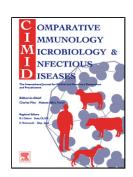
Accepted Manuscript

Title: West Nile virus infection in horses, Indian ocean

Authors: E. Cardinale, C. Bernard, S. Lecollinet, V.M. Rakotoharinome, J. Ravaomanana, M. Roger, M.M. Olive, D. Meenowa, M.R. Jaumally, J. Melanie, J.M. Héraud, S. Zientara, C. Cêtre-Sossah



PII: S0147-9571(17)30053-X

DOI: http://dx.doi.org/doi:10.1016/j.cimid.2017.06.006

Reference: CIMID 1148

To appear in:

Received date: 23-3-2017 Revised date: 20-6-2017 Accepted date: 23-6-2017

Please cite this article as: Cardinale E, Bernard C, Lecollinet S, Rakotoharinome VM, Ravaomanana J, Roger M, Olive MM, Meenowa D, Jaumally MR, Melanie J, Héraud JM, Zientara S, Cêtre-Sossah C.West Nile virus infection in horses, Indian ocean. *Comparative Immunology, Microbiology and Infectious Diseases* http://dx.doi.org/10.1016/j.cimid.2017.06.006

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

West Nile virus infection in horses, Indian ocean

Cardinale E.^{1,2*}, Bernard C. ^{1,2}, Lecollinet S.³, Rakotoharinome V.M.⁴, Ravaomanana J.⁵, Roger M. ^{1,2}, Olive MM. ^{1,2}, Meenowa D.⁶, Jaumally MR⁶, Melanie J.⁷, Héraud JM.⁸, Zientara S.³, Cêtre-Sossah C. ^{1,2}

- 1. CIRAD, UMR 117 ASTRE, F-97490 Sainte Clotilde, La Réunion, France
- 2. INRA, UMR 1309 ASTRE, F-34598 Montpellier, France
- 3. UMR 1161 (ANSES/INRA/ENVA), EU-RL on Equine Diseases, F- 94701 Maisons-Alfort, France
- 4. Ministère auprès de la Présidence en charge de l'Agriculture, de l'Elevage, Direction des Services Vétérinaires, Ampandrianomby, Antananarivo, Madagascar.
- 5. Centre National de la Recherche Appliquée au Développement Rural, Département de Recherches Zootechniques et Vétérinaires, Antananarivo, Madagascar
- 6. Ministère des Agro-Industries, Réduit, Mauritius
- 7. Ministère de l'Agriculture et des ressources marines, Victoria, Sevchelles
- 8. Institut Pasteur de Madagascar, Unité de Virologie, BP 1274, Antananarivo 101, Madagascar.

Highlights

- Circulation of West Nile virus (WNV) in horses in the Southwest Indian ocean
- An overall seroprevalence of 27.4% was detected with the highest WNV antibody prevalence of 46.2% in Madagascar.
- Potential risk of infection for humans and animals

Abstract

The circulation of West Nile virus (WNV) in horses was investigated in the Southwest Indian ocean. In 2010, blood samples were collected from a total of 303 horses originating from Madagascar, Mauritius, Reunion and the Seychelles and tested for WNV-specific antibodies. An overall seroprevalence of 27.39% was detected in the Indian Ocean with the highest WNV antibody prevalence of 46.22% (95% CI: [37.4-55.2%]) in Madagascar. The age and origin of the horses were found to be associated with the WNV infection risk. This paper presents the first seroprevalence study investigating WN fever in horses in the Southwest Indian Ocean

^{*}Corresponding author: eric.cardinale@cirad.fr

Download English Version:

https://daneshyari.com/en/article/5539894

Download Persian Version:

https://daneshyari.com/article/5539894

<u>Daneshyari.com</u>