1 ZOONOTIC AND VECTOR-BORNE DISEASES

a An update on rabies in South Africa, 2017

A total of three human cases of rabies has been laboratory-confirmed in South Africa for 2017 to date. Two of these cases were reported from the Eastern Cape Province, whilst the most recent case was reported from KwaZulu-Natal Province. A fourth human case was confirmed in a child hospitalized in Johannesburg, but the patient acquired rabies in Zimbabwe.

Reports of dog rabies along the coastline of KwaZulu-Natal remain a concern (Figure 1). Whilst dog vaccination campaigns are being conducted to bring the outbreak under control, healthcare workers need to be aware of the increased risk of rabies in dog bite cases and provide rabies post-

Positive Negative Human case Dackal cycle Risk area for human disease Current mass Vaccination campaigns (dogs) exposure prophylaxis in accordance with national guidelines. Continued reporting of animal rabies cases is also noted from the eastern districts of the Eastern Cape (Figure 2).

For additional information regarding rabies postexposure prophylaxis please visit the NICD website: <u>www.nicd.ac.za</u>

Source: Centre for Emerging, Zoonotic and Parasitic Diseases, NICD/NHLS; (januszp@nicd.ac.za)

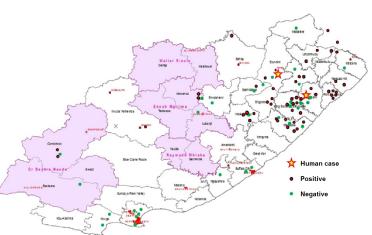


Figure 1 (above left). Map indicating the animal rabies cases (red dots) in the KwaZulu-Natal Province, year-to-date (source: Allerton Provincial Veterinary La**Figure 2 (above right).** Map indicating the animal rabies cases (red dots) in the Eastern Cape Province, year to date. (source: Allerton Provincial Veterinary Laboratory)

b Plague outbreak in Madagascar

Plague is an endemic disease in Madagascar, where plague cases account for over 80% of the world's cases. Since 1991, 300 to 600 cases of predominately bubonic plague have been reported every year from September to April. The unexpected feature in this year's epidemic season is a high number of cases of primary pneumonic plague, which is transmissible by humans through respiratory droplets produced during coughing. Pneumonic plague can also be secondary to untreated bubonic or septicaemic plague. Usually, the majority of plague cases in Madagascar are bubonic, and occur following bites from *Yersinia pestis*-infected fleas or contact with carcasses of small mammals, especially black rats, in the rural highlands in central and northern Madagascar.

This year's epidemic season took a different turn following the death of an infected patient on 28 August during an 8-hour journey in a shared public taxi from plague-endemic Central Highlands via the capital Antananarivo to the east coast port city, Toamasina. Within 24 hours of infection, two more people who had travelled in the same taxi died of pneumonic plague. The outbreak was only detected on 11 September, following another death caused by pneumonic plague in Antananarivo. Subseguently cases were detected in areas not previously