



KEY UPDATES

- Angola epidemiological update (as of 15 September):
 - The last confirmed case had symptom onset on 23 June.
 - Three of the four laboratory positive cases reported in the previous situation report have been discarded as having recent vaccination history. The remaining case reported in Tchindjenje district in Huambo province is under investigation.
 - Phase II of the vaccination campaign has been prepared and will begin shortly in 12 districts in nine provinces.
- Democratic Republic of The Congo (DRC) epidemiological update (as of 18 September):
 - The last confirmed non-sylvatic case had symptom onset on 12 July.
 - Nine new cases are under investigation, eight in Kinshasa province and one in Lingomono Health Zone in Tshuapa province. A total of 12 cases are under investigation including the first notified case reported in Sud Ubangi province in Bominenge Health Zone (reported in the situation report of 26 August).
 - The reactive vaccination campaign in Feshi and Mushenge Health Zones in Kwango province will begin soon.
- Republic of Congo is planning a pre-emptive vaccination campaign.

ANALYSIS

- The continuing detection and investigation of suspected and laboratory positive cases demonstrate that active surveillance is functioning well in some areas. Nevertheless, it is important to note the inherent difficulties in surveillance and laboratory confirmation capacities. It remains possible that detection of a case could be delayed in some remote areas. A strong and sustained surveillance effort is therefore more crucial than ever.

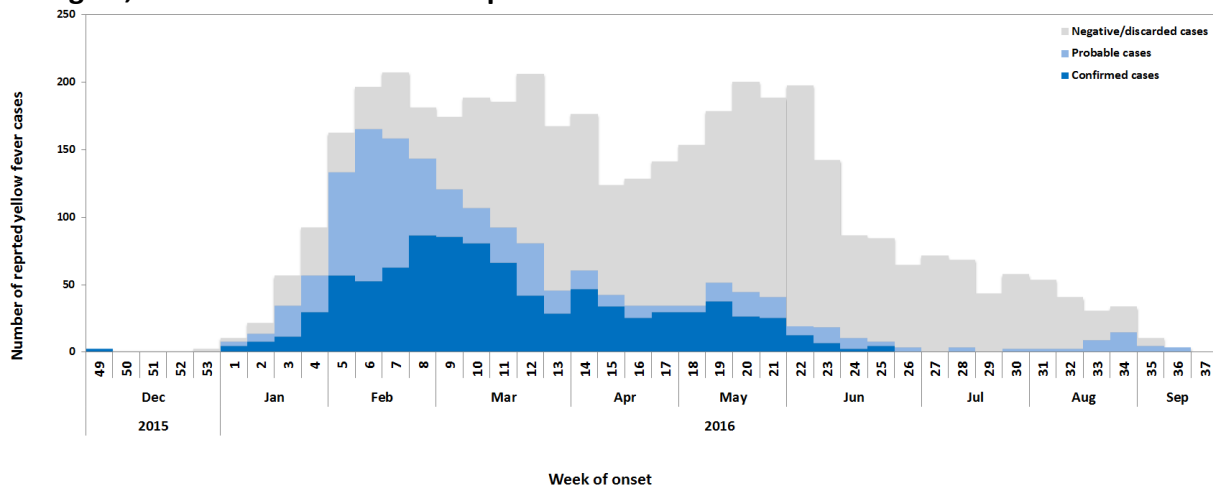
EPIDEMIOLOGICAL SITUATION

Angola

- Three of the four laboratory positive cases reported in the last situation report have been discarded as having recent vaccination history. The remaining case is under investigation.
- From 5 December 2015 to 15 September 2016 (Fig. 1, Table 1):
 - 4120 suspected cases, with 373 deaths (case fatality rate, CFR: 9.1%);
 - 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.

- Luanda and Huambo provinces have reported the highest number of total cases. As of 15 September, 2082 cases including 488 confirmed cases have been reported in Luanda and 642 cases including 128 confirmed cases have been reported in Huambo.

Figure 1. National weekly number of confirmed, probable and negative yellow fever cases in Angola, 5 December 2015 to 15 September 2016



Data source: Data as of 15 September 2016. Data for the past four weeks are subject to revision pending ongoing investigation and reclassification.

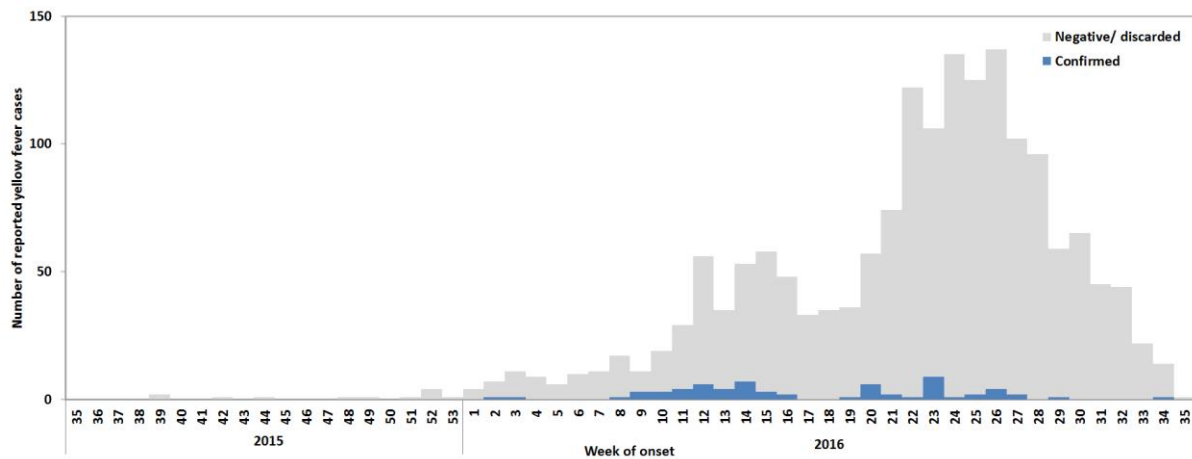
Democratic Republic of The Congo (DRC)

- From 1 January to 18 September 2016 (Fig. 2, Table 1):
 - 2770 notified cases reported from all 26 provinces;
 - 76 confirmed cases have been identified from 2345 suspected cases that have been laboratory tested, with 16 deaths (CFR: 21%);
 - Of the 76 confirmed cases, reported from eight provinces (Fig. 4), 57 acquired infection in Angola, 13 are autochthonous¹, and six are cases of sylvatic² transmission (not related to the outbreak).
- Nine new cases are under investigation, eight in Kinshasa province and one in Lingomono Health Zone in Tshuapa province. A total of 12 cases are under investigation including the first notified case reported in Sud Ubangi province in Bominenge Health Zone. Sud Ubangui province, which borders the Republic of the Congo and Central African Republic, reported the potential case for the first time in the week to 25 August. .
- The 13 autochthonous cases were reported from 10 Health Zones in three provinces: Kinshasa (six cases), Kongo Central (two cases) and Kwango (five cases).
- The most affected age group among men is 25 to 29 years of age (0.53 per 100 000) and 35 to 39 years of age among women (0.16 per 100 000) (Fig. 3).

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.

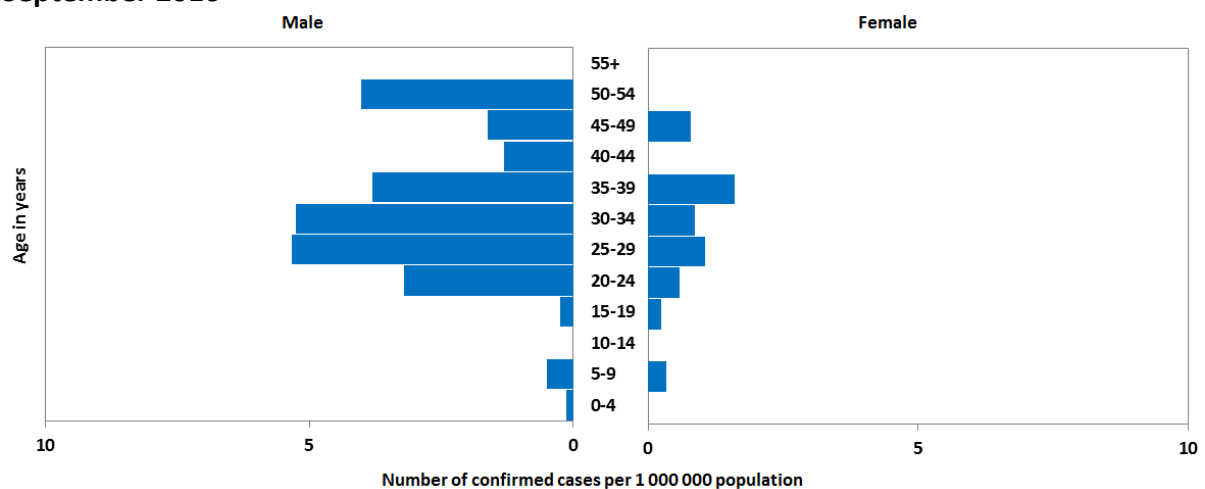
² <http://www.who.int/mediacentre/factsheets/fs100/en/>

Figure 2. National weekly number of confirmed and negative yellow fever cases in DRC, 24 August 2015 to 11 September 2016*



Data source: DRC yellow fever data as of 11 September. Data are subject to revision pending ongoing investigation and reclassification. *Data where date of onset is unknown are not shown.

Figure 3. Cumulative incidence of confirmed cases by sex and age group in DRC as of 18 September 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

| Cases and deaths | Angola | | Democratic Republic of The Congo | |
|------------------|------------------------------|---------------------------------|----------------------------------|---------------------------------|
| | Recent week (9 – 15 Sept) | Cumulative (5 Dec – 15 Sept) | Recent week (12 – 18 Sept) | Cumulative (1 Jan – 18 Sept) |
| Confirmed cases | 0 | 884 | 0 | 76* |
| Confirmed deaths | 0 | 121 | 0 | 16 |
| Reported cases | 20 | 4120 | 63 | 2770 |
| Reported deaths | 0 | 373 | 4 | 119 |

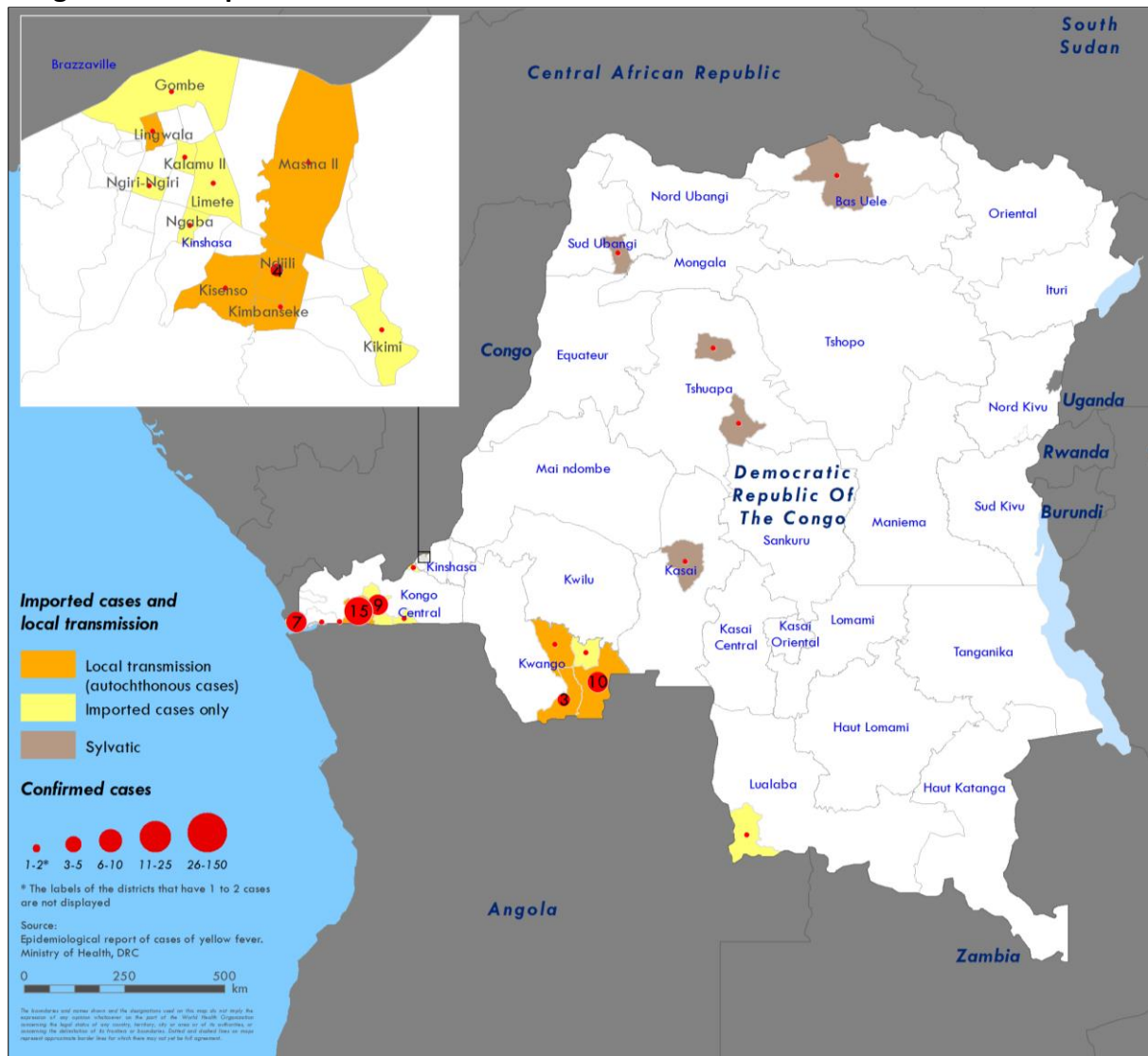
Cases and deaths include autochthonous, sylvatic and imported cases. Data are as of most recent week for which data are available. These numbers are subject to change due to ongoing reclassification, retrospective investigation and availability of laboratory results. *Six cases are sylvatic yellow fever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

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

| Geographical distribution of cases | Angola | | Democratic Republic of The Congo | |
|---|---------------------------|-----------------------------|----------------------------------|------------------------------|
| | Recent week (9 – 15 Sept) | Cumulative (5 Dec –15 Sept) | Recent week (12 – 18 Sept) | Cumulative (1 Jan – 18 Sept) |
| Districts/ health zones with confirmed cases | 0 | 80 | 0 | 29* |
| Districts/ health zones with documented local transmission (autochthonous and sylvatic) | 0 | 45 | 0 | 15* |
| Provinces with confirmed cases | 0 | 16 | 0 | 8* |
| Provinces with documented local transmission (autochthonous and sylvatic) | 0 | 12 | 0 | 7* |

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.

Figure 4. Distribution of confirmed yellow fever cases in Democratic Republic of The Congo as of 18 September 2016



RESPONSE

- Information on the current outbreak continues to be updated on the WHO website³.
- In Angola, Phase II of the vaccination campaign has been prepared and will begin shortly in 12 districts in nine provinces (Fig. 5).
- In DRC, the 10 day reactive vaccination campaign in Feshi and Mushenge Health Zones in Kwango province will begin soon.
- WHO has sent more than 30 million vaccine doses to Angola, DRC and Angola through the International Coordinating Group (ICG) global stockpile and with additional vaccines from Bio-Manguinhos in Brazil.
- As of 20 September 2016, 20.0 million vaccine doses have been approved for Angola and 9.4 million doses for DRC (Table 3).
- The number of vaccines currently available for the emergency response is 5.7 million through the ICG (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 (DRC) as of 20 September 2016

| Country | Target areas: Province/Region (District/Health zone) | Doses approved (in millions) |
|---------|--|---------------------------------|
| Angola | 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 |
| | Namibe (Namibe), Moxico (Lumbala Nguimbo, Luena), Bie (Chinguar, Andulo, Nharea) Cuando Cubango (Cuito Cuanavale), Cuanza Sul (Cela), Lunda Sul (Cacolo) | 1.9 |
| DRC | 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 |
| | Kwango (Feshi), Kasai (Mushenge) | 0.3 |

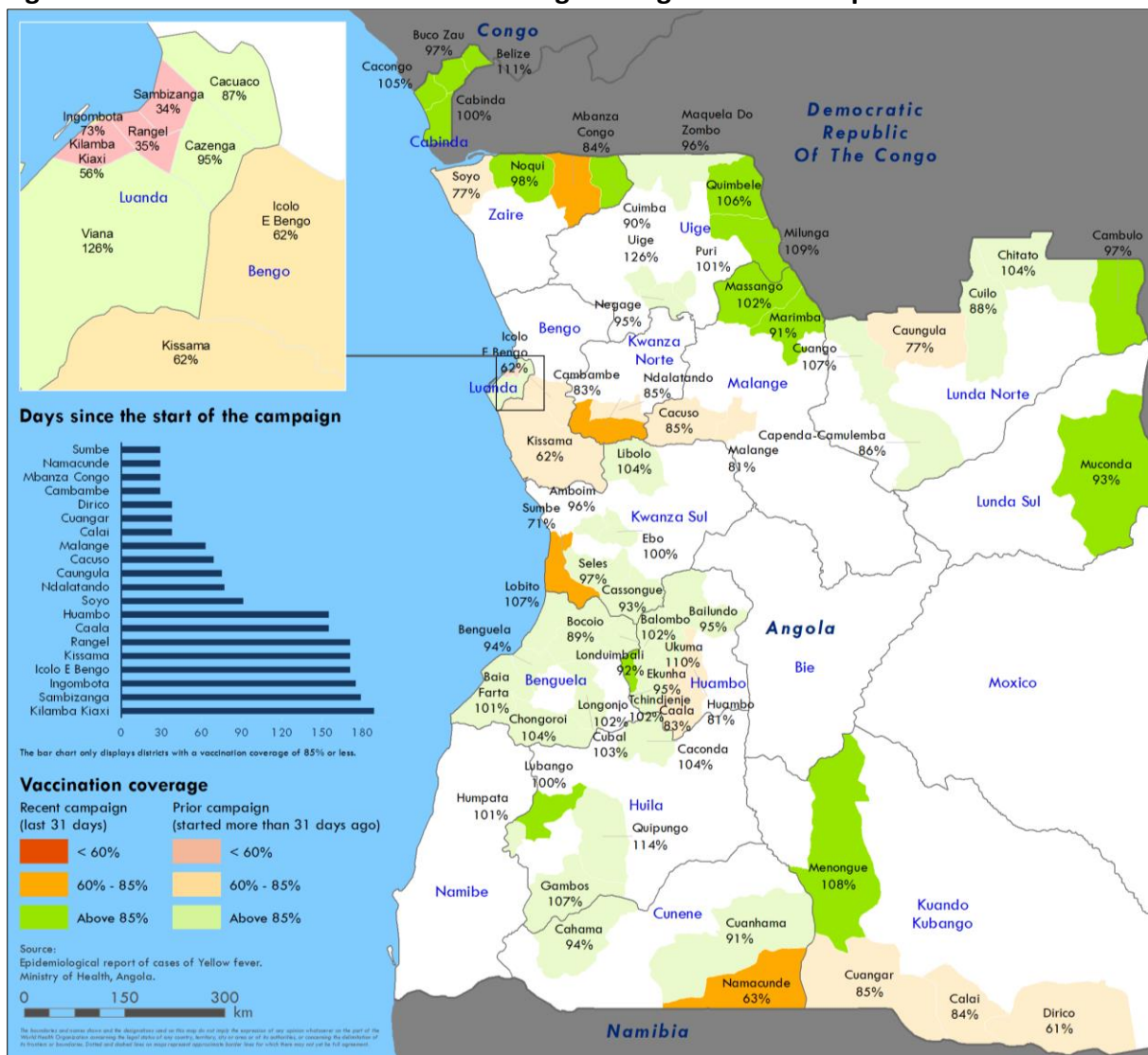
³ <http://www.who.int/features/qa/yellow-fever/en/>

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

| Date (as of) | Number of vaccine doses available* |
|---|------------------------------------|
| 20 September | 5.7 |
| Cumulative number of vaccine doses projected° | |
| 31 October | 19.5 |
| 30 November | 25.6 |
| 31 December | 30.4 |

*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 15 September 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.