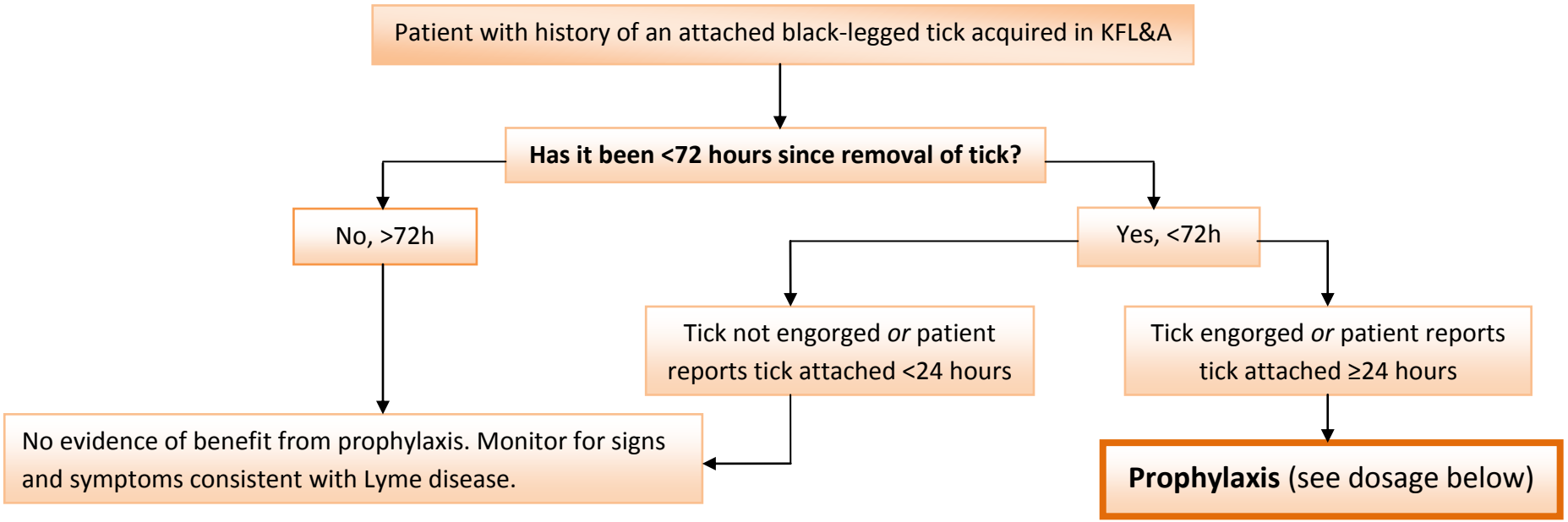
KFL&A Public Health

Lyme disease prophylaxis algorithm for the KFL&A area: 2015 update



Age	Recommended prophylaxis	Contraindications
>12 years	Doxycycline, 200 mg po x 1	- Pregnancy - Lactation - Allergy or sensitivity to doxycycline
8-12 years*	Doxycycline, 4 mg/kg (maximum, 200 mg) po x 1	
<8 years	**Prophylaxis is not recommended** in this age group because "of the absence of data on an effective short-course regimen for prophylaxis, the likely need for a multiday regimen (and its associated adverse effects), the excellent efficacy of antibiotic treatment of Lyme disease if infection were to develop, and the extremely low risk that a person with a recognized bite will develop a serious complication of Lyme disease" (Wormser et al., 2006). If a practitioner would like to provide prophylaxis, however, the dosage below can be used.[§]	

*Recommendation for prophylaxis in this age group is based on data from children ≥12 years old.
[§]Amoxicillin, 50 mg/kg per day in 3 divided doses (maximum 500 mg per dose) x 10 days in children without an allergy or sensitivity to amoxicillin

This algorithm only applies to tick bites acquired in the KFL&A region; it is not applicable to travel-related tick bites. In 2013, 89% of ticks submitted to KFL&A Public Health were black-legged ticks (*Ixodes scapularis*). Of those submitted black-legged ticks, 23% were positive for *Borrelia burgdorferi*, the causative agent of Lyme disease. More recent data are unavailable due to a change in tick surveillance methodology in the region. All patients should still be monitored for signs and symptoms of Lyme disease after receiving prophylaxis. Lyme disease treatment guidelines are available from the *Anti-infective Guidelines for Community-acquired Infections* ("Orange Book") by the Anti-infective Review Panel or the Infectious Diseases Society of America (reference 1).

Sources: 1. Wormser GP, Dattwyler RJ, Shapiro ED, et al. The Clinical assessment, treatment, and prevention of Lyme disease, human granulocytic anaplasmosis, and babesiosis: Clinical practice guidelines by the Infectious Diseases Society of America. *Clin Infect Dis* 2006; 43:1089–134. 2. Warshafsky S, Lee DH, Francois LK, et al. Efficacy of antibiotic prophylaxis for the prevention of Lyme disease: An updated systematic review and meta-analysis. *J Antimicrob Chemother* 2010; 65: 1137-1144