



MEASLES

ANALYTICS HUB

Quarterly Meeting 1

3rd March 2025



Welcome

Caroline Trotter, Director VIMC



Agenda for today's meeting

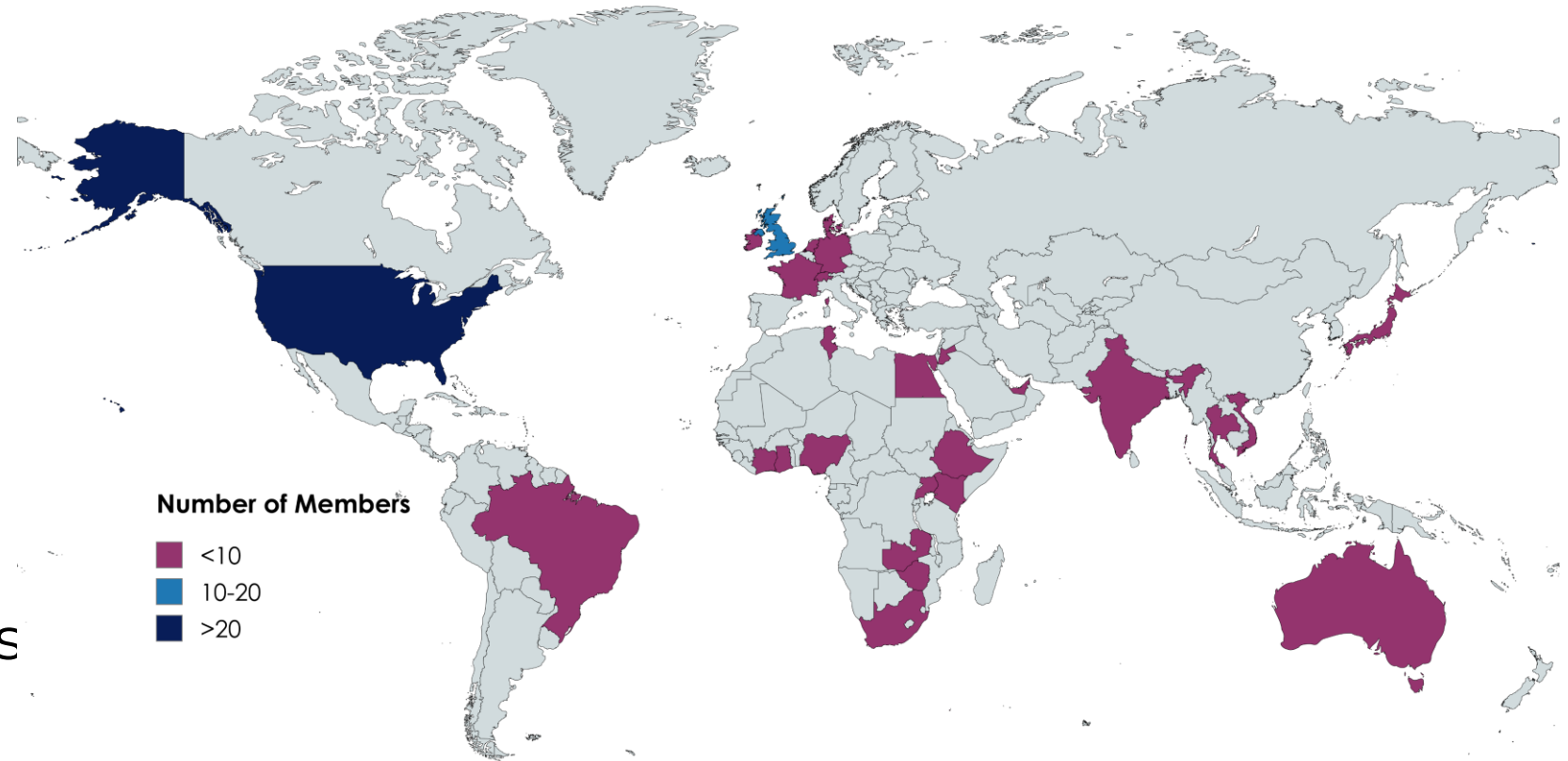
- Achievements since the launch event
- Present MAH aims & objectives
- Vote on Terms of Reference
- Situation Report
- Present scoping review of other modelling consortia
- Discuss ways of working of the MAH
- Announce annual in-person meeting & membership logistics
- Call will remain open for 30 minutes after to allow for Q&A

Achievements

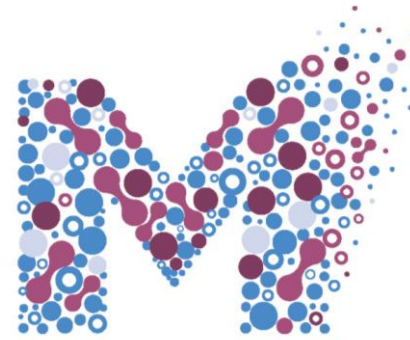
Membership representation



- Since the launch of the Measles Analytics Hub in November 2024, we have >100 members in 28 countries.
- Scope to improve representation from high measles burden countries.



Achievements cont'd



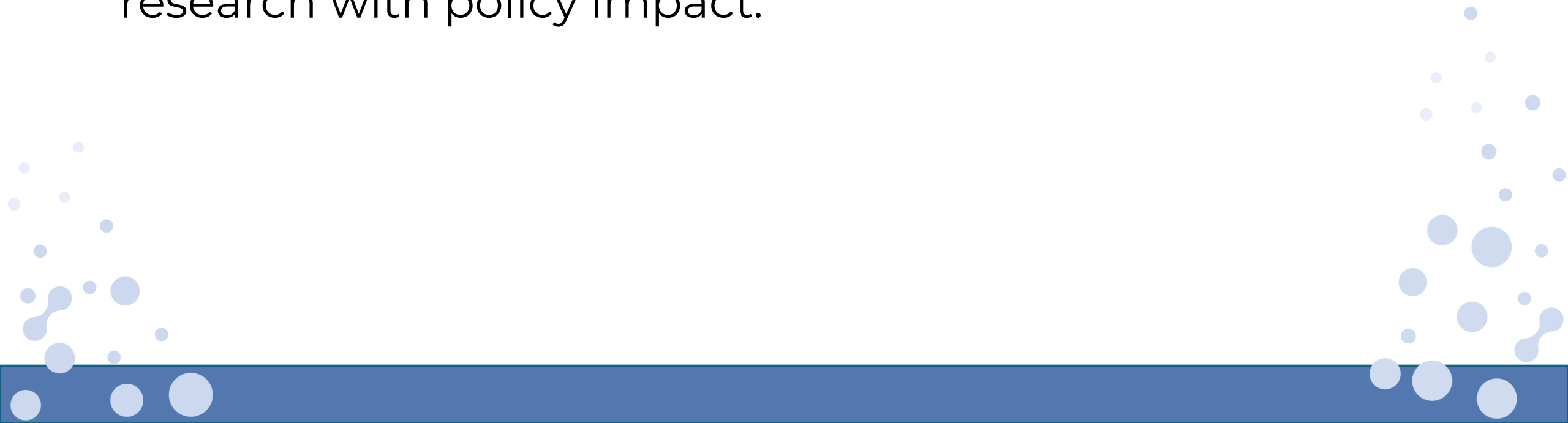
- Scoping review of other modelling networks/consortia – *completed by Secretariat February 2025*
- Mapping of the measles community & establishment of MAH ways of working– *ongoing*
- Terms of Reference – *drafted will be put to vote to ratify*

MAH Aims & Objectives

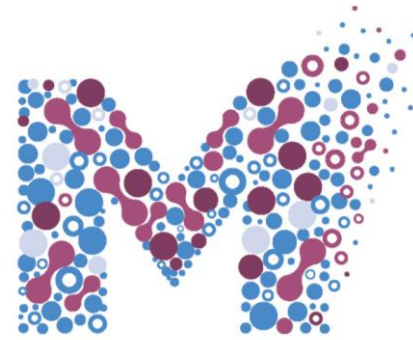
MAH Aims



The MAH aims to enhance the measles modelling ecosystem. We aim to improve communication and collaboration between modelers and stakeholders for measles modelling and data analytics and deliver research with policy impact.

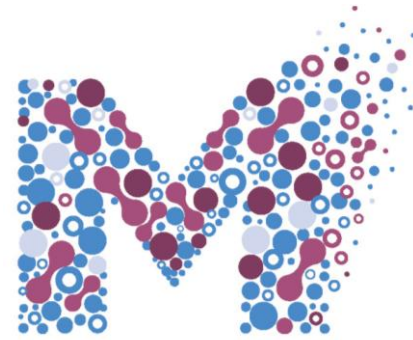


MAH Objectives



- To provide a forum for modelers and policymakers to exchange ideas, co-create new projects and discuss on-going projects.
- To co-develop a workplan with modelers and stakeholders that articulates policy-relevant questions
- To issue requests for proposals (RfP) when new projects are identified, appoint modelers and monitor progress towards deliverables.
- To develop the membership of the Hub over time to be larger and more inclusive of both modelers in settings with a high measles burden and early career researchers.
- To map key data sources, including identifying and working with partners to resolve data inconsistencies where possible.

MAH Objectives cont'd



- To create a central point of contact into a network of measles modelers for policymakers, and other stakeholders to both facilitate global visibility into ongoing work and open questions
 - Achieve a reputable 'brand' for MAH as the 'go-to' place for measles modelling needs, 'Quality assurance stamp'
- To coordinate with Gavi, WHO and country-level stakeholders on data access, facilitating modelling groups' access to the data needed to start local, quantitative research programmes.
- To establish a memorandum of understanding with the Measles Rubella Partnership (MRP) to facilitate joint working towards the goals of the Hub
- To identify synergies within both VIMC and other modelling consortia/ actors to enhance opportunities for LMIC researchers.

MAH Terms of Reference

Terms of Reference (summary – Role of Members)



1. Members are expected to work towards building a community of modelers and users and promote the MAH as the 'go to place' for measles modelling.
2. Members are expected to participate in MAH meetings and events and are requested to support the communication strategy.
3. Members can expect the MAH Secretariat to rigorously assess applications in response to Requests for Proposals (RfPs) and make decisions in a fair and transparent manner.
4. Members involved in workshops, exchanges and delivery of modelling projects are expected to engage fully in the events.
5. Members delivering modelling projects are expected to adhere to the agreed budget and deliverable timelines.

Terms of Reference (summary – Role of Members)



6. Members are expected to treat each other with respect and create a collaborative, and non-competitive community
7. Any disputes with the MAH Secretariat should be raised in the first instance with the VIMC Director.
8. Members are encouraged to discuss possible improvements and/or issues requiring attention with the MAH Secretariat.
9. Members can expect to have a timely response from the MAH Secretariat.

VOTE on the Terms of Reference

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Are you generally happy with the MAH Terms of Reference?



Yes



No

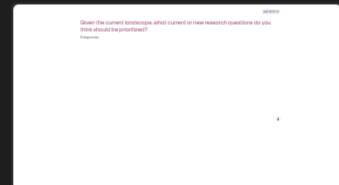
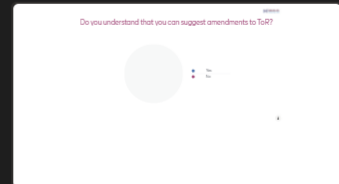


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March Members Meeting



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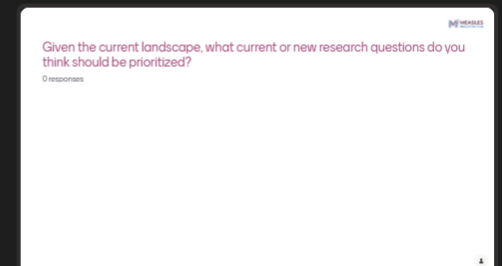
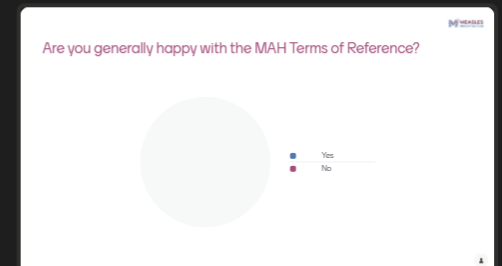
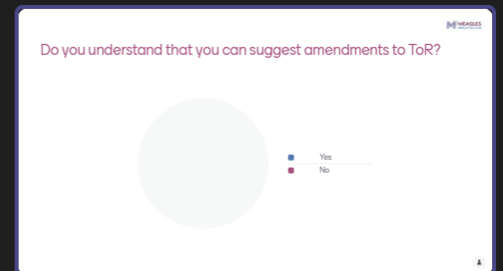
Do you understand that you can suggest amendments to ToR?



☐ Yes
☐ No



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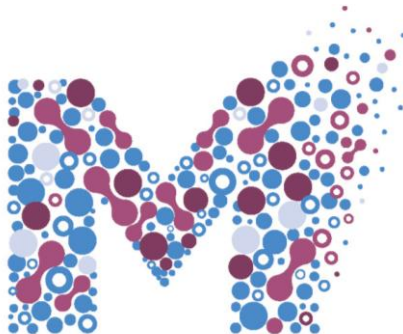




Situation Report

Matt Ferrari, MAH Scientific Chair

Number of reported measles cases by WHO Region



2025

Region	Member States*	Suspected MR cases	Measles cases	Clin	Epi	Lab	Date Received
AFR	33/47	3,131	1,467	577	328	562	2025-02
AMR	13/35	279	58	0	6	52	2025-02
EMR	0/21	0	0	0	0	0	2025-02
EUR	2/53	30	15	0	0	15	2025-02
SEAR	6/11	4,193	1,558	1,176	100	282	2025-02
WPR	0/27	0	0	0	0	0	2025-02
Total	54/194	7,633	3,098	1,753	434	911	

2024

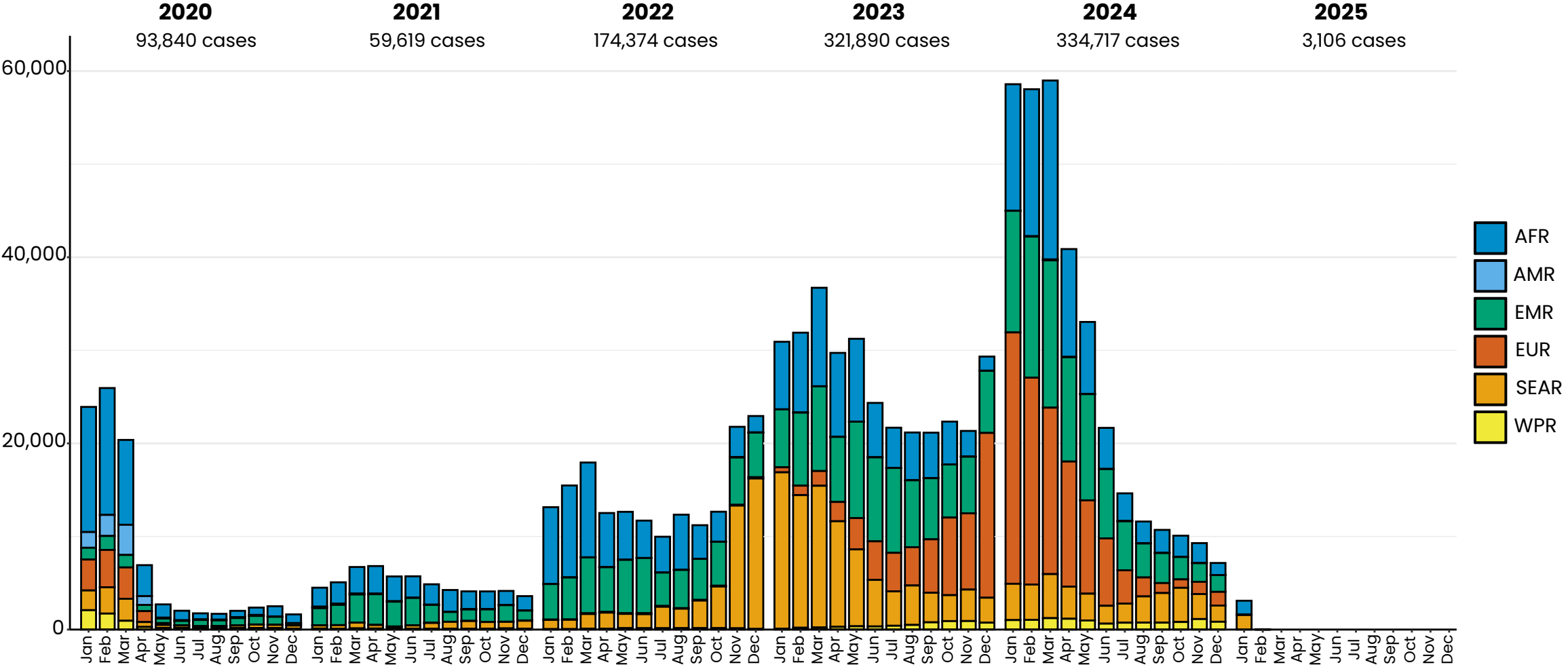
Region	Member States*	Suspected MR cases	Measles cases	Clin	Epi	Lab	Date Received
AFR	43/47	147,563	85,745	15,837	51,697	18,211	2025-02
AMR	33/35	18,750	461	0	53	408	2025-02
EMR	20/21	150,139	92,425	51,283	5,094	36,048	2025-02
EUR	52/53	129,701	108,200	21,055	14,757	72,388	2025-02
SEAR	11/11	156,545	36,824	12,372	6,832	17,620	2025-02
WPR	25/27	61,446	11,062	3,978	656	6,428	2025-02
Total	184/194	664,144	334,717	104,525	79,089	151,103	

Monthly WHO status available here:



Notes: Based on data received 2025-02 - This is surveillance data, hence for the last month, the data may be incomplete. * Member States Reporting / Total Member States in Region

Measles case distribution by month and WHO Region (2020-2025)



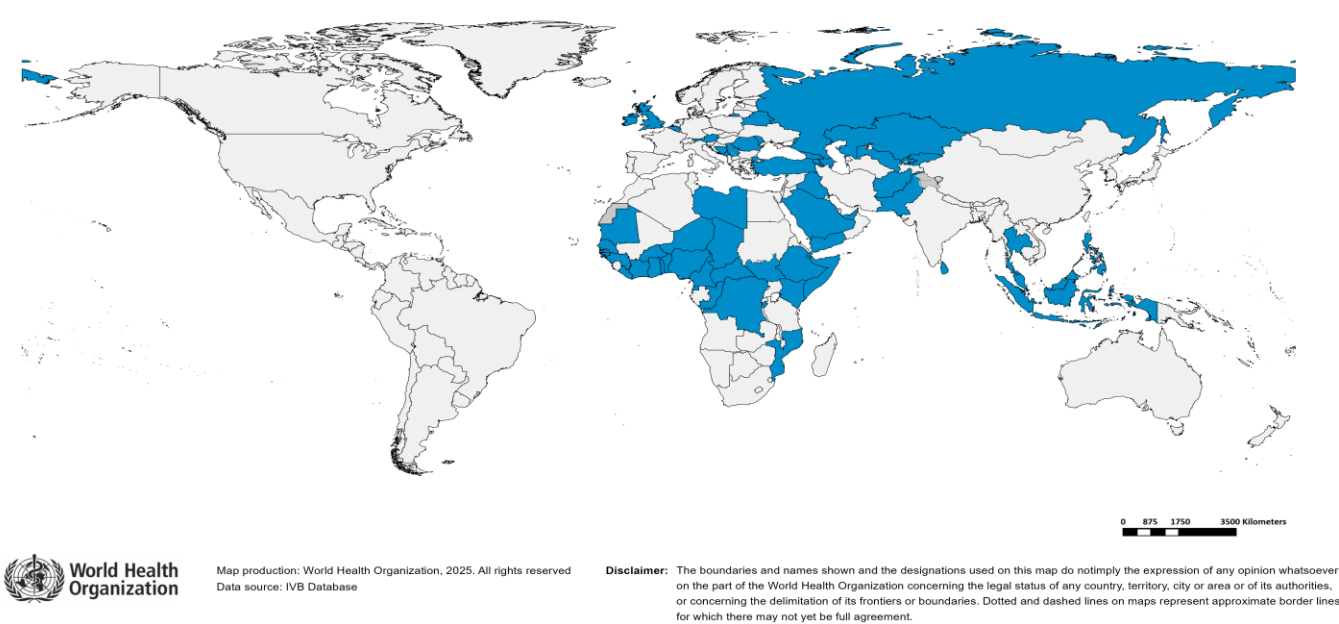
Based on data received 2025-02 - Data Source: IVB Database - This is surveillance data, hence for the last month(s), the data may be incomplete.

Immunization Agenda 2030 - Impact Goal 1.3

Countries provisionally meeting the large and disruptive outbreaks definition - Data from 2023-10 to 2024-09 included

Country	Cases	Rate/M	Clinical %
Azerbaijan	30,334	2,934.63	62%
Kyrgyzstan	17,602	2,449.48	41%
Kazakhstan	35,280	1,713.24	2%
Iraq	37,541	815.36	85%
Romania	14,218	747.72	3%
Yemen	26,875	662.22	93%
Bosnia and Herzegovina	1,684	532.20	80%
Liberia	2,238	398.73	16%
Burkina Faso	7,621	323.63	67%
Equatorial Guinea	542	286.39	58%
South Sudan	3,104	259.89	67%
Burundi	3,443	245.09	1%
Ethiopia	31,729	240.26	0%
Armenia	644	216.55	0%
Côte d'Ivoire	6,765	211.84	0%
Afghanistan	8,317	195.02	0%
Russian Federation	25,814	178.25	1%
Ghana	4,361	126.67	1%
Malaysia	4,310	121.21	6%
Pakistan	26,106	103.90	14%
Mauritania	437	84.54	0%
Somalia	1,599	84.12	0%
Belarus	687	75.86	1%
Thailand	4,956	69.15	20%
Serbia	460	68.29	20%
Chad	1,334	65.72	8%
United Arab Emirates	676	61.30	6%
Republic of Moldova	183	60.30	1%

Country	Cases	Rate/M	Clinical %
San Marino	2	59.56	0%
Georgia	223	58.57	7%
Austria	534	58.55	0%
Uzbekistan	2,005	55.14	2%
Niger	1,434	53.05	29%
Monaco	2	51.77	0%
Belgium	595	50.69	9%
DR Congo	5,496	50.29	2%
Djibouti	57	48.77	0%
Nigeria	11,117	47.78	51%
Montenegro	27	42.29	0%
Benin	596	41.21	17%
Togo	380	39.94	11%
Philippines	4,595	39.67	80%
United Kingdom of Great Britain and Northern Ireland	2,705	39.12	0%
Central African Republic	205	38.46	2%
Saudi Arabia	1,291	38.01	0%
Guinea	453	30.70	4%
Congo	192	30.32	7%
Senegal	556	30.05	7%
Ireland	151	28.73	1%
Cameroon	832	28.57	9%
Indonesia	7,739	27.30	62%
Mozambique	895	25.84	30%
Kenya	1,426	25.27	2%
Türkiye	2,121	24.25	0%
Sri Lanka	536	23.20	4%
Libya	158	21.41	0%
Guinea-Bissau	46	20.90	100%

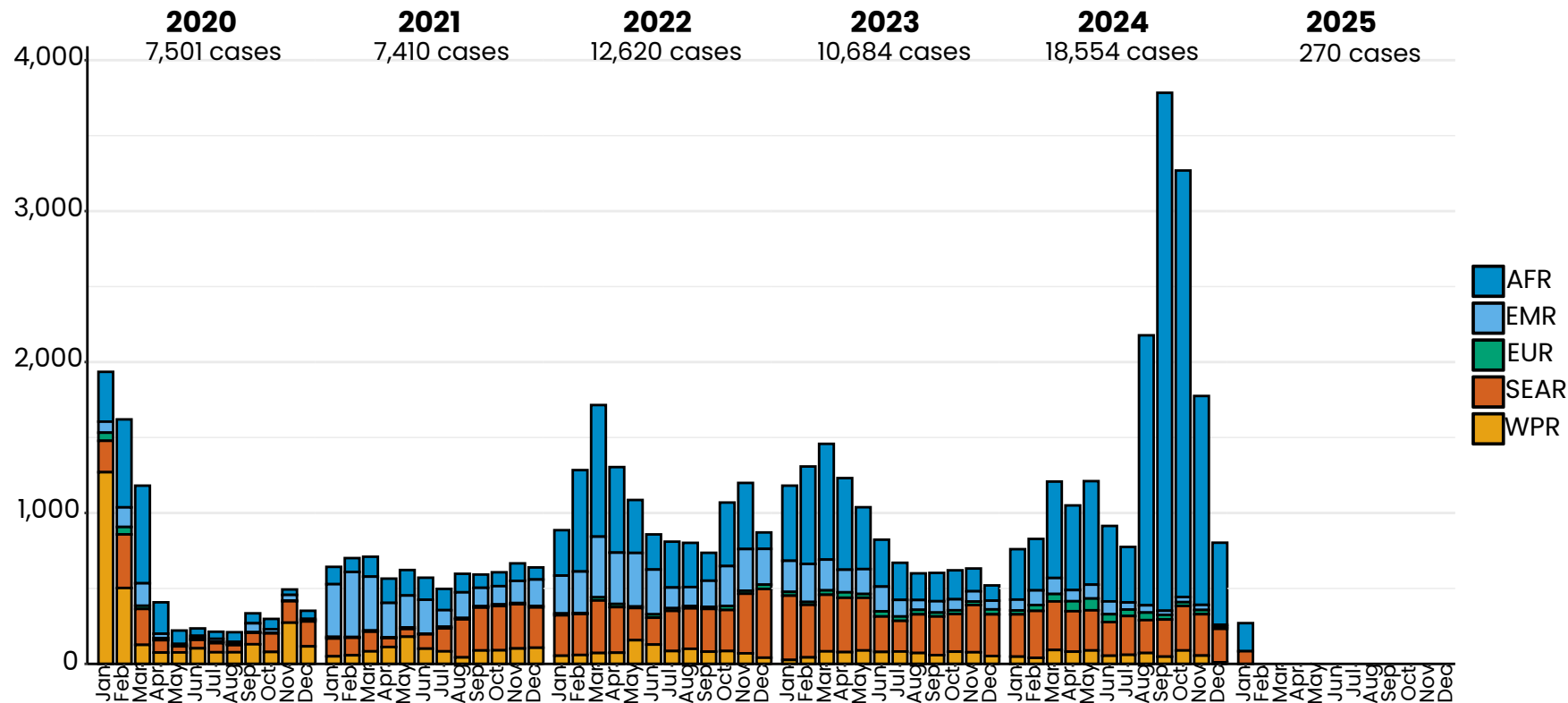


Total: 57 countries

In the frame of tracking progress towards the goals of Immunization Agenda 2030 (IA2030), an indicator has been developed by a working group in order to represent large and disruptive measles outbreaks. This indicator is defined as an incidence equal or greater than 20 reported measles cases per million population over a period of 12 months. It is important to note that measles outbreak definitions vary between countries and regions according to local context and level of progress towards regional elimination goals. This definition of large and disruptive outbreaks aims to complement and not replace the national and regional definitions, while also providing a degree of global standardization and permitting tracking of progress against a common metric.

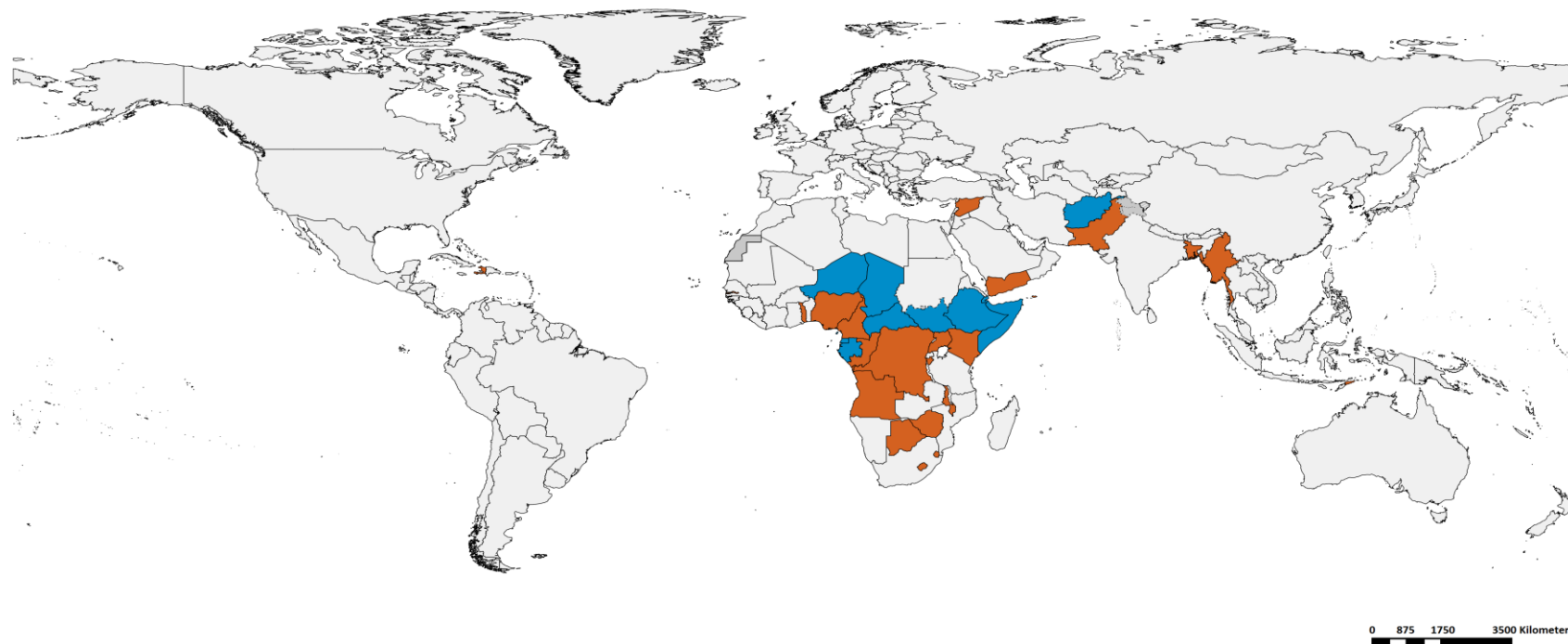
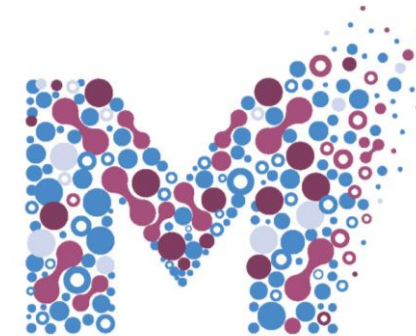
Notes: Based on data received 2025-02 and covering the period between 2023-10 and 2024-09 - Incidence: Number of cases / 1M population - Population Data: World population prospects, 2019 revision - A high proportion of clinical cases indicates a high level of uncertainty associated with the incidence rates and the inclusion of countries in this list.

Rubella case distribution by month and WHO Region (2020-2025)



WHO-SAGE recommended lifting the requirement for $\geq 80\%$ MCV coverage through routine immunization or campaigns before RCV introduction. SAGE also recommended the universal introduction of RCV in the 13 countries with no current plans to introduce the vaccine.

Upcoming MMR, MR and Measles campaigns (2025-2026)

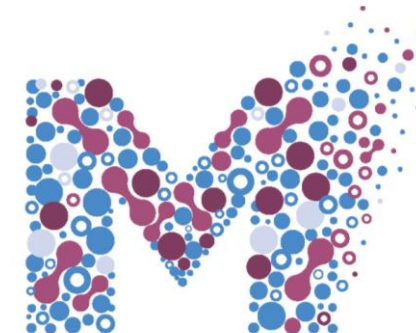


Map production: World Health Organization, 2025. All rights reserved
Data source: IVB Database

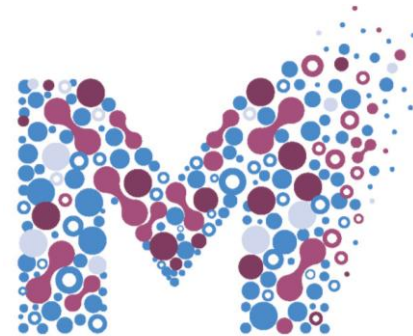
Disclaimer: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation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

■ Measles ■ MR ■ No campaign planned ■ Not applicable

Upcoming MMR, MR and Measles campaigns (2025-2026)



Year	Region	Name	Type	Intervention	StartDate	Status	Age Group(s)	Extent	Target
2025	AFR	Niger	FollowUp	MEASLES	2025-03-??	Planned	9-59 M	NATIONAL	4972177
2025	AFR	Ethiopia	FollowUp	MEASLES	2025-04-??	Planned	9-59 M	NATIONAL	17797907
2025	AFR	Congo	FollowUp	MR	2025-08-??	Planned	9-59 M	NATIONAL	846894
2025	AFR	Democratic Republic of the Congo	CatchUp	MR	2025-10-??	Planned	9 M-14 Y	NATIONAL	61697195
2025	AFR	Central African Republic	FollowUp	MEASLES	2025-11-??	Planned	9-59 M	NATIONAL	984810
2025	AFR	Lesotho	CatchUp-SIA	MR	2025-11-??	Planned	9-59 M	NATIONAL	274805
2025	AFR	Uganda	FollowUp	MR	2025-11-??	Planned	9-59 M	NATIONAL	7685529
2025	AFR	Comoros	FollowUp	MR	2025-12-??	Planned	9-59 M	NATIONAL	113688
2025	AFR	Togo	FollowUp	MR	2025-12-??	Planned	9-59 M	NATIONAL	2219710
2025	AFR	Botswana	FollowUp	MR	2025-NA-??	Planned	9-59 M	NATIONAL	148268
2025	AFR	Chad	FollowUp	MEASLES	2025-NA-??	Planned	9-59 M	NATIONAL	3217682
2025	AFR	Chad	FollowUp	MEASLES	2025-NA-??	Planned	9-59 M	NATIONAL	4972177
2025	AFR	Eswatini	FollowUp	MR	2025-NA-??	Planned	9-59 M	NATIONAL	140066
2025	AFR	Gambia	FollowUp	MR	2025-NA-??	Planned	9-59 M	NATIONAL	412351
2025	AFR	Kenya	FollowUp	MR	2025-NA-??	Planned	9-59 M	NATIONAL	6913106
2025	AFR	Nigeria	CatchUp	MR	2025-NA-??	Planned	9 M-14 Y	NATIONAL	97224670
2025	AFR	South Sudan	FollowUp	MEASLES	2025-NA-??	Planned	9-59 M	NATIONAL	1485839
2025	AFR	Zimbabwe	FollowUp	MR	2025-NA-??	Planned	9-59 M	NATIONAL	2299711
2025	AMR	Haiti	Campaign	MR	2025-11-??	Planned	-	-	-
2025	EMR	Pakistan	FollowUp	MR	2025-10-??	Planned	9-59 M	NATIONAL	29604478
2025	EMR	Afghanistan	FollowUp	MEASLES	2025-11-??	Planned	9-59 M	NATIONAL	16047992
2025	EMR	Somalia	FollowUp	MEASLES	2025-NA-??	Planned	9-59 M	NATIONAL	3200130
2025	SEAR	Bangladesh	FollowUp	MR	2025-09-??	Planned	9-59 M	NATIONAL	14663335
2026	AFR	Angola	FollowUp	MR	2026-NA-??	Planned	9-59 M	NATIONAL	5983408
2026	AFR	Burundi	FollowUp	MR	2026-NA-??	Planned	9-59 M	NATIONAL	2053824
2026	AFR	Cameroon	FollowUp	MR	2026-NA-??	Planned	9-59 M	NATIONAL	4345819
2026	AFR	Equatorial Guinea	FollowUp	MEASLES	2026-NA-??	Planned	9-59 M	NATIONAL	229691
2026	AFR	Gabon	FollowUp	MEASLES	2026-NA-??	Planned	9-59 M	-	306528
2026	AFR	Malawi	FollowUp	MR	2026-NA-??	Planned	9-59 M	NATIONAL	3034104
2026	EMR	Djibouti	CatchUp	MEASLES	2026-NA-??	Planned	9-59 M	NATIONAL	340185
2026	EMR	Syrian Arab Republic	FollowUp	MR	2026-NA-??	Planned	9-59 M	NATIONAL	1892447
2026	EMR	Yemen	FollowUp	MR	2026-NA-??	Planned	9-59 M	NATIONAL	4714060
2026	SEAR	Myanmar	FollowUp	MR	2026-NA-??	Planned	9-59 M	NATIONAL	4491396
2026	SEAR	Timor-Leste	FollowUp	MR	2026-NA-??	Planned	9-59 M	NATIONAL	157311



Impact on global agencies

- WHO
- Global Measles and Rubella Laboratory Network
- Gates Foundation
- USAID

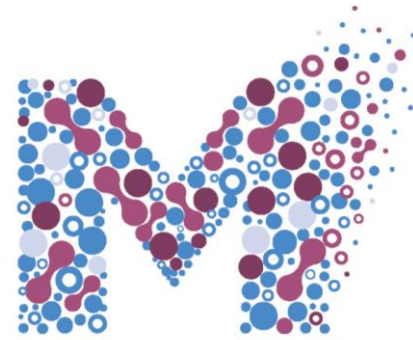


Impact of US withdrawal on WHO



- The US CDC has provided critical funding, staff, and technical expertise for global measles and rubella elimination efforts
- Without US support, the Global Measles and Rubella Laboratory Network (GMRLN) faces an \$8m shortfall compromising the continuity of measles and rubella surveillance, and outbreak detection for measles and rubella as well as multiple other infections critical to the global health security agenda.
 - Reduced outbreak detection and response capabilities will likely lead to larger, more widespread measles outbreaks, including potential increased importation to non-endemic countries.
- Planned rubella vaccine introductions and measles vaccination campaigns in high-priority nations may be delayed or compromised in quality, increasing disease burden.
 - Major campaigns are planned in DRC and Nigeria (rubella vaccine introduction), measles follow-up in Ethiopia, and MR follow-up in Pakistan; these all are at risk due to reduced financial and technical support.

Impact of US withdrawal on Global Measles and Rubella Laboratory Network



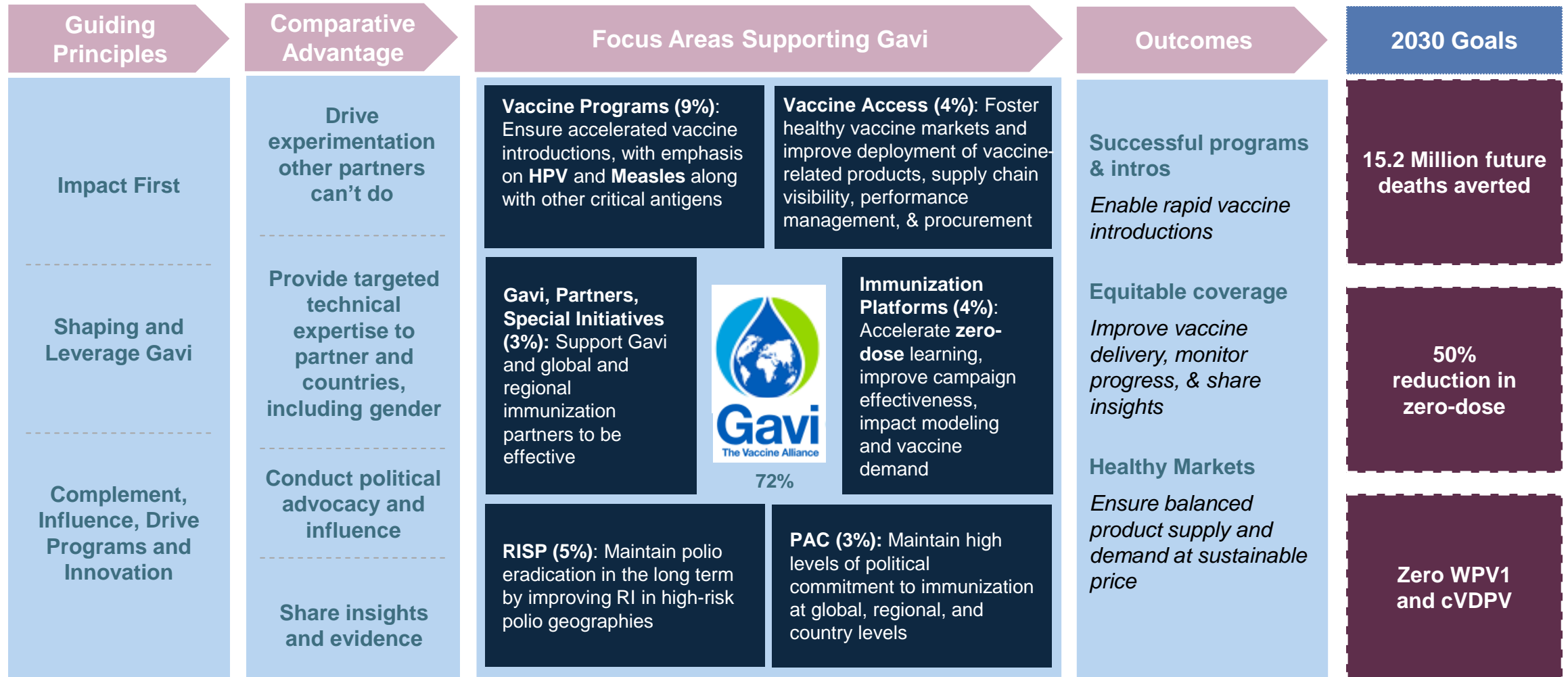
- ❁ Potential for loss of Global and Regional Laboratory Coordinator positions, which maintain lab network through accreditation, external quality assurance, technical capacity building, provision of diagnostic supplies, leveraging institutional memory and individual expertise.
- ❁ Implications both for outbreak detection AND for verification of the elimination of measles and rubella due to loss of capacity for laboratory confirmation and genotyping.
- ❁ Current stocks of reagents and kits previously provided by the International Reagent Resource (US CDC funded) will soon become depleted, leading to increased dependence of low-specificity clinical confirmation.
- ❁ The LCs also form the backbone for other vaccine preventable diseases: Yellow Fever, rotavirus, JE, diphtheria, pertussis, cholera, and typhoid. This horizontal approach will also be negatively impacted and so affect other programmes.

Impact of US withdrawal on Gates Foundation



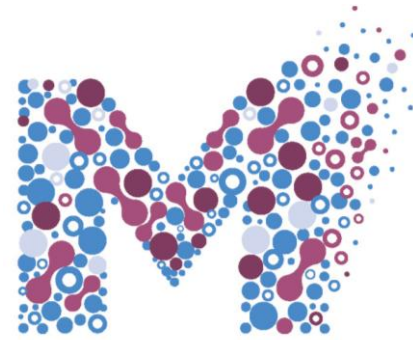
- Given the current context, The Foundation will focus more on the link between the work they support and impact goals.
 - Areas of focus will be the same, but with a clear line to the most urgent and impactful activities.
- Moving away from having explicit buckets around “Routine Immunisation” and “Campaigns”, allows for more intentional work around various ways to identify and address immunity gaps
- Focus on direct impact, delivery portfolio is more country-facing and seeks to better understand and inform approaches to improving coverage at the 9-month touchpoint

Gates immunization team strategy



Slide taken from Gates Foundation Measles Strategy 2024
Courtesy of Kendall Krause

Impact of US withdrawal on USAID



- USG has been a major contributor to Gavi, via USAID
- The withdrawal of those funds threatens support for SIAs and outbreak response over the Gavi 6.0 replenishment cycle (2025-2030).

Given the current landscape, what current or new research questions do you think should be prioritized?

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Given the current landscape, what current or new research questions do you think should be prioritized?

All responses to your question will be shown here

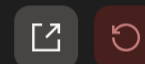
Each response can be up to 200 characters long

Turn on voting to let participants vote for their favorites



Menti

March Members Meeting



Choose a slide to present

Do you understand that you can suggest amendments to ToR?

Are you generally happy with the MAH Terms of Reference?

Given the current landscape, what current or new research questions do you think should be prioritized?

0 responses

Q&A



Scoping review & MAH Ways of Working

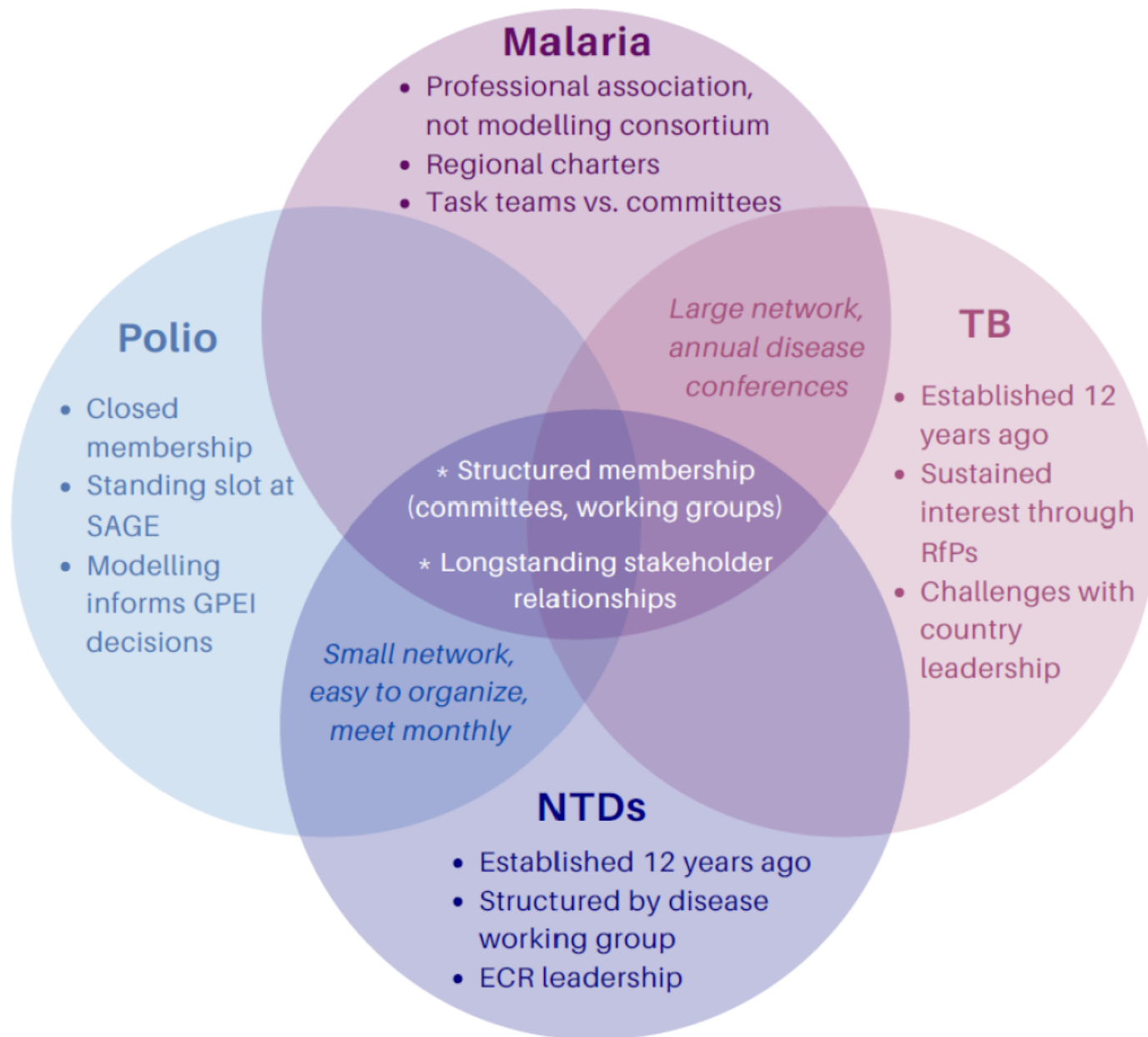
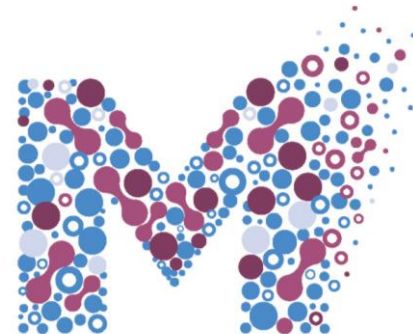
Megan Auzenberg, MAH Scientific Coordinator

Scoping review of other modelling networks

Scoping of other modelling networks

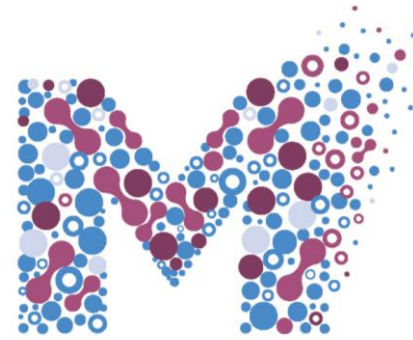


- Consultations with modelling networks/consortia for polio, NTDs, malaria and TB
- Noteworthy differences in size of the research community, number of members, global funding, research priorities and programmatic aims, however, several overarching themes were identified →



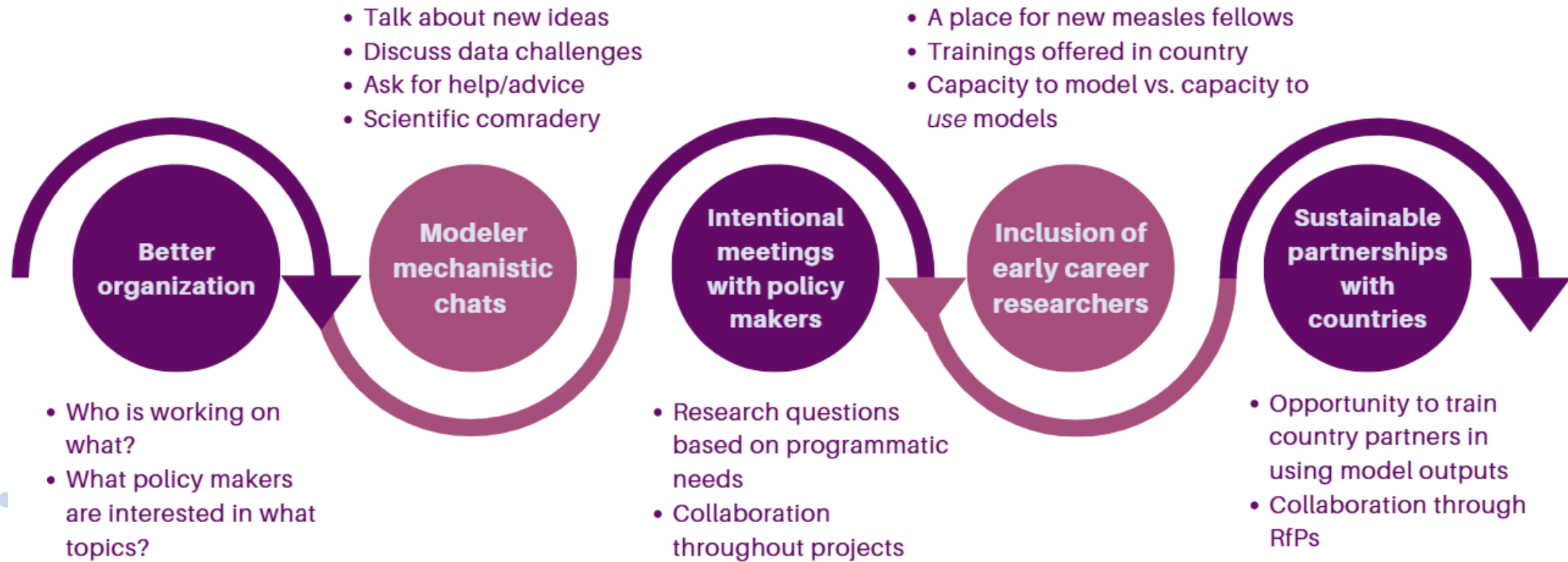
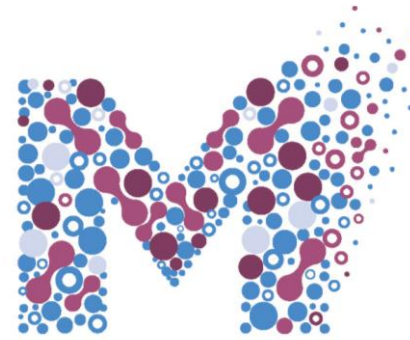
Mapping the measles community

Mapping the measles community



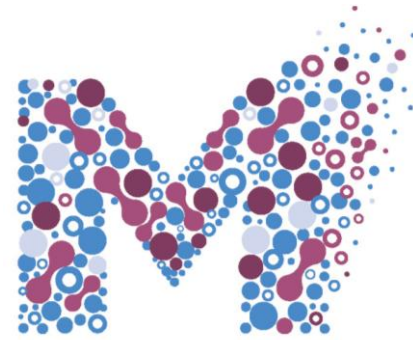
- Mapping of existing MAH members and stakeholders
 - Who is working on what?
 - What collaborations are ongoing?
 - What current needs exist within the community of measles modelling and analytics?
 - How can the Hub address these current needs?

Mapping of the measles community – *needs identified*



MAH Ways of Working

MAH Ways of Working

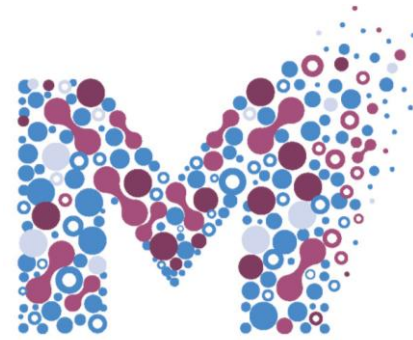


- The MAH Management Team will work alongside stakeholders *and* measles modelers to identify important research questions – bidirectional relationship



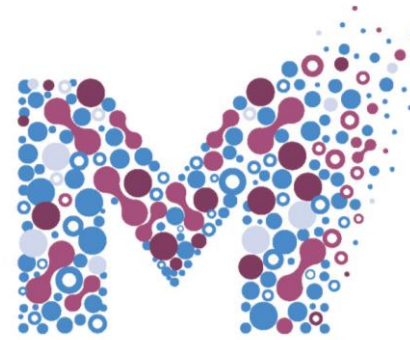
- Policymakers identify questions that are communicated to MAH management, which are then shared with membership
- Policy relevant questions can also be proposed from modelers
 - Questions will then be shared with the MAH membership via several mechanisms:
 - Recurring meetings, events and newsletters
 - RfPs
- Enhance comradery *not* change the community

MAH Ways of Working, cont'd



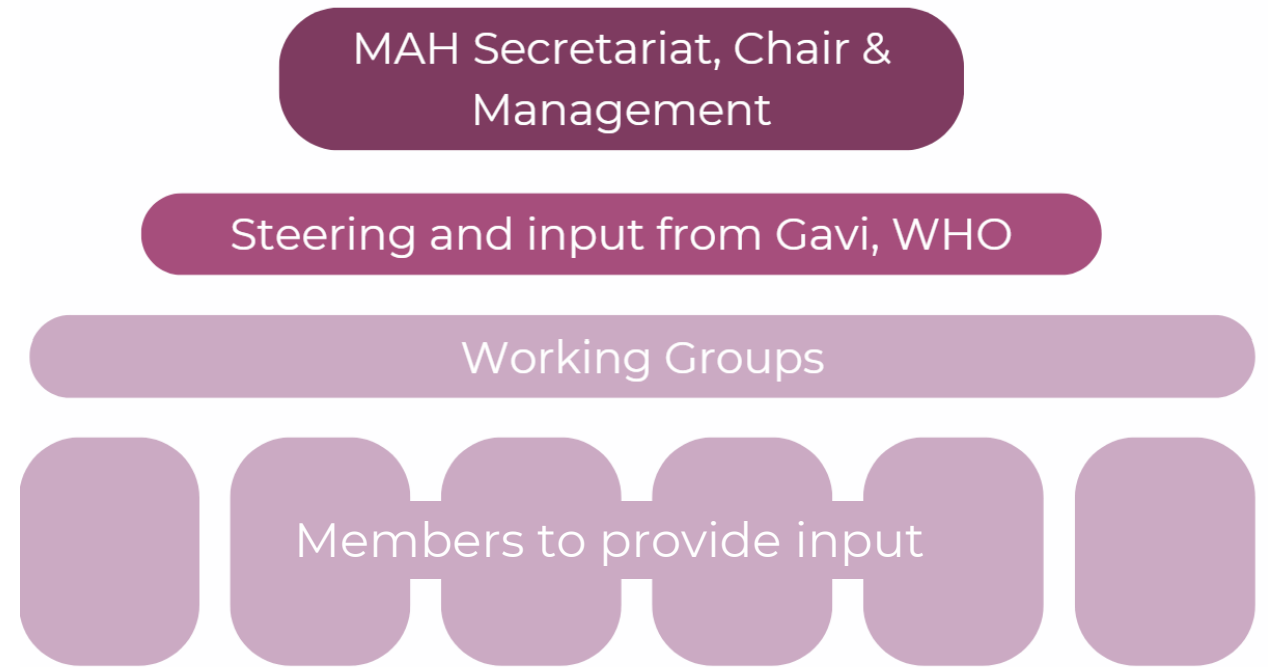
- The MAH Secretariat will be responsible for the administrative support of Hub and coordination of all meetings/events
 - Members are encouraged to refer collaborators to the Hub - open membership
 - Members can suggest events or meetings for which Hub representation would be beneficial
 - Recurring online meetings will feature MAH updates, a Situation Report and time for members to raise questions or suggestions.
 - Emphasis on transparency & input from members.

MAH *proposed* structure (V1.0)



- Initially, we will operate under the following structure:

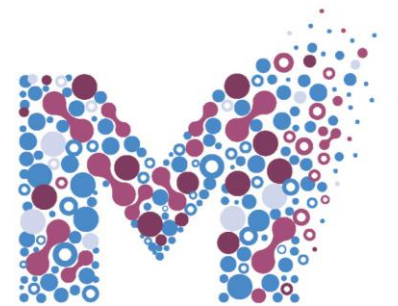
- MEMBER INPUT:**
 - What topic(s) would you like to work on alongside other collaborators from the MAH?



Add your topics

Menti.com

Use code: 8201 7518



MEASLES
ANALYTICS HUB

Join at menti.com | use code **7870 2313**



What topic(s) would you like to work on alongside other collaborators from the MAH?

All responses to your question will be shown here

Each response can be up to 200 characters long

Turn on voting to let participants vote for their favorites



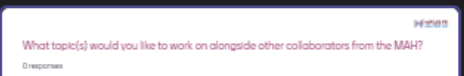
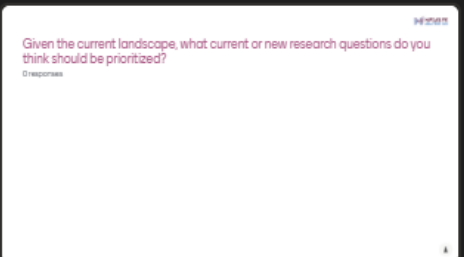
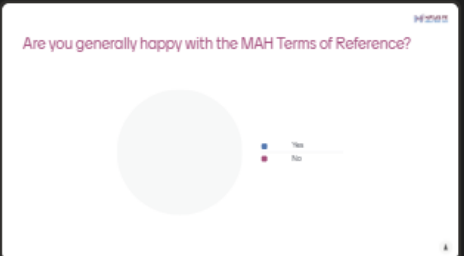
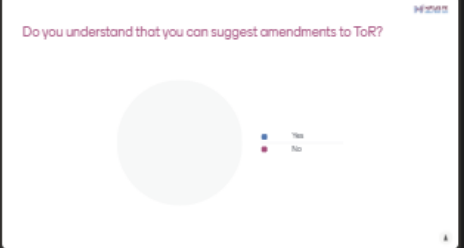
AM

Menti

March Members Meeting



Choose a slide to present

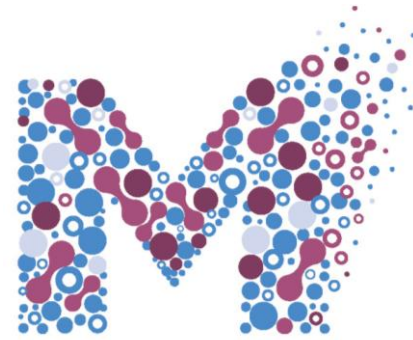




MAH Reminders

Chris Brookes, MAH Project Administrator

Membership



- Please remember to register for the MAH – going forward, all correspondence, meeting invites, newsletters, etc. will only be sent out to members
- Use the QR code at the bottom of this slide to register (a link will also be sent around in a follow-up email following this call)



Have your say in the Hub



- Today, we voted to ratify the Terms of Reference, to propose amendments in the future, please reach out:

vimc-mah@imperial.ac.uk

There will also be an entry form on the new website for feedback

Annual in-person meeting 12th & 13th June Accra, Ghana

An opportunity for networking, a showcase of regional modelling work, opportunities for knowledge exchange...



Annual meeting – Accra, Ghana



- An invite was already sent out to MAH members (note you needed to be a member to receive this email)
- A reminder will be sent out along with a link to register for the event following today's call
- If you have not received an invite, please contact vimc-mah@imperial.ac.uk

• **DEADLINE TO RSVP: 14TH March 2025**

Share your news & updates



• The MAH will send out a newsletter every quarter. Please submit your news to be featured in the newsletter:

- Recent publications or pre-prints
- Jobs or training opportunities
- Calls for proposals or funding
- Upcoming meetings relevant to the MAH
- Other news items you'd like to share

• **Email newsletter submissions to vimc-mah@imperial.ac.uk**

• We also welcome timely or urgent items that should be forwarded to members via email



Primers for Ghana



Primer for Ghana

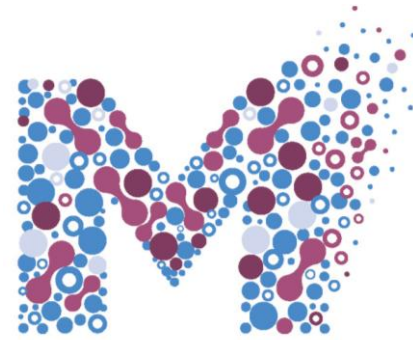
During our June meeting, we will have a break-out session to discuss persistent data challenges.

Ahead of our next meeting, please think about the following topics and come ready to discuss:

(1) what data challenges/gaps currently exist for measles modelling?

(2) what practical and feasibility issues contribute to these challenges? i.e., what relationships do you need to form/strengthen to address these data challenges?

Annual meeting – Accra, Ghana



CALL FOR ABSTRACTS

- The meeting will feature a symposium of measles modelling research within the context of West Africa.
- If you would like to present your research at the symposium, please look out for more details in the MAH newsletter.



Closing remarks

The meeting has now ended. The call will remain open for 30 minutes to allow for further questions.

