Lassa Fever Outbreak in Enugu State, Nigeria, August 2018: The Role of Contact Tracing

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Background

• Lassa Fever is a zoonosis caused by Lassa virus, a member of the *arenaviridae* family

• Spread by human exposure to urine or faeces of infected *Mastomys natalensis* or human to human

• On 31\textsuperscript{st} July 2018, hospital management notified of a suspected case by a medical doctor, 3\textsuperscript{rd} Aug 2018, State DSNO notified, 4\textsuperscript{th} Aug 2018, outbreak confirmed, EOC activated

• NCDC team deployed on 6\textsuperscript{th} Aug, 2018
Background
Objectives

• To describe the outbreak
• To follow up the contacts for 21 days from their day of last contact with the index patient
Methods
Study Area
Case definition

• **Suspected case:** any person residing in Enugu state presenting with any of malaise, fever, headache, sore throat, cough, vomiting, diarrhea, myalgia, chest pain, hearing loss and a history of contact with excreta of rodents or with a case of Lassa Fever between July and August 2018

• **Confirmed case:** a suspected case of Lassa Fever with a laboratory confirmation

• **Probable case:** any suspected case who died without collection of specimen for laboratory test

• **Contact:** A person having a close contact with the patient or testing the laboratory specimens of a patient in 3 weeks after the onset of illness
Active case search

- Review of hospital records
- Community based case search in the affected and neighboring LGAs
Contact Tracing

• Among family members, health workers and communities

• Nine contact tracing teams and supervisors trained

• Categorized contacts according to risk level
  • High risk contacts (category 3)
  • Low risk contacts (category 2)
  • Non risk contacts (category 1)

• Follow up of contacts: temperature monitoring through home visits for 21 days from the date of last exposure
Results

• A total of 1 confirmed, 1 probable and 10 suspected cases occurred.

• Six of the suspected cases were symptomatic contacts of the confirmed case

• The remaining 4 were independent suspected cases however PCR results of their samples were negative

• Post-mortem oral swab sample collected from the probable case was negative
Results

• Contacts listed: 101
  • Ninety seven (96.0%) traced and followed up for 21 days
  • Four not traced due to incorrect/incomplete addresses
• Most contacts 58 (57.4%) between 20 – 39 years
• Majority 72 (71.3%) were health workers
• 17 (16.8%) contacts became symptomatic during follow up but symptoms resolved within follow up
• Moreso, Serum PCR done for 6 (35.3%) of the symptomatic contacts yielded negative
• None of the contacts was confirmed to have Lassa Fever
Distribution of contacts by LGA
Public Health Actions
Public Health Actions
Public Health Actions
Conclusion

• Lassa Fever outbreak was confirmed in Enugu state
• Ninety seven out of 101 contacts were traced and followed up for 21 days
• No symptomatic contact was confirmed positive giving a low yield though not all could be tested
Recommendations

• Adequate sample collection and transportation should be enhanced by the government
Thank you!