



#### KEY UPDATES

- Angola epidemiological update (as of 11 August):
  - There have been no new confirmed cases since 23 June;
  - 3922 suspected cases, with 369 deaths (Case fatality rate: 9.4%);
  - 879 of 3922 suspected cases have been laboratory confirmed, with 119 deaths amongst confirmed cases (CFR: 13.5%);
  - 16 of 18 provinces have reported at least one confirmed case, with local transmission.
- Mass reactive vaccination campaigns in Angola have been implemented in areas with confirmed local transmission (Fig 4). In addition, a preventive vaccination campaign targeting approximately three million people in phase I and additional two million people in phase II, was launched on 15 August. The initial phase of the campaign aims to immunize at-risk populations in 22 districts, 17 of which are on, or close to Angola's border with The Democratic Republic of The Congo (DRC), Namibia, and Republic of Congo. As of 18 August 922 177 people had been vaccinated — 31% of the target population for phase I campaign.
- DRC epidemiological update (as of 18 August):
  - 2357 suspected cases from seven of 26 Provinces;
  - 73 confirmed cases\* have been identified from 1956 suspected cases that have been laboratory tested, with 16 deaths (CFR: 21.9%)(Table 1);
  - Of the 73 confirmed cases:
    - 56 acquired infection in Angola,
    - 13 are autochthonous<sup>1</sup>,
    - 3 are cases of sylvatic<sup>1</sup> transmission (not related to the outbreak),
    - One remains under investigation.
- A preventive vaccination campaign was launched in DRC on 17 August. The campaign aims to immunize over 8 million people in 32 Health Zones in Kinshasa province, and an additional 3 million people in 16 Health Zones on or near the border with Angola. The vaccination campaign in Kinshasa will use the fractionate dose strategy, which is administered at one-fifth of the standard vaccine dose, and is only recommended for use in an emergency situation in the context of limited vaccine availability.

\* One case from the previously reported 74 confirmed cases was found to be a duplicate and has been discarded.

## ANALYSIS

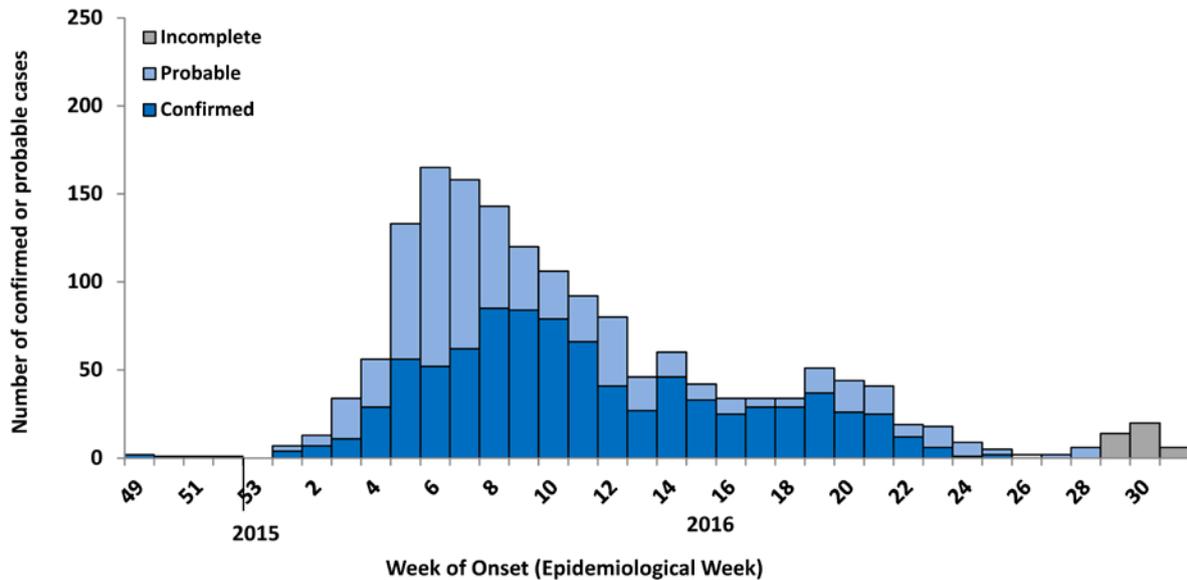
- The overall risk assessment remains unchanged.
- Concurrent and pre-emptive mass vaccination campaigns currently underway in both Angola and DRC represent an opportunity to bring this longstanding outbreak to a close. However, given the significant operational challenges associated with such large campaigns in often very remote areas, the risk remains high.
- Vaccine stocks are adequate to complete all planned vaccination campaigns and leave sufficient stock to respond to additional cases and/or outbreaks in other countries, should they arise.

## EPIDEMIOLOGICAL SITUATION

### Angola

- There has been no confirmed case since 23 June. The situation remains stable, with a low number of suspected cases reported over the past month, indicating ongoing surveillance (Fig. 1 & 2).
- From 5 December 2015 to 11 August 2016, a total of 3922 suspected cases have been reported, of which 879 are laboratory confirmed. A total of 369 deaths have been reported over the same period, including 119 deaths among confirmed cases (Table 1).
- 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 (Fig. 2, Table 2). Autochthonous transmission has been reported from 45 districts in 12 provinces.
- Luanda and Huambo provinces have reported the highest number of total cases. As of 11 August, 2037 cases (including 487 confirmed, 55.5% of all confirmed cases) were reported in Luanda and 624 cases (127 confirmed, 14.5% of all confirmed cases) were reported in Huambo.

**Figure 1. National weekly number of probable and confirmed yellow fever cases in Angola, 5 December 2015 to 11 August 2016**

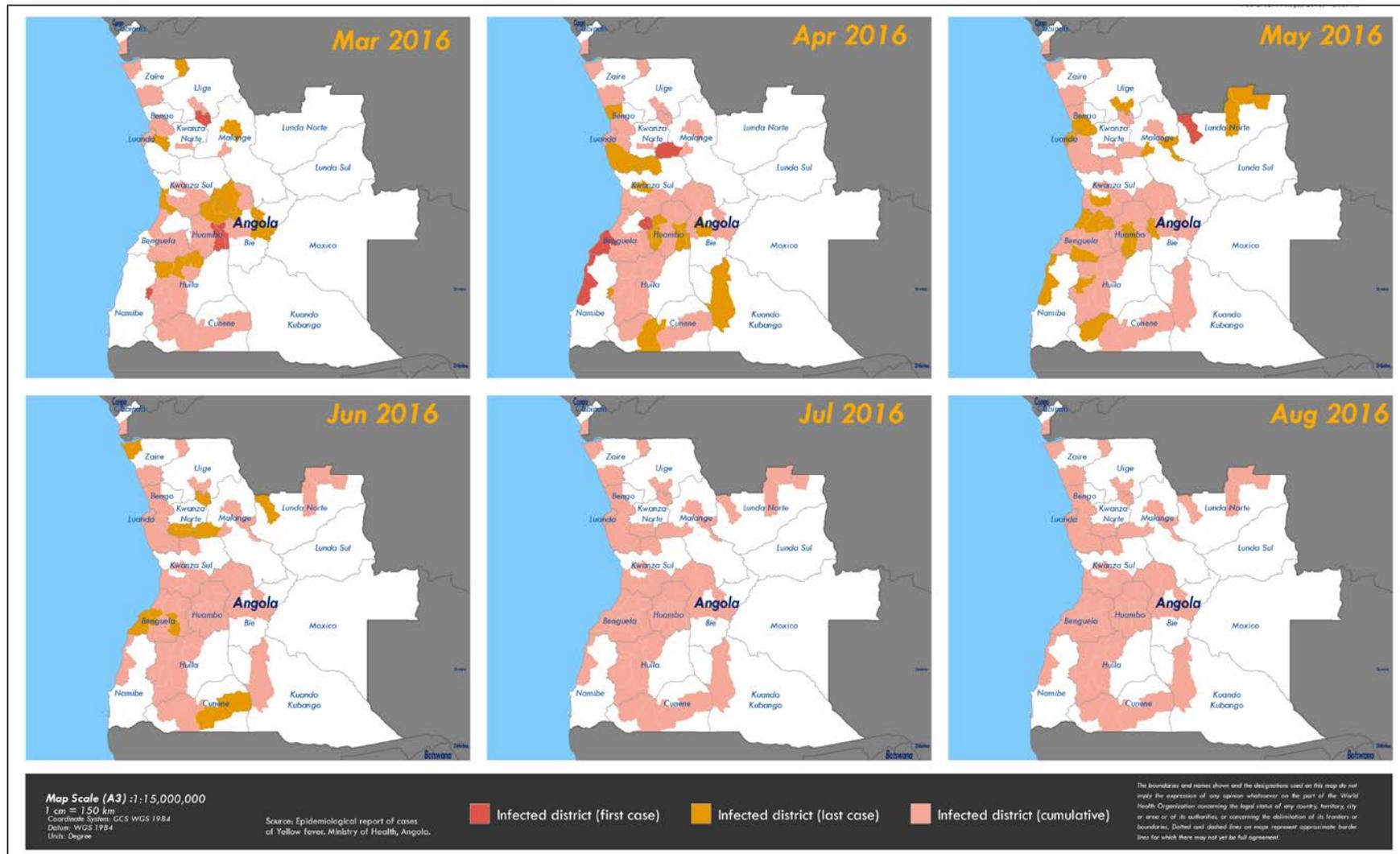


Data source: Angola yellow fever situation report published on 15 August 2016. Data for the past four weeks are subject to revision pending ongoing investigation.

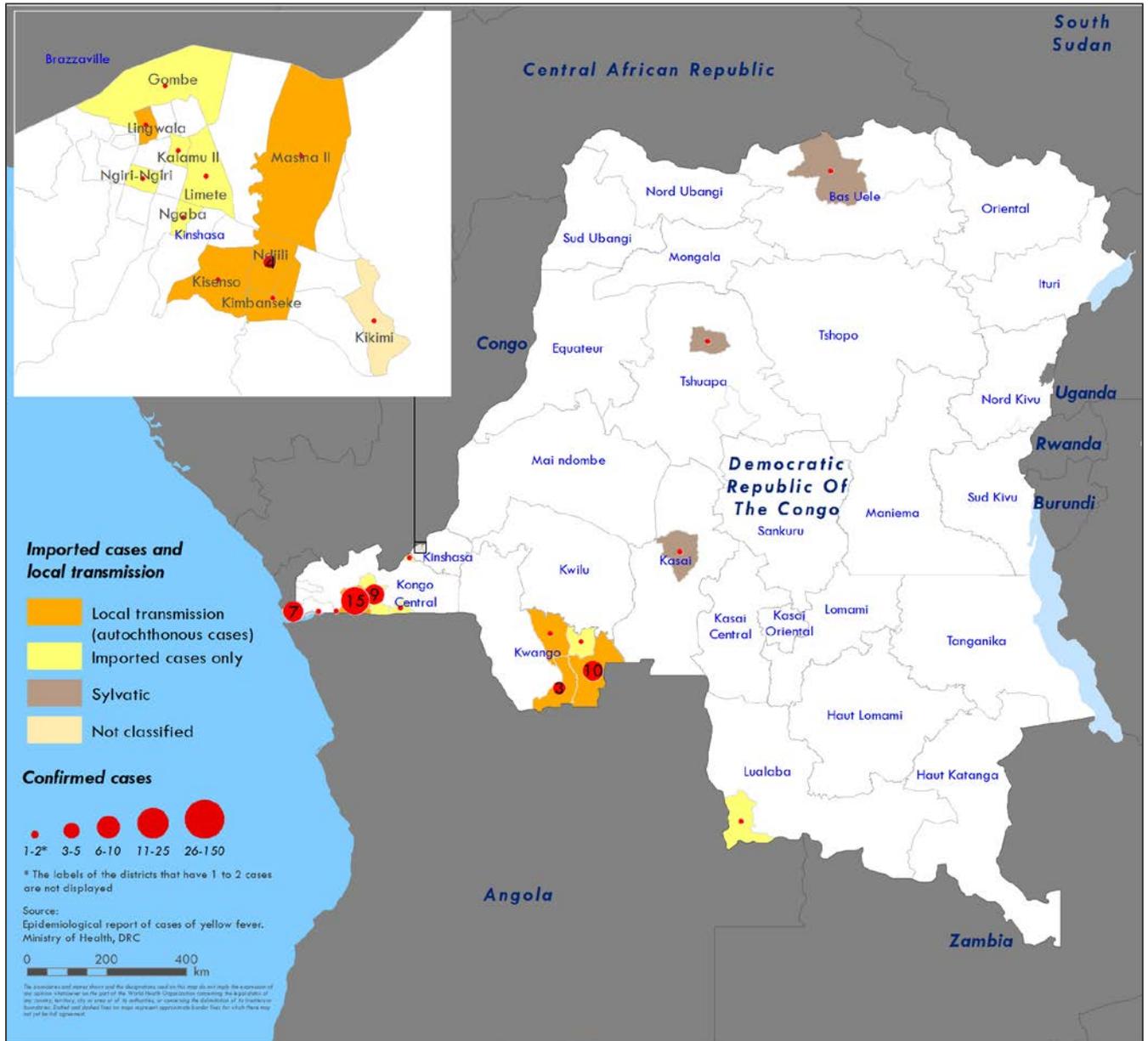
### Democratic Republic of The Congo (DRC)

- As of 18 August, a total of 2357 suspected cases have been reported from seven of 26 provinces in DRC.
- Out of 1956 samples analysed 73 cases have been confirmed (Table 1). 16 deaths have been reported among confirmed cases. Fifty six (56) of the 73 confirmed cases acquired infection in Angola; three cases are sylvatic transmission, 13 are autochthonous; and one case remains under investigation (Fig. 3). One of the previously reported 74 confirmed cases was found to be a duplicate and has been discarded.
- The 13 autochthonous cases were reported from 10 health zones in three provinces: Kinshasa (six cases), Kongo Central (two cases) and Kwango (five cases). One sylvatic case was reported in each of Bas Uele, Kasai, and Tshuapa provinces.
- A preventive vaccination campaign was launched in DRC on 17 August. The campaign aims to immunize over 8 million people in 32 Health Zones in Kinshasa province, and an additional 3 million people in 16 Health Zones on or near the border with Angola. The vaccination campaign in Kinshasa is using the fractionate dose strategy, which is administered at one-fifth of the standard vaccine dose, and is only recommended for use in an emergency situation in the context of limited vaccine availability.
- So far a high population turnout has been observed in all 32 districts in Kinshasa. According to data received on 18 August from 14 health zones in Kinshasa, 570 085 people were vaccinated on 17 August 2016. Data for the first day of the campaign are still awaited from the remaining 18 health zones. No refusal of vaccination has been recorded.

Figure 2. Geographical distribution of confirmed cases in Angola by district through time, March 2016 to 11 August 2016



**Figure 3. Distribution of confirmed yellow fever cases in Democratic Republic of The Congo as of 18 August 2016**



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

Cases and deaths	Angola		Democratic Republic of The Congo	
	Recent week (5 – 11 August)	Cumulative (5 Dec – 11 August)	Recent week	Cumulative (1 Jan – 18 Aug)
Confirmed cases	0	879	Not available	73*
Confirmed deaths	Not available	119	Not available	16
Reported cases	55	3922	Not available	2357
Reported deaths	0	369	Not available	Not available

Cases and deaths include both autochthonous 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. \*Three cases are sylvatic yellow fever cases not associated with the outbreak in Angola.

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

Geographical distribution of cases	Angola		Democratic Republic of The Congo	
	Recent week (5 – 11 August)	Cumulative (5 Dec – 11 August)	Recent week	Cumulative (1 Jan – 10 Aug)
Districts/ health zones with confirmed cases	0	80	Not available	27
Districts/ health zones with documented autochthonous transmission	0	45	Not available	10
Provinces with confirmed cases	0	16	Not available	7*
Provinces with documented local transmission	0	12	Not available	6*

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. Data for the most recent week represent newly affected districts/ health zones or provinces. \*Includes sylvatic cases.

## RESPONSE

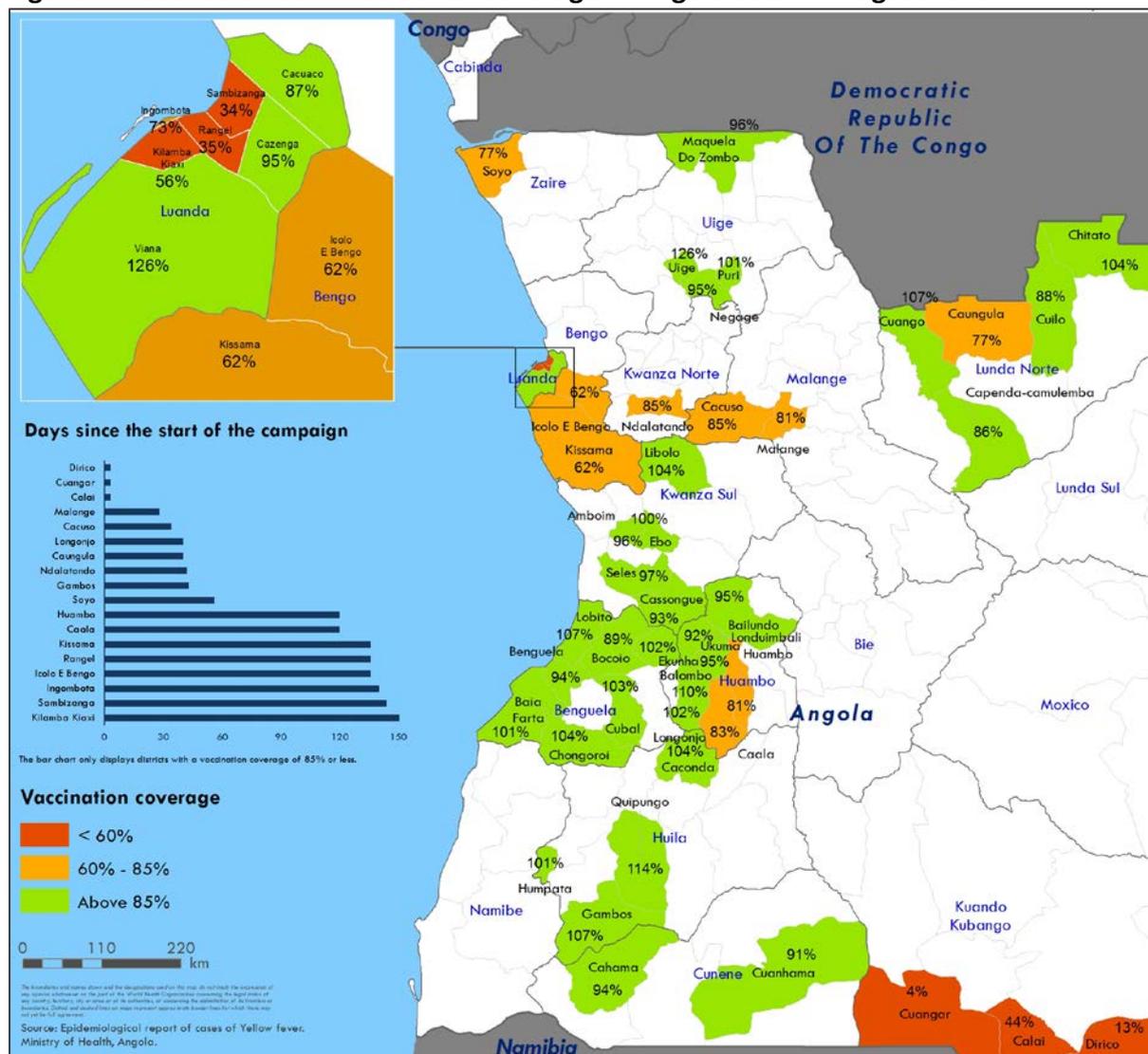
- Information on the current outbreak continues to be updated on the WHO website<sup>1</sup>.
- WHO has sent nearly 27 million vaccine doses to Angola and DRC through the International Coordinating Group (ICG) global stockpile and with additional vaccines from Bio-Manguinhos in Brazil.
- As of 18 August 2016, 18.1 million vaccine doses have been approved for Angola and 9.1 million doses for DRC (Table 3).
- The number of vaccines currently available for the emergency response is 6.7 million through the ICG (Table 4). The amount of doses already allocated to respond to the outbreak is not included in this number.

<sup>1</sup> <http://www.who.int/features/qa/yellow-fever/en/>

**Table 3. Vaccination coverage in Angola and The Democratic Republic of The Congo (DRC) as of 18 August 2016**

<b>Country</b>	<b>Target areas: Province/Region (District/Health zone)</b>	<b>Doses approved (in millions)</b>
<b>Angola</b>	Luanda (Viana)	1.8
	Luanda (all 8 districts)	5.6
	Benguela, Bie, Huambo, Kwanza Sul	4.3
	Benguela, Bie, Cunene, Huila, Kuando Kubango, Kwanza Norte, Kwanza Sul, Namibe, Uige	3.3
	Preventive vaccination campaigns in areas which border DRC	3.1
<b>DRC</b>	Kinshasa, Kongo Central	2.2
	Kwango province (3 health zones), Kinshasa (Kisenso)	1.1
	Preventive vaccination campaigns in Kinshasa and areas which border Angola	5.8

Figure 4. Vaccination administrative\* coverage in Angola as of 11 August 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.

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

Date (as of)	Number of vaccine doses available*
18 August	6.7
<b>Cumulative number of vaccine doses projected°</b>	
28 August	10.7
30 September	19.7
31 October	21.0
30 November	27.7
31 December	24.7

\*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.