



YELLOW FEVER OUTBREAK IN ANGOLA

SITUATION REPORT

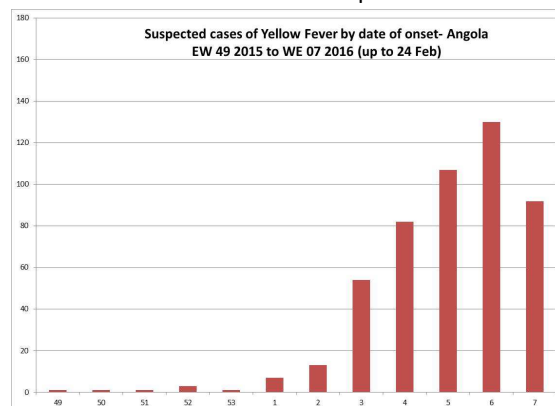
24 FEBRUARY 2016

Summary

- A cluster of fever and jaundice syndrome with hemorrhagic in Eritrean adult men were reported on 30 December 2015 and investigated. Three samples of these cases sent to the Reference Laboratory for yellow fever in Dakar were reported positive (IPD) on January the 20th . WHO team of experts carried out a rapid assessment and confirmed the high risk for yellow fever in Luanda.
- Geographical distribution of suspected cases has progressively extended to other rural and urban areas of the coast, mid-land, and from the north in Cabinda down to the South in Cunene . Suspected cases have been reported in 13 of the 18 provinces and 49 districts countrywide.
- Most of the cases have been moderate to severe and up to 91% of them were inpatients. There is a high case fatality ratio (CFR) specially due to low access to quality health services.
- Until now nine confirmed cases were identified in the province of Luanda: 8 cases in Viana and 1 in the district of Belas.
- On the 11th of February 2016 in order to set-up the response structure WHO decided to classify this outbreak as a Grade 2 Emergency according to the Emergency Response Framework (ERF) and to appoint an Incident Manager for the response to the outbreak in Angola.

I. Surveillance

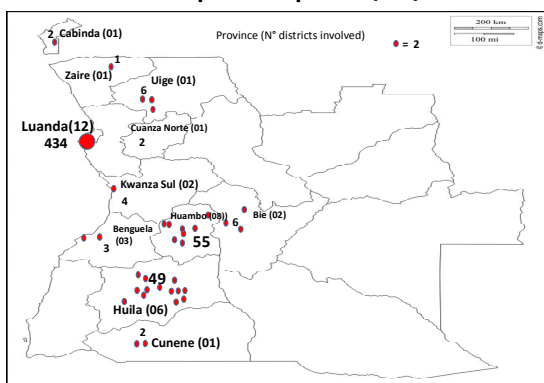
- Since 30 December 2015 and 22 February 2016 , 507 suspected cases with 110 deaths were notified at country level. Of them 397 cases and 78 deaths were reported in Luanda Province and, 110 cases and 33 deaths in other provinces.
- Case-fatality ratio is 22% at country level, but higher values are present outside Luanda province.
- The trend of suspected cases shows a sharp increase since Epid Week 3 in 2016 without change until now.
- On the 22 of February a first positive case (PRNT) was reported in the province of Cuanza Sul
- A total of ten positive cases have been reported countrywide : seven by PCR and three by PRNT. A positive case with vaccination antecedents was identified in Huambo and need further studies.



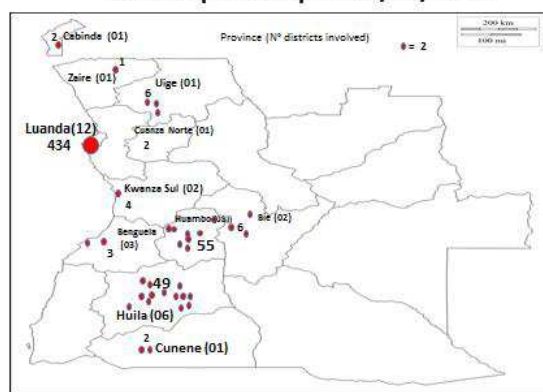
Luanda Prov	23-Feb		30 Dec 2015 to 24 Feb 2016					
District	Suspected cases	Deaths	Suspected Cases	Deaths	CFR	IgM Positive IPD	Positive PCR at IPD	Positive PRNT IPD
Viana	16	2	204	59	29%	12	6	2
Cazenga	10	1	74	7	9%	2	0	0
Cacuaco	2	0	41	2	0%	0	0	0
Belas	5	0	43	4	9%	3	0	1
Maianga	2	1	24	5	21%	0	0	0
K. Kiayi	0	0	20	2	10%	0	0	0
Sambizanga	0	0	10	1	10%	1	0	0
Samba	1	0	8	1	13%	0	0	0
Range!	0	0	5	1	0%	0	0	0
Ingombotas	1	0	3	0	0%	0	0	0
Icolo e Bengo	0	0	2	0	0%	0	0	0
Quicama	0	0	0	0	0%	0	0	0
Total	37	4	434	82	19%	18	6	3

Provinces	District	23 Feb		30 Dec 2015 to 24 Feb 2016					
		Suspected cases	Deaths	Suspected cases	Deaths	CFR	IgM Positive IPD	Positive PCR at IPD	Positive PRNT IPD
Huila	Caluquembe	0	0	6	4	67%	0	0	0
	Caconda	0	0	11	1	9%	0	0	0
	Chibia	0	0	5	2	40%	0	0	0
	Quipungo	0	0	9	3	0%	0	0	0
	Lubango	2	0	15	2	13%	0	0	0
	Matala	0	0	3	0	0%	0	0	0
Total Huila	2	0	49	12	24%	0	0	0	
Huambo	Huambo	10	1	28	9	32%	1	1	0
	Alto Hama	0	0	4	0	0%	0	0	0
	Ekunha	4	1	9	3	33%	0	0	0
	Mungo	2	1	4	2	50%	0	0	0
	Bailundo	0	0	2	1	50%	0	0	0
	Longonjo	0	0	1	0	0%	0	0	0
	Londumbali	0	0	3	1	33%	0	0	0
	Caála	0	0	4	2	50%	0	0	0
Total Huambo	16	3	55	18	33%	1	1	0	
Benguela	Cubal	0	0	1	0	0%	0	0	0
	Lobito	0	0	1	0	0%	0	0	0
	Quilumbo	0	0	1	0	0%	0	0	0
	Benguela total	0	0	3	0	0%	0	0	0
Cuanza Sul	Pto. Amboim	0	0	3	3	100%	1	0	0
	Cela	1	0	1	0	0%	0	0	0
	Total Cuanza S	1	0	4	3	75%	1	0	1
Kwanza Norte	Dande	0	0	2	0	0%	0	0	0
Uíge	Uíge	0	0	6	2	33%	0	0	0
Zaire	Mbanza Congo	0	0	1	0	0%	0	0	0
Malanje	Malanje	0	0	1	0	0%	0	0	0
Cabinda	Cabinda	0	0	2	1	50%	0	0	0
Cunene	Ombandja	0	0	2	0	0%	0	0	0
Bie	Kuito	0	0	4	0	0%	0	0	0
	Chinguar	0	0	2	0	0%	0	0	0
	Total Bie	0	0	6	0	0%	0	0	0
Total Province (exclude Luanda)	19	3	131	36	27%	2	1	1	
Luanda	36	0	434	82	20%	18	6	3	
Total country	22	0	565	118	22%	20	7	4	

Distribution of suspected cases at National level reported up to 24/02/2016



Distribution of suspected cases at National level reported up to 24/02/2016



Yellow fever vaccination campaign in Belas and Viana districts			
District	Target population	Vaccinated up to 23/02/2016	% advance
Belas*	1,046,713	298,778	29%
Viana**	1,500,381	1,697,995	113%
Luanda	6,626,200	1,996,773	30%
* initiated on 19 Feb 2016			

II.- Response

- VACCINATION

- ⇒ Data includes population coming from other districts to be vaccinated in these districts
- ⇒ Vaccination is experiencing severe constraints in the organization in addition, there is not adequate funding for ensuring operation costs such as ensuring lunches, vaccination material, transport, etc.
- ⇒ Corrections in campaign developed on 23 Feb 2016 got improvement in the quality of vaccination activities

- **CASE INVESTIGATION**

- ⇒ The investigation on a positive (PCR) case reported in Huambo province shown that the person had been vaccinated four days previous to the date of the onset of the disease. *Aedes aegypti* was found mainly in extra-domiciliary locations within this province.
- ⇒ An investigation team sent to the province of Huila found a cluster of suspected cases in the district of Gambos with a high case-fatality ratio. The case investigation will continue in the six district that reported cases.

Gaps & Challenges

- Optimize the vaccination and management of the demand and partnership with local authorities
- Integrate the information of case management, epidemiology, entomologic and laboratory interventions
- Communicational and vector control interventions at the country level

Strategic Analysis

- Lack of operation cost may hamper vaccination campaign. It is becoming urgent need to allocate adequate funding for the operations
- Ten days have passed since the launch of the vaccination campaign in Luanda and an operational research is as well as a quick survey are required to evaluate the impact of the campaign
- The high CFR needs a rapid investigation in order to identify and fill gaps and decrease the deaths caseload
- Need to evaluate extra-domiciliary infestation of *Aedes aegypti* to identify and evaluate interventions
- A KAP study is needed to identify prevalent knowledge and attitudes to yellow fever in urban and rural setting to orientate social and communicational interventions

SOCIAL MOBILIZATION— Messages to guide the public to look for early attention in presence of a febrile disease have been developed and disseminated by all media as well as about the protection from mosquito bites and on how to reduce the population of mosquitos.

WHO SUPPORT - AFRO and HQ teams are supporting WHO country office in the implementation of the response to the emergency. A total of Incident Manager (01), Epidemiologists (07), Logisticians (03), Communication (01), Social Mobilization (01), Entomologist (01) and Data manager (01) experts are already in Angola and are supporting and coordinating response activities. More experts are expected to arrive in the coming days.

PARTNERS SUPPORT.— The United Nations with the Resident Coordinator, UNICEF, UNDP, ONUSIDA and other UN agencies are providing support to the response: i.e. epidemiologists, national consultants, vaccination personnel as well logistic support with vehicles and transport.

CDC Atlanta and USAID are present with a team providing support in epidemiology, laboratory skills strengthening and equipment to allow PCR diagnosis confirmation.

MSF is providing assistance in the area of case management and are mobilizing more human resources to come to Angola.

RESOURCE MOBILIZATION — Resource mobilization actions under the leadership of the RC and WHO are ongoing and involves the UNCT and other partners. A request to the African Public Health Emergency Fund (APHEF) was approved for USD 287,000 USD and already disbursed to the country. a CERF grant request for 7,197,824 USD has been sent to the CERF Secretariat. An appeal has been done through the RC to the embassies, bilateral and multi-lateral cooperation agencies in Angola by presenting the current situation and the need of an urgent support. The involvement of the international community is welcome.