



## TropNet Global Surveillance News 2012

### 30. Dec. 2012 - Cruise ships, Carribean: Diarrhoea outbreak on "Queen Mary 2" & "Emerald Princess"

Currently 2 cruise ships face outbreaks of infectious diarrhoea while cruising the Carribean. The predominant symptoms are vomiting and diarrhea. The causative agent(s) are currently unknown and under investigation.

"Queen Mary 2" (Voyage dates: December 22nd 2012 to January 3rd 2013): Number of passengers who have reported being ill during the voyage out of total number of passengers onboard: 194 of 2.613 (7.4%). Number of crew who have reported being ill during the voyage out of total number of crew onboard: 11 of 1.255 (0.9%).

"Emerald Princess" (Voyage dates: December 17th to 27th 2012): Number of passengers who have reported being ill during the voyage out of total number of passengers onboard: 189 of 3235 (5.8%). Number of crew who have reported being ill during the voyage out of total number of crew onboard: 31 of 1189 (2.6%).

Background: Cruise ships participating in the Vessel Sanitation Program are required to report the total number of gastrointestinal illness cases evaluated by the medical staff before the ship arrives at a U.S. port, when sailing from a foreign port. A separate notification is required when the gastrointestinal illness count exceeds 2% of the total number of passengers or crew onboard. Besides these 2 outbreaks 14 other outbreaks of infectious gastroenteritis on cruise ships have been recorded by the CDC in 2012: 12 due to Norovirus, 1 due to Norovirus and *Enterotoxigenic E. coli* (ETEC) and 1 where the causative agent has not been determined ([Reference](#)).

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### 23. Dec. 2012 - United Kingdom: Whooping cough outbreak continues

In the United Kingdom, the largest outbreak of whooping cough in the last 20 years is taking place. In November 2012, new recorded cases were dropping for the 1st time in the past 18 months, but as number of cases of whooping cough do not generally decline during the winter months, that does not necessarily indicate that the peak in the outbreak has been reached.

Other data show that hospital admissions for the disease in young children have increased steeply over the past month. Figures from the Health Protection Agency show 1080 new whooping cough cases in November 2012, compared to more than 1600 during October 2012. Thus far over 8800 cases of whooping cough have been reported in 2012, the highest annual number since the early 1990s. Overall, 14 babies have died from the disease because they were too young to be completely vaccinated. ([Reference](#))

Background: Whooping Cough (Pertussis) has been on the increase throughout most of the world. This has been attributed in part to increased virulence and other genetic changes in the circulating clones of *Bordetella pertussis*, as well as to waning or ineffective immune response after vaccination.

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## **22. Dec. 2012 - Egypt & Indonesia: Avian (A/H5N1) influenza update**

Egypt:

On 18. December 2012, Egyptian health authorities reported one new human case of A/H5N1 influenza to the WHO (diagnosed in Damietta governorate). The case was a hospitalized 2 years old girl with onset of symptoms on 3. December 2012 and a positive history of exposure to poultry. The last confirmed case in Egypt was reported on 7. June 2012 in Kafr-El-Sheikh governorate. To date, a total number of 169 A/H5N1 influenza cases (including 60 deaths) have been confirmed in Egypt.

Indonesia:

On 18. December 2012, Indonesian health authorities reported one new human case of A/H5N1 influenza to the WHO (diagnosed in West Java). The case was a hospitalized 4 years old boy with onset of symptoms on 30. November 2012 and a positive history of exposure to poultry. The boy died on 6. December. The last confirmed case in Indonesia was reported on 6. July 2012 in West Java. To date, a total number of 192 A/H5N1 influenza cases (including 160 deaths) have been confirmed in Indonesia. (EpiSouth Weekly Bulletin No. 248)

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## **20. Dec. 2012 - Sweden ex Tanzania: Imported case of African trypanosomiasis**

A previously healthy woman of Swedish origin has been diagnosed with African trypanosomiasis most probably *Trypanosoma brucei rhodesiense* on 3. December 2012 after a tourist visit to north western Tanzania. She fell ill with fever, malaise, muscular pain, and slight headache 2 days earlier on 1st December 2012. The blood parasitemia was quite high (about 70 trypomastigotes/microliter blood) but no trypomastigotes were found in the cerebrospinal fluid. Treatment with suramin was initiated and the patient has improved. The safari included a game drive and one night at a lodge in Lake Manyara National Park (19-20 Nov 2012), 3 nights and several game drives in Serengeti (20-23 Nov 2012), and finally one night and a game drive in Ngorongoro crater. The patient could not recall any bites of tsetse flies during her visit to the

national parks (NPs). The NPs in north western Tanzania are well known endemic areas for human trypanosomiasis but it is difficult to establish where the patient was infected.

Background: During the 1st half year of 2001 a total of 7 cases were reported among visitors to Serengeti, Ngorongoro, and lake Manyara National Parks. As a response to this an extensive vector control program was initiated. During the following 10 years only occasional reports have been found in the literature on human trypanosomiasis transmission from this area and one posting on ProMED mail (tourist to Serengeti 2005). ([Reference](#))

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#### **20. Dec. 2012 - New Zealand: Shellfish poisoning outbreak**

Health officials have labeled an outbreak of paralytic shellfish poisoning as the worst seen in the Bay of Plenty. Since Wednesday 12. December 2012, 20 people have been poisoned by eating shellfish collected from the Bay of Plenty shoreline. 10 were admitted for hospital care after suffering symptoms ranging from tingling around the mouth to difficulty walking. The levels of toxins being reported from routine shellfish sampling, and the number and severity of cases underline that collecting shellfish from the affected area is a significant health risk. Note: The health warning applies to all bivalve shellfish. Shellfish in the affected area should not be taken or consumed. Paua, crayfish, and crabs can still be taken but the gut should be removed before cooking. Consumption of shellfish affected by the paralytic shellfish toxin can cause numbness and tingling around the mouth, face or extremities; difficulty swallowing or breathing; dizziness; double vision; and in severe cases, paralysis and respiratory failure. These symptoms usually occur within 12 hours of a person consuming affected shellfish. ([Reference](#))

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#### **19. Dec. 2012 - Gabon: Chikungunya outbreak**

The Gabonese Ministry of Health announced on Wednesday [12. December 2012] that 150 suspected cases of chikungunya had been recorded at the Melen Regional Hospital on the eastern outskirts of Libreville.

Note: In late November, the Ministry of Health had recognized the existence of an outbreak of chikungunya in the city of Mouila, 444 km South of Libreville. This is the 2nd outbreak of chikungunya reported from Gabon. The 1st outbreak took place in 2007, when more than 21.000 Gabonese were infected. ([Reference](#))

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#### **17. Dec. 2012 - Isle of Man, United Kingdom: Mumps outbreak**

A mumps outbreak has taken hold among a generation of adolescents who were not vaccinated after the MMR vaccination autism scare in the 1990s. Until the end of November 2012, 196 cases have been reported and more cases are reported since the beginning of December. The cases are mostly adolescents in their 20s. ([Reference](#))

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**9. Dec. 2012 - Sudan: Yellow fever outbreak in Darfur region**

Since early October 2012 the outbreak of yellow fever in the Darfur region of Sudan has grown into the worst yellow fever epidemic to strike Africa in 2 decades. The latest figures from the WHO put the number of suspected cases of yellow fever at 732, including 165 deaths. The last outbreak of this size occurred also in Sudan 20 years ago (604 cases, including 156 deaths, in South Kordofan state). The WHO reports that the already started emergency-response vaccination campaign will cover 5.5 million people. ([Reference](#))

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**30. Nov. 2012 - Jordan: 2 fatal cases of novel coronavirus infection detected retrospectively**

On 22. September 2012, 2 cases of acute respiratory syndrome with renal failure linked to a novel coronavirus were reported from Saudi Arabia and Qatar (see posting from 27. September). Meanwhile 5 more cases of this new virus infection have been reported (see postings from 4. and 23. November 2012). Today the WHO announced, that retrospective analysis of fatal pneumonia cases which occurred in Jordan in April 2012 identified 2 more cases: In April 2012 a number of severe pneumonia cases occurred in Jordan and the Jordanian Ministry of Health (MOH) requested a WHO Collaborating Centre for Emerging and Re-emerging Infectious Diseases (NAMRU - 3) team to assist in the laboratory investigations. All performed laboratory tests for known coronaviruses and other respiratory viruses were negative. In October 2012, after the discovery of the novel coronavirus, stored samples were sent for reinvestigation and today the WHO announced, that the laboratory results retrospectively confirm 2 fatal cases of infection with the novel coronavirus.

In summary, to date a total of 9 laboratory-confirmed cases (including 5 fatal cases) of infection with the novel coronavirus have been reported to the WHO - 5 cases (including 3 deaths) from Saudi Arabia, 2 cases from Qatar and 2 cases (both fatal) from Jordan. ([Reference](#))

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**30. Nov. 2012 - Madeira, Portugal: Update on autochthonous dengue fever outbreak**

Since 3. October 2012, an autochthonous outbreak of dengue due to DEN-1 serotype is ongoing in the autonomous region of Madeira, Portugal (see posting from 4. October and update on 18. October 2012 below). As of 25. November 2012, the Portuguese health authorities reported 1891 dengue cases in the autonomous region of Madeira. In addition, 32 cases have been reported in travellers from Madeira. After the establishment of a monitoring system for dengue (on 29 October 2012), the number of reported cases seems to have stabilized for the past 3 weeks with between 200 and 315 cases reported per week. (EpiSouth Weekly Bulletin No.245)

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### 29. Nov. 2012 - U.K. ex Afghanistan: Fatal Crimean Congo hemorrhagic fever case



Just published online in EUROSURVEILLANCE: A patient with fever, and haemorrhagic symptoms was admitted to a hospital in Glasgow on 2. October 2012. Since he had returned from Afghanistan, serum samples were sent for diagnosis at the Rare and Imported Pathogens Laboratory, where the real-time reverse transcriptase-PCR based diagnosis of Crimean Congo haemorrhagic fever (CCHF) was made. Hereafter the patient was transferred to a high-security infectious diseases unit in London but died on. 6 October. ([Reference](#)) Background: CCHF is endemic in Africa, the Balkans, the Middle East and in Asia south of the 50° parallel north, the geographic limit of the genus *Hyalomma*, the principal tick vector ([View map](#)). CCHF outbreaks constitute a threat to public health services because of its epidemic potential, its high case fatality rate (10-40%), its potential for nosocomial outbreaks and the difficulties in treatment and prevention.

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### 28. Nov. 2012 - Congo, DRC: Update on ebola outbreak

The latest outbreak of Ebola in the Democratic Republic of Congo [DRC] (see posting from 16. September 2012 below) has been declared over on 26. November 2012: a total of 62 people were infected and 34 of them died. The responsible Ebola virus has been identified as Bundibugyo strain. ([Reference](#))

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### 23. Nov. 2012 - USA: West Nile fever update

The 2012 West Nile virus (WNV) season continues nationally, although it seems to be slowing. As of 20. November, a total of 5207 human WNF cases (including 234 deaths) have been reported to the CDC. (This number is the highest since 2003, however way off from the total of 9862 cases (including 264 fatalities) in 2003. In 2003 Colorado alone reported nearly 3000 cases). Of the current 5207 cases, 2643 (51%) were classified as neuroinvasive disease (meningoencephalitis). Texas has reported most cases this year: 1707. California is the state with the second most cases: 424. Alaska and Hawaii are the only states not to report WNV infections in people, birds, or mosquitoes this year. ([Reference](#))

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### **23. Nov. 2012 - Saudi Arabia & Qatar: 4 new cases of novel coronavirus infection**

The WHO has been notified on 4 additional cases (including one death) due to infection with the novel coronavirus (see postings from 27. September & 4. November below). The additional cases have been identified as part of the enhanced surveillance in Saudi Arabia (3 cases, including 1 death) and Qatar (1 case). This brings the total of laboratory confirmed cases to 6 (Saudi Arabia 4, Qatar 2). The epidemiological investigations are ongoing. So far, only the 2 most recently confirmed cases in Saudi Arabia are epidemiologically linked - they are from the same family, living in the same household. Preliminary investigations indicate that these 2 cases presented with similar symptoms of illness. One died and the other recovered. Additionally, 2 other members of this family presented with similar symptoms of illness, where one died and the other is recovering. Laboratory results of this fatal case is pending, while the case that is recovering was tested negative for the novel coronavirus. ([Reference](#))

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### **23. Nov. 2012 - Cuba: Cholera update**

Dozens of prisoners of the Boniato prison in Santiago have been transferred because of cholera to the Ambrosio Grillo Hospital according to dissidents and employees of the health center. According to members of the opposition Patriotic Union of Cuba (UNPACU) cholera has also spread to several locations in Santiago de Cuba Province in the recent days and to the municipalities of Imias, Baracoa, Yateras, Maisi, and San Antonio del Sur in Guantanamo Province. ([Reference](#)) Background: by mid November 2012 countrywide 6600 suspected, 1571 confirmed and 47 fatal cases of cholera were recorded. (see posting from 6th July 2012: first cholera outbreak in Cuba since 1959)

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### **22. Nov. 2012 - Madeira, Portugal: Dengue outbreak update**

Since 3. October 2012, an autochthonous outbreak of dengue due to DEN-1 serotype is ongoing in the autonomous region of Madeira, Portugal (see posting from 4. October 2012 below). As of 18. October 2012, the Portuguese health authorities reported 1672 dengue cases in the autonomous region of Madeira. 10 cases were reported in the mainland Portugal. In addition, 5 European countries reported imported cases of dengue among tourists returning from Madeira: 6 cases in the United Kingdom, 7 cases in Germany, 1 case in Sweden, 2 cases in France, 1 case in Finland So far, 100 cases were hospitalised. The dengue outbreak in Madera represents the first reported local sustainable transmission cycle of dengue in Europe since the 1920's. These last weeks, the significant increase of dengue cases (autochthonous and exported cases) on the archipelago, including on Porto Santo Island, is not in favor of a decreasing of the outbreak. Nonetheless, the arrival of the winter season could limit the spreading of the vector. (EpiSouth Weekly Bulletin No. 244)

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### **21. November 2012 - Dominican Republic: update on cholera situation**

An outbreak of cholera hit the Espaillat Province in northern Dominican Republic at the beginning of the month (November 2012). Within a couple of days several hundred suspected cases were reported. Data on the current situation remains scarce. (Background: The cholera outbreak has been ongoing in the Dominican Republic since November 2010. According to the Dominican Ministry of Health, as of 19. August 2012, there have been a total of 26.712 suspected cholera cases and a total 415 suspected cholera-related deaths since the cholera epidemic began)

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### **19. Nov. 2012 - Columbia: Pertussis**

So far this year, 50 children have died from whooping cough [pertussis] in Columbia. 23 of them in Bogota and 6 in the department of Antioquia. 54% of the fatal cases were children under 2 months of age.

[The unfortunate death of this significant number of infants underscores how important it is to cocoon vaccinate around young infants, including booster immunization of any relatives involved with the infants' care] ([Reference](#))

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### **15. Nov. 2012 - Europe: Update on West Nile fever**

Montenegro:

On 14. November 2012, the Public Health Institute in Montenegro reported the first human case of West Nile fever ever reported in Montenegro. The case was diagnosed on 31. October 2012 by the Reference Laboratory of the Public Health Institute in Montenegro. The case is a 18 years old woman from Montenegro, who developed symptoms on 14. October 2012 (mild meningitis). The patient lives in Podgorica (the capital city) and had a travel history in Ulcinj area (on the coast) during the incubation period. Therefore, according to the Public Health Institute in Montenegro these two localities can be considered as a potential place of infection.

Croatia:

This year Croatia reported several equine outbreaks of West Nile virus (WNV) in different parts of the country. On 17. September 2012, 5 probable WNV cases in humans were reported by the Croatian National Institute of Public Health. They were all located in the East of the country. It is the first year that Croatia is reporting WNV cases in humans and equine.

Italy:

On 31. October 2012, the Italian Institute of Public Health reported a total of 28 confirmed human cases of WNV in the country, including one in Matera region, Basilicata province. It is

the first time that a WNV case in human was reported in Basilicata province. In 2011, equine cases were reported in Basilicata province, but no human cases.

EpiSouth data:

To date, for the 2012 season, a total of 381 WNV infections (clinical and confirm cases) in humans have been reported in 12 EpiSouth countries. In 2010, 485 human WNV infections were reported in 9 countries, while in 2011 232 WNV human infections were reported in 8 countries. (EpiSouth Weekly Bulletin No. 243)

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#### **14. Oct. 2012 - Uganda: New Ebola outbreak reported**



After the World Health Organization (WHO) declared the end of the recent Ebola hemorrhagic fever outbreak in Uganda's Kibaale district on 5. Oct. 2012 (see posting from 5. Oct. 2012 below) a new Ebola outbreak has just been reported from the central Ugandan district of Luweero. The outbreak was confirmed on 13. Oct. 2012 following positive results of laboratory tests.

([Reference](#))

(Note: this 2nd outbreak of Ebola in Uganda this year comes at a time when another currently ongoing outbreak of Marburg virus hemorrhagic fever in Uganda has not yet been declared over (see posting 20. Oct. 2012 below).

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#### **11. Nov. 2012 - Sudan: Yellow fever case reported from Khartoum**

The Minister of Health from the state of Khartoum revealed the emergence of the 1st case of yellow fever in the capital of Sudan, according to a press statement from Thu 8 Nov. 2012.

Background: see posting below: 7. Nov. 2012: Yellow fever outbreak in Dafur)([Reference](#))

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#### **10. Nov. 2012 - France ex Serbia: NDM-1 producing Pseudomonas aeruginosa**

Just published: In March 2012, a patient with a history of prior hospitalisation in Serbia was diagnosed in France with acute pyelonephritis due to New Delhi metallo-beta-lactamase-1 (NDM-1) producing Pseudomonas aeruginosa. This is the first case of infection due to NDM-1-

producing *P. aeruginosa* in France ([Reference](#)).

Background: Infections with New Delhi metallo-beta-lactamase-1-producing (NDM-1) bacteria were first described in 2010 in India. Since then global spread of NDM-carrying bacteria is an emerging public health problem all over the world. See posting from 17. and 23. June 2012 ("NDM-1-producing bacteria: update on imported cases 2012") below for more information.

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#### **10. Nov. 2012 - Thailand: Diphtheria outbreak**

The current outbreak of diphtheria has begun in June 2012 in the Northeastern region of Thailand (Loei province) and spread to adjacent provinces. 43 confirmed cases and 4 deaths were reported from 6 provinces between 1 Jan. 2012 and 4 Nov. 2012. Among these, 26 cases and 2 deaths were reported from Loei, 5 cases were from Pattani, 3 cases and 2 deaths were from Yala, 4 cases were from Petchabun, 4 cases were from Nong Bua Lamphu and one case was from Surat Thani province. ([Reference](#))

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#### **10. Nov. 2012 - Global: Update on Influenza situation**

Many countries of the Northern Hemisphere temperate region report increasing detections of influenza viruses, particularly in North America and Western Europe, however none have crossed their seasonal threshold for ILI/ARI [influenza-like illness/acute respiratory disease] consultation rates. Several countries in the tropical areas experienced active transmission of influenza virus in recent weeks. In the Americas, Nicaragua and Costa Rica reported mainly influenza B virus detections. In Asia, India, Sri Lanka, Nepal, and Cambodia are all reporting a mixture of all 3 virus subtypes. In Sub-Saharan Africa, Cameroon and Ethiopia have reported an increase in influenza virus detections. Influenza activity in the temperate countries of the Southern Hemisphere is at inter-seasonal levels. ([Reference](#)) (Note: on the right side of this webpage you find the links to the global and regional influenza charts)

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#### **9. Nov. 2012 - Vietnam: Hand-foot-mouth disease update**

As of 7. Oct 2012, the Vietnam Ministry of Health has confirmed that approximately 116.418 people in 63 provinces have had hand-foot-mouth disease (HFMD) since the beginning of 2012; 42 people in 15 provinces have died. Slightly more than half of the HFMD cases and 91 percent of the deaths have occurred in the southern region. The Vietnam Ministry of Health is currently working with World Health Organization to control the outbreak. ([Reference](#))

Background: Large outbreaks of severe HFMD occur frequently in some countries in Asia. Thousands of people may get infected during these outbreaks. Some people, particularly young children, may have severe disease requiring hospitalization or even causing death. ([WHO](#) info page on HFMD)

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#### **8. Nov. 2012 - Columbia: Pertussis outbreak**

An outbreak of whooping cough [pertussis] has been reported from Bogota and already caused the deaths of 23 children younger than 5 years. The District Department of Health confirmed that this number almost doubles the 14 fatal cases recorded in 2011. Most of the victims were younger than one year. Between January and September 2012, 589 cases of pertussis were confirmed in Bogota, 21 percent of all cases diagnosed in the country. Bogota is 2nd to Antioquia, with the most confirmed cases, mostly in children under 5 years. ([Reference](#))

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#### **7. Nov. 2012 - Sudan: Yellow Fever outbreak in Darfur**

According the United Nations health agency a yellow fever outbreak in Sudan's Darfur region has killed 67 people so far. Up to now the number of cases has more than doubled since the start of the epidemic last month [October 2012]. In a report, the WHO stated that the outbreak has now affected 17 localities in central, south, west, and north Darfur, with 194 cases reported - a significant increase from the 84 initial cases reported at the start of the outbreak. ([Reference](#))

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#### **4. Nov. 2012 - Saudi Arabia: New case of novel coronavirus infection reported**

The Saudi Arabian Ministry of Health has reported a new case of the recently discovered novel coronavirus in a hospitalized male patient with pneumonia. This case has no epidemiological links to the 2 previously reported cases (see posting from 27. Sep. 2012 below). The patient had no significant travel history, in fact had not been out of Riyadh. When he was admitted to hospital he was evaluated for the usual respiratory pathogens, including influenza viruses. When none of these tests were positive, additional specimens were collected and sent to an additional regional laboratory and an international reference centre. Both labs reported a RT-

PCR positive results for the novel coronavirus. Regarding the current status of the patient: he is out of intensive care and recovering. There are no apparent secondary cases. ([Reference](#))

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### **3. Nov. 2012 - Indonesia: Evidence of Filovirus infection in orangutans on Kalimantan (Borneo)**

Researchers from Airlangga University's Avian Influenza-zoonosis Research Center in Surabaya, East Java, report that they have detected evidence of filovirus infections in several orangutans in Kalimantan. 65 serum samples collected from 353 healthy orangutans between Dec. 2005 and Dec. 2006 were tested positive. Of interest is (even though the performed test(s) were not specified), that 60 of the positive tested samples were reported to be similar to the 4 ebolavirus species found in Africa (Zaire, Sudan, Tai forest/Ivory Coast & Bundibugyo ebolavirus), 6 samples were tested positive for Marburg virus and only 5 samples showed similarities with the only known filovirus ever isolated in Asia, the Reston ebolavirus reported from the Philippines. ([Reference](#))

Note on the history of filoviruses in Asia and recent discoveries in Europe: While investigating an outbreak of Simian hemorrhagic fever in 1989, a filovirus similar in appearance to the African ebola viruses was discovered in tissue samples from monkeys imported from the Philippines to Hazleton Laboratories in Reston, Virginia. While the infection was highly fatal for monkeys, the absence of human infections led to the conclusion, that the virus strain is apathogenic for humans. The Reston virus was later isolated again from monkeys of a monkey export facility in the Philippines (1996) and from pigs from farms north of Manila (2008). In 2011 Lloviu virus, another ebola-like filovirus was discovered in dead bats in Spain. Similar to the Reston ebolavirus no report of human pathogenic potential has so far been described for Lloviu virus ([Reference](#)).

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### **1. Nov. 2012 - Mauretania: update on Rift Valley Fever outbreak**

The Ministry of Health in Mauritania declared an outbreak of Rift Valley Fever (RVF) on 4 Oct. 2012 (see posting from 11. Oct. below). From 16 Sep. 2012 (the date of onset of the index case) to 30 Oct. 2012, a total of 34 cases, including 17 deaths have been reported from 6 regions. The last case was notified on the 27 Oct. 2012 from Magta Lahjar in the Brakna region. The 6 regions include Assaba, Brakna, Hodh Chargui, Hodh Gharbi, Tagant and Trarza. All the cases had history of contact with animals. ([Reference](#))

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### **31. Oct. 2012 - Uganda: Update on Marburg hemorrhagic fever outbreak**

As of 28. Oct. 2012, a total of 18 cases and 9 deaths (including a health care worker) have been reported from 5 districts, namely Kabale district, in southwestern Uganda (see map), Kampala,

Ibanda, Mbarara and Kabarole. The case fatality rate is 50%. The outbreak was declared by the Ministry of Health in Uganda on 19. Oct. 2012 (see posting from 20. Oct. below). Blood samples from 9 cases were tested positive for Marburg virus at the Uganda Virus Research Institute (UVRI). Currently, 13 patients are admitted to hospital (2 in Kampala, 8 in Kabale, 3 in Ibanda), and their contacts are followed up daily. The latest confirmed case was admitted to the Ibanda district isolation ward on 26. Oct. 2012. ([Referenze](#))



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### 30. Oct. 2012 - Europe: Update on the current West Nile fever situation

To date, for the 2012 season, a total of 344 WNV infections (clinical and laboratory confirm cases) in humans have been reported within Europe and from neighbouring regions: Algeria (1), Croatia (5), Former Yugoslav Republic of Macedonia (6), Greece (109), Israel (61), Italy (45), Kosovo (4), Palestine (2), Romania (14), Serbia (64), Tunisia (33) (map overview of the current WNV situation: [map](#))

For Algeria, Croatia, Kosovo, Serbia, it is the first year that WNV infections in humans were reported.

In 2010, 485 human WNV infections were reported in 9 countries, while in 2011 232 WNV human infections were reported in 8 countries. (EpiSouth Weekly Epi Bulletin No 241)

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### 30. Oct. 2012 - Europe: Update on the autochthonous malaria situation in Greece

To date, a total of 16 autochthonous malaria (*P. vivax*) cases have been reported from 4 different regions of Greece in 2012 ([map](#)):

- 4 cases from the East Attica region,
- 8 cases from Laconia, Peloponnese region,
- 1 case from the Xanthi region, Thrace region,
- 2 cases from the Karditsa region, Thessaly region.

(Background: Next to the autochthonous cases 48 imported cases (all of them *P. vivax* as well) have so far been reported in 2012 in Greece.

In 2011 63 (*P. vivax*) malaria cases have been recorded (between 21. May - 9. Dez.) in Greece, of which 33 were considered to be autochthonous cases (as patients had no travel history to malaria endemic countries). (EpiSouth Weekly Epi Bulletin No 241 & ECDC)

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### 27. Oct. 2012 - Bolivia: Vampire bat rabies in cattle



Recent cases of vampire bat rabies in cattle have been reported from Collpaciaco (70km from the city of Cochabamba) in the highlands of Bolivia. So far no human cases have been recorded in the region. Background: human cases of vampire bat rabies are regularly reported from the Americas, with most cases being recorded in Equador and Peru. The responsible "Common Vampire Bat" (*Desmodus rotundus* [geographic distribution see map]) is found in parts of Mexico, Central America and South America. As the indigeneous population is often relying on traditional healers and not reporting to institutions of the national health system no data on the exact number of cases are available. A high number of unregistered cases is suspected. For travelers sleeping outside in endemic regions a mosquito net is highly recommended for protection. ([Reference](#))

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### 23 Oct. 2012 - China, Hong Kong ex USA: Babesiosis

A case of a Chinese business man has been reported, who was diagnosed with Babesiosis following frequent buisness trips to New York. ([Reference](#)) Background: Babesia (a tick transmitted parasitic disease) is increasingly recognized as a emerging human health problem on the east coast of the United States. A recent survey of babesia in the US (Anderson SA et al. Babesiosis among Elderly Medicare Beneficiaries, United States, 2006-2008. [EID 2012,18](#)) found the highest rates in Connecticut, Rhode Island, New York, and Massachusetts. Thus, babesia is a risk, although a small one, when visiting the northeastern parts of the United States. Since national surveillance was implemented in 2011 a total number of 1124 cases were reported, 97% in 7 states (Connecticut, Massachusetts, Minnesota, New Jersey, New York, Rhode Island, Wisconsin)

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### 23. Oct. 2012 - Portugal, Madeira: Update on autochthonous dengue fever outbreak

Since 3. Oct. 2012, an autochthonous outbreak of dengue due to DEN-1 serotype is on-going in the autonomous region of Madeira, Portugal (see posting from 4th Oct. 2012 below). As of 24. Oct. 2012, the Portuguese health authorities reported 52 confirmed dengue cases and 404 suspect cases in the autonomous region of Madeira. In addition, at least 3 European countries

reported imported cases of dengue among tourists returning from Madeira: 2 cases in French residents, 1 case in a Sweden resident, 1 case in an English resident. Considering that Madeira is a touristic destination, the reporting of additional cases in foreign tourists can be expected. (EpiSouth Weekly Bulletin No 240)

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### **23. Oct. 2012 - Greece: First canine rabies cases since 1987 reported**



On 19. Oct. 2012, Greek authorities reported one case of rabies in a fox in the Western Macedonian prefecture, at the border with the Former Yugoslav Republic of Macedonia (Fyrom) and Albania. Greece is considered as a rabies-free country since 1987. Foxes are the main reservoir of rabies in European and Balkan countries. In Nov. 2011, a rabid fox was reported by Fyrom health authorities in a locality located 3 km away from the Greek border. Following this event, a rabies surveillance system was implemented in 2012 in some Greek prefectures at the border with Albania and Turkey (including the Western Macedonian prefecture). (Reference: EpiSouth Weekly Bulletin No 240)

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### **23. Oct. 2012 - Uganda: Update on Marburg hemorrhagic fever outbreak**

On 19. Oct. 2012, the Ministry of Health of Uganda reported to WHO an outbreak of Marburg haemorrhagic fever in Kitumba, Kabale district, in the South West of Uganda (see posting from 20. Oct. 2012 below). A cluster of 9 cases including 5 deaths were reported in a single family. All cases are linked to the index case. Among these 9 cases, 3 were biologically confirmed by the Virology Research Institute in Uganda. (Epi South Weekly Bulletin No 240)

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### **22. Oct. 2012 - Bulgaria: Hepatitis A outbreak**

An outbreak of hepatitis A has been reported from Sofia. According to the Regional Health Inspection Service the morbidity rate has increased dramatically: 58 cases have been

hospitalized during the past week. The last Hepatitis A outbreak in Bulgaria was registered in 1999: back then 7,269 cases were reported. ([Reference](#))

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#### **22. Oct. 2012 - Europe ex Malaysia: reemerging muscular sarcocystosis in European travellers returning from Tioman Island**

According to current GeoSentinel/EuroTravNet- & TropNet-observations - and similar to 2011 - cases of muscular sarcocystis infections are again increasingly observed in European travellers returning from Tioman Island, Malaysia. ([background](#) 2011/ [update](#) 2012 ). The clinical presentation of muscular sarcocystosis is dominated by muscle pain, elevated eosinophil counts and raised serum CPK levels, mimicking trichinellosis (even though clinically asymptomatic cases presenting with isolated eosinophilia have been observed). Currently the only available diagnostic method is muscle biopsy.

Our TropNet-site from Leiden, The Netherlands just reported 2 cases with severe manifestations ([Reference](#))

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#### **22. Oct. 2012 - Democratic Republic of Congo (DRC): travel restrictions for Congolese pilgrims to Mecca**

Muslims living in the Democratic Republic of Congo (DRC) will not participate in the pilgrimage to Mecca this year [2012]. Due to the recent Ebola outbreak as well as cholera in the DRC the Saudi Arabian government has taken the decision to exclude participation of Congolese pilgrims in order to protect the 2 million pilgrims expected in Mecca this year. The information was confirmed by the President and Legal Representative of the Islamic Community in the DRC, Sheikh Abdallah Mangala. ([Reference](#)) Notes: concerning the recent outbreak of Marburg virus in Uganda (see posting 20. Oct. 2012 below) no information regarding travel restrictions for pilgrims from Uganda have yet been stated.

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#### **20. Oct. 2012 - Chile: Meningococcal meningitis outbreak**

Chile is currently facing an increase of meningococcal disease and also a shift of serotypes compared to the year 2011. The surveillance system of the Chilean Ministry of Health has reported the following numbers, which reflect the epidemiological situation of meningococcal disease for 2012 from week 1 to 40 [1 Jan-6 Oct 2012]: There are a total of 83 accumulated cases compared with 52 for the total of 2011 (median number of cases 2007-2011: 76). The increase is mainly observed in 2 Chilean regions: the Metropolitan Region (RM), which includes Santiago, with 58 percent of cases and the region of Valparaiso with 21 percent of cases. In the RM 76 percent of cases were caused by serogroup W135, compared with 14 percent and 48

percent in the years 2010 and 2011, respectively. This epidemiological change is not observed in the other regions, where serogroup B is predominant. The most affected age groups are children under the age of 5 (48 percent of cases); almost half of those are 9 months or younger. The reported case fatality rate reached 20 percent (17/83) and seems to be higher than in previous years (2011: 15 percent). The Chilean Ministry of Health is planning to start a targeted vaccination campaign (with quadrivalent conjugate vaccine) focusing on the areas and age groups mostly affected by the end of October 2012. ([Reference](#))

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#### **20. Oct. 2012 - Vietnam: Rabies on the rise in the Northern provinces**

Rabies has claimed the lives of 74 people in the northern mountainous provinces so far this year [2012], but only 83 percent of deaths were reported. According to the National Institute of Hygiene and Epidemiology, after 5 straight years of reductions, the number of rabies cases rose sharply this year, spreading across the northern mountainous region. ([Reference](#))

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#### **20. Oct. 2012 - Uganda: Marburg virus outbreak in the Southwest**

After the recent ebola outbreak in Uganda (17 fatal cases) has just been declared over (see posting from 5. Oct. 2012 below), a suspected Marburg virus outbreak has been reported yesterday from Southwestern Uganda. A full statement from the Ministry of Health is still pending but the Uganda Virus Research Institute in Entebbe has reportedly confirmed that the causative agent is Marburg virus, prompting widespread containment measures now unfolding around the affected areas between Kabale and Kisoro. Until 20. Oct. 2012 5 fatal cases have been recorded. Background: the last outbreak of Marburg virus disease in Uganda occurred in 2007 and killed 2 miners in the west of the country. A major outbreak of Marburg virus disease occurred among gold miners in the Democratic Republic of Congo between 1998 and 2000, causing 128 deaths out of 154 cases. An outbreak in Angola in 2004-05 killed 227 people out of 252 cases. In 2008, 2 cases imported from Uganda were reported in a Dutch and an American tourists. ([Reference](#))

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#### **20. Oct. 2012 - Uganda: One reported case of Yellow fever in the North**

A case of Yellow fever has been reported from the district of Agago, Northern Uganda ([map](#)). The patient, admitted to Dr. Ambrosoli Hospital in Kalongo on September 24, was initially suspected to be infected with Ebola virus but he instead tested positive for yellow fever. In 2010-2011, there was an outbreak in this same area (Abim and Agago districts) with 224 cases and 53 deaths, later spreading to Kitgum and 10 other districts in Northern Uganda. ([Reference](#))

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**18. Oct. 2012 - Iraq: Cholera outbreak**

According to WHO, the local health authorities recorded a cholera outbreak in Sep. and Oct. 2012 in Northern Iraq, in the Suleimaniyah, Dohuk and Kirkuk areas. According to the available data 3.400 acute watery diarrhoea cases including 205 confirmed cholera cases and 3 deaths have been reported from Suleimaniyah between 15. Sep. and 8. Oct. 2012; one confirmed case has been reported on 9. Oct. 2012 in Dohuk; at least 15 cases of cholera have been recorded in Kirkuk on 8. Oct. 2012. In Suleimaniyah, the number of cases started declining from 4. Oct. In Iraq, the last cholera outbreak was reported in December 2008 in Diwanyia, Babil and Baghdad. (EpiSouth weekly bulletin No 239)

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**18. Oct. 2012 - Greece, Corfu: First case of West Nile fever reported**

On 12. Oct. 2012, the Hellenic Centre for Disease Control and Prevention (KEELPNO) reported one human confirmed case of West Nile virus (WNV) on Corfu Island. It is the first time ever that a human case is reported from the island. As of 12. Oct. 2012, a total of 107 neuroinvasive human WNV cases were reported in Greece. The occurrence of WNV cases on different Greek islands (Samos, Lefkada, Euboea and Corfu) could indicate a geographical extension of the virus in the country compared to the previous years where the Greek mainland and Euboea were mainly affected. (EpiSouth weekly bulletin No 239)

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**18. Oct. 2012 - France ex Algeria: Imported West Nile fever case, fatal**

On 4. Oct. 2012, the French National Reference Laboratory for Arboviruses (ERBA) diagnosed a case of neuro-invasive West Nile virus (WNV) infection imported from Algeria. The case was a 74 year-old French resident who had travelled to Algeria: From 24. August to 11. Sep. he had stayed in Jijel, located on the Mediterranean coast between Algier and Annaba. After onset of fever on 12./13. Sep. 2012 and was hospitalized on 16. Sep. 2012 with fever and cognitive disorders. The patient died on 29 September 2012. On 15 October 2012, The French National Reference Laboratory confirmed the diagnosis of WNV with seroneutralisation. This is the first reported case infected in Algeria since 1994. There is no specific human or equine WNV surveillance in Algeria. In 2011, a sero-prevalence survey in humans showed that among 165 samples 16 tested positive for WNV antibodies. Tunisia and Morocco have a specific human WNV surveillance system: In Tunisia, between 14. Aug. 2012 and 5. Oct. 2012, a total of 15 human WNV infections have been reported by the ministry of health. In Morocco, 24 equine cases were reported in 2010. (EpiSouth weekly bulletin No 239)

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### **15. Oct. 2012 - Brazil: Outbreak of food-borne chagas disease**

For the second time this year an outbreak of Chagas disease [American trypanosomiasis] affecting at least 24 cases (including one fatal case) has been reported from the city of Abaetetuba in the interior of Para state. The source of infection is suspected to be again contaminated acai juice. See posting from 3rd Sep. 2012 below for details: Brazil: Outbreak of food-borne Chagas disease ([Reference](#))

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### **13. Oct. 2012 - USA ex Zimbabwe: Imported trypanosomiasis in a traveler**

A 64-year-old Minneapolis woman accompanied her husband on safari in Zimbabwe for 3 weeks in September 2012. She returned on 4th Oct. 2012 and developed high fever, nausea, and diffuse myalgias on 6th October. She presented to the emergency department on 10th Oct. 2012 and was admitted after trypanosomes were seen on a peripheral blood smear. Rapid clinical deterioration and normal CSF studies were consistent with *Trypanosoma brucei* rhodesiense infection / East African sleeping sickness. The patient developed multi-organ failure and remains in the intensive care unit at Abbott Northwestern Hospital in Minneapolis, Minnesota. The patient is under suramin treatment. ([Reference](#))

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### **11. Oct. 2012 - Mauretania: Rift Valley Fever outbreak**

Beginning of Oct. 2012, Mauritanian authorities reported human cases of Rift Valley Fever (RVF) in the country. There were at least 2 confirmed and 2 probable cases (including 2 deaths) which are under investigation. Patients come from different localities and regions of Mauritania (South, Centre and East). Mauritania is a known endemic region for RVF (risk map: [link](#)). The last epizootics and human cases reported in Mauritania dated from 2010 in Adrar (30 human cases including 17 deaths). In Mauritania, sentinel animal surveillance is in place. The situation needs to be followed carefully, especially due to the upcoming Eid religious celebration (end of October), during which flock is being slaughtered. (Reference: EpiSouth Weekly Bulletin)

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### **10. Oct. 2012 - Papua New Guinea: First cases of autochthonous Chikungunya infections**

14 laboratory confirmed cases of Chikungunya virus infections have now been reported from Papua New Guinea, after the disease was first reported in the region in June this year. The cases are reported from Sandau (West Sepik province, border with Irian Jaya, Indonesia: [map](#)). Since June more than 600 suspected cases have been reported. ([Reference](#)) (Note: the region has already been labeled as "risk area" by the WHO: [link](#) to WHO Chikungunya risk map)

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## 9. Oct. 2012 - Italy: Bacterial meningitis outbreak among cruise ship crew members

A bacterial meningitis outbreak has been reported among the crew members of the MSC Orchestra cruise ship, which docked on 7. Oct. 2012 in an Italian port. 2800 passengers on the boat received antibiotic prophylaxis after 4 crew members were hospitalized in serious condition. ([Reference](#))

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## 9. Oct. 2012 - Southeast Asia: Travel-associated Melioidosis

*Burkholderia pseudomallei*, the etiologic agent of melioidosis, is endemic to tropic regions, mainly in Southeast Asia and northern Australia. Melioidosis occurs only sporadically in travelers returning from disease-endemic areas. Even though very rare 2 recent cases have been reported in European travelers.

- 4. Oct. 2012: A 44-year-old Caucasian man developed pneumonia, with bilateral pleural effusions and complicated by a hemodynamically significant pericardial effusion, soon after his return from Thailand to Switzerland. Cultures from different specimens including blood cultures turned out negative. Diagnosis was finally accomplished by isolation of *Burkholderia pseudomallei* from the pericardial aspirate. (just published in BMC Infectious Diseases 2012;12:242: "A traveller presenting with severe melioidosis complicated by a pericardial effusion: a case report" ([Reference](#)))
- 3. Oct. 2012: A 60-year-old female Belgium traveler returning from Thailand presented to her general practitioner with an ulcerated lesion on her leg that resisted treatment with common disinfectants. Bacterial culture confirmed *Burkholderia pseudomallei* - cutaneous Melioidosis. ([Reference](#))

A summary of travel-associated/imported Melioidosis cases has just been published by GIDEON (Global Infectious Disease & Epidemiology Network) and is available as abstract at ProMED-mail: [Link](#)

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## 5. Oct. 2012 - Uganda: End of Ebola outbreak declared

4th Oct. 2012: the Ministry of Health of Uganda has declared the end of the Ebola haemorrhagic fever outbreak in Kibaale district. The last case was confirmed on 3rd August 2012 and was discharged from the hospital on 24th August 2012. This is double the maximum incubation period (21 days) for Ebola as recommended by WHO. In the outbreak, a total of 24 probable and confirmed cases were recorded, of which 11 were laboratory confirmed by the Uganda Virus Research Institute in Entebbe. A total of 17 deaths were reported in this outbreak. ([Reference](#))

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#### **4. Oct. 2012 - Portugal, Madeira: Autochthonous dengue fever cases suspected**

On 3rd October 2012, the Portuguese health authorities reported dengue fever cases in the autonomous region of Madeira, Portugal. To date, 2 confirmed and at least 20 suspect cases of dengue fever have been reported. Further investigation and laboratory results are on the way. The place of infection (autochthonous versus imported) has yet to be specified. Presence of *Aedes aegypti* in the Portuguese archipelago is known since 2004-2005 (Eurosurveillance, 2007). In this respect, an autochthonous transmission cannot be excluded. To date, no autochthonous dengue cases have been reported in Madeira autonomous region. Sporadic autochthonous cases of dengue in Europe were already reported in the past years from Croatia and France. Note: a suspected case of autochthonous dengue fever reported on 7th Sept. 2012 from Greece (see posting below) has now been ruled out by additional laboratory investigations. (EpiSouth Weekly Bulletin – N°237)

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#### **2. Oct. 2012 - Italy 2011: Traveler dies of malaria due to fake over the counter artesunate**

Recently published: In 2011 a 28-year-old woman from Spain got diagnosed with malaria in Equatorial Guinea (being a regular traveller to Equatorial Guinea, she took no chemoprophylaxis and had already acquired malaria on 3 previous occasions all of which resolved with a 3 day course of locally acquired artesunate combination therapy). This time she bought a artesunate-sulfadoxin/pyrimethamin drug imported from Vietnam at a local pharmacy in Equatorial Guinea. With a fast deteriorating course of disease she returned to Spain, where she died. Consecutive laboratory investigations of the artesunate-combination drug finally demonstrated, that the drug was fake. ([Link to article](#))

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#### **30. Sep. 2012 - USA: West Nile fever update**

More than 400 new cases of West Nile fever emerged in the last week in an outbreak that remains the 2nd worst on record but has begun to show signs of slowing. So far this year, 3545 cases have been reported. About 38% of all cases have been reported in Texas. Other states with large numbers of cases include Mississippi, Michigan, South Dakota, Louisiana, Oklahoma, and California. A total of 147 people have died from the disease this year. Just over half of the cases reported to the CDC this year have been of the severe neuroinvasive form of the disease, which can lead to meningitis and encephalitis. The milder form of the disease causes flu-like symptoms and is rarely lethal. The CDC said the number of cases this year is the highest reported to federal health officials through the last week in September since 2003, the year with the most cases. ([Reference](#))

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#### **29. Sep. 2012 - USA, New York: Cluster of bacterial meningitis in HIV positive gay men**

A cluster of bacterial meningitis has erupted among HIV positive gay men in New York City. The city's health department on Thursday [27 Sep 2012] issued an alert for "gay men and men who have sex with men." The outbreak includes a dozen cases in the last 2 years, but it seems to have accelerated with 4 cases in the last 4 weeks. Of the 12 total cases, 4 died. All 4 of the men - between the ages of 31 and 42 - who contracted the disease are HIV positive, which the department says put them at a much greater risk than the general population. ([Reference](#))

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#### **28. Sep. 2012 - Congo D.R.C.: Novel hemorrhagic fever virus discovered**

The discovery of a new hemorrhagic fever virus has just been reported from central Africa: Bas-Congo Virus (BASV). The virus has been named after the province (west of Kinshasa), where it has been isolated from the blood of a patient. The discovered virus belongs to the Rhabdovirus family (like the rabies viruses). Currently the natural animal reservoir / host or arthropod vector and precise mode of transmission of the virus remain unclear. So far only three people in the remote village of Mangala are known to have contracted Bas-Congo hemorrhagic fever, with two of the three cases being fatal. One fatal case was a health care worker who cared for the other two patients, which indicates the potential for person to person transmission. ([Reference](#))

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#### **27. Sep. 2012 - USA, Florida: autochthonous case of dengue fever**

The Miami-Dade County Health Department officials received confirmation of the first locally acquired case of dengue fever in Miami-Dade County. The patient was diagnosed with dengue fever based on symptoms and confirmed by laboratory tests. The individual fully recovered from this illness. Background: Local transmission of dengue was last documented in Florida in 1934. The not infrequently diagnosed cases of dengue fever in Florida nowadays are imported cases, seen in travelers returning to the US after visiting endemic countries ([CDC](#)). ([Reference](#))

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#### **27. Sep. 2012 - Saudi Arabia: Report of a novel Coronavirus associated with acute respiratory syndrome and renal failure**

On 22. Sep. 2012, 2 cases of acute respiratory syndrome with renal failure linked to a novel coronavirus have been reported from Saudi Arabia and Qatar.

1st case: a 60 year-old male, hospitalised in Jeddah, in June 2012 for an acute respiratory syndrome with renal failure. He died. The laboratory analyses performed in Saudi Arabia and then in Erasmus University Medical Centre, Netherlands identified a novel coronavirus of the beta group.

2nd case: a 49 year-old male, Qatari national, with onset of symptoms on 3rd September 2012 and with travel history to Saudi Arabia prior to onset of illness. On 7th September he was hospitalised in Doha, Qatar, and on 11th September in the United Kingdom. The patient is still in intensive care unit. The Health Protection Agency of the U.K. conducted laboratory testing and has confirmed the presence of a novel coronavirus.

Apart from their travel to Saudi Arabia, no epidemiological link was found between the two cases. A comparison of clinical samples collected from these 2 cases indicated 99.5% identity of the two strains. Meanwhile retrospectively a third suspected case has been reported: a Saudi patient who presented severe acute respiratory disease of unknown aetiology. He died after being admitted to hospital in August 2012 in the U.K.. He has no epidemiological link with the other cases and unfortunately no sample is available to carry out further tests. Thus, this case can be neither confirmed nor denied.

Coronaviruses are a large family of viruses with the ability to cause a wide spectrum of diseases: from the common cold to SARS. Of note is, that the reported novel coronavirus is not genetically similar to the SARS virus. To date no secondary cases have been reported in people who were in contact with the two reported cases. Currently there is no evidence of human to human transmission for this new virus and available information does not allow confirming and refuting a causal relation between an infection by this new virus and the observed clinical symptoms. In the light of the upcoming Hajj pilgrimage to Mecca (23rd to 28th October 2012) the Saudi Arabian public health authorities and the WHO are implementing surveillance measures and do not recommend travel restrictions. (EpiSouth Weekly Bulletin, No. 236; ProMED-Mail) The ECDC has published a leaflet containing the current available information and recommendations for health care professionals: [Link](#)

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#### **21. Sep. 2012 - China ex India: Israeli traveler dies of rabies**

A 34-year old Israeli traveler died at a Beijing hospital of rabies this week. According to the report, the Israeli, who recently arrived in China after traveling in India, suffered from severe back pain, had difficulties drinking, was constantly vomiting and suffered from hallucinations. After hospitalization he deteriorated fast into coma with the need for artificial ventilation and died on Wednesday. It remains unclear where the patient got infected, but considering the high prevalence, India is highly likely. ([Reference](#))

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#### **20. Sept 2012 - USA, Nebraska: Histoplasmosis outbreak among day camp attendees**

In June the Douglas County Health Department (DCHD) in Omaha, Nebraska, was notified of an acute respiratory illness cluster among 32 counselors at city-sponsored day camps. Laboratory investigations confirmed histoplasmosis in 17 cases. The probable infection source in this

outbreak was campsite contamination of soil and picnic tables by bat guano, which likely became aerosolized during camp activities or clean-up before camper arrival. No other potential sources of infection were identified.

Histoplasmosis is a common fungal infection in the United States and is a cause of respiratory illness outbreaks in endemic areas, which include areas in the midwestern states, and particularly the Mississippi and Ohio River valleys. Illness usually is acquired from inhalation of soil contaminated with bird or bat droppings; human-to-human transmission does not occur. Symptoms include fever, headache, and respiratory symptoms, although infected persons can remain asymptomatic. Most patients will recover regardless of treatment, but severe disease can lead to respiratory failure and should be treated; immunocompromised patients are at high risk for developing histoplasmosis that spreads throughout the body. ([Reference](#))

(see postings from 27. July 2012 - South Africa: Histoplasmosis cluster in cavers & 8. Sep. 2011 - Europe: Histoplasmosis ex Uganda below)

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#### **20. Sep. 2012 - Belgium ex Greece: West Nile fever in a Belgium traveler to Greece**

A laboratory confirmed case of West Nile fever (WNF) has been reported in a 73 year old Belgian woman who traveled to Kavala in Macedonia (Greece). While traveling the woman developed fever and neurological symptoms and was hospitalized. IgM antibodies against WNV were detected in the serum by ELISA in the absence of IgG antibodies. The patient was repatriated to Brussels (Belgium) on 30. Aug. 2012. The patient was in a coma when she arrived in Brussels and her situation has not improved since. ([Reference](#))

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#### **19. Sep. 2012 - Croatia: first ever cases of West Nile fever reported**

Croatian health authorities have notified the presence of 3 probable autochthonous cases of West Nile fever (WNF) in Osijek-Baranja and Vukovar-Syrmia counties. These cases represent the first ever reported human cases of WNF from Croatia. (ECDC weekly bulletin, [week 37](#)). (For an updated overview on the current WNF situation in Europe see: [ECDC WNF map](#))

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#### **16. Sep. 2012 - Congo DRC: Update on ebola outbreak**

The outbreak of Ebola virus in the Democratic Republic of Congo (DRC) is continuing and could threaten major towns, the World Health Organization (WHO) has warned. An epidemic was officially declared on 17. Aug. 2012 in the north-western Orientale Province. The death toll from this outbreak, centred on the towns of Isoro and Viadana, has more than doubled since the outbreak started and is now at 31. Up to 5 health workers are thought to be among the dead. In July an outbreak of a different Ebola virus strain in neighbouring Uganda killed 16 people. (see posting from 18. & 21. Aug. 2012 below)([Reference](#))

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### 7. Sep. 2012 - Greece: one autochthonous case of dengue fever

The Hellenic Centre for Disease Control and Prevention has reported a probable case of autochthonous (locally acquired) dengue fever on mainland Greece. The case was an 84 year old male resident of Agrinio ([map](#)), in the municipality of Aetolia-Acarmania, who died on 30. Aug. 2012. Although his illness and diagnosis was complicated by underlying chronic medical conditions, the presence of a high titer of IgM dengue antibodies and a positive NS1-antigen test support the diagnosis of probable dengue fever. Dengue IgG and dengue PCR were negative; IgM for West Nile virus was weakly positive. There was no history of international travel to dengue fever endemic areas or of blood transfusion before the onset of illness. This isolated case is the first case of locally acquired dengue fever to be reported in Greece since an outbreak that occurred in the country between 1927 and 1928 (Note: an excellent article on the 1920s dengue epidemic in Athens, Greece has been published in Jan. 2012: [link to article](#)). ([Reference](#) & EpiSouth)

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### 5. Sept. 2012 - Thailand: Regarding the deaths of 2 tourists on Phi Phi Island in June 2012

On 15th Jun. 2012 two Canadian women, aged 20 and 25, from Quebec province, were found dead in their hotel room on Phi Phi Island in Krabi province. (ProMED-mail: 19th Jun. 2012: "Undiagnosed deaths - Thailand: Krabi") Initially poisoning (food, drugs etc.) was suspected. Now autopsy results indicate that the sisters had ingested a "cocktail" known throughout Thailand as "4x100", which probably also contained the insect repellent compound DEET. Although 4x100 is not considered lethal when made using the usual ingredients of kratom leaf extract, cough syrup, cola, and ice, the addition of DEET may have caused the tragic consequences. ([Reference](#))

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### 3. Sep. 2012 - Brazil: Outbreak of food-borne Chagas disease



A foodborne outbreak of Chagas disease (South American trypanosomiasis) has been reported from Abaetetuba municipality, North-Eastern Para State, Brazil. 35 cases have been registered and the source of infection is most likely the consumption of food/beverages made from "Acai" (a palm, cultivated for fruit, juice and hearts of palm).

[Note: Oral transmission of Chagas became recognized after an outbreak in Santa Catarina (Southern Brazil) in 2005. Since 2005, several food-borne outbreaks have been reported and oral transmission is probably playing an important role in maintaining the human reservoir as source of infection. Review: Oral transmission of Chagas disease. Clin Infect Dis. 2012  
[Link](#)([Reference](#))

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### **31. Aug. 2012 - USA: Hantavirus infections in Yosemite National Park**

The California Department of Public Health has confirmed 6 cases of hantavirus infections (hantavirus pulmonary syndrome (HPS) / hantavirus cardiopulmonary syndrome (HCPS)) in tourists visiting Yosemite National Park. Five of the six cases were individuals who stayed in Signature Tent Cabins in Curry Village. Hantaviruses are found in the droppings, urine, and saliva of rodents. In California, the deer mouse (*Peromyscus maniculatus*) is the only carrier of hantavirus, and statewide approximately 14% of mice carry the virus. Most infections are caused by breathing small particles of mouse droppings or urine that have been stirred up in the air. The illness starts one to six weeks after exposure with fever, headache, muscle ache, and progresses rapidly to severe difficulty in breathing (ARDS). 36% of all reported cases have resulted in death. Since the discovery of hantavirus pulmonary syndrome in the Four Corners region of the western United State in 1993, approximately 587 cases have been reported nationwide. Various New World hantaviruses can cause HPS in the Americas: from Canada to Patagonia: [map](#). In the USA and Canada, the *Sin Nombre* hantavirus is responsible for the majority of cases. (see posting from 17. Apr. 2012 below)([Reference](#))

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### **30. Aug. 2012 - Serbia: First cases of West Nile fever reported**

The first laboratory confirmed human cases of West Nile fever (WNF) have been reported from Serbia this month. These are the first human cases of WNF in Serbia ever. In 2009-2010, a seroprevalence survey among horses in Serbia showed an 8% seropositivity. (Reference: EpiSouth weekly Bulletin) ([ECDC WNF maps](#))

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### **30. Aug. 2012 - Romania: Crimean-Congo haemorrhagic fever virus endemicity**



A recently published study (2012) reports for the first time evidence for the circulation of Crimean-Congo Haemorrhagic Fever Virus (CCHF) in Romania. The study took place in the

district of Tulcea, Northern Dobrogea and shows that 28% of sheep were IgG positive for CCHF virus. The infection among animals is asymptomatic. The reservoir and vector of the virus, the tick *Hyalomma marginatum*, is present in Romania. Although in humans, infection with Crimean-Congo Haemorrhagic Fever virus is usually pauci-asymptomatic, it can lead to a haemorrhagic viral fever, and might be associated with secondary nosocomial transmission. Human cases of CCHF (seropositive cases and clinical cases) are regularly reported in Romania's neighbouring countries and from almost all countries around the Black Sea. Recent cases of CCHF in Kosovo were reported in August 2012. The recent discovery of a seroprevalence in animals in Romania indicates the extension of the circulation zone of CCHF in Europe. (Reference: EpiSouth weekly Bulletin)

Note: As the virus was also identified in ticks in Spain last year (see posting from 28. Oct. 2011 below) the virus has probably a wider distribution within Europe than currently known. ([map of CCHF endemicity](#))

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#### **29. Aug. 2012 - Switzerland ex USA: Fatal human case of bat rabies**

Rabies was diagnosed in a US citizen who was transferred to Switzerland on 29. Jul. 2012 after a progressive course of neurological disease with unknown etiology in the United Arab Emirates. Clinical symptoms started on 5. Jul. 2012. Analgosedation was applied on 8. Jul. 2012 and the patient died on 31. Jul. 2012. The first indication for rabies was a high titer of rabies antibodies measured by rapid fluorescent focus inhibition test (RFFIT) on 8. Aug. 2012. The diagnosis was confirmed by fluorescence antibody testing (FAT) in brain smears. Phylogenetic analysis by molecular methods point to an unrecognized exposure to a bat in the USA (American bat rabies strain associated with the insectivorous bat *Tadarida brasiliensis*) as the probable source of infection.

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#### **24. Aug. 2012 - Tioman Island, Malaysia: Human muscular sarcocystis infections**

In 2011 GeoSentinel reported 23 cases of muscular sarcocystosis in travelers returning from Tioman Island off the east coast of Peninsular Malaysia. The patients were seen at 9 different clinics in 6 European countries after returning from vacation on Tioman Island between June and August 2011. The patients presented with fever, myalgia or musculoskeletal complaints, elevated serum creatinine phosphokinase (CPK), and marked blood eosinophilia (eosinophilia & elevations of CPK typically occurred ~40 days post-departure).

In the last weeks similar travel-related cases have again been reported from travel clinics in Paris and Geneva in travelers who visited Tioman Island in early June 2012.

Background:

Two forms of sarcocystis infections occur in humans: *intestinal sarcocystosis* and *muscular sarcocystosis*. The protozoa *sarcocystis hominis* naturally infects the human intestinal tract (intestinal sarcocystosis), and secreted oocysts are ingested by predominantly porcine and

bovine intermediate hosts. In the intermediate hosts cysts develop in muscle, and the lifecycle is completed by human ingestion of undercooked pork or beef. In the reported cases of muscular sarcocystosis humans become accidental intermediate hosts for zoonotic sarcocystis species (more than 100 species with a wide range of intermediate and definitive hosts have been described) by ingesting fecally-contaminated material. (Reference: GeoSentinel) (for more info on sarcocystis click [here](#))

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## **22. Aug. 2012 - Germany: First human usutu virus infection detected**

After the detection of the tropical usutu virus in bird populations in Germany in 2011 and 2012 (see posting from 26. July 2012 below) the first case of a human infection has now been traced in a German blood donor, when a total of 4200 blood samples were analyzed for antibodies. Outside Africa, the virus was reported in Europe for the first time in 2001 when it occurred in and around Vienna, Austria causing death in several bird species. The virus is transmitted between birds and to humans by mosquitoes (*Culex pipiens*). The affected blood donor from Gross-Gerau (Hesse) claims to have experienced no symptoms of illness. The infection might be asymptomatic in most cases or present with fever, headache and rash. In some cases encephalitis might occur, as reported in 2 immunocompromised patients in Italy in 2009 [both survived, but one had severe sequelae]. ([Reference](#))

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## **21. Aug. 2012 - Congo DRC: Update on ebola outbreak**

A total of 15 (13 probable and 2 confirmed) cases with 10 deaths have been reported in the Eastern Province of Orientale in the Democratic Republic of Congo (DRC). The reported cases and deaths have occurred in 3 health zones: 12 cases and 8 deaths in Isiro, including 3 health care workers who have died; 2 cases and one death in Pawa; and one fatal case in Dungu. The new outbreak comes just after an Ebola epidemic in Uganda was declared to be over. The Ugandan outbreak killed 16 people in July. The two epidemics are not believed to be linked, since the virus strain found in the DRC outbreak is different from the one identified in Uganda outbreak (see posting from 18. Aug. 2012 below). Congo's last major Ebola epidemic in 1995 killed 245 people. Recent Ebola outbreaks were recorded in Uganda, when 37 people were killed in the western part of the country in 2007, and when at least 170 died in the nation's northern region in 2000. ([Reference](#))

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## **18. Aug. 2012 - Congo DRC: Ebola outbreak**

On 17. Aug. 2012, the Ministry of Health of the Democratic Republic of Congo (DRC) notified the World Health Organization of an outbreak of Ebola hemorrhagic fever in the Isiro and Dungu Health Zones of the Province Orientale in Eastern DRC. A total of 10 suspected cases (9

in Isiro and 1 in Dungu) and 6 deaths (5 deaths in Isiro and 1 in Dungu) have been reported. Laboratory investigations conducted at the Uganda Virus Research Institute in Entebbe, Uganda, confirmed "Bundibugyo virus" (BDBV)(formerly "Budibugyo Ebola virus") in three samples taken from two patients. The Ebola virus strain responsible for the recent outbreak in Uganda (see posting from 29. July 2012 below) has been identified as "Sudan virus" (SUDV)(formerly "Sudan Ebola Virus"). Due to the different virus strains the two outbreaks are considered to be two independent events. ([Reference](#))



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#### 17. Aug. 2012 - France ex Cameroon: NDM-4 producing bacteria in a patient from Cameroon

According to a recent publication in "Emerging Infectious Diseases" a man from Cameroon may represent the first reported African case of infection with bacteria carrying New Delhi metallo-beta-lactamase-4 resistance (NDM-4). The publication describes the case of a man with Hodgkin lymphoma who was treated with chemotherapy 1 year before his current 1-month hospitalization in Cameroon for an inflammatory disorder with kidney failure. After transfer to a hospital in France, a rectal swab revealed NDM-4 *Escherichia coli*. The strain was resistant to all beta-lactam antimicrobial drugs, including imipenem, meropenem, ertapenem, and doripenem, and to fluoroquinolones. It was also resistant to all aminoglycosides except amikacin.

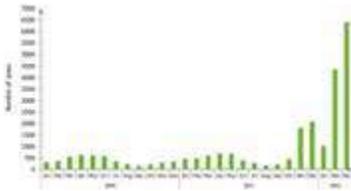
([Reference](#))

**Background:** Infections with New Delhi metallo-beta-lactamase-1-producing (NDM-1) bacteria were first described in 2010 in India. Since then, NDM-2, NDM-4, and NDM-5 variants have been identified, with NDM-4 having a higher carbapenemase activity than NDM-1. Global spread of NDM-carrying bacteria is an emerging public health problem all over the world. See posting from 23. June 2012 ("NDM-1-producing bacteria: update on imported cases 2012") below for more info on the topic.

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#### 8. Aug. 2012 - Europe: Update on rubella in Europe & ongoing outbreak in Sweden

From 1 January to 31 May 2012, 16.729 cases of rubella were reported to ECDC by the 25 contributing EU and EEA countries. Poland and Romania accounted for 99% of the number of cases during the past 12-month period. ([view figure](#))



**Sweden:** An outbreak of rubella in Järna has spread and there are now 47 reported cases of rubella in Stockholm County, all linked to the area in Södertälje. It is the highest number since 1996. Women in the early stage of their pregnancy are advised to contact the antenatal clinic to check their immunity to rubella. Järna is the centre for the anthroposophic community in Sweden with known opposition to vaccination. According to the county medical officer there is a possibility of a large number of unreported cases as there is a wish in the community to contract the disease in order to develop immunity. ([Reference](#))

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#### **8. Aug. 2012 - Bangkok, Thailand: Rabies in a pet rabbit**

An unusual case of rabies in a pet rabbit purchased at a Sunday market in Bangkok has been reported. The rabbit became symptomatic about 7 months after being bought at the market. The source of infection is unknown, but as rats are frequently observed around the market this putative source of infection has been discussed (Note: rat rabies is a rare finding: among the tens of thousand tested animals the Queen Saovabha Institute (Thai Red Cross Society), the referral laboratory for rabies in Thailand, has only observed one other case some 10 years ago (a pet rabbit was observed having been attacked by a rat and later died of laboratory proven rabies). Alternatively the infection might have been transmitted via a dog or a cat. ([Reference](#))

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#### **2. Aug. 2012 - Pakistan: Free-living amoebic encephalitis (*Naegleria fowleri*)**

The Pakistani Health Department confirmed 5 fatal cases of Primary Amebic Meningoencephalitis (PAM) observed in Karachi within the recent months, while reports from different hospitals put the figure at around 10 since January 2012. Insufficient chlorination in the public water pipeline system is considered to be a possible cause. Even though considered to have worldwide distribution, Primary Amebic Meningoencephalitis (PAM) caused by the free-living amoeba *Naegleria fowleri* is only rarely diagnosed and reported (most cases are reported from the Southern United States: approx. 3 cases per year). The amoeba is commonly found in warm freshwater (lakes, rivers, hot springs) and soil. The parasite infects people by entering the body through the nose. This typically occurs when people go swimming or diving in warm freshwater. In very rare instances, infections may also occur when contaminated water from other sources (such as inadequately chlorinated swimming pool water or heated tap water <47°C) enters the nose. Even though several drugs are considered to be active against the parasite the effectiveness of treatment remains unclear, the rapid course

of disease is almost always fatal and the diagnosis is mostly only made post mortem. ([Lifecycle](#)). ([Reference](#))

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### 1. August 2012 - Bhutan: First confirmed case of Chikungunya

The first laboratory confirmed case of Chikungunya has been reported from Bhutan this week. (Note: neighbouring India has seen several large outbreaks of Chikungunya in the last years and several thousand cases have been reported this year already) ([Reference](#))

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### 29. July 2012 - Uganda: Ebola outbreak



After weeks of speculations on the cause of a strange disease that has been observed in Kibale district in midwestern Uganda ([map](#)) it has now been confirmed, that Ebola viral hemorrhagic fever has killed 14 people (20 reported cases) in the last month.

[Even though hemorrhagic manifestations were not reported in this outbreak, Ebola has already been suspected: "The undiagnosed disease is characterised by high fever, vomiting, diarrhea and systems failure. It kills patients within 4 days to a week, and appears to be easily transmissible to carers. Haemorrhage is not mentioned as a significant feature which excludes some filovirus haemorrhagic fevers such as Ebola and Marburg. However, the signs and symptoms are compatible with an outbreak of Bundibugyo haemorrhagic fever, a filovirus haemorrhagic fever first identified in the Bundibugyo district of Western Uganda. Bundibugyo District is located in western Uganda, which borders the Democratic Republic of Congo. After reports of a mysterious illness in Bundibugyo District, the presence of a novel 5th filovirus species, Bundibugyo ebolavirus (BEBOV), was identified in diagnostic samples in 2007." ([Reference](#) & ProMED-Mail)

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### **27. July 2012 - South Africa: Histoplasmosis cluster in cavers**

A 28-year-old man from Pretoria developed an influenza-like illness with abrupt onset on 25 May 2012. His symptoms included backache, fever and rigors. He was admitted to a private hospital in Pretoria 5 days later with progressively worsening dyspnoea, a non-productive cough, and pleuritic chest pain. Together with 8 other persons, the index patient had gone on an expedition to the Sterkfontein cave complex on 11 May 2012 (exactly 2 weeks prior to the onset of his symptoms) for approximately 5 hours. Four other members of the group also developed an acute influenza-like illness approximately 2 weeks after the expedition; one other person was admitted to the same private hospital with a diagnosis of acute community-acquired pneumonia. The 2 hospitalised patients were treated empirically for an acute community-acquired pneumonia, and the attending clinician elected to add intravenous liposomal amphotericin B once histoplasmosis was deemed a possible diagnosis. The 3 other patients were treated with oral itraconazole as outpatients. Urine specimens from the hospitalised patients were sent for *Histoplasma capsulatum* antigen testing; however, the investigational assays were negative for both patients. Despite the absence of laboratory confirmation of *H. capsulatum* in this cluster of cases, acute pulmonary histoplasmosis remains the most likely diagnosis given the common exposure history and compatible clinical features. (Reference: ProMED-Mail) (Note: see below our posting on Histoplasmosis in cavers from 8th Sep. 2011)

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### **27. July 2012 - Vietnam: Rabies outbreak**

The northern mountainous provinces of Son La, Lai Chau, Dien Bien, Lao Cai, and Yen Bai ([↗ map](#)) have reported an outbreak of rabies. 16 of the reported 200 people who were bitten by dogs this month died of rabies. ([↗ Reference](#))

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### **26. July 2012 - Germany: Usutu virus found in bird population**

In June 2012 an unusual high number of dead birds was reported in some regions of Germany, especially in Baden-Wuerttemberg and Rhineland-Palatinate region: 223 birds from 19 species were examined. Of these, 86 (including 72 blackbirds) were infected with Usutu virus. Last summer the death of hundreds of thousands of blackbirds has been attributed to this virus in Rhineland-Palatinate, Hesse and Baden-Wuerttemberg. Usutu virus (a flavivirus endemic in Africa) was now isolated from a dead blackbird in North Rhine-Westphalia again. Usutu virus has been found in Germany as early as 2010; the disease is carried by mosquitoes (*Culex pipiens*) and can be transmitted to humans (causing encephalitis). In 2009, 2 immunocompromised patients in Italy were infected by the virus [both survived, but one had severe sequelae]. Outside Africa, the virus was reported for the first time in 2001 when it occurred in and around Vienna, Austria causing death in several bird species. ([↗ Reference](#) & ProMED-Mail)

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**19. July 2012 - Flores, Indonesia: Rabies outbreak ongoing**

Rabies continues to threaten Flores Island in East Nusa Tenggara ([map](#)). Since 1997, 205 people have died from rabies in Flores, according to a report from the Sikka health agency. 2 people died from rabies in the first 6 months of 2012, while there were 1032 cases of dog bites in the same period. In 2011 2866 cases of dog bites were reported in Flores. Before the current rabies outbreak, there were an estimated 600.000 to 800.000 dogs on the island. To control the rabies outbreak 80% of the dog population has been killed over the years and a vaccination program was launched. In 2002 only 5314 dogs remained, of whom only ~40% were vaccinated, not even close to the 70% vaccination rate needed to stop an epidemic and less than half of the 85% rate that the World Health Organization recommends as the goal of vaccination campaigns to contain an epidemic. ([Reference](#) & ProMed-Mail)

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**17. July 2012 - Thailand: Update on leptospirosis outbreak**

The currently ongoing leptospirosis outbreak in the lower northeastern region of Thailand (provinces: Nakhon Ratchasima, Chaiyaphum, Buri Ram, Surin and Si Sa Ket) appears to affect more patients than previously reported (see posting from July 1st below): according to the latest report 567 people have been admitted to hospital with leptospirosis (including 9 fatal cases). ([Reference](#))

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**15. July 2012 - China: Hand, foot & mouth disease**

In June 34.768 cases (including 17 fatal cases) of hand, foot & mouth disease (HFMD) were reported from Hunan province ([map](#)) (in April this year 19 children died from HFMD in Hunan province). See posting from 1. July below on the current situation of HFMD in Asia and beyond. ([Reference](#))

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**13. July 2012 - Cambodia: Cluster of fatal HFMD in children due to Enterovirus EV-71**

On June 4th Cambodian authorities reported a cluster of 59 cases (including 51 fatal cases!) with a febrile neuro-respiratory syndrome to the WHO. The investigation into the illnesses and deaths, which mainly affected very young children (most below 3 years, all below 12 years), is finished now and concludes that a severe form of hand, foot & mouth disease (HFMD) caused by Enterovirus EV-71 was the cause in the majority of cases. See postings from 1. July below (and 15. July above) on the current situation of HFMD in Asia. ([Reference](#))

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#### 6. July 2012 - New Zealand: Pertussis update

The pertussis outbreak that was first detected on the West Coast in May 2011 is now being experienced in other areas of the country, including in Canterbury, Nelson-Marlborough, and parts of the North Island. The number of new cases on the West Coast has decreased from the peak in 2011 but is still higher than normal levels. Between 1 May 2011 and 22 Jun 2012, there have been 497 notifications of suspected pertussis received by Community & Public Health's West Coast Office. To date, 328 people have been confirmed as having the disease. The difference between the number of notifications and the numbers of confirmed cases indicates that general practices are being vigilant when patients present with a cough of more than 2 weeks' duration. Children under the age of 10 years continue to have the highest rates of the disease. ([Reference](#))

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#### 6. July 2012 - Cuba: Cholera outbreak

A cholera outbreak in Cuba has left at least 15 dead and sent hundreds to hospitals. The epicentre of the outbreak is Manzanillo in the South-Eastern province of Granma ([map](#)). This is the first reported cholera outbreak since soon after the 1959 revolution. The last cholera epidemic in Cuba ended in 1882. ([Reference](#))

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#### 4. July 2012 - Spain: Legionellosis outbreak

An outbreak of legionellosis has been reported from Spain. Of the 12 confirmed and 13 possible cases of legionellosis, there are 18 men and 7 women who range in age from 35 to 87. Epidemiological studies have shown that the patients had visited the same restaurant in an industrial area of Mostoles a town 18km South West of Madrid. ([Reference](#))

**Note:** Between November 2011 and July 2012, 39 cases of Legionnaires' disease, including 6 deaths, have been reported in relation with a hotel in Calpe, Spain. 35 of the cases are travel-associated and 4 cases are among hotel staff. All 35 travellers (16 residents from the U.K., 10 from Spain, 2 from France and 7 from Belgium) stayed at the same hotel between 25 November 2011 (first arrival) and 29 June 2012 (last departure). The hotel is currently closed, extensive investigations are ongoing and the ECDC has deployed a mission related to the outbreak investigation. ([Reference](#))

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### 1. July 2012 - Thailand: Leptospirosis outbreak

A leptospirosis outbreak is currently affecting the lower Northeast of Thailand with 220 reported cases (9 fatal cases) so far. The affected provinces are: Surin (95 cases, 5 deaths), Nakhon Ratchasima (45 cases, 4 deaths), Buri Ram (68 cases), and Chaiyaphum (12 cases). The number of Leptospirosis cases this year is estimated to be 20% higher than last year.

([↗ Reference](#))

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### 1. July 2012 - Worldwide: Hand, foot & mouth disease on the rise

#### *United States:*

areas in Utah are seeing one of the biggest outbreaks of Hand, foot & mouth disease (HFMD), a contagious children's disease ever seen in this region. ([↗ Reference](#))

#### *Vietnam:*

The HFMD pandemic in the Mekong Delta continues. Since March 2012 HFMD has claimed the lives of 7 children in An Giang Province and 1300 infectious cases have been reported far, ten times higher than in the first 3 months of the year. Health authorities have expressed serious concerns over the development of the disease as patients continue to increase by almost 50 cases per day. Most affected cases are children under the age of 5 and who are usually staying at home these days because of summer vacations. ([↗ Reference](#))

#### *Malaysia:*

KUCHING: The number of HFMD cases have been on an increasing trend this week. A total of 341 new cases were reported from Sunday to Thursday (June 24th to 28th). The divisions with the highest number of new cases were Kuching, Samarahan, Miri, Sarikei and Mukah. During the week, an increasing number of cases were noted in Sarikei, Mukah, Bintulu, and Limbang. As of Thursday, the cumulative number of cases stood at 8611. This week, 31 clusters were reported involving 25 family clusters, 3 preschools, 2 primary schools and one childcare centre. 9 closure orders were served to preschools in Serian, Limbang, Sarikei, Miri, Dalat and Kota Samarahan. ([↗ Reference](#))

*Thailand:* (see posting 13. June 2012 below)

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## 28. June 2012 - Greece: update on autochthonous malaria situation

In 2012, three cases of *Plasmodium vivax* infection have so far been reported from Greece: The first case had onset of disease in early April 2012; this case is hypothesised to be a late clinical manifestation of an infection acquired in the 2011 transmission season. The second case is an adult citizen of Afghanistan with onset of diseases in March 2012; this case had a reported history of malaria infection four years ago and is therefore hypothesised to be a relapse of an existing infection, not acquired in Greece. On 22 June, Greece reported a third case, a 78 year old Greek resident who does not have a history of travel to endemic areas in the past five years. He is a resident of a suburb of Athens, but has a summer house in Marathon, Attiki region, where he is considered to have been infected. Onset of symptoms was around 7 June. Laboratory investigation revealed *Plasmodium vivax*, confirmed by molecular biology (PCR). The Marathon area is a historical place of malaria transmission, combining humid zones and intensive agricultural activities. Climatic conditions are now considered favourable for local vector development. In 2011, an autochthonous case occurred in a nearby location.

### Background:

Autochthonous transmission of malaria was reported in 2011: between 21 May and 9 December 2011, 63 cases of *Plasmodium vivax* infection were reported in Greece, of whom 33 were Greek citizens without travel history to an endemic country. The main affected area was Evrotas, located in the district of Lakonia in Peloponnese, southern Greece. Cases were also reported from the municipalities of Attiki, Evoia, Viotia and Larissa. In addition, 30 cases of *P. vivax* infection in migrant workers were reported from the area of Evrotas. ([Reference](#))

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## 28. June 2012 - Romania: Outbreak of aseptic meningitis linked to coxsackie B2

On June 16th 2012, the Romanian Ministry of Health reported an outbreak of aseptic meningitis linked to a kindergarten in Suceava city, Suceava county in the northern part of the country. 28 cases were linked with the kindergarten: 18 primary cases and 10 secondary cases (household members or neighbourhood contacts). 14 additional cases have been identified in the city with no epidemiological link to the kindergarten. Since then, media have reported additional cases with a total of 110 reported cases by 28 June. Cases are now not necessarily linked to the kindergarten. Media have also quoted local officials saying that microbiological investigations identified Coxsackie B2 virus as the causative agent. Investigations are ongoing. ([Reference](#))

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## 25. June 2012 - ECDC, Europe: West Nile fever map 2012 launched

In 2011 the ECDC monitored the West Nile fever (WNF) situation during the transmission season (June to November) in the EU Member States and neighbouring countries: 130 probable and confirmed autochthonous cases were detected in the EU and 207 in neighbouring countries. The cases reported in the EU included 69 confirmed and 31 probable cases from Greece, 14

confirmed and two probable cases from Italy, 10 confirmed cases and one probable case from Romania and 3 confirmed cases from Hungary. In the neighbouring countries, cases have been notified in Albania, the former Yugoslav Republic of Macedonia, Israel, the Russian Federation, Tunisia, Turkey and Ukraine. So far no WNF cases have been reported in 2012. As the WNF transmission season is close ahead, the ECDC launched the 2012 weekly updated [WNF-map on the ECDC-website](#) today.

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### **25. June 2012 - India: Hepatitis E outbreak**

Officials in Maharashtra, the western Indian state located 300 kilometers south of Mumbai, suspect that contaminated water from the Panchganga river is responsible for a recent hepatitis E outbreak in Ichalkaranji. Eighteen people from Ichalkaranji and the city's surrounding area have died from the infection over the past month, with another 4,000 remaining ill. ([Reference](#))

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### **23. June 2012 - NDM-1-producing bacteria: update on imported cases 2012**

In the recent years the number of reports on New Delhi metallo-beta-lactamase (NDM) type carbapenemase producing bacteria isolated from patients returning from high-prevalence countries increased. In 2012 this trend continues:

21 Jun 2012 NDM-1 carrying Enterobacteriaceae - [USA ex Viet Nam](#)

12 Jun 2012 NDM-1 carrying Enterobacteriaceae - [China ex Thailand](#)

17 Feb 2012 NDM-1 carrying Acinetobacter - [Czech Republic ex Egypt](#) (see posting from 17. Feb. 2012 below)

17 Feb 2012 NDM-1 carrying Enterobacteriaceae - [Ireland ex India](#) (see posting from 17. Feb. 2012 below)

**Background:** Carbapenems are the preferred treatment for severe infections caused by multidrug-resistant Gram-negative bacteria producing an extended-spectrum beta-lactamase (ESBL). Therefore the increasing and rapid spread of mobile genetic elements that determine acquired resistance to carbapenems and all other beta-lactams in Enterobacteriaceae is of great concern. In 2008, the first case of a novel carbapenemase "New Delhi metallo-beta-lactamase 1" (NDM-1) has been recognised in a Swedish patient who was repatriated to Sweden from the Indian subcontinent. Since this first report, cases involving New Delhi metallo-beta-lactamase (NDM)-producing Enterobacteriaceae have been reported from every continent except South America and Antarctica. NDM-1-producing isolates have been identified in patients in the U.K. who had a history of receiving healthcare in India and Pakistan and NDM-1-producing *E. coli* have been reported from rectal screens of neonates returning to France after having attended healthcare facilities in Egypt and India. In 2010, Canada and the USA detected cases in travelers

coming from India. In Europe: a total of 77 cases were reported from 13 countries from 2008 to 2010 ([Reference](#)). Although medical care in the Indian subcontinent was associated with many early reports, recent cases have been described involving persons who traveled to endemic regions but were not hospitalized. (The plasmid-carrying NDM is highly transmissible to other bacteria, and bacteria carrying NDM can colonize the gastrointestinal systems of humans for prolonged periods). If colonization or infection of returning travelers, medical tourists or repatriated patients is suspected isolation and early detection is the only way to prevent nosocomial spread.

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#### **14. June 2012 - Europe: Decreasing susceptibility & emerging drug resistance of gonorrhoea**

Results from the European gonococcal antimicrobial surveillance programme (Euro-GASP) show that the percentage of isolates with decreased susceptibility to the recommended drug for treatment of gonorrhoea (cefixime) rose from 4% in 2009 to 9% in 2010. Decreased susceptibility was detected in 17 countries in 2010, seven more than in the previous year. At the same time, the susceptibility to the injectable drug ceftriaxone is decreasing as well [3]. The loss of both cefixime and ceftriaxone as treatment options for gonorrhoea would have a significant impact on public health: gonorrhoea is the second most commonly reported bacterial sexually transmitted infection (STI) in Europe and its effective control relies entirely on antimicrobial treatment. ([Reference](#))

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#### **13. June 2012 - Thailand: Hand-foot-mouth disease (HFMD) outbreak**

Since January this year, over 6000 cases of hand-foot-mouth Disease (HFMD) have been recorded in Thailand, 3 times more than recorded during the same period last year. According to the Thai Ministry of Public Health a total number of 6652 cases and no deaths were reported from 77 provinces between 1st Jan. 2012 and 5th Jun. 2012. The overall attack rate was 10.47 per 100 000 population. The highest attack rates were reported in the 5 provinces of Phayao (73.49), Surat Thani (50.09), Chiang Rai (39.83), Phuket (39.59) and Nan (35.53). The south region has the highest attack rate (per 100 000 population) of HFMD (18.72), followed by north (16.78), central (9.13) and northeastern (4.97) regions. ([Reference](#))

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## **12. June 2012 - Egypt: Tick paralysis, first record in Egypt**

Tick paralysis caused by the bite of certain ticks and the secretion of toxins with the tick saliva while taking a blood meal is an important veterinary disease, but rare in humans. Although it has certain geographical predilections, it exists worldwide. Tick paralysis is the most likely explanation for the symptoms of 4 children living in a rural area of Giza Governorate. The clinical pictures was confused with rabies, myasthenia gravis, botulism, and diphtheritic polyneuropathy. The recovery of ticks infesting the 4 children, the absent evidence of other diagnoses and the negative laboratory results of the respective differential diagnoses makes tick paralysis the most likely cause of the observed symptoms. The cases are the first suspected cases of tick paralysis in Egypt. (Reference via ProMED-mail: Mosabah AA, Morsy TA. Tick paralysis: first zoonosis record in Egypt. J Egypt Soc Parasitol. 2012; 42: 71-8.)

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## **11. June 2012 - Mauritius: 2 autochthonous malaria cases**

For the first time since 1997 two autochthonous cases of malaria (*P. vivax*) have been reported from Mauritius. The cases were recorded in the city of Quatre-Bornes (South-West of St. Louis). (Reference: BHI Nr. 350, 2012)

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## **10. June 2012 - Iran: Crimean-Congo haemorrhagic fever (CCHF)**

7 fatal cases of Crimean-Congo haemorrhagic fever (CCHF) have been reported from Iran. Most victims have been identified in the eastern provinces, but reports indicate that the disease is present in 27 of Iran's 31 provinces.

In 2011 Iranian health officials recorded a total of 87 cases (including 15 fatal cases). In 2010 154 cases were recorded (including 26 fatal cases). ([Reference](#)) (For more information on CCHF in the region see posting from 17. May 2012 - Turkey: Crimean Congo Hemorrhagic Fever (CCHF))

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## **9. June 2012 - Thailand: Leptospirosis outbreak in the lower Northeast**

A leptospirosis outbreak in the lower Northeast affected 184 people from January to June 2012, including 7 fatal cases. The most affected provinces were [Surin](#) (78 cases (4 fatal cases)), Buri Ram's (57 cases), Nakhon Ratchasima's (39 patients (3 fatal cases)), and Chaiyaphum's (10 cases). ([Reference](#))



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#### **9. June 2012 - Ghana: Cholera outbreak subsides**

Over 4.000 cases and 64 deaths have been recorded nationwide following the cholera outbreak that hit Ghana during the first quarter of 2012, according to available statistics. The Accra metropolis is said to be leading with 2.756 cases and 31 deaths. Currently health officials in Accra have announced a significant decline in the outbreak but say with the onset of the rains, there are fears of possible fresh outbreaks. ([Reference](#))

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#### **7. June 2012 - United Kingdom: Legionellosis outbreak**

Edinburgh is currently facing an outbreak of legionnaires' disease. The number of confirmed and suspected cases has risen to 40 in the last days. Of these, one person has died, 12 remain in intensive care, and 2 others have been discharged from hospital. The source of the outbreak is currently under investigation. ([Reference](#))

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#### **7. June 2012 - Canary Islands, Tenerife: Ciguatera food poisoning**

In May 2012 a family outbreak of ciguatera food poisoning, affecting 4 people, was detected in Tenerife, Canary Islands. The outbreak was caused by eating amberjack fish (*Seriola spp.*) bought in a local market. This is the third outbreak of ciguatera food poisoning in the Canary Islands in 2012. ([Reference](#))

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#### **4. June 2012 - Peru: Leptospirosis outbreak**

Flooding has caused an outbreak of leptospirosis in Peru, especially in the [Loreto region](#) (Iquitos). This is the worst flooding seen in this area for over 20 years. Peru has reported more than 300 cases and 3 deaths associated with leptospirosis thus far in 2012. ([Reference](#))



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## 2. June 2012 - United Kingdom: Cryptosporidiosis outbreak

267 cases of Cryptosporidiosis have been reported across four areas of England since May 11 (more than double the normal rate). The intestinal parasite *Cryptosporidium* is normally associated with contained swimming pools, contaminated drinking water supply or salad foods but no source has yet been identified in this outbreak. People in the North East, Yorkshire, West and East Midlands have been infected. ([Reference](#))



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## 25. May 2012 - France ex Sub-Saharan Africa: Invasive W135 meningococcal infections

From January to April 2012, 16 cases of W135 invasive meningococcal infection were reported in France. Of these, eight were linked to a recent travel history to Sub-Saharan Africa. These cases were reported in France concomitantly with the meningitis epidemic season in Sub-Saharan Africa. (Figure: Sub-Saharan "meningitis belt" ([Reference](#)))

[WHO surveillance data on meningococcal meningitis](#)

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## 25. May 2012 - Slovenia: Unusual high numbers of human hantavirus infections

Haemorrhagic fever with renal syndrome (HFRS) is endemic in parts of Slovenia. Since 1999, in January-April each year, the number of notified cases has generally been low ( $n=0-6$ ). A high number of cases ( $n=26$ ) in the 1st 4 months of 2012 has been observed, similar to that seen in the same period in 2008 ( $n=14$ ). Given the increase in the number of cases at the start of 2012, a high number of cases should be expected this year. Although HFRS patients have been found throughout the country, most of them have been reported in the endemic regions of Novo Mesto, Murska Sobota, and Ljubljana.

Dobrava and Puumala viruses have been shown to coexist in Slovenia. There are considerable differences in disease severity as well as mortality due to infection with these viruses: all fatal HFRS cases in Slovenia have been caused by Dobrava virus (case fatality rate 8.3%). Infection with Puumala virus usually results in a milder disease course. ([Reference](#))

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#### 25. May 2012 - Germany: Unusual high numbers of human hantavirus infections

From October 2011 to April 2012, 852 human hantavirus infections were notified in Germany, of which 580 (68%) were recorded in [Baden-Wuerttemberg](#), a known endemic region. Case numbers started to rise earlier than they did before during the previous outbreaks in 2007 and 2010, and are the largest ever reported in this state during October to April of any year. Puumala virus is the predominant human pathogenic hantavirus species in western, central, and northern Europe. It is transmitted to humans by exposure to excreta of its rodent reservoir, bank voles (*Myodes glareolus*). The causes for the early increase of case numbers remain unclear. The early rise could be due to a beech mast year in 2011, followed by an early and massive reproduction of the reservoir bank vole populations during winter 2011 and spring 2012. ([Reference](#))

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#### 25. May 2012 - Peru: Human cases of vampire bat rabies



The Peruvian Ministry of Health reports the death of 7 Machiguengas [indigenous] children from Camana (La Convencion province, Cusco region) due to bat rabies. Cases of vampire bat rabies are regularly reported from the Americas, with most cases being recorded in Ecuador and Peru. The responsible "Common Vampire Bat" (*Desmodus rotundus* [geographic distribution see map]) is found in parts of Mexico, Central America and South America. As the indigenous population is often relying on traditional healers and not reporting to institutions of the national health system no data on the exact number of cases are available. A high number of unregistered cases is suspected. For travelers sleeping outside in endemic regions a mosquito net is highly recommended for protection. ([Reference](#))

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## 25. May 2012 - WHO: Global influenza update

### Summary:

- The 2011-2012 influenza season is coming to an end in most northern temperate regions of the world. Countries in the southern hemisphere temperate zone are still at low or inter-seasonal levels, though some very small increases in detections have been reported in Chile. Some activity persists in sub-Saharan Africa.
- Throughout the 2011-12 influenza season, different viruses have predominated in different parts of the world in the northern hemisphere. In North America, Canada had a slight predominance nationally of influenza B over influenza A(H3N2) (67 percent vs. 33 percent respectively) particularly later in the season but the distribution was not uniform across the country. In the United States of America (USA), the proportions were reversed, and A(H3N2) was more common. The season in Mexico was dominated by influenza A(H1N1)pdm09. In Europe, the large majority of influenza viruses have been influenza A(H3N2) with only very small numbers of A(H1N1)pdm09 and B. In Asia, northern China and Mongolia reported mostly influenza B early in the season with influenza A(H3N2) appearing later, and this sequence was reversed in the Republic of Korea and Japan where, A(H3N2) was predominant in the beginning and type B appeared later.
- Early in the season, most viruses tested were antigenically related to those found in the current trivalent seasonal vaccine. However, by mid-season, divergence was noted in both the USA and Europe in the A(H3N2) viruses tested. Significant numbers of A(H3N2) viruses tested in recent months have shown reduced cross reactivity with the 2011-12 vaccine virus. Influenza type B virus detections have been both from the Victoria and Yamagata lineages with the former slightly more common in China and parts of Europe.
- Resistance to neuraminidase inhibitors has been low or undetectable throughout the season; however, a slight increase in levels of resistance to oseltamivir has been reported in influenza A(H1N1)pdm09 isolates in the USA. Most (11/16) of these oseltamivir resistant cases have been from the state of Texas, where influenza A(H1N1)pdm09 has been the most common virus circulating.

([↗ Reference](#))

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## 24. May 2012 - U.K. ex South Asia: Human rabies

A case of human rabies has been reported from London's Hospital for Tropical Diseases: the patient had returned from South Asia where he acquired the fatal infection by a dog bite. More than 55.000 people are estimated to die from rabies each year, with most cases occurring in South and South-East Asia. Four cases of human rabies (all acquired abroad through dogs bites) have been recorded in the UK since 2000. ([↗ Reference](#))

This is the third case of human rabies imported to Europe in 2012. See respective postings below (16. April 2012 - Toronto, Canada ex Dominican Republic: Human rabies & 6. Feb. 2012 - Italy ex India: Human rabies)

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### 17. May 2012 - Turkey: Crimean Congo Hemorrhagic Fever (CCHF)



5 fatal cases of Crimean Congo Hemorrhagic Fever (CCHF) have been reported from the Black Sea region of Turkey (3 residents of Kastamonu province in northern Turkey, 1 shepherd from Tokat district in Tokat province, and 1 farmer from Corum province). CCHF spreads to humans either by tick-bites, or through contact with viraemic animal tissues during and immediately post-slaughter. CCHF outbreaks constitute a threat to public health services because of its epidemic potential, its high case fatality ratio (10-40%), its potential for nosocomial outbreaks and the difficulties in treatment and prevention. CCHF is endemic in all of Africa, the Balkans, the Middle East and in Asia south of the 50° parallel north, the geographic limit of the genus *Hyalomma*, the principal tick vector. ([Reference](#)) ([View map](#))

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### 12. May 2012 - East Africa: Evidence of evolving Artemisinin resistance

The genetic characterisation of *P. falciparum* parasites (isolated from ill returning travellers) indicates the presence of mutations responsible for emerging Artemisinin drug resistance in the East African region: ["Artemether resistance in vitro is linked to mutations in PfATP6 that also interact with mutations in PfMDR1 in travellers returning with Plasmodium falciparum infections"](#) ([Reference](#))

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### 12. May - Pakistan: Crimean Congo Hemorrhagic Fever (CCHF) outbreak

There has been an outbreak of 8 cases of Crimean Congo Hemorrhagic Fever (CCHF) in Pakistan including 3 deaths (timeframe: 5 - 28th Apr 2012). While the 8 confirmed cases have been identified in all 4 provinces of Pakistan and Afghanistan, they are all linked to Balochistan, a known endemic focus of CCHF. ([Reference](#))

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### 9. May 2012 - Solomons islands: Rubella outbreak

Travellers to the Solomon Islands and those planning to attend the upcoming Festival of Pacific Arts in Solomon Islands in July are being urged to vaccinate against rubella, also known as German measles. ([↗ Reference](#))

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## **2. May 2012 - United Kingdom: Ongoing measles outbreak**

The largest measles outbreak on Merseyside since MMR vaccine was introduced in 1988 is continuing. 210 laboratory confirmed cases have been recorded until 1st May. A further 92 probable cases are under investigation. The majority of the confirmed cases are in Liverpool (125) and neighbouring areas of Knowsley (29) and Sefton (22). ([↗ Reference](#))

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## **1. May 2012 - Haiti: Cholera cases increase due to rainy season**

The number of cholera cases has tripled in the cholera treatment centres of Doctors Without Borders/Médecins Sans Frontières (MSF) in Port au Prince and Leogane in less than a month (134 cases in the town of Martissant and nearly 400 in total in the different cholera treatment centres of MSF in Port-au-Prince and Leogane). The arrival of the rainy season facilitates the spread of the disease.

Since the epidemic began in October 2010, cholera has killed more than 7.000 people in Haiti (out of approximately 500.000 cases recorded, a number that represents approximately 5 percent of the population). ([↗ Reference](#))

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## **24. April 2012 - Vietnam: Rabies update**

According to a report by the Ministry of Health, at least 13 people have died of rabies in the northern provinces of Dien Bien, Yen Bai, Ha Giang, Tuyen Quang, Phu Tho, Son La, and the central province of Nghe An since the beginning of the year 2012. ([↗ Reference](#))

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## **22. April 2012 - Bolivia, Beni province: Machupo (Bolivian hemorrhagic fever) update**

So far this year [2012] 50 suspected cases (including 3 fatal cases) of Bolivian hemorrhagic fever (Machupo) have been reported from Beni departement. This appears to be a continuation of the outbreak in the region that began at the end of November 2011. Beni department is a known endemic region of Bolivian hemorrhagic fever. ([↗ Reference](#)) (see below posting 29. Jan. 2012).

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## 21. April 2012 - Minnesota, USA: Cryptosporidiosis outbreak at water park

Water Park in Duluth, Minnesota: 97 cases (22 laboratory confirmed) of cryptosporidiosis have been reported during last month's outbreak at Edgewater Resort and Water Park in Duluth. The investigation of the outbreak is still in progress. The contaminated pools have been closed. Another unrelated cryptosporidiosis outbreak in Brainerd [Minnesota] last month resulted in 36 reported cases (1 laboratory confirmed). The symptoms of cryptosporidiosis include stomach cramps, fevers and diarrhea. It can be contracted by swimming in infected water, contact with animals or even drinking raw unpasteurized milk. ([Reference](#))

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## 17. April 2012 - USA & Chile: Hanta pulmonary syndrome (HPS) update

USA:

Up to date 3 confirmed cases of hantavirus pulmonary syndrome (HPS) have been reported from Colorado (1) and Montana (2) this year. Cases of HPS occur sporadically, usually in rural areas where forests, fields, and farms offer suitable habitat for the virus's rodent hosts. Hantavirus cases often increase as people begin to clean their garages and sheds in the warmer spring weather: cleaning measures can expose humans to aerosol inhalation of virus-contaminated dried saliva, urine, or droppings from infected deer mice [*Peromyscus maniculatus*]. The illness usually starts with flu-like symptoms, including fever, sore muscles, and headaches. It progresses to a severe shortness of breath. In the USA and Canada, the *Sin Nombre* hantavirus is responsible for the majority of cases of HPS. The deer mouse (*Peromyscus maniculatus*) is present throughout the western and central US and Canada. In total 35 confirmed HPS cases have been reported from Montana since 1993; Montana typically sees 1 to 2 cases a year. ([Reference](#))

Chile:

Up to date 4 cases of hantavirus infections have been reported in the Los Rios region during this summer season [2012] and during March. These include a 5-year-old girl in the Lanco community, a 48-year-old man in the Valdivia coastal area, and 2 people from Santiago who were vacationing in the Panguipulli community in February. (In Chile and Argentina the *Andes virus* is responsible for HPS. *Oligoryzomys* is the predominant rodent carrier).([Reference](#))

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## 16. April 2012 - Toronto, Canada ex Dominican Republic: Human rabies

A Toronto man is being treated as the 1st case of rabies in a human in the city in more than 80 years. The 41-year-old man had been working as a bartender in the Dominican Republic for 4 months. He had already reported symptoms at the end of last month in the Dominican Republic where he was seen 3 times at a resort clinic. His condition worsened to the point that he was having trouble swallowing and was afraid of food, water and even the air. He returned to

Toronto a week ago by airplane. He was taken to hospital by police after behaving erratically at the airport. His symptoms worsened by 11 Apr 2012, and on 12 Apr 2012, samples were sent for testing. The laboratory tests confirmed rabies infection. ([Reference](#))

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#### **12. April 2012 - Serbia: Q-fever outbreak**

From 27th Jan. 2012 to 10th Feb. 2012, 43 cases of Q-fever (37 laboratory confirmed) were reported from the village of Nocaj, Srem county, Autonomous Province of Vojvodina, Republic of Serbia. Although, the outbreak is considered over, the outbreak investigation is still ongoing in order to identify aetiologic factors relevant for this outbreak. ([Reference](#))

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#### **10. April 2012 - Caracas, Venezuela: Cluster of Chagas**

According to a report issued by the Venezuelan Medical Scientific Societies Network in their last Epidemiological Alert bulletin, a new outbreak of Chagas disease occurred at the end of March [2012] in Caracas. To date 4 confirmed cases have been reported who acquired the disease at the Caracas "Mercado de Coche" [market], presumably after drinking watermelon juice. Infection via the oral route are reported to have more pronounced symptoms when compared to the classical transmission route: i.e. high fever, weakness, malaise, and leg edema. All 4 patients have satisfactorily responded to medical therapy. Another 2 cases are still considered as "suspicious", while waiting for additional tests. ([Reference](#))

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#### **8. April 2012 - East Kalimantan, Indonesia: Lymphatic filariasis hot spot**

North Penajam Paser, East Kalimantan: Nearly an entire village is suspected to be infected with lymphatic filariasis (210 of the 300 inhabitants of Sebakung Jaya village in North Penajam Paser district).

Background:

3 species are responsible for human filariasis in Indonesia: *Wucherichia bancrofti*, *Brugia malayi* and *Brugia timori*. A 4th zoonotic species, *Brugia pahangi*, is occasionally reported.

*Wucherichia bancrofti*:

Bancroftian filariasis is found in the forests of Sumatra, Kalimantan and Sulawesi. Cases have also been reported in Jakarta and Semarang (Prevalence surveys: 0.3 percent in West Kalimantan (1976 publication), 4 percent in Irian Jaya (1972))

*Brugia malayi*:

Brugian filariasis is endemic to Nusa Tenggara, Seram (Maluku Islands), Kalimantan, Sulawesi, Timor and Sumatra (Prevalence surveys: 3.6 percent of the population of West Kalimantan

(1976 publication), 15 percent of the population of south Sulawesi (1978 publication))

*Brugia timori*:

*Brugia timori* infection is limited to Timor and islands of the Lesser Sunda Archipelago: Flores, Alor, Sumba, Roti and Savu. The total number of persons infected is estimated at <800.000. Clinical disease on Flores occurs in coastal (but not highland) areas, and is more common among males than females (Prevalence surveys: 25 percent of the highland population of Alor Island are microfilaremic and 13 percent have lymphedema (2001))

*Brugia pahangi*:

Evidence for *Brugia pahangi* infection has been documented among humans, domestic cats, and silvered leaf monkeys from South Kalimantan.

(References: [✉ Jakarataglobe 1](#), [✉ Jakarataglobe 2](#), [✉ Promedmail](#))

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#### **4. April 2012 - Nigeria: Lassa fever outbreak update**

At the beginning of 2012, WHO was notified by the Federal Ministry of Health in Nigeria of an outbreak of Lassa fever. As of March 22, 2012, 623 suspected cases, including 70 deaths have been recorded from 19 of the 36 States since the beginning of the year. Laboratory analysis undertaken at the Irrua Specialist Teaching Hospital, Irrua Edo State has confirmed the presence of Lassa virus infection in 108 patients. Three doctors and four nurses were reported to be among the fatalities. ([✉ Reference](#)) (also see posting from 26. Jan 2012 below)

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#### **4. April 2012 - Chile: Whooping cough / Pertussis**

There has been an approximately 50 percent increase in the number of cases of whooping cough (pertussis) in Chile between 1 Jan 2012 and 24 Mar 2012, totaling 643 cases, compared to only 338 cases for the same period during 2011. According to data issued by the Chilean Ministry of Health, 43 percent of the cases correspond to children less than one year old (274 cases), and the incidence rate is 108.7 per 100 000 children less than 1 year old. The most affected regions all over Chile are Antofagasta, Coquimbo, Valparaiso, Maule, Los Rios, and Los Lagos. Between 1 Jan 2012 and 24 Mar 2012, 5 fatal cases in children have been reported, 1 in Antofagasta, 3 in Valparaiso, and 1 in Coquimbo. 4 of the deceased children were less than 2 months old and the other was a 4 month old baby. ([✉ Reference](#))

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#### **27. Mar. 2012 - Bahamas: Malaria in a traveler returning from Great Exuma Island**

The Centers for Disease Control and Prevention (CDC) has recently received an official report of a confirmed case of malaria in a U.S. traveler to the island of Great Exuma, Bahamas. The traveler visited the island between February and March 2012 and reported no additional recent travel outside of the U.S. An outbreak of malaria previously occurred on Great Exuma Island,

Bahamas in 2006, and the last documented case on the island was in 2008. Malaria is not endemic to the Bahamas and no malaria cases had been reported from the country since then. Malaria control measures have been implemented, environmental controls have been put into operation, and on-island surveillance has been enhanced. ([Reference](#))

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#### **12. Mar. 2012 - Venezuela: Venezuelan hemorrhagic fever (Guanarito)**



Currently Venezuela is facing the 3rd largest outbreak of Venezuelan hemorrhagic fever (Guanarito), after the outbreaks in 2002-2003 and 1997-1998: 76 cases were reported in 2011 and 10 in 2012 so far. The cases are reported from the rural municipalities of Guanarito, San Nicolas, San Genaro de Boconoito, and Papelón, in Portuguesa state.

The causal agent is the *Guanarito* virus (Arenavirus family), which is maintained in nature in the rodent species *Zygodontomys brevicauda* (a mouse of sugar cane [habitat]). As with other arenaviruses human infection is incidental and occurs when an individual comes into contact with the excretions or materials contaminated with the excretions of an infected rodent such as ingestion of contaminated food, or by direct contact of abraded or broken skin with rodent excrement. Transmission of this rare, but locally known infection occurs mainly in the rainy season. ([Reference](#)) (also see posting from 20. Aug. 2011 below)

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#### **10. Mar. 2012 - India: Polio update**

Barely two weeks after World Health Organisation (WHO) declared India as a polio-free nation, an 18-month-old child was admitted to a hospital in Kolkata with suspected polio on Monday. The last polio case in the country was detected in January last year when a two-year-old girl from Howrah district was afflicted with the virus. There were no reports of other polio cases in the country in the following 12 months, and India was declared polio-free. The laboratory result of the current suspected polio infection is still pending. ([Reference](#))

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#### **06. Mar. 2012 - Cebu Island, Philippines: Typhoid fever outbreak**

An outbreak of typhoid fever (558 suspected cases, 4 confirmed deaths) has been reported from Tuburan city on Cebu Island. ([Reference](#))

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#### **05. Mar. 2012 - Maluku Province, Indonesia: Rabies outbreak**

According to a report by the Jakarta Globe "At least 50 people have died of rabies in the recent weeks in a reported outbreak in the southwest district of Indonesia's Maluku province, local officials said on Monday". The outbreak has hit the remote province hard in recent weeks and rabies vaccine supplies in the district have run out. No hospitals in the district currently stock the vaccine. ([Reference](#))

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#### **01. Mar. 2012 - Australia: Ross river virus**

*Western Australia:* more people have contracted the Ross river virus in the past two months than in all of 2011.

*South Australia:* a rise of cases across the state has been reported in the past two months, with 511 cases state-wide since the start of the year. This is more than the total number of cases in all of 2010, when 245 were reported. By the same time last year 245 cases were reported state-wide. ([Reference](#))

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#### **24. Feb. 2012 - Fiji: Typhoid fever**

A typhoid fever outbreak has been reported from a village in the North-Western region of the Fiji island of Viti Levu (Koroboya village and Naitasiri settlement in Ba [ [map](#)]). ([Reference](#))

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#### **22. Feb. 2012 - Nigeria: Lassa fever**

In the last 6 weeks 40 people have died (including 6 health care workers (2 doctors and 4 nurses)) across the country from the outbreak of Lassa fever. So far, 397 cases (87 confirmed) have been reported. Cases have been reported in 12 states Edo, Nasarawa, Plateau, Ebonyi, Taraba, Yobe, Ondo, Rivers, Gombe, Anambra, Delta, and Lagos. ([Reference](#)) (see posting from 26. Jan. 2012 below)

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#### **22. Feb. 2012 - Belgium ex Kenya: African Trypanosomiasis**

African Trypanosomiasis has been diagnosed in a Belgian adult male traveler who had stayed in Kenya from Jan. 30. to Feb. 13. 2012 and visited Masai Mara from Feb. 7. until Feb. 9. 2012. After developing fever on Feb. 16. 2012 the diagnosis of human African trypanosomiasis was made on a thick film on 19. Feb. 2012. The patient is currently treated in the inpatient ward for

tropical diseases of the Institute of Tropical Medicine, University Hospital Antwerp. (*TropNet intern communication*) ([↗ Final report](#))

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#### **21. Jan. 2012 - Congo: Cholera outbreak**

A cholera epidemic has spread to 9 out of 11 provinces in the Democratic Republic of the Congo (Congo DRC): since Jan. 2011 26.000 cases (644 fatal cases) have been recorded. ([↗ Reference](#)) In the neighbouring Republic of Congo (Brazzaville) 340 cases of cholera (9 fatal cases) have been reported since June 2011. ([↗ Reference](#))

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#### **18. Feb. 2012 - The Netherlands ex Marocco: Canine rabies**

A dog imported from Marocco (via Spain) was diagnosed with rabies in Amsterdam: the 8.5-week-old puppy which was introduced on 11. Feb. 2012 in The Netherlands. The 1st signs of rabies occurred on 12. Feb. 2012 and consisted in a change in an aggressive behaviour. The dog was euthanized on 15 Feb 2012. 2 cats and 1 dog had minimal contact and were vaccinated and isolated for 6 months in a quarantine facility. Humans in contact with the dog during the salivary excretion of rabies virus have been taken in charge by the health services and an anti-rabies treatment has been administered when appropriate. ([↗ Reference](#)) ([↗ Final report](#))

*Note:* France ex Marocco/North Africa: cases of imported canine rabies due to illegally imported dogs have been reported in [↗ 2002](#), [↗ 2004](#), and [↗ 2011](#).

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#### **17. Feb. 2012 - Czech Republic ex Egypt: NDM1-carrying Acinetobacter**

A NDM-1-producing *Acinetobacter baumannii* has been isolated from a Czech patient repatriated in July 2011 from Egypt. The infection spread to another patient on the same ward. Both isolates showed the same resistance pattern and were susceptible only to colistin. This is the first time a NDM-1-producing bacteria has been isolated in Czech Republic. ([↗ Reference](#)) (background: see posting below)

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#### **17. Feb. 2012 - Ireland ex India: NDM1-carrying enterobacteriaceae**

The isolation of a NDM-1 (New Delhi metallo-beta-lactamase 1)- producing strain of *Klebsiella pneumoniae* has been reported from Ireland: The organism was isolated from an 6 month old infant who was born in India and moved to Ireland at the age of 4 months. This is the 1st reported isolation of an NDM-1-producing *Enterobacteriaceae* strain in Ireland. ([↗ Reference](#))

*Note:* July 2011 - August 2011: the New Delhi metallo-beta-lactamase 1 (NDM-1) gene was detected in *Klebsiella pneumoniae* and *Escherichia coli* isolates obtained from 6 patients hospitalized in 4 healthcare facilities in northern Italy. A patient who had been hospitalized in New Delhi, India, from February to May 2011 and subsequently in the Bologna area, Italy, from May to July 2011, may have been the source of the outbreak. The findings suggest ongoing spread of this carbapenem-resistance gene in Italy and highlight the need for intensive surveillance. ([Reference](#))

*Note:* 28. Nov. 2011: First report of NDM-1 carrying *Klebsiella pneumoniae* from Guatemala ([Reference](#))

*Note:* 18. Oct. 2011: First report of NDM-1 carrying bacteria isolated from patients in South Africa ([Reference](#))

**Background:** Carbapenems are the preferred treatment for severe infections caused by multidrug-resistant Gram-negative bacteria producing an extended-spectrum beta-lactamase (ESBL). Therefore the increasing and rapid spread of mobile genetic elements that determine acquired resistance to carbapenems and all other beta-lactams in Enterobacteriaceae is of great concern. In 2008, the 1st case of a novel carbapenemase "New Delhi metallo-beta-lactamase 1" (NDM-1) has been detected in a patient in Sweden that had traveled to India. This NDM-1 carbapenemase can be produced by several Enterobacteriaceae species. In 2010, Canada and the USA detected cases in travelers coming from India. In Europe: a total of 77 cases were reported from 13 countries from 2008 to 2010 ([Reference](#)). In Italy, NDM-1-positive isolates were first described earlier in 2011 ([Reference](#)).

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#### **16. Feb. 2012 - Senegal: Yellow fever**

Yellow fever outbreak in Senegal, bordering Guinea & Mali: three cases of yellow fever were notified on 26 October 2011, in Salémata, Kédougou and Saraya health districts, in the eastern part of the country. The affected areas share borders with Guinea and Mali and cross border movements are common because of the local gold mining industry. The currently ongoing vaccination campaign in the 3 districts is expected to be completed by March 2012. ([Reference](#))

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#### **15. Feb. 2012 - Cambodia: Suspected methanol poisoning through rice wine**

At least 49 Cambodians (31 men, 18 women) died and 318 (276 men, 42 women) were hospitalized after consumption of home-made rice wine. The incidents occurred in seven provinces (including Pursat, Siem Reap, Kratie, Kompong Cham, Prey Veng, Sihanoukville, and Phnom Penh). In October last year, more than 10 Cambodians died in two different provinces related to home-made rice wine consumption and suspected methanol poisoning. ([Reference](#))



#### **12. Feb. 2012 - India: Kyasanur forest disease**

Cases (including 1 death) of Kyasanur Forest Disease (viral hemorrhagic fever) have been reported from Karnataka (Shimoga District). Kyasanur forest disease is endemic in the region. 400-500 cases of the disease are reported annually in India. The disease can manifest as hemorrhagic fever with a case fatality rate of ~45%.



#### **08. Feb. 2012 - Uganda: Plague**

An outbreak of plague is suspected after two people died of similar symptoms in Vurra County, Arua District (North-Western Uganda bordering DR Congo) where the health officials here have put the community on alert. Over the years, plague outbreaks have been emerging from the neighbouring DR Congo. ([Reference](#))

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#### **06. Feb. 2012 - Italy ex India: Human rabies**

A 40-year-old man was admitted to the public hospital (Mantova, Italy) on 23 Oct 2011 with a suspected rabies infection. At the time of admission, he presented fever, myalgias, and acute respiratory distress. The patient died of rabies on 14 Nov 2011, after 17 days of a Glasgow Coma Score (GCS) of 3. Mortem and post mortem laboratory diagnostic tests for rabies confirmed the initial suspicion based on the clinical symptoms and history: The patient was the victim of an episode of severe biting on the left arm and leg by an aggressive dog on 28 Sep 2011 in a suburban area in the city of Manpur, North-East India. He immediately underwent post-exposure prophylaxis, which consisted of vaccination in absence of rabies immunoglobulin administration. ([Reference](#))

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#### **05. Feb. 2012 - Zambia: Typhoid fever outbreak**

Since the beginning of the typhoid fever outbreak in Northern Zambia (Mufulira region, close to the border of Kongo DRC) 3 months ago (see our posting from Jan. 4. below) the number of recorded cases has risen to 4.396 (including 9 fatal cases). ([Reference](#))

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#### **04. Feb. 2012 - Queensland, Australia: Cryptosporidiosis outbreak warning**

Queensland health authorities report, that the number of laboratory confirmed intestinal cryptosporidiosis cases had increased to 51 in January 2012: on average 10-20 cases are expected monthly. In 2008 a outbreak of Cryptosporiosis was witnessed in Cairns. In May 2010 cryptosporida were detected in southern Cairns' water supply, prompting warnings at that time for thousands of residents to boil their drinking water. ([Reference](#))

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#### **31. Jan. 2012 - Germany ex Kenya: African Trypanosomiasis**

A case of trypanosomiasis imported from Masai Mara, Kenya was diagnosed in Frankfurt, Germany. A 61-year-old male patient had returned from Kenya on 28 Jan 2012. Two hours after arrival, he developed a high fever and admitted himself to a local hospital on 29 Jan 2012. Treatment was started for suspected malaria tropica, and the patient was transferred to Frankfurt University Hospital the following day. Malaria could not be confirmed, but trypanosomes were seen in thick blood stain, QBC and Giemsa. Treatment was started with Suramin. Clinically, the patient suffered from high fever, cephalgia, and fatigue. There was a marked inoculation eschar on the tibia. The patient had travelled to Mombasa where he stayed at a beach resort the entire time except for a 2-day excursion to Masai Mara for a safari on 18-19 Jan 2012. The night was spent at a camp. ([Reference](#))

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#### **29. Jan. 2012 - Bolivia, Beni province: Machupo hemorrhagic fever**

There appears to be continuation of the Machupo virus outbreak in Beni department that began at the end of November last year (2011). Beni department has been a known endemic region for Machupo virus infections (*Bolivian hemorrhagic fever*) since the virus was first isolated in the region in 1959. Currently 6 suspected cases of Machupo hemorrhagic fever have been reported in the provinces Mamore and Itenez, of whom 3 are hospitalized in San Ramon and one in Magdalena. ([View map](#)) ([Reference](#))

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**27. Jan. 2012 - Europe: Influenza update, H3N2 predominant**

Influenza activity continues to rise slowly in the WHO European region due to A(H3N2): Based on data for week 3/2012 reported by 46 Member States in the WHO European Region consultation rates for influenza-like illness (ILI) and acute respiratory infection (ARI) continue to be relatively low in most countries of the region, but with many countries reporting increasing activity. 29% of sentinel specimens tested positive for influenza, which is an increase over last week: 95% of these were influenza A. Of the 352 influenza A viruses from sentinel sources that were subtyped, 99 % were A(H3N2). ([Reference](#))

**26. Jan. 2012 - Nigeria, River state: Lassa fever**

Two fatal cases of Lassa fever have been reported from the River State in Southern Nigeria. Lassa fever is endemic throughout Nigeria with currently seven states, reporting clusters of cases. The two victims in River State have probably acquired the infection while travelling to their homes in Edo and Ebonyi State. ([View map](#)) ([Reference](#))

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**25. Jan. 2012 - Puno, Peru: Yellow fever**

After a confirmed fatal case of yellow fever in a 45-year-old farmer in Alto Inambari (North-Eastern Puno district) and a second suspected case of YF in a 57-year-old farmer from the same region a local vaccination campaign has been launched. ([Reference](#))

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**19. Jan. 2012 - Calpe, Costa Blanca, Spain: Suspected outbreak of Legionellosis**

In the last week the Health Protection Agency (HPA) has received notifications of four confirmed cases of Legionnaires' disease and a probable fifth case associated with a hotel in this area. A further 16 possible cases are currently being investigated. The onset date of the probable case was 16th January and it is therefore possible for further cases to develop. ([Reference](#))

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#### **15. Jan 2012 - Vietnam, Ho Chi Minh City: Cluster of Meningococcal Meningitis**

Doctors in Ho Chi Minh City report a meningococcal meningitis cluster involving five patients, who worked at the same company. ([Reference](#))

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#### **8. Jan. 2012 - India, Andhra Pradesh: Anthrax contaminated ground water**

In a microbiological survey conducted by students of the Palamur University in the Mahbubnagar district of Andhra Pradesh multiple water sources were found to be contaminated by *Bacillus anthracis* spores. ([Reference](#))

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#### **4. Jan. 2012 - Zambia: Typhoid fever**

~800 cases of typhoid fever (~450 of them confirmed) have been reported from the Northern region of Mufulira close to the border of Kongo DRC. The region is far away from the Victoria falls and rarely visited by tourists. (Reference)

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#### **1. Jan. 2012 - France & Germany - Measles update 2011**

##### *France:*

More than 22.000 cases of measles have been reported in France since the beginning of the epidemic in January 2008, according to the latest figures from the Institute of Health Surveillance [l'Institut de veille sanitaire (InVS)]. During the first eleven months of 2011, as many as 15.000 people were affected by the disease. However, the InVS has identified a major decline in the number of cases since the summer, marking the end of the 3rd wave of the measles epidemic. Among the 15.000 cases observed during the first 11 months of 2011, 16 experienced neurological complications, 649 contracted severe pneumonia, and 6 died from the disease. Despite the decline in the number of cases since the summer of 2011, the InVS cautioned the French population to be vigilant "as a 4th epidemic wave is very likely with risk of increase in the number of cases in the coming weeks."

##### *Germany:*

With 1607 cases the number of reported measles cases has more than doubled in 2011 compared to 2010 (780 cases). ([Reference](#))