

## Annual emerging infection surveillance report for 2020

February 2021

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## Key: Outcomes of the Emerging Infectious Agent Report analysis

Risk assessment	Colour	Decision/action
Very low	White	No further action No further action required at this time beyond the formal recording of the analysis and any subsequent recommendations for further or on-going review
Likely very low and/or insufficient information at this time	Grey	Minor changes to GDRI If new infectious agent, maintain awareness and gather additional information before taking any other action.
Low	Green	No specific additional action at this time Maintain awareness
Potential risk	Amber	Potential risk present Although a potential risk, the reports are currently either ad-hoc cases or increasing spread of known risk. Close watching brief for changes in incidence and spread of infectious agent. Ongoing review of the situation, which may be dealt with in the first instance by the Professional Director of JPAC and chairs of relevant SACs, but which may subsequently require action from SACTTI.
Potential risk	Red	Risk present Risk present and a full SACTTI risk assessment is required, together with possible immediate action. SaBTO involvement may be required. If immediate action is required, this to be discussed initially between Professional Director of JPAC and the Chairs of relevant SACs.

EIARs that required action, further discussion or monitoring, or no action by SACTTI

Month	Year	Infectious agent/disease	Country	Comment	SACTTI Review
12	2019	<b>Novel agent</b>	China	<b>Since the initial report on 31 December 2019, as of 22 January 2020, 440 laboratory-confirmed cases of 2019-nCoV infection have been reported from China</b> from 13 provinces. There have been at least six confirmed deaths associated with the virus. There has also been one officially confirmed case in Japan, one in Republic of Korea, one in Taiwan and one in USA, plus one unofficially confirmed case in Macau and four in Thailand. All of these had a history of travel to Wuhan. These numbers include infection in 14 healthcare workers in China. There is now evidence of person-to-person spread of this virus.	<b>Action:</b> TV deferral already in place for China. 21-day deferral implemented for visitors to area and contacts. 3-month deferral for infected individuals. Position Statement prepared for JPAC website. Risk assessment may be required when more information available. Maintain awareness. Deferrals for other countries may be required in transmission within those countries occurs. Currently most cases are exported from China. ODT same measures applied.
12	2019	<b>Severe fever with thrombocytopenia syndrome</b>	Asia	<b>SFTS is rapidly spreading through Asia with such a high death rate that it should be treated on par with diseases such as Ebola</b> , a Japanese virologist has warned. The new virus -- severe fever with thrombocytopenia syndrome (SFTS) -- is spread by tick bites and was 1st identified by Chinese researchers 8 years ago. It has a death rate of 30 percent, similar to diseases such as Crimean-Congo haemorrhagic fever, classified by the WHO as having "epidemic potential". As well as being found in China and Japan, SFTS has now been confirmed on the Korean Peninsula, Taiwan and Viet Nam. As of the end of October 2019, a total of 491 people had been treated in Japan for SFTS, with 70 patients dying.	<b>No action:</b> Most Asian countries have malaria deferral. Keep under observation. Insufficient data at this time.
12	2019	<b>Borna disease</b>	Germany	<b>Borna disease virus 1 (BoDV-1) infection has to be considered as a potentially lethal zoonosis in endemic regions with reported spillover infections in horses and sheep.</b> BoDV-1 infection can result in fatal encephalitis in immunocompromised and apparently healthy people. Consequently, all severe encephalitis cases of unclear cause should be tested for bornaviruses especially in endemic regions. In 2018-19, BoDV-1, the causative agent of Borna disease in horses, sheep, and other domestic mammals, was reported in five human patients with severe to fatal encephalitis in Germany.	<b>No action:</b> No evidence for TT-bornavirus? In 2004 study in Scottish blood donors showed no evidence of active Borna virus infection. Absence of evidence that BDV exists as a cell-free virus therefore leucodepletion may be effective measures to reduce the risk that a BDV-infected donor will transmit the infection via blood transfusion. In Germany study showed that seropositive individuals are rare even in areas with highest zoonotic risk and in a group with potentially elevated exposure risk. Maintain awareness.

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12	2019	<b>Eastern equine encephalitis</b>	USA	As of October 15, 2019, CDC received reports of 34 cases of EEEV disease from 21 counties in seven states. Cases were reported from Massachusetts (12), Michigan (10), Connecticut (4), New Jersey (3), Rhode Island (3), North Carolina (1), and Tennessee (1).	<b>No action:</b> The incidence and duration of asymptomatic viremia unknown. Short incubation period (3-10 days). No transfusion cases documented.
12	2019	<b>Leishmaniasis</b>	Italy	<b>Asymptomatic <i>Leishmania infantum</i> infection in blood donors living in an endemic area, northeastern Italy.</b> Anti- <i>Leishmania</i> IgG were detected by WB in 27 subjects (11.2%, 95% CI 7%-15%), while <i>Leishmania</i> kinetoplast DNA was detected in peripheral blood specimens of 4 out of 240 donors (1.7%, 95% CI 0.2%-3.2%). Overall, the prevalence of <i>Leishmania</i> infection in the blood donor cohort was 12.5%, thus indicating an elevated cumulative exposure to the <i>Leishmania</i> parasite in the examined municipality.	<b>No action:</b> Leucodepletion risk mitigation. Risk assessment in place.
12	2019	<b>Tick-borne encephalitis</b>	UK	<b>Large-scale surveillance for the presence and prevalence of tick-borne encephalitis virus (TBEV) and louping ill virus (LIV) in sentinel animals and ticks in the UK.</b> Detection of TBEV genomic sequence in UK ticks has important public health implications, especially for undiagnosed encephalitis.	<b>No action:</b> Study described in SACTTI TBEV risk assessment reviewed at SACTTI Jan 2020. Maintain awareness.
1	2020	<b>Chikungunya</b>	Ethiopia	The latest numbers from officials in Ethiopia show that the outbreak in Dire Dawa has grown to 51,361 cases, with no deaths, since it started in August. <b>[CHIKV not listed under the tropical deferral]</b>	<b>No action:</b> Chair SACCS D already contacted. Change to GDRI being progressed.

Month	Year	Infectious agent/disease	Country	Comment	SACTTI Review
1	2020	Dengue	Afghanistan	<b>This is the first report of people with autochthonous cases of dengue fever in Afghanistan.</b> Previous reports of dengue fever involved cases with travel history to dengue-endemic countries. The laboratory performed differential diagnosis and tests on 40 samples that had tested negative for Crimean-Congo Haemorrhagic Fever (CCHF). Between 1 October to 4 December 2019, 14 out of the 40 samples tested positive for dengue fever by the CPHL (13 by polymerase chain reaction (PCR) and one by Immunoglobulin M (IgM)). Of the 14 confirmed cases of dengue fever, seven were presumably autochthonous as the persons had no travel history to dengue endemic countries. The 14 cases were reported from six provinces. <b>[Not covered by tropical risk in GDRI]</b>	<p><b>Action:</b> Report to Chair of SACCS. Potential risk for a number of reasons: Area of limited monitoring/surveillance and bordered by countries with Dengue (Pakistan). Unlikely to obtain good information. Do Dengue affected provinces align with malaria deferral zones (yes, they largely do, with malaria deferral November - May). Recommend 28 day Dengue deferral is applied.</p> <p><b>From WHO:</b> <i>Afghanistan is experiencing a complex humanitarian emergency because of the ongoing conflict, frequent natural disasters, waves of population displacement, mass casualty incidents, and outbreaks of communicable diseases. Based on the Afghanistan Health Survey 2018, 57% population has access to primary health care (PHC) facility within half-hour distance, and 90% of the population has access to PHC facilities with a cumulative 2 hours distance. In addition, the country has limited capacity to prevent and control dengue outbreaks.</i></p> <p><i>The current cases of autochthonous dengue fever virus in the six affected provinces pose a risk to other areas in Afghanistan where the virus has not previously been recorded. Intense population movements during the rainy season pose an increased risk of spreading or intensifying the current dengue fever outbreaks.</i></p>
1	2020	Dengue	USA	<b>Two further locally-acquired dengue cases were reported in Florida, USA, bringing the 2019 total to 16 (Florida's highest annual total since 2014).</b> Affected counties are Miami-Dade (14 cases), Broward (1) and Hillsborough (1). <b>[area not covered by GDRI]</b>	<b>No action:</b> Low numbers and accurate data provided by CDC, any shifts will be easy to detect.

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1	2020	<b>Malaria</b>	Thailand	<b>A German tourist visited Little Koh Chang Island (Andaman Sea, Thailand) from 25 Dec 2019 to 20 Jan 2020 and subsequently diagnosed with malaria.</b> He complained about intermittent fever and headache and presented in Munich, Germany afebrile. The commercial malaria rapid test was negative, however, malaria was diagnosed using thin smear microscopy. A differential malaria PCR revealed <i>Plasmodium knowlesi</i> infection. A similar case of <i>P. knowlesi</i> malaria acquired on that same island before has been reported before, an island that is currently defined as a low-risk area. <b>[area not covered by malaria deferral in GDRI]</b>	<b>Action:</b> From SACTTI parasite meeting <i>P. knowlesi</i> samples to run through malaria screening assay have been requested. Is there further information on malaria in Thai islands? Email Peter Chiodini. <i>Hi Lisa, Many thanks. P. knowlesi is zoonotic and associated with jungle exposure. Sporadic cases occur in those working or visiting jungle areas, but it is very rare as an imported infection in the UK (zero to two cases a year). These cases do not require a change in GDRI for that area. Kind regards Peter</i>
1	2020	<b>COVID-19</b>	Global	<b>Since 31 December 2019 and as of 21 February 2020, 76 740 cases of COVID-19 infection according to the applied case definition in the countries have been reported, including 2 247 deaths.</b> Cases have been reported in the following continents: Africa: Egypt (1). Asia: China (PRC) (75 484), Hong Kong (SAR) (68), Macao (SAR) (10), Republic of Korea (156), Japan (93), Singapore (85), Thailand (35), Taiwan (24), Malaysia (22), Vietnam (16), United Arab Emirates (9), Islamic Republic of Iran (5), India (3), Philippines (3), Cambodia (1), Nepal (1) and Sri Lanka (1). America: the United States (16) and Canada (9). Europe: Germany (16), France (12), United Kingdom (9), Italy (3), Spain (2), Russia (2), Belgium (1), Finland (1), and Sweden (1). Oceania: Australia (17) Other: Cases on an international conveyance (Japan) (634). <b>ABO update from Su Brailsford: convalescent plasma not set up yet but being discussed, UK probably has most stringent list of countries with deferrals. US deferral slightly different - see USA COVID entry. France following ECDC guidance.</b>	<b>Action:</b> Discussion re. whether 28-day deferral for travel to any country would be easier to manage in current environment. Impact on blood supply? COVID-19 being managed on a daily basis through Promed reports and WHO situation Reports.
1	2020	<b>COVID-19</b>	UK	<b>As of 20 February, a total of 5,549 people have been tested, of which 5,540 were confirmed negative and 9 positive.</b> Infection Prevention and Control guidance link given.	
1	2020	<b>COVID-19</b>	USA	<b>AABB recommends a 28 day voluntary donor deferral for travel to China to address public concerns about the safety of the blood supply.</b> AABB, FDA, and CDC are not recommending any action by blood collection establishments at this time because there are no data or precedent suggesting risk of transfusion transmission	

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2	2020	COVID-19	Europe	<b>Daily ECDC RA 13 Mar 2020: it is likely that in a few weeks or even days, similar situations to those seen in China and Italy may be seen in other EU/EEA countries or the UK</b> , because of the speed with which COVID-19 can cause nationally incapacitating epidemics once transmission within the community is established. COVID-19 infection causes mild disease (i.e. non-pneumonia or mild pneumonia) in about 80% of cases and most cases recover, 14% develop more severe disease and 6% experience critical illness. Severe illness and death is more common among the elderly and those with other chronic underlying conditions.	<b>Action:</b> A range of deferrals have been put in place and subsequently modified as more information has become available through risk assessments/WHO etc. No evidence for transfusion-transmission for coronaviruses (SARS-CoV-1, MERS) or other respiratory viruses. Viraemia only detectable in small % of individuals with severe COVID-19 infection. Blood services should investigate NAT and Ab assays to detect SARS-CoV-2 in case required for release of tissues/convalescent plasma/staff etc. COVID WHO and ECDC situation reports are examined on a daily basis.
2	2020	COVID-19	Europe	<b>6th ECDC RRA 12 March 2020: Risk of transmission of COVID-19 by SoHO which remains theoretical but cannot be completely excluded.</b> Management of the SOHO supply and business continuity is discussed. In the absence of evidence of COVID-19 transmission through organ transplantation, precautionary measures should be applied to prevent possible transmission to recipients, organ procurement and patient treating personnel.	
2	2020	COVID-19	UK	<b>As of 17th March 2020, the Foreign and Commonwealth Office (FCO) have issued an Exceptional Travel Advisory Notice advising all British people against all non-essential travel worldwide.</b> This FCO advice takes effect immediately, initially for a period of 30 days. This change in travel advice reflects the pace at which other countries are either closing their borders or implementing restrictive measures in response to the global pandemic.	<b>Action:</b> Travels deferrals (for COVID-19) were in place but have now been removed due to sustained community spread within UK and wide travel restrictions. Focus on ensuring donors are healthy and well when they present for donation.
2	2020	COVID-19	USA	<b>American Society of Nephrology, American Society of Transplantation release guidance on coronavirus:</b> A deceased donor with known or highly suspected COVID-19 infection should be deferred for all organs to avoid transmission to recipient as well as to the health care team. There are reports of coronavirus RNA being isolated outside the lungs including in stool and blood in some cases and therefore it is possible extra-pulmonary infection can occur. Case-by case consideration is required for deceased donors with epidemiologic risks and within the 14-day incubation period.	<b>Action:</b> All organs tested for SARS-CoV-2 and confirmed negative before progressing with retrieval

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2	2020	COVID-19	China	<b>Researchers in a NON-PEER REVIEWED paper estimated that 44% of transmission could occur before first symptoms of the index.</b> They detected the highest viral load in throat swabs at the time of symptom onset, and inferred that infectiousness peaked on or before symptom onset.	<b>No action:</b> Emphasis on donors providing post-donation information with recall of components if symptom onset within 5-days of donation. Precautionary as no evidence of viraemia in pre-symptomatic period.
2	2020	Chikungunya & Dengue	Iran	<b>Seropositive samples suggest possible CHIKV and DENV infection in Iran.</b> Serum samples were selected at random from measles and rubella IgM negative patients presenting with rash and fever from December 2016 to November 2017 from eight provinces. The presence of DENV IgM and CHIKV IgM was examined by enzyme-linked immunosorbent assay. Of the 1306 sera tested, 210 were CHIKV seropositive and 82 were dengue seropositive. <b>[CHIKV and DENV not included in GDRI]</b>	<b>Action:</b> Determine if there are other reports/studies on presence of Dengue/Chik in Iran
2	2020	Dengue	Chile	<b>There have been three confirmed cases of autochthonous dengue fever reported on Easter Island, Chile.</b> These are the first reports of autochthonous transmission of serotype 2 on the island. The dates of symptom onset were between 27 January to 6 February 2020. None of the cases reported any travel history. In 2009, two autochthonous DENV 4 cases were detected and in 2016, 2017 and 2018, cases due to DENV 1 were reported (33, 2 and 18 cases, respectively). Since 2009, no other serotypes besides DENV 1 have been identified in autochthonous cases until the beginning of 2020. The density of competent vectors on Easter Island could potentially contribute to the spread of the disease throughout the island. <b>[DENV not included in GDRI]</b>	<b>No action:</b> Maintain watching brief. Small number of samples TV risk already applied.
2	2020	Macacine herpesvirus 1 (B virus)	USA (Ex Thailand)	<b>Monkey Bite in a Public Park and Possible Exposure to Herpes B Virus — Thailand, 2018:</b> The case was given rabies PEP and also tested for Macacine herpesvirus 1 (B virus). This virus, commonly found in macaques, can, in rare cases, cause severe encephalitic infection in humans if not treated promptly. The case fatality rate of untreated B virus infection approaches 80%. Because B virus can establish a lifelong latent infection with possible subsequent illness, the patient was advised always to carry a Medical Alert card in case symptoms occur despite her initial negative tests.	<b>No action:</b> excluded from donation - Animal bite DSG entry

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2	2020	<b>Babesia</b>	Singapore (Ex USA)	<b>Imported Human Babesiosis, Singapore, 2018:</b> In 2018, Babesia microti infection was diagnosed for a 37-year-old man in Singapore who acquired the infection in the US. In 2018, he travelled to Indonesia (Bali) in January and March, then to the United States during June 14–25, where he visited friends and relatives in Boston (MA), Nantucket (MA), and New York (NY). The patient did not recall any tick bites but on June 17 noticed a right ankle papule, which lasted 3 weeks. He sought consultation at a travel clinic because of high fever (104°F), rigors, and headaches, which had persisted and worsened over 18 days. Consistent with US clinical guidelines, he was advised to not donate blood indefinitely.	<b>No action:</b> excluded from donation - Babesia DSG entry
3	2020	<b>Influenza</b>	Brazil	<b>Findings from a study implies the theoretical risk for viremia and transfusion transmission of influenza A virus.</b> Influenza A virus infection has rarely been documented to cause viremia. In 28 blood donations in Brazil that were deferred because of post-donation information, we identified influenza A(H3N2) virus RNA in 1 donation using metagenomic analysis.	<b>No action:</b> A paper to consider referencing in the Risk Assessment.
4	2020	<b>Malaria</b>	Cyprus	<b>A report of two cases of vivax malaria in individuals returning from Northern Cyprus, which was declared malaria free in 1967.</b> One further case of vivax malaria, also in an individual returning from the Cyprian resort of Esentepe in August 2017, has been highlighted by the Centers for Disease Control and Prevention. <b>[Malaria not included in GDRI]</b>	<b>Action:</b> Flag as a potential issue, but just watch at the moment. As travel is restricted, exposure of UK residents this year is likely to be low
4	2020	<b>VHF</b>	Brazil	<b>Sabiá Virus-Like Mammarenavirus in Patient with Fatal Haemorrhagic Fever, Brazil, 2020.</b> SABV is a New World arenavirus that was previously isolated in São Paulo in 1994 in a patient with fatal haemorrhagic fever. Little is known about the natural history of SABV infection. Three additional SABV cases in humans have been reported since 1994 including 2 in laboratory workers handling SABV samples, raising concern about the potential for aerosol transmission. Four additional New World arenavirus are known to be associated with human disease in South America: Junin, Machupo, Guanarito, and Chapare. Chapare virus is closely related to SABV and has been recently implicated in an outbreak of 5 cases (3 fatal) of haemorrhagic fever in Bolivia. <b>[VHF not included in GDRI]</b>	<b>No action:</b> Cases numbers are not sufficient to change country status. Many countries have endemic VHF's, but at a low level with few outbreaks

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4	2020	Yellow fever	Brazil	<b>Santa Catarina in Southern Brazil has 15 patients infected with yellow fever, according to the office of Epidemiological Surveillance on 27 Apr 2020.</b> Of the total number of people who have contracted the disease, 6 were diagnosed in Blumenau, in the Vale of Itajai. The number of deaths remains the same; 2 deaths in 2020, both registered in the month of March 2020. Neither of these victims were vaccinated against the disease. <b>[VHF not included in GDRI]</b>	
4	2020	Mosquito	France	<b>Spread of Tiger mosquito in France. Just as France emerges from its lockdown, almost 65% of the region has been put on alert</b> because of these tiger mosquitoes. As per experts, these insects will colonize in France by 2030. <i>Aedes albopictus</i> has been expanding its geographic range in southern Europe for several years. The rapid expanse northward in France is noteworthy. It has gone from 41 departments reported in April 2018 to 51 departments in 2019 and now to 57 departments. The risk of initiation of ongoing transmission of dengue, chikungunya, and Zika viruses following introduction from elsewhere will depend on population abundance of mosquito vectors and susceptible human population densities as well as the amount of time that people spend out-of-doors in areas where there is risk of bites by these mosquitoes. Eradication of this mosquito from France is not possible with current pest control measures.	<b>No action:</b> Flag as a potential issue, but just watch at the moment.
5	2020	Dengue	Bhutan	<b>A total of 708 dengue cases were notified through national surveillance between January 2016 and June 2019.</b> There was significant residual spatial clustering after accounting for climate and environmental variables. The temporal trend was significantly higher than the national average in eastern sub-districts. <b>[GDRI has no tropical risk listed]</b>	<b>Action:</b> Add tropical virus risk as Dengue has been circulating since 2004, but only in some regions and low numbers of reported cases

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5	2020	Dengue	French Antilles	<b>French authorities reported an increased number of dengue cases in Guadeloupe, Saint Martin, Saint Barthelemy and Martinique islands in recent weeks.</b> As of 31 May 2020, 1 716 additional dengue suspected cases with no associated deaths have been reported in the French Antilles.	<p><b>Action:</b> Add Dengue risk to Saint Barthelemy</p> <p>Figure 4. Distribution of suspected dengue cases by epidemiological week, Saint-Barthélemy, August 2017 to 8 February 2020.</p>
5	2020	TBE	France	<b>French regional public health authorities have reported an outbreak of tick borne encephalitis (TBE), primarily in the Rhone-Alpes-Provence region.</b> As of 10 June 2020, 37 cases had been linked to the consumption of raw milk goat cheeses. The cheese producer has been named as GAEC des Chevrettes du Vieux Valey, located at Condamine in Haut-Bugey, Ain. TBE is uncommon in people in France, but is widespread in Alpine areas of Europe and may occur in neighbouring rural areas.	<b>No action:</b> Monitor to ensure no spread
6	2020	Crimean-Congo haemorrhagic fever	Spain	<b>The Junta de Castilla y León, has confirmed a case of Crimean-Congo haemorrhagic fever.</b> The confirmed case is a man who had suffered a tick bite in a pine forest area in the province of Salamanca in late May. <b>[VHF not in GDRI]</b>	<b>No action:</b> Maintain watching brief. If CCHF is to be considered in the future as endemic in Spain then changes to GDRI may be required. 6-month deferral for VHF endemic areas currently required
6	2020	Crimean-Congo haemorrhagic fever	Spain	<b>A Crimean-Congo haemorrhagic fever virus (CCHFV)-specific antibody detection study in western Spain, found a CCHFV seroprevalence of between 0.58% and 1.16%.</b> The study looked at among 516 asymptomatic blood donors. Three confirmed positive individuals were detected. None could remember having been bitten by a tick, but all lived in a rural area and were involved in animal husbandry. <b>[VHF not in GDRI]</b>	

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6	2020	Dengue	USA	<b>The Florida Department of Health in Monroe County has received laboratory confirmation of eight cases of Dengue fever.</b> All indications are that these infections were locally acquired. This is the tenth confirmed case of Dengue this year in Monroe County. <b>[Florida not covered for DENV in GRDI]</b>	<b>No action:</b> Reliable surveillance data available - low numbers
6	2020	WNV	Iran	<b>This study supports earlier findings suggesting the circulation of WNV in Khuzestan province in Iran.</b> A total of 408 sera were taken from volunteers living in Khuzestan and Anti-WNV IgG antibody was detected in 97 (23.8%) out of them. The highest seropositivity rate was observed in cases aged between 20-29 yr. The majority of positive cases were from the city of Ahvaz (47 cases, 48.4%) and Andimeshk (32 cases, 33%). <b>[WNV not in GRDI]</b>	<b>Action:</b> Maintain watching brief. No confirmatory testing performed. Flaviviruses often show cross reactivity.
6	2020	WNV	Kazakhstan	<b>Researchers report two cases of West Nile Virus (WNV) that occurred in August 2019 in a rural area near Tekeli city in Kazakhstan.</b> Previously healthy 28- and 19-year-old husband and wife with febrile illness and neurological manifestations were hospitalized with the diagnosis of meningoencephalitis of unknown etiology and treated empirically. Retrospective serological analysis showed the presence of high titers of IgG against WNV on day 9 after onset of symptoms. <b>[WNV not in GRDI]</b>	
6	2020	Bat lyssavirus	Italy	<b>A cat in the town of Arezzo in Tuscany, Italy, has been diagnosed with rabies caused by a bat lyssavirus (West Caucasian bat lyssavirus).</b> The cat became unwell and was diagnosed on 27 June 2020 by the National Reference Centre for Rabies in Italy. All travellers to rabies endemic areas should be aware of the risk of rabies, and are advised to avoid contact with animals, both wild and domestic, particularly dogs and cats.	<b>Action:</b> ODT have implemented measures. No action for Blood.
6	2020	CJD	France	<b>A lab technician in France developed vCJD after being accidentally exposed to prions in May 2010.</b> First symptoms were noted Nov 2017 and the woman died in June 2019, 19 months after her symptoms 1st appeared. The technician was 24 years old and working in a prion research lab. She worked with samples of brain tissue from mice that had been infected with a form of mad cow disease.	<b>Action:</b> Position Statement to be updated for SACTTI September 2020

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6	2020	<b>Malaria</b>	Malaysia	<b>P. knowlesi continues to be a public health concern in the Kapit Division of Sarawak, Malaysian Borneo. P. cynomolgi, also is an emerging cause of malaria in humans.</b> In 1,047 blood samples from patients with malaria at Kapit Hospital in Kapit, Malaysia, during June 24, 2013–December 31, 2017 they found 845 (80.6%) patients had either P. knowlesi mono-infection (n = 815) or co-infection with other Plasmodium species (n = 30). The annual number of these zoonotic infections increased greatly in 2017 (n= 284). 6 patients, 17–65 years of age, had P. cynomolgi and P. knowlesi co-infections.	<b>Action:</b> Send to P. Chiodini for SACTTI Parasite Sub-committee. Large no. of P. knowlesi mono-infections described. Obtain samples to test on malaria screening tests.
7	2020	<b>Babesiosis</b>	UK	<b>On 31 July, English health authorities reported an autochthonous babesiosis case in England. This is the first record of human babesiosis acquired in the UK.</b> Health authorities surveyed sites in Devon, close to the place of residence of the confirmed case, in order to collect and test ticks for the parasite causing the disease. The causative Babesia sp. was not detected in any of the tick samples tested for this survey.	<b>No action:</b> Peter Chiodini reported that the species was confirmed as Babesia divergens (confirmed by blood film and PCR agreed. Patient to be followed up in HTM. B.divergens (generally affects bovine) cases are rare in UK.
7	2020	<b>Dengue</b>	France	<b>On 28 July local health authorities in France recently reported one autochthonous case of dengue fever in residents of Cessenon-sur-Orb in Hérault prefecture, France.</b> Outbreak investigations have enabled the identification of the primary case in a returning traveller from a dengue risk zone. This is the first autochthonous transmission reported in continental France in 2020. <b>[DENV not in GDRI]</b>	<b>No action:</b> 1 case reported near Montpellier. France blood services have stopped collecting in the area and deferrals are in place for visitors to the Herault region. However, no further cases reported to date. No action required at this stage. Monitor alerts.
7	2020	<b>Malaria</b>	India	<b>According to a municipal report released on Monday 10 Aug, 45 cases of malaria and 35 cases of Dengue have been reported in Delhi.</b> Out of the 35 dengue cases, seven were reported in August, 11 in July and the rest between February and June. The commissioner of the South Delhi Municipal Corporation (SDMC) had recently issued an advisory on prevention and control of vector-borne diseases. <b>[GDRI map - low risk area]</b>	<b>No action:</b> TV flag applied. Also see SACTTI parasite committee minutes (16th May 2019) for PLC response re. malaria in Delhi. No data on whether cases locally acquired or imported to Delhi.


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7	2020	Dengue	French Antilles	<b>Since the previous updates and as of 2 August, 1 409 additional dengue suspected cases have been reported in Guadeloupe, Saint Martin and Martinique.</b> According to the French health authorities Guadeloupe and Martinique are in an epidemic phase, Saint Martin is in a pre-epidemic phase and in Saint Barthelemy the epidemic was declared in week 17 of 2020.	<b>Action:</b> Saint Barthelemy and Marshall Islands have dengue outbreaks. Other TV flags applied so change not urgent. Inform Chair SACCSD.
7	2020	WNV	Europe	<b>Between 14 and 20 August, 34 human cases of WNV were reported. Spain is currently experiencing an outbreak in Seville Province.</b> Six confirmed human cases have been reported through TESSy and an additional 13 probable cases are being further investigated. As these probable cases have not yet been reported through TESSy they are not included in the list of the cases in the Surveillance Atlas. Additional patients with meningoencephalitis are currently being tested. Since the beginning of the 2020 transmission season and as of 20 August 2020, EU Member States have reported 66 human cases of WNV infection and six deaths through The European Surveillance System (TESSy): Greece (39, including six deaths), Italy (19), Spain (six) and Romania (two). One case was reported from the province of Verbano-Cusio-Ossola, Italy, which had not been affected in previous transmission seasons. All other cases were reported from areas that have been affected during previous transmission seasons. No cases have been reported from EU neighbouring countries. Between 2010 and 2019, Spain only reported five locally-acquired WNV infections: two cases in 2010 in the province of Cádiz and three cases in 2016 in the province of Seville. During the same period, 89 outbreaks among equids were reported. <b>[GDRI updated to reflect Seville Province]</b>	<b>Action:</b> WNV guidance applied to Seville Region 18th August 2020.
8	2020	Chikungunya	Chad	<b>Chikungunya cases are rising rapidly in Chad, with spread outside the city of Abéché.</b> On 28 Aug 2020, the World Health Organization reported that since 14 August 2020, a total of 6,163 Chikungunya cases (11 confirmed), with no deaths were recorded in Abéché district near the border with Sudan. <b>[CHIKV not in GDRI]</b>	<b>Action:</b> Inform Chair of SACCSD. No other TV flag applied but malaria flag for whole country.

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8	2020	Dengue	France	<b>A second person with dengue fever was diagnosed in Nice in the Alpes-Maritimes, the second autochthonous dengue transmission in France this year.</b> This second person was identified as part of the vector control interventions carried out around the first case, confirming the circulation of the dengue virus in this area. <b>[DENV not in GDRI]</b>	<b>No action:</b> Discussed at SACTTI. Small outbreaks not unexpected. Monitor to ensure under control
8	2020	Dengue	Italy	<b>In August 2020, 5 locally acquired cases of dengue were detected in Vicenza Province, North-East Italy. The primary case was an importation from West Sumatra, Indonesia.</b> This is the first outbreak of autochthonous dengue reported in Italy. on 28 August, the National Transplant Centre activated DENV NAT screening in organ, tissue and haematopoietic stem cell donors, as well as in blood donors, who reside in Vicenza Province or had stayed for at least one night in Vicenza Province in the 28 days before donation. Blood collections from donors in the town where the outbreak occurred have been suspended. <b>[DENV not in GDRI].</b>	<b>No action:</b> Discussed at SACTTI. Small outbreaks not unexpected. Monitor to ensure under control
8	2020	WNV	Spain	<b>Andalusia confirms four more positive cases of WNV all of whom are hospitalized, these are additional to the 24 cases already detected in Seville. The outbreak emerged in mid-August in the Bajo Guadalquivir region.</b> The outbreak of 'Nile Virus' detected in mid-August in several municipalities along the Guadalquivir has made the leap to Cádiz. The Ministry of Health confirmed this Saturday the existence of four positive cases. <b>[Region NOW included in GDRI]</b>	<b>Action:</b> WNV flag extended to include Andalusia
8	2020	Leishmaniasis	Algeria	<b>Incidence of cutaneous leishmaniasis in the western region [of Algeria] has been growing steadily for several years.</b> A recently published document, traces the evolution of cutaneous leishmaniasis in the western region, indicates that the incidence of this disease has risen from 0.6 per 100 000 inhabitants in 2014, to 2.8 per 100 000 inhabitants in 2019. Cases of visceral leishmaniasis remain rare. Moderator comments that Cutaneous leishmaniasis is a serious public health problem in Algeria, which is the second largest focus in the world after Afghanistan. Three outbreaks of cutaneous leishmaniasis occurred in 2004-2006, with respectively 17 100, 32 200, and 15 000 cases.	<b>No action:</b> Low risk, see RA re. effectiveness of leucodepletion filters

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8	2020	<b>Malaria</b>	India	<b>A total of 3099 malaria cases have been reported across the Mumbai in 2020, with almost 70% of them in 5 wards of south Mumbai. There have also been two recorded malaria-COVID-19 co-infection deaths.</b> As most people are staying inside due to the lockdown, many of them living in these congested areas are getting malaria, and the number will rise further.	<b>No action:</b> Malaria flag attached to Mumbai region
8	2020	<b>Strongyloides</b>	Australia	<b>Strongyloides hyperinfection in an HIV-positive kidney transplant recipient: a case report.</b> The recipient was a 58-year-old African-American male, originally from the Caribbean. He had HIV with an undetectable viral load. Five months post-transplant, he developed gastrointestinal symptoms and weight loss. His Strongyloides serology remained negative throughout. A diagnosis of Strongyloides hyperinfection was made by the histological examination of his duodenum and lung, which identified the parasites.	<b>No action:</b> Infor for ODT
8	2020	<b>Usutu</b>	Europe	<b>Epidemiology of Usutu Virus: The European Scenario.</b> The zoonotic potential of USUV has been reported in a growing number of human cases. Clinical cases of neuroinvasive disease and USUV fever, as well as seroconversion in blood donors were reported in Europe since 2009. In Europe, USUV was detected in bats, whereas antibodies were found in different animal species (horses, dogs, squirrels, wild boar, deer and lizards).	<b>Action:</b> Review USUTU HAIRS Risk Assessment and carry out GAP analysis. WNV NAT testing will pick up Usutu but only from those countries will WNV deferral attached. Query re. cases in Germany /Spain are confirmed WNV by sequencing. Contact EBA EID to ask if cases have been sequenced.
8	2020	<b>WNV</b>	Germany	<b>In mid-August 2020, the first reported human autochthonous infections with the West Nile virus diagnosed and reported as suspected cases.</b> In 2020, the human infections have so far been without exception people who were test positive after donating blood or plasma. The NRZ for Tropical Infections at the Bernhard Nocht Institute for Tropical Medicine has so far confirmed four findings as WNV infections by sequencing. Further suspected cases are still being clarified. Last year, five suspected mosquito-borne autochthonous human WNV infections were identified in Germany for the first time. WNV-infected blood donors and donors were not known in 2019. <b>[GDRI UPDATED]</b>	<b>Action:</b> WNV flag applied to Germany

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9	2020	Acanthamoeba Keratitis	USA	<b>Case Report: Suspected Donor Transmission of Acanthamoeba Keratitis After Deep Anterior Lamellar Keratoplasty.</b> To the authors' knowledge, there have been no confirmed cases of Acanthamoeba keratitis transmission through corneal transplantation. There was little opportunity for graft exposure to the amoeba, and deep amoebic cysts and trophozoites were present on postoperative week 1-a highly unusual time course and depth of invasion for primary amoebic infection. In addition, pathological analysis revealed cysts only within the confines of the donor tissue and none in the recipient.	<b>Action:</b> Information for ODT
9	2020	Dengue	France	<b>Autochthonous dengue in two Dutch tourists visiting Département Var, southern France, July 2020.</b> Dengue virus infection was detected in two Dutch tourists who visited Département Var, southern France, in July and August 2020. The two patients were on holiday together. <b>[DENV not in GDRI]</b>	<b>Action:</b> Monitor situation to ensure outbreak does not increase in numbers. Currently limited travel from EU to UK
9	2020	Malaria	Belgium	<b>Belgium reported two locally acquired cases of the malaria parasite in a municipality close to Brussels Zaventem international airport and to Melsbroek airport.</b> The two cases have an epidemiological link. Both cases had no recent travel history abroad. This is the second report of airport malaria cases in continental EU/EEA this year. In August 2020, three airport malaria cases were reported in Paris, France. <b>[Malaria not in GDRI]</b>	<b>No action:</b> Likely to be due to imported infected mosquito.
9	2020	WNV	Spain	<b>On 24 September, one case of WNV was reported in Extremadura, in the central west of Spain.</b> The patient was a 52-year old woman from the town of Valdetorres who presented with fatigue, muscle pain and fever and was originally diagnosed with viral meningitis. Specific control of possible donors in the area and, where appropriate, the quarantine of extractions was implemented by the Blood Bank of Extremadura. Note there have been 5 cases in Badajoz in ECDC weekly reports <b>[Region not covered in GDRI]</b>	<b>Action:</b> Discussed by email 28/09/2020. Monitor for further infections/ confirmation that locally / acquired given likely low amount of travel to this region?

Month	Year	Infectious agent/disease	Country	Comment	SACTTI Review
9	2020	<b>Balamuthia mandrillaris</b>	UK	<b>Clinicians in Leicester, UK report a rare case of fatal amoebic encephalitis cases by Balamuthia mandrillaris. The patient, an 85-year-old Gujarati woman, had no recent travel history</b> and initially presented to hospital with suspected stroke. The patient died 11 days after admission. With assistance from the US CDC, B. mandrillaris was identified in post-mortem histopathology samples. B. mandrillaris is an emerging protozoan parasite (free-living amoeba), an agent of granulomatous amoebic encephalitis involving the central nervous system, with a case fatality rate of >98%, even in immunocompetent individuals. It is a free-living amoeba found in soil and dust worldwide. Over 200 cases of disease have been reported globally, the majority in Latin America and the US. Infection is thought to occur via inhalation of airborne cysts or through direct skin inoculation, although transplantation associated clusters have also been reported.	<b>Action:</b> Information for ODT
9	2020	<b>Dengue</b>	USA	<b>As of 19 September, 65 cases of locally acquired dengue have been reported from two counties (Miami-Dade and Monroe) in Florida during 2020.</b> Onsets were in February, March, April, May, June, July, and August. One case was reported in a non-Florida resident.	<b>No action:</b> Dengue cases sporadic in Florida. Monitor reports. 750 million biotech male mosquitoes developed by Oxitec with a gene that limits female offspring to be released. Currently limited travel.
9	2020	<b>Dengue</b>	Italy	<b>In August, authorities in the Veneto region reported Italy's first autochthonous dengue case. To date, a total of 10 locally acquired cases have been reported in this region.</b> Dengue is not endemic in the EU/EEA and the vast majority of the cases are travellers infected outside of the EU/EEA. When the environmental conditions are favourable, in areas where Ae. albopictus is established, viraemic travel-related cases may generate a local transmission of the virus, as demonstrated by the sporadic events of dengue virus transmission since 2010.	<b>Action:</b> Monitor for further infections/ confirmation that locally / acquired given likely low amount of travel to this region?
9	2020	<b>Malaria</b>	Algeria	<b>One year after having been declared free from malaria or malaria by the World Health Organization, Algeria recorded its first epidemic of malaria. The Algerian Ministry of Health has recorded a thousand cases, especially in the south of the country.</b> The epidemic has been blamed on recent heavy rains in the region.	<b>Action:</b> Contact Chair of SACTTI Parasite to determine if malaria flag should be applied to Algeria.

Month	Year	Infectious agent/disease	Country	Comment	SACTTI Review
				<p>From: CHIODINI, Peter (UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST) &lt;p.chiodini@nhs.net&gt;            Sent: 07 November 2020 10:13            To: Lisa Jarvis &lt;Lisa.Jarvis@nhs.scot&gt;            Cc: Hearn Pasco &lt;Pasco.Hearn@nhsbt.nhs.uk&gt;            Subject: RE: Malaria in Algeria</p> <p>Hi Lisa            Many thanks.            The outbreak is in a defined area in the south of Algeria, well away from Algiers and other cities in the north (see map pasted in below).            I would not advise applying a deferral at this time.            Best wishes            Peter</p>  <p>From: Lisa Jarvis &lt;Lisa.Jarvis@nhs.scot&gt;            Sent: 06 November 2020 16:23            To: CHIODINI, Peter (UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST) &lt;p.chiodini@nhs.net&gt;            Cc: Hearn Pasco &lt;Pasco.Hearn@nhsbt.nhs.uk&gt;            Subject: Malaria in Algeria</p> <p>Hi Peter,            See below, highlighted in this month's SACTTI Horizon Scanning review. Should a deferral be applied? Currently there is no other deferral applied to Algeria (e.g. chikungunya/dengue) that would result in a deferral of any time for visitors to Algeria (of which I assume there won't be many due to COVID).            Many thanks and have a good weekend!            Lisa</p> <p>Current deferral in the Donor Selection Guidelines is: Risk is very limited, to all year in the <u>dessat</u> oasis of <u>laur</u> (Ilizi Department) in the south east of the country</p>	
9	2020	Unknown haemorrhagic fever	South Sudan	<p><b>South Sudan's Ministry of Health is investigating the death of three people, who had initial symptoms of bleeding and fever, in Western Bhar-el-Ghazal State, raising fears of an Ebola outbreak in the region.</b> 127 similar cases had been recorded in the week prior to the 3 deaths. The deceased were all members of the same family. Six healthcare workers, including epidemiologists from the WHO, have been sent to investigate. Suspected viral haemorrhagic reports are semi-regular in South Sudan, the last such report was in 2018. [VHF not in GDRI]</p>	No action: Monitor / malaria flag in place

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9	2020	Usutu Virus	England	<b>In August 2020, Usutu virus (USUV) was detected for the first time in the UK in a small number of wild birds (five Eurasian blackbirds and one house sparrow) in Greater London.</b> This mosquito-borne flavivirus, first detected in South Africa in 1959, is maintained through an enzootic cycle involving birds. First detected in Europe in Austria in 2001 and subsequently expanded its range across Europe with increased reporting frequency in recent years. Researchers hypothesise that autochthonous transmission of USUV has occurred in local passerine populations in Greater London, probably vectored by indigenous mosquitoes. The HAIRS group has assessed the UK public health risk of USUV human infection as low, the impact as low to moderate. The vast majority of USUV infection in humans are asymptomatic or mild, but a few cases of neurological complications have been reported in endemic countries.	<b>Action:</b> Formally review HAIRS Usutu risk assessment at next SACTTI
9	2020	WNV	Spain	<b>Thus far in 2020, Spain has reported 75 human cases of WNV infection, including 7 deaths in the regions of Sevilla (57 cases), Cadiz (14 cases) and Badajoz, of which 40 (53%) have been officially confirmed.</b> This is the largest outbreak of human WNV infection to date in Spain and it follows very low and sporadic reporting of human cases since 2010. The increase in the incidence of WNV-related meningoencephalitis during this summer is unprecedented, but mirrors an increase in equine cases in the same regions. Competent vectors, as well as circulating WNV, and equine cases have been observed in this area for many years. There are reports that vector activity may be particularly high in affected regions this season. There remains a risk of further cases in these areas for the rest of the vector season	<b>No action:</b> WNV flag for Andalucia in place
9	2020	WNV	Netherlands	<b>A male patient has become the first person to contract West Nile virus in the Netherlands.</b> The man had not travelled abroad recently but may have contracted the virus from a bite from a mosquito bite the Utrecht region. West Nile Virus has been detected in birds and mosquitoes in the region in August and September [for the first time]. <b>[Added to GDRI]</b>	<b>Action:</b> Further information from EBA EID Monitor = 6 cases. Recommend that a WNV flag applied to the NUTS-3 regions Arnhem/Nijmegen, Zuidwest-Gelderland and Veluwe region of the Netherlands. WNV NAT has been implemented by blood services in the region in question. Inform Chair SACCS to add flag to affected area in the Netherlands. Risk low as end of mosquito/WNV season, currently limited travel due to COVID

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10	2020	Mayaro Fever	French Guiana	<b>On 13 October, the French health authorities officially reported 13 laboratory-confirmed cases of Mayaro fever in French Guiana.</b> The cases were discovered after an initial case was detected in September 2020 and a retrospective search for additional cases of Mayaro fever among patients with dengue-like symptoms who tested negative for dengue was conducted. Mayaro virus has been known to circulate in French Guiana since 1998, but the number of RT-PCR detections of MAYV between 2017 and 2019 were between 1 and 3 cases annually- detection of 13 confirmed cases within less than 3 months is thus unusual.	<b>No action:</b> TV risk applied
11	2020	T.cruzi	Italy	<b>The aim of this study was to assess the prevalence of anti-T. cruzi antibodies in blood donors at risk of infection in Tuscany, Italy, following the introduction of blood safety Italian legislation.</b> Donors (N = 1985) were tested in 2016 to 2018 for anti-T. cruzi IgG. Results found ten blood donors had a positive ICT result, with a resulting T. cruzi seroprevalence of 0.5% and provide evidence for discontinuing the use of ICT as a screening test and suggest that a sensitive, specific and multi-sample format assay should be used at the national level for uniformity of results. <b>[Peer reviewed]</b>	<b>No action:</b> T.cruzi risk should be picked up by Qs on DHQ
11	2020	Malaria	Global	<b>World Malaria report 2020. The data shows that in 2019, a global total of 229 million cases of malaria were recorded, including more than 400,000 deaths from the disease.</b> Global malaria mortality fell by over 60% from 2000 to 2019 and Countries in South-East Asia made particularly strong progress, with reductions in cases and deaths of 73% and 74%, respectively. Twenty-one countries have eliminated malaria over the last 2 decades and, of these, 10 countries were officially certified by WHO as malaria free.	<b>Action:</b> check report for countries with WHO malaria eradication certification/alignment with GDRI and inform Chair of SACCSD of any changes required.

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11	2020	<b>West Nile Virus</b>	UK	<b>Qualitative assessment of the risk that West Nile virus presents to the UK population has been published by HAIRS.</b> Overview: West Nile virus infections have long been recognised in Europe where there is annual surveillance for human and equine disease. There is no evidence that WNV is present in the UK and very few travel related cases have been reported to date. Populations of competent mosquitoes ( <i>Culex modestus</i> ), that may act as bridge vectors have, however, been detected in areas of Essex and Kent. Assessment of the risk of infection in the UK is: probability - very low for the general population, low for those living, working or visiting area with human biting mosquito vectors and impact - Low/Moderate.	<b>Action:</b> Ensure aligned with WNV position statement. Take to SACTTI (Jan 2021)
11	2020	<b>Yellow fever</b>	Nigeria	<b>The Nigerian CDC is currently responding to yellow fever outbreaks in Delta, Enugu, Bauchi, Bengue and Ebonyi States.</b> Since the beginning of the year, 1,558 suspected cases and 56 confirmed cases have been reported from 62% LGA's in Nigeria. The confirmed cases were from; Bauchi (8); Benue (3); Delta (10); Ebonyi (1); Edo (5); Ekiti (1); Enugu (27); Oyo (1). Mass vaccination campaigns have finished in Bauchi, Delta and Enugu.	<b>Action:</b> Place on SACTTI agenda (Jan 2020). Should there be an YF entry in DSG - currently links to acute infection. Number of outbreaks noted in 2020.
11	2020	<b>Zika</b>	USA	<b>Zika virus RNA and IgM persistence in blood compartments and body fluids.</b> 53 Zika-infected blood donors were enrolled in a 1-year follow-up study. Results found that Zika virus RNA was detectable in plasma for 9.9 days, in red blood cells for 95.4 days, and in whole blood for 73.5 days. Replicate NAATs extended detection of Zika virus RNA in plasma to 34.8 days and in whole blood to 104.8 days. Urine was rtPCR reactive up to 14.5 days and saliva up to 26.4 days. Zika virus IgM persisted for 237.7 days from estimated time since plasma NAAT-detectable infection. <b>[Peer reviewed]</b>	<b>No action:</b> A paper to consider referencing in the Risk Assessment.
12	2020	<b>WNV</b>	Brazil	<b>NON PEER REVIEW West Nile virus detection in horses in three Brazilian states. In the north- eastern state of Brazil, the 10th human case of WNV was detected,</b> presenting neuroinvasive disease compatible with WNV infection. No additional information was provided on the case. <b>[WNV not in GDRI]</b>	<b>Action:</b> Wait for more information before applying WNV flag to Brazil? Article not peer reviewed? Reports cases in horses and refers to one human WNV case in 2015. Serological evidence available but often lack of specificity.