



**WEBINAR Q&A**

**APMEN TECHTALKS #10**

Hosted by the APMEN Vector Control Working Group (VCWG)

**“Appropriate Surveillance: Better local understanding for reduced vector exposure”**

**12 October 2021, 11:00 PM Singapore Time**

**Panelists**

**Dr Camille Guillot**

Residency in Public Health and Preventative Medicine,  
Universite de Sherbrooke, Canada

**Professor Leanne Robinson**

Programme Director  
Health Security  
Burnet Institute, Australia

**Dr Susanta Kumar Ghosh.**

Former Scientist G  
ICMR-National Institute of Malaria Research, India

**Moderator**

**Dr Leo Braack**

Co-Chair of APMEN Vector Control Working Group  
Senior Vector Control Specialist, Malaria Consortium

**Question:**

Anonymous Attendee	To Dr. Camille, thanks a lot. A very interesting study. How do this design and findings work in your further look into the aforementioned development of Pan-canadian surveillance network?
Dr Camille Guillot	Hello! Thank you for your question ! The list of criteria extracted from the scoping review was used in a multicriteria decision analysis

	(MCDA). First, we had a panel of 12 surveillance experts from across the country, and the most relevant criteria were selected in a group approach. We then completed a spatial MCDA with the retained criteria.
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Indra Vythilingam	In the forest areas of Cambodia do they have simian malaria in humans? Are they looking for it?
Professor Leanne Robinson	Thanks Indra. Yes, I understand there are ongoing studies investigating this in the area.

Min Zin	To Dr. Camille Is the selection of sentinel surveillance different from disease specific? How it is defined generally? From your study findings, can we apply risk-based criteria for any communicable disease for selection of sentinel surveillance? Thank You.
Dr Camille Guillot	Many thanks for your question! Our scoping review did not analyse whether use of the criteria differed between diseases, we had too many different types of diseases, and too many criteria in order to analyse statistically. However, some considerations are particularly important for some diseases. For instance, some criteria included presence of human activities near water features (for schistosomiasis). I think it would be interesting to use risk-based criteria for communicable diseases in general, however the scoping review only looked at vector-borne diseases, and so I unfortunately don't have all the information to answer completely. It is worth noting that sentinel surveillance is not very good (generally) at acting as an Early Warning System (EWS), so using risk based measure for communicable diseases in sentinel surveillance, with the aim of acting as an EWS, may not be efficient.

Indra Vythilingam	Prof. Robinson: Is there a pattern for gametocytes - do they occur at certain time of the day/night? Will this change when vectors change their biting time for late night to early evenings?
Professor Leanne Robinson	Yes, these are excellent questions. I understand there is some evidence that more gametocytes circulate at night, and also that gameotcytes are more infective at night, coinciding with peak mosquito biting. We have not undertaken that frequency of sampling in the studies presented.

Ramesh Dhiman	Prof Robinson, Villages at risk of malaria can be identified using spatial tools, but how to identify households at risk. Do you suggest mass survey to detect submicroscopic infection?
Professor Leanne Robinson	Foci based intervention during malaria elimination. Then role of sentinel sited

MYO MINN OO	Prof Leanne, a very insightful overview. I was wondering what could be the role of reactive focal case detection plus employing certain interventions such as mass drug administration and indoor residual spraying in settings like PNG, given that household and village level risks were heterogeneous yet high. Thanks.
Professor Leanne Robinson	Thank you. The PNG National Malaria Control Program is currently exploring the potential of IRS to complement LLINs and case management in certain areas. As routine surveillance and response functions are strengthened at a Provincial and District level, there is interest in exploring the role of some reactive strategies in some Provinces.

Kerre Willsher	Could community members be educated to be entomologists? It is important to engage entire communities, address any concerns.
	Question was answered but may need to be taken further to address staff shortages.

Aldillah Wulan	Dr Ghosh, how India do the migration surveillance in border area, to achieve malaria elimination, especially for submicroscopic and asymptomatic malaria?
Dr Susanta Ghosh	It is not only border areas. We can use microPCR device to detect low level parasite that can address this issue.
	but I don't think it is possible to do PCR for all asymptomatic people come from outside the borders? is there any strategies for this

prudence hamade	@ Prof Robinson Do you think the resurgence of malaria in the villages in PNG were due to the failure to eliminate the asymptomatic reservoir or were there other factors like in migration, change of climate or agricultural practices
Professor Leanne Robinson	Thanks Prudence. I agree that the high asymptomatic reservoir certainly contributed to the rapid bounce back that was observed post-2015, however there were other factors as well. PNGIMR have published evidence about the lower bioefficacy of bednets that were distributed after 2013. There was also a period in 2015/16 when health facilities experience severe shortages of ACTs.

Kerre Willsher	We need ecological approaches as well. Many creatures that prey on insect vectors are going extinct due to climate change. Probably need collaboration with other sectors.
	I agree. Multidisciplinary and intersectoral approaches are needed.



Kerre Willsher	Could the education at village level be a stepping stone to higher education? Could be a way to lift out of poverty.