MADAGASCAR

I.) BACKGROUND INFORMATION

The Island of Madagascar covers 587,041 sq km and lies east of Mozambique. Its population is estimated to be around 22.6 million (July 2013), with about 30 percent living in urban areas (2010). Its GDP per capita (PPP) amounts to 1,000 USD. However, 50 percent of the population lived below the poverty line in 2004, which might have even increased due to recent political crisis. Madagascar is ranked according to the Human Development Index of 2013 in 151st place as a low human development country.[i] [ii]

Laboratory tests of samples from the years 2005 to 2010 showed that the rabies virus (RABV) is endemic in Madagascar. Additionally, the European Bat Lyssavirus type 1 (EBLV-1) is present and there is a high probability that this is also the case for the Lagos Bat Virus (LBV). Human rabies infection is mostly due to RABV. [iii]

Rabies is a notifiable disease in Madagascar. Animal and human rabies cases are confirmed via fluorescent antibody test (FAT) at the national authorized laboratory for rabies diagnostic at the Institute Pasteur of Madagascar[iv].

II.) HUMAN RABIES EPIDEMIOLOGY

Rabies in humans in Madagascar is mostly transmitted through the bite of the domestic dog. According to data submitted to OIE World Animal Health Information System, in 2011, there were 2 confirmed human rabies cases[v]. From 2005 to 2010 a total of 9 human rabies cases were laboratory confirmed[vi].

III.) RABIES VECTORS

In Madagascar, the domestic dog is the main vector of rabies. The dog density in the country is often higher than in many (urban) parts in Africa, leading to a relatively unrestricted and inadequately vaccinated dog population. Within the wild animal population, apart from bats, it is unclear, which animals act as rabies vectors. A fossa (*Cryptopracta ferox*) was confirmed infected with a lyssavirus of the species RABV in 2007. Other carnivorous mammals present in Madagascar have not been tested for rabies.[vii]

In 2011, 22 rabies cases in dogs were reported[viii]. In the first half of 2012 two cases of rabies in dogs were reported to the OIE.[ix]

IV.) RABIES BIOLOGICS AVAILABILITY

In 2011, rabies post-exposure-prophylaxis (PEP) was available in only 26 of the 111 administrative districts of Madagascar.[x]

V.) OTHER

n/a

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[i] CIA (2013). The World Factbook: Madagascar. https://www.cia.gov/library/publications/the-world-factbook/geos/ma.html [accessed 1.6.2013]

[ii] UNDP (2013). The Rise of the South: Human Progress in a Diverse World. Human Development Report 2013. New York: UNDP. http://www.undp.org/content/dam/undp/library/corporate/HDR/2013GlobalHDR/English/HDR2013%20Report%20English.pdf [accessed 1.6.2013]

[iii] Reynes JM, SF Andriamandimy, GM Razafitrimo, J Razainirina, EM Jeanmaire, H Bourhy and JM Heraud (2011). Laboratory Surveillance of Rabies in Humans, Domestic Animals, and Bats in Madagascar from 2005 to 2010. *Advances in Preventive Medicine; 2011:727821. doi:10.4061/2011/727821*

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[ix] OIE World Animal Health Information System. Madagascar, 2012 (1). http://www.oie.int/wahis_2/public/wahid.php/Reviewreport/semestrial/review?year=2012&semester=1&wild=0&country=MDG&this_country_code=MDG&detailed=1 [accessed 1.6.2013]

[x] Reynes JM, SF Andriamandimy, GM Razafitrimo, J Razainirina, EM Jeanmaire, H Bourhy and JM Heraud (2011). Laboratory Surveillance of Rabies in Humans, Domestic Animals, and Bats in Madagascar from 2005 to 2010. *Advances in Preventive Medicine; 2011:727821. doi:10.4061/2011/727821*