



**Infectious Disease Surveillance and Monitoring for Animal and Human Health: summary of notable incidents of public health significance. August 2018**

\*Incident assessment:

<b>Deteriorating</b>	<b>No Change</b>	<b>Improving</b>	<b>Undetermined</b>
Incident is deteriorating with increased implications for public health	Update does not alter current assessment of public health implications	Incident is improving with decreasing implications for public health	Insufficient information available to determine potential public health implications

Notable incidents of public health significance	Incident assessment*
<b>Ebola virus disease (EVD), Democratic Republic of Congo</b>	
<p><b>North-Kivu and Ituri provinces, eastern DRC</b></p> <p>The outbreak in eastern DRC continues. <a href="#">As of 8 September</a>, there had been a total of 100 confirmed and 31 probable cases across eight health zones in the two affected provinces. <a href="#">Seventeen cases</a> (16 confirmed) have been reported among health workers and exposures likely occurred in health facilities outside of dedicated Ebola treatment centres. All cases were initially linked back to the outbreak epi-centre in Mabalako, however, during late August, most new cases were epidemiologically linked with the city of Béni (see <a href="#">latest WHO dashboard map</a>). In addition to this geographic spread, of particular concern is the detection of cases amongst individuals not known to be contacts, continuing infection among healthcare workers, and ongoing community resistance and high-risk behaviours (eg unsafe burials and hiding of sick contacts). Community unrest and militia activity also compromise the response. In early August the <a href="#">epidemic curve</a> was looking encouraging, but there is still ongoing transmission and further cases are expected in the coming month.</p> <p>The <a href="#">use of experimental therapies</a> was approved by the DRC Government, and by 7 September, <a href="#">26 patients</a> had received either mAb114, Remdesivir or ZMapp. Over 7,000 persons had been vaccinated by early September.</p> <p>The risk for the UK population has not changed and is currently assessed as negligible-very low.</p>	
<b>Other incidents of interest</b>	
<ul style="list-style-type: none"> <li>an <a href="#">early and rapid increase</a> in the number of human West Nile virus (WNV) infections in <b>Europe and neighbouring countries</b> has been observed this season compared to previous years. Following a <a href="#">notification of an early spike in cases in early August</a>, by <a href="#">30 August 2018</a>, 975 confirmed and probable human cases were reported, with Italy (327), Serbia (213) and Greece (147) reporting the majority of cases. WNV was also detected for the <a href="#">first time in Germany, in two owls</a>, the furthest north WNV has ever been reported in Europe. To date, no autochthonous human cases have been reported in Germany</li> </ul>	

- **Spain** reported one [confirmed fatal case of Crimean-Congo haemorrhagic fever](#) (CCHF) in Ávila in August. More than [100 contacts were monitored](#) without any secondary cases. This is the second incident of human cases of CCHF in Spain, following the confirmation of two cases in 2016. CCHF was previously detected in ticks (*Hyalomma lusitanicum*) in the Extremadura Autonomous Community, a neighbouring region to Ávila [\[map\]](#)
- an [imported case of MERS](#) was reported in **England** in a person with recent travel to Saudi Arabia. Contacts, including passengers who were in close proximity to the patient on the same flight to the UK, were monitored. [No further cases](#) were reported. This is the fifth case of MERS diagnosed in England
- confirmed [cholera cases were reported in Algeria](#) for the first time in over 20 years. As of [30 August](#), a total of 74 confirmed cases had been reported from six northern and coastal areas of the country. Due to the geographical extent of the outbreak, [further cases are expected](#)
- a confirmed [case of yellow fever in an unvaccinated person](#) in **French Guiana** was reported. The case had been living in the country for four months and reported no recent overseas travel. French Guiana is considered endemic for yellow fever and vaccination is compulsory for everyone above the age of 1 living in or travelling to the country. Except for a confirmed case in August 2017, the [last autochthonous case in the country was notified in 1998](#)
- **Papua New Guinea** continued to report cases of circulating vaccine-derived polio (cVDPV1). Following the identification of CVDPV1 in Morobe province, cases were reported from three new provinces during August; Eastern Highlands (2), Madang (2) and Enga (2) [\[map\]](#). As of [31 August](#), a total of 9 confirmed cases have been reported, all epidemiologically linked. All affected areas are noted to have [low vaccine coverage](#)

#### Publications of interest

- a [new ebolavirus](#) has been detected in two species of insectivorous bats (three little free-tailed bats (*Chaerephon pumilus*) and one Angolan free-tailed bat (*Mpos condylurus*)) in Sierra Leone. Tentatively referred to as Bombali virus (BOMV) after the region the infected bats were discovered, this novel virus shares 55-59% nucleotide homology with other known ebolaviruses. Cell line studies showed that that BOMV glycoprotein could mediate entry into human cells, however the pathogenic potential of this virus is as yet unknown
- during the 2014/2015 seasonal period, the Brazilian Ministry of Health reported a change in the pattern of sylvatic yellow fever (YF) outbreaks and since 2016, Brazil has experienced unusually large outbreaks among humans as well as nonhuman primates (NHP). Sequencing from the 2016/2017 outbreak demonstrated that it was most likely [caused by an YF strain introduced from an endemic area](#), rather than a re-emergence of a lineage that had persisted in the area. Researchers [hypothesise that the recent increase](#) is due to human behaviour (eg increased mobility and low vaccination rates) combined with ecological changes that encouraged a significant increase in mosquito and NHP populations and their contacts with humans
- a review of the [yellow fever outbreaks in Africa and the Americas in 2017](#) published in the WHO weekly epidemiological record illustrates how the epidemiology and risk of yellow fever are changing, not only in Brazil but elsewhere in Africa and the Americas as well. This change is contributing to an increased risk of yellow fever and urban outbreaks with the potential for international spread

#### Novel agents, rare pathogens and disorders

- batai virus (BATV) is an orthobunyavirus that has been documented to cause mild illness in ruminants and humans. In 2016, [evidence of natural BATV infection associated with central nervous system disease was detected in Germany in two captive harbor seals](#) from the same enclosure. BATV is transmitted by *Anopheles* and *Culex* spp. mosquitoes and is widely distributed in Europe, Asia and Africa. Evidence of infection in the seals indicated that the virus was circulating in the area during the mosquito season and that captive seals are possible dead-end hosts
- angiostrongyliasis is caused by the nematode *Angiostrongylus cantonensis* which can be found in the lungs of rodents and spread to snails and slugs. Human infection can occur by ingestion of snails or slugs containing larvae. Infection in humans is often asymptomatic, or mild, and self-limiting, however it can lead to eosinophilic meningitis, coma and death in some cases. Angiostrongyliasis most often occurs in Asia and the Pacific Islands, though infection in snail and rat species has been reported in southern states in the US. [Between 2011 and 2017, twelve confirmed human cases of angiostrongyliasis were reported in the continental US](#). All 12 patients had eosinophilic meningitis and the majority (55%) reported the consumption of raw vegetables. Exposure to and/or ingestion of gastropods (snails, slugs etc.) was also reported in some cases. Six were likely autochthonous cases occurring in southern USA
- *Calodium hepaticum* is a nematode that is found worldwide. Rodents are considered the primary hosts; however infections of other species, including humans, have been noted. A rare case of [C hepaticum in a European brown hare was reported in Great Britain](#); the second occurrence in the country (the first in 1911). The hare was found unwell and later died, and on autopsy was found to have liver lesions consistent with advanced coccidiosis in rabbits. Since research indicates that hepatic coccidiosis does not occur in Europe brown hares, and large numbers of nematode eggs were identified in the liver, severe extensive granulomatous hepatitis due to presumptive *C hepaticum* infestation was diagnosed

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