

## A note from the Chair:

*Dear colleagues,*

Welcome to the 10<sup>th</sup> IPAC bulletin – the second for 2017. Thanks very much to IPAC members and observers for participation in our teleconference in early July. This call enabled us to discuss, among other things, the emerging utility of Total Systems Effectiveness concepts, progress on the Controlled Temperature Chain roadmap for the four priority CTC vaccines, progress by the Delivery Technologies working group, and to endorse the Target Product Profile document for a Measles-Rubella Micro-Array Patch.

Also discussed was the critically important ongoing work to update global guidance on the Collection, Assessment and Use of Immunization Data. IPAC will continue to consider how we can address the need for more streamlined data management given the increasing numbers of vaccines and ages of vaccination; and the best balance between administrative and survey data collection methods. Some specific questions will return to IPAC for advice, including how best to capture gender disaggregated data and redefinition of the fully immunized child in a way that properly recognizes vaccination beyond the first year of life and other programmatic expansions.

At a broader level, indicators for Sustainable Development Goal Three (Ensure healthy lives...) had a high-level review this month: <https://sustainabledevelopment.un.org/sdg3>. While only one of SDG3's nine specific targets (3.8) mentions vaccination specifically, at least four of the other targets (3.1- 3.4) will be hard to hit without strong national immunization programs, especially considering the role of vaccines in preventing some common cancers. Beyond this, access targets such as those for family planning (3.7) could be boosted if we can integrate those services with vaccination. Integrated health services are a key element of the Global Vaccine Action Plan. However I feel that what many of us miss, when researching integrated care, is the need to examine the pattern of family health care

needs at various points in the life course, especially needs that co-exist with immunization needs, and use this perspective as the starting point in designing more integrated services. More attention to 'demand-side' preferences for how services could be organized is a key, I believe, to stronger, better supported, and better utilised services.

Lastly, I'll touch on a recent request for resources to help those working at country level to better appreciate WHO's global programmatic perspective on immunization. We will develop a fuller pack for new members on this, but for now, here are four quick plugs:

New visualisations of GVAP progress that should be coming next month at <http://apps.who.int/gho/cabinet/gvap.jsp>

Discussion of global vaccine development to policy at [http://www.who.int/immunization/policy/WHO\\_vaccine\\_development\\_policy.pdf](http://www.who.int/immunization/policy/WHO_vaccine_development_policy.pdf)

Global Routine Immunization Strategies and Practices (GRISP) and other resources at [http://www.who.int/immunization/programmes\\_systems/service\\_delivery/](http://www.who.int/immunization/programmes_systems/service_delivery/)

Sign up for Global Immunization Newsletter at <http://www.who.int/immunization/gin/> (Sign up button top left of page)

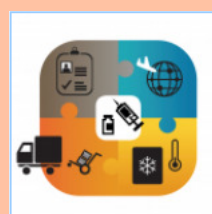
Sending you fire-side greetings from a southern hemisphere winter, hoping all you northern colleagues are making the most of summer warmth,



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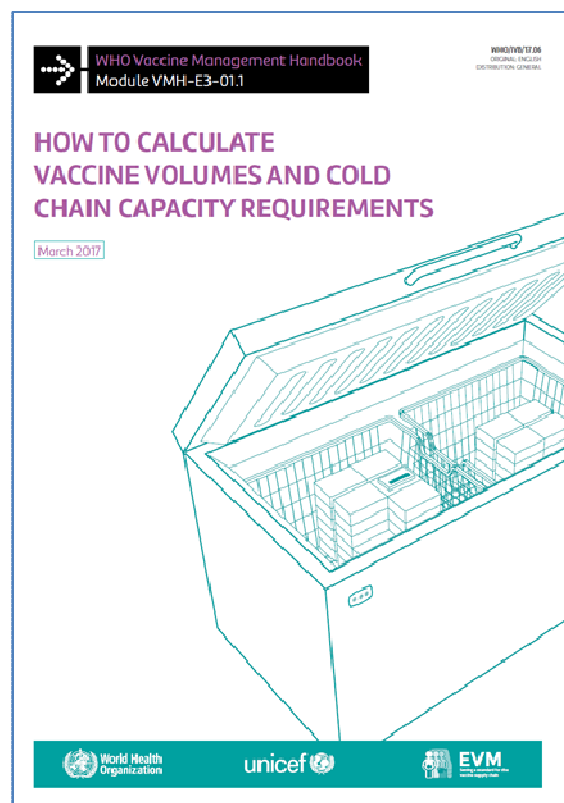


## New vaccine management guidance available

by Daniel Brigden (WHO)

WHO has published two new modules in its Vaccine Management Handbook. The modules provide technical guidance on the following topics.

1. **How to Develop a Repair and Maintenance System for Cold Chain Equipment.**  
This module introduces the policy, technical, material, budget and management requirements of an effective cold chain equipment maintenance and repair system.
2. **How to Calculate Vaccine Volumes and Cold Chain Capacity Requirements.**  
This module describes how to calculate vaccine volumes and evaluate the cold chain capacity requirements of a vaccine supply chain. It also provides guidance on how to calculate cold chain storage needs for coolant-packs and the dry-storage capacity needed for immunization-related commodities.



Both modules are available in English and French on the WHO website:

[http://www.who.int/immunization/programmes\\_systems/supply\\_chain/evm/en/index5.html](http://www.who.int/immunization/programmes_systems/supply_chain/evm/en/index5.html)

The Vaccine Management Handbook, a component of the EVM Initiative, has been written for decision-makers at national and subnational levels; its purpose is to provide technical advice on key topics related to immunization logistics to help countries develop and refine national policies. For more detailed guidance on specific operational activities, refer to the [EVM Standard Operating Procedures \(SOPs\)](#).

## Update from the Working Group on the Controlled Temperature Chain (CTC-WG) by Anna-Lea Kahn (WHO)

The CTC-WG have continued to meet regularly by way of teleconferences taking place every two months through which important progress has been made on the development of a Strategic Roadmap for four years (2017 to 2020) reflecting the group's consensus around the necessary activities required to meet the CTC programme's objectives. These consist of:

- \* Improving stakeholder involvement, advocacy, and alignment on CTC work-streams;

- \* Increasing the base of evidence demonstrating the benefits and impact of delivering vaccines through this approach, as well as better characterizing the value proposition of CTC with respect to improving immunization coverage and equity targets for CTC-labelled vaccines;

- \* Developing operational guidance and communication tools in support of CTC practices; and

- \* Supporting efforts towards the licensure and pre-qualification of appropriate vaccines for CTC.

The bulk of the detailed activities and outputs proposed in this document concern the four priority vaccines (Human Papilloma Virus vaccine, Oral Cholera Vaccine, Tetanus-Toxoid containing vac-

cines, and Hepatitis B vaccine for birth dose) which the CTC-WG identified last February and IPAC endorsed as being where efforts should currently be concentrated, given these vaccines' promising potential for both CTC licensure and country-level uptake and impact. However, the CTC-WG will continue to also evaluate and support other existing and emerging candidate vaccines for CTC compatibility, including working on creating an enabling environment at the financing and procurement level to support the supply of additional CTC-labelled products.

In the meantime, a pool of relevant technical and programmatic experts for each of the respective four priority vaccines is being sought at global, regional, and country levels in order to provide guidance as CTC planning proceeds.

## Fractional Dose IPV

by Alejandro Ramirez Gonzalez (WHO)

In line with the Strategic Advisory Group of Experts (SAGE) recommendation, WHO is working closely and supporting countries to implement the intradermal fractional dose IPV (fIPV) vaccination in routine immunization programmes. The experiences from countries that already rolled out fIPV, India and Sri Lanka, which already represent around 19% of the global birth cohort, are shown to be very valuable and demonstrate that despite the operational challenges the implementation of fIPV is feasible and safe. Advance planning, quality

trainings and good supportive supervision and monitoring have been identified as critical components of the implementation on those countries.



WHO/K. Kretsinger

While the South East Asia Region (SEAR) experience expands to two additional countries, Bangladesh and Nepal, in the coming weeks, other regions are also

recommending and supporting countries in their decision making and implementation. Positive signs come from the Region for the Americas (PAHO), where the Technical Advisory Group (TAG) has recommended the switch to fIPV in 14 countries. These countries are now discussing with the National advisory groups and will be making decision in the coming weeks.

WHO, together with countries and other partners, is preparing to document these experiences in order to have all the information and data needed to promote successful implementation of fIPV in other countries and regions.

## Update #2 on Second Year of Life (2YL) Progress:

by Karen Hennessey (WHO) and Imran Mirza (UNICEF)

This update picks up from the last bulletin update (October 2016) and IPAC meeting (February 2017). In reference to the project timeline above, 2YL work is well on-track. Draft WHO guidance, *“Establishing and strengthening immunization in the second year of life: Practices for immunization beyond infancy”* is expected to be completed in 2017 (Activity #4). A near-final version is expected this August that considers IPAC recommendations given during the February 2017 meeting. Advocacy and demand creation packages targeting decision makers, planners, health workers and caretakers are also under development and will be ready by end of 2017.

With the guidelines on track, WHO and UNICEF are moving ahead to develop training materials for country-level staff and for building a pool of consultants trained to identify gaps and facilitate actions needed to maximize coverage of vaccines scheduled in the second year of life. It is important to ramp up this expertise now because several countries are preparing to introduce 2YL vaccines in 2017-2018.



WHO/A. Kahn

### 2YL Project, 2015-2017

1	2YL WORKGROUP - oversight (pending)	2015
2	LANDSCAPE ANALYSIS (WHO & UNICEF)	2015
3	COUNTRY PROJECTS (WHO & CDC)	2016
4	DRAFT GUIDELINES	2017
5	IMPLEMENTATION FEEDBACK & Finalize guidelines	2017

To help undertake the planning, costing and financing aspects of a 2YL immunization platform, a user-friendly excel-based tool is also under development - the 2YL Planning, Costing and Financing Tool. The tool has been field tested in Ghana and will allow the user to easily identify the activities required, estimate the incremental costs, projects future resource requirements, and analyze the corresponding financing gaps.

This work is largely supported by UNICEF using a generous donation from Al Waleed Philanthropies, by WHO using funds from the Bill and Melinda Gates Foundation, and by US CDC. Where applicable, activities will build on new vaccine introduction grants that countries receive from Gavi.



## Pre-empting and managing vaccine shortages – The Vaccine Shortage Project: by Tania Gernuschi (WHO)

Vaccine shortages occur when global supply of a vaccine cannot meet the full demand from countries. Depending on the severity, vaccine shortages can translate into national vaccine stock-outs and in suspension of immunization activities.

Over the past couple of years, several countries across regions and income groups have reported being confronted with shortages of vaccines and the trend seems to be on the rise. Given the growing concern related to global vaccine shortages, the 2016 SAGE meeting in April discussed this topic at length and highlighted an important gap in ongoing work to address supply shortages. This is a gap in information collection, analysis and exchange on supply availability,

related regulatory matters, country demand and access risks. Investment in this area could enhance informed decisions for both countries (e.g. vaccine introduction, product choice) and manufacturers (e.g. facility improvement, capacity investment). The issue was highlighted particularly with regards to self-procuring countries not supported by targeted intelligence efforts. SAGE recommended that WHO plays a key role to address this gap by enhancing dialogue between countries and manufacturers on global demand predictability, supply availability and potential threats to vaccine supply, particularly for vaccines and countries not supported by UNICEF Supply Division, PAHO, and GAVI.

Against this background, WHO has initiated a Vaccine Shortage Project. The aim of the project is to provide concrete proposals on WHO's role and actions to enhance information sharing for pre-empting and managing vaccine supply shortages. Up to now, a mapping of information available through WHO and immunization stakeholders was completed to identify gaps and opportunities. Two global market assessments, one for BCG and one for diphtheria and tetanus toxin containing vaccines are being used to prototype an operating model for WHO in this space. The model will be submitted for feedback to immunization stakeholders by the end of 2017 and for funding consideration to donors.

## TechNet Conference Update: by Patrick Lydon (WHO)

Hosted in collaboration between WHO and UNICEF, the TechNet Conference is organized every two years with this year returning to the European region. The conference runs for a duration of five days, to be held on 16-20 October in Cascais, Portugal. 250+ participants are expected to attend. The theme will continue to follow the last TechNet on supply chain as "Building the next generation of immunization supply chain".

A TechNet conference planning committee (TCPC) is in place that includes Bill and Melinda Gates foundation (BMGF), Gavi, Clinton

Health Access Initiative (CHAI), JSI, PATH and Village Reach. The planning committee meets weekly with the main task to develop the conference agenda. Alongside the plenary, this year will incorporate more interactive sessions. Major side events will continue, such as Manufacturers Marketplace, Innovation Café, Project Gallery and TechTalk.

The TechNet conference website is in the link below:

<http://www.technet-21.org/en/home/technet-conference/2017>

For those who cannot attend, there will be a live stream available where people can view the plenary sessions remotely. Videos will also be posted for later viewing of the plenary sessions. There will also an opportunity for people to engage remotely and to receive feedback from the TechNet community.



**TechNet-21**  
The Technical Network for  
Strengthening Immunization Services

## Announcements

### Acknowledgement of departing IPAC Members & Observers

We regretfully farewell two long-serving members of IPAC, who reached their maximum terms of service in June 2017. The committee and secretariat are extremely grateful for the time, effort and guidance they have provided over these six years.



Dr. Jean-Marc Olivé

**Dr Jean-Marc Olivé** commenced with IPAC in August 2011 and brought to the committee more than thirty years of experience in public health: having first worked with WHO as a medical epidemiologist in Sudan in 1980; this was succeeded by numerous posts in Africa, Asia and the Americas, before joining WHO headquarters immunization teams in the mid-1990s; lastly as WHO Representative in Philippines and then Viet Nam prior to his retirement from WHO in 2010. We were thus very fortunate to have Jean-Marc's thoughtful, strategic and always practical advice available to us through his contributions as IPAC member. In addition to

advice on the breadth of IPAC topics, he provided special contributions to the various revisions of Immunization in Practice, to the Call To Action on Immunization Supply Chains and Logistics, through the Measles Working Group for Strengthening Routine Immunization, to Maternal Immunization against influenza, and the SAGE Multiple Injections working group. Jean-Marc continues his leadership role in the certification of polio eradication and in technical advice to Afghanistan, Pakistan and elsewhere in this cause.



Dr. Francois Gasse

**Dr Francois Gasse** also commenced with IPAC in August 2011 and brought a deep experience drawn from field and headquarters postings with both UNICEF and WHO across immunization and child survival. His skills and history in programme design, health worker training, monitoring and evaluation added greatly to IPAC's advisory capacity. Francois has contributed across the range of IPAC discussions and document reviews, bringing a pragmatic understanding of grass-roots realities to our discussions. He has provided special inputs to work on maternal immunization against influenza, the original work on the con-

trolled temperature chain for meningococcal vaccine, to revisions to Immunization in Practice, and to the HIV and Tetanus post-circumcision working group. We also acknowledge and appreciate his passionate commitment to maternal and neonatal tetanus elimination, which preceded, and continues beyond, his IPAC service.



Dr. Reinaldo de Menezes Martins

We also acknowledge the contribution of one of our long-serving observers, **Dr Reinaldo de Menezes Martins**, who is stepping down from this role after serving as representative to IPAC for the Developing Countries Vaccine Manufacturers Network since 2011. Reinaldo has been ever-reliable in meetings, calls and document review, representing the DCVMN viewpoint discussions with clarity and grace. He has often been generous in discussions to add a perspective borne of his own experience as paediatrician and scientific advisor to governments, academia and industry over many years. We are grateful for his time with the committee.

## The Journal of Infectious Disease

Volume 216, Issue suppl\_1



Global polio eradication and immunization partners have announced the launch of a new supplement to the Journal of Infectious Diseases, ***Polio Endgame and Legacy: Implementation, Best Practices, and Lessons Learned***.

The 51 articles in the publication serve as a resource and reference on how to implement large scale, globally synchronized public health activities within ambitious timelines, and provides valuable insights for other initiatives looking to do the same.

[https://academic.oup.com/jid/issue/216/suppl\\_1](https://academic.oup.com/jid/issue/216/suppl_1)

## Upcoming Meetings & Events:



- ⇒ 29-31 Aug — Geneva, Switzerland:  
**SAGE DoV Working Group Meeting**
- ⇒ 20-22 Sep — Veyrier du Lac, France:  
**Immunization and Vaccine-related Implementation Research Advisory Committee Meeting**
- ⇒ 25-26 Sep — Barcelona, Spain:  
**IT Surveillance Consultation**
- ⇒ 02-03 Oct — Geneva, Switzerland:  
**Rotavirus Meeting**
- ⇒ 16-20 Oct — Cascais, Portugal  
**15th TechNet Conference**
- ⇒ 17-19 Oct — Geneva, Switzerland:  
**SAGE on Immunization**
- ⇒ 23-26 Oct — Cascais, Portugal:  
**Management of the Data**

## A final word from the IPAC Secretariat

This issue of the IPAC Bulletin will be the first since the Committee's new terms of reference (TORs) came into effect in June 2017. As mentioned in the previous IPAC Bulletin, the new TORs bring several changes to the IPAC's mode of working (that was last modified in 2014), including: more regular face-to-face meetings (annual, every March); continuation of regular teleconferences and the closed TechNet21 online group discussion forum; a different approach to participation in SAGE working groups, which had previously been the driver for this Bulletin's conception; and a shift in the definition and role of "observers" versus "members". *Members* are independent individuals, representing themselves. The number of IPAC members will be gradually sized down to 11, all of which will continue to be selected through a rigorous application and appointment process. *Observers* are professionals representing a specific institution (other than WHO.) Observers will no longer be pre-defined or limited to specific institutions, broadening the opportunity for participation to all relevant global immunization partners, but thereby be limited in contribution to the discussions occurring at the annual meetings (to which they must register and will not be automatically invited) and through this quarterly bulletin (on request or invitation). In light of these recent changes, we must consider if and how we want the IPAC Bulletin to serve the Committee.

We therefore would like to invite your inputs on the value and necessity of this quarterly bulletin. Would you like it to continue? If so, should the content change? Which features, if any, do you find particularly useful? Kindly email your responses to Carmen ([auc@who.int](mailto:auc@who.int)). IPAC members can also respond to the discussion feed on this subject which will shortly be initiated within the IPAC group page on TechNet.

In the meantime, we wish you each a very pleasant August, in the hope that you might take some much deserved time off to rest and recuperate.

**The IPAC Secretariat Team**