

One Health disease surveillance and community engagement in Sierra Leone

No registrations found.

Ethical review	Not applicable
Status	Pending
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON21660

Source

NTR

Brief title

Community One Health

Health condition

disease surveillance, health knowledge, health behaviors, human and animal health levels

Sponsors and support

Primary sponsor: Wageningen University and Research, Ministry of Agriculture, Forestry, and Food Security (MAFFS), the Ministry of Health and Sanitation (MoHS) of the Government of Sierra Leone

Source(s) of monetary or material Support: Royal Netherlands Embassy in Ghana

Intervention

Outcome measures

Primary outcome

Effectiveness of Community Health Worker Disease Surveillance Behavior

Human Health Knowledge Index

Human Health Behavior Index

Human Health Index

Animal Health Index

Secondary outcome

Animal spillover disease levels

Disease knowledge

Hygienic practices

Access to local government services

Food security

Wealth

Study description

Background summary

Purpose and Background of the study

Effective disease surveillance is a cornerstone of public health. A well-functioning disease surveillance system can detect and respond to potential threats as they arise and inform response efforts in emergency situations. The absence of a high-quality system can have long lasting detrimental welfare consequences. For example, during the Ebola Virus Disease outbreak in Sierra Leone, the lack of timely and high quality information about Ebola case-loads across the country led to speculative predictions that exacerbated the outbreak.

In the wake of the Ebola crisis, policy makers in Sierra Leone are working to improve health provision and integrate the global One Health Agenda into national policy. A core component is to design and implement a One Health Disease Surveillance System. Disease surveillance is a cornerstone of public health and a cost-effective policy strategy for preventing and controlling community diseases. A One Health perspective to community disease surveillance entails effective monitoring of human and animal health and environmental conditions.

The government of Sierra Leone has taken bold steps to bring disease surveillance to a community level. The national Community Based Surveillance (CBS) system trained Community Health Workers (CHWs) across the country to file weekly reports on suspected cases of priority diseases and suspected events. Governmental ministries and key development partners have identified that the current disease surveillance system in Sierra Leone suffers from several shortcomings:

- Lacks systematic animal disease surveillance
- Limited community engagement
- No mechanism for integrating human and animal health

This research project looks at three nested components in a One Health pilot project and explores how each component can improve community level disease surveillance in Sierra Leone. This project assesses the overall impacts of a One Health Programme.

This project is a collaborative effort between the Ministry of Agriculture, Forestry, and Food Security (MAFFS), the Ministry of Health and Sanitation (MoHS) and an international research team coordinated by Wageningen University (Netherlands). The pilot project is implemented in Kono District. Eligible communities have been identified by MAFFS. First, seven Chiefdoms were identified where households are to a large extent dependent on livestock rearing. Second, within each Chiefdom a list of communities was made (by MAFFS) that has a trained Community Health Worker (CHW). We limit the potential beneficiary communities to villages with existing CHWs, stimulating human and animal health workers to work together in a One Health framework.

We describe each programme component below.

Description and Design

Over the past year, a team of researcher has been collaborating with the MAFFs, MoH and international development partners to design a community level programme for One Health disease surveillance (see letters of support). This pilot project will be implemented in communities in Kono District in eastern Sierra Leone and is made up of several programme elements: a) recruiting a Community Animal Health Worker (CAHW) for each community (eligibility criteria of candidates include literacy, numeracy, and residing in said community), b) a 21 day animal health training, c) instalment of CAHW at community meeting, d) a 2-day One Health training for both CHW and CAHW on One Health topics (spillover diseases, good

animal husbandry practices, surveillance), e) facilitating the creation of a community One Health Platform and One Health Action Plan, and f) in parallel to CHW, CAHWs are required to complete weekly animal health disease and symptom surveillance reports submitted to the District One Health Technical Working Group.

Our study considers 375 communities in Kono District in Sierra Leone. These communities have been selected from within seven Chiefdoms identified by MAFFS where households are to a large extent dependent on livestock rearing. Within each Chiefdom a list of communities was made (by MAFFS) that had a Community Health Worker. From this list, we randomly select 300 communities where the One Health Programme is to be implemented.

We evaluate the impact of the program on the quality of disease surveillance reporting, community health knowledge, health seeking behaviors and human and animal health levels.

Glennester, M'Cleod, & Suri. "How bad data fed the Ebola crisis". New York Times Jan 30, 2015

<https://www.cdc.gov/onehealth/index.html>, <http://www.onehealthinitiative.com/> and refer to the Global Health Security Agenda to which Sierra Leone is a signatory <https://www.ghsagenda.org/>

Study objective

A Community One Health approach (bringing human and animal health together at the community level) improves disease surveillance efforts by Community Health Workers, health knowledge and behavior and physical health in study populations.

Study design

Baseline measurements are taken after randomization but before implementation of intervention step b).

Endline measurements are taken 12 months after intervention

Intervention

We collaborate with the Ministry of Agriculture, Forestry, and Food Security (MAFFS), the Ministry of Health and Sanitation (MoHS), and the FAO in Sierra Leone to implement a pilot One Health disease surveillance programme in 375 rural communities.

Included communities have been identified by MAFFS as eligible communities. First seven Chiefdoms were identified where households are to a large extent dependent on livestock rearing. Second, within each Chiefdom a list of communities was made (by MAFFS) that had a Community Health Worker (CHW). CHWs are required to report on human disease events and symptoms in weekly surveillance reports submitted to the District One Health Technical Working Group.

The treatment comprises a One Health Programme. Of the 375 communities, 300 communities are randomly selected to participate in the One Health Programme. The programme consists of: a) recruiting a Community Animal Health Worker (CAHW) for each community (eligibility criteria of candidates include literacy, numeracy, and residing in said community), b) a 21 day animal health training, c) instalment of CAHW at community meeting, d) a 2-day One Health training for both CHW and CAHW on One Health topics (spillover diseases, good animal husbandry practices, surveillance), e) facilitating the creation of a community One Health Platform and One Health Action Plan, and f) in parallel to CHW, CAHWs are required to complete weekly animal health disease and symptom surveillance reports submitted to the District One Health Technical Working Group.

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Eligibility criteria

Inclusion criteria

Intervention participants:

- at least 18 years of age
- adequate levels of numeracy and literacy
- villages should have a Community Health Worker

Survey respondents:

- at least 18 years of age

Exclusion criteria

- people below 18 years old
- people outside 375 identified communities by the Ministry of Agriculture

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Non controlled trial
Masking:	Single blinded (masking used)
Control:	Active

Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	19-07-2017
Enrollment:	375
Type:	Anticipated

Ethics review

Not applicable

Application type:

Not applicable

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL6456
NTR-old	NTR6634
Other	Ministerie van Buitenlandse Zaken : RSG0120335

Study results

Summary results

NA