

# SITUATION REPORT

YELLOW FEVER 21 OCTOBER 2016

#### **KEY UPDATES**

- Angola epidemiological update (as of 13 October):
  - The last confirmed case had symptom onset on 23 June.
  - o Forty-five probable cases were reported in the last four weeks.
  - 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 19 October):
  - o The last confirmed non-sylvatic case had symptom onset on 12 July.
  - Sixteen probable cases remain under investigation (four in Kinshasa, eight in Kwango, and one case each in Bas Uele, Kwilu, Lualaba and Sud Ubangi provinces).
  - The reactive vaccination campaign in Feshi Health Zone in Kwango province concluded after 152 492 people were vaccinated. The reactive campaign in Mushenge Health Zone in Kasai province began on 20 October.

#### **ANALYSIS**

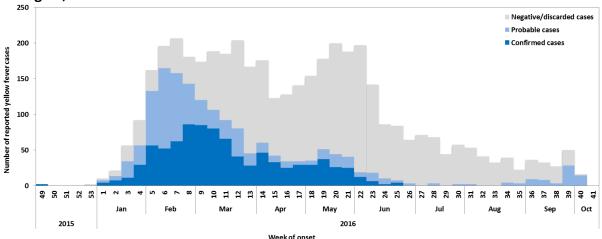
- The continuing detection and investigation of probable cases (including the 45 probable cases in Angola) demonstrate that active surveillance is ongoing. Nevertheless, it is important to note persistent difficulties in surveillance and laboratory confirmation capacities, which may delay case detection. A strong and sustained surveillance effort remains crucial.
- The status of the probable cases in Angola will be reviewed by the Ministry of Health's Final Classification Committee once the investigations are completed on their exposure history and yellow fever vaccination status.

### **EPIDEMIOLOGICAL SITUATION**

#### **Angola**

- Forty-five probable cases were reported in the last four weeks (Fig. 1).
- From 5 December 2015 to 13 October 2016 (Table 1):
  - 4306 suspected cases, with 376 deaths (case fatality rate, CFR: 8.8%);
  - o 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

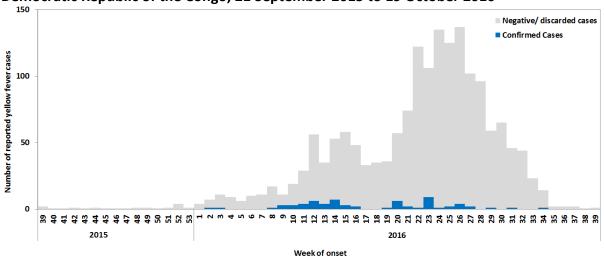


Data for the past four weeks are subject to revision pending ongoing investigation and reclassification.

## **Democratic Republic of the Congo**

- From 1 January to 19 October 2016 (Fig. 2, Table 1):
  - 2970 notified cases reported from all 26 provinces;
  - 77 confirmed cases have been identified from 2800 suspected cases that have been laboratory tested, with 16 deaths (CFR: 21%);
  - Of the 77 confirmed cases, reported from eight provinces (Fig. 4), 57 acquired infection in Angola, 13 are autochthonous<sup>1</sup>, and seven are cases of sylvatic<sup>2</sup> transmission (not related to the outbreak).
- Sixteen probable cases remain under investigation (four in Kinshasa, eight in Kwango and one case each in Bas Uele, Kwilu, Lualaba and Sud Ubangi provinces).

Figure 2. National weekly number of confirmed and negative yellow fever cases in Democratic Republic of the Congo, 21 September 2015 to 19 October 2016\*

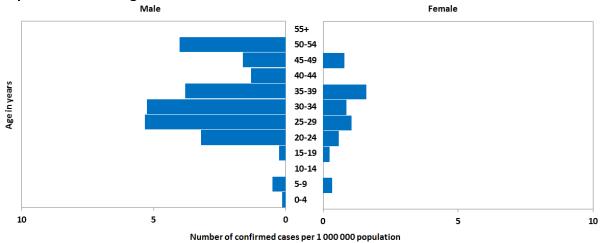


Data are subject to revision pending ongoing investigation and reclassification.\*Data where date of onset is unknown are not shown.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> http://www.who.int/mediacentre/factsheets/fs100/en/

Figure 3. Cumulative incidence of confirmed cases by sex and age group in Democratic Republic of the Congo as of 19 October 2016



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

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	A	ngola	Democratic Republic of the Congo		
Cases and deaths	Recent week (7– 13 Oct)	Cumulative (5 Dec – 13 Oct)	Recent week (13 – 19 Oct)	Cumulative (1 Jan – 19 Oct)	
Confirmed cases	0	884	0	77*	
Confirmed deaths	0	121	0	16	
Reported cases	85	4306	54	2970	
Reported deaths	3	376	1	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. \*Seven cases are sylvatic yellow fever cases not associated with the outbreak.

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

	Angola		Democratic Republic of the Congo	
Geographical distribution of cases	Recent week (7–13 Oct)	Cumulative (5 Dec – 13 Oct)	Recent week (13 – 19 Oct)	Cumulative (1 Jan – 19 Oct)
Districts/ health zones with confirmed	0	80	0	30*
cases				
Districts/ health zones with				
documented local transmission	0	45	0	16*
(autochthonous and sylvatic)				
Provinces with confirmed cases	0	16	0	8*
Provinces with documented local				
transmission (autochthonous and	0	12	0	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.

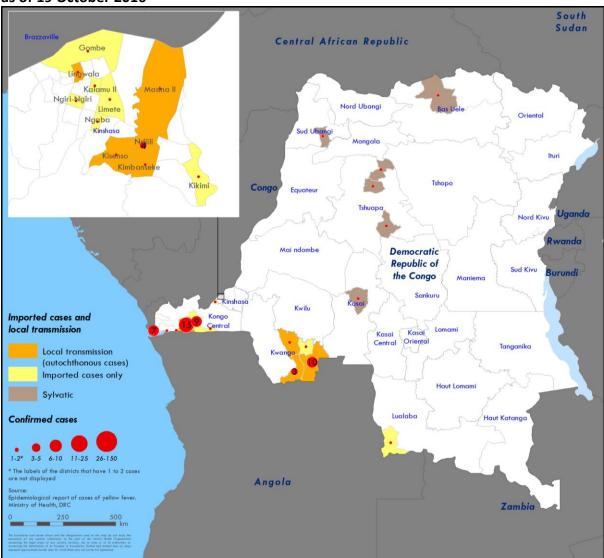


Figure 4. Distribution of confirmed yellow fever cases in Democratic Republic of the Congo as of 19 October 2016

### **RESPONSE**

- Information on the current outbreak continues to be updated on the WHO website<sup>3</sup>.
- 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 concluded after 152 492 people were vaccinated among a target of 146 449 (104.1%). in the reactive campaign in Mushenge Health Zone in Kasai province began on 20 October. 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.

<sup>&</sup>lt;sup>3</sup> http://www.who.int/features/qa/yellow-fever/en/

- As of 20 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 6.4 million (Table 4). The amount of doses already allocated to respond to the outbreak is not included in this number.

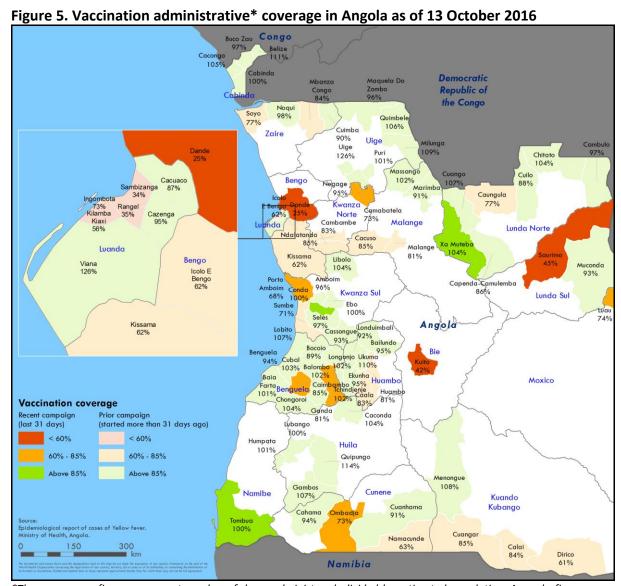
Table 3. Vaccination coverage in Angola and Democratic Republic of the Congo as of 20 October 2016

Country	Target areas:	Doses approved
	Province/Region (District/Health zone)	(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 Republic of the Congo	Kwango province (3 health zones), Kinshasa (Kisenso)	1.1
	Pre-emptive vaccination campaigns in Kinshasa and areas which border Angola	5.8
	Kwango (Feshi), Kasai (Mushenge)	0.3

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

Date (as of)	Number of vaccine doses available*
17 October	6.4
	Cumulative number of vaccine doses projected°
31 October	7.4
30 November	18.9
31 December	26.0

<sup>\*</sup>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.



<sup>\*</sup>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.