



Public Health
England

Protecting and improving the nation's health

Global high consequence infectious disease events

Monthly update: November 2018

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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 2018.

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, 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 (22 cases in world literature)
	<p>Recent cases/outbreaks:</p> <ul style="list-style-type: none"> • the number of cases reported in Afghanistan have been on a downward trend for the past 2 months. Afghanistan reported 9 cases in November, down from 39 in October. The total since January 2018 is now 477 suspected cases, of which 127 are confirmed, and 59 deaths • Pakistan continued reporting sporadic cases in November • Uganda reported 1 confirmed and 1 suspected case in Rukungiri district in November 			
Ebola virus disease	<p>Sporadic outbreaks in Western, Central and Eastern Africa</p>	<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 (one 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>Recent cases/outbreaks:</p> <p>The outbreak in eastern DRC continued with increased incidence since early October. As of 01 December, a total of 392 confirmed (+140 in the past month) and 48 probable cases have been reported across fourteen health zones in North Kivu and Ituri provinces [map]. Forty-four cases have been reported among health workers. Kalunguta, Beni, Butembo and Katwa remain the principle hotspots of the outbreak. Three new health zones reported cases in November: Mutwanga (in North Kivu, bordering Uganda), Kyondo and Musienene (previously reported a probable case). A large proportion of cases continue to be reported among those who were not previously registered as contacts. The response was again disrupted by community resistance and attacks by armed groups.</p> <p>The risk for the UK population has not changed and is currently assessed as negligible-very low.</p>			
<p>Lassa fever</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's the most common imported VHF but still rare (global total 33 reported since 1969)</p>
	<p>Recent cases/outbreaks:</p> <ul style="list-style-type: none"> • Nigeria continues to report cases, with 19 confirmed in November (compared to 25 in October). Two states (Edo and Ondo) remain active. Incidence is likely to increase over the next few months in line with usual seasonality • Liberia reported a slight increase in lassa fever cases in November, including an outbreak in Jorquelleh District, Bong County. As of 18 November, a total of 182 suspected cases, including 21 confirmed, have been reported 			

Marburg virus disease	Sporadic outbreaks in Central and Eastern Africa	- Contact with infected blood or body fluids	No known cases in UK	VERY LOW - 5 travel related cases in the world literature
	Recent cases/outbreaks: <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	<ul style="list-style-type: none"> - 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)
	<p>Recent cases/outbreaks:</p> <ul style="list-style-type: none"> • no confirmed or suspected human cases of H7N9 were reported in China 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	<ul style="list-style-type: none"> - 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)
	<p>Recent cases/outbreaks:</p> <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), two secondary cases in close family members of second case; 3 deaths	VERY LOW (PHE Risk Assessment)
	Recent cases/outbreaks: <ul style="list-style-type: none"> • five cases were reported by Saudi Arabia in November. One case was a household contact, and four were primary cases for whom the route of transmission was unknown 			
Monkey pox	West and Central Africa	- Close contact with infected animal or human - Indirect contact with contaminated material eg bed linen	3 cases in total; 2 imported (September 2018) and one nosocomial transmission	VERY LOW
	Recent cases/outbreaks: <ul style="list-style-type: none"> • during 2018, DRC has reported 3,949 suspected cases. 892 cases were reported in November, a significant increase compared to recent months. Cases have been reported in 14 provinces • Central African Republic continued to report sporadic cases. As of 25 November, CAR has reported 41 cases, including 19 confirmed, and 1 death since the beginning of the year • as of 13 November, Nigeria has reported a total of 300 cases, including 126 confirmed, from 26 states since the outbreak began in September 2017; 104 of which were reported in 19 states in 2018 			

Nipah virus	Outbreaks in Bangladesh and India; SE Asia at risk	<ul style="list-style-type: none"> - 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 human cases reported in November 			
Pneumonic plague (<i>Yersinia pestis</i>)	Predominantly sub-Saharan Africa but also Asia, North Africa, South America, Western USA	<ul style="list-style-type: none"> - Flea bites - Close contact with infected animals - Contact with human cases of pneumonic plague 	Last outbreak in UK 1918	VERY LOW - Rarely reported in travellers
	Recent cases/outbreaks: <ul style="list-style-type: none"> • Madagascar continued to report cases of plague as part of seasonal transmission. As of 29 November, a total of 49 confirmed cases, including 11 pneumonic and 16 deaths, have been reported from 13 districts across the country 			
Severe acute respiratory syndrome (SARS)	Currently none; two outbreaks originating from China 2002 and 2004	<ul style="list-style-type: none"> - Airborne particles - Direct contact with contaminated environment 	4 cases related to 2002 outbreak	VERY LOW - Global spread but 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

- Nothing of significance

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"> • Argentina has not provided an update since the end of March 2018 			
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"> • no confirmed or suspected human cases were reported in November 			

Lujo virus disease	Single case acquired in Zambia lead to a cluster in South Africa in 2008	- Presumed rodent contact (excreta, or materials contaminated with excreta of infected rodent) - Person to person via body fluids	No known cases in UK	VERY LOW - Single travel related case; not reported anywhere since 2008
	Recent cases/outbreaks: <ul style="list-style-type: none"> no confirmed or suspected human cases reported since 2008 			
Severe fever with thrombocytopenia syndrome (SFTS)	Only reported from China (southeastern), Japan and Korea	- 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
	Recent cases/outbreak: <ul style="list-style-type: none"> South Korea reported 2 cases in November, consistent with previous years <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
	<p>Recent cases/outbreaks:</p> <ul style="list-style-type: none"> • one confirmed case was reported in O'Higgins Region, Chile in November, bringing the total for the region to 4. Cocquimbo Region also reported a case; its first in 2018 <p>(Argentina reports hantavirus detections generically so it is not possible to determine specifically any Andes virus infections)</p>			
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 - Close contact with infected humans (no sustained human-human transmission) 	No known cases	VERY LOW - Not known to have occurred in travellers (PHE risk assessment)

	<p>Recent cases/outbreaks:</p> <ul style="list-style-type: none"> • China reported one human case of avian influenza H5N6 in Jiangsu Region with symptom onset in November. Since 2014, 23 human cases have been reported from China • avian outbreaks were reported in China (Jiangsu and Yunnan regions) and Vietnam 			
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 sustained human-human transmission) 	No known cases	VERY LOW - Human cases are rare, and severe disease even rarer
	<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

