

# IMMUNIZATION VACCINE DEVELOPMENT

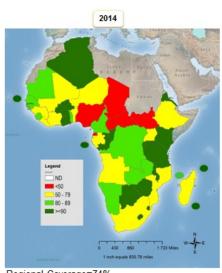
# MONTHLY IMMUNIZATION

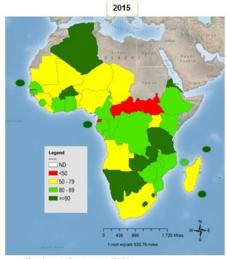
# IN THE AFRICAN REGION

July-August 2016 (Vol 4, issue N° 5)

Special issue on 2015 WHO/UNICEF Estimates of National Immunization Coverage (WUENIC)

# Coverage of third dose of DTP containing vaccine in AFR, 2014 vs 2015



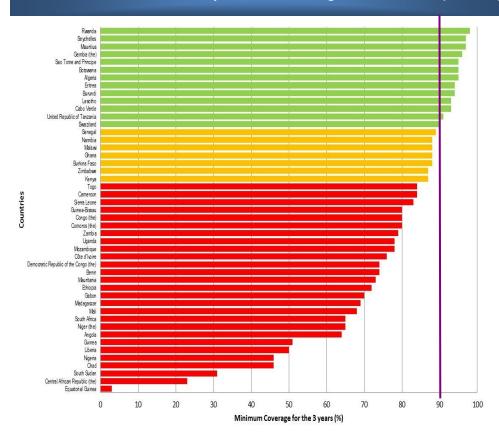


Regional Coverage=74%

Regional Coverage=76%

Source: WHO/UNICEF estimates for 2015, July 2016 release http://apps.who.int/immunization\_monitoring/globalsummary/timeseries/tswucoveragedtp3.html

## Countries which sustained for 3 years, DTP3 coverage of at least 90% (WUENIC)



# **Highlights**

This special issue focusses on the 2015 WHO & UNICEF Estimates of National Immunization Coverage (WUENIC) released in July

According to the 2015 WUENIC, the Regional coverage for DTP3 containing vaccine increased from 74% to 76% between 2014 and 2015. Around 24.96 million children were vaccinated with DTP3 in 2015 compared to 23.98 million in 2014.

Sixteen countries reached a DTP3-containing vaccine coverage ≥90% in 2015 compared to 18 in 2014.

In 14 countries coverage was sustained at >90% for the last 2 consecutive years, while it dropped in 4 (Ghana, Kenya, Malawi Zimbabwe) and increased in Namibia and

The coverage increased in 17 countries including in 4 of the 6 priority countries (Ethiopia, Chad, Nigeria & DRC) that received direct support from the Regional Office. Coverage in CAR, Equatorial Guinea and South Sudan remained below 50% for both years and even decreased in South Sudan and Equatorial Guinea. The conflict in CAR and in South Sudan with insecurity areas and inadequate implementation of RED approach in Equatorial Guinea are the main causes of the sub optimal performances observed.

### **Highlights**

Detailed analysis of the 2015 WUENIC data show that only 16 out of 47 countries achieved a national DPT3 coverage of ≥ 90% as set by the Global Vaccine Action Plan & the Regional Strategy with 13 sustaining this coverage for 3 consecutive years representing only 12% of the regional surviving infants.

This means that majority of surviving infants in the region still live in countries which did not reach the GVAP/RVAP recommended target of ≥90% coverage, denoting persistent iniquities between countries.

Seven countries sustained a coverage of between 87 and 89%.

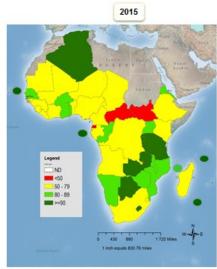
More than half of the countries (27) with 14% of surviving infants had a coverage <87% for 3 consecutive years.

Assessment in many countries showed that strategies aimed at increasing coverage and reducing inequities are not optimally implemented and much efforts are still needed in order to meet and sustain the set goals.

Among other causes that affect the EPI performances in the Region we could list: insufficient number of immunization sessions at HF, vaccine stockouts at operational level and lack of secured domestic funding.

# Coverage of first dose of Measles Containing Vaccine (MCV1) in AFR, 2014 vs 2015

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Regional Coverage=74%

# **Highlights**

The regional coverage for MCV1 increased from 72 to 74% and MCV2 from 11 to 18% with only 23/47 countries having introduced this vaccine.

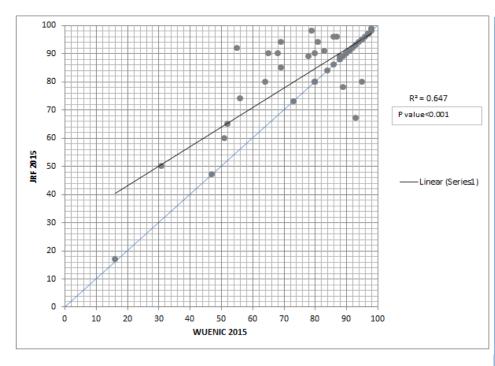
Analysis of the WUENIC 2015 show that 12/47 countries in the region have reached 90% coverage for the 1st dose of measles containing vaccine (MCV1) compared to 14 in 2014

11 countries have sustained 90% coverage during 2 consecutive years: Algeria, Botswana, Burundi, Cape Verde, Gambia, Lesotho, Mauritius, Rwanda, Sao Tome et Principe, Seychelles, Tanzania and Zambia. Eritrea, Ghana and Zimbabwe who had a coverage≥90 in 2014 ha a slight drop this year

MCV2 coverage ≥90 were observed in only 3 countries (Algeria, Capo Verde and Seychelles)

Three countries (CAR, Equatorial Guinea and South Sudan) reported MCV1 coverage below 50% for both years.

# Comparison between 2015 DTP3 national official reported coverage (JRF) and WUENIC



The figure shows a good positive correlation between country reported data in the JRF and the WUENIC for 2015 with a P value <0.001. This implies that the administrative reported data can be reliably used for decision making on a monthly basis and for programme review and planning prior to the release of the WUENIC later the following year. Caution should be taken for countries which persistent data quality issues.

# **Highlights**

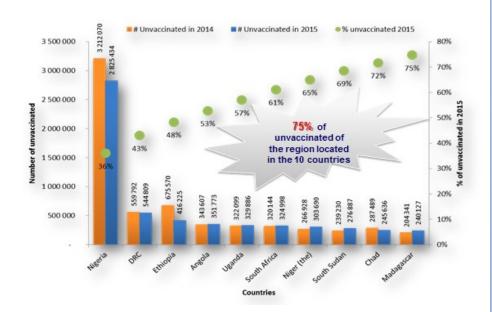
Comparative analysis of 2015 DTP3 administrative data (JRF) and WUENIC show similar coverage in 27 countries with 14 having met the GVAP target of 90%.

The WUENIC for Lesotho and Botswana, was higher than the administrative data, highlighting possible underreporting from national administrative system.

Equatorial Guinea had the same level of coverage for the 2 source but below 20% while in South Sudan, the WUENIC showed a coverage lower than the reported by 19 points.

However, in 17 countries, there was a gap between these 2 sources of data (Administrative data > WUENIC). The highest gap (≥20 points) was observed in South Africa, Mali, Niger, and Chad. Moderate gap (>10 and <20) was observed in Democratic Republic of the Congo (the), Benin, Uganda, Madagascar, Angola, Nigeria, Liberia and South Sudan. Minor gap (≥3 and <=10) was observed in Ethiopia, Côte d'Ivoire, Guinea-Bissau, Guinea and Zimbabwe. Majority of these countries developed data quality improvement plans which are being implemented. This will surely contribute to reduce the gap between the 2 sources of data.

# Countries with highest number of DTP3 under immunized children, 2014-2015 (WUENIC)



Number under/unvaccinated with DTP3 containing vaccine in AFR:

2014	2015
8 234 679	7 840 969

# **Highlights**

The 2015 WUENIC data show that an estimated 7.84 millions children were not reached with DTP3 in 2015 compared to 8.2 million in 2014.

Around 75% of these children are located in the 10 countries shown in the beside graph with 53% of these children located in 4 countries only (Nigeria, Ethiopia, DRC and Angola).

Those countries are among the AFR priority countries that are supported in the development and implementation of national immunization coverage improvement plans with specific strategies to reach the unreached children. These are collaborative efforts with other immunization partners need to be strengthened as well as close monitoring done through regular teleconferences and field visits.

# Routine immunization coverage per country in AFR, all antigens in 2015 (WUENIC)

0	BCG		Penta 1		Penta 3		MCV1		MCV2		PAB		PCV3		OPV3		RCV1		Rota Last		YFV	
Cname	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015
Algeria	99	99	99	99	95	95	95	95	99	99	92	92	NA	NA	95	95	NA	NA	NA	NA	NA	NA
Angola	81	79	81	77	64	64	60	55	NA	26	78	78	45	58	68	70	NA	NA	18	49	77	72
Benin	93	89	90	90	75	79	68	75	NA	NA	93	85	70	74	75	79	NA	NA	NA	NA	64	71
Botswana	98	98	98	98	95	95	97	97	85	85	92	92	81	81	96	96	NA	NA	82	82	NA	NA
Burkina Faso	98	98	95	95	91	91	88	88	17	50	89	92	91	91	91	91	NA	68	91	91	88	88
Burundi	92	93	98	97	95	94	94	93	60	65	85	85	95	94	95	94	NA	NA	96	96	0	0
Cabo Verde	99	94	99	97	95	93	93	92	79	95	92	92	NA	NA	95	93	79	95	NA	NA	0	0
Cameroon	82	74	93	92	87	84	80	79	NA	NA	85	85	87	85	86	83	NA	NA	46	73	80	77
Central African Republic (the)	74	74	69	69	47	47	49	49	NA	NA	60	60	47	47	47	47	NA	NA	NA	NA	48	48
Chad	59	70	60	60	46	55	54	62	NA	NA	60	75	NA	NA	54	62	NA	NA	NA	NA	40	49
Comoros (the)	76	73	83	81	80	80	80	81	NA	NA	85	85	NA	NA	79	81	NA	NA	NA	NA	NA	NA
Congo (the)	95	85	95	85	90	80	80	80	NA	NA	85	85	85	80	90	80	NA	NA	60	80	65	65
Côte d'Ivoire	84	79	93	99	76	83	62	72	NA	NA	82	85	NA	72	76	81	NA	NA	NA	NA	49	49
DR Ccongo	78	74	81	82	80	81	77	79	NA	NA	82	82	61	73	79	78	NA	NA	NA	NA	65	65
Equatorial Guinea	56	48	59	28	20	16	44	27	NA	NA	70	70	NA	NA	24	17	NA	NA	NA	NA	0	0
Eritrea	97	97	97	98	94	95	90	85	NA	75	94	94	NA	NA	94	95	NA	NA	25	96	NA	NA
Ethiopia	75	75	86	94	77	86	70	78	NA	NA	80	80	76	85	75	85	NA	NA	63	83	0	0
Gabon	91	98	77	87	70	80	61	68	NA	NA	85	85	NA	NA	68	79	NA	NA	NA	NA	60	68
Gambia (the)	96	98	98	99	96	97	96	97	73	77	92	92	96	97	97	96	NA	NA	92	97	96	97
Ghana	99	97	99	97	98	88	92	89	67	63	88	88	93	88	93	88	92	89	98	88	92	88
Guinea	72	72	60	60	51	51	52	52	NA	NA	80	80	NA	NA	42	42	NA	NA	NA	NA	53	53
Guinea-Bissau	94	94	92	92	80	80	69	69	NA	NA	80	80	NA	10	78	78	NA	NA	NA	NA	53	69
Kenya	94	87	97	96	92	89	79	75	NA	28	76	80	81	75	93	83	NA	NA	19	66	1	1
Lesotho	98	98	98	98	93	93	90	90	82	82	83	83	NA	29	90	90	NA	NA	NA	NA	NA	NA
Liberia	73	74	74	77	50	52	58	64	NA	NA	89	89	45	56	49	52	NA	NA	NA	NA	54	56
Madagascar	75	70	83	79	73	69	64	58	NA	NA	78	78	72	69	73	71	NA	NA	39	69	NA	NA
Malawi	97	90	97	93	91	88	85	87	NA	8	89	89	87	88	87	88	NA	NA	83	84	NA	NA
Mali	79	79	90	80	77	68	80	76	NA	NA	85	85	78	58	84	76	NA	NA	13	33	64	64
Mauritania	98	85	88	87	84	73	84	70	NA	NA	80	80	71	71	84	67	NA	NA	5	56	0	0
Mauritius	97	98	97	98	97	97	98	99	85	85	95	95	NA	NA	98	98	98	99	NA	66	NA	NA
Mozambique	94	95	92	90	79	80	85	85	NA	NA	83	83	73	80	79	80	NA	NA	NA	17	NA	NA
Namibia	97	94	92	98	88	92	83	85	NA	NA	85	85	NA	81	88	92	NA	NA	NA	87	NA	NA
Niger (the)	76	77	89	85	68	65	72	73	3	16	81	81	13	74	67	65	NA	NA	19	70	70	72
Nigeria	64	68	64	70	49	56	51	54	NA	NA	55	55	NA	13	49	55	NA	NA	NA	NA	51	54
Rwanda	99	99	99	99	98	98	97	97	NA	87	90	90	98	98	98	98	NA	97	98	98	0	0
Sao Tome and Principe	95	97	98	98	95	96	92	93	71	76	99	99	95	96	95	96	NA	NA	NA	NA	92	93
Senegal	95	95	94	94	89	89	80	80	13	54	91	91	81	89	85	85	80	80	NA	83	80	80
Seychelles	98	99	99	99	99	97	99	98	98	98	NA	NA	NA	NA	99	97	99	98	NA	NA	NA	NA
Sierra Leone	90	90	88	95	83	86	78	76	NA	60	85	85	83	86	83	86	NA	NA	53	85	80	78
South Africa	77	69	73	72	70	69	70	76	60	63	80	80	65	69	71	70	NA	NA	72	72	NA	NA
South Sudan	46	43	49	49	39	31	22	20	NA	NA	NA	NA	NA	NA	44	41	NA	NA	NA	NA	NA	NA
Swaziland	99	98	99	96	98	90	86	78	89	89	88	88	67	88	98	98	NA	NA	NA	36	NA	NA
Togo	79	86	91	92	87	88	82	85	NA	NA	81	81	34	86	85	88	NA	NA	35	85	82	85
Uganda	93	93	89	89	78	78	82	82	NA	NA	85	85	50	66	82	82	NA	NA	NA	NA	0	0
United Republic of Tanzania	99	99	99	99	97	98	99	99	29	57	88	90	93	95	97	96	99	99	97	98	0	0
Zambia	99	99	96	97	86	90	85	90	33	47	85	85	77	86	78	90	NA	NA	73	82	NA	NA
Zimbabwe	99	90	98	94	91	87	92	86	NA	NA	75	75	91	87	92	88	NA	NA	48	87	NA	NA
AFR	81	80	83	85	74	76	72	74	11	18	76	77	50	59	74	76	9	12	29	41	42	43

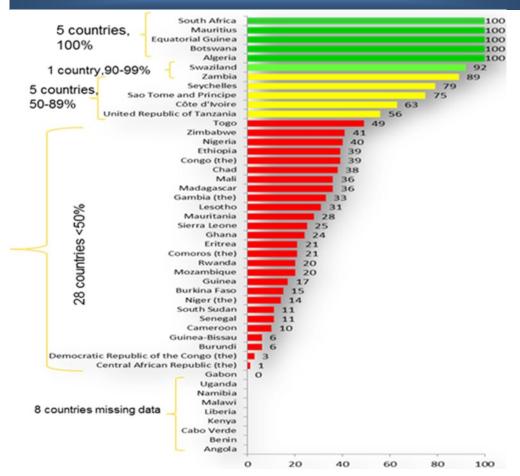
# Number of countries that have reported vaccines stock outs at national and district level (JRF 2015)



Vaccines	National level	District level	Countries
BCG	17	18	
Penta	5	6	National= Angola, Congo, Equatorial Guinea, Gabon, Mali District= Angola, Congo, Equatorial Guinea, Gabon, Cabo verde, DRC
Pneumo	0	1	District= Togo
Rota	2	3	National = Eritrea, Mauritania District= Eritrea, Mauritania, Togo
OPV	4	7	National=Guinea, Kenya, Mali, Mauritania District=Botswana, Cabo verde, cameroon, DRC, Kenya, Mali, Mauritania
Measles	3	4	National = Gabon, Ghana, Guinea District= Cabo Verde, Gabon, Ghana, Guinea Bissau
YF	5	5	National= Burkina Faso, Congo, Cote d'Ivoire, Guinea Bissau, Kenya District=Burkina Faso, Congo, Cote d'Ivoire, DRC, Guinea Bissau
Tetanus	5	6	National= Guinea, Guinea Bissau, Mauritania, Swaziland, Zimbabwe National=Cabo Verde, Cameroon, DRC, Guinea, Guinea Bissau, Swazilan

\*Penta = DPT-HepB-Hib

# Funding of immunization programmes by Governments in the AFR in 2015



# **Highlights**

Analysis of data as reported in the 2015 Joint Reporting form (JRF) show that 17/47 countries (36%) in the region reported at least one episode of stock out of one or more vaccine at national level for a duration of at least one week.

For some countries, there was also shortage at district level.

BCG vaccine has been the most affected antigen for stock out (18 countries), followed by OPV (7countries), DTP-HepB-Hib and Tetanus (6 countries).

Most of the stock outs at district level were due to unavailability of vaccines at national level.

Recurrence of these vaccine shortage stock outs at district level in some countries probably may have contributed to the interruption of vaccination sessions and therefore to the non achievements of the set objectives.

Tailored corrective measures should be implemented to improve vaccine management in those countries.

### **Highlights**

Analysis of 2015 country reported data through the Joint Reporting form (JRF) indicates that 38 countries in the region confirmed having their immunization programmes funded by their Government.

Five countries reported funding 100% of their immunization programmes with one funding ≥ 90%. More than half of the countries (28)

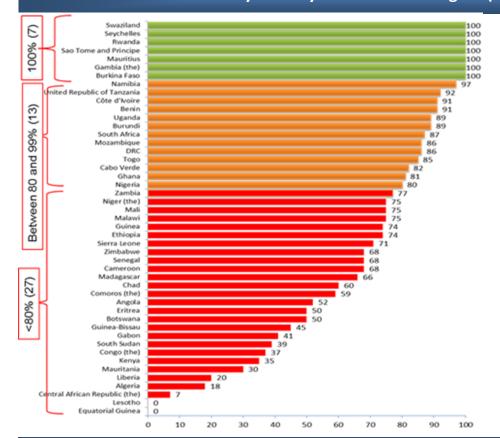
are funding <50% of their immunization programme among which 10 funding even <20% leaving a lot of unmet needs and challenges to reach all target groups

Eight countries did not provide this information in their 2015 JRF.

This picture is almost the same as last year and this situation highlights the need for strong country ownership of immunization programmes in the African region.

This is reflected in the Addis Ababa declaration of the 2016 Ministerial conference on Immunization, which now needs to be implemented

# Coverage and equity: % of district with at least 80% of third dose of DTP containing vaccine by country in the African Region (JRF 2015)



# **Highlights**

GVAP recommends that by 2020, coverage should reach at least 90%, at national level and at least 80% in every district or equivalent administrative unit for all vaccines.

The 2015 data reported by countries show that only 7/47 countries have reached ≥80% coverage in each district. Another 13 countries were close to reaching the target with 80-99% of districts having reached 80% coverage.

But more than half of the countries in the Region are lagging behind with almost 34% of countries still having ≤60% des districts reaching 80% coverage.

The data shows that some districts have poor access compared to others, emphasizing geographic restricted inequity. Those countries should strengthen activities to equitably reach all children and increase coverage.

# Third annual meeting of the MenAfriNet data management group Ouagadougou 18-22 July 2016





Group photo with WHO country Rep Burkina Faso, CDC country Director –Burkina Faso, AMP Rep, HSE IST focal point, WHO countries' IVD focal points and DM, DMs from MOH and MenAfriNet DMT

### **Background**

**M**enAfriNet project was launched 3 years ago following the success of the men A vaccine introduction in the African Region. Funded by the Bill and Melinda Gates foundation, it comprises CDC, AMP, WHO and the Ministries of Health of 5 countries, **Burkina Faso, Mali, Niger, Togo and Chad.** 

The main objective was to support the case based surveillance of meningitis in those countries and progressively in the remaining AFR countries within the meningitis belt by ensuring active case search, laboratory capacity, data management and use of quality data for decision making, research, communication etc.

MenAfriNet has different technical groups (surveillance, laboratory, data management, communication and research).

The Data management team (DMT) is building a robust data management system and coordinating support to countries in data collection, collation, compilation, analysis and sharing. The team chaired by WHO, includes specialists from WHO, CDC and AMP . It has monthly calls and meets on a yearly basis to evaluate the annual plan, assess the data management systems and analyze feedback from users for improvement and to develop a new POA.

The 1st two meetings of MenAfriNet took place in Atlanta and Niger respectively.

The 3rd annual meeting was organized by WHO in Ouagadougou from 18 to 22 July 2016 with 26 participants from MOH & WHO of the following countries: Burkina Faso, Mali, Niger, Togo and Chad; as well as IST West ,AMP, MenAfriNet Data team (CDC, AMP, WHO/AFRO and IST). At the end of the 5-day workshop, the following was achieved:

- Each of the 5 countries and the DMT conducted an evaluation of their 2015-2016 Data management plan and developed their new plan of action for August 2016 to December 2017;
- ◆ 4/5 countries further included surveillance and laboratory activities in this process;
- ◆The DMT conduced an evaluation of the current DMS and came up with a road map for system upgrade, generic system development and deployment of the revised module.
- ◆The data sharing mechanism was adopted and clear recommendations and actions adopted.

# Regional Immunization Technical Advisory Group (RITAG) Meeting, Brazzaville: 5-8 July 2016



Group picture of participants at RITAG in Brazzaville, CONGO

# Highlights The newly constituted Reg

The newly constituted Regional Immunization Technical Advisory Group (RITAG) had its 1st meeting in Brazzaville, from 5th to 8th July 2016. The meeting was officially opened by Dr Joseph Cabore, Director of Programmes Management (DPM), on behalf of the Regional Director, Dr. Matshidiso Moeti. Present during the opening were Cluster Directors and staff of the WHO from the RO, ISTs, HQ. and immunization partner's.

The primary goals of the meeting were to brief the new RITAG members on the regional priorities for immunization and to seek their advice on current specific challenges. Some of the current priority areas in immunization were discussed in sessions of the meeting after the briefing sessions. In these sessions, the progress made was summarized, challenges highlighted and the RITAG members given the opportunity to discuss and to provide advice. At the end, a number of key recommendations were made.

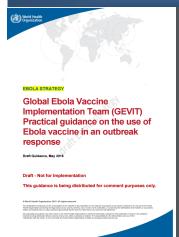
# **Key recommendations**

Some of the key recommendations in specific immunization areas include:

- Immunization coverage and equity: Countries, especially those reporting high immunization coverage, to triangulate available data to improve the accuracy of population immunity estimates.
- ♦ In the context of decreased polio funds: Maintain essential polio programme functions to ensure that the polio-free status remains, WHO/AFRO to work with partners to mobilize additional resources to fill funding gaps, including the development of detailed advocacy plans to increase country ownership and leadership, and monitoring government commitments.
- ♦ Yellow Fever: Steps should be taken to reduce response time between identifying cases and implementation of outbreak response interventions, Maintain high immunization coverage in Routine Immunization during outbreaks, Review the efficacy and feasibility of the use of fractional doses in situations where stockpiles of vaccine are low.

Practical Guidance on the Use of Ebola Vaccine in an outbreak response:

Call for comments by 30 September 2016



# **Background**

The unprecedented Ebola virus disease (EVD) epidemic in West Africa which started in 2013 exposed global weaknesses to effectively prevent and manage emerging infectious disease outbreaks in timely manner. On 8 August 2014 (epidemiologic week 32 of the outbreak), the World Health Organization declared the Ebola outbreak a Public Health Emergency of International Concern (PHEIC) under the International Health Regulations (IHR) (2005) and the outbreak was graded 3 in line with the WHO Emergency Response Framework (ERF).

As part of the measures to control this and future EVD outbreaks, the WHO and its international partners and affected countries worked on a comprehensive Ebola research and development effort for effective vaccines, therapies and rapid diagnostic tests.

Several Ebola vaccine clinical trials were launched; however there was lack of guidance for the use of Ebola vaccines in an outbreak response and lack of clarity on vaccination strategies, vaccine supply and logistics. To help address these needs the *Global Ebola Vaccine Implementation Team (GEVIT)* was created under WHO leadership in order to facilitate the collaborative planning for the potential use of Ebola vaccines.

The first comprehensive draft of the Global Ebola Vaccine Implementation Team (GEVIT) Practical Guidance on the Use of Ebola Vaccine in an outbreak response has been posted on the WHO website <a href="http://www.who.int/csr/resources/publications/ebola/gevit-guide/en/">http://www.who.int/csr/resources/publications/ebola/gevit-guide/en/</a> for the first round of public consultation and comments. The French version will be available in August 2016.

### **Highlights**

This draft guidance is the result of a collaborative effort of a multi-partner initiative also known as the Global Ebola Vaccine Implementation Team (GEVIT). We hope that once this is finalized, it will serve as a "Blueprint" to governments and partners as they plan to use the potential effective and safe Ebola vaccines in an outbreak response.

All comments received by the published deadline will be considered in the preparation of the next version of this draft.

Comments are expected by no later than 30 September 2016 using the forms posted on the website and sent to <a href="mailto:prezio-sim@who.int">prezio-sim@who.int</a> with subject line "Comments on draft GEVIT Practical guidance on use of Ebola vaccine". inputs can either be provided to the entire document or only to certain parts. They can be submitted in English or French. Inputs received will contribute to the further development of the guidance document.