

Lyme-Borreliose, Epidemiologie, Klinik, Gender bias, Fachkontroverse, Cartoons Lyme-Borreliosis, Epidemiology, clinic, gender bias, controversy, Cartoons

Maps

https://www.google.de/search?q=lyme+borreliosis+worldwide+maps&hl=de&biw=1600&bih=766&tbm=isch&tbo=u&source=univ&sa=X&ei=vd8HVb_GHMLJPN7PgcgL&ved=0CCUQsAQ

Lyme borreliosis maps

<http://www.cdc.gov/lyme/stats/maps/interactiveMaps.html>

<http://www.borreliose-infektionskrankheiten.de/vorkommen-von-borreliose-infektionen.html>

Keim-Verbreitung unter Mammalia, germ-spreading among Mammalia

<http://www.kabilahsystems.de/borreliensexuellschwanger.pdf>

und über Vektoren, and by means of vectors

<http://www.insectimages.org/browse/highslide-imageservice.cfm?area=77&desc=7&page=2>

(2006) Borrelieninfektion, Therapieversager, Halbwertszeit v. Immunglobulinen und DNA

<http://www.erlebnishaft.de/dauerheilung.pdf>

„Die maximale Latenzzeit bis zum Auftreten von Krankheitssymptomen betrug acht Jahre.... Daher kann heute als geklärt gelten, dass die Lyme-Borreliose eine primär chronisch verlaufende Infektionskrankheit ist, bei der es in Analogie zur Syphilis keine Spontanheilung gibt. Die These eines „Durchseuchungstiters“ im Sinne einer durchgemachten, spontan überstandenen Infektion konnte nie belegt werden und sollte heute obsolet sein“.

“The maximum latency to onset of disease symptoms was eight years The thesis of a "Durchseuchungstiters" in the sense of had taken place spontaneously recovering from infection could never be substantiated and should now be obsolete”.

Cost calculations for causal treatment. Kosten bei Behandlung der Lyme-Borreliose

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Henningsson AJ, Malmvall B-E, Ernerudh J et al (2010) Neuroborreliosis—an epidemiological, clinical and healthcare cost study from an endemic area in the south-east of Sweden. Clin Microbiol Infect 2010; 16: 1245–1251 10.1111/j.1469-0691.2009.03059.x

<http://www.diva-portal.org/smash/get/diva2:343393/FULLTEXT01.pdf>

Johnson L, Wilcox S, Mankoff J, Stricker RB (2014) Severity of chronic Lyme disease compared to other chronic conditions: a quality of life survey. PeerJ 2, e322; DOI 10.7717/peerj.322

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3976119/>

Lohr B, Müller I, Mai M et al. (2014). Epidemiology and cost of hospital care for Lyme borreliosis in Germany: Lessons from a health care utilization database analysis. Ticks Tick-borne Dis.,

<http://dx.doi.org/10.1016/j.ttbdis.2014.09.004>

Adrión ER, Aucott J, Lemke KW, Weiner JP (2015) Health Care Costs, Utilization and Patterns of Care following Lyme Disease. PLOS ONE | DOI:10.1371/journal.pone.0116767. p 1-14

<http://www.ncbi.nlm.nih.gov/pubmed/25650808>

Cameron D (2016) Lyme Disease Can Cost Billions.

<https://www.youtube.com/watch?v=lxvNQMFBdIk&feature=youtu.be&a=>

→ **Differential – Diagnosen, Cavete – Diagnosen und symptomatische Behandlung, differential - diagnoses, Cavete - diagnosis and symptomatic treatment**
<http://www.erlebnishaft.de/kommentalternativ.pdf>

Epidemiologie, epidemiology

[Damon SR](#) (1926) **A NOTE ON THE SPIROCHAETES OF TERMITES.** *J Bacteriol.* 11(1), 31–36.
PMCID: PMC379304 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC379304/>
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC379304/pdf/jbacter00905-0032.pdf>
„From this survey it will be seen that all the species of termites examined are infested with spiral organisms of one or another sort.“

[Lennhoff C](#) (1948) **Spirochaetes in Aetiologically Obscure Diseases.** *Acta Derm Venereol* 28(3), 295- 324 (**special stain!**)
<http://lymerick.net/1948-Lennhoff.htm> <http://www.ncbi.nlm.nih.gov/pubmed/18891989>
<https://www.docphin.com/research/article-detail/15473169/PubMedID-18891989/Spirochaetes-in-aetiologically-obscure-diseases>

[Felsenfeld O.](#) (1971) **Borrelia. Strains, vectors, human and animal borreliosis.** Warren H. Green, Inc., St. Louis, MO
<http://annals.org/aim/article/685957/borrelia-strains-vectors-human-animal-borreliosis>
"Our patient recovered without antibiotic therapy in about 4 weeks. Untreated TBRFs typically last for 3 weeks up to 7 months."

[Mast WE, Burrows WM](#) (1976) **Erythema chronicum migrans and "lyme arthritis".** *JAMA.* 236(21), 2392. <http://jamanetwork.com/journals/jama/article-abstract/349662>

[Steere AC, Malawista SE, Hardin JA](#) et al. (1977) **Erythema chronicum migrans and Lyme arthritis. The enlarging clinical spectrum.** *Ann Intern Med.* 86(6), 685-98.

[Wallis RC, Brown SE, Kloter KO, Main AJ Jr.](#) (1978) **Erythema chronicum migrans and lyme arthritis: field study of ticks.** *Am J Epidemiol.* 108(4), 322-7.

[Burgdorfer W, Barbour AG, Hayes SF, Benach JL, Grunwaldt E, Davis JP](#) (1982) **Lyme disease-a tick-borne spirochetosis?** *Science.* 216(4552), 1317-9.
<https://www.ncbi.nlm.nih.gov/pubmed/7043737>

[Steere AC, Grodzicki RL, Kornblatt AN, Craft JE, Barbour AG, Burgdorfer W, Schmid GP, Johnson E, Malawista SE](#) (1983) **The spirochetal etiology of Lyme disease.** *N Engl J Med.* 308(13), 733-40.
<https://www.ncbi.nlm.nih.gov/pubmed/6828118>

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[Magnarelli LA, Freier JE, Anderson JF](#) (1987) **Experimental Infections of Mosquitoes with Borrelia burgdorferi, the Etiologic Agent of Lyme Disease.** *J Infect Dis* 156 (4), 694-695. DOI:
<https://doi.org/10.1093/infdis/156.4.694>
<https://academic.oup.com/jid/article-abstract/156/4/694/2190517/Experimental-Infections-of-Mosquitoes-with?redirectedFrom=PDF>

[Mather TN, Fish D, Coughlin RT](#) (1994) **Competence of dogs as reservoirs for Lyme disease spirochetes (Borrelia burgdorferi).** *J Am Vet Med Assoc* 205(2), 186-188. [PubMed Abstract](#)

[Fukunaga M, Takahashi Y, Tsuruta Y, Matsushita O, Ralph D, McClelland M, Nakao M](#) (1995) **Genetic and phenotypic analysis of Borrelia miyamotoi sp. nov., isolated from the Ixodid tick Ixodes persulcatus, the vector for Lyme disease in Japan.** *Int J Syst Bacteriol* 45(4), 804-810.
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<http://www.ncbi.nlm.nih.gov/pubmed/10584895>

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Barbour A (2005) Relapsing fever, p 220–236. In Dennis DT, Goodman JL, Sonenshine DE (ed), Tick-borne diseases of humans. ASM Press, Washington, DC. [Google Scholar](#)

Mun J, Eisen RJ, Eisen L, Lane RS (2006) [Detection of a Borrelia miyamotoi sensu lato relapsing-fever group spirochete from Ixodes pacificus in California](#) [\[archive\]](#), J Med Entomol. 43, 120-123

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<https://www.efsa.europa.eu/de/efsajournal/pub/1723> <http://planetaryhealthalliance.org/publications/scientific-opinion-geographic-distribution-tick-borne-infections-and-their-vectors>

„Findings from this review have provided evidence of the extent of ticks and tick-borne diseases (TBDs) in geographical ranges and the existing risk areas that should be considered as baseline information to assess potential risk of these diseases. The report indicates the validity of using available literature to support the presence of ticks and TBDs without further predication using weather and other environmental factors associated with the ticks survival. The report concluded that animal and human movement play more impact on the spread of the ticks and TBDs. Climate changes and flight pattern of migratory birds can influence the presence and spread of the ticks and TBDs, but have not been determined to be responsible for the widespread distribution of ticks ».

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« Questing nymphal and adult ticks were infected mainly by Borrelia afzelii, whereas larval ticks resulting from engorged females of the same population were solely infected by B. miyamotoi. Since larvae acquire Lyme disease spirochetes within a few hours of attachment to an infected rodent, questing larvae in nature may have acquired Lyme disease spirochetes from an interrupted host contact. »

Krause PJ, Narasimhan S, Wormser GP, Rollend L, Fikrig E, Lepore T, Barbour A, Fish D (2013) **Human *Borrelia miyamotoi* infection in the United States.** *New Engl J Med* 368(3), 291-293. [Publisher Full Text http://www.nejm.org/doi/full/10.1056/NEJMc1215469](http://www.nejm.org/doi/full/10.1056/NEJMc1215469)
<http://cognitiveliberty.net/2014/human-borrelia-miyamotoi-infection-in-the-united-states/>

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«Emerging relapsing fever caused by *B. miyamotoi* has been identified in Russia, North America, and Europe, and *B. miyamotoi*-related meningoencephalitis has been reported in the United States and the Netherlands. Our study indicates that a human health threat from emerging relapsing fever is present in Japan. For risk analysis of this emerging relapsing fever, epidemiologic surveys (e.g., determining infection rates of host-seeking ticks of the *I. persulcatus* species complex in various locations in Japan) and improvement of serologic diagnostic systems (especially early diagnosis) should be considered.»

Estrada-Pena A, Ostfeld RS, Townsend Peterson A et al. (2014) **Effects of environmental change** on zoonotic disease risk: an ecological primer. *CellPress* <http://mdlinx.pdr.net/nursing/news-article.cfm/5153209/0/zoonotic-diseases-abiotic-niche-biotic-factors/next/77/?source=scroller>

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[Clark KL](#), [Leydet BF](#), [Threlkeld C](#). (2014) **Geographical and genospecies distribution of Borrelia burgdorferi sensu lato DNA detected in humans in the USA.** [J Med Microbiol](#). 63(Pt 5), 674-84. doi: 10.1099/jmm.0.073122-0. Epub 2014 Feb 25.

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« Note that the old annual CDC surveillance estimate was 9.4 cases per 100,000 person-years. The new CDC estimate (August 2013) is 106.6 cases per 100,000 person-years. So the military falls somewhere in between. »

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Rückfallfieber, relapsing fever, Q-Fieber (Coxiella burnetii)

<http://www.rki.de/DE/Content/InfAZ/Q/QFieber/Q-Fieber.html> <http://de.wikipedia.org/wiki/Q-Fieber>

„**Läuse Rückfallfieber** (louse-borne relapsing fever, LBRF, hauptsächlicher Erreger ist Borrelia recurrentis).

Zecken Rückfallfieber (tick-borne relapsing fever, TBRF, meist durch Borrelia duttoni).

Relapsing fever is a vector-borne disease caused by [Rickettsia](#) and [Borrelia](#)“.

Quelle, Source: <http://de.wikipedia.org/wiki/R%C3%BCckfallfieber> http://en.wikipedia.org/wiki/Relapsing_fever

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➔ **Terminologie, Epidemiologie, Klinik**
http://www.erlebnishaft.de/terminol_epidemiol_klin.pdf

Klinik

2015 ICD-9-CM Code 088.81

[convert to ICD-10-CM] **Lyme disease**

Acute lyme disease · Arthritis due to Lyme disease · Erythema chronica migrans · Erythema chronicum migrans · Erythema chronicum migrans (skin condition) · Lyme arthritis · Meningitis due to lyme disease · Meningitis in Lyme disease...

2015 ICD-10-CM Code A69.2 **Lyme disease**

and nervous system can occur. · Lyme disease is a bacterial infection you get from... aches a stiff neck fatigue lyme disease can be hard to diagnose because you may not have... history, to figure out whether you have lyme disease. Lab tests may help at this stage... test can confirm whether you have it. antibiotics can cure most cases of lyme disease... post-lyme disease syndrome (plds). Long-term antibiotics have not been shown to help...) in europe. It is a disease with early and late cutaneous manifestations plus involvement of the nervous system, heart, eye, and joints in variable combinations. The disease was formerly known as lyme arthritis and first discovered at old lyme, connecticut. · An infectious disease caused by the spirochete borrelia burgdorferi. Early manifestations... Erythema chronicum migrans due to Borrelia burgdorferi · An infectious disease

2015 ICD-10-CM Code A69.20 [convert to ICD-9-CM] **Lyme disease, unspecified**

Acute lyme disease · Erythema chronica migrans · Erythema chronicum migrans · Erythema chronicum migrans (skin condition) · Lyme disease · The disease was formerly known as lyme arthritis and first discovered at old lyme... the joints, heart, and nervous system can occur. · Lyme disease is a bacterial... muscle and joint aches a stiff neck fatigue lyme disease can be hard to diagnose because... symptoms and medical history, to figure out whether you have lyme disease. Lab tests may help... of lyme disease. The sooner treatment begins, the quicker and more complete... symptoms. This is called post-lyme disease syndrome (plds). Long-term antibiotics have not been...)
B99.9 Borrelia bergdorfi A69.20 Lyme disease A69.20 · ..., diseased - see also Syndrome Lyme A69.20 Erythema, erythematous (infectional

2015 ICD-10-CM Code A69.21 [convert to ICD-9-CM] **Meningitis due to Lyme disease**

Meningitis in Lyme disease · Meningitis (basal) (basic) (brain) (cerebral) (cervical) (congestive) (diffuse) (hemorrhagic) (infantile) (membranous) (metastatic) (nonspecific) (pontine) (progressive) (simple) (spinal) (subacute) (sympathetic) (toxic) G03.9 in (due to) Lyme disease A69.21...

2015 ICD-10-CM Code A69.22 [convert to ICD-9-CM] **Other neurologic disorders in Lyme disease**

in (due to) Lyme disease A69.22 Neuritis (rheumatoid) M79.2 cranial nerve due to Lyme disease A69.22 Polyneuropathy (peripheral) G62.9 in (due to) Lyme disease A69.22 · ...Cranial neuritis · Meningoencephalitis · Polyneuropathy · A nerve disease where many peripheral nerves are affected · An inflammatory process involving the brain (encephalitis) and meninges (meningitis), most often produced by pathogenic organisms which invade the central nervous system, and occasionally by toxins, autoimmune

disorders, and other conditions. · Diseases of multiple peripheral nerves simultaneously. Polyneuropathies usually are characterized by symmetrical, bilateral distal motor and sensory impairment with a graded increase in severity distally. The pathological processes

[2015 ICD-10-CM Code A69.23 \[convert to ICD-9-CM\]](#) **Arthritis due to Lyme disease**

Lyme arthritis · Arthritis, arthritic (acute) (chronic) (nonpyogenic) (subacute) M19.90 due to or associated with Lyme disease A69.23 in (due to) Lyme disease A69.23...

[2015 ICD-10-CM Code A69.29 \[convert to ICD-9-CM\]](#) **Other conditions associated with Lyme disease**

Myopericarditis due to Lyme disease · Myocarditis (with arteriosclerosis)(chronic)(fibroid) (interstitial) (old) (progressive) (senile) I51.4 in (due to) Lyme disease A69.29...

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- ➔ **Therapie** <http://www.kabilahsystems.de/kommentinhalt.pdf>

- ➔ **Textauswahl** <http://www.xerlebnishaft.de/textauswahl.pdf>
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- ➔ **Die kleine Diagnostik-Therapie-Fibel bei Borrelien und Ko-Infekten für Kliniker** <http://www.grin.com/de/e-book/283084/die-kleine-diagnostik-therapie-fibel-bei-borrelien-und-ko-infekten-fuer>

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➔ **Pro und Contra** http://www.erlebnishaft.de/pro_contra.pdf

➔ **Standpunkte und Perspektiven** http://www.xerlebnishaft.de/standpunkte_perspektiven.pdf

Youtube (Cartoons) [01](#) [02](#) [03](#) [04](#) [05](#) [06](#) [07](#) [08](#) [09](#)

Lyme disease? Bah! The Very Idea! http://goanimate.com/videos/0XCA4kvs8vk4?utm_source=facebook

Lyme Disease - Dr Phil

<https://www.youtube.com/watch?v=regyYSAFb9I&list=PL53Pb2ML9857IVdyey5ID8f20hcvGCQwT>

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