Ghana Health Service: Focus on Lassa

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Background of Lassa Fever in Ghana

Sporadic Cases:
- Two cases; Amansie West; 2011
- One case; West Akim 2011

Imported cases
- Two imported cases in May 2013 among Ghanaian Peace keepers in rural Liberia on Peace keeping mission confirmed
- Mastomys, exist in Ghana
Response Approach to Lassa Fever

- One Health Approach structured along the following Thematic Areas:
  - Coordination
  - Surveillance
  - Laboratory Diagnosis
  - Case Management and Safe Burial
  - Risk Communication
  - Logistics
  - Collaboration with Wildlife
COORDINATION
Public Health Emergency Response Organizational Structure

Core NTCC Members
- MOH/GHS/PHD, ICD, FP etc
- Police
- Military
- Immigration
- GCPS
- SPH
- NADMO
- VSD
- Wildlife
- Environmental Health
- NMIMR
- Local Government
SURVEILLANCE

• **Suspected Case of Lassa fever is defined as** an illness of gradual onset with unexplained acute fever (>38°C or 101°F) **AND** one or more of the following: malaise, headache, sore throat, cough, nausea, vomiting, diarrhoea, myalgia, chest pain, hearing loss **AND/OR** no response to appropriate anti-malarial or antibiotic treatment within 24-72 hours of treatment, a history of contact with excreta of rodents and having epidemiological linkage to a confirmed case of Lassa fever.

• **Probable case of Lassa fever** is defined as a suspected case that is epidemiologically linked to a confirmed case.

• **Confirmed case of Lassa fever** is a suspected case that is laboratory confirmed (positive IgM antibody, PCR or virus isolation).
PoE and Community-based surveillance

- 54 approved PoES, 14 designated
- A number of unapproved points
- Use Alert or simple case definitions through Port Health and other staff
- Fever is a cardinal sign using non-contact thermometers or Walk Through Thermometers
- CBS volunteers are prominent in rural and hard to reach communities
- Use Alerts for detection of events
# Reported VHF Cases by Regions, 2014-2018

<table>
<thead>
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<th>Region</th>
<th>2014</th>
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<th>2016</th>
<th>2017</th>
<th>2018</th>
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<td><strong>Grand Total</strong></td>
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<td><strong>139</strong></td>
<td><strong>119</strong></td>
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Laboratory Diagnosis

• Samples are collected and triple packed and transported to Noguchi Memorial Institute of Medical Research, Accra for confirmation. Any of the following constitutes a confirmed case of Lass fever:
  • Isolation of the virus
  • Positive IgM serology
  • Demonstration of Lassa antigen by immunohistochemistry or ELISA
  • A positive RT-PCR
Contact Tracing and Management

• Community Health Officers and Community volunteers are used as tracers
• Trained Surveillance officers at national, regional and district levels are supervisors
• Identify and trace all listed contacts
• Monitor contacts, and record their body temperatures twice daily, for a period of 21 days
• Isolate and initiate treatment for any symptomatic contacts
Case management and Safe Burial

• No Infectious Disease Hospital
• Have an Infectious Disease Centre (South/North)
• All cases should be admitted to isolation facilities
• Ensure strict barrier nursing using Personal Protective Equipment (PPEs)
• Initiate IV or Oral (if IV Unavailable) Ribavirin treatment
• Back up of 42 Ghanaians used for the EVD outbreak in Liberia and Sierra Leone
• RRT at national and regional levels
• Preposition limited quantities of PPEs at Central and regional levels
• IV Ribavirin stockpiled
• Environmental health Officers lead safe burial
  • Limited burial teams
Collaboration with Wildlife
Risk Communication

• Health Promotion Department of GHS works with the Ministry of Information and Communication to promote health education
• Communication teams are at national and regional levels and some districts
• Communication facilities exist at community level
• Vibrant Media which can be a distraction
• Social Media is an emerging opportunity and also a Threat
• No National Toll Free or Hotline
Conclusion

- Lassa Fever is recognized as a Public Health Threat in Ghana and managed as a VHF

- Detection of cases can be early and confirmed but reported high numbers may face challenges due to limited case management facilities
THANK YOU