

World Health Organization

SITUATION REPORT

YELLOW FEVER 28 OCTOBER 2016

KEY UPDATES

- Angola epidemiological update (as of 20 October):
 - The last confirmed case had symptom onset on 23 June.
 - Two new probable cases without a history of yellow fever vaccination were reported from Kwanza Sul province in the last week.
 - Phase two of the vaccination campaign is ongoing, targeting more than two million people in 10 provinces.
- Democratic Republic of the Congo epidemiological update (as of 26 October):
 - \circ $\;$ The last confirmed non-sylvatic case had symptom onset on 12 July.
 - A new confirmed, sylvatic case was reported from Bominenge Health Zone in Sud Ubangui province.
 - Fourteen probable cases remain under investigation.
 - The reactive campaign in Mushenge Health Zone in Kasai province, which began on 20 October, is ongoing.

ANALYSIS

The majority of the probable cases in Angola have been ruled out as yellow fever cases by the Institut Pasteur of Dakar. They will remain classified as probable cases until a full battery of tests has been run to determine other possible causes of illness. Once the final results are received the cases will be reclassified. Coincidentally, a previously scheduled pre-emptive vaccination campaign is ongoing in Kwanza Sul province where two new probable cases were reported.

EPIDEMIOLOGICAL SITUATION

Angola

- Two new probable cases without a history of yellow fever vaccination were reported from Kwanza Sul province in the last week.
- Of the forty-five probable cases that were reported in the four weeks to 13 October: 31 have been discarded, two are undergoing further testing and 12 await classification by the committee (Fig. 1).
- From 5 December 2015 to 20 October 2016 (Table 1):
 - 4347 suspected cases, with 377 deaths (case fatality rate, CFR: 8.7%);
 - $\circ~$ 884 cases have been laboratory confirmed, with 121 deaths (CFR: 13.7%).

Since the start of the outbreak, suspected cases have been reported from all 18 provinces; confirmed cases have been reported from 80 districts in 16 provinces (Table 2). Autochthonous transmission has been reported from 45 districts in 12 provinces.



Figure 1. National weekly number of confirmed, probable and negative yellow fever cases in Angola, 5 December 2015 to 13 October 2016

Data for the past four weeks are subject to revision pending ongoing investigation and reclassification.

Democratic Republic of the Congo

- From 1 January to 26 October 2016 (Fig. 2, Table 1):
 - 2987 notified cases reported from all 26 provinces;
 - 78 confirmed cases have been identified from 2800 suspected cases that have been laboratory tested, with 16 deaths (CFR: 21%);
 - Of the 78 confirmed cases, reported from eight provinces (Fig. 4), 57 acquired infection in Angola, 13 are autochthonous¹, and eight are cases of sylvatic² transmission (not related to the outbreak).
 - One new confirmed, sylvatic case was reported from Bominenge Health Zone in Sud Ubangui province. This was one of the sixteen probable cases that were reported under investigation last week. This new sylvatic case reportedly had symptom onset on 17 August.
- Fourteen probable cases remain under investigation (three in Kinshasa, eight in Kwango and one case each in Bas Uele, Kwilu, and Lualaba provinces). In addition to the case in Sud Ubangui that was under investigation and is now classified as a new sylvatic case, one case in Kinshasa was ruled out due to previous yellow fever vaccination history.

¹ Autochthonous infection is considered to be an infection acquired among patients with no history of travel during the incubation period, excluding cases classified as sylvatic.

² http://www.who.int/mediacentre/factsheets/fs100/en/



Figure 2. National weekly number of confirmed and negative yellow fever cases in Democratic Republic of the Congo, 21 September 2015 to 26 October 2016*

Data are subject to revision pending ongoing investigation and reclassification.*Data where date of onset is unknown are not shown.





Number of confirmed cases per 1 000 000 population

Population figures are based on estimates from the United Nations Department of Economic and Social Affairs. Excludes cases for which data on sex or age are not available.

Table 1: Reported yellow fever cases and deaths in Angola and Democratic Republic of the	
Congo	

	Ar	ngola	Democratic Republic of the Congo		
Cases and deaths	Recent week (14 – 20 Oct)	Cumulative (5 Dec – 20 Oct)	Recent week (20 – 26 Oct)	Cumulative (1 Jan – 26 Oct)	
Confirmed cases	0	884	1*	77*	
Confirmed deaths	0	121	0	16	
Reported cases	41	4347	17	2987	
Reported deaths	1	377	0	121	

Cases and deaths include autochthonous, sylvatic and imported cases. Data are as of most recent week for which data are available. These numbers are subject to change due to ongoing reclassification, retrospective investigation and availability of laboratory results. *Eight cases are sylvatic yellow fever cases not associated with the outbreak.

Table 2: Geographical distribution of yellow fever cases in Angola and DemocraticRepublic of the Congo

	Angola		Democratic Republic of the Congo	
Geographical distribution of cases	Recent week (14 – 20 Oct)	Cumulative (5 Dec – 20 Oct)	Recent week (20 – 26 Oct)	Cumulative (1 Jan – 26 Oct)
Districts/ health zones with confirmed	0	80	1*	31*
cases	U	80	T.	51.
Districts/ health zones with				
documented local transmission	0	45	1*	17*
(autochthonous and sylvatic)				
Provinces with confirmed cases	0	16	1*	8*
Provinces with documented local				
transmission (autochthonous and	0	12	1*	7*
sylvatic)				

Data are as of most recent week for which data are available. Data are subject to revision due to retrospective investigation and availability of laboratory results. *Includes sylvatic cases.

Figure 4. Distribution of confirmed yellow fever cases in Democratic Republic of the Congo as of 26 October 2016



RESPONSE

- Information on the current outbreak continues to be updated on the WHO website³.
- In Angola, phase two of the vaccination campaign targeting more than two million people in 12 districts in 10 provinces is ongoing.
- In Democratic Republic of the Congo, the reactive vaccination campaign in Feshi Health Zone in Kwango province ended after 152 492 people were vaccinated among a target of 146 449 (104.1%). The reactive campaign in Mushenge Health Zone in Kasai province which began on 20 October is ongoing. Monitoring continues in the 62 Health Zones where the pre-emptive vaccination campaigns were conducted in August.
- WHO has sent more than 30 million vaccine doses to Angola, Democratic Republic of the Congo and Uganda since the beginning of the outbreak through the International Coordinating Group (ICG) global stockpile, with additional vaccine doses from the manufacturer Bio-Manguinhos in Brazil.
- As of 25 October 2016, 20 million vaccine doses have been approved for Angola and 9.4 million doses for Democratic Republic of the Congo (Table 3).
- The number of vaccine doses currently available in the ICG global stockpile for emergency response is 6.9 million (Table 4). The amount of doses already allocated to respond to the outbreak is not included in this number.

Table 3. Vaccination coverage in Angola and Democratic Republic of the Congo as of 25October 2016

Country	Target areas: Province/Region (District/Health zone)	Doses approved (in millions)
	Luanda (Viana)	1.8
	Luanda (all 8 districts)	5.6
	Benguela, Bie, Huambo, Kwanza Sul	4.3
Angola	Benguela, Bie, Cunene, Huila, Kuando Kubango, Kwanza Norte, Kwanza Sul, Namibe, Uige	3.3
	Pre-emptive vaccination campaigns in areas which border Democratic Republic of the Congo	3.1
	Namibe (Namibe), Moxico (Lumbala Nguimbo, Luena), Bie (Chinguar, Andulo, Nharea) Cuando Cubango (Cuito Cuanavale), Cuanza Sul (Cela), Lunda Sul (Cacolo)	1.9
	Kinshasa, Kongo Central	2.2
Democratic Bopublic of	Kwango province (3 health zones), Kinshasa (Kisenso)	1.1
Republic of the Congo	Pre-emptive vaccination campaigns in Kinshasa and areas which border Angola	5.8
	Kwango (Feshi), Kasai (Mushenge)	0.3

³ <u>http://www.who.int/features/qa/yellow-fever/en/</u>

Table 4. Cumulative number of vaccine doses (millions) available and projected for emergency stockpile

Date (as of)	Number of vaccine doses available*
25 October	6.9
	Cumulative number of vaccine doses projected [®]
31 October	7.4
30 November	18.9
31 December	26.0

*Number of doses available is the current stock minus number of vaccine doses planned to be distributed for emergency response. *Projections are revised on a regular basis.



Figure 5. Vaccination administrative* coverage in Angola as of 13 October 2016

*These coverage figures represent number of doses administered, divided by estimated population. As such, figures may not reflect true vaccination coverage due to inaccurate population estimates.