



INTERNATIONAL CONVENING ON DIARRHEAL DISEASES SURVEILLANCE

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International Convening on Diarrheal Disease Surveillance – Agenda Version February 3, 2026

Background: With both current and future changes to the global health financing landscape, disease surveillance will need to be increasingly led and financed by countries. Diarrhea surveillance is important because it provides critical evidence needed to prevent deaths; develop, design, and target interventions; mobilize resources; and strengthen health systems, particularly for young children and vulnerable populations. This convening brings together leading researchers and surveillance practitioners to chart a path forward towards sustainable diarrhea surveillance.

Meeting Objectives:

- Review empirical and modeled evidence on diarrheal disease burden to inform priority-setting for surveillance investments.
- Compare surveillance models, diagnostic strategies, and data sources to determine which approaches best support country decision-making and programmatic action.
- Reach alignment on priority pathogens and characteristics of the ideal diagnostic platform for diarrheal surveillance
- Consider surveillance use cases and describe what is needed to best support prevention, treatment, and policy.
- Generate concrete recommendations for integrating diarrheal disease surveillance into existing national systems, including options for financing, governance, and long-term sustainability.

Discussion Questions for Review and Consideration During Convening:

- **How important are diarrheal diseases today** as a cause of under-5 mortality, severe illness, and longer-term sequelae?
- **What should a diarrheal surveillance system accomplish? What policy decisions should diarrheal disease surveillance primarily support** at country level, and which use cases are essential versus optional?
- **What has driven successful country ownership and leadership** of surveillance systems—either for diarrheal disease or other conditions—and what factors most commonly undermine sustainability?
- **How can diarrheal surveillance be integrated into existing national surveillance platforms** rather than operating as a stand-alone or donor-driven system?
- What new approaches or technologies could move the needle for acceptability/affordability of country-led diarrhea surveillance?
- **What pathogens are essential for inclusion in diarrheal surveillance, how should they ideally be detected, and how should this be translated into estimates of diarrhea etiology?**
- **What diagnostic approaches are “good enough” for sustainable surveillance**, and which elements are primarily research-oriented?

Expected Meeting Outputs (tentative):

- Global surveillance diagnostic target product profile + pathogen list
- Description of diagnostic needs and reconciliation of tradeoffs with different diagnostic approaches/platforms
- Prioritization of diarrhea surveillance use cases (must-have vs. nice-to-have)
- Minimum viable product for diarrhea surveillance and consideration of design elements needed to achieve it
- Opportunities for integration of diarrhea surveillance into national programs, including options for financing and key steps needed to mainstream diarrhea surveillance into national surveillance programs

Meeting report manuscript documenting critical opportunities and challenges for sustainable disease surveillance (writing group + group authorship)

Time	Topic	Presentation	Speaker
8:30-8:45	Welcome	Welcome / Introduction	Jacob John Gagandeep Kang
8:45-9:00	Keynote Address	Pan-India Syndromic Surveillance of Acute Diarrhoeal Disease through ICMR/DHR VRDL & IRDL Network	Nivedita Gupta
9:00-9:15	Inaugural Address	Importance of surveillance and why countries should invest in it.	Rakesh Gupta (remote)
9:15-10:30	Session objective: Highlight key findings from landmark etiology studies		
	Diarrhea etiology, incidence, and severity Research studies Facilitator: Eric Houpt	Etiology and Burden of Diarrheal Disease in Early Life: Multisite Findings from the MAL-ED Study	Venkat Raghava Mohan
		Uncovering the etiology and outcomes of moderate-to-severe diarrhea in low resource settings: the GEMS and VIDA studies	Karen Kotloff
		Diarrhea etiology and severity from ABCD and EFGH and implications for future surveillance	Patricia Pavlinac
10:30-11:00	Coffee Break		

	Session objective: Showcase examples of country-led diarrhea surveillance		
11:00-12:30	Diarrhea etiology, incidence, and severity Surveillance Facilitator: Jason Mwenda	The Global Pediatric Diarrhea Surveillance (GPDS) Network 2017-2024	James Platts-Mills
		National diarrhea surveillance in South Africa	Nicola Page
		National diarrhea surveillance in Bangladesh	Tahmeed Ahmed
		Diarrhea surveillance in Southeast Asia	Watcharapong Kumla (remote)
12:30-13:15	Lunch		
	Session objective: Review empiric data on diarrhea mortality, both as an overall cause of mortality as well as etiology-specific mortality		
13:15-14:15	Diarrhea mortality Facilitator: Robert Black	Diarrhea-Attributable U5 Mortality in LMICs: Preliminary Systematic Review Findings	Sofia Donovan
		Contribution of Diarrhoeal Disease to Mortality in Resource-Poor Settings of Sub-Saharan Africa and South Asia: Findings from Verbal Autopsies in Selected Health and Socio-Demographic Surveillance Systems	Chodziwadziwa Kabudula (remote)
		Use of minimally invasive tissue sampling to quantify and understand the contribution of diarrheal diseases and associated co-infections in children	Portia Mutevedzi

14:15-15:45	Session objective: Compare/contrast leading global burden estimates for diarrhea mortality (overall / pathogen-specific); identify key areas of uncertainty and data gaps that would be impactful on estimates		
	Global burden: modeled estimates Facilitator: John Crump	Global burden of diarrheal diseases and pathogens, 1990-2023: results from the Global Burden of Disease Study 2023	Hmwe Kyu (remote)
		Global and Regional Causes of Deaths from Diarrhea in Children Less than 5 Years, 2000-2021	Robert Black
		GPDS: incorporating access to care and etiology-specific case fatality rates into mortality estimates	Maria Garcia Quesada
		Updated Estimates of the Global, Regional and National Burden, and Etiology of Diarrheal Diseases Transmissible via Food: A Systematic Review and Meta-Analytical Modelling Study for the World Health Organization	Margaret Kosek
		Modelling and projecting climate impacts: The Plan-EO and SPRINGS projects	Josh Colston
15:45-16:00	Coffee Break		
16:00-17:30	Workshop 1 - 3 parallel tracks		
	1a. Co-infections	1b. Adenovirus	1c. Special Populations
17:30	End of Day 1		
19:00	Welcome Dinner		

Time	Topic	Presentation	Speaker
8:00-9:15	Session objective: Highlight what is known/not known about non-acute diarrhea morbidity		
	Broader consequences of diarrheal diseases Facilitator: Alejandro Cravioto	Impact of diarrhea on linear growth faltering: evidence across Gates-funded studies	Elizabeth McQuade
		The gut of the problem: diarrhea and malnutrition in children	Temsunaro Rongsen
		EED - does it matter?	Paul Kelly
		Diarrhea and Cognitive Outcomes: Evidence from Indian Birth Cohorts	Beena Koshy
9:15-11:00	Session objective: Showcase key learnings from molecular dx and look ahead to new approaches. Set the stage for Day 3 workshop.		
	Diagnostics Facilitator: Senjuti Saha	Overview of Molecular Diagnostics and Diarrhea Etiology	Eric Houpt
		Redefining feasibility in diarrheal surveillance: long term nucleic acids stability with simple, low-cost stool preservation	Amanda Debes
		Diagnostic Utility of Fecal Inflammatory Biomarkers and their relevance for Shigellosis Case Identification in Surveillance Systems	Billy Ogwel
		Landscape review of new diarrhea surveillance diagnostics	Keerthi Boddupally

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11:00-11:30	Coffee Break		
11:30-13:00	Session objective: Highlight key AMR threats for diarrheal diseases and how we better monitor AMR / include in diarrheal surveillance initiatives. Why does AMR matter?		
	AMR Facilitator: Iruka Okeke	Antimicrobial Resistance in South Asia: The Growing Threat from Diarrheal Pathogens and the Surveillance Challenge	Balaji Veeraraghavan
		The Global AMR surveillance system (GLASS)	Silvia Bertagnolio
		Antibiotic resistant <i>Shigella</i> and <i>E.coli</i> -Lessons learned from EFGH and ABCD	Patricia Pavlinac
		Panel Discussion	
13:00-14:00	Lunch		
14:00-15:30	Workshop 2 - 2 Parallel Tracks		
	2a. Vaccines		2b. Non-clinical approaches to surveillance
15:30-16:00	Coffee Break		
16:00-17:30	Plenary Report Workshops 1 & 2 10 minutes report out + 5 minutes discussion per workshop		
17:30	End of Day 2		

Time	Topic	Presentation	Speaker
	Session objective: Set stage for Workshop 3. Identify hallmarks of successful surveillance networks with country ownership, and consider how they are applicable (or not) to diarrheal disease surveillance.		
8:00 - 9:45	Building sustainable surveillance for the future Facilitator: Rebecca Grais	Lessons learned from the Global Rotavirus Surveillance Network	Shilpa Iyer
		Lessons learned from other WHO surveillance programs	Mick Mulders
		Lessons learned from Integrated Disease surveillance initiatives	Goitom Weldegebriel
		Re-imagining the future of Global Pediatric Diarrhoea Surveillance: feedback from a stakeholder consultation	Thomas Cherian
		Panel Discussion	
9:45-11:00		Workshop to discuss as small groups:	Facilitators:
	Workshop 3 - Building sustainable surveillance for the future	Diagnostics	Keerthi Boddupally and Chitra Pattabiraman
		Design	Thomas Cherian and Kirsten Vannice
		Finance and operation	Arindam Ray and Sarang Deo

11:00-11:30	Coffee Break		
11:30-12:30	Workshop 3 - Plenary Reports		
12:30-12:50	Closing Keynote	Closing Keynote	Thomas Cherian
12:50-13:00	Close of Meeting	Meeting Closure	Duncan Steele
13:00-14:00	Lunch		
14:00	End of Day 3		

Workshop Topics

	Workshop Topic	Presentation	Speakers	Questions for the workshop
1a	Co-infections Facilitator: James Platts-Mills	Definitions, diagnostics, and attribution	James Platts-Mills	What is a co-infection? How common are they? Are they clinically relevant, and do some matter more than others? Do they need to be considered for vaccine trials?
		Clinical consequences of co-infections & implications for vaccine trial endpoints	Elizabeth McQuade	
1b	Adenovirus Facilitator: Firdausi Qadri	Burden of adenovirus-associated diarrheal hospitalizations in Indian children under 5 in the post rotavirus vaccine era	Tintu Varghese	How much does adenovirus contribute to diarrhea morbidity? Mortality? How important are non-enteric adenoviruses? What research is needed to better clarify the role/importance of adenovirus?
		Severity of adenovirus and potential role of sequential infections	Maria Garcia Quesada	
		Role of non-enteric adenoviruses	Benjamin Lee	
		Adenovirus immunity and vaccine prospects	Jen Hendrick (remote)	
1c	Special populations Facilitator: Richard Omore	Diarrhea burden in older adults in Cameroon: A case control study using low cost specimen preservation	Jerome Ateudjieu	How can we capture diarrhea burden and etiology in special populations? What is the evidence it is variable?
		Adult diarrhea - Peru	Claudio Lanata	
		HIV	Niyi Bejide	
		Can traveller-derived genomic data strengthen enteric surveillance in LMICs?	Kate Baker	

Workshop Topics

2a	Vaccines Facilitator: Miren Iturriza	New vaccine timelines	Miren Iturriza	What diarrhea surveillance do we need in place to support vaccines (pathogen prioritization, product development, testing, policy, post-introduction evaluation). How long after a vaccine is introduced (e.g. rotavirus vaccine) should surveillance continue?
		Oral vaccine performance for rotavirus and other enteric diseases	Carl Kirkwood	
		Vaccines and indirect protection	John Clemens	
		Vaccine impact on Antimicrobial usage – lessons learned from Typhoid conjugate vaccines	James Meiring	
2b	Nonclinical approaches to diarrhea surveillance Facilitator: Supriya Kumar	WES in India	Labanya Mukhopadhyay	In what situation/context would you use non-clinical approaches to make decisions regarding diarrheal disease interventions? What questions would you <u>not</u> use non-clinical approaches to address? Are there any pathogen-specific nuances to consider?
		Sewage surveillance for enteric diseases form Dhaka, Bangladesh study	Mami Taniuchi	
		Lessons from Malawi: Can Environmental Surveillance Guide Shigella Vaccine Planning?	Jen Cornick (remote)	
		Advancing diarrheal disease surveillance through multiplex serologic approaches	Richelle Charles	

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