



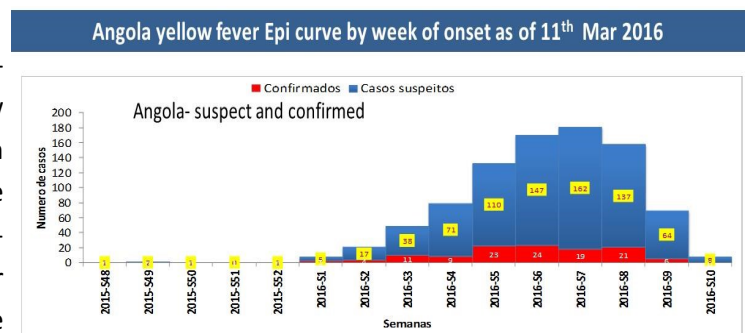
Summary

A yellow fever outbreak was detected in Angola late in December 2015 and confirmed by the Regional Reference Laboratory, Institut Pasteur Dakar (IPD) on 20 January 2016. Subsequently, a rapid increase in the number of suspected cases was observed since mid-January 2016. Since 20 January 2016, imported cases were detected in Huambo province, Huila, Benguela, Cuanza Sul, Cunene, Bie and Zaire. As all these cases were imported from Luanda, the epidemiological curve shows a similar trend as that for Luanda province. Beginning 02 February 2016, a response vaccination campaign started in Viana district, this initial campaign reached 80% of the targetted population 12 days after its beginning. The campaign has progressively continued in Belas, Cazenga and Cacucaco districts. Currently vaccination is ongoing in Kilama Kiayi and Mianga districts and will continue in the remaining 6 districts of the province in the following days. Up to date, administrative data indicates a vaccination coverage of 80% for the whole province of Luanda. There have been many constraints in the implementation of the campaign, these included availability of vaccines, inadequate number of vaccination teams and limited funds to cover operational activities.

With the update of the laboratory data, the following observations can be made:- (i) The highest transmission was in the month of February, epidemiologic Weeks (EW) 5 to 8, when 87/121 (72%) of the total confirmed cases occurred; (ii) the trend has been on a gradual decline since EW 9. Given the trend in the frequency of imported cases (reported from other provinces), and the local climatic and environmental conditions as well as the presence of the vector, it exist a high risk of extension of the epidemic to those provinces with the subsequent local transmission. Viana continues to report laboratory-confirmed cases even now after the massif campaign ended in that district. Possible reasons for this situation include the fact that a significant proportion of residents from other districts and provinces were vaccinated in that district. A rapid assessment of the number of people vaccinated in Viana shows that between 89 and 92% of the people were vaccinated. With only 1.5m doses of vaccines to be used, it is important to guarantee the vaccination of the remaining targeted population as quickly as possible.

I. Surveillance

- After updating the laboratory data, there are 18 districts and 7 provinces with confirmed cases. Until now there are no indigenous cases nor local transmission identified in the case investigation developed in the provinces of Huambo, Huila, Cuanza Sul, and Benguela. There are other case investigation ongoing or ready to be deployed in the provinces of Bie, Cunene and Cabinda. However with the presence of clusters of imported cases in at least 6 districts since February, the risk of local transmission is likely and there is an urgent need to strengthen surveillance in these areas.
- Recent report received of possible cluster of suspected YF cases in a town which is on the border with DRC (see separate report), highlight the need of a close follow up of the provinces bordering other countries as DRC, Namibia and Zambia.



Distribution of suspected and confirmed* cases at National level reported up to 14/03/2016

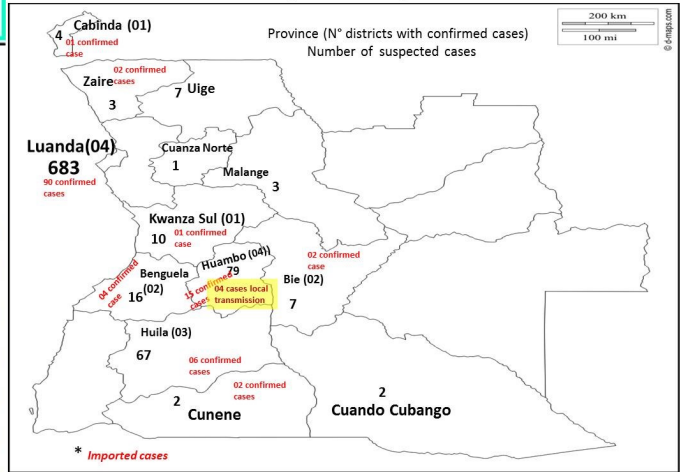


Table 1 – suspected and confirmed cases by date of notification, 5 Dec 15-13 Mar 16

Província	Casos e óbitos notificados na Semana Epidemiológica (07/03/2016 à 13/03/2016)			Casos e óbitos notificados na Semana Epidemiológica (29/02/2016 à 06/03/2016)			Cumulativo de 05-12-2015 à 13-03-2016		
	Casos Suspeitos	Óbitos	Casos Confirmados	Casos Suspeitos	Óbitos	Casos Confirmados	Casos Suspeitos	Óbitos	Casos Confirmados
LUANDA	63	9	0	111	20	15	683	112	90
HUAMBO	2	0	0	9	0	2	79	15	15
HUILA	4	0	0	5	0	1	67	12	6
BENGUELA	1	0	0	3	0	0	16	0	4
CUANZA SUL	4	0	0	0	0	0	10	4	1
BIE	0	0	0	3	0	0	7	0	2
UIGE	0	0	0	0	0	0	7	2	0
CABINDA	0	0	0	0	0	0	4	0	1
MALANGE	1	0	0	0	0	0	3	0	0
ZAIRE	0	0	0	0	0	0	3	0	0
CUNENE	0	0	0	0	0	0	2	0	2
CUANDO CUBANGO	1	1	0	0	0	0	3	1	0
CUANZA NORTE	0	0	0	0	0	0	1	0	0
TOTAL	76	10	0	131	20	18	885	146	121

I. Analysis and Response

- ⇒ Total advance at provincial level is 80% of target population, and there was an unexpected slow advance in Kilamba Kiaxi district. This area, located between the districts of Viana and Belas, according to supervisors, seems to have a high proportion of its population vaccinated in the previous campaigns in these districts. A convenience sample survey developed recently by CORE group will release its results this Wednesday.
- ⇒ Vaccination was initiated in Maianga (Luanda district), but taking into account the current stock balance of vaccines, there is not enough vaccine to complete the vaccination of Luanda district. Only 355,000 of the 1.4 million doses necessary to complete the vaccination of the province has arrived to Angola.
- ⇒ The shortage of vaccines was a major constraint together with lack of minimal operational cost to deliver the campaign. We are seeing a gradual decrease in the number of confirmed cases in Luanda province. The risk of transmission of YF to other provinces and ever to other countries is a real fact and the post Luanda campaign scenario, due to the shortage of vaccines should be considered
- ⇒ given the shortage of vaccines supply, vector control interventions should be strengthened when considering the post-campaign scenarios after the vaccination campaign,
- ⇒ Just before publishing this SITREP, local transmission was confirmed in 2 districts of Huambo province on 15 March 2016.

Distribution of suspected and confirmed cases in Luanda province reported up to 15/03/2016



Epidemiology and immunization response in Angola, as of 13th Mar 2016

PROVINCIA	MUNICÍPIOS/DISTRITOS	Epidemiológica			Campanha de Vacinação			
		Casos confirmados	Data de início de sintomas (primeiro caso)	Data de início de sintomas (último caso)	Pop. Alvo	Data de início da Campanha	Doses Administradas	% Cob.
LUANDA	Viana	36	25/12/2015	28/02/2016	1 500 381	02-fev-16	2 086 652	139%
	Cazenga	23	18/01/2016	29/02/2016	848 034	29-fev-16	804 494	95%
	Cacuaco	10	07/02/2016	28/02/2016	867 748	29-fev-16	757 240	87%
	Belas	8	15/01/2016	11/02/2016	1 047 423	19-fev-16	1 274 485	122%
	K. Kiaxi	5	07/02/2016	25/02/2016	625 530	10-mars-16	81 332	Na
	Maianga	4	08/02/2016	21/02/2016	645 936	A precisar	Na	Na
	Sambizanga	2	23/01/2016	16/02/2016	433 970	A precisar	Na	Na
	Samba	1	10/02/2016	10/02/2016	132 954	A precisar	Na	Na
	Rangel	1	25/02/2016	25/02/2016	24 670	A precisar	Na	Na
	Icolo e Bengo	0			73 405	A precisar	Na	Na
	Ingombota	0			87 530	A precisar	Na	Na
	Kissama	0			424 154	A precisar	Na	Na
Outros (Hospitais)	0					238 055		
TOTAL LUANDA		90			6 711 735		5 242 258	78%
BIE	Cuito	1 (com ligação a Luanda)	30/01/2016	30/01/2016	426 780			
	Chinguar	1 (com ligação a Luanda)	02/02/2016	02/02/2016	118 593			
CUNENE	Ombadja	2 (com ligação a Luanda)	01/02/2016	05/02/2016	291 861			
BENGUELA	Lobito	3 (com ligação a Luanda)	22/01/2016	11/02/2016	326 044			
	Ganda	1 (com ligação a Luanda)	11/02/2016	11/02/2016	226 051			
HUAMBO	Huambo	3 (com ligação a Luanda)	20/01/2016	22/02/2016	669 571			
	Ekunha	4 (com ligação a Luanda)	17/01/2016	09/02/2016	79 334			
	Longojo	1 (com ligação a Luanda)	09/02/2016	09/02/2016	87 329			
	Ukuma	1 (com ligação a Luanda)	22/02/2016	22/02/2016	42 950			
	Caála	1 (com ligação a Luanda)	14/02/2016	14/02/2016	261 080			
	Londilmbali	1 (com ligação a Luanda)	17/02/2016	17/02/2016	125 214			
	Mungo	2 (com ligação a Luanda)	06/02/2016	06/02/2016	111 109			
KUANZA SUL	Amboim	1 (com ligação a Luanda)	23/01/2016	23/01/2016	236 339			
CABINDA	Cabinda	1 (com ligação a Luanda)	25/01/2016	25/01/2016	601 892			
	Lubango	1 (com ligação a Luanda)	01/02/2016	09/02/2016	736 077			
HUILA	Humpata	1 (com ligação a Luanda)	09/02/2016	09/02/2016	83 267			
	Caconda	1 (com ligação a Luanda)	31/01/2016	31/01/2016	160 892			
	Quilengues	1 (com ligação a Luanda)	21/02/2016	21/02/2016	69 105			
TOTAL FORA LUANDA		31			4 653 588			
TOTAL		121			11 365 323			

CASE INVESTIGATION AND LABORATORY

- ⇒ The team sent to the provinces of Cuanza Sul and Benguela for case investigation found no evidence of local transmission based in the investigation of the cases reported. However, at community level the team found fever and jaundice cases not detected by the surveillance system and recommended that the surveillance system be strengthened urgently. The investigation team also reported high Breteau and container indices of the mosquito, *Aedes aegypti*, which increases the potential for transmission.
- ⇒ The Field Epidemiology Training Program (FETP) based in Mozambique, supported by CDC, developed a research in case-deaths occurring at community level. A total number of 58 deaths attributed to severe febrile illness was reported in the districts of Cacucaco and Cazenga districts. These deaths were not captured by the surveillance system. The results of this study will be released in an upcoming meeting.

COORDINATION

- ⇒ The daily meetings with the MOH has been rescheduled to three times a week.
- ⇒ The plan for strengthening the surveillance, case management and vector control in the post campaign phase has been revised together with the MOH to take in account the contingency plan developed for the high risk provinces

SOCIAL MOBILIZATION (SM)

- ⇒ Weekly Press release was released with contributions received from UNICEF, MSF, Medicos Del Mondo and RED Cross
- ⇒ Supervision and support to activities at municipal and district level (Luanda, Maianga and Kilamba Kiaxi);
- ⇒ Distribution of IEC materials at provincial level in Luanda province and meeting with key health partners to reinforce social mobilization at community level;

GAPS AND CHALLENGES

- ⇒ There is need to adjust the strategy to the scenario of a continuous transmission in Luanda and the very high risk of local transmission in the provinces of Huambo, Huila, Benguela and Kwanza Sul. with a net effect of a general increase of the trend at national level. It is a priority to provide a local long term support in the main provinces in high risk together with the strengthening of the local teams of control

STRATEGIC ANALYSIS

The current situation with a risk to re-initiate the increase of the trend in Luanda province as vaccination is not completed as well as the risk of a increase of the epidemic trend at provincial level due to non availability of vaccines calls for a necessary boost in human resources and equipment to develop vector control activities. Lessons learnt from last public health campaigns indicate a poor active involvement of the community as well as the national health workforce.

WHO SUPPORT

The WHO continue to provide a valuable support in all the areas of the response especially vaccination, Epid Surveillance and investigation, social mobilization, logistics. With the new priority interventions (strengthening of surveillance and vector control) it has become critical for the WHO to ensure the availability of its experts in the field to continue the provision of the technical support at the required expectation.

PARTNERS SUPPORT

There was a mission with the FETP from Mozambique, sponsored by CDC, who developed research in case-deaths occurring at hospital and community level. MSF continued the preparation to the attention of cases in the event of a confirmed local transmission especially in the province of Huambo.

RESOURCE MOBILIZATION

There is a high global demand of support to YF vaccination from other countries concerned with possible outbreaks. The reduced offer of financing for vaccines and operations is another major challenge.