

**From:** Marston, Barbara J. (CDC/CGH/DGHP)  
**Sent:** Sat, 13 Jun 2015 10:30:00 -0400  
**To:** EOC Conf/Bridge Calendar (CDC); Demby, Austin (CDC/CGH/DGHA); Damon, Inger K. (CDC/OID/NCEZID); GDD-OUTBREAK (CDC); CDC IMS AV/Communications; Helfand, Rita (CDC/OID/NCEZID); Williams, Teresa (CDC/OD/OCS); Dills, Kimberly C. (CDC/OD/OCS); Braden, Chris (CDC/OID/NCEZID); CDC IMS OD LNO; CDC IMS Incident Manager (CDC); Davis, Carma L. (CDC/OD/OCS) (CTR); Bumpus, Stefanie (CDC/OD/OCS); Brown, Clive (CDC/OID/NCEZID); Frieden, Thomas (Tom) (CDC/OD); Demby, Austin (HHS/OS/OGA); Knust, Barbara (CDC/OID/NCEZID); Nichol, Stuart T. (CDC/OID/NCEZID); Tappero, Jordan (CDC/CGH/DGHP); Wuichet, John W. (CDC/OD/OCS); Bell, Beth (CDC/OID/NCEZID); Morgan, Oliver (CDC/OID/NCEZID); 2014 Ebola Response (CDC); Kenyon, Thomas A. (CDC/CGH/OD); Foti, Kathryn (CDC/OD/OCS); CDC IMS Policy Unit -2 (Ebola); Merkle, Sarah (CDC/ONDIEH/NCEH); Rayfield, Mark (CDC/CGH/DGHP); Petersen, Lyle (CDC/OID/NCEZID); Perrone, Laura (CDC/CGH/OD); Meltzer, Martin I. (CDC/OID/NCEZID); Washington, Michael (Wash) (CDC/OID/NCEZID); Gambhir, Manoj (CDC/OID/NCIRD) (CTR); Reott, Erica (CDC/ONDIEH/NCBDDD); Kibunja, Julia N. (CDC/CGH/OD); Brunette, Gary W. (CDC/OID/NCEZID); Dicker, Richard C. (CDC/CGH/DGHP); Bunnell, Rebecca (CDC/CGH/DGHP); Hersey, Sara (CDC/CGH/DGHP); Glover, Maleeka (CDC/OID/OD); Kennedy, David N. (CDC/OPHPR/DEO); Merlin, Toby (CDC/OID/NCEZID); Crockett, James B. (CDC/OPHPR/DEO); Anaya, Gabriel (CDC/CGH/GID); Williams, Ian (CDC/OID/NCEZID); Jernigan, Daniel B. (CDC/OID/NCIRD); English, Lorna M. (CDC/ONDIEH/NCCDPHP); CDC IMS DGMQ Task Force Leader/Deputy; Irwin, Kathleen L. (CDC/OID/NCHHSTP); Kretsinger, Katrina (CDC/CGH/GID); Linkins, Robert (CDC/CGH/GID)  
**Cc:** Ervin, Elizabeth (CDC/OID/NCEZID); Park, Benjamin (CDC/OID/NCEZID); Davis, Stephanie Marie (CDC/CGH/DGHA); Daves, Sharon (CDC/CGH/DGHP); Brooks, Jennifer (CDC/OPHPR/DEO); Briss, Peter (CDC/ONDIEH/NCCDPHP); CDC IMS Laboratory; Hall, Aron (CDC/OID/NCIRD); McMorrow, Meredith (CDC/OID/NCIRD); Mast, Eric (CDC/CGH/GID); Tohme, Rania A. (CDC/OID/NCHHSTP); Srivastava, Pamela (CDC/OID/NCIRD); Barbour, Kamil E. (CDC/ONDIEH/NCCDPHP); hersey.sara@gmail.com; Zulz, Tammy (CDC/OID/NCEZID); Gupta, Neil (CDC/OID/NCEZID); Wilson, Katie (CDC/OID/NCEZID) (CTR); Rollin, Pierre (CDC/OID/NCEZID); Ransom, Ray (CDC/CGH/DGHP); CDC IMS Health Promotion; Pembleton, Elizabeth (CDC/OID/NCEZID) (CTR); Lindblade, Kimberly (Kim) (CDC/OID/NCIRD); Henderson, Alden (CDC/CGH/DGHP); Pappas, Claudia (CDC/OID/NCIRD); Waterman, Steve (CDC/OID/NCEZID); Kahn, Emily B. (CDC/OPHPR/DSLIR); Moore, Melissa (CDC/OID/NCIRD); Balish, Amanda (CDC/OID/NCIRD); Weirich, Elizabeth (CDC/OPHSS/CSELS); Anderson, Mark (CDC/CGH/DGHP); Chen, Guan Ming (CDC/OPHSS/CSELS) (CTR); Nowlin, Sue (CDC/NIOSH/DSHEFS); Sniadack, David (CDC/CGH/GID); Dennis, Miatta (CDC/CGH/DGHP); Lawrence, Gena G. (CDC/CGH/DPDM); Jones, LaBrina M. (CDC/OPHPR/DEO); CDC IMS Incident Manager Task Tracker; Karem, Kevin (CDC/CGH/OD)  
**Subject:** RE: Ebola: Country Call Sierra Leone  
**Attachments:** Weekly Epi Report 12 June 2015 FINAL.PPTX



-----Original Appointment-----

**From:** EOC Conf/Bridge Calendar (CDC)  
**Sent:** Monday, November 24, 2014 9:00 AM  
**To:** EOC Conf/Bridge Calendar (CDC); Demby, Austin (CDC/CGH/DGHA); Marston, Barbara J. (CDC/CGH/DGHP); Damon, Inger K. (CDC/OID/NCEZID); GDD-OUTBREAK (CDC); CDC IMS

AV/Communications; Helfand, Rita (CDC/OID/NCEZID); Williams, Teresa (CDC/OD/OCS); Dills, Kimberly C. (CDC/OD/OCS); Braden, Chris (CDC/OID/NCEZID); CDC IMS OD LNO; CDC IMS Incident Manager (CDC); Davis, Carma L. (CDC/OD/OCS) (CTR); Bumpus, Stefanie (CDC/OD/OCS); Brown, Clive (CDC/OID/NCEZID); Frieden, Thomas (Tom) (CDC/OD); Demby, Austin (HHS/OS/OGA); Knust, Barbara (CDC/OID/NCEZID); Nichol, Stuart T. (CDC/OID/NCEZID); Tappero, Jordan (CDC/CGH/DGHP); Wuichet, John W. (CDC/OD/OCS); Bell, Beth (CDC/OID/NCEZID); Morgan, Oliver (CDC/OID/NCEZID); 2014 Ebola Response (CDC); Kenyon, Thomas A. (CDC/CGH/OD); Foti, Kathryn (CDC/OD/OCS); CDC IMS Policy Unit -2 (Ebola); Merkle, Sarah (CDC/ONDIEH/NCEH); Rayfield, Mark (CDC/CGH/DGHP); Petersen, Lyle (CDC/OID/NCEZID); Perrone, Laura (CDC/CGH/OD); Meltzer, Martin I. (CDC/OID/NCEZID); Washington, Michael (Wash) (CDC/OID/NCEZID); Gambhir, Manoj (CDC/OID/NCIRD) (CTR); Reott, Erica (CDC/ONDIEH/NCBDDD); Kibunja, Julia N. (CDC/CGH/OD); Brunette, Gary W. (CDC/OID/NCEZID); Dicker, Richard C. (CDC/CGH/DGHP); Bunnell, Rebecca (CDC/ONDIEH/NCCDPHP); Hersey, Sara (CDC/CGH/DGHA); Glover, Maleeka (CDC/OID/OD); Kennedy, David N. (CDC/OPHPR/DEO); Merlin, Toby (CDC/OID/NCEZID); Crockett, James B. (CDC/OPHPR/DEO); Anaya, Gabriel (CDC/CGH/GID); Williams, Ian (CDC/OID/NCEZID); Jernigan, Daniel B. (CDC/OID/NCIRD); English, Lorna M. (CDC/ONDIEH/NCCDPHP); CDC IMS DGMQ Task Force Leader/Deputy; Irwin, Kathleen L. (CDC/OID/NCHHSTP); Kretsinger, Katrina (CDC/CGH/GID); Linkins, Robert (CDC/CGH/GID)

**Cc:** Ervin, Elizabeth (CDC/OID/NCEZID); Park, Benjamin (CDC/OID/NCEZID); Davis, Stephanie Marie (CDC/CGH/DGHA); Daves, Sharon (CDC/CGH/DGHP); Brooks, Jennifer (CDC/OPHPR/DEO); Briss, Peter (CDC/ONDIEH/NCCDPHP); CDC IMS Laboratory; Hall, Aron (CDC/OID/NCIRD); McMorrow, Meredith (CDC/OID/NCIRD); Mast, Eric (CDC/CGH/GID); Tohme, Rania A. (CDC/CGH/GID); Srivastava, Pamela (CDC/OID/NCIRD); Barbour, Kamil E. (CDC/ONDIEH/NCCDPHP); hersey.sara@gmail.com; Zulz, Tammy (CDC/OID/NCEZID); Gupta, Neil (CDC/OID/NCHHSTP); Wilson, Katie (CDC/OID/NCEZID) (CTR); Rollin, Pierre (CDC/OID/NCEZID); Ransom, Ray (CDC/CGH/DGHP); CDC IMS Health Promotion; Pembleton, Elizabeth (CDC/OID/NCEZID) (CTR); Lindblade, Kimberly (Kim) (CDC/OID/NCIRD); Henderson, Alden (CDC/CGH/DGHP); Pappas, Claudia (CDC/OID/NCIRD); Waterman, Steve (CDC/OID/NCEZID); Kahn, Emily B. (CDC/OPHPR/DSLRL); Moore, Melissa (CDC/OID/NCIRD); Balish, Amanda (CDC/OID/NCIRD); Weirich, Elizabeth (CDC/OPHSS/CSELS); Anderson, Mark (CDC/CGH/DGHP); Chen, Guan Ming (CDC/OPHSS/CSELS) (CTR); Nowlin, Sue (CDC/NIOSH/DSHEFS); Sniadack, David (CDC/CGH/GID); Dennis, Miatta (CDC/CGH/DGHP); Lawrence, Gena G. (CDC/CGH/DPDM); Jones, LaBrina M. (CDC/OPHPR/DEO); CDC IMS Incident Manager Task Tracker; Karem, Kevin (CDC/CGH/OD)

**Subject:** Ebola: Country Call Sierra Leone

**When:** Saturday, June 13, 2015 10:25 AM-10:55 AM (UTC-05:00) Eastern Time (US & Canada).

**Where:** Conference Call Only (b)(6)

Please note that starting April 18, 2015 duration for this call is 30 minutes and the time will be as follows:

Atlanta: 10:25-10:55 AM



Sierra Leone: 2:25-2:55 PM

Updated bridgeline

POC: INTL TF Barbara Marston & Lorna English

The call line information is:

Bridgeline: (b)(6)  
Passcode: (b)(6)  
International Number: (b)(6)

For any changes or updates, please contact [EOCReport@cdc.gov](mailto:EOCReport@cdc.gov) or phone (770) 488-7100

# **Sierra Leone Ebola Response**

## **Epidemiology Overview**

**June 13, 2015**



# Summary of New Cases

Summary Case Counts																
	Epi Week 23								Epi Week 24*							
	1-Jun	2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun	Totals	8-Jun	9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun	Totals
Kambia		1			1		3(1)	5(1)	1	2	2					
Western																
Port Loko	1	1	1	2	1(1)	2	2(1)	10(1)	2	2	3					
<b>National</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2(1)</b>	<b>2</b>	<b>5(2)</b>	<b>15(3)</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>0</b>	<b>0</b>			

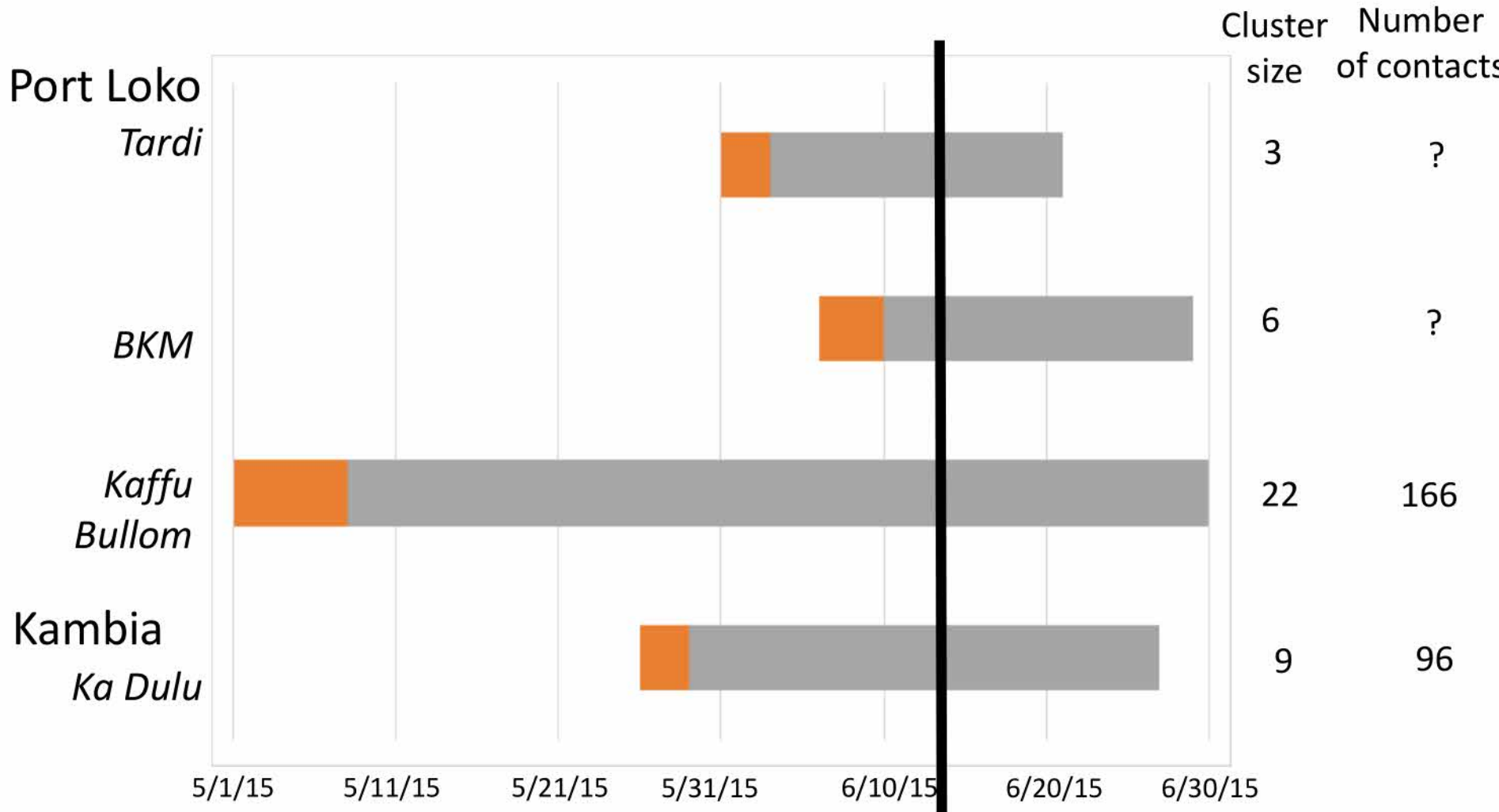
\*Epi week 24 is incomplete

Current as of 12:00pm GMT June 13, 2015

# Cluster Tracking



# Clusters by District and Chiefdom



Current as of 12:00pm GMT June 13, 2015

Quarantine period

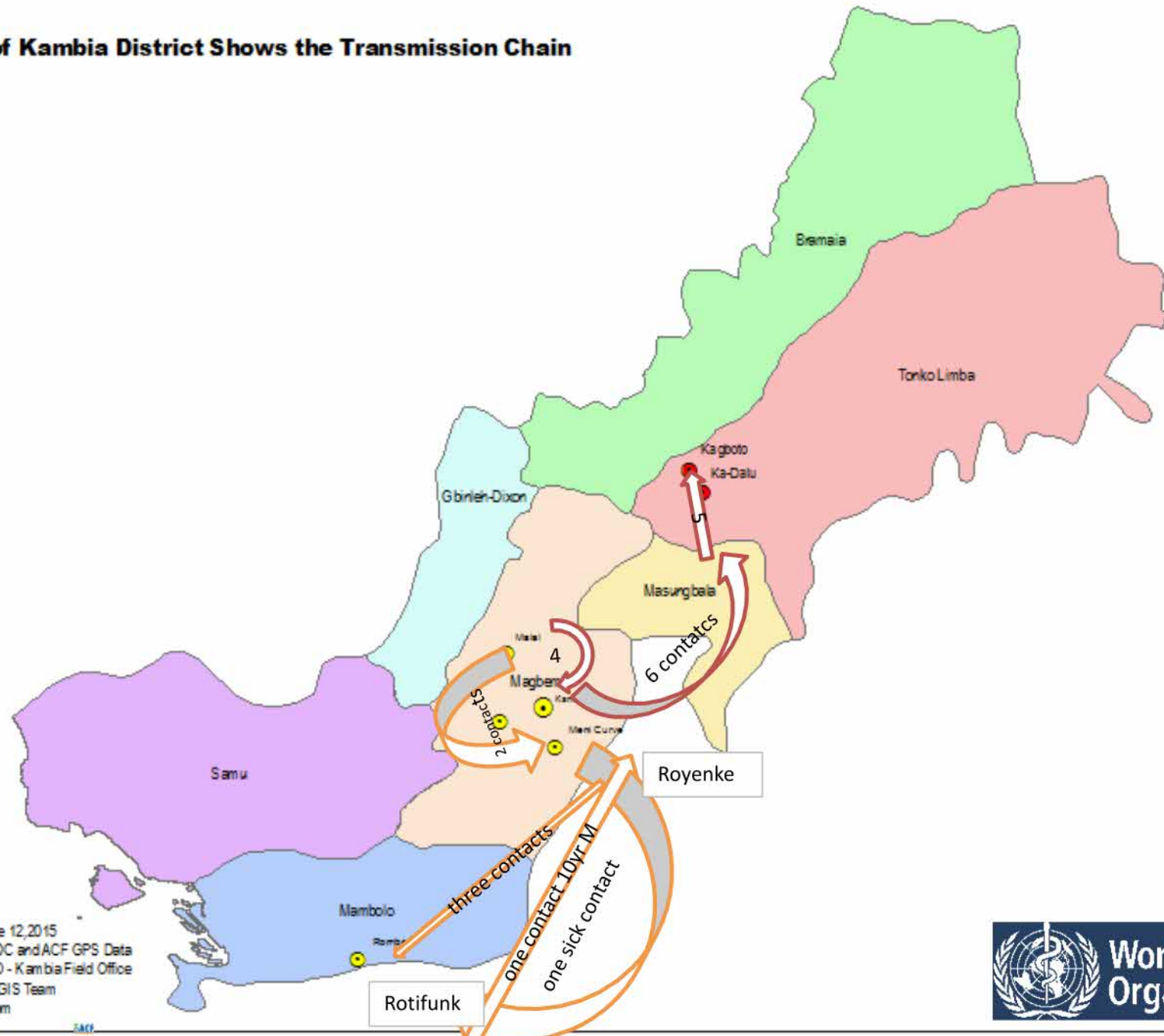
# Kambia

## Ka-Dalu Cluster

- **Cases:** 9
- **Contacts:** 96
- **Date quarantine ends:** estimated June 27
- **Epi-link:** Imported case from Kamba, Magbema Chiefdom



# Spot Map of Kambia District Shows the Transmission Chain



Date of Production: June 12, 2015  
Data Source: DHMT, CDC and ACF GPS Data  
Technical Support: WHO - Kambia Field Office  
Data Management and GIS Team  
reguswoku@gmail.com



Current as of June 12, 2015

# Port Loko

## Kaffu Bullom Cluster

- **Cases:** 22
- **Contacts:** 166
- **Date quarantine ends:** June 30, 2015
- **Epi-link:** Imported case from Kambia

# Port Loko

## BKM Cluster

- **Cases:** 6
- **Contacts:** under investigation
- **Date quarantine ends:** June 29, 2015
- **Epi-link:** Mene Curve (Kambia) cluster



# Port Loko

- Kaffu Bullom, Tardi
- **Cases: 3**
- **Contacts: under investigation**
- **Date quarantine ends: June 21, 2015**
- **Epi-link: under investigation**

# Port Loko – Ambulance Driver Investigation

Date of Onset: June 4<sup>th</sup> (previously seen in Lungi Hospital May 15<sup>th</sup>)

Exposure: under investigation; conflicting reports

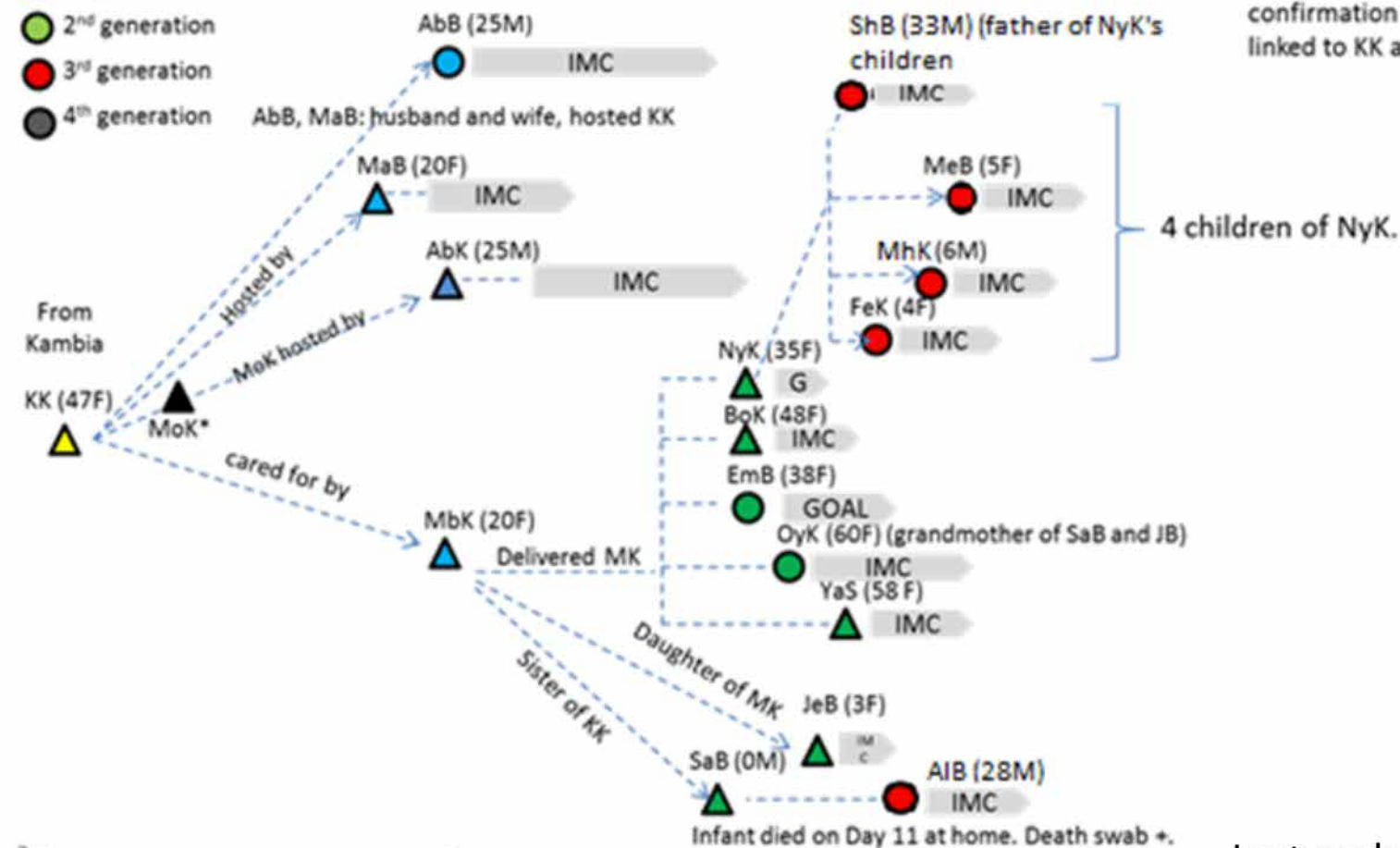
- Ambulance Driver for Lungi Hospital, non-EVD transport, mostly maternity
- May have transported herbalist from Kaffu Bullum cluster

Contacts: 50 (10 HCWs, 4 other hospital workers (e.g., security), 36 community); more under investigation

# Transmission Port Loko – Date of Onset of Symptoms

- isolated in care
- alive/contagious
- dead/contact
- Index case
- 1<sup>st</sup> generation
- 2<sup>nd</sup> generation
- 3<sup>rd</sup> generation
- 4<sup>th</sup> generation
- Died
- Survived

\*MoK is the grandson of KK who accompanied her from Kambia to Port Loko. He was also ill, and was hosted by ABK and another household while ill. He fled back to Kambia before dying in Kambia. No confirmation of his illness but epidemiologically linked to KK and AK.



Last updated June 5, 2015;  
5 cases under investigation



# EVD Diagnosis at Death

## Epi Week #23

Kambia – 1 corpse

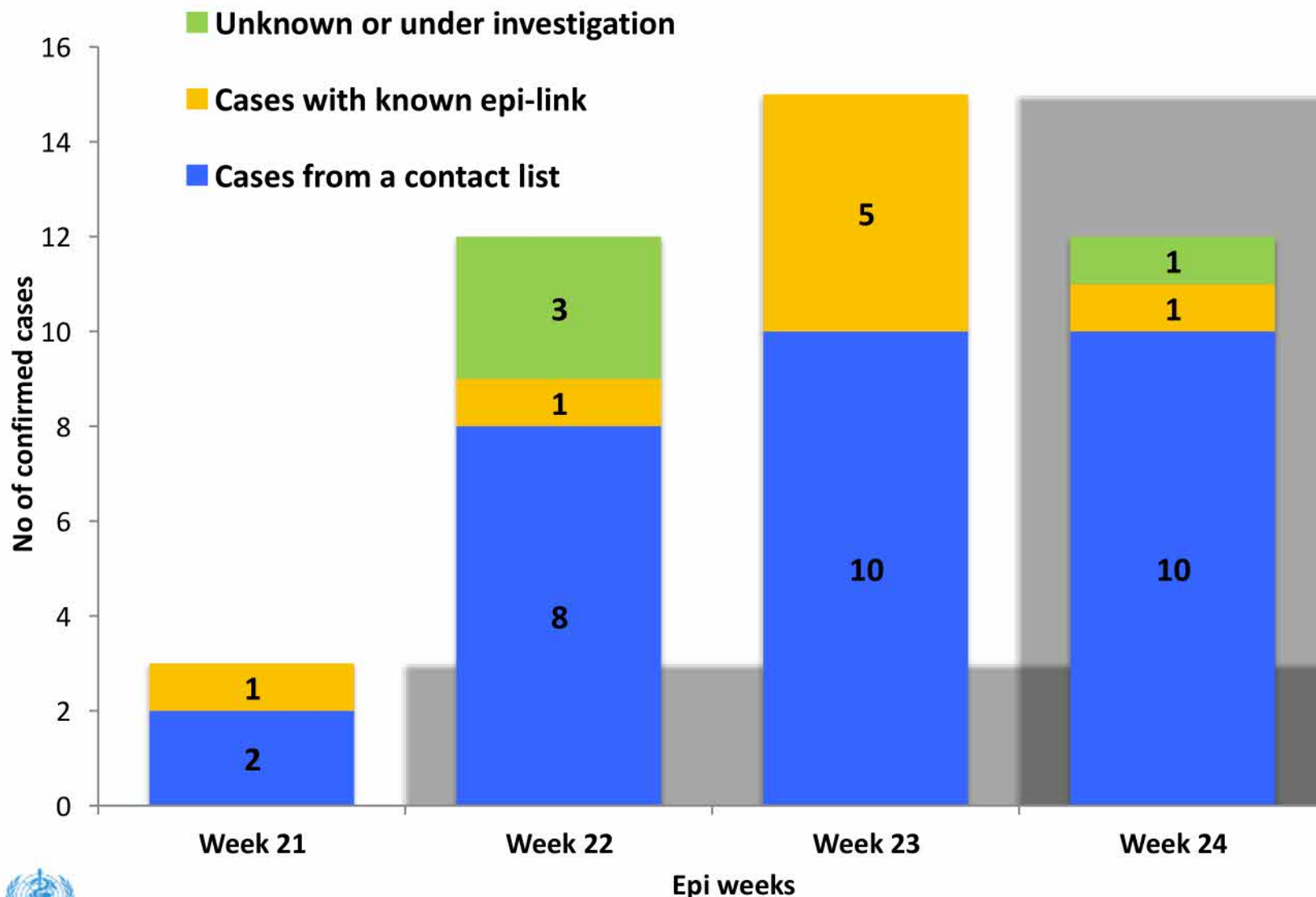
- 2 yo female died on June 7; positive swab on June 7. Not on a contact list, not from quarantine home; epi-linked to Kaffu Bullom

Port Loko – 2 corpses

- 56 yo female died on June 4; positive swab on June 5. Known contact from a quarantine home
- 9 yo female died on June 6; positive swab on June 7. Known contact from quarantine home



# Trend of EVD Positive Cases and Their Sources of Transmission



Information is current for recent epi weeks and may not be retrospectively updated

# ZMAPP TRIAL UPDATE

# Zmapp Trial

- Medication arrived April 2<sup>nd</sup> in Sierra Leone
- Trial began April 3<sup>rd</sup>
- Enrolled 30 people in Sierra Leone
  - 23 adults
  - 7 children

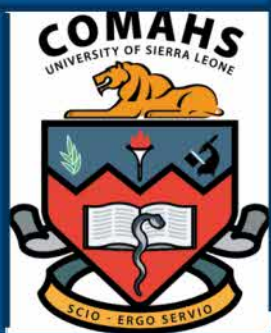
# **VACCINE STUDY UPDATE**



# STRIVE

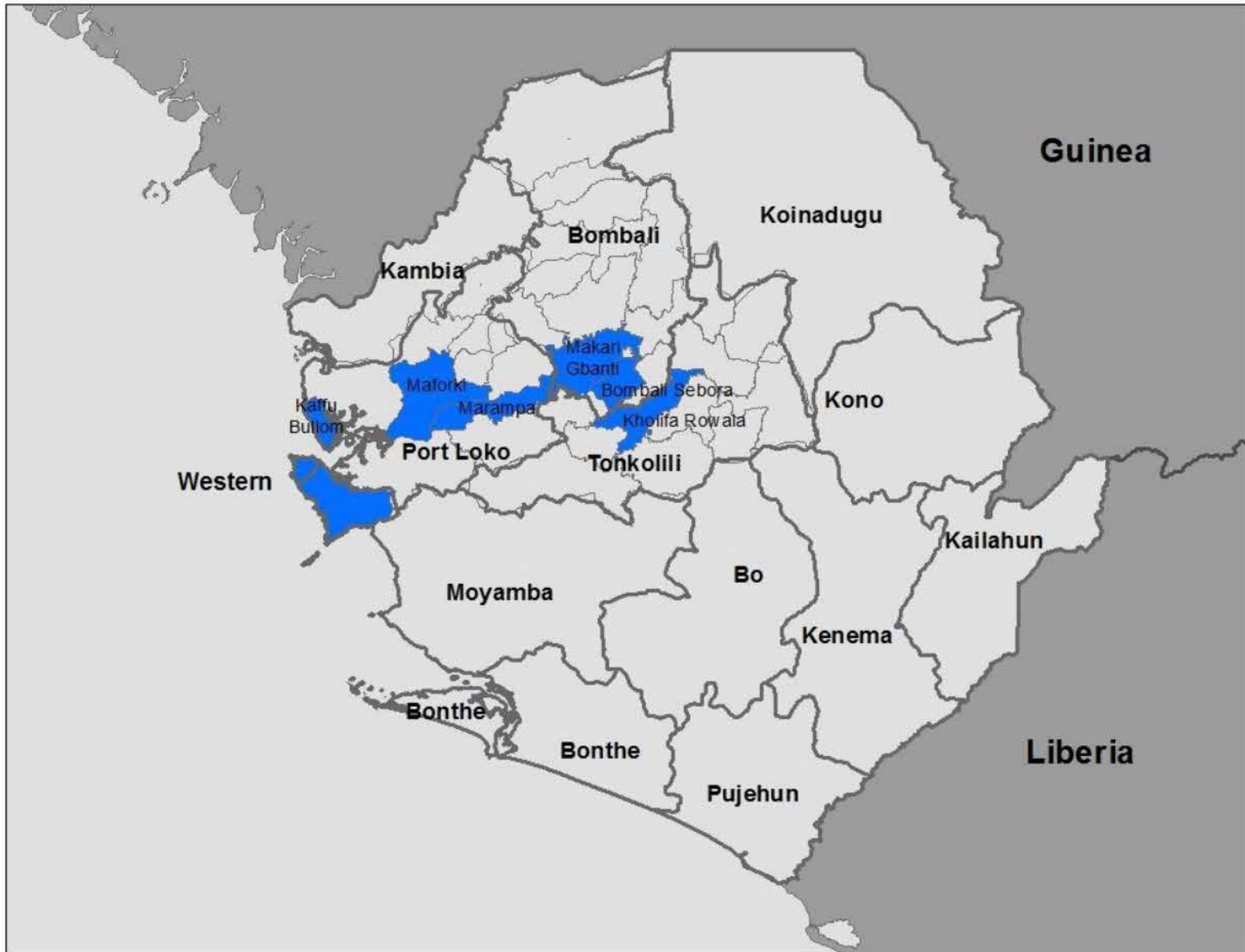
Sierra Leone Trial to Introduce a Vaccine against Ebola  
Together we **STRIVE** to end Ebola!

- Sierra Leone College of Medicine and Allied Health Sciences (COMAHS)
- Sierra Leone Ministry of Health and Sanitation (MoHS)
- U.S. Centers for Disease Control and Prevention (CDC)

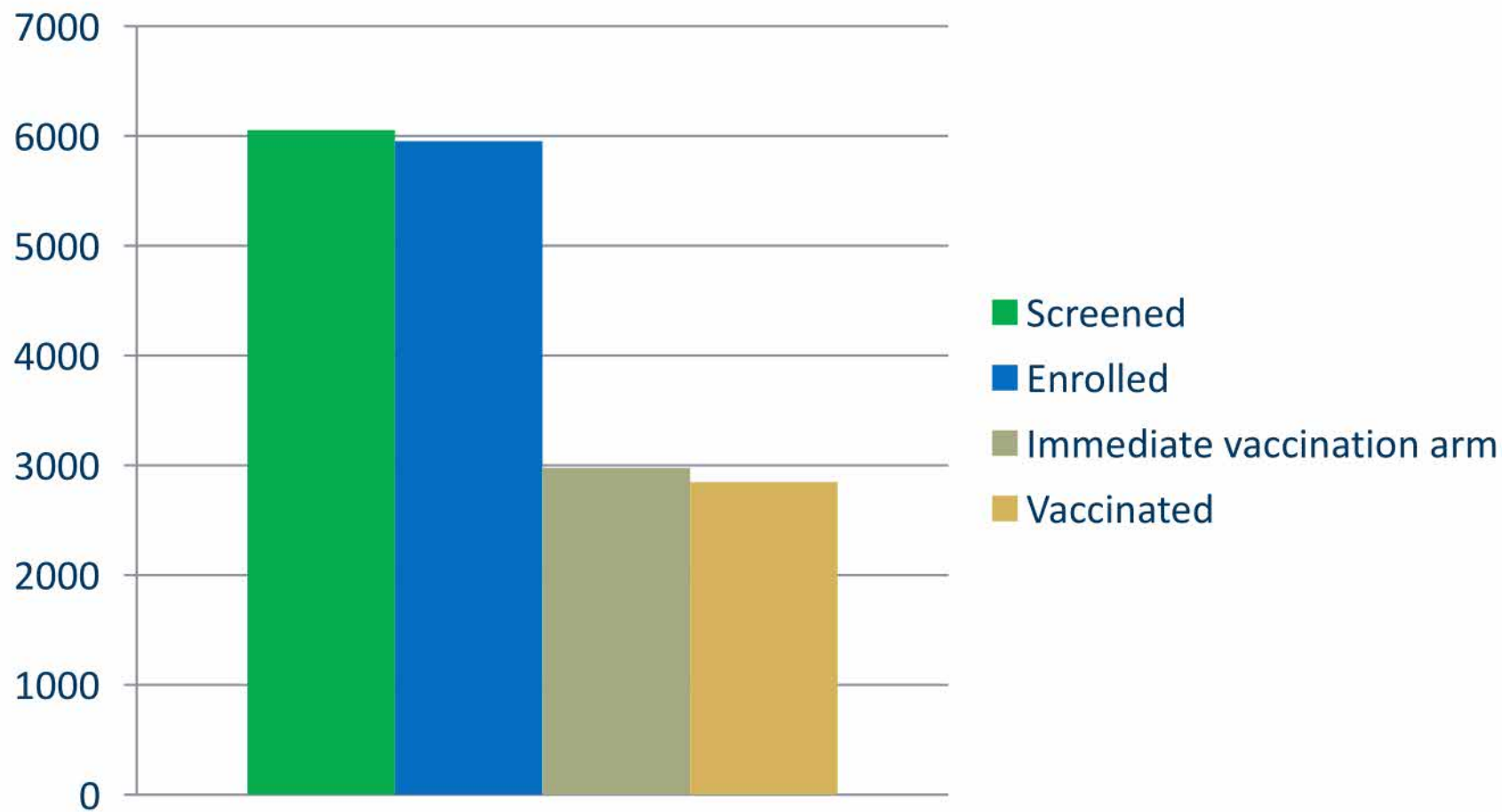




# 7 STRIVE Study Sites in 5 Districts



## Cumulative Enrollment and Vaccination in Western, Port Loko, Bombali & Tonkolili districts (6 sites), April 9 – June 7, 2015

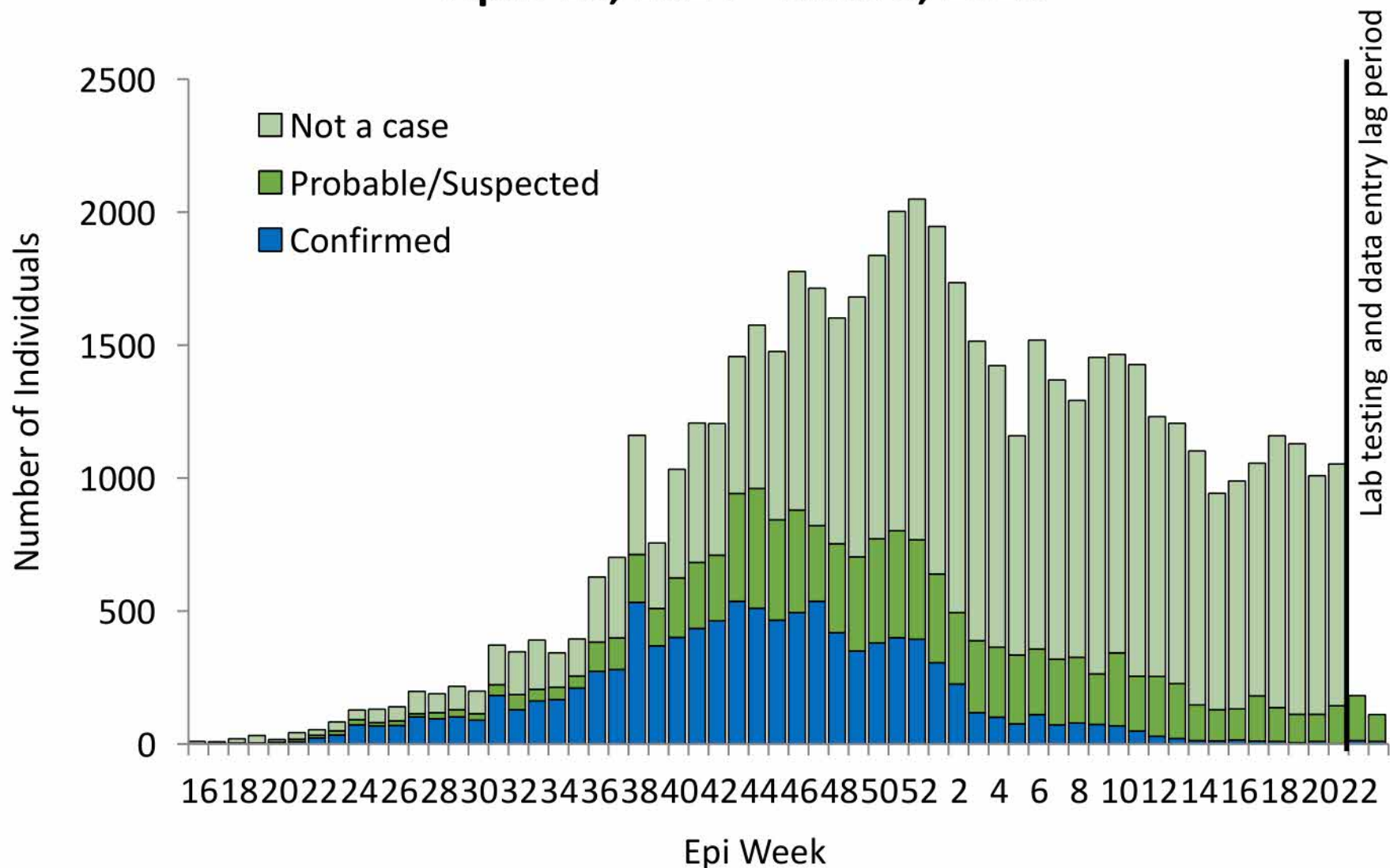


# Vaccine Safety

- Regular meetings of Data Safety Monitoring Board
- Safety data so far is consistent with previous trials  
–no vaccine related serious adverse events
- Nine participants evaluated for possible Ebola virus infection
  - All negative for Ebola; eight final Dx malaria (5 positive by malaria rapid test)

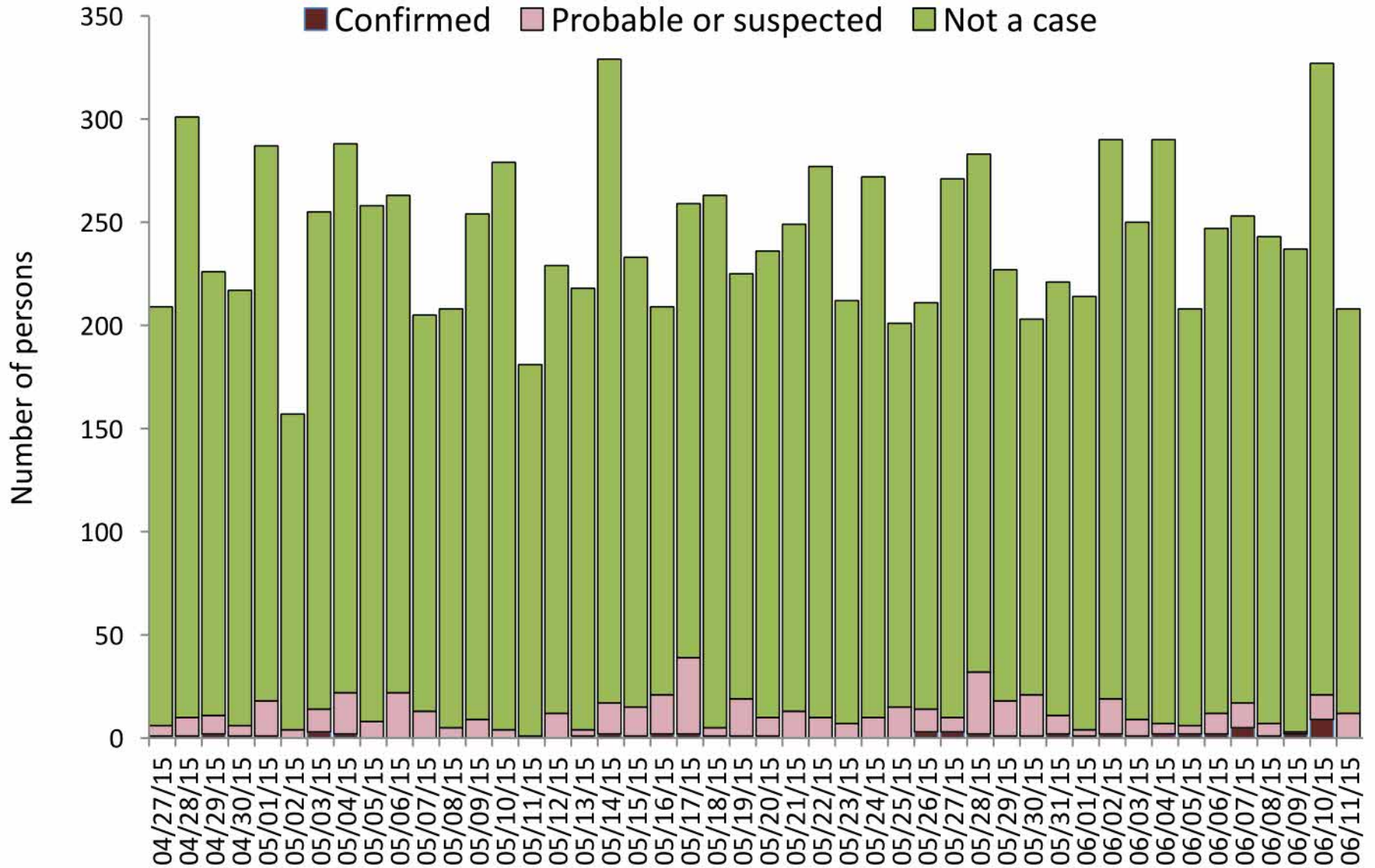
# **NATIONAL DATA**

# VHF - Reports by Case Definition and Epi-week of Onset – National April 13, 2014 – June 9, 2015

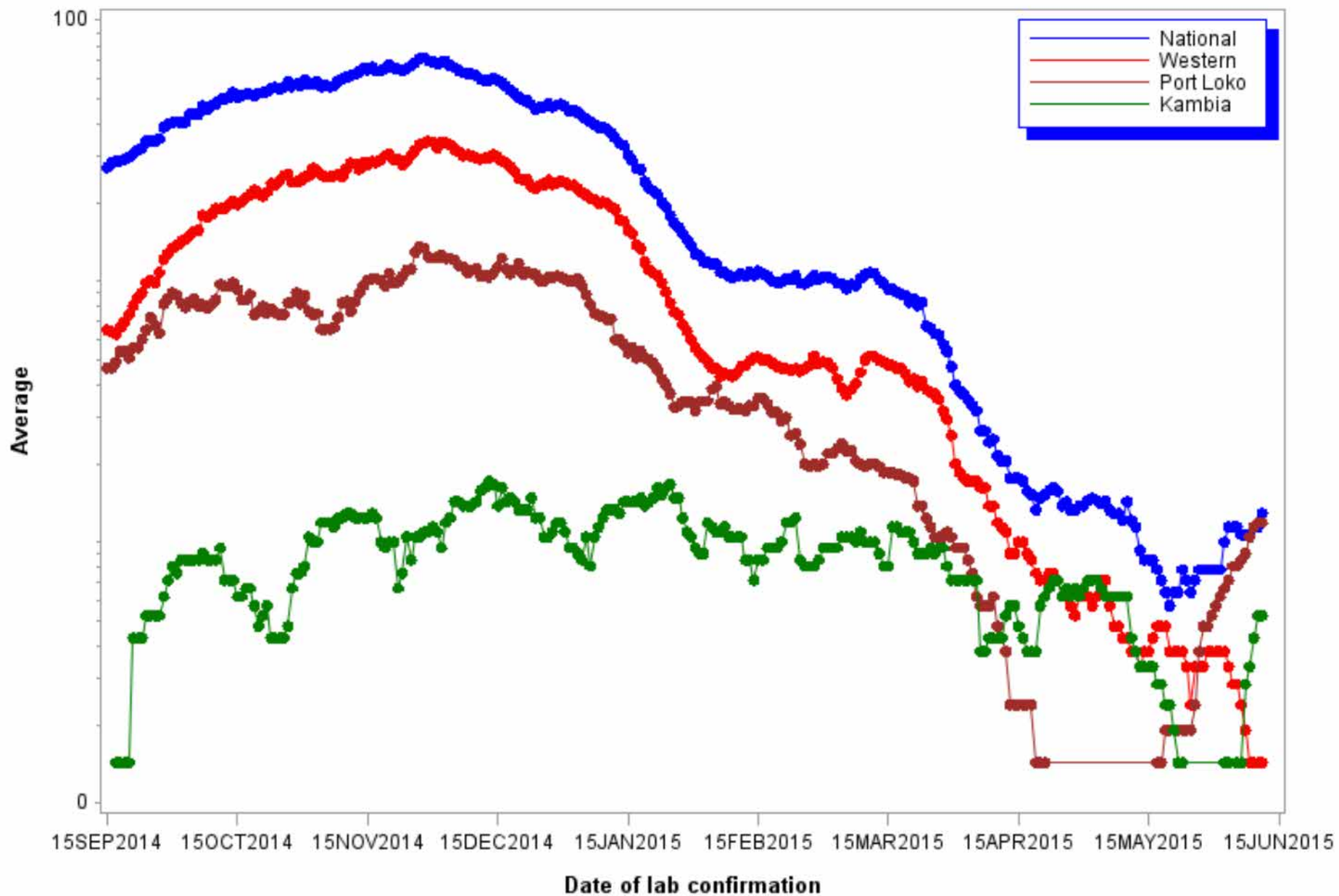




# MoHS - Reported Lab Results (by Date of the Lab Results Report) National, March 15 – June 11, 2015



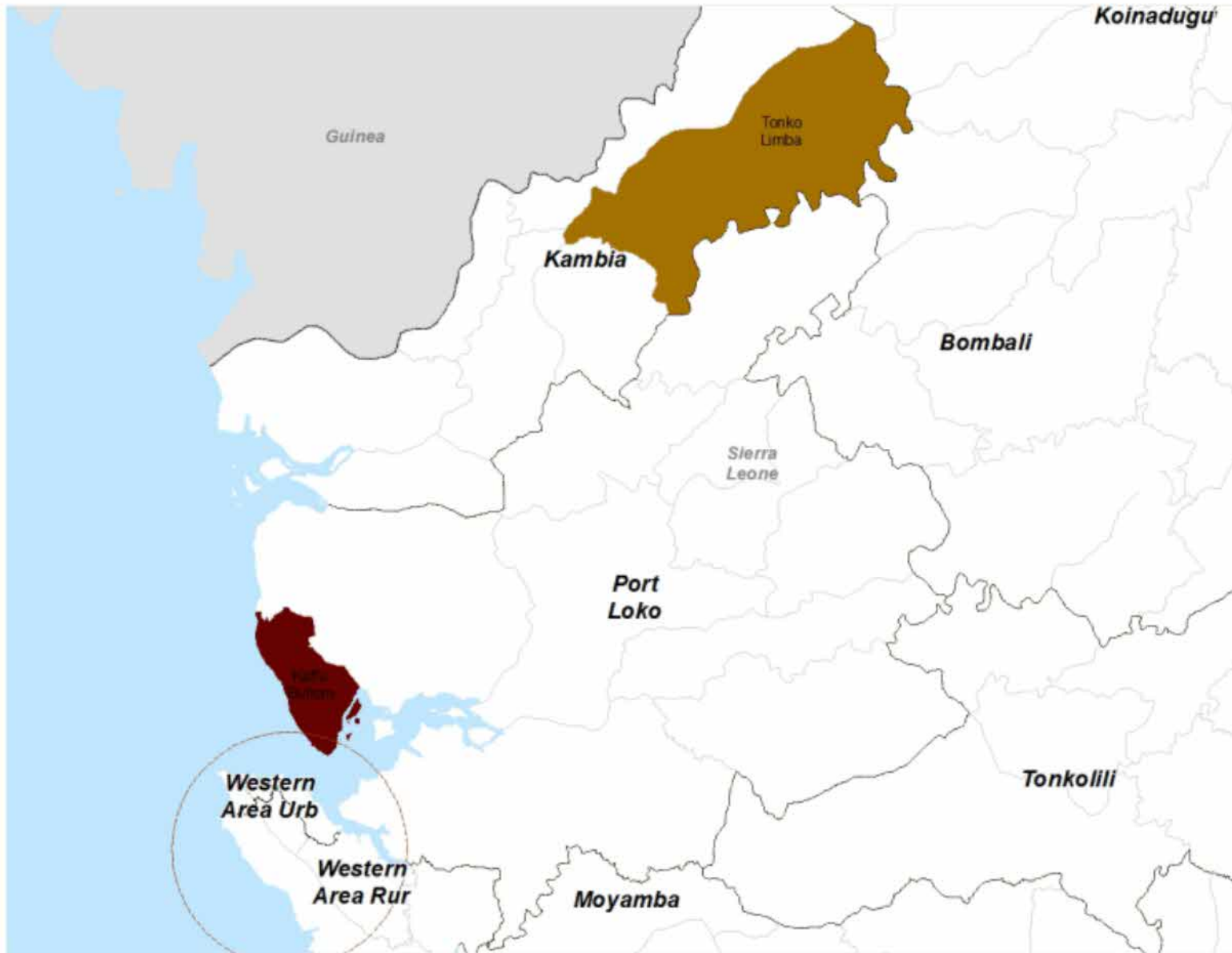
# MoHS-Lab Confirmed Cases Per Day (21-day Moving Average) Sept 15, 2014 - June 11, 2015



Y axis is on the log scale

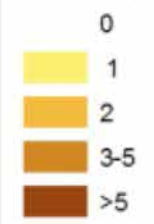
# Confirmed Ebola case from Kambia-Porto Loko week 24


MAP DATE: 11 June 2015



- Country Boundary
- District Boundary
- Chiefdom boundary

### Cases by Chiefdom



 This map is produced by IMMAP through steady partner agreement with WHO for the Ebola outbreak.

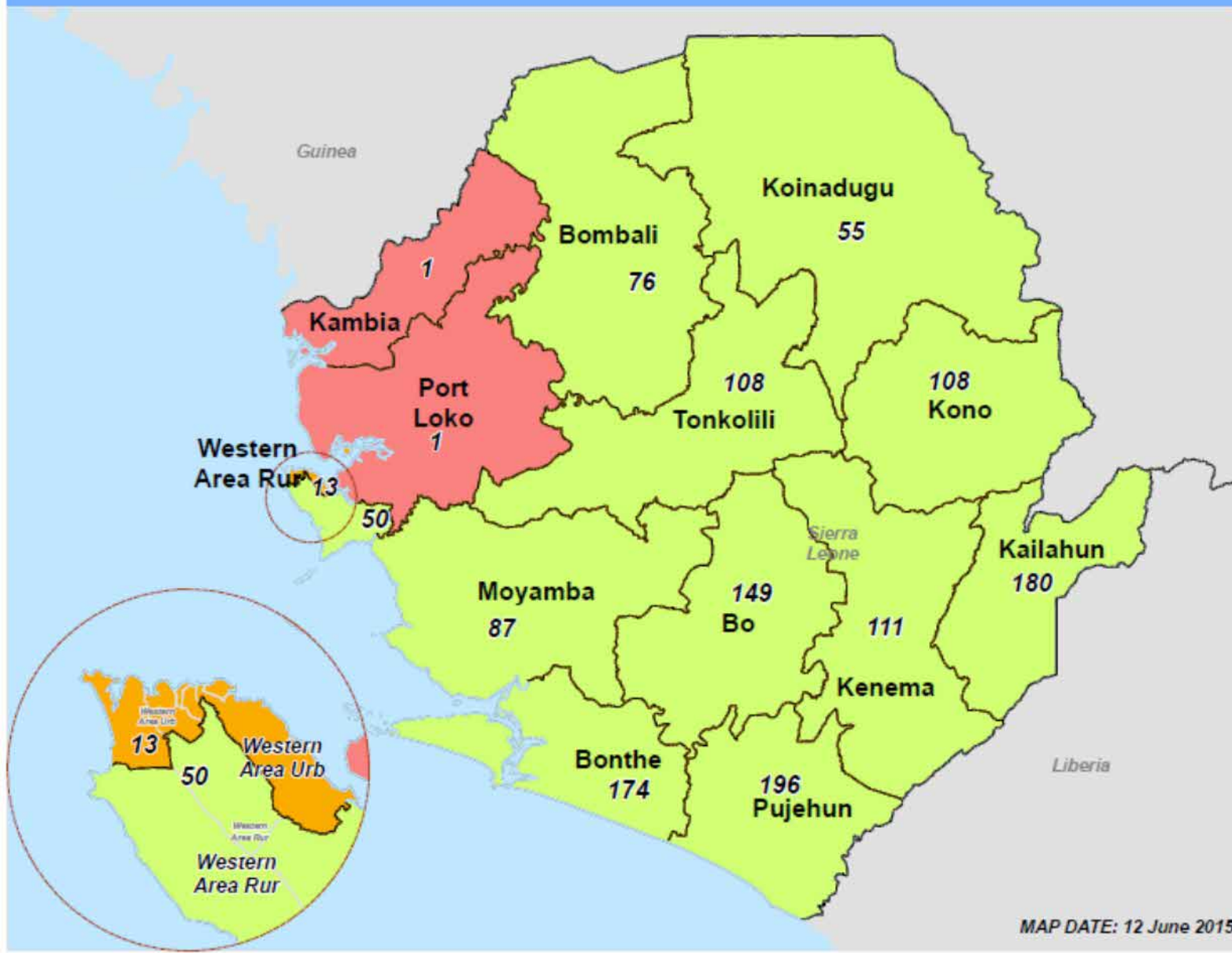
Sources:  
 Admin. boundaries: Ebolegene/ndc  
 Cartography: WHO HQ  
 Confirmed Ebola cases: WoRS daily SE-Rep  
 Contact: [aficosi@who.int](mailto:aficosi@who.int), [ebolamaps@who.int](mailto:ebolamaps@who.int)  
 Map projection: WGS 1984  
 Created in country by Fayyaz Ahmed Malik ([fmalik@immap.org](mailto:fmalik@immap.org))



WHO DISCLAIMER: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.



# Number of days since last case reported by district as of 11th June 2015



- Country Boundary
  - District Boundary
- Days since last case**
- 0-7 days
  - 8-21 days
  - 22-42 days
  - > 42 days

This map is produced by IMMAPP through standby partner agreement with WHO for the Ebola outbreak.

**IMMAPP**


Sources:  
 Admn. boundaries: EboIageonode  
 Cartography: WHO HQ  
 Death deletion rates: Reported deaths / expected number of deaths  
 Contact:haskewc@who.int  
 Map projection: WGS 1984  
 Created in country by: Fayyaz Ahmed Malik (fmalik@immapp.org)

Expected number of deaths calculated using crude mortality rate of 17.3/1000/year (Source: WHO Global Health Observatory, 2012) based on district population data (Source: Sierra Leone National Census 2004).



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MAP DATE: 12 June 2015



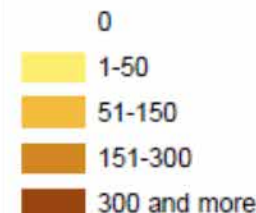



# Contacts followed by chiefdom/ward as of 12th June 2015

MAP DATE: 12 June 2015

- Country Boundary
- District Boundary
- Chiefdom boundary

## Contacts followed



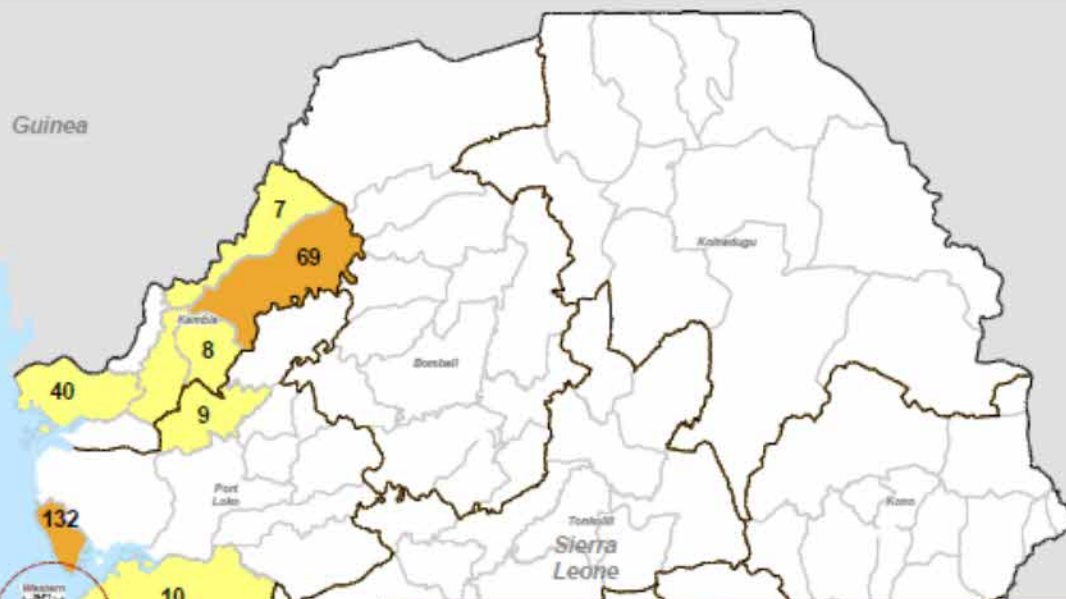
 This map is produced by IMMAP through standby partner agreement with WHO for the Ebola outbreak.

Sources:  
Admin. boundaries: Ebolageonode  
Cartography: WHO HQ  
Confirmed Ebola cases: MoHS daily Sit-Rep  
Contact: afwco@who.int, ebolamaps@who.int  
Map projection: WGS 1984  
Created in country by: Fayyaz Ahmed Malik (fmalik@immap.org)

Sierra Leone in Africa:



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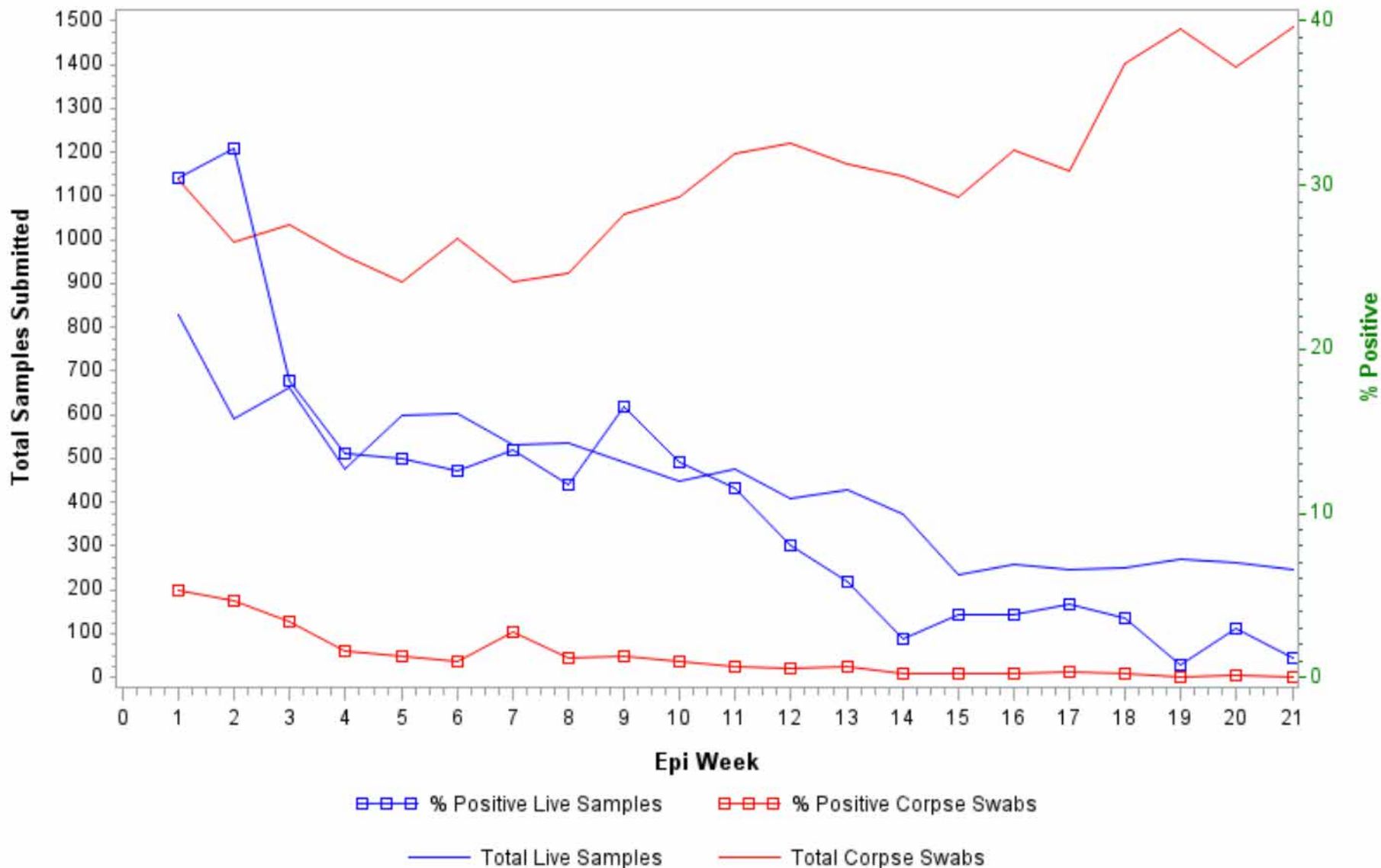


Districts	Chiefdom/Ward	No. of contacts
Kambia	Tonko Limba	69
Kambia	Magbema	7
Kambia	Bramaia	7
Kambia	Samu	40
Kambia	Masungbala	8
Porto Loko	Kaffu Bullom	132
Porto Loko	Koya	10
Porto Loko	BKM	9
Western Urban	W347	64
Western Urban	W350	29



# Comparison of Positive Results to Total Samples

## Live Cases and Death Swabs

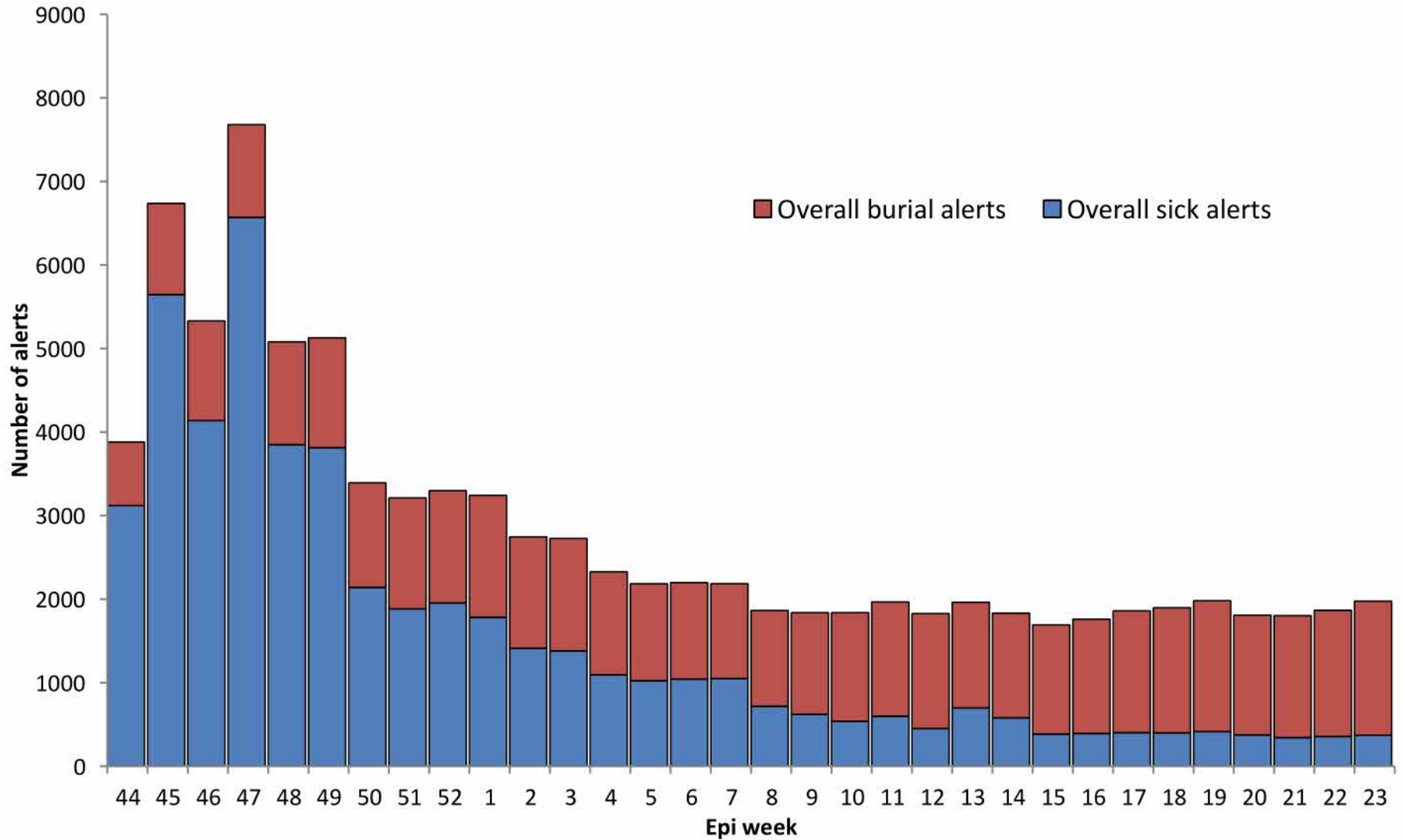


SitRep Data, Last Updated: June 8, 2015



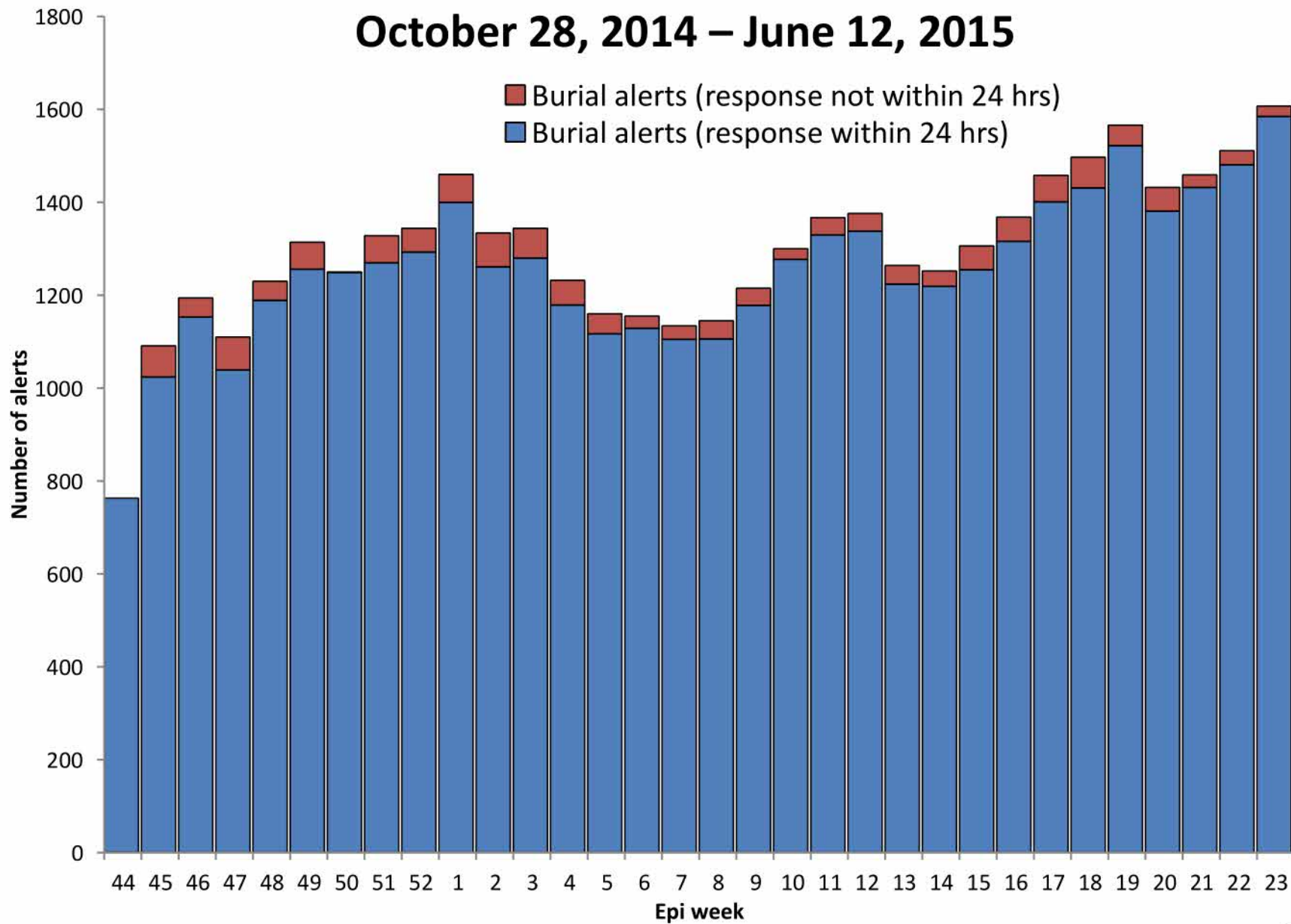
# MoHS- Alerts Reported by Type

## October 28, 2014 – June 12, 2015



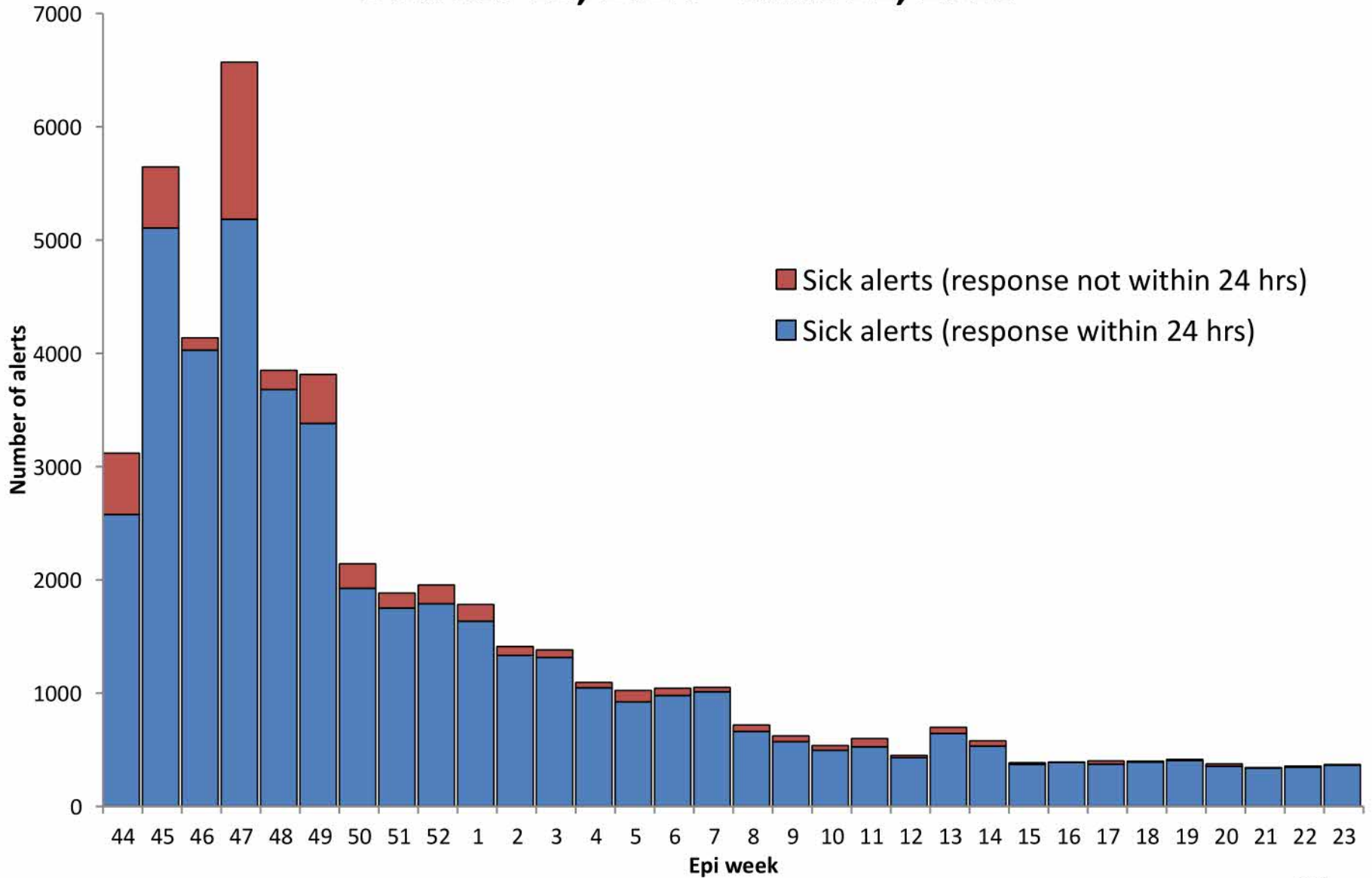
# MoHS- Burial Alerts and Response

## October 28, 2014 – June 12, 2015

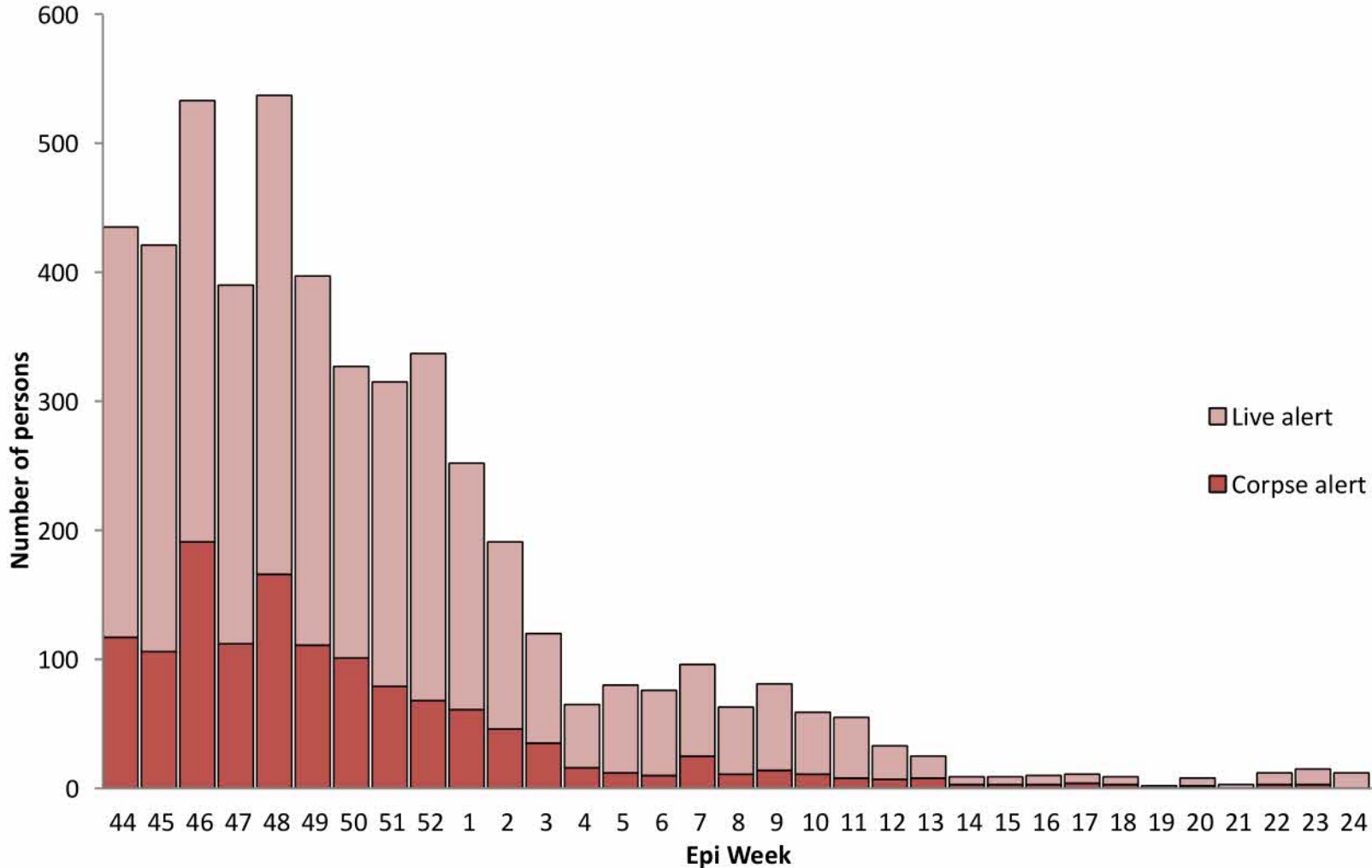


# MoHS- Sick Alerts Reported and Response

## October 28, 2014 – June 12, 2015



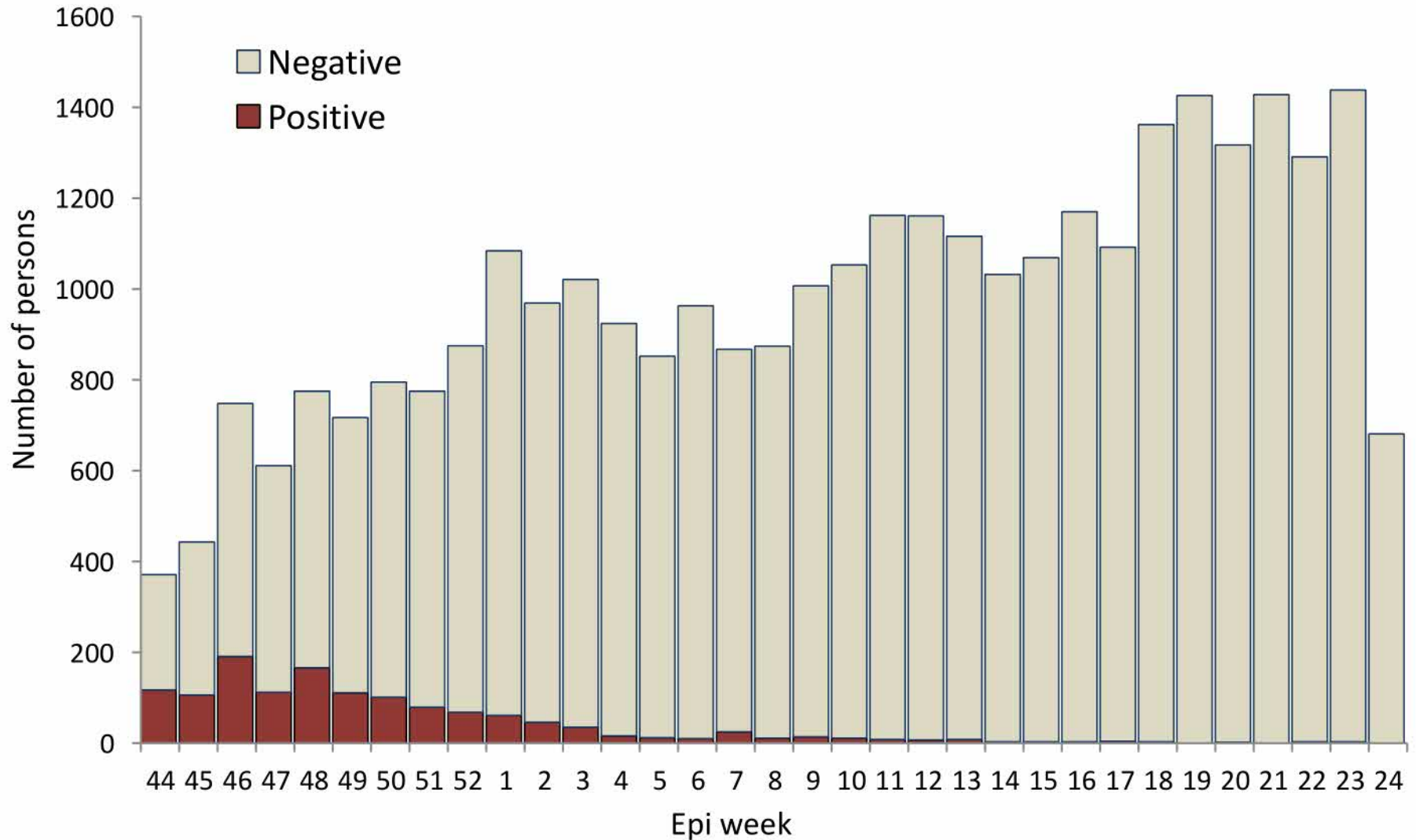
# MoHS - Reported Confirmed Cases\* by Type of Alert, Sierra Leone, October 27, 2014 – June 11\*\*, 2015



\*Cases confirmed through swab testing were assumed to be corpse alerts.

\*\*Epi week 24 incomplete; current through June 11, 2015

# MoHS - Reported Corpses\* by EVD Result, Sierra Leone, October 27, 2014 – June 11\*\*, 2015



\*Swab samples were assumed to be from corpse alerts.

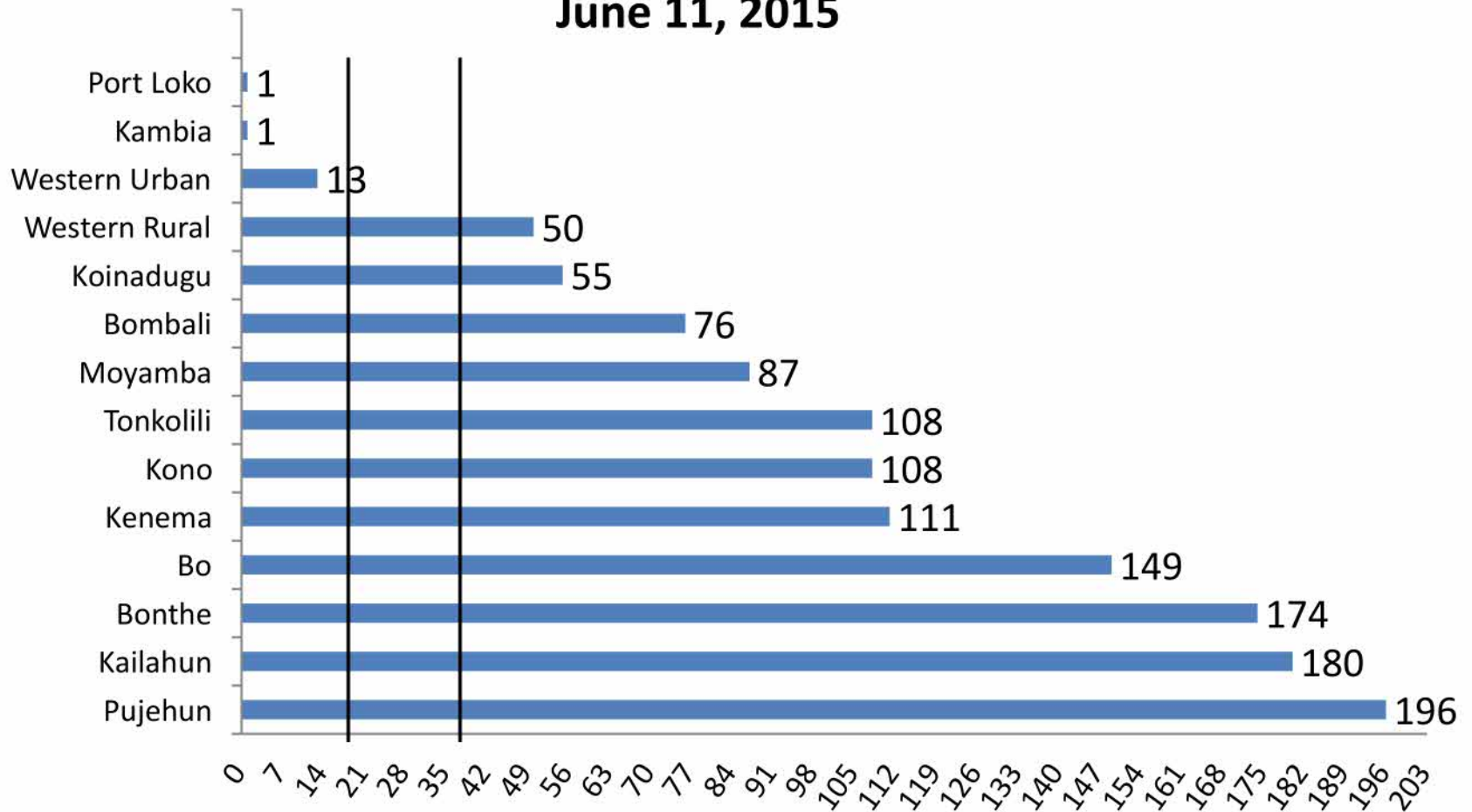
\*\*Epi week 24 incomplete, current through June 11, 2015

## EVD Cases Confirmed from Swabs Data (Epi week 22: May 25 – May 31, 2015 and Epi week 23: June 1 – June 7, 2015)

National/District	Epi week 22		Epi week 23	
	EVD confirmed corpses	Total corpses swabbed	EVD confirmed corpses	Total corpses swabbed
National	3	1288	3	1471
Bo	0	167	0	182
Bombali	0	80	0	152
Bonthe	0	44	0	56
Kailahun	0	28	0	32
Kambia	1	71	1	82
Kenema	0	92	0	55
Koinadugu	0	45	0	61
Kono	0	73	0	88
Moyamba	0	127	0	105
Port Loko	1	151	2	172
Pujehun	0	18	0	87
Tonkolili	0	101	0	112
Western	1	296	0	287

Data Source: MoHS Daily Sit Rep, May 19 – June 11, 2015

## Days Since Last Confirmed Case by District June 11, 2015



Current as of 12:00pm GMT June 13, 2015

Data Source: MoHS Daily Sit Rep, June 11, 2015



# DISTRICT DATA

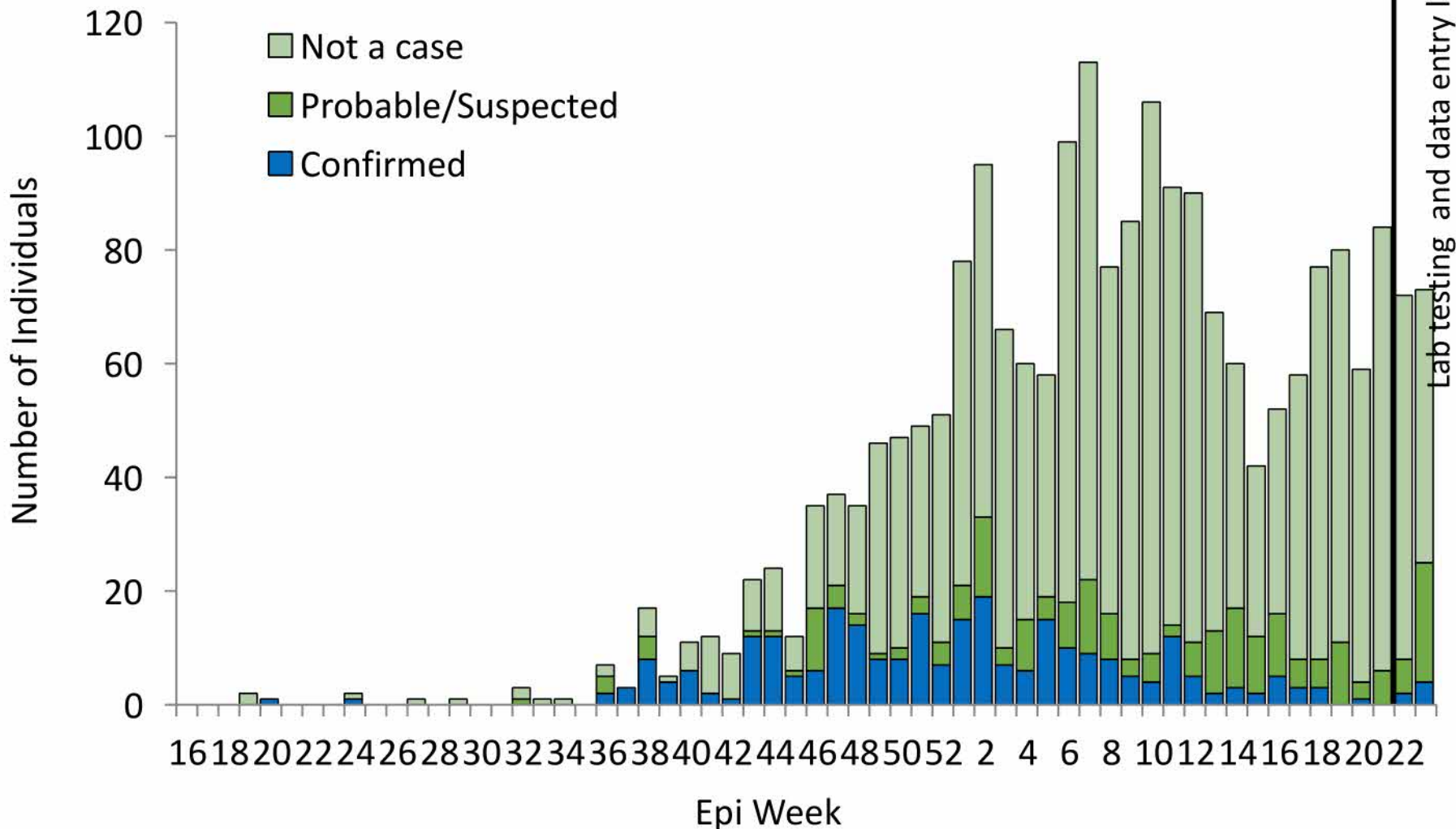
**Note:**

Only includes district data where days since last confirmed case is  $\leq 42$  days

# **Kambia District**

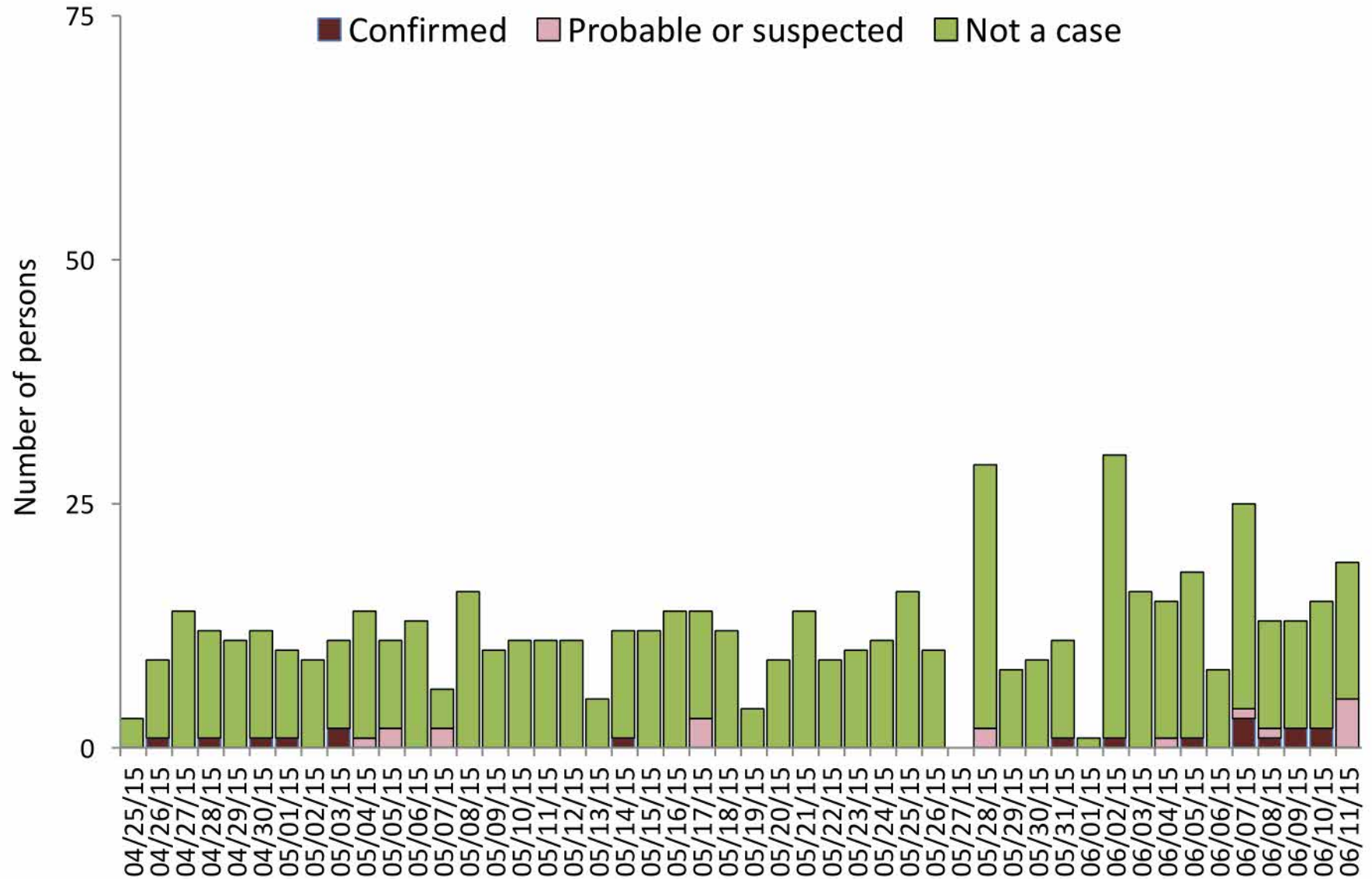
# VHF - Reports by Case Definition and Epi-week of Onset – Kambia

## April 13, 2014 – June 9, 2015



# MoHS - Reported Lab Results by Case Definition and Lab Report Date

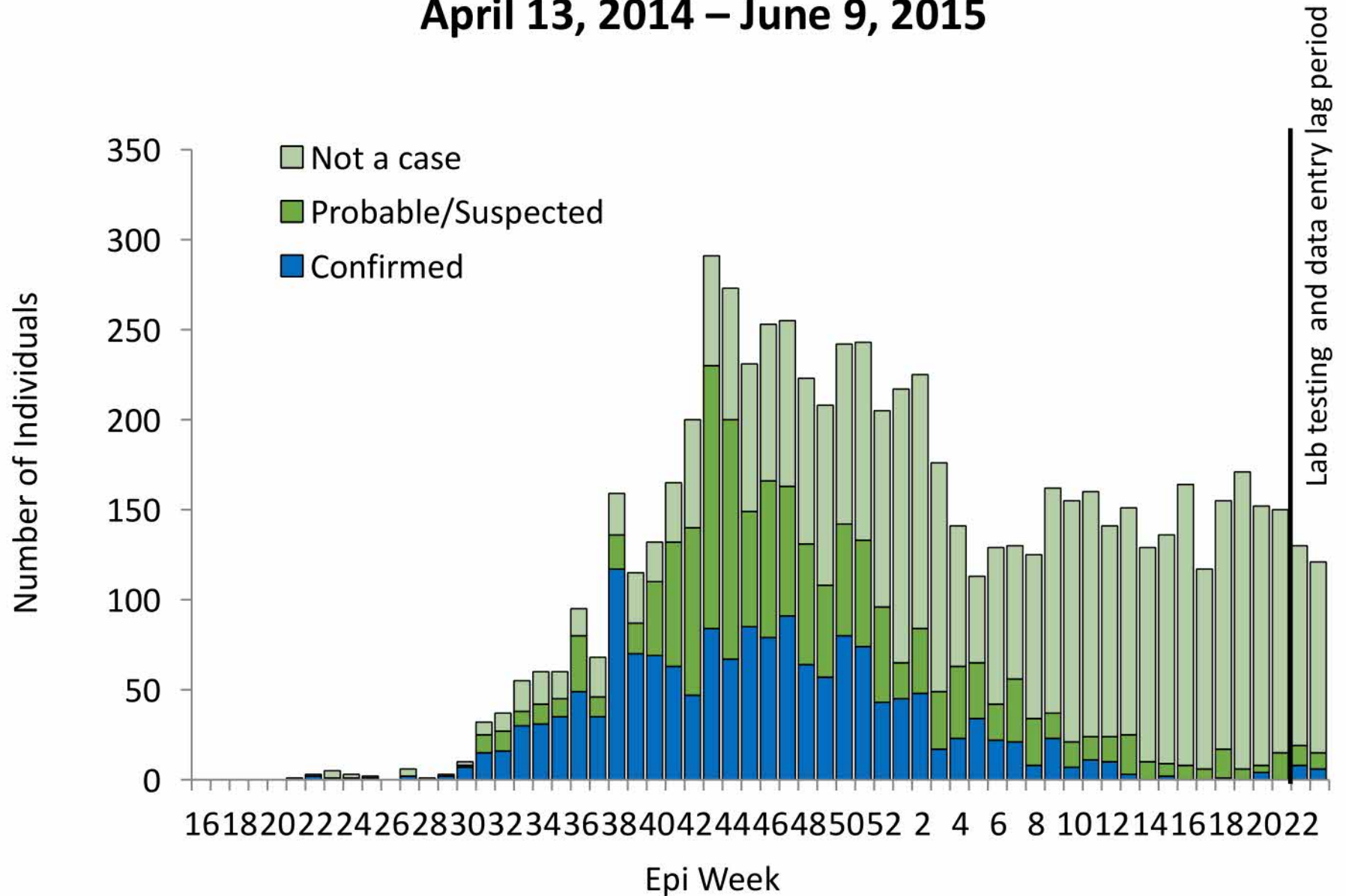
## Kambia, March 15 – June 11, 2015



# Port Loko District

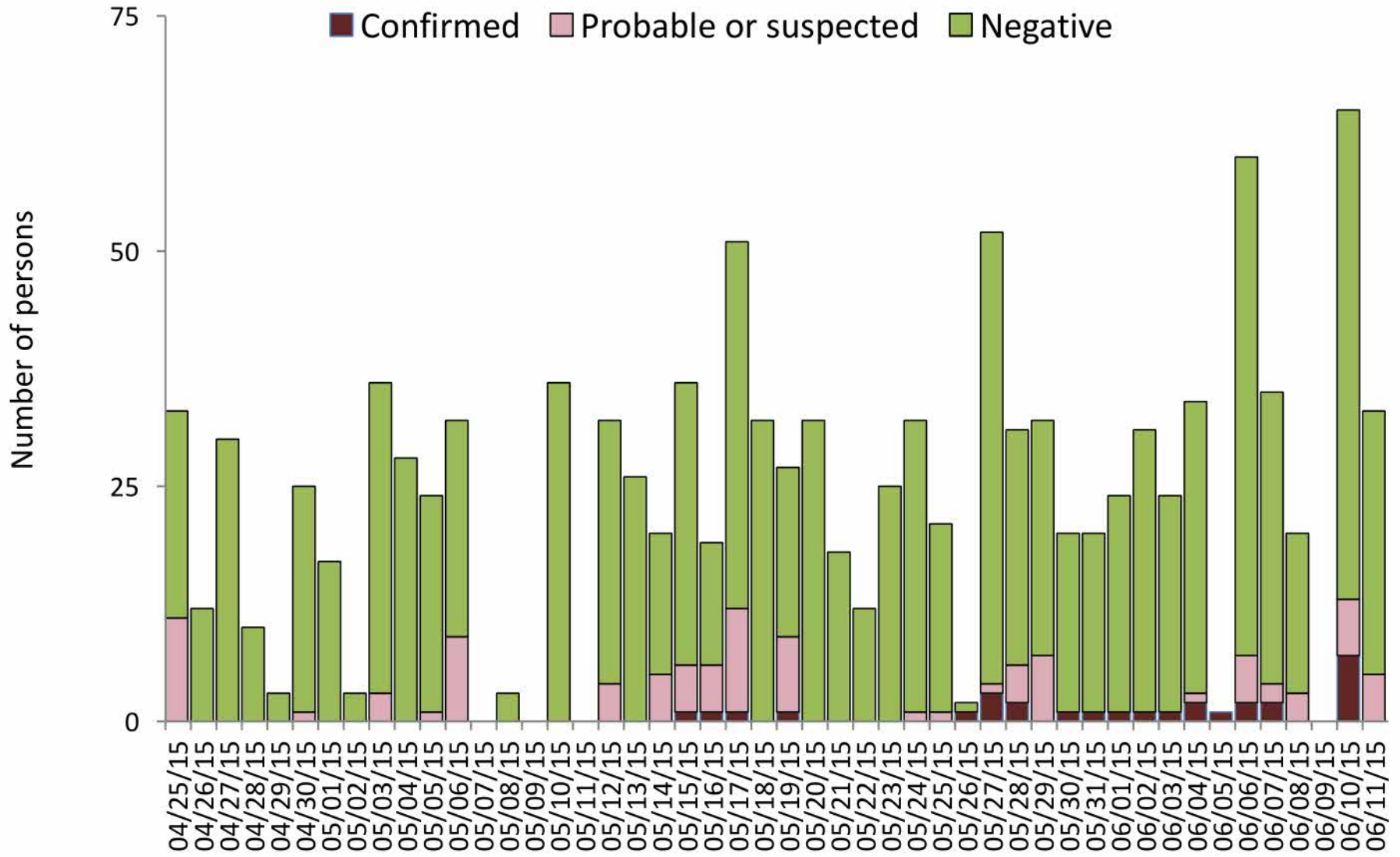
# VHF - Reports by Case Definition and Epi-week of Onset – Port Loko

## April 13, 2014 – June 9, 2015



# MoHS - Reported Lab Results by Case Definition and Lab Report Date

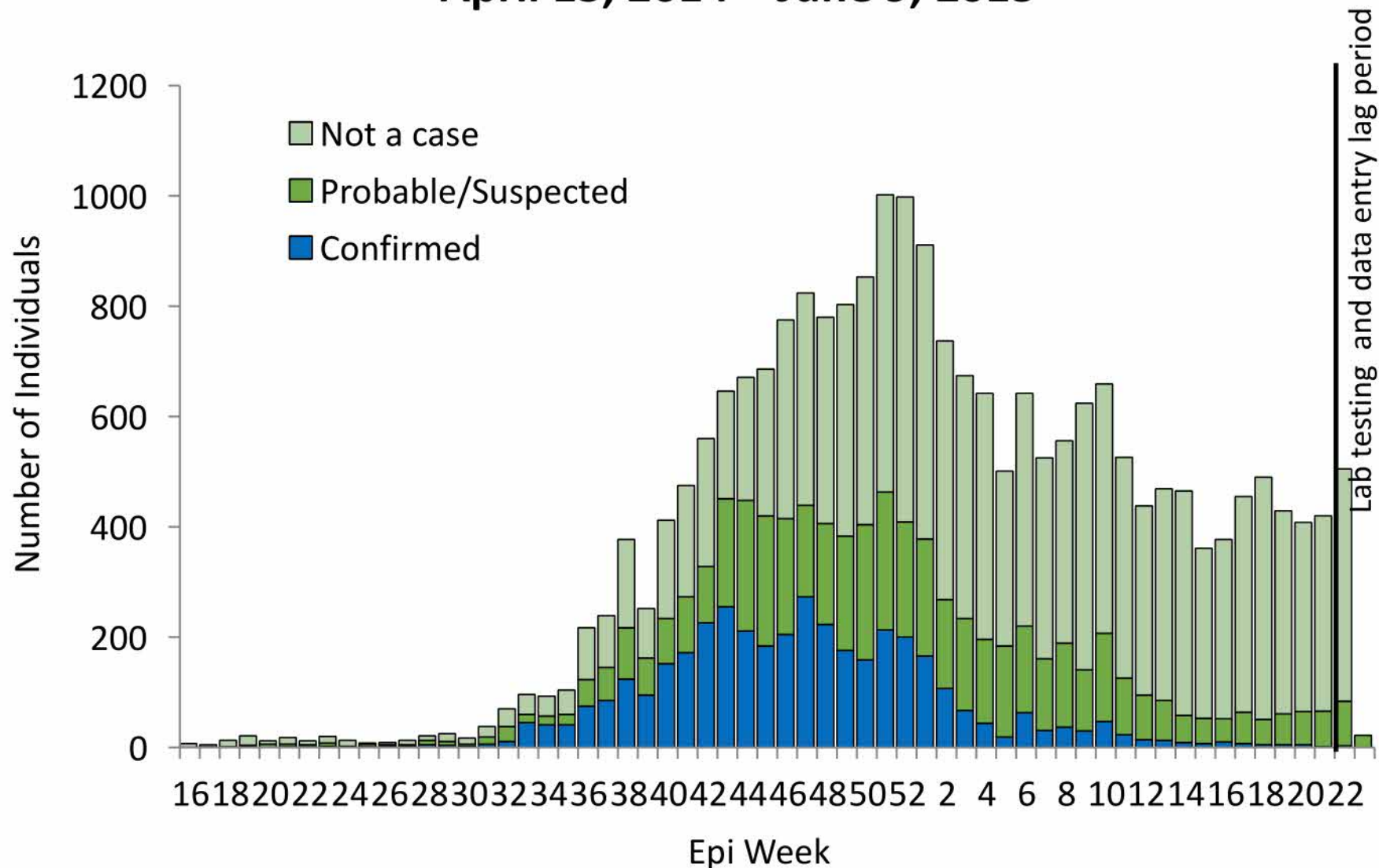
## Port Loko, March 15 – June 11, 2015





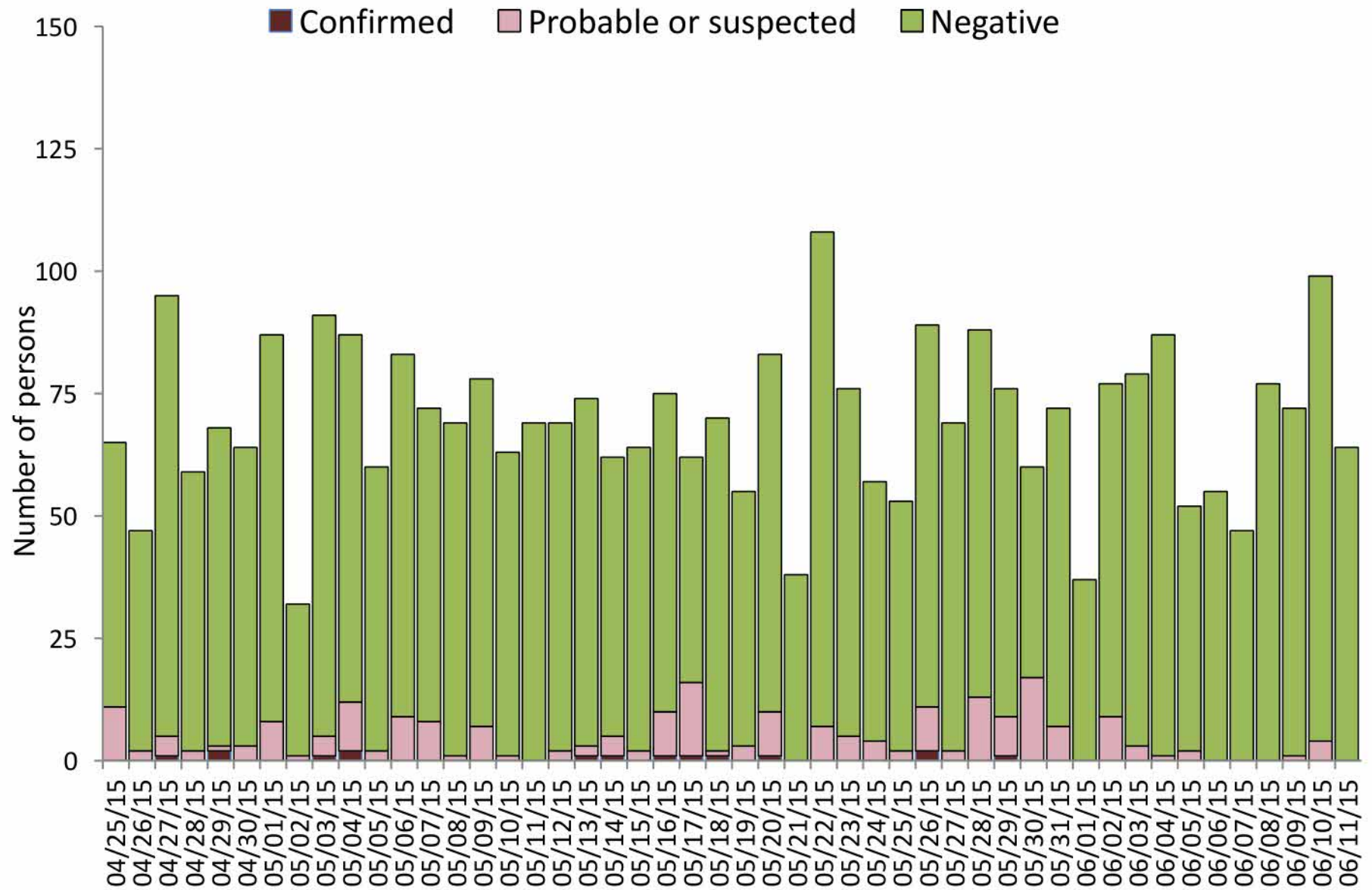
# Western District

# VHF - Reports by Case Definition and Epi-week of Onset – Western April 13, 2014 – June 9, 2015



# MoHS - Reported Lab Results by Case Definition and Lab Report Date

## Western Area, March 15 – June 11, 2015





**Government of Sierra Leone**  
Ministry of Health and Sanitation



**World Health  
Organization**

# **Ebola Virus Disease**

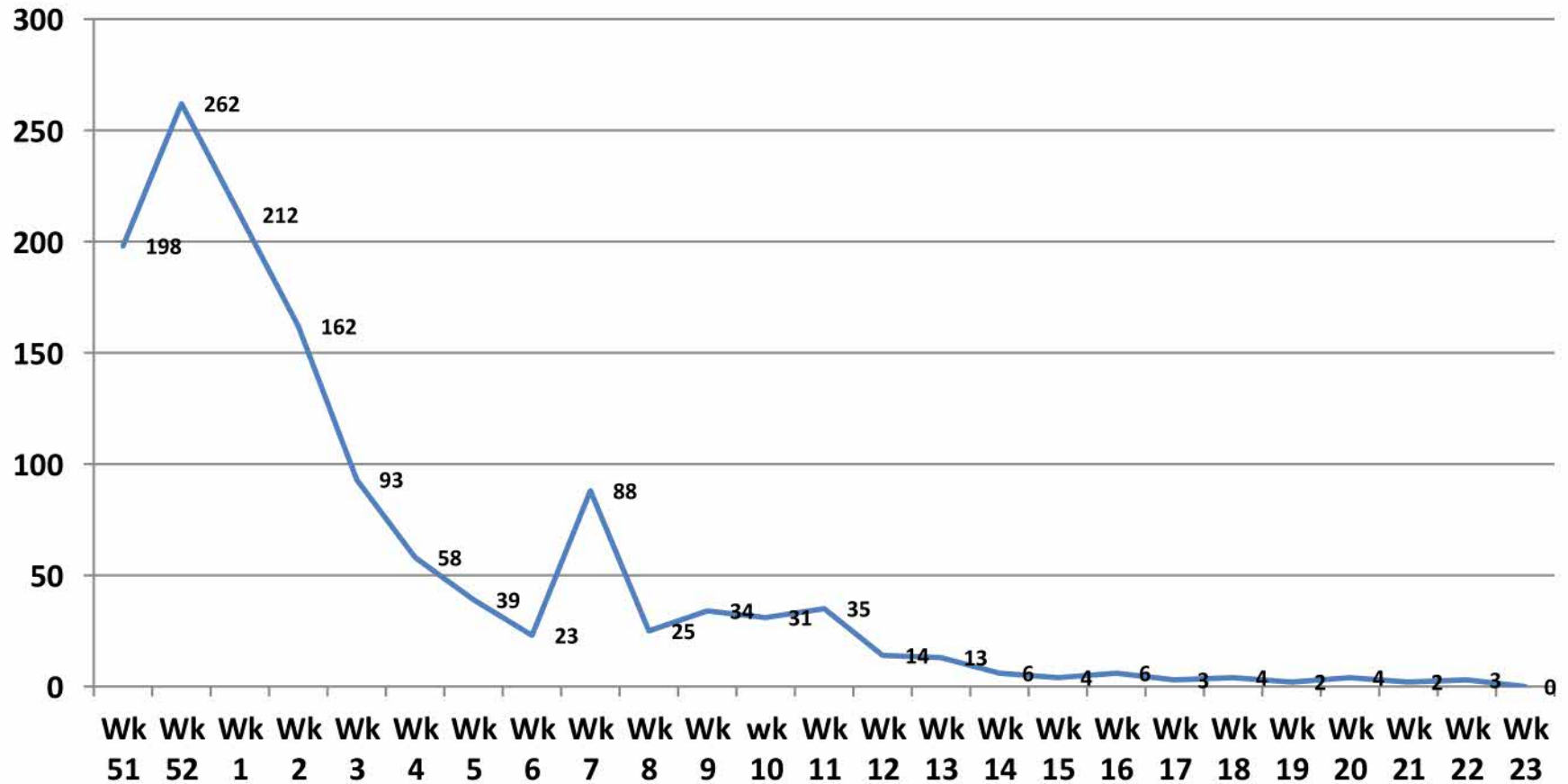
## **Epi-situation in Western Area**

**Week 23 (1<sup>st</sup> – 7<sup>th</sup> June 2015)**

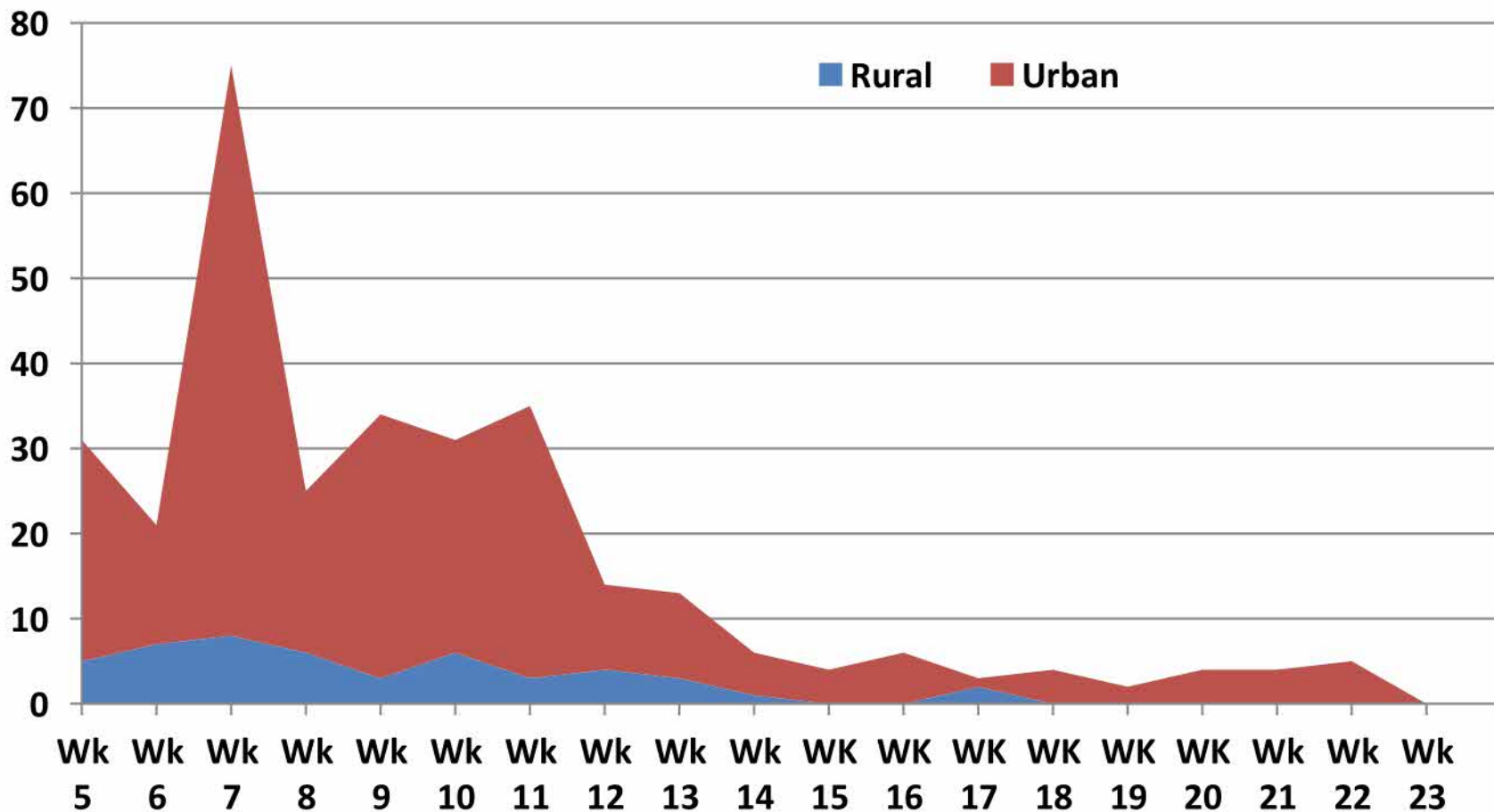
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With the support of the Center for Disease Control and Prevention (CDC)

# Week-wise Number of Confirmed Cases: Western Area

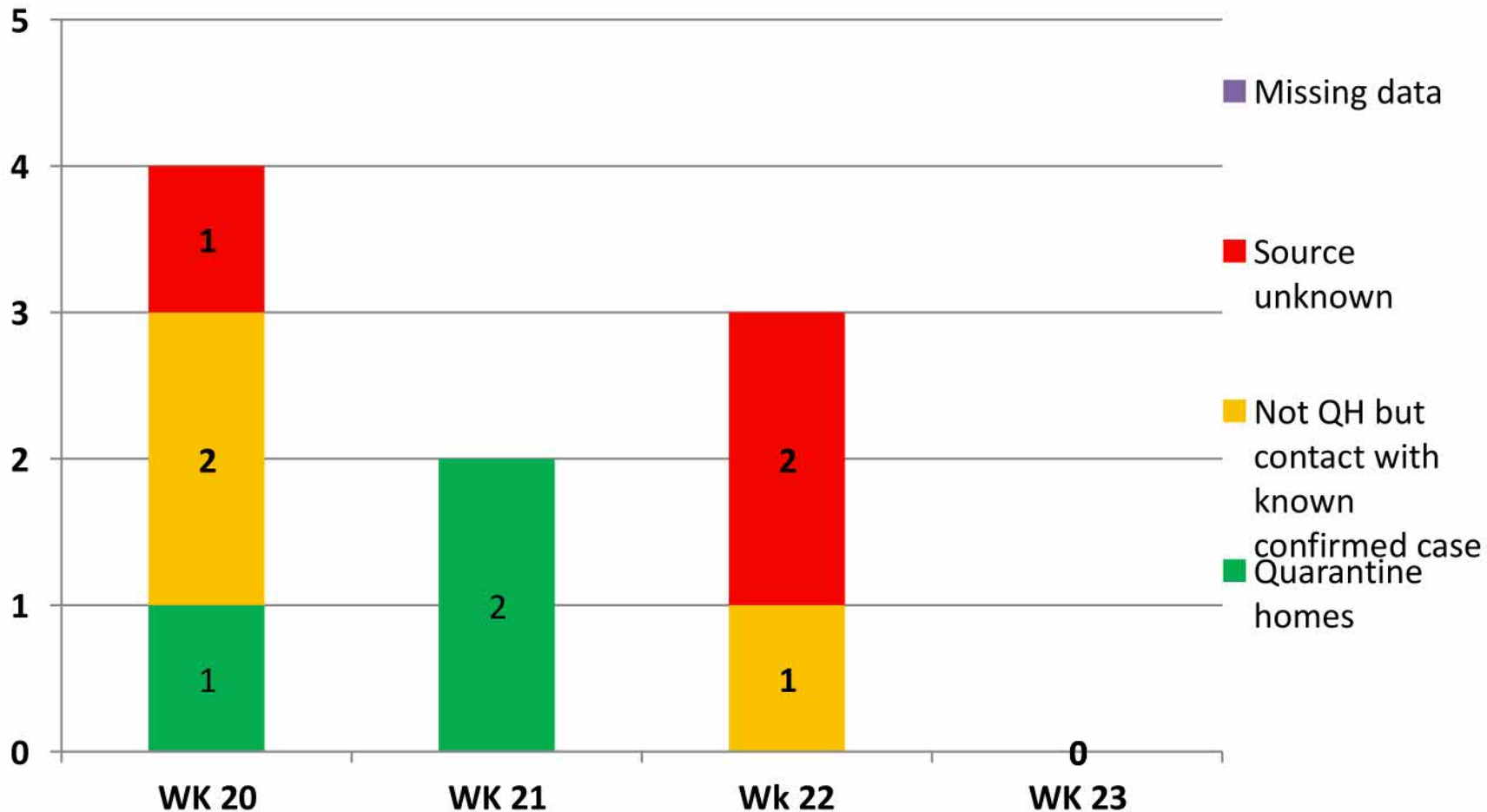


# Week-wise Number of Confirmed Cases by Western Urban and Rural Areas



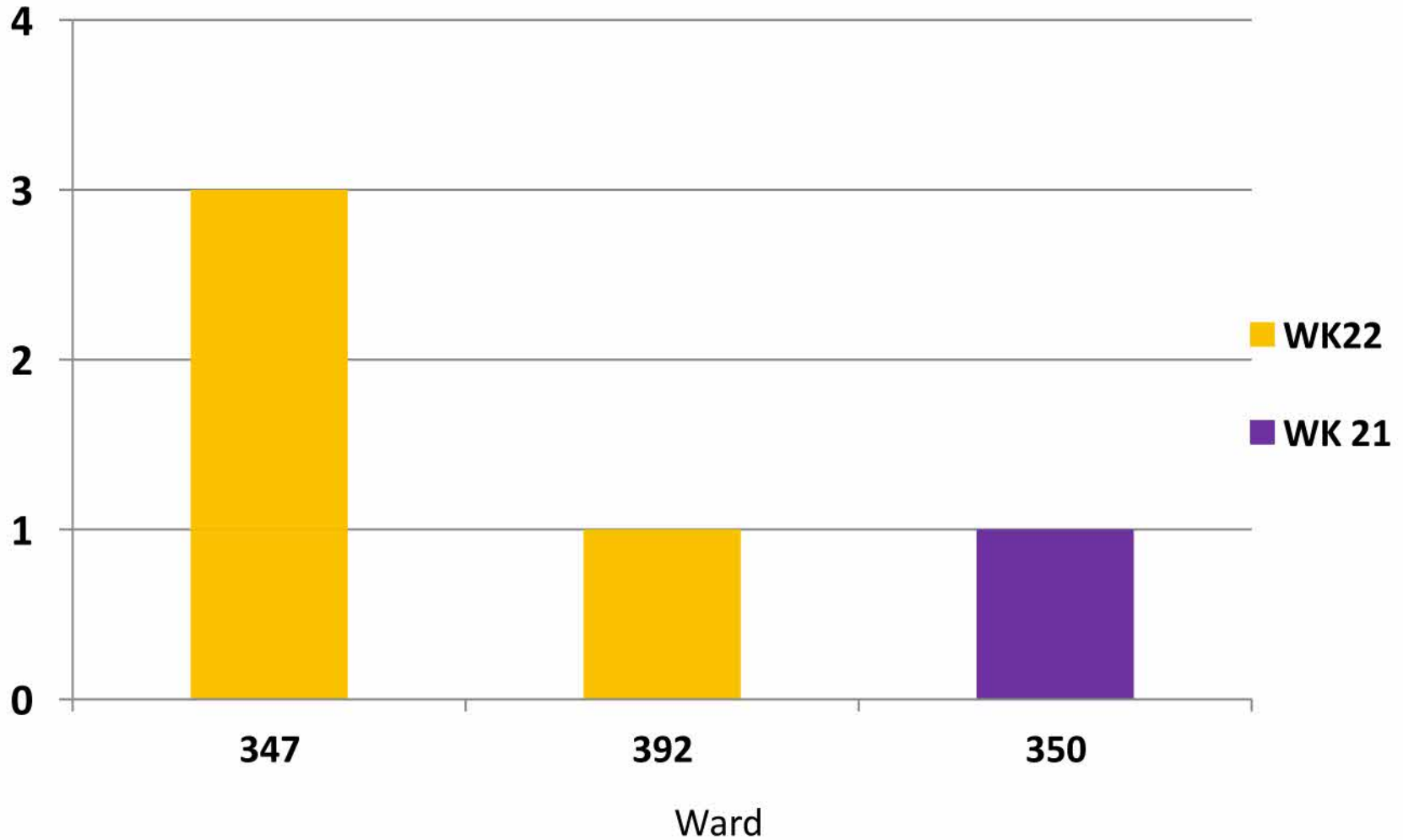
Source: Western operation line list as on 1<sup>st</sup> June 2015

# Source of Suspected Cases: Western Area





# Weekly Hotspot of Western Area



***THANK YOU***

**From:** Bumpus, Stefanie (CDC/OD/OCS)  
**Sent:** Sat, 7 Mar 2015 08:24:42 -0500  
**To:** EOC Conf/Bridge Calendar (CDC); Demby, Austin (CDC/CGH/DGHA); Marston, Barbara J. (CDC/CGH/DGHP); Damon, Inger K. (CDC/OID/NCEZID); GDD-OUTBREAK (CDC); CDC IMS AV/Communications; Helfand, Rita (CDC/OID/NCEZID); Williams, Teresa (CDC/OD/OCS); Dills, Kimberly C. (CDC/OD/OCS); CDC IMS OD LNO; CDC IMS Incident Manager (CDC); Davis, Carma L. (CDC/OD/OCS) (CTR); Demby, Austin (HHS/OS/OGA); Knust, Barbara (CDC/OID/NCEZID); Nichol, Stuart T. (CDC/OID/NCEZID); Tappero, Jordan (CDC/CGH/DGHP); Wuichet, John W. (CDC/OD/OCS); Bell, Beth (CDC/OID/NCEZID); Morgan, Oliver (CDC/OID/NCEZID); 2014 Ebola Response (CDC); Kenyon, Thomas A. (CDC/CGH/OD); Foti, Kathryn (CDC/OD/OCS); CDC IMS Policy Unit -2 (Ebola); Merkle, Sarah (CDC/ONDIEH/NCEH); Rayfield, Mark (CDC/CGH/DGHP); Petersen, Lyle (CDC/OID/NCEZID); Perrone, Laura (CDC/CGH/OD); Meltzer, Martin I. (CDC/OID/NCEZID); Washington, Michael (Wash) (CDC/OID/NCEZID); Gambhir, Manoj (CDC/OID/NCIRD) (CTR); Reott, Erica (CDC/ONDIEH/NCBDDD); Kibunja, Julia N. (CDC/CGH/OD); Brunette, Gary W. (CDC/OID/NCEZID); Dicker, Richard C. (CDC/CGH/DGHP); Bunnell, Rebecca (CDC/ONDIEH/NCCDPPH); Hersey, Sara (CDC/CGH/DGHA); Glover, Maleeka (CDC/OID/OD); Kennedy, David N. (CDC/OPHPR/DEO); Merlin, Toby (CDC/OID/NCEZID); Crockett, James B. (CDC/OPHPR/DEO); Anaya, Gabriel (CDC/CGH/GID); Williams, Ian (CDC/OID/NCEZID); Jernigan, Daniel B. (CDC/OID/NCIRD)  
**Cc:** Ervin, Elizabeth (CDC/OID/NCEZID); Park, Benjamin (CDC/OID/NCEZID); Davis, Stephanie Marie (CDC/CGH/DGHA); Daves, Sharon (CDC/CGH/DGHP); Brooks, Jennifer (CDC/OPHPR/DEO); Briss, Peter (CDC/ONDIEH/NCCDPPH); CDC IMS Laboratory; Hall, Aron (CDC/OID/NCIRD); McMorrow, Meredith (CDC/OID/NCIRD); Mast, Eric (CDC/CGH/GID); Tohme, Rania A. (CDC/CGH/GID); Srivastava, Pamela (CDC/OID/NCIRD); Barbour, Kamil E. (CDC/ONDIEH/NCCDPPH); hersey.sara@gmail.com; Zulz, Tammy (CDC/OID/NCEZID); Gupta, Neil (CDC/OID/NCHHSTP); Wilson, Katie (CDC/OID/NCEZID) (CTR); Rollin, Pierre (CDC/OID/NCEZID)  
**Subject:** RE: Ebola: Country Call Sierra Leone  
**Attachments:** Weekly Epi Report EW9(7mar2015).pptx



Please find the Sierra Leone data pack for today's call attached.

-----Original Appointment-----

**From:** EOC Conf/Bridge Calendar (CDC)  
**Sent:** Monday, November 24, 2014 9:00 AM  
**To:** EOC Conf/Bridge Calendar (CDC); Demby, Austin (CDC/CGH/DGHA); Marston, Barbara J. (CDC/CGH/DGHP); Damon, Inger K. (CDC/OID/NCEZID); GDD-OUTBREAK (CDC); CDC IMS AV/Communications; Helfand, Rita (CDC/OID/NCEZID); Williams, Teresa (CDC/OD/OCS); Dills, Kimberly C. (CDC/OD/OCS); CDC IMS OD LNO; CDC IMS Incident Manager (CDC); Davis, Carma L. (CDC/OD/OCS) (CTR); Bumpus, Stefanie (CDC/CGH/DGHP); Frieden, Thomas (Tom) (CDC/OD); Demby, Austin (HHS/OS/OGA); Knust, Barbara (CDC/OID/NCEZID); Nichol, Stuart T. (CDC/OID/NCEZID); Tappero, Jordan (CDC/CGH/DGHP); Wuichet, John W. (CDC/OD/OCS); Bell, Beth (CDC/OID/NCEZID); Morgan, Oliver (CDC/OID/NCEZID); 2014 Ebola Response (CDC); Kenyon, Thomas A. (CDC/CGH/OD); Foti, Kathryn (CDC/OD/OCS); CDC IMS Policy Unit -2 (Ebola); Merkle, Sarah (CDC/ONDIEH/NCEH); Rayfield, Mark (CDC/CGH/DGHP); Petersen, Lyle (CDC/OID/NCEZID); Perrone, Laura (CDC/CGH/OD); Meltzer, Martin I. (CDC/OID/NCEZID); Washington, Michael (Wash) (CDC/OID/NCEZID); Gambhir, Manoj (CDC/OID/NCIRD) (CTR); Reott, Erica (CDC/ONDIEH/NCBDDD); Kibunja, Julia N. (CDC/CGH/OD); Brunette, Gary W. (CDC/OID/NCEZID); Dicker, Richard C. (CDC/CGH/DGHP); Bunnell, Rebecca

(CDC/ONDIEH/NCCDPHP); Hersey, Sara (CDC/CGH/DGHA); Glover, Maleeka (CDC/OID/OD); Kennedy, David N. (CDC/OPHPR/DEO); Merlin, Toby (CDC/OID/NCEZID); Crockett, James B. (CDC/OPHPR/DEO); Anaya, Gabriel (CDC/CGH/GID); Williams, Ian (CDC/OID/NCEZID); Jernigan, Daniel B. (CDC/OID/NCIRD)  
**Cc:** Ervin, Elizabeth (CDC/OID/NCEZID); Park, Benjamin (CDC/OID/NCEZID); Davis, Stephanie Marie (CDC/CGH/DGHA); Daves, Sharon (CDC/CGH/DGHP); Brooks, Jennifer (CDC/OPHPR/DEO); Briss, Peter (CDC/ONDIEH/NCCDPHP); CDC IMS Laboratory; Hall, Aron (CDC/OID/NCIRD); McMorrow, Meredith (CDC/OID/NCIRD); Mast, Eric (CDC/CGH/GID); Tohme, Rania A. (CDC/CGH/GID); Srivastava, Pamela (CDC/OID/NCIRD); Barbour, Kamil E. (CDC/ONDIEH/NCCDPHP); hersey.sara@gmail.com; Zulz, Tammy (CDC/OID/NCEZID); Gupta, Neil (CDC/OID/NCHHSTP); Wilson, Katie (CDC/OID/NCEZID) (CTR); Rollin, Pierre (CDC/OID/NCEZID)

**Subject:** Ebola: Country Call Sierra Leone

**When:** Saturday, March 07, 2015 10:30 AM-11:00 AM (UTC-05:00) Eastern Time (US & Canada).

**Where:** Conference Call Only

(b)(6)

**Note: Time change is only for today's Conference Call**

Updated bridgeline

POC: INTL TF Barbara Marston & Lorna English

The call line information is:

Bridgeline: (b)(6)

Passcode:

International Number: (b)(6)

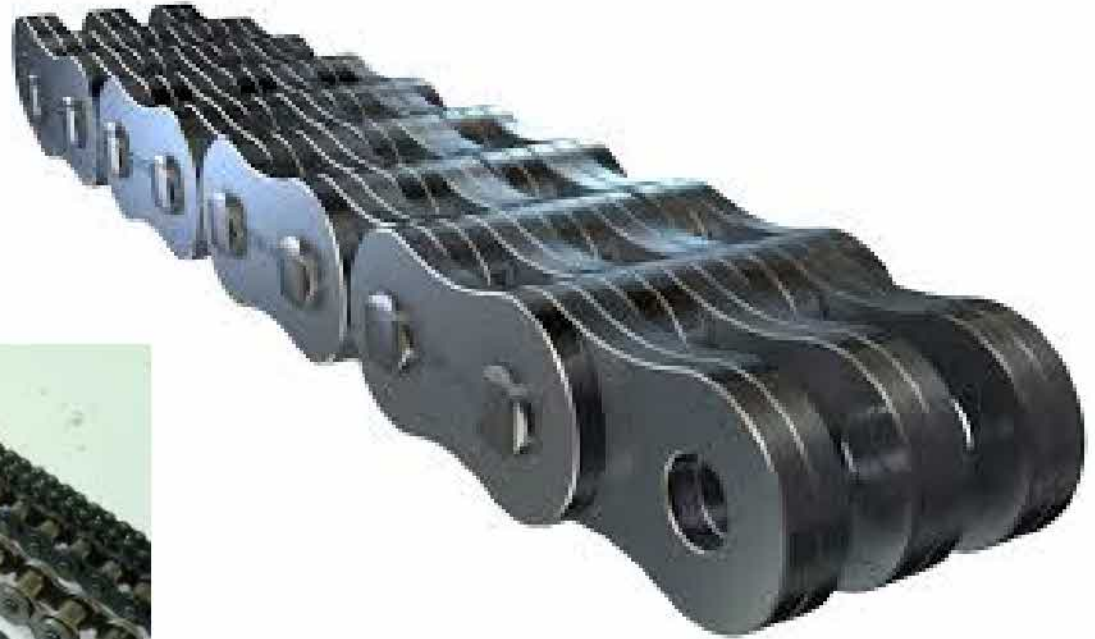
For any changes or updates, please contact [EOCReport@cdc.gov](mailto:EOCReport@cdc.gov) or phone (770) 488-7100

Sierra Leone Ebola Response  
Epidemiology Overview  
March 7, 2015

# **Update on Ebola Clusters**



# Transmission Chains





# Bombali

## 1. Rosanda/ Makeni

- Cases: **42 confirmed through Feb 27th; 4 new symptomatic individuals conveyed to ETC, 1 child positive (Mar 3) and 1 more child positive (Mar 5 but not reported yet), awaiting results on 2 women.**
- Contacts: 60 people exposed to corpse of case 1; entire village (914 people in 72 homes) being monitored daily; **surveillance ends March 27<sup>th</sup>. Surveillance extended in orphanage where children are held.**
- Epi-link: case 1 came from Aberdeen cluster; 1 case was traditional healer who performed burial of index case.

## 2. Biriwa/Kapeteh

- Cases: **No new cases;** 1 case traveled from Western on Feb 11 and confirmed Feb 18
- Contacts: Case was released from ETC before test results returned; celebration because she did "not" have Ebola resulted in many high risk contacts (including several HCWs); **surveillance ends March 11.**
- Epi-link: Case's brother died of EVD on Feb 9 in Western Rural (Portee)

# Kambia

## 1. RockPimp

- **No new cases**; 6 cases: -on an area which is only reachable by boat.
- Contacts: 14 contacts last week
- Epi-link: A later laboratory-confirmed case in a holding center in Port Loko spent 4 nights in the subsequently quarantined home in RockPimp after travelling to Guinea to visit her ailing mother. The confirmed cases all lived in this household and had contact with this case.

## 2. Gbalamoya

- **6** cases - in a village on the border of Guinea- households about 50 m from the checkpoints
- Contacts: 11 Quarantined homes. **Last case was HS (KAM0500479) on 2/21/15. Surveillance ends March 14<sup>th</sup>.**
- Epi-link: both with travel history to Pamalap, a Guinean village with cases

# Kambia

## 3. Malal II

- **4 cases**
- Contacts: **13 quarantined. Most recent case, 2/21/15, was a religious leader in the village of Malal. Surveillance ends March 14<sup>th</sup>.**
- Epi-link: Household contact with confirmed case in Mayafa, moved back to Malal at symptom onset.

## 4. Kathkera

- Cases: 3 new cases in non-household contacts of a previous case that were missed by contact listing. **Last one on 3/1.**
- Contacts: **4 Quarantined households, surveillance ends March 22<sup>nd</sup>.**
- Epi-link: non-household contacts of a previous case that were missed by contact listing, close proximity and noted movement of active cases to and from Kiamp-Dee Soraia, a village with active cases and two quarantined homes. **New case lives in the same house where AK first became sick.**

# Kambia

## 5. Magbengbeh/Lokoya

- Case: **2**
- Contacts: In Magbengbeh symptom onset 2/27; surveillance ends March 20<sup>th</sup>. In Lokoya, two houses are exposed, his and his brothers, as well as the motorbike rider and a man that applied traditional medicine.
- Epi-link: Source stayed with sister in Kunya, Guinea when symptoms developed. He became sick in Guinea and returned to Kambia while sick.

## 6. Konta Dubalai

- Cases: **1 positive swab**
- Contacts: **12; Last exposure 2/19. Surveillance ends March 12.**
- Epi-Link: **travel history to Guinea for buying fertilizer in Siramodiah regularly. CDC in Guinea confirms active transmission chain in this area.**

# Kambia

## 7. Kampde Soria

- Cases: **4**
- Contacts: **Last case 2/20. Surveillance ends March 13<sup>th</sup>.**
- Epi-link: **Traveler from KatheKera.**

## 8. Kagbhana

- Cases: **1**
- Contacts: **Last exposure 3/4.**
- Epi-Link: **Area not safe to enter.**

## 9. Thairay

- Cases: **1**
- Contacts: **Last exposure 3/4/2015.**
- Epi-Link: **Travel to FTN**

# Kenema

**(investigated by Kono)**

## Goroma Mendie Chiefdom

- **No new case**; 1 case - 4 year old boy died (swab +) on Feb 18 near border with Kono.
- Contacts: family members and priest; **surveillance ends March 11.**
- Epi-link: no clear source, potential link to unsafe burial in Kono on Feb 4 (death appears to be non-EBV); lab result will be double checked, as first lab test negative.

# Kono

## Case from Freetown

- **No new cases**; 1 case - young man coming from Freetown, sister cared for him; sx onset Feb 17, diagnosed Feb 23.
- Contacts: sister / family and motor bike driver, who drove the case to clinic; **surveillance ends March 16.**
- Epi-link: case's sister in Freetown (Juweah) died of Ebola, case was on contact list.



# Port Loko

## 1. Lungi (Kaffu Bullom Chiefdom)

- Cases: More than 20 confirmed and 3 probable cases spanning 6 villages in the Lungi-Rotifunk axis. Last confirmed case on 19 February.
- Contacts: Close contact prior to a death on 23 January led to numerous cases within one extended family.
- Epi-link: Possible linkage back to a healthcare worker who died on 21 December 2014.

## 2. Tagrin (Kaffu Bullom Chiefdom)

- Cases: At least 27 confirmed cases
- Contacts: Transmission within an extended family which propagated to other members of the community through a traditional healer. Cases within the chain have been limited to one quarantine home in the last 3 weeks.
- Epi-link: Death of source case on 29 November 2014 after attending a funeral in Lunsar (Marampa).

# Port Loko

## 3. Lunsar (Maforki Chiefdom)

- Cases: At least 13 confirmed and 2 suspected cases
- Contacts: **Three households of extended family and one neighbor (11 household members and 2 extended family members/neighbors became sick within a period of 14-21 days following the funeral of the source case.**
- Epi-link: First case in this chain reported onset on 4 February with possible exposure to a source case in the Western Area.

## 4. Thombo Bana, Kaffu Ballum (Feb-March 2015)

- Cases: 4 cases (one newborn died in holding center)
- Contacts: **Taxi driver transported mother to ETU and a neighbor from a quarantine home assisted in the delivery.**
- Epi-link: **Father and mother of pregnant women (newborn died at ETU) EVD+ in January and February.**

# Port Loko

## 5. Gbonko Maforay/Roktolon, BKM

- Cases: 2
- Contacts: **One case residing in area known as a place for drug users; other case attended funeral of EVD- neighbor and several family members died of EVD in 2014.**
- Epi-link: **Source unknown in both cases, but both traveled to a neighboring village in recent weeks where a previous suspect case lived.**

# Tonkolili

## 1. Yoni Mayierah

- **No new cases**; 2 cases- groundnut trader who traveled from Freetown while symptomatic; died in Tonkolili on Feb 12 (swab positive); daughter in quarantined house confirmed as a case Feb 23.
- Contacts: Tent set-up to isolate high risk contacts; **surveillance ends March 15<sup>th</sup>**.
- Epi-link: Related to Hagan St. cluster in Western area.

# Western\*

## 1. Lumpa (Ward 342)

- Cases: 3
- Contacts: Quarantine extended for 4 households to March 10.
- Epi-link: Yansaneh Lane: One confirmed, FS, 2 mos F, sx onset about Jan 30, died Jan 31 at home.

## 2. Wright St, Portee (ward 355)

- 4 cases: All from same family, tested positive between Feb 9 & Feb 22.
- Contacts: Quarantine to end Mar 16.
- Epi-link: First case was a community death with no known exposures

\*Data not updated fully as of 3/7/15.

# Western (cont.)\*

## 3. Power Magazine, Portee (ward 360)

- 7 confirmed cases: 4 cases from one family, tested positive between Feb 13 and Feb 23; 3 other cases from quarantined houses tested positive Feb 20
- Contacts: Quarantine to end Mar 16.
- Epi-link: First case was a community death with no known exposures
- **UPDATE: New case in army guard assigned to guard quarantine homes, the home area of case is in ward 337 but infection likely from ward360; coordinating with WHO on the investigation.**

## 4. Hagan Street Market (ward 374)

- Cases: 1 new case this week in known contact
- Contacts: Micro-surge ongoing; ~800 contacts in 8 quarantined homes; results pending for several suspect cases
- Epi-links: Has generated at least 3 other clusters elsewhere in Sierra Leone

\*Data not updated fully as of 3/7/15.

# Western (cont.)\*

## 5. Susan's Bay (wards 377 and 378)

- 2 cases: 2 cases in Epi-week 8
- Contacts: micro-surge began Feb 24
- Epi-link: Adjacent to Hagan St Market area

## 6. Jui New Site (Ward 329)

- 5 cases
- Quarantine ends March 14th
- Epi-link - FS 25 F, nursing student (may have treated an Ebola case); FS died in Adra Holding Center

\*Data not updated fully as of 3/7/15.



# Western (cont.)\*

## 7. Devil Hole (ward 329)

- Case: 1
- Contacts: Four people quarantined. Family reports that a nurse-friend took her to Connaught Hospital on 2/25 but hospital records indicate she arrived DOA on 2/27. Investigation under way at Connaught where we are getting conflicting information. Surveillance ends March 18<sup>th</sup>.
- Epi-Link: Deceased 31 F (SK) – swab; Onset 2/24; Unknown source, unknown exposure

## 8. Jui Hanger (ward 329)

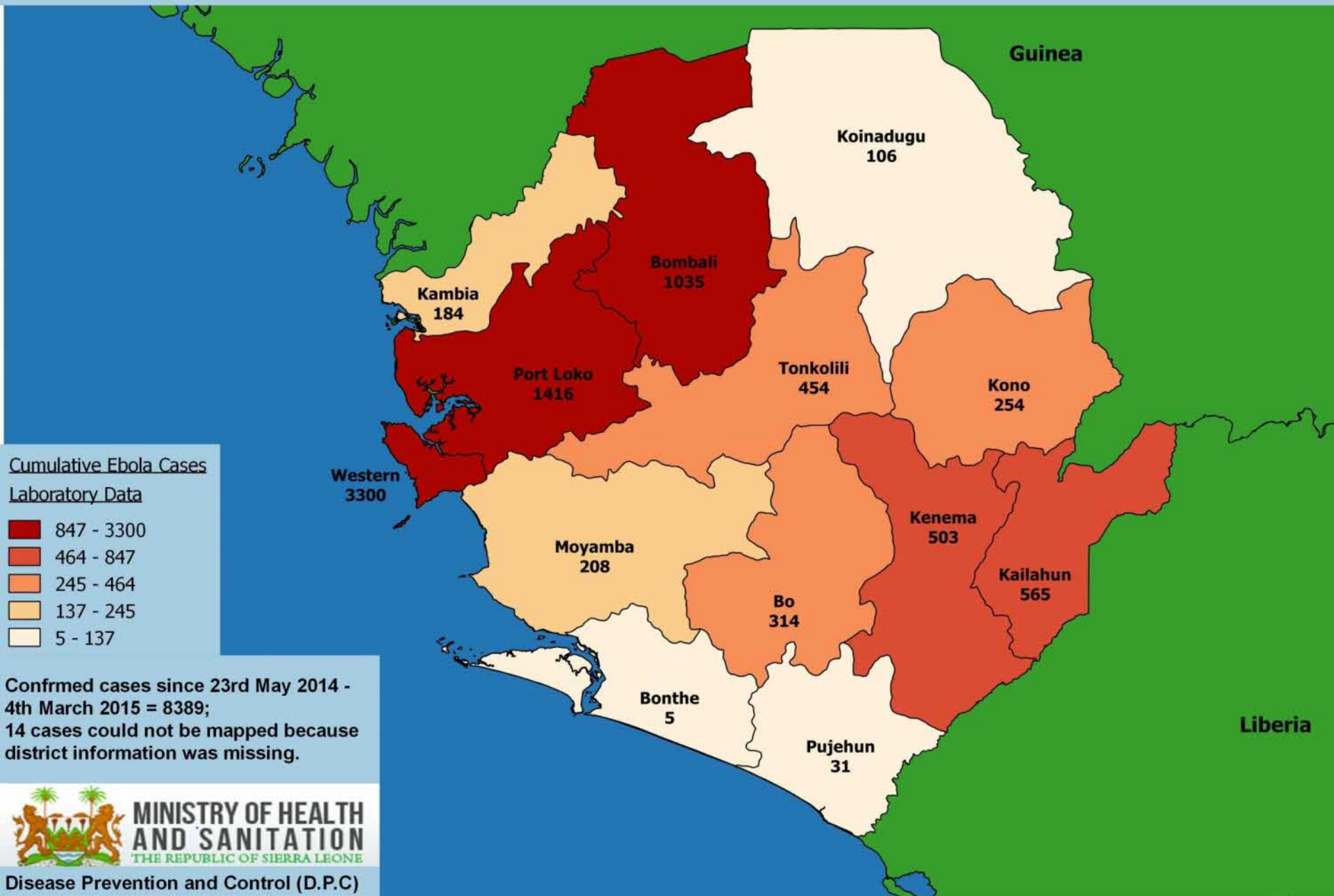
- Cases: 30 y/o with onset 3/1 or 3/2.
- Contacts: Under investigation. Surveillance ends March 23<sup>rd</sup>.
- Epi-Link: Exposure under investigation but may be related to 15 Black Hole Rd.

\*Data not updated fully as of 3/7/15.

By District – MoHS Laboratory Data

# **DAILY SITUATION REPORT MAPS**

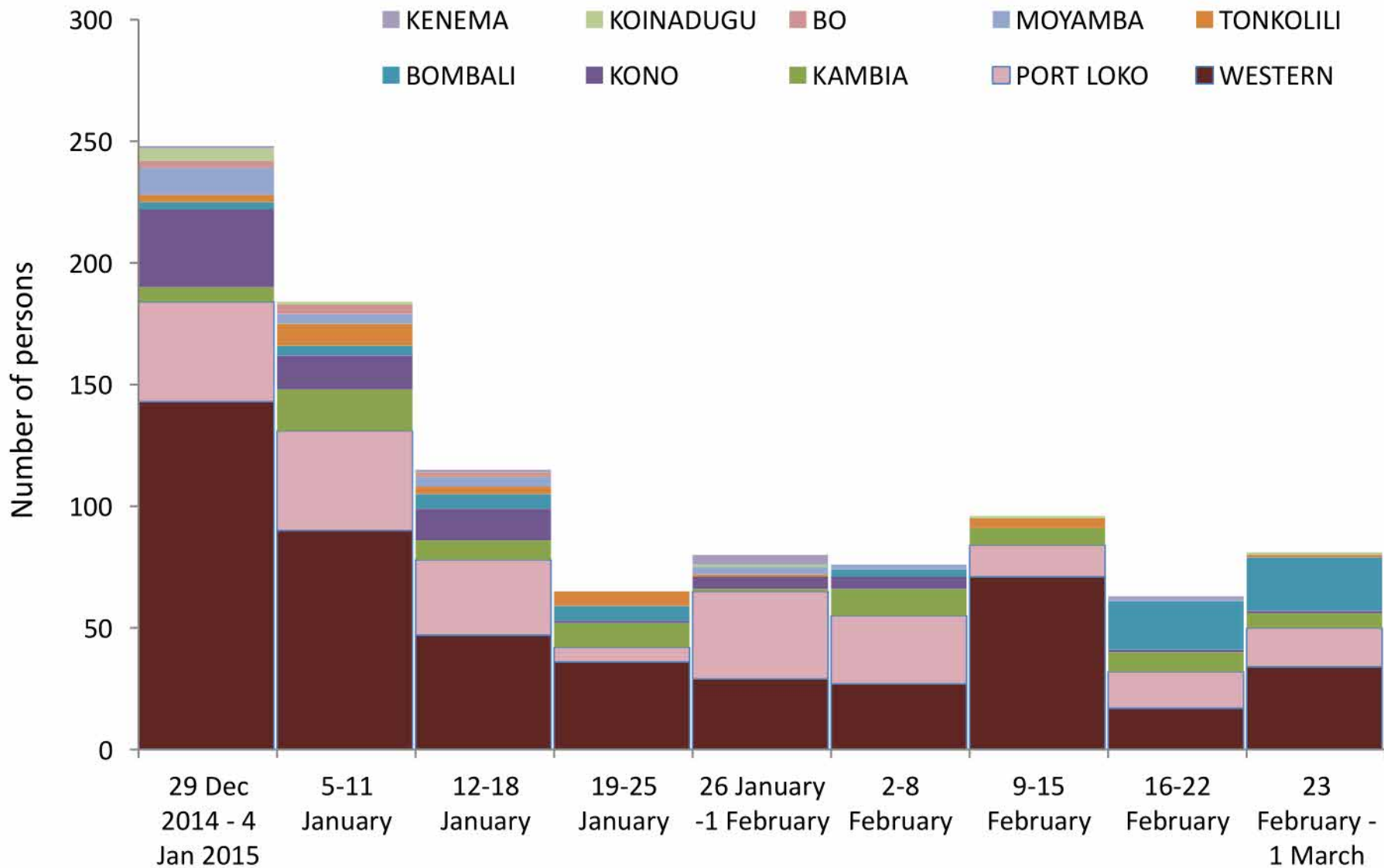
# Cumulative Confirmed Ebola Cases, Laboratory Data, 23rd May 2014 - 4th March 2015



# Confirmed Ebola Cases, Laboratory Data, 19th February - 4th March 2015

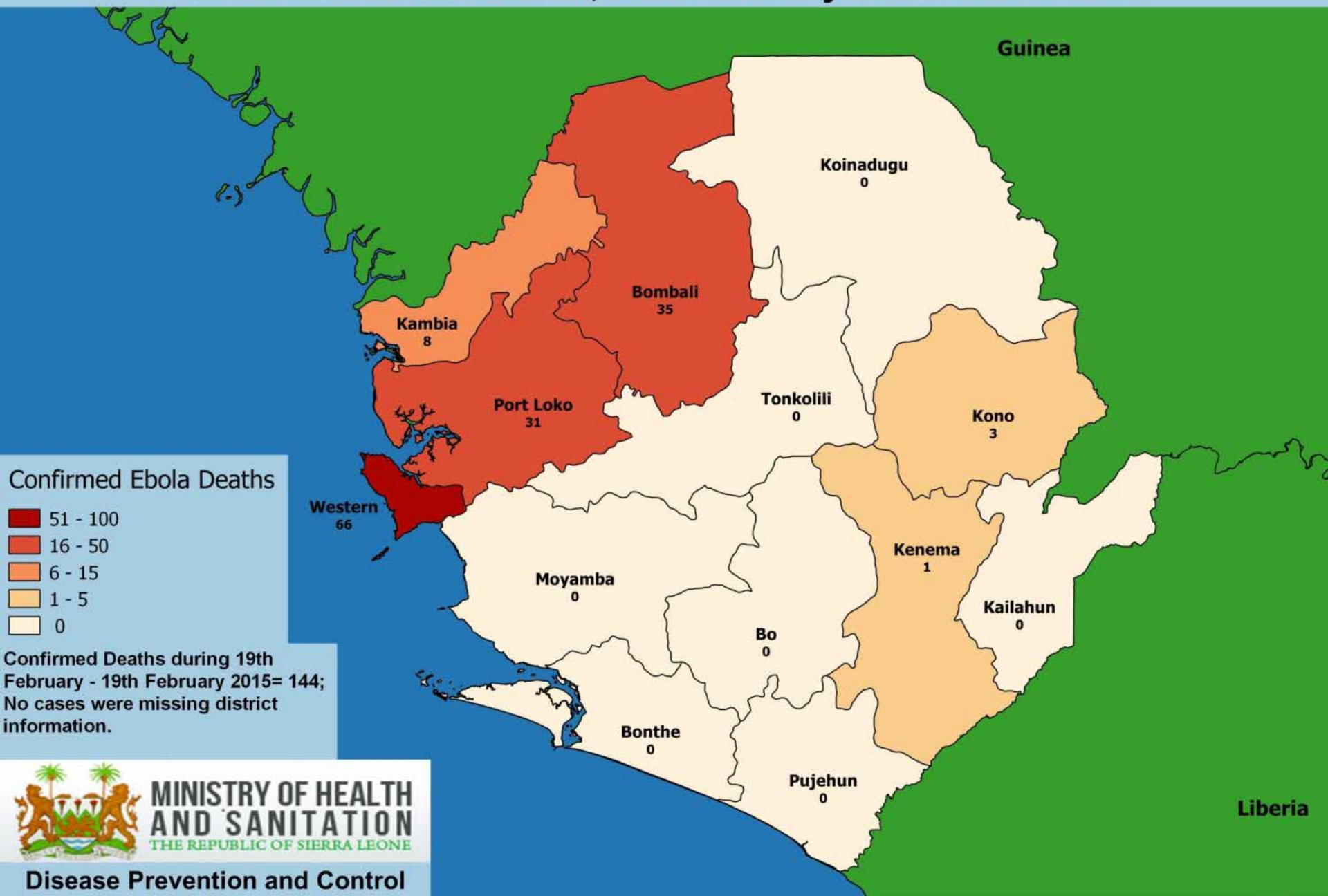


# MoHS-weekly reported confirmed cases date of the test and district, December 29, 2014 – March 1, 2015





# Confirmed Ebola Deaths, 19th February to 4th March 2015



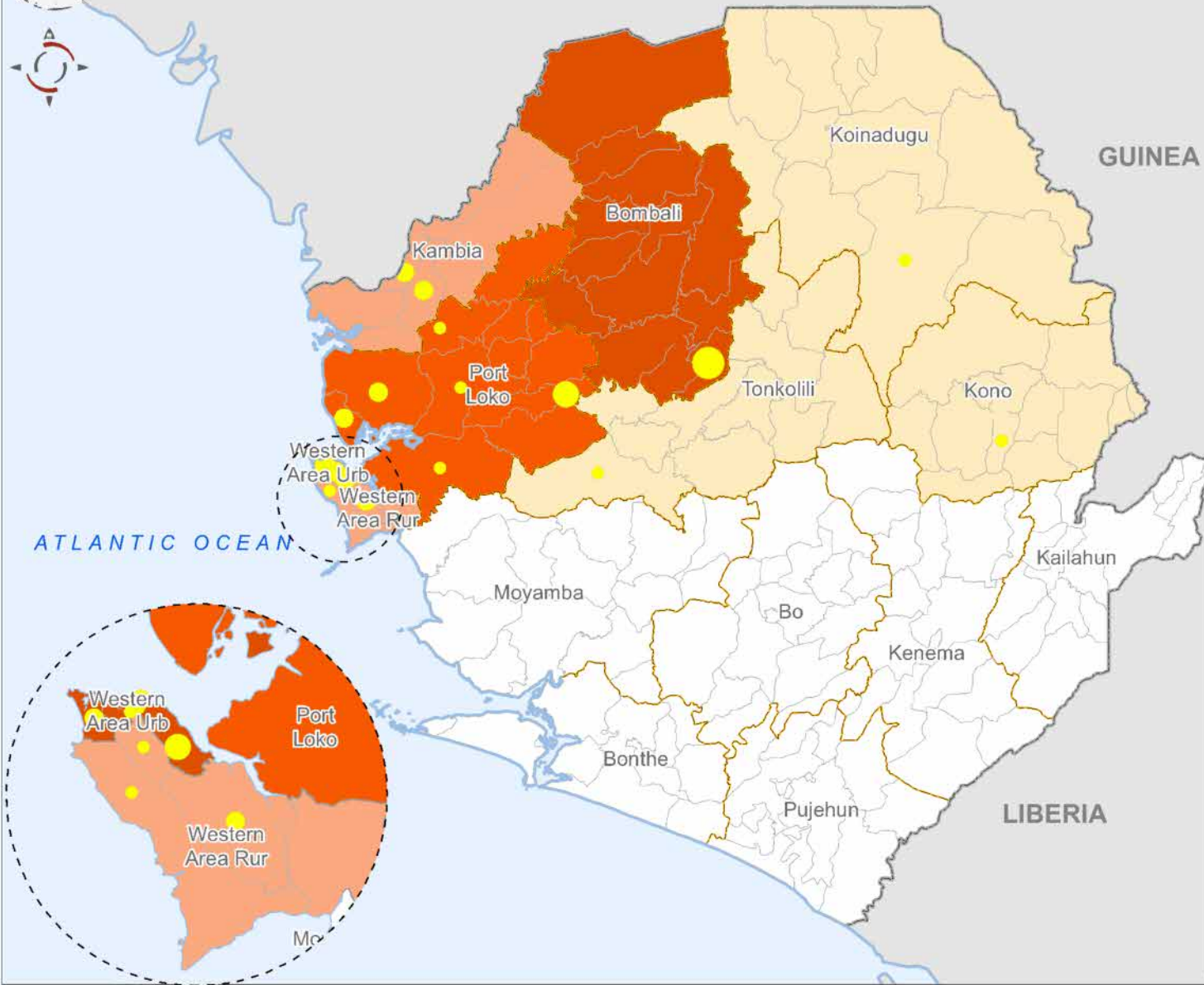
National, and Hot Spots – MoHS VHF Data

# **CHIEFDOM MAPS**





# Sierra Leone: Confirmed Ebola cases, laboratory data, 23 February to 1 March



**Legend**

**Cases - District level**

- 0
- 1
- 2 - 8
- 9 - 16
- +17

**Cases - Chiefdom level**

- 1
- 2 - 5
- 6 - 10
- 11 - 22

**Sources:**  
 Cartography: Ebolageonode.  
 Confirmed Ebola cases: MoHS daily Sit-Rep  
 Contact: afwcosl@who.int  
 Created: 3 March 2015.

**Kilometers**

0 10 20 40 60 80

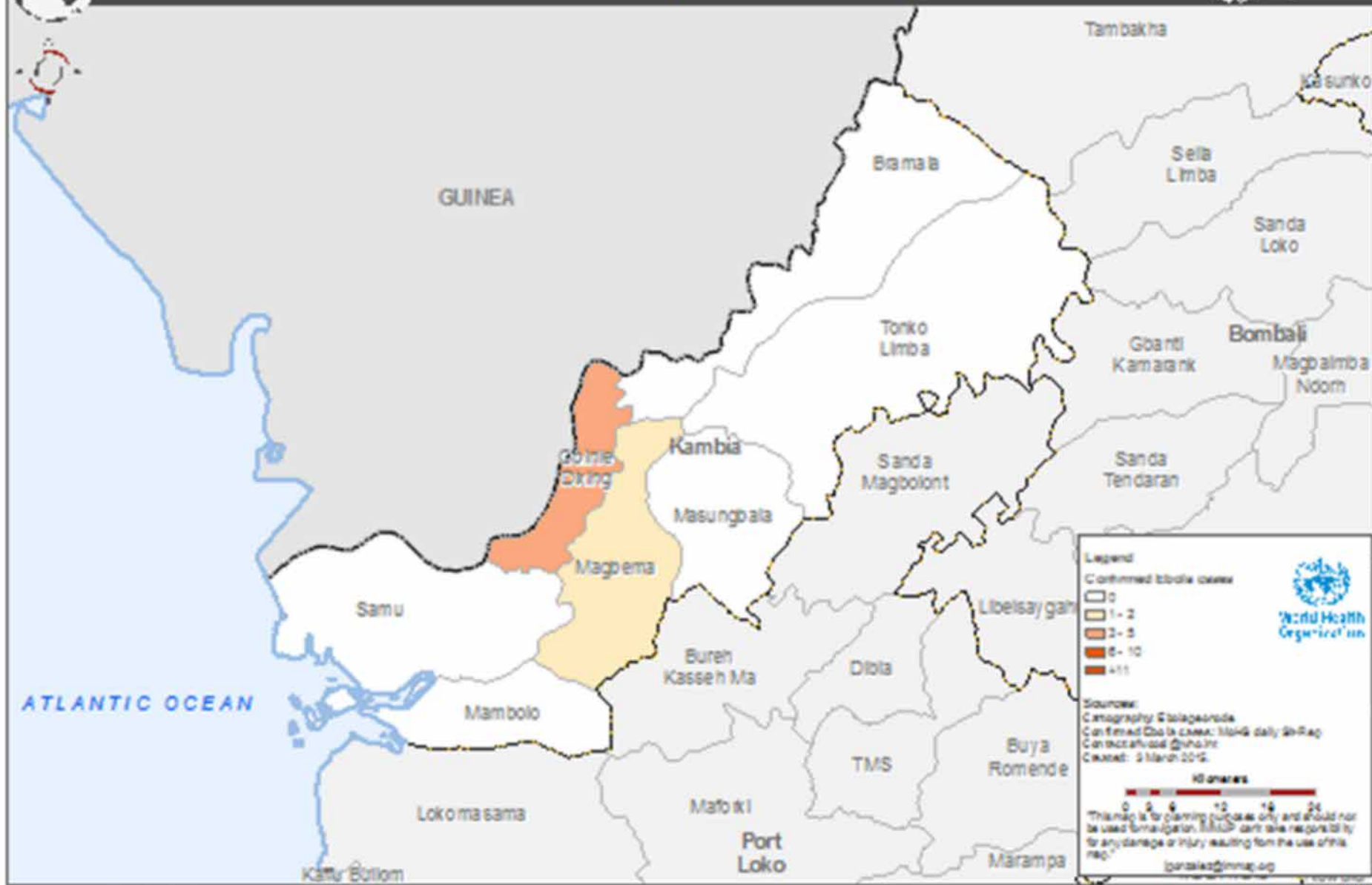
"This map is for planning purposes only and should not be used for navigation. IMMAP can't take responsibility for any damage or injury resulting from the use of this map."

jgonzalez@immap.org

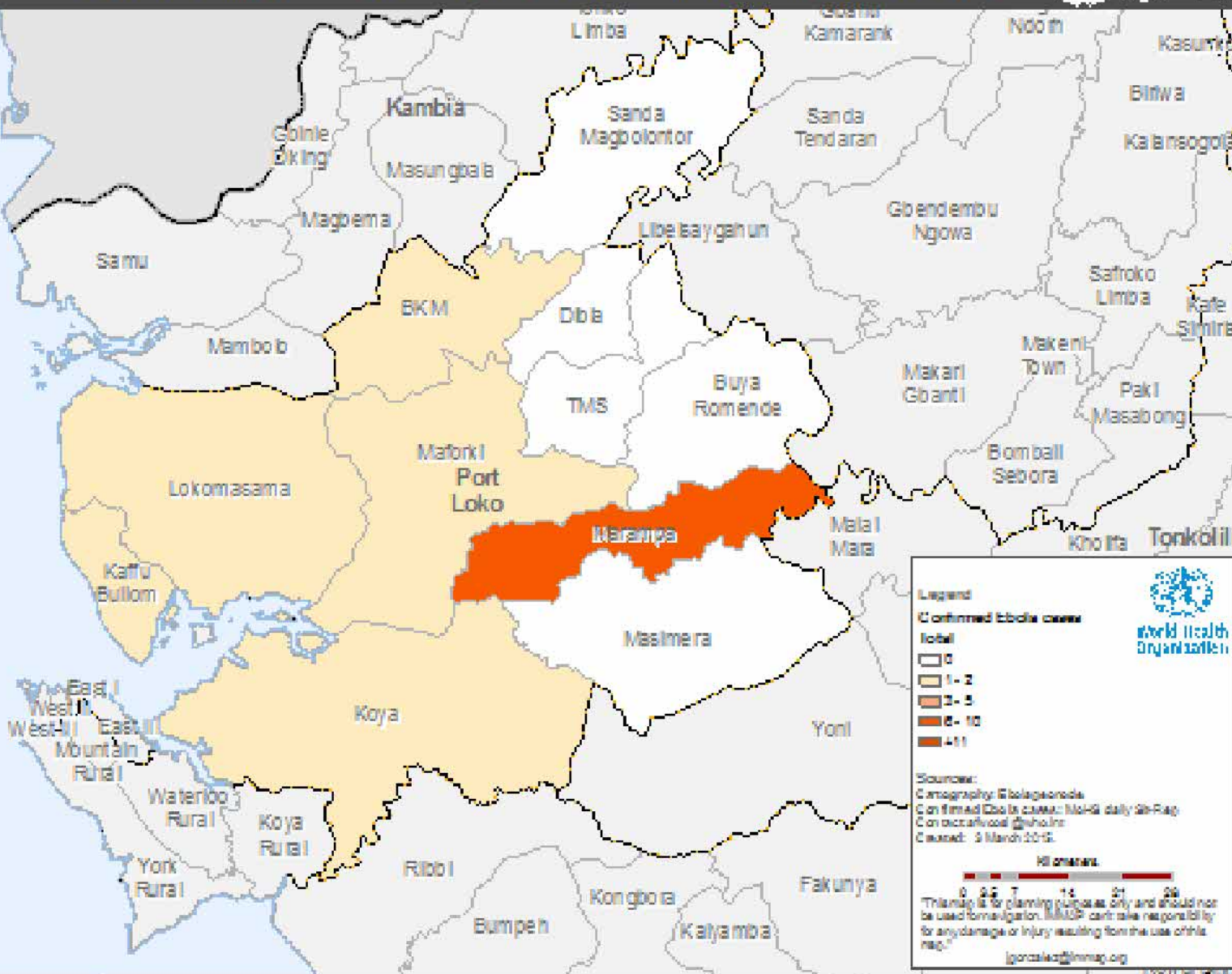




# Sierra Leone: Kambia confirmed Ebola cases by chiefdom, laboratory data, 23 Feb to 1 Mar



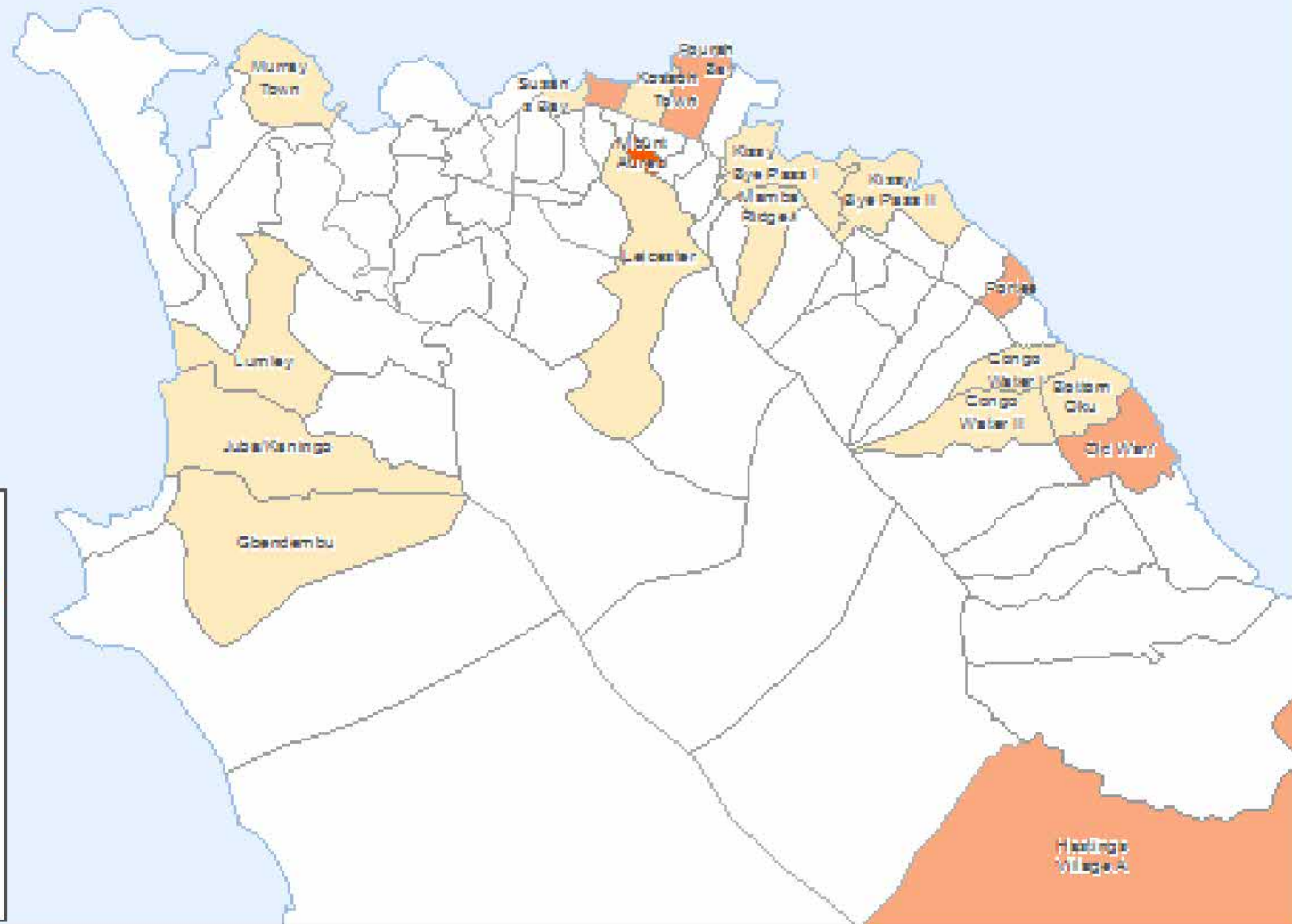
# Sierra Leone: Port Loko confirmed Ebola cases by chiefdom, laboratory data, 23 Feb to 1 Mar







# Sierra Leone: Western confirmed Ebola cases by chiefdom, laboratory data, 23 Feb to 1 Mar



**Legend**

Confirmed Ebola cases

- 0
- 1
- 2
- 3

— District boundary  
— Chiefdom boundary

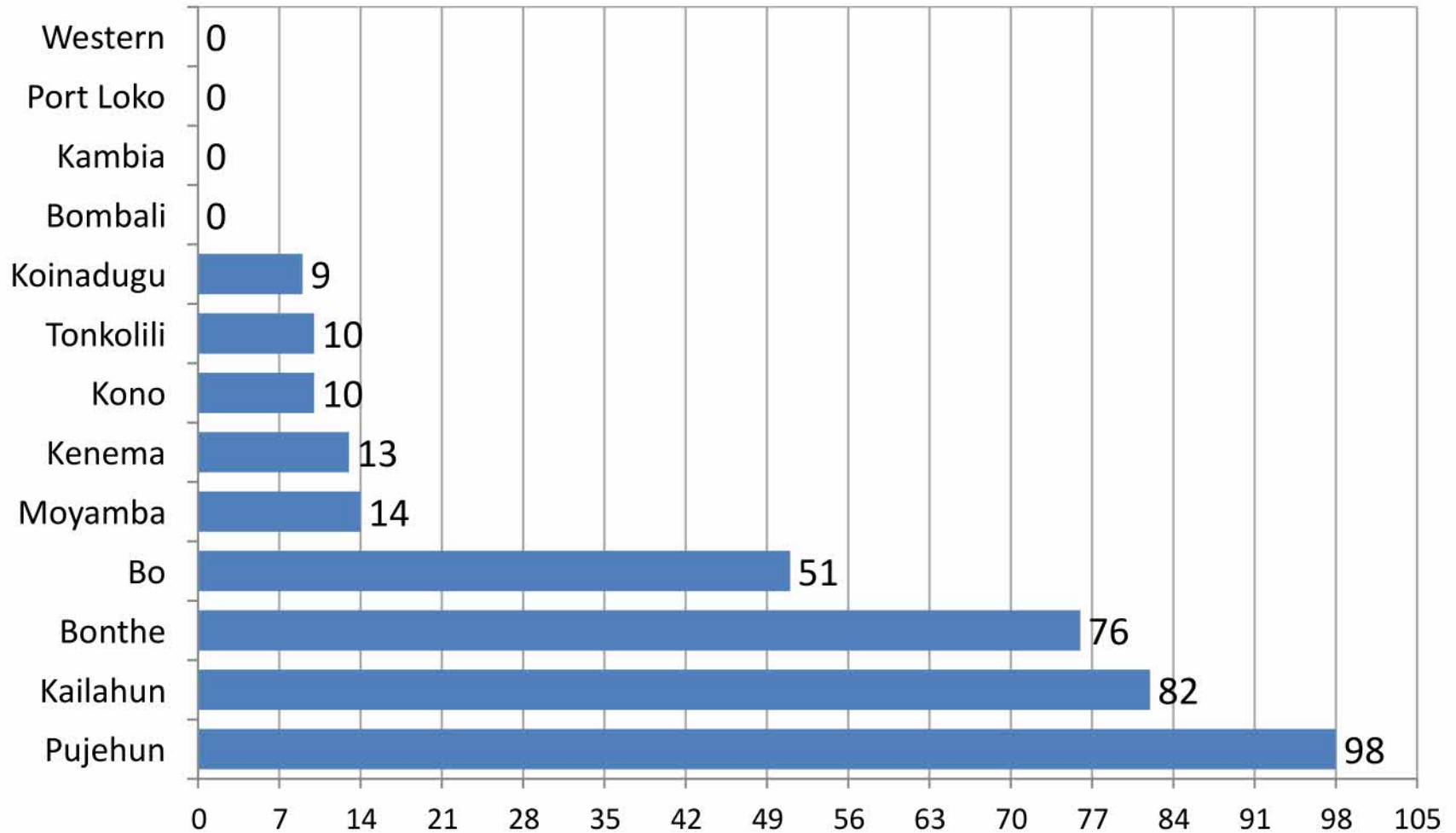
**Source:**  
Cartography: Stalagmed  
Confirmed Ebola cases: MERS daily 2 in-Pop  
Contact: hws@who.int  
Created: 5 March 2015

This map is for planning purposes only and should not be used for navigation. WHO can't take responsibility for any damage or injury resulting from the use of this map.

jspreied@inmaging

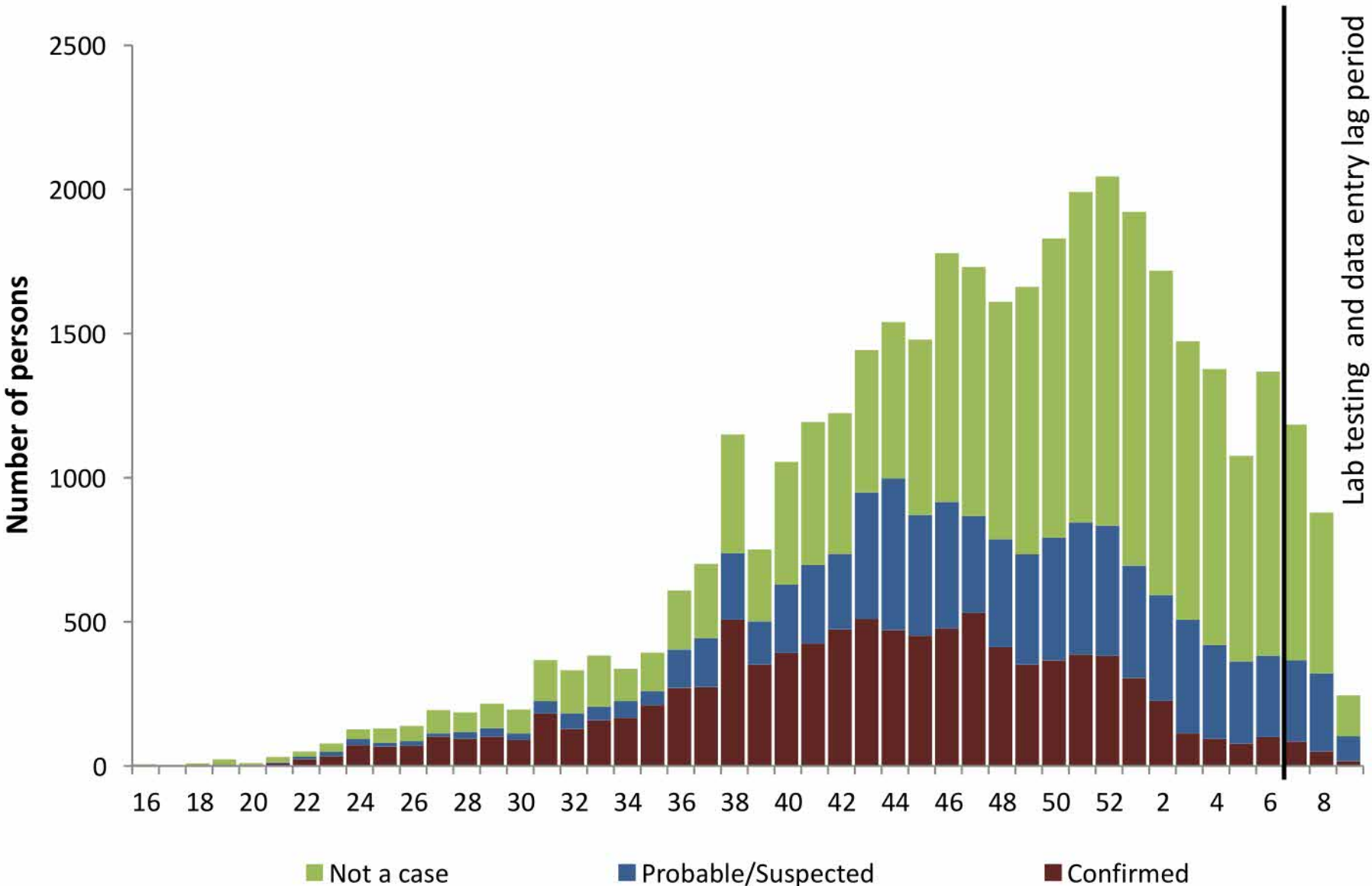
# **NATIONAL DATA**

# Days Since Last Confirmed Case, as of March 5, 2015



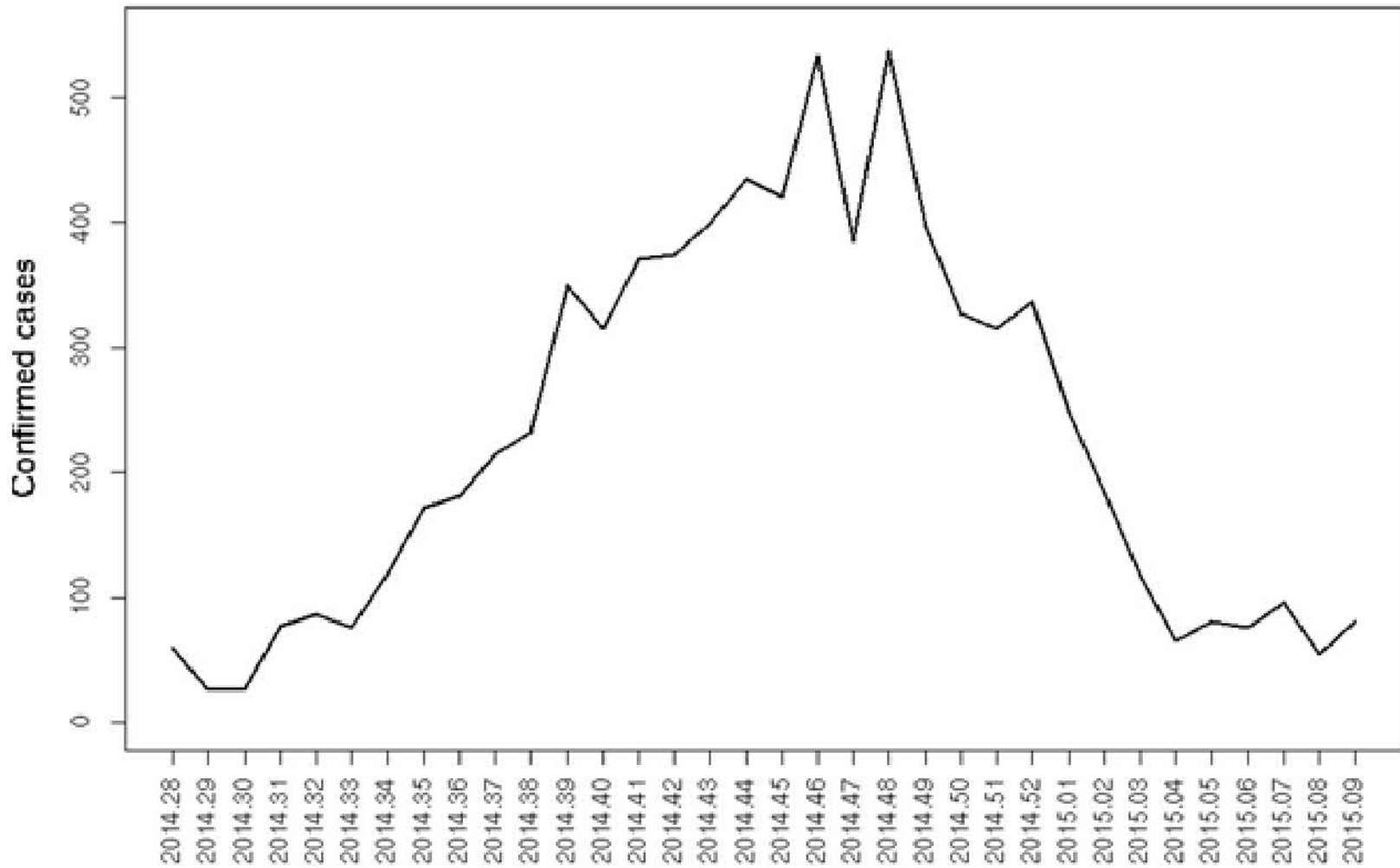
Data Source: MoHS Daily Sit Rep, March 5

# Ebola Investigations by Case Status, MoHS VHF Data, Sierra Leone, April 13, 2014 – March 1, 2015



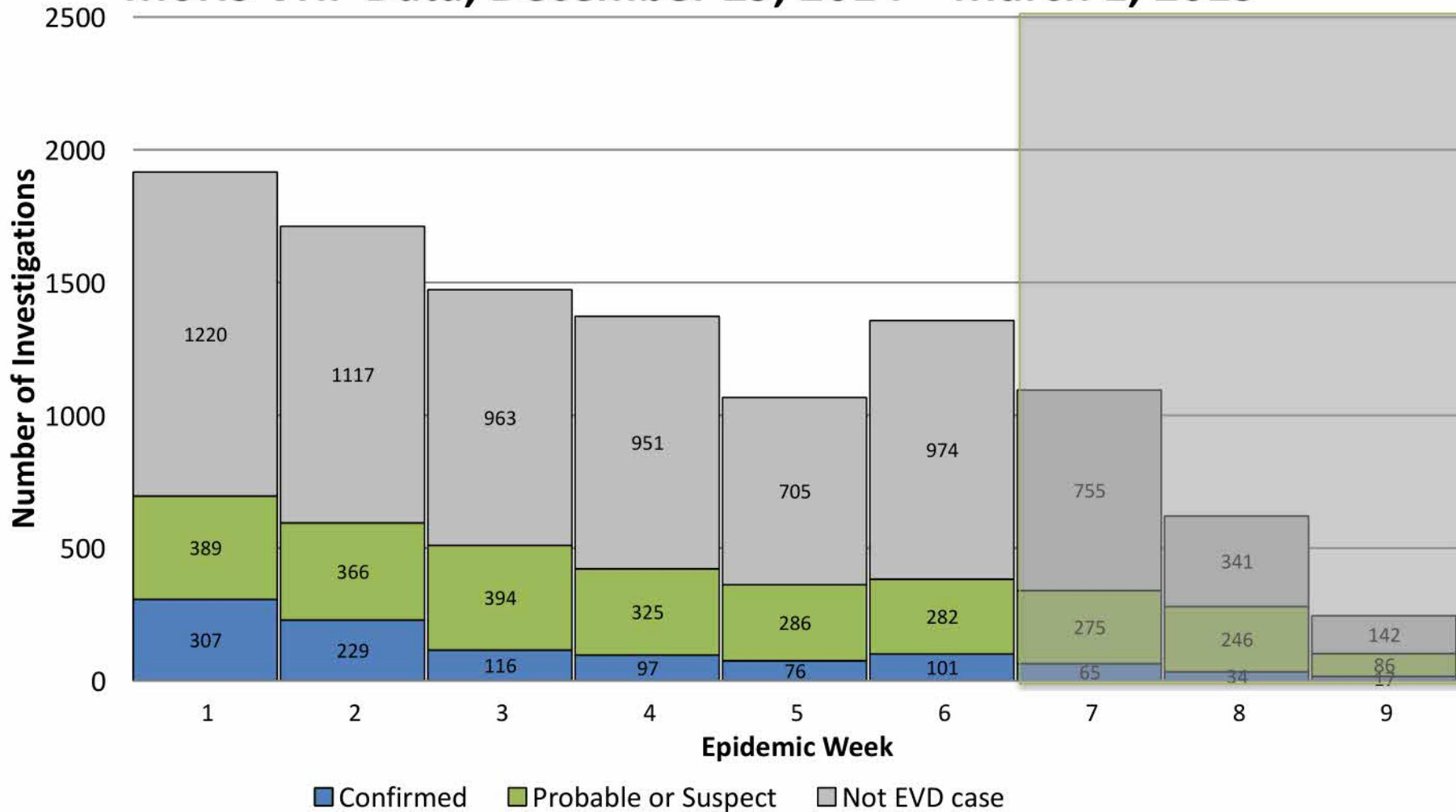


# Cumulative Confirmed Cases by Ebola Investigations, MoHS VHF Data, Sierra Leone, May 1, 2014 – March 1, 2015



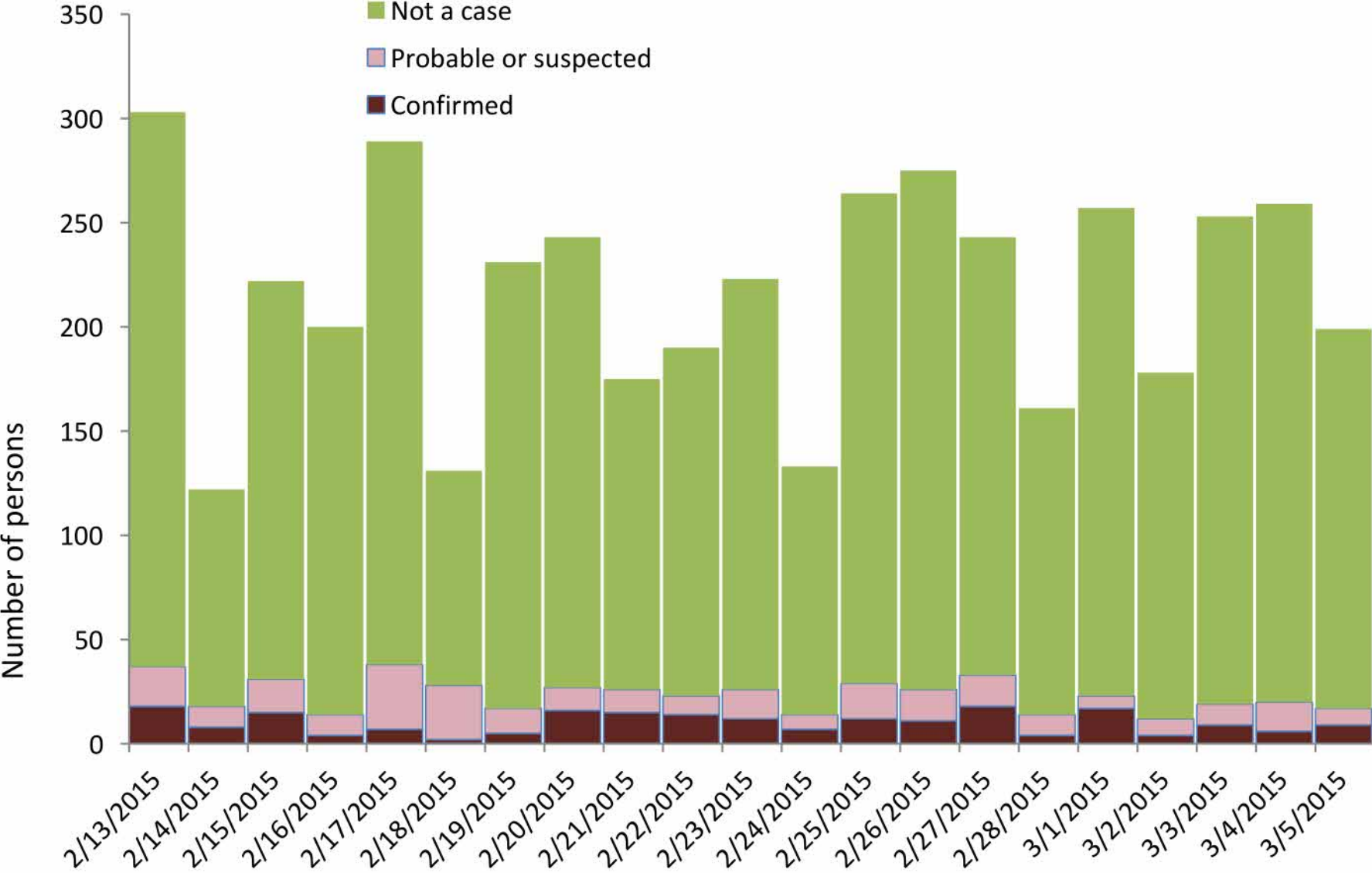
# Ebola Investigations by Case Status, Sierra Leone

MoHS VHF Data, December 29, 2014 – March 1, 2015\*



\*Data updated March 1; Reporting during the last few weeks may not yet be complete

# MoHS-reported lab results by case definition and the date of the lab results report, National, February 13 – March 5, 2015

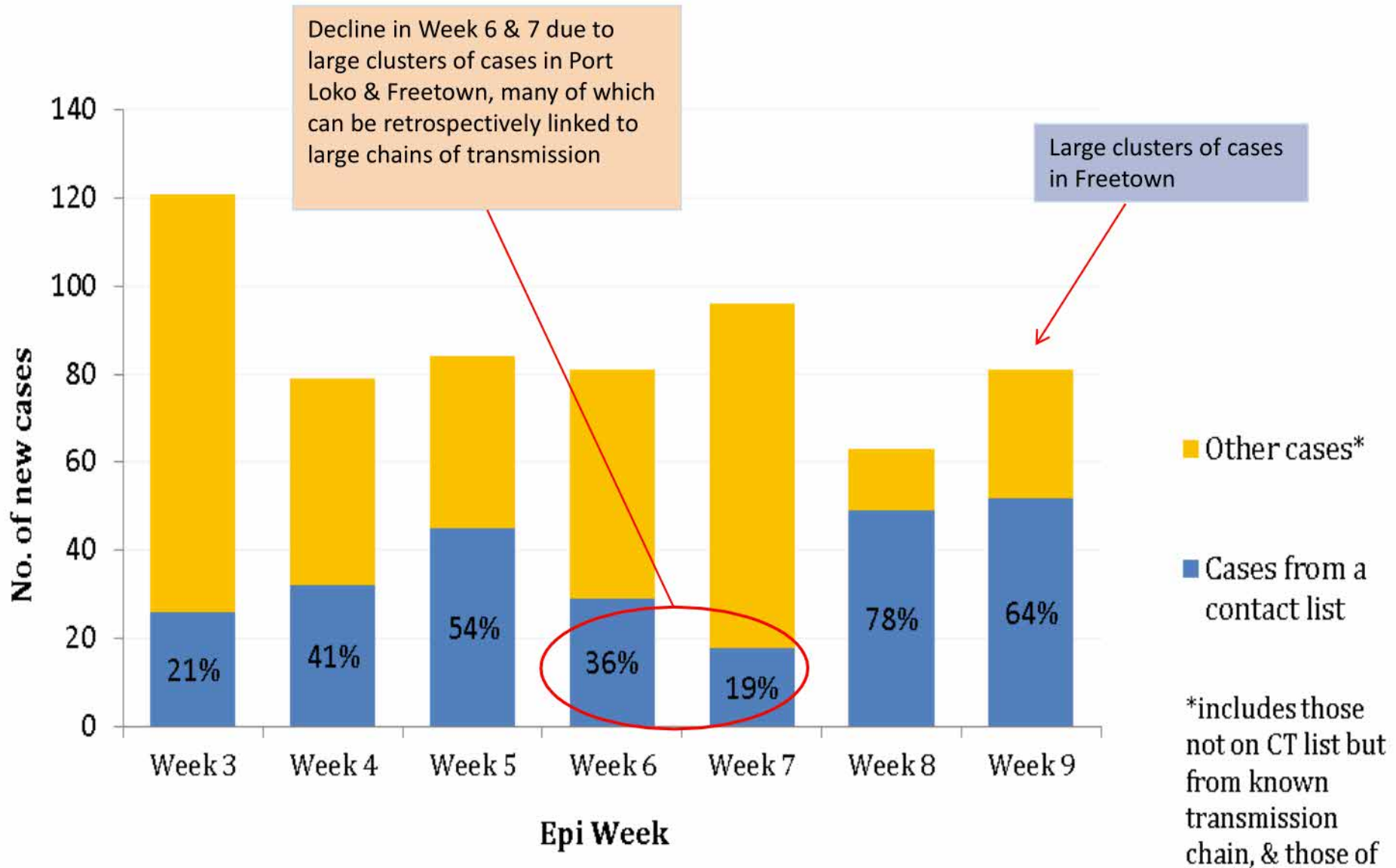


# Contact Tracing (EpiWeek 9, February 23 - March 1, 2015)\*

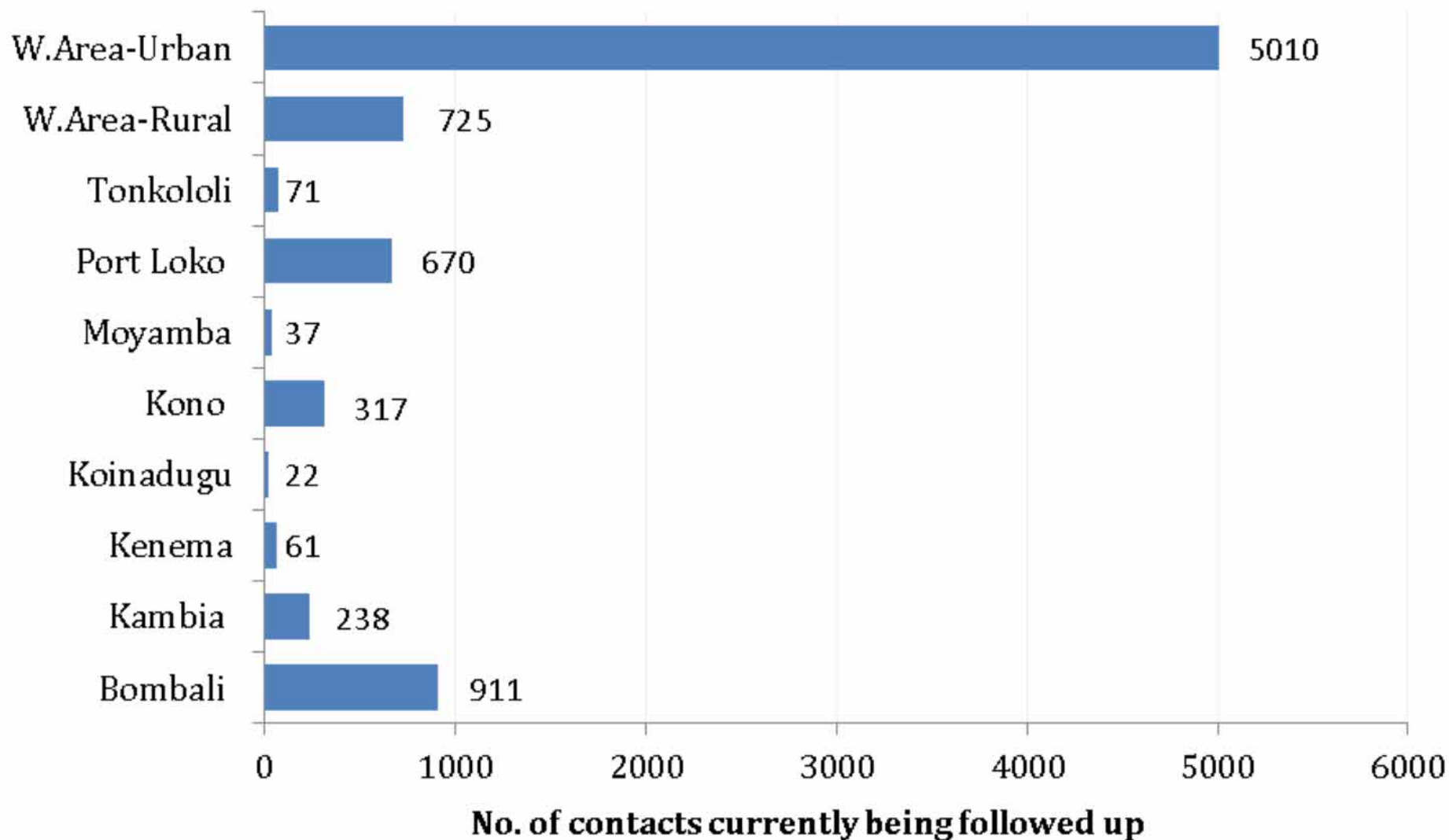
District	Confirmed cases	Confirmed cases from contact list (%)	Ill contact evacuated in 24h	Deaths in quarantine homes
Bombali	22	22 (100%)	30 of 30	0
Kambia	6	3 (50%)	0	0
Koinadugu	1	1 (100%)	1 of 1	0
Kono	1	0 (0%)	0	0
Port Loko	16	10 (63%)	6 of 6	1
Tonkolili	1	1 (100%)	1 of 1	0
Western	34	15 (44%)	16 of 16	0
Total	81	52 (64%)	54 of 54	1

\*Districts not included in the table have no data to report for all fields.

# No.(%) of new cases from a contact list, by Epi Week, (January 12 - March 1, 2015)

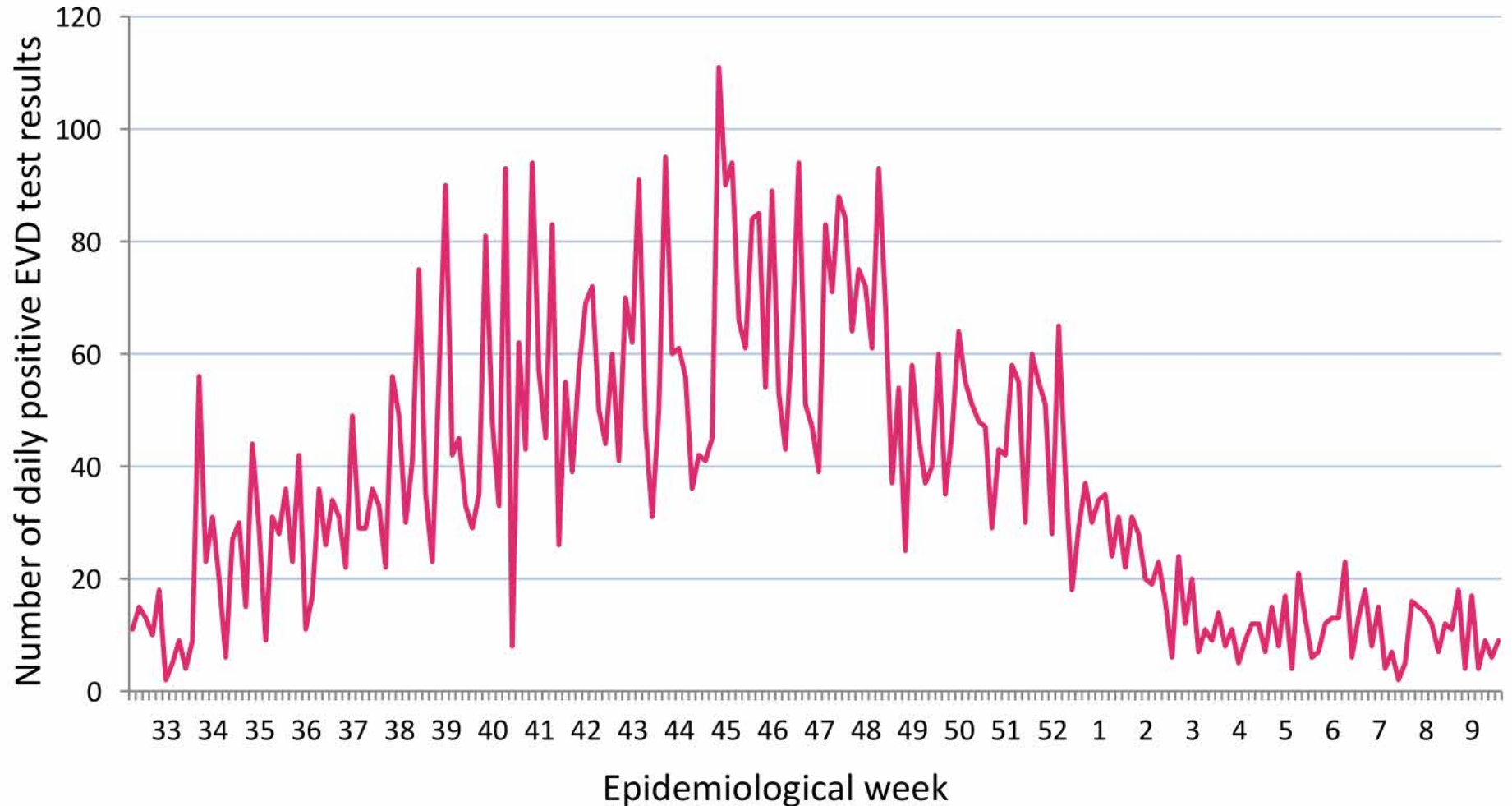


# No. of contacts (n=8062) being followed up, by district – Snapshot (1<sup>st</sup> March 2015)



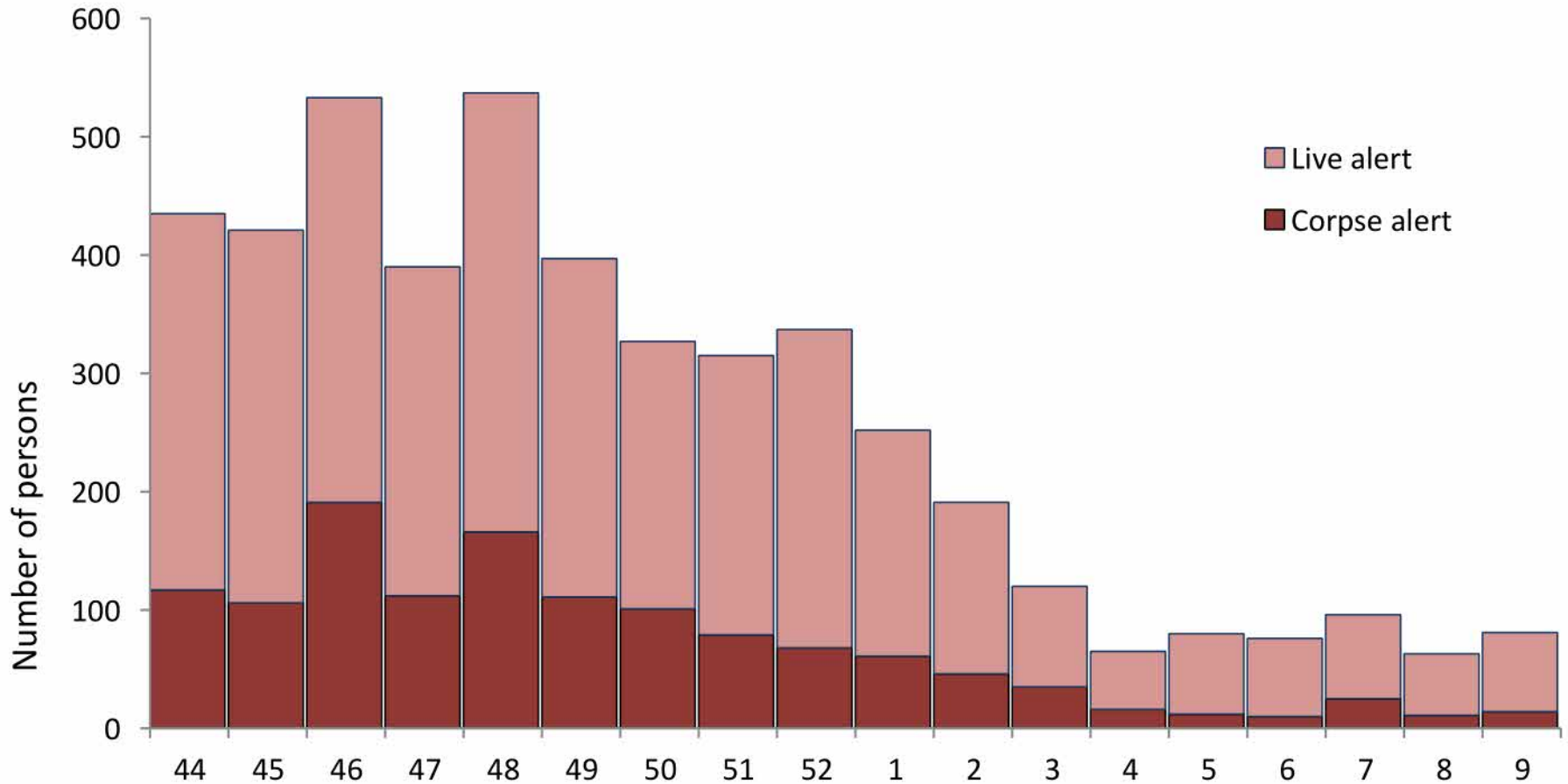


Daily positive EVD test results by date of report,  
Sierra Leone,  
August 12, 2014 – March 5, 2015  
(Total cumulative number of cases 8,398)



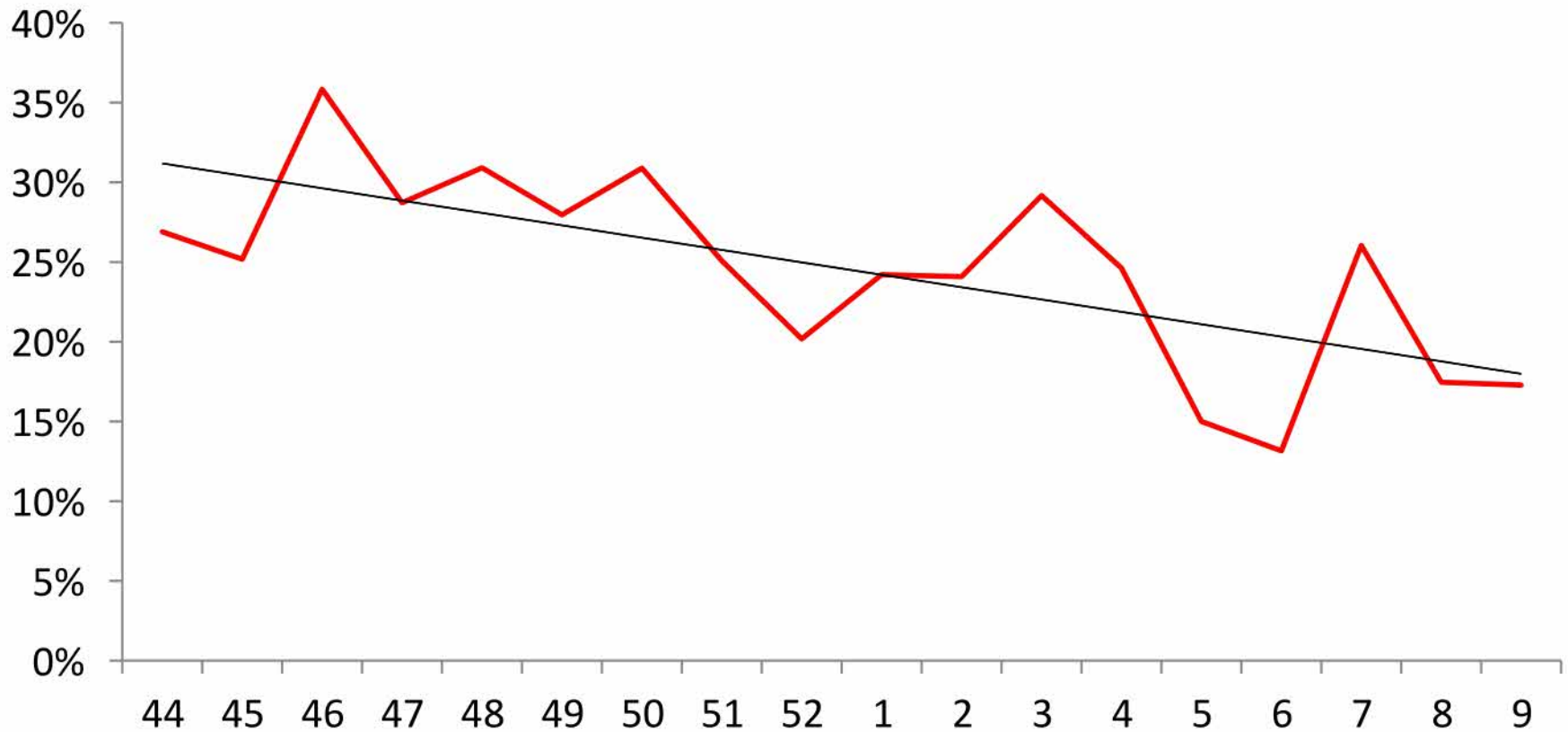


# MoHS-reported confirmed cases\* by type of alert and epi-week, Sierra Leone, October 27, 2014 – March 1, 2015



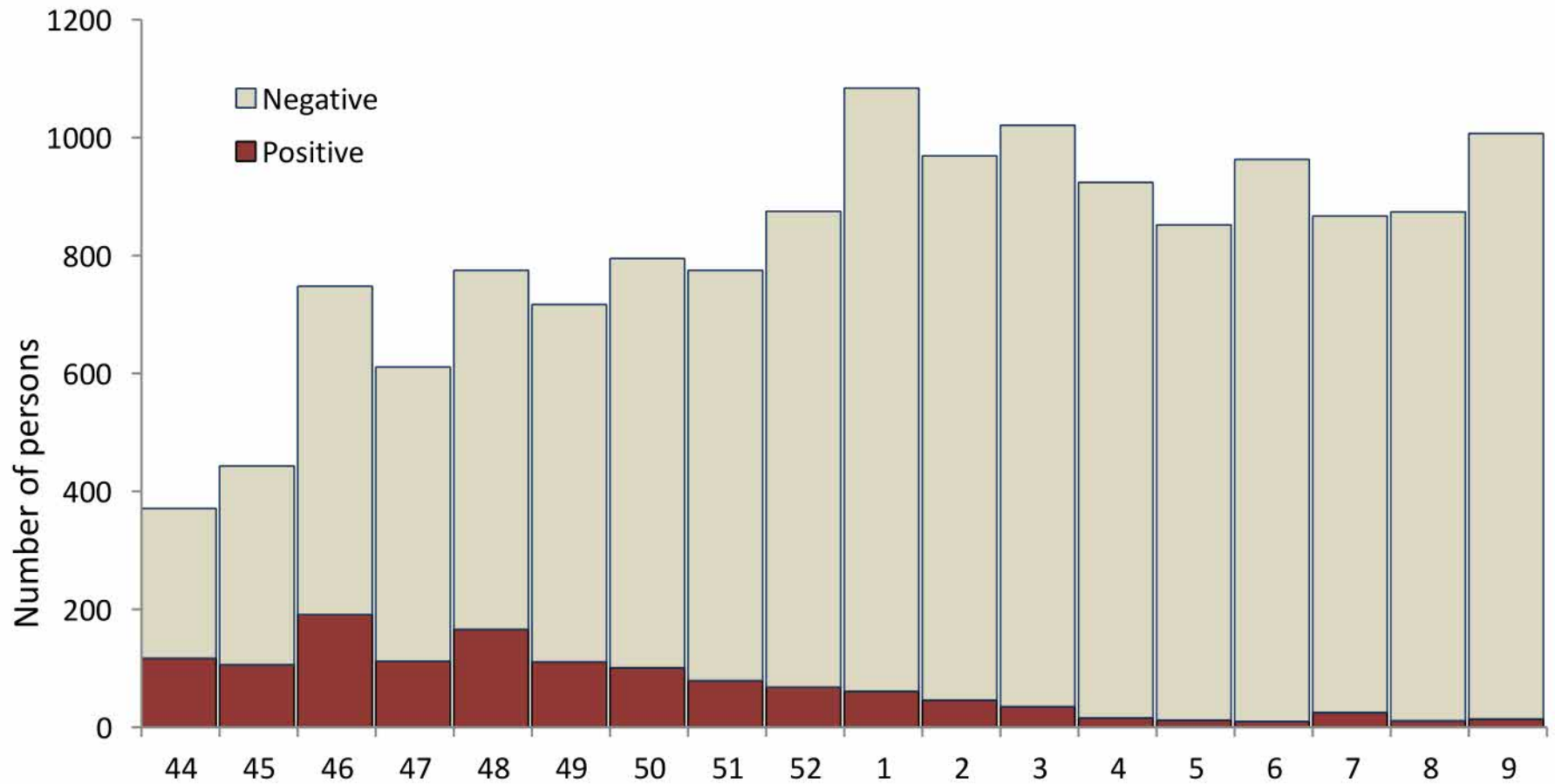
\*Cases confirmed through swab testing were assumed to be corpse alerts.

Percentage dead\* at the time of alert by epi-week,  
Sierra Leone,  
October 27, 2014 – March 1, 2015



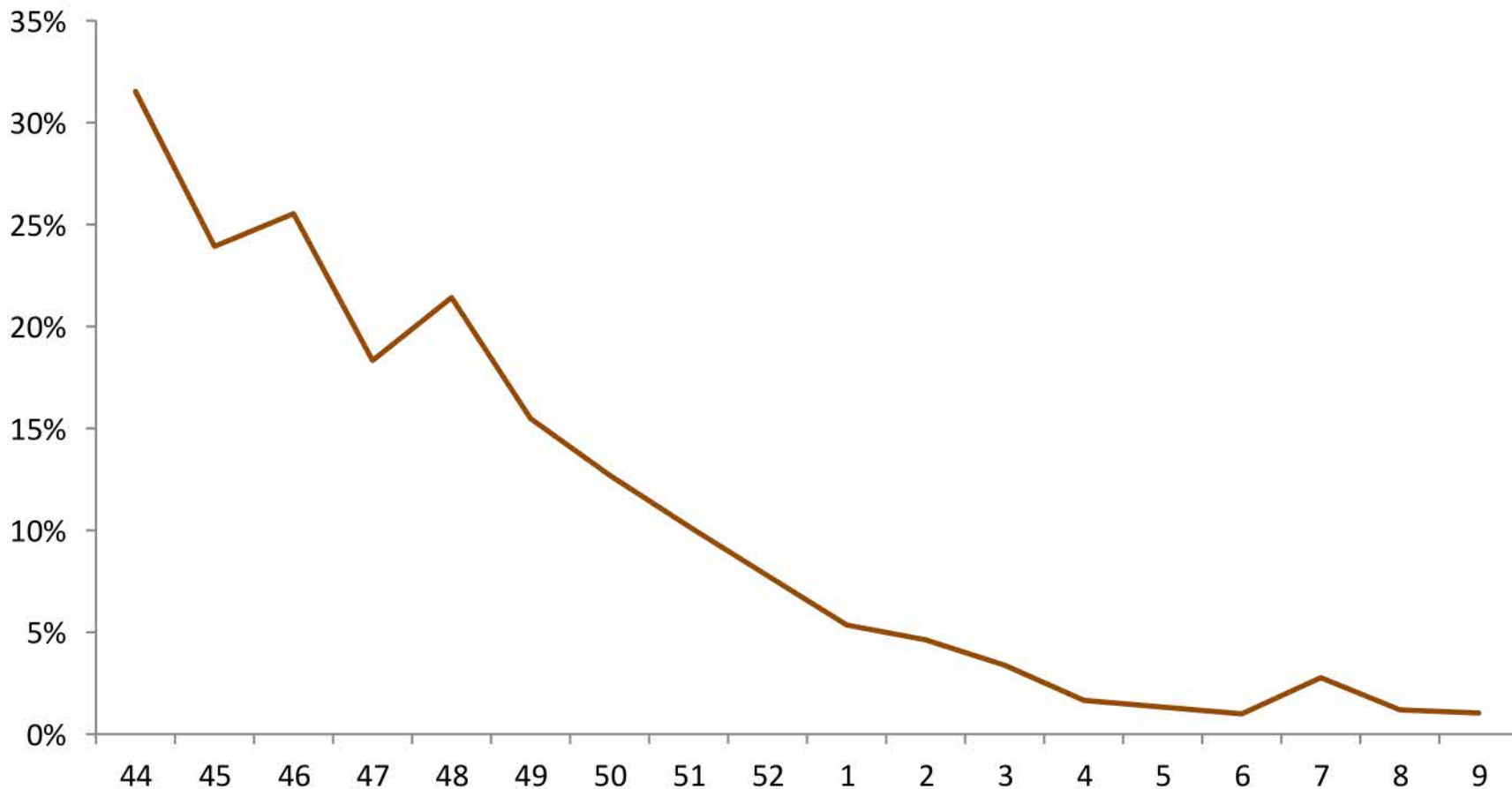
\* Cases confirmed through swab testing were assumed to be corpse alerts.

# MoHS-reported corpses\* by positivity and epi-week, Sierra Leone, October 27, 2014– March 1, 2015



\*Swab samples were assumed to be from corpse alerts.

# Percentage community deaths at the time of alert by epi-week at the time of the lab results report, National, October 27, 2014 – March 1, 2015



\*Swab samples were assumed to be from corpse alerts.

# MoHS lab-reported EVD initial post-mortem diagnosis, February 23- March 1, 2015

Week 9 (February 23- March 1, 2015)							
National/ District	# Confirmed Cases	# Swabs Tested	# Positive post-mortem swabs	# Community deaths	% Community Death/Total positive swabs	% Positive Swabs/ Total Swabs	% Positive Swabs/ Total Cases
National	81	1059	11	6	55%	1%	14%
Bo	0	105	0	0	n/a	0%	n/a
Bombali	22	97	1	0	0%	1%	5%
Bonthe	0	37	0	0	n/a	0%	n/a
Kailahun	0	34	0	0	n/a	0%	n/a
Kambia	6	73	0	0	n/a	0%	0%
Kenema	0	104	0	0	n/a	0%	n/a
Koinadugu	1	4	0	0	n/a	0%	0%
Kono	1	69	0	0	n/a	0%	0%
Moyamba	0	70	0	0	n/a	0%	n/a
Port Loko	16	118	3	2	67%	3%	19%
Pujehun	0	23	0	0	n/a	0%	n/a
Tonkolili	1	76	0	0	n/a	0%	0%
Western	34	246	7	5	71%	3%	21%

# Community deaths investigation

- Between 23 February and March 1 2015, labs reported 14 “initial” positive swabs, 11 of which were confirmed to be collected from the corpses.

Deaths in Quarantined Homes	Other Community Deaths	Deaths in Holding Centers	Deaths in Treatment Centers	Other
0(0%)	6 ( 55%)	1 (9%)	4 (36%)	0

- Western Urban: 1. female infant, from quarantined house, was tested negative with a live swab on 02/04/2015, later died in ETU from EVD on 2/27/2015. 2. 31 y.o. male, no clear epi-link, taken to ETU;
- Port Loko: an infant died in ETU, swab was tested positive for EVD.
- Bombali: 24 y.o. woman from non-quarantined house became symptomatic, arrived to ETU and died. She is a family relation of the EVD index case.

# Community/CCC deaths investigation (not from quarantined home)

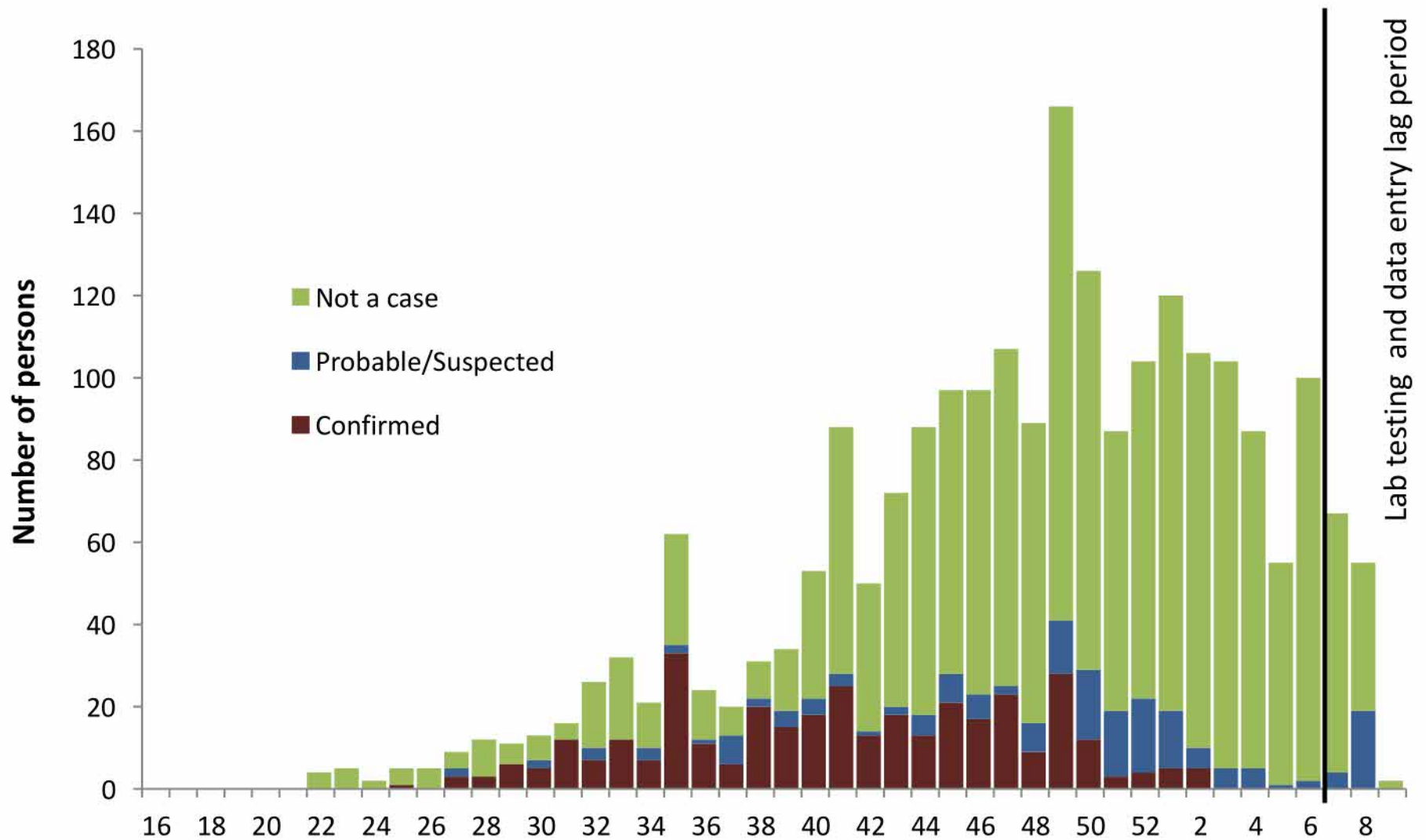
- Port Loko – 2 corpses,
  - 38 y.o. woman who died in CCC on 2/26/15. She was in contact with her father who died on 2/1/15 from EVD.
  - 40 y.o. woman.
- Western – 5 corpses
  - 51 y.o. male, no epi link known, herbalist;
  - a person, unknown age and gender, may be linked to quarantined house;
  - 48 y.o. female, linked to a quarantined house;
  - 35 y.o. male, no clear epi-link;
  - 42 y.o. male, linked to a quarantined house;



# District Data

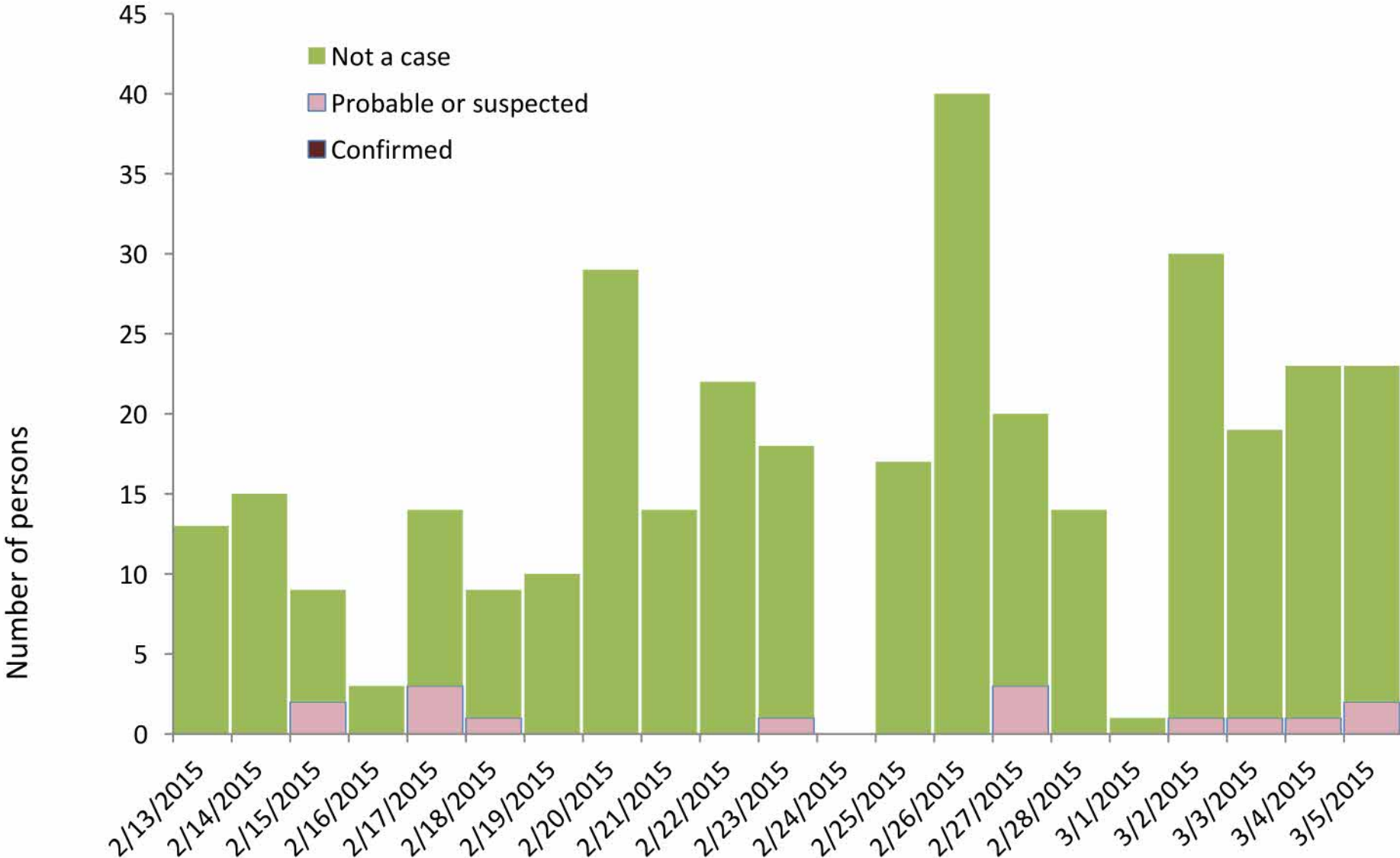
**Bo District**

# Ebola Investigations by Case Status, MoHS VHF-reports, Bo, April 13, 2014 – March 1, 2015



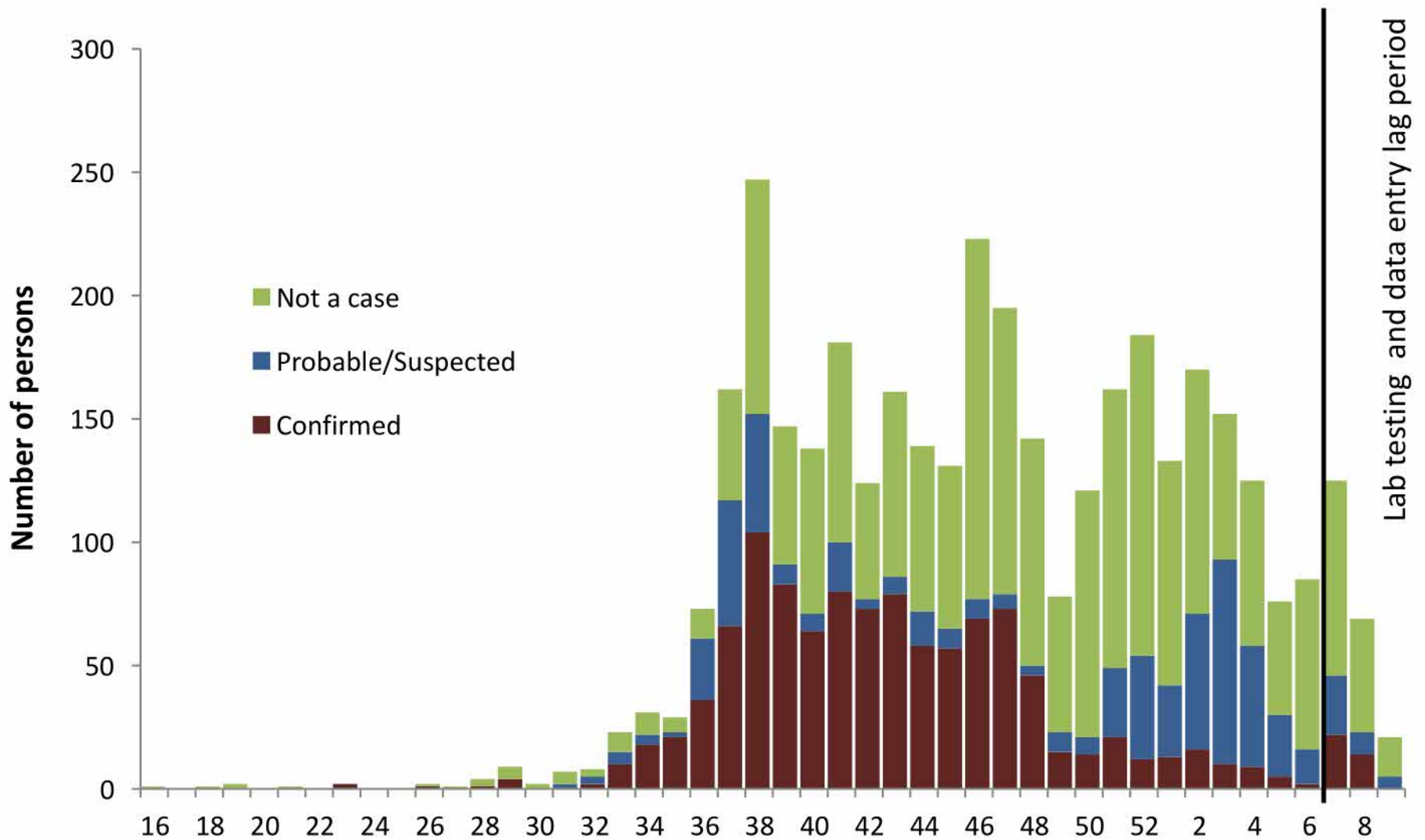
Lab testing and data entry lag period

# MoHS-reported lab results by case definition and the date of the lab results report, Bo, February 13 – March 5, 2015

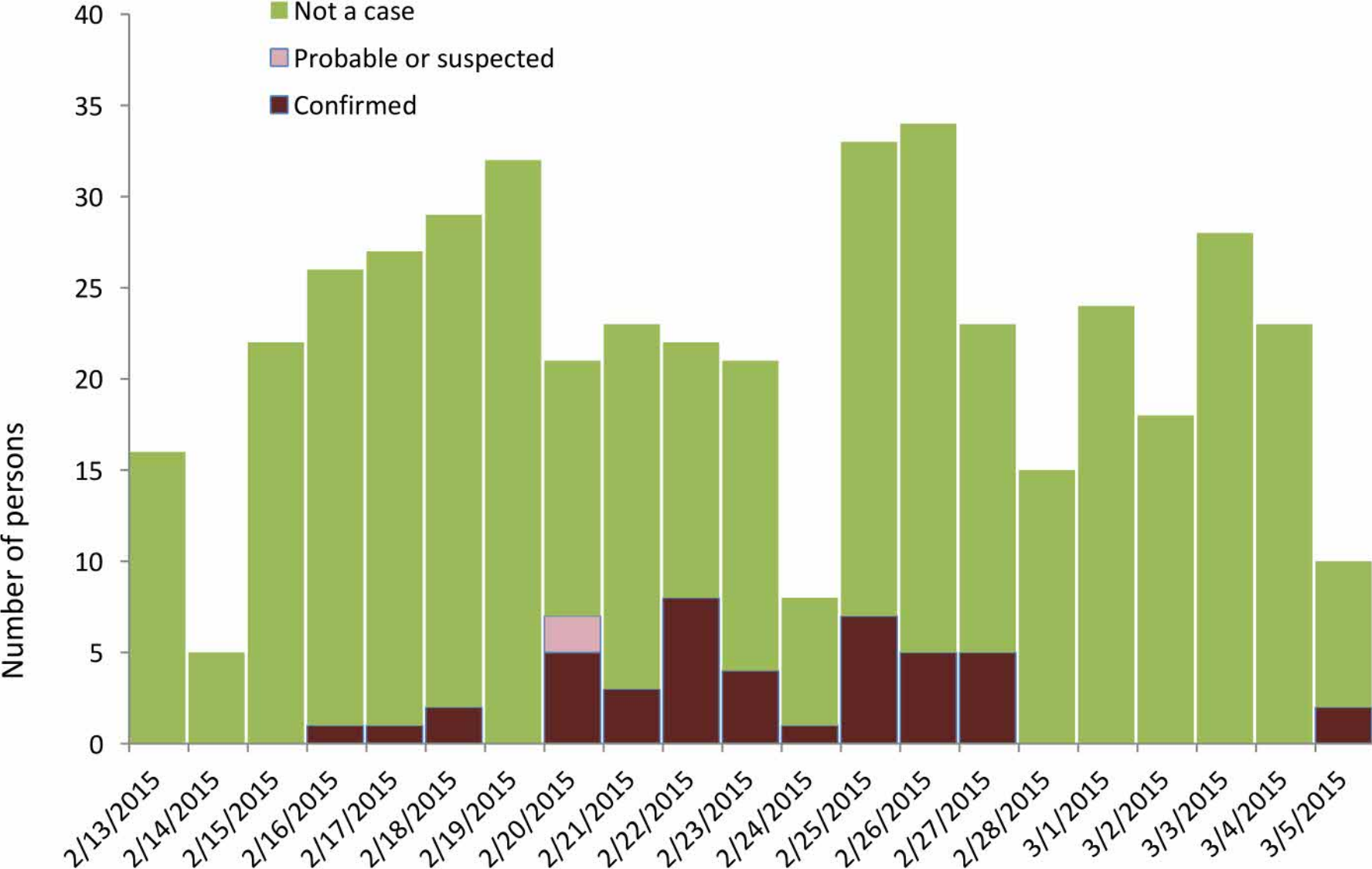


# **Bombali District**

# Ebola Investigations by Case Status, MoHS VHF Data, Bombali, April 13, 2014 – March 1, 2015



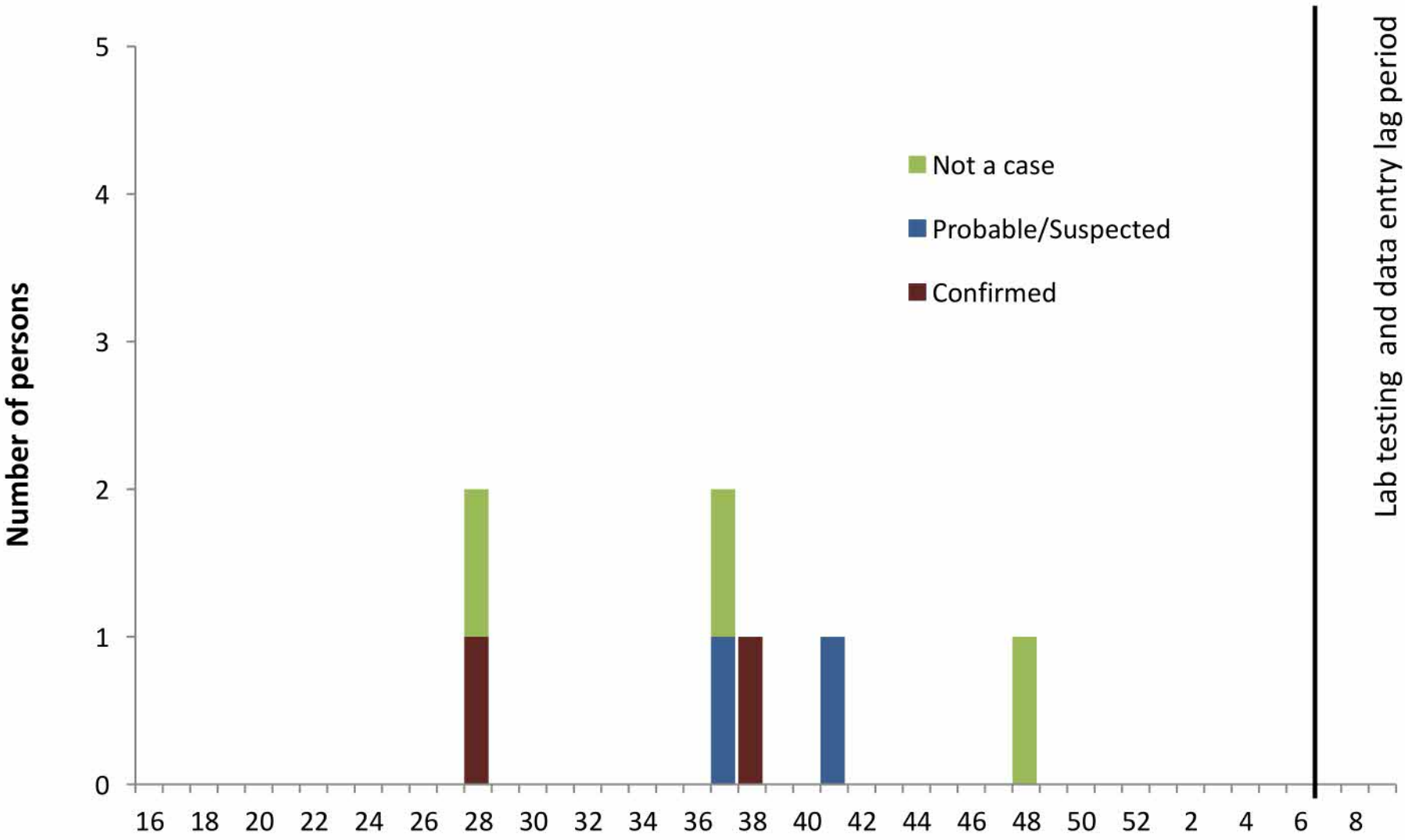
# MoHS-reported lab results by case definition and the date of the lab results report, Bombali, February 13 – March 5, 2015



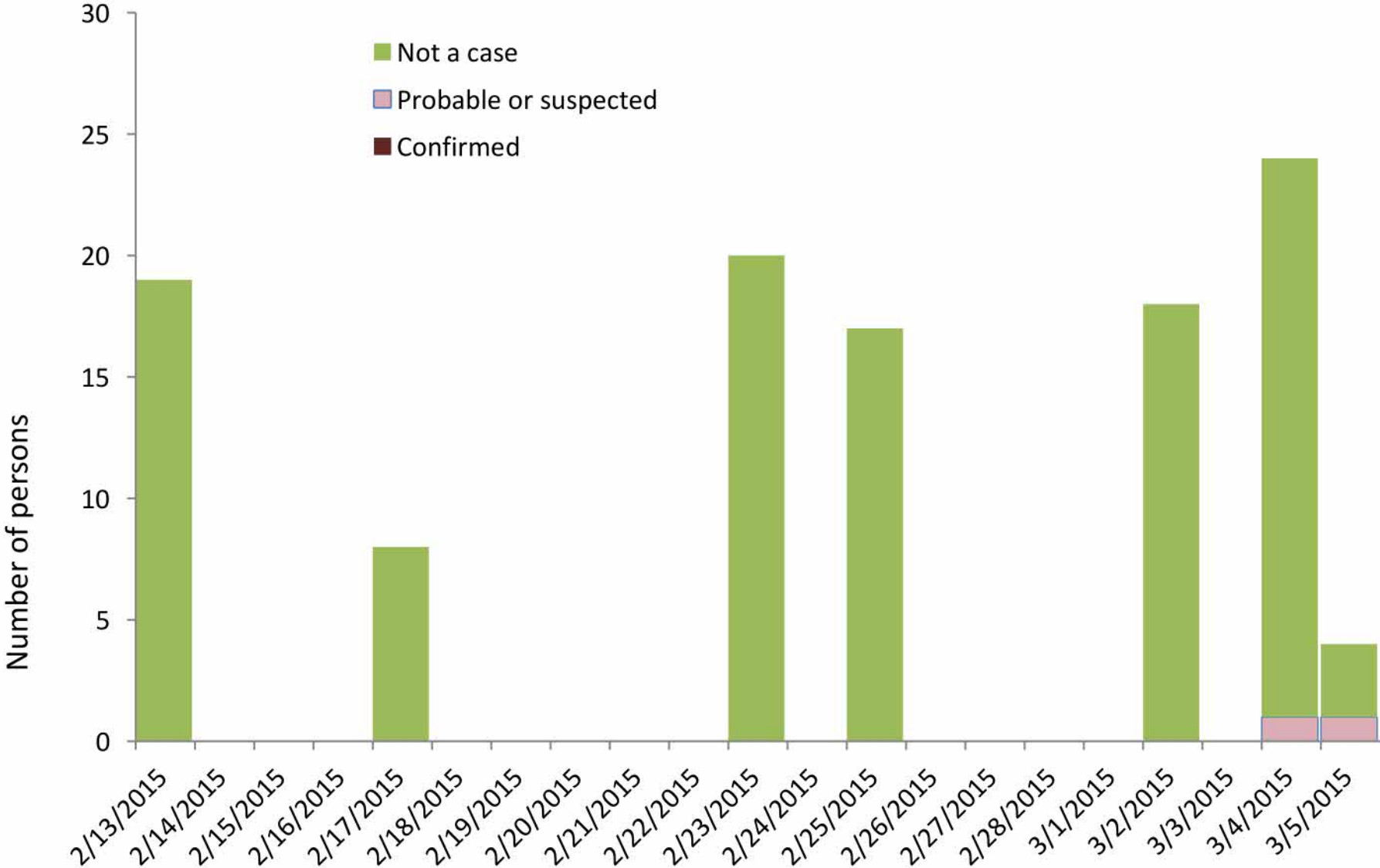


# **Bonthe District**

# Ebola Investigations by Case Status, MoHS VHF Data, Bonthé, April 13, 2014 – March 1, 2015

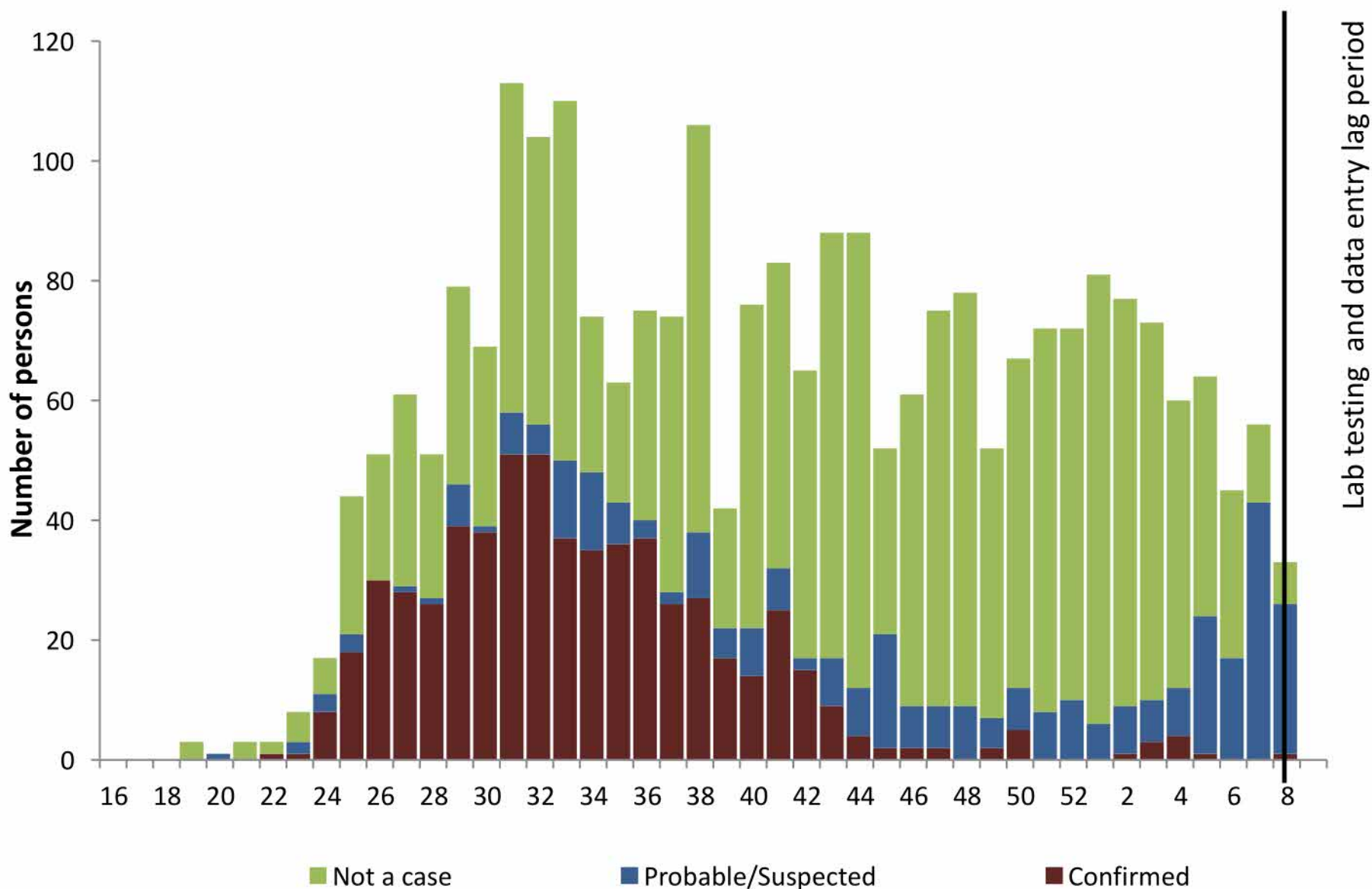


# MoHS-reported lab results by case definition and the date of the lab results report, Bonthe, February 13 – March 5, 2015

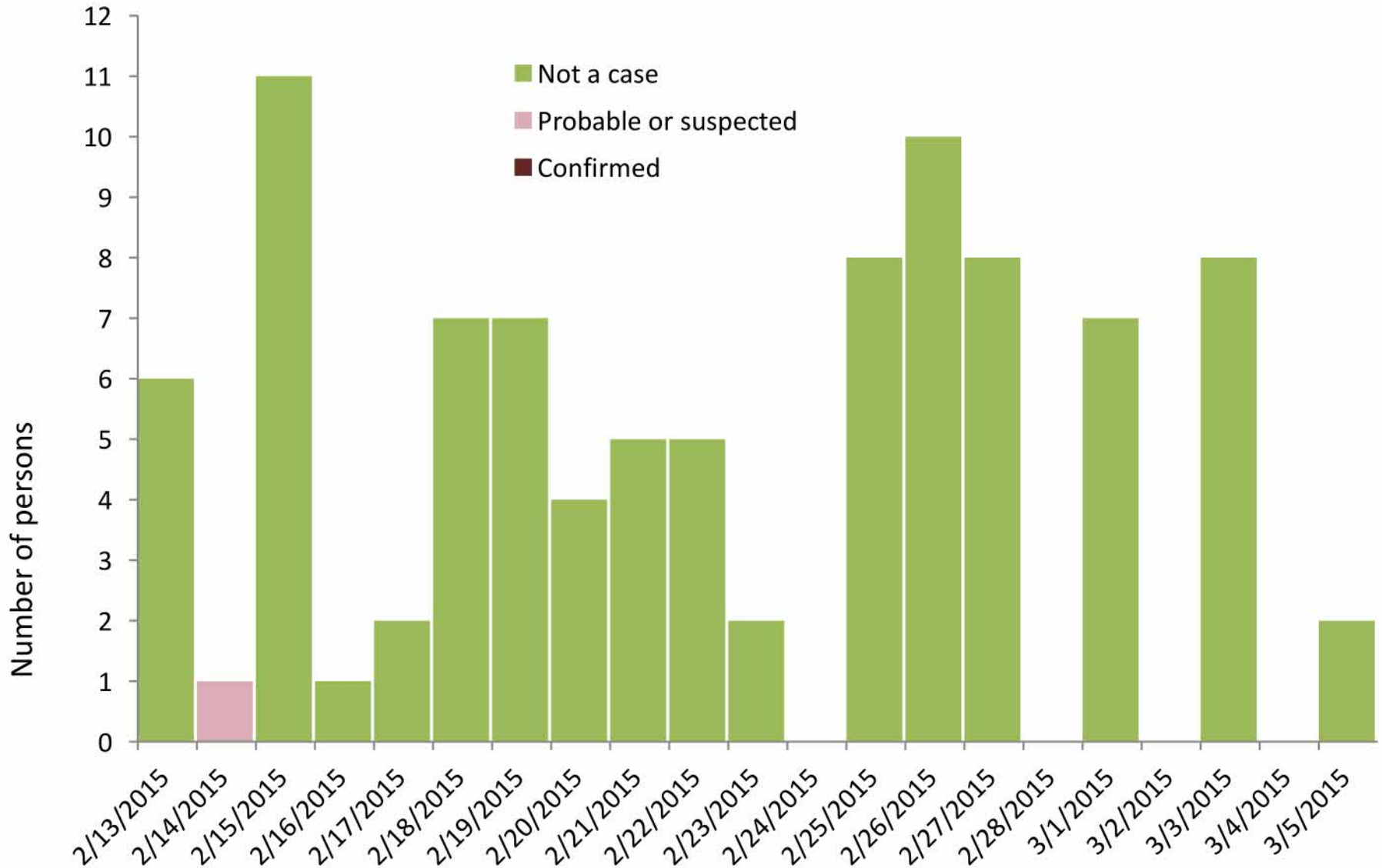


# **Kailahun District**

# Ebola Investigations by Case Status, MoHS VHF Data, Kailahun, April 13, 2014 – March 1, 2015



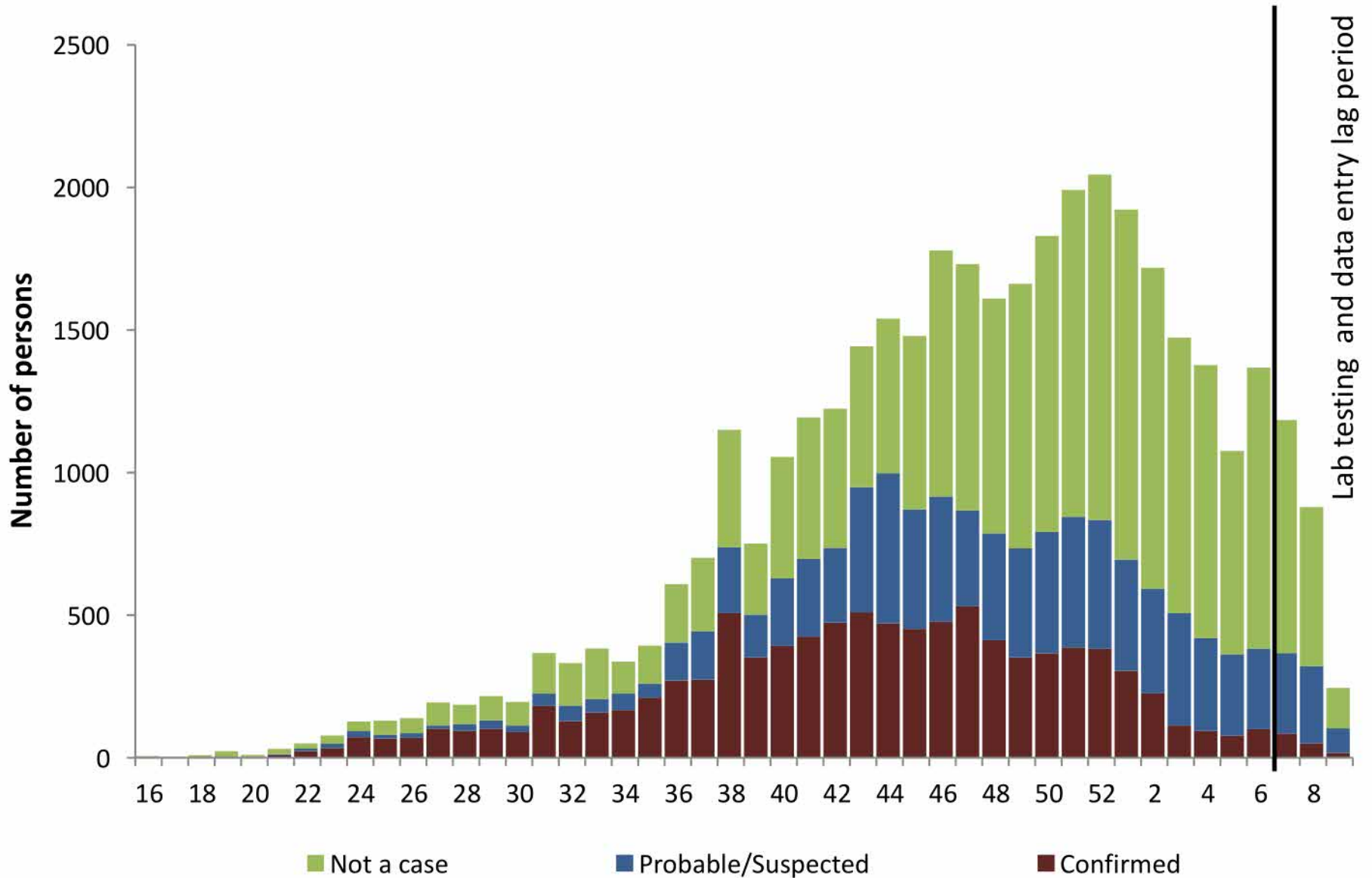
# MoHS-reported lab results by case definition and the date of the lab results report, Kailahun, February 13 – March 5, 2015



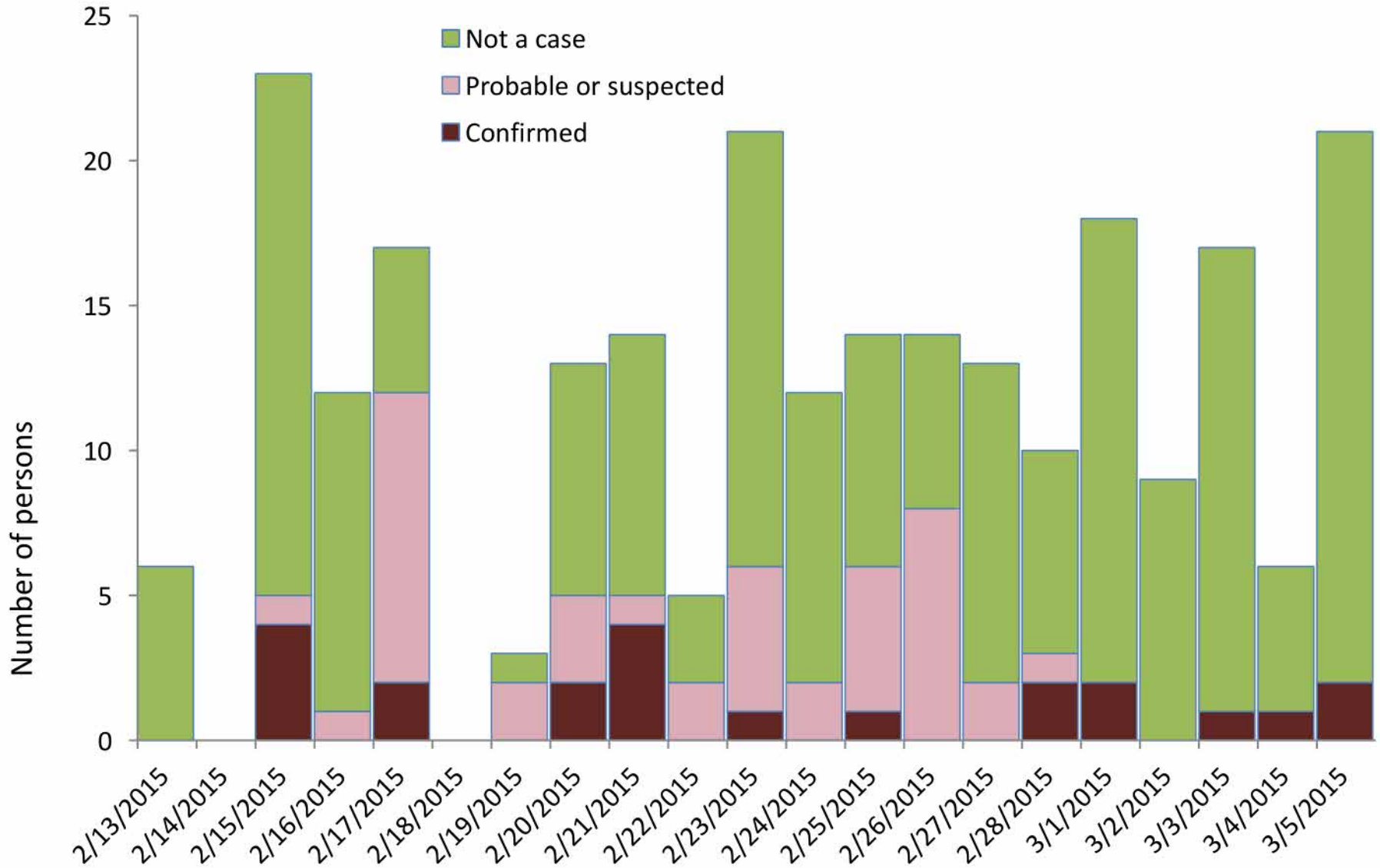
# **Kambia District**



# Ebola Investigations by Case Status, MoHS VHF Data, Kambia, April 13, 2014 – March 1, 2015

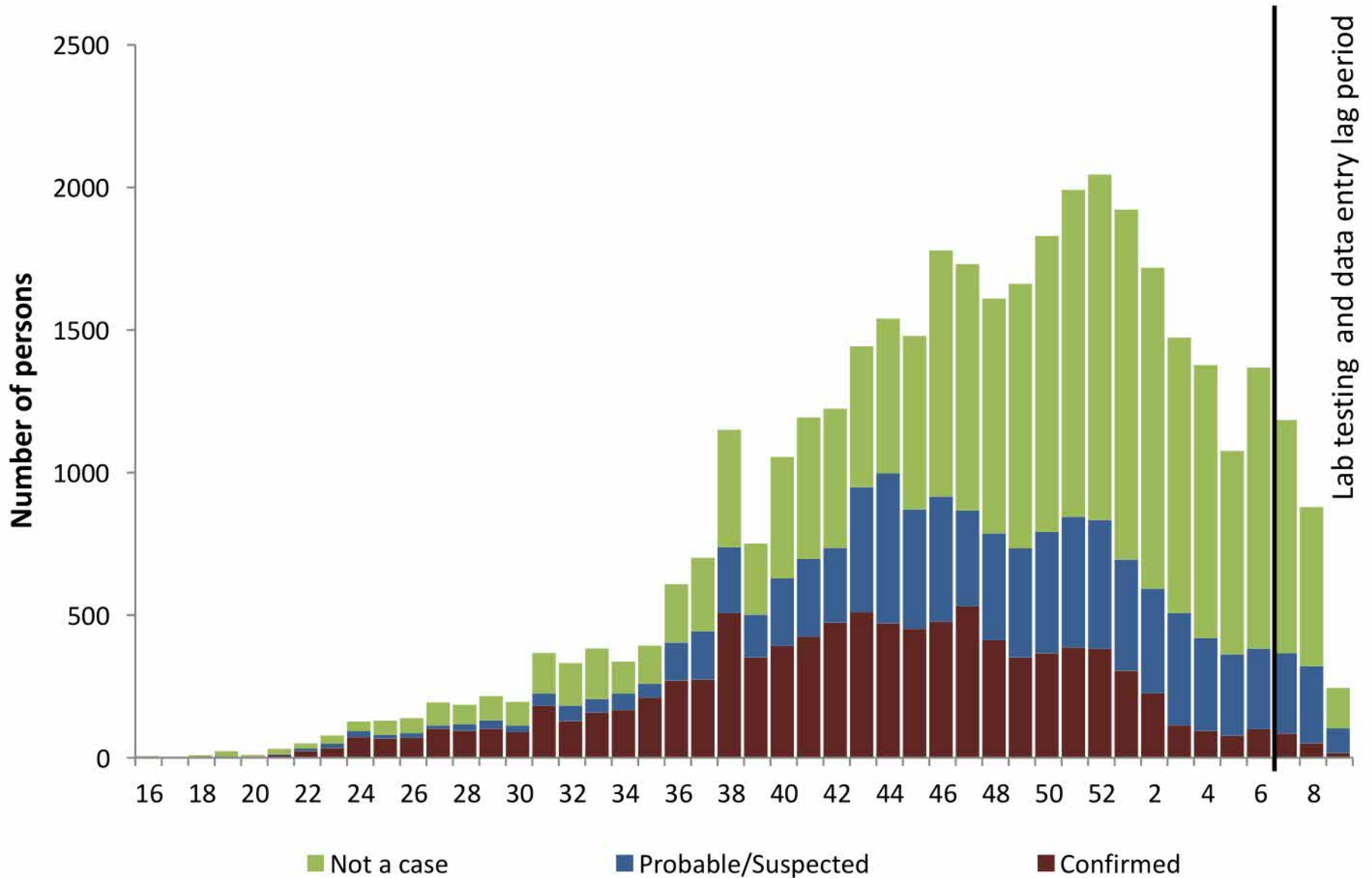


# MoHS-reported lab results by case definition and the date of the lab results report, Kambia, February 13 – March 5, 2015

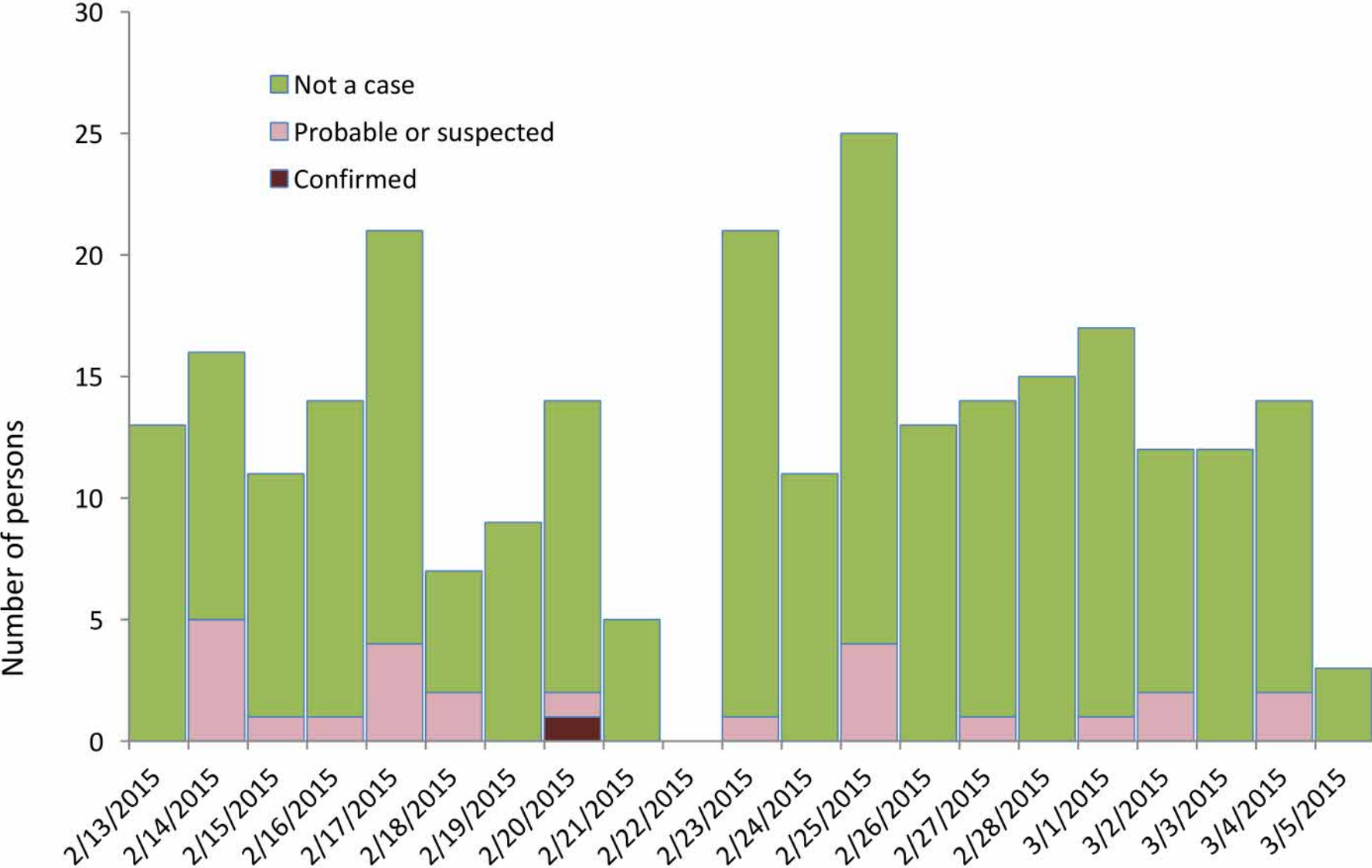


# **Kenema District**

# Ebola Investigations by Case Status, MoHS VHF Data, Kenema, April 13, 2014 – March 1, 2015

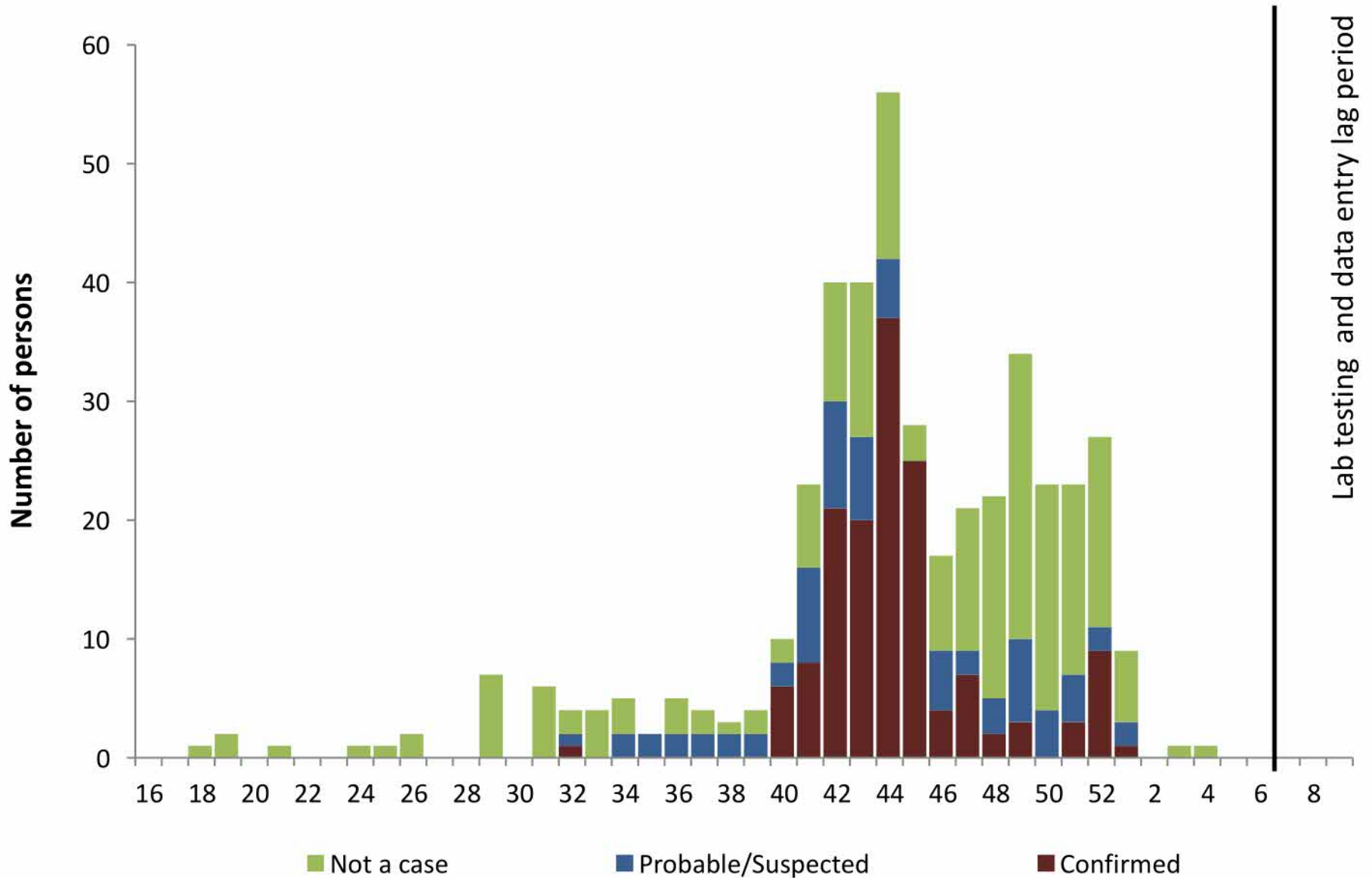


# MoHS-reported lab results by case definition and the date of the lab results report, Kenema, February 13 – March 5, 2015



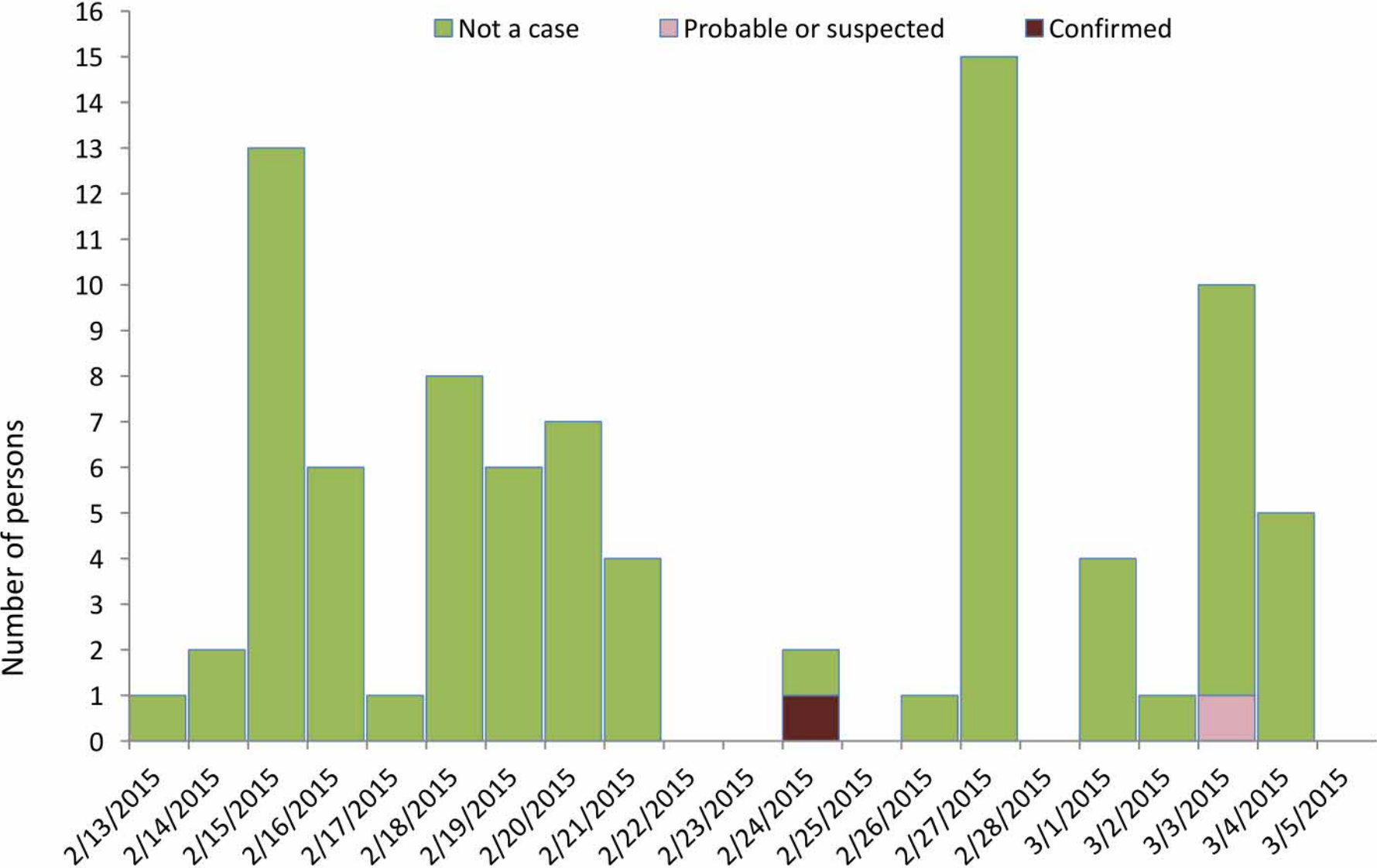
# **Koinadugu District**

# Ebola Investigations by Case Status, MoHS VHF Data, Koinadugu, April 13, 2014 – March 1, 2015



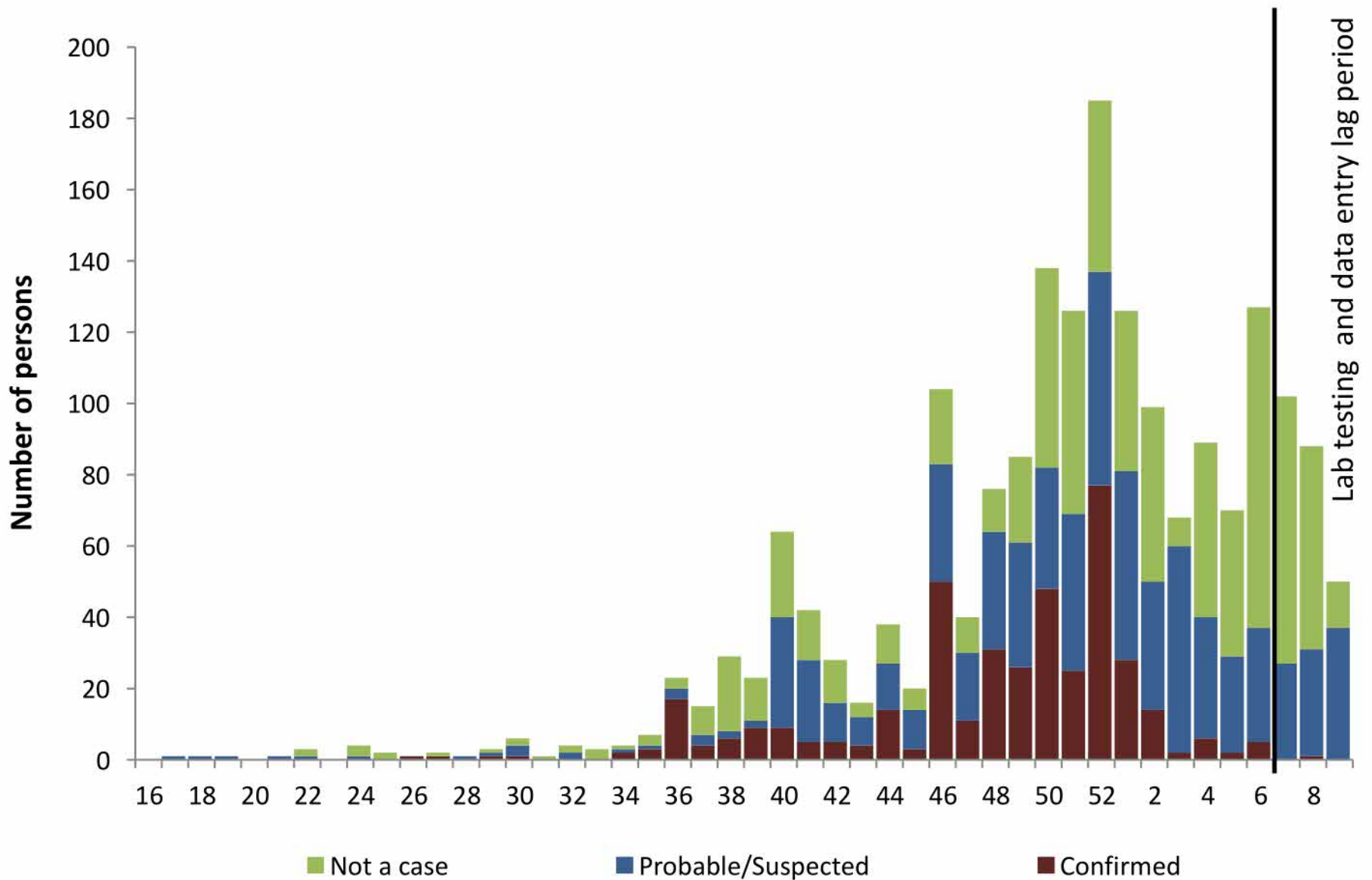


# MoHS-reported lab results by case definition and the date of the lab results report, Koinadugu, February 13- March 5, 2015

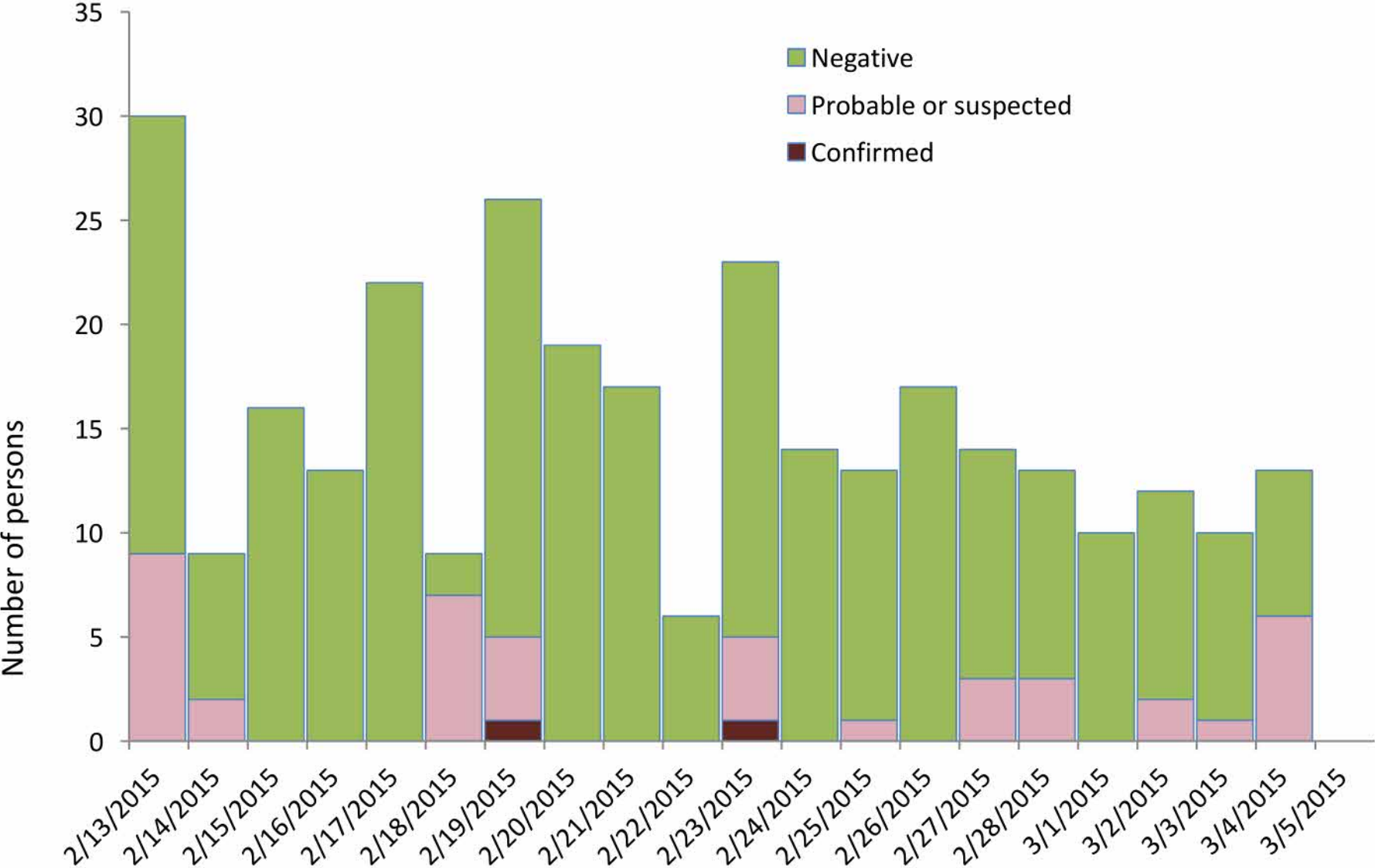


# **Kono District**

# Ebola Investigations by Case Status, MoHS VHF Data, Kono, April 13, 2014 – March 1, 2015

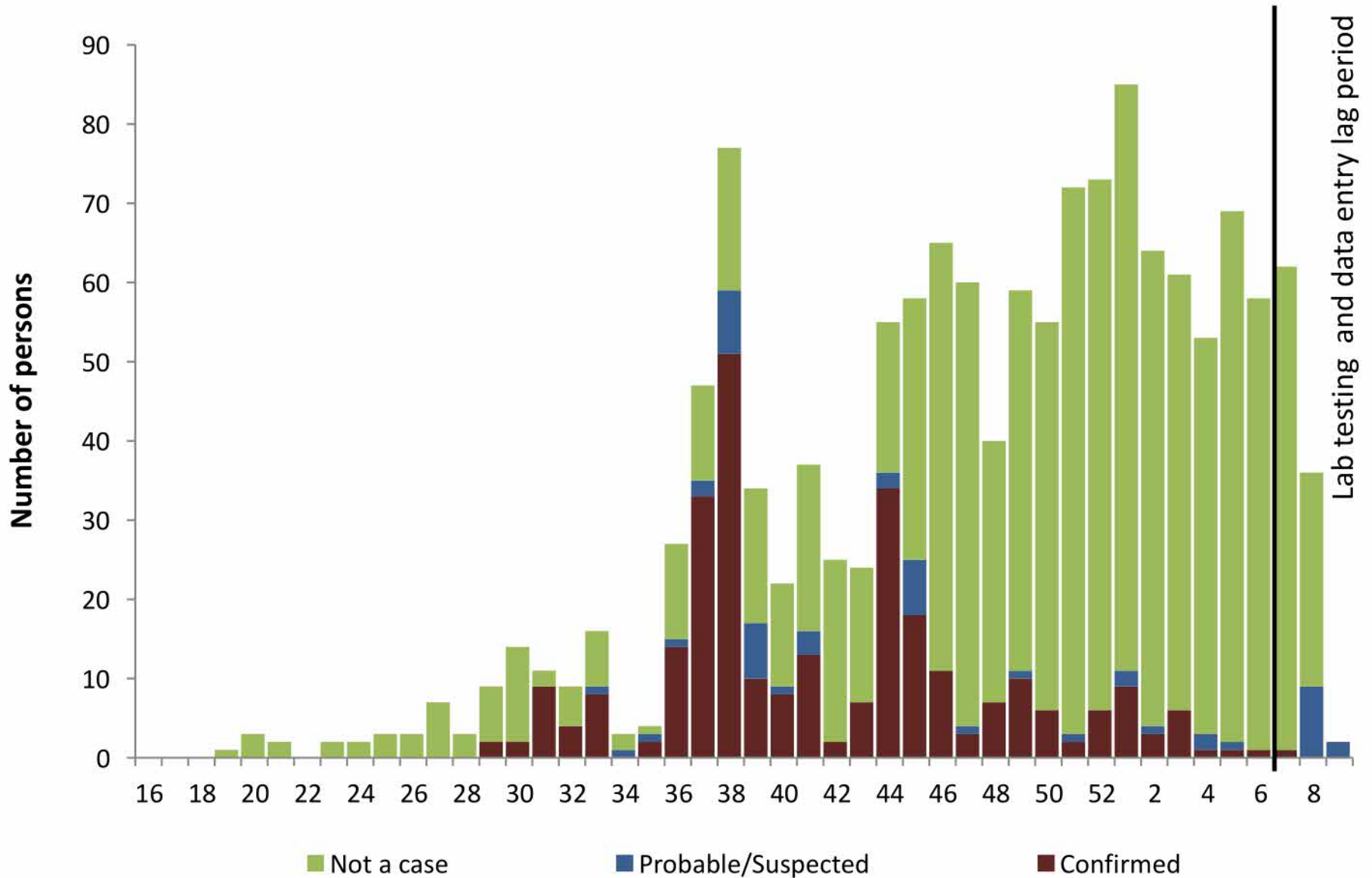


# MoHS-reported lab results by case definition and the date of the lab results report, Kono, February 13 – March 5, 2015

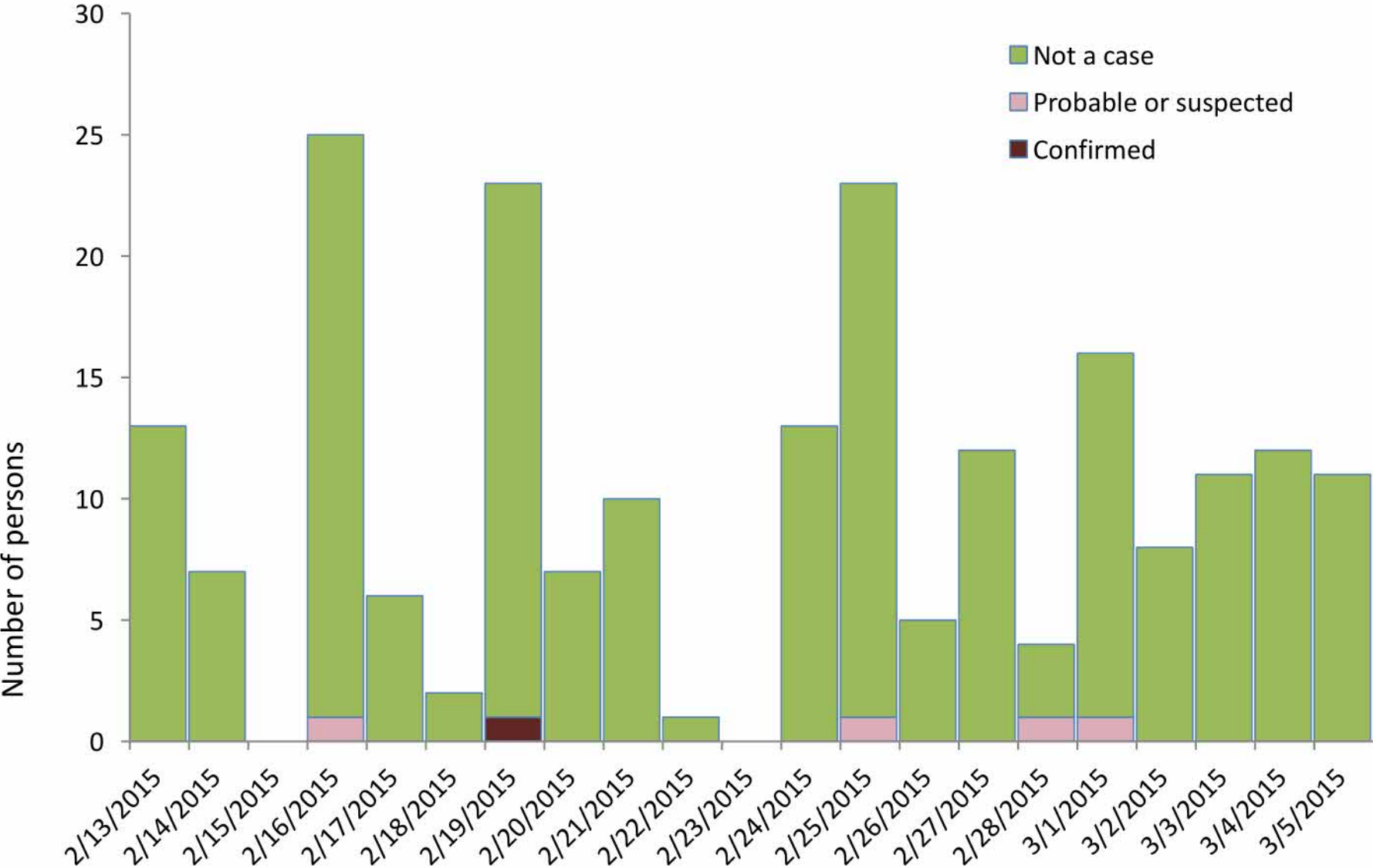


# **Moyamba District**

# Ebola Investigations by Case Status, MoHS VHF Data, Moyamba, April 13, 2014 – March 1, 2015



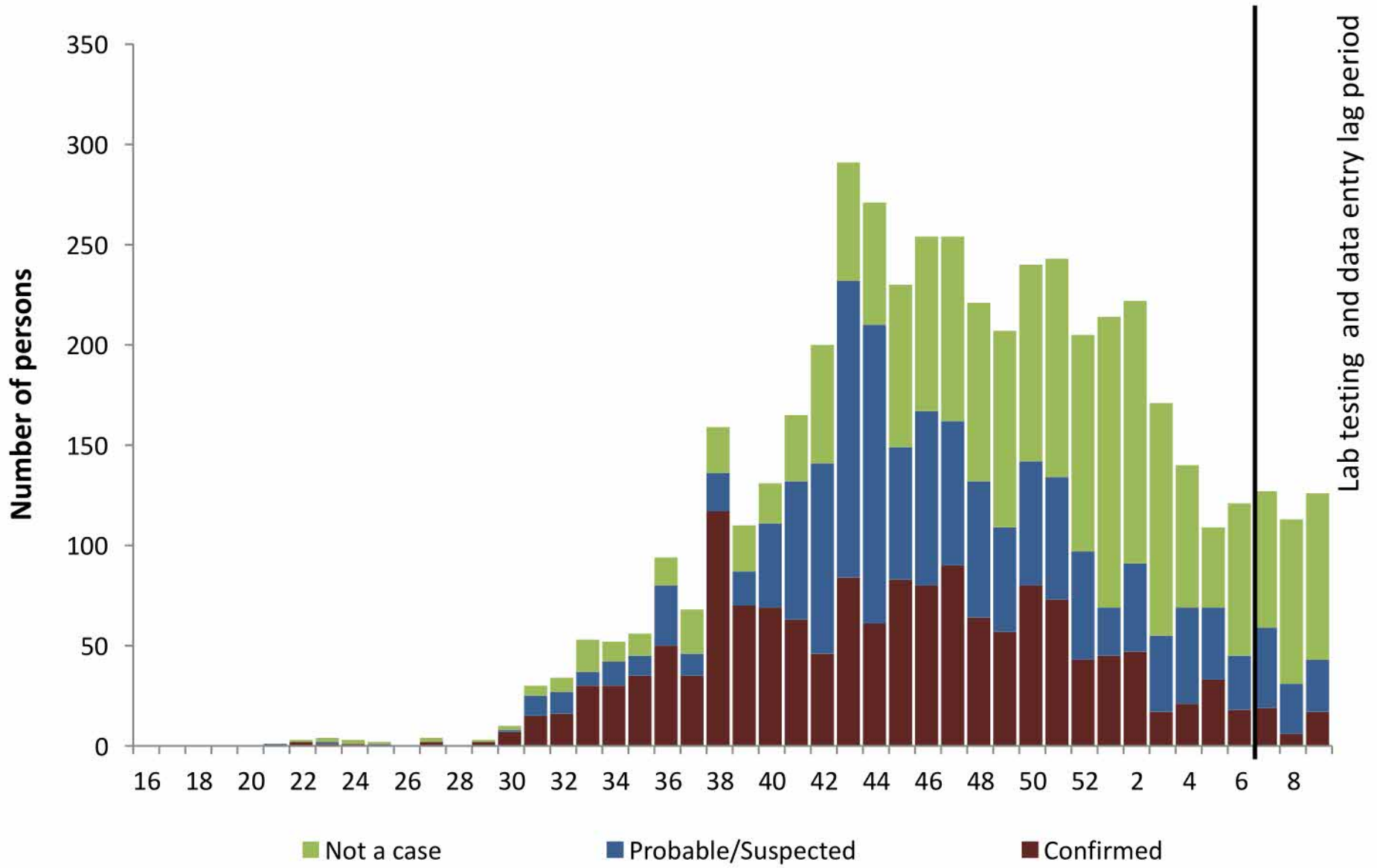
# MoHS-reported lab results by case definition and the date of the lab results report, Moyamba, February 13- March 5, 2015



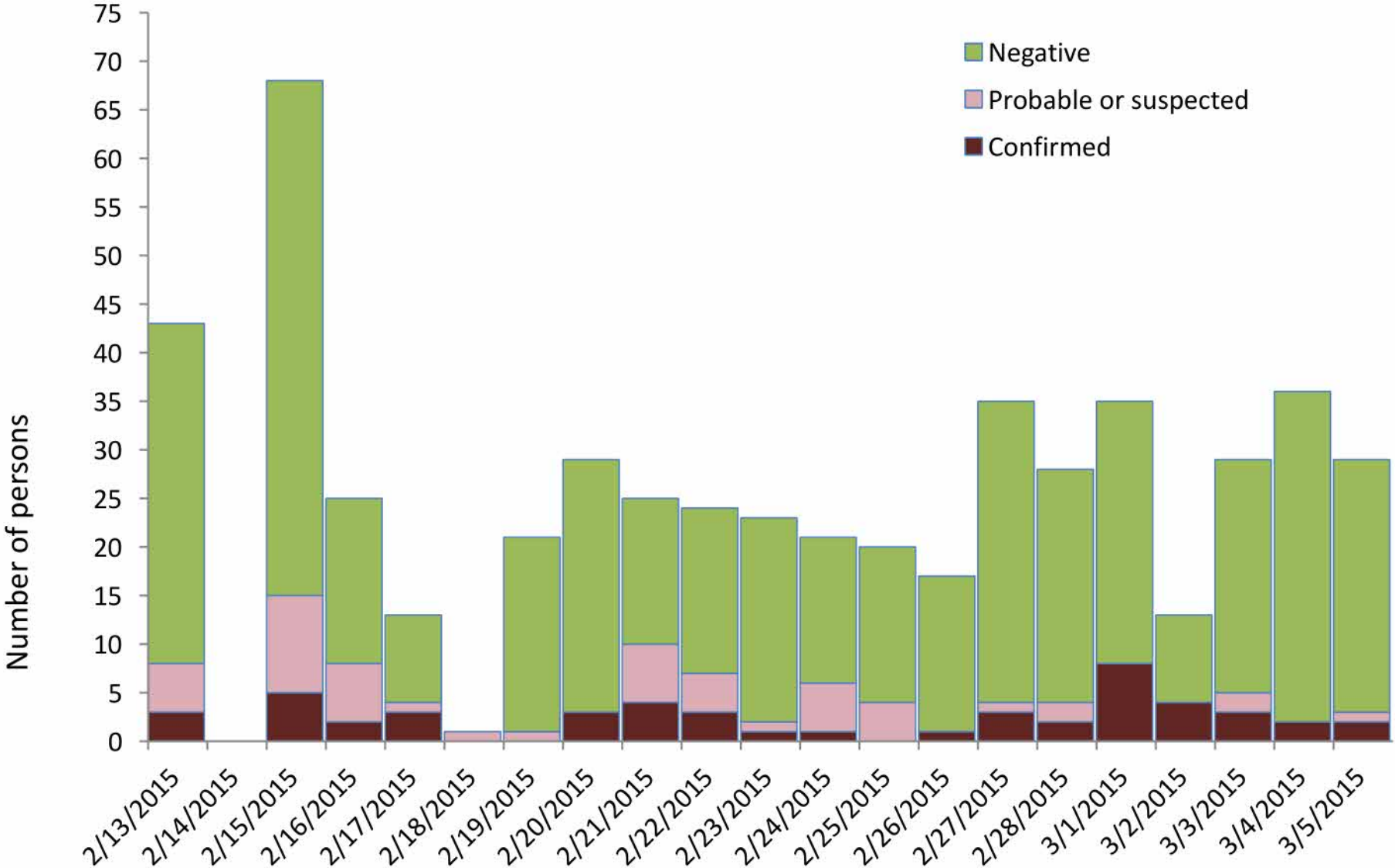


# **Port Loko District**

# Ebola Investigations by Case Status, MoHS VHF Data, Port Loko, April 13, 2014 – March 1, 2015

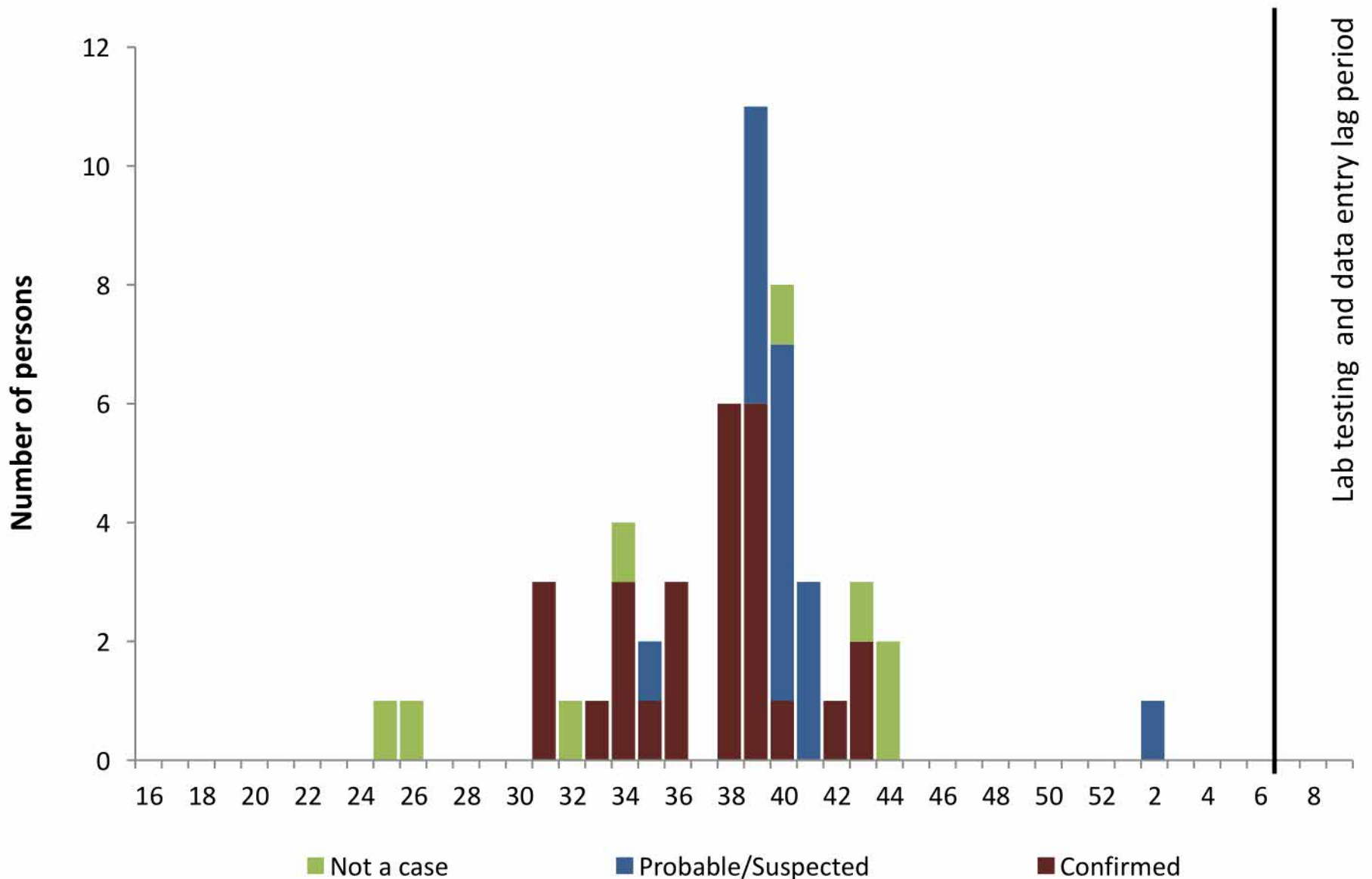


# MoHS-reported lab results by case definition and the date of the lab results report, Port Loko, February 13 – March 5, 2015



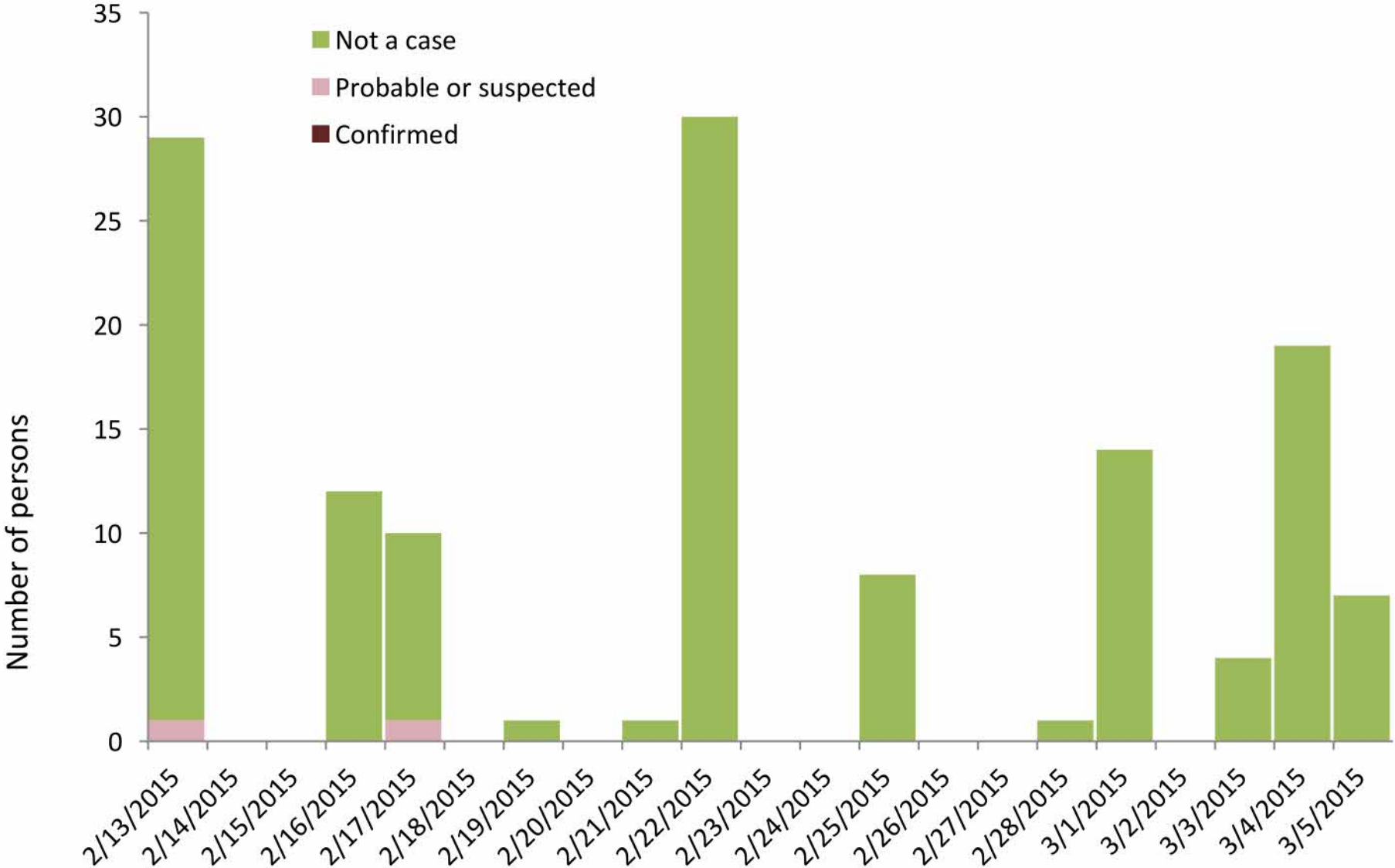
# **Pujehun District**

# Ebola Investigations by Case Status, MoHS VHF Data, Pujehun, April 13, 2014 – March 4, 2015



Lab testing and data entry lag period

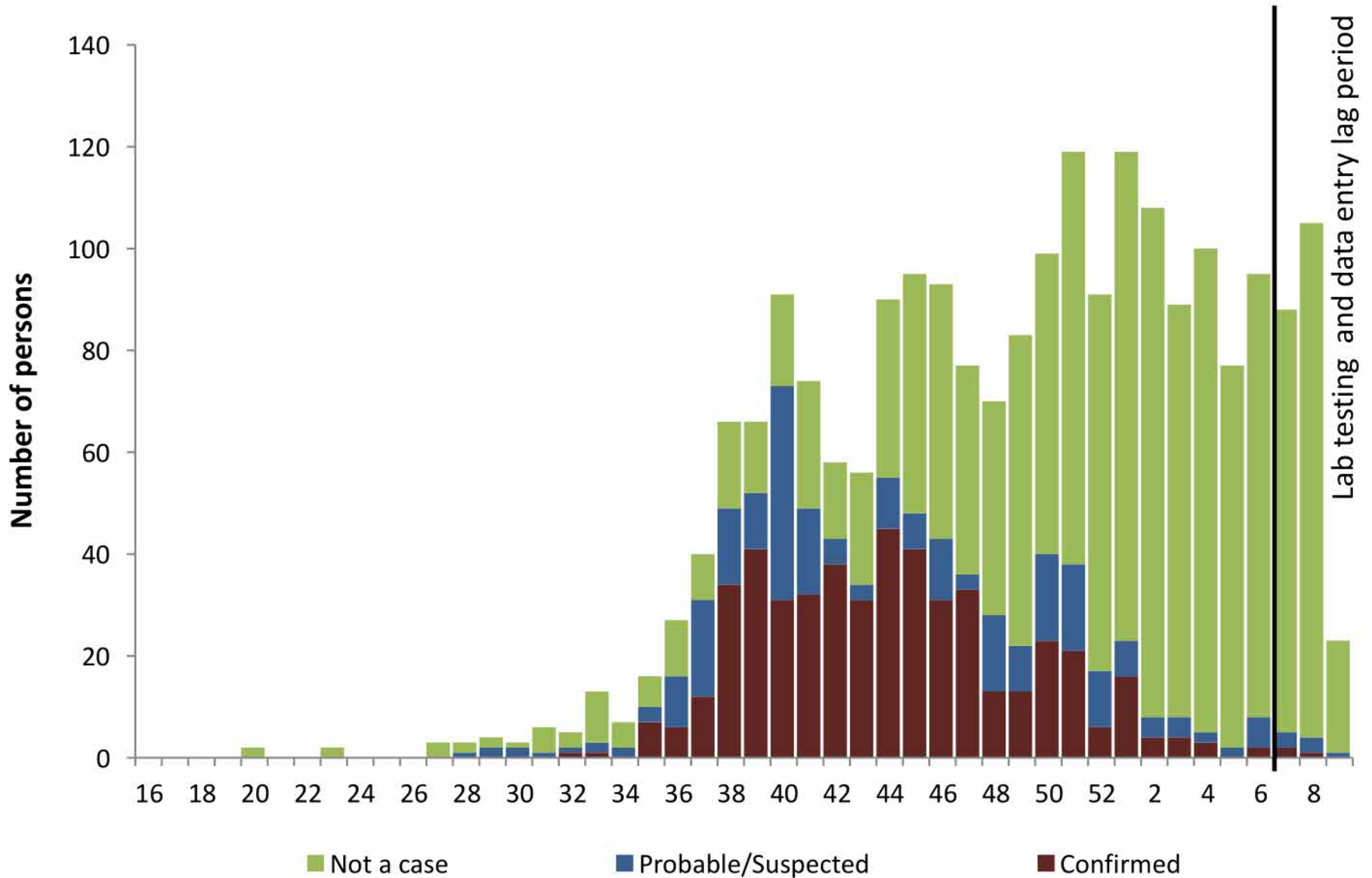
# MoHS-reported lab results by case definition and the date of the lab results report, Pujehun, February 13- March 5, 2015



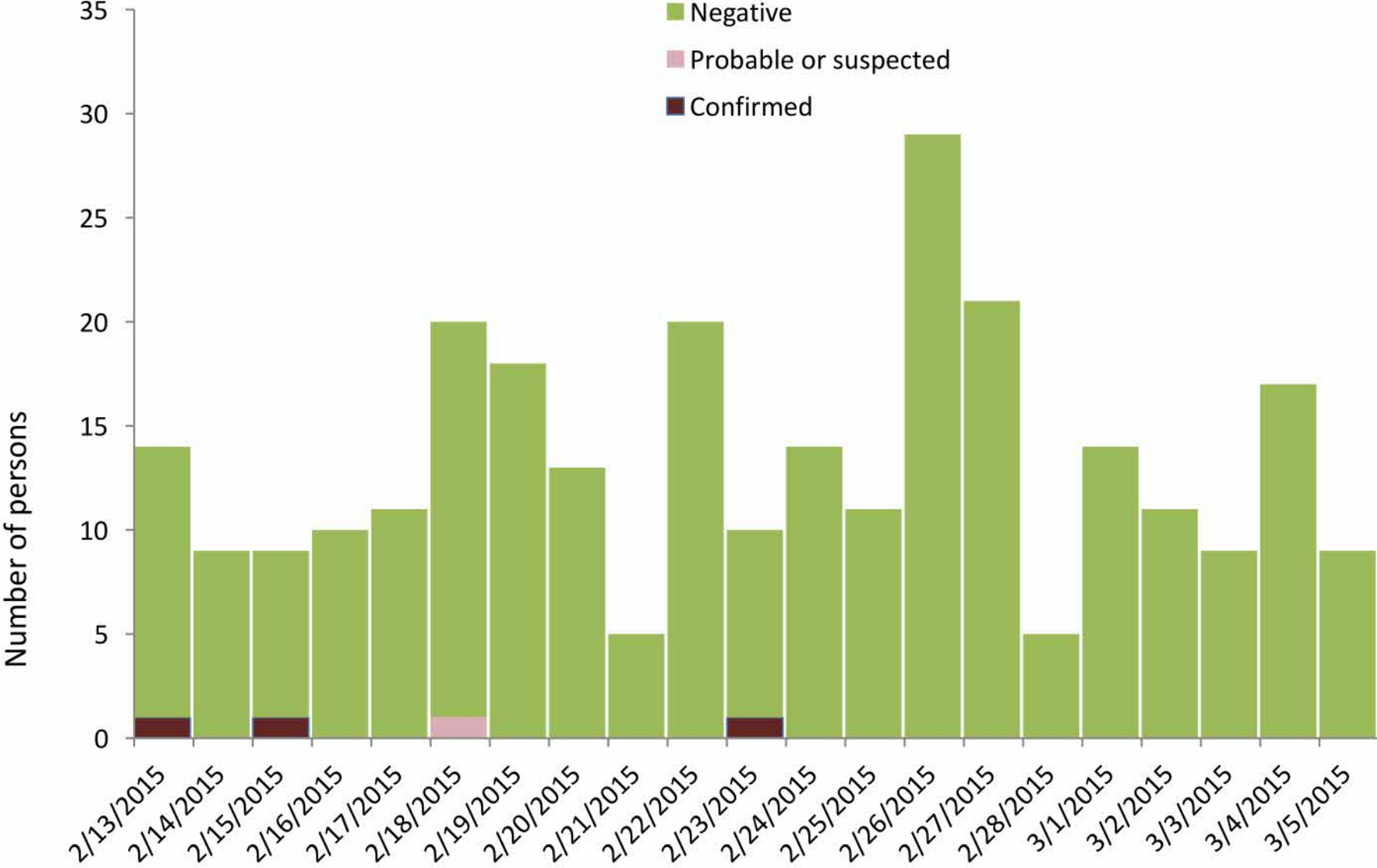
# **Tonkolili District**



# Ebola Investigations by Case Status, MoHS VHF Data, Tonkolili, April 13, 2014 – March 1, 2015

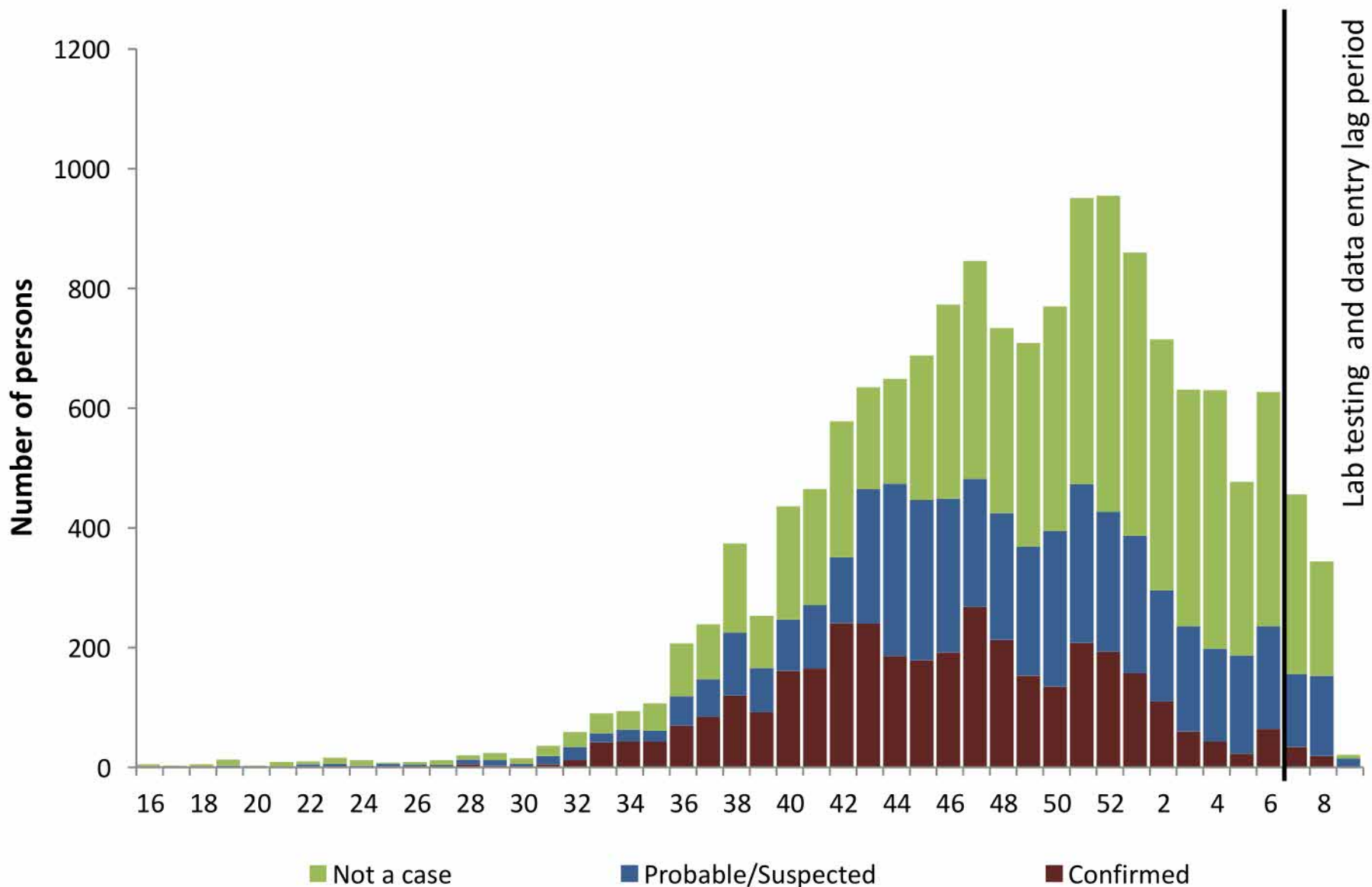


# MoHS-reported lab results by case definition and the date of the lab results report, Tonkolili, February 13- March 5, 2015

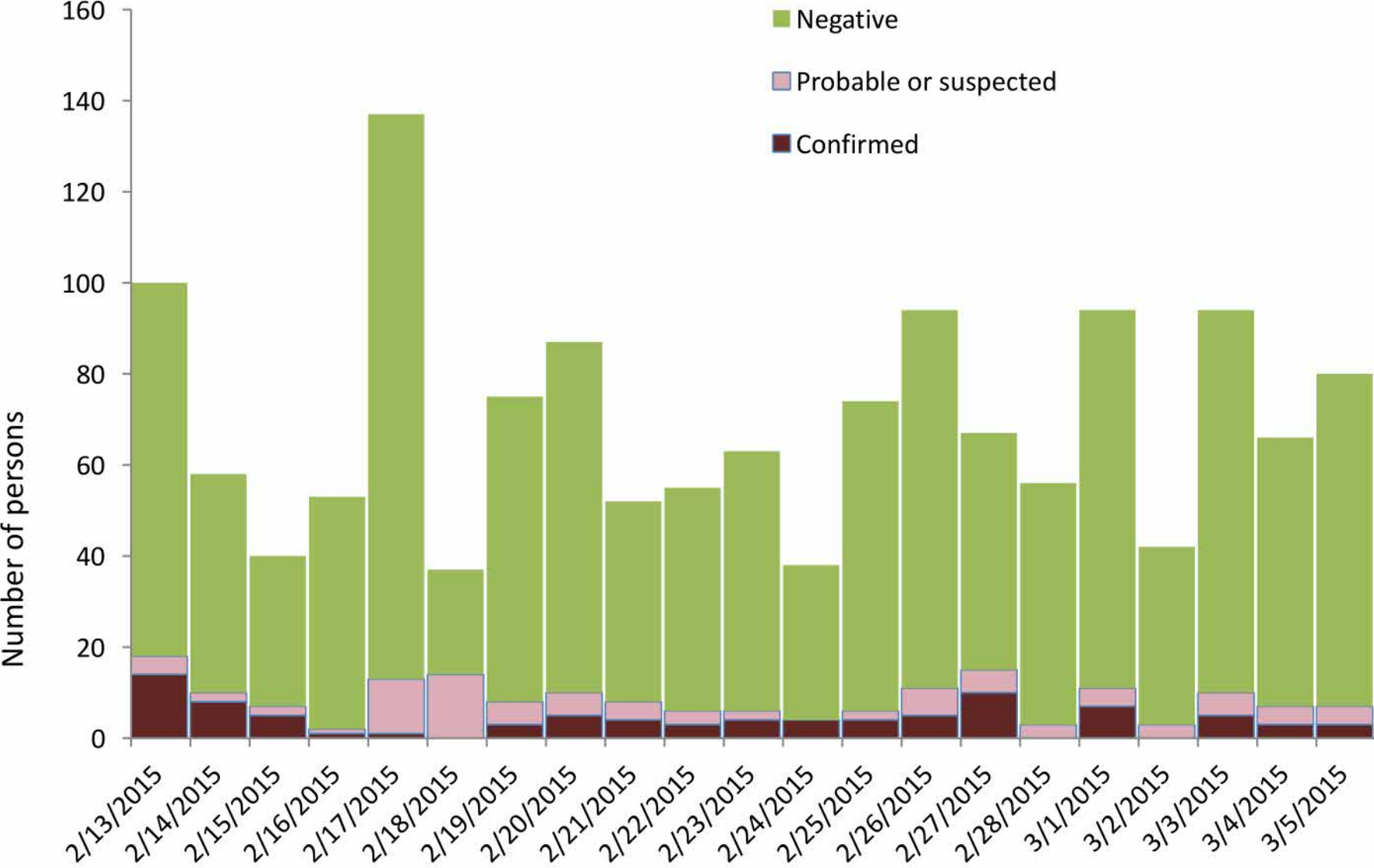


# **Western District**

# Ebola Investigations by Case Status, MoHS VHF Data, Western Area, April 13, 2014 – March 1, 2015



# MoHS-reported lab results by case definition and the date of the lab results report, Western, February 13- March 5, 2015



# **WAERC UPDATE**

2 March 2015

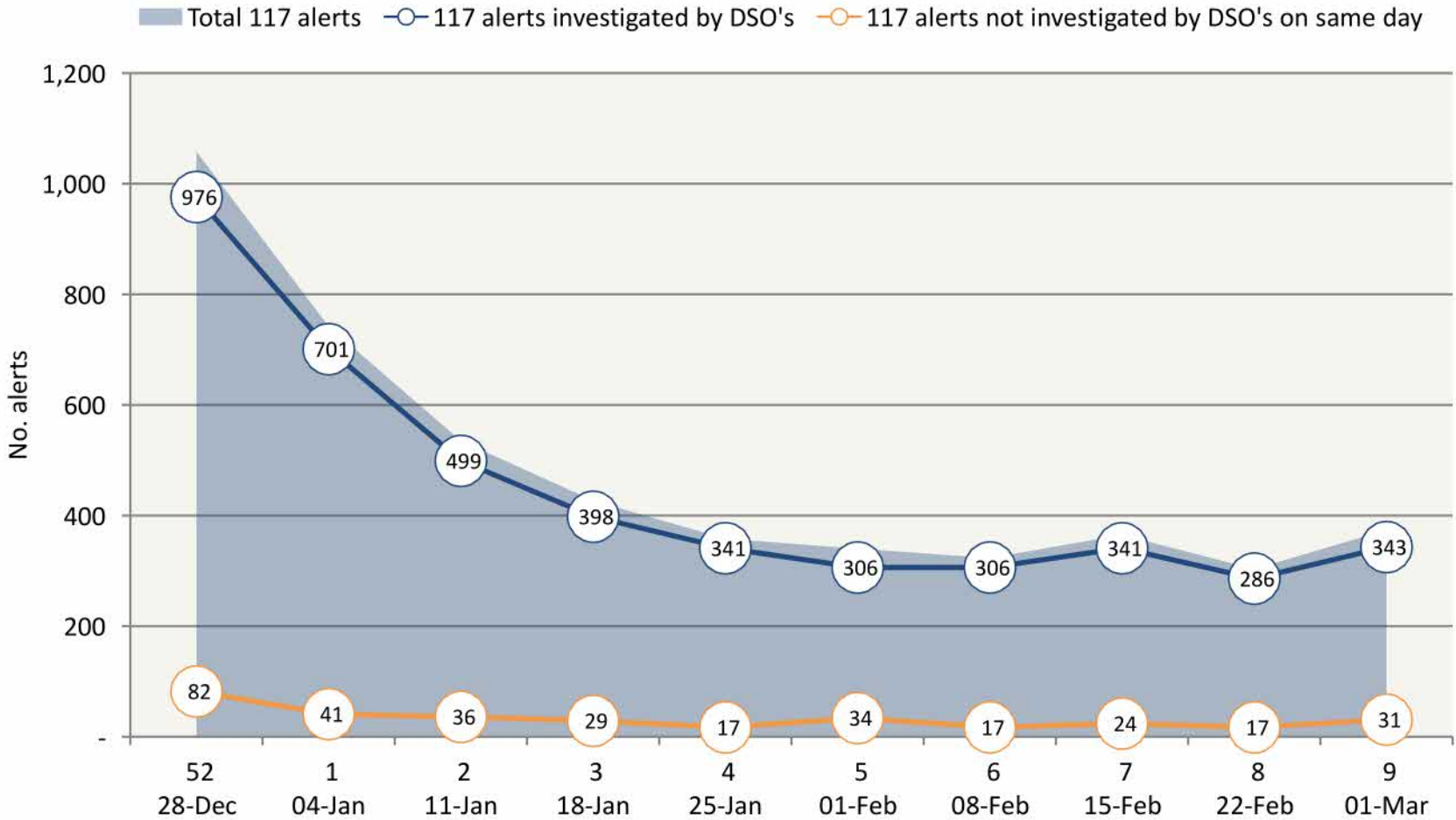
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# Technical updates

- Slide 4A changed to stack bar graph

# 1A. Surveillance

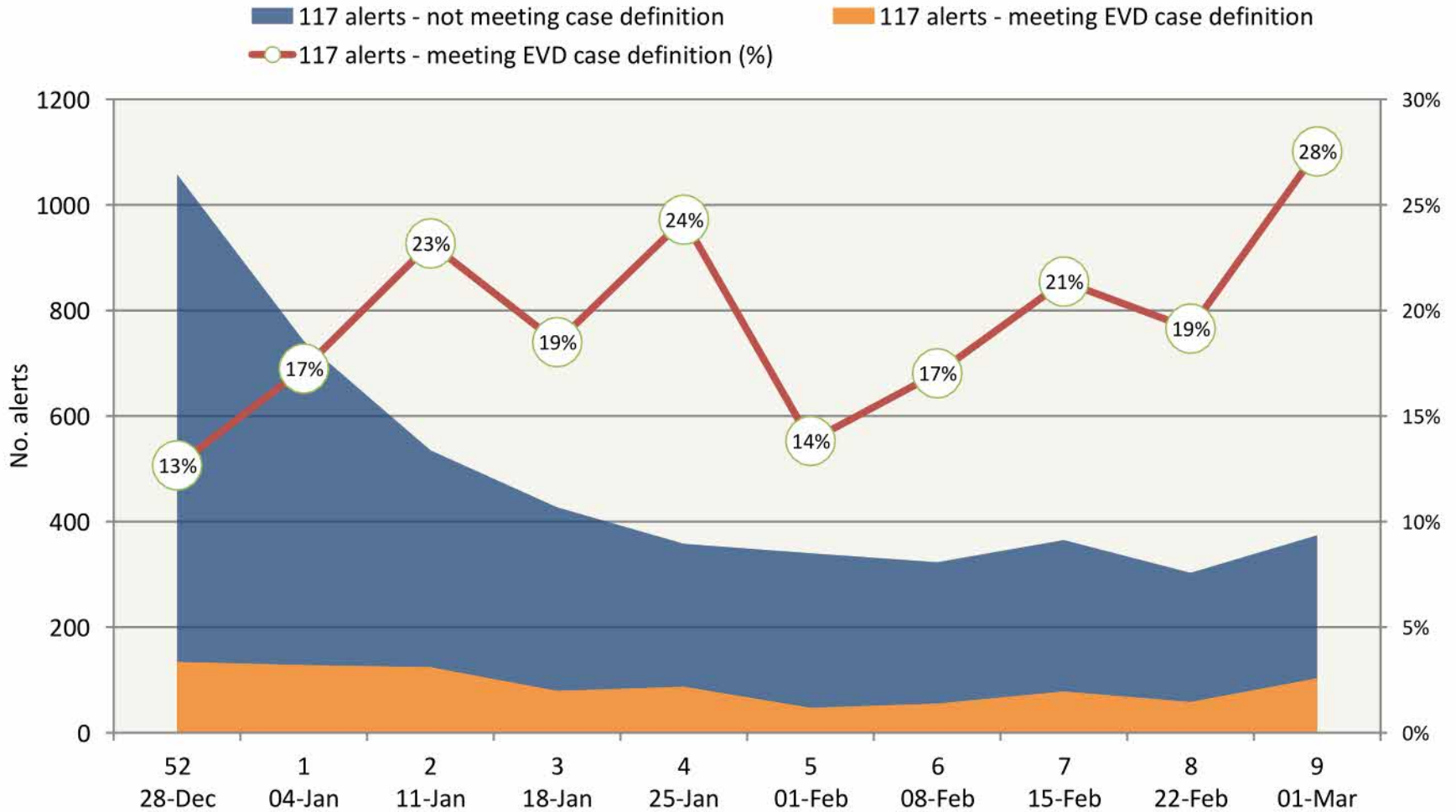
Total alerts and response by DSO within 24 hours





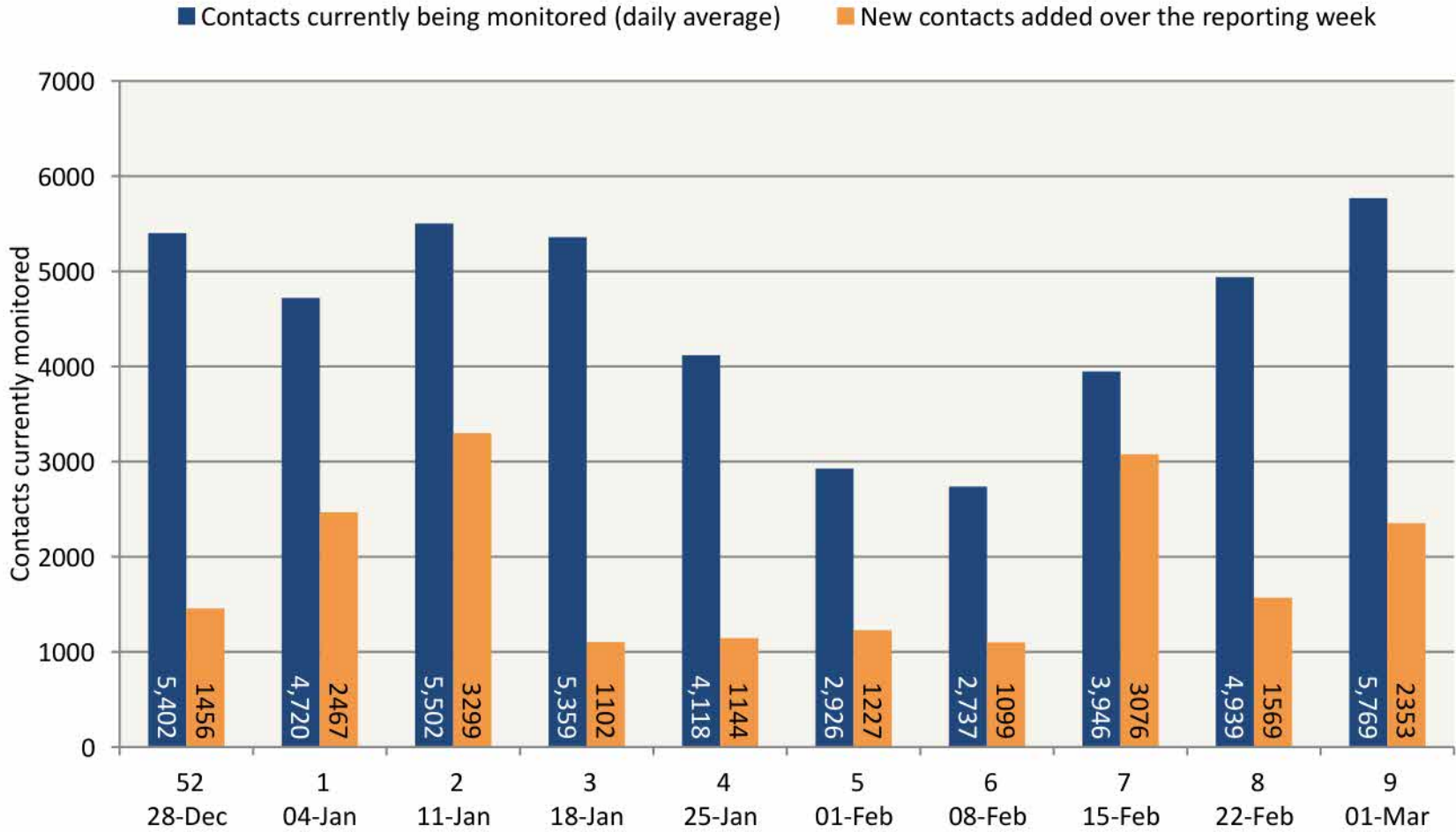
## 2A. Surveillance

Total alerts and those meeting EVD case definition since 22 DEC 14



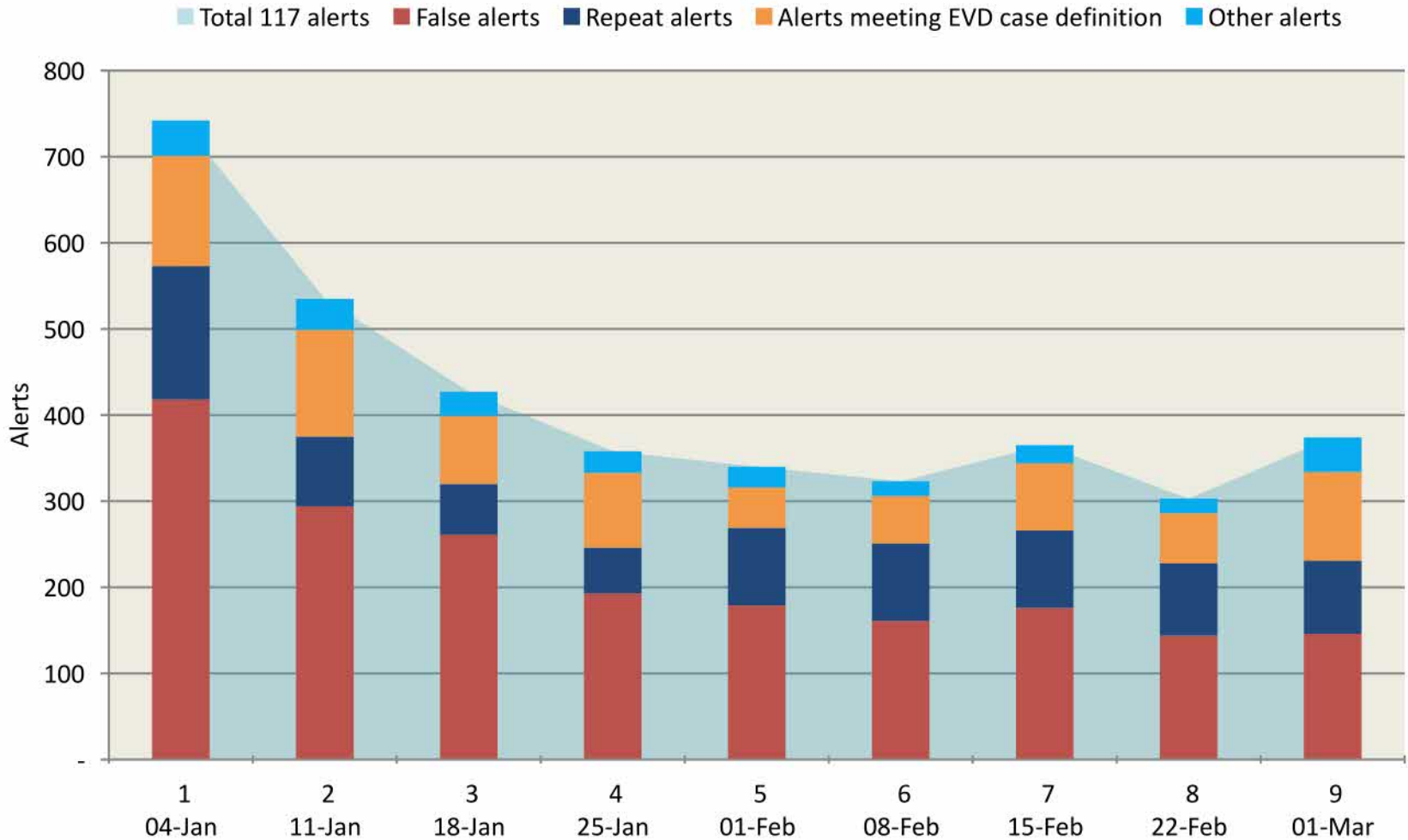
### 3A. Surveillance

New and existing contacts being monitored



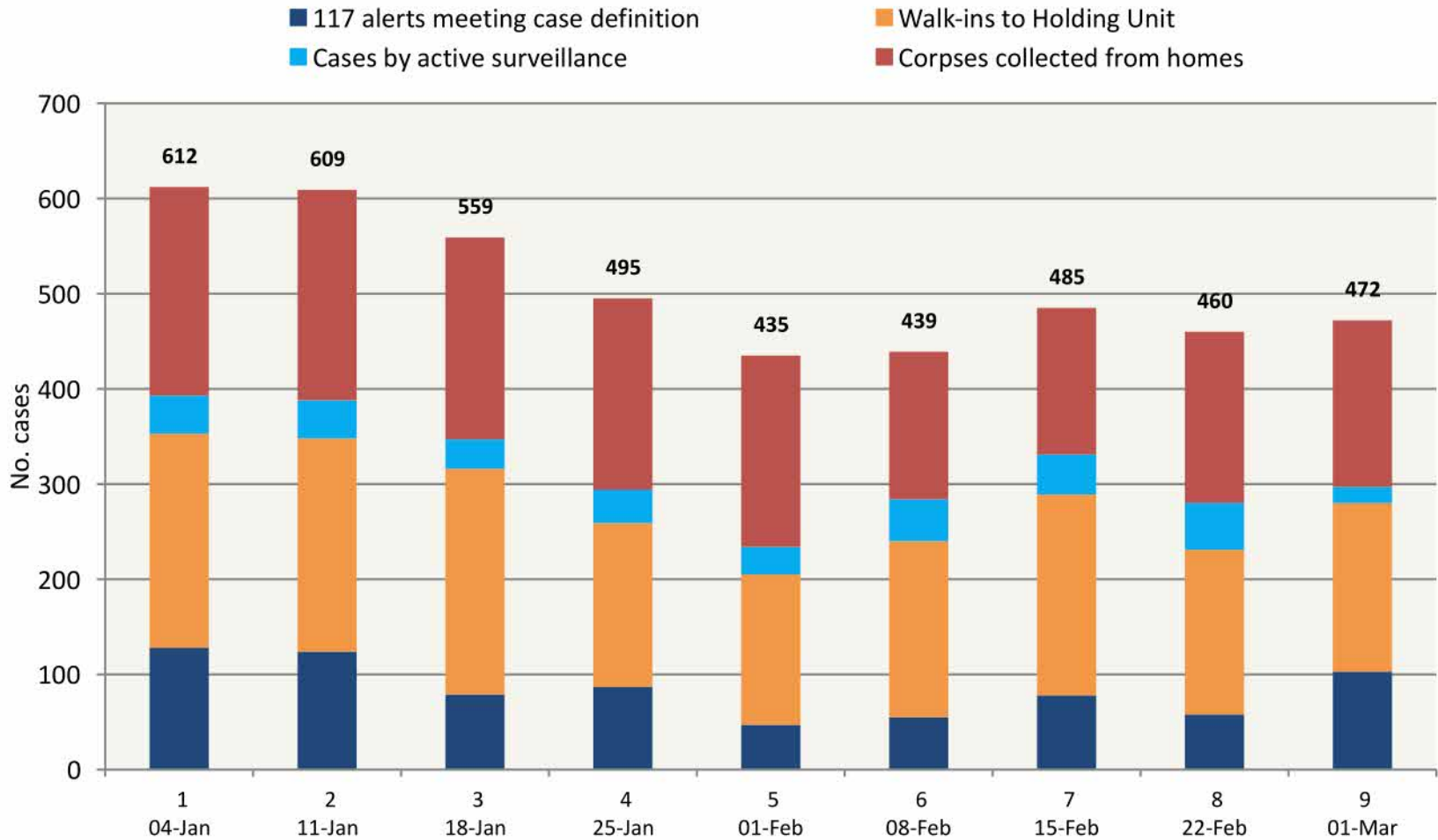
# 4A. Surveillance

## Composition of 117 alerts



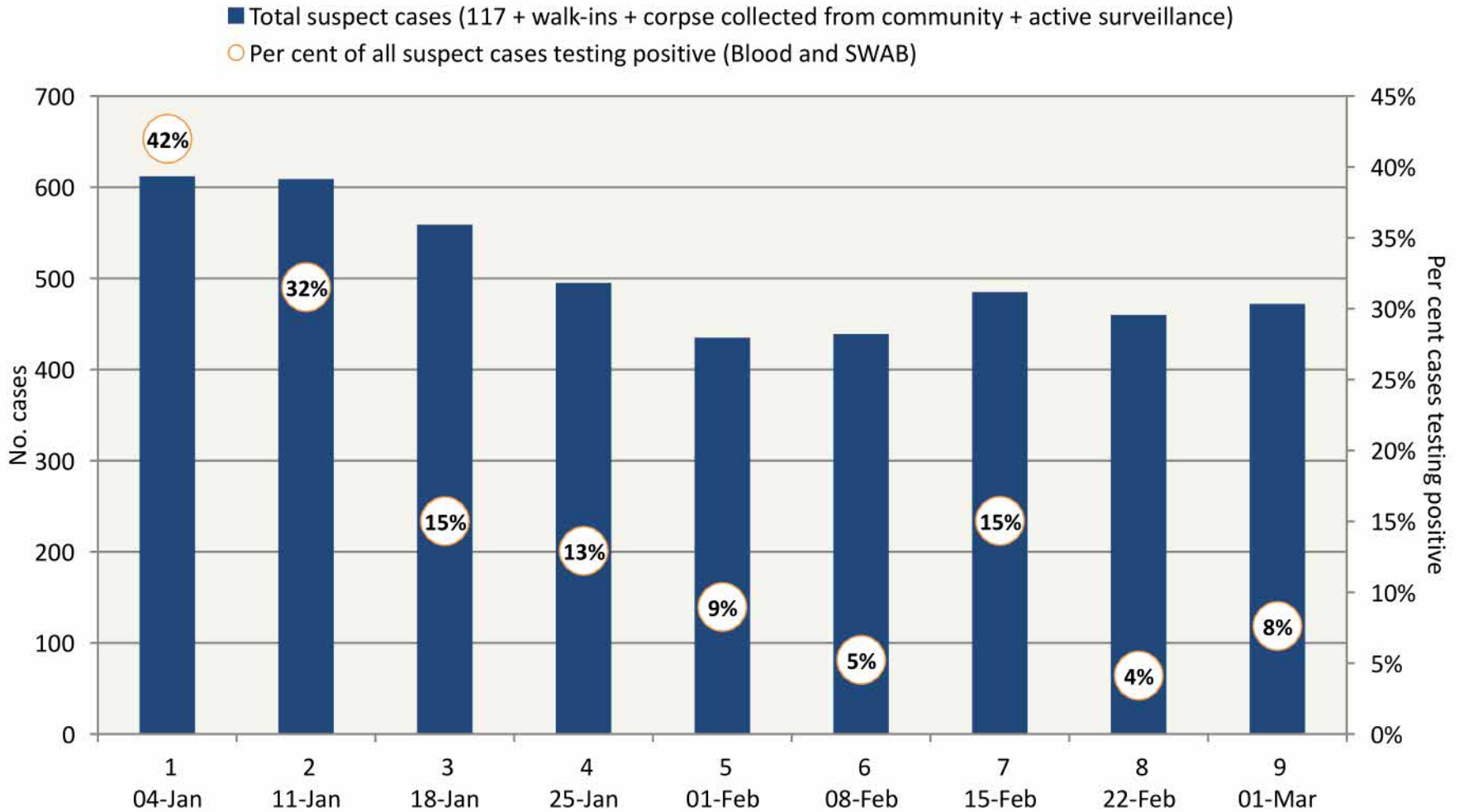
## 5A. Surveillance

Total suspect cases



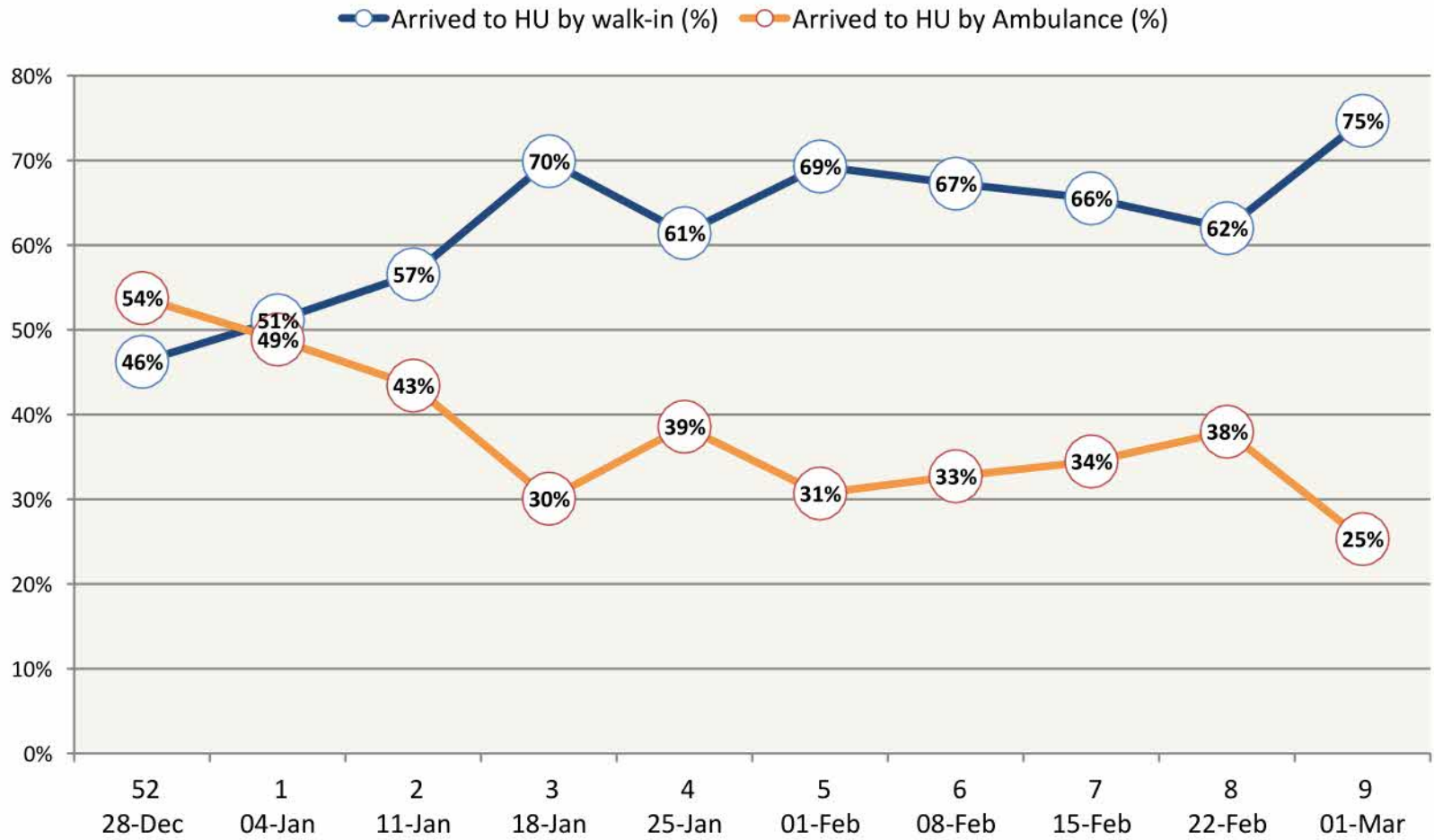
## 6A. Surveillance

### Total suspect cases



# 7A. Holding Centres

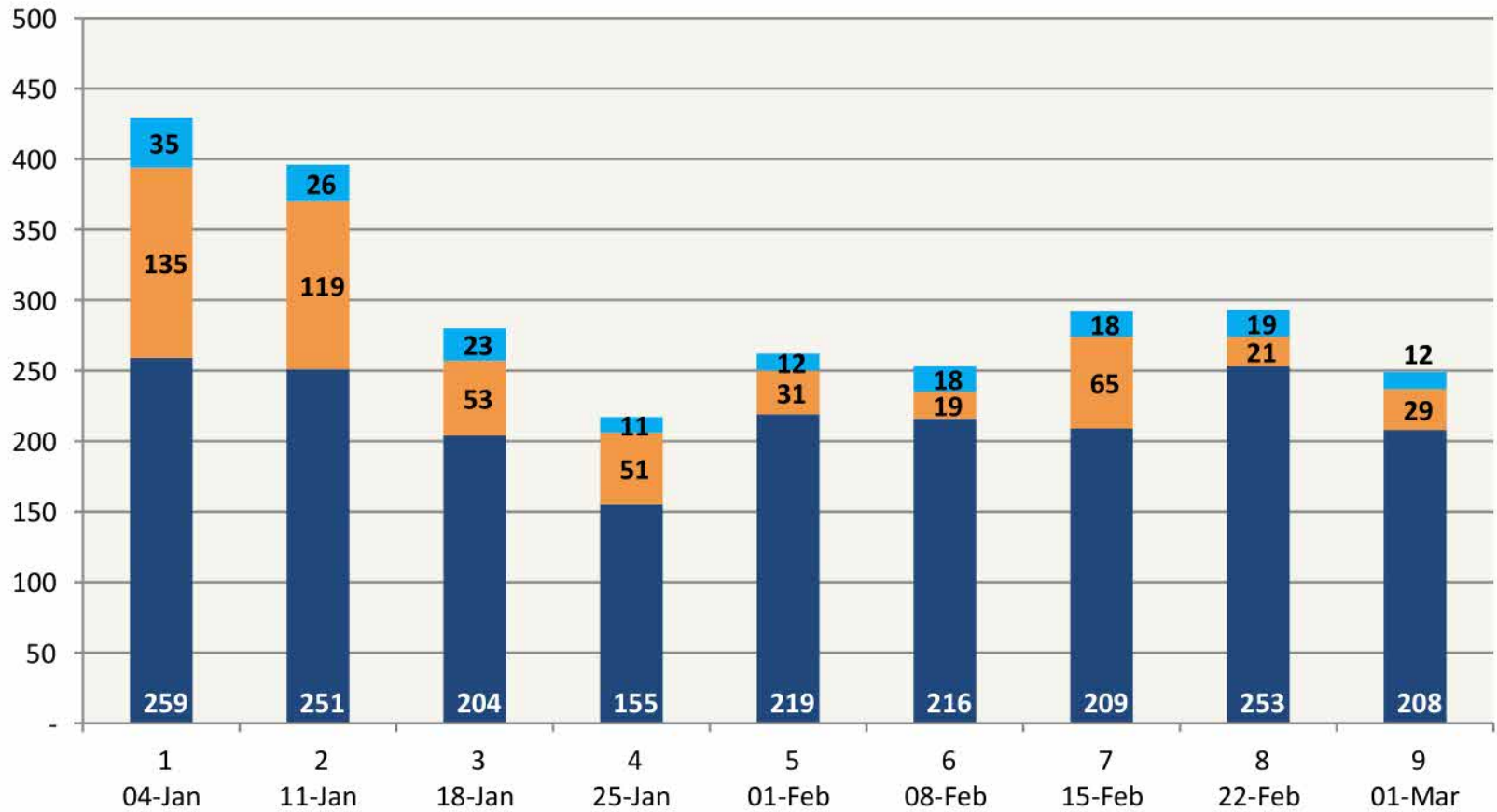
Mode of arrival



# 8A. Holding Centre

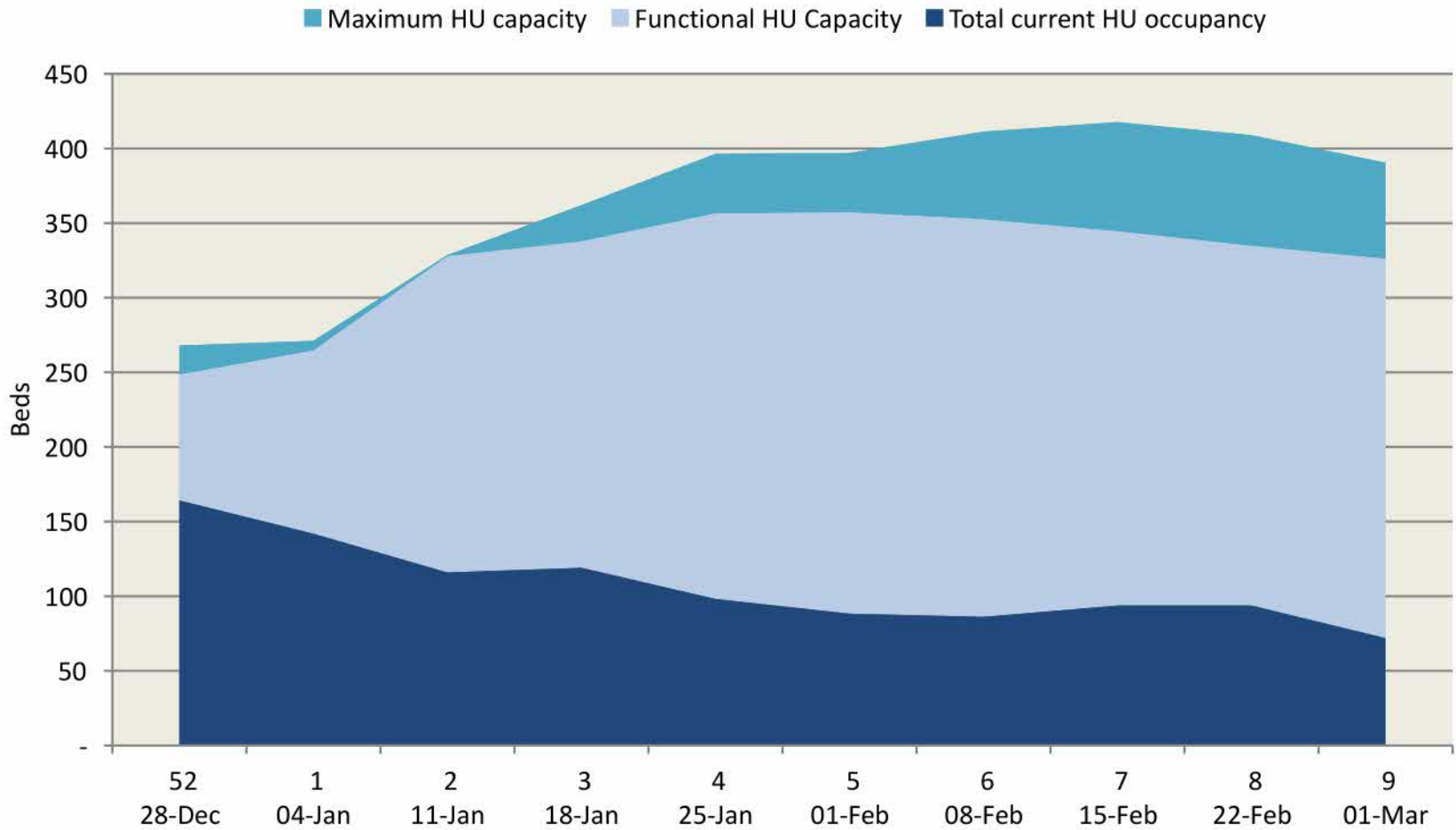
Mode of discharge

■ Negative discharge ■ Positive cases transferred to ETU ■ Death



# 9A. Holding Units (HU)

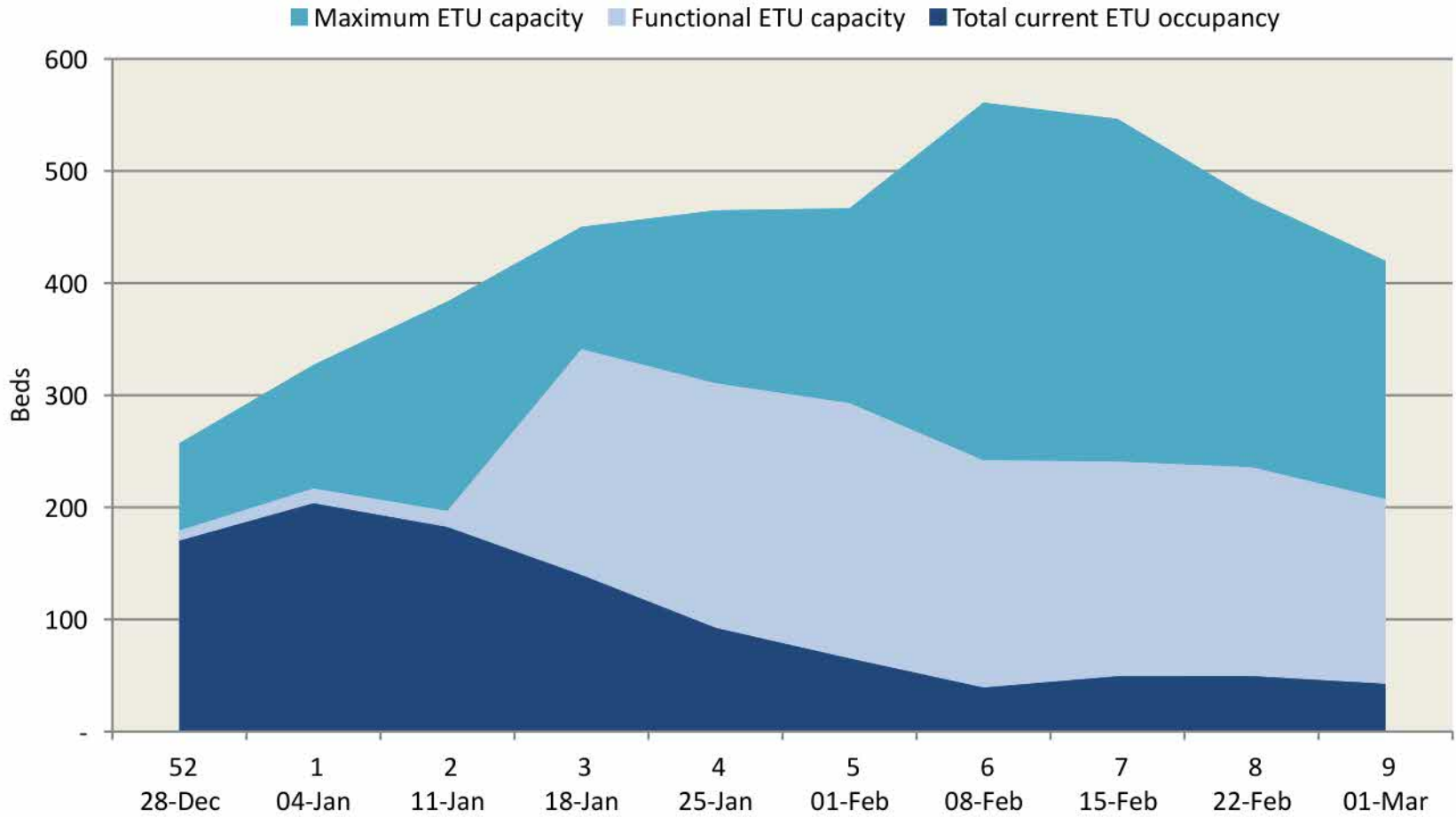
Functionality and occupancy





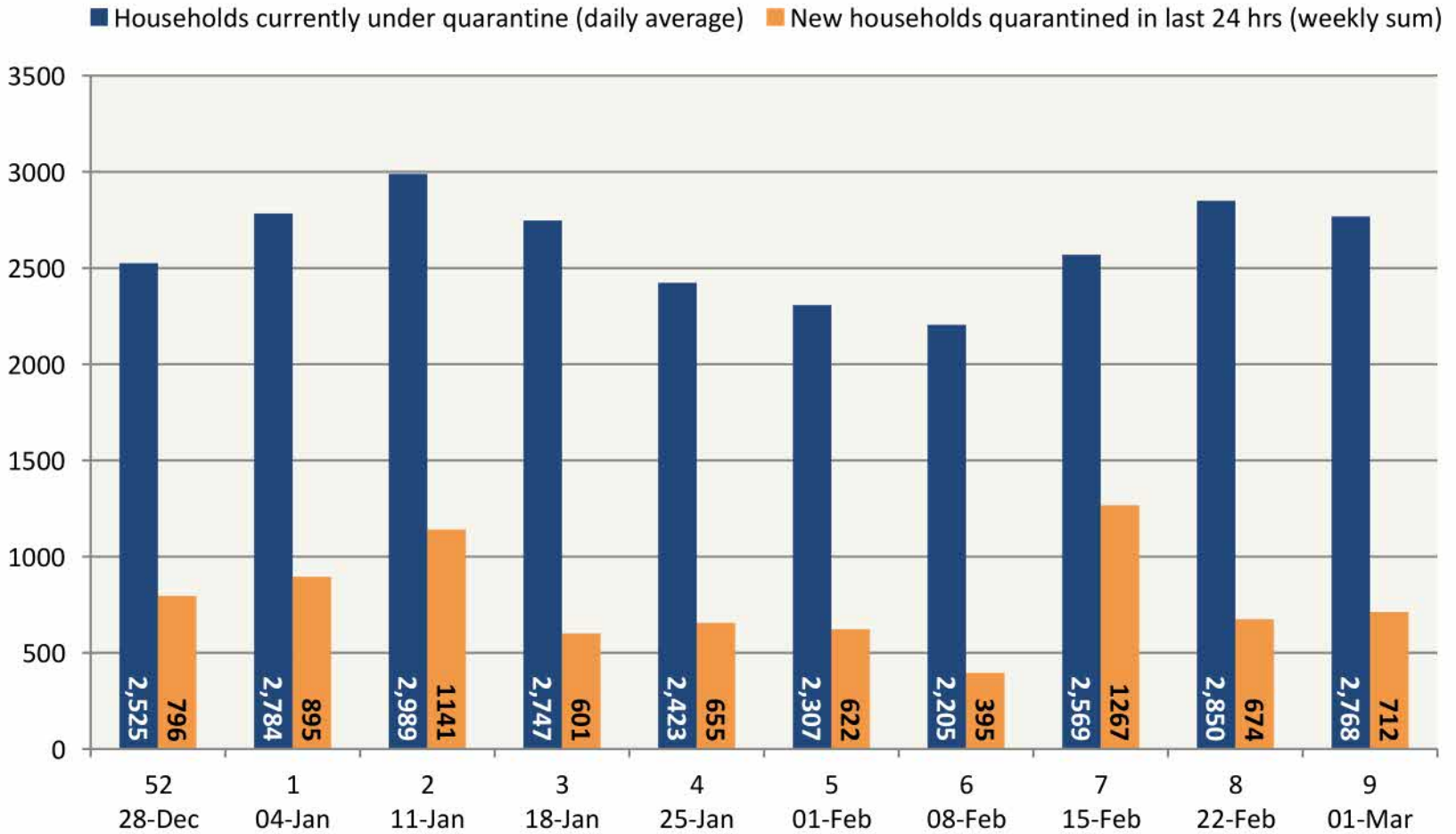
# 10A. Ebola Treatment Units (ETU)

Functionality and occupancy



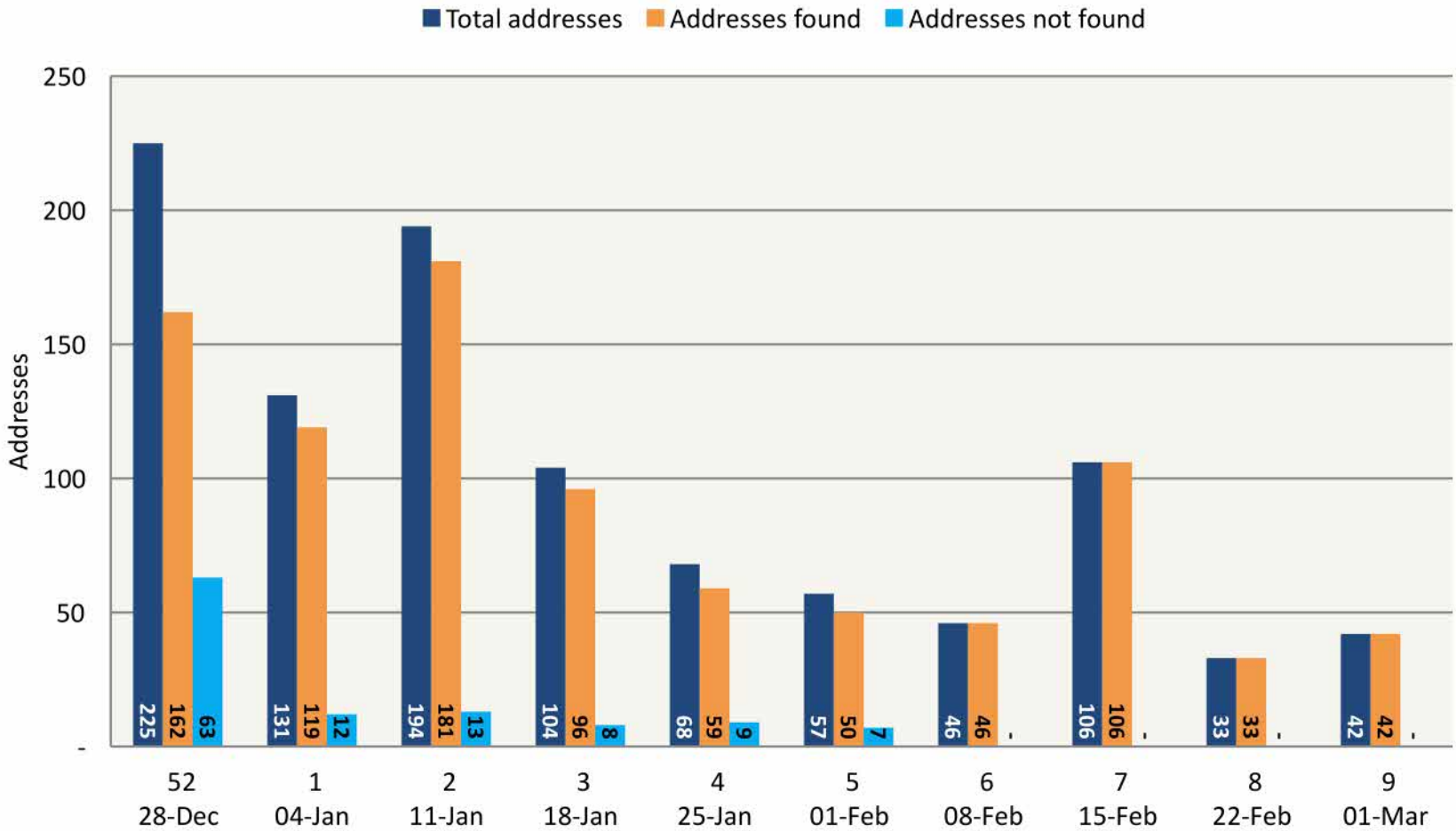
# 11A. Quarantine

New and existing households quarantined



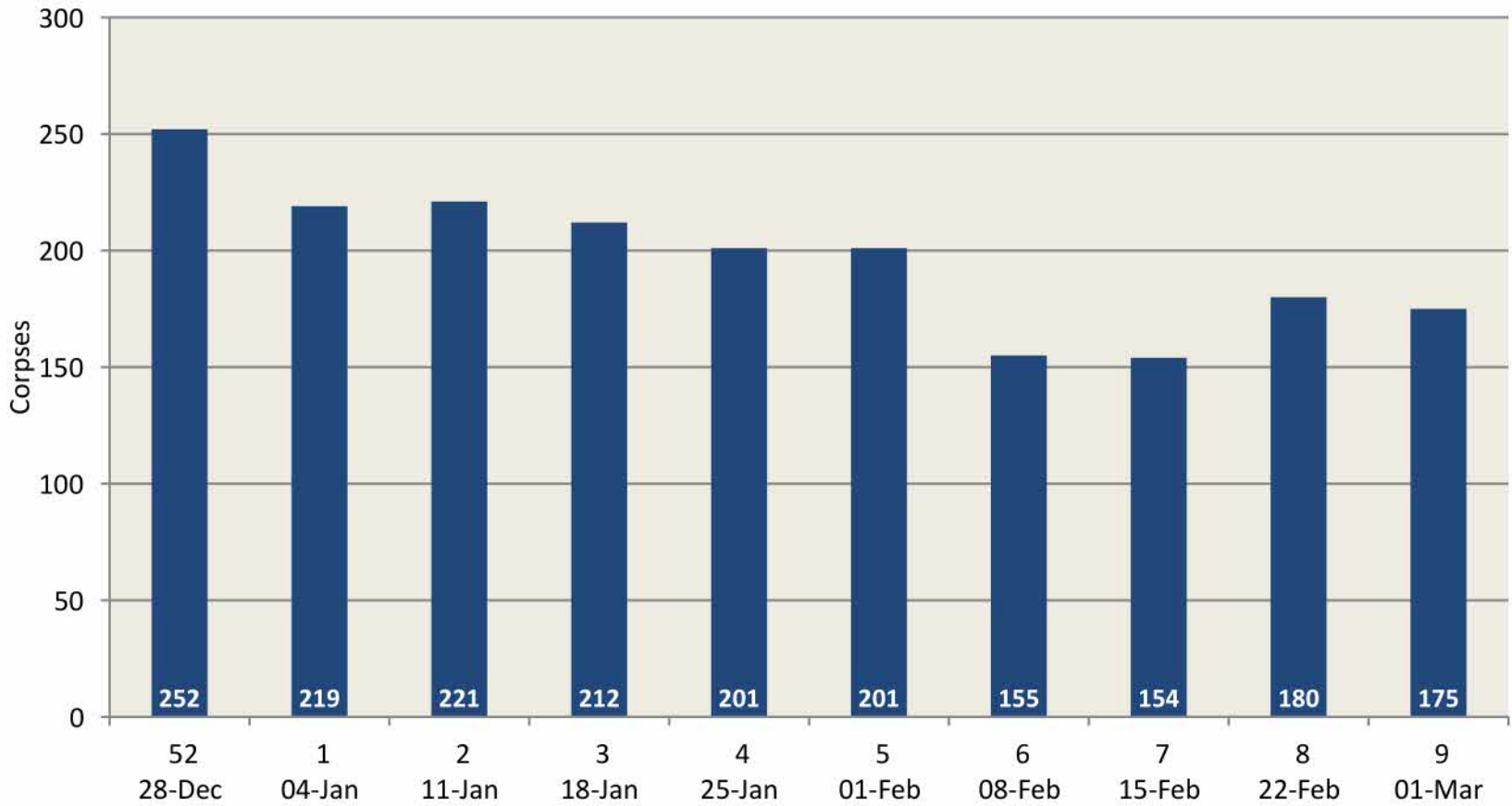
## 12A. Quarantine

Addresses not known within first 24 hours (weekly sum)



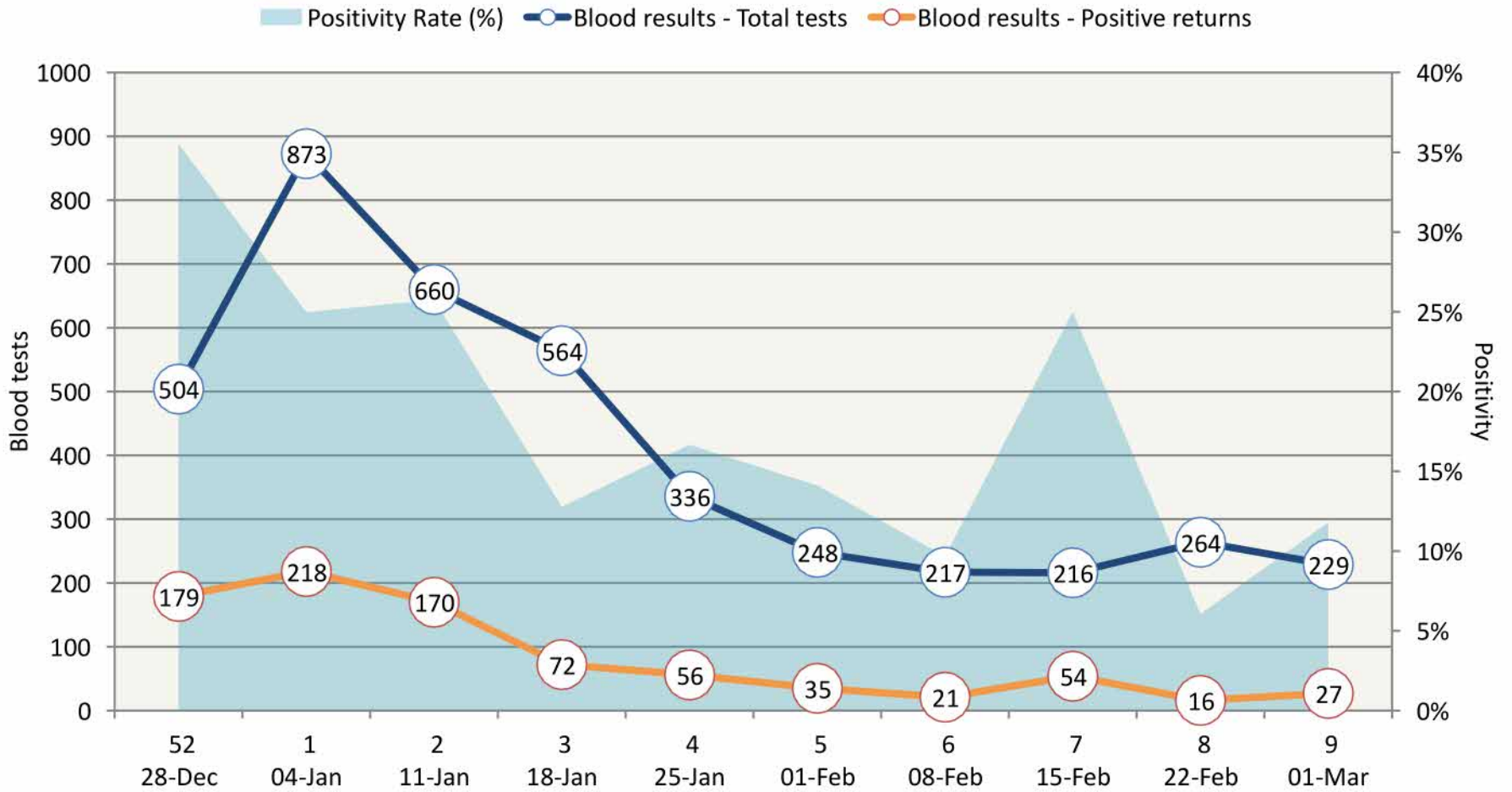
### 13A. Burial management

Corpses collected and buried within 24 hours



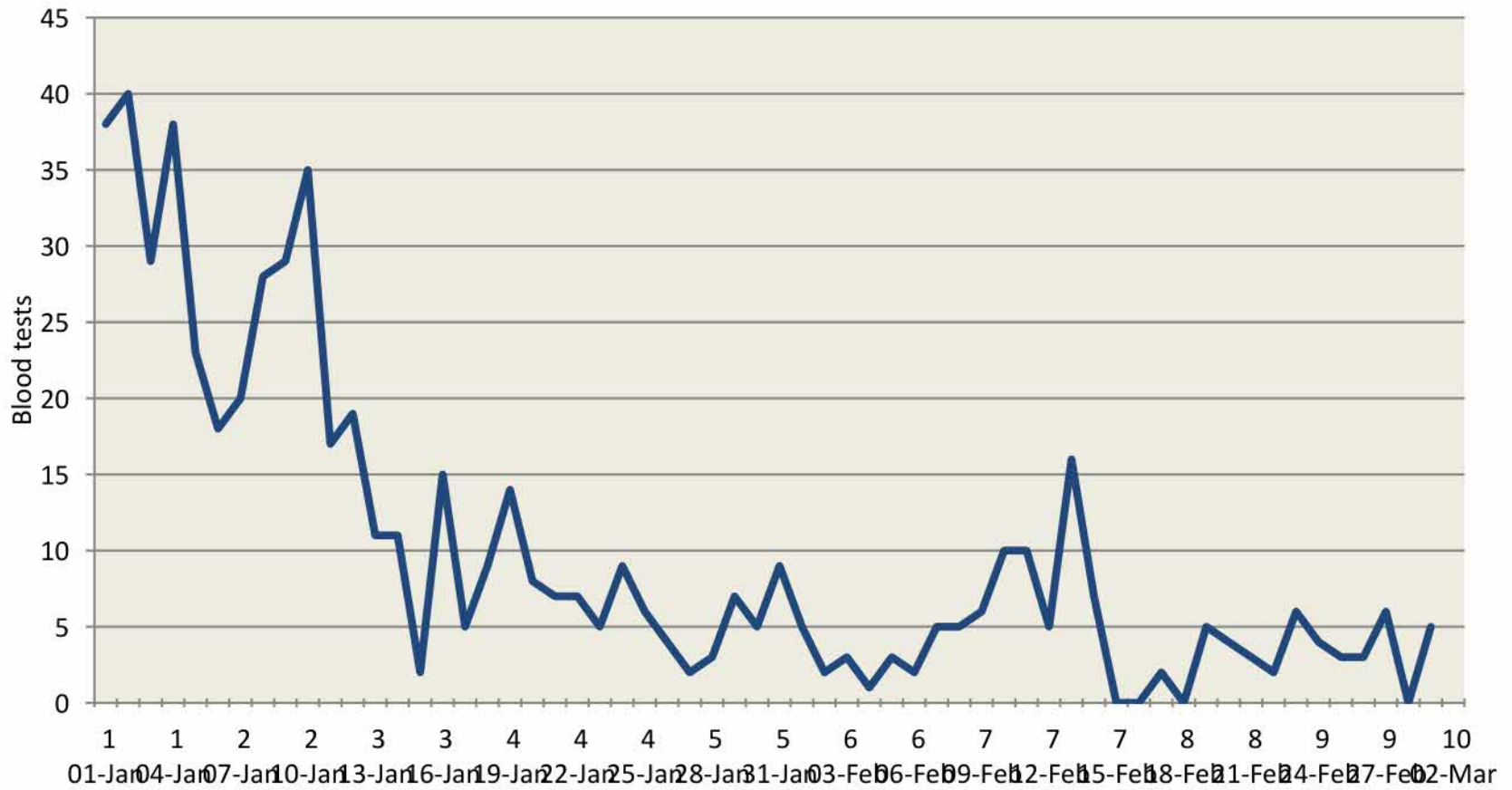
# 14A. Labs

## Blood tests



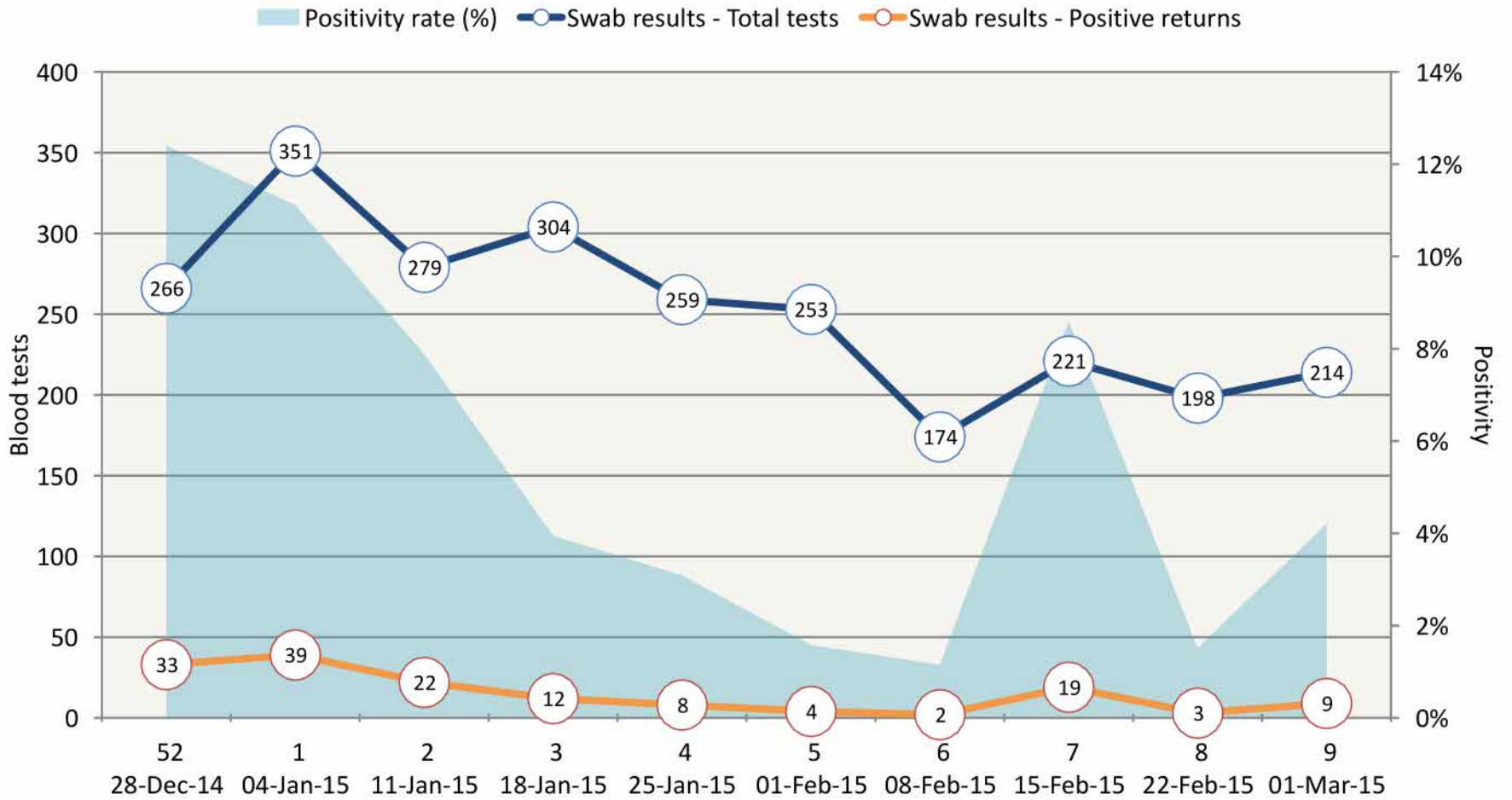
## 16. Labs

Blood tests – Positive results



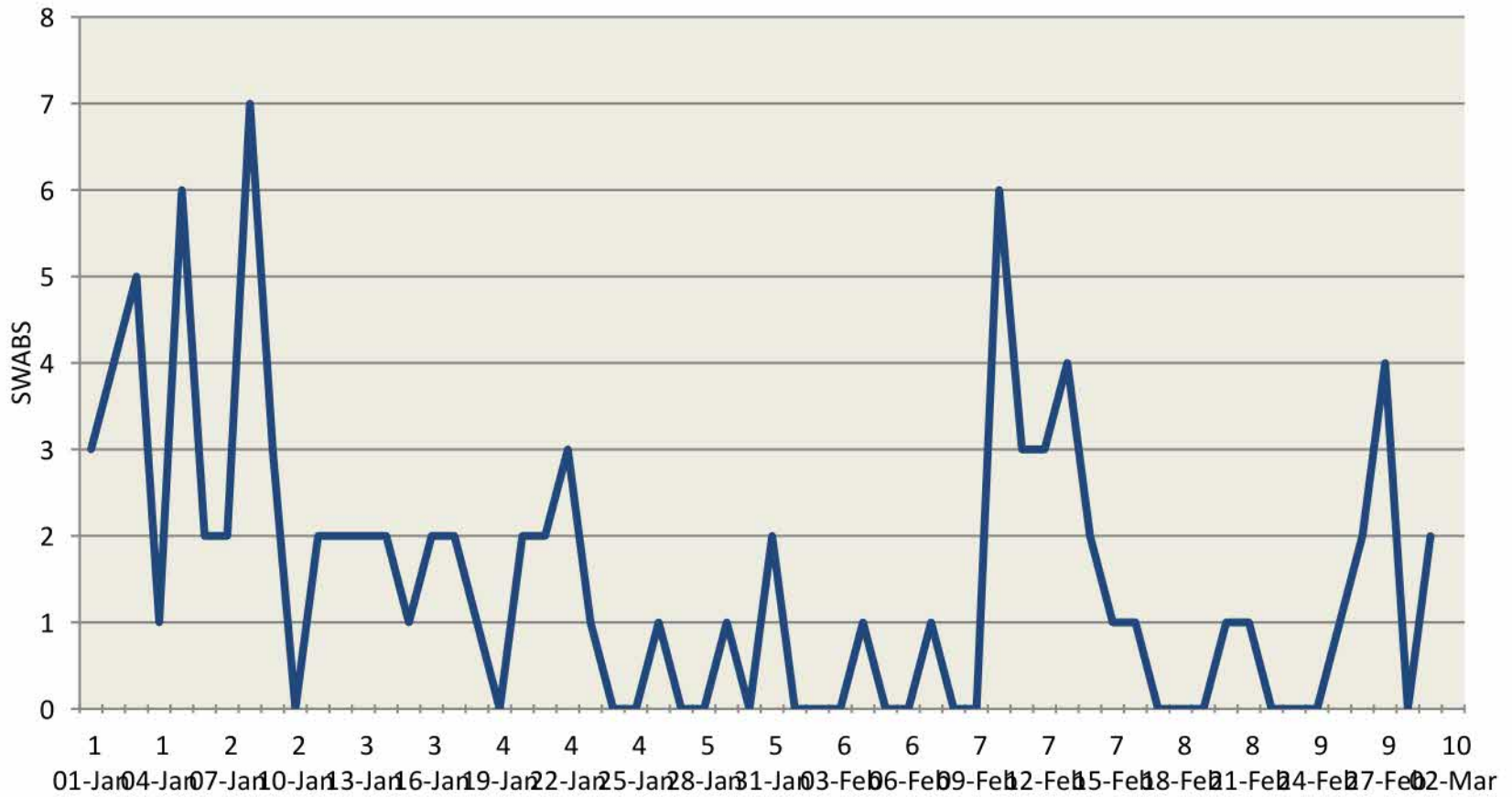
# 16A. Labs

## SWAB tests



# 17A. Labs

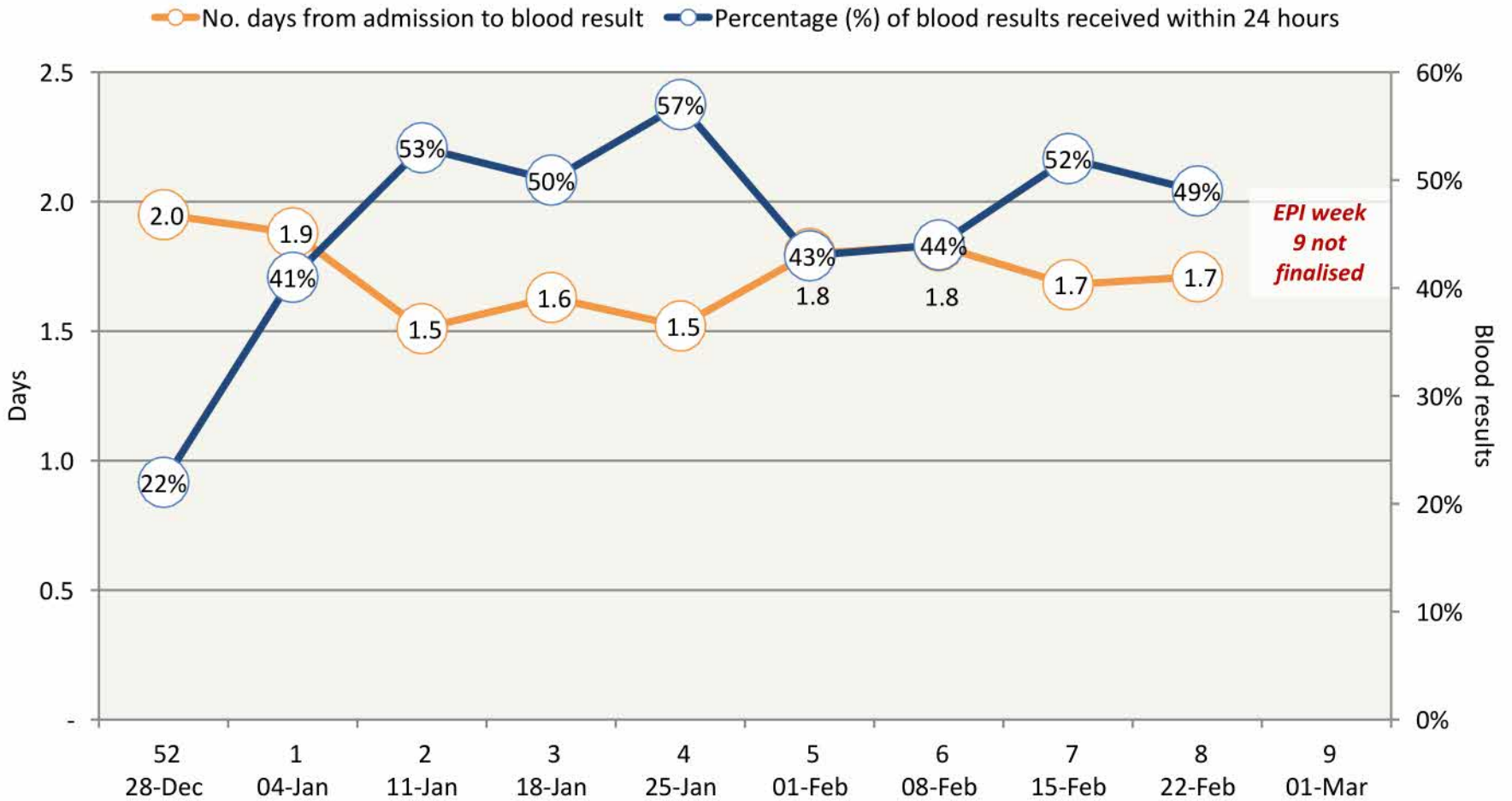
SWAB tests – Positive results





# 18A. Labs

## System efficiency

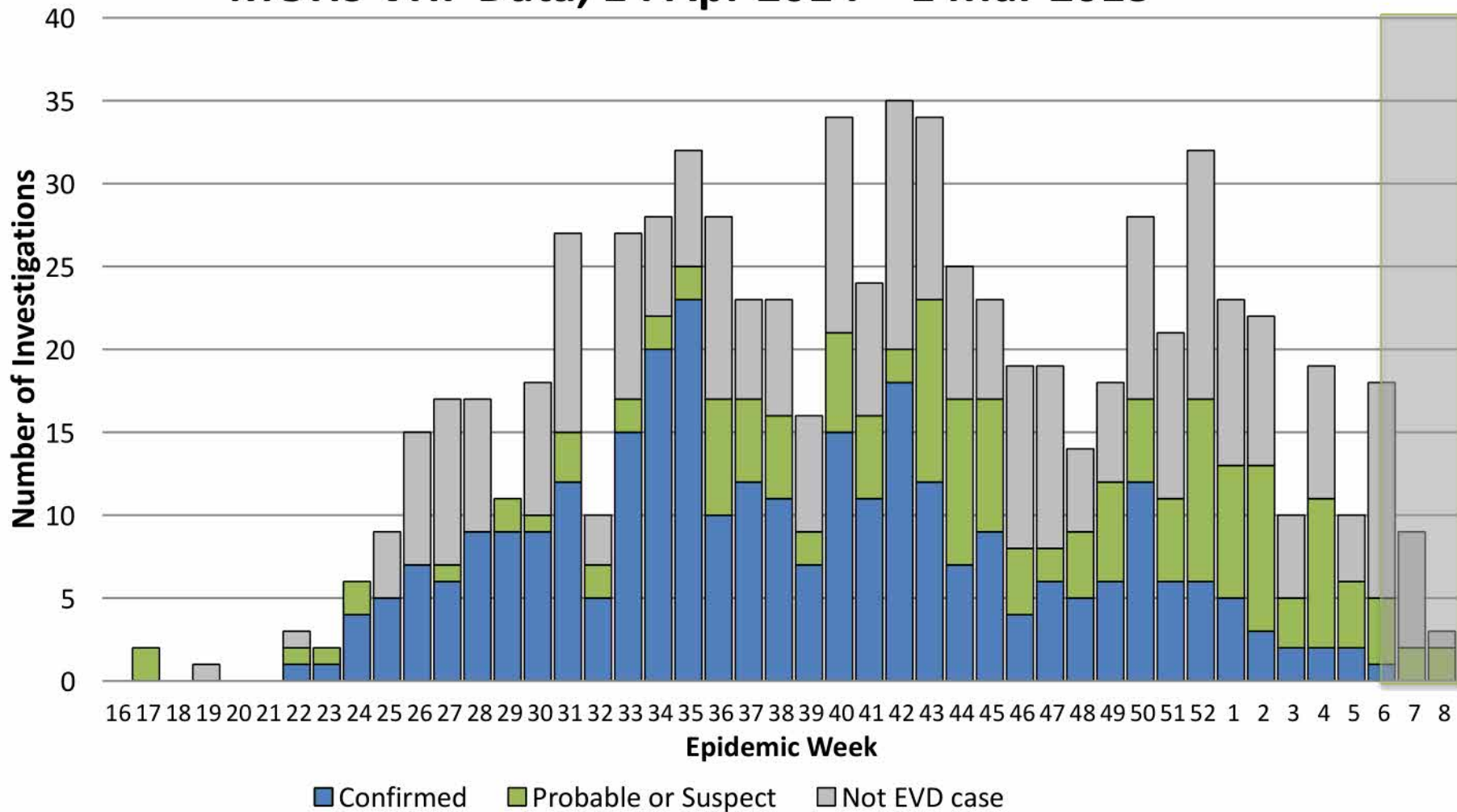


# **Update on HCW Infections from VHF\***

\*No HCW cases reported for EpiWeek 9.

# Ebola HCW Investigations by Case Status, Sierra Leone

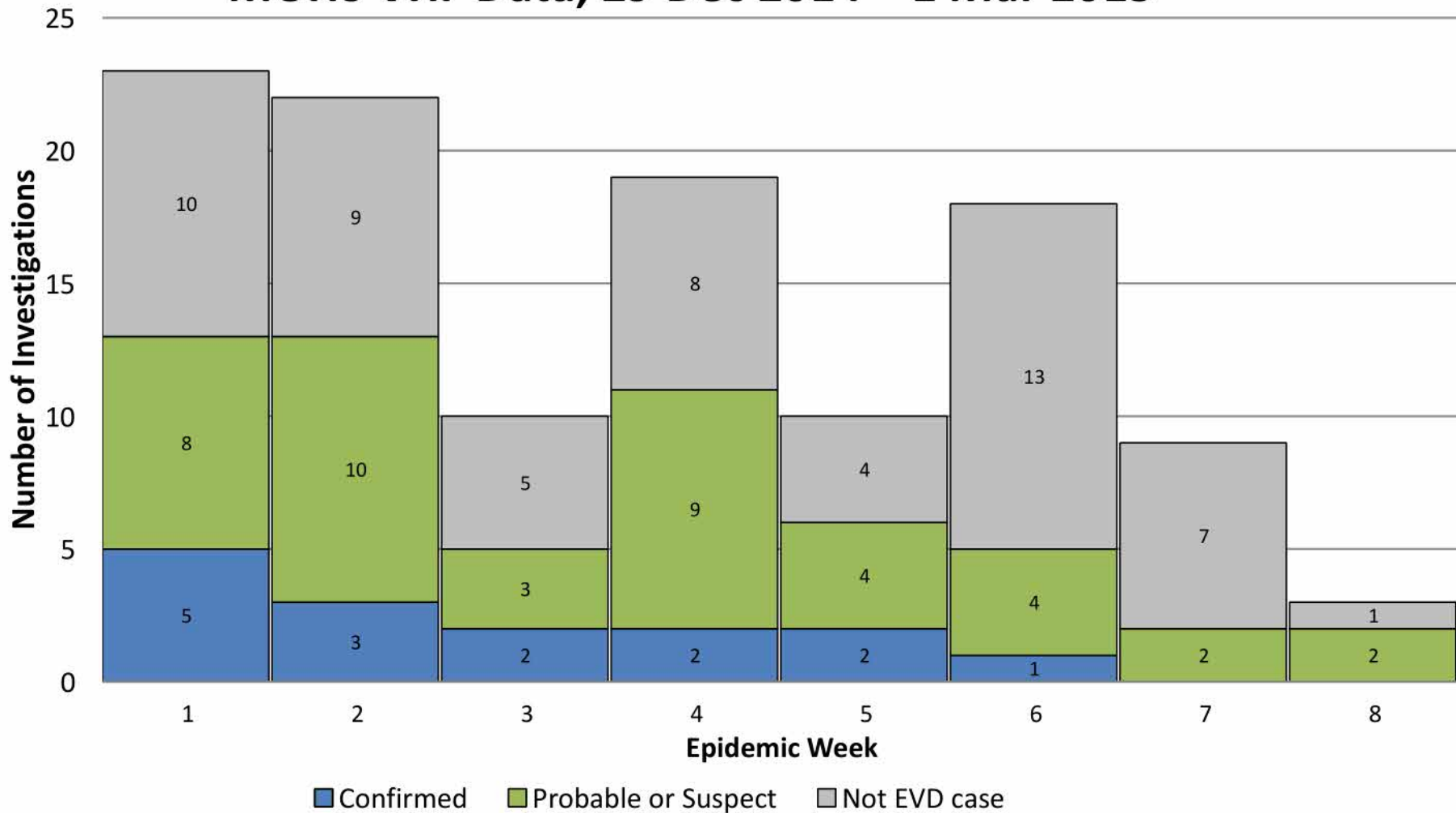
MOHS VHF Data, 14 Apr 2014 – 1 Mar 2015\*



\*Data updated March 1 – no new cases reported EpiWeek 9; Reporting during the last few weeks may not yet be complete

# Ebola HCW Investigations by Case Status, Sierra Leone

MOHS VHF Data, 29 Dec 2014 – 1 Mar 2015\*



\*Data updated March 1 – no new cases reported for EpiWeek 9; Reporting is preliminary.

# Cumulative HCW Cases by District of Onset

District	Confirmed	Probable	Suspect	Total	Epi-Week of Last Confirmed HCW Case
Bo	19	4	6	29	2015, Week 1
Bombali	42	5	14	61	2015, Week 6
Kailahun	24	8	5	37	2014, Week 42
Kambia	1	0	0	1	2015, Week 2
Kenema	80	0	8	88	2015, Week 4
Koinadugu	2	0	0	2	2014, Week 42
Kono	19	2	11	32	2015, Week 1
Moyamba	4	0	0	4	2014, Week 47
Port Loko	34	9	12	55	2015, Week 5
Pujehun	2	2	1	5	2014, Week 42
Tonkolili	19	4	2	25	2015, Week 1
Western	53	7	60	120	2015, Week 3
Missing	0	0	3	3	
<b>Total</b>	<b>299</b>	<b>41</b>	<b>122</b>	<b>462</b>	



**From:** Bumpus, Stefanie (CDC/OD/OCS)  
**Sent:** Sat, 6 Jun 2015 10:28:23 -0400  
**To:** EOC Conf/Bridge Calendar (CDC); Demby, Austin (CDC/CGH/DGHA); Marston, Barbara J. (CDC/CGH/DGHP); Damon, Inger K. (CDC/OID/NCEZID); GDD-OUTBREAK (CDC); CDC IMS AV/Communications; Helfand, Rita (CDC/OID/NCEZID); Williams, Teresa (CDC/OD/OCS); Dills, Kimberly C. (CDC/OD/OCS); Braden, Chris (CDC/OID/NCEZID); CDC IMS OD LNO; CDC IMS Incident Manager (CDC); Davis, Carma L. (CDC/OD/OCS) (CTR); Brown, Clive (CDC/OID/NCEZID); Demby, Austin (HHS/OS/OGA); Knust, Barbara (CDC/OID/NCEZID); Nichol, Stuart T. (CDC/OID/NCEZID); Tappero, Jordan (CDC/CGH/DGHP); Wuichet, John W. (CDC/OD/OCS); Bell, Beth (CDC/OID/NCEZID); Morgan, Oliver (CDC/OID/NCEZID); 2014 Ebola Response (CDC); Kenyon, Thomas A. (CDC/CGH/OD); Foti, Kathryn (CDC/OD/OCS); CDC IMS Policy Unit -2 (Ebola); Merkle, Sarah (CDC/ONDIEH/NCEH); Rayfield, Mark (CDC/CGH/DGHP); Petersen, Lyle (CDC/OID/NCEZID); Perrone, Laura (CDC/CGH/OD); Meltzer, Martin I. (CDC/OID/NCEZID); Washington, Michael (Wash) (CDC/OID/NCEZID); Gambhir, Manoj (CDC/OID/NCIRD) (CTR); Reott, Erica (CDC/ONDIEH/NCBDDD); Kibunja, Julia N. (CDC/CGH/OD); Brunette, Gary W. (CDC/OID/NCEZID); Dicker, Richard C. (CDC/CGH/DGHP); Bunnell, Rebecca (CDC/CGH/DGHP); Hersey, Sara (CDC/CGH/DGHP); Glover, Maleeka (CDC/OID/OD); Kennedy, David N. (CDC/OPHPR/DEO); Merlin, Toby (CDC/OID/NCEZID); Crockett, James B. (CDC/OPHPR/DEO); Anaya, Gabriel (CDC/CGH/GID); Williams, Ian (CDC/OID/NCEZID); Jernigan, Daniel B. (CDC/OID/NCIRD); English, Lorna M. (CDC/ONDIEH/NCCDPPH); CDC IMS DGMQ Task Force Leader/Deputy; Irwin, Kathleen L. (CDC/OID/NCHHSTP); Kretsinger, Katrina (CDC/CGH/GID); Linkins, Robert (CDC/CGH/GID)  
**Cc:** Ervin, Elizabeth (CDC/OID/NCEZID); Park, Benjamin (CDC/OID/NCEZID); Davis, Stephanie Marie (CDC/CGH/DGHA); Daves, Sharon (CDC/CGH/DGHP); Brooks, Jennifer (CDC/OPHPR/DEO); Briss, Peter (CDC/ONDIEH/NCCDPPH); CDC IMS Laboratory; Hall, Aron (CDC/OID/NCIRD); McMorrow, Meredith (CDC/OID/NCIRD); Mast, Eric (CDC/CGH/GID); Tohme, Rania A. (CDC/OID/NCHHSTP); Srivastava, Pamela (CDC/OID/NCIRD); Barbour, Kamil E. (CDC/ONDIEH/NCCDPPH); hersey.sara@gmail.com; Zulz, Tammy (CDC/OID/NCEZID); Gupta, Neil (CDC/OID/NCEZID); Wilson, Katie (CDC/OID/NCEZID) (CTR); Rollin, Pierre (CDC/OID/NCEZID); Ransom, Ray (CDC/CGH/DGHP); CDC IMS Health Promotion; Pembleton, Elizabeth (CDC/OID/NCEZID) (CTR); Lindblade, Kimberly (Kim) (CDC/OID/NCIRD); Henderson, Alden (CDC/CGH/DGHP); Pappas, Claudia (CDC/OID/NCIRD); Waterman, Steve (CDC/OID/NCEZID); Kahn, Emily B. (CDC/OPHPR/DSLRL); Moore, Melissa (CDC/OID/NCIRD); Balish, Amanda (CDC/OID/NCIRD); Weirich, Elizabeth (CDC/OPHSS/CSELS); Anderson, Mark (CDC/CGH/DGHP); Chen, Guan Ming (CDC/OPHSS/CSELS) (CTR); Nowlin, Sue (CDC/NIOSH/DSHEFS); Sniadack, David (CDC/CGH/GID); Dennis, Miatta (CDC/CGH/DGHP); Lawrence, Gena G. (CDC/CGH/DPDM); Jones, LaBrina M. (CDC/OPHPR/DEO); CDC IMS Incident Manager Task Tracker; Karem, Kevin (CDC/CGH/OD)  
**Subject:** RE: Ebola: Country Call Sierra Leone  
**Attachments:** Weekly Epi Report 06 June 2015 FINAL.PPTX



Slides for today's call

-----Original Appointment-----

**From:** EOC Conf/Bridge Calendar (CDC)

**Sent:** Monday, November 24, 2014 9:00 AM

**To:** EOC Conf/Bridge Calendar (CDC); Demby, Austin (CDC/CGH/DGHA); Marston, Barbara J.

(CDC/CGH/DGHP); Damon, Inger K. (CDC/OID/NCEZID); GDD-OUTBREAK (CDC); CDC IMS AV/Communications; Helfand, Rita (CDC/OID/NCEZID); Williams, Teresa (CDC/OD/OCS); Dills, Kimberly C. (CDC/OD/OCS); Braden, Chris (CDC/OID/NCEZID); CDC IMS OD LNO; CDC IMS Incident Manager (CDC); Davis, Carma L. (CDC/OD/OCS) (CTR); Bumpus, Stefanie (CDC/OD/OCS); Brown, Clive (CDC/OID/NCEZID); Frieden, Thomas (Tom) (CDC/OD); Demby, Austin (HHS/OS/OGA); Knust, Barbara (CDC/OID/NCEZID); Nichol, Stuart T. (CDC/OID/NCEZID); Tappero, Jordan (CDC/CGH/DGHP); Wuichet, John W. (CDC/OD/OCS); Bell, Beth (CDC/OID/NCEZID); Morgan, Oliver (CDC/OID/NCEZID); 2014 Ebola Response (CDC); Kenyon, Thomas A. (CDC/CGH/OD); Foti, Kathryn (CDC/OD/OCS); CDC IMS Policy Unit -2 (Ebola); Merkle, Sarah (CDC/ONDIEH/NCEH); Rayfield, Mark (CDC/CGH/DGHP); Petersen, Lyle (CDC/OID/NCEZID); Perrone, Laura (CDC/CGH/OD); Meltzer, Martin I. (CDC/OID/NCEZID); Washington, Michael (Wash) (CDC/OID/NCEZID); Gambhir, Manoj (CDC/OID/NCIRD) (CTR); Reott, Erica (CDC/ONDIEH/NCBDDD); Kibunja, Julia N. (CDC/CGH/OD); Brunette, Gary W. (CDC/OID/NCEZID); Dicker, Richard C. (CDC/CGH/DGHP); Bunnell, Rebecca (CDC/ONDIEH/NCCDPPH); Hersey, Sara (CDC/CGH/DGHA); Glover, Maleeka (CDC/OID/OD); Kennedy, David N. (CDC/OPHPR/DEO); Merlin, Toby (CDC/OID/NCEZID); Crockett, James B. (CDC/OPHPR/DEO); Anaya, Gabriel (CDC/CGH/GID); Williams, Ian (CDC/OID/NCEZID); Jernigan, Daniel B. (CDC/OID/NCIRD); English, Lorna M. (CDC/ONDIEH/NCCDPPH); CDC IMS DGMQ Task Force Leader/Deputy; Irwin, Kathleen L. (CDC/OID/NCHHSTP); Kretsinger, Katrina (CDC/CGH/GID); Linkins, Robert (CDC/CGH/GID)

**Cc:** Ervin, Elizabeth (CDC/OID/NCEZID); Park, Benjamin (CDC/OID/NCEZID); Davis, Stephanie Marie (CDC/CGH/DGHA); Daves, Sharon (CDC/CGH/DGHP); Brooks, Jennifer (CDC/OPHPR/DEO); Briss, Peter (CDC/ONDIEH/NCCDPPH); CDC IMS Laboratory; Hall, Aron (CDC/OID/NCIRD); McMorrow, Meredith (CDC/OID/NCIRD); Mast, Eric (CDC/CGH/GID); Tohme, Rania A. (CDC/CGH/GID); Srivastava, Pamela (CDC/OID/NCIRD); Barbour, Kamil E. (CDC/ONDIEH/NCCDPPH); hersey.sara@gmail.com; Zulz, Tammy (CDC/OID/NCEZID); Gupta, Neil (CDC/OID/NCEZID); Wilson, Katie (CDC/OID/NCEZID) (CTR); Rollin, Pierre (CDC/OID/NCEZID); Ransom, Ray (CDC/CGH/DGHP); CDC IMS Health Promotion; Pembleton, Elizabeth (CDC/OID/NCEZID) (CTR); Lindblade, Kimberly (Kim) (CDC/OID/NCIRD); Henderson, Alden (CDC/CGH/DGHP); Pappas, Claudia (CDC/OID/NCIRD); Waterman, Steve (CDC/OID/NCEZID); Kahn, Emily B. (CDC/OPHPR/DSLRL); Moore, Melissa (CDC/OID/NCIRD); Balish, Amanda (CDC/OID/NCIRD); Weirich, Elizabeth (CDC/OPHSS/CSELS); Anderson, Mark (CDC/CGH/DGHP); Chen, Guan Ming (CDC/OPHSS/CSELS) (CTR); Nowlin, Sue (CDC/NIOSH/DSHEFS); Sniadack, David (CDC/CGH/GID); Dennis, Miatta (CDC/CGH/DGHP); Lawrence, Gena G. (CDC/CGH/DPDM); Jones, LaBrina M. (CDC/OPHPR/DEO); CDC IMS Incident Manager Task Tracker; Karem, Kevin (CDC/CGH/OD)

**Subject:** Ebola: Country Call Sierra Leone

**When:** Saturday, June 06, 2015 10:25 AM-10:55 AM (UTC-05:00) Eastern Time (US & Canada).

**Where:** Conference Call Only (b)(6)

Please note that starting April 18, 2015 duration for this call is 30 minutes and the time will be as follows:



Atlanta: 10:25-10:55 AM  
Sierra Leone: 2:25-2:55 PM

Updated bridgeline

POC: INTL TF Barbara Marston & Lorna English

The call line information is:

Bridgeline: (b)(6)  
Passcode: (b)(6)  
International Number (b)(6)

For any changes or updates, please contact [EOCReport@cdc.gov](mailto:EOCReport@cdc.gov) or phone (770) 488-7100



# **Sierra Leone Ebola Response**

## **Epidemiology Overview**

**June 6, 2015**

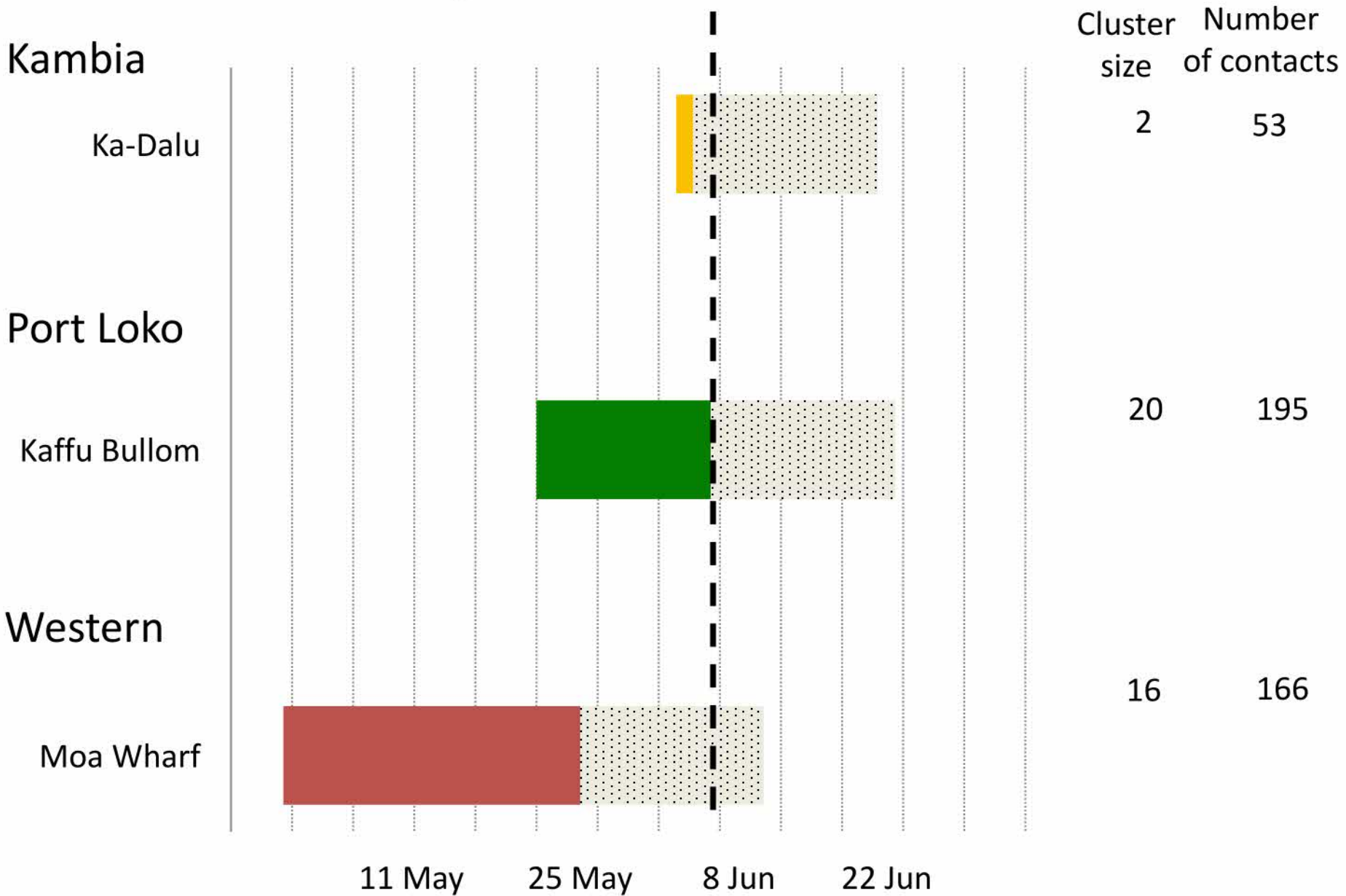
# Summary of New Cases

Summary Case Counts																
	Epi Week 22								Epi Week 23*							
	25-May	26-May	27-May	28-May	29-May	30-May	31-May	Totals	1-Jun	2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun	Totals
Kambia							1(1)	1(1)			1				1	2
Western		2(1)			1			3(1)								
Port Loko		1(1)	3	2		1	1	8(1)	1	1	1	2				5
<b>National</b>	<b>0</b>	<b>3(2)</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2(1)</b>	<b>12(3)</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>1</b>		<b>7</b>

\*Epi week 23 updated 12pm  
GMT June 6

# Cluster Tracking

# Clusters by District and Chiefdom



 Quarantine period

# Kambia

## Ka-Dalu Cluster

- **Cases: 2**
  - Case 1, traditional healer apprentice, reported community death, confirmed EVD+ on May 31
  - Case 2, traditional healer, confirmed EVD+ on June 2
- **Contacts: 53**
- **Date quarantine ends: June 22**
- **Epi-link: under investigation**

## Unlinked Case

- 28 yo female, confirmed EVD+ on June 6
- Epi-link under investigation; not from quarantine home or contact list

# EVD Diagnosis at Death

## Epi Week #22

Kambia – 1 corpse, unknown source, epi-link under investigation

- 29 yo male died on May 29; positive death swab on May 31. Not on contact list, not from quarantine home

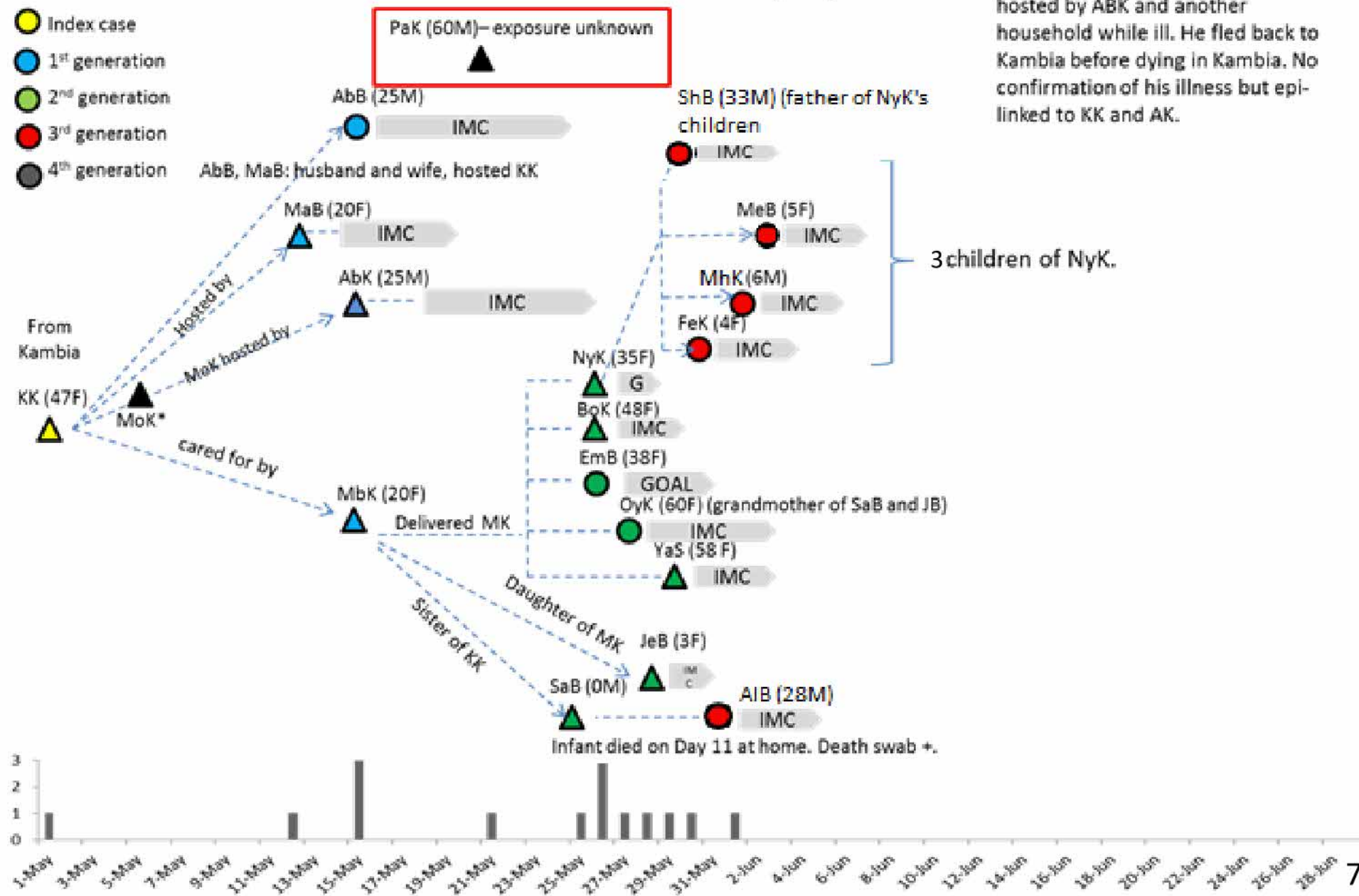
# Transmission Port Loko – Date of Onset of Symptoms

\*MoK is the grandson of KK who accompanied her from Kambia to Port Loko. He was also ill, and was hosted by ABK and another household while ill. He fled back to Kambia before dying in Kambia. No confirmation of his illness but epidemiologically linked to KK and AK.

- isolated in care
- alive/contagious
- dead/contact

- Died
- Survived

- Index case
- 1<sup>st</sup> generation
- 2<sup>nd</sup> generation
- 3<sup>rd</sup> generation
- 4<sup>th</sup> generation



# Port Loko

## Kaffu Bullom Cluster

- **Cases:** 16
- **Contacts:** 166
- **Date quarantine ends:** June 25
- **Epi-link:** Imported case from Kambia

## Unlinked Case

- 60yo male herbalist; died in community on May 29
- Epi-link under investigation; not from a quarantine home or contact list





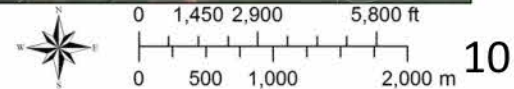
# EVD cases connected to Moa Wharf Cluster, Western Area



SOURCES: Medical data - MSF/CDC/WHO; Imagery - DigitalGlobe. CREATED BY: CDC

● EVD Cases April 20 - May 3, 2015

● EVD Cases May 7-15, 2015



# Western

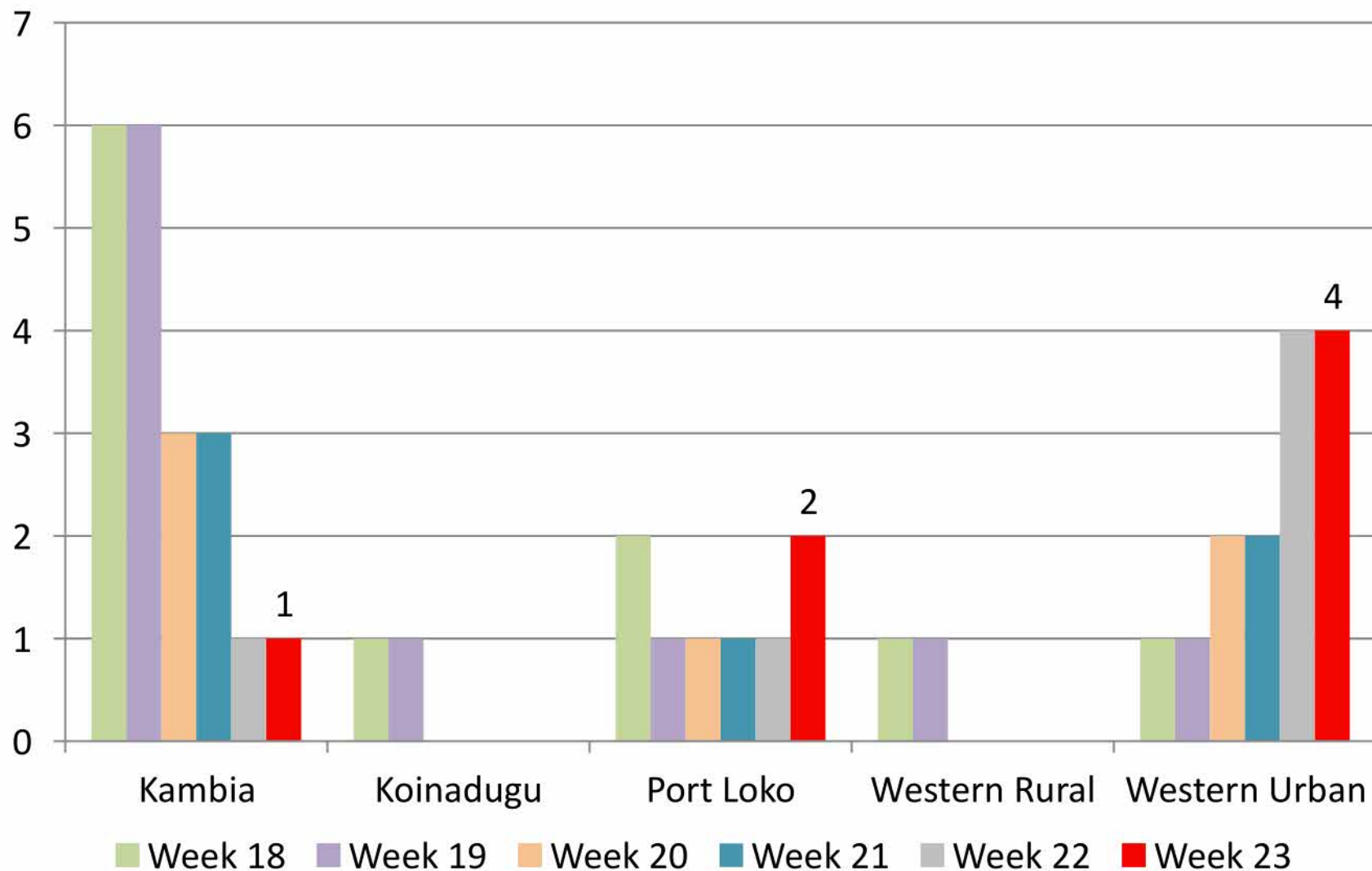
## Moa Wharf

- **Cases:** 20
- **Contacts:** 195
- **Date quarantine ends:** June 10
- **Epi-link:** In community with frequent cases and clusters; no definitive epi-link to index case

## Unlinked Cases

- Stillbirth, confirmed EVD+ on May 26
- 73 yo male, confirmed EVD+ on May 29
- Sources under investigation

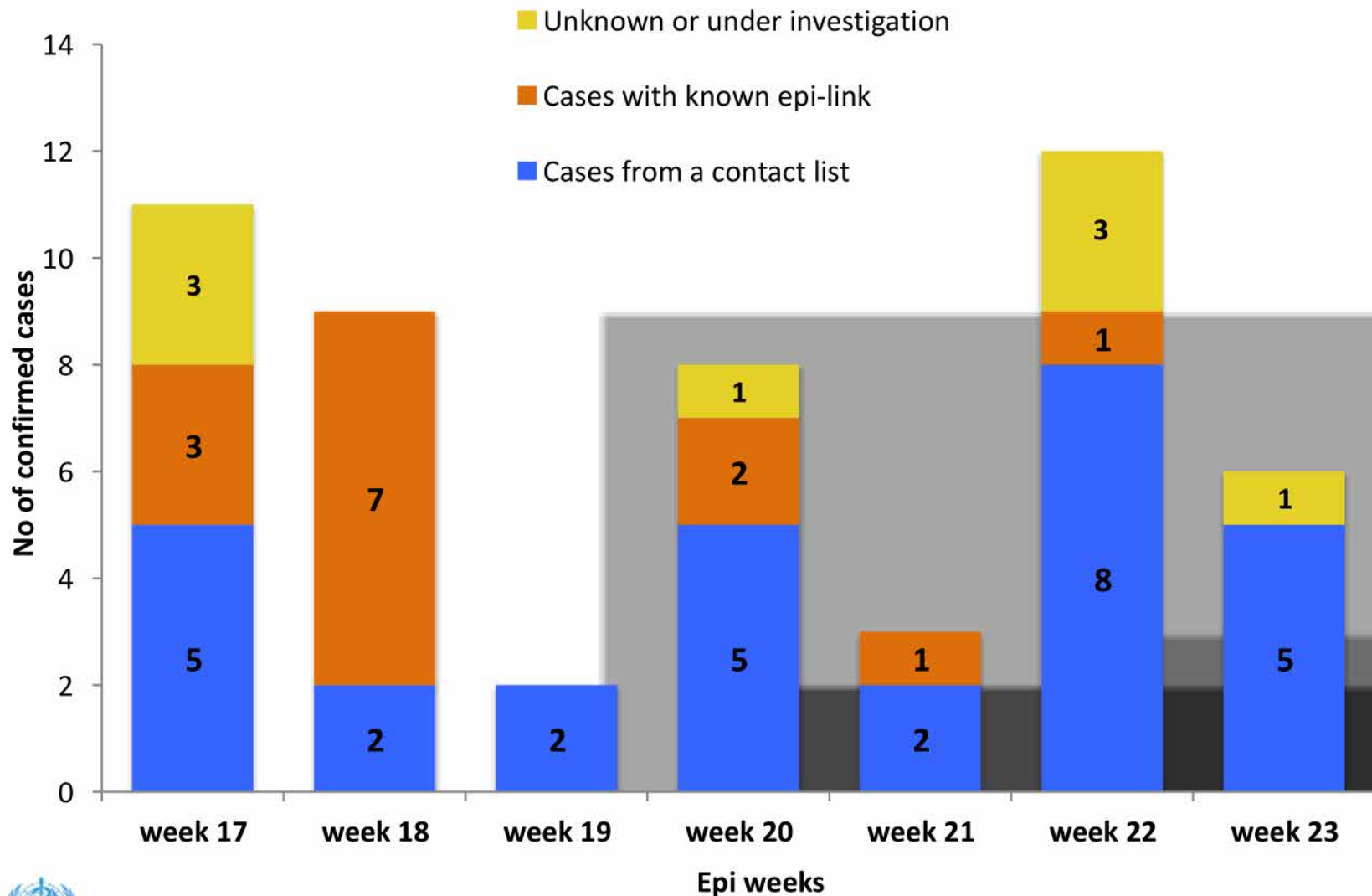
# Active Transmission Chains as of June 4, 2015



Information is current for recent epi weeks and may not be retrospectively updated



# Trend of EVD Positive Cases and Their Sources of Transmission



Information is current for recent epi weeks and may not be retrospectively updated

# ZMAPP TRIAL UPDATE

# Zmapp Trial

- Medication arrived April 2<sup>nd</sup> in Sierra Leone
- Trial began April 3<sup>rd</sup>
- Enrolled 27 people in Sierra Leone
  - 21 adults
  - 6 children

# **VACCINE STUDY UPDATE**

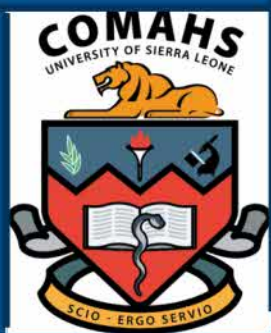




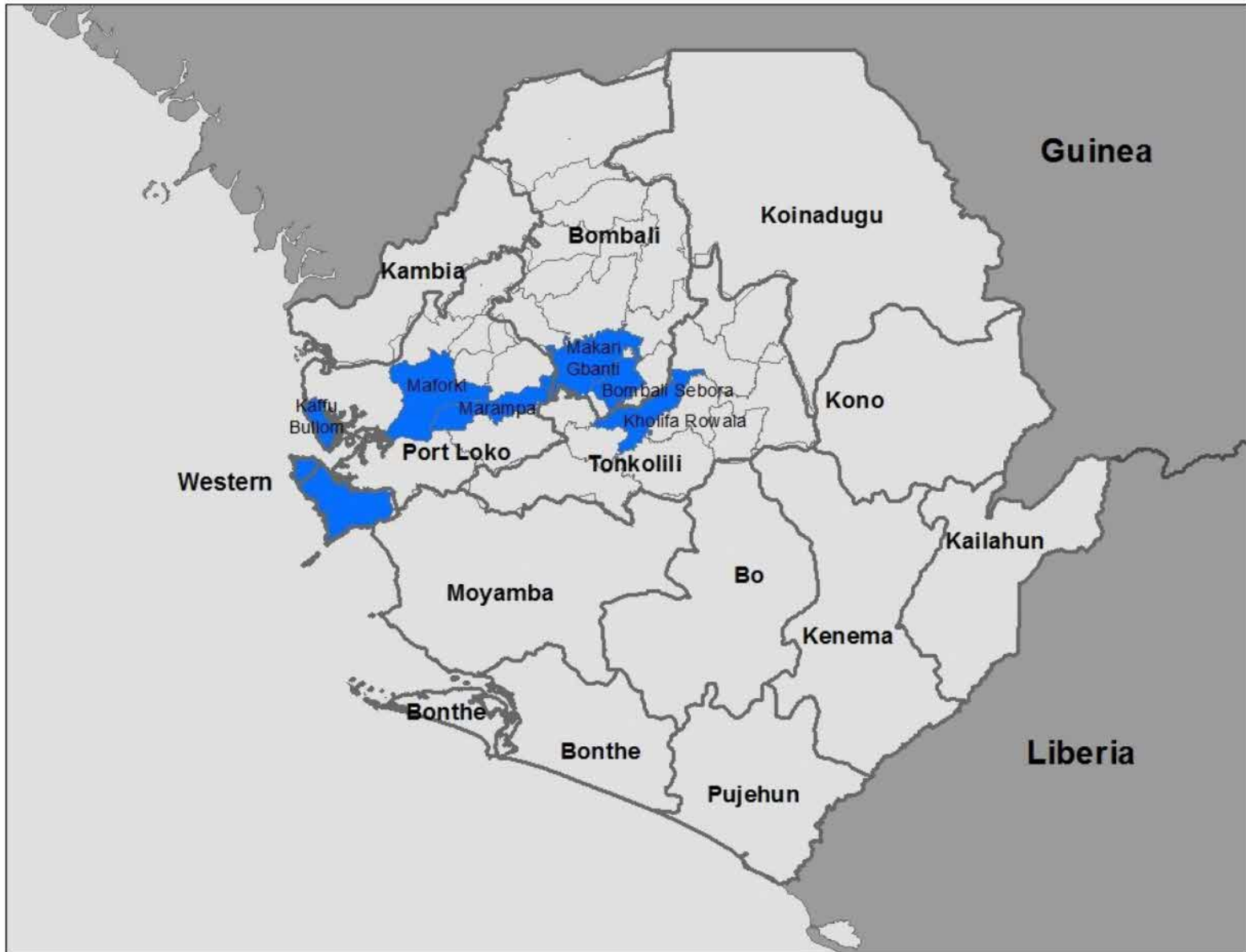
# STRIVE

Sierra Leone Trial to Introduce a Vaccine against Ebola  
Together we **STRIVE** to end Ebola!

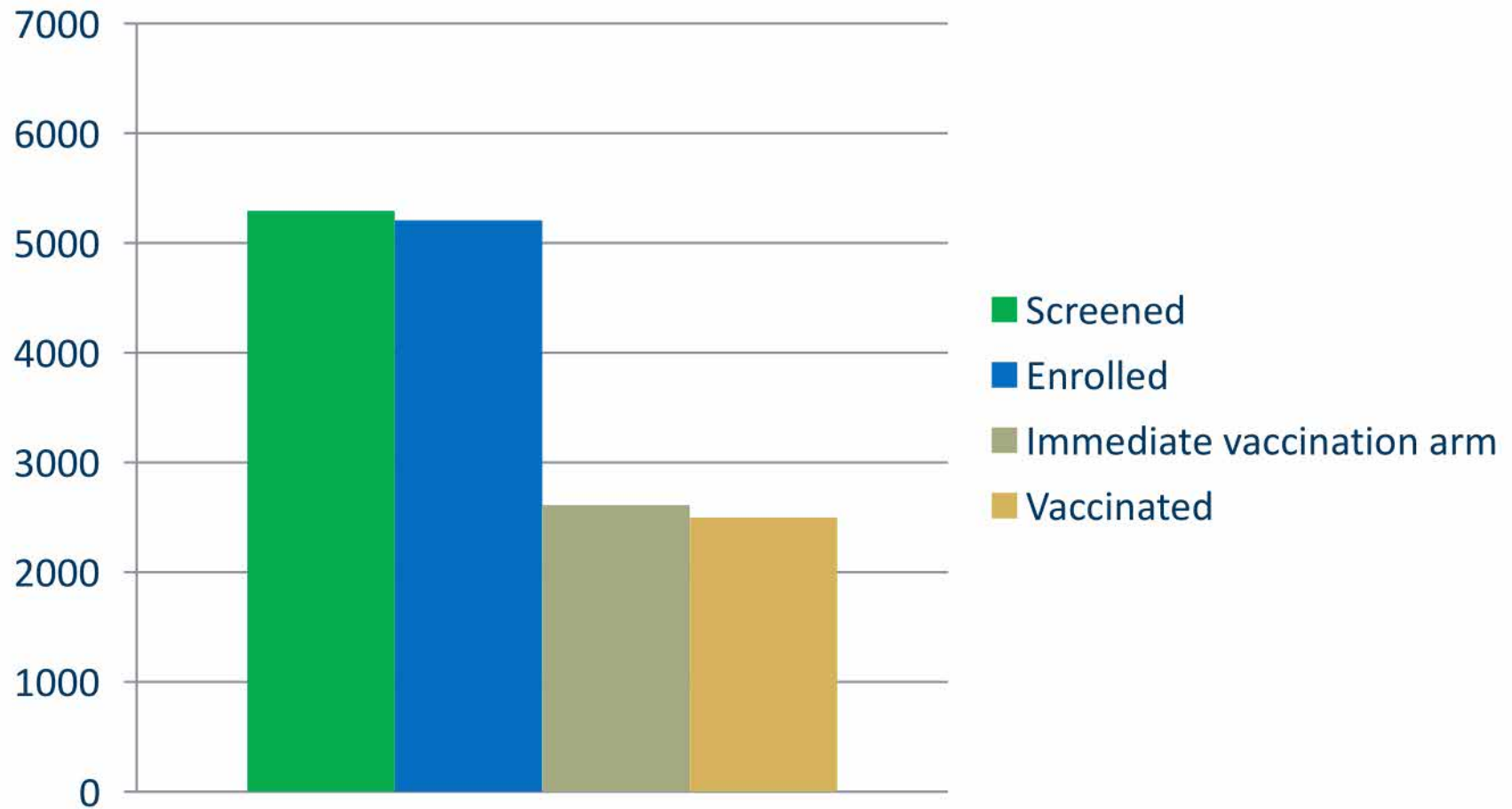
- Sierra Leone College of Medicine and Allied Health Sciences (COMAHS)
- Sierra Leone Ministry of Health and Sanitation (MoHS)
- U.S. Centers for Disease Control and Prevention (CDC)



# 6 STRIVE Study Sites in 5 Districts



# Cumulative Enrollment and Vaccination in Western, Port Loko, Bombali & Tonkolili districts (6 sites), April 9 – May 31, 2015

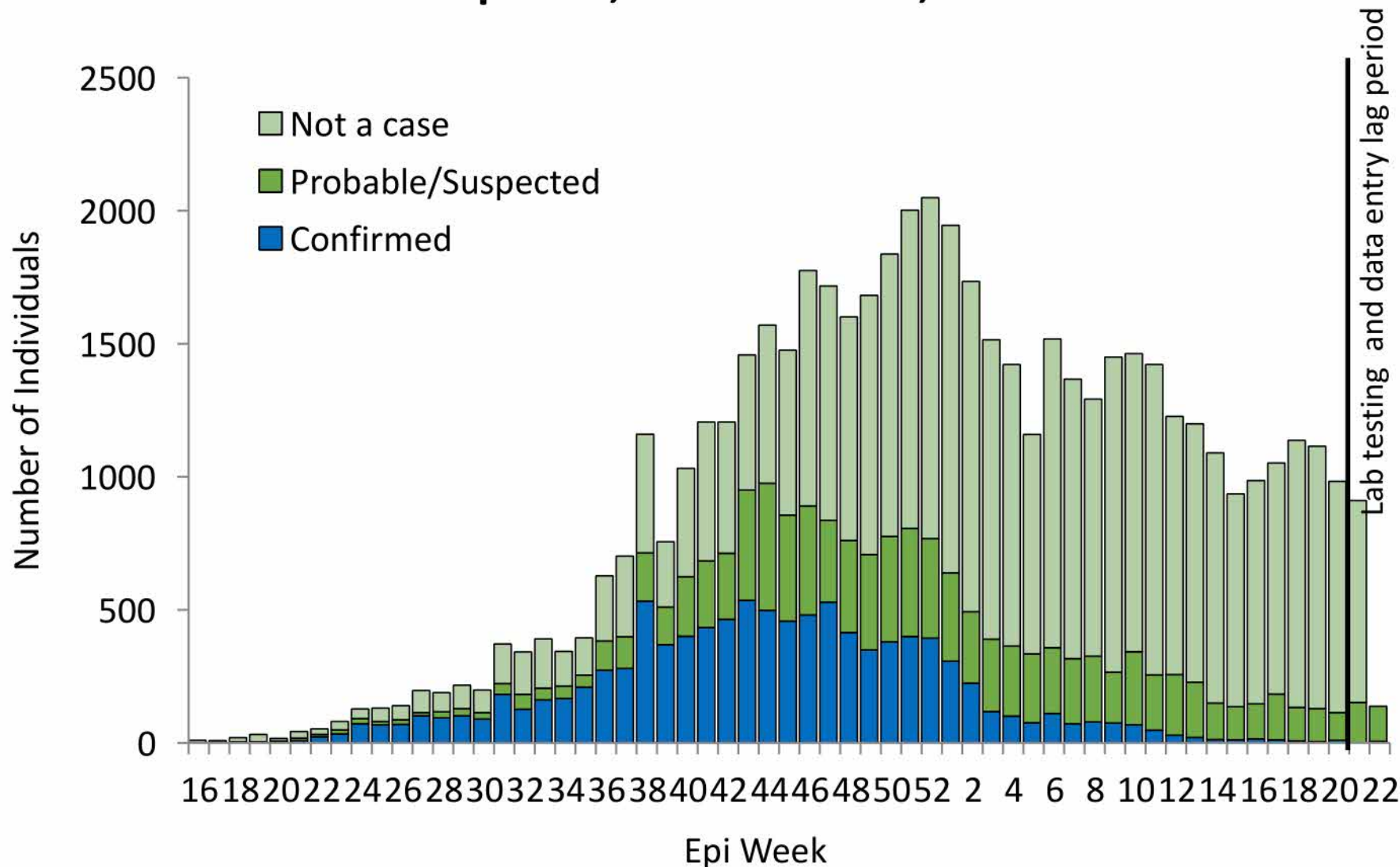


# Vaccine Safety

- Regular meetings of Data Safety Monitoring Board
- Safety data so far is consistent with previous trials  
–no vaccine related serious adverse events
- Eight participants evaluated for possible Ebola virus infection
  - All negative for Ebola; most positive for malaria (by rapid test)

# **NATIONAL DATA**

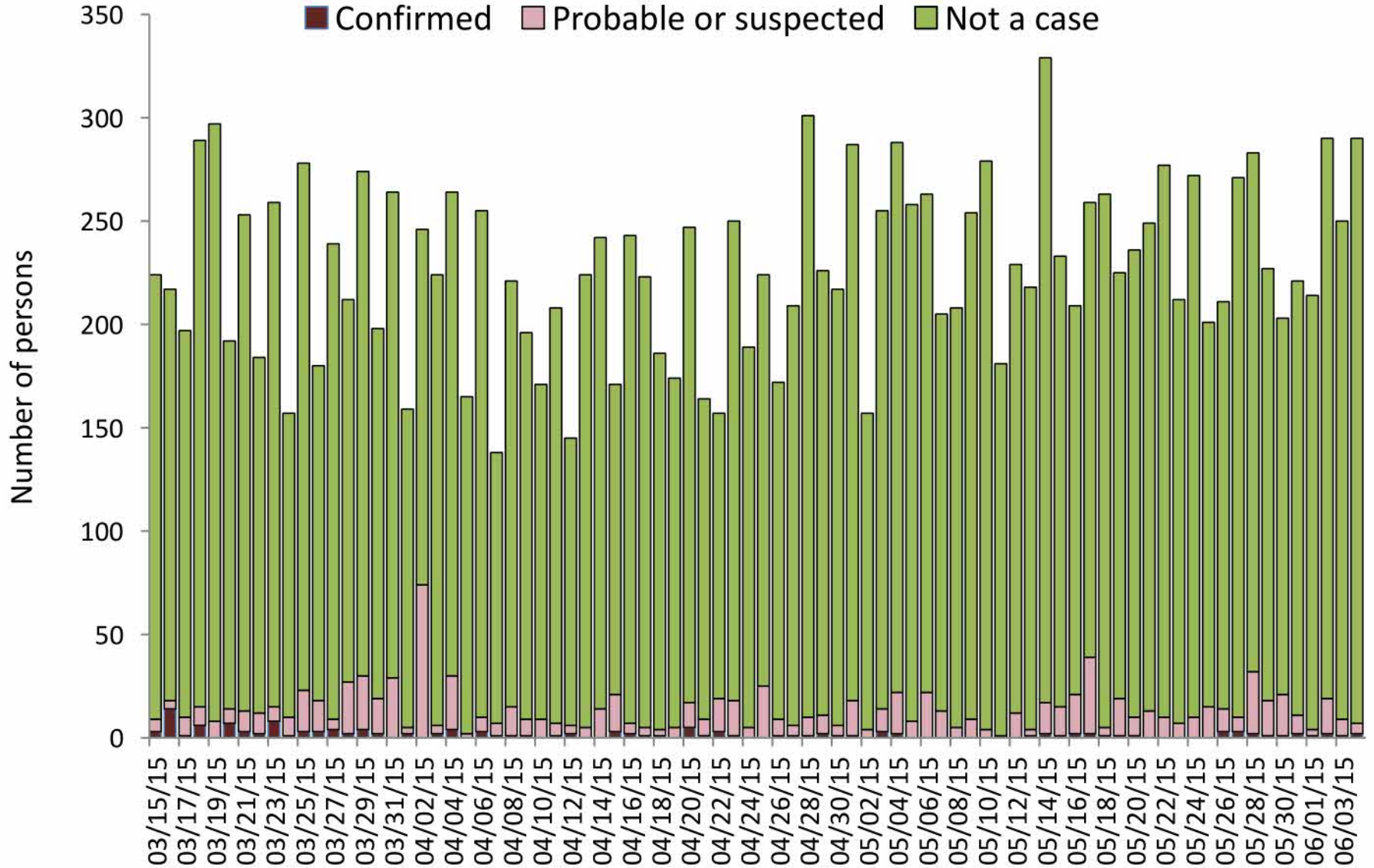
# VHF - Reports by Case Definition and Epi-week of Onset – National April 13, 2014 – June 1, 2015



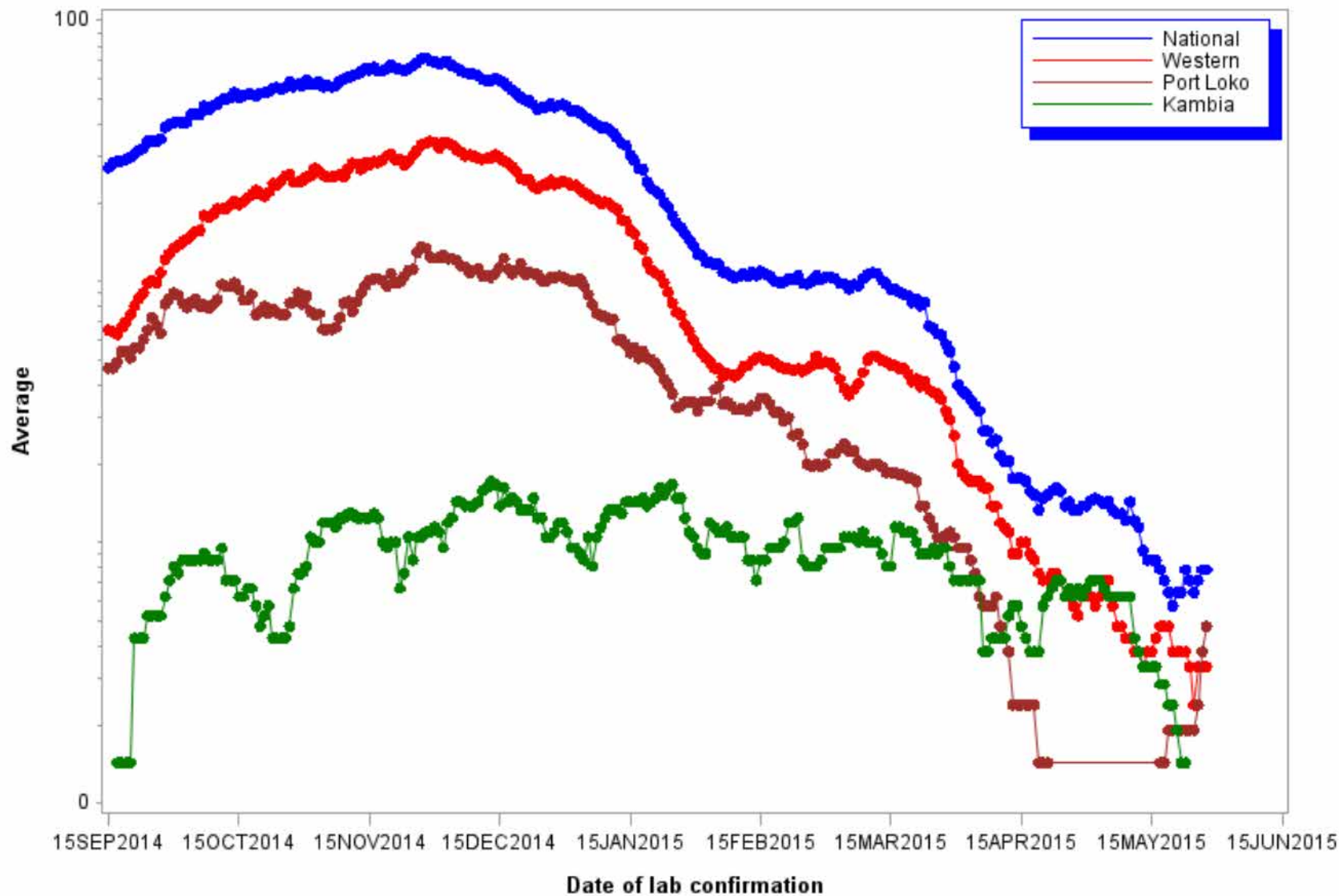


# MoHS - Reported Lab Results (by Date of the Lab Results Report)

## National, March 15 – June 4, 2015



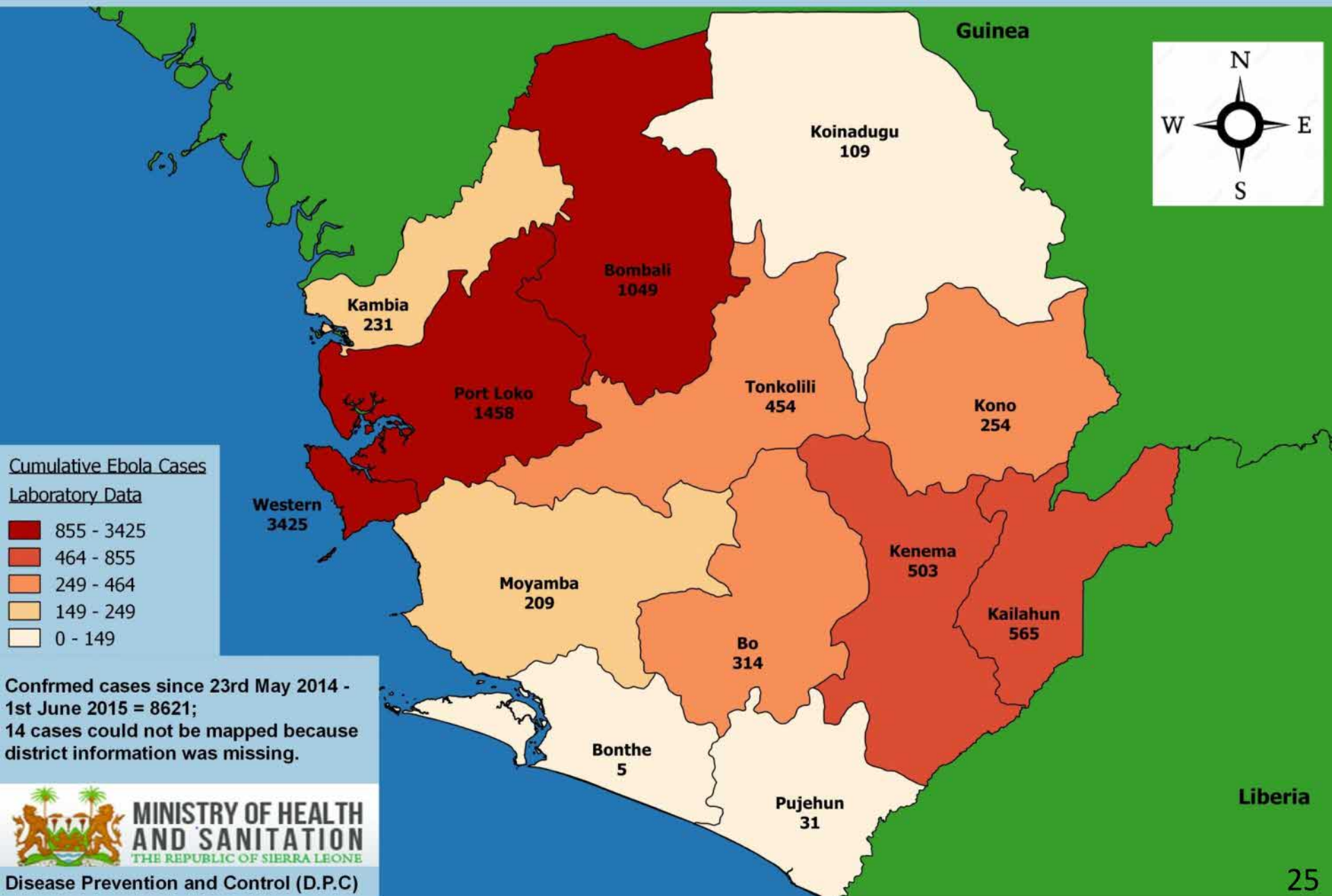
# MoHS-Lab Confirmed Cases Per Day (21-day Moving Average) Sept 15, 2014 - June 4, 2015



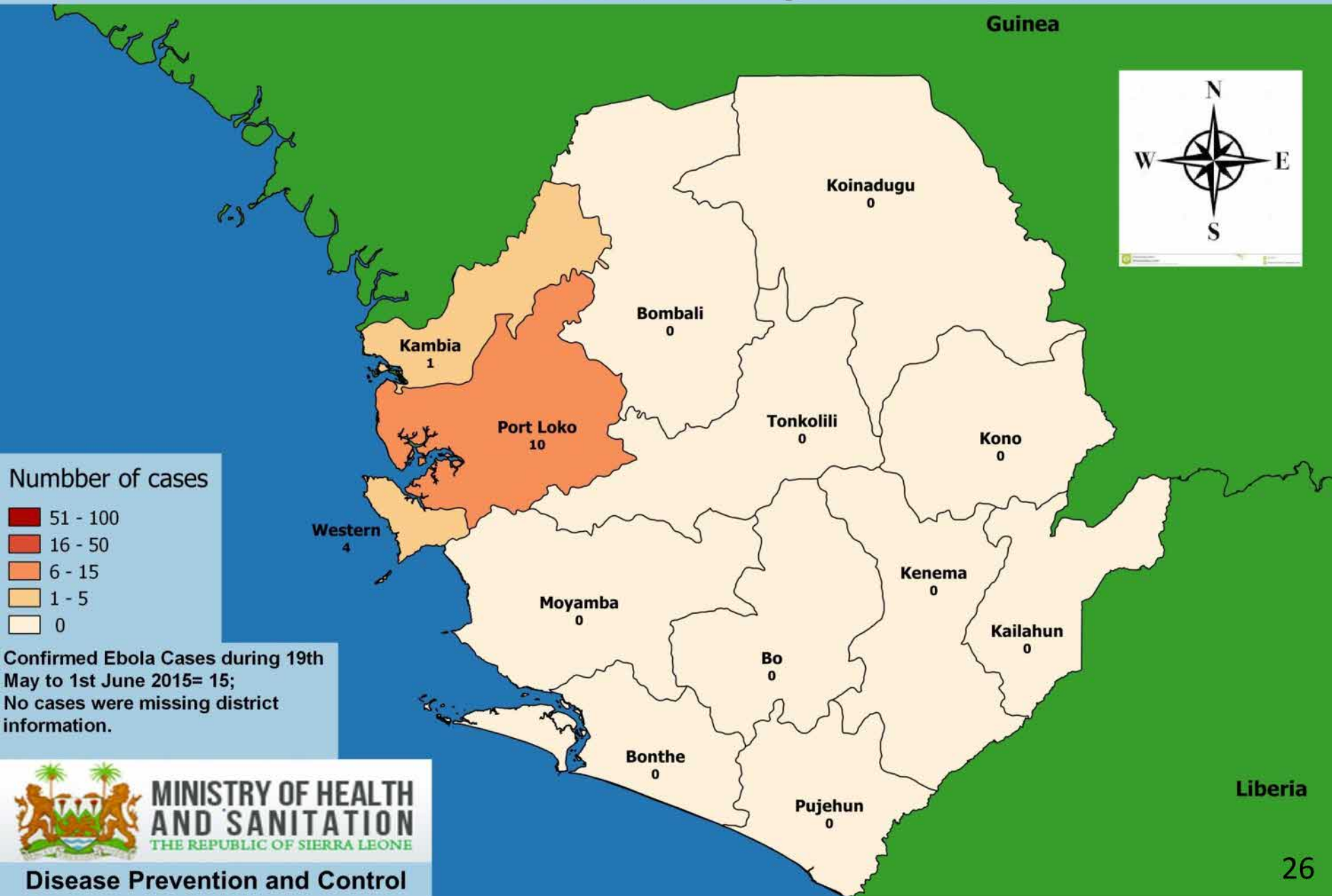
Y axis is on the log scale



# Cumulative Confirmed Ebola Cases, Laboratory Data, 23rd May 2014 - 1st June 2015



# Confirmed Ebola Cases, 19th May to 1st June 2015

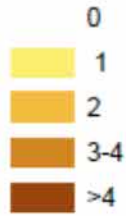



# Confirmed Ebola case from Kambia-Porto Loko week 23

MAP DATE: 05 June 2015

- Country Boundary
- District Boundary
- Chiefdom boundary

Cases by Cheifdom

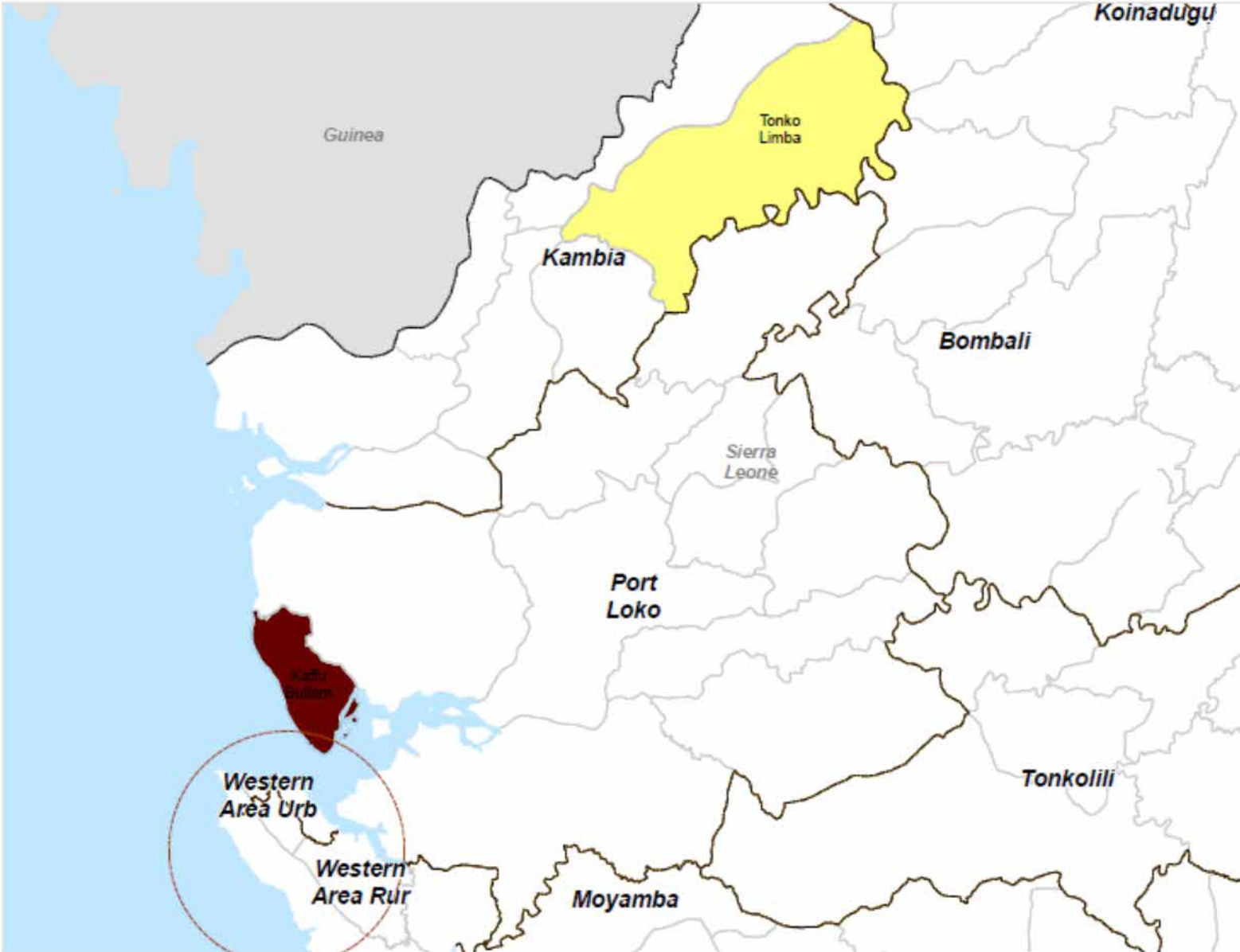


 This map is produced by IMMAP through standby partner agreement with WHO for the Ebola outbreak.

Sources:  
 Admin. boundaries: EboIageonode  
 Cartography: WHO HQ  
 Confirmed Ebola cases: MoHS daily Sit-Rep  
 Contact: afwcosi@who.int, ebolamaps@who.int  
 Map projection: WGS 1984  
 Created in country by: Fayyaz Ahmed Malik (fmalik@immap.org)



WHO DISCLAIMER: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.





# Number of days since last case reported by district as of 04th June 2015



— Country Boundary  
— District Boundary

### Days since last case



IMMAP - This map is produced by IMMAP through standby partner agreement with WHO for the Ebola outbreak.

Sources:  
Admin. boundaries: EboIageonode  
Cartography: WHO HQ  
Death definition rates: Reported deaths / expected number of deaths  
Contact: hshkwic@who.int  
Map projection: WGS 1984  
Created in country by: Fayyaz Ahmed Malik (fmalik@immap.org)

Expected number of deaths calculated using crude mortality rate of 17.3/1000/year (Source: WHO Global Health Observatory, 2012) based on district population data (Source: Sierra Leone National Census 2004).



WHO DISCLAIMER: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.



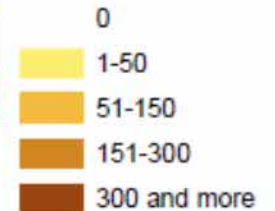
MAP DATE: 04 June 2015

# Contacts followed by chiefdom/ward as of 04th June 2015

MAP DATE: 04 June 2015

- Country Boundary
- District Boundary
- Chiefdom boundary

## Contacts followed



This map is produced by IMMAP through standby partner agreement with WHO for the Ebola outbreak.

Sources:  
 Admin. boundaries: EboIageonode  
 Cartography: WHO HQ  
 Confirmed Ebola cases: MoHS daily Sit-Rep  
 Contact:afacosi@who.int,ebolamaps@who.int  
 Map projection: WGS 1984  
 Created in country by: Fayyaz Ahmed Malik (fmalik@immap.org)

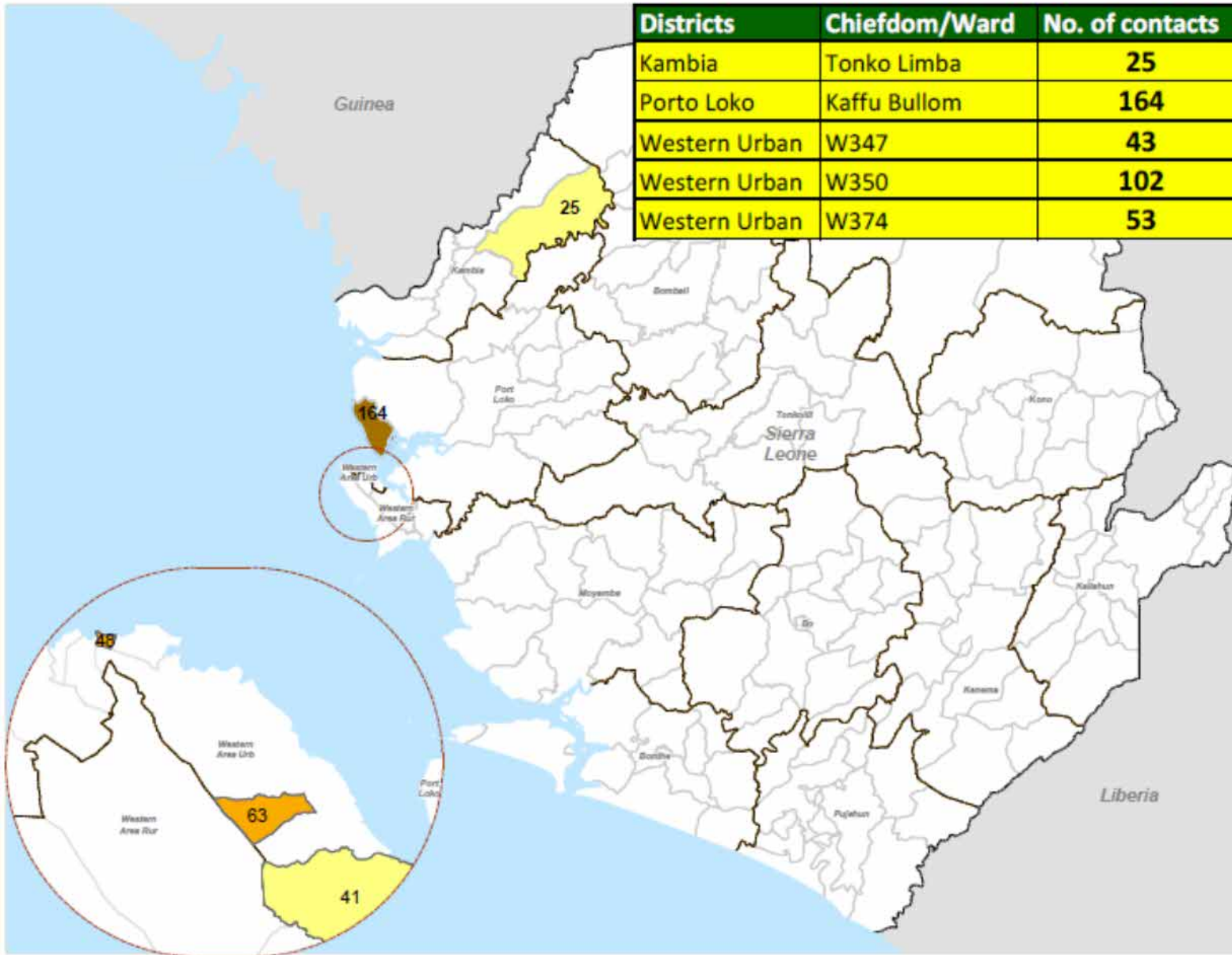
### Sierra Leone in Africa:



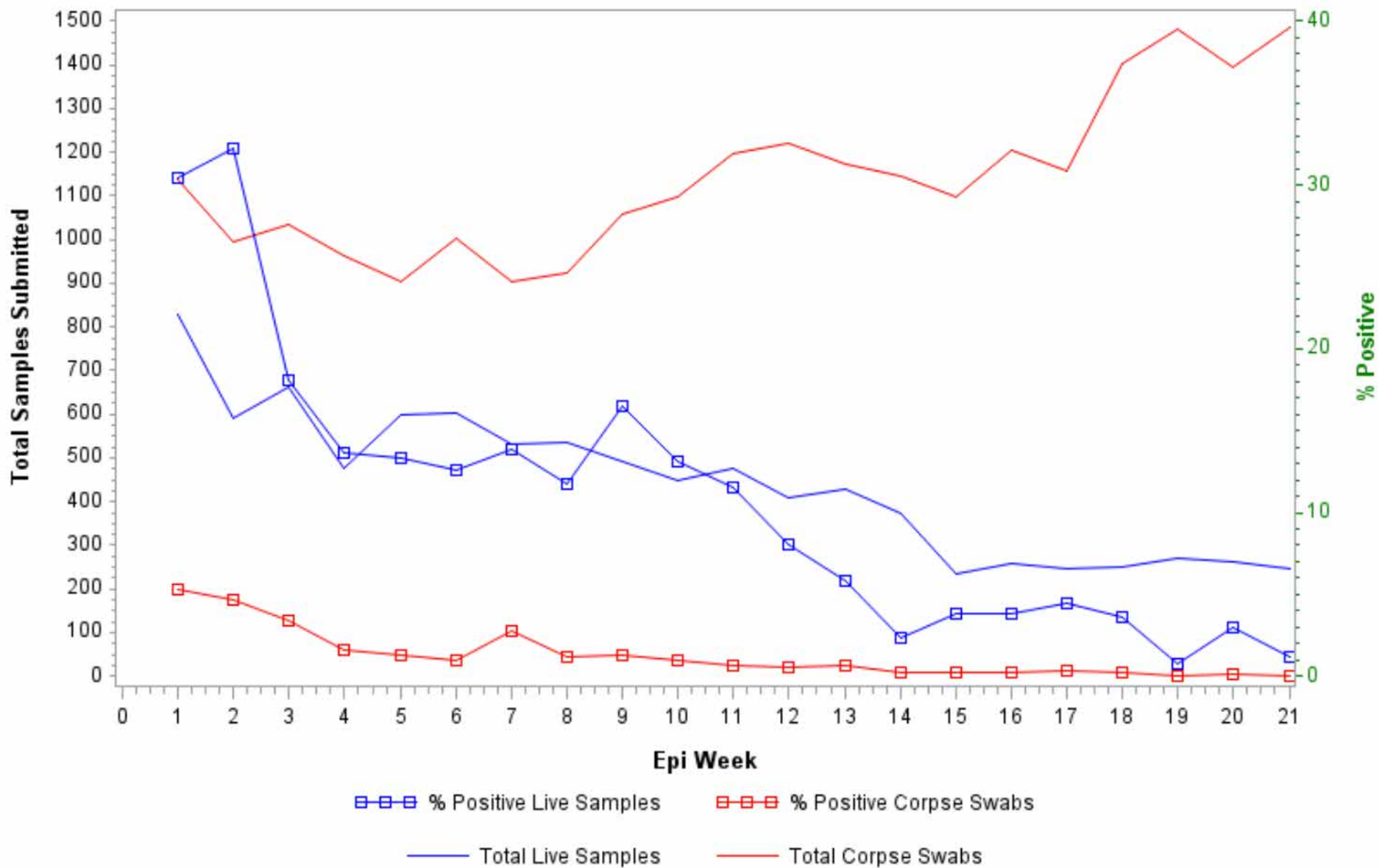
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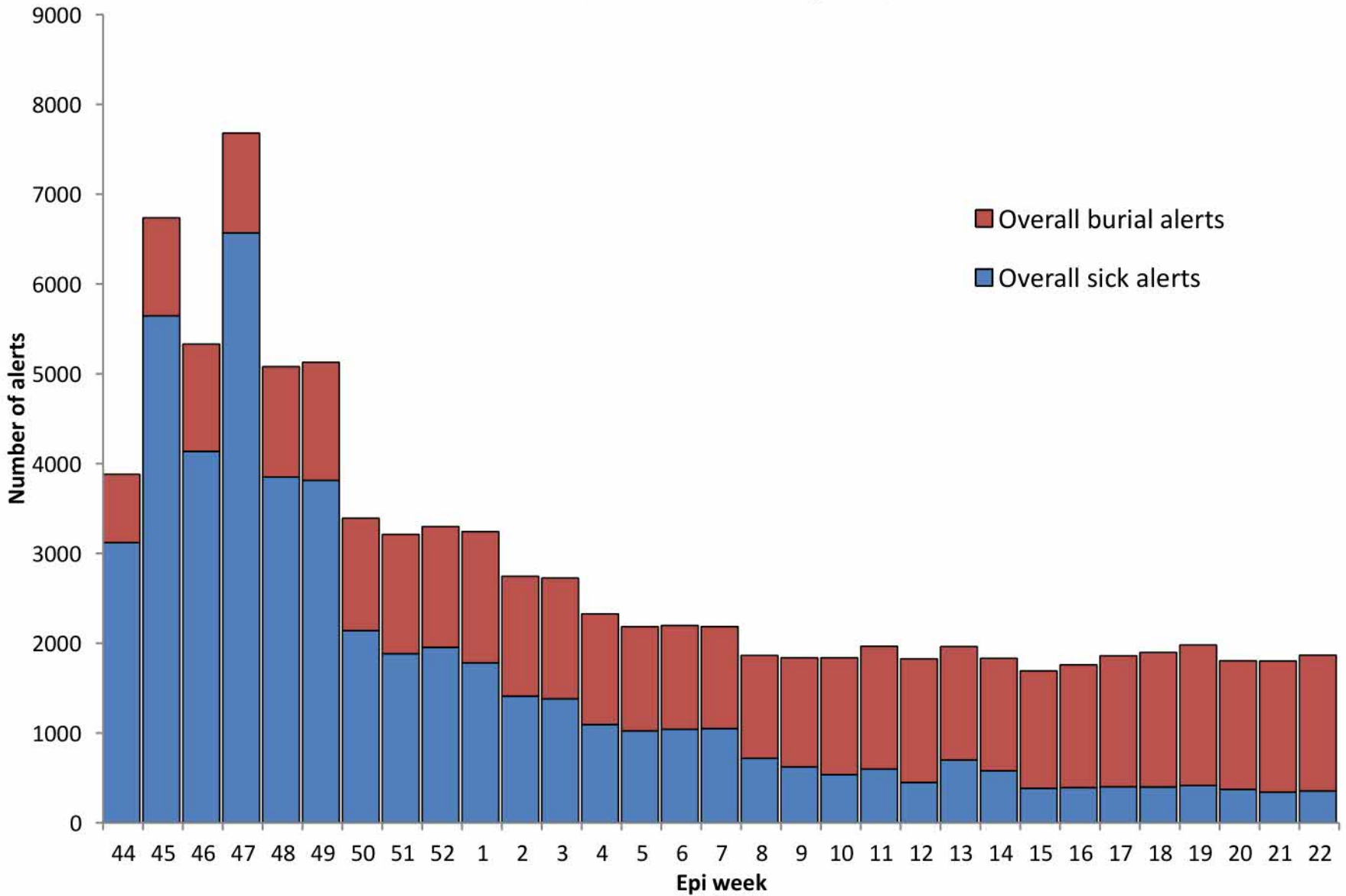
Districts	Chiefdom/Ward	No. of contacts
Kambia	Tonko Limba	25
Porto Loko	Kaffu Bullom	164
Western Urban	W347	43
Western Urban	W350	102
Western Urban	W374	53



## Comparison of Positive Results to Total Samples Live Cases and Death Swabs



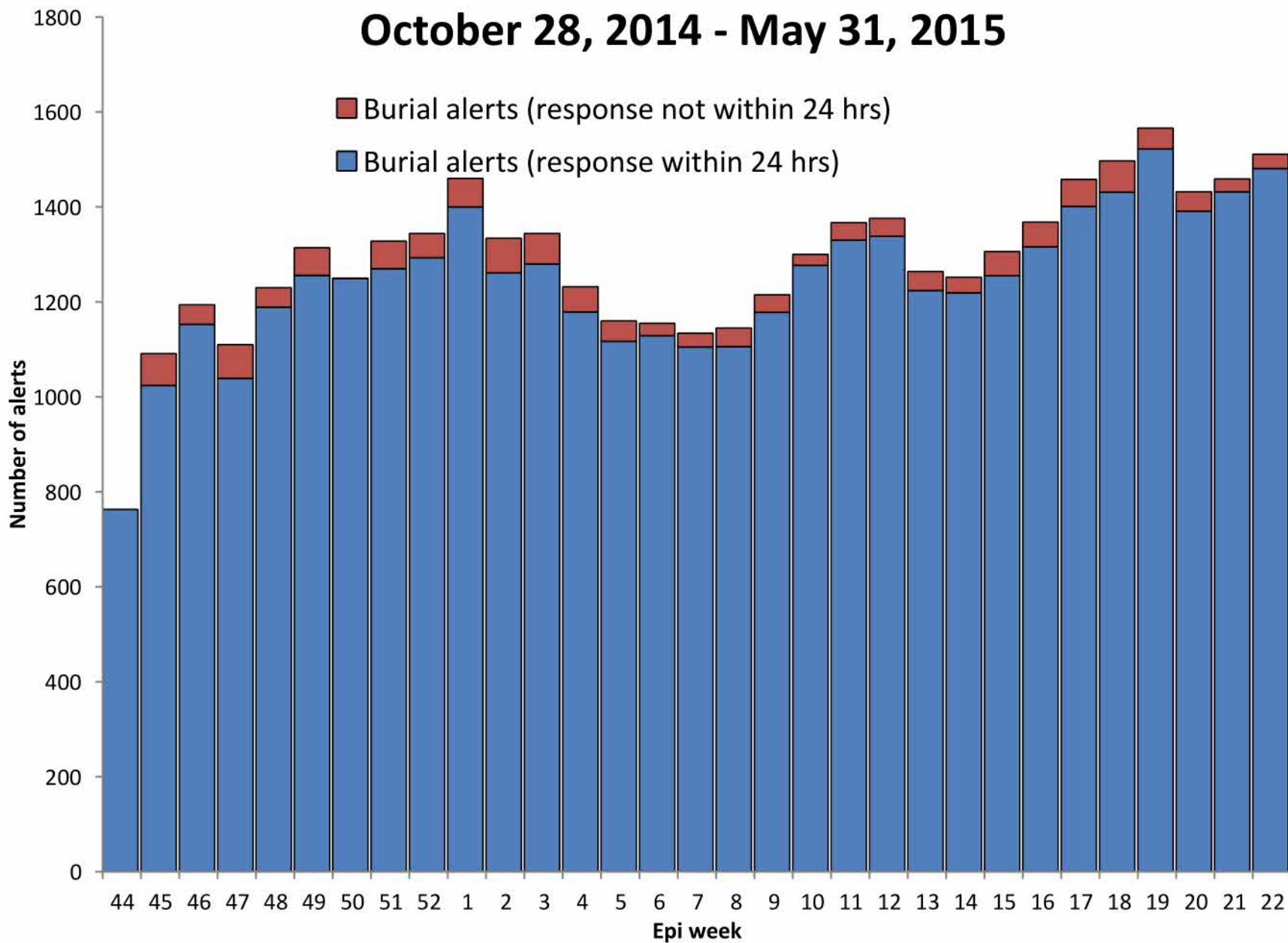
# MoHS- Alerts Reported by Type October 28, 2014 - May 31, 2015





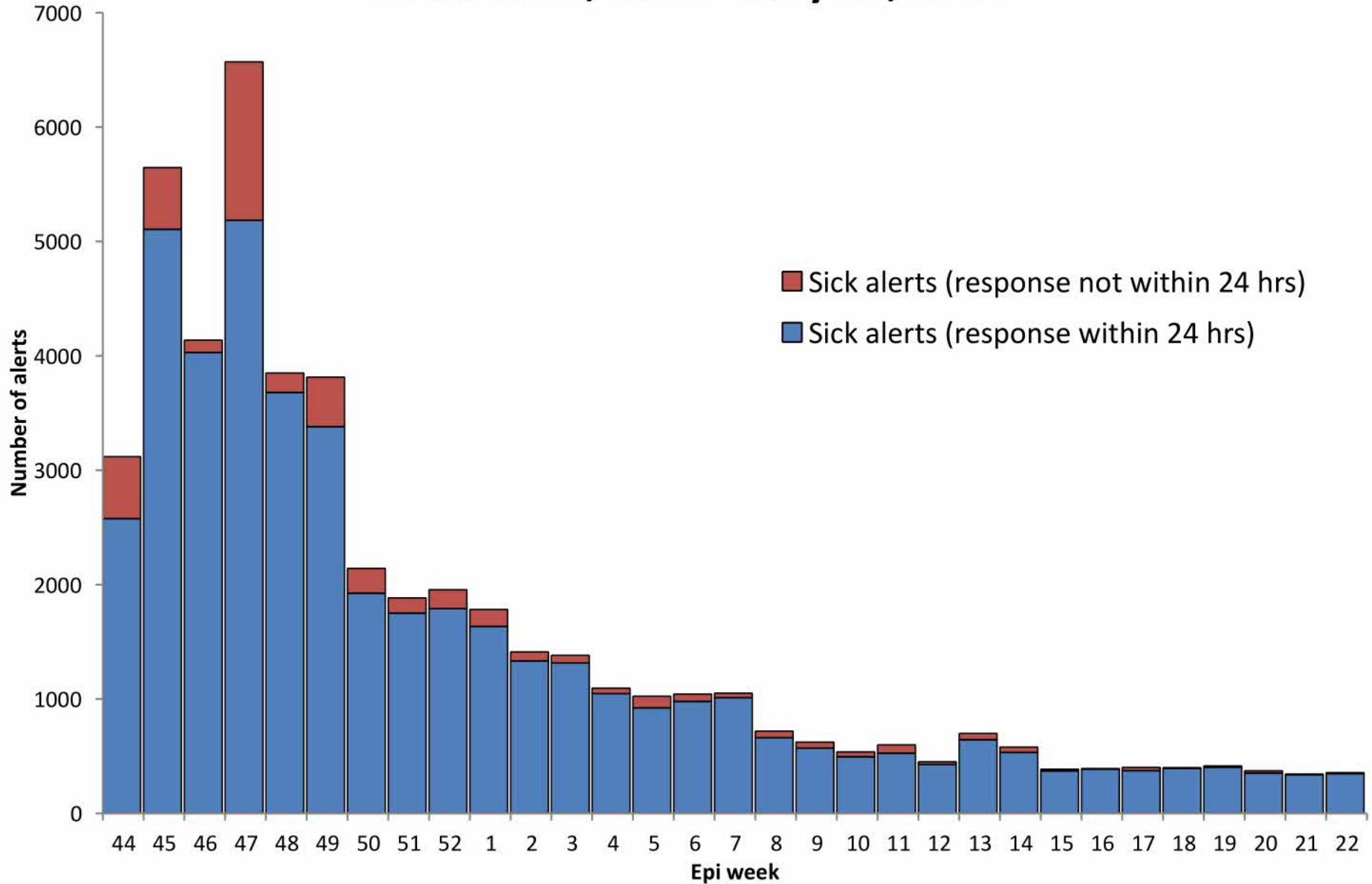
# MoHS- Burial Alerts and Response

## October 28, 2014 - May 31, 2015

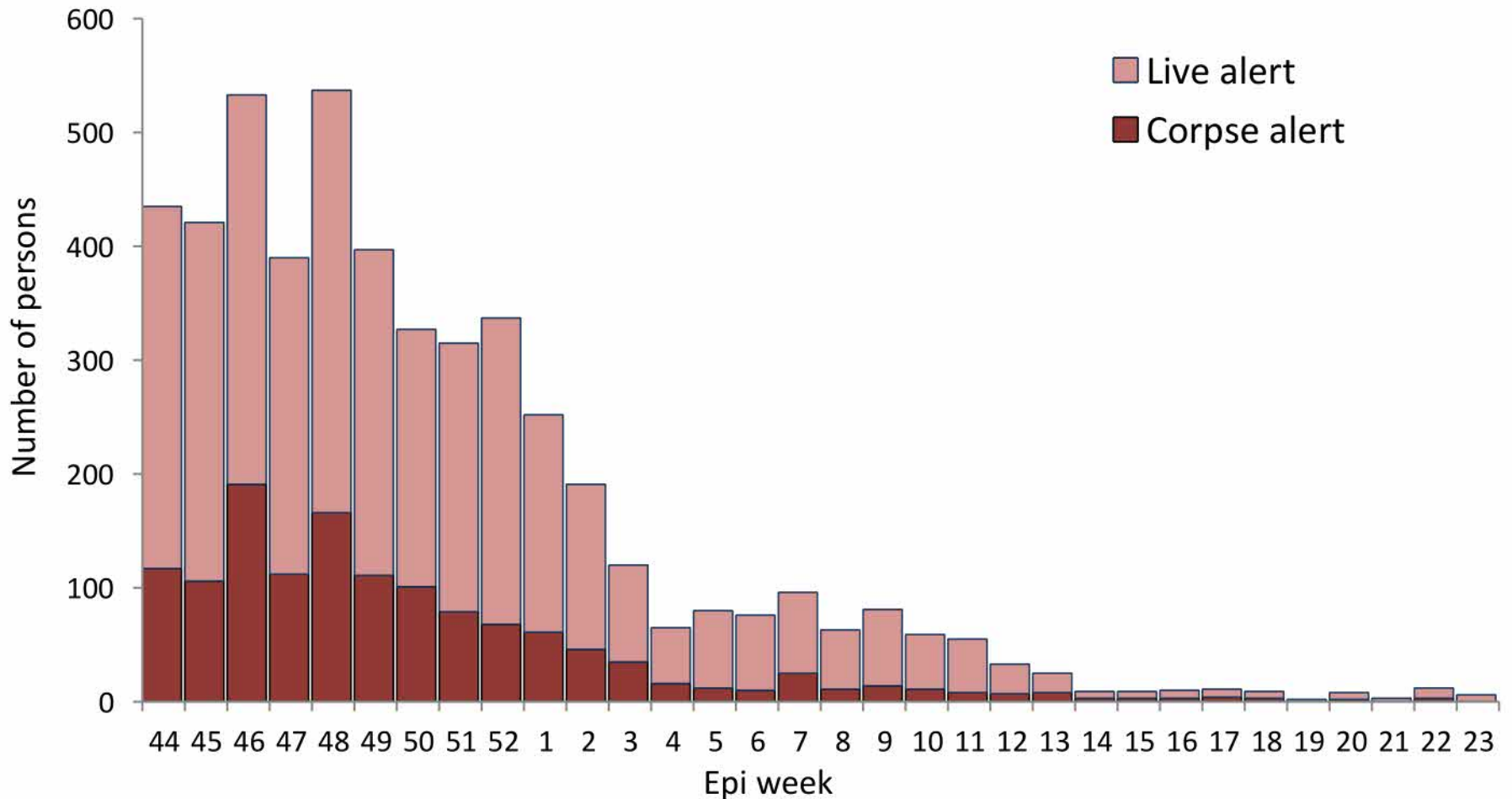


# MoHS- Sick Alerts Reported and Response

## October 28, 2014 - May 31, 2015



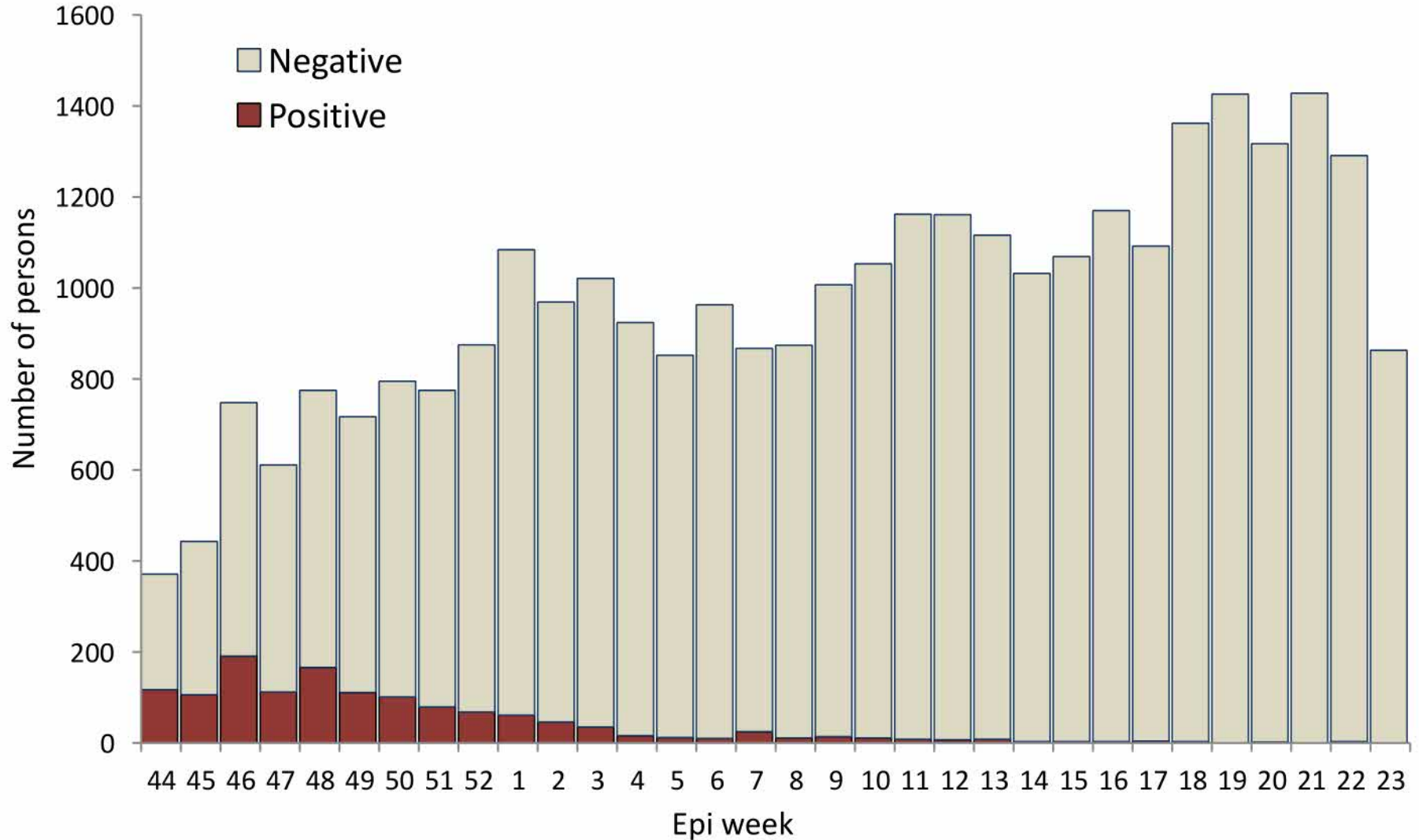
# MoHS - Reported Confirmed Cases\* by Type of Alert, Sierra Leone, October 27, 2014 – June 7\*\*, 2015



\*Cases confirmed through swab testing were assumed to be corpse alerts.

\*\*Epi week 23 incomplete; current through June 4, 2015

# MoHS - Reported Corpses\* by EVD Result, Sierra Leone, October 27, 2014 – June 7\*\*, 2015



\*Swab samples were assumed to be from corpse alerts.

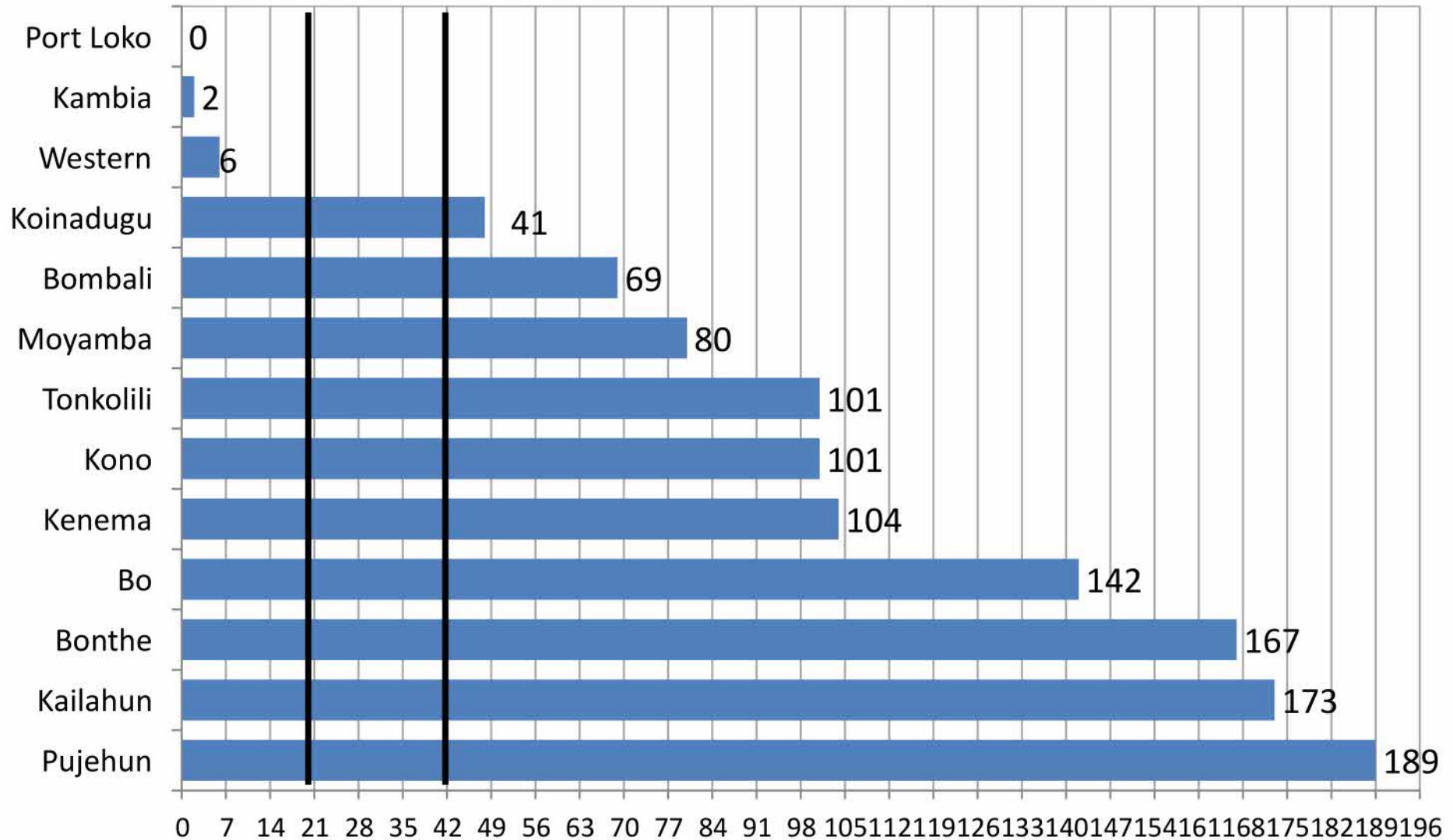
\*\*Epi week 23 incomplete, current through June 4, 2015

## EVD Cases Confirmed from Swabs Data (Epi week 21: May 18 – May 24, 2015 and Epi week 22: May 25 – May 31, 2015)

National/District	Epi week 21		Epi week 22	
	EVD confirmed corpses	Total corpses swabbed	EVD confirmed corpses	Total corpses swabbed
National	0	1486	3	1288
Bo	0	172	0	167
Bombali	0	102	0	80
Bonthe	0	49	0	44
Kailahun	0	24	0	28
Kambia	0	61	1	71
Kenema	0	110	0	92
Koinadugu	0	74	0	45
Kono	0	80	0	73
Moyamba	0	115	0	127
Port Loko	0	167	1	151
Pujehun	0	79	0	18
Tonkolili	0	117	0	101
Western	0	322	1	296

Data Source: MoHS Daily Sit Rep, May 19 – June 5, 2015

# Days Since Last Confirmed Case by District, June 5



# DISTRICT DATA

**Note:**

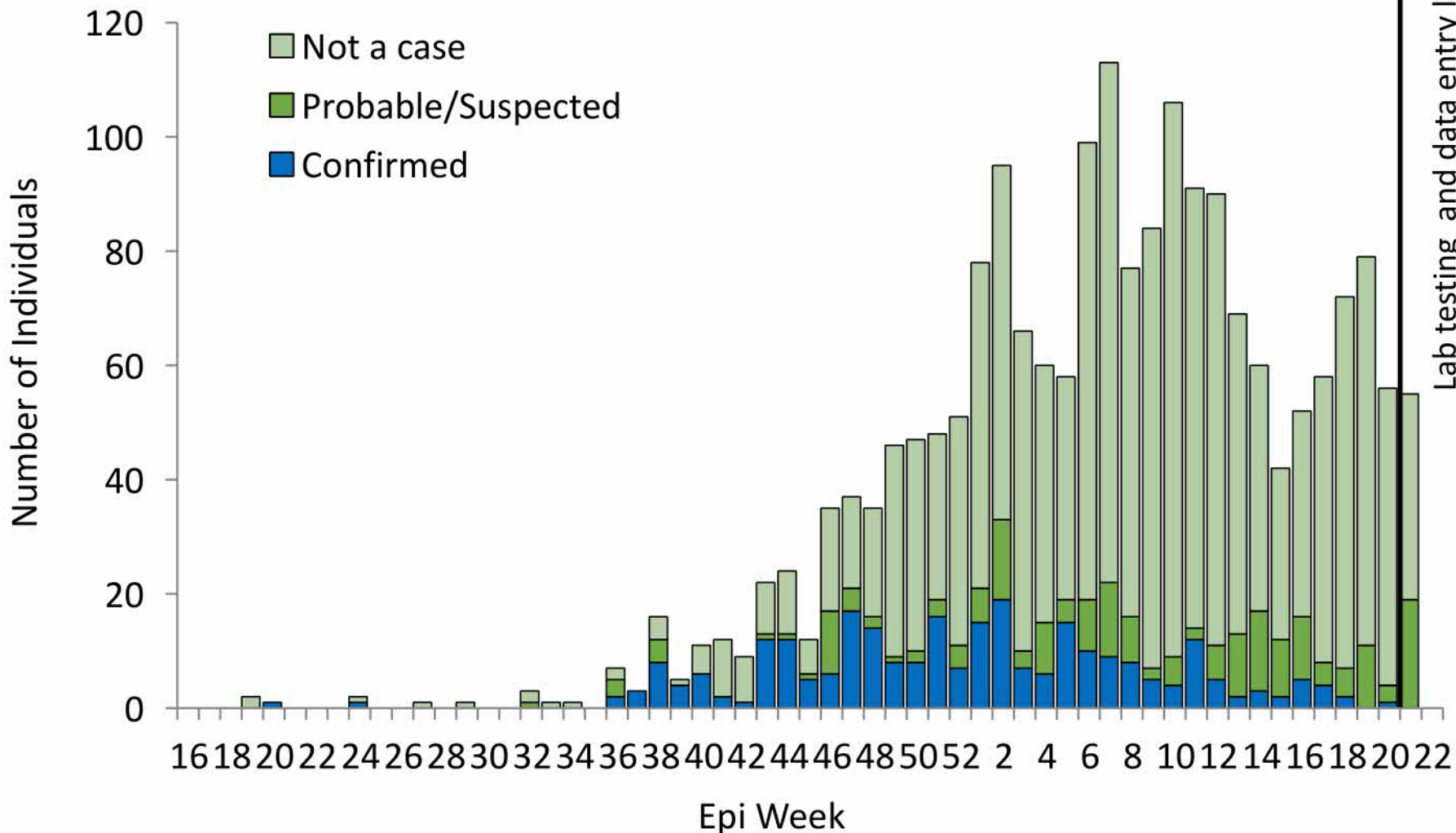
Only includes district data where days since last confirmed case is  $\leq 42$  days



# **Kambia District**

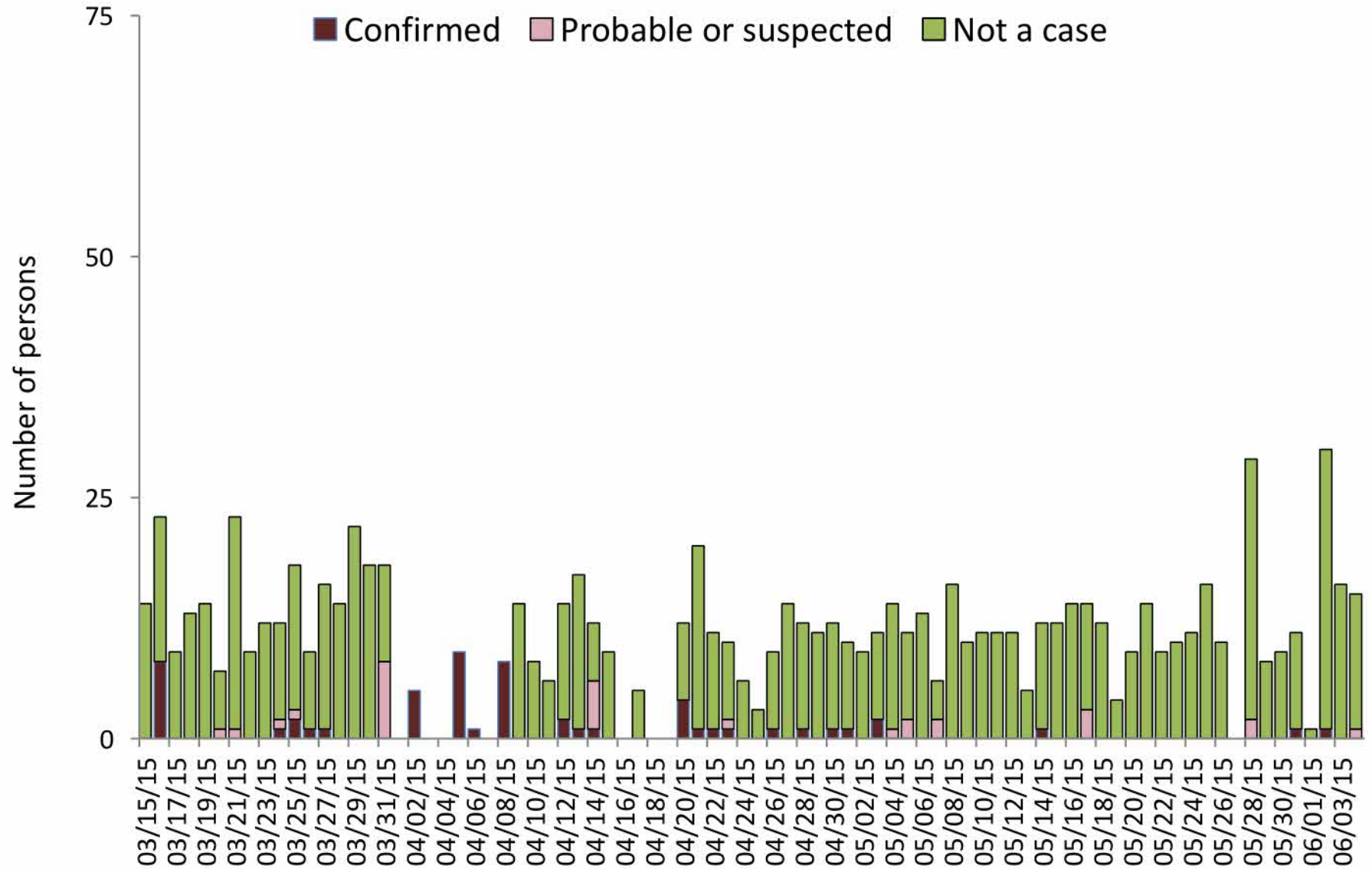
# VHF - Reports by Case Definition and Epi-week of Onset – Kambia

## April 13, 2014 – June 1, 2015



# MoHS - Reported Lab Results by Case Definition and Lab Report Date

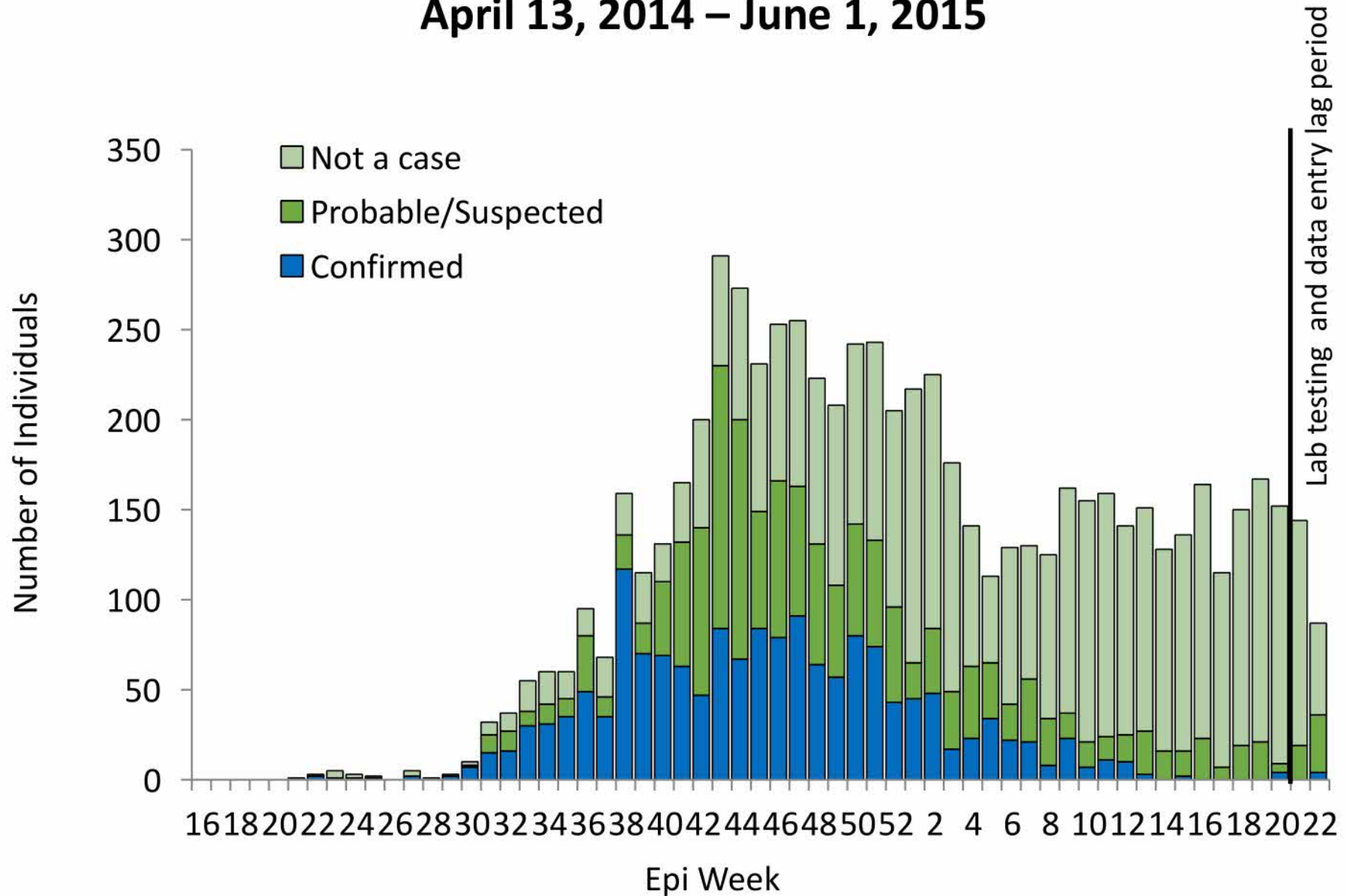
## Kambia, March 15 – June 4, 2015



# Port Loko District

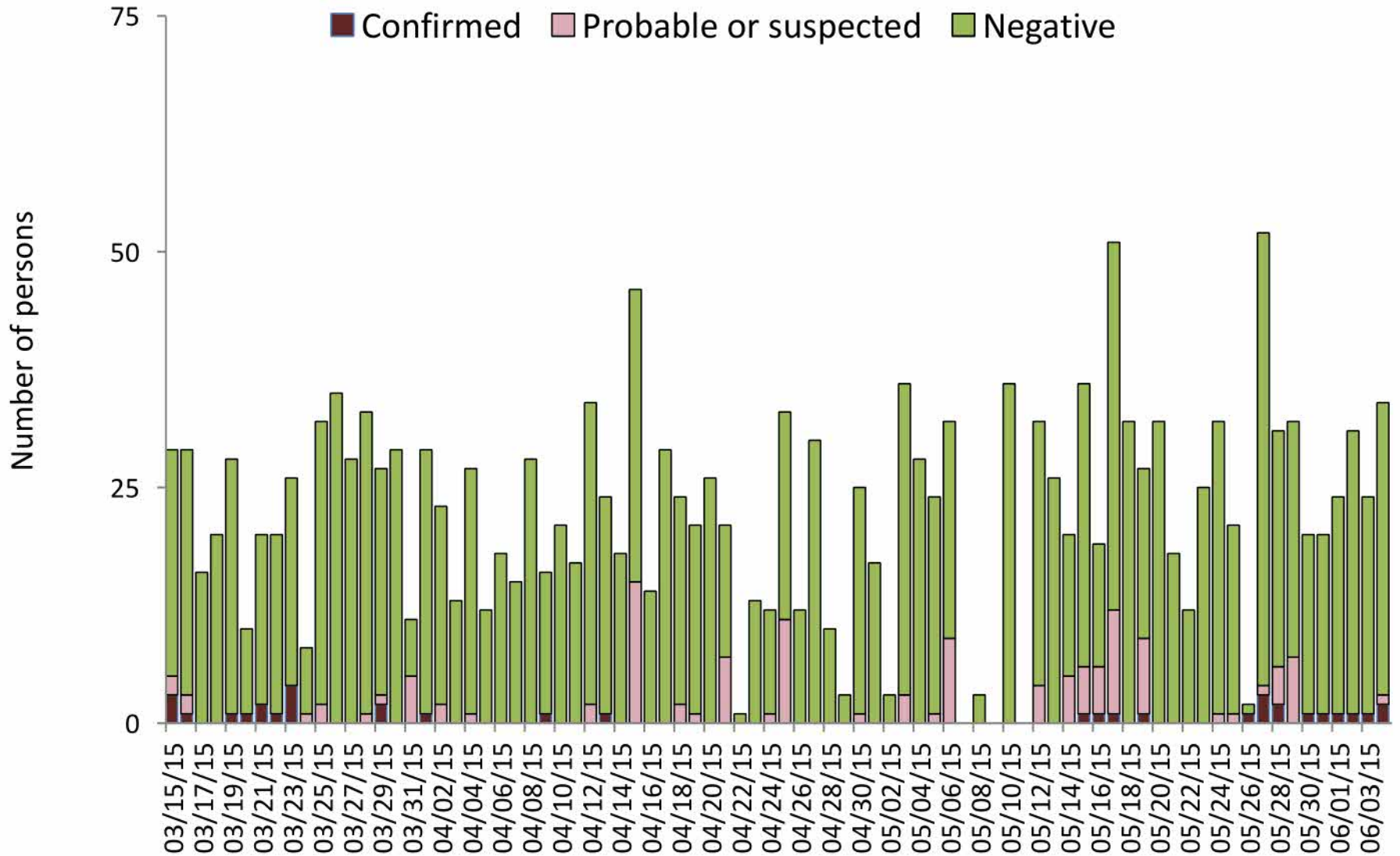
# VHF - Reports by Case Definition and Epi-week of Onset – Port Loko

## April 13, 2014 – June 1, 2015



# MoHS - Reported Lab Results by Case Definition and Lab Report Date

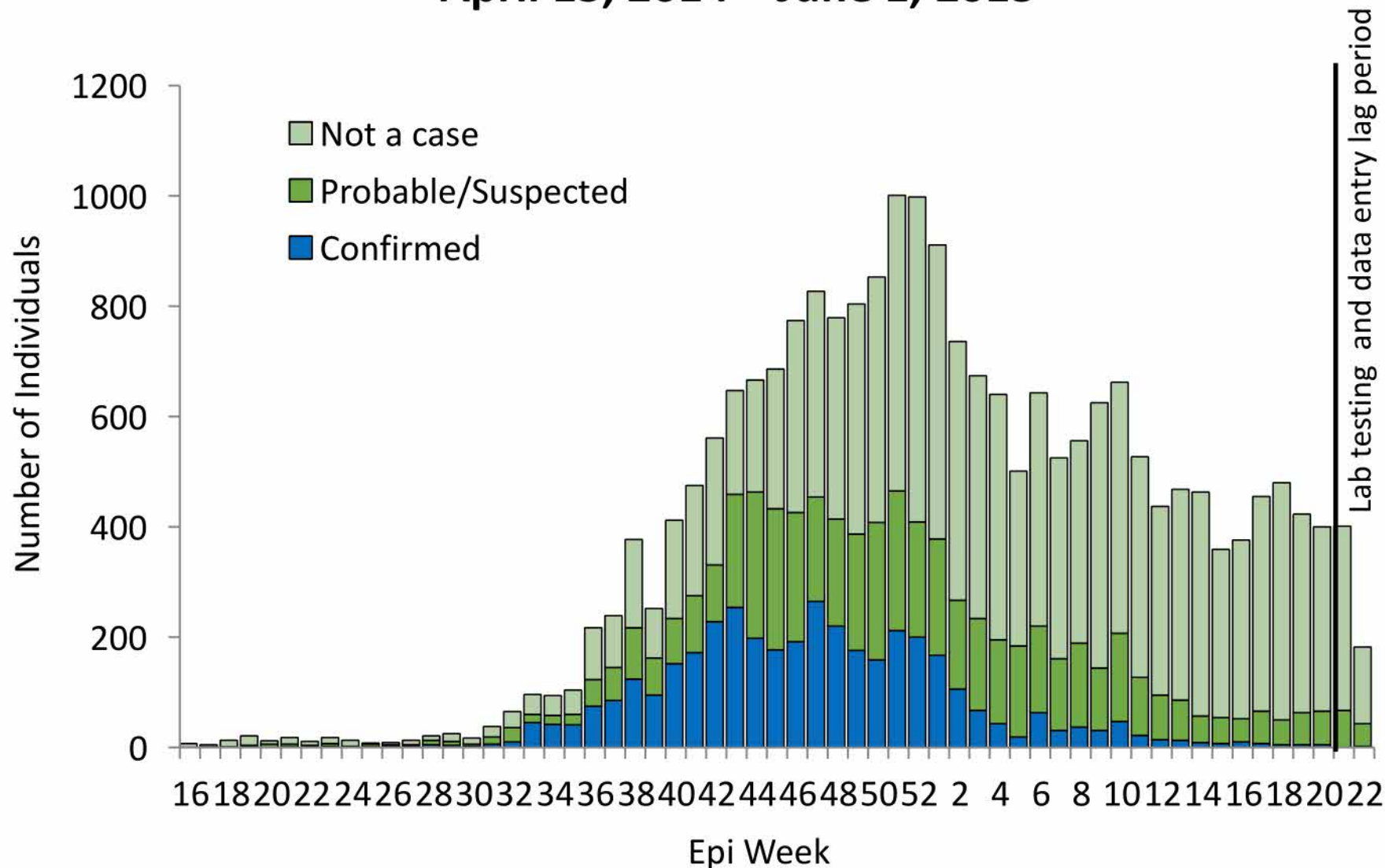
## Port Loko, March 15 – June 4, 2015



# Western District



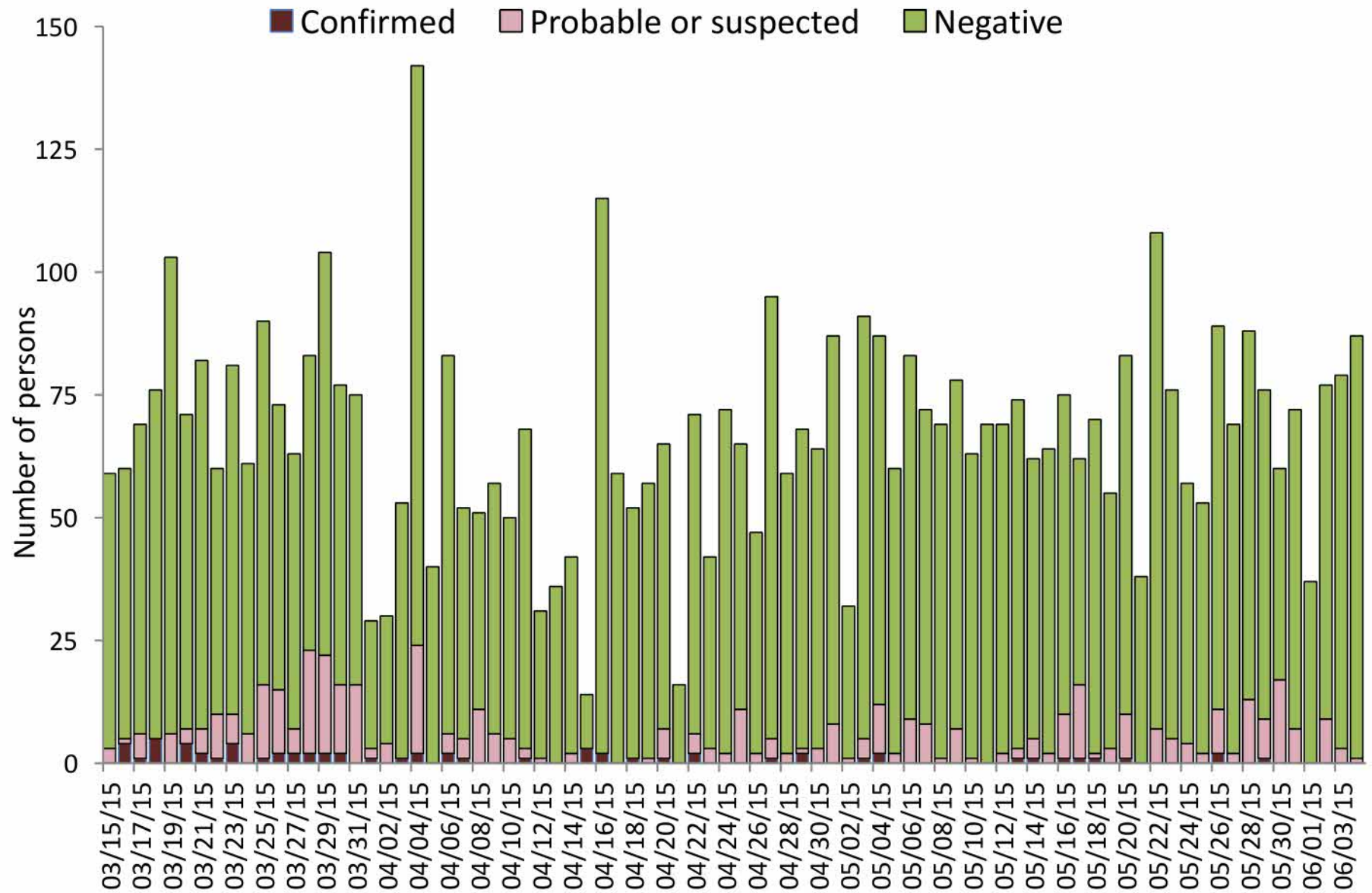
# VHF - Reports by Case Definition and Epi-week of Onset – Western April 13, 2014 – June 1, 2015



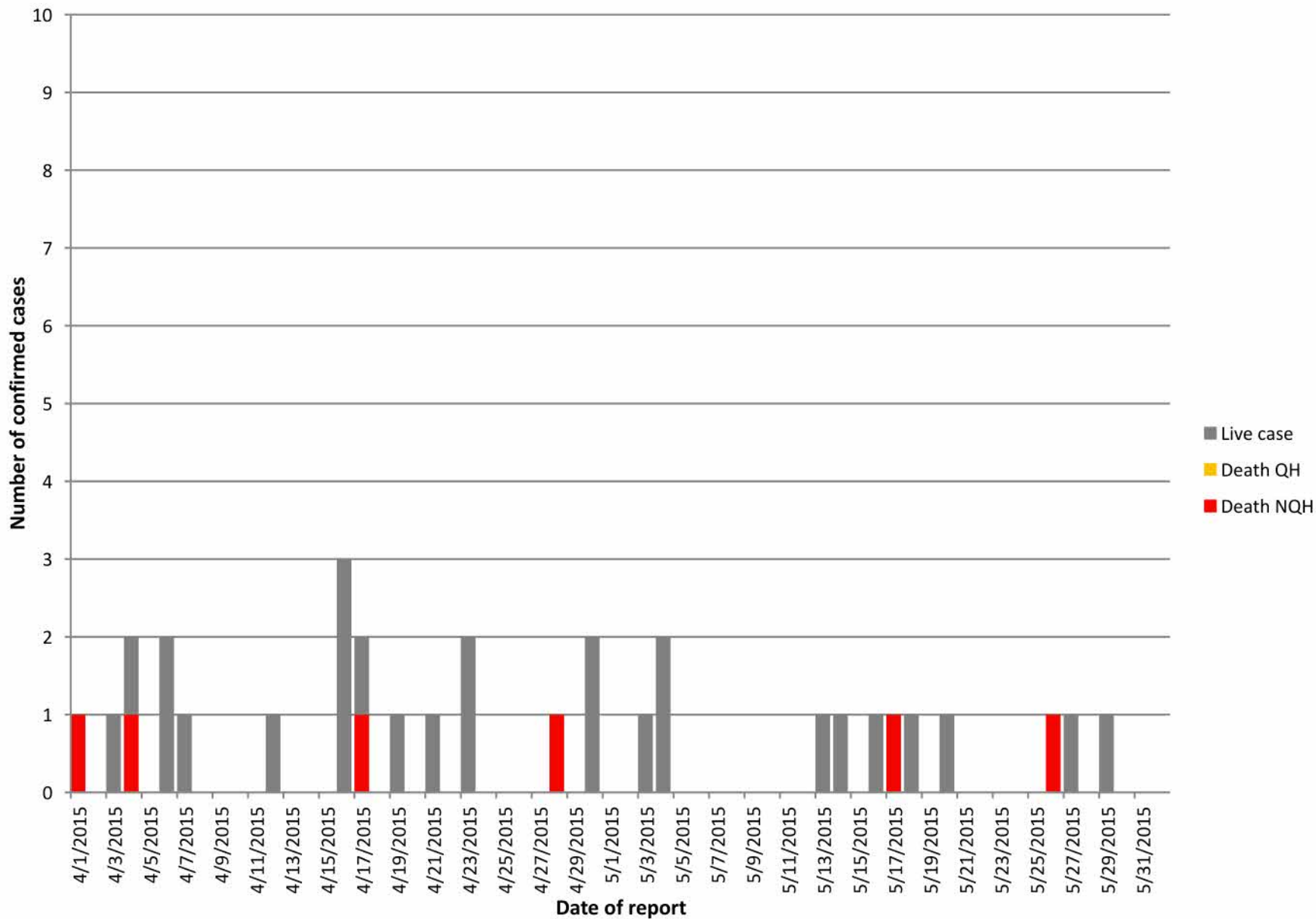
VHF sync file not submitted for epi week 20

# MoHS - Reported Lab Results by Case Definition and Lab Report Date

## Western Area, March 15 – June 4, 2015



# Number of Confirmed Cases by Date, Western Area





**Government of Sierra Leone**  
Ministry of Health and Sanitation



**World Health  
Organization**

# **Ebola Virus Disease**

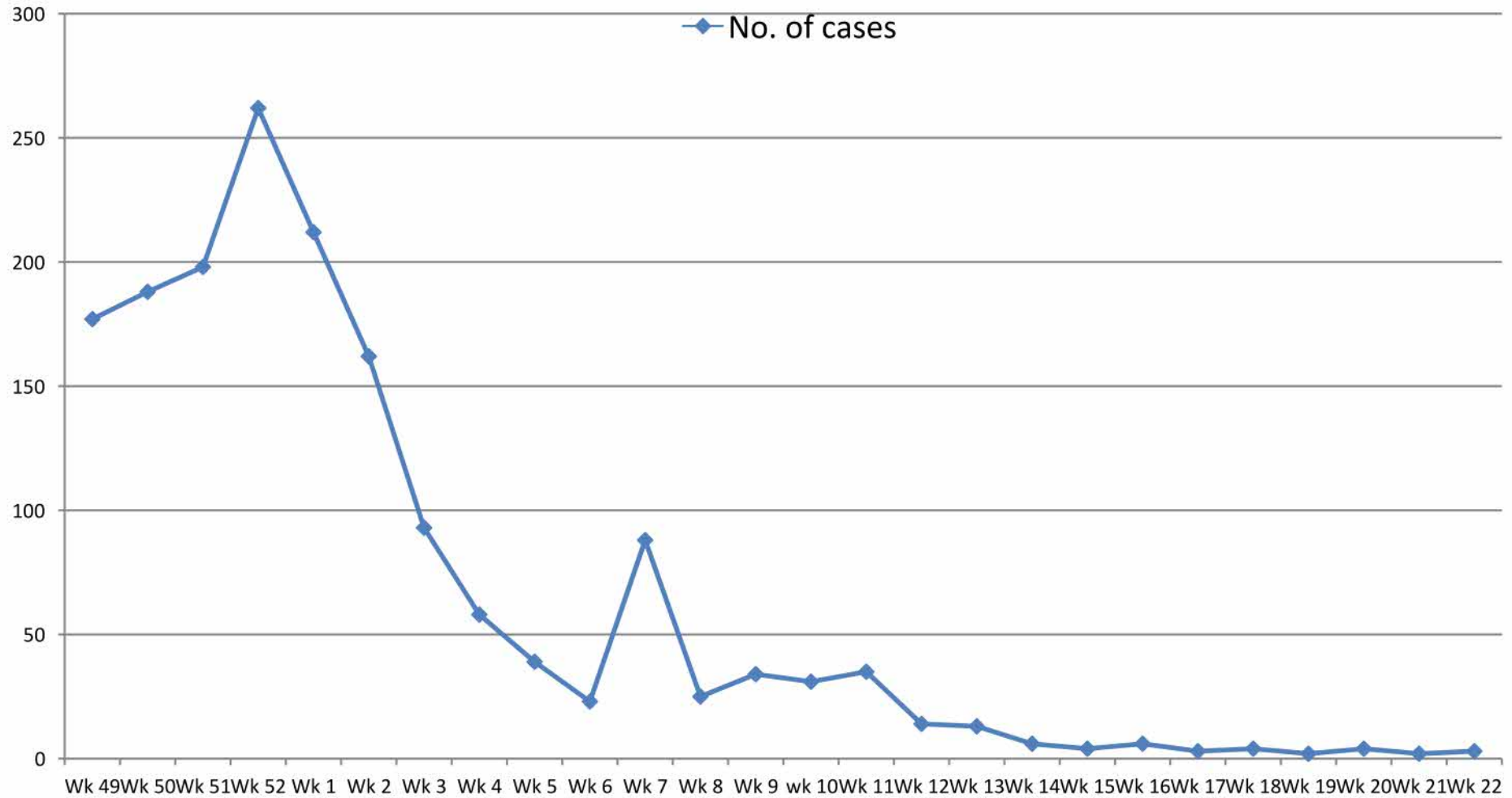
## **Epi-situation in Western Area**

**Week 22 (25<sup>th</sup> - 31<sup>st</sup> May 2015)**

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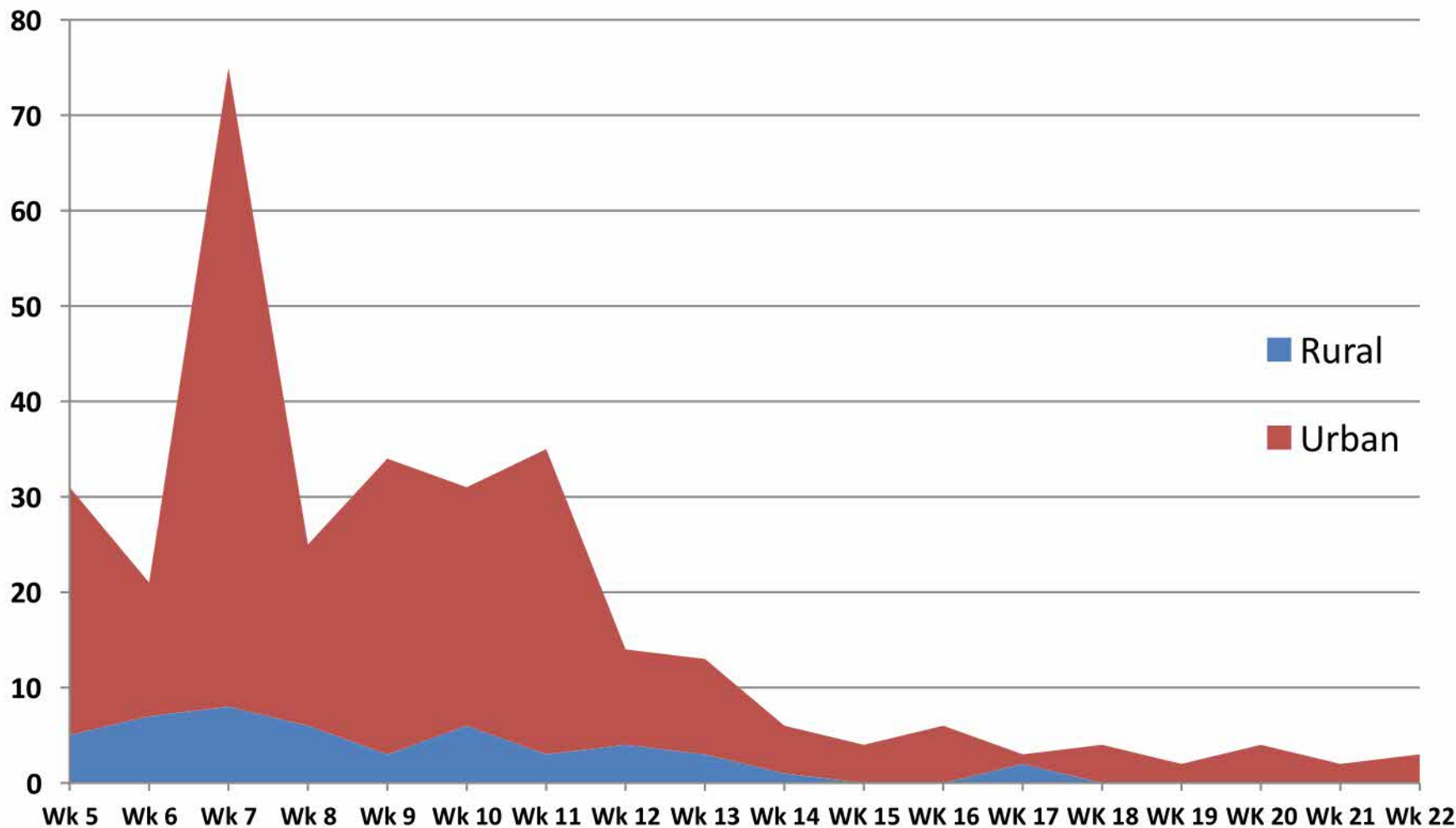
With the support of the Center for Disease Control and Prevention (CDC)

# Week-wise Number of Confirmed Cases: Western Area



Source: Western operation line list as on 1<sup>st</sup> June 2015

# Week-wise Number of Confirmed Cases by Western Urban and Rural Areas

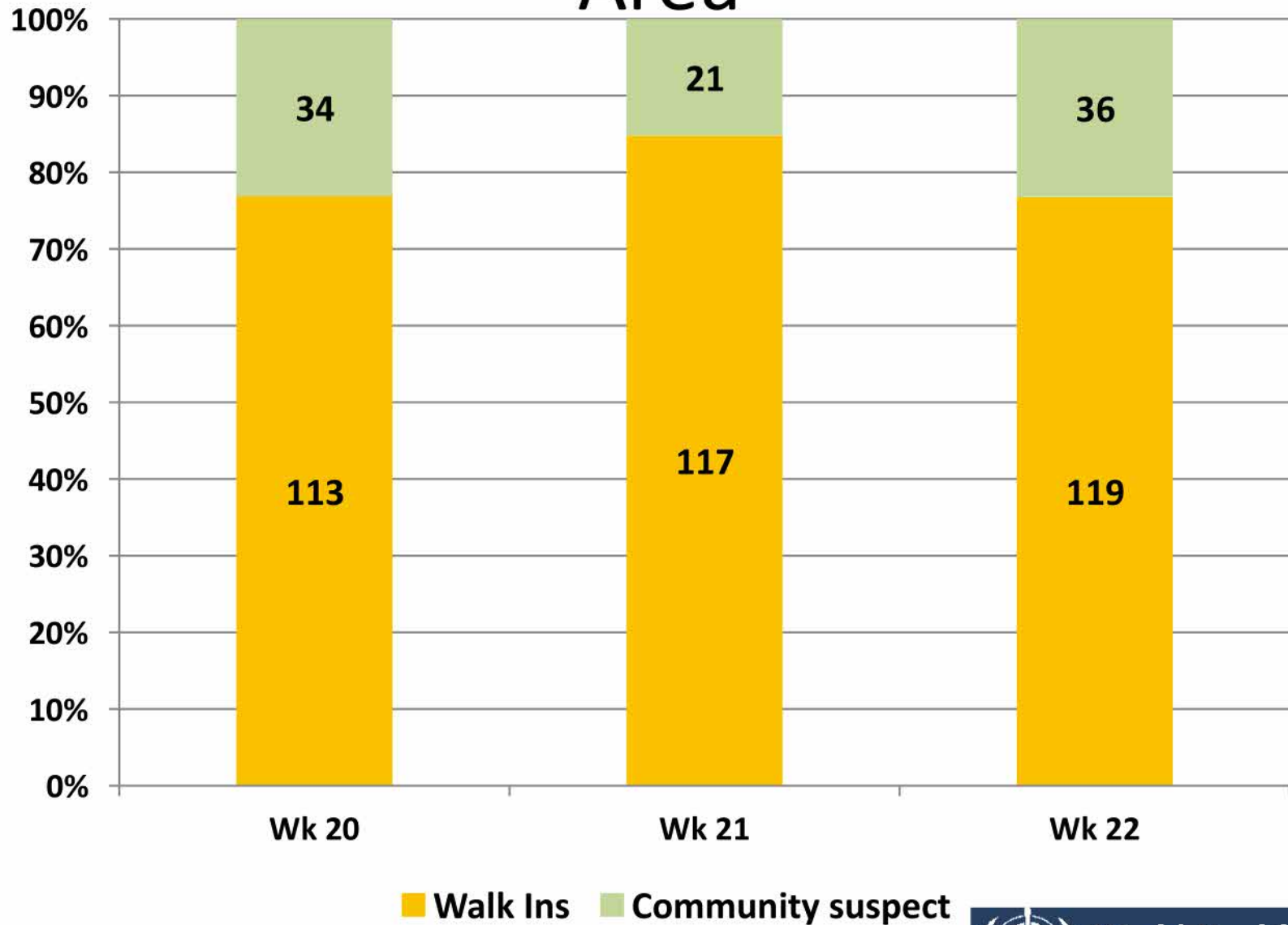


Source: Western operation line list as on 1<sup>st</sup> June 2015





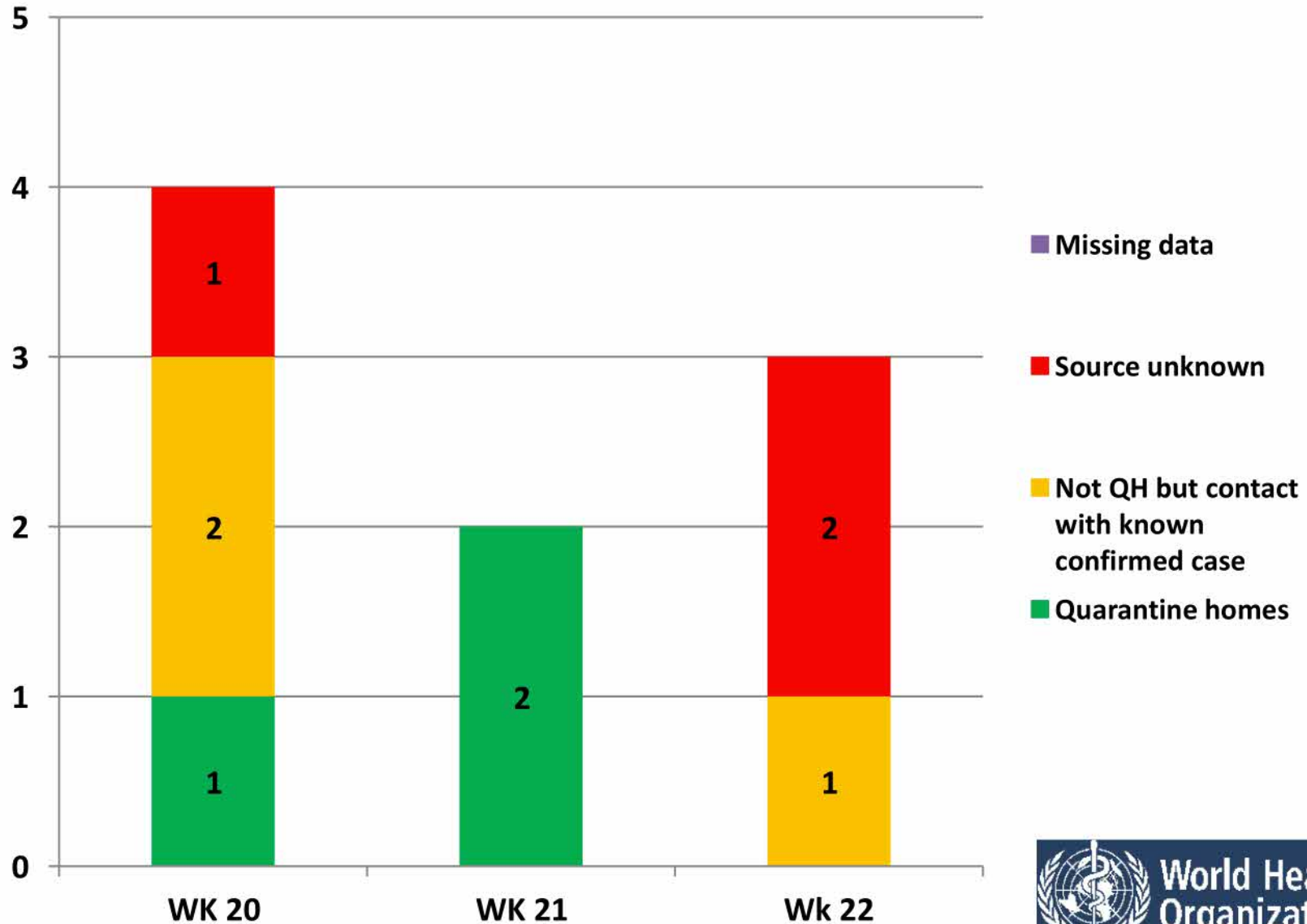
# Source of Suspected Cases: Western Area



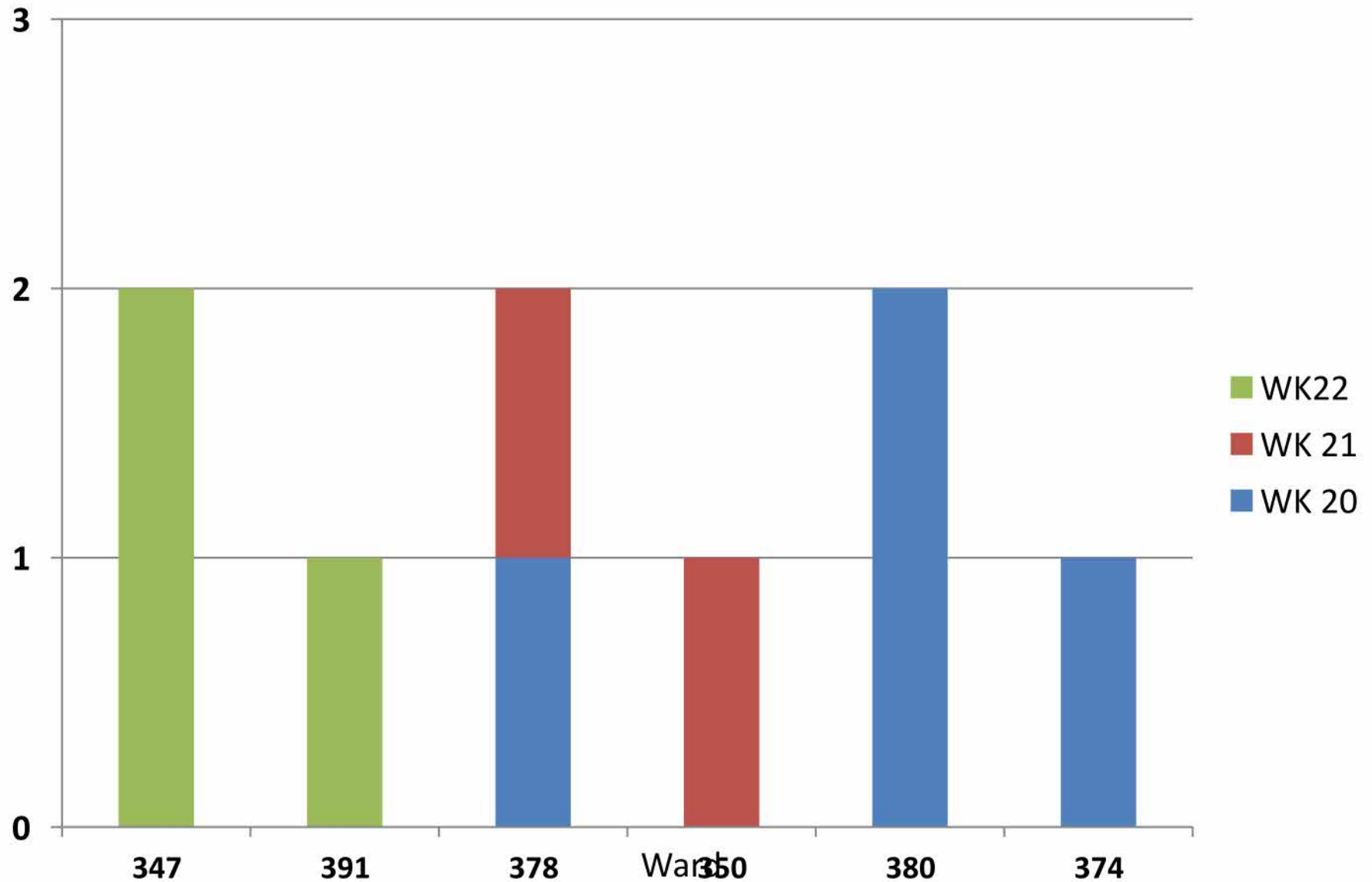
Source: Western operation line list as on 1<sup>st</sup> June 2015



# Source of Confirmed EVD Cases: Western Area



# Weekly Hotspot of Western Area



***THANK YOU***

**From:** Marston, Barbara J. (CDC/CGH/DGHP)  
**Sent:** Sat, 9 May 2015 10:36:33 -0400  
**To:** EOC Conf/Bridge Calendar (CDC); Demby, Austin (CDC/CGH/DGHA); Damon, Inger K. (CDC/OID/NCEZID); GDD-OUTBREAK (CDC); CDC IMS AV/Communications; Helfand, Rita (CDC/OID/NCEZID); Williams, Teresa (CDC/OD/OCS); Dills, Kimberly C. (CDC/OD/OCS); Braden, Chris (CDC/OID/NCEZID); CDC IMS OD LNO; CDC IMS Incident Manager (CDC); Davis, Carma L. (CDC/OD/OCS) (CTR); Bumpus, Stefanie (CDC/OD/OCS); Brown, Clive (CDC/OID/NCEZID); Frieden, Thomas (Tom) (CDC/OD); Demby, Austin (HHS/OS/OGA); Knust, Barbara (CDC/OID/NCEZID); Nichol, Stuart T. (CDC/OID/NCEZID); Tappero, Jordan (CDC/CGH/DGHP); Wuichet, John W. (CDC/OD/OCS); Bell, Beth (CDC/OID/NCEZID); Morgan, Oliver (CDC/OID/NCEZID); 2014 Ebola Response (CDC); Kenyon, Thomas A. (CDC/CGH/OD); Foti, Kathryn (CDC/OD/OCS); CDC IMS Policy Unit -2 (Ebola); Merkle, Sarah (CDC/ONDIEH/NCEH); Rayfield, Mark (CDC/CGH/DGHP); Petersen, Lyle (CDC/OID/NCEZID); Perrone, Laura (CDC/CGH/OD); Meltzer, Martin I. (CDC/OID/NCEZID); Washington, Michael (Wash) (CDC/OID/NCEZID); Gambhir, Manoj (CDC/OID/NCIRD) (CTR); Reott, Erica (CDC/ONDIEH/NCBDDD); Kibunja, Julia N. (CDC/CGH/OD); Brunette, Gary W. (CDC/OID/NCEZID); Dicker, Richard C. (CDC/CGH/DGHP); Bunnell, Rebecca (CDC/ONDIEH/NCCDPPH); Hersey, Sara (CDC/CGH/DGHA); Glover, Maleeka (CDC/OID/OD); Kennedy, David N. (CDC/OPHPR/DEO); Merlin, Toby (CDC/OID/NCEZID); Crockett, James B. (CDC/OPHPR/DEO); Anaya, Gabriel (CDC/CGH/GID); Williams, Ian (CDC/OID/NCEZID); Jernigan, Daniel B. (CDC/OID/NCIRD); English, Lorna M. (CDC/ONDIEH/NCCDPPH); CDC IMS DGMQ Task Force Leader/Deputy; Irwin, Kathleen L. (CDC/OID/NCHHSTP); Kretsinger, Katrina (CDC/CGH/GID); Linkins, Robert (CDC/CGH/GID)  
**Cc:** Ervin, Elizabeth (CDC/OID/NCEZID); Park, Benjamin (CDC/OID/NCEZID); Davis, Stephanie Marie (CDC/CGH/DGHA); Daves, Sharon (CDC/CGH/DGHP); Brooks, Jennifer (CDC/OPHPR/DEO); Briss, Peter (CDC/ONDIEH/NCCDPPH); CDC IMS Laboratory; Hall, Aron (CDC/OID/NCIRD); McMorrow, Meredith (CDC/OID/NCIRD); Mast, Eric (CDC/CGH/GID); Tohme, Rania A. (CDC/CGH/GID); Srivastava, Pamela (CDC/OID/NCIRD); Barbour, Kamil E. (CDC/ONDIEH/NCCDPPH); hersey.sara@gmail.com; Zulz, Tammy (CDC/OID/NCEZID); Gupta, Neil (CDC/OID/NCEZID); Wilson, Katie (CDC/OID/NCEZID) (CTR); Rollin, Pierre (CDC/OID/NCEZID); Ransom, Ray (CDC/CGH/DGHP); CDC IMS Health Promotion; Pembleton, Elizabeth (CDC/OID/NCEZID) (CTR); Lindblade, Kimberly (Kim) (CDC/OID/NCIRD); Henderson, Alden (CDC/CGH/DGHP); Pappas, Claudia (CDC/OID/NCIRD); Waterman, Steve (CDC/OID/NCEZID); Kahn, Emily B. (CDC/OPHPR/DSLR); Moore, Melissa (CDC/OID/NCIRD); Balish, Amanda (CDC/OID/NCIRD); Weirich, Elizabeth (CDC/OPHSS/CSELS); Anderson, Mark (CDC/CGH/DGHP); Chen, Guan Ming (CDC/OPHSS/CSELS) (CTR); Nowlin, Sue (CDC/NIOSH/DSHEFS); Sniadack, David (CDC/CGH/GID); Dennis, Miatta (CDC/CGH/DGHP); Lawrence, Gena G. (CDC/CGH/DPDM); Jones, LaBrina M. (CDC/OPHPR/DEO)  
**Subject:** RE: Ebola: Country Call Sierra Leone  
**Attachments:** Weekly Epi Report 09 May 2015 FINAL.PPTX



-----Original Appointment-----

**From:** EOC Conf/Bridge Calendar (CDC)  
**Sent:** Monday, November 24, 2014 9:00 AM  
**To:** EOC Conf/Bridge Calendar (CDC); Demby, Austin (CDC/CGH/DGHA); Marston, Barbara J. (CDC/CGH/DGHP); Damon, Inger K. (CDC/OID/NCEZID); GDD-OUTBREAK (CDC); CDC IMS



AV/Communications; Helfand, Rita (CDC/OID/NCEZID); Williams, Teresa (CDC/OD/OCS); Dills, Kimberly C. (CDC/OD/OCS); Braden, Chris (CDC/OID/NCEZID); CDC IMS OD LNO; CDC IMS Incident Manager (CDC); Davis, Carma L. (CDC/OD/OCS) (CTR); Bumpus, Stefanie (CDC/OD/OCS); Brown, Clive (CDC/OID/NCEZID); Frieden, Thomas (Tom) (CDC/OD); Demby, Austin (HHS/OS/OGA); Knust, Barbara (CDC/OID/NCEZID); Nichol, Stuart T. (CDC/OID/NCEZID); Tappero, Jordan (CDC/CGH/DGHP); Wuichet, John W. (CDC/OD/OCS); Bell, Beth (CDC/OID/NCEZID); Morgan, Oliver (CDC/OID/NCEZID); 2014 Ebola Response (CDC); Kenyon, Thomas A. (CDC/CGH/OD); Foti, Kathryn (CDC/OD/OCS); CDC IMS Policy Unit -2 (Ebola); Merkle, Sarah (CDC/ONDIEH/NCEH); Rayfield, Mark (CDC/CGH/DGHP); Petersen, Lyle (CDC/OID/NCEZID); Perrone, Laura (CDC/CGH/OD); Meltzer, Martin I. (CDC/OID/NCEZID); Washington, Michael (Wash) (CDC/OID/NCEZID); Gambhir, Manoj (CDC/OID/NCIRD) (CTR); Reott, Erica (CDC/ONDIEH/NCBDDD); Kibunja, Julia N. (CDC/CGH/OD); Brunette, Gary W. (CDC/OID/NCEZID); Dicker, Richard C. (CDC/CGH/DGHP); Bunnell, Rebecca (CDC/ONDIEH/NCCDPHP); Hersey, Sara (CDC/CGH/DGHA); Glover, Maleeka (CDC/OID/OD); Kennedy, David N. (CDC/OPHPR/DEO); Merlin, Toby (CDC/OID/NCEZID); Crockett, James B. (CDC/OPHPR/DEO); Anaya, Gabriel (CDC/CGH/GID); Williams, Ian (CDC/OID/NCEZID); Jernigan, Daniel B. (CDC/OID/NCIRD); English, Lorna M. (CDC/ONDIEH/NCCDPHP); CDC IMS DGMQ Task Force Leader/Deputy; Irwin, Kathleen L. (CDC/OID/NCHHSTP); Kretsinger, Katrina (CDC/CGH/GID); Linkins, Robert (CDC/CGH/GID)

**Cc:** Ervin, Elizabeth (CDC/OID/NCEZID); Park, Benjamin (CDC/OID/NCEZID); Davis, Stephanie Marie (CDC/CGH/DGHA); Daves, Sharon (CDC/CGH/DGHP); Brooks, Jennifer (CDC/OPHPR/DEO); Briss, Peter (CDC/ONDIEH/NCCDPHP); CDC IMS Laboratory; Hall, Aron (CDC/OID/NCIRD); McMorrow, Meredith (CDC/OID/NCIRD); Mast, Eric (CDC/CGH/GID); Tohme, Rania A. (CDC/CGH/GID); Srivastava, Pamela (CDC/OID/NCIRD); Barbour, Kamil E. (CDC/ONDIEH/NCCDPHP); hersey.sara@gmail.com; Zulz, Tammy (CDC/OID/NCEZID); Gupta, Neil (CDC/OID/NCHHSTP); Wilson, Katie (CDC/OID/NCEZID) (CTR); Rollin, Pierre (CDC/OID/NCEZID); Ransom, Ray (CDC/CGH/DGHP); CDC IMS Health Promotion; Pembleton, Elizabeth (CDC/OID/NCEZID) (CTR); Lindblade, Kimberly (Kim) (CDC/OID/NCIRD); Henderson, Alden (CDC/CGH/DGHP); Pappas, Claudia (CDC/OID/NCIRD); Waterman, Steve (CDC/OID/NCEZID); Kahn, Emily B. (CDC/OPHPR/DSLRL); Moore, Melissa (CDC/OID/NCIRD); Balish, Amanda (CDC/OID/NCIRD); Weirich, Elizabeth (CDC/OPHSS/CSELS); Anderson, Mark (CDC/CGH/DGHP); Chen, Guan Ming (CDC/OPHSS/CSELS) (CTR); Nowlin, Sue (CDC/NIOSH/DSHEFS); Sniadack, David (CDC/CGH/GID); Dennis, Miatta (CDC/CGH/DGHP); Lawrence, Gena G. (CDC/CGH/DPDM); Jones, LaBrina M. (CDC/OPHPR/DEO)

**Subject:** Ebola: Country Call Sierra Leone

**When:** Saturday, May 09, 2015 10:25 AM-10:55 AM (UTC-05:00) Eastern Time (US & Canada).

**Where:** Conference Call Only

(b)(6)

Please note that starting April 18, 2015 duration for this call is 30 minutes and the time will be as follows:

Atlanta: 10:25-10:55 AM

Sierra Leone: 2:25-2:55 PM

Updated bridgeline

POC: INTL TF Barbara Marston & Lorna English

The call line information is:

Bridgeline: (b)(6)

Passcode: (b)(6)

International Number: (b)(6)

For any changes or updates, please contact [EOCReport@cdc.gov](mailto:EOCReport@cdc.gov) or phone (770) 488-7100

# **Sierra Leone Ebola Response**

## **Epidemiology Overview**

**May 9, 2015**



# Summary of New Cases

Summary Case Counts															
Epi Week 18								Epi Week 19*							
27-Apr	28-Apr	29-Apr	30-Apr	1-May	2-May	3-May	Totals	4-May	5-May	6-May	7-May	8-May	9-May	10-May	Totals
	1 (1)		1	1		2 (1)	5 (2)								0
1 (1)		2				1	4 (1)	2							2
<b>1 (1)</b>	<b>1 (1)</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>3 (1)</b>	<b>9 (3)</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>			<b>2</b>

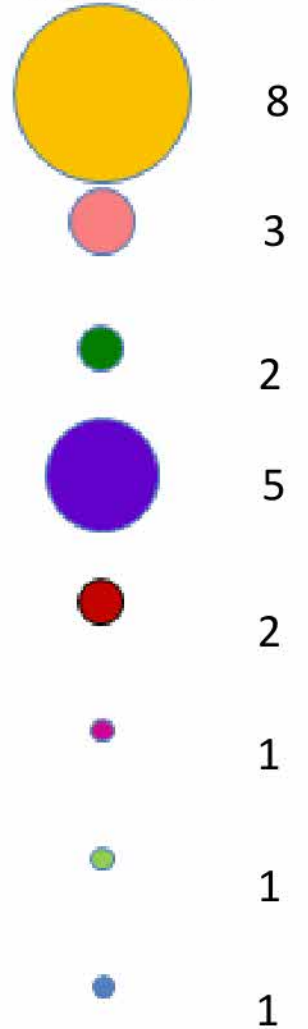
\*Epi week 19 is incomplete

# Cluster Tracking

# Kambia Clusters

Cluster name

Cluster size



Rogberay

Makuma

Barmoi Luma

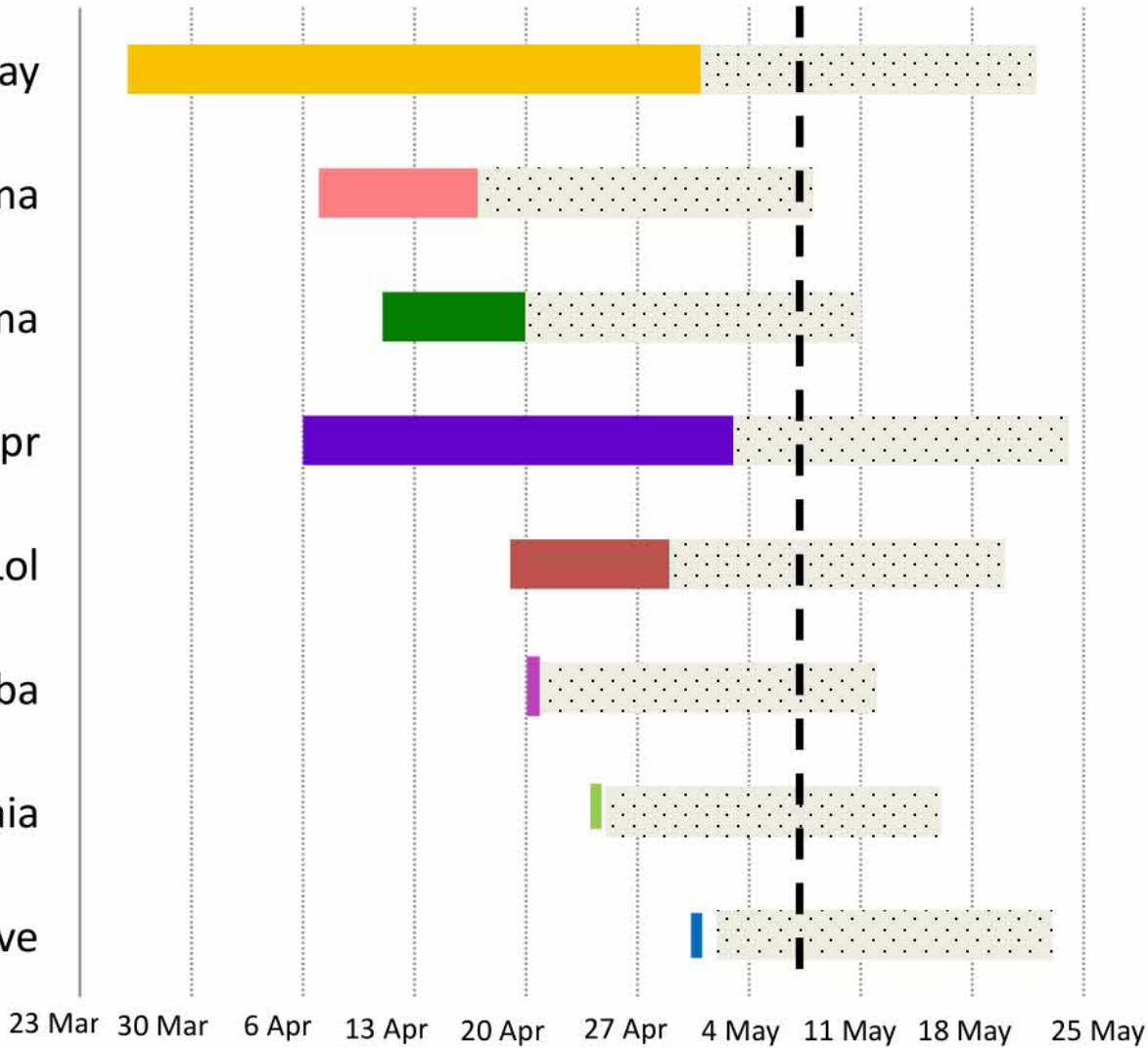
Rokupr

Bombeh-Lol

Kamba

Turaia

Mene Curve



 Quarantine period

Linked clusters are indicated by color

Last updated 9 May, 2015

# Kambia Clusters

## Makuma

- **Case:** 3
- **Contacts:** 21
- **Date quarantine ends:** May 10
- **Epi-link:** Linked to Guinea (Fofayah)

## Barmoi Luma

- **Case:** 2
- **Contacts:** 7
- **Date quarantine ends:** May 11
- **Epi-link:** Possible epi-link to Malal cluster in February and March, 2015

# Kambia Clusters (cont.)

## Bombeh-Lol

- **Case:** 2
- **Contacts:** 2
- **Date quarantine ends:** May 11
- **Epi-link:** Investigation ongoing

## Kamba

- **Case:** 1
- **Contacts:** 5
- **Date quarantine ends:** May 12
- **Epi-link:** Investigation ongoing

# Kambia Clusters (cont.)

## Turaia

- **Case: 1**
- **Contacts: 15**
- **Date quarantine ends: May 16**
- **Epi-link:** Traveled from Degambeh, Guinea where was registered as a known case

## Mene Curve

- **Case: 1**
- **Contacts: 39**
- **Date quarantine ends: May 18**
- **Epi-link:** Investigation ongoing

# Kambia Clusters (cont.)

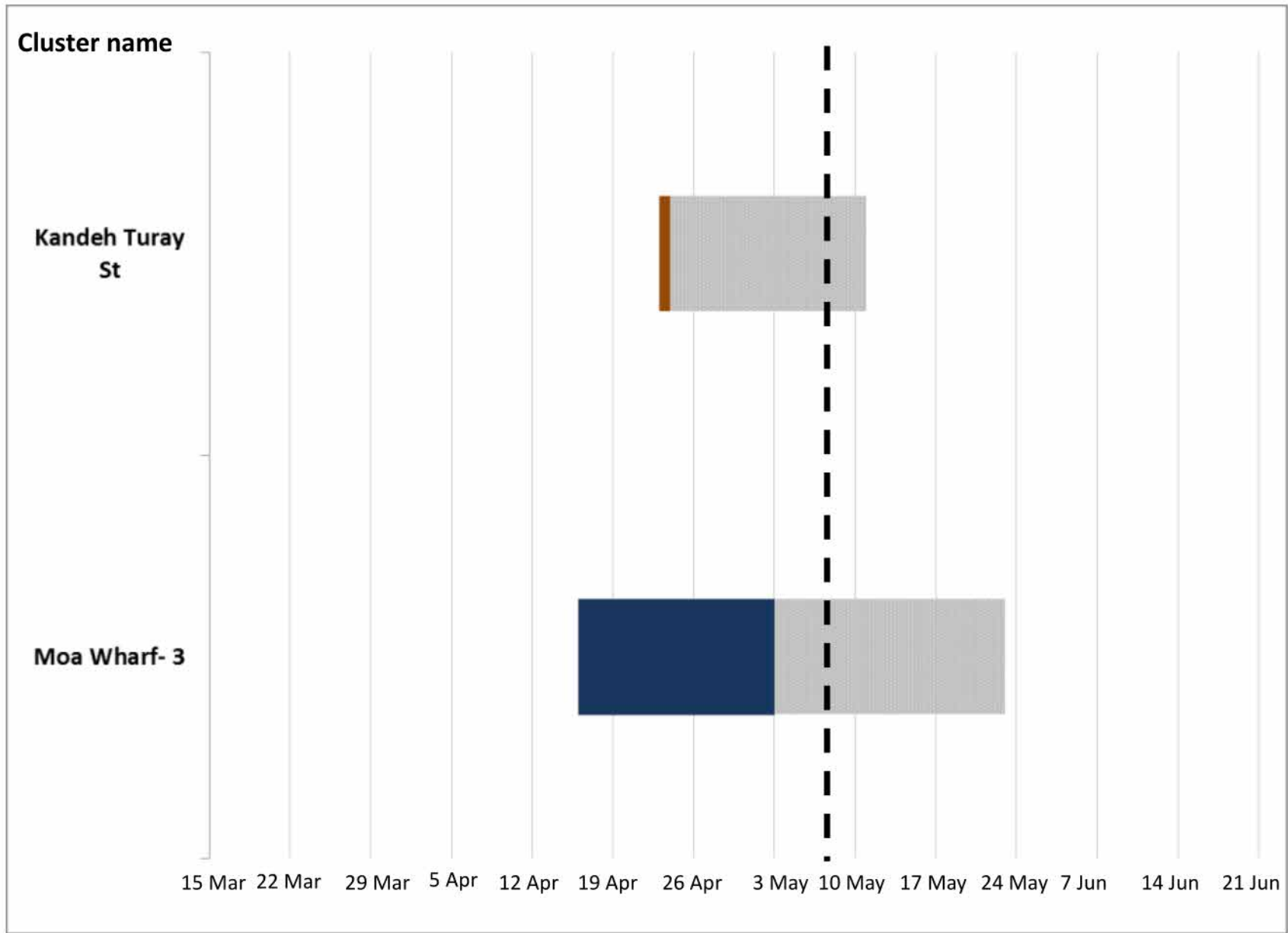
- Rogberay
- **Case: 8**
- **Contacts: 49**
- **Date quarantine ends: May 21**
- **Epi-link: Linked to Rogberay case**

## Rokupr

- **Case: 5**
- **Contacts: 13**
- **Date quarantine ends: May 24**
- **Epi-link: 2 households epi-linked; source unknown**



# Western Area Clusters



# Western Clusters

## Kandeh Turay St

- **Cases:** 2
- **Contacts:** 67
- **Date quarantine ends:** May 11
- **Epi-link:** Possible fomite exposure; investigation ongoing

# Western Clusters (cont.)

## Moa Wharf cluster

- **Cases:** 13
- **Contacts:** 502
- **Date quarantine ends:** May 23
- **Epi-link:** In community with frequent cases and clusters; no definitive epi-link to index case

# **VACCINE STUDY UPDATE**



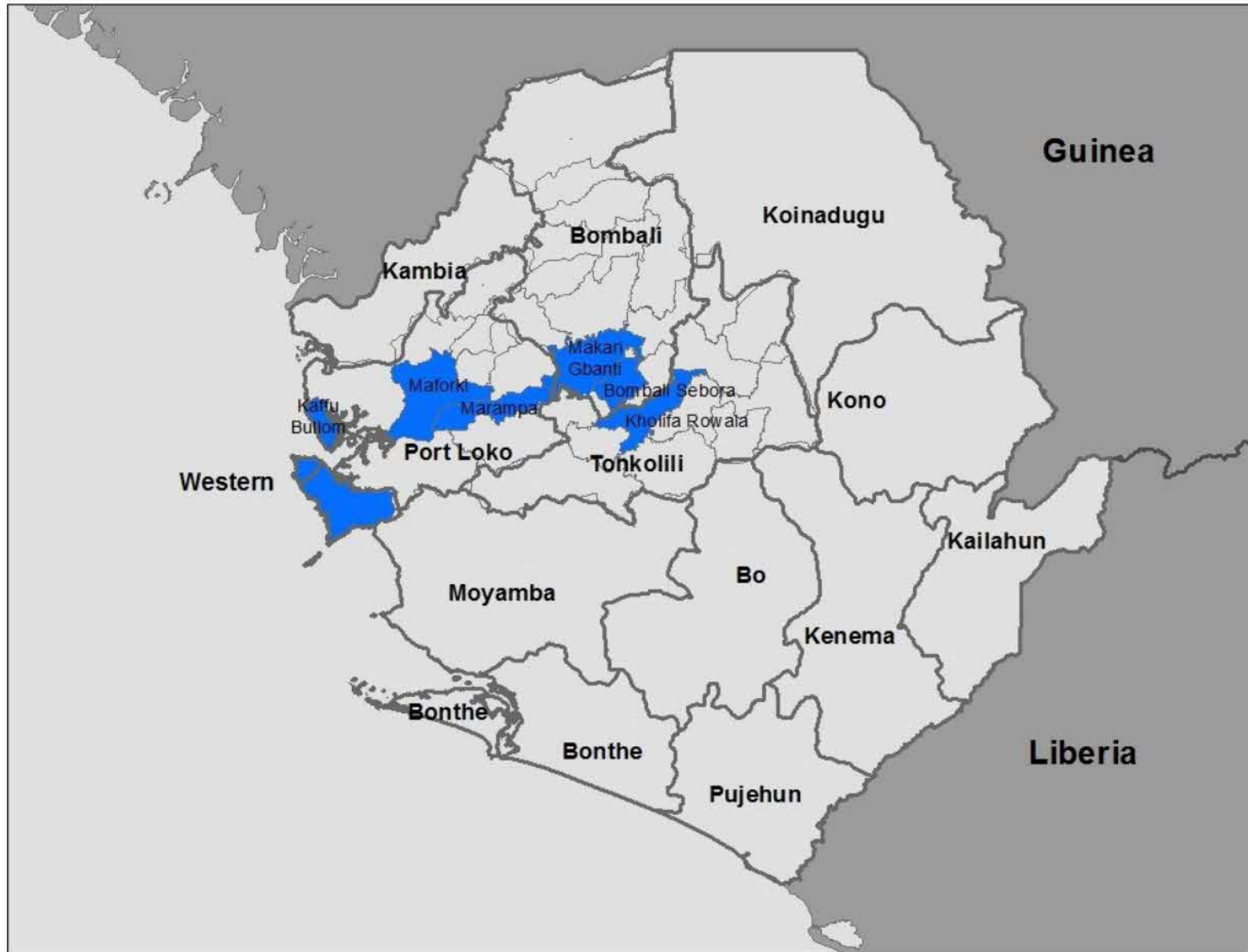
# STRIVE

Sierra Leone Trial to Introduce a Vaccine against Ebola  
Together we **STRIVE** to end Ebola!

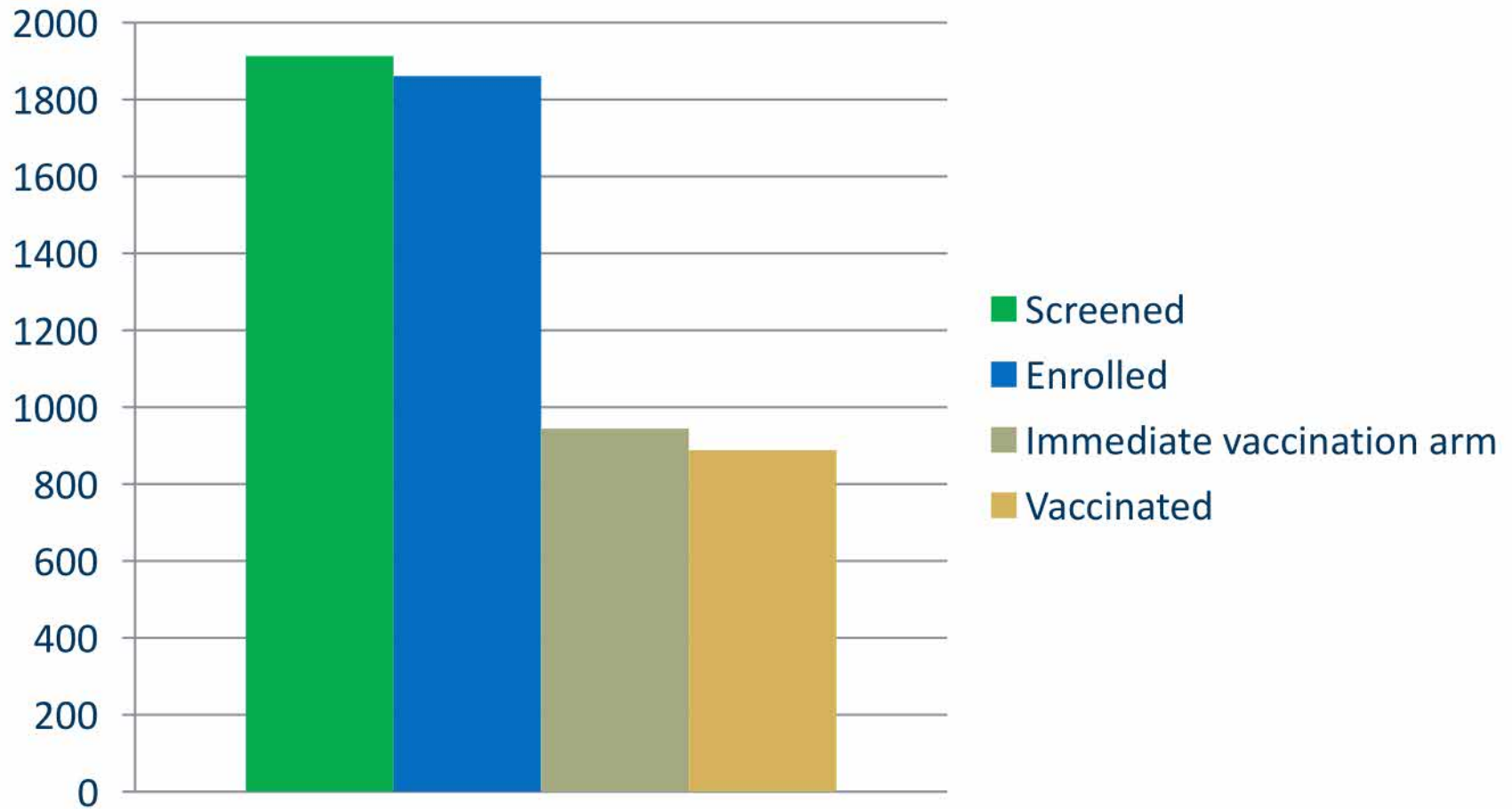
- Sierra Leone College of Medicine and Allied Health Sciences (COMAHS)
- Sierra Leone Ministry of Health and Sanitation (MoHS)
- U.S. Centers for Disease Control and Prevention (CDC)



# 7 STRIVE Study Sites in Five Districts



# Cumulative Enrollment and Vaccination, in Western, Port Loko and Bombali Districts (4 sites), April 9 – May 3, 2015





# Vaccine Safety and EVD Surveillance

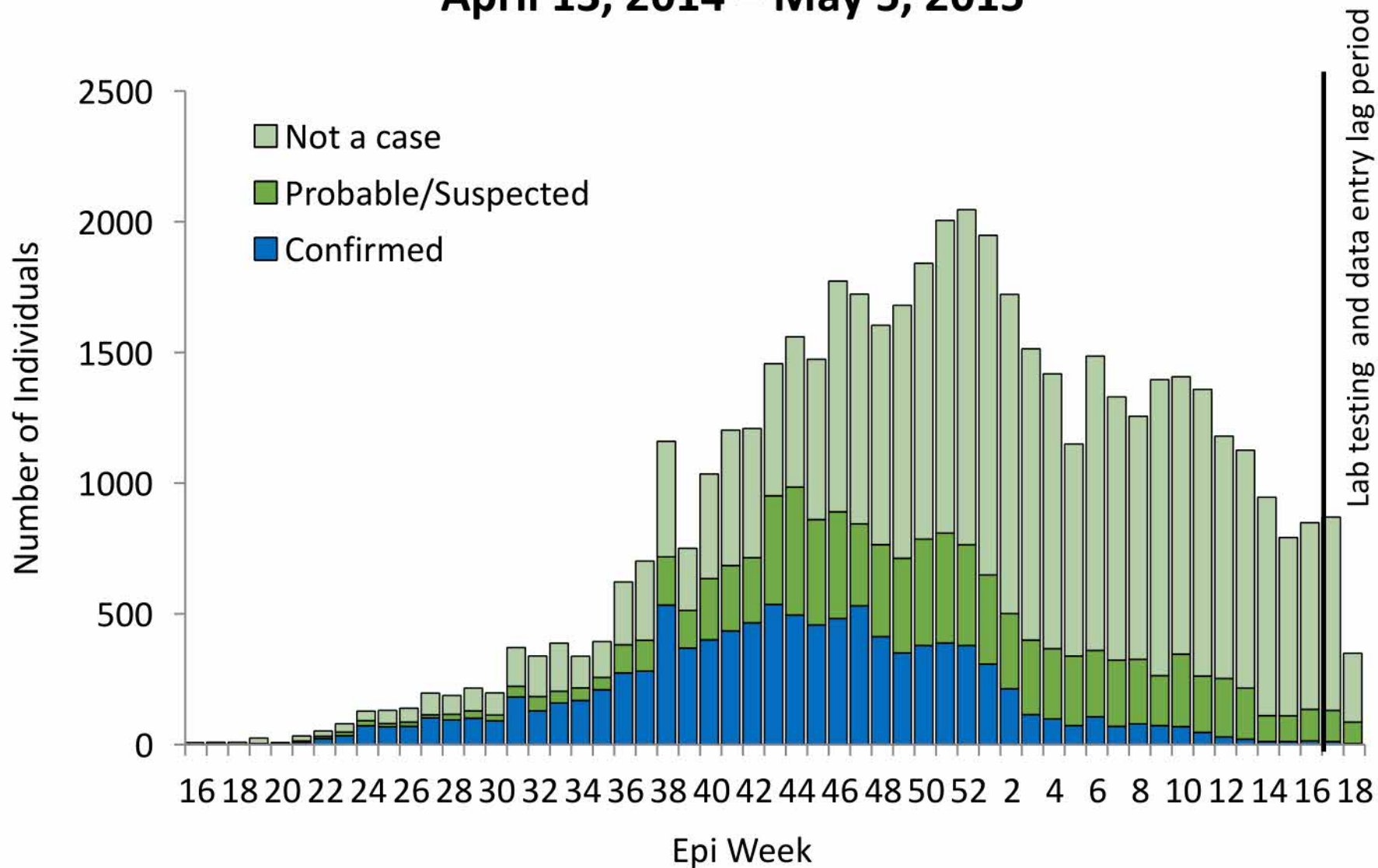
- Data Safety Monitoring Board meets regularly
  - No adverse events reported with immediate vaccine arm
  
- Safety data consistent with previous trials of rVZV-ZEBOV vaccine
  
- No STRIVE participants referred for EVD evaluation

# Zmapp Trial

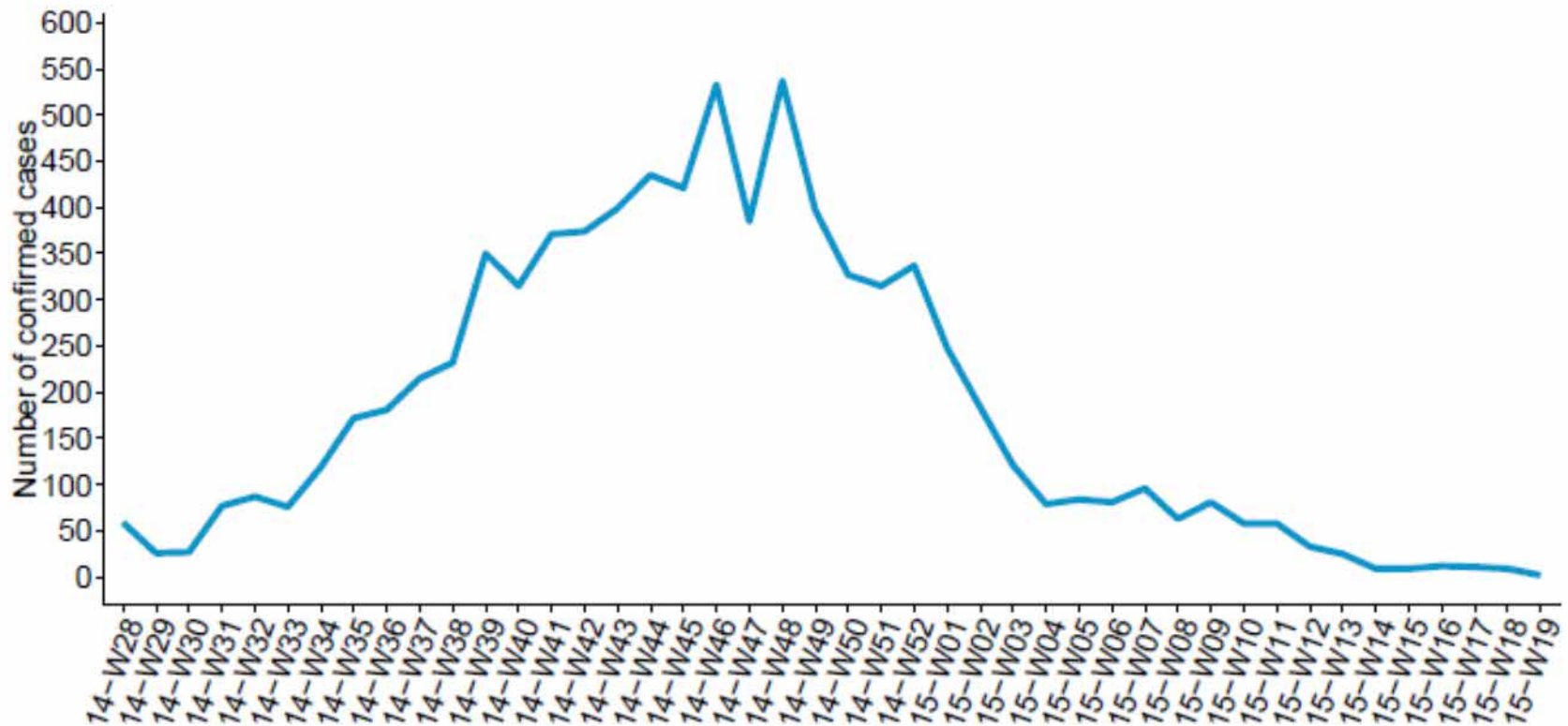
- Medication arrived April 2<sup>nd</sup> in Sierra Leone
- Trial began April 3<sup>rd</sup>
- Enrolled 14 people in Sierra Leone
  - 12 adults
  - 2 children

# **NATIONAL DATA**

# VHF - Reports by Case Definition and Epi-week of Onset – National April 13, 2014 – May 5, 2015



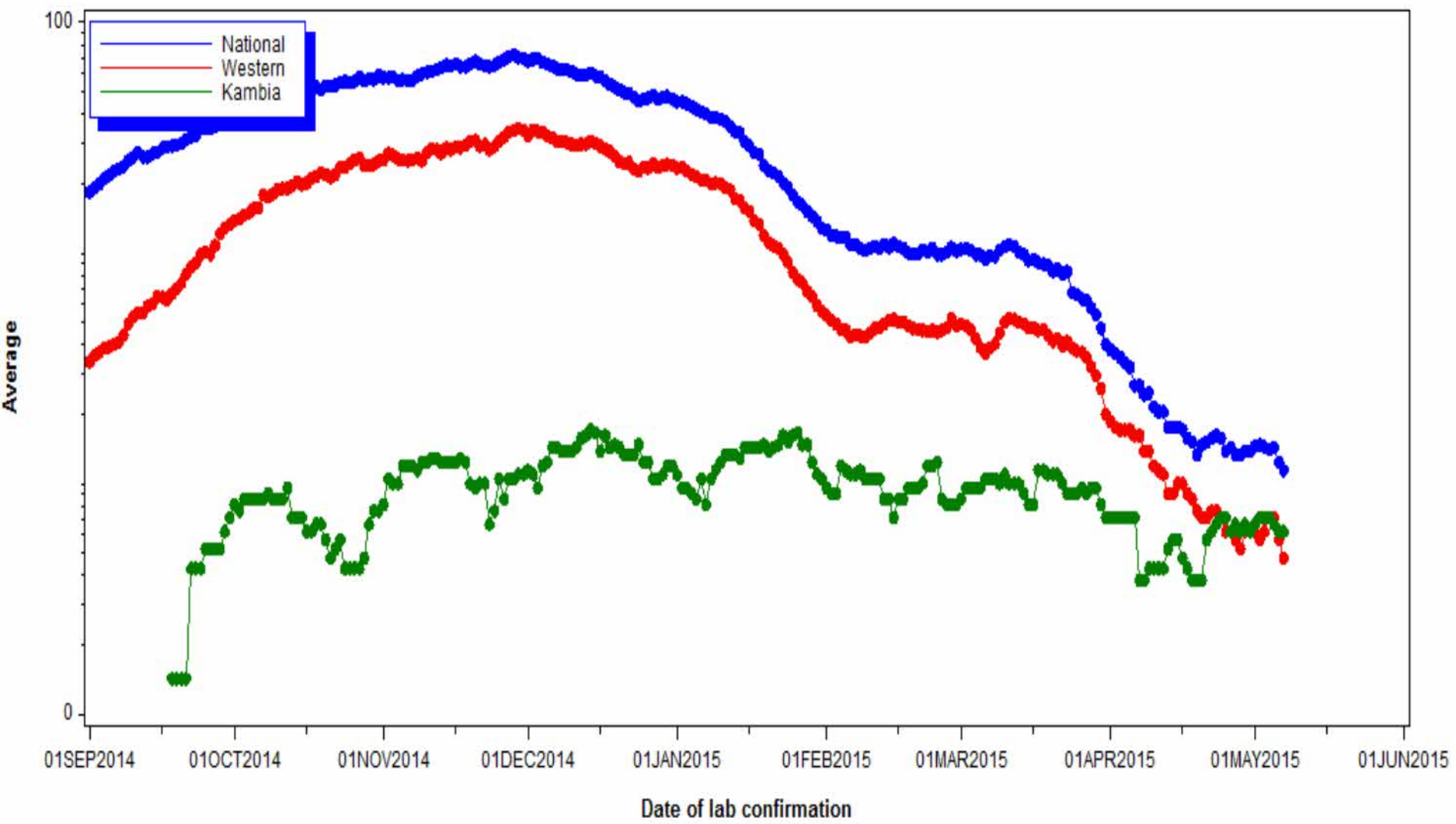
## Confirmed Ebola Cases, Sierra Leone MoHS Situation Report Data, up to Week 19, 2015



first case: 30/12/14, last case: 04/05/15

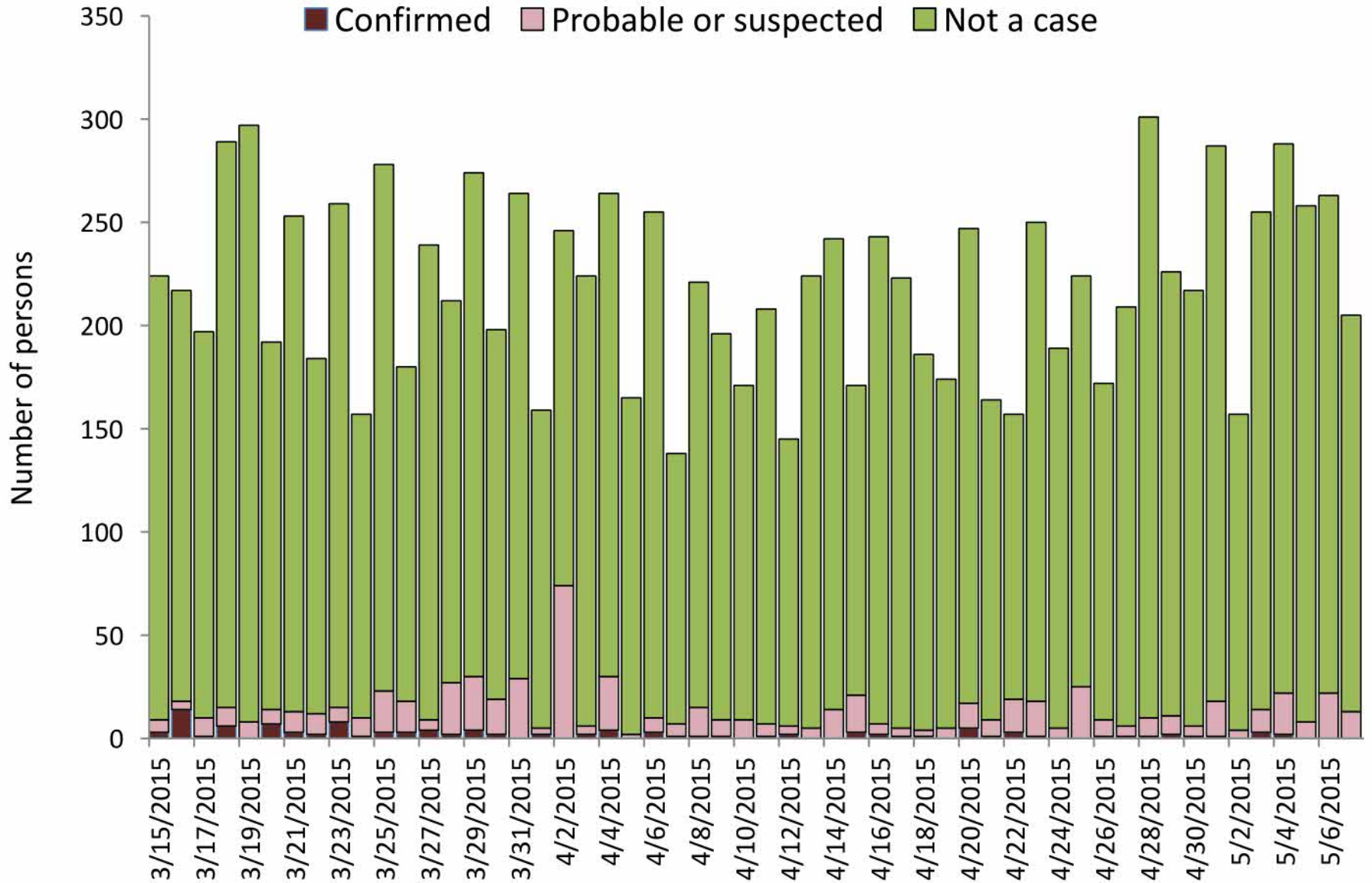


# MoHS-Lab Confirmed Cases Per Day (21-day Moving Average) Sept 1, 2014 - May 8, 2015



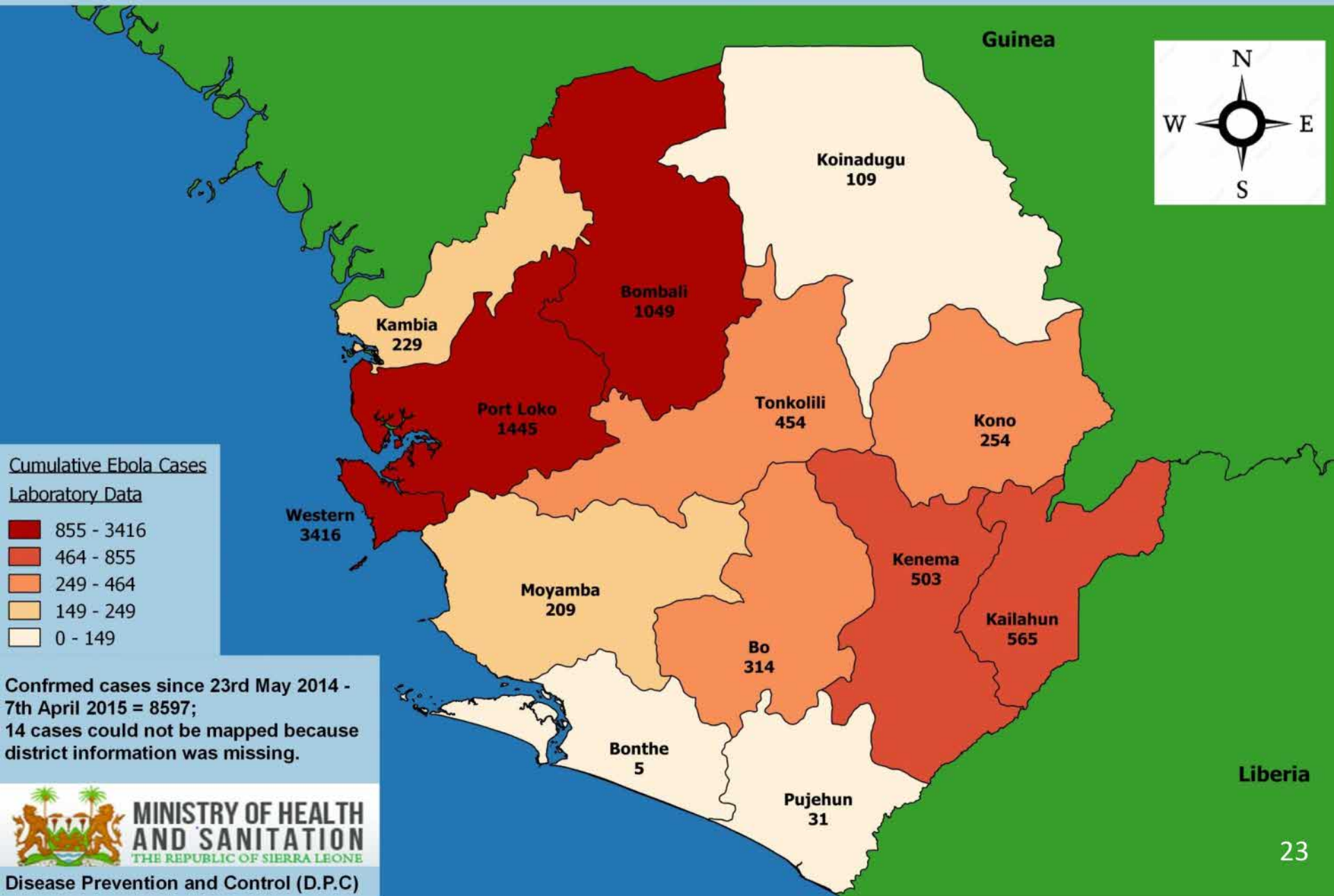
Y axis is on the log scale

# MoHS - Reported Lab Results (by Date of the Lab Results Report) National, March 15 – May 7, 2015

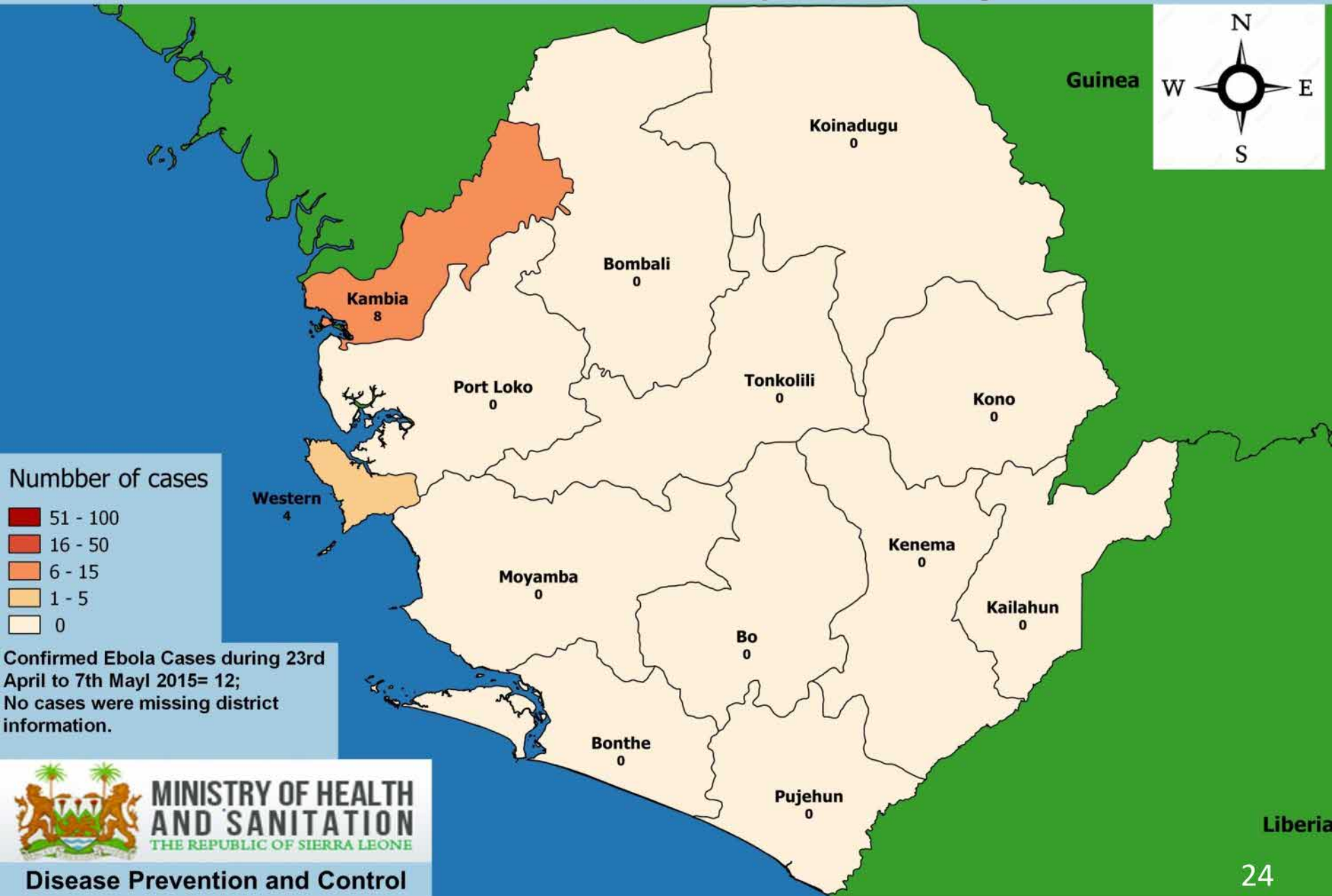




# Cumulative Confirmed Ebola Cases, Laboratory Data, 23rd May 2014 - 7th May 2015

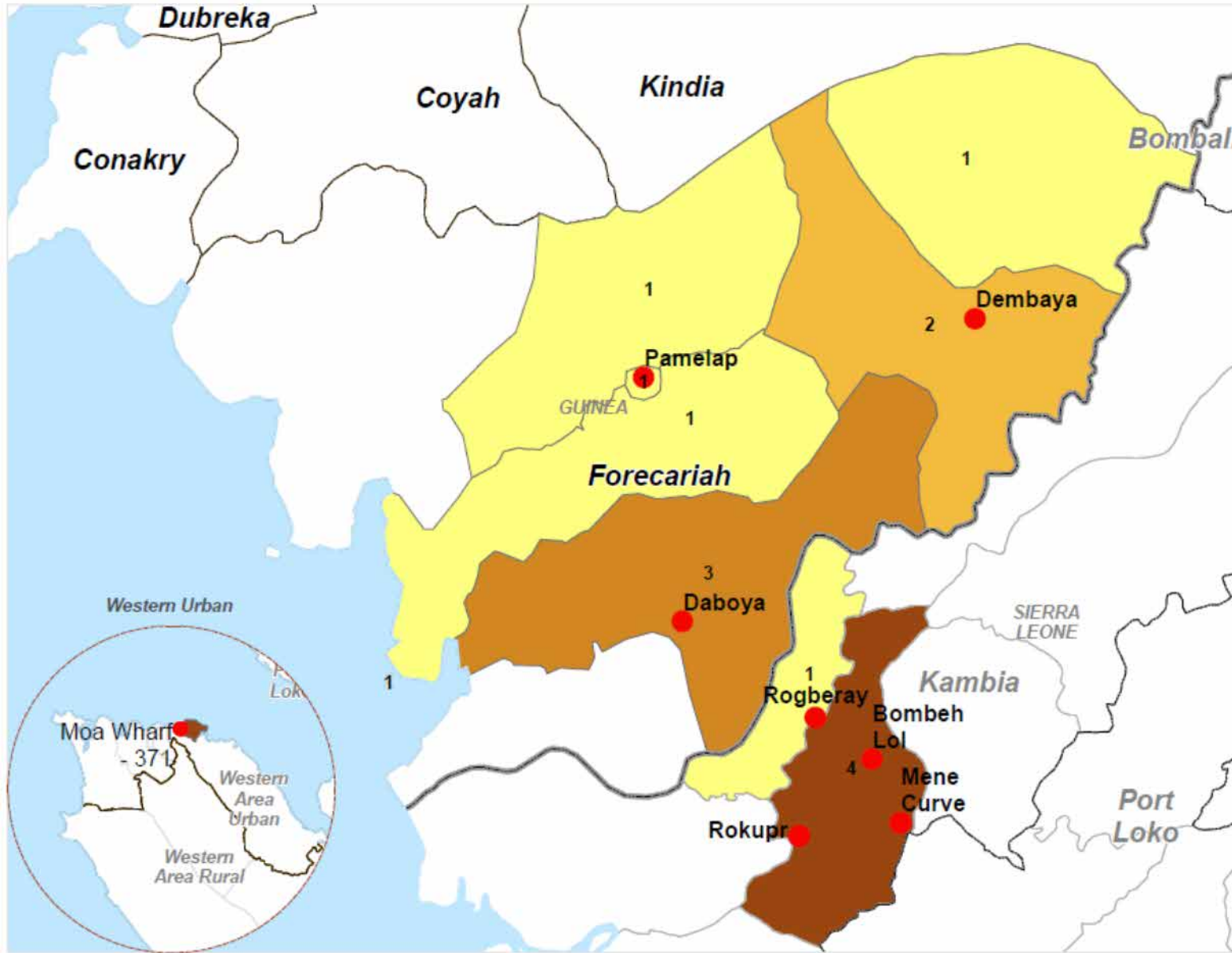


# Confirmed Ebola Cases, 23rd April to 7th May 2015



# Confirmed Ebola cases (Guinea and Sierra Leone) week 18

MAP DATE: 08 May 2015



- Villages with cases
- Country boundary
- District boundary
- Chiefdom boundary



This map is produced by IMMAP through standby partner agreement with WHO for the Ebola outbreak.

Sources:  
 Admin. boundaries: EboIageonode  
 Cartography: WHO HQ  
 Death detection rates: MoHSL daily Sit-Rep and WHO Guinea  
 Contact: [ahwoosi@who.int](mailto:ahwoosi@who.int), [ebolamaps@who.int](mailto:ebolamaps@who.int)  
 Map projection: WGS 1984  
 Created in country by: Fayyaz Ahmed Malik ([fmalik@immap.org](mailto:fmalik@immap.org))



**WHO DISCLAIMER:** The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.





# Confirmed Ebola cases (Guinea and Sierra Leone) week 19 - As of 6 May 2015

MAP DATE: 07 May 2015

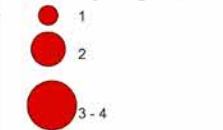
### Legend

- Country boundary
- District boundary
- Chiefdom boundary

### Cases - by Prefecture/Chiefdom



### Cases - by Village / Ward

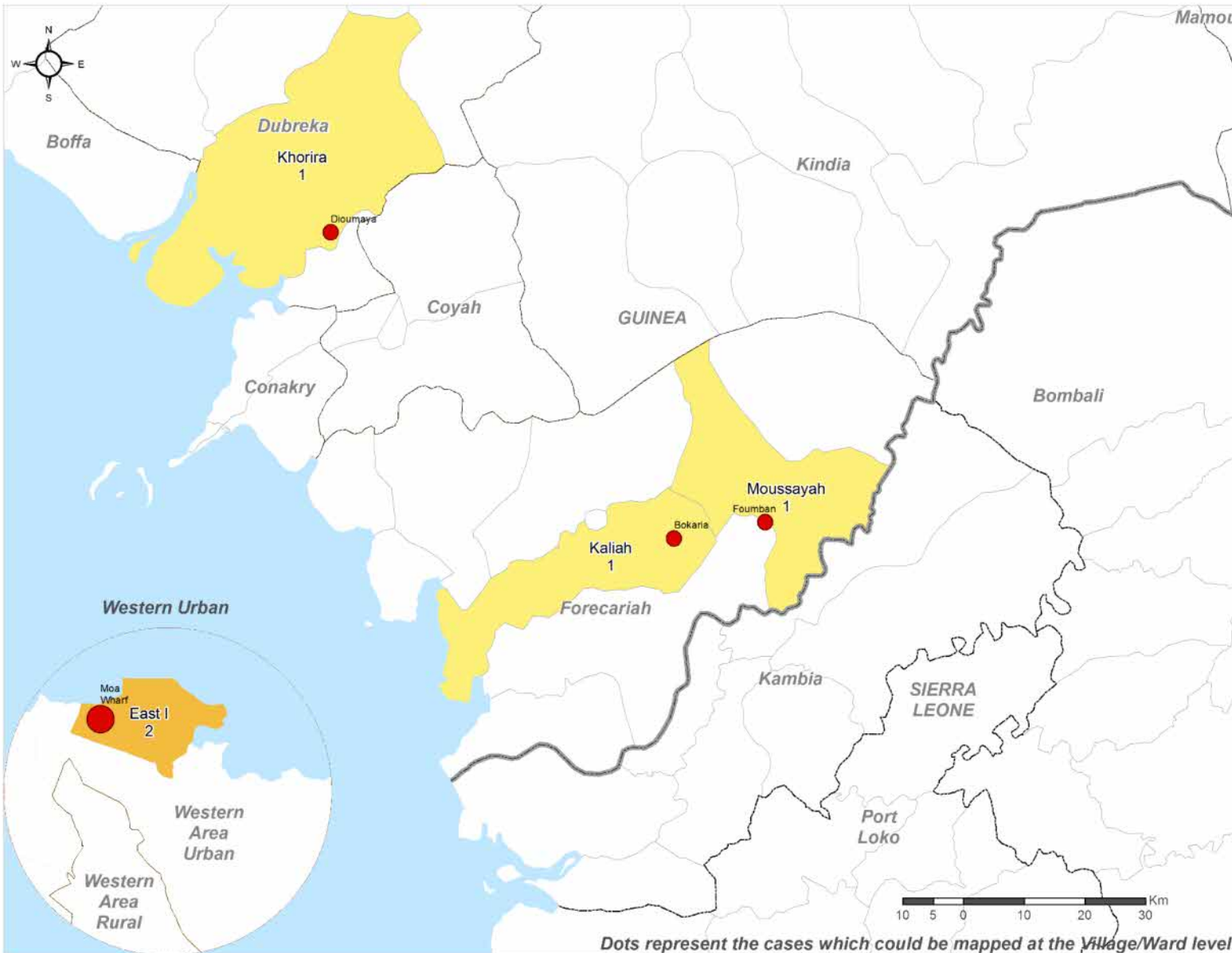


This map is produced by IMMAP through standby partner agreement with WHO for the Ebola outbreak.

Sources:  
**Admin. boundaries:** Ebolageonode  
**Cartography:** WHO HQ  
**Death detection rates:** MoHSL daily Sit-Rep and WHO Guinea  
**Contact:** afwcosl@who.int, ebolamaps@who.int  
**Map projection:** WGS 1984  
**Created in country by:** Johan Gonzalez (jgonzalez@immap.org)



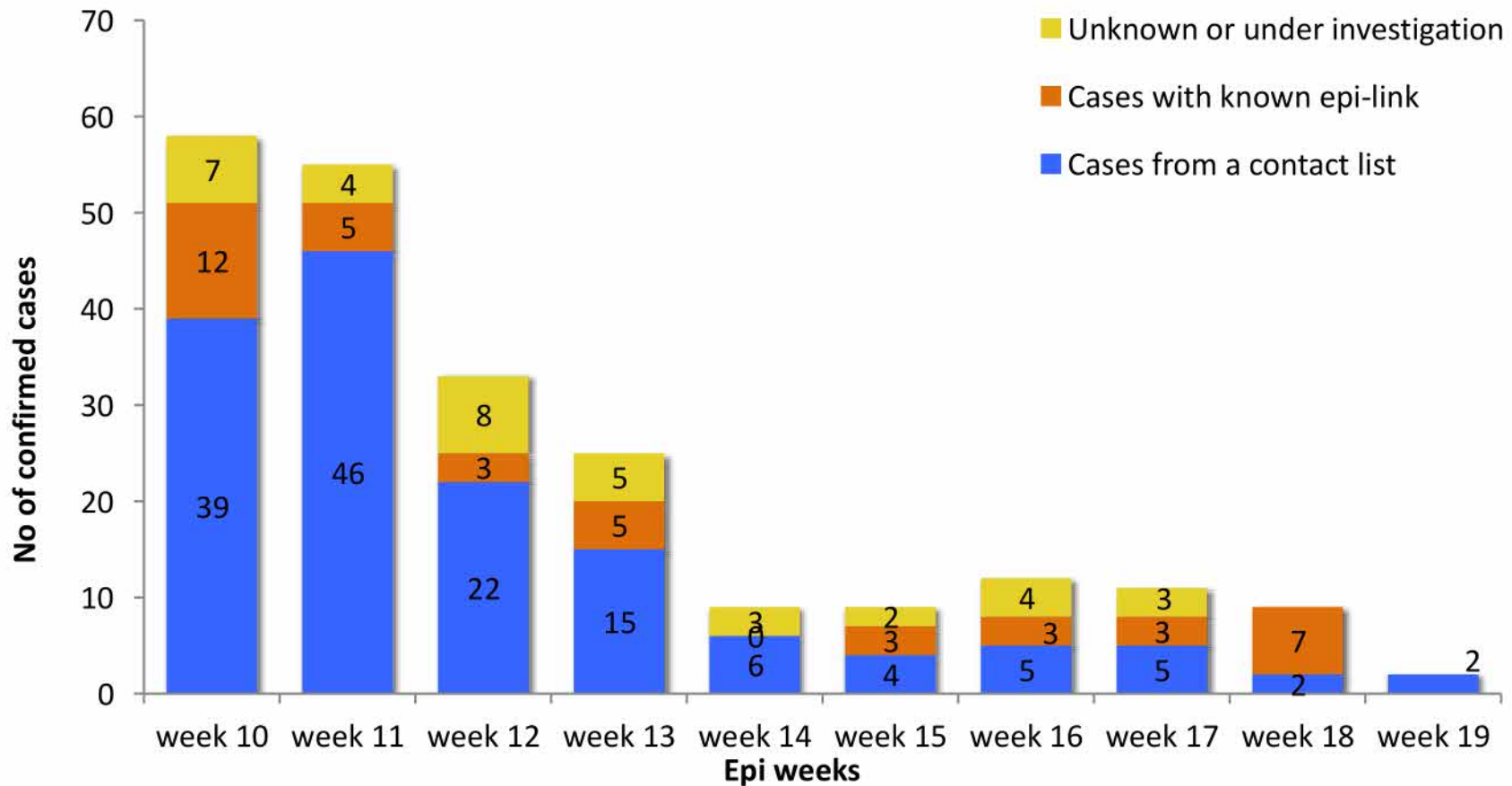
**WHO DISCLAIMER:** The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.



Dots represent the cases which could be mapped at the Village/Ward level.

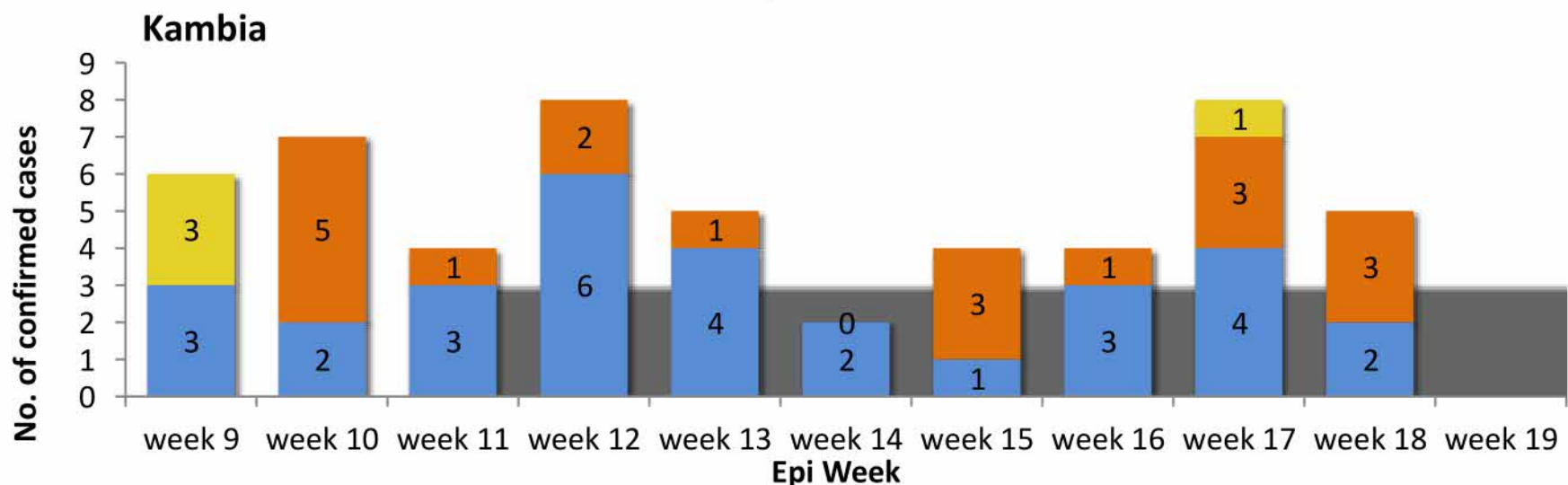
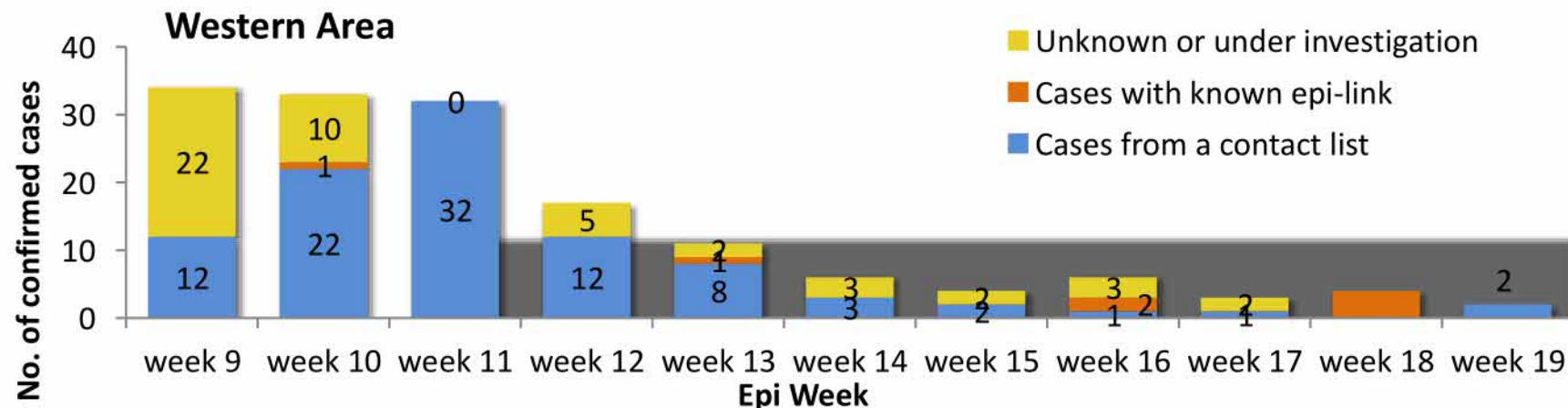


# Number of New Confirmed Cases who are Registered Contacts or have Other Known Epi-link, National

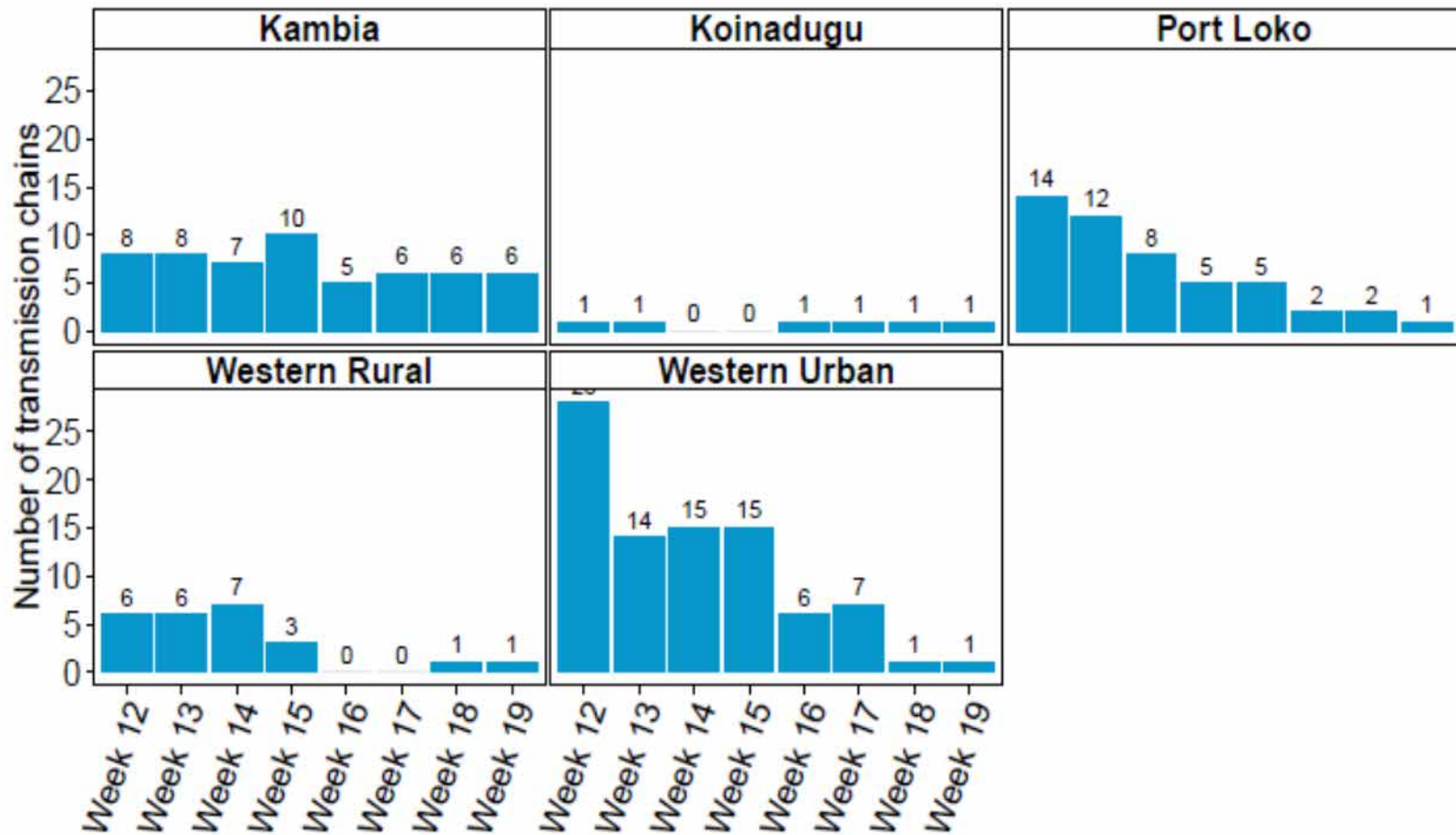


Information is current for recent epi weeks and may not be retrospectively updated

# Number of New Confirmed Cases who are Registered Contacts or have Other Known Epi-link, by District



# ACTIVE TRANSMISSION CHAINS



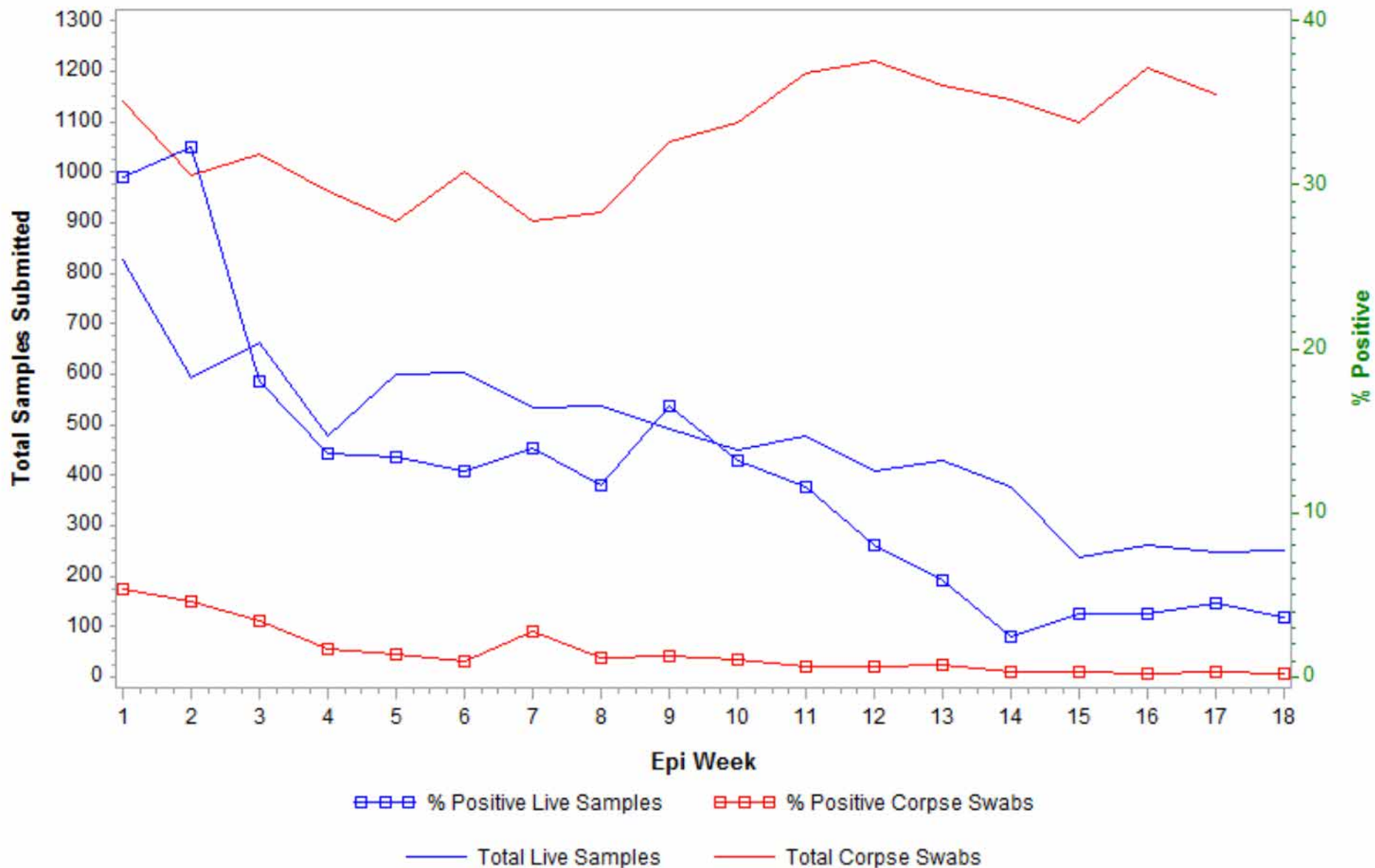
**Note:** Koinadugu and Port Loko chains closed due to past 21 days





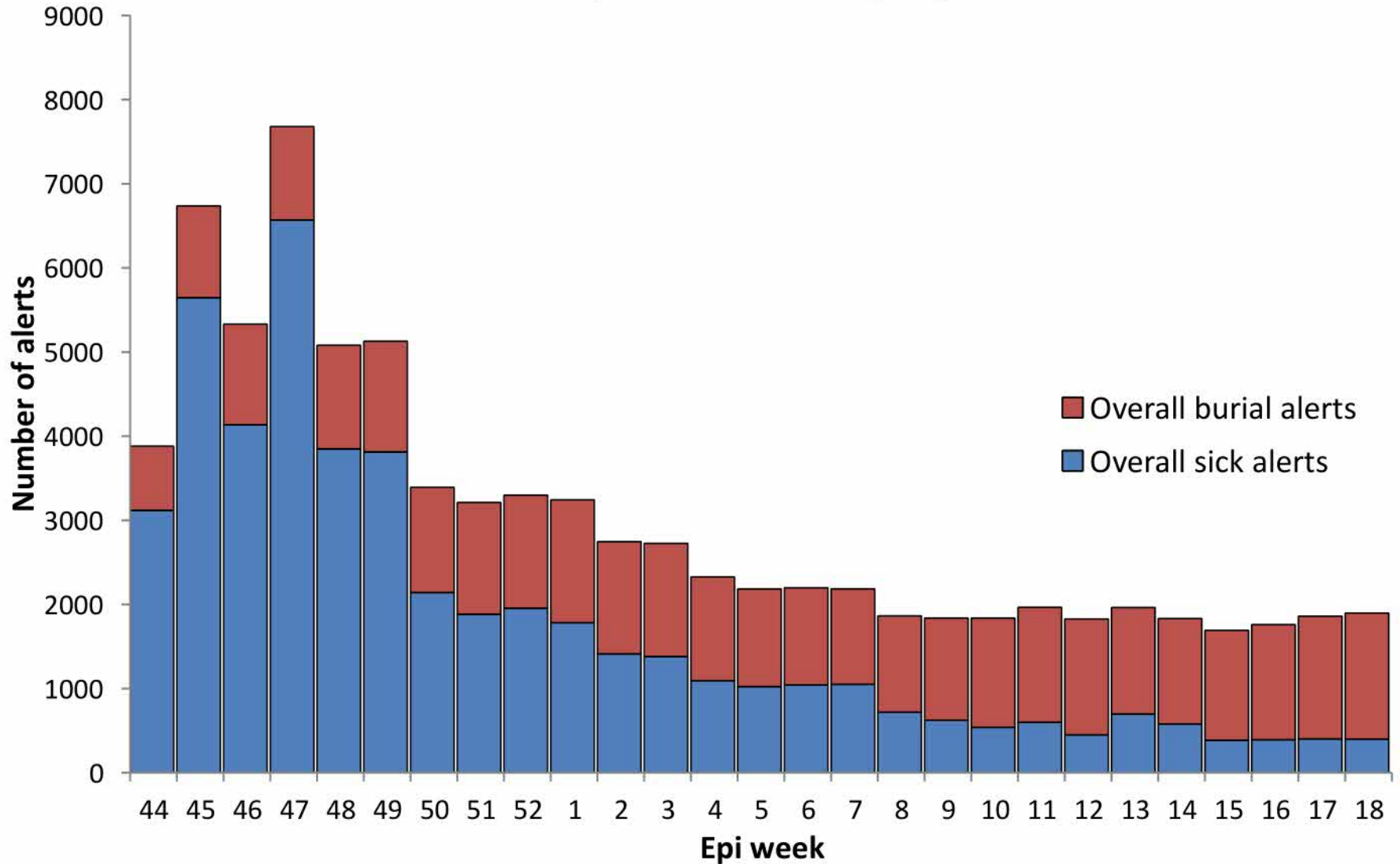
## Comparison of Positive Results to Total Samples

### Live Cases and Death Swabs

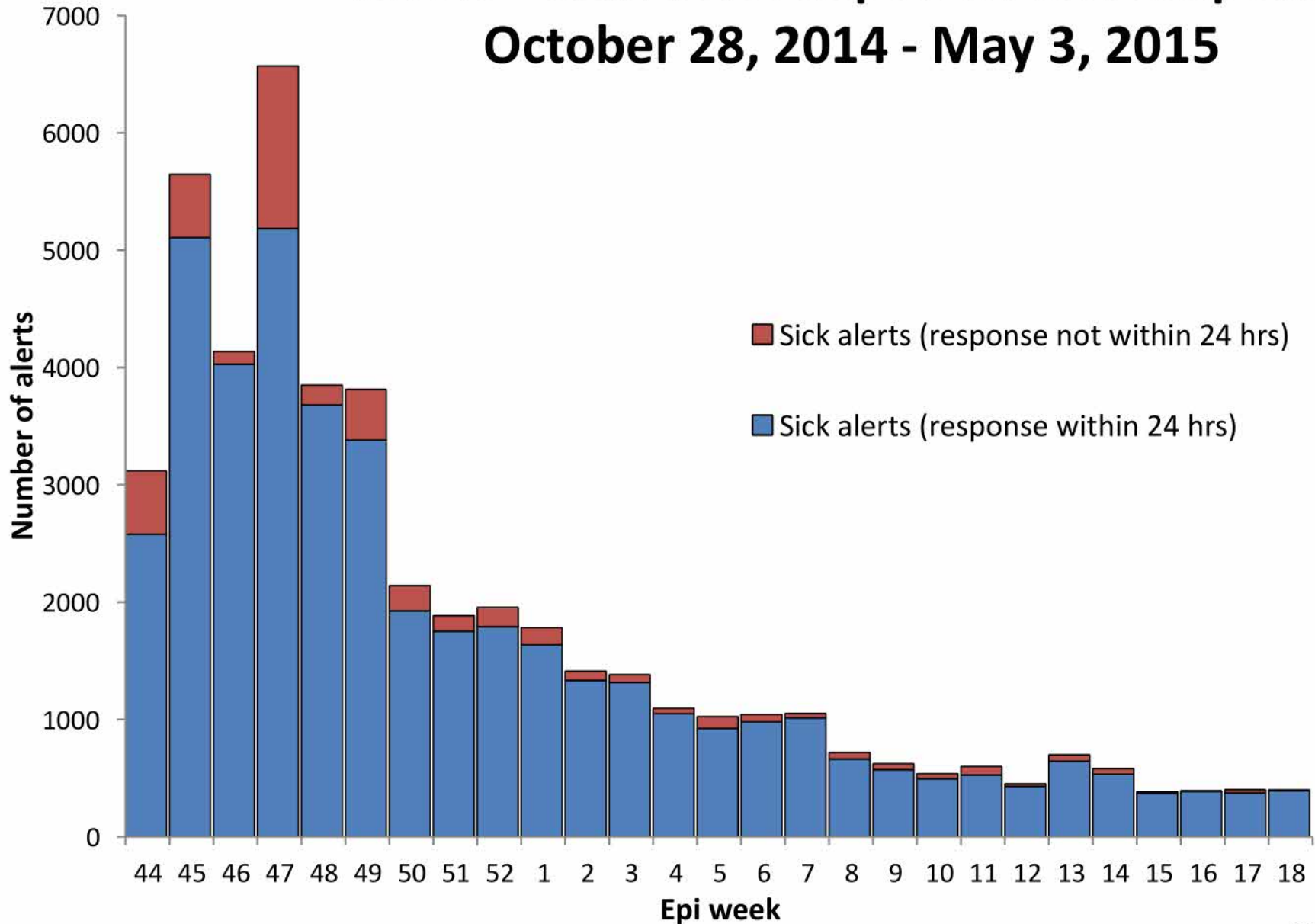


# MoHS - Alerts Reported by Type

## October 28, 2014 - May 3, 2015

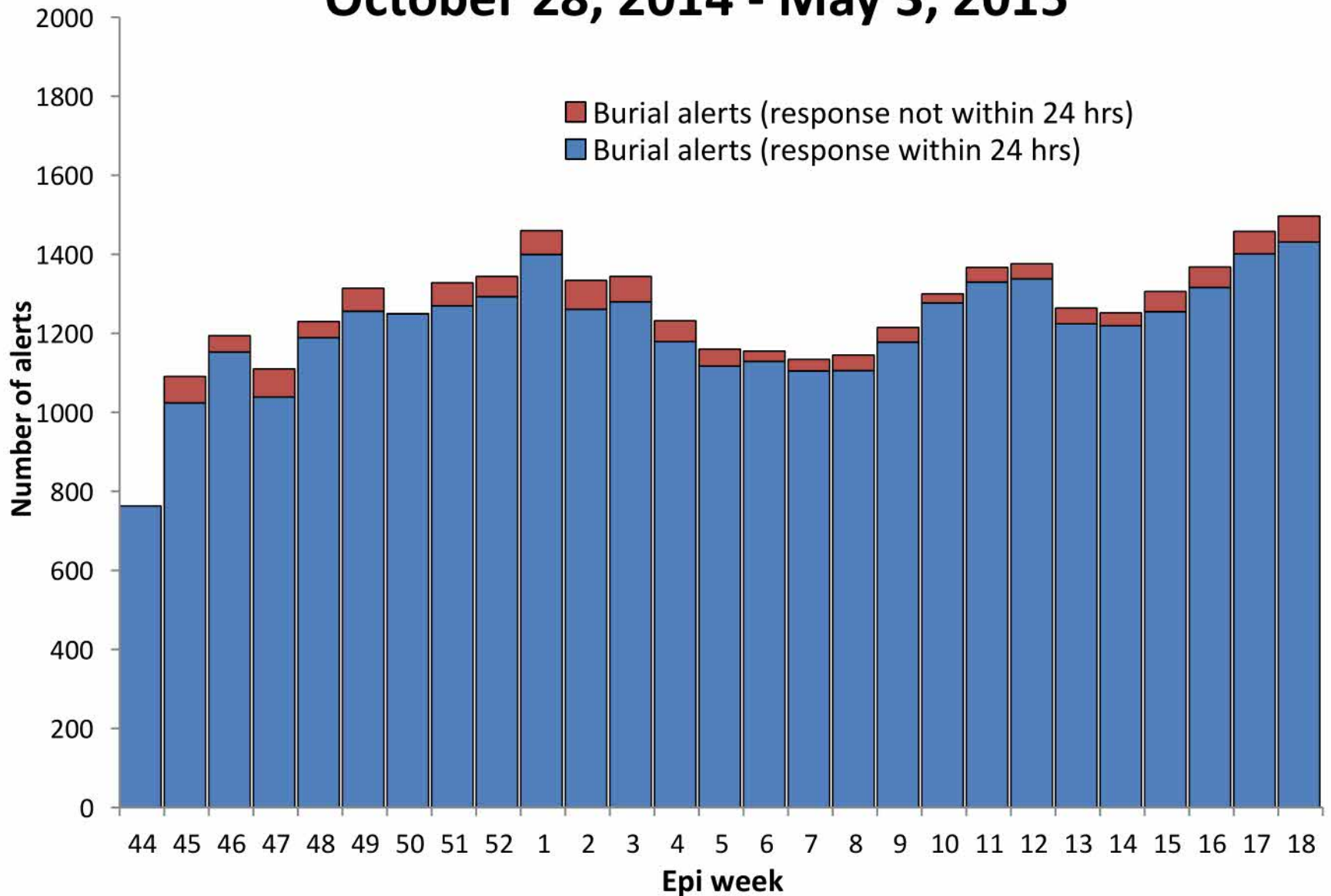


# MoHS - Sick Alerts Reported and Response October 28, 2014 - May 3, 2015

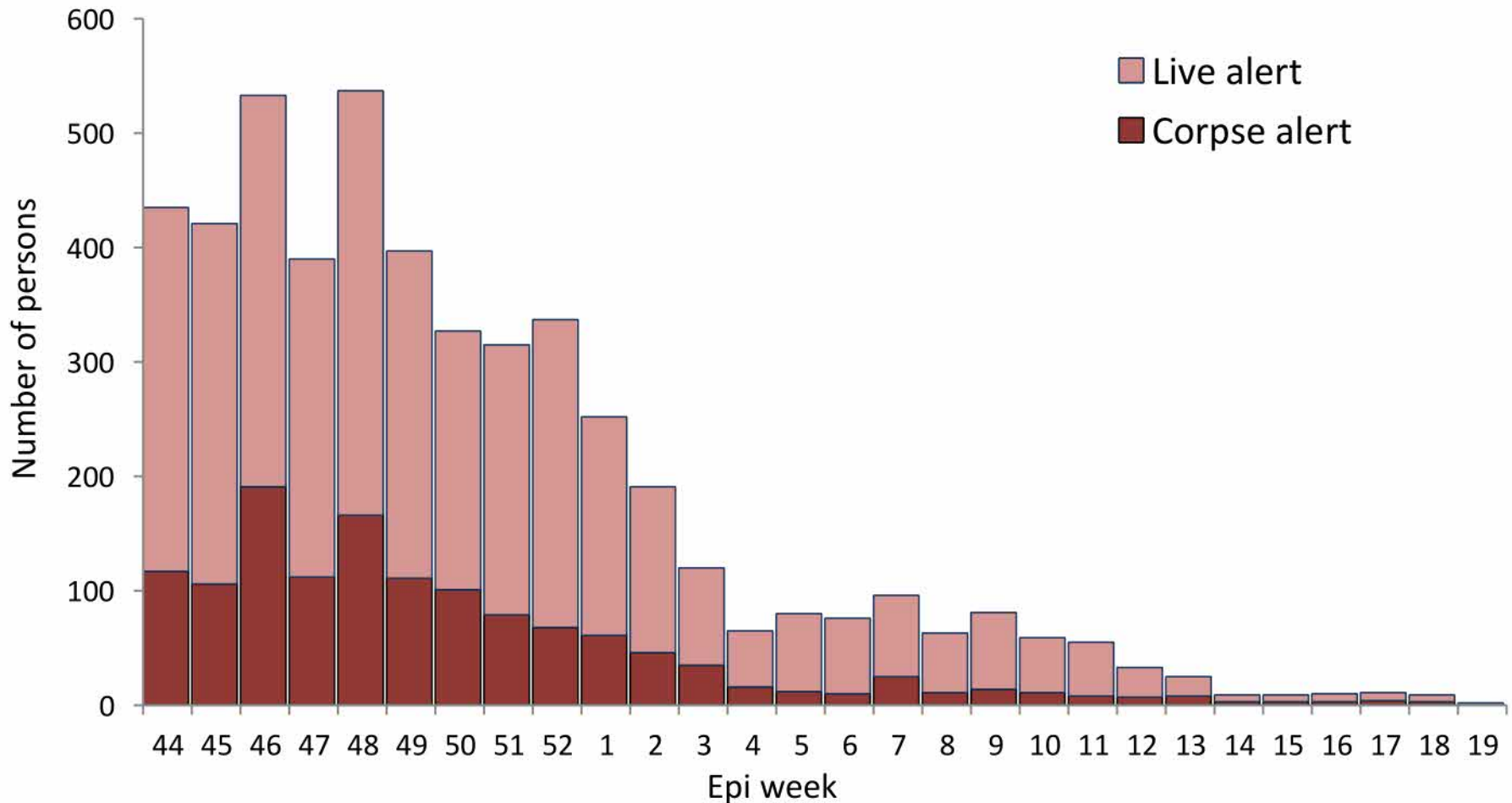


# MoHS - Burial Alerts Reported and Response

## October 28, 2014 - May 3, 2015



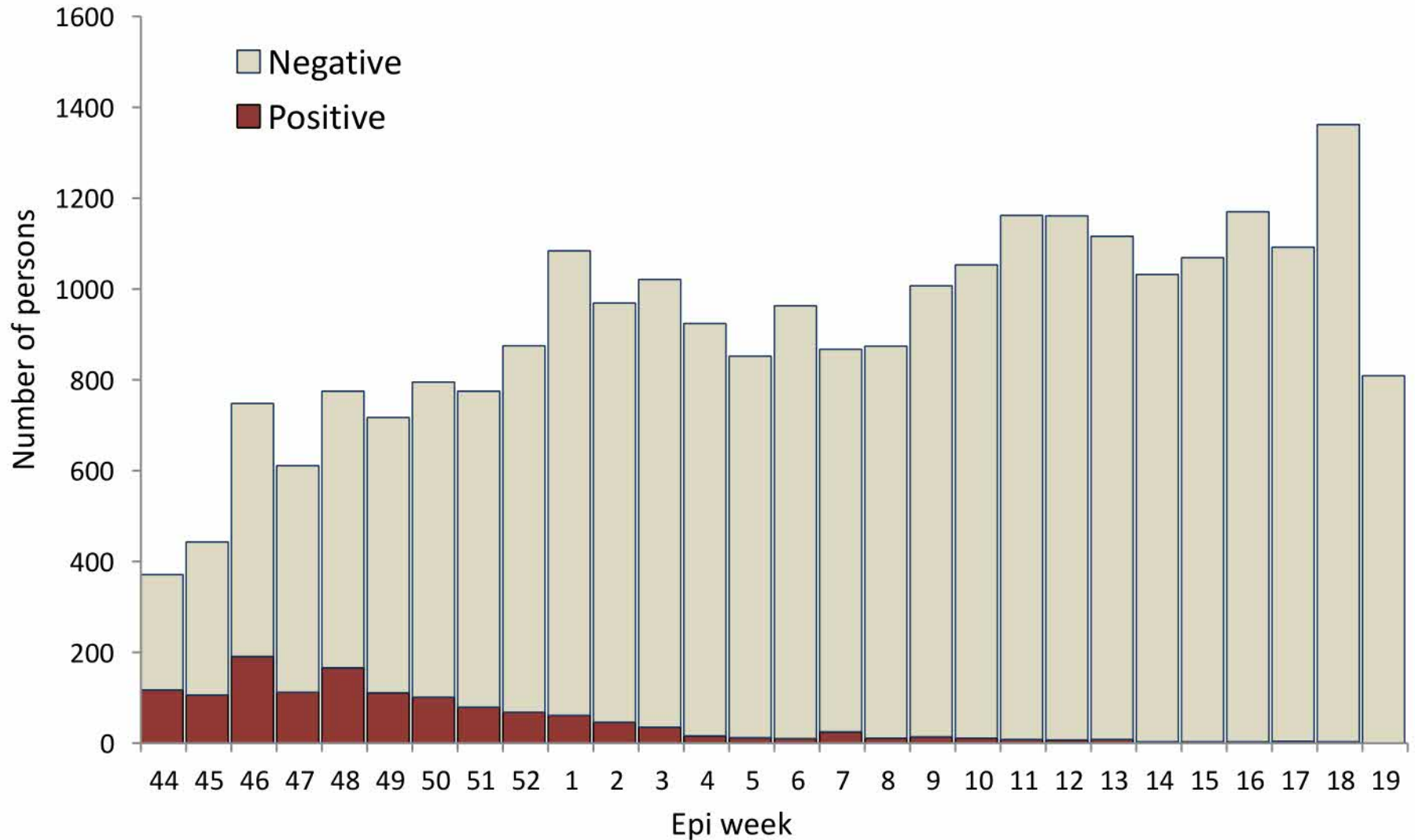
# MoHS - Reported Confirmed Cases\* by Type of Alert, Sierra Leone, October 27, 2014 – May 10\*\*, 2015



\*Cases confirmed through swab testing were assumed to be corpse alerts.

\*\*Epi week 19 incomplete

# MoHS - Reported Corpses\* by EVD Result, Sierra Leone, October 27, 2014 – May 10\*\*, 2015



\*Swab samples were assumed to be from corpse alerts.

\*\*Epi week 19 incomplete



## EVD Cases Confirmed from Swabs Data (Epi week 18: April 27 – May 3, 2015 and Epi week 19: May 4 – May 10, 2015\*)

National/District	Epi week 18		Epi week 19	
	EVD confirmed corpses	Total corpses swabbed	EVD confirmed corpses	Total corpses swabbed
National	3	1042	0	854
Bo	0	162	0	96
Bombali	0	159	0	33
Bonthe	0	54	0	26
Kailahun	0	34	0	12
Kambia	2	69	0	38
Kenema	0	102	0	52
Koinadugu	0	59	0	33
Kono	0	57	0	80
Moyamba	0	81	0	49
Port Loko	0	113	0	80
Pujehun	0	50	0	24
Tonkolili	0	90	0	73
Western	1	326	0	197

Data Source: MoHS Daily Sit Rep, April 27 – May 10, 2015

\* Epi week 19 incomplete



# Community Deaths Investigation

## Epi week #18

Kambia – 2 corpses

- 35 year old, female; died 04/27/15; epi-link: Rokupr cluster
- 45 year old, female; died 05/1/15; epi-link: under investigation

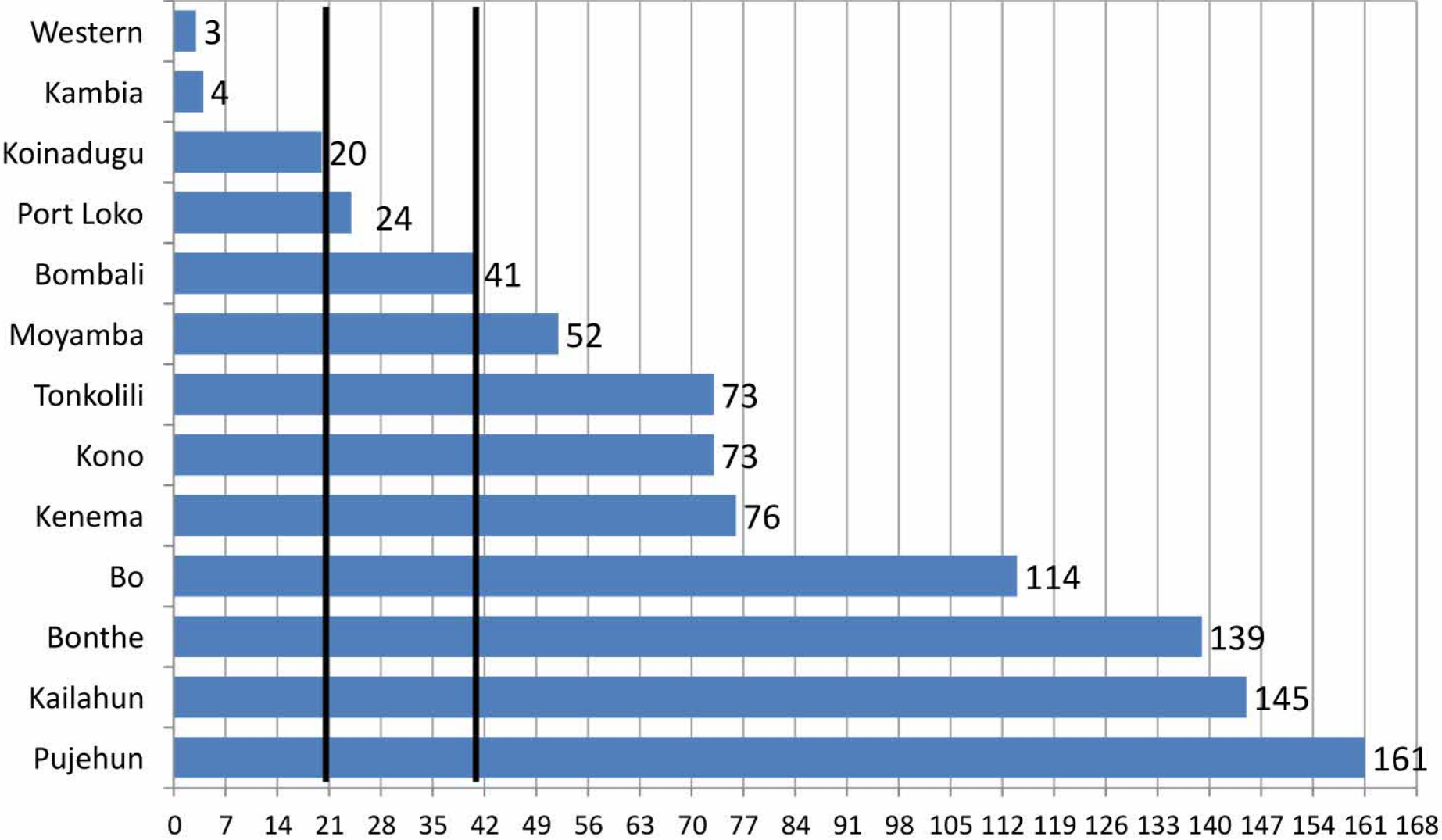
# Community Deaths Investigation (cont.)

## Epi week #18

Western - 1 corpse

- 37 year old, male; died 4/26/2015; epi-link: Moa Wharf cluster

# Days Since Last Confirmed Case by District, May 8th



Data Source: MoHS Daily Sit Rep, May 8th

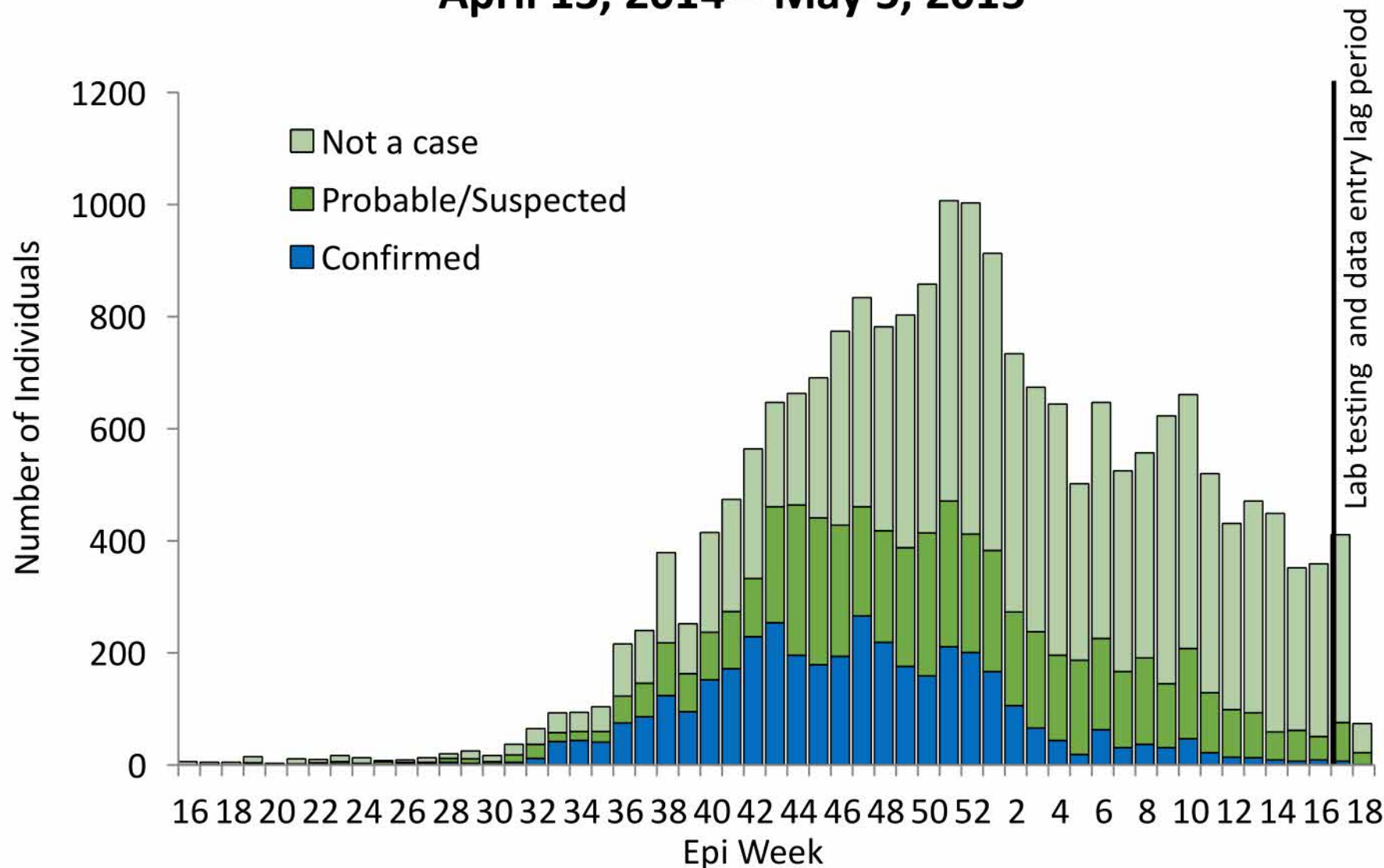
# DISTRICT DATA

**Note:**

Only includes district data where days since last confirmed case is  $\leq 42$  days

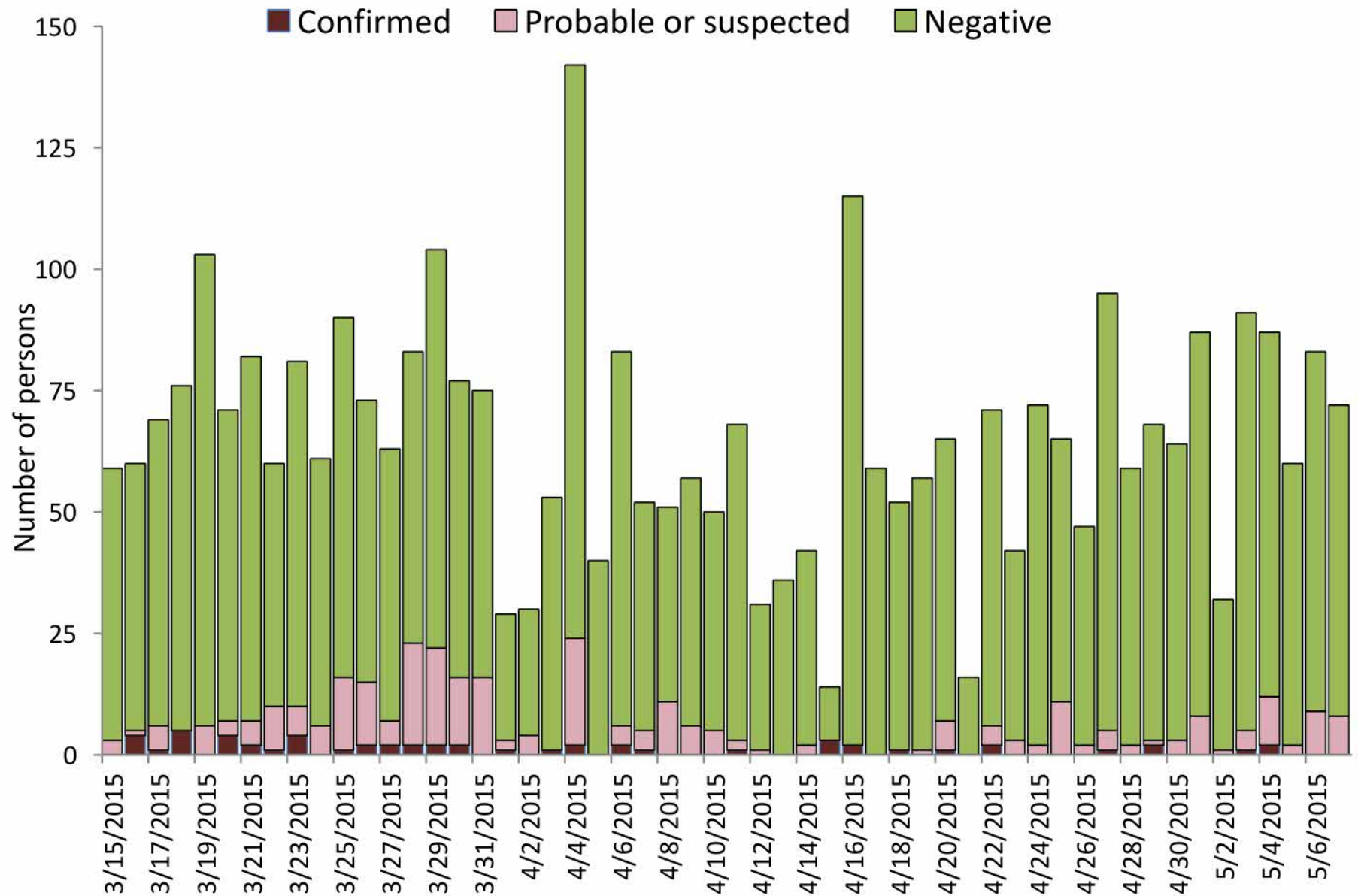
# Western District

# VHF - Reports by Case Definition and Epi-week of Onset – Western April 13, 2014 – May 5, 2015



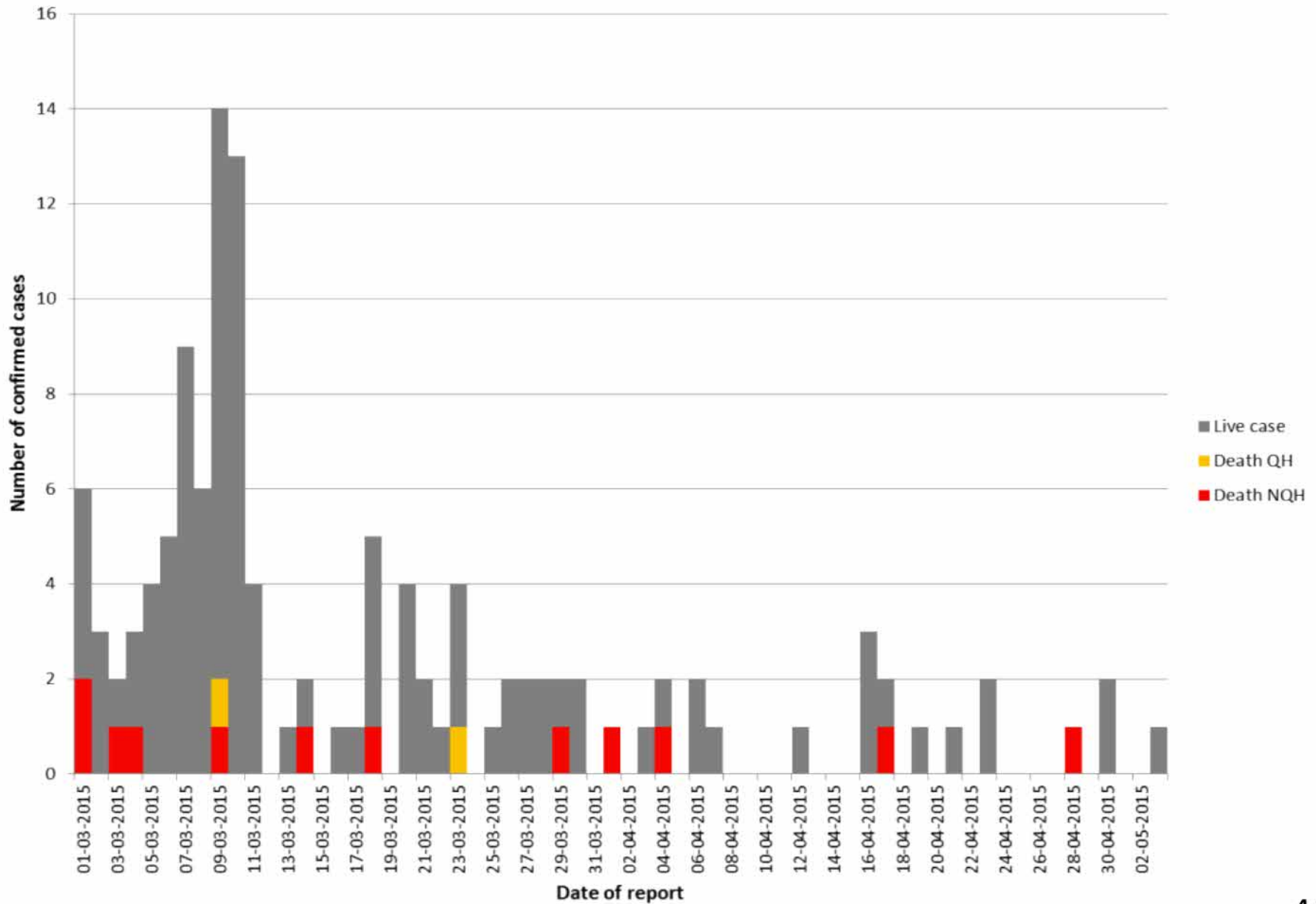
# MoHS - Reported Lab Results by Case Definition and Lab Report Date

## Western Area, March 15 – May 7, 2015





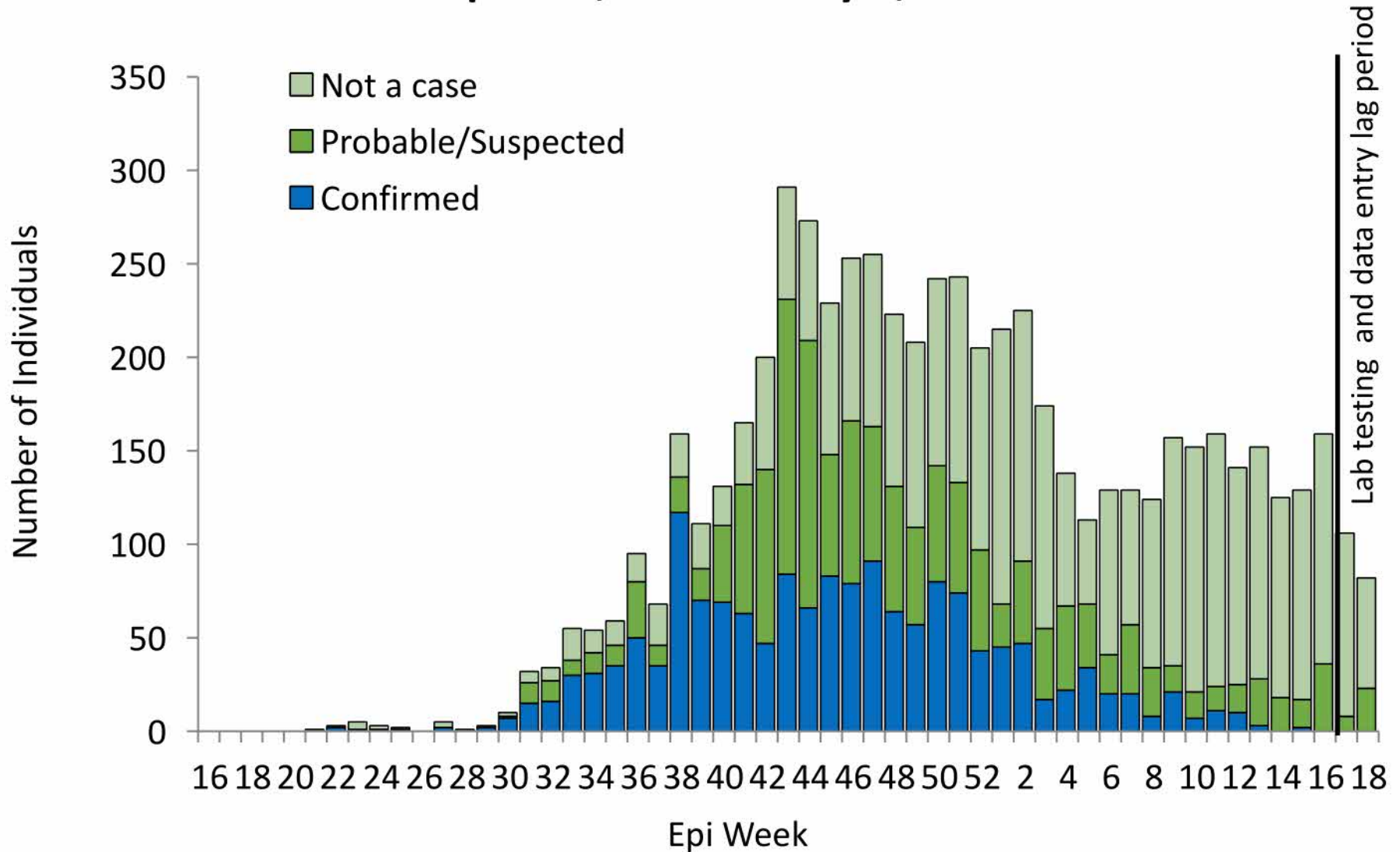
# Western Area: Number of Confirmed Cases Daily



# Port Loko District

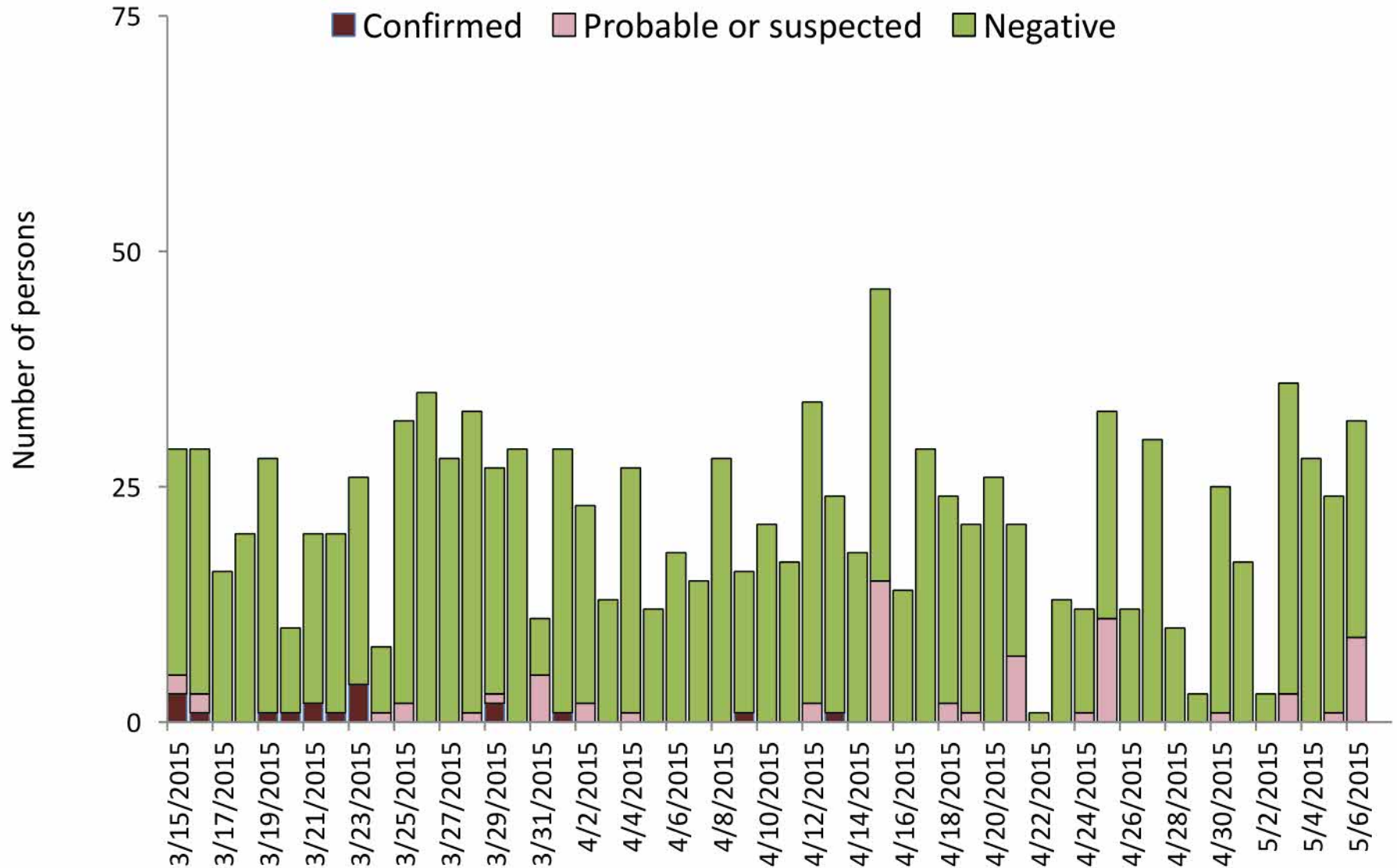
# VHF - Reports by Case Definition and Epi-week of Onset – Port Loko

## April 13, 2014 – May 5, 2015



# MoHS - Reported Lab Results by Case Definition and Lab Report Date

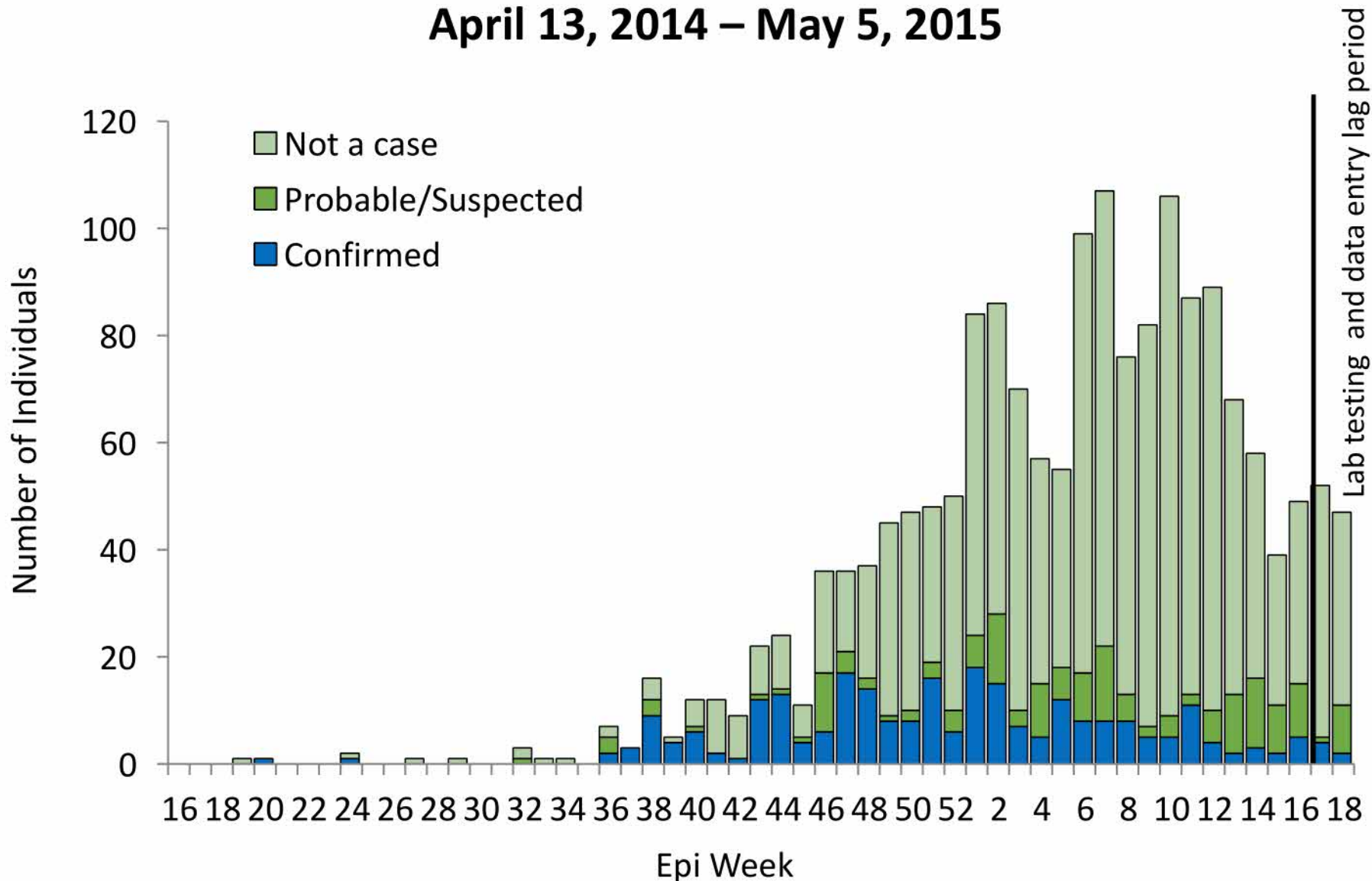
## Port Loko, March 15 – May 7, 2015



# **Kambia District**

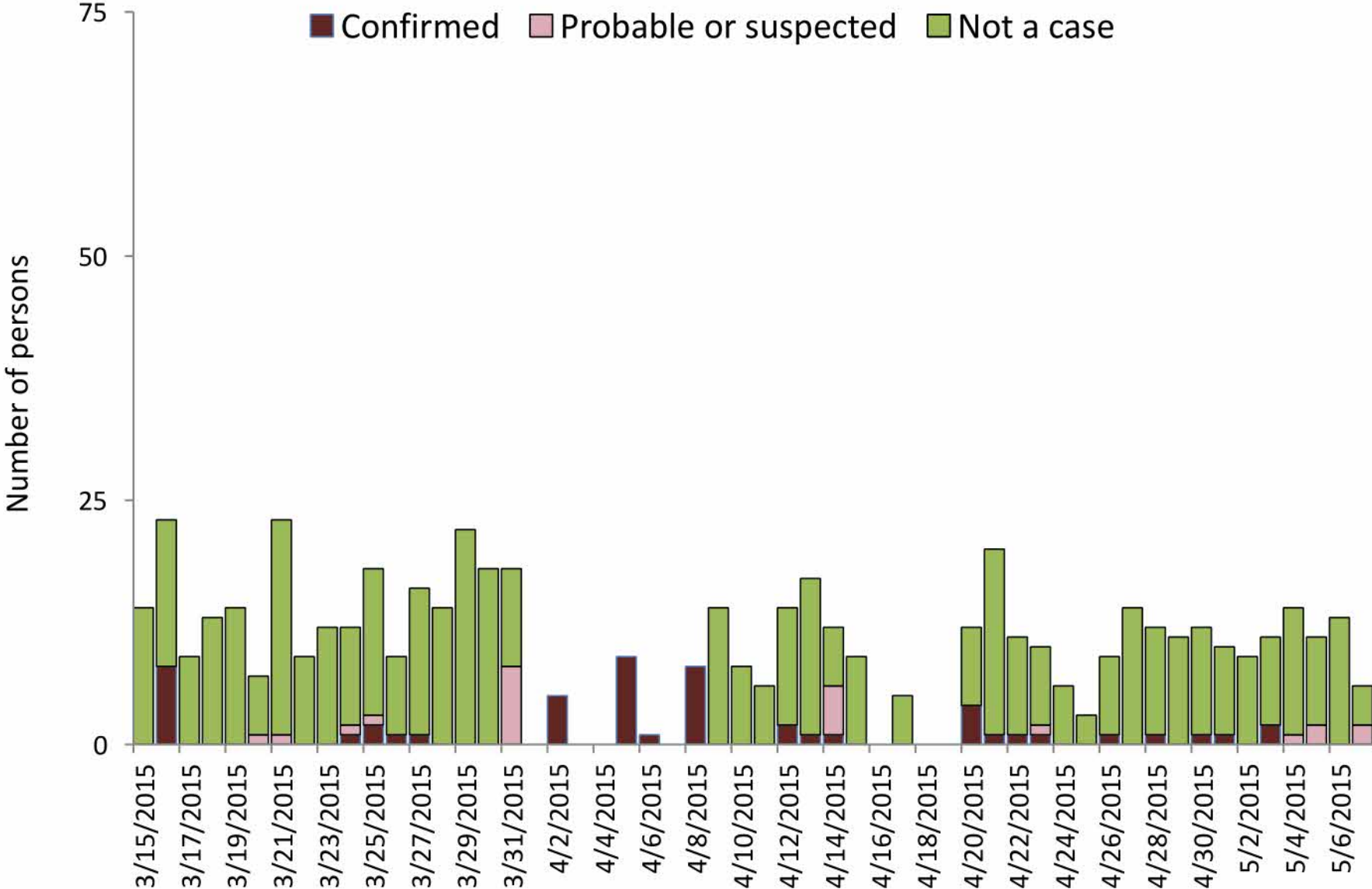
# VHF - Reports by Case Definition and Epi-week of Onset – Kambia

## April 13, 2014 – May 5, 2015



# MoHS - Reported Lab Results by Case Definition and Lab Report Date

## Kambia, March 15 – May 7, 2015

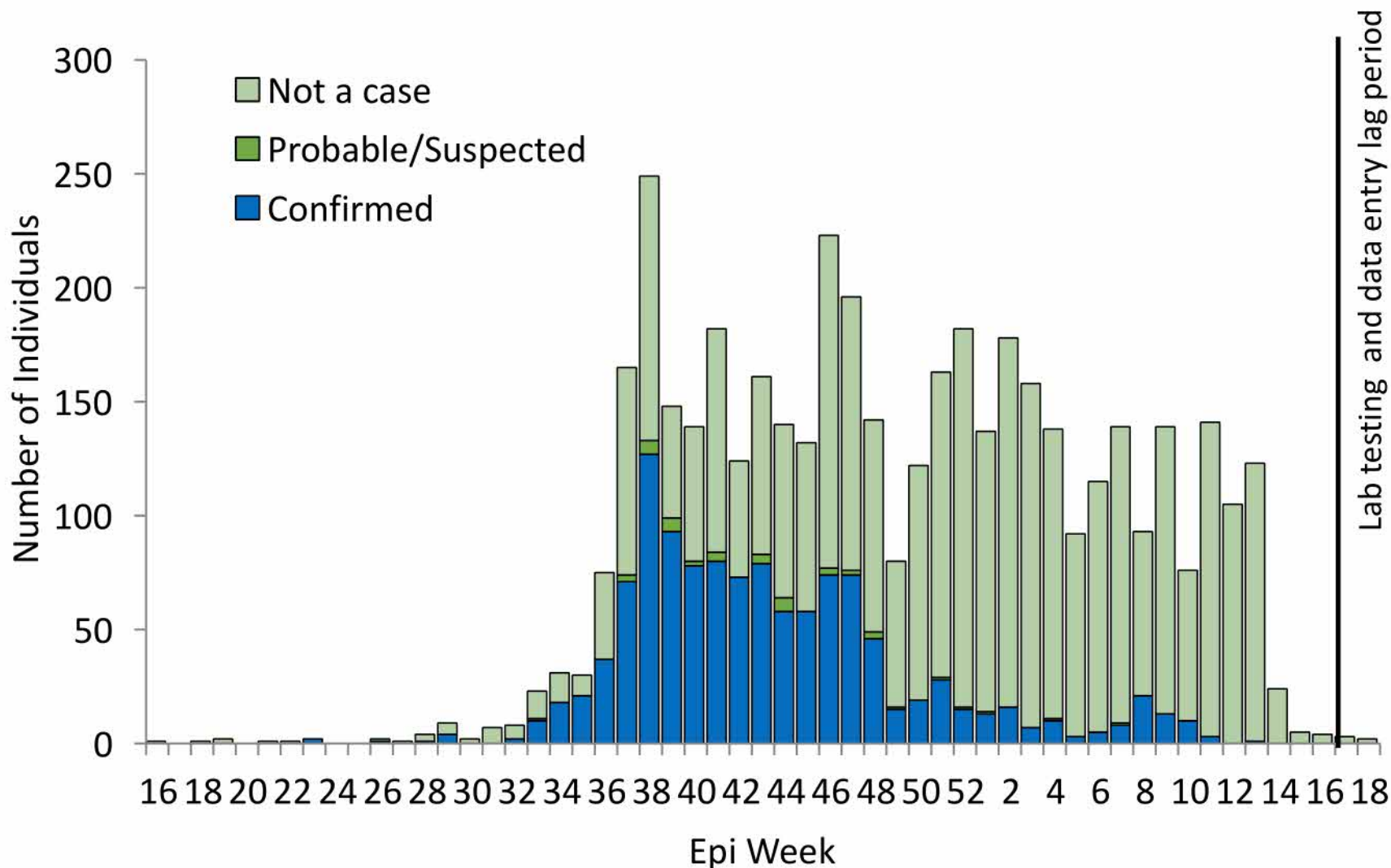




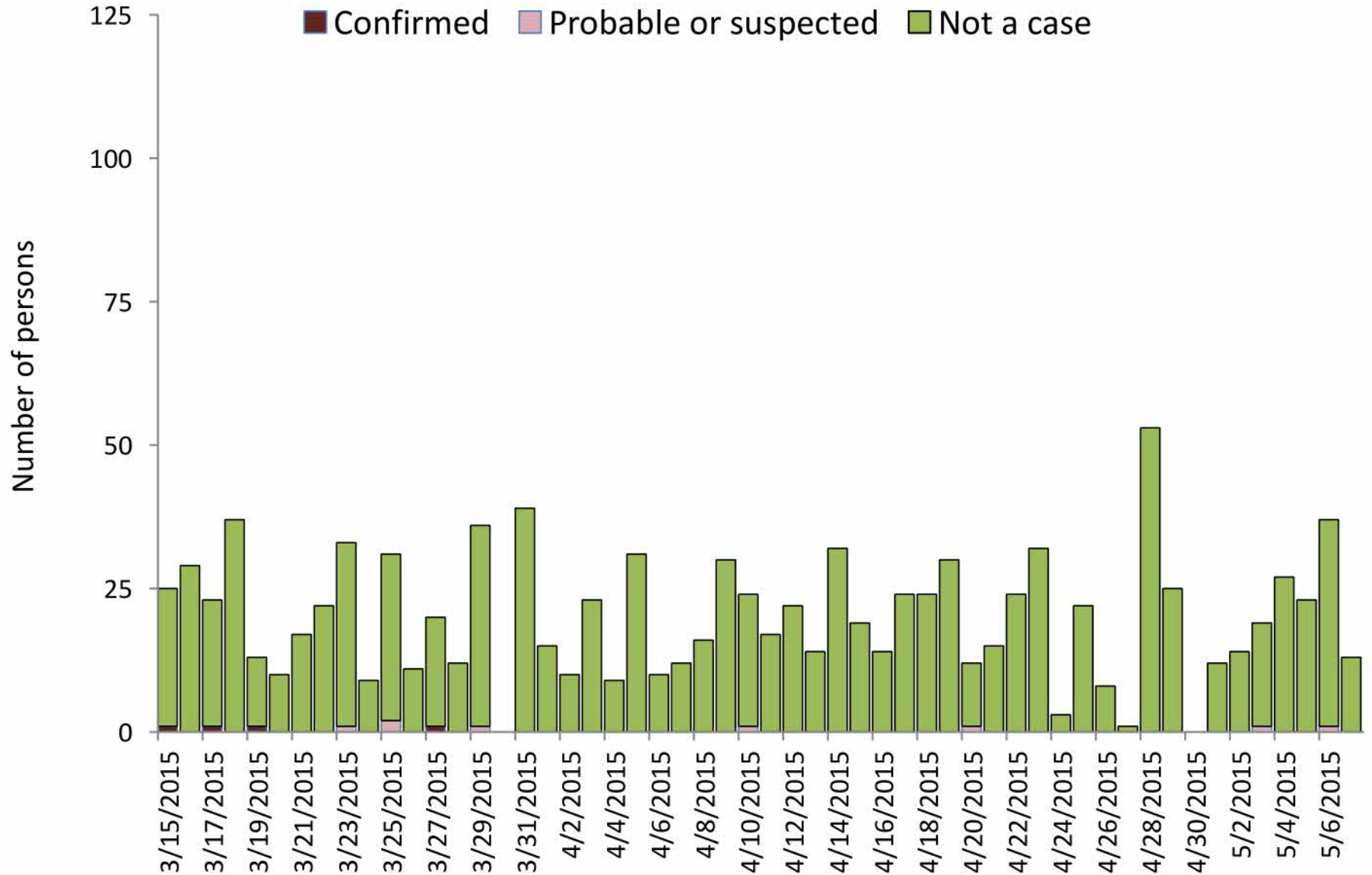
# **Bombali District**

# VHF - Reports by Case Definition and Epi-week of Onset - Bombali

## April 13, 2014 – May 5, 2015



# MoHS - Reported Lab Results by Case Definition and Lab Report Date, Bombali, March 15 – May 7, 2015

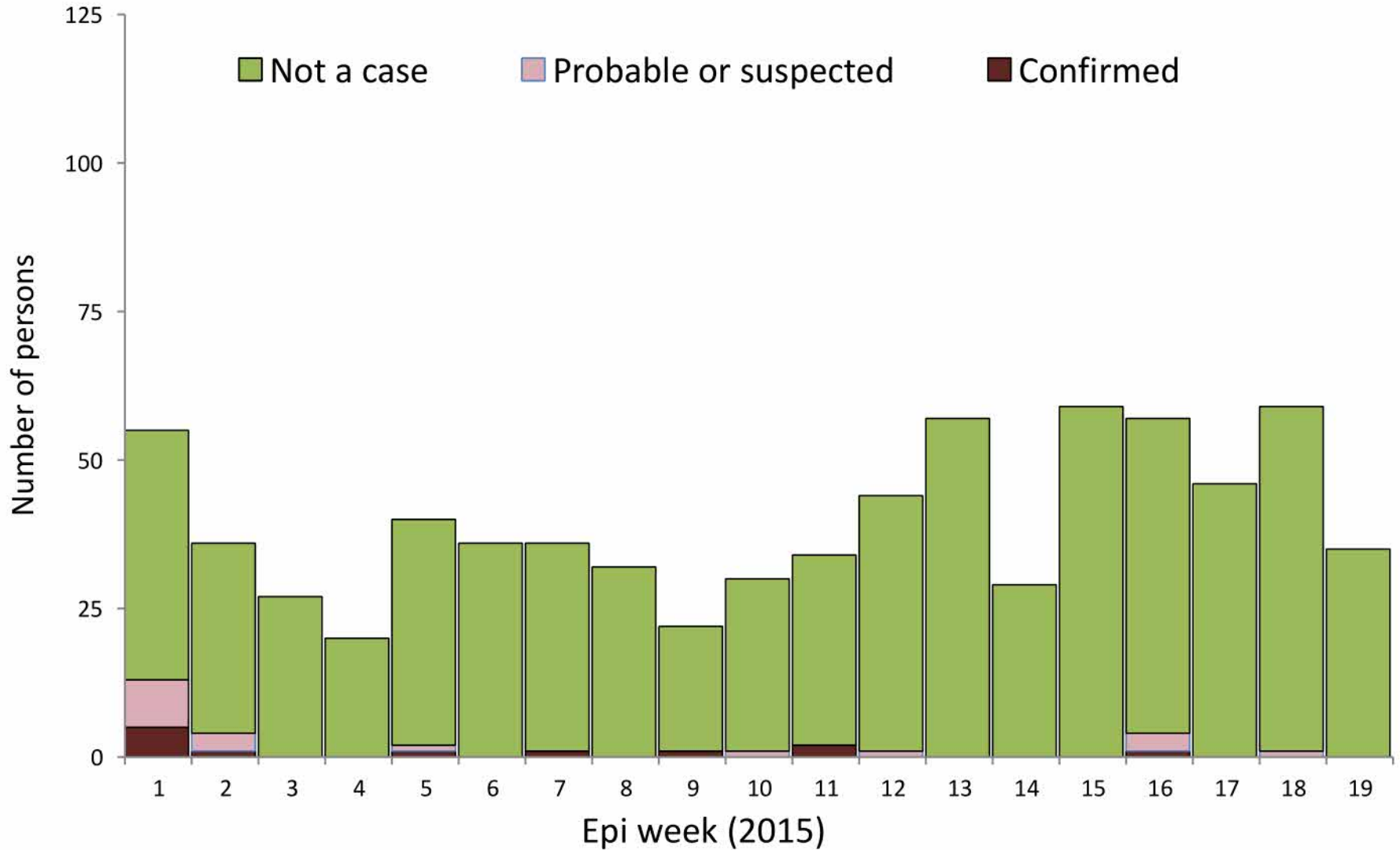


# Koinadugu District

**Note:**

Last VHF data update: Jan 17, 2015. For this reason, only reporting laboratory data from SitRep for current year.

# MoHS - Reported Lab Results by Case Definition and Lab Report Date Koinadugu, December 29, 2014 – May 7, 2015 (end of epi week 19\*)



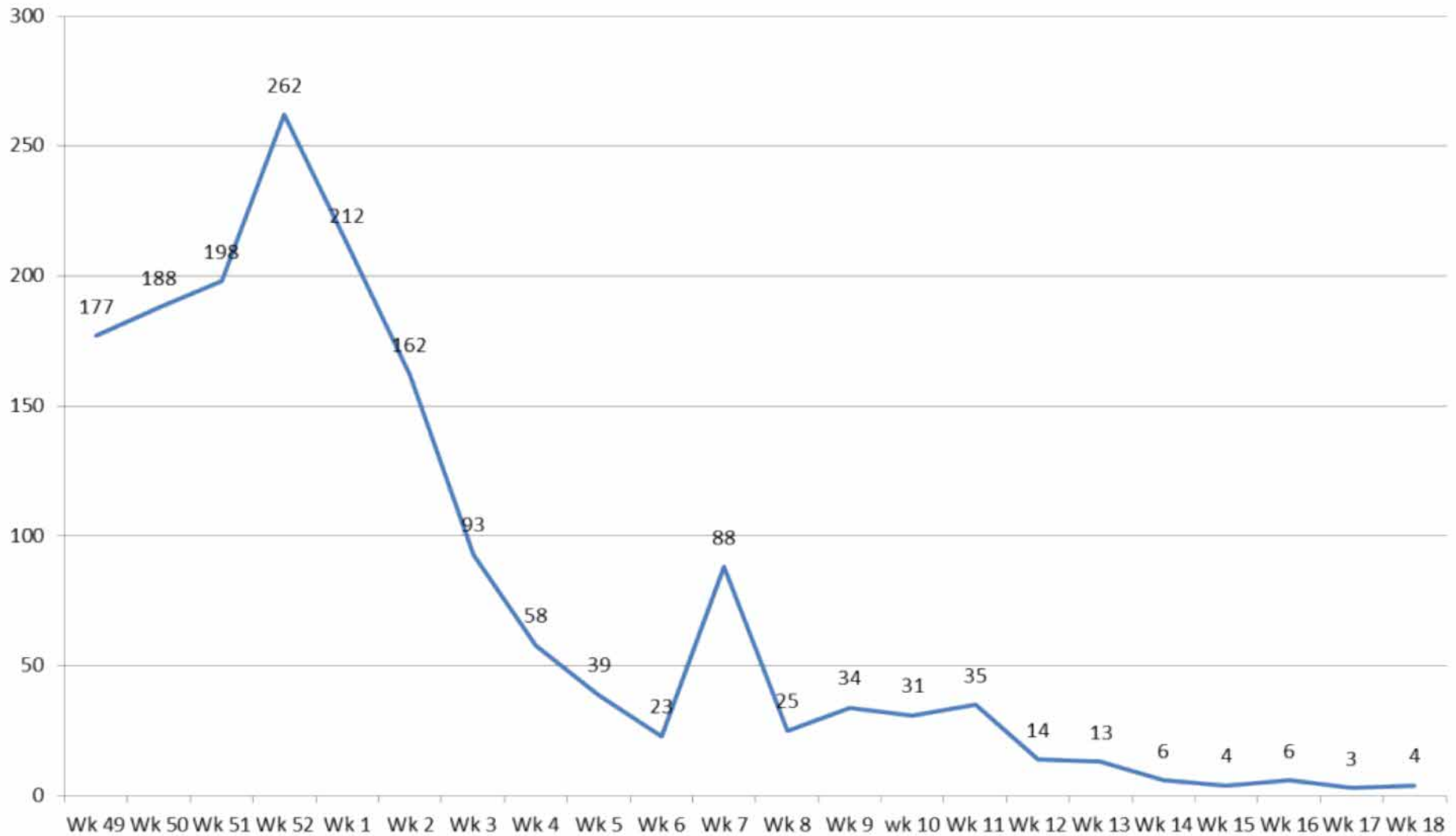
\*Epi week 19 incomplete

# Western Area Ebola Response Center (WAERC) Update

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05 May 2015

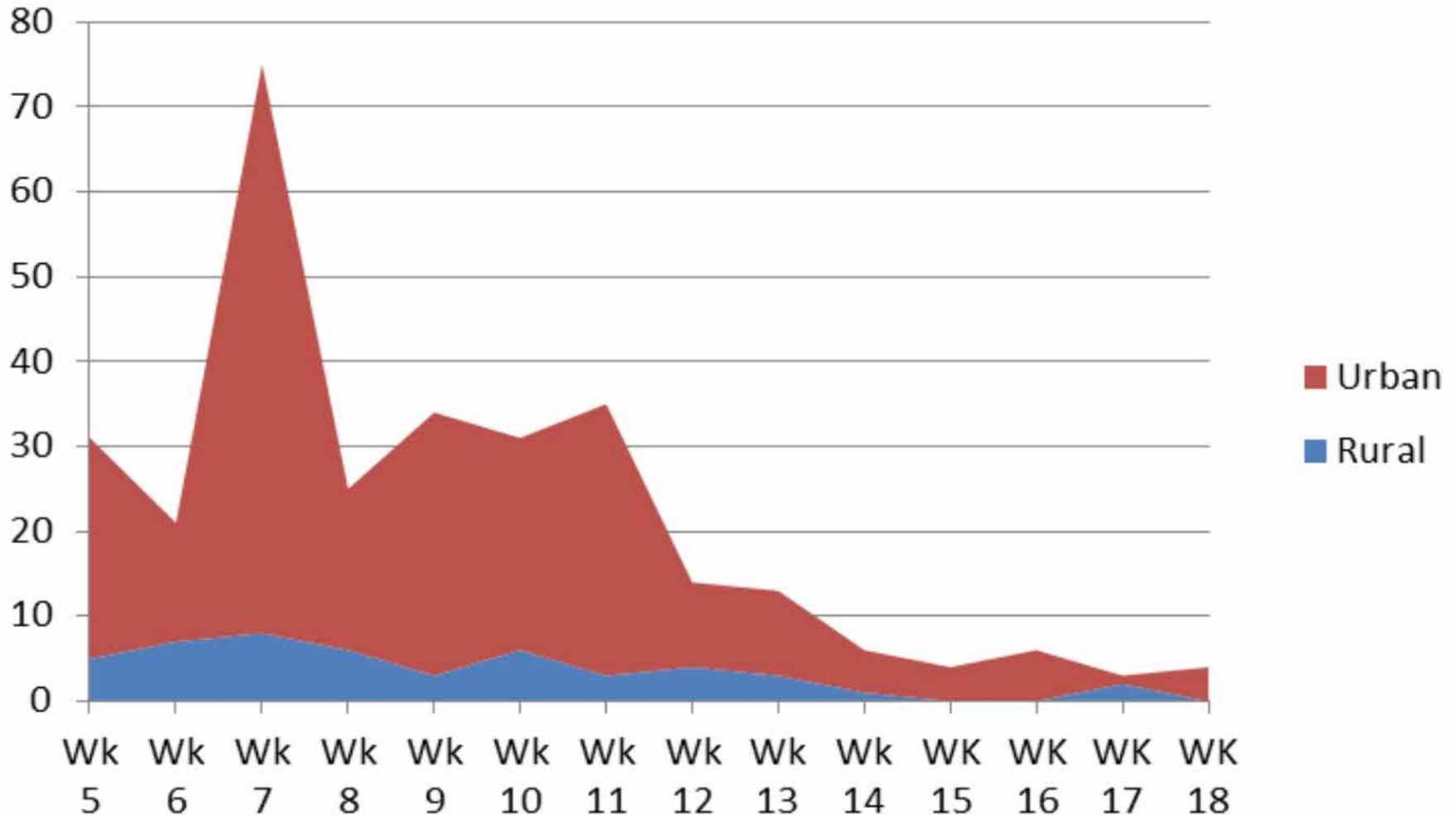
# Western Area: Week-wise Number of Confirmed Cases



Source: Western operation  
line list as on 4<sup>th</sup> May 2015



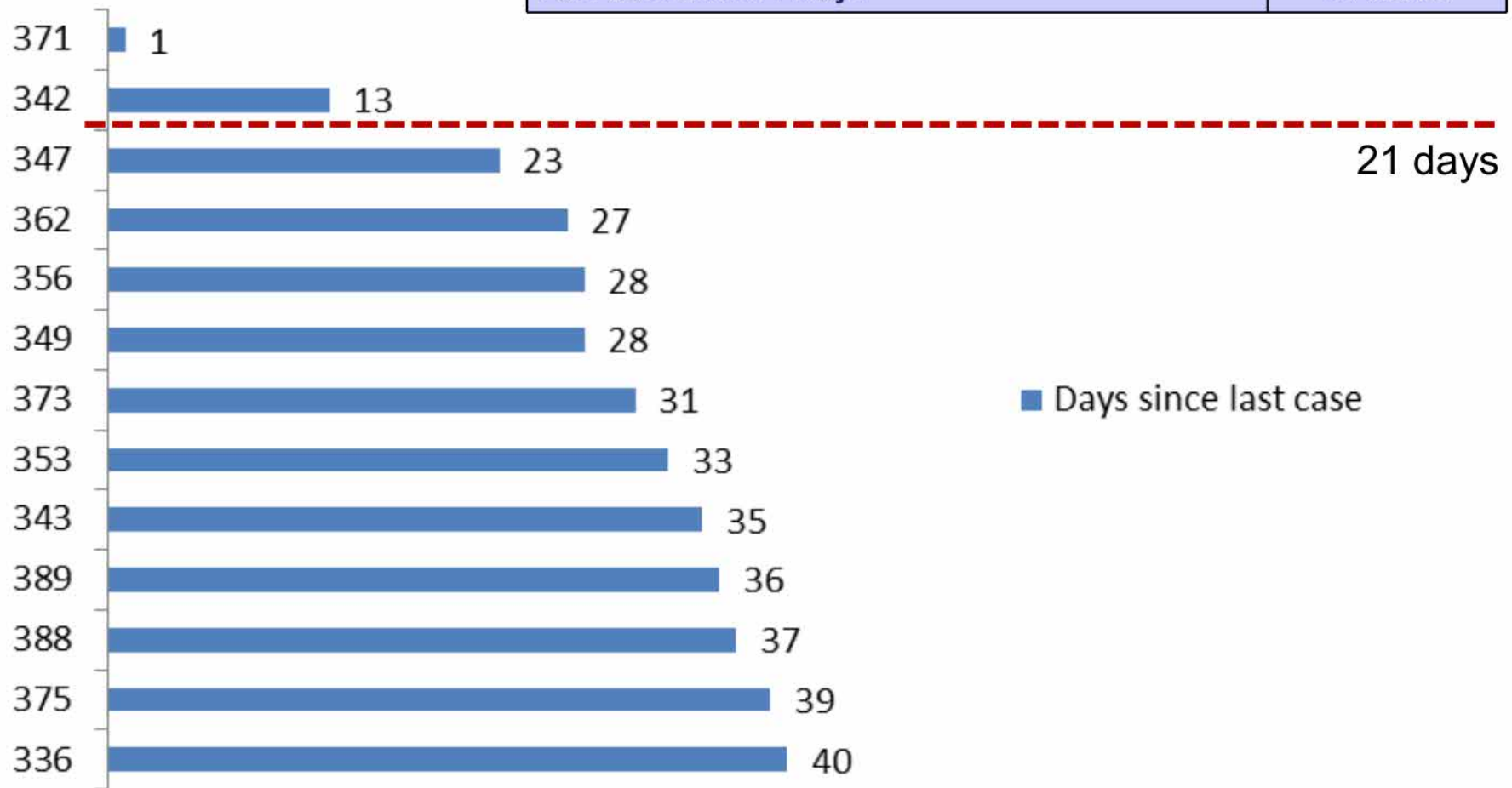
# Western Area: Week-wise Number of Confirmed Cases by Area



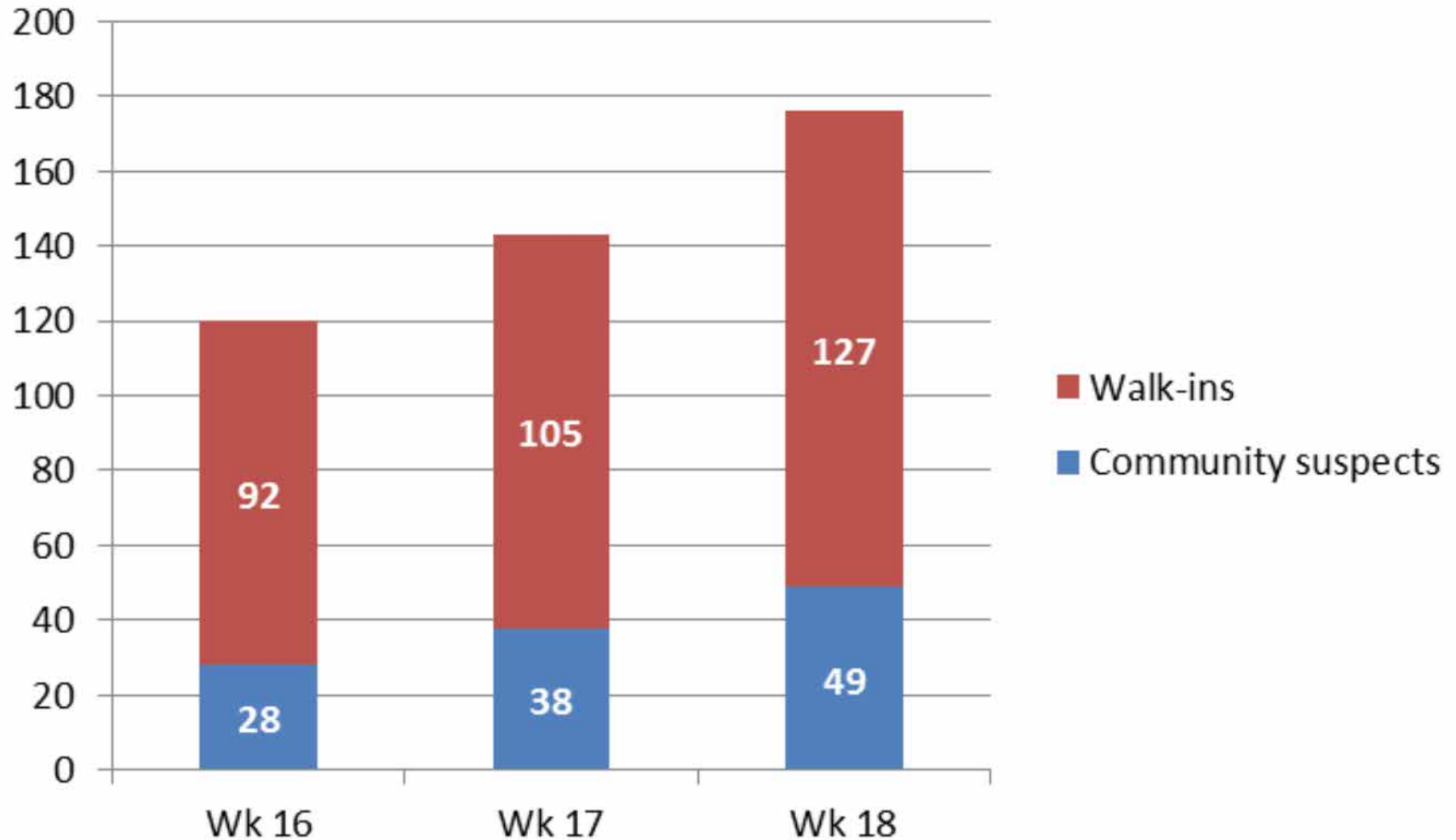
Source: Western operation line list as on 4<sup>th</sup> May 2015

# EVD Free Period in Different Wards of Western Area

Last case within 21 days	2 Wards
Last case before 21 days but within 42 days	11 Wards
Last case before 42 days	56 Wards

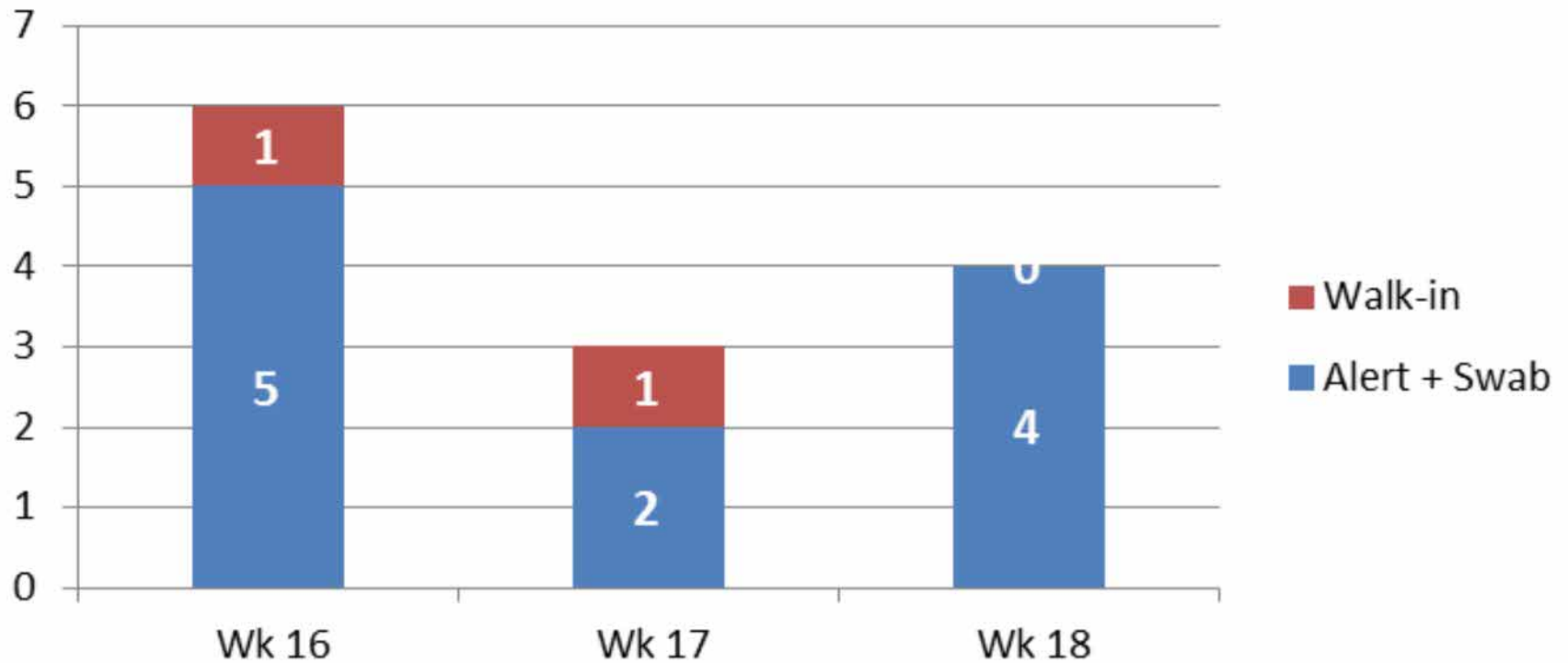


# Western Area: Suspected Cases Source



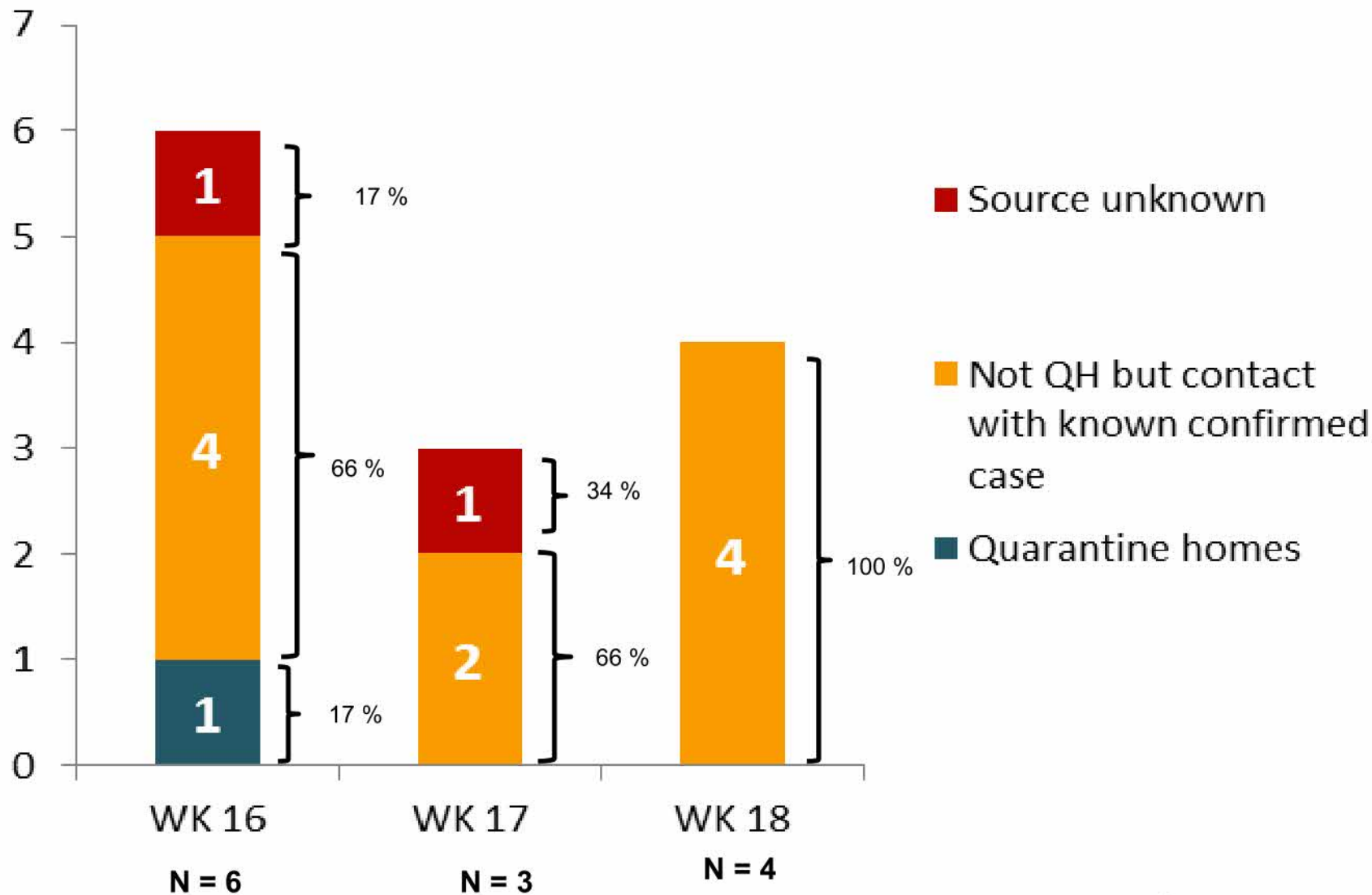
Source: Western operation  
line list as on 4<sup>th</sup> May 2015

# Western Area: Number of EVD Confirmed Cases According to Source

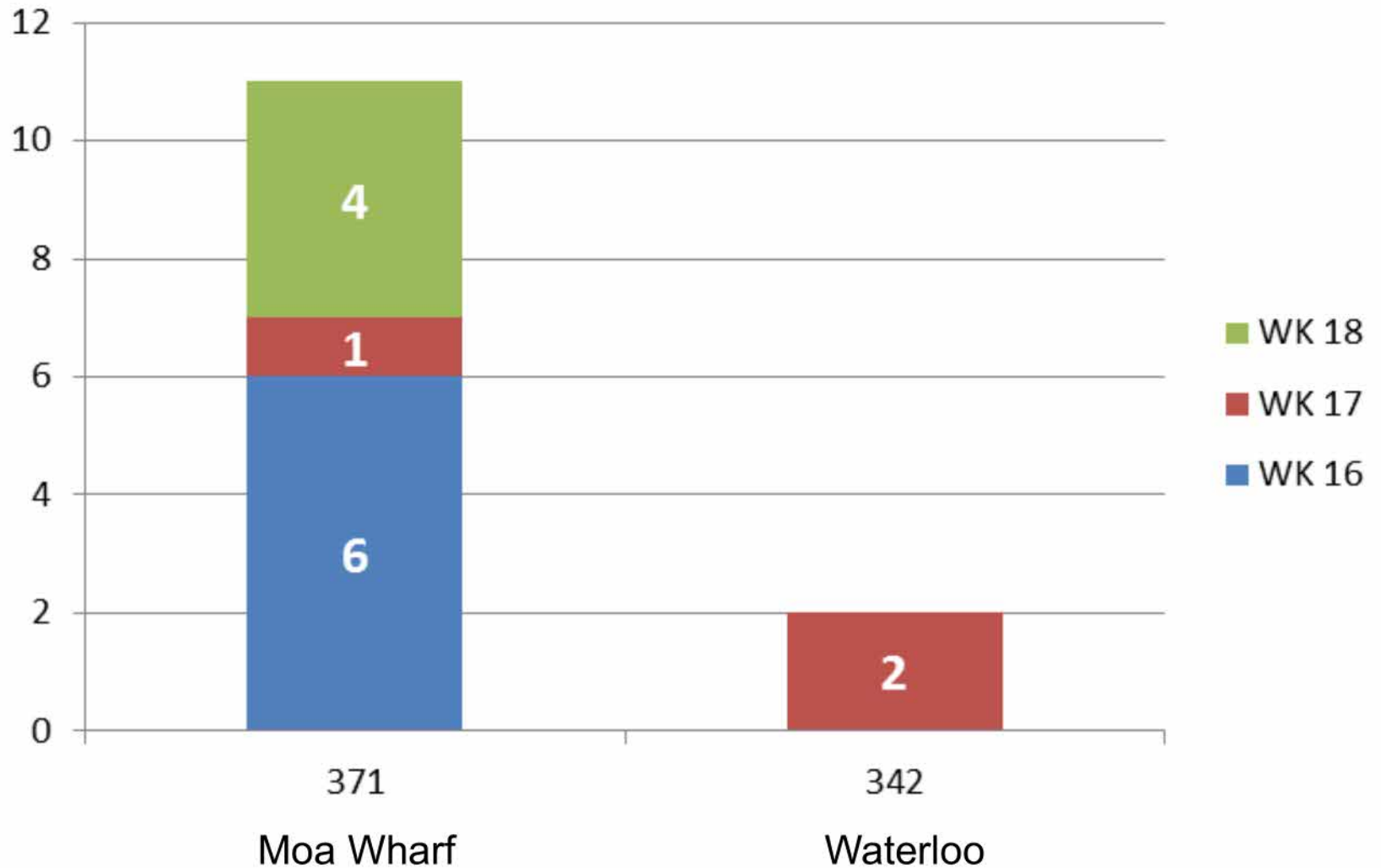


Source: Western operation line list as on 4<sup>th</sup> May 2015

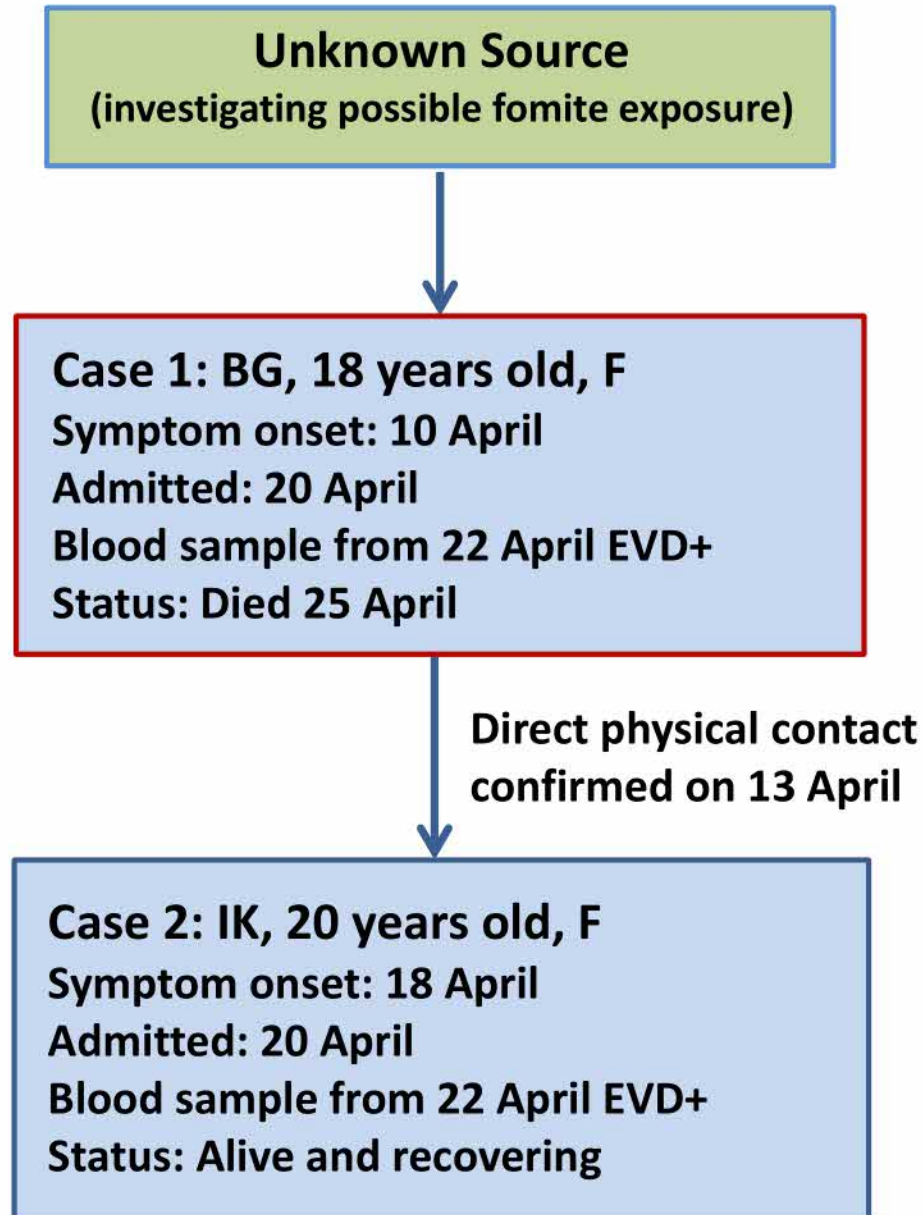
# Western Area: Source of Confirmed EVD Cases



# Weekly Hotspot of Western Area

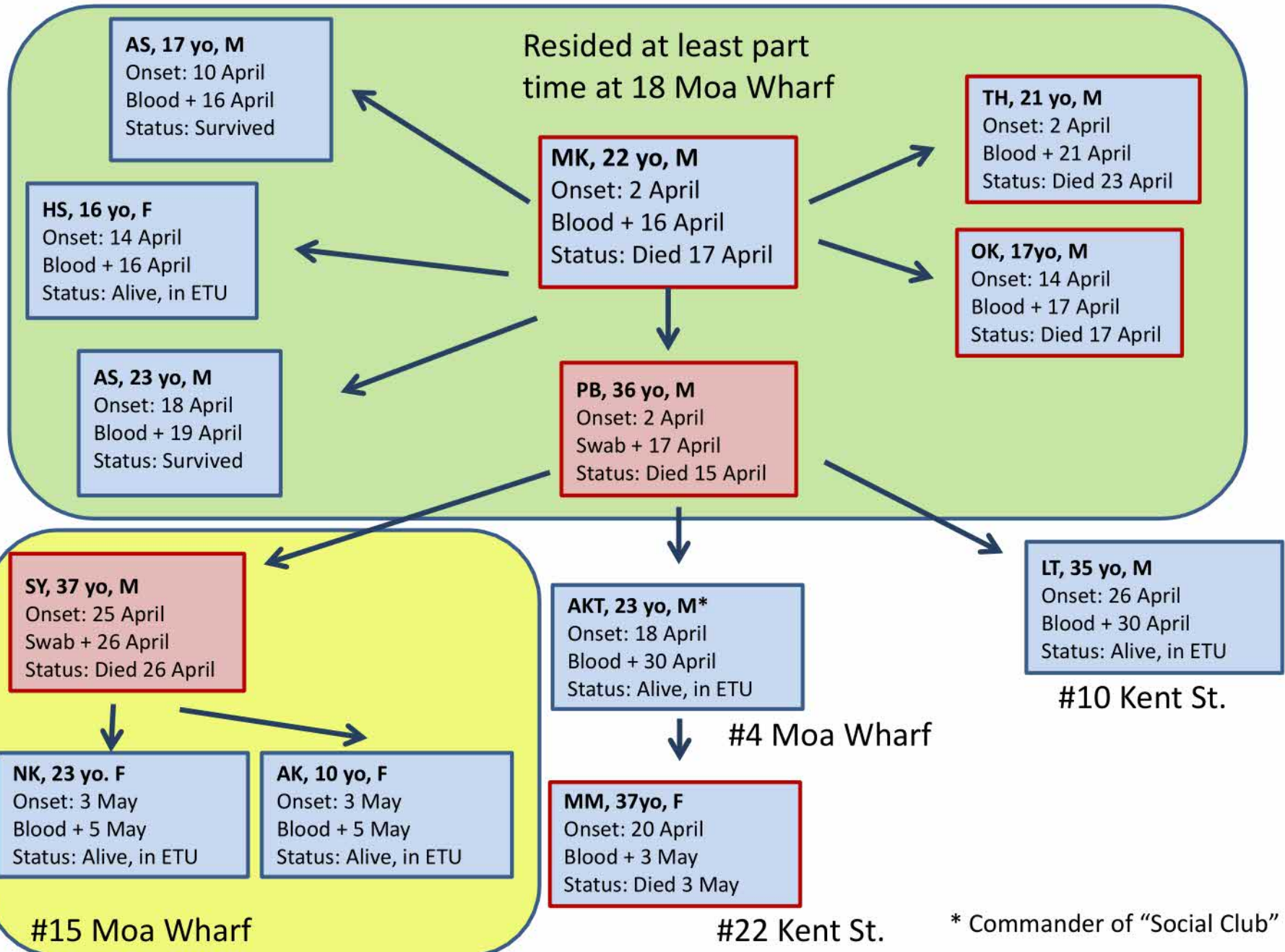


# Transmission Chain - Kandeh Turay St. Cluster (Waterloo, Western Rural)





# Transmission Chain - Moa Wharf - 3 Cluster (Western Urban)



\* Commander of "Social Club"

# **OTHER UPDATES**

# Measles Update

- 72 cases reported since January 2015
  - 50 investigated, 21 IgM positive
- MCH Campaign April:
  - 98.5% 6-59 months vitamin A
  - 96% 12-59 months given albendazole
  - Catch-up vaccination offered
- May 29 – June 3 – Measles and Polio Campaign:
  - 1.3 million 9-59 months targeted for measles
  - 1.4 million 0-59 months targeted for polio
  - GAVI, OFDA, WHO funded

***THANK YOU***

**From:** Marston, Barbara J. (CDC/CGH/DGHP)  
**Sent:** Sat, 4 Apr 2015 08:00:47 -0400  
**To:** EOC Conf/Bridge Calendar (CDC); Demby, Austin (CDC/CGH/DGHA); Damon, Inger K. (CDC/OID/NCEZID); GDD-OUTBREAK (CDC); CDC IMS AV/Communications; Helfand, Rita (CDC/OID/NCEZID); Williams, Teresa (CDC/OD/OCS); Dills, Kimberly C. (CDC/OD/OCS); CDC IMS OD LNO; CDC IMS Incident Manager (CDC); Davis, Carma L. (CDC/OD/OCS) (CTR); Bumpus, Stefanie (CDC/OD/OCS); Brown, Clive (CDC/OID/NCEZID); Frieden, Thomas (Tom) (CDC/OD); Demby, Austin (HHS/OS/OGA); Knust, Barbara (CDC/OID/NCEZID); Nichol, Stuart T. (CDC/OID/NCEZID); Tappero, Jordan (CDC/CGH/DGHP); Wuichet, John W. (CDC/OD/OCS); Bell, Beth (CDC/OID/NCEZID); Morgan, Oliver (CDC/OID/NCEZID); 2014 Ebola Response (CDC); Kenyon, Thomas A. (CDC/CGH/OD); Foti, Kathryn (CDC/OD/OCS); CDC IMS Policy Unit -2 (Ebola); Merkle, Sarah (CDC/ONDIEH/NCEH); Rayfield, Mark (CDC/CGH/DGHP); Petersen, Lyle (CDC/OID/NCEZID); Perrone, Laura (CDC/CGH/OD); Meltzer, Martin I. (CDC/OID/NCEZID); Washington, Michael (Wash) (CDC/OID/NCEZID); Gambhir, Manoj (CDC/OID/NCIRD) (CTR); Reott, Erica (CDC/ONDIEH/NCBDDD); Kibunja, Julia N. (CDC/CGH/OD); Brunette, Gary W. (CDC/OID/NCEZID); Dicker, Richard C. (CDC/CGH/DGHP); Bunnell, Rebecca (CDC/ONDIEH/NCCDPHP); Hersey, Sara (CDC/CGH/DGHA); Glover, Maleeka (CDC/OID/OD); Kennedy, David N. (CDC/OPHPR/DEO); Merlin, Toby (CDC/OID/NCEZID); Crockett, James B. (CDC/OPHPR/DEO); Anaya, Gabriel (CDC/CGH/GID); Williams, Ian (CDC/OID/NCEZID); Jernigan, Daniel B. (CDC/OID/NCIRD); English, Lorna M. (CDC/ONDIEH/NCCDPHP); CDC IMS DGMQ Task Force Leader/Deputy  
**Cc:** Ervin, Elizabeth (CDC/OID/NCEZID); Park, Benjamin (CDC/OID/NCEZID); Davis, Stephanie Marie (CDC/CGH/DGHA); Daves, Sharon (CDC/CGH/DGHP); Brooks, Jennifer (CDC/OPHPR/DEO); Briss, Peter (CDC/ONDIEH/NCCDPHP); CDC IMS Laboratory; Hall, Aron (CDC/OID/NCIRD); Srivastava, Pamela (CDC/OID/NCIRD); Barbour, Kamil E. (CDC/ONDIEH/NCCDPHP); hersey.sara@gmail.com; Zulz, Tammy (CDC/OID/NCEZID); Gupta, Neil (CDC/OID/NCHHSTP); Wilson, Katie (CDC/OID/NCEZID) (CTR); Rollin, Pierre (CDC/OID/NCEZID); Ransom, Ray (CDC/CGH/DGHP); CDC IMS Health Promotion; Irwin, Kathleen L. (CDC/OID/NCHHSTP); Pembleton, Elizabeth (CDC/OID/NCEZID) (CTR); Lindblade, Kimberly (Kim) (CDC/OID/NCIRD); Henderson, Alden (CDC/CGH/DGHP); Pappas, Claudia (CDC/OID/NCIRD)  
**Subject:** RE: Ebola: Country Call Sierra Leone  
**Attachments:** Weekly Epi Report 04april2015\_final.pptx

Dear all—

Please find attached the data pack for today's call with Sierra Leone.

Barb



-----Original Appointment-----

**From:** EOC Conf/Bridge Calendar (CDC)

**Sent:** Monday, November 24, 2014 9:00 AM

**To:** EOC Conf/Bridge Calendar (CDC); Demby, Austin (CDC/CGH/DGHA); Marston, Barbara J. (CDC/CGH/DGHP); Damon, Inger K. (CDC/OID/NCEZID); GDD-OUTBREAK (CDC); CDC IMS AV/Communications; Helfand, Rita (CDC/OID/NCEZID); Williams, Teresa (CDC/OD/OCS); Dills, Kimberly C. (CDC/OD/OCS); CDC IMS OD LNO; CDC IMS Incident Manager (CDC); Davis, Carma L. (CDC/OD/OCS) (CTR); Bumpus, Stefanie (CDC/OD/OCS); Brown, Clive (CDC/OID/NCEZID); Frieden, Thomas (Tom) (CDC/OD); Demby, Austin (HHS/OS/OGA); Knust, Barbara (CDC/OID/NCEZID); Nichol, Stuart T. (CDC/OID/NCEZID); Tappero, Jordan (CDC/CGH/DGHP); Wuichet, John W. (CDC/OD/OCS); Bell, Beth (CDC/OID/NCEZID); Morgan, Oliver (CDC/OID/NCEZID); 2014 Ebola Response (CDC); Kenyon, Thomas A. (CDC/CGH/OD); Foti, Kathryn (CDC/OD/OCS); CDC IMS Policy Unit -2 (Ebola); Merkle, Sarah



(CDC/ONDIEH/NCEH); Rayfield, Mark (CDC/CGH/DGHP); Petersen, Lyle (CDC/OID/NCEZID); Perrone, Laura (CDC/CGH/OD); Meltzer, Martin I. (CDC/OID/NCEZID); Washington, Michael (Wash) (CDC/OID/NCEZID); Gambhir, Manoj (CDC/OID/NCIRD) (CTR); Reott, Erica (CDC/ONDIEH/NCBDDD); Kibunja, Julia N. (CDC/CGH/OD); Brunette, Gary W. (CDC/OID/NCEZID); Dicker, Richard C. (CDC/CGH/DGHP); Bunnell, Rebecca (CDC/ONDIEH/NCCDPPH); Hersey, Sara (CDC/CGH/DGHA); Glover, Maleeka (CDC/OID/OD); Kennedy, David N. (CDC/OPHPR/DEO); Merlin, Toby (CDC/OID/NCEZID); Crockett, James B. (CDC/OPHPR/DEO); Anaya, Gabriel (CDC/CGH/GID); Williams, Ian (CDC/OID/NCEZID); Jernigan, Daniel B. (CDC/OID/NCIRD); English, Lorna M. (CDC/ONDIEH/NCCDPPH); CDC IMS DGMQ Task Force Leader/Deputy

**Cc:** Ervin, Elizabeth (CDC/OID/NCEZID); Park, Benjamin (CDC/OID/NCEZID); Davis, Stephanie Marie (CDC/CGH/DGHA); Daves, Sharon (CDC/CGH/DGHP); Brooks, Jennifer (CDC/OPHPR/DEO); Briss, Peter (CDC/ONDIEH/NCCDPPH); CDC IMS Laboratory; Hall, Aron (CDC/OID/NCIRD); McMorrow, Meredith (CDC/OID/NCIRD); Mast, Eric (CDC/CGH/GID); Tohme, Rania A. (CDC/CGH/GID); Srivastava, Pamela (CDC/OID/NCIRD); Barbour, Kamil E. (CDC/ONDIEH/NCCDPPH); hersey.sara@gmail.com; Zulz, Tammy (CDC/OID/NCEZID); Gupta, Neil (CDC/OID/NCHHSTP); Wilson, Katie (CDC/OID/NCEZID) (CTR); Rollin, Pierre (CDC/OID/NCEZID); Ransom, Ray (CDC/CGH/DGHP); CDC IMS Health Promotion; Irwin, Kathleen L. (CDC/OID/NCHHSTP); Pembleton, Elizabeth (CDC/OID/NCEZID) (CTR); Lindblade, Kimberly (Kim) (CDC/OID/NCIRD); Henderson, Alden (CDC/CGH/DGHP); Pappas, Claudia (CDC/OID/NCIRD)

**Subject:** Ebola: Country Call Sierra Leone

**When:** Saturday, April 04, 2015 10:50 AM-11:35 AM (UTC-05:00) Eastern Time (US & Canada).

**Where:** Conference Call Only (b)(6)

Please note that starting March 21, 2015 the time for this call is as follows:

Atlanta: 10:50-11:35 AM

Sierra Leone: 2:50-3:35 PM

Updated bridgeline

POC: INTL TF Barbara Marston & Lorna English

The call line information is:

Bridgeline: (b)(6)

Passcode:

International Number: (b)(6)

For any changes or updates, please contact [EOCReport@cdc.gov](mailto:EOCReport@cdc.gov) or phone (770) 488-7100

Sierra Leone Ebola Response  
Epidemiology Overview  
April 4, 2015



# Cluster Tracking

# **Update on HCW associated clusters**

# Bombali

## Kamaranka Cluster (SL25)

- **Case:** 1 HCW (51 y/o man who administers vaccines in Makeni); symptom onset Mar 8, died Mar 16, EVD (+) dead swab reported Mar 18
- **Contacts:** 80 contacts under active surveillance. Surveillance ends April 7
- **Epi-link:** Uncertain. Suspect recent travel to Freetown to visit family, some of whom are reported to have died from Ebola (not yet confirmed, under investigation)

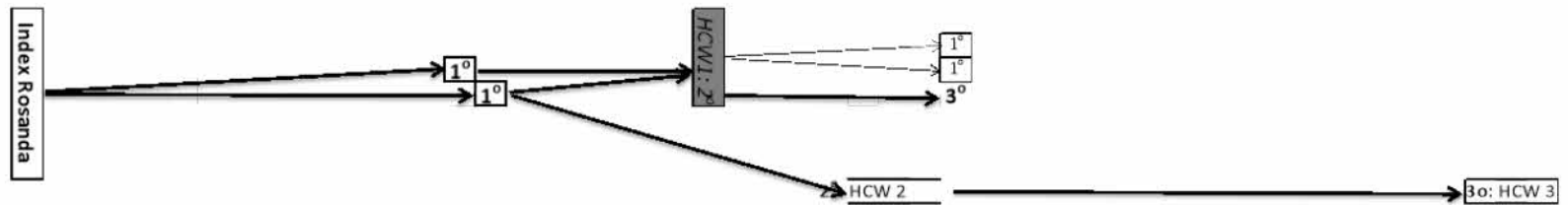
# Bombali HCW Cluster Summary

## Bombali MRGH Cluster (SL26)

- **Cases:** 5 total; 3 HCWs: 2 original (porter and maternity ward nurse) + new case (maternity ward nurse) identified March 29 - investigation is ongoing.
- **Contacts:** 296 contacts (+195 commercial motorbike riders under phone monitoring); surveillance ends April 17 (will be extended).
- **Epi-Link:** Two plausible links; both from Rosanda Cluster
  - 58 y/o F triaged at Makeni Hospital on Feb 25 PCR(+) had contact with HCW 1, who then had contact with HCW 2 while still wearing contaminated PPE
  - 24 y/o pregnant F transported to the Makeni hospital Feb 26 PCR(+) had direct contact with HCW 1 and HCW 2 (more likely link)

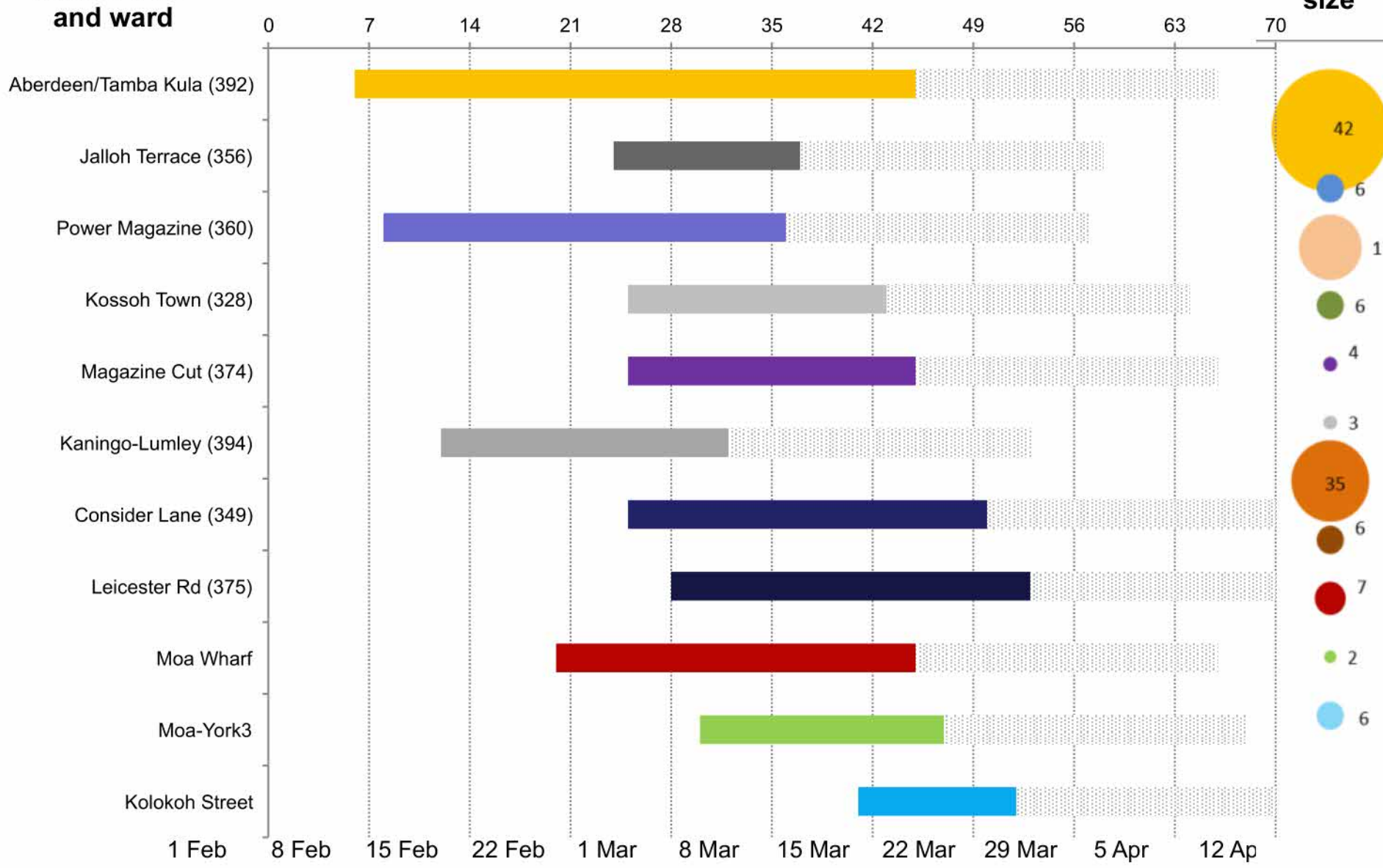
# Ebola Virus Disease Cases, Bombali 3/2/2015 – ongoing MRGH Cluster (SL26)


Ebola Virus Disease Cases, Bombali 3/2/15- ongoing MRGH Cluster



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# Confirmed Current Ebola Case Clusters in Western Area, Sierra Leone



 Quarantine period

Linked clusters are indicated by color

Last updated: 29th March 2015 CDC

# Port Loko

## Thombo Bana, Kaffu Ballum (Feb-March 2015) (SL13)

- **Cases:** 8 cases
- **Contacts:** 2 (Taxi driver and neighbor); surveillance ends April 23
- **Epi-link:** Father and mother of pregnant women (newborn died at ETU) EVD+ in January and February

## Lokomasama (SL17)

- **Cases:** 4
- **Contacts:** 46 contacts under surveillance; Quarantine ends April 10
- **Epi-Link:** Previous cases in a neighboring village seeded this cluster epi link is a secret burial on Feb 15; first case symptom onset Feb 23



# Port Loko (cont.)

## Gbonko Maforay/Roktolon, BKM (SL19)

- **Cases:** 2
- **Contacts:** 1; quarantine ends April 3
- **Epi-Link:** Source unknown in both cases, but both traveled to a neighboring village in recent weeks where a previous suspect case lived; first case symptom onset Feb 25

## Kaffu Bullom (Baimbaya and Yoroya) (SL29)

- **Cases:** 3
- **Contacts:** Under investigation; quarantine ends April 15
- **Epi-Link:** Source case may have travelled to Freetown (ill family in Freetown); first case symptom onset Mar 4

# Port Loko (cont.)

## Port Loko/lunsar cluster (SL37)

- **Cases:** 1
- **Contacts:** 88 contacts under surveillance; Quarantine ends April 11
- **Epi-Link:** From quarantine home. Source case may have been infected in Freetown or through her employment (hairstresser/sex worker)

## Kaffu Bullom, Kasongha (SL38)

- **Cases:** 1
- **Contacts:** 36 contacts under surveillance; Quarantine ends April 15
- **Epi-Link:** From quarantine home. First case identified on February 17, further epi link cannot be identified at the moment

# Port Loko (cont.)

## Koya (SL39)

- **Cases:** 1
- **Contacts:** 34 contacts under surveillance (including 7 HCW); Quarantine ends April 12
- **Epi-Link:** Admitted to holding center on February 28 as a EVD suspect case tested EVD(-) and discharged to general hospital with pneumonia. Discharged home on March 12 . Not from a quarantined home.

## Lokomasama-Pepel (SL40)

- **Cases:** 1
- **Contacts:** 12 contacts under surveillance; Quarantine ends April 14
- **Epi-Link:** Unknown. Repeated visits from local, CDC, and WHO surveillance and epi staff have not revealed a source or epi link.

# Port Loko (cont.)

## Buya Romende Foredugu (SL41)

- **Cases:** 1
- **Contacts:** 14 contacts under surveillance; Quarantine ends April 10
- **Epi-Link:** Unknown. Repeated visits from local, CDC, and WHO surveillance and epi staff have not revealed a source or epi link.

# Kambia

## Malal-Magbema (SL01)

- **Cases:** 13
- **Contacts:** 16. Surveillance ends Apr 6
- **Epi-link:** Household contact with confirmed case in Mayafa; moved back to Malal at symptom onset. First case symptom onset Nov 18.

## Lakoya, Gbinle-Dixing Chiefdom (SL32)

- **Case:** 2
- **Contacts:** 33 quarantined in Lakoya & Magbenbeh (including 2 HWC); quarantine ends April 15
- **Epi link:** Linked to a no longer active cluster associated to a unsafe burial in Guinea

# Kambia (cont.)

## Kabaya, Bramaia Chiefdom (SL33)

- **Case:** 1
- **Contacts:** 36 quarantined in 8 households living in three houses at two separate locations; quarantine ends April 6
- **Epi link:** Not clear. However, there is evidence of recent travel to Guinea

## Guinea-Soria cluster (SL35)

- **Case:** 1
- **Contacts:** 7 (likely to increase), quarantine ends Apr16
- **Epi link:** Travel history to attend grandmother's burial in Guinea

# Kambia (cont.)

## Guinea-Yeamalabay cluster (SL36)

- **Case:** 1
- **Contacts:** 1 quarantined home with 13 confirmed cases; date quarantine ends was not reported
- **Epi link:** History of traveling to Guinea escaping from a quarantined home (15 confirmed cases)

## Fouta, Gbinle Dixon (SL42)

- **Case:** 1
- **Contacts:** 11 contacts in 2 households, date of last contact March 24, quarantine ends April 13
- **Epi-link:** EVD case who died in community, QH in nearby village. Otherwise unknown.



# Kambia (cont.)

## Rogberay, Gbinle Dixon-Kambia, Magbema (SL43)

- **Case:** 1
- **Contacts:** Total of 47; 15 in Rogberay and 32 in Kambia 1 & 2, including 10 nurses, 2 CHOs and 1 laboratorian.
- **Epi-link:** No known epi link. Positive swab.
- **Index case info:** Patient died in Kambia Government Hospital with a diagnosis of peptic ulcer disease. Was not suspected of Ebola. Investigation ongoing into possible exposure of other patients.

# Koinadugu

## Kumala-Ferenkoro (SL31)

- **Cases:** 3
- **Contacts:** 67; Surveillance ends April 6.
- **Epi-link:** Index case was woman who delivered baby on March 1<sup>st</sup>, died post-partum and later found to be EVD+. Neonate died at 7 days of age. 3<sup>rd</sup> case was grandchild of birth attendant. Epi-link of index case still being investigated.

# Moyamba

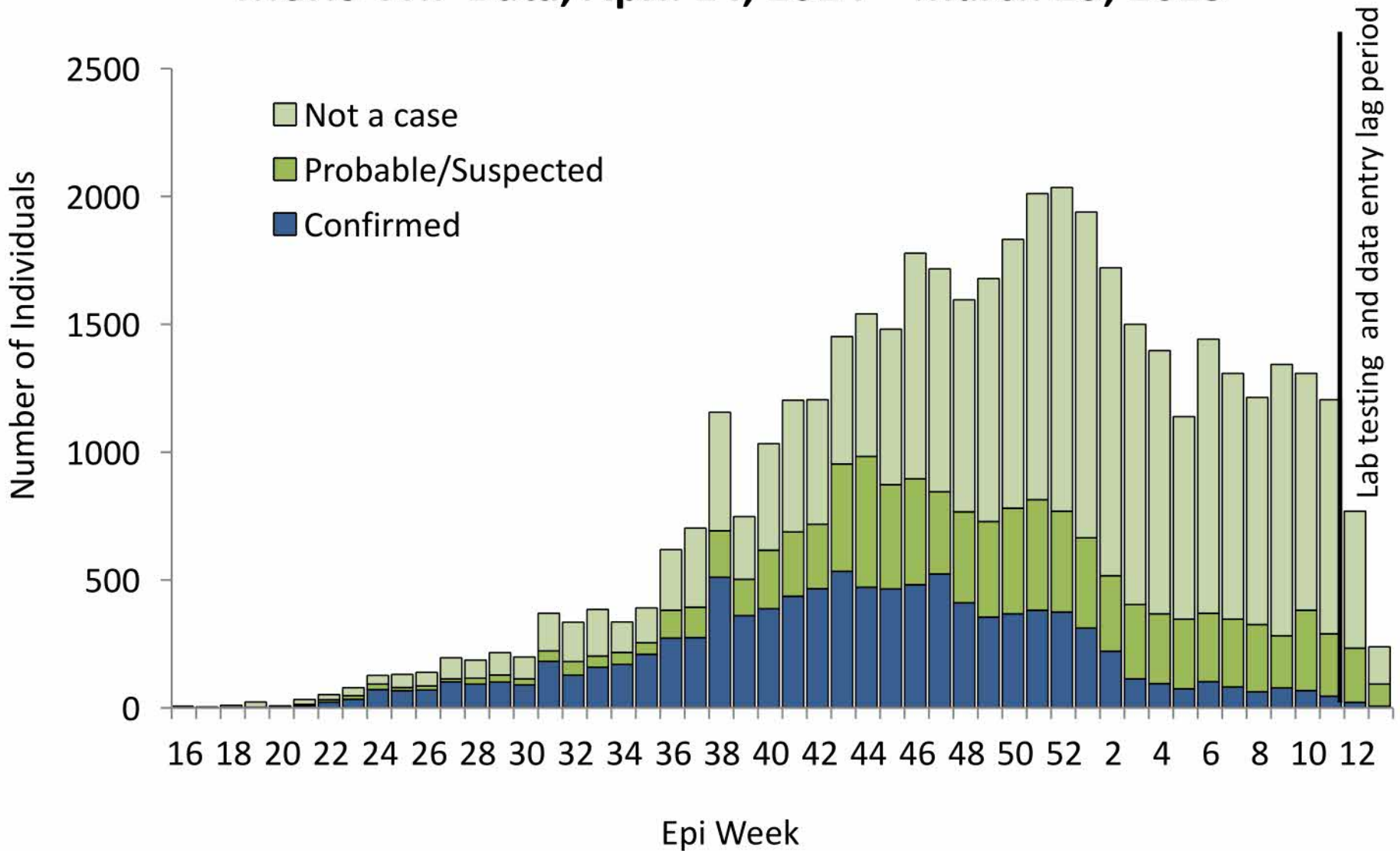
## Ribbi-Waterloo (SL37)

- **Case:** 1
- **Contacts:** 16 under quarantine. Quarantine ends April 5
- **Epi-link:** Unclear. However, the case travels frequently to Waterloo (Western rural). Investigation is ongoing.

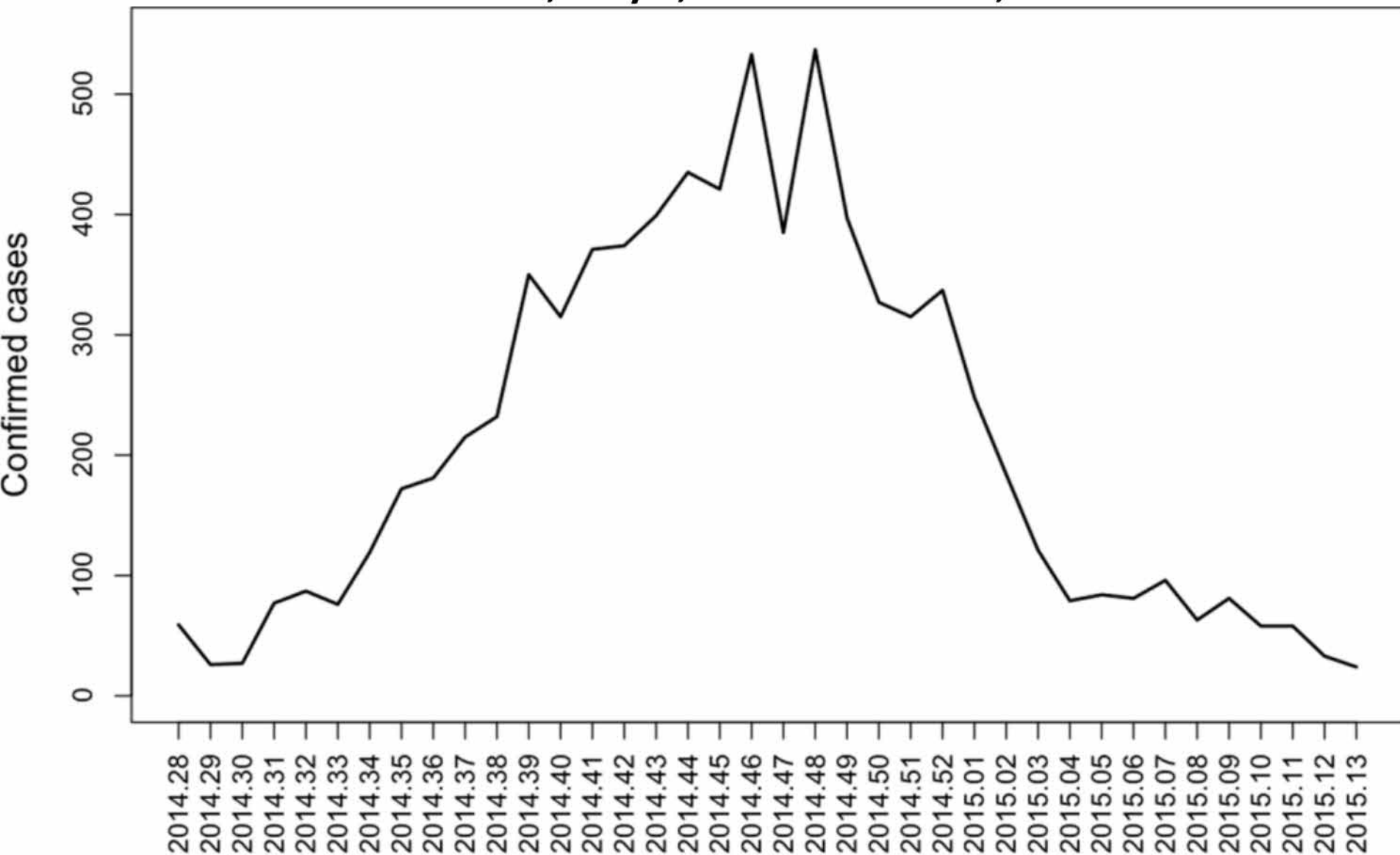
# **NATIONAL DATA**

# Ebola investigations by case status, Sierra Leone

## MoHS VHF Data, April 14, 2014 – March 29, 2015

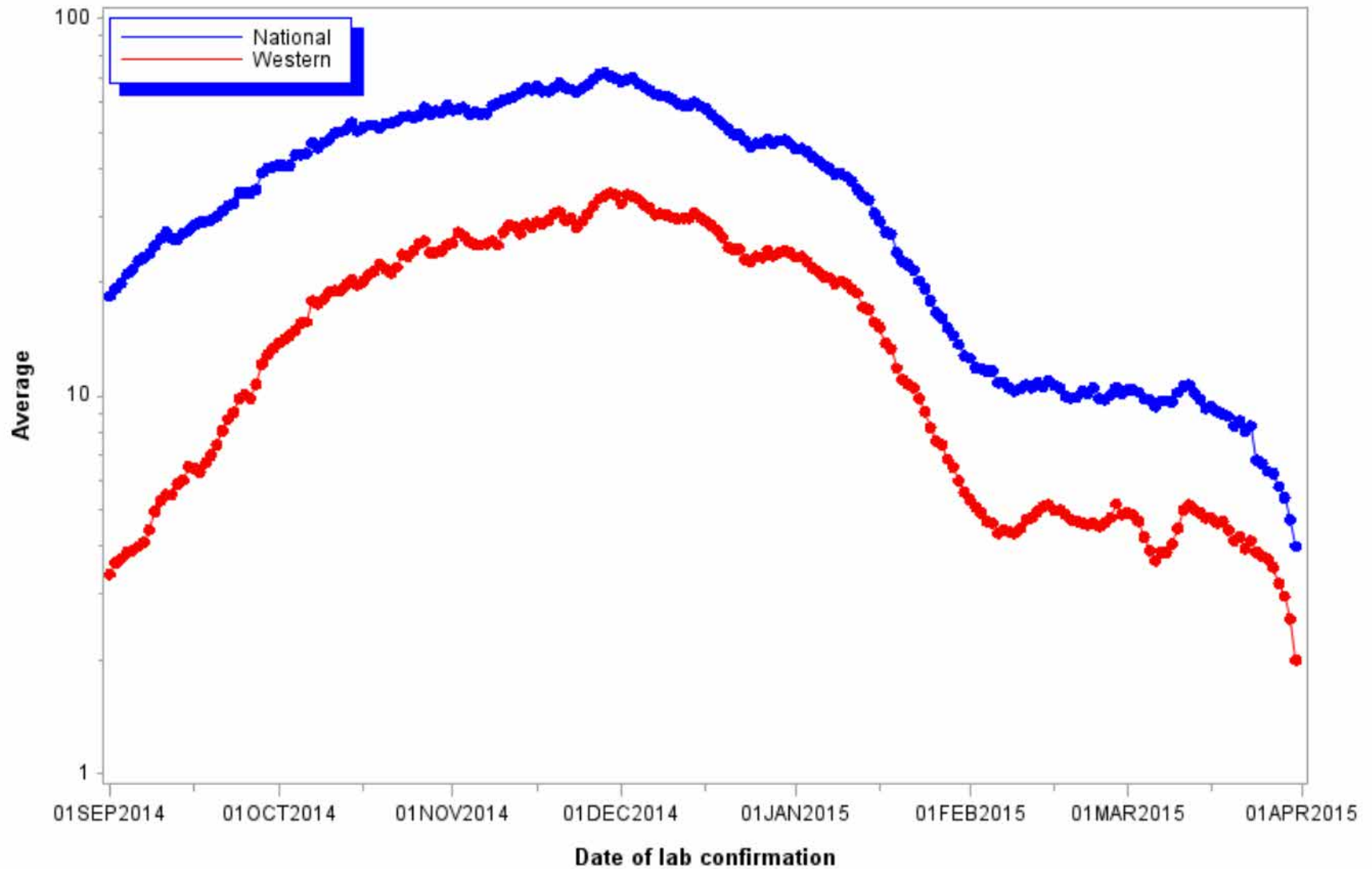


## Weekly confirmed cases by Ebola investigations, MoHS Data, Sierra Leone, May 1, 2014 – March 29, 2015



Data source: MoHS Situation Reports, [health.gov.sl/?page.id=583](http://health.gov.sl/?page.id=583)

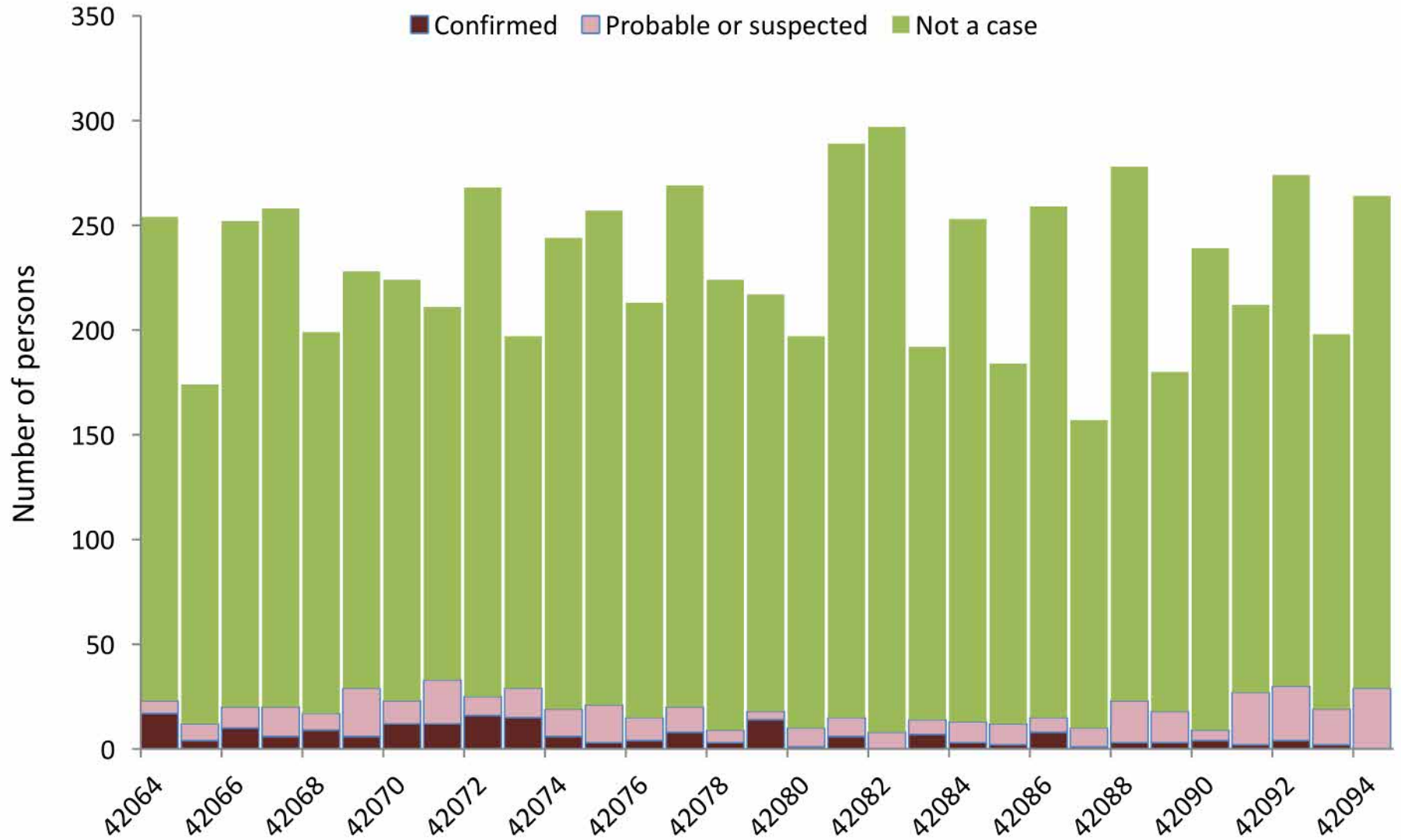
# Number of confirmed cases/day (21-day moving average) September 1, 2014 – March 29, 2015



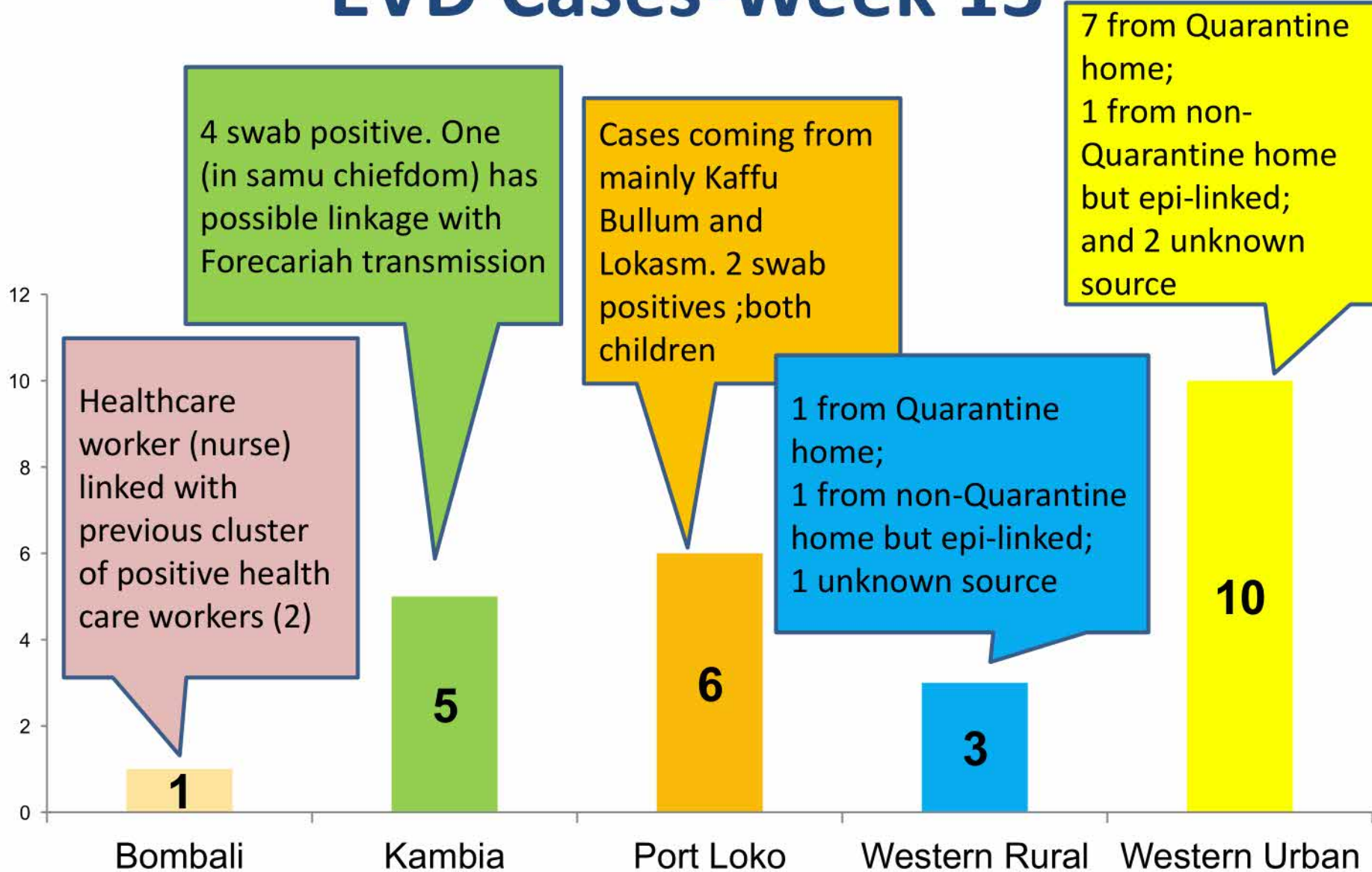
Y axis is on the log scale



# MoHS - reported lab results (by date of the lab results report) National, March 1 – March 31, 2015



# EVD Cases-Week 13



# Confirmed Ebola Cases, 16th March to 29th March 2015



## Number of Cases

- 51 - 100
- 16 - 50
- 6 - 15
- 1 - 5
- 0

Confirmed Ebola Cases during 16th March - 29th March 2015= 58;  
No cases were missing district information.

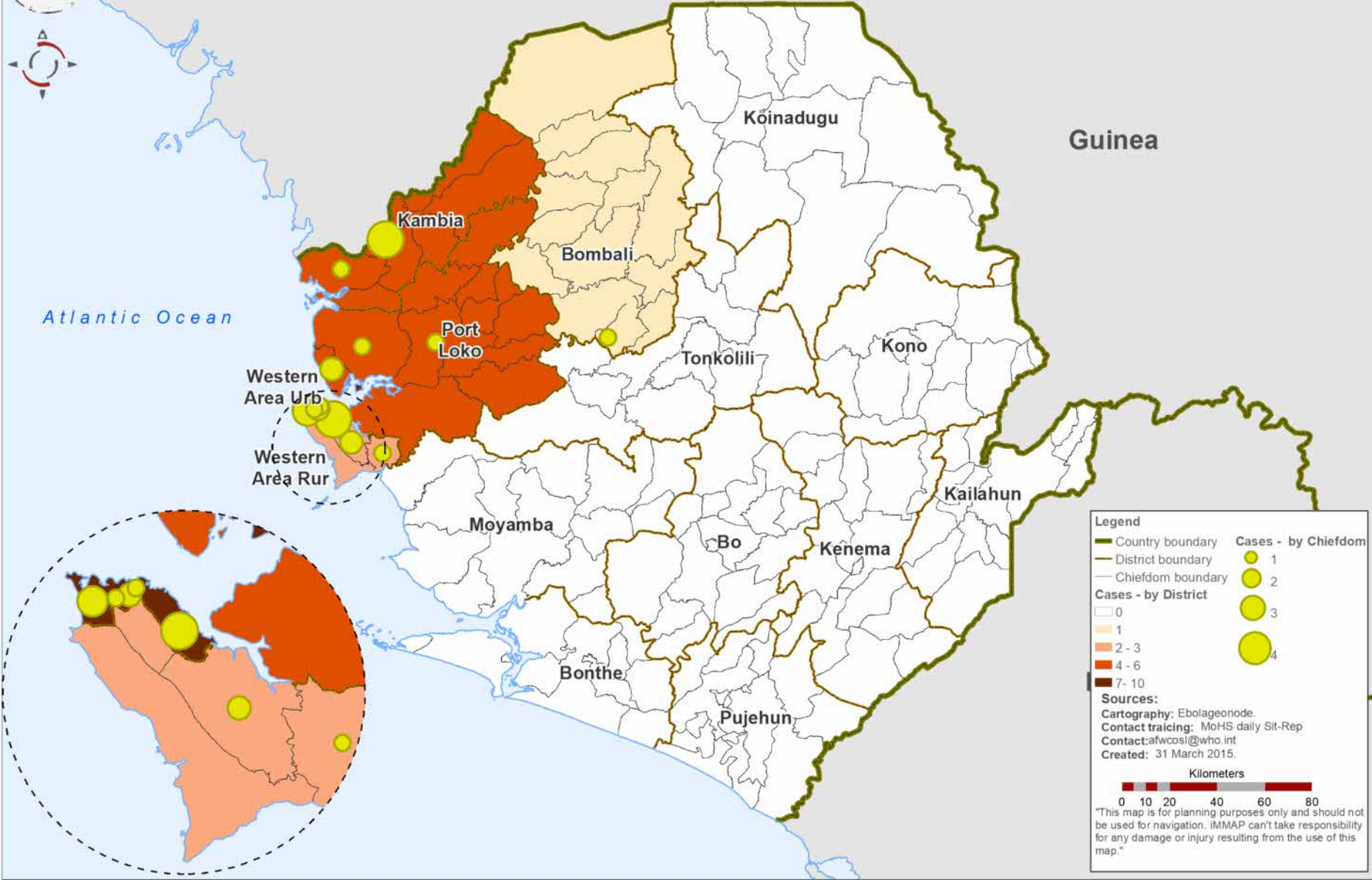


Disease Prevention and Control





# Sierra Leone: Confirmed Ebola cases, laboratory data, week 13



Guinea

Atlantic Ocean

Western Area Urb  
Western Area Rur

Koinadugu

Kambia

Bombali

Port Loko

Tonkolili

Kono

Moyamba

Bo

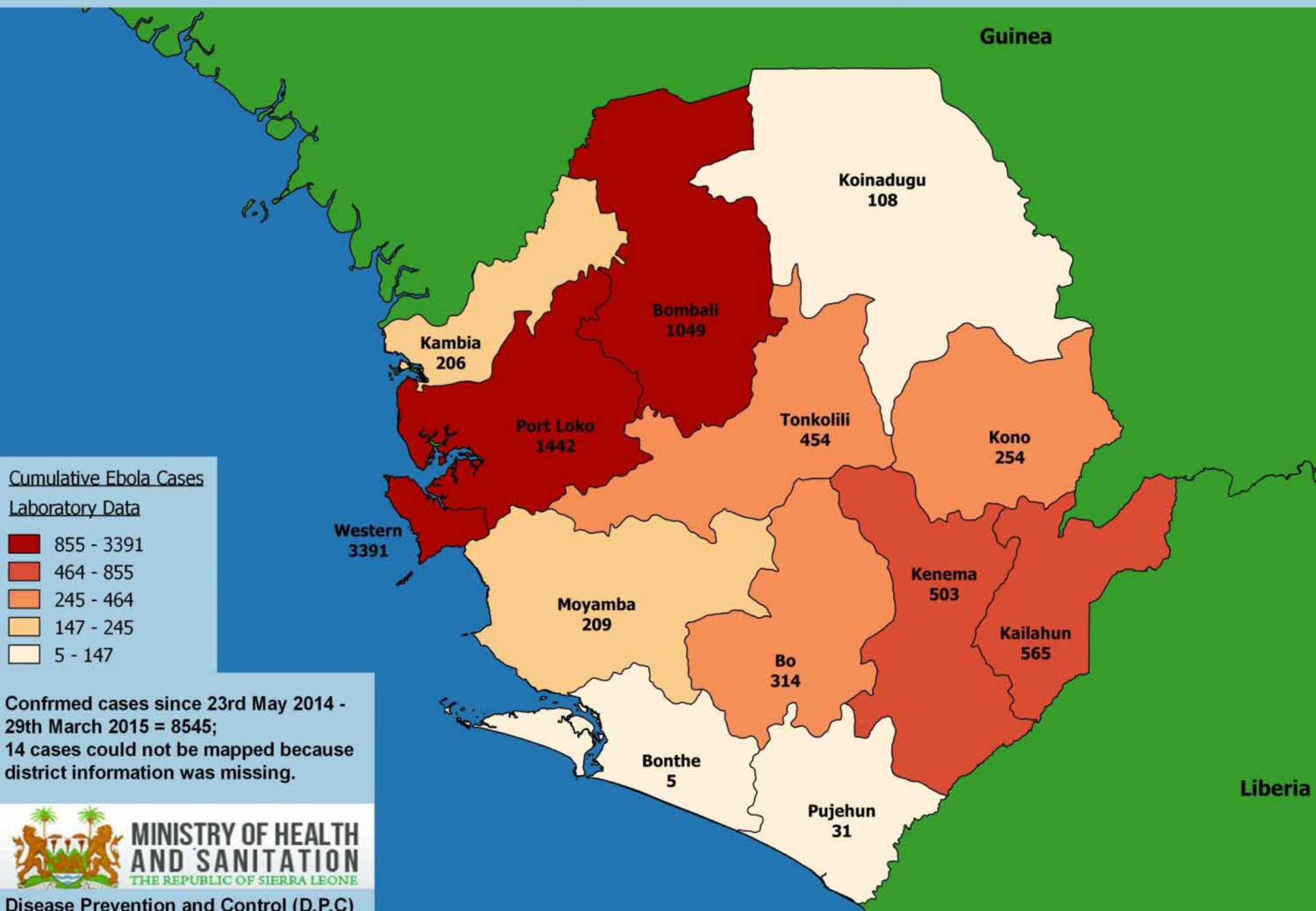
Kenema

Kailahun

Bonthe

Pujehun

# Cumulative Confirmed Ebola Cases, Laboratory Data, 23rd May 2014 - 29th March 2015

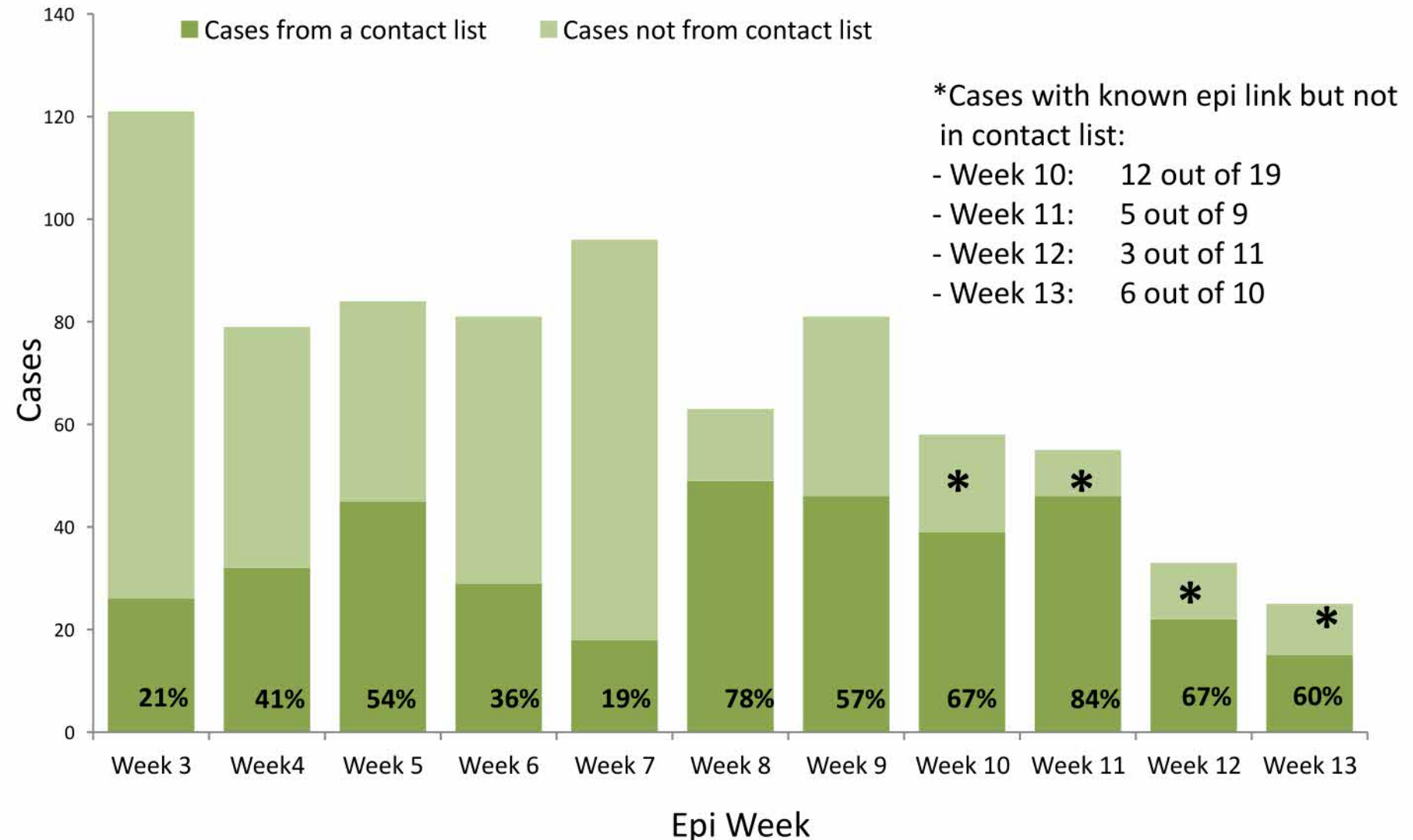


**Cumulative Ebola Cases  
Laboratory Data**

- 855 - 3391
- 464 - 855
- 245 - 464
- 147 - 245
- 5 - 147

Confirmed cases since 23rd May 2014 - 29th March 2015 = 8545;  
14 cases could not be mapped because district information was missing.

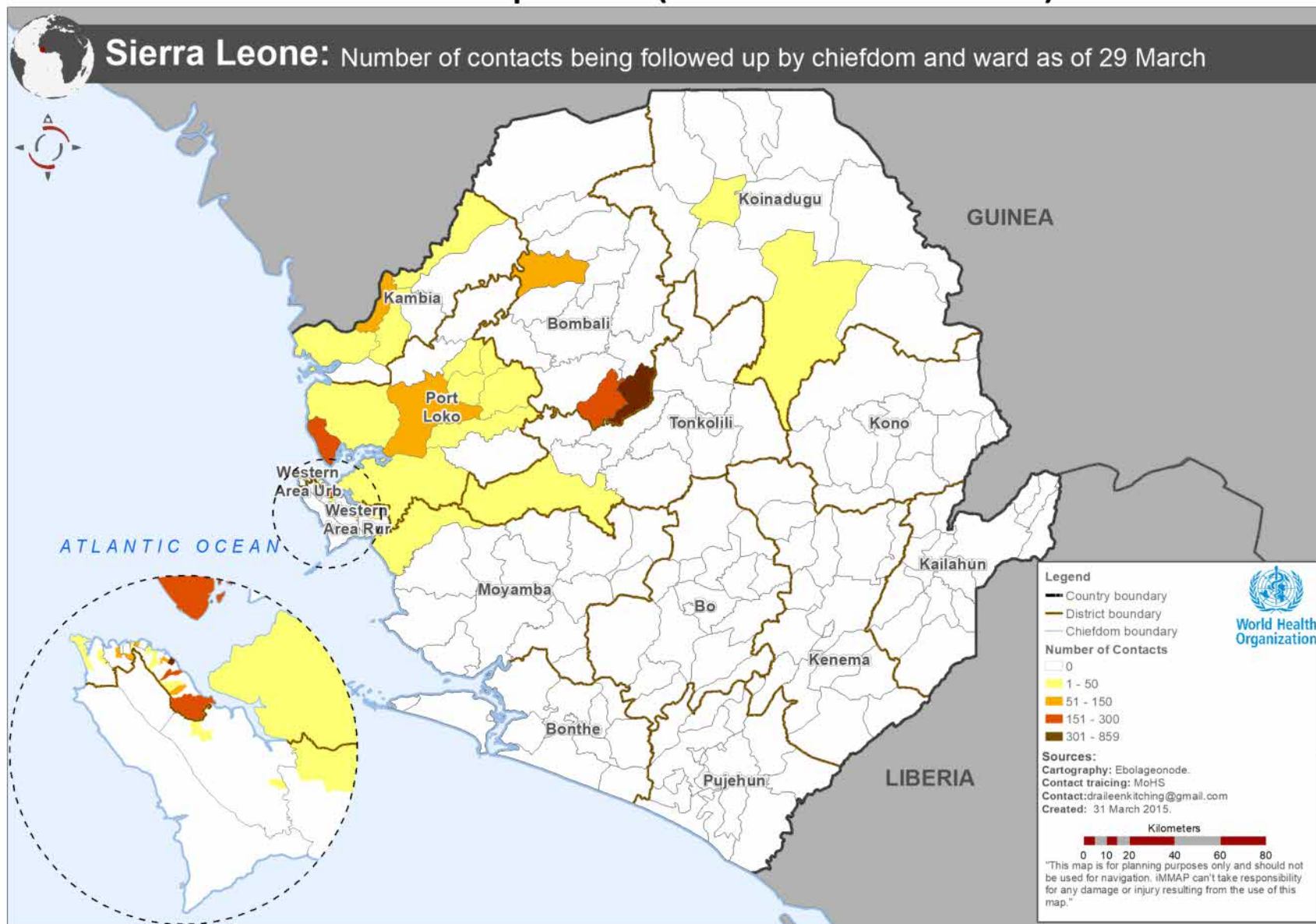
# No. (%) of new cases from contact lists



Cases not from a contact list include: cases with known epi link but not in a contact list, unknown and under investigation



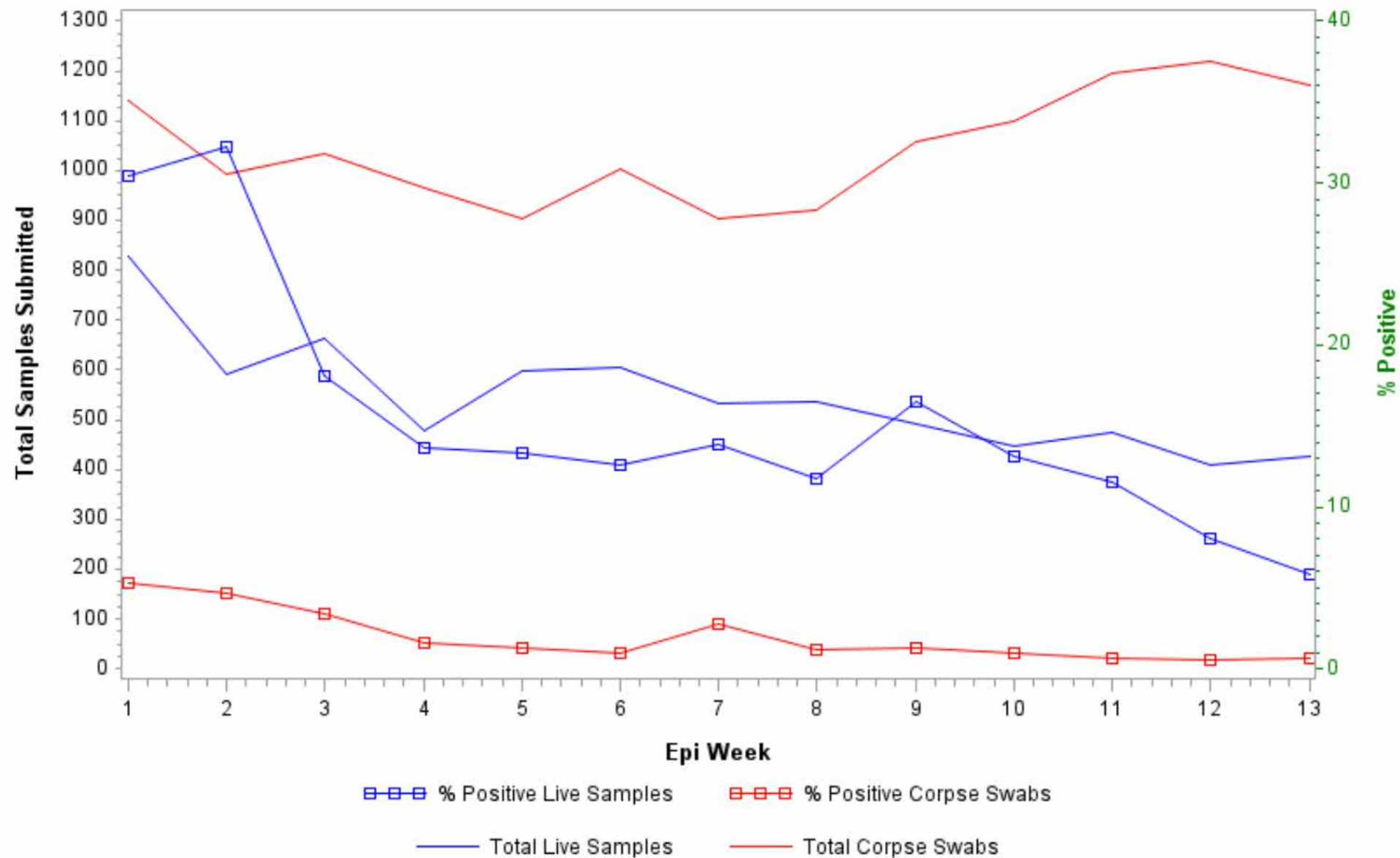
# No. of contacts (n=2,865) being followed up by Chiefdom & ward – Snapshot (29<sup>th</sup> March 2015)



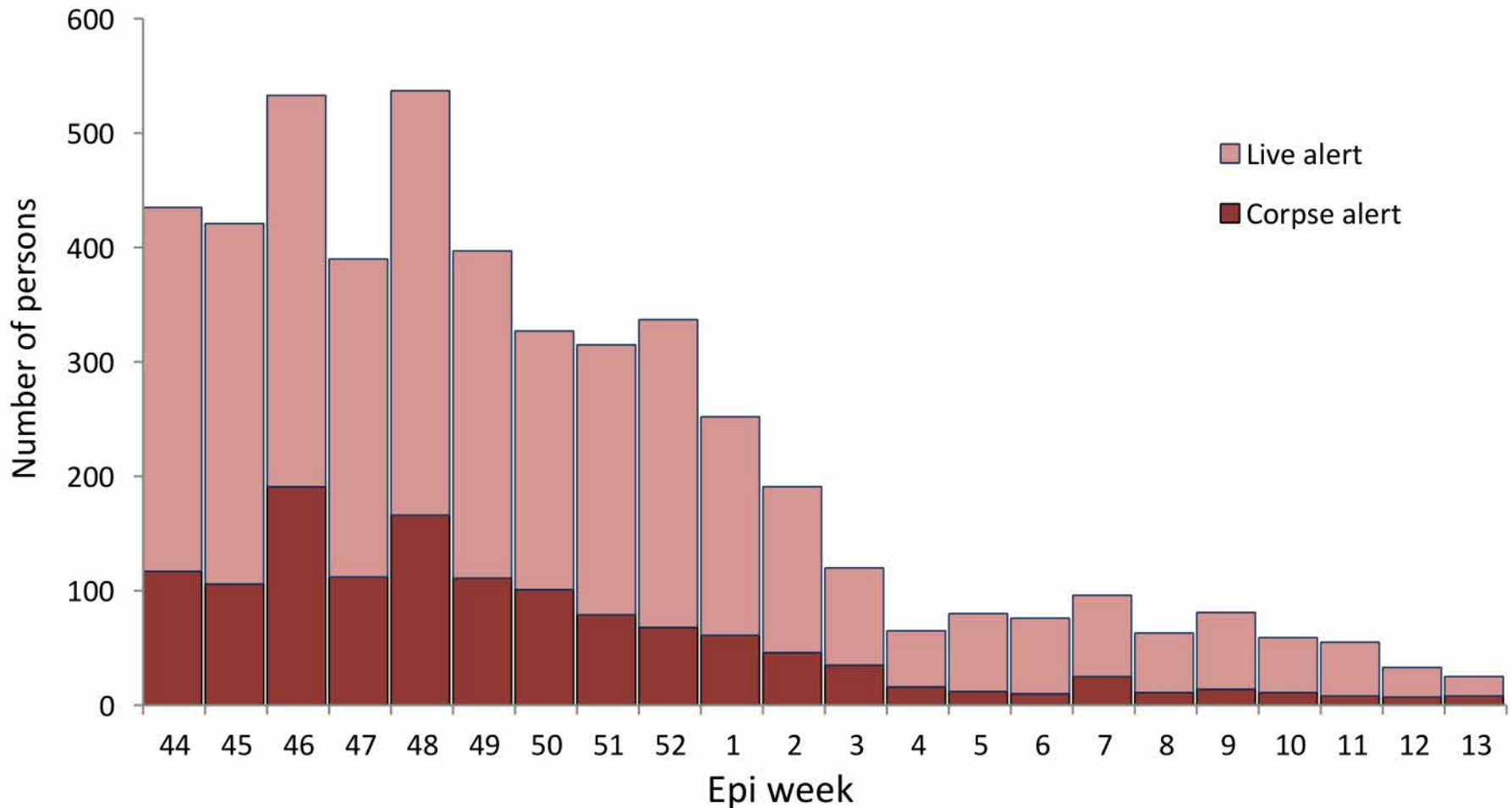


# Comparison of Positive Results to Total Samples

## Live Cases and Death Swabs

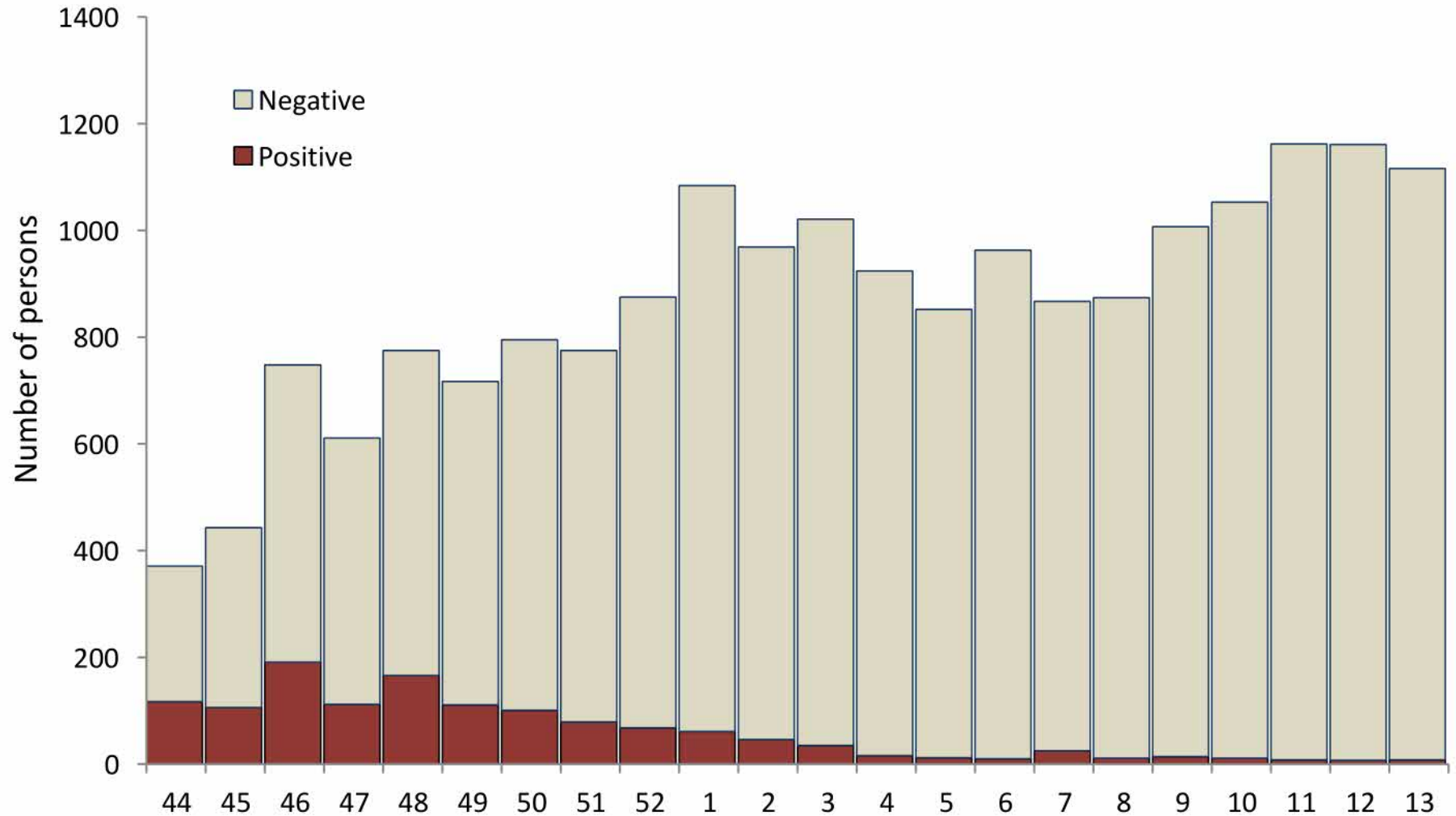


# MoHS-reported confirmed cases\* by type of alert, Sierra Leone, October 27, 2014 – March 29, 2015



\*Cases confirmed through swab testing were assumed to be corpse alerts.

# MoHS-reported corpses\* by EVD result, Sierra Leone, October 27, 2014– March 29, 2015



\*Swab samples were assumed to be from corpse alerts.

## EVD cases confirmed from swabs data (Epi week 13: March 23-March 29, 2015)

National/District	EVD confirmed corpses	Total corpses swabbed
National	8	1168
Bo	0	109
Bombali	0	104
Bonthe	0	21
Kailahun	0	28
Kambia	4	64
Kenema	0	72
Koinadugu	0	50
Kono	0	50
Moyamba	0	47
Port Loko	2	141
Pujehun	0	55
Tonkolili	0	103
Western	2	324

Data Source: MoHS Daily Sit Rep, March 29

# Community deaths investigation

- Between March 23-29, 2015, labs reported 8 “initial” positive swabs, all of which were confirmed to be collected from corpses.

Deaths in Quarantined Homes	Other Community Deaths	Deaths in Holding Centers	Deaths in Treatment Centers	Death in non-Ebola health care facility
1	5	0	1	1

# Community deaths investigation

## Epi week # 13

Port Loko – 2 corpses,

- 5 y/o child who died on 3/21/15. Epi link: Unknown. Community death, not from a quarantined home
- 2 month old baby y/o female who died on 3/19/2015. Epi link: unknown. No cases in the village for a long time. Community death, not from a quarantined home

# Community deaths investigation

## Epi week # 13

Kambia– 4 corpses,

- 1 y/o child who died on 3/23/15. Epi link: Mother and child travelled to Guinea to attend grandmother's funeral (likely unsafe burial). Community death, not from a quarantined home
- 45 y/o male who died on 3/24/15. Epi link: Unknown. Community death



# Community deaths investigation

## Epi week # 13

### Kambia– 4 corpses, (cont.)

- 50 y/o female who died on 3/26/15. Epi link: Unknown. Admitted to hospital (was not suspected of Ebola) and died in hospital with a peptic ulcer disease diagnosis
- 5 y/o child who died 3/28/2015. Epi link: EVD (+) person in household (under quarantine). Died in GOAL ETU

# Community deaths investigation

## Epi week # 13

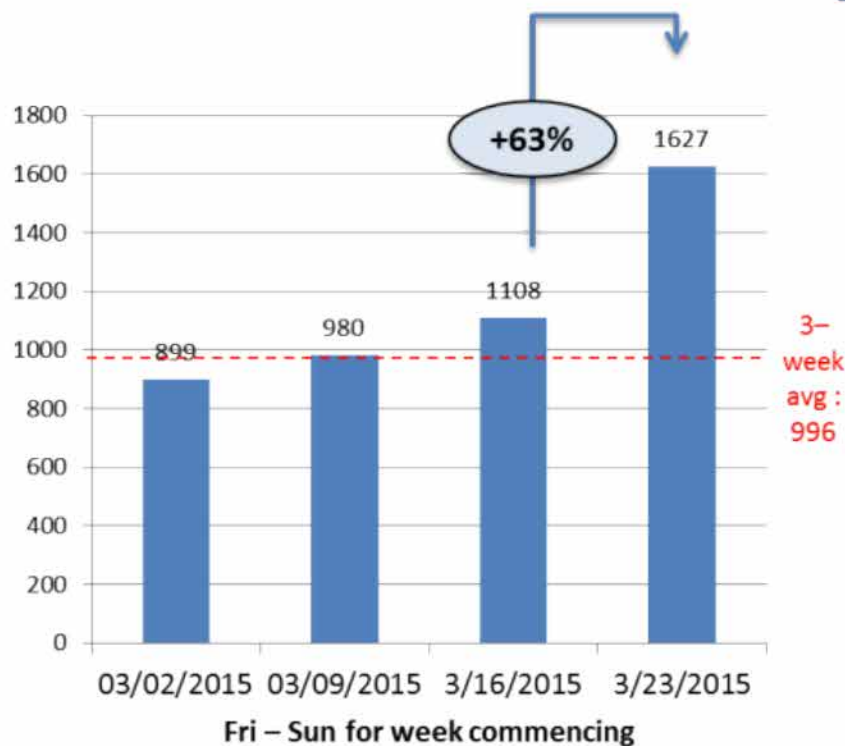
Western Urban – 2 corpses,

- 65 y/o man who died on 3/29/15. No information available. Community death and not from a quarantined home
- 1 y/o child who died on 3/22/15. Epi link: Consider lane cluster. Community death, from a quarantined home (mother did not disclose symptoms for 3 days)

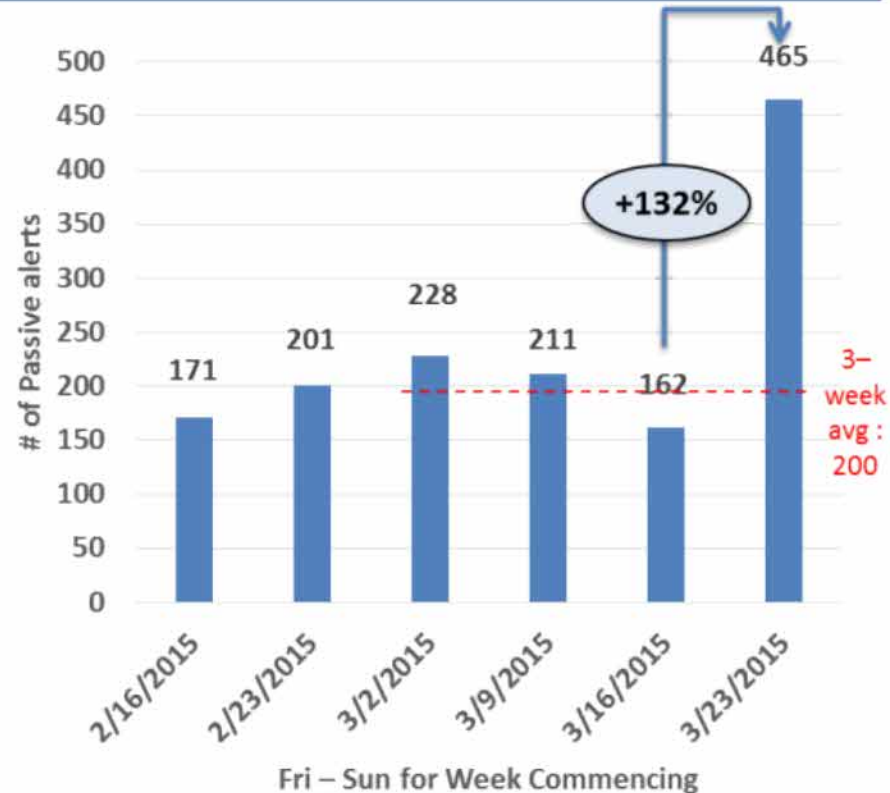
# Did the campaign lead to people engaging more with the response?

Number of calls and alerts during the 3-day campaign

Number of 117 sick and death calls



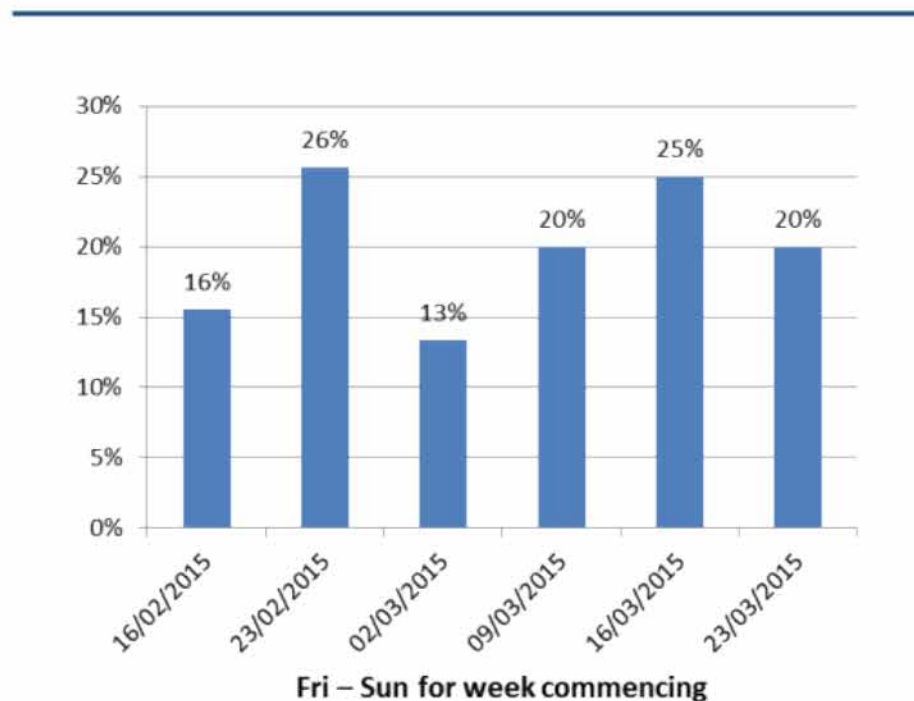
Number of passive alerts



# Did the campaign lead to people engaging more with the response?

Only 2 cases came from deaths in the community

*% of new confirmed EVD cases coming from deaths in community*



Total cases

45

39

30

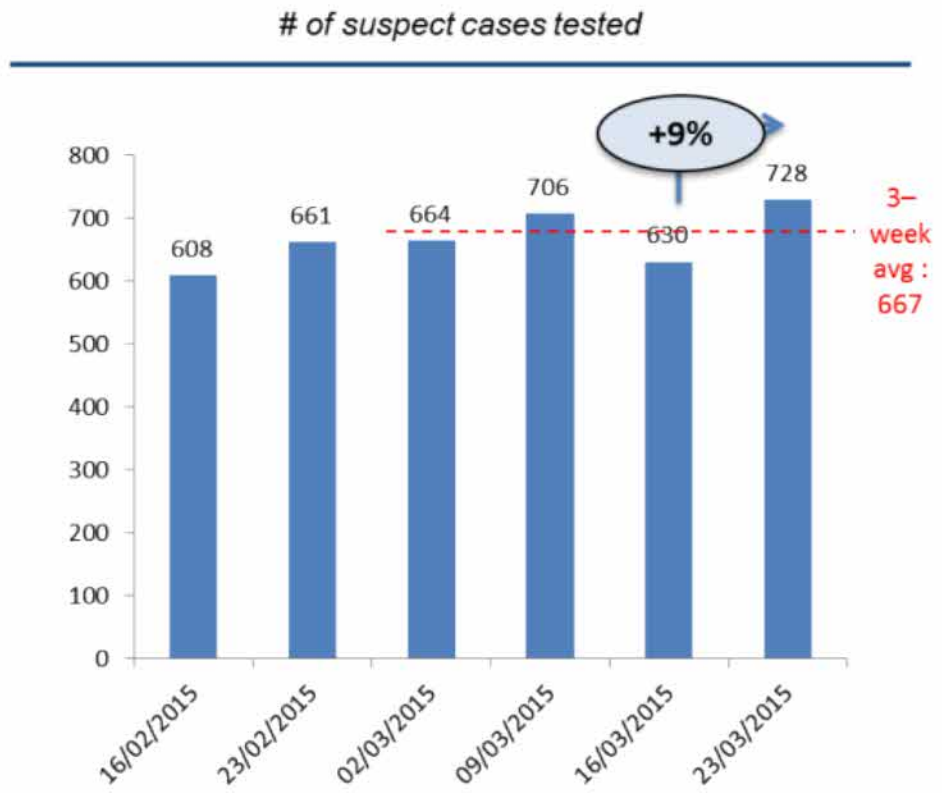
15

12

10

# Did we find more sick people and screen them for EVD?

The number of suspect cases by week



*Note: # of suspect cases tested serve as a proxy for the number of people found that meet the case definition. However, these numbers will differ so it should only be used to assess trend over time. Some lab tests may also be for repeat tests for those already found before the campaign*

# Zmapp trial

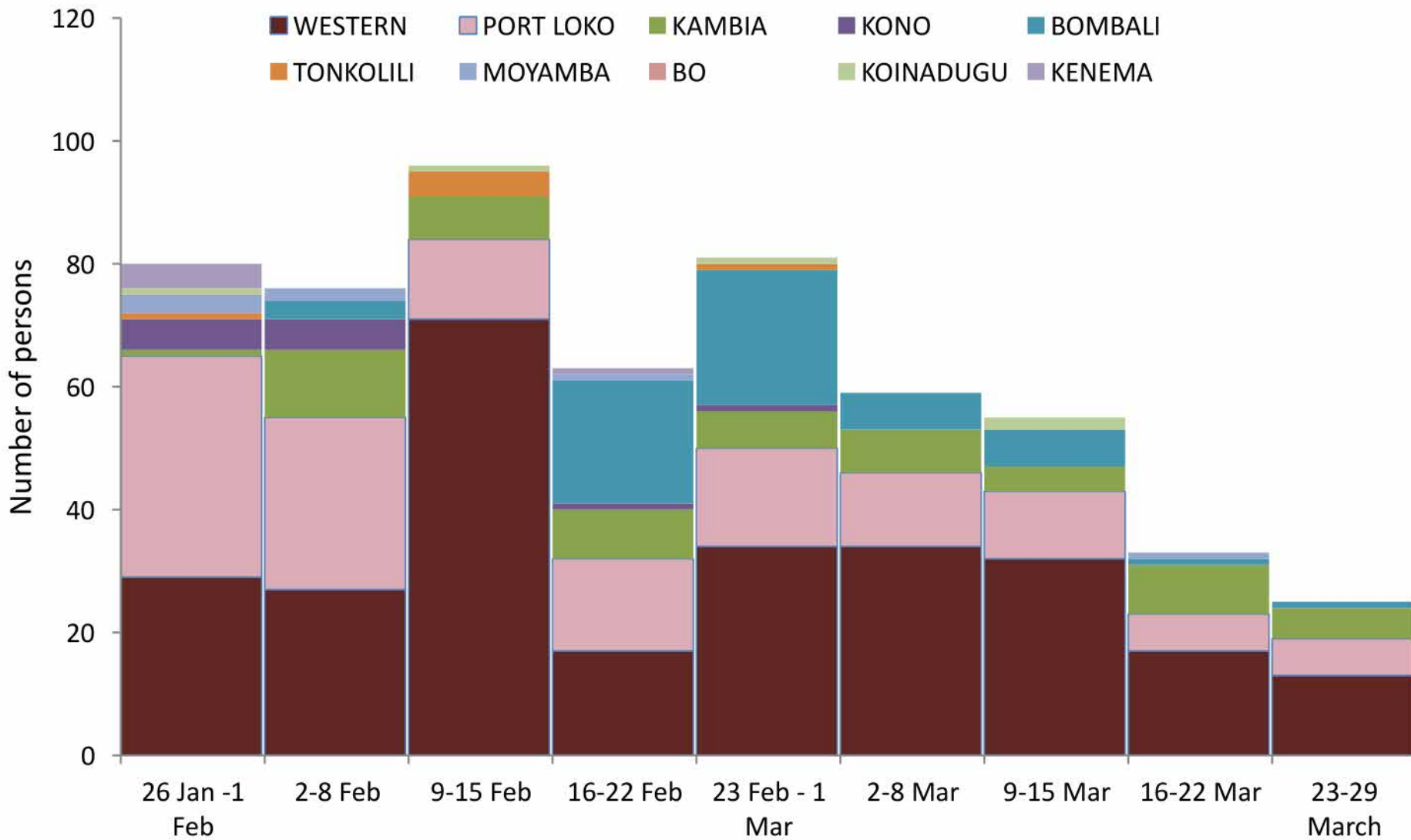
Medication arrived April 2<sup>nd</sup> in SL,  
trial began April 3<sup>rd</sup>



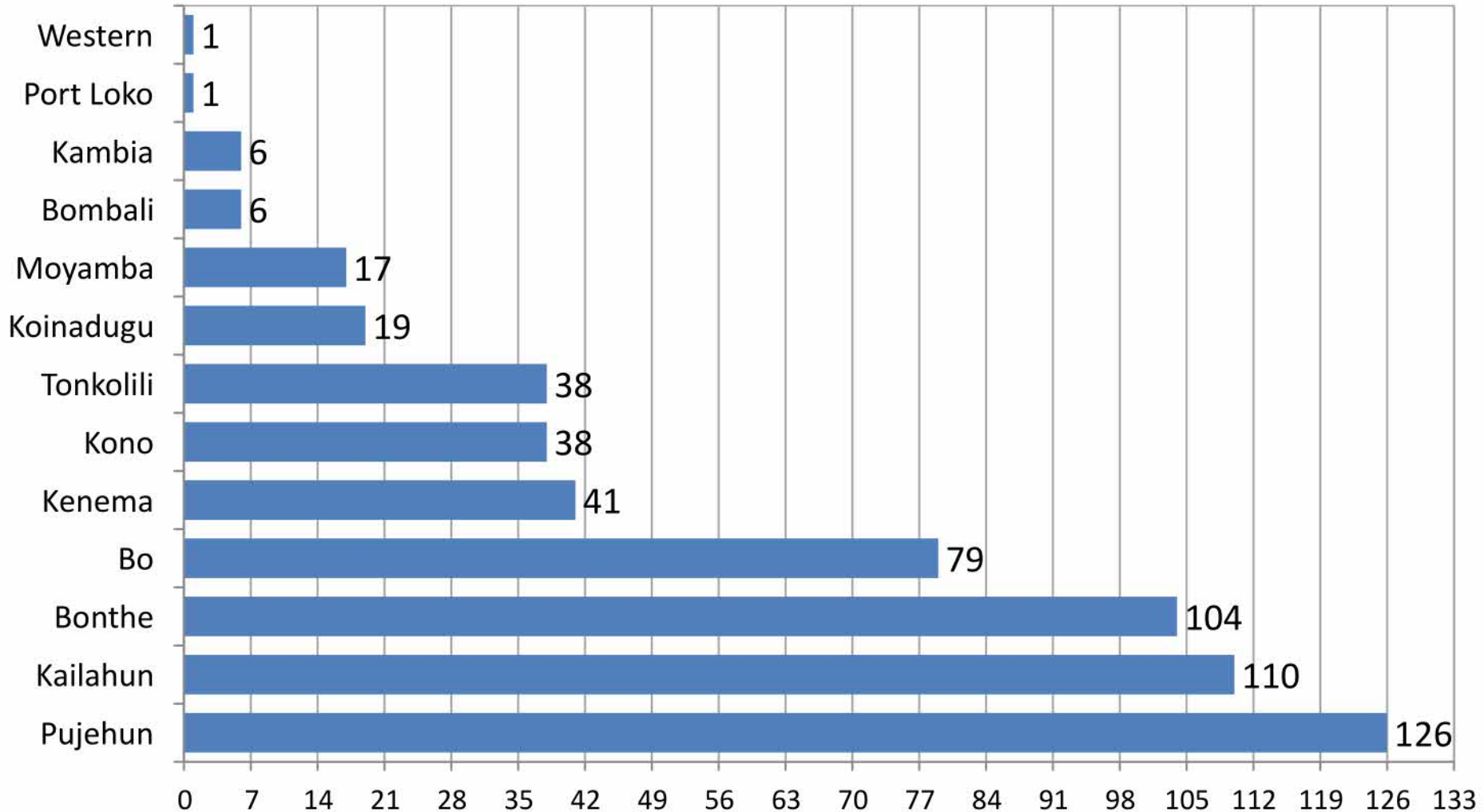
# District Data



# MoHS-weekly reported confirmed cases (by test date), December 29, 2014 – March 29, 2015



# Days Since Last Confirmed Case by District, April 2<sup>nd</sup>



Data Source: MoHS Daily Sit Rep, April 2<sup>nd</sup>

# **Western District**

# Quarantine facility

## Hastings, Western Urban



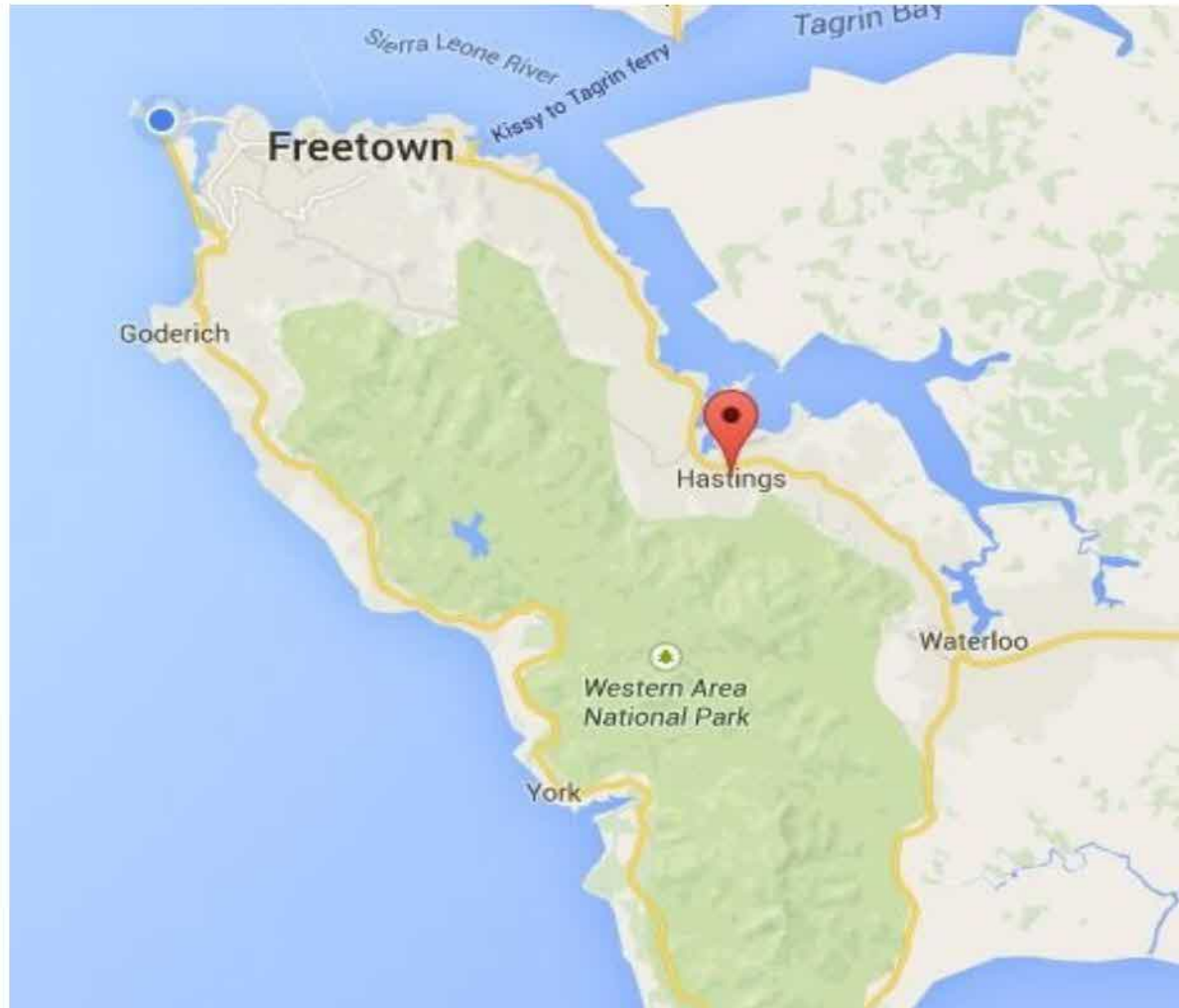
Total capacity: ~80 people

Current occupancy: 34 people

EVD (+) since officially opened: 0

# Quarantine facility

## Hastings, Western Urban



# Quarantine facility Hastings, Western Urban



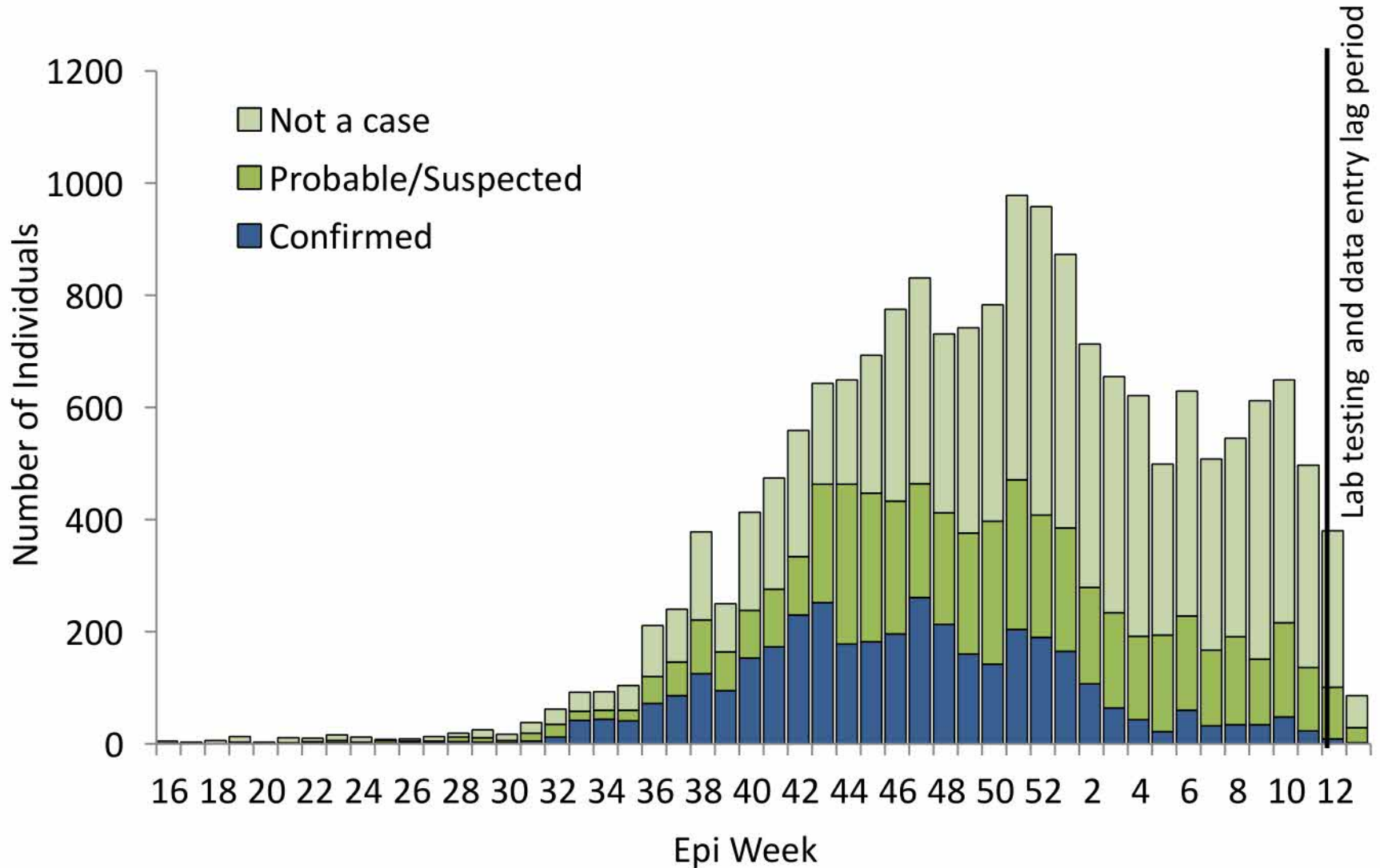


# Quarantine facility Hastings, Western Urban

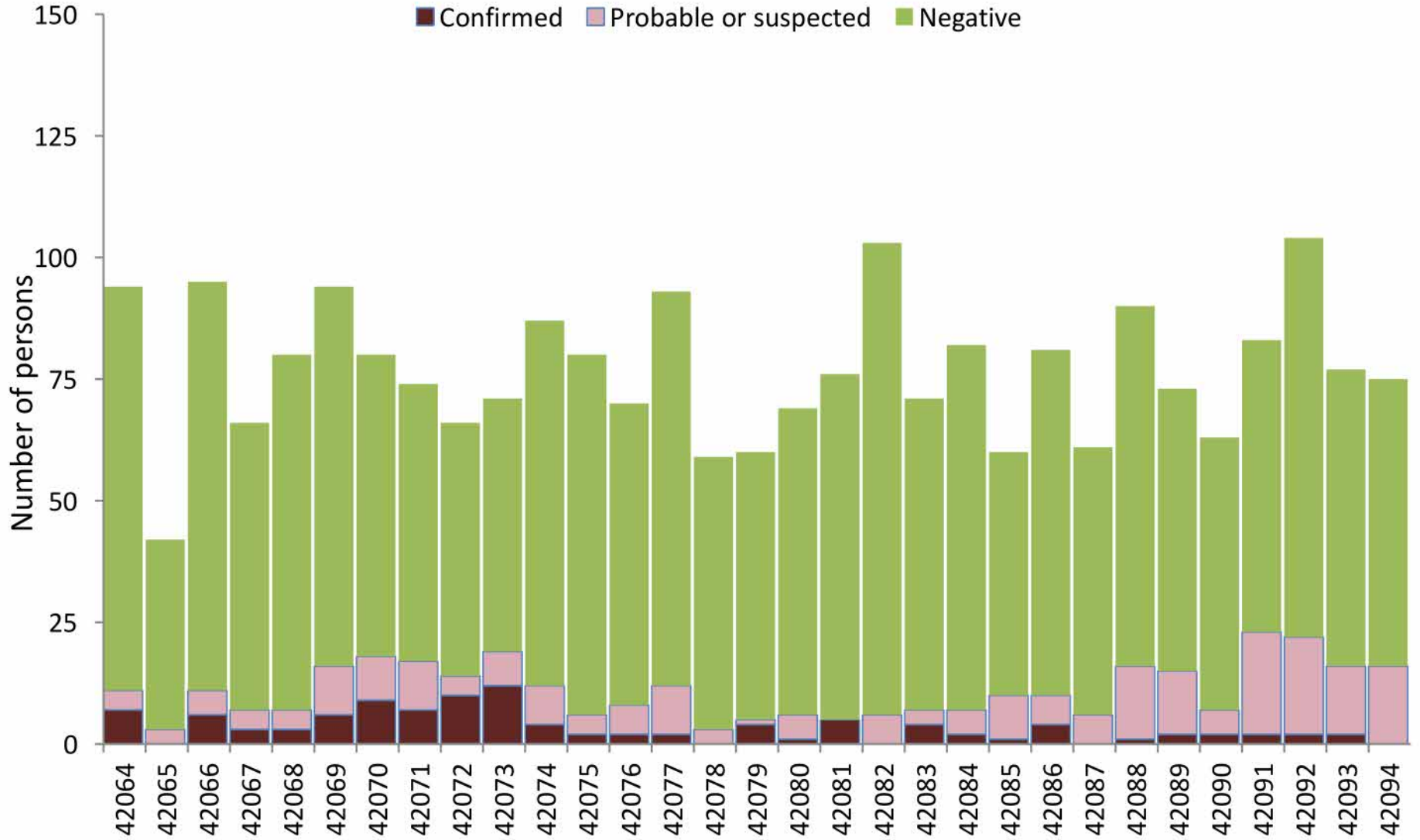




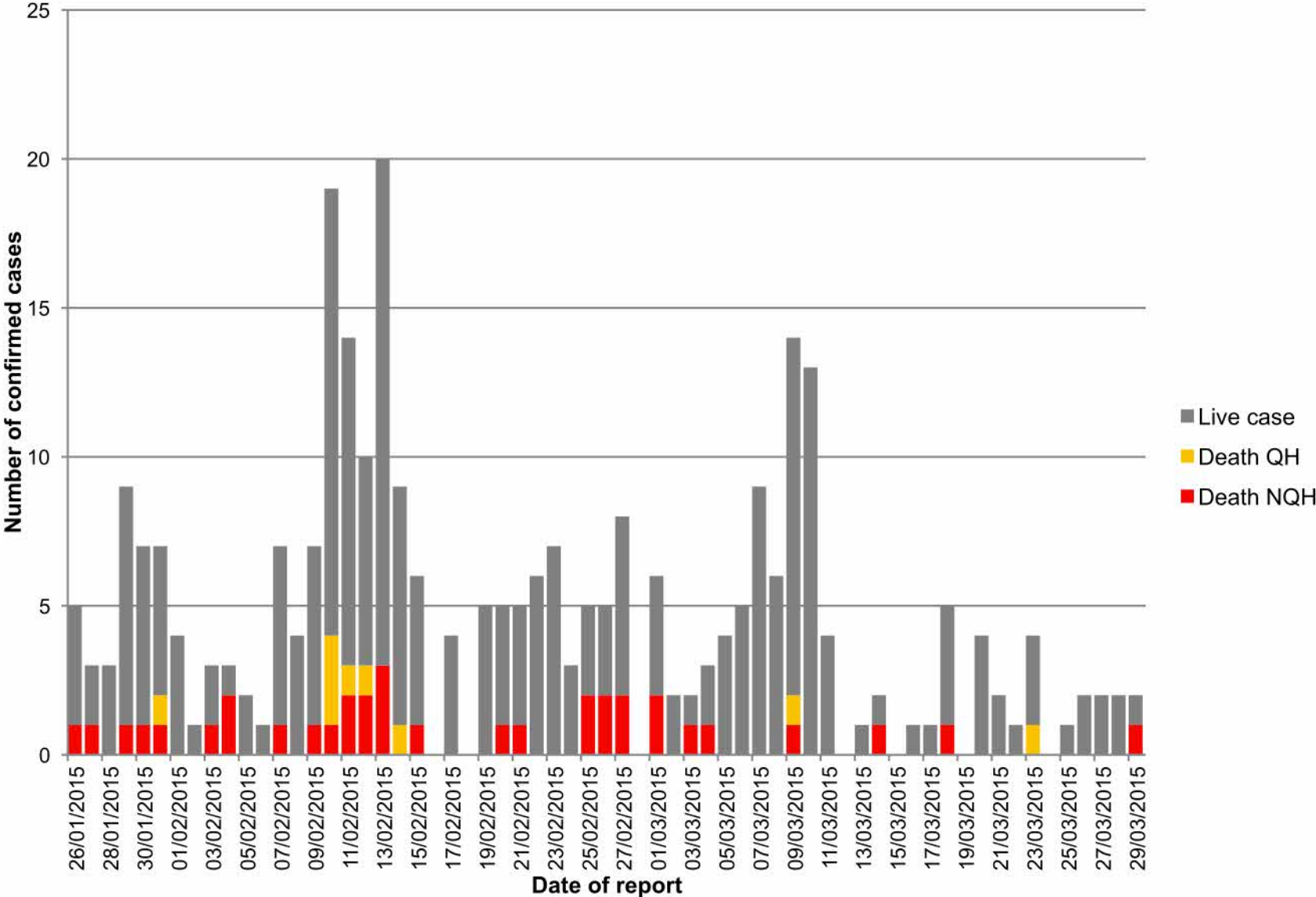
# VHF Reports by Case Definition and Epi-Week of Onset – Western March 23, 2014 – March 31, 2015



# MoHS - reported lab results (by date of the lab report), Western Area, March 1 - March 31, 2015

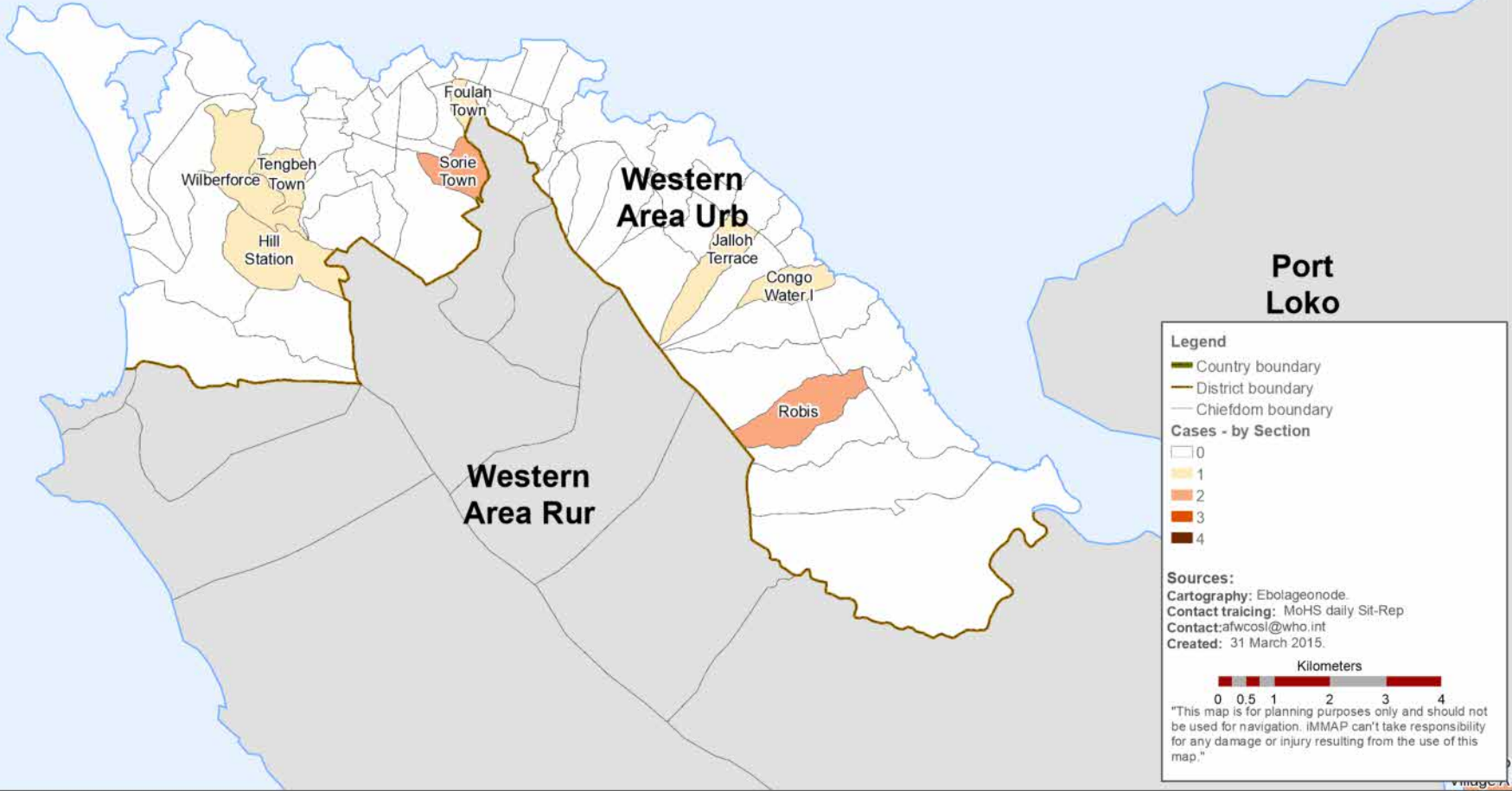


# Number of Confirmed Cases by Date, Western Area





# Sierra Leone: Western Urban confirmed Ebola cases, laboratory data, Week 13



Wilberforce Town  
 Tengbeh Town  
 Hill Station  
 Foulah Town  
 Sorie Town  
 Jalloh Terrace  
 Congo Water, I  
 Robis

**Western Area Urb**

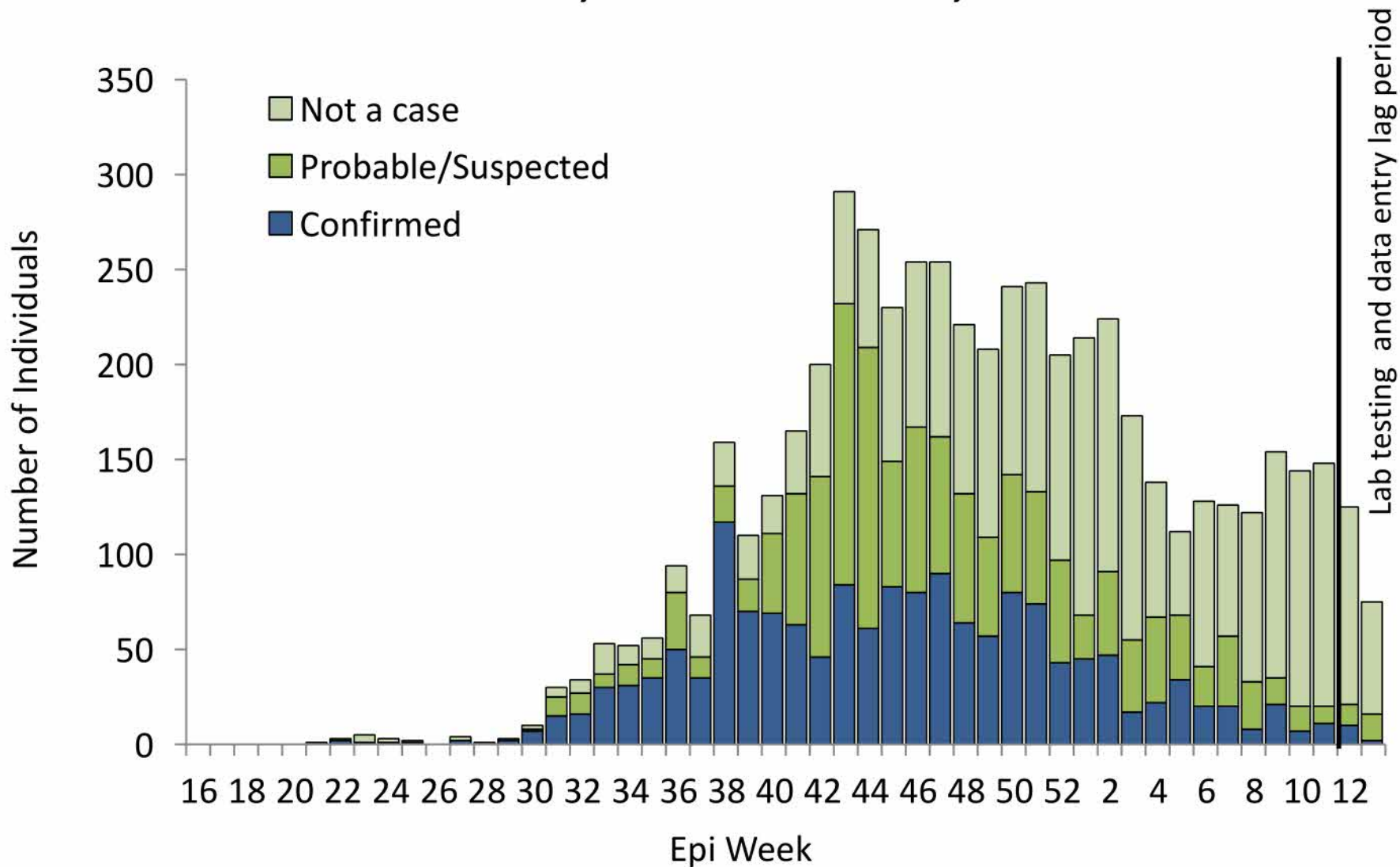
**Western Area Rur**

**Port Loko**

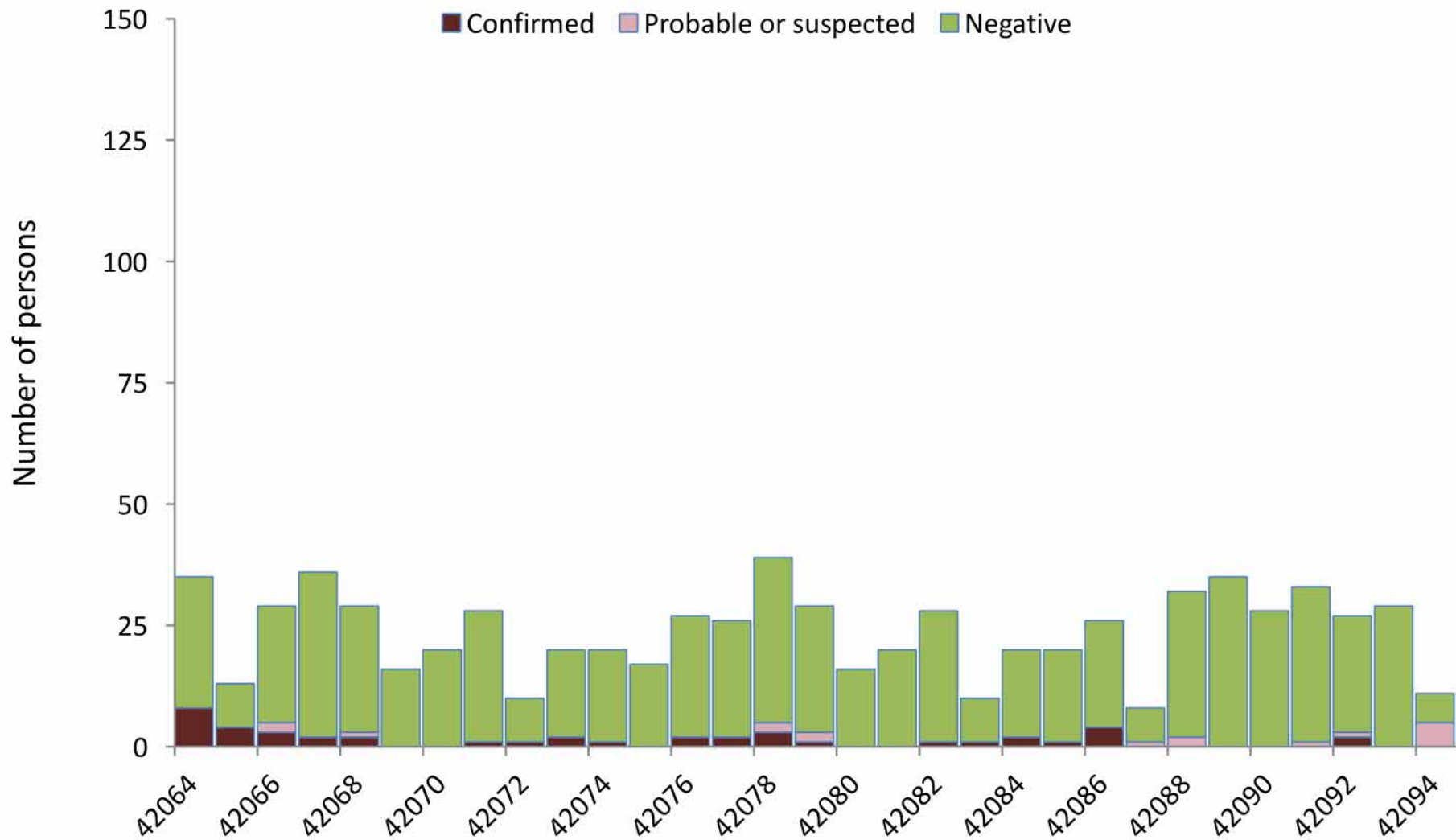
# **Port Loko District**

# VHF Reports by Case Definition and Epi-Week of Onset – Port Loko

## March 23, 2014 – March 31, 2015



# MoHS - reported lab results (by date of the lab report), Port Loko, March 1 – March 31, 2015

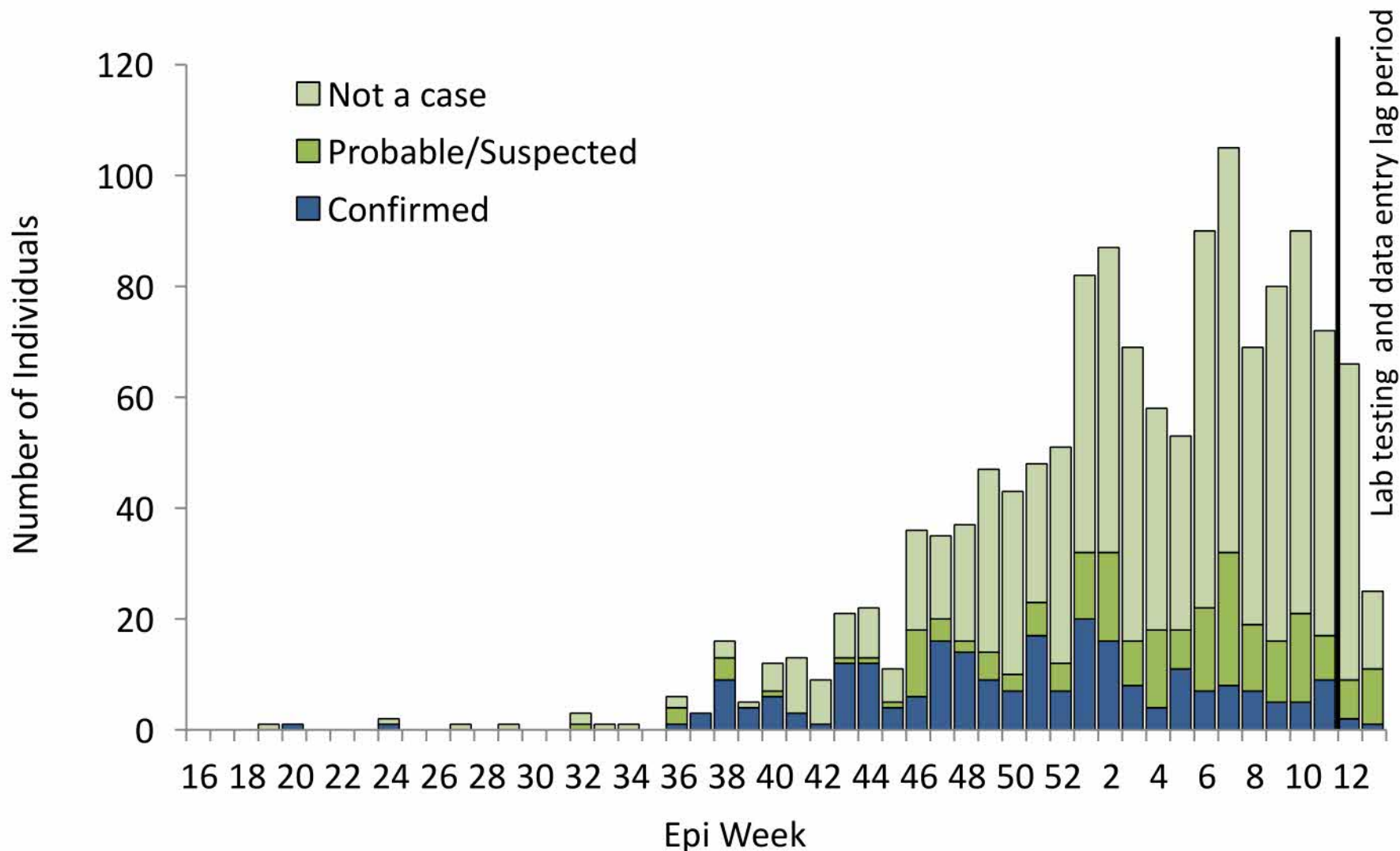




# **Kambia District**

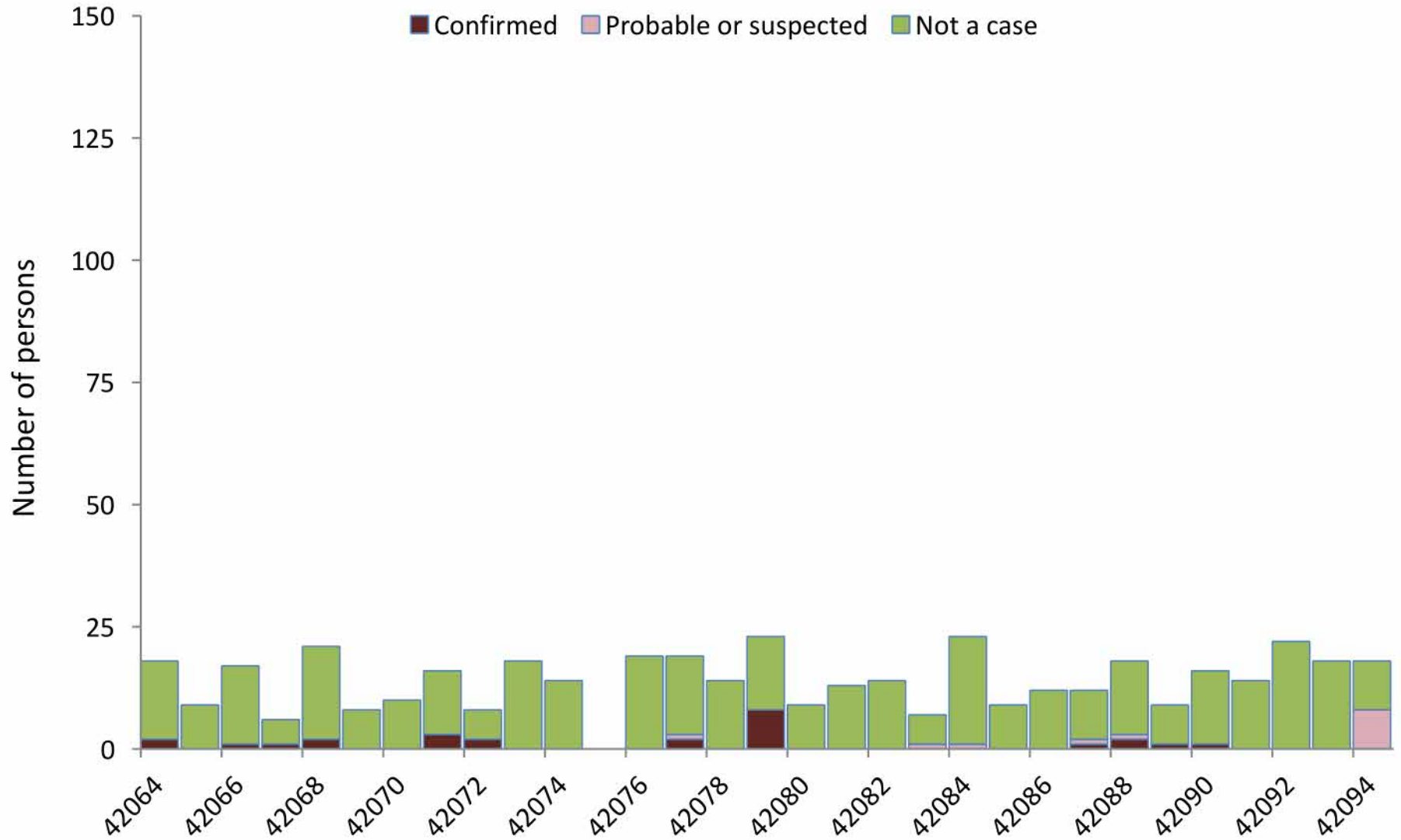
# VHF Reports by Case Definition and Epi-Week of Onset – Kambia

## March 23, 2014 – March 31, 2015



VHF sync file not submitted for epi week 13

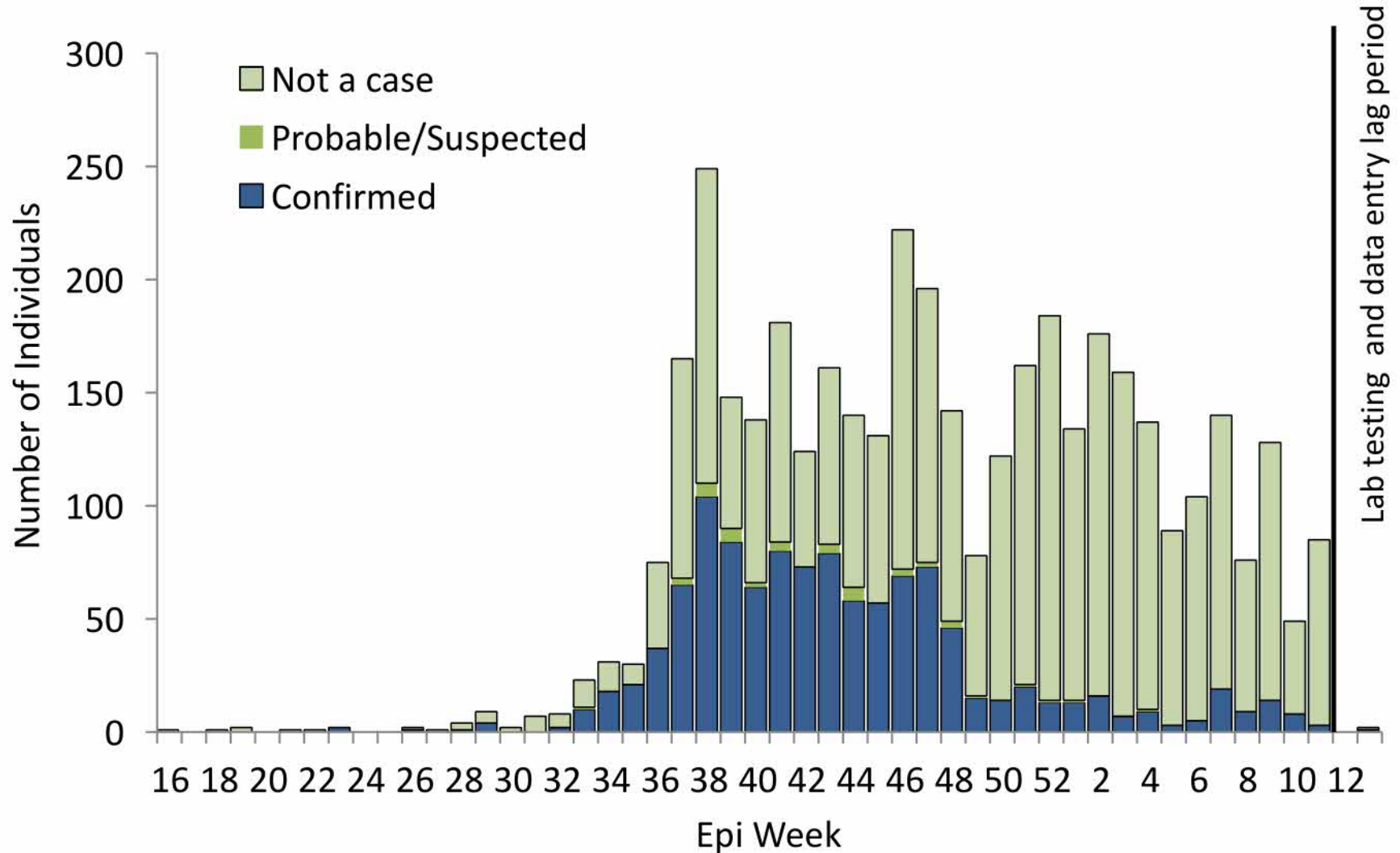
# MoHS - reported lab results (by case date of the lab report) Kambia, March 1 – March 31, 2015



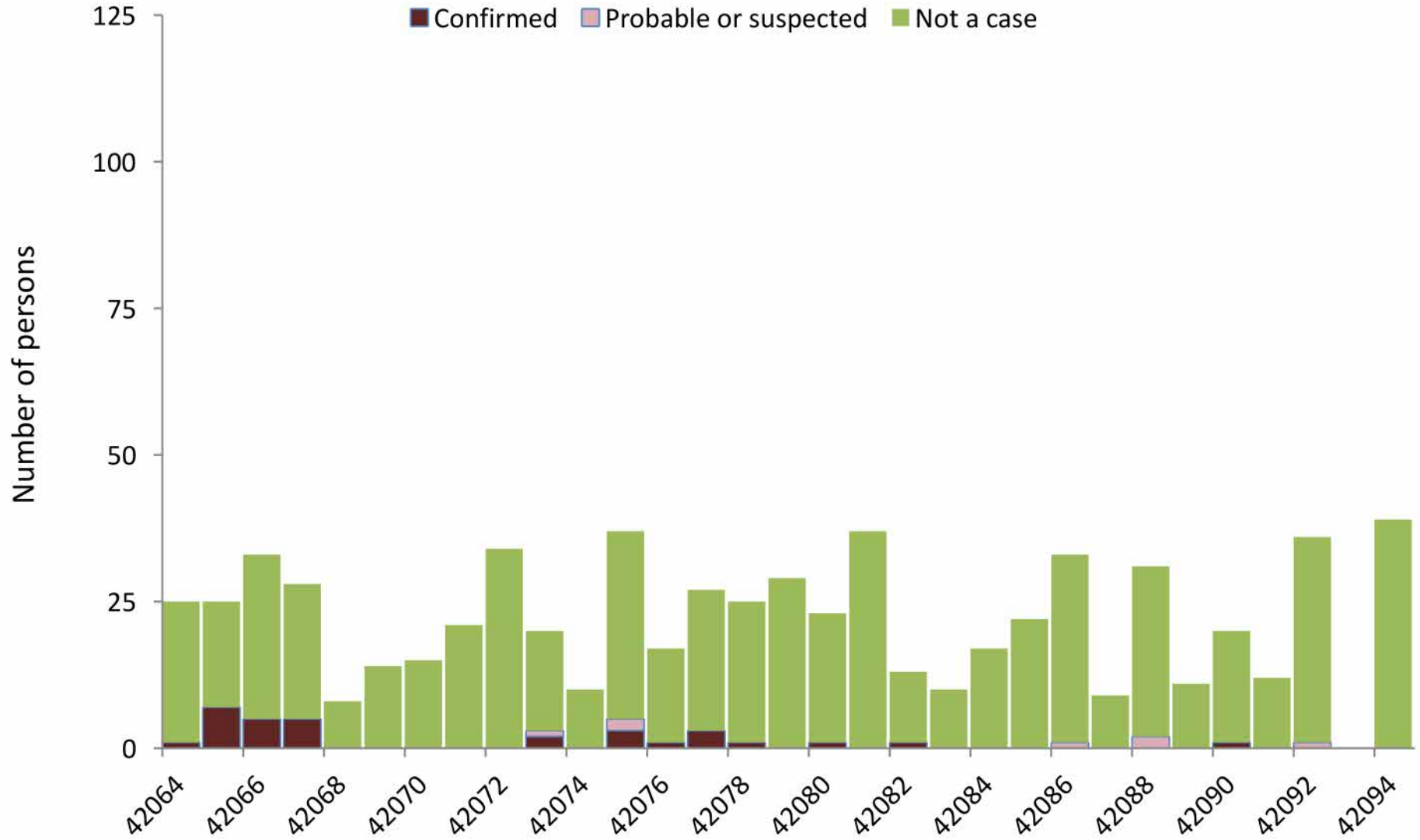
# **Bombali District**

# VHF Reports by Case Definition and Epi-Week of Onset – Bombali

## March 23, 2014 – March 31, 2015



# MoHS - reported lab results by case definition and date of the lab report, Bombali, March 1 – March 31, 2015

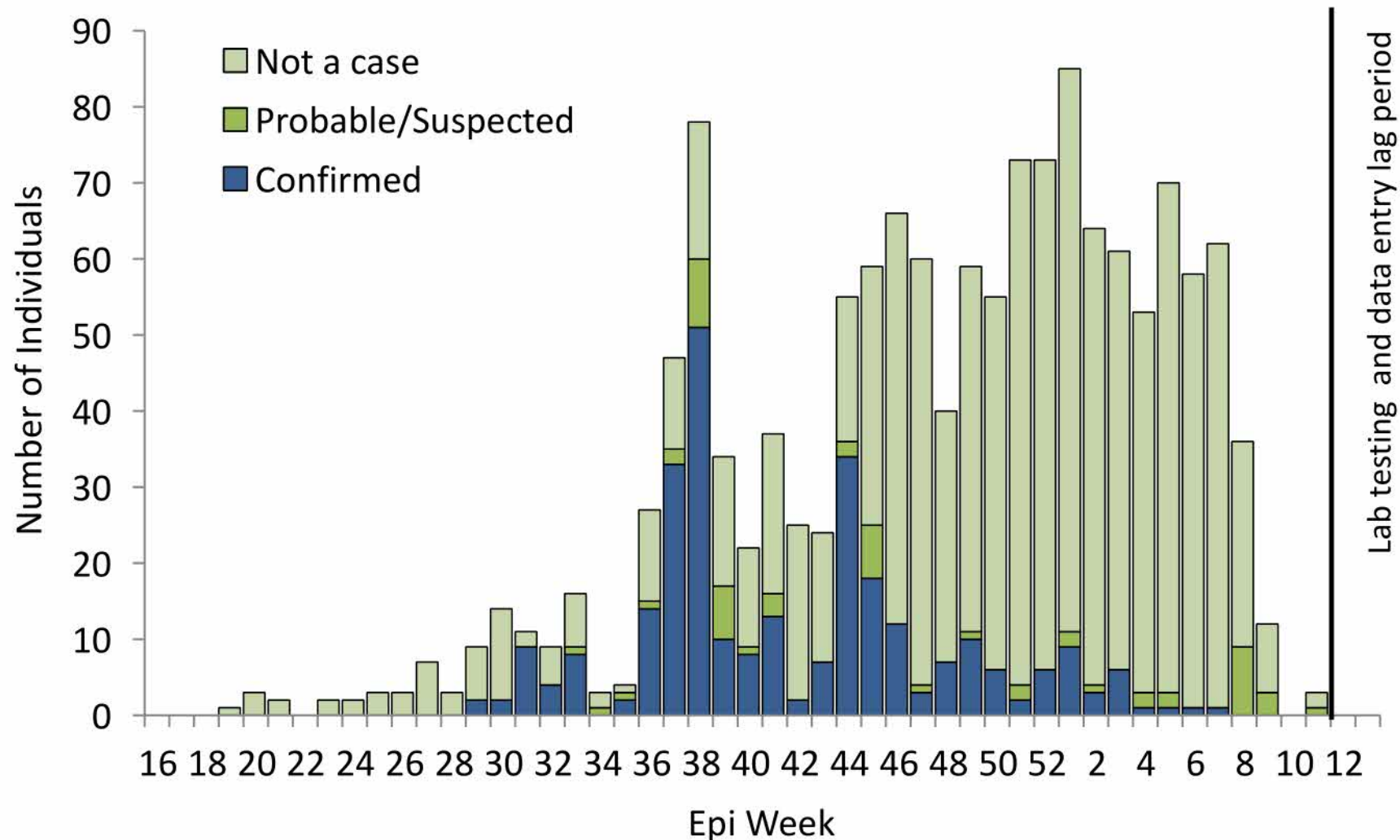


# **Moyamba District**

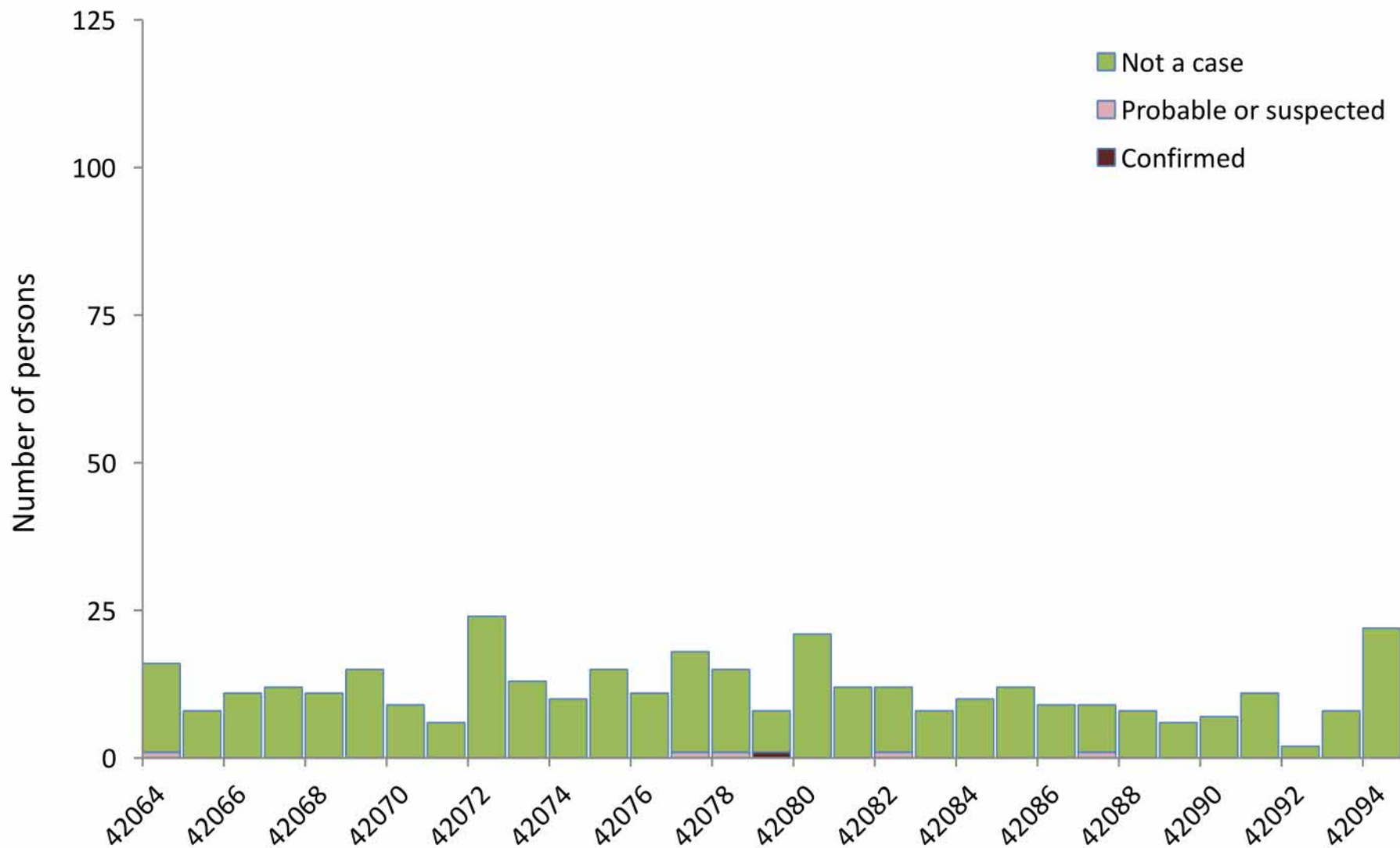


# VHF Reports by Case Definition and Epi-Week of Onset – Moyamba

## March 23, 2014 – March 31, 2015



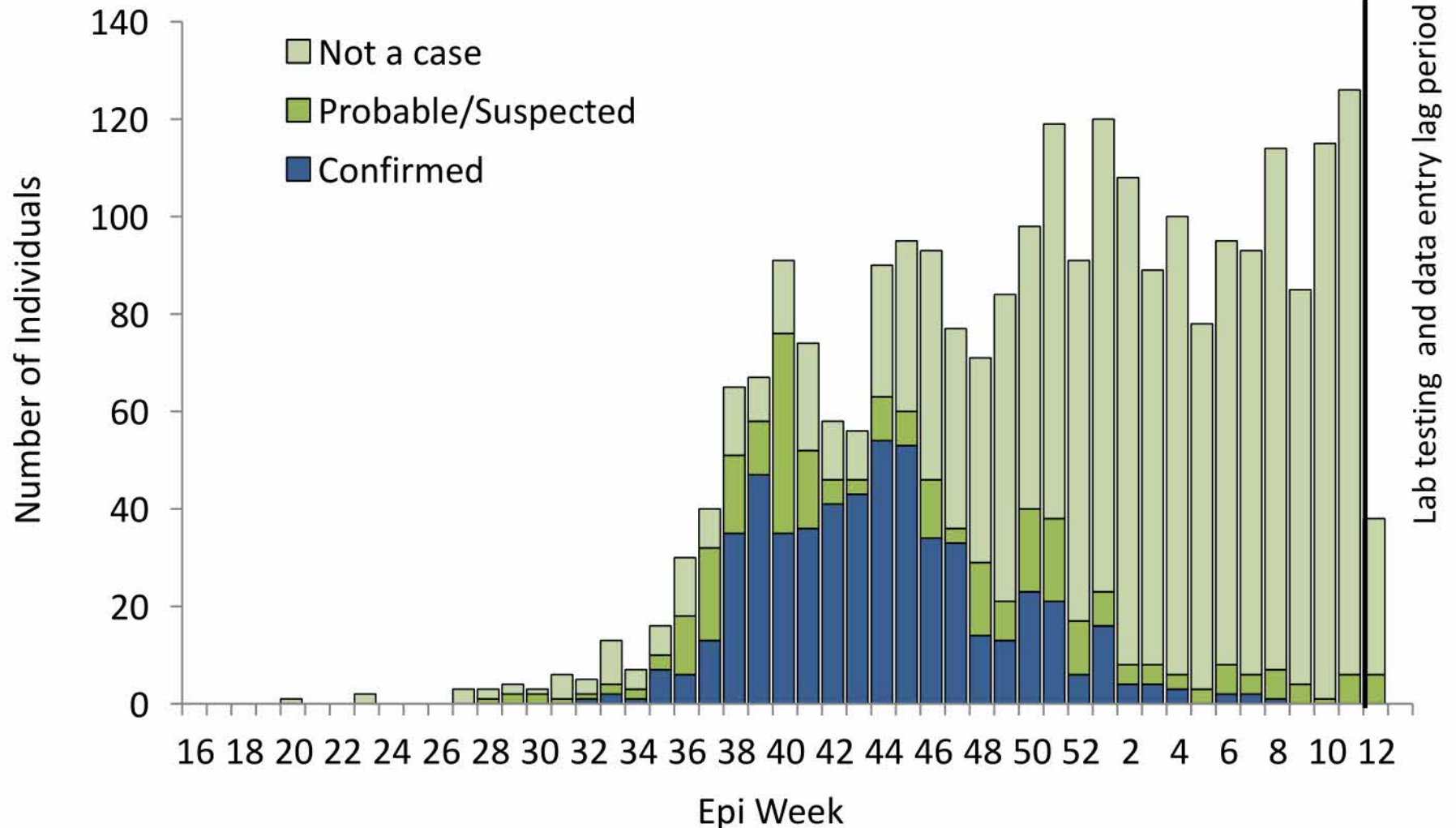
# MoHS - reported lab results by case definition and date of the lab report, Moyamba, March 1 - March 31, 2015



# **Tonkolili District**

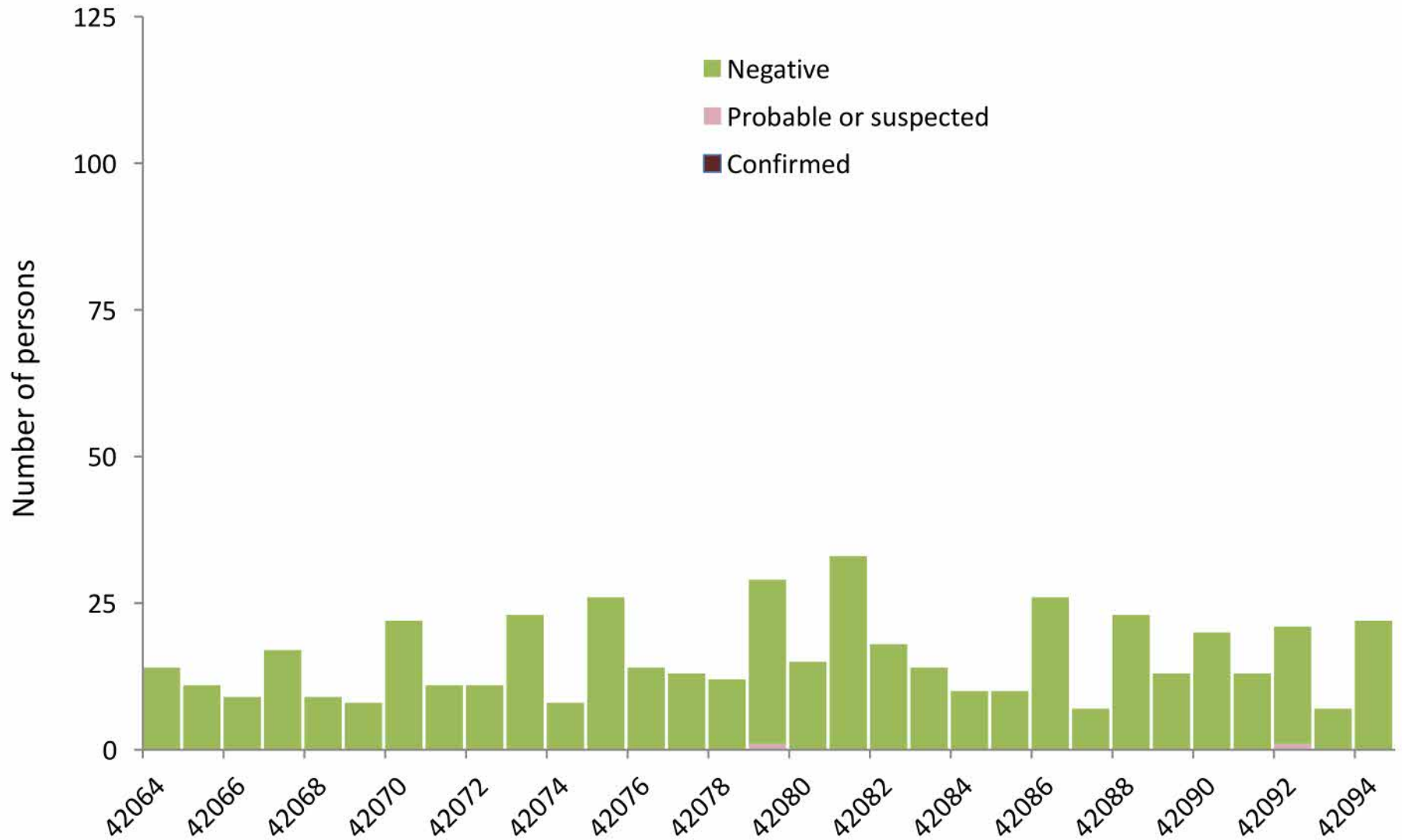
# VHF Reports by Case Definition and Epi-Week of Onset – Tonkolili

## March 23, 2014 – March 31, 2015



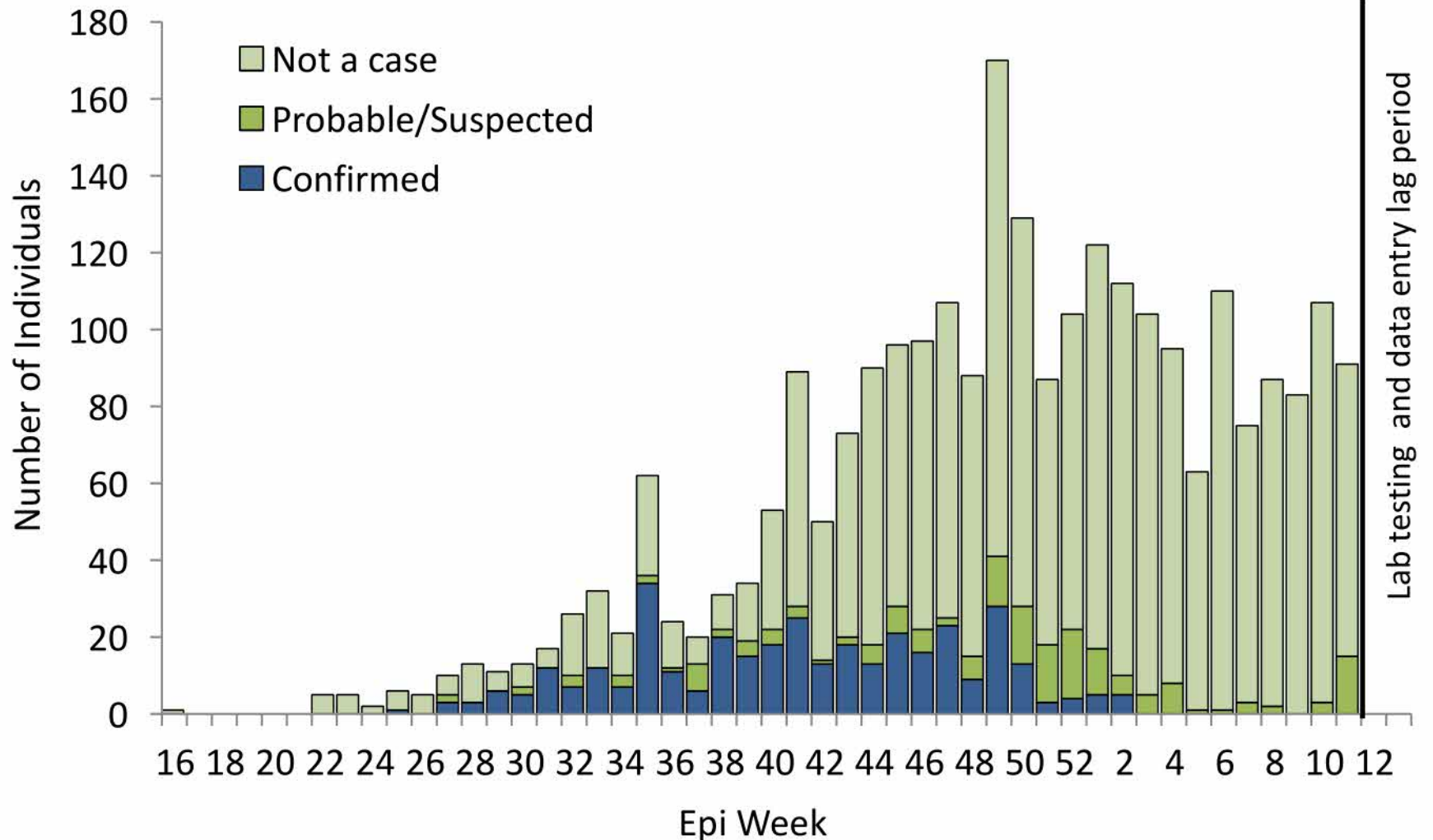
VHF sync file not submitted for epi week 13

# MoHS - reported lab results (by date of the lab report), Tonkolili, March 1 - March 31, 2015



**Bo District**

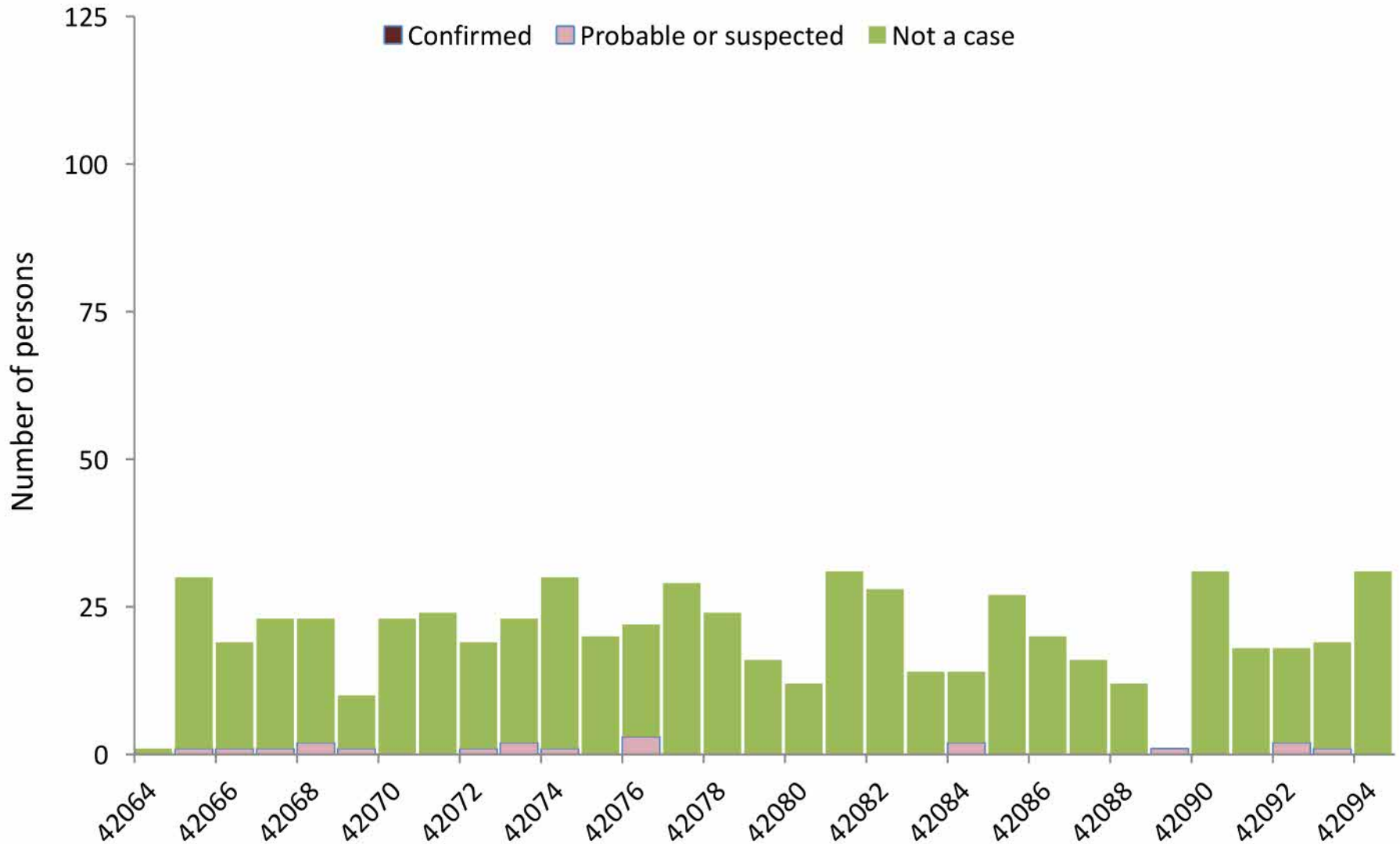
# VHF Reports by Case Definition and Epi-Week of Onset – Bo March 23, 2014 – March 31, 2015



VHF sync file not submitted for epi week 13



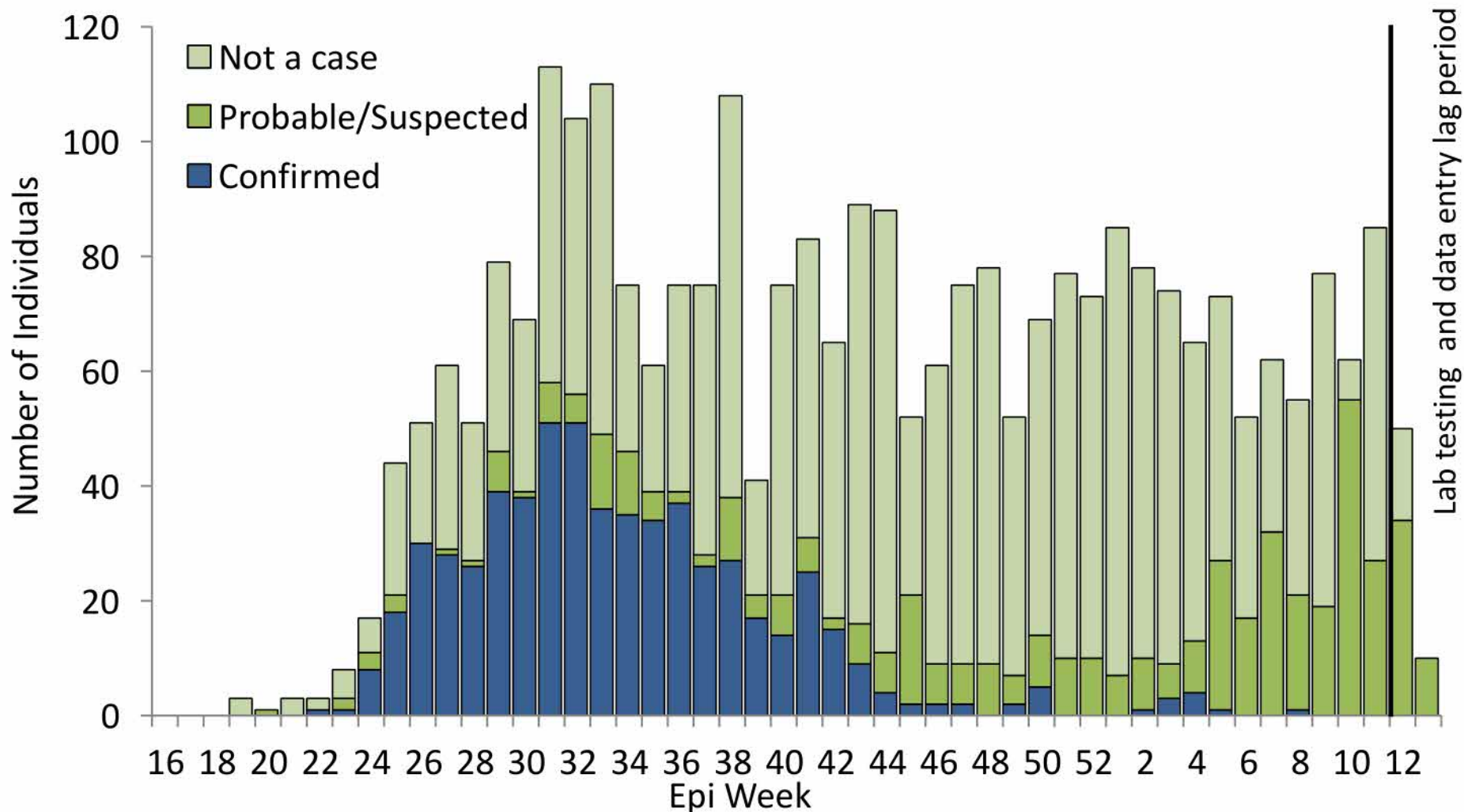
# MoHS - reported lab results (by date of the lab report), Bo, March 1 – March 31, 2015



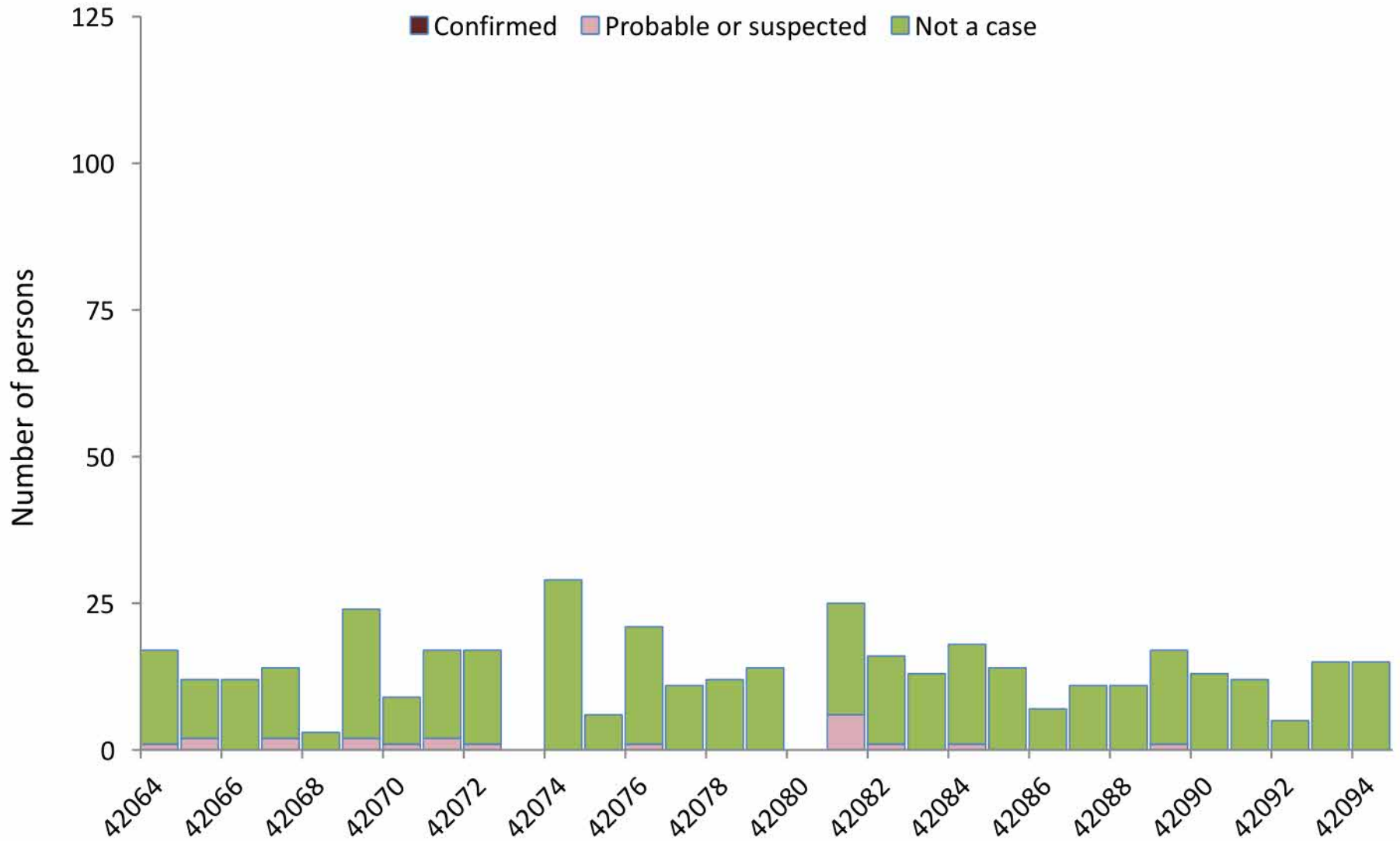
# **Kenema District**

# VHF Reports by Case Definition and Epi-Week of Onset – Kenema

## March 23, 2014 – March 31, 2015



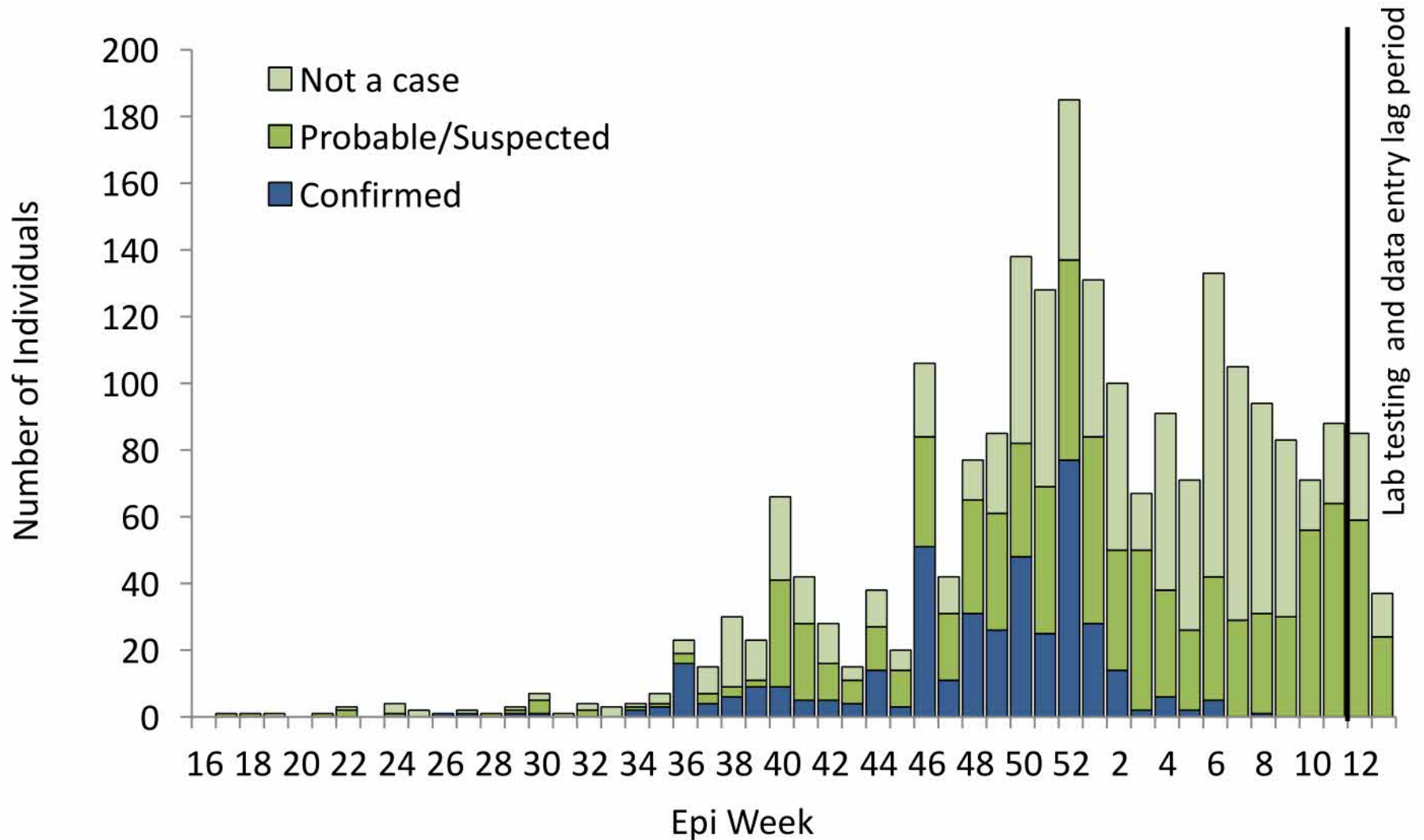
# MoHS - reported lab results (by date of the lab report), Kenema, March 1 – March 31, 2015



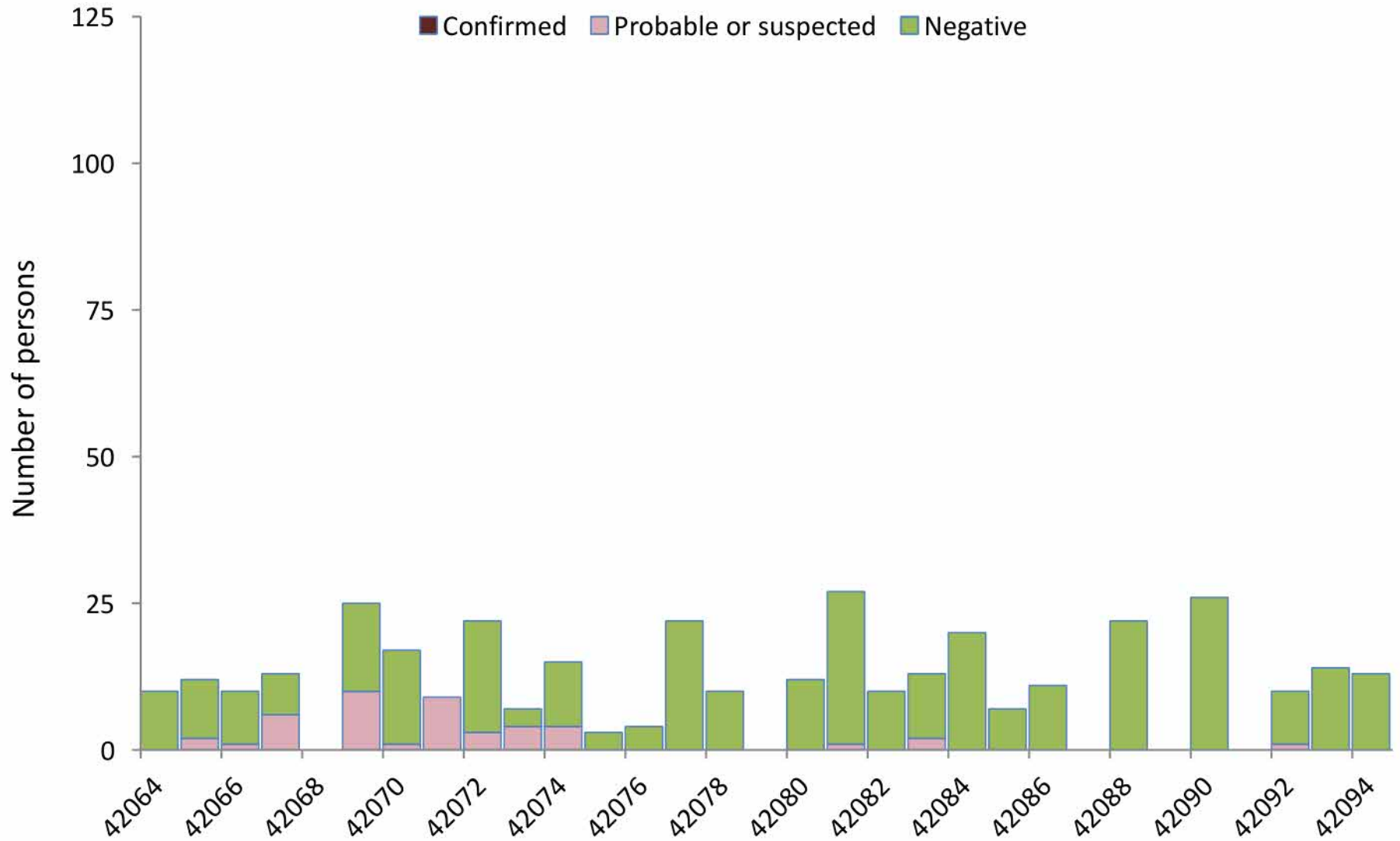
# **Kono District**

# VHF Reports by Case Definition and Epi-Week of Onset – Kono

## March 23, 2014 – March 31, 2015



# MoHS - reported lab results (by date of the lab report), Kono, March 1 – March 31, 2015



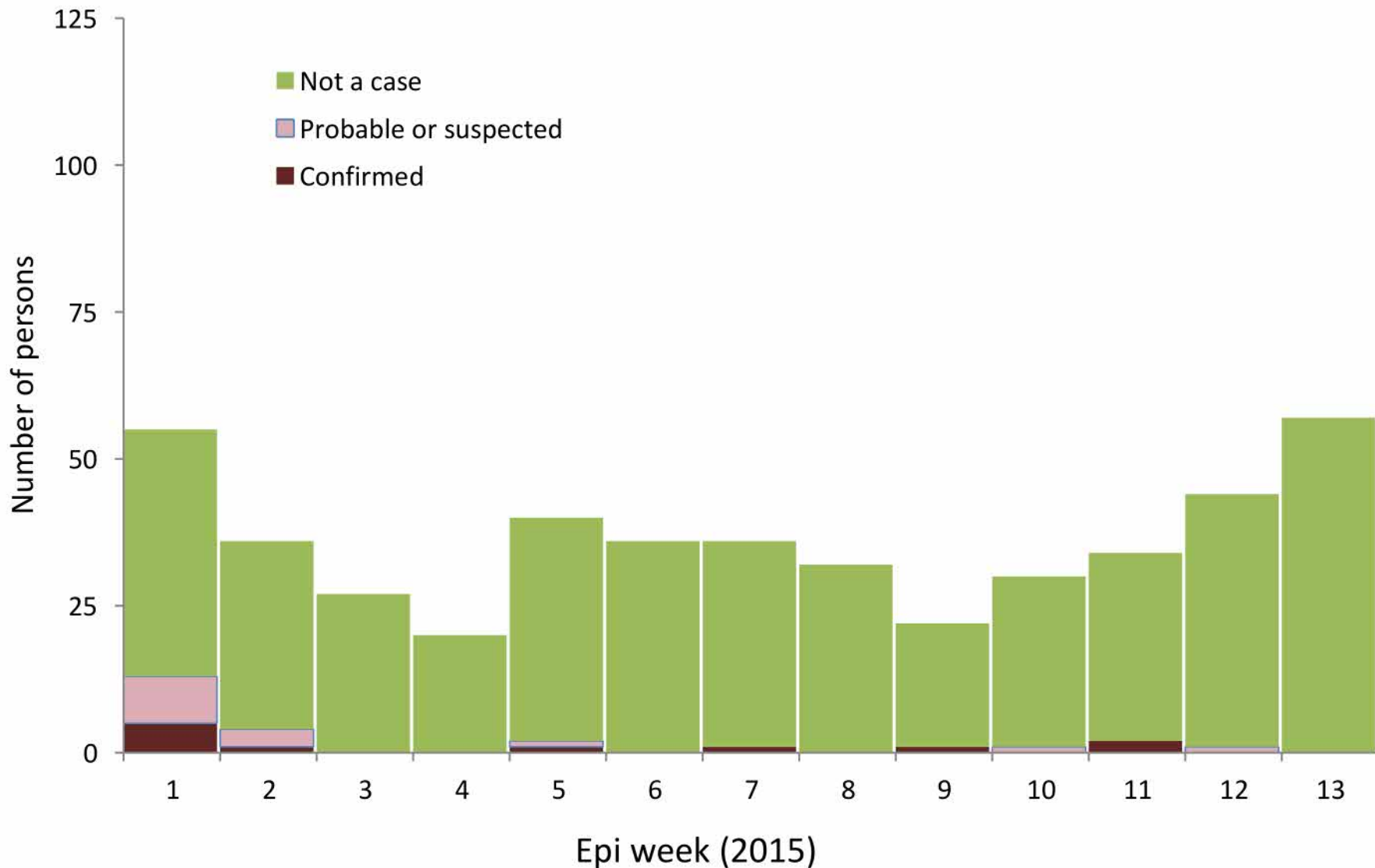


# Koinadugu District

**Note:**

Last VHF data update: Jan 17, 2015. For this reason we are only reporting laboratory data from SitRep for current year.

# MoHS - reported lab results (by date of lab report), Koinadugu, January 1 – March 29, 2015 (end of epi week 13)

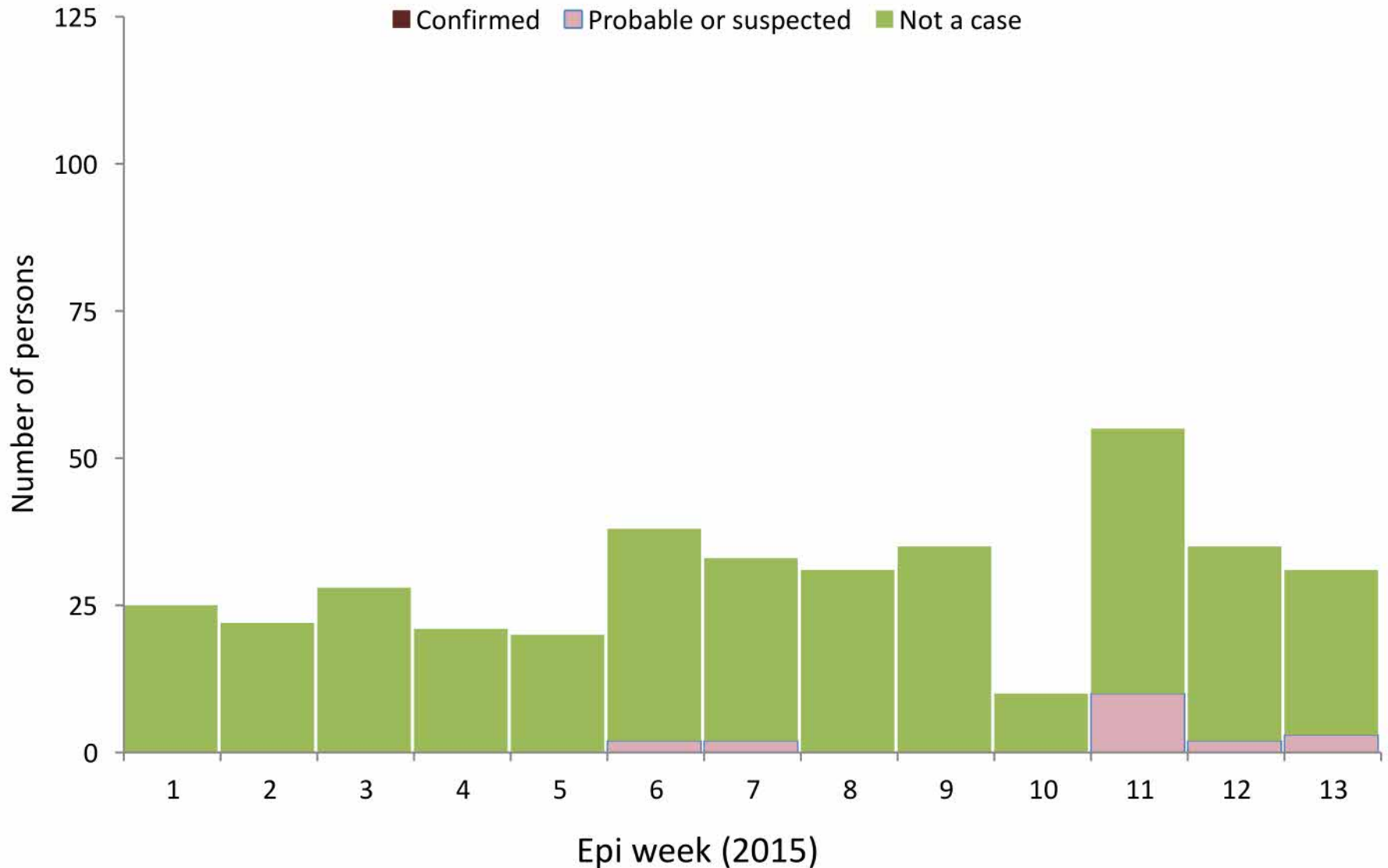


# Kailahun District

**Note:**

Last VHF data update: March 17, 2015. For this reason we are only reporting laboratory data from SitRep for current year.

# MoHS - reported lab results (by date of lab report), Kailahun, January 1 – March 29, 2015 (end of epi week 13)

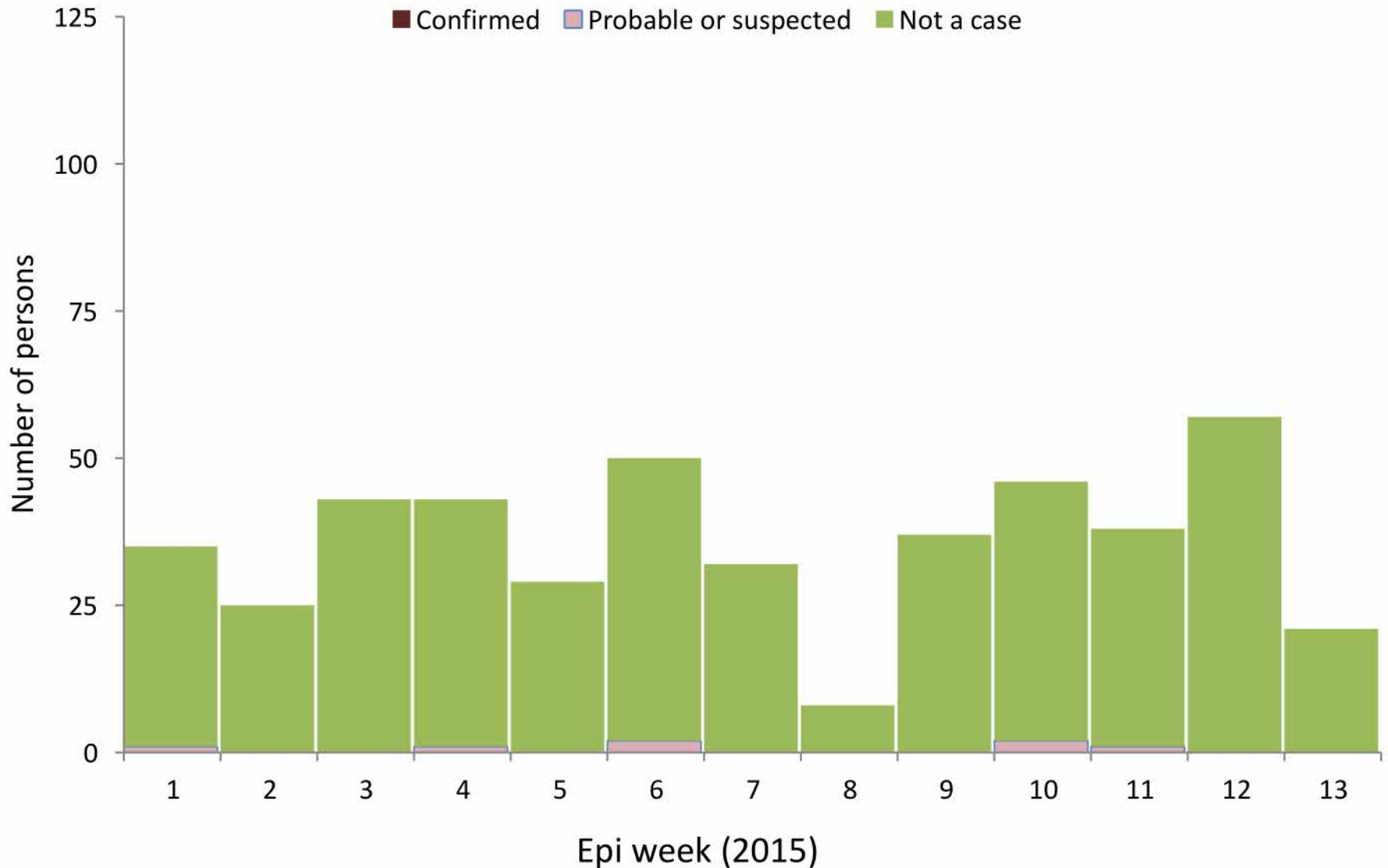


# Bonthe District

**Note:**

Last VHF data update: March 17, 2015. For this reason we are only reporting laboratory data from SitRep for current year.

# MoHS - reported lab results (by date of lab report), Bonthe, January 1 – March 29, 2015 (end of epi week 13)



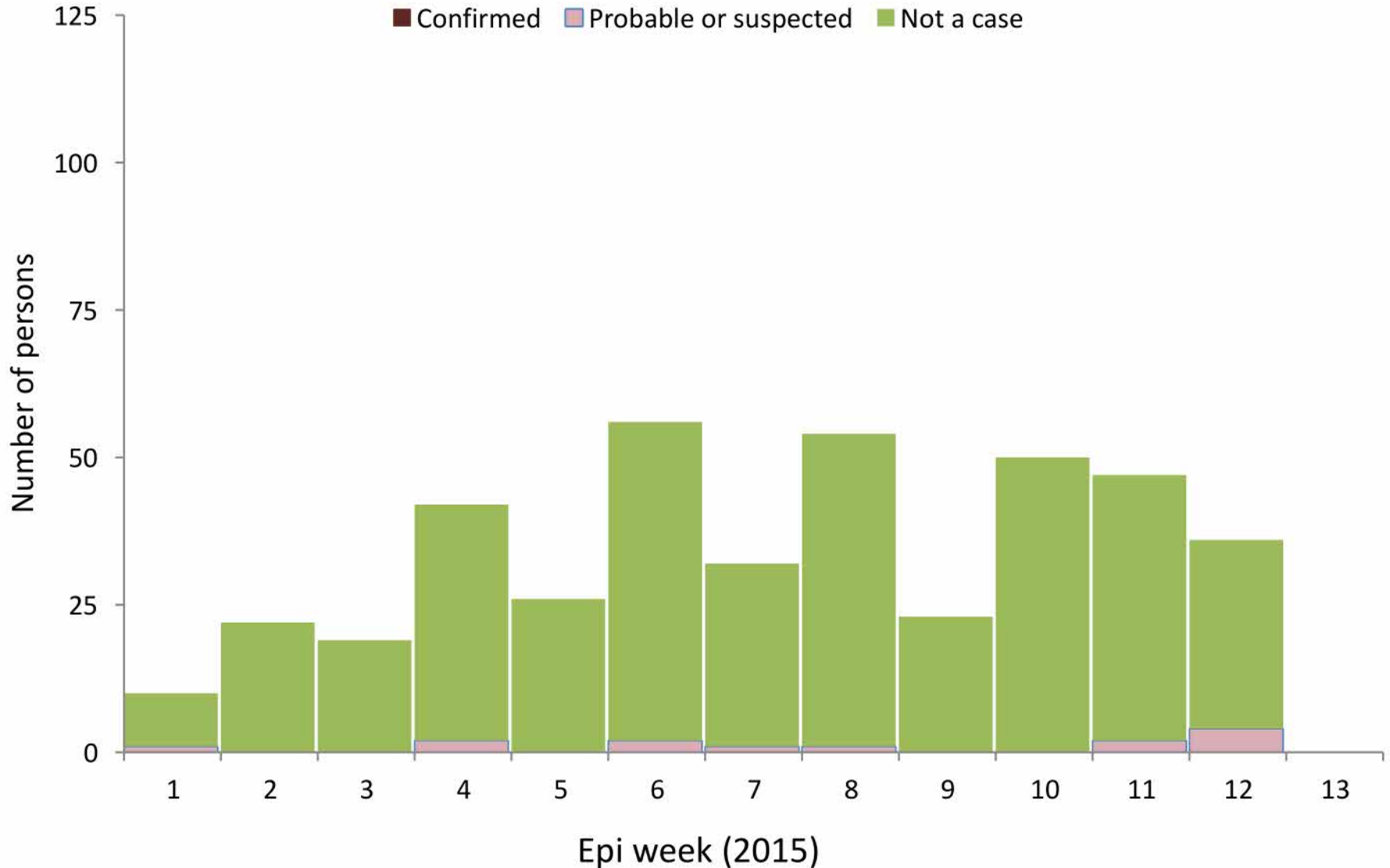
# Pujehun District

**Note:**

Last VHF data update: March 17, 2015. For this reason we are only reporting laboratory data from SitRep for current year. .



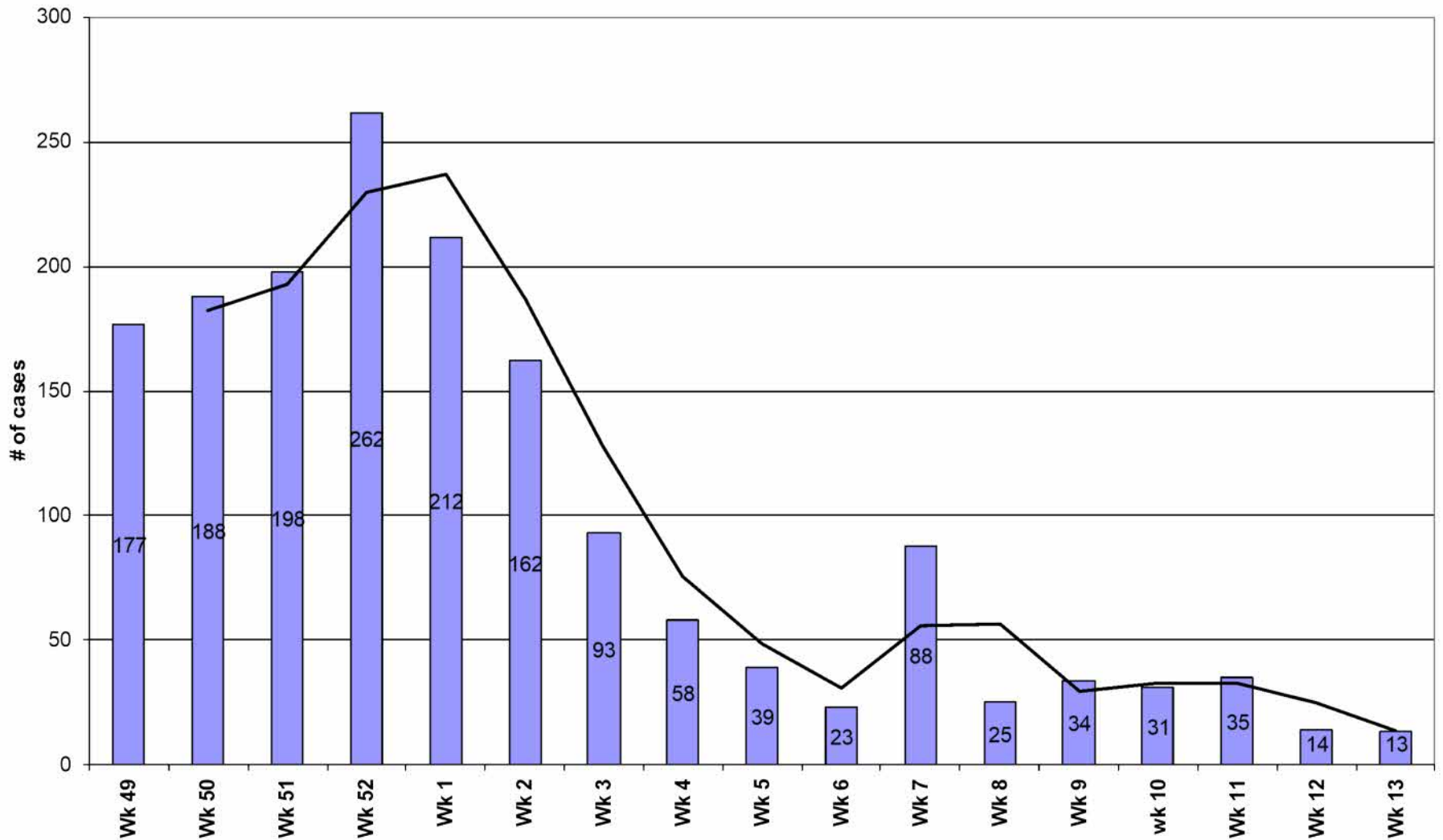
# MoHS - reported lab results (by date of lab report), Pujehun, January 1 – March 29, 2015 (end of epi week 13)



# *Surveillance Update Week 13*

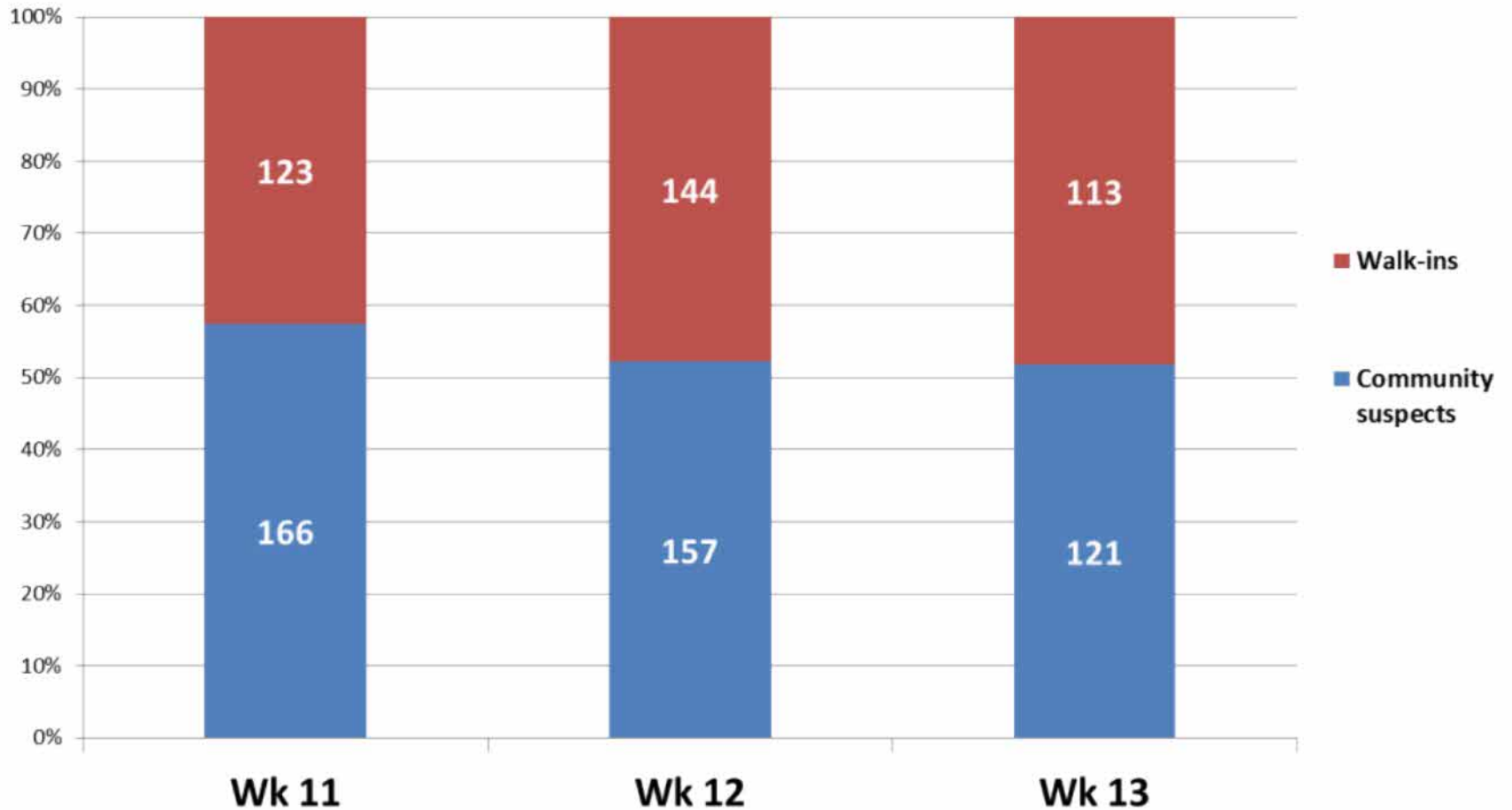
*23<sup>rd</sup> -29<sup>th</sup> March 2015*

Weekly trend of confirmed EVD cases in Western Area, Week 49/14 - Wk 13/15



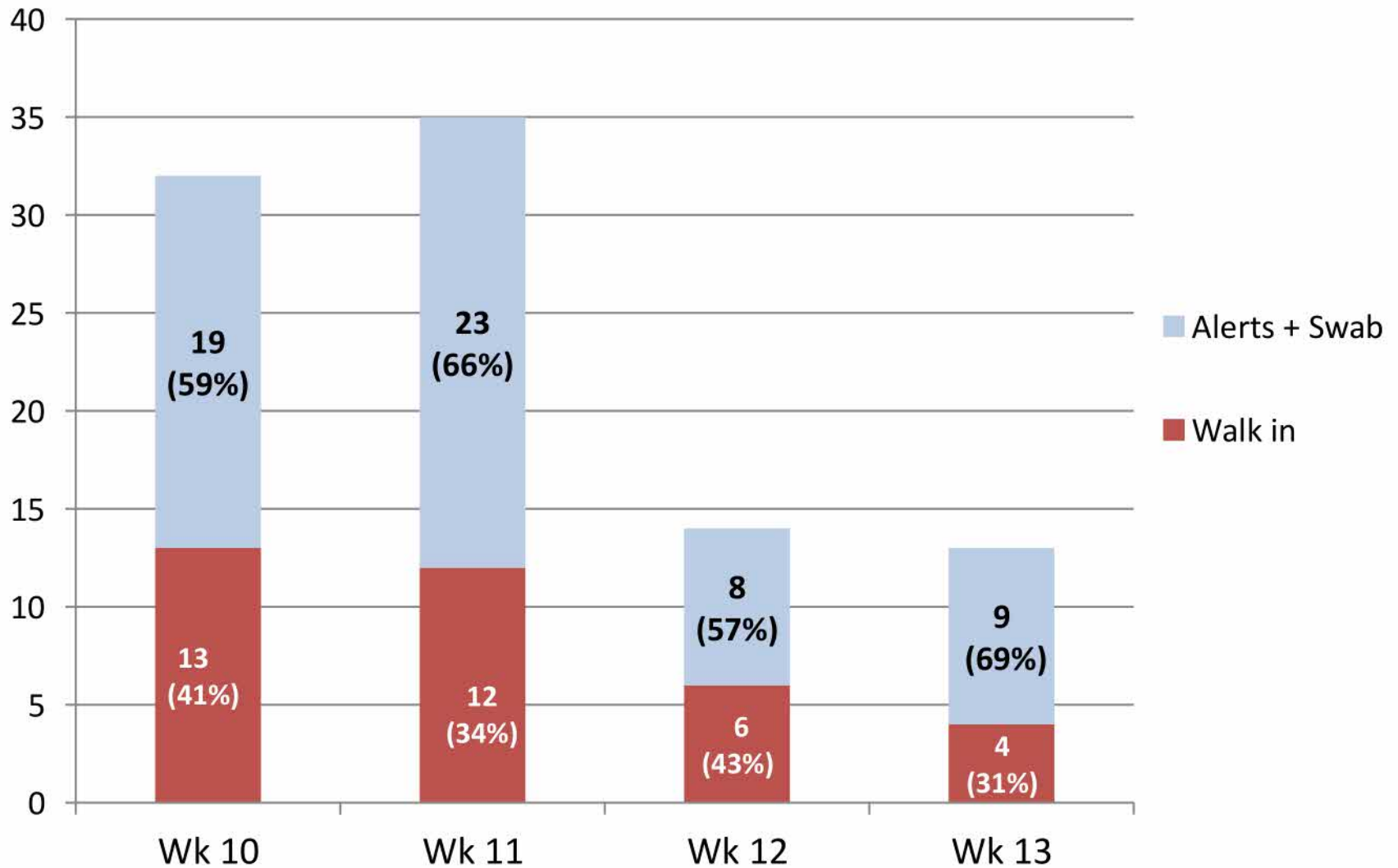
Source: Western operation  
line list as on 29th Mar 2015

# Suspected cases source



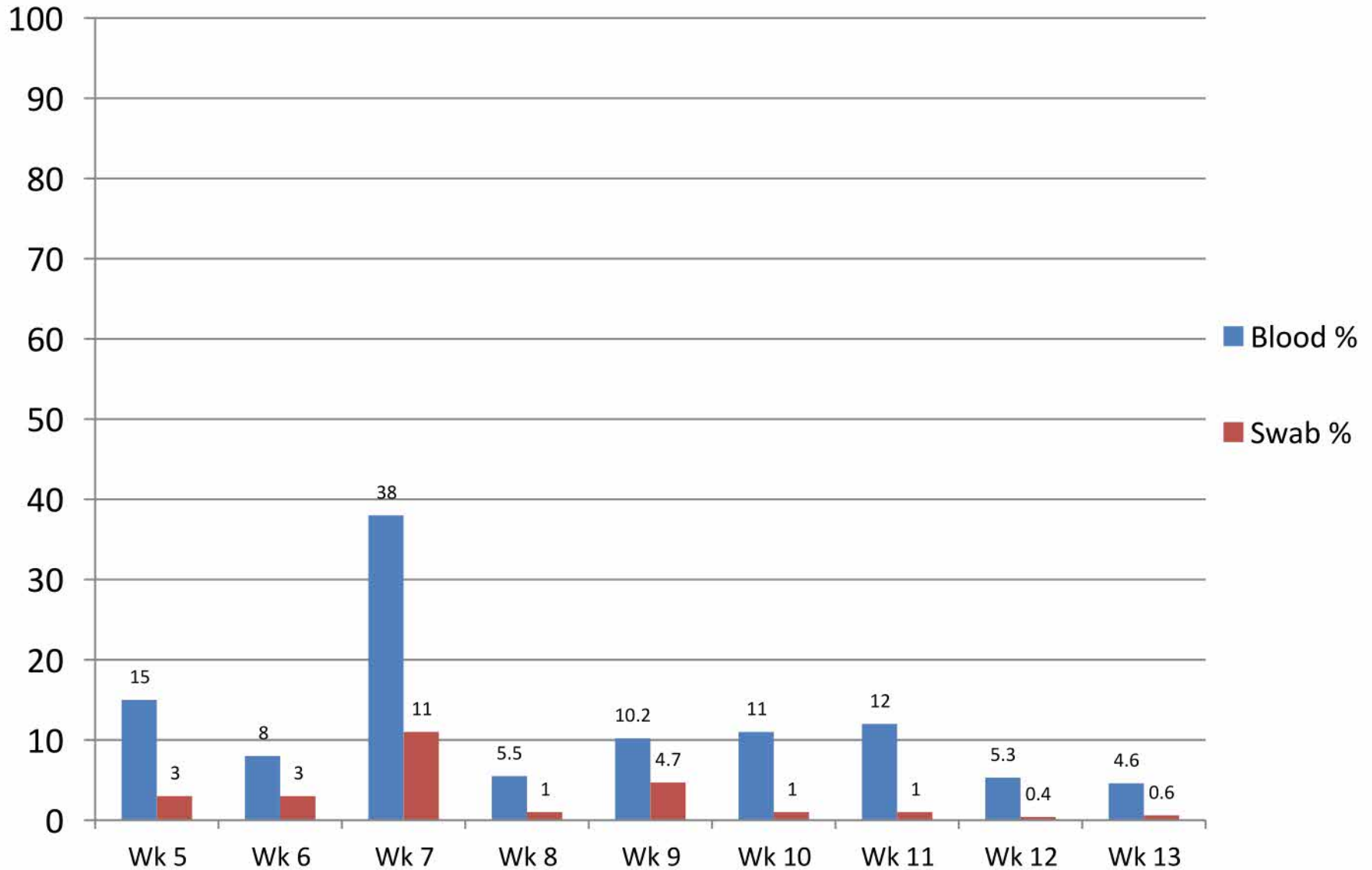
Source: Western operation line list as on 29th Mar 2015

# No. of Confirmed EVD cases according to types of alert



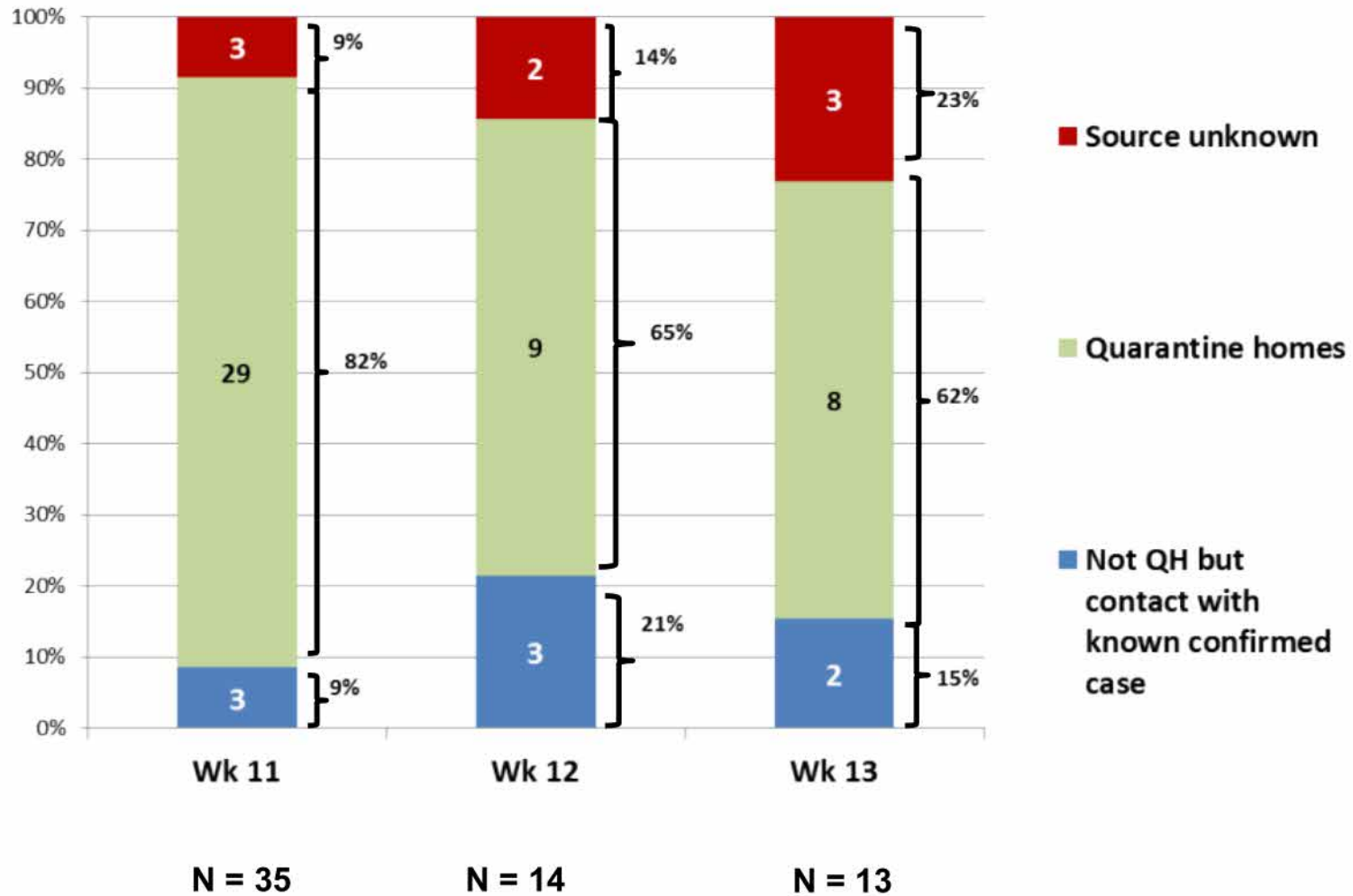
Source: Western operation line list as on 29th Mar 2015

# Proportion of Positivity



Source: Western operation line list  
as on 29th Mar 2015

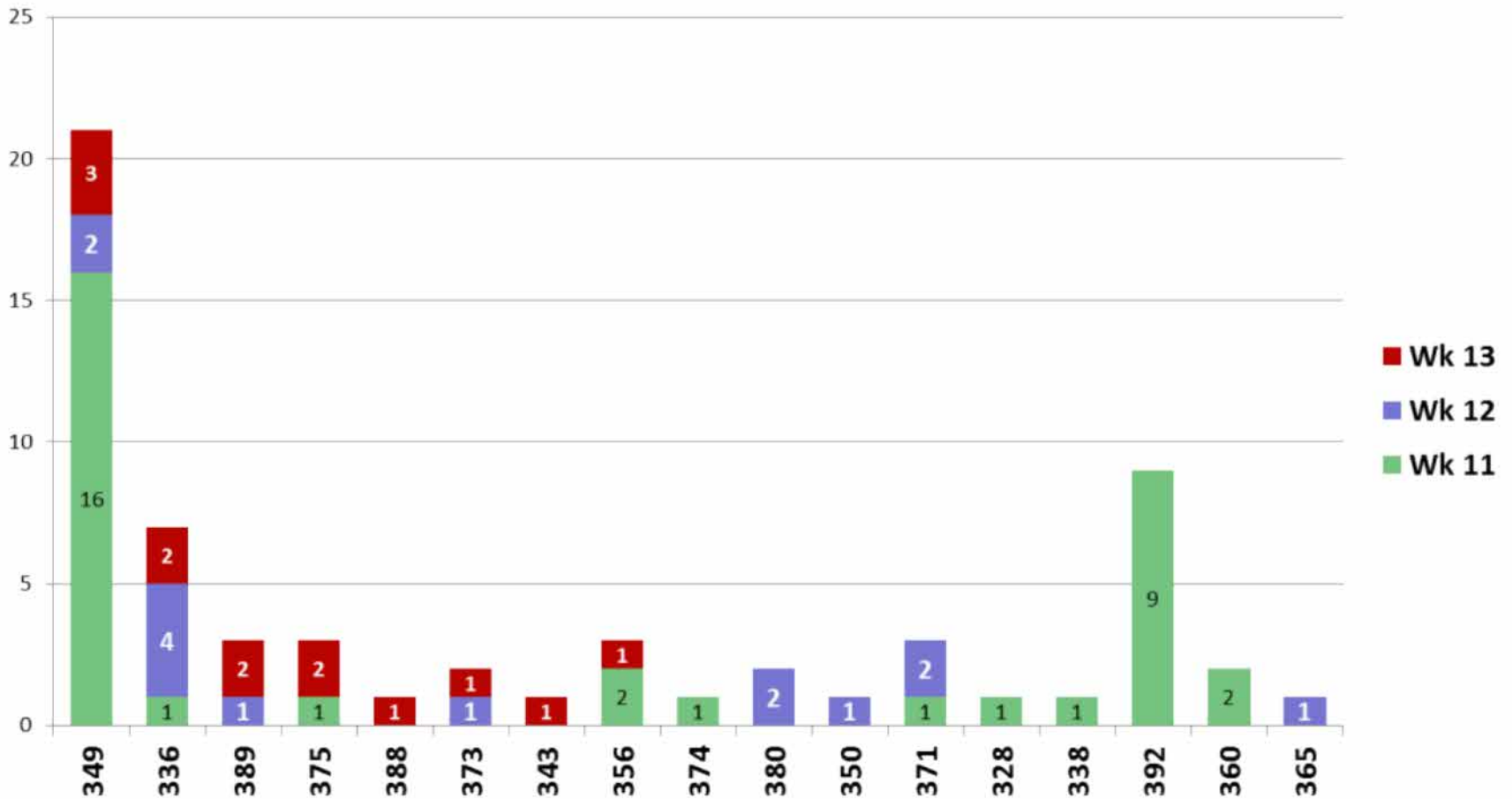
# Source of confirmed EVD cases



Source: Western operation line list as on 30<sup>rd</sup> Mar 2015



# Weekly hotspot of Western area



Source: Western operation line list  
as on 29th Mar 2015

# ***CRITICAL ISSUES***

- Cross border transmission
- High risk contact monitoring
- Still birth swab collection
- Community Deaths
- Herbalist Infection

***THANK YOU***