicine.org/news/media/releases/immune_system_research_may_help_doctors_predict_w_ho_gets_long_term_complications_from_lyme_disease">http://www.hopkinsmedicine.org/news/media/releases/immune_system_research_may_help_doctors_predict_w_ho_gets_long_term_complications_from_lyme_disease</a> some patients experience long-term complications after antibiotic treatment</p> <p><a href="http://www.jci.org/articles/view/58813">http://www.jci.org/articles/view/58813</a> <i>Borrelia burgdorferi</i> antigens persist after antibiotic treatment</p> <p><a href="http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0029914">http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0029914</a> Persistence of <i>Borrelia burgdorferi</i> in Rhesus Macaques following Antibiotic Treatment</p> <p><a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2346637/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2346637/</a> Persistence of Bb after antibiotic treatment in mice</p>
<p>Lyme Disease is easily diagnosed with conventional blood tests</p>	<p>The CDC approved two-tier blood test is notoriously inaccurate and unreliable.</p> <p>False negatives are reported over 50% of the time.</p>	<p><a href="http://lymemd.blogspot.com/2013/11/lies-about-western-blot.html">http://lymemd.blogspot.com/2013/11/lies-about-western-blot.html</a> Lies about western blot blood test</p> <p><a href="http://www.poughkeepsiejournal.com/story/news/health/lyme-disease/2014/03/21/lyme-diagnosis-false-tests/6692353/">http://www.poughkeepsiejournal.com/story/news/health/lyme-disease/2014/03/21/lyme-diagnosis-false-tests/6692353/</a> CDC two-tier blood test misses over half Lyme positive patients</p> <p><a href="http://tbdalliance.org/diagnosing-tbds/tests">http://tbdalliance.org/diagnosing-tbds/tests</a> According to many experts, there is no reliable test for Lyme disease and many other tick-borne diseases at this time</p> <p><a href="http://www.lymeinfo.net/medical/LDSeronegativity.pdf">www.lymeinfo.net/medical/LDSeronegativity.pdf</a> false negative blood results are common</p> <p><a href="http://www.lymedisease.org/lyme101/lyme_disease/lyme_tests.html">http://www.lymedisease.org/lyme101/lyme_disease/lyme_tests.html</a> blood tests are not accurate</p>
<p>Lyme disease is only transmitted by deer ticks</p>	<p>Lyme disease can be transmitted by many species of ticks and other arthropods including black fly, sand flea, biting flea and mosquito</p>	<p><a href="http://cassia.org/library/N_Engl_J_Med_1990_Jun_14,322(24),1752.htm">http://cassia.org/library/N_Engl_J_Med_1990_Jun_14,322(24),1752.htm</a> Lyme disease transmitted by biting fly</p> <p><a href="http://www.lymefight.info/wp-content/uploads/2013/11/Handbook-Transmission-Studies-1-page.doc">http://www.lymefight.info/wp-content/uploads/2013/11/Handbook-Transmission-Studies-1-page.doc</a> Lyme transmitted by many types of vectors</p> <p><a href="http://www.lymeneteurope.org/forum/viewtopic.php?f=5&amp;t=1489">http://www.lymeneteurope.org/forum/viewtopic.php?f=5&amp;t=1489</a> <i>Borrelia burgdorferi</i> in other insects and ticks</p> <p><a href="http://www.txlda.com/transmission.php">http://www.txlda.com/transmission.php</a> -Lyme can be transmitted by many types of ticks</p> <p><a href="http://www.stopthelymelies.com/lyme-disease-101/transmission-controversies">http://www.stopthelymelies.com/lyme-disease-101/transmission-controversies</a> Lyme is transmitted by sand flea, mosquito, flea, biting flies, mites, other arthropods</p> <p><a href="http://lymediseaseresource.com/wordpress/sandflies-in-iraq-infect-americans-who-bring-home-lyme-disease-and-multiple-co-infections/">http://lymediseaseresource.com/wordpress/sandflies-in-iraq-infect-americans-who-bring-home-lyme-disease-and-multiple-co-infections/</a> - transmitted by sand fleas in Iraq</p> <p><a href="http://www.ncbi.nlm.nih.gov/pubmed/4075471">http://www.ncbi.nlm.nih.gov/pubmed/4075471</a> Lyme disease transmitted by mosquito or biting fly</p>

<p>Lyme disease cannot be transmitted sexually</p>	<p>The evolution of medical science shows Lyme disease can be transmitted through sexual contact</p>	<p><a href="http://www.onlineprnews.com/news/454866-1390261507-lyme-disease-may-be-sexually-transmitted-study-suggests.html">http://www.onlineprnews.com/news/454866-1390261507-lyme-disease-may-be-sexually-transmitted-study-suggests.html</a> Lyme disease can be transmitted sexually</p> <p><a href="http://whatislyme.com/recovery-of-lyme-spirochetes-by-pcr-in-semen-samples-of-previously-diagnosed-lyme-disease-patients/">http://whatislyme.com/recovery-of-lyme-spirochetes-by-pcr-in-semen-samples-of-previously-diagnosed-lyme-disease-patients/</a> Lyme spirochetes recovered in semen of Lyme positive patients</p> <p><a href="http://lymediseaseresource.com/wordpress/the-risk-of-getting-infected-with-lyme-disease-in-the-bedroom/">http://lymediseaseresource.com/wordpress/the-risk-of-getting-infected-with-lyme-disease-in-the-bedroom/</a> The presence of the Lyme spirochete in genital secretions and identical strains in married couples strongly suggests that sexual transmission of the disease occurs</p> <p><a href="http://player.vimeo.com/video/37137701">http://player.vimeo.com/video/37137701</a> Lyme transmitted through sexual contact and from mother to child congenitally</p> <p><a href="http://lymediseaseresource.com/wordpress/lyme-disease-on-the-rise-sexual-transmission/">http://lymediseaseresource.com/wordpress/lyme-disease-on-the-rise-sexual-transmission/</a> Laboratory studies confirm the existence of Lyme spirochetes in semen/vaginal secretions.</p> <p><a href="http://www.myfoxdc.com/video?clipId=10214080&amp;autostart=true#axzz3393SezSP">http://www.myfoxdc.com/video?clipId=10214080&amp;autostart=true#axzz3393SezSP</a> Video newscast Lyme can be sexually transmitted</p>
<p>Lyme disease cannot be spread from mother to child</p>	<p>Lyme disease can be spread through blood transfusions as well as congenitally from mother to child</p>	<p><a href="http://home.comcast.net/~runagain/Congenital%20Transmission%20of%20Lyme.doc">http://home.comcast.net/~runagain/Congenital%20Transmission%20of%20Lyme.doc</a> Specific studies referencing Lyme transmission during pregnancy</p> <p><a href="http://www.ncbi.nlm.nih.gov/pubmed/2685924">http://www.ncbi.nlm.nih.gov/pubmed/2685924</a> Documentation that transplacental transmission of the Lyme spirochete from mother to fetus is possible.</p> <p><a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2687033/?tool=pubmed">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2687033/?tool=pubmed</a> Documentation that Babesia, a Lyme co-infection can be transmitted from pregnant mother to fetus</p> <p><a href="http://jcm.asm.org/content/48/6/2289.abstract">http://jcm.asm.org/content/48/6/2289.abstract</a> Molecular Evidence of Perinatal Transmission of <i>Bartonella vinsonii</i> and <i>Bartonella henselae</i> to a Child</p> <p><a href="http://www.ncbi.nlm.nih.gov/pubmed/2349627?ordinalpos=74&amp;itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/2349627?ordinalpos=74&amp;itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum</a> Lyme disease (<i>Borrelia burgdorferi</i>) can survive in human blood stored under blood banking conditions</p> <p><a href="http://player.vimeo.com/video/37137701">http://player.vimeo.com/video/37137701</a> Lyme transmitted through sexual contact and from mother to child congenitally</p>
<p>14-21 days of antibiotic use will cure Lyme disease.</p>	<p>A significant number of Lyme patients experience long term chronic symptoms after stopping antibiotic treatment.</p>	<p><a href="http://lookingatlyme.blogspot.com/2010/09/case-for-chronic-infection.html">http://lookingatlyme.blogspot.com/2010/09/case-for-chronic-infection.html</a> Evidential persistence of <i>Borrelia</i> species post antibiotic exposure in vivo and in vitro.</p> <p><a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2876246/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2876246/</a> Evidence continues to mount that Chronic Lyme exists and needs to be addressed by the medical community</p>

<p>There is no such thing as Chronic Lyme.</p>		<p><a href="http://www.hcplive.com/articles/New-Study-Provides-Hope-for-Chronic-Lyme-Disease-Sufferers">http://www.hcplive.com/articles/New-Study-Provides-Hope-for-Chronic-Lyme-Disease-Sufferers</a> Some studies estimate up to 20% of all patients with Lyme disease may suffer long-term symptoms known as Chronic Lyme after their initial treatment period is done</p> <p><a href="http://www.nature.com/emi/journal/v3/n7/full/emi201453a.html">http://www.nature.com/emi/journal/v3/n7/full/emi201453a.html</a> Post antibiotic use Lyme disease symptoms can persist</p> <p><a href="http://www.ncbi.nlm.nih.gov/pubmed/1980573?dopt=Abstract">http://www.ncbi.nlm.nih.gov/pubmed/1980573?dopt=Abstract</a> Active cases of Lyme disease may show clinical relapse following antibiotic therapy</p> <p><a href="http://www.sys-con.com/node/3265359">http://www.sys-con.com/node/3265359</a> For some patients antibiotic use is not effective</p> <p><a href="http://www.hopkinsmedicine.org/news/media/releases/immune_system_research_may_help_doctors_predict_w_ho_gets_long_term_complications_from_lyme_disease">http://www.hopkinsmedicine.org/news/media/releases/immune_system_research_may_help_doctors_predict_w_ho_gets_long_term_complications_from_lyme_disease</a> After antibiotic use some patients develop post-treatment Lyme disease syndrome</p> <p><a href="http://www.jci.org/articles/view/58813">http://www.jci.org/articles/view/58813</a> Lyme disease symptoms persist after antibiotic treatment ends</p> <p><a href="http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0029914">http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0029914</a> Persistence of <i>Borrelia burgdorferi</i> in Rhesus Macaques following Antibiotic Treatment of Disseminated Infection</p>
<p>Co-infections are not common</p>	<p>In addition to Lyme disease (<i>borrelia burgdorferi</i>) ticks transmit many other diseases or co-infections</p>	<p><a href="http://www.ncbi.nlm.nih.gov/pubmed/18648996?ordinalpos=2&amp;itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/18648996?ordinalpos=2&amp;itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum</a> Ticks are often infected with more than one pathogen Several field surveys have documented nonrandom levels of coinfection.</p> <p><a href="http://www.lymeresearchalliance.org/PDF/TFLpressreleases/Sept08-Lyme-Disease-Co-Infect.pdf">http://www.lymeresearchalliance.org/PDF/TFLpressreleases/Sept08-Lyme-Disease-Co-Infect.pdf</a> Lyme disease proves even more complicated with associated coinfections</p> <p><a href="http://lymedisease.org/news/lymepolicywonk/lymepolicywonk-ticks-transmit-a-world-of-disease-and-co-infections-into-the-lives-of-lyme-patients.html">http://lymedisease.org/news/lymepolicywonk/lymepolicywonk-ticks-transmit-a-world-of-disease-and-co-infections-into-the-lives-of-lyme-patients.html</a> study showing co-infections are common</p> <p><a href="http://www.prweb.com/releases/2008/09/prweb1345344.htm">http://www.prweb.com/releases/2008/09/prweb1345344.htm</a> Ticks that transmit Lyme disease transmit other pathogens which can complicate Lyme treatment leading to a more devastating illness</p> <p><a href="http://www.ncbi.nlm.nih.gov/pubmed/16814477?ordinalpos=9&amp;itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum">http://www.ncbi.nlm.nih.gov/pubmed/16814477?ordinalpos=9&amp;itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum</a> Numerous different microbes have been found in ticks which co-infect the human host.</p> <p><a href="http://www.lymedisease.org/lyme101/coinfections/other_tick_diseases.html">http://www.lymedisease.org/lyme101/coinfections/other_tick_diseases.html</a> Coinfections complicate diagnosis and treatment and make recovery even more difficult.</p>

**Medical Disclaimer: The foregoing information is for educational purposes only. It is not intended to replace or supersede patient care by a healthcare provider. If an individual suspects the presence of a tick-borne illness, they should consult a healthcare provider who is familiar with the diagnosis and treatment of tick-borne diseases.**