

03.5 Reference: 20080160

Track: International health

First recorded circulation of Rift Valley Fever Virus in Mayotte, a French territory in the South-western Indian Ocean, 2007-2008

Daouda Sissoko (1), C. Giry (2), P. Gabriele (3), A. Tarantola (4), L. Collet (2), E. d'Ortenzio (1), P. Renault (1), V. Pierre (1)

1. Institut de veille sanitaire, Cellule interrégionale d'épidémiologie (Cire) Réunion- Mayotte, Drass de la Réunion, France
2. Laboratoire de Biologie, Centre Hospitalier de Mayotte, France
3. Cellule de veille épidémiologique, Centre Hospitalier de Mayotte, France
4. Institut de veille sanitaire, Département international et tropical, Saint Maurice, France

BACKGROUND

The circulation of Rift Valley fever virus (RVFV) has never been recorded in Mayotte. A resurgence of RVFV in 2006-2007 in several East-African countries of the region led to an active laboratory-based surveillance in the livestock being set up. Several seroconversions in Mayotte were detected in cattle. Consequently, human surveillance was implemented. This report describes the findings for human surveillance from 1 September, 2007 through 31 May, 2008.

METHODS

Serum specimens collected from patients with dengue like illness (DLI) in any health centre in Mayotte and tested negative for Chikungunya, dengue, and malaria were screened for RVFV infection. A confirmed human case-patient was defined as a person with the presence in the serum of anti-RVFV IgM by MAC-ELISA or RVFV RNA by RT-PCR.

RESULTS

In total, specimens from 217 patients were screened. Nine (4.2%) had evidence of recent RVFV infection (i.e., presence of viral RNA in 6 and presence of IgM for 3). Of these confirmed case-patients, the earliest recorded onset of DLI was September 28, 2007 and the latest was May 12, 2008. Confirmed case-patients resided across the four sub-regions of Mayotte. Of these 9 persons, 8 (88%) were male, the median age was 22 years. Neither severe cases nor fatalities were observed. Animal exposure was documented in 5 of 8 cases (63%) and only presence of numerous breeding sites for mosquito in the housing environment in 3 others (37%).

CONCLUSIONS

Initial animal and human surveillance efforts led to the rapid identification of this first recorded active circulation of RVFV in Mayotte. These efforts should be intensified and maintained routinely in order to detect promptly any renewed introduction or resurgence of RVFV in Mayotte.