

introduction of tiny targets led to reductions in the vector populations of 80% in Guinea and 90% in Uganda. "Tsetse flies have a very slow reproduction rate so you do not have to kill that many to have a big impact on the population, and the transmission dynamics are such that you do not have to get rid of all the flies to have a big impact on the disease", said Torr.

During the 2014–16 Ebola virus disease epidemic in Guinea, active screening campaigns for sleeping sickness were halted. This resulted in a sharp rise in prevalence of the disease, but not in the areas covered by tiny targets. "It is a sustainable community intervention that offers something of a safety net when things go wrong", said Torr.

Certain regions will struggle to attain the one in 10 000 target by 2020. Unrest is partly to blame. "Insecurity in the trypanosomiasis-endemic health zone does not

facilitate control work with mobile teams", said Victor Kande, former director of the sleeping sickness programme at the DR Congo Ministry of Health and lead investigator in the fexinidazole trial. Militia activities have disrupted control efforts in DRC and the Central African Republic. The London declaration also outlined a target of zero transmission of *T brucei gambiense* by 2030. "Vector control could be crucial in helping to push us over the finishing line in terms of the 2012 goals", said Torr.

As the cases continue to fall, it will be necessary to clarify the role of asymptomatic carriers of the disease. Could they act as a source of potential infection? Unlike rhodesiense human African trypanosomiasis, the gambiense disease is assumed to be an anthroponosis. However, if it turns out that there is indeed an animal reservoir, control efforts would be complicated. There remains a need for improved diagnostics.

"We need simpler, sensitive, specific, and inexpensive tools for detecting the disease", said Minguell. "That is an important gap—the current tools are cumbersome to use with limited specificity and sensitivity." Minguell added that containment activities will have to be integrated into public health-care networks. This could be challenging, given the weakness of the health-care systems in endemic areas. Surveillance programmes will have to be maintained, which means ensuring that political engagement does not falter. Then, there is the issue of the rhodesiense form of disease. "It would be great if we could find an oral medication that could be made freely available to everyone who contracts sleeping sickness", said Torr. A trial of fexinidazole in rhodesiense human African trypanosomiasis in Malawi and Uganda is planned for 2019.

Talha Burki

Infectious disease surveillance update

Syphilis in Japan

6096 cases of syphilis were reported in Japan this year, as of Nov 19. This is the first time in 50 years that the annual number of cases has exceeded 6000. The highest number of cases were reported in Tokyo (1548), followed by Osaka (1043), Aichi (399), Kanagawa (314), and Fukuoka (272). The sharpest increase has been in heterosexual individuals. Authorities have been unable to identify the cause of the increase in cases; however, prevention activities continue.

Ebola in DR Congo update

Six new confirmed cases of Ebola virus disease were reported from North Kivu province in DR Congo between Nov 24 and 30. In the same week, four deaths were reported and seven patients recovered. Since August, 2018, 434 cases have been reported as of Nov 30: 386 confirmed

and 48 probable, making it the second largest outbreak in history. Overall, 134 people have recovered and 252 have died from their illness. There continues to be some community resistance to response activities due to mistrust and false rumours.

Yellow fever in Nigeria

A new cluster of yellow fever cases was reported in Edo state, Nigeria, on Nov 22. Since Sept 9, 2018, 36 suspected cases and eight deaths have been reported. A further 13 samples from Edo state were sent to a laboratory outside the yellow fever laboratory network. Nine of the samples tested positive and have been sent for confirmation to the WHO yellow fever reference laboratory in Senegal. Rapid response teams have been deployed to help with active case finding, sensitising health-care

workers, and determining the appropriate response. The outbreak began in September, 2017, and as of Nov 25, 3510 suspected cases have been reported across Nigeria. Of those, 74 deaths have been reported, giving a case fatality rate of 2.1%.

Diphyllobothriasis in Chile

Six cases of diphyllobothriasis have been reported at a hospital in Puerto Octay, Chile. The infection is acquired by consuming raw fish containing tapeworms of the *Diphyllobothrium* genus. All patients reported regularly consuming raw fish, specifically ceviche. The infection causes abdominal pain, nausea, vomiting, and diarrhoea. Authorities are encouraging individuals with these symptoms to visit a health-care facility.

Ruth Zwizwai



For more on **syphilis in Japan** see <https://www.promedmail.org/post/6175741>

For more on **Ebola virus disease in DR Congo** see <https://www.promedmail.org/post/6176037>

For more on **yellow fever in Nigeria** see <https://ncdc.gov.ng/diseases/sitreps/?cat=10&name=An%20update%20of%20Yellow%20Fever%20outbreak%20in%20Nigeria>

For more on **diphyllobothriasis** see <http://outbreaknewstoday.com/fish-tapeworm-outbreak-reported-los-lagos-chile-28029/>