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The data used in this study were collected as part of the monitoring and evaluation processes of the Schistosomiasis Control Initiative programs taking place in Niger. Sequences were obtained using the DNA sequencing facilities in the Natural History Museum. Ethical approval for this research was granted by the Niger Ministry of Health Ethical Review Board and by the Imperial College Research Ethics Committee (ICREC_8_2_2, EC no. 03.36, R&D no. 241 03/SB/003E) in combination with ongoing Schistosomiasis Control Initiative activities. All infected children in the study were provided treatment with 40 mg/kg praziquantel.

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Rickettsia raoultii in *Dermacentor reticulatus* Ticks, Chernobyl Exclusion Zone, Ukraine, 2010

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To the Editor: The Chernobyl Exclusion Zone (CEZ) surrounds the center of the 1986 Chernobyl nuclear power plant disaster. Preliminary study shows predominance of *Dermacentor reticulatus* ticks in the CEZ; ticks of other species, such as *Ixodes ricinus*, are surprisingly rare, even in habitats where they should be relatively common (*1*). A few reports document presence of *Ix. trianguliceps* ticks (*2,3*). Prevalence of pathogens (*Anaplasma phagocytophilum*, *Borrelia burgdorferi* s.l., *Babesia* spp.) in these ticks is higher in the CEZ than in other regions (*3,4*). One pathogen transmitted by *Dermacentor* spp. ticks is *Rickettsia raoultii*, which has been isolated from species of *Dermacentor* ticks found in Asia (*5,6*) and since 1999 has also been detected in Europe.

In our study, *D. reticulatus* ticks were collected by use of the flagging method (*1*) in the CEZ in September 2010. Ticks were collected from areas where they were known to occur, around the former villages of Korohod (51°16′02″N; 30°01′04″E) and Cherevach (51°12′44″N; 30°07′45″E) and around Chernobyl city (51°17′04″N; 30°13′25″E). The habitats investigated included open areas and the remnants of farmlands. A total of 201 *D. reticulatus* ticks, 87 males and 114 females, were collected and investigated (Table).

DNA was extracted by use of the ammonium hydroxide method (*7*). Isolated DNA was examined for the presence of the *Rickettsia* sp. citrate synthase gene (*gltA*) by use of PCR with *Rp*CS.409d and *Rp*CS.1258n primers (*8*). Positive amplicons were sequenced, and sequences were edited by using AutoAssembler software (Applied Biosystems, Foster City, CA, USA) and compared with GenBank entries by using blastn version 2.2.13 (http://www.ncbi.nlm.nih.gov/blast/download.shtml). All obtained sequences were submitted to GenBank (accession nos. KX056493 and KX056494).

Table. Prevalence of *Rickettsia raoultii* infection among *Dermacentor reticulatus* ticks, Chernobyl Exclusion Zone, Ukraine, 2010

Area of tick collection	No. ticks infected/no. ticks examined (prevalence, %)		
	Male	Female	Total
Korohod	40/48 (83.33)	40/60 (66.66)	80/108 (74.07)
Cherevach	21/28 (75.00)	32/46 (69.56)	53/74 (71.62)
Chernobyl	9/11 (81.82)	4/8 (50.00)	13/19 (68.42)
All 3 areas	70/87 (80.46)	76/114 (66.66)	146/201 (72.64)

Infection with *Rickettsia* spp. was detected in 72.64% of ticks (Table). A higher proportion of males (80.46%) than females (66.66%) were infected. Sequence analysis showed 100% identity with *R. raoultii* isolated from *D. marginatus* ticks from China (GenBank accession nos. KU171018.1 and KT261764.1) and *D. reticulatus* ticks from Poland (KT277489) and Hungary (LC060714.1). In the CEZ, the predominant tick species is *D. reticulatus*; no *D. marginatus* ticks have been found in the CEZ (*1*). Thus, in this area, the *R. raoultii* vector is *D. reticulatus* ticks.

The prevalence of *R. raoultii* infection among *D. reticulatus* ticks (68.42%–74.07%) is significantly higher in the CEZ than in other regions. A previous study found prevalence of *A. phagocytophilum* infection in the CEZ to be high, mainly associated with *Ixodes* ticks (*9*) and rarely associated with *D. reticulatus* ticks. The prevalence of *Babesia canis* infection, also vectored by this tick, was within the usual range (*4*). The reason for prevalence of at least 2 vectored pathogens being higher in *D. reticulatus* ticks in the CEZ than in other region is not known and needs more study. The prevalence of these pathogens among mammals that inhabit the CEZ is also not known; the influence of radiation on pathogen level has not been studied. The nucleotide sequences of *R. raoultii* detected in ticks in the CEZ are identical to sequences originating from other regions and deposited in GenBank; the sequences of *A. phagocytophilum* and *B. canis* from the CEZ were also similar to those described elsewhere (*4*). If the reason for the higher *R. raoultii* infection prevalence is radiation, then radiation also influences the ticks—some morphologic abnormalities have been noted on *D. reticulatus* ticks collected from the CEZ (*10*).

This study confirms presence of *R. raoultii* in *D. reticulatus* ticks in the CEZ. The structure of zoonotic foci in the CEZ seems to differ from that in other regions. Confirmation of this hypothesis needs follow-up study of tick-borne pathogens in wild mammals that might serve as a source of infection for ticks in the CEZ.

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