World Health Organization

iPrime

Yellow Fever outbreak, Democratic Republic of Congo

Report on surveillance & data management

28 August 2016

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Overview

The Yellow Fever outbreak which began in Angola in ... and subsequently spread to border areas within the République démocratique du Congo has, in recent weeks, appeared to have slowed and perhaps even come to an end. This assumption is based on the numbers of samples testing positive by the Institut National de Recherche Biomédicale (INRB).

However, important questions remain as to the reliability of this interpretation of the situation, particularly in view of potential weaknesses and lack of sensitivity of the surveillance system.

An overview of important issues to be explored:

- Information flow & sharing
- meetings timetable (Annex?)
- lack of field staff and supervision/overview of field realities
- requests approved but blocked at IM level
- DB decentralisation plan
- Field operational support

Data collection and management

Process

- CLEARLY DESCRIBE IN DETAIL WHAT IS HAPPENING SO NEW PEOPLE DO NOT NEED TO ASK SAME QUESTIONS
- multiple databases - need to integrate and syncronise/consolidate in a standardised manner
- Multiple CI forms in use - need to standardise/harmonize, with plan for printing and distribution & training
- SOP for data sharing should be codified and implemented
- sharing of info from various meetings (esp. CC) - needs to be communicated as standard to DM team
- show simplified data flows in ppt slide! with bottlenecks...
- Decentralisation plan - approved but no funds allocated and no response

Surveillance

- concerns regarding field realities
- lack of adequate training of sample takers
- logistic support
- phones, credit, fuel, vehicles, mobile/internet coverage...
- transport of samples
- lab supplies? diagnostic kits, equipment
- training
  - what is CD. How to use it
  - How to fill forms
  - How to collect and transport samples
- Involvement of HC? should HC be involved, given new way of working in WEP? In any case, a weekly forum similar to HC IMWG should be created to share info and issues and find solutions to surveillance and lab
- HC meeting every Thursday 10am
- Proposal made to support surveillance activities in Panzi, but no response. After 1 week, MCZ Panzi came by motorbike (7 hours) on Thursday 25th August to inform that there are 28 suspected cases, and needed sample kits. He left with 50 and will return on Monday 29th.
- need field epis to observe and support/strengthen, also for voice - stefan ignored as log
- ACTIVE SURVEILLANCE instead of Passive...
- Survaillance systems:
- IDSR - passive surveillance system. Aggregated data at ZdS level. Mostly (entirely?) suspected cases - not sure role of diagnostic tests in this, if any. Maintained by MoH and shared w/ WCO
- YF EpiInfo - maintained by WCO, and shared with MoH
- Lab line list
- feedback loop to field? Labs have requested this, but also to field and patients...
- what is discussed at CC meeting
  - newly lab +ive - they have case investigation done once lab +ive
  - this is really a narrative free text report, not following anything too structured
- Manifestations postvaccinales indésirables (MAPI) are not well defined
- What is being done with case investigation of probable cases (e.g. deaths?)
- Case definition - surveillance vs. outbreak... Is outbreak CD being implemented adequately, if not we are missing ~80% cases
  - CD still not settled upon

- What is alert capture system? Do we have an ability to investigate alerts?

Vaccination campaign

- need an assessment of this as many people missed due to method
  - target was 97%, and this is what has been reported
- need case definition for MAPI

Quotes from Stefan

"For the last two weeks I'm kind of representing WHO in Kahemba and participating in the surveillance meetings. These meetings are not giving us any real picture of what is the actual situation on ground as there is no active case finding ongoing nor is there communication with the different health facilities due to non existence of mobile network and huge distances between the health facilities. We have already around 400 sample kits in Kahemba, but due to lack of means they do not get to the places where they should be. What kind of support can we give MOH? We might be also looking at training for nurses as these types of sample tubes have not been used in this area.> I requested a list of all the health facilities and in the 5 health> zones including the availability of communication materials. If we want to mobile lab to be of any use, we need to dramatically strengthen the surveillance component of the yellow fever epidemic response."

"The current "surveillance" activities are vey passive. On top of that we do not have regular communication with most of the health zones. According to the surveillance committee "No communication" with a health facility meant NO suspected case, and was recorded as such. I advised them that it should be recorded as '-'"

"During yesterday's surveillance meeting MCZ again stressed the need for support to enhance surveillance in the different health zones with the priority of Panzi. Can you let me know what would be the best way forward and when we can expect your answer regarding the proposal I forwarded last week"

"Kindly find attached incident report from lab team regarding the quality of lab samples received yesterday evening. It shows the importance of:

1. having the correct sample kits distributed to the health facilities,
2. a specific training to be conducted on how to use these sample kits including the safety aspect of manipulating and transporting urine or blood samples.

Both are justification to the proposal sent earlier for sample kit distributed, for which we are still awaiting your approval. In any case we need to ensure healthcare workers are protected.

Today's suspected case turned out not to be a suspected case at all, so health care workers might benefit from additional training in terms of case definition.

Unfortunately, I do not have sufficient private funds left to be able to send a WHO vehicle with the MCZ. I never received any operational funds. From my arrival I have been funding this project with my private funds. From purchasing fuel for the vehicles to move for the supervision during the vaccination campaign to buying the fuel for the generators for PEV cold room. Now I'm still using my money to buy fuel for the running of the hospital generator to ensure a 24h power supply for the EMLAB. We only have 80 liters of fuel left for the generator to ensure the power to the lab, in combination with the solar/battery system this gives the lab another 7 days of power."

Laboratory

- description of actual processes
- CC meeting - take time to find new cases by eye and then copy/paste...

Recommendations

- IM and DM/Epi should have closer collaboration
- Field epis + logs to support surveillance
- Stronger coordination required - overall surveillance, lab, epi
- Better system - exists in Angola - forms entered by WHO in morning, then DB passed to lab who enter results, which is then shared back with WHO
- Eventual plan should be for proper decentralised and disaggregated surveillance system (e.g EWARS), with single, centralised database (one source of truth from which everyone works, incl. MoH, WCO, RO and HQ)
  - plan for decentralisation only to provincial level
  - current IDSR is aggregated only
- training for staff
- reinforce surveillance on road to, and within, Kikwit
- Evaluate the sensitivity of the surveillance system (e.g. Rapid capture-recapture study)
- Somebody should bring epiinfo DB master to CC meeting and work done directly on that DB
  - or code written to compare last version of lab with what was just sent to identify those with changes

Annexes

- Epidemiological context & analysis of current situation
- Case definition
- 2 decision trees
- Elements of Anita and Philippe's reports
- Meetings timetable?