HOA Outbreak Response assessment

Kenya

8th to 12th June 2015

Subject areas of assessment

- Implementation of recommendation from previous assessment
- Quality of outbreak response
- AFP surveillance sensitivity
  - Risk of undetected transmission
  - Ability to detect any new transmission at earliest
- Population Immunity: Quality of SIAs, RI and assessment of need for additional SIAs
- Communication strategy
- Plans to strengthen / maintain population immunity with special focus on known high risk areas and populations
- Outbreak preparedness and response plan

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Status of implementation of previous outbreak response assessment recommendations

- 10 recommendations:
  - 6 Fully implemented
  - 1 partially done:
    - Permanent vaccination points in high risk areas around border
  - 3 Not done:
    - Domestic resources to ensure sufficient funding
    - Active surveillance visits
    - Improving routine immunization in high risk areas

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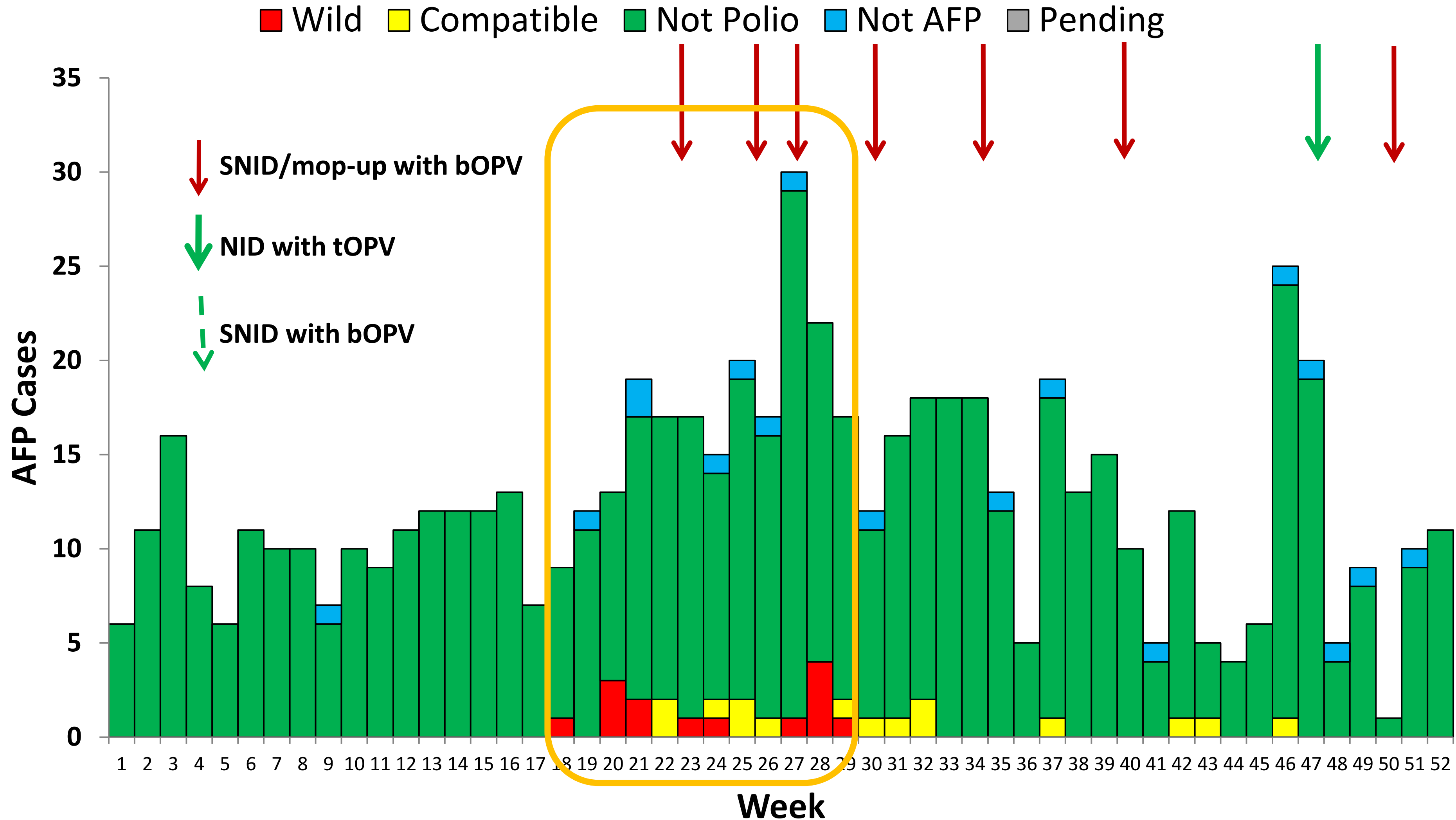
Speed and appropriateness of outbreak response activities as per WHA Resolution, 2006 (WHA59.1)

Indicators	Status
Activation of outbreak response within 72 hrs. of notification	Yes
At least three large scale OPV SIAs	Yes
SIA coverage at least 95% as evaluated by PCM data	Not met (90 to 95%)
Initial response SIA conducted within 4 wks. of notification	Yes
At least 2 SIAs since date of onset of last WPV	Yes
Rapid analysis of AFP and lab data conducted	Yes
Response plan prepared within two weeks of outbreak notification	Yes
Response plan was followed during outbreak response	Yes
NP AFP rate>2 during the outbreak and for at least one year after	Yes
% Adequate stool ≥ 80%	Yes

Impact of the response

Epi-curve (2013)



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Key AFP Surveillance Indicators, Kenya 2009-2015*

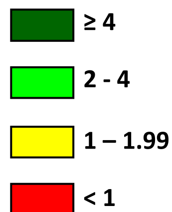
Indicators	Target	2010	2011	2012	2013	2014	2015*
NPAFP rate per 100,000 <15 years	≥ 2.0	2.33	3.29	4.02	3.41	4.07	2.50**
Stool adequacy (%)	≥ 80	87	85	93	80	88	89
Timeliness including zero reporting (Weekly) (%)	≥ 80	92	95	91	74	80	90
Investigated ≤ 2 days of notification (%)	≥ 80	72	88	94	85.2	85.4	82
Specimen arriving at lab ≤ 3 days since collection (%)	≥ 80	90	85	92	85.3	87.3	84.6
Specimen arriving in good condition (%)	≥ 90	100	100	99	99.8	99.3	100
Non-polio enterovirus isolation rate(%)	≥ 10	9.9	8.6	11.8	13.4	9	6.5
Lab result at programme within 14 days of receipt (%)	≥ 80	93	90	94	74	87.3	81

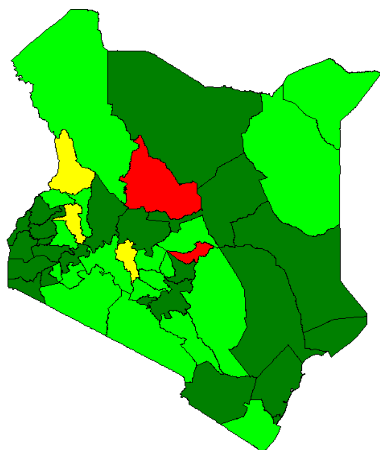
*As at Week22

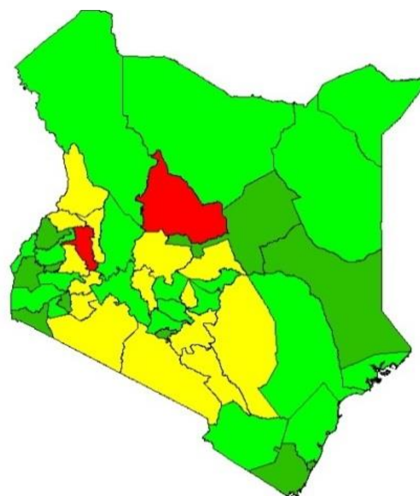
** - Pending Lab Results

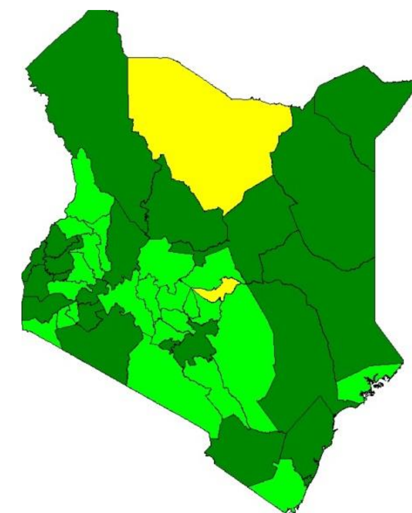
Key Surveillance Indicators, 2012-2014

NP-Polio AFP Rate







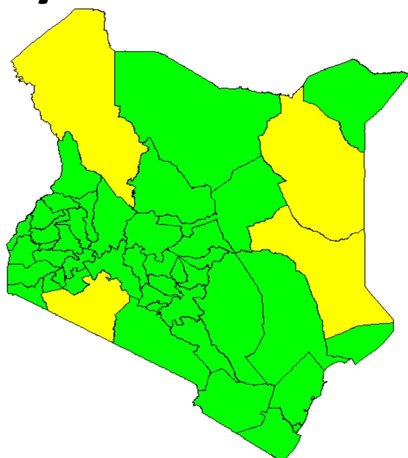


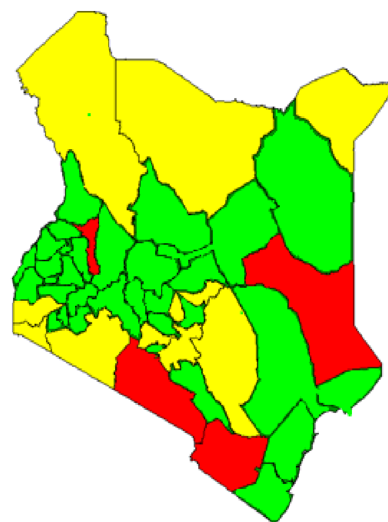
2012

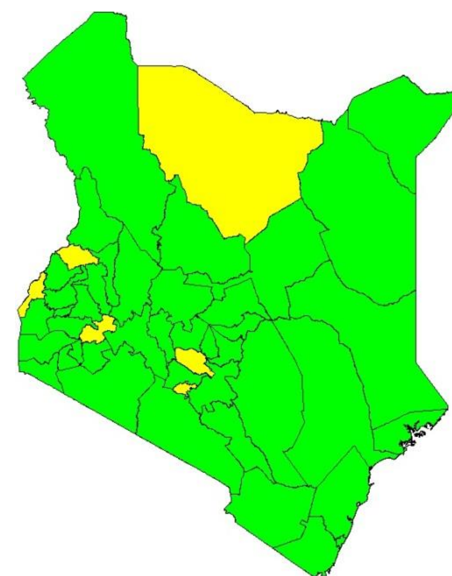
2013

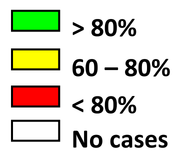
2014

Stool Adequacy

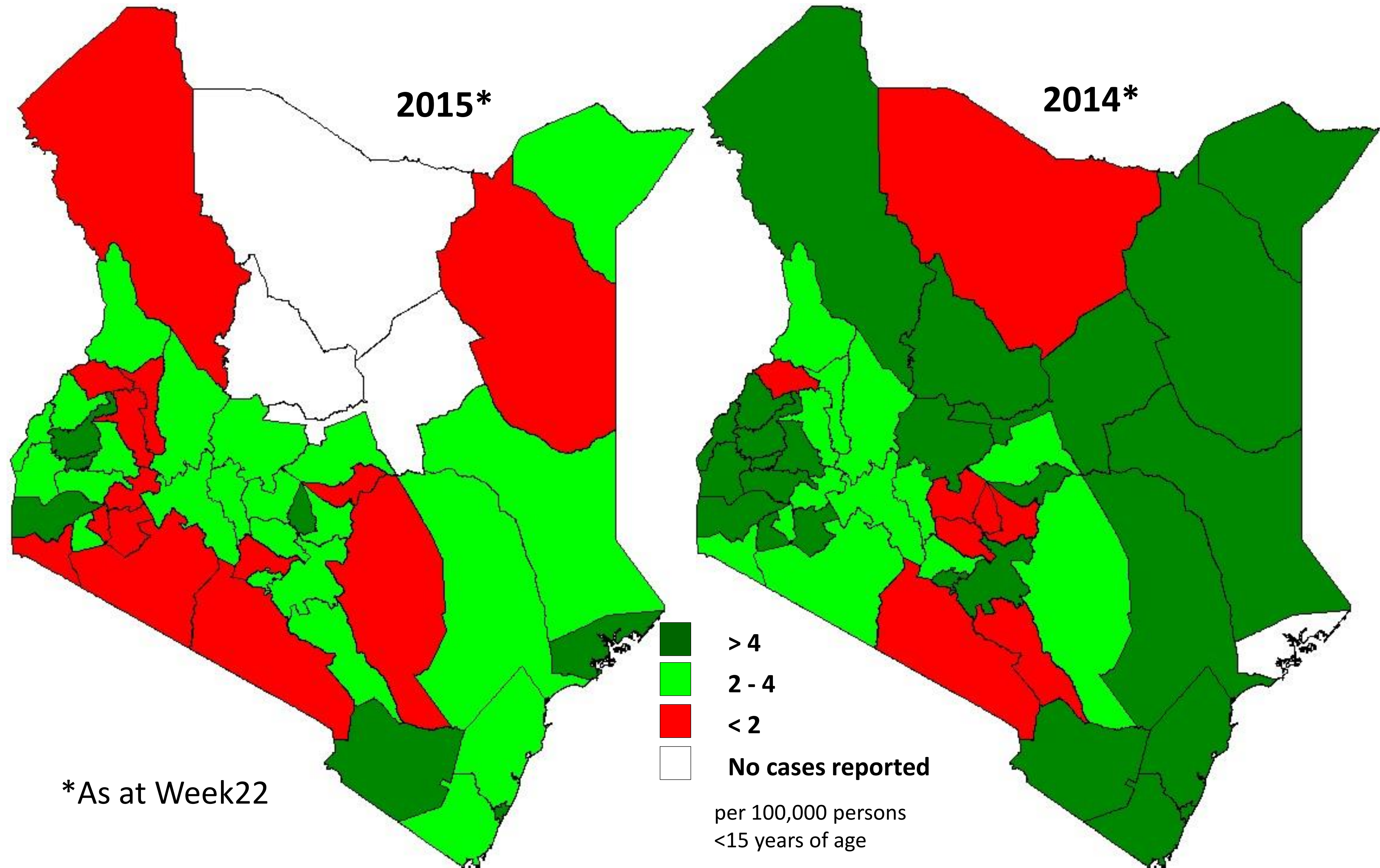




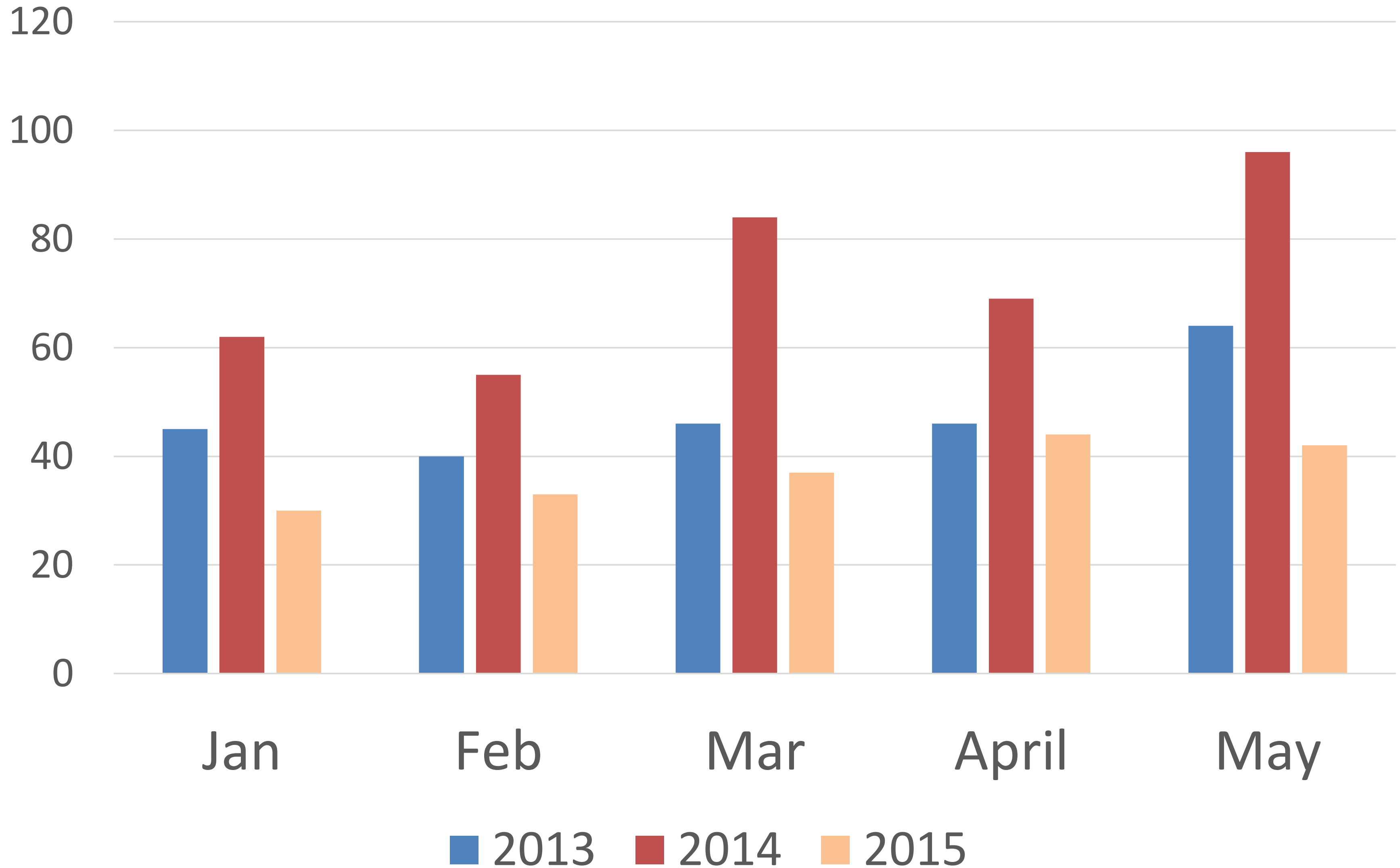




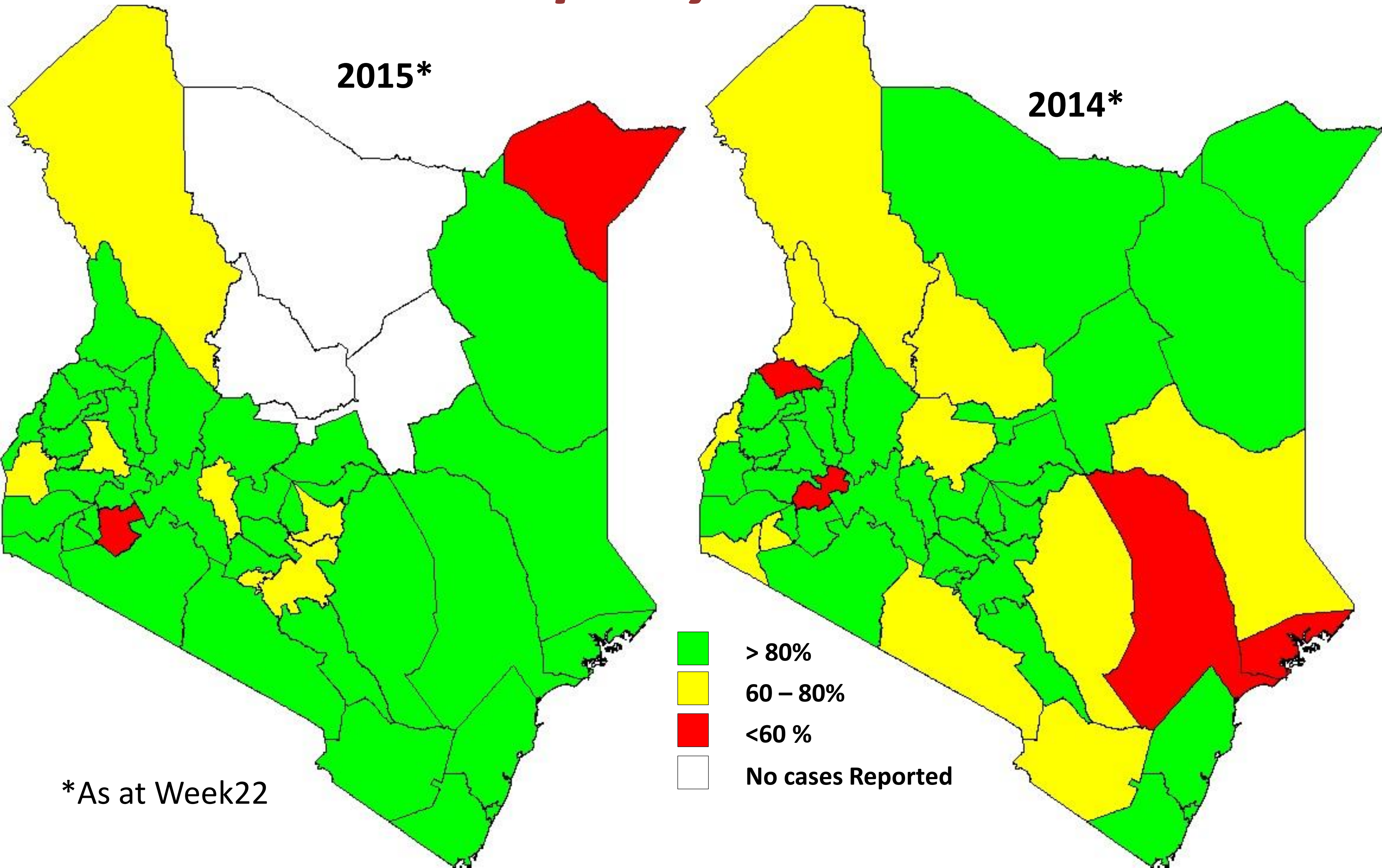
County Level Surveillance Indicators NPAFP Rate 2014* & 2015*



AFP case detection by month of onset Jan –May, 2013, 2014 & 2015



County Level Surveillance Indicators
% Stool adequacy 2014* & 2015*



Environmental surveillance

Date of sample collection	12-Oct-13							28-Nov-13		10-Dec-13	17-Dec-13				16-Jan-14			07-Feb-14				06-Mar-14				01-Apr-14				30-Apr-14			19-May-14						3-Jul-14								20-Aug-14					30-Sep-14				31-Oct-14				28-Nov-14				23-Dec-14
Epidemiological week	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
1 Kamukunji site 1	Pos							S, NE			S				S,NP			S,NP				S, NP								S,NP			S						S								S					S				S,NP				S				S
2 Kamukunji Site 2																						NP								S			S,NP						S								NP					N				S				S				
3 Kibera								S, NP		S,NP	S,NP				S,NP			S,NP								S,NP				S, NP			S						S, NP								N					S				S								
4 Madaraka bridge	S, NP									S,NP																																																						
5 Mathare																						S								S			S						S,NP								S					NP				S				S,NP				S
6 Kisumu Site 1																																																																
7 Mombasa Site 1																																																																

Date of sample collection			15-Jan-15	22-Jan-15	27-Jan-15	29-Jan-15	8-Feb-15	9-Feb-15	16-Feb-15	23-Feb-15	24-Feb-15	27-Feb-15		9-Mar-15	16-Mar-15	25-Mar-15	31-Mar-15	7-Apr-15	8-Apr-15	13-Apr-15	14-Apr-15	20-Apr-15	21-Apr-15	28-Apr-15	4-May-15	11-May-15	12-May-15	13-May-15	25-May-15	26-May-15	
Epidemiological week	1	2	3	4	5	5	7	7	8	9	9	9	10	11	12	13	14	15	15	16	16	17	17	18	19	20	20	20	22	22	
1 Kamukunji site 1			S	S,NP				NP				NP			NP		NP				NP,NEV										
2 Kamukunji Site 2			S	S				S,NP				S,NP			S		NP				NP										
3 Kibera			NP	S,NP				S,NP				NP			S,NP		NP,S			NP											
4 Madaraka bridge																															
5 Mathare			S,NP	S				S,NP,NEV				S			S		S				S,NP										
6 Kisumu Site 1					NP		S,NP			S,NEV				S		NP			NP				NP								
7 Mombasa Site 1						S			S		NP			NP				S				NP,N									

- negative for WPV; grew either an Sabin, Non polio enterovirus or a non enterovirus
- concentrates awaiting shipment to CDC
- Samples undergoing processing
- Frozen samples awaiting processing

AFP surveillance sensitivity

- Surveillance sensitivity:
  - Increased following outbreak.
  - **However, significant drop in AFP detection in 2015.**
- Reporting network:
  - Includes govt. as well as private health facilities
  - The reporting network list needs to be updated
  - Prioritization exists-Needs to be more uniform
- Active surveillance visits:
  - Suboptimal frequency and quality
  - Key issues: Resources and capacity
  - No system of tracking Active surveillance visits

AFP surveillance sensitivity

- Low NPEV isolation rate from 2nd half of 2014 onwards.
- Contact sampling:
  - for inadequate cases
  - Irregular (~25%)
- Good mechanism of tracking weekly 'zero' reports with regular feedback to counties.
- CBS being piloted in 3 counties.
- Improved lab performance

Performance Indicator	2012	2013	2014	2015**
14-day Timeliness of reporting isolation result (80%)	**95.3%**	**67.3%***	**95.9%**	**86.2%**
Timeliness of ITD results within 7 days is at least 90%	**90.3%**	**91%**	**93.1%**	**95.8%**

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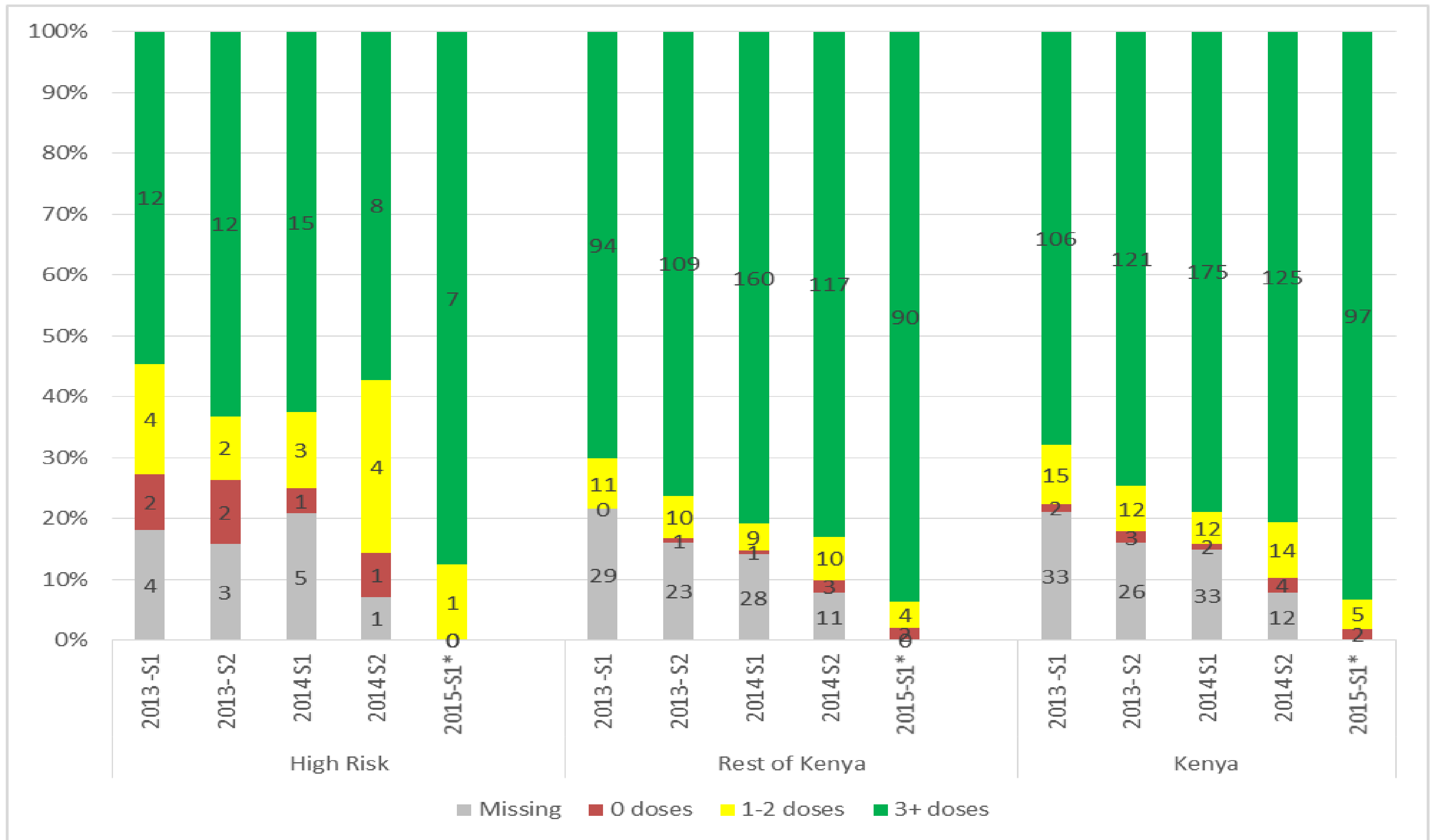
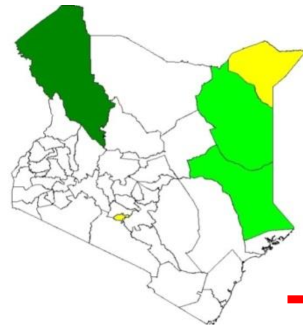
Population immunity
OPV status of NP AFP, 6-59 Months, 2013-2015



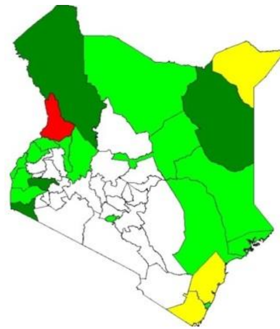
High risk- Garissa, Wajir, Mandera and Turkana

Kenya: IM performance May 2013 – Dec 2014

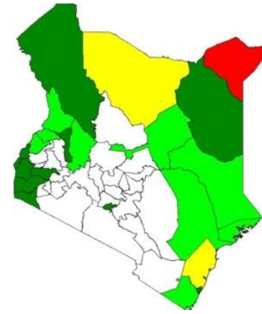
Round 1: 27-31 May2013



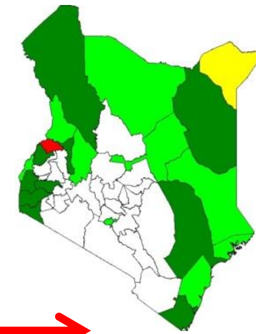
Round 2: 17-21 June2013



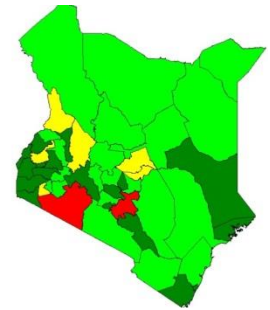
Round 3: 1-10 July 2013



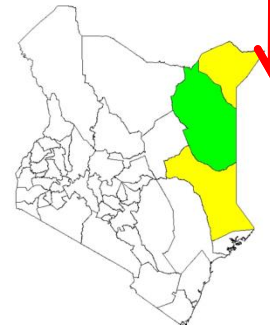
Round 4 17-21 Aug 2013



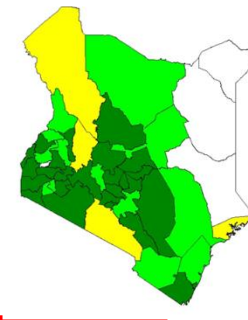
Round 5- 21-25 Sept 2013



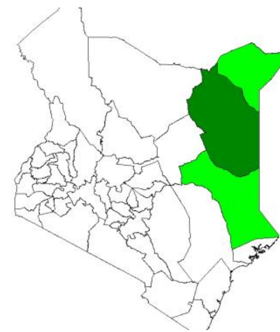
Round 6: 16-20 Nov2013



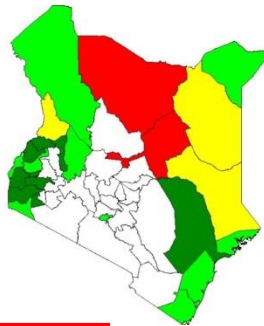
Round 7: 14-18 Dec2013



Jan 18- 22 2014

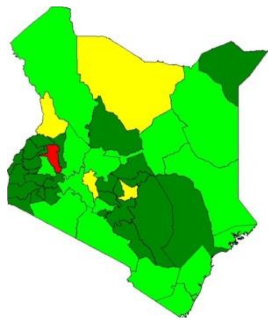


Feb 1-5 2014

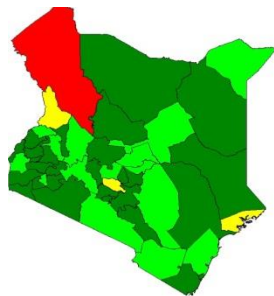


April 5-9 2014

May 10-14 2014

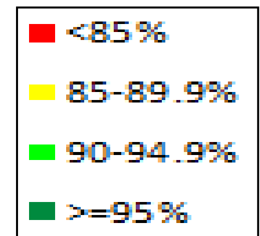


June 21-25 2014

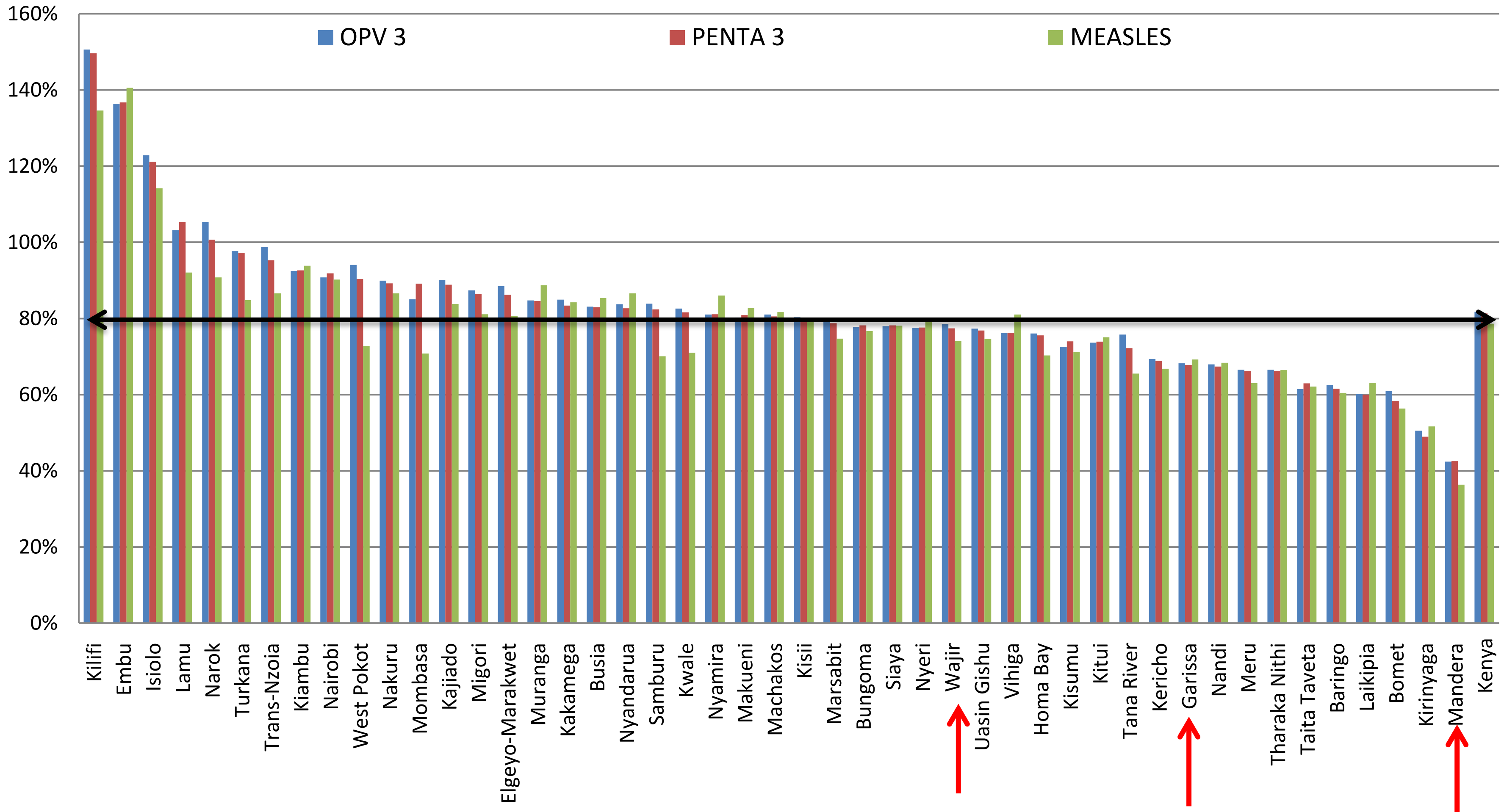


Nov 8-12 2014

Dec 6-10 2014



RI-County Performance 2014



Immunizations

- Quality of SIA campaigns:
  - IM: >90% for most of the campaigns at national level as well as in high risk counties
  - LQAS introduced in Nov 14 in 5 counties
- Strategies for vaccination of nomadic and migrant populations:
  - Teams focusing on nomadic settlements
  - Vaccination teams at water points
  - Transit teams to vaccinate children in movement
- No campaigns since Dec 14:
  - Controversy around vaccines used for SIAs

Immunizations

- Permanent vaccination point at Turkana; no such points in NE counties.

- Vaccine management:
  - Vaccine utilization/ wastage is being tracked
  - Need to improve data quality and timeliness
  - Wastage at storage level should also be tracked

- Low routine immunization coverage in some of the high risk counties:
  - Garissa and Mandera <70%
  - cMYP being updated, however, no specific RI improvement plan for high risk counties.

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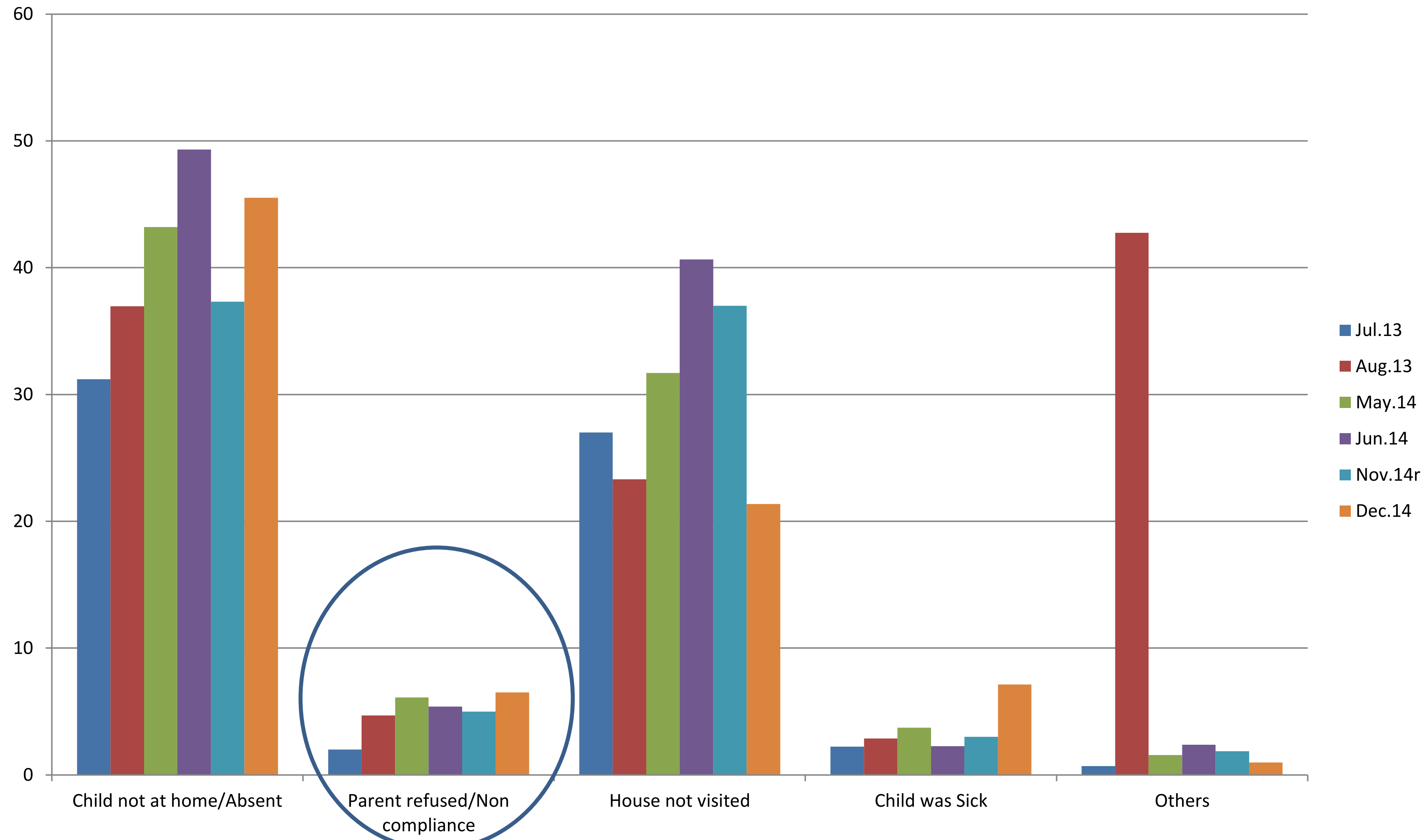
Communications

- Outbreak Response and Legacy Communication Strategy to December 2015 in place and implemented but no outbreak plan in place for 2016.

- Existing strategy has contributed to reasonably good coverage (missed children above 5%) with **refusal and non-compliance less than 10% of all missed children**.

Reasons for non-vaccination/missed children during SIAs July 2013-December 2014



Communications (ACSM)

- Major activities within the highest risk Counties focused on:
  - social mobilization for campaign awareness,
  - engagement of community leaders,
  - national and county targeted media and IEC materials,
  - and the piloting of a school based polio/RI communication strategy.

- IM data used for tracking and course correction

Communications

- Religious leaders and other influencers at the local (sub-county level) engaged in response.
- However, recent issues around Immunization campaigns a cause for concern.
- IPC training of vaccinators is of suboptimal level.
- Cascade ACSM training not fully rolled out.
- Social mobilization movement and activity plan tools for SIAs and mobile populations seen.

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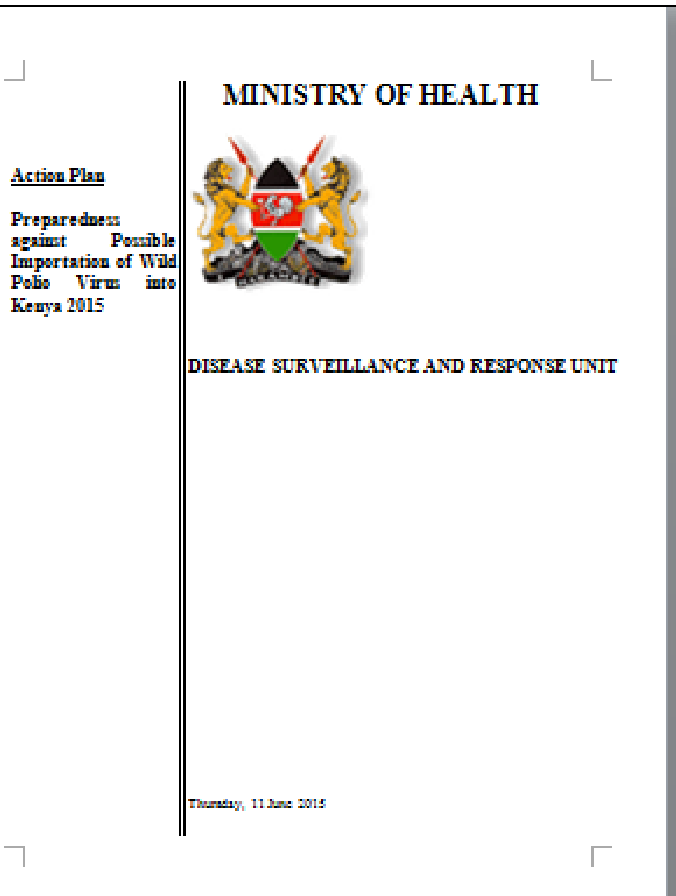
Outbreak preparedness and response plan



MINISTRY OF HEALTH

Action Plan

Preparedness against Possible Importation of Wild Polio Virus into Kenya 2015

DISEASE SURVEILLANCE AND RESPONSE UNIT

Thursday, 11 June 2015

- Outbreak preparedness and response plan including communication response plan exists.
- However, it needs to be revised to make it comprehensive and specific.
- Country has 4 SIAs (SNIDs) planned for year 2015 (1 bOPV and 3 tOPV).
  - Postponed SIAs
- RI improvement plans?

Response to the questions

Have the National authorities and supporting partners played their role as laid down in the WHA resolutions?	**Yes.** The response under the leadership of government was commendable.
Were recommendations of previous outbreak response assessment fully implemented?	**Partially.** 60% recommendations fully implemented.
Did the outbreak response activities meet the outbreak response standards?	**Partially.** It was robust response however, 95% coverage as per IM not achieved.

Response to the questions

How likely is it that the country has stopped polio transmission based on analysis of surveillance, SIA and other programme data?	**Yes.** The evidence suggests that country has interrupted transmission.
Is population immunity sufficient enough to reliably maintain a polio-free status?	**No.** Population immunity is good as of now. However delay in campaigns and low RI coverage pose a serious risk.
Is AFP surveillance sensitivity currently adequate to detect all transmission?	**No.** There has been significant drop in AFP detection in 2015.

Response to the questions

Is country well prepared for responding to any new outbreak?	**Partially.** The outbreak response plan needs to be strengthened.
Was the communication response to outbreak adequate?	**Yes.** Sustained high level of vaccine acceptability despite repeated campaigns.
Is there strong outbreak response communication strategy in place?	**Partially.** The communication response plan needs to be strengthened and updated.

Response to the questions

Does the country have additional unmet financial or resource needs?	**Yes.** Particularly in surveillance (funds and human resources) and RI
What are the risks to maintaining polio free status?	• Declining surveillance sensitivity. • Delay in SIAs in 2015 • Low RI coverage in high risk areas • Population movement • Risk of possible continuing circulation in Somalia • Managing the effect of devolution.

Conclusions

Conclusions (1)

The assessment team commends the robust outbreak response by the country with strong vaccination, communication strategy and strengthened surveillance.

Conclusions (2)

- **The assessment team believes that transmission in Kenya has been interrupted.**
- Assessment team is concerned about decreasing sensitivity of surveillance in 2015; country may not be able to quickly detect any new importation/ transmission, if it occurs.
- As of now population immunity is high. However, low RI coverage in some of the high risk areas and delay in SIAs pose significant risk.
- Outbreak preparedness and response plan including communication response plan needs to be strengthened and updated for ensuring a robust and rapid response

Recommendations

Recommendations

- **Surveillance:**
  - Rapidly improve sensitivity of surveillance by improving quality and frequency of active surveillance visits, documenting and updating reporting network, capacity building of staff and providing adequate resources.
- **Population immunity:**
  - Conduct the SIAs scheduled as quickly as possible.
  - Sustain and strengthen reach to high risk population groups for SIA and RI
  - Deploy Permanent vaccination points in towns, villages near border
  - Rapidly improve RI in high risk counties by developing and implementing county specific RI improvement plans
  - Fully implement communication strategy; IPC training of vaccinators, ACSM training of health workers

Recommendations

- **Outbreak response preparedness:**
  - Revise and update the outbreak response plan including communication response plan before next HOA TAG meeting.
  - Conduct a simulation exercise by the end of Q1 2016.
- **Resources:**
  - Ensure adequate resources for surveillance at national and county levels particularly related to active surveillance visits and sensitization of reporting network.
  - Rapidly fill the vacancies in health facilities
  - Develop and implement a plan for systematic capacity building of staff on RI and surveillance.

Thank you