

Transmission time of Bb from bites of infected ticks

Eine Zeckensaug-Dauer von 6 oder 12 oder 48 Stunden als grenzwertig für die Übertragung einer Infektion mit Borrelien anzugeben wurde an Menschen bisher nicht ausreichend dokumentiert.

A tick attachment duration of 6 or 12 or 48 hours as borderline for infection with *Borrelia burgdorferi* was never adequately documented in humans.

See also M. Kroun <http://lymerick.net/Transmission-Bb-rate-time.htm>

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“Lyme disease transmission to humans by *Ixodes* ticks is thought to require at least 36-48 h of tick attachment. We describe 3 cases in which transmission of *Borrelia burgdorferi*, the spirochetal agent of Lyme disease, appears to have occurred in less than 24 h based on the degree of tick engorgement, clinical signs of acute infection, and immunologic evidence of acute Lyme disease. Health care providers and individuals exposed to ticks should be aware that transmission of Lyme disease may occur more rapidly than animal models suggest. A diagnosis of Lyme disease should not be ruled out based on a short tick attachment time in a subject with clinical evidence of *B. burgdorferi* infection.”

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„The minimum duration of attachment by single infected *I. scapularis* nymphs required for transmission to result in host infection is poorly defined for most pathogens, but experimental studies have shown that Powassan virus can be transmitted within 15□min of tick attachment and both *A. phagocytophilum* and *Bo. miyamotoi* within the first 24□h of attachment.
There is no experimental evidence for transmission of Lyme disease spirochetes by single infected *I. scapularis* nymphs to result in host infection when ticks are attached for only 24□h (despite exposure of nearly 90 experimental rodent hosts across multiple studies) but the probability of transmission resulting in host infection appears to increase to approximately 10% by 48□h and reach 70% by 72□h for *Bo. burgdorferi*.“

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“Inclusion of asymptomatic seroconversion into the primary efficacy analysis led to no prevention effect with topical azithromycin.”

