

c Ebola virus disease (EVD) outbreak

The incidence of new EVD cases appears to be declining. The outbreak in Liberia was declared over for the second time on 3 September 2015. In Guinea and Sierra Leone the case incidence has declined with only 5 confirmed cases reported in the week to 13th September, all of which were in Sierra Leone. In Guinea no new laboratory-confirmed cases have been reported since 1 September 2015. Nonetheless still of concern is the detection of new cases from unknown chains of transmission. In Sierra Leone, a new confirmed case was reported from the central Sierra Leonean district of Bombali, which has not reported a case for over 5 months. The case, a 16-year-old girl, had severe symptoms in the community for several days before being admitted to an Ebola treatment centre (ETC).

As at 13 September 2015, a cumulative total of 28,220 cases (laboratory-confirmed, probable and suspected) including 11,291 deaths with a case fatality rate of 40% has been reported in Guinea, Liberia and Sierra Leone. In the past 21 days, transmission has been occurring in Conakry and Dubreka while in Sierra Leone, mostly in Kambia and Bombali. A summary of case numbers and deaths reported is shown in Table 1.

Interim results from the Guinea vaccine trial have been released. The trial began in March 2015 to evaluate the efficacy, effectiveness and safety of a single dose of the vesicular stomatitis virus-based vaccine expressing a surface glycoprotein of Zaire Ebolavirus (rVSV-ZEBOV). The study used a novel cluster-randomised 'ring' methodology, in which contacts of index cases were randomised to immediate vs delayed (after 20 days post contact) vaccination, and study endpoint was the development of EVD amongst contacts after 7 days

following exposure. More than 7,600 eligible consenting individuals aged ≥ 18 years (close contacts and contact of contacts of laboratory-confirmed EVD case-patients) participated in the trial and were randomly assigned to either the immediate or delayed vaccination group. The vaccine has shown to be highly efficacious (vaccine efficacy of 100%) as there were no EVD cases from the immediate recipient group at least 10 days after randomisation. However more research is needed to determine its ability to protect populations through herd immunity. Assessment of serious adverse events following vaccination is ongoing. However to date, 43 serious adverse events have been reported and one was judged to be casually related to vaccination. The study design is described in *BMJ* 2015;351:h3740 (<http://www.bmj.com/content/351/bmj.h3740>) and results in the *Lancet* 2015; 386,9996; 857-866.

Situation in South Africa

As at 17 September 2015 there have been no EVD cases in South Africa associated with the current outbreaks in West Africa. In addition, there are no suspected cases of EVD in South Africa at present. The risk of Ebola being introduced into South Africa still remains low. However a high index of suspicion is necessary given on-going EVD transmission in West Africa.

Testing for viral haemorrhagic fever viruses (including Ebola virus) in South Africa is only available at the NICD. Requests for testing (with a detailed clinical, travel and exposure history) should be directed to the NICD Hotline at 082 883 9920 (a 24-hour service, for healthcare professionals only)

Source: Division of Public Health Surveillance and Response, NICD-NHLS

Table 1: Number of Ebola virus disease cases and deaths in Guinea, Liberia and Sierra Leone (as at 13 September 2015)

Country	Total cases (laboratory-confirmed, probable and suspected)	Total deaths	Case fatality rate	Number of cases among healthcare workers (Number of deaths)
Guinea	3 792	2 530	67%	196 (100)
Sierra Leone	13 756	3 953	29%	307 (221*)
Liberia (as at 9 May)	10 666	4 806	45%	378 (192)
Liberia (from 29 June)	6	2	33%	
Totals	28 220	11 291	40%	881 (513)

Source: World Health Organization Global Alert and Response: Ebola situation report of 16 September 2015 (www.who.int); *Data as at 17 February