An update on rabies in the Eastern Cape Province, and in South Africa

A case of rabies was confirmed in a seven-year-old girl from Maclear, Eastern Cape Province. The child was bitten by a stray dog in May 2017. Rabies post-exposure prophylaxis was administered but the patient did not complete the vaccination schedule. The child died in July 2017, and the clinical diagnosis of rabies was confirmed after testing of a postmortem brain sample at the NICD. This is the second confirmed human rabies case in South Africa for 2017 to date. The first case also involved a child from the Eastern Cape Province.

In addition a suspected case of rabies was reported in a child from Lusikisiki in the Eastern Cape Province. The child was apparently bitten by a donkey before falling ill with rabies-like symptoms. The donkey was ill and subsequently died, but was not tested for rabies. The child died in July 2017. Ante-mortem testing on the child yielded negative results for rabies. No postmortem samples were available for testing. Given the animal exposure and clinical history of the child, but the absence of laboratory confirmation, the case is recorded as a probable case of rabies.

This brings to three the number of confirmed or probable cases of rabies reported in South Africa to date in 2017, all of which occurred in the Eastern Cape Province. Cases of animal rabies predominate in the northern districts of the Eastern Cape Province (Figure 1) and in certain districts in KwaZulu-Natal Province (Figure 2). Health care practitioners in the affected areas are advised to administer post-exposure prophylaxis according to guidelines when consulted for dog bite, and to ensure that the patient understands the importance of adherence to the vaccination schedule.

Human rabies in South Africa is likely underreported. Surveillance for human rabies cases is passive, and relies on the astute clinical recognition of rabies disease, along with laboratory confirmation of cases. Clinicians are requested to be on the look out for human cases especially in areas where canine rabies cases are increasing (Figures 1 & 2).

Antemortem testing for rabies is complicated and follow-up with testing of several specimens is typically required to confirm or exclude the
diagnosis. Postmortem testing requires the submission of brain tissue, which for various reasons is difficult to obtain. Testing of brain samples in fatal cases of encephalitis, with or without animal exposure history, and where a diagnosis has not been confirmed, is encouraged. Methods for minimally invasive tissue sampling of the brain are possible. Alternatively, if brain tissue cannot be collected, nuchal skin biopsies may be submitted for laboratory testing. For more information on the prevention of human rabies and the laboratory testing of suspected rabies cases at the NICD, visit www.nicd.ac.za.

Source: Centre for Emerging, Zoonotic and Parasitic Diseases, NICD/NHLS; (januszp@nicd.ac.za); KwaZulu-Natal Department of Health

Figure 2. Positive (red dots) and negative (green dots) rabies results from specimens submitted from animals suspected of rabies in KwaZulu-Natal Province, January to 12 June 2017. Two foci of jackal rabies exist in the southern regions of the province. Map courtesy of KZN Veterinary Services