Lassa Fever Surveillance Data Analysis, Liberia, 2016-2017

Oscar N. Gbearr

District Surveillance Officer
B’hai District, Grand Gedeh County

Graduate, Liberia Field Epidemiology Training Program-Intermediate

Presenter's ID: O.E-7
Outline

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Introduction 1/2

- Lassa fever (LF) is an acute viral hemorrhagic illness

- Overall case-fatality rate is 1%
  - 15% among hospitalized severe cases
Introduction 2/2

- Under surveillance as an immediately-reportable disease
- One (1) confirmed case is an outbreak
- We analyzed secondary LF data for Liberia from 2016-2017 to inform public health action

Objectives

- Estimate the burden of LF
- Describe the distribution of LF cases
Methods

Map of Liberia

- 4.85 million inhabitants
- 15 counties
- 92 Health districts

Legend
- Endemic counties
- Non-endemic counties

- Reviewed national line list for 2016 – 2017
- Performed descriptive analysis to summarize results
Results 1/3

➢ Total of 150 reported cases

- Suspected cases = 84 (56.7%)
- Confirmed cases = 23 (55%)

- Median age 24 (7 months-68 years)
- Incidence Rate 0.9 per 100,000 population

➢ 42 confirmed cases (28%)

- Median age 25 (1-67 years)
- Overall Case fatality rate 16 (38%)

- Case fatality rate among hospitalized 14 (33.3%)
Results 2/3

Distribution of reported suspected Lassa fever cases by counties, Liberia, 2016-2017

Legend
- Zero “0” case
- 1 to 9 cases
- 10 cases and above
Result 3/3

Trend of confirmed cases of Lassa fever by epi week, Liberia, 2016-2017
Discussion

- More LF cases were reported from January to June similar to finding in Nigeria (“WHO | Lassa Fever – Nigeria,” 2017)

- More females were among confirmed cases comparable to findings in Ondo state, Southwest Nigeria, June 2016

- Case fatality was high among confirmed cases similar to findings in Ondo state, Southwest Nigeria, June 2016 (Isere et al., 2018)
Conclusion

- There was an increased in trend over the 2 years period

- Incidence rate of the disease continue to be high in three endemic counties (Bong, Nimba and Grand Bassa)

- There were confirmed cases reported in non-endemic counties

- The disease seems to have a seasonal trend
Recommendations

- County Health Teams (CHT) / National Public Health Institute of Liberia (NPHIL)
  - Increase awareness about disease
  - Heighten LF surveillance during dry season

- NPHIL/ Ministry of Health (MoH)
  - To conduct analytical studies to identify prevalence of risk factors
  - Analysis of reporting patterns and case management practices
Acknowledgements

- Dr. Maame P. Amo-Addae-Resident Advisor, LFETP