



High mortality rates of Lassa fever- Kenema district, Sierra Leone, 2014- 2017

Author and Presenter:

Amara A. Sheriff

Intermediate Graduate

Sierra Leone Field Epidemiology Training Program

Co-authors: G. Okure, G. Gebru, E.Ikoona, T. Singh



Presentation outline

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Introduction

- Lassa Fever (LF) is an acute viral hemorrhagic disease
- Globally, 300,000 – 500,000 LF cases occur annually (WHO 2015)
- CFR in West Africa –
 - Nigeria = 25.7% (141/548) January – October 28th 2018,
 - Sierra Leone = 73% (19/26) in 2017
- In Sierra Leone, 13 of the 14 districts have reported LF cases
 - Kenema most affected
- LF cases usually peak in the dry season
- Very little analyses have been done on available data

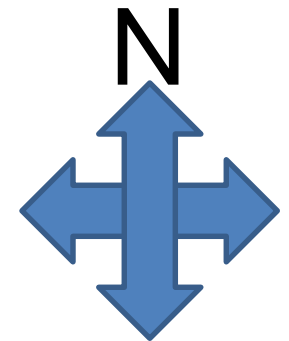
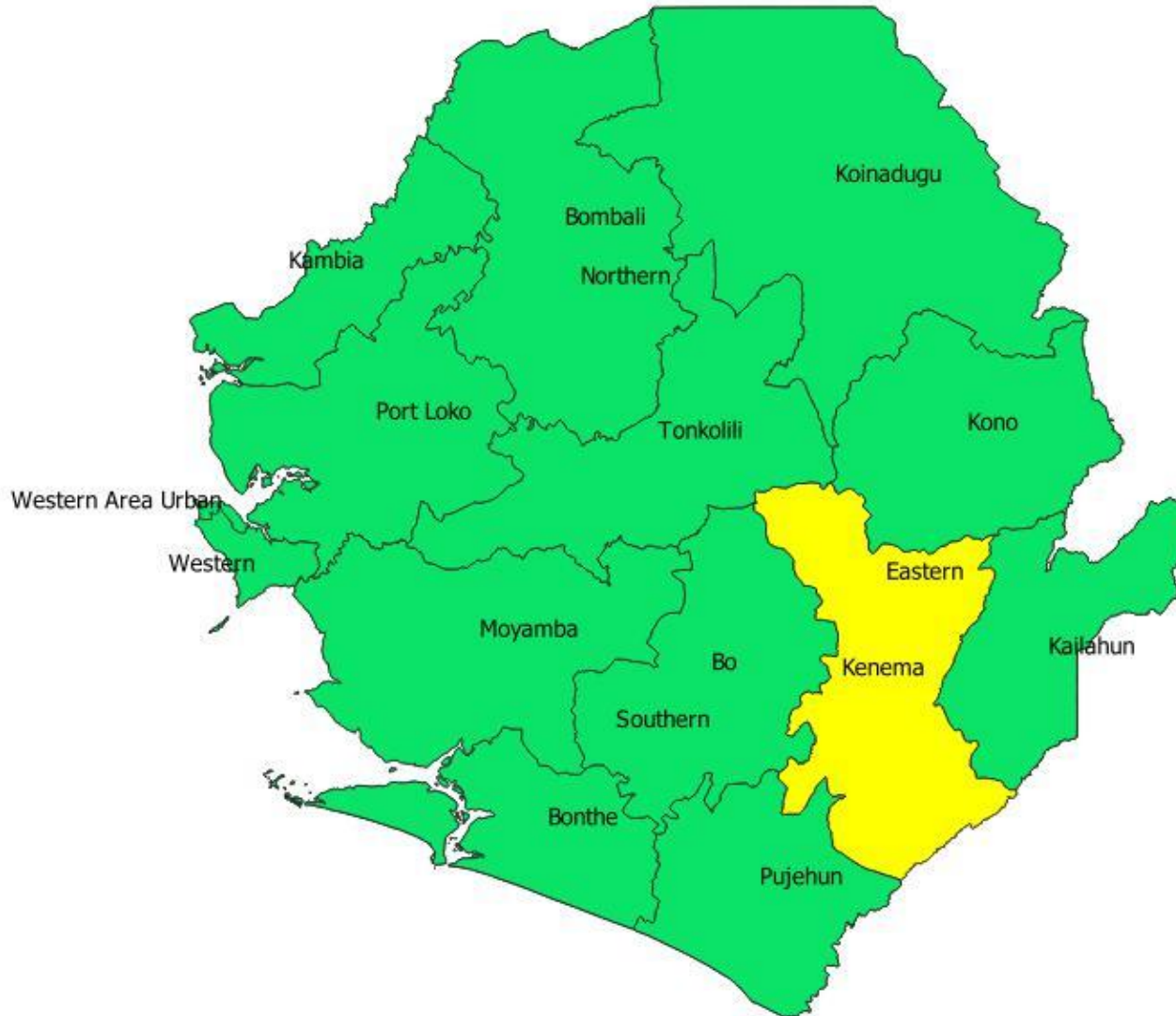


Objectives

- To understand the morbidity and mortality pattern of LF in Kenema district, Sierra Leone, 2014 – 2017
- Specifically:
 - To determine the incidence and CFR of LF disease, 2014 – 2017
 - To describe the trend of LF disease, 2014 – 2017



Map of Sierra Leone Showing study area





Methods 2/2

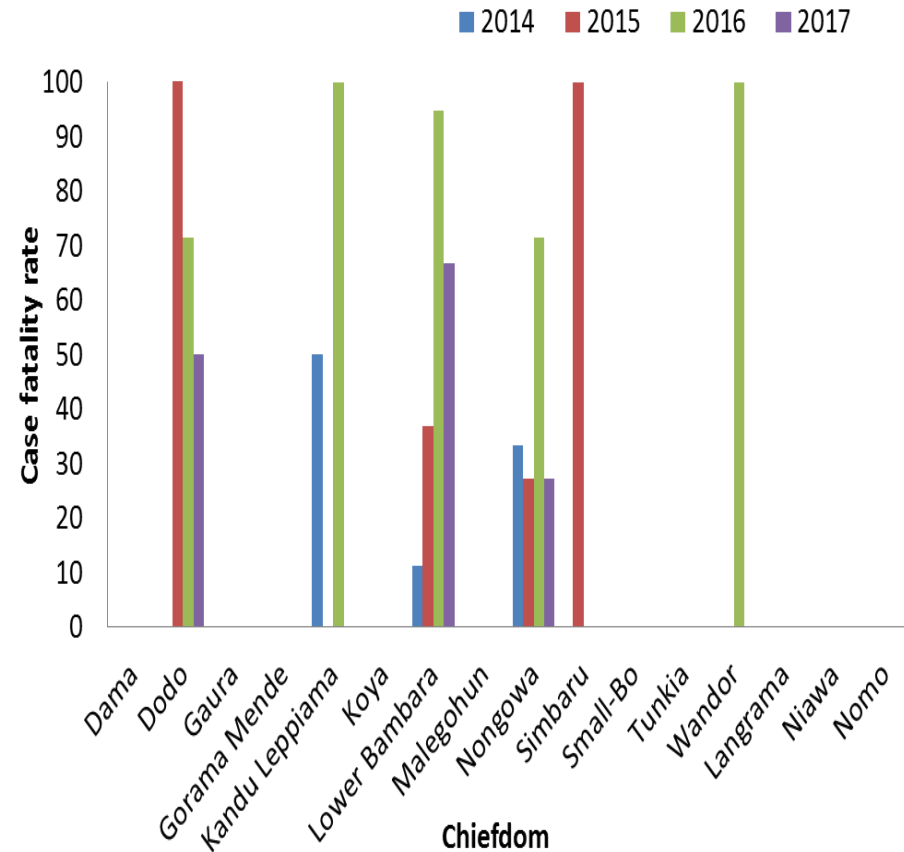
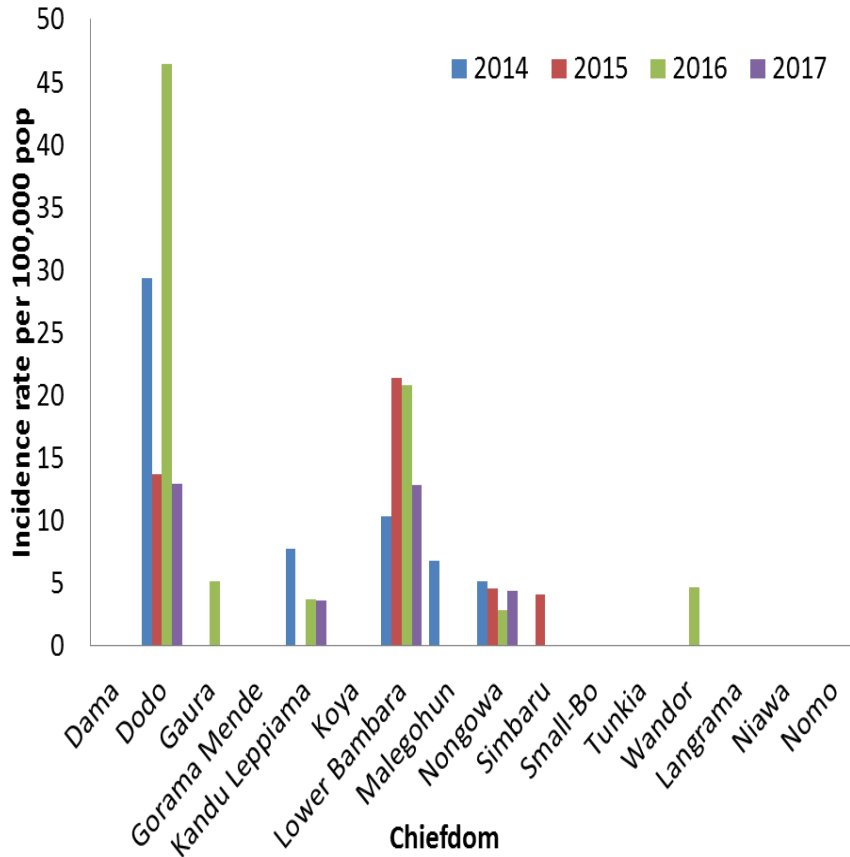
- Analyzed Lassa fever surveillance data in Kenema district for 2014 - 2017
- Reviewed, cleaned, and edited 2014 - 2017 LF surveillance data
- Selected variables
 - demographic (age, sex, patients' residence)
 - clinical (laboratory results, case outcomes, date of onset)
- Used Epi Info 7 to Calculate incidence and case fatality rates

Results

- 120 of 941 (12.8%) suspected LF cases were confirmed positive
- Of the 120 confirmed LF cases:
 - Median age was 20 (range, <1 - 83) years
 - Females: 73 (60.8%)
- Overall incidence rate was 5/100,000 population (female – 6/100,000, males – 3.9/100,000)
- General CFR was 38.3% (46/120) but 71.4% (5/7) in pregnant women

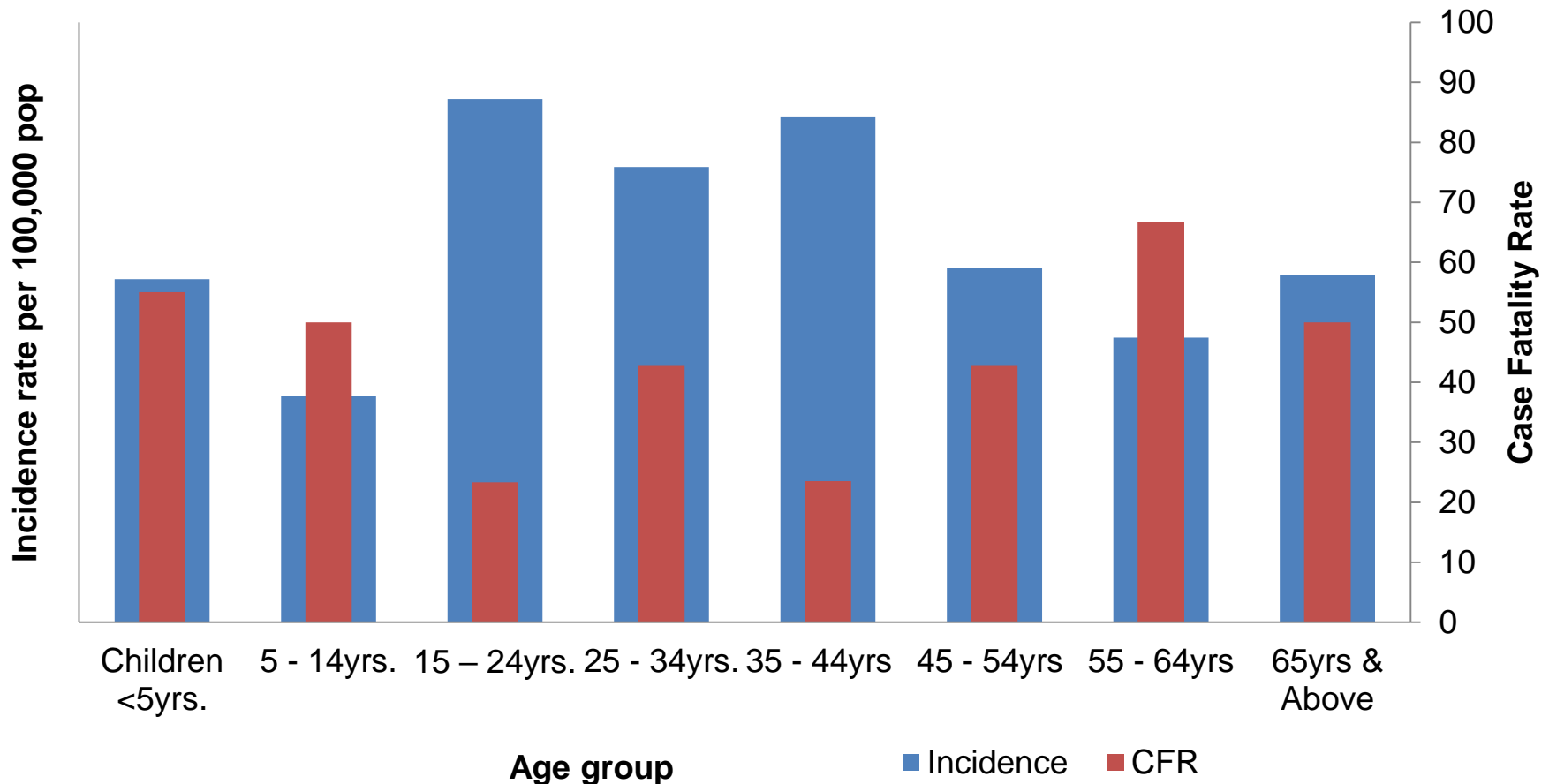
Lassa fever incidence rate by chiefdom – Kenema district, 2014 - 2017

Lassa fever case fatality rate by chiefdom – Kenema district, 2014 - 2017



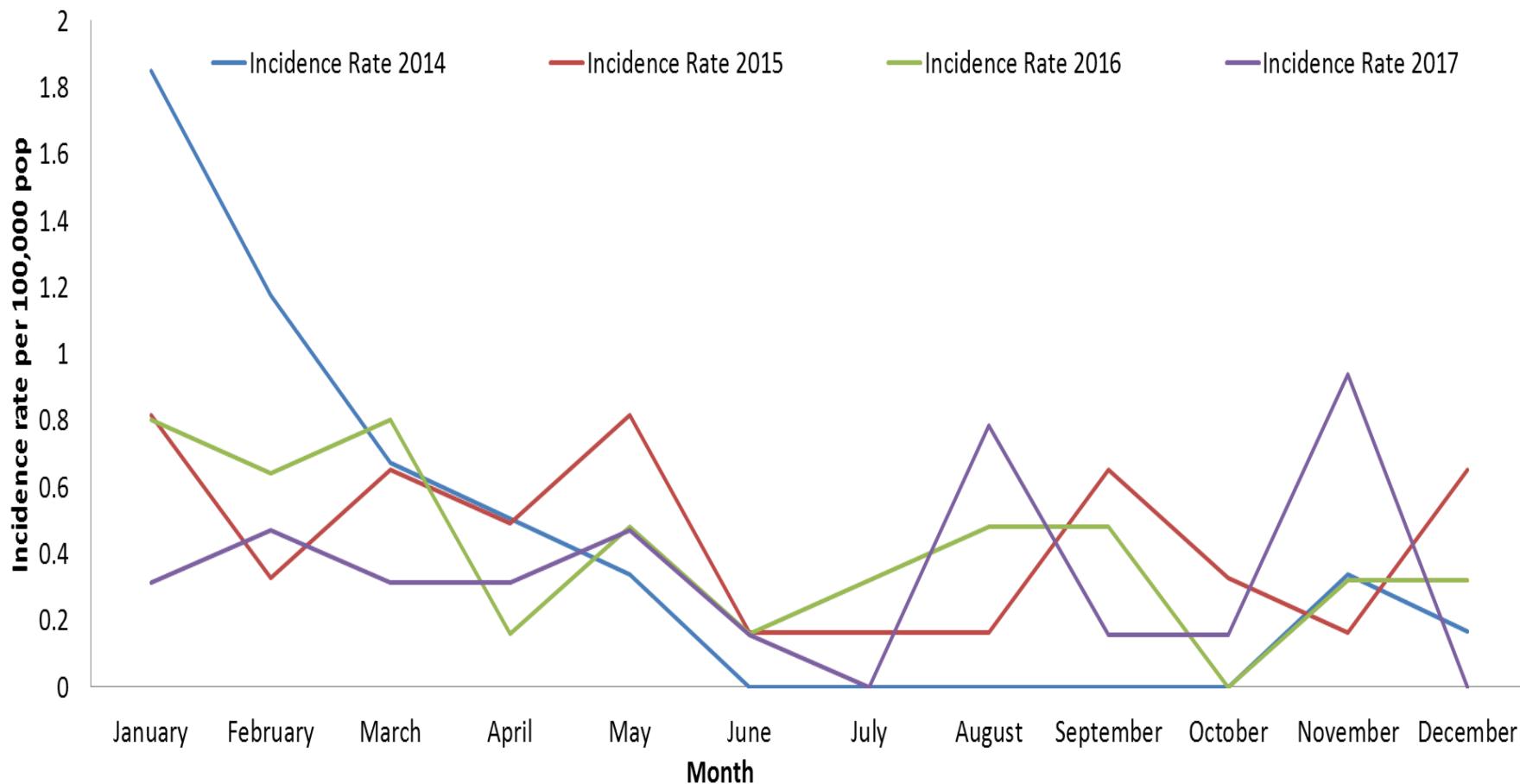


Lassa fever incidence and case fatality rates by age group – Kenema district, 2014 – 2017





Lassa fever incidence rate by month, 2014 – 2017, Kenema district





Discussion/Conclusion

- The high incidence of LF in Dodo and Lower Bambara chiefdoms may indicate that focused interventions (rodent control, selective community sensitization) are not working well
- The high incidence rate among females and of 15 – 24 age group could be due to increased exposure to excreta from rodents while performing domestic chores
- Although LF is known to be seasonal, we did not find any marked seasonal variation



Discussion

- The high risk of dying from LF among people living in low LF incidence areas may be due to low index of suspicion of LF among health care workers leading to late detection
- The high risk of dying from LF among the very young and the very old may be a result of low immunity



Recommendations /

Kenema District Health Team and MOH should;

- Train health facility staff on early case detection and reporting system for LF with focus on chiefdoms with low incidence
- Conduct community health education on signs and symptoms of LF and to encourage early health seeking behaviour
- Intensify community sensitization on LF prevention and control practices

Public health action

- We trained and provided job aides on LF case management to clinicians in affected chiefdoms



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- eHealth Africa
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