

## Current Infectious Disease Outbreaks for NYC Providers

June 21, 2019

Disease	Last Update	2019 Cases	Con- firmed	Deaths	Notes and References (R 1, 2, 3)
<b>New York City</b>					
<b>Measles</b>	17-Jun	596	596	0	<p>As of June 17, 2019, there have been 596 confirmed measles cases identified in New York City (NYC) since October. Most have involved members of the Orthodox Jewish community. Most cases are less than five years old, and &gt;73% were unvaccinated. To-date, there have been numerous hospitalizations and ICU admissions, but no deaths. The outbreak tempo has quickened in recent weeks. On April 9, the NYC Health Commissioner declared a public health emergency, ordering all unvaccinated adults and children in certain Brooklyn ZIP codes to be vaccinated. Persons found unvaccinated or non-immune in these ZIP codes are subject to fines.</p> <p>The initial case was unvaccinated and acquired measles in October 2018 on a visit to Israel; multiple importations have occurred since from Israel and other countries. A large number of exposures have occurred, especially in hospitals, outpatient medical facilities, and schools. Measles outbreaks also have occurred in New York's Rockland, Orange, and Monroe Counties. R <a href="#">1</a> <a href="#">2</a></p>
<b>United States</b>					
<b>Hepatitis A</b>	01-Jun	>19,800 (2018-19)	>19,800 (2018-19)	186	<p>The sustained 2018-19 outbreak of hepatitis A has persisted in multiple eastern and midwestern states. Of the &gt;19,800 nationwide cases reported as of June 14, 2019, &gt;11,300 have been hospitalized. Current incidence is greatest in OH (&gt;3,300), FL (1,870), and TN (&gt;1,640). CO, GA, VA, MA, and NH also are reporting increases in cases. Main risk factors continue to be homelessness and IV drug use. On October 24, the Advisory Committee on Immunization Practices (ACIP) recommended hepatitis A vaccination for all homeless persons over one year old. R <a href="#">1</a>, <a href="#">2</a></p>
<b>Measles</b>	13-Jun	1,044	1,044	—	<p>As of June 13, a total of 1,044 measles cases have been reported from 28 states — WA, TX, OK, NJ, NY, PA, CA, CO, CT, IL, KY, TN, NH, OR, GA, FL, IN, MD, MA, MI, MO, IA, NV, AZ, VT, RI, VA, and ID. This is the greatest case load in the US since 1992. The majority of cases have been in NYC and nearby NYS counties. R <a href="#">1</a></p>
<b>E. coli O26</b>	15-Jun	17	17	0	<p>As of June 15, a total of 17 cases of <i>E. coli</i> O26 (STEC) infections have been reported in 8 states (CA, MO, OH, PA, NY, NJ, CT, and RI), including 3 hospitalizations. Onsets have ranged from December 11, 2018 to April 18, 2019. Illness has been linked to eating raw dough made from flour manufactured by ADM Milling Co., and specifically, of Baker's Choice All-Purpose Flour. R <a href="#">1</a></p>
<b>*Powassan virus</b>	8-Jun	2	1	1 (50%)	<p>Two cases of Powassan virus infection were reported in Sussex County, in northwestern NJ. Powassan virus is transmitted by the blacklegged <i>Ixodes scapularis</i> tick, the same vector as in Lyme disease and babesiosis. One case recounted being bitten by a tick while gardening. R <a href="#">1</a></p>

Disease	Last Update	2019 Cases	Con- firmed	Deaths	Notes and References (R 1, 2, 3)
<b>United States</b>					
<b>Gastro- enteritis (Multiple Pathogens)</b>	22-May	16	16	0	On May 10, CDC posted a Food Safety Alert warning consumers to avoid eating raw oysters from Estero El Cardon estuary in Baja California, Mexico. As of May 22, a total of 16 cases of gastroenteritis from 5 states (CA, NV, IL, NH, and AK) have been linked to this exposure; 2 were hospitalized. Onset dates range from December 16, 2018 to April 4, 2019. Pathogens involved: <i>Shigella flexneri</i> , <i>Campylobacter lari</i> , STEC (non-O157), <i>Vibrio parahaemolyticus</i> , <i>Vibrio albensis</i> , and <i>Vibrio</i> of unknown species. R <a href="#">1</a>
<b>Salmonella Concord</b>	13-Jun	4	3	0	On May 17, CDC posted a Food Safety alert, warning consumers not to eat food made from Karawan brand tahini. As of June 13, a total of 4 cases of <i>Salmonella</i> Concord gastroenteritis, including one hospitalization, have been linked to this product. Illness onset has ranged from March 9 to March 23. This outbreak is distinct from a previous cluster of <i>S. Concord</i> cases that also were linked to tahini. R <a href="#">1</a>
<b>Salmonellosis</b>	13-Jun	279	279	0	As of June 13, a total of 279 cases of salmonellosis have been reported from 41 states, following contact with chicks and ducklings in backyard flocks. Forty cases were hospitalized. Onset dates range from January 1 to May 24. Infections have been due to <i>Salmonella</i> Braenderup, <i>S. Montevideo</i> , <i>S. Agona</i> , <i>S. Anatum</i> , <i>S. Infantis</i> , and <i>S. Newport</i> . R <a href="#">1</a>
<b>Legionnaires' disease</b>	13-Jun	16	16	1	As of June 13, a total of 16 patients have been diagnosed with Legionnaires' disease at the Mount Carmel Grove City Hospital in Grove City, OH; one patient died. <i>Legionella</i> was detected in the hospital's hot water supply; mitigations in place. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
<b>Caribbean, Central America, and South America</b>					
<b>Dengue</b>	08-Jun	>741,000	>291,000	287	In 2019 as of Jun 8, a total of >741,000 dengue cases, including >291,000 laboratory-confirmed, already have been reported to the Pan American Health Organization (PAHO). <b>Brazil</b> (>586,500), <b>Colombia</b> (>48,000), <b>Nicaragua</b> (>33,000), <b>Mexico</b> (>20,000), and <b>Honduras</b> (>12,500) have reported the most cases. Cases also have been confirmed in all Central and South American countries except Uruguay. Most dengue cases in the Caribbean have been reported by the <b>Dominican Republic</b> , <b>Jamaica</b> , and <b>Guadeloupe</b> , <b>Martinique</b> , and <b>Trinidad/Tobago</b> . R <a href="#">1</a>
<b>Chikungunya</b>	5-May	>15,900	—	2	In 2018, >80,000 chikungunya cases were reported in the Americas and the Caribbean. In 2019 as of May 5, <b>Brazil</b> has reported >15,300 cases (Rio de Janeiro, Tocantins, Pará and Acre regions); <b>Colombia</b> reported >230 cases; and <b>Peru</b> reported >90 cases. To date in 2019, chikungunya cases also have reported in <b>Paraguay</b> , <b>El Salvador</b> , <b>Mexico</b> , and <b>Nicaragua</b> . R <a href="#">1</a> <a href="#">2</a>
<b>Zika</b>	18-Apr	~4,000	—	—	So far in 2019, there has been limited Zika cases reported. In addition to <b>Brazil's</b> 3,085 reported cases, <b>Peru</b> , <b>Bolivia</b> , <b>Colombia</b> , <b>El Salvador</b> , and <b>Honduras</b> have reported Zika cases. R <a href="#">1</a>
<b>Measles</b>	18-May	>14,000	1,323	—	In 2018, of the >16,000 reported measles cases in the Americas and Caribbean, >60% and 34% were reported in <b>Brazil</b> and <b>Venezuela</b> , respectively. So far in 2019, most of the >14,000 suspected cases have been reported by <b>Brazil</b> and <b>Venezuela</b> . Confirmed cases also have been reported in <b>Argentina</b> , <b>Chile</b> , <b>Colombia</b> , <b>Costa Rica</b> , <b>Mexico</b> , and the <b>Bahamas</b> . R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>

Disease	Last Update	2019 Cases	Con- firmed	Deaths	Notes
<b>Haiti</b>					
<b>Cholera</b>	16-Mar	218	—	3 (1.4%)	In 2018, a total of 3,786 cholera cases were reported in Haiti, compared with 13,681 cases in 2017. As of March 13, a total of 218 cholera cases, including 3 deaths, have been reported. Since the outbreak began in 2010, Haiti has reported 819,963 suspected cases and 9,792 deaths (1.2%). R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a> <a href="#">4</a>
<b>Diphtheria</b>	20-Apr	62	6	1 (16.6%)	In 2018, a total of 375 probable cases were reported, including 105 confirmed and 14 (13.3%) deaths. The highest incidence has been in children 6-14 years old followed by 1-5 year olds. As of April 20, a total of 25 diphtheria cases have been reported in Haiti in 2019, including 6 confirmed and one death (16.6%). R <a href="#">1</a>
<b>Argentina</b>					
<b>Hantavirus</b>	10-May	50	50	13 (26%)	The number of confirmed hantavirus cases in Argentina is now 50, including 13 (26%) deaths. The epicenter of the outbreak has been Epuyen, an Andean village in Chubut province. Over the past two months, cases also have been detected in Rio Negro and Jujuy provinces. Infection with the endemic Andes virus has been confirmed. R <a href="#">1</a> <a href="#">2</a>
<b>Bolivia</b>					
<b>Hantavirus</b>	20-May	15	15	5 (33.3%)	In recent weeks, multiple foci of hantavirus infections have been reported in Bolivia. In Cochabamba department, 8 cases of suspected hantavirus pulmonary syndrome (HPS) were reported. In Santa Cruz department, 2 soldiers died and 8 more were hospitalized with suspected HPS. Another case was reported on May 20 in Tarija Department. R <a href="#">1</a>
<b>Brazil</b>					
<b>Yellow fever</b>	14-May	81	81	14 (22.7%)	This is the beginning of yellow fever season. As of May 14, a total of 81 confirmed cases (all presumed to be sylvatic) have been reported in the southern states of São Paulo (68), Parana (12), and Santa Catarina (1) This may indicate the emergence of a 3rd wave of yellow fever expansion into south and southeastern Brazil. Epizootics among non-human primates have been confirmed in both of the two southern states. Travelers to Brazil are advised to get vaccinated more than 10 days before travel. R <a href="#">1</a>
<b>Peru</b>					
<b>*Guillain-Barré syndrome</b>	13-Jun	548	—	—	In 2019 and as of June 13, a total of 548 cases of Guillain-Barré syndrome (GBS), including 391 cases in the last two reporting weeks. Lima (176), Piura (108), and Junín (107) regions. The cause of the GBS outbreak is unknown at this time. R <a href="#">1</a> <a href="#">2</a>
<b>Venezuela</b>					
<b>Diphtheria</b>	30-Mar	190	—	13 (6.8%)	A diphtheria outbreak that began in 2016 has continued in Venezuela. As of March 30, a total of 190 cases and 13 deaths have been reported in 2019. This compares with 1,102 cases and 50 (13.6%) deaths in 2018. With Venezuela's collapsing healthcare system, childhood vaccination has been affected. R <a href="#">1</a> <a href="#">2</a>

Disease	Last Update	2019 Cases	Confirmed	Deaths	Notes
<b>Europe</b>					
<b>Measles</b>	5-Jun	>68,000	>68,000	42	Between January 2018 and January 2019, >70,000 measles cases were confirmed throughout WHO's European Region. So far in 2019, measles outbreaks have occurred in all regions of Europe. A total of >53,100 cases, including 16 deaths, were reported in <b>Ukraine</b> alone as of Jun 4. Outbreaks have been reported in most European countries, including <b>Serbia</b> (5,797), <b>North Macedonia</b> (1,734), <b>Romania</b> (1,533), <b>France</b> (1,453), <b>Poland</b> (1,044), <b>Bulgaria</b> (866), <b>Italy</b> (864), <b>Lithuania</b> (709), <b>Czech Republic</b> (545), <b>Germany</b> (400), the <b>United Kingdom</b> (322), <b>Switzerland</b> (196), <b>Slovakia</b> (194), <b>Spain</b> (189) and <b>Austria</b> (125) R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
<b>France</b>					
<b>E. coli O26</b>	27-May	16	16	—	As of May 27, a total of 16 cases of <i>E. coli</i> O26 infection, including 14 with hemolytic uremic syndrome (all <5 years old), have been reported in children by French public health authorities. Consumption of or cross-contamination with Saint-Félicien or Saint-Marcellin cheeses are the suspected sources. R <a href="#">1</a> <a href="#">2</a>
<b>Germany</b>					
<b>Hantavirus</b>	15-May	211	211	—	Stuttgart, in the southwestern state of Baden-Wuerttemberg, has reported 211 cases of hantavirus in 2019 according to a press report. At this time, health authorities have not disclosed the total number of hospitalizations and deaths caused by this outbreak. Puumala virus (PUUV), endemic to southwestern and central Germany, causes hemorrhagic fever with renal syndrome (HFRS). R <a href="#">1</a>
<b>Norway</b>					
<b>*Campylobacteriosis</b>	11-Jun	~2,000	36	—	A large outbreak of gastroenteritis on the southwestern Norway island of Askøy, just north of Bergen, is thought to be due to contaminated drinking water. Campylobacter has been cultured from 36 stool specimens, though the illnesses may be the result of polymicrobial contamination. R <a href="#">1</a>
<b>Spain</b>					
<b>*Chikungunya</b>	14-Jun	4	4	0	On June 14, Iceland health authorities announced that four travelers to Allcante, Valencian Community had been diagnosed with chikungunya. They had traveled to Spain during May 17-31. To date, no cases in Spanish residents have been detected. R <a href="#">1</a>
<b>Switzerland</b>					
<b>Q fever</b>	3-Jun	~50	~50	0	So far in 2019, approximately 50 cases of Q fever have been confirmed in Switzerland; 20 reside in the southern, Italian-speaking canton of Ticino. "Several" cases of Q fever have been reported by public health authorities in recent weeks in Ticino's Maggia Valley, where farmers have been ordered to vaccinate their goats. R <a href="#">1</a>
<b>United Kingdom</b>					
<b>*Listeriosis</b>	7-Jun	6	6	3 (50%)	Six nosocomial listeriosis cases have been reported by Public Health England. Three patients in Manchester and Liverpool have died. Packaged sandwiches produced by The Good Food Chain have been implicated. Sandwich meat by North Country Cooked Meats yielded <i>Listeria</i> that was indistinguishable from the outbreak strain. R <a href="#">1</a>

Disease	Last Update	2019 Cases	Confirmed	Deaths	Notes
<b>Arabian Peninsula and Middle East</b>					
<b>Saudi Arabia</b>					
<b>MERS-CoA</b>	20-Jun	155	155	35 (22.6%)	In 2019, as of Jun 20, the Ministry of Health (MOH) has reported a total of 155 cases of MERS-CoA infection. Since Overall, the incidence tempo has slowly considerably since a large nosocomial outbreak in March, though cases continue to be reported in geographically dispersed locations. The past two weeks, cases have been reported from the central Al-Qassim Region (Qusaiba, Unaizah), Riyadh City, in the east (Qaisumah), and along the western coast (Medina). During the recent nosocomial MERS outbreak, some cases isolated at home with mild or no illness may have progressed to serious disease requiring hospitalization. This might be worth keeping in mind when evaluating patients with possible MERS. <a href="#">R 1</a> <a href="#">2</a> (See epidemic curve, map, and nosocomial transmission diagram on p. 13 of this report.)
<b>Yemen</b>					
<b>Cholera</b>	9-Jun	>380,000	3,464	610 (0.002%)	As of June 9, at least 380,000 suspected cases of cholera have been reported in Yemen in 2019, compared with 80,500 suspected cases during the same period in 2018. More than 3,400 cases have been culture-confirmed. Most cases have been reported from Governates in the western areas. Yemen's water, sanitation, electricity, and health care infrastructures have been decimated by the civil war raging there since 2014. <a href="#">R 1</a> <a href="#">2</a> <a href="#">3</a> <a href="#">4</a>
<b>Asia</b>					
<b>Dengue</b>	6-Jun	>238,000	—	—	Dengue is endemic throughout Asia. Already in 2019, the <b>Philippines, Vietnam, Malaysia, Sri Lanka, and Thailand</b> have reported >77,000, >57,800, >47,100, >20,000, and >22,000 dengue cases, respectively. <b>Cambodia</b> (>5,000), <b>Singapore</b> (>3,900) the <b>Maldives</b> (>2,100), <b>Laos</b> (>2,400), <b>Indonesia</b> (>1,000), <b>Timor-Leste, Nepal,</b> and <b>Pakistan</b> also have reported cases. <a href="#">R 1</a> <a href="#">2</a>
<b>Chikungunya</b>	13-May	>4,400	—	—	So far in 2019, <b>Thailand</b> has reported >3,370 chikungunya cases, most of which are in its southern districts near Malaysia. More than 200 cases also have been reported in <b>Malaysia</b> (largely in Kuala Langat District). <b>India</b> (Tamil Nadu), <b>Indonesia</b> (Depok, West Java), and the <b>Maldives</b> also have reported cases. <a href="#">R 1</a> <a href="#">2</a>
<b>Hong Kong</b>					
<b>Rat Hepatitis E</b>	14-May	3	3	0	Hong Kong authorities reported 3 laboratory-confirmed cases of rat hepatitis E virus (HEV) infections in recent weeks. All cases were male, more than 65 years old, and had underlying health conditions; none have died. The cases did not report contact with rodents. The mode of transmission of rat HEV from rodents to humans is unknown. Hong Kong authorities have recommended for the public to maintain good personal and food hygiene. <a href="#">R 1</a> <a href="#">2</a> <a href="#">3</a>

Disease	Last Update	2019 Cases	Confirmed	Deaths	Notes
<b>India</b>					
<b>Kyasanur Forest disease</b>	1-May	307	307	15 (4.9%)	In mid-December, an initial two cases of Kyasanur Forest disease (KFD) were announced in Karnataka state. Since then, incidence has continued steadily despite vaccination efforts. As of May 1, a total of 307 cases of KFD have been reported in the Shivamogga, Shimoga, Uttara Kannada, Sagar taluk, Udupi, Aralagodu and Chikkamagaluru districts of Karnataka state, including 15 deaths. Multiple deaths in non-human primates preceded human cases. A third round of KFD vaccination (87% effective after third vaccine) is being planned. In March and April, Kerala state also reported 6 cases in Wayanad district, including 2 deaths. R <a href="#">↓</a>
<b>Nipah virus</b>	18-Jun	2	1	0	Public health authorities in Kerala, India, announced a confirmed case of Nipah virus infection in a 21-year old resident of Emakulam district, who presented with high fever and CNS dysfunction. Five symptomatic contacts have been isolated in a university hospital. A second suspected case was hospitalized on June 17. R <a href="#">↓</a>
<b>*Acute encephalitis syndrome</b>	17-Jun	??	??	>100	A pediatric outbreak of acute encephalitis syndrome (AES) has been reported in the northern Indian state of Bihar. The hardest hit district has been Muzaffarpur. Most AES cases are thought to be due to the vaccine-preventable disease, Japanese encephalitis. R <a href="#">↓</a>
<b>Pakistan and Afghanistan</b>					
<b>Polio (WPV1)</b>	19-Jun	32	32	—	Already in 2019, a total of 24 infections with wild poliovirus type 1 (WPV1) have been reported in <b>Pakistan</b> (12 cases in 2018), including 2 in the past week (Khyber Pakhtunkhwa/Bannu and Shangla). Environmental samples have yielded WPV1 from four provinces (Sindh, Balochistan, Khyber Pakhtunkhwa, and Punjab). In <b>Afghanistan</b> , a total of 8 WPV1 infections have been reported in 2019, compared with 21 in 2018. No new cases were reported over the past two weeks. R <a href="#">↓</a>
<b>Taiwan</b>					
<b>Japanese Encephalitis</b>	4-Jun	4	4	0	Four cases of Japanese encephalitis (JE), a vaccine-preventable disease, have been confirmed in Kaohsiung City (3) and Chiayi City (1), indicating that the JE transmission season has started in Taiwan. Two of the patients have required intensive care management. The <i>Culex</i> mosquito vector is abundant in Taiwan. R <a href="#">↓</a>
<b>Australia and the Pacific</b>					
<b>Dengue</b>	6-May	>2,500	—	—	Already, 2019 promises to record significant dengue incidence. As of May 6, <b>New Caledonia</b> has reported 3,081 cases (DENV-2), nearly the total for 2018. Similarly, <b>Australia</b> has reported more than twice as many by May 5 (429) as the same time last year. In <b>French Polynesia</b> , cases due to DENV-1 have been reported in <b>Moorea, Raiatea, Bora Bora, Palau, Rangiroa, Vanatu, the Cook Islands, Wallis and Fortuna, and Tahiti</b> , where DENV-2 also has been detected for the first time since 2000. R <a href="#">↓</a> <a href="#">↗</a>
<b>Australia</b>					
<b>*Hendra virus</b>	19-Jun	1 (equine)	1 (equine)	1	A 25-year-old unvaccinated mare from New South Wales (area of Scone) died of Hendra virus infection after a short neurological illness. Health authorities have implemented surveillance of horses and humans that live on the affected property. Since Hendra virus was discovered in 1994, only 7 human cases have been documented. R <a href="#">↓</a>

Disease	Last Update	2019 Cases	Confirmed	Deaths	Notes
<b>Papua New Guinea</b>					
<b>Polio (cVDPV)</b>	19-Jun	0	0	—	In 2019, as of June 19, there have been no reported cases of circulating vaccine-derived poliovirus (cVDPV) infection in Papua New Guinea, compared with 26 cases in 2018. cVDPV has not be detected in an environmental sample since November 2018. R <a href="#">1</a>
<b>Africa</b>					
<b>Polio (cVDPV)</b>	19-Jun	14	14	—	So far in 2019, compared with 80 cases in 2018, a total of 14 cases of circulating vaccine-derived poliovirus (cVDPV) infection have been reported in <b>Nigeria</b> (8), <b>Somalia</b> (3), <b>Niger</b> (1), <b>Ethiopia</b> (1), and <b>DRC</b> (1). In 2018, outbreaks of cVDPV persisted in <b>Nigeria</b> , (Jigawa, Katsina, Borno, and Sokoto states). <b>Somalia</b> (Lower Juba), <b>DRC</b> (Haut Katanga, Haut Lomami, Mongala, and Maniema Provinces), <b>Niger</b> (Zinder province) and <b>Mozambique</b> (Zambézia province). R <a href="#">1</a>
<b>Measles</b>	18-May	>280,000	>4,000	—	The most severe outbreak has been in <b>Madagascar</b> , with >145,00 cases in 2019. <b>DRC</b> and <b>Nigeria</b> have reported >106,000 and >28,700 cases, respectively, in 2019. To a lesser extent, <b>Angola</b> , <b>Cameroon</b> , <b>Central African Republic</b> , <b>Chad</b> , <b>Liberia</b> , <b>Sierra Leone</b> , <b>Mauritius</b> , <b>Ethiopia</b> , <b>South Sudan</b> , <b>Mali</b> , <b>Guinea</b> , <b>Uganda</b> , <b>Kenya</b> , and <b>Tunisia</b> also have reported cases. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a> <a href="#">4</a>
<b>Dengue</b>	4-Jun	>17,000	—	—	As of April 24, a total of >11,900 cases of dengue have been reported in <b>Côte d'Ivoire</b> , <b>Kenya</b> , <b>Tanzania</b> , and on <b>Mauritius</b> and the island of <b>Réunion</b> , where incidence may have started to decrease, yet 15,000 confirmed cases of both DENV-1 and DENV-2 have been reported as of Jun 4. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
<b>Leishmaniasis</b>	10-Apr	>6,000	—	—	In February, >6,000 cutaneous leishmaniasis cases were reported in <b>North Africa</b> over the past 6 months. Most have been diagnosed along the Mediterranean coast (west of Tripoli) of <b>Libya</b> (>5,000), followed by central and southwestern <b>Tunisia</b> (~1,300) and in the Ghardaia Province of <b>Algeria</b> (~400). In April, a kala-azar outbreak including nearly 30 cases was reported in in Marsabit, <b>Kenya</b> . Leishmaniasis also can be found in <b>South Sudan</b> and <b>Somalia</b> . R <a href="#">1</a>
<b>Algeria</b>					
<b>*Brucellosis</b>	10-Jun	154	154	—	In 2019, a total of 154 brucellosis cases have been reported in the northwestern province of Tiaret. Recent cases have occurred in the city of Ksar Chellala, following consumption of milk curds. R <a href="#">1</a>
<b>Burundi</b>					
<b>*Malaria</b>	26-May	3,207,552	—	1273 (0.04%)	Burundi currently has epidemic levels of malaria throughout the country. In 2019, as of May 26, more than 3.2 million suspected cases of malaria have been reported, which is >50% more than at the same time in 2018. Health authorities are hampered by a lack of resources to mount a comprehensive, nationwide malaria prevention campaign. R <a href="#">1</a>
<b>Chad</b>					
<b>Measles</b>	16-Jun	20,355	97	201 (1.0%)	As of June 16, a total of 20,355 measles cases have been reported in 2019, including 201 (1.0%) deaths, as the epidemic continues to spread geographically. Of the country's 126 districts, 117 (93%) have now been affected. The mean age of cases is ~2 years, with ~50% of cases being <1 year old. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>

Disease	Last Update	2019 Cases	Con- firmed	Deaths	Notes
<b>Congo</b>					
<b>Chikungunya</b>	19-May	9,015	61	0	A chikungunya outbreak was declared on February 2. As of May 19, a total of 9,015 cases, including 61 confirmed, have been reported by health authorities. Cases have been reported in 8 of 12 departments: Kouilou, Pool., Bouenza, Pointe-Noire, Plateaux, Niari, Lékoumou and Brazzaville. Kouilou has been the most affected department (34%) of cases, followed by Niari. <i>Aedes albopictus</i> , a competent mosquito vector, was found during investigations. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
<b>Democratic Republic of Congo</b>					
<b>Cholera</b>	26-May	11,373	—	252 (2.2%)	As of May 26, a total of 11,373 cholera cases have been reported in the DRC in 2019, including 252 (2.2%) deaths. Outbreaks have been reported in 19 (73%) of the 26 DRC provinces. Approximately 90% of the cases have been reported from eastern provinces where cholera is now considered endemic: Tanganyika, Upper Katanga, Upper Lomami, North Kivu and South Kivu. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
<b>Monkeypox</b>	5-May	1,739	Unclear	37 (2.1%)	So far in 2019 and as of April 14, a total of 1,739 suspected monkeypox cases have been reported in DRC, including 175 in the past two reporting weeks; 26 (1.9%) have died. An unknown number of cases have been confirmed from the Ecuador, North Ubangi, and South Ubangi Provincial Health Divisions. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a> <a href="#">4</a>
<b>Measles</b>	9-Jun	106,870	782	1,815 (1.8%)	Already in 2019 as of June 9, a total of 106,870 measles cases have been reported in DRC, including 1,815 deaths (1.8%). In the past week, >2,300 cases and 73 deaths were reported. More than 64% of cases in 2019 have been from Tshopo, Lualaba, Kasai, and Upper Lomami provinces. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a> <a href="#">4</a>
<b>Ebola</b>	18-Jun	2,190	2,096	1,470 (67.1%)	<p>Over the last two months, the Ebola virus disease (EVD) outbreak in northeastern DRC expanded dramatically, fueled by a breakdown in control efforts that were interrupted by security breakdowns and resistance of local communities. Over the past four weeks, there have been some encouraging signs that transmission has been slowing down in Katwa, Butembo, and Beni. However, cases continue to grow in Mabalako.</p> <p>In the 21 days from May 27 to June 16, a total of 64 health areas within 17 health zones reported new cases, representing 10% of the 664 health areas affected to date. During this period, a total of 248 confirmed cases were reported (a 16.5% reduction in cases from the previous three weeks), the majority of which were from the health zones of Mabalako (38%, n=93), Katwa (12%, n=30), Mandima (11%, n=27), Butembo (10%, n=26), and Beni (10%, n=24), and .</p> <p>As of June 18, a total of 2,190 EVD cases have been reported, including 2,096 confirmed and 94 probable; 1,470 (67.1%) have died. Fifty-seven percent of cases have been female and 29% (632) have been children &lt;18 years old.</p> <p>As of June 18, a total of 137,316 Ebola vaccinations had been administered. R <a href="#">1</a> <a href="#">2</a> (<b>See epidemic curve and maps on p. 14 of this report.</b>)</p>
<b>Ethiopia</b>					
<b>*Measles</b>	5-May	5,622	59	—	In Ethiopia as of May 2, a total of 5,622 measles cases have been reported in 2019, including 59 laboratory-confirmed. The impacted areas have been Oromia, Amhara, and Solami regions. A vaccination campaign is being planned to target 6.7 million displaced children aged 6 months to 14 years. R <a href="#">1</a>

Disease	Last Update	2019 Cases	Confirmed	Deaths	Notes
<b>Guinea</b>					
Measles	12-May	1,359	593	14 (1.0%)	As of May 12, a total of 1,359 measles cases, including 14 (1.0%) deaths have been reported, compared with 1,863 total cases in 2018. Of 874 specimens tested, 519 (59.4%) have been positive. Disease transmission currently is most acute in Matoto, Ratoma, Dixinn, Matam, ,Dubreka, Coyah, Maferinyah, Kegneko, and Manéah. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
<b>Kenya</b>					
Leishmani-asis	16-Jun	1,564	294	22 (1.4%)	As of June 16, a kala-azar outbreak in Marsabit and Wajir counties has led to 1,564 suspected cases, including 294 confirmed with rapid diagnostic testing and 22 deaths (1.4%). R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
Cholera	16-Jun	2,916	129	20 (0.7%)	A cholera outbreak that began in early January has been contained in Nairobi and Narok. As of June 16, a total of 2,916 cases have been reported, including 129 confirmed and 20 (0.7%) deaths. Cases continue to be reported from Kajiado, Garissa, Wajir, Mombassa, and Nairobi Counties. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a> <a href="#">4</a>
<b>Liberia</b>					
Lassa fever	16-Jun	29	22	8 (27.6%)	As of June 16, Liberia has reported a total of 29 suspected cases of Lassa fever, including 22 confirmed with RT-PCR and 8 (27.6%) deaths, in 2019. Cases have been reported in Nimba, Bong, Grand Kru, Grand Bassa, and Montserrado Counties. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
Measles	9-Jun	1,010	81	5 (0.5%)	As of June 9, a total of 1,010 measles cases have been reported from 13 counties, including 81 confirmed. Eleven of 15 counties have reported cases. Gbeshlay-Geh District, Nimba County has been especially hard-hit recently. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
<b>Mali</b>					
Measles	26-May	909	261	0	As of May 26, a total of 909 measles case were reported in Mali, including 261 confirmed. Cases have been reported recently in the following health districts: Koulikoro, Segou, Kayes, Mopti, Bamako, Kidal, and Babamba. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
<b>Mayotte</b>					
Rift Valley fever	3-Jun	137	137	0	Between December 11 and June 3, a total of 137 Rift Valley fever (RVF) cases were reported on the island of Mayotte, which is between Madagascar and Mozambique. There has been a significant decrease in RVF incidence over the past three months. Seventy-five percent of the cases have been male. Most cases have been concentrated Centre-West and North area of the island. One hundred twenty-three separate animal RVF outbreaks also have been documented in the Mayotte's central and western regions. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
<b>Mozambique</b>					
Cholera	5-May	6,739	—	8 (0.1%)	Tropical Cyclones Idai and Kenneth, hitting Mozambique in March and April, caused widespread flooding, crop loss, and devastation to infrastructure. More than 6,730 cholera cases have been reported in central Sofala (especially Beira district) and northern Cabo Delgado provinces, including recently in the port town and provincial capital of Pemba, which is one of the most cholera-endemic areas in Mozambique. Due to severe damage to healthcare, sanitation, and water facilities and infrastructure, affected areas will remain especially vulnerable to waterborne and vectorborne disease. Wide areas of the coastal regions remain without electricity and communications. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>

Disease	Last Update	2019 Cases	Confirmed	Deaths	Notes
<b>Namibia</b>					
Hepatitis E	2-Jun	5,309	987	45 (0.8%)	The hepatitis E outbreak that started nearly one year ago has persisted and become protracted. The outbreak, which at first was restricted to the Windhoek district in the Khomas Region (still the most affected region), spread to 8 other regions: Erongo, Omusati, Oshana, Ohangwen, Oshikoto, Kavango, and, most recently, Otjozo and Hardap. As of June 2, a total of 5,309 hepatitis E cases had been identified. Forty-five cases have died, of whom 20 (43.0%) were either pregnant or post-partum women. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
<b>Niger</b>					
Measles	9-Jun	8,835	0	44 (0.5%)	As of June 9, a total of 8,835 measles cases, including 44 (0.5%) deaths have been reported by Niger in 2019, with cases reported from Maradi and Tahoua regions., followed by Zinder, Niamey, Tillaberi, Agadez, Diffa, and Dofo. R <a href="#">1</a> <a href="#">2</a>
<b>Nigeria</b>					
Measles	18-May	28,796	1,423	89 (0.3%)	As of May 18, a total of 28,796 suspected measles cases have already been reported in Nigeria, including 2,029 in the past week. The states of Borno in northeast Nigeria, Yobe, and Katsina in the north have accounted for nearly 80% of cases. Nigerian health authorities reported >17,000 suspected measles cases in 2018. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
Lassa fever	16-Jun	606	591	147 (24.3%)	As of June 16, there have been a total of 591 laboratory-confirmed and 15 probable Lassa fever cases reported in 2019, including 18 healthcare workers, two of whom died. One hundred forty-seven (24.3%) deaths have occurred. Since a peak at the end of January, there has been a steady decline in cases, with fewer cases in the last 5 weeks than at any other time in 2019. The emergency phase of the outbreak has been declared over. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a> <a href="#">4</a>
*Cholera	20-Jun	91	8	1 (1.1%)	On June 18, health authorities in Adamawa State declared a cholera outbreak in the northeast state. As of June 20, a total of 91 suspected cases have been reported, including one death. <i>Vibrio cholera</i> classical O1 strain has been confirmed in 6 of the 8 confirmed cases. R <a href="#">1</a>
<b>Somalia</b>					
Cholera	30-May	55	—	—	In the week ending May 19, a total of 55 suspected cholera patients, 24 (68%) of whom are children under 5 years old, have been reported by Somali authorities. Sixteen districts in Banadir region are affected. R <a href="#">1</a>
<b>South Sudan</b>					
Measles	9-Jun	1,187	72	7 (0.6%)	As of June 9, total of 1,187 suspected measles cases, including 72 confirmed, have been reported in 12 South Sudan counties: Abyei, Juba, Pibor, Gogri West, Gogri East, Bor South, Melut, Mayom, Tonj North, Awiel South, Awiel West, and Awiel Central. Three Protection of Civilian sites have been affected. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
<b>Tanzania</b>					
Cholera	16-June	381	13	6 (1.6%)	In 2019, a new wave of cholera was reported in 9 Tanzanian Districts, including Longido, Handeni, and Pangani. In the past reporting few reporting weeks, Dar es Salaam and Tanga regions reported cases. As of June 16, a total of 381 suspected cases, including 6 deaths, have been reported by health authorities. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>

Disease	Last Update	2019 Cases	Confirmed	Deaths	Notes
<b>South Sudan</b>					
<b>Measles</b>	9-Jun	1,187	72	7 (0.6%)	As of June 9, total of 1,187 suspected measles cases, including 72 confirmed, have been reported in 12 South Sudan counties: Abyei, Juba, Pibor, Gogriell West, Gogriell East, Bor South, Melut, Mayom, Tonj North, Awiel South, Awiel West, and Awiel Central. Three Protection of Civilian sites have been affected. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
<b>Tanzania</b>					
<b>Cholera</b>	16-June	381	13	6 (1.6%)	In 2019, a new wave of cholera was reported in 9 Tanzanian Districts, including Longido, Handeni, and Pangani. In the past reporting few reporting weeks, Dar es Salaam and Tanga regions reported cases. As of June 16, a total of 381 suspected cases, including 6 deaths, have been reported by health authorities. R <a href="#">1</a> <a href="#">2</a> <a href="#">3</a>
<b>Uganda</b>					
<b>Measles</b>	7-May	1,041	525	6 (0.6%)	As of May 7, a total of 1,041 suspected measles have been reported in 2019, of which 525 have been confirmed. Children under 5 years old accounted for more 64% of confirmed cases; all but one live in rural areas. R <a href="#">1</a> <a href="#">2</a>
<b>Yellow fever</b>	26-May	6	2	0	On May 14, the Ugandan Ministry of Health reported that routine sampling for a sentinel surveillance program identified two cases of yellow fever in widely separated districts. One case originated in Koboko, in the northwest close to the borders of South Sudan and the DRC. The second came from a patient in south-central Masaka, which is on close to Lake Victoria. Neither had been vaccinated. A survey by a public health response team determined that there were many unvaccinated persons in both areas. R <a href="#">1</a> <a href="#">2</a>
<b>*Ebola virus disease</b>	14-Jun	3	3	3 (100%)	From June 11-13, a total of three confirmed Ebola virus disease (EVD) cases were confirmed in Kasese District in western Uganda. All three died. They were members of the same family, contacts of a confirmed EVD case, who crossed over the porous border between the Democratic Republic of Congo (DRC) and Uganda. Following these deaths, the remaining family members returned to the DRC. R <a href="#">1</a>
<b>Zambia</b>					
<b>Cholera</b>	22- May	253	31	6 (2.4%)	Since April 3 and as of May 22, a total of 253 suspected cholera cases, including 31 confirmed, have reported by Zambian health authorities; 6 (2.4%) have died. Most cases (96%) have occurred in Mpulungu District, Northern Province, near to Lake Tanganyika. The disease has spread to neighboring Mbala District. R <a href="#">1</a>

**Removed from last bi-weekly list:**

***E. coli* O103 (US, Multistate)**

**Legionnaires' disease (Belgium)**

***Plasmodium vivax* (Greece)**

**Leishmaniasis (Pakistan)**

**Crimean-Congo hemorrhagic fever (Africa, Multistate)**

**Meningitis (Chad)**

**Measles (Madagascar)**

**Meningitis (Nigeria)**

**New outbreaks since last bi-weekly list**

\* **Powassan virus (US, New Jersey)**

\* **Guillain-Barré syndrome (Peru)**

\* **Campylobacteriosis (Norway)**

\* **Chikungunya (Spain)**

\* **Listeriosis (United Kingdom)**

\* **Acute encephalitis syndrome (India)**

\* **Hendra virus (Australia)**

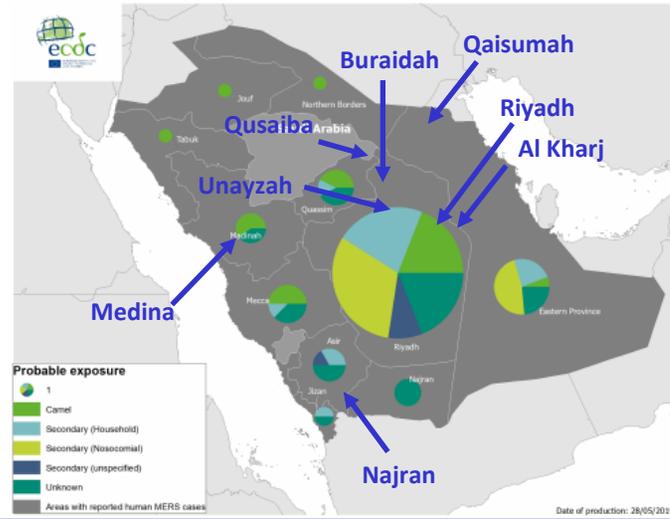
\* **Brucellosis (Algeria)**

\* **Malaria (Burundi)**

# MERS-CoV

Geographical distribution of confirmed MERS-CoV cases by probable region of infection and exposure in 2019, Saudi Arabia, as of 28 May 2019

ECDC



# Cholera

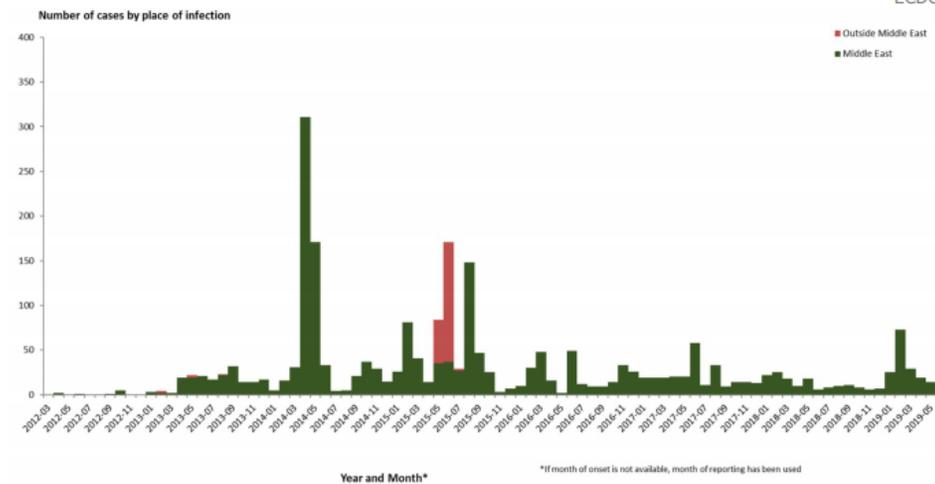
Geographical distribution of cholera cases reported worldwide in 2018

ECDC



Distribution of confirmed cases of MERS-CoV by place of infection and month of onset, from March 2012 to 28 May 2019

ECDC

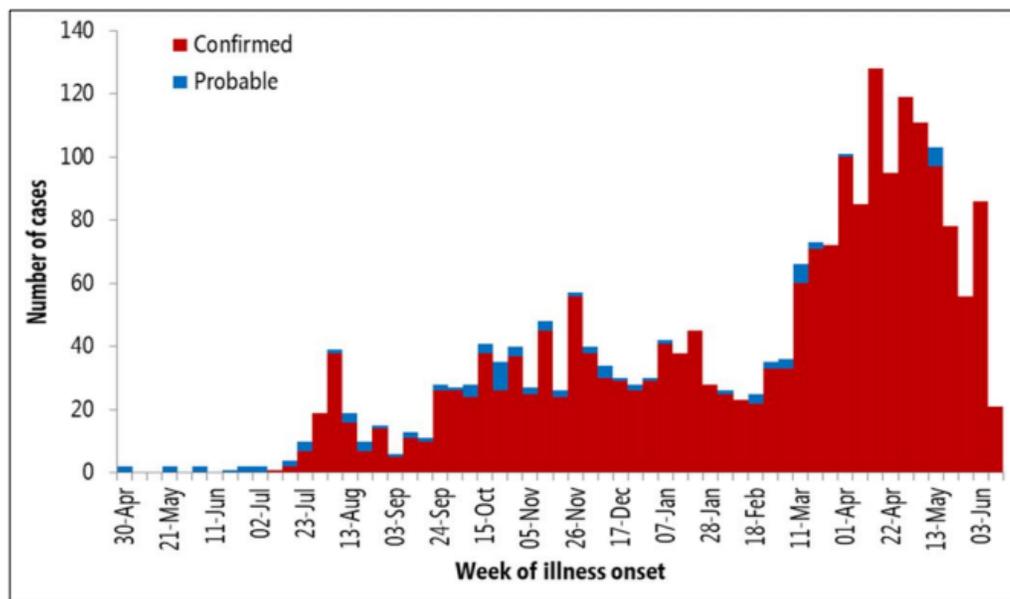


Geographical distribution of new cholera cases reported worldwide between April to June 2019

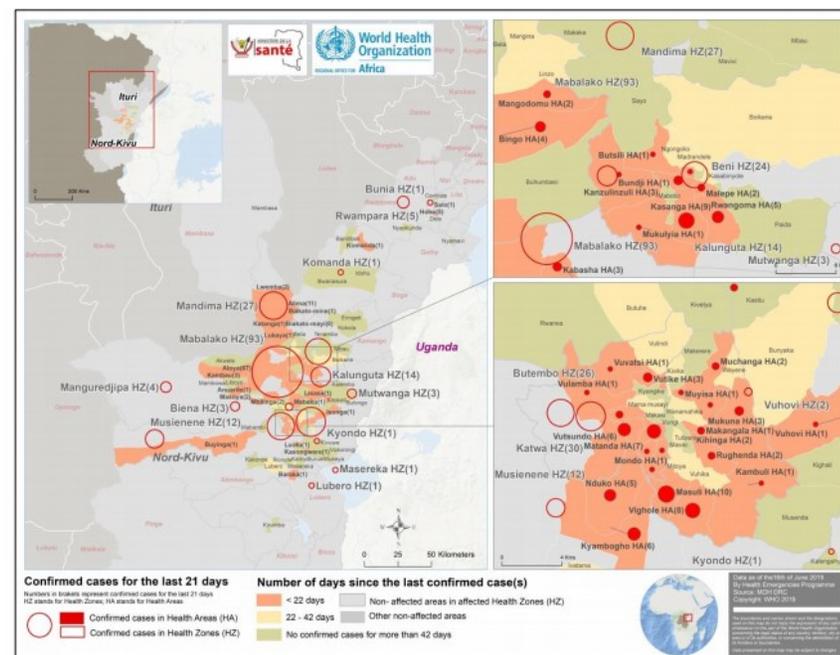
ECDC



**Figure 1: Confirmed and probable Ebola virus disease cases by week of illness onset, as of 16 June 2019**



**Figure 2: Geographical distribution of confirmed and probable Ebola virus disease cases by health area, North Kivu and Ituri provinces, Democratic Republic of the Congo, 16 June 2019**

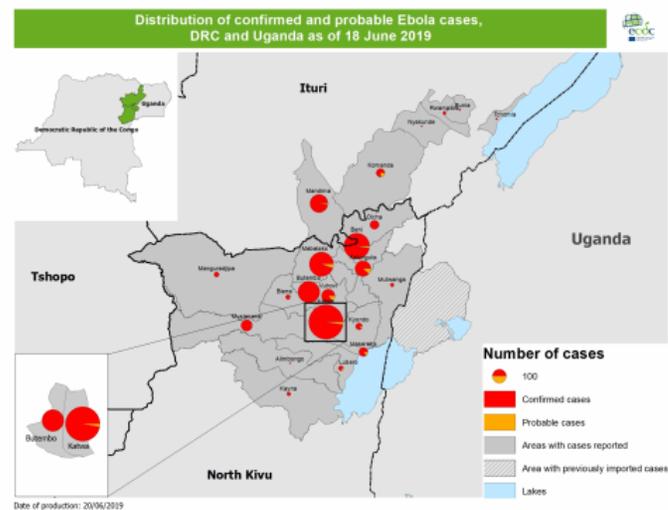


## Ebola virus disease outbreak, North Kivu and Ituri Provinces, Democratic Republic of Congo

As of June 18, 2019

**Geographical distribution of confirmed and probable cases of Ebola virus disease, North Kivu and Ituri Provinces, Democratic Republic of the Congo, as of 18 June 2019**

Source: ECDC



### Geographical distribution of chikungunya cases reported worldwide, March to May 2019

Source: ECDC



### Geographical distribution of dengue cases reported worldwide, March to May 2019

Source: ECDC

