

TBE in Tunisia

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E-CDC risk status: imperiled country (data as of end 2023)

History and current situation

Ixodes ricinus is principally located in oak forests, in humid to semi-humid microclimatic zones in Northwestern Tunisia.¹ While *I. ricinus* is considered the main vector of tick-borne encephalitis virus (TBEV) in Europe, no reports concerning this arbovirus have been reported from North African countries. To date no human cases of tick-borne encephalitis (TBE) have been reported in Tunisia. Ticks were collected from the oak forest of EL Jouza, located in Northwestern Tunisia, by flagging and from grazing cattle during the period from November 2015 through February 2016, a period corresponding to the peak activity of only adult *I. ricinus* in Tunisia. *I. ricinus* was the most dominant tick species during winter. TBEV was detected in a pool of engorged *I. ricinus* collected from grazing cattle yielding a minimum field detection rate of 0.1%.² The European subtype (TBE-EU) was detected. A serological survey was performed on grazing cattle where ticks were collected. Of a total of 96 sera tested by ELISA, no positive sera were detected. Recently, a cross-sectional study performed on sheep (N = 289) from Northern Tunisia showed that one sera was tested positive by sero-neutralization test, leading to an overall antibody prevalence of 0.38%.³ Despite the fact that no human TBE cases have been reported in Tunisia, the aforementioned results provide strong evidence that TBE is endemic in Northwestern Tunisia. To assess the risk of TBE, serological studies on Tunisian populations at high-risk such as farmers and forestry workers and active surveillance in Northwestern Tunisia are urgently needed.

Overview of TBE in Tunisia

Viral subtypes, distribution	European subtype
Reservoir animals	Information not available
Infected tick species (%)	<i>I. ricinus</i>
Dairy product transmission	Not documented

Burden of TBE in Tunisia over time: no data available

Age and gender distribution of TBE in Tunisia: no data available

TBEV-isolation and TBE cases in Tunisia:

no reported cases of TBE in the country

Table 2: TBE reporting and vaccine prevention in Tunisia

Mandatory TBE reporting	Not applicable
Other TBE surveillance	Not applicable
Special clinical features	Information not available
Available vaccines	Not applicable
Vaccination recommendations and reimbursement	No recommendations
Vaccine uptake by age group/risk group/general population	Data not available
Name, address/website of TBE NRC	Not available

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