

POTENTIAL ROLE OF HEAD LICE, *PEDICULUS HUMANUS CAPITIS*, AS VECTORS OF *RICKETTSIA PROWAZEKII*.

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Since the pioneering work of Charles Nicolle in 1909 (see Gross 1996), most medical officers and scientists have assumed that body lice are the sole vectors of *Rickettsia prowazekii*, the aetiological agent of louse-borne epidemic typhus (LBET). Here we review the evidence for the axiom that head lice are not involved in epidemics of LBET. Laboratory experiments demonstrate the ability of head lice to transmit *R. prowazekii*, but evidence for this in the field has not been reported. However, the assumption that head lice do not transmit *R. prowazekii* has meant that head lice have not been examined for *R. prowazekii* during epidemics of LBET. The strong association between obvious (high) infestations of body lice and LBET has contributed to this perception, but this association does not preclude head lice as vectors of *R. prowazekii*. Indeed, where the prevalence and intensity of body louse infections may be high (e.g. during epidemics of LBET), the prevalence and intensity of head louse infestations is generally high as well. This review of the epidemiology of head louse and body louse infestations, and of LBET, indicate that head lice are potential vectors of *R. prowazekii* in the field. Simple observations in the field would reveal whether or not head lice are natural vectors of this major human pathogen.