



Public Health
England

Protecting and improving the nation's health

Global high consequence infectious disease events Monthly update

November 2019

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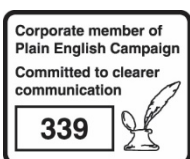
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Introduction

This monthly report provides detailed updates on known high consequence infectious disease (HCID) events around the world.

This report details all the HCID pathogens that are covered during epidemic intelligence activities. The report is divided into two sections. The first contains contact and airborne HCIDs that have been specified for the HCID Programme by NHS England. The second section contains additional HCIDs that are important for situational awareness.

Each section consists of two tables of known pathogens and includes descriptions of recent events. A third table will be included in the second section when undiagnosed disease events occur that could be interpreted as potential HCIDs.

Likelihood assessment

Included for each disease is a 'likelihood assessment'; the likelihood of a case occurring in the UK, based on past UK experience and the global occurrence of travel-associated cases. There are three categories currently – LOW, VERY LOW and EXCEPTIONALLY LOW. This assessment is as of January 2019.

When considering clinical history, it is important to remember that cases can and do occur outside of the usual distribution area. It is not possible to assess accurately the risk of cases presenting to healthcare providers in England, but taken together it is inevitable that occasional imported cases will be seen.

Events found during routine scanning activities that occur in endemic areas will briefly be noted in the report. Active surveillance, other than daily epidemic intelligence activities, of events in endemic areas will not be conducted (eg, actively searching government websites or other sources for data on case numbers).

The target audience for this report is any healthcare professional who may be involved in HCID identification.

Section 1. Incidents of significance of primary HCIDs

- Ebola virus disease – outbreak in North Kivu and Ituri provinces, Democratic Republic of the Congo (DRC)

Contact HCIDs				
Infectious disease	Geographical risk areas	Source(s) and route of infection	UK experience to date	Likelihood assessment
Crimean-Congo haemorrhagic fever (CCHF)	<p>Endemic in Central and Eastern Europe, Central Asia, the Middle East, East and West Africa. First locally acquired case in Spain 2016 (Risk Assessment)</p>	<ul style="list-style-type: none"> - Bite from or crushing of an infected tick - Contact with blood or tissues from infected livestock - Contact with infected patients, their blood or body fluids 	2 confirmed cases (ex-Afghanistan 2012; ex-Bulgaria 2014)	LOW - Rarely reported in travellers (23 cases in world literature)
	<p>Recent cases/outbreaks:</p> <ul style="list-style-type: none"> • India retrospectively reported 5 cases for September and October (weeks 38, 39 & 40). Local media also reported further cases in November • in Pakistan, media reported a fatal case • Senegal reported one case in Kaolack in November • one case was reported in Jalalabad City in Afghanistan 			
Ebola virus disease	Sporadic outbreaks in Western, Central and Eastern Africa	<ul style="list-style-type: none"> - Contact/consumption of infected animal tissue (eg bushmeat) - Contact with infected human blood or body fluids 	4 confirmed cases (1 lab-acquired in UK in 1976; 3 HCWs associated with West African epidemic 2014-15)	VERY LOW - Other than during the West Africa outbreak, exported cases are extremely rare

	<p>Ongoing outbreak:</p> <p>The Ebola outbreak in the DRC continues, with further reductions in intensity of transmission. During November, 39 confirmed cases were reported, compared to 76 in October. This was the lowest monthly total since the declaration of the outbreak in August 2018. As of 30 November, a total of 3,313 confirmed and probable cases had been reported across 29 health zones in North Kivu, Ituri and South Kivu provinces. The number of health zones reporting active transmission declined, however, security and operational challenges continued in some areas with consequent reduced access for response teams. Violent attacks against response activities resulted in the death of four Ebola response workers.</p> <p>The risk for the UK population has not changed and is currently assessed as negligible-very low.</p>			
	<p>Endemic in sub-Saharan West Africa</p>	<ul style="list-style-type: none"> - Contact with excreta, or materials contaminated with excreta of infected rodent - Inhalation of aerosols of excreta of infected rodent - Contact with infected human blood or body fluids 	<p>14 cases since 1971, all ex-West Africa</p>	<p>LOW - Overall it is the most common imported VHF but still rare (global total 35 reported since 1969)</p>
<p>Lassa fever</p>	<p>Recent cases/outbreaks:</p> <ul style="list-style-type: none"> • Nigeria - 39 confirmed cases in the 4 weeks to 1 December 2019, mostly from Edo and Ondo states. As of 1 December, 793 cases had been confirmed in 2019. Weekly case numbers have been at low level since week 15 (April) • as of 24 November, Liberia had reported 169 suspected cases, of which 46 were confirmed. This is an increase of 39 cases (11 confirmed), since 3 November • 2 imported cases were confirmed in the Netherlands, both most likely acquired during surgical procedure in a rural hospital in Sierra Leone. As part of the same incident, Sierra Leone reported 2 probable cases (both fatal) and four additional cases (one confirmed, three suspected) among healthcare workers in the same hospital. Contact tracing activities, which 			

	<p>included identification and monitoring of other workers at the same hospital, were carried out in the Netherlands, the UK, Sierra Leone, Germany, Denmark, Uganda and India. Some high risk contacts were medically evacuated to Europe</p>			
<p>Marburg virus disease</p>	<p>Sporadic outbreaks in Central and Eastern Africa</p>	<p>- Contact with infected blood or body fluids</p>	<p>No known cases in UK</p>	<p>VERY LOW - 5 travel related cases in the world literature</p>
	<p>Recent cases/outbreaks:</p> <ul style="list-style-type: none"> • no cases reported since November 2017 			

Airborne HCIDs				
Infectious disease	Geographical risk areas	Source(s) and route of infection	UK experience to date	Likelihood assessment
Influenza A(H7N9) virus (Asian lineage)	All human infections acquired in China	- Close contact with infected birds or their environments - Close contact with infected humans (no sustained human-human transmission)	No known cases in UK	VERY LOW (PHE Risk Assessment)
	Recent cases/outbreaks: <ul style="list-style-type: none"> no confirmed or suspected human cases of H7N9 were reported in November 			
Influenza A(H5N1) virus	Human cases predominantly in SE Asia, but also Egypt, Iraq, Pakistan, Turkey, Nigeria. Highly pathogenic H5N1 in birds much more widespread, including UK	- Close contact with infected birds or their environments - Close contact with infected humans (no sustained human-human transmission)	No known cases in UK	VERY LOW (PHE Risk Assessment)
	Recent cases/outbreaks: <ul style="list-style-type: none"> no confirmed or suspected human cases of H5N1 were reported in November 			
Middle East respiratory syndrome (MERS)	The Arabian Peninsula - Yemen, Qatar, Oman, Bahrain, Kuwait, Saudi Arabia and United Arab Emirates	- Airborne particles - Direct contact with contaminated environment - Direct contact with camels	5 cases in total; 3 imported cases (2012, 2013 and 2018); 2 secondary cases in close family members of 2 nd case; 3 deaths	VERY LOW (PHE Risk Assessment)

	<p>Recent cases/outbreaks:</p> <ul style="list-style-type: none"> 12 cases, including 4 deaths, were reported in Saudi Arabia during November, bringing the total reported here during 2019 to 201, and the global total to 2,494 cases with 858 associated deaths 			
<p>Monkey pox</p>	<p>West and Central Africa</p>	<ul style="list-style-type: none"> - Close contact with infected animal or human - Indirect contact with contaminated material eg bed linen 	<p>3 cases in total; 2 imported (Sept 2018) and 1 nosocomial transmission</p>	<p>VERY LOW - Reported outside Africa for the first time in 2018 (2 in UK and 1 in Israel)</p>
	<p>Recent cases/outbreaks:</p> <ul style="list-style-type: none"> DRC: as of 24 November, 4,848 suspected cases and 97 deaths had been reported in 2019, an increase of 474 cases since last month's summary Nigeria reported 8 suspected cases in November, of which 1 was confirmed 			

Nipah virus	Outbreaks in Bangladesh and India; SE Asia at risk	- Direct or indirect exposure to infected bats; consumption of contaminated raw date palm sap - Close contact with infected pigs or humans	No known cases in UK	EXCEPTIONALLY LOW - No travel related infections in the literature
	Recent cases/outbreaks: <ul style="list-style-type: none"> no confirmed or suspected cases were reported in November 			
Pneumonic plague (<i>Yersinia pestis</i>)	Predominantly sub-Saharan Africa but also Asia, North Africa, South America, Western USA	- Flea bites - Close contact with infected animals - Contact with human cases of pneumonic plague	Last outbreak in UK was in 1918	VERY LOW - Rarely reported in travellers
	Recent cases/outbreaks: <ul style="list-style-type: none"> China reported two cases of pneumonic plague, from Xilingol League in Inner Mongolia, an endemic area. The cases were transferred to Beijing for diagnosis and treatment 			
Severe acute respiratory syndrome (SARS)	Currently none; two outbreaks originating from China 2002 and 2004	- Airborne particles - Direct contact with contaminated environment	4 cases related to 2002 outbreak	EXCEPTIONALLY LOW - Not reported since 2004
	Recent cases/outbreaks: <ul style="list-style-type: none"> no confirmed or suspected human cases reported since 2004 			

Section 2. Incidents of significance of additional HCIDs

Contact HCIDs				
Infectious disease	Geographical risk areas	Source(s) and route of infection	UK experience to date	Likelihood assessment
Argentine haemorrhagic fever (Junin virus)	Argentina (central). Limited to the provinces of Buenos Aires, Cordoba, Santa Fe, Entre Rios and La Pampa	- Direct contact with infected rodents - Inhalation of infectious rodent fluids and excreta - Person-to-person transmission has been documented	No known cases in UK	EXCEPTIONALLY LOW - Travel related cases have never been reported
	Recent cases/outbreaks: <ul style="list-style-type: none"> no new Argentine haemorrhagic fever data were published in November. 			
Bolivian haemorrhagic fever (Machupo virus)	Bolivia - limited to the Department of Beni, municipalities of the provinces Iténez (Magdalena, Baures and Huacaraje) and Mamoré (Puerto Siles, San Joaquín and San Ramón)	- Direct contact with infected rodents - Inhalation of infectious rodent fluids and excreta - Person-to-person transmission has been documented	No known cases in UK	EXCEPTIONALLY LOW - Travel related cases have never been reported
	Recent cases/outbreaks: <ul style="list-style-type: none"> a single confirmed case was reported retrospectively for October, in La Paz department. 			
Lujo virus disease	Single case acquired in Zambia lead to a cluster in South Africa in 2008	- Presumed rodent contact (excreta, or materials contaminated	No known cases in UK	EXCEPTIONALLY LOW – a single travel related case; not

		with excreta of infected rodent) - Person to person via body fluids		reported anywhere since 2008
	<p>Recent cases/outbreaks:</p> <ul style="list-style-type: none"> no confirmed or suspected human cases reported since 2008 			
Severe fever with thrombocytopenia syndrome (SFTS)	Mainly reported from China (southeastern), Japan and Korea; first ever cases reported in Vietnam and Taiwan in 2019	- Presumed to be tick exposure - Person to person transmission described in household and hospital contacts, via contact with blood/bloodstained body fluids	No known cases in UK	EXCEPTIONALLY LOW - Not known to have occurred in travellers
	<p>Recent cases/outbreak:</p> <ul style="list-style-type: none"> Japan reported one case in November (retrospectively for October), bringing the total reported in 2019 to 96 Taiwan reported its first ever locally-acquired case, in the north of the country <p>(China does not provide publically available data on cases of SFTS)</p>			

Airborne HCIDs				
Infectious disease	Geographical risk areas	Source(s) and route of infection	UK experience to date	Likelihood assessment
Andes virus (Hantavirus)	Chile and southern Argentina	<ul style="list-style-type: none"> - Rodent contact (excreta, or materials contaminated with excreta of infected rodent - Person to person transmission described in household and hospital contacts 	No known cases in UK	VERY LOW - Rare cases in travellers have been reported
	Recent cases/outbreaks: <ul style="list-style-type: none"> • Chile reported 5 hantavirus cases in November, bringing the total for 2019 to 67 cases. This total is higher than expected, given the median for the last 5 years. (Chile no longer reports specific hantaviruses separately) 			
Influenza A(H5N6) virus	Mostly China (March 2017 new strain in Greece, and subsequently found in Western Europe)	<ul style="list-style-type: none"> - Close contact with infected birds or their environments 	No known cases	VERY LOW - Not known to have occurred in travellers (PHE risk assessment)
	Recent cases/outbreaks: <ul style="list-style-type: none"> • no confirmed or suspected human cases of H5N6 were reported in November 			
Influenza A(H7N7) virus	Sporadic occurrence including Europe and UK	<ul style="list-style-type: none"> - Close contact with infected birds or their environments - Close contact with infected humans (no 	No known cases	VERY LOW - Human cases are rare, and severe disease even rarer

		sustained human-human transmission)		
	<p>Recent cases/outbreaks:</p> <ul style="list-style-type: none"> • no confirmed or suspected human cases of H7N7 were reported in November 			

Undiagnosed Disease Events	
	None reported