

6 FREQUENTLY-ASKED QUESTIONS TO THE NICD 24-HOUR HOTLINE

a Is it necessary to give rabies post-exposure prophylaxis after a rat/mouse/rabbit bite?

All animal exposures should be considered for potential rabies risk, and assessed for rabies post-exposure prophylaxis (PEP). Important factors that assist decisions on rabies PEP management include details on the animal species, the animal's behavior and health, rabies vaccination status of the animal and the geographical location where the animal is from/exposure occurred. If the incident suggests potential rabies virus exposure, it is imperative that rabies PEP be instituted as soon as possible, even before there is laboratory confirmation of rabies in the animal.

- Animal's behaviour and health: Healthy animals do not transmit the rabies virus. Animals that may transmit the virus will themselves be affected with the disease. Any abnormal behaviour or signs of ill health in the animal could indicate rabies.
- The rabies vaccination status of the animal: Consider the validity of the vaccination certificate and the timing of vaccination (i.e. if vaccinated in the two weeks preceding the exposure event, may not be immune yet and may have been incubating ra-

bies already at the time of vaccination).

- The geographical location of the exposure: Rabies is endemic in South Africa, but the risk of rabies transmission is not equal in all locations.

- Animal species involved in the contact: Domestic dogs and cats are important vectors of rabies virus to humans. **All mammalian species may potentially be infected with the virus; however, small rodents such as mice and rats, commonly found in and around dwellings, are not typically associated with rabies transmission. Mice and rats, and also rabbits, have not been known to transmit rabies to humans.** These animals are not primary hosts and do not play a role in the transmission or maintenance of rabies. Rabies PEP is therefore not indicated in the event of a rat, mouse or rabbit bite.

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

7 BEYOND OUR BORDERS

The 'Beyond our Borders' column focuses on selected and current international diseases that may affect South Africans travelling abroad. Numbers correspond to Figure 3 on page 8.

1. Cholera: Zimbabwe

On 6 September 2018, a cholera outbreak in Harare was declared by the Ministry of Health and Child Care (MoHCC) of Zimbabwe and notified to WHO on the same day. A clinical sample tested positive for *Vibrio cholerae* serotype O1 Ogawa. The outbreak has intensified since it was first declared in September, with 54 reported deaths, more than 10 000 suspected cases and over 200 confirmed cases to date. In October, the government said it would vaccinate 1.4 million people. The outbreak has exposed lack of maintenance of infrastructure with burst pipes and contaminated boreholes.

2. Salmonellosis: North America

The Israeli Ministry of Health has reported almost 40 cases of *Salmonella* infection linked to tahini products, that has also caused illness in five people in the USA. Tahini is a paste made from raw sesame seeds and is exported from Israel to several countries. Other products made from sesame seeds include hummus and halvah. Tahini products packed under five brands were recalled in the USA last month (November 2018) because a sample tested positive for *Salmonella* Concord. The Ministry of Health found a possible connection between the *Salmonella* accumulation and tahini products made by Achdut Ltd. in Ari'el, Israel, with

expiry dates 7 April 2019 to 21 May 2019. People have been told not to consume tahini of all weights and package variants, with those expiry dates that had been marketed to retail, institutional markets and restaurants.

3. Lassa Fever: Nigeria

From 1 January to 2 December 2018, a total of 3 229 suspected cases has been reported. Of these, 581 were confirmed positive, 17 probable and 2 631 negative. Since the onset of the 2018 outbreak, there have been 147 deaths in confirmed cases and 17 in probable cases. Case fatality rate (CFR) in confirmed cases is 25.3%. This outbreak has been widespread, occurring in 23 states and 92 local government areas. It is not known whether the prevalence of Lassa fever virus has been increasing in populations of rodent hosts in these areas. A total of 9 193 contacts has been identified from 23 states. Of these, 303 (3.3%) are currently being followed up, 8 760 (95.3%) have completed 21-day-follow-up period, while 15 (0.2%) were lost to follow-up. Of the remaining 115 (1.3%) symptomatic contacts identified, 36 have tested positive from five states. Lassa fever national multi-partner, multi-agency Technical Working Group (TWG) continues to coordinate response activities at all levels.

4. West Nile fever: Tunisia

West Nile fever is a mosquito-borne viral disease caused by the West Nile virus (WNV). It can affect birds, humans and horses, and can cause inapparent infection, mild febrile illness, meningitis, encephalitis, or death. WNV is endemic in Tunisia. Since 1997 till 2012, three major upsurge of WNV cases were reported in the country. From the beginning of 2018 till the last week of November 2018, 377 suspected cases of West Nile fever were reported, of which 49 were confirmed by RT-PCR, with two related deaths. In comparison with the previous years, the number of suspected and confirmed cases reported in 2018 already exceeded previous year's number. This increased number of reported, suspected and confirmed cases compared to previous years, confirms the intensified circulation of WNV in the country.

5. Yellow Fever: South Sudan

The Ministry of Health in South Sudan declared a yellow fever (YF) outbreak on 29 November 2018 in Sakure, Nzara County, Gbudue state (formerly Western Equatoria state). Following the reported suspect case, the Ministry of Health, with support from WHO and partners, deployed a rapid response team for in-depth investigations as well as sample collection. The confirmation of the case automatically triggered the activation of the YF incident management system (IMS) with an incident manager designated to coordinate response to this event, including risk communication, surveillance, and disease control to prevent further spread of the disease. It is not clear if the yellow fever virus infection was acquired in South Sudan or in the Democratic Republic of the Congo (DRC). There is no indication if the DRC health authorities have been alerted, given that the case comes from Sakure, a border town between the two countries. A swift response to this single case is important to determine the risk of ongoing transmission. The general public was urged to be

vaccinated against yellow fever to protect themselves from the risk of yellow fever virus, nevertheless, an organised vaccination campaign would be the most effective response. What is concerning is that, within the four months preceding the case, there were reports of fake YF vaccination certificates being sold in South Sudan.

6. Measles: Southeast Asia, Europe, Americas

There have been multiple outbreaks of measles reported across the globe in the past months. These outbreaks have been driven by low levels of vaccination amongst those infected. In the Philippines, the incidence of measles in Western Visayas was 170 cases, and three suspected deaths recorded as of 6 December 2018. There has been an even bigger outbreak of measles among the Haredi, an ultra-Orthodox Jewish community in Israel, the UK and in the USA. This community is known to have lower immunisation coverage than the general public in all these countries. In Israel, more than 1 400 cases have been reported to date since October, with roughly 60% of those infected coming from the Haredi sector. In the UK, close to 70 members of London's Orthodox Jewish community have been infected since October 2018. In the USA, 70 cases have been reported in New York since October to date, and 18 cases have been reported in New Jersey, mostly affecting the Haredi communities in these areas. In the Americas as of 30 November 2018, a total of 16 766 confirmed measles cases, including 86 deaths, has been reported in 12 countries of the region. Incidence of measles has increased in the Americas, largely also due to low levels of vaccination and importation from countries where measles is more prevalent.

Source: Promed (www.promed.org) and the World Health Organization (www.who.int)



Figure 3. Current outbreaks that may have implications for travellers. Numbers correspond to text above. The red dot is the approximate location of the outbreak or event.