

LETTER TO THE EDITOR

REPORTING DELAY DURING THE YELLOW FEVER OUTBREAK, ANGOLA, 2016

Sao Paulo, October 17, 2016

Dear Editor

A yellow fever outbreak was detected in Angola late in December 2015 and was confirmed by the National Institute for Communicable Diseases in South Africa and Institut Pasteur of Dakar, Senegal in 20 January 2016¹. Subsequently, a rapid increase in the number of cases was observed. From 5 December 2015 to 22 September 2016, 4,143 suspected cases were registered, among them 884 laboratory confirmed cases and 121 deaths (case fatality rate: 13.7%)². Considering the epicurve of suspected and confirmed cases, the epidemic peak occurred between February and March 2016^{2,3}.

The World Health Organization (WHO) and partners supported the government of Angola to control the outbreak, to strengthen measures to prevent new cases and to avoid its spread to other countries. Five priority areas were focused: surveillance and risk assessment, vaccination, case management, vector control, social mobilization and risk communication⁴.

The Incident Management Team-Angola periodically published Situation Reports⁵. We considered them to discuss the average days of reporting delay and the surveillance system response. The average days of reporting delay means “the average of difference between date of receipt of case report at national level and date of case notification”⁶. We analyzed the public data from 05 December, 2015 to 11 September, 2016 available in the published Situation Reports⁵, estimating the average days and standard deviation (σ) of the delay by Province.

The provinces that presented higher average days of delay reporting were: Cuanza Norte (14; $\sigma \pm 3$), Lunda Norte (13; $\sigma \pm 9$) and Cunene (12; $\sigma \pm 3$) (Fig. 1).

However, we can see in the graph bar, at the end of May, that the reporting delay occurred in all the provinces. But in the wake of the epidemiological weeks, the delay in the notification process was reduced in the first month and then stabilized. For this fact, we present some hypotheses. First, the surveillance system is self-limited and does not depend on external factors such as the WHO task force and partners to the yellow fever outbreak response. Despite all the efforts, the surveillance system could not further reduce the delay in notification. Second, the surveillance system has reached the response capacity limit, or for operational reasons or by the system stability. It might be related to the surveillance system weakness resulting in the yellow fever outbreak or be weakened by it.

Angola is a country with limited health care and transportation facilities (like many others!). However, a reasonable time for reporting is difficult to define. The important is the opportunity of surveillance in all the government levels.

We reinforce the importance of the routine surveillance to apply control measures timely and efficiently, and we cannot conclude that the delay in notifications has influenced the response and control of the outbreak. Conversely, the observation of the impact of the vaccination was deferred because of the reporting delay.

Data until the last vaccination campaign, 09 Sep 2016, shows that 16,001,164 people were vaccinated against yellow fever in Angola³, and, as shown by the two other Letters to the Editor of Emerging Infectious Diseases Journal^{7,8}, mass vaccination is incontestable to control the outbreak and prevent a new one.

It is not less important to remember that October comes with heat and rain and besides the epidemiologic surveillance, it will be necessary to improve the vector surveillance and control.

Many lessons were learned from this outbreak. Perhaps, it is time for a new approach and to apply a new work front, contrasting with the One Health concept. The current rabies outbreak could be an opportunity to try a new approach.

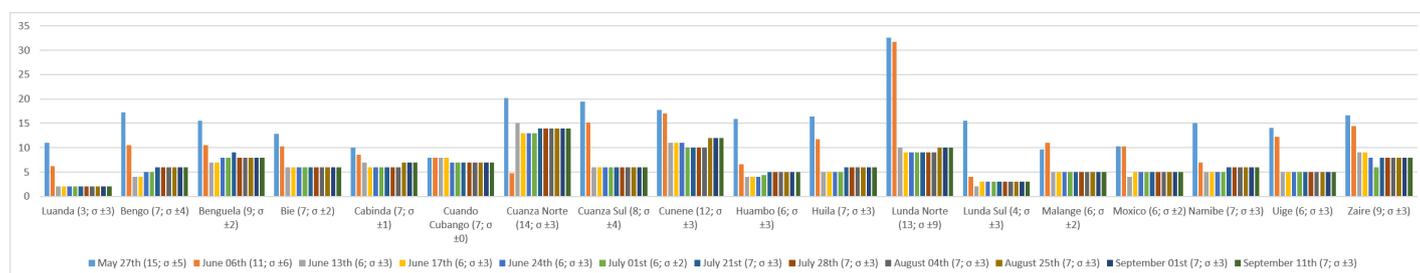


Fig.1 - Average days and standard deviation of the reporting delay during the yellow fever outbreak, by Province. Angola, 2016.

COMPETING INTERESTS

The authors declare that they have no competing interests.

AUTHORS' CONTRIBUTIONS

EVR and EJAL (1) have contributed substantially to the conception and planning, as well as the analysis and interpretation of data; (2) have contributed significantly in the elaboration of the outline or in the critical review of the content of this study and (3) have participated in the approval of the final version of this manuscript.

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