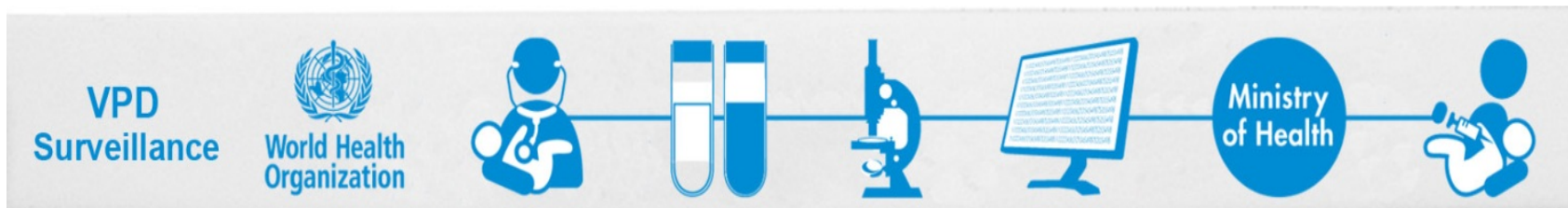


Moving Forward after the Strategic Review: Next Steps and Future Vision

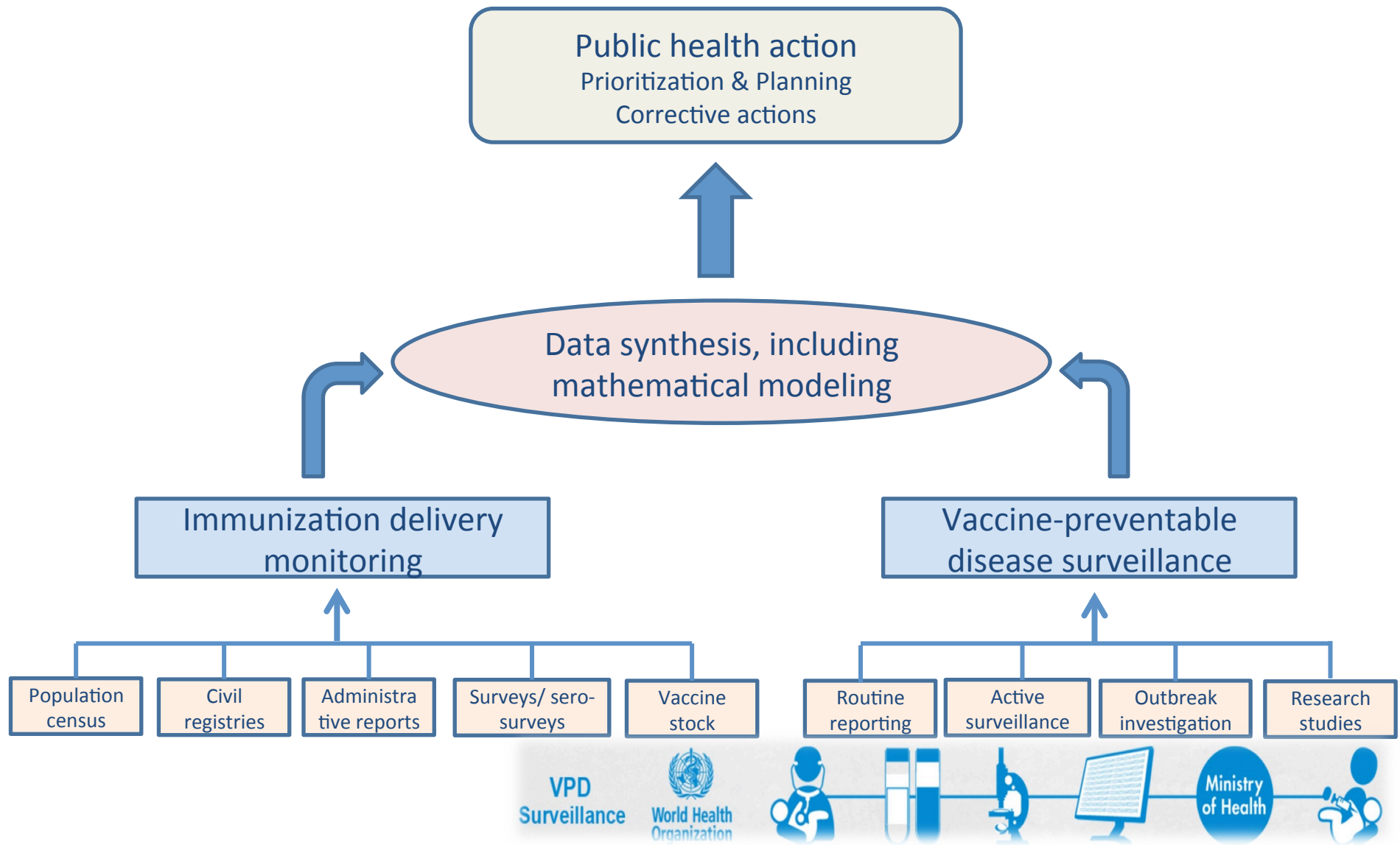
T. Cherian, WHO



Presentation outline

- Reminder on where sentinel site surveillance fits in our overall surveillance & monitoring strategy
- Re-emphasize some of the positive outcomes so far
- Proposed next steps to address gaps, based on the recommendations from the strategy review
- Longer term vision for this surveillance platform

Figure 1. Framework for immunization programme and impact monitoring

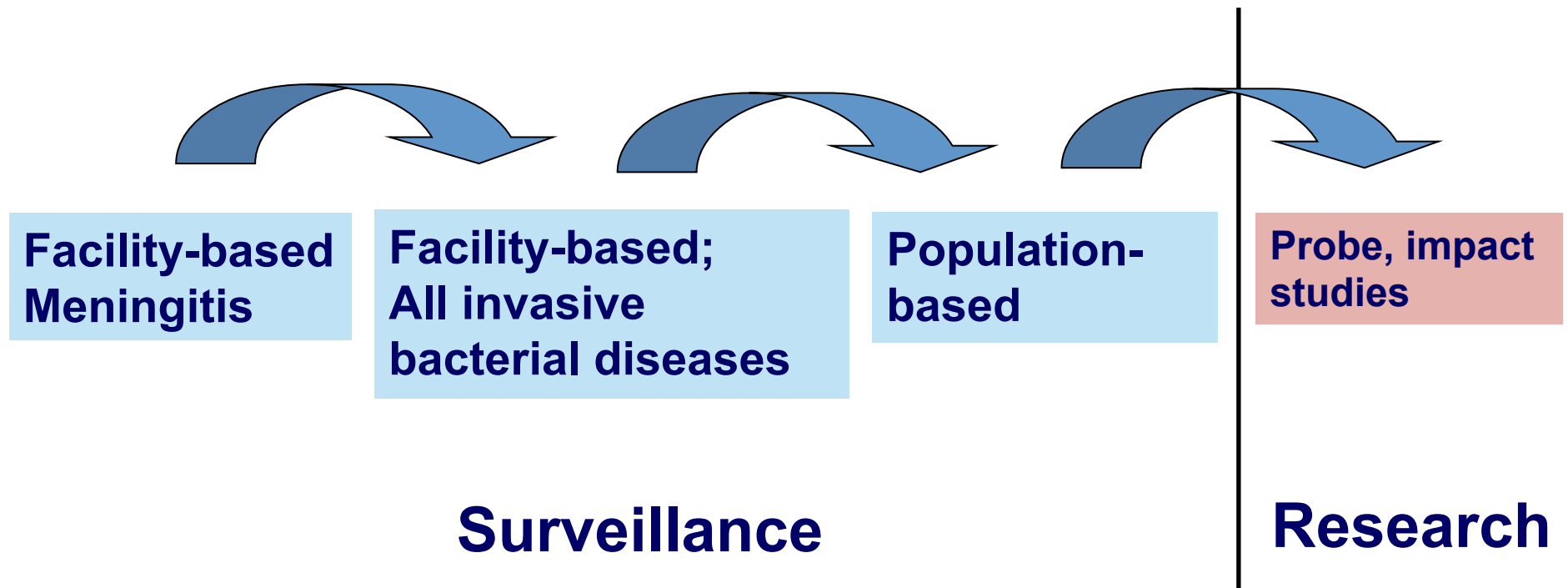


Type of surveillance needs to be aligned to surveillance objectives

Type	Objective	Example
Country-wide, active, with lab confirmation of all cases	Document eradication/elimination -find all chains of transmission; certification	Polio, measles
Country-wide passive, aggregate reporting, with selective investigation	Routine monitoring & reporting; outbreak detection & investigation	Pertussis, diphtheria,
Sentinel site surveillance	Networks of sentinel sites providing representative data for the population	Meningitis, Invasive bacterial diseases, rotavirus
Epidemiologic studies (detailed, labour intensive) and sero-surveys	Obtain epidemiological information or assess vaccine impact	Hepatitis B impact; impact assessment special studies (e.g. PCV impact on radiological pneumonia)

A strategy to deal with the complexity of Hib and pneumococcal disease surveillance

Bridging to get more comprehensive data



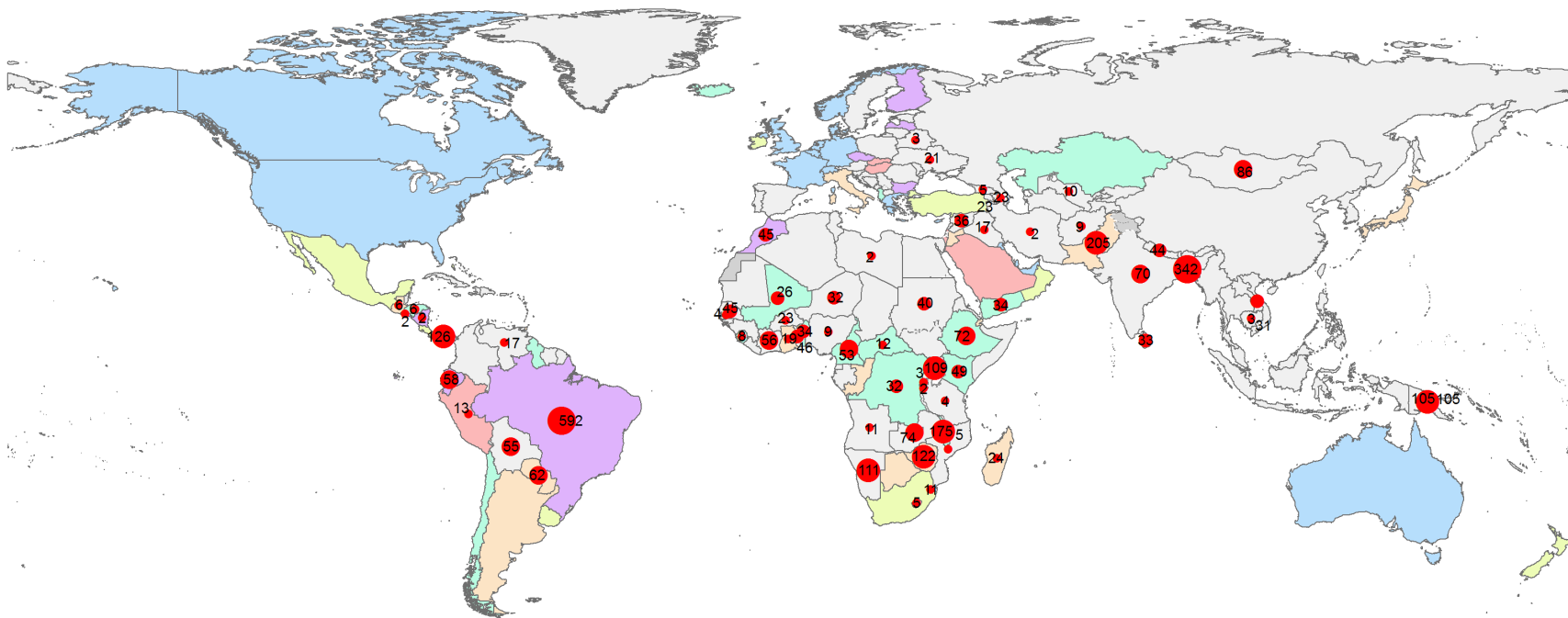
No. Diarrhoea Hospitalizations due to Rotavirus per Year, by Age Group, All Inclusion Sites —2011-2012

Region	# sites	0-5m		6-11m		12-23m		24-59m		All ≤59m	
		No. tested	No. pos	No. tested	No. pos	No. tested	No. pos	No. tested	No. pos	No. tested	No. pos
AFR	15	2,856	1,311	5,234	2,427	3,678	1,355	1,364	305	13,132	5,398
AMR*	22	5,677		1,265		4,044	1,107	2,187	757	14,988	4,054
EMR	12	2,982	1,113	5,335	2,027	4,491	1,458	2,036	512	14,844	5,110
EUR	9	1,497	348	3,583	1,225	5,646	2,199	6,113	2,206	16,918	6,007
SEAR	5	349	168	792	466	1,061	505	486	133	3,749	1,634
WPR	16	2,185	775	4,486	2,151	3,710	1,965	1,298	503	11,722	5,404
All	79	9,869	3,715	19,430	8,296	22,630	8,589	13,484	4,416	75,353	27,607

*AMR – reports for age groups 0-11, 12-23, 24-59, All ≤59 only

GLOBAL IB-VPD SURVEILLANCE

- COUNTRIES WITH PCV VACCINE INTRODUCTION AND PNEUMOCOCCUS CASES, 2008 -2012



Map Scale:

0 500 1,000 2,000 3,000 Miles

Data Source:

Admin. Boundaries: World Health Organization
Map Production: EPI, World Health Organization

Data as on 13 Sep 2013

of Pneumococcus Cases

• 1 - 25
• 26 - 50
• 51 - 100
• 101 - 250
• 251+

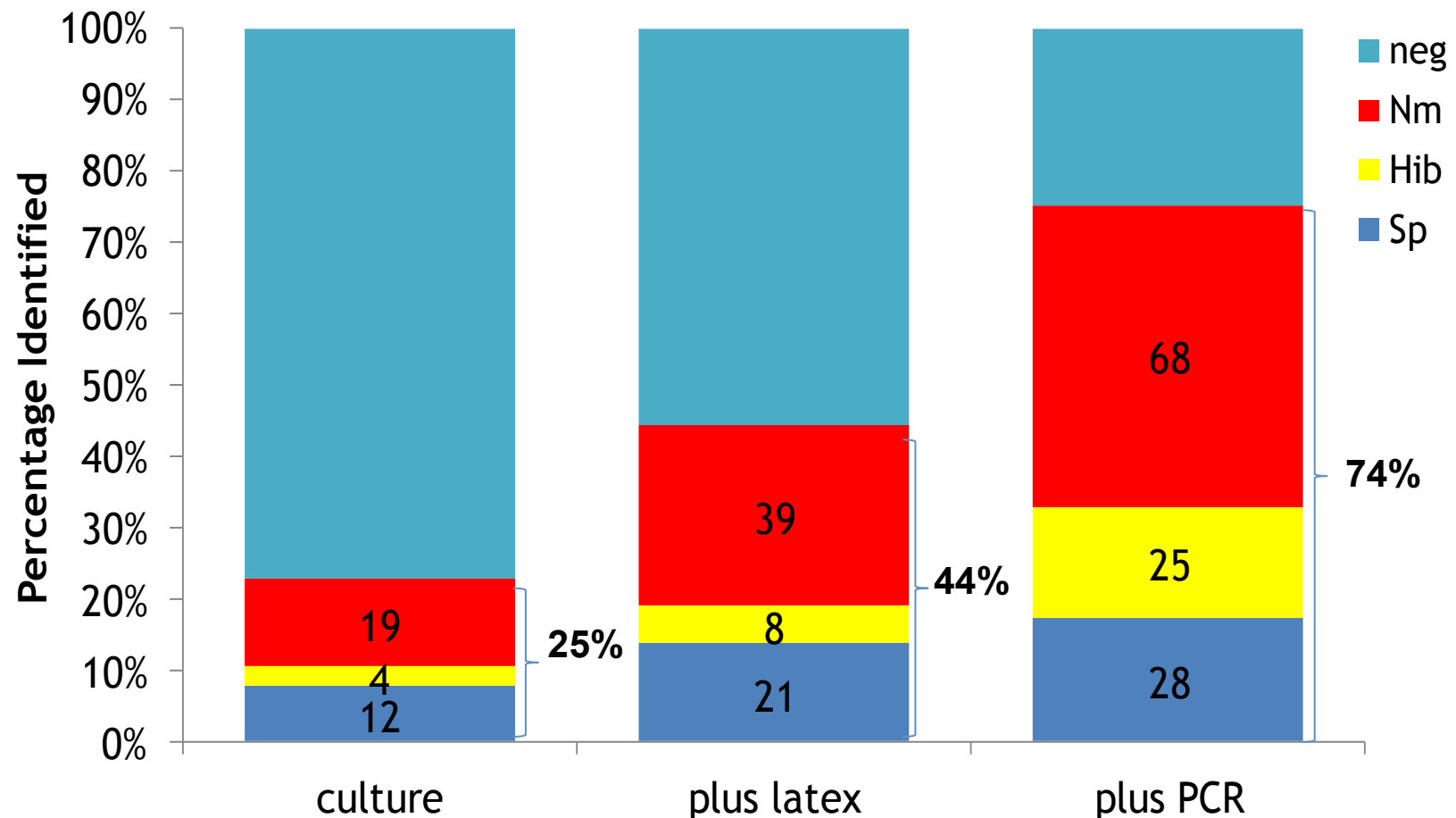
PCV Vaccine Introduced by Year

• Prior to 2008
• 2008
• 2009
• 2010
• 2011
• 2012

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 dashes lines on maps represent approximate border lines for which there may not yet be full agreement. ©WHO 2013. All rights reserved.

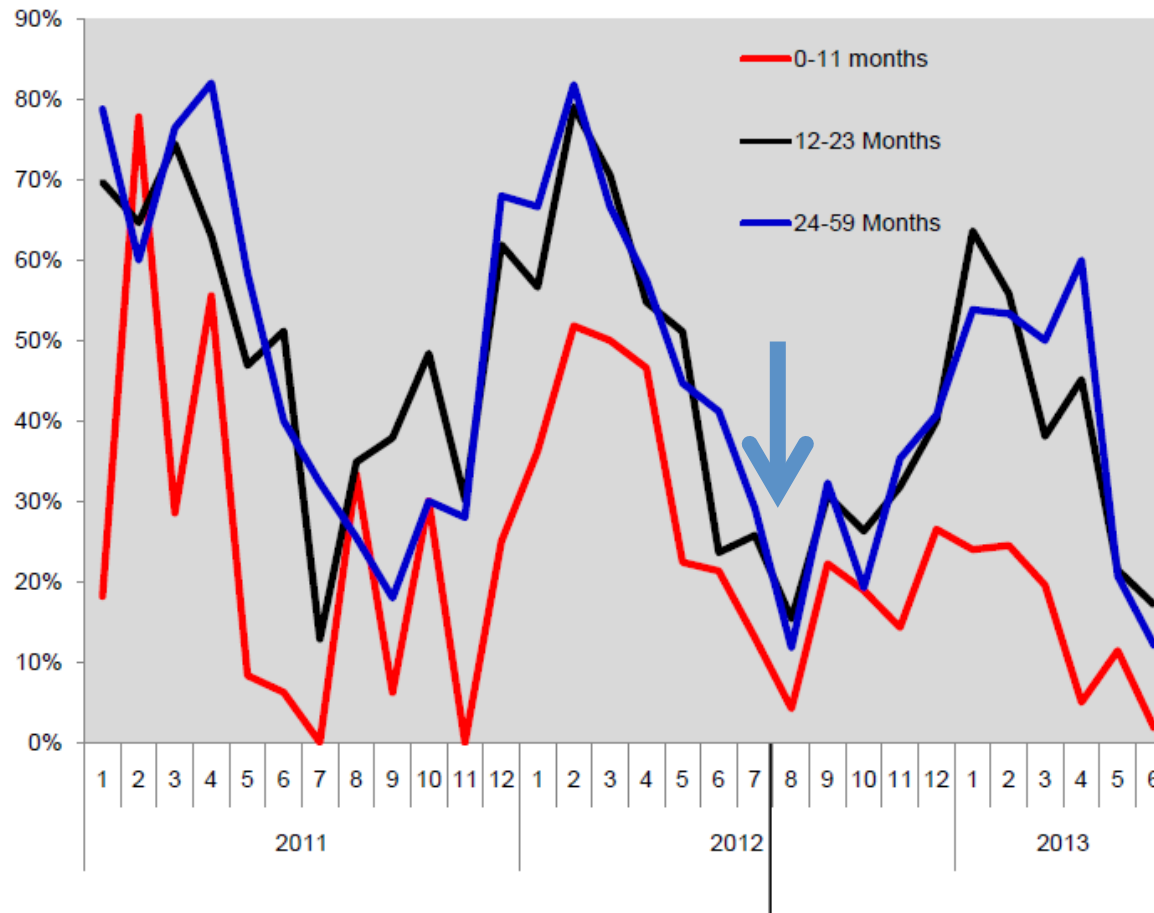
Impact of different test methods on diagnostic sensitivity for bacterial aetiologies of meningitis (WHO/EUR)

Among 153 probable bacterial meningitis cases tested by culture, latex agglutination and PCR.....



Note: Of the 36 specimens also tested by BINAX, SP identified in 6 (16%) of which 3 were identified by culture and-or latex and all were identified by PCR.

Impact of vaccination on % diarrhoea positive for RV



VPD
Surveillance

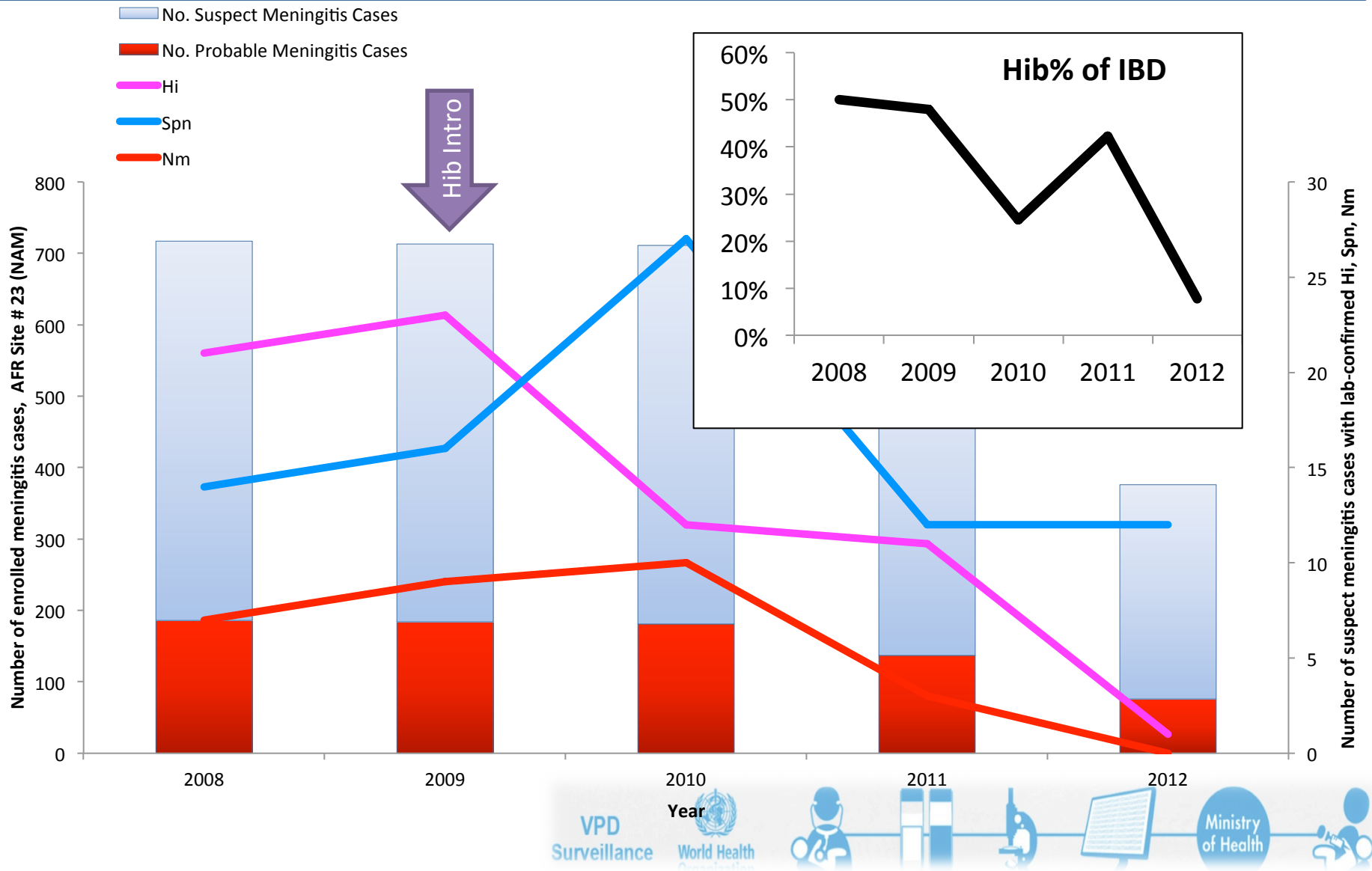


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Impact of Hib Vaccine Introduction on Hib meningitis

AFR (Namibia: Site # 23)



Proposed next steps

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Actions	Timeline
<p>Target IB-VPD Support to sites meeting performance criteria</p> <ol style="list-style-type: none"> 1. Analysis of 2013 data, by site, against performance criteria for site classification 2. Site selection for targeted support <ul style="list-style-type: none"> • Need to manage country expectations 	<p>End 2013</p> <p>Q1 2014</p>
<p>IB-VPD & RV Network Management</p> <ol style="list-style-type: none"> 1. Finalize action plan for implementation of recommendations from strategic review <ol style="list-style-type: none"> a) Define long term surveillance objectives b) Updated list of performance criteria 2. Develop performance monitoring framework <ol style="list-style-type: none"> a) Site & lab assessment schedule 	<p>Q1 2014</p> <p>Q1 2014</p>

Actions	Timeline
<p>Data management: facilitate timely sharing of case-based data at all levels of WHO</p> <ol style="list-style-type: none"> 1. IB-VPD: data dictionary finalized 2. IB-VPD: formalize standard variable coding, zero reporting, 3. Pilot web-based reporting of case-based data in 2 regions 4. Review and refine data management systems in remaining regions 5. Establish mechanisms to link serotype/ genotype data in RRL to individual cases 	<p>2013 End 2014 End 2014 End 2014 End 2014</p>
<p>Laboratory Networks</p> <ol style="list-style-type: none"> 1. Laboratory IB-VPD & RV network meeting, with discussion and consensus on lab component of action plan 2. Finalize protocols for selection specimens for RRL testing <ol style="list-style-type: none"> a) Serotyping/genotyping b) Quality control 3. Assessment of added value of new diagnostics using all available data 	<p>Q4 2013 Q2 2014 End 2014</p>

Actions	Timeline
Communication <ol style="list-style-type: none"> 1. Revise global IB-VPD & RV surveillance bulletins 2. Modify WHO web-site 	Q1 2014
Impact assessment <ol style="list-style-type: none"> 1. Draft guidance for countries regarding use of alternate approaches for PCV impact assessment (i.e. pneumonia hospital admissions, radiological pneumonia or nasopharyngeal carriage), including conditions under which such approaches may not be used 2. Publish surveillance requirements for impact assessment and update guidance on use of data for documenting impact 	<p>End 2014</p> <p>2015?</p>

How can we build on this platform?

- Test for **more pathogens for same disease syndromes** and on same clinical specimens
 - e.g. diarrhoea, meningitis/encephalitis
- Expand case definitions and age groups under surveillance to include **other diseases but use same lab tests**
 - e.g. typhoid
- Add **other diseases**, using **additional lab tests**
 - e.g. CRS, malaria
- **Utilize the platform** and the capacity strengthening to conduct epidemiological investigations
 - Outbreak investigation for pertussis using laboratory network
 - Impact assessment of PCV on pneumonia

Conclusions

- Sentinel site surveillance network, with a **bacterial laboratory network** has been established
 - Varying levels of performance, depending on surveillance objective and disease under surveillance
- The strategy review provides guidance for **actions to optimize the network performance**
 - Need for a monitoring framework and regular monitoring of performance
- The network provides a **platform** to
 - Conduct surveillance for additional diseases
 - Use the capacity to conduct more sophisticated epidemiological studies, e.g. impact studies, outbreak investigations

Thank you

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