CARIBBEAN VECTOR BORNE DISEASES NETWORK

CariVeCNet

Volume 1
Issue No. 1
December 2021

We Have Relaunched Our Network!

In this Issue

Our Mission

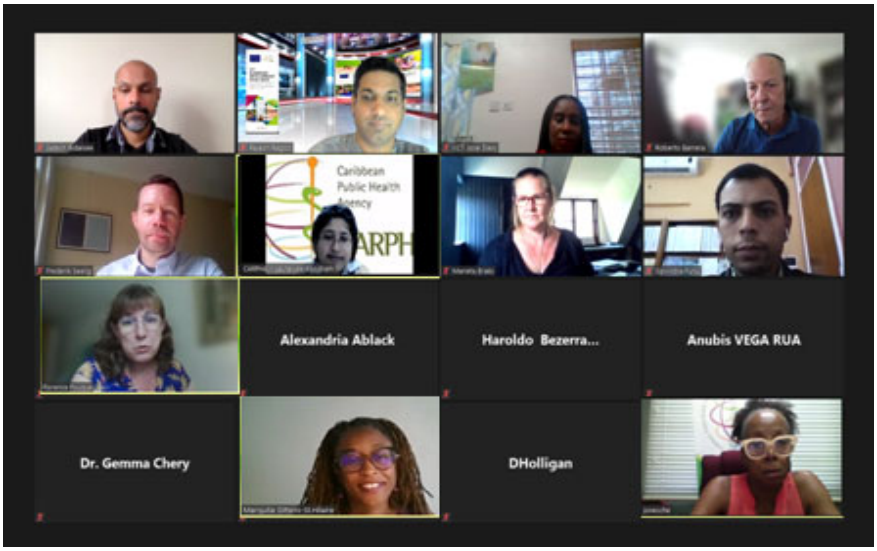
We operate to reduce the burden of Vector Borne Diseases (VBD) in the Caribbean by promoting information sharing on prevention and control; support capacity building for diagnosis and surveillance; facilitate collaboration on research related topics; harmonise the regional use of technologies and protocols for VBD management; and foster the integration of community engagement into vector control activities.

Greetings from the Caribbean Public Health Agency

We at CARPHA are pleased to be the Coordinating Secretariat for the Caribbean Vector-Borne Disease Network (CariVecNet). With the participation of national, regional, and international stakeholders, the goal of this network is to strengthen Regional capacity for the prevention and control of Vector-Borne Diseases (VBDs).

VBDs pose a major threat to health and economies globally. Vectors such as mosquitoes transmit viruses and parasites to humans, which can cause mild to severe diseases. The WHO estimates that VBDs account for approximately 17% of global infectious diseases, with around 700,000 attributed deaths each year. As we look to the future, we cannot underestimate the continued efforts and resources necessary to turn the tide against mosquito-borne diseases. The ongoing COVID-19 pandemic has left the Region's public health system extremely vulnerable to other public health threats. A collaborative effort is required to reduce the spread of diseases. Everyone, the public and private sectors, communities, and individuals, must play their role in this call.

Meet our Steering Committee Members



- Dr. Anubis Vega-Rúal (Institut Pasteur Guadeloupe)
- Dr. Florence Fouque (World Health Organization Tropical Diseases Research); Observer
- Dr. Haroldo Bezerra (Pan American Health Organization); Observer
- Dr. Roberto Barrera from Dengue Branch (Centres for Disease Control and Prevention)
- Ms. Dawn Byng (International Federation of Red Cross and Red Crescent Societies (IFRC)
- Dr. Satesh Bidaisee (St. George's University); **Chair**
- Dr. Frederik Seelig (London School of Hygiene & Tropical Medicine; Global Vector Hub)
- Dr. Marieta Braks (National Institute for Public Health and the Environment (RIVM)); Co-chair
- Dr Jose Davy (Ministry of Health Wellness & Environment, St. Vincent and Grenadines)
- Dr. Gemma Chery (Ministry of Health, Saint Lucia)
- Dr. Marquita Gittens-St. Hillaire (Ministry of Health & Wellness, Barbados)
- Ms. Dale Holligan (Ministry of Health & Wellness, Barbados)
- Dr. Laura-Lee Boodram (CARPHA)

About our Technical Working Groups (TWGs)

The network consists of five technical working groups (Vector Control, Disease Surveillance, Laboratory Diagnostics, Clinical Management, and Community Engagement., which are overseen by members of the steering committee. Representatives from Technical TWGs are sourced from CARPHA States and regional agencies. Working group members are experienced in interventions that aid in the prevention and control of Vector-Borne Diseases that relate to their specific professional disciplines. Each TWG develops and contributes to activities under a biennial workplan, which is summarized in the next section.

- **Vector Control**

The Vector Control TWG will be improving the implementation of their Integrated Vector Management (IVM) strategies and, will develop country-specific strategies in the area of prevention and control of VBDs. These activities will contribute to more effective control of mosquito vectors in the Caribbean.

- **Disease Surveillance**

The Disease Surveillance TWG will be reviewing the surveillance systems for VBDs and will share recommendations for improvement. Focus will be placed on potential system measures for future integration of entomological and climatic information to aid in disease modeling for early detection and management of outbreaks.

- **Laboratory Diagnosis**

National lab capacity assessments are planned to facilitate future training in diagnostic methods for detecting VBDs. Examples include serology and PCR for detecting arboviruses, including Zika, Chikungunya, and Dengue. Other interventions related to strengthening regional laboratory surveillance will be carried out in conjunction with the Caribbean Public Health Laboratory Network (CARIPHLN)

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- **Clinical Management**

The Clinical Management TWG will share technical information and develop strategic alliances among agencies utilizing and or applying current theories for clinical management of VBD. They will be conducting technical reviews of and endorse clinical interventions, initiatives, and research for the management of VBDs.

- **Community Engagement**

This group will develop community engagement strategies to promote behavioral change through Knowledge, Attitudes, and Practices (KAP) national studies. Evidence will generate how individuals make decisions and take action to reduce their risk of contracting Zika and other mosquito-borne diseases. Train the trainer initiative s will be rolled out for public health professionals working on community interventions.

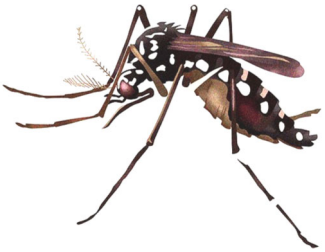
Key Developments

The CariVecNet is, funded in part by the European Development Fund (EDF) project which, supports health system strengthening for the prevention and control of outbreaks of mosquito-borne diseases in the Caribbean. Other current financial support is provided by the Agence Française de Développement (AFD) and Centres for Disease Control and Prevention (CDC).

In March 2021, the CariVecNet sought to increase the involvement of CARPHA member states through formal recruitment. Current participating Member States include Antigua and Barbuda, Aruba, Barbados, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Guyana, Jamaica, Saba, Saint Kitts and Nevis, Saint Lucia, Suriname, Trinidad and Tobago, and Turks and Caicos Islands.

Regional Advances in VBD Prevention and Control

In 2019/2020 a major Dengue outbreak was of grave concern in the Caribbean Region, resulting in increased mortality of severe Dengue cases. There is also the ever-present threat of importation of new or 'exotic' arboviruses into the Caribbean, in a similar way that led to previous Zika and Chikungunya outbreaks in the Region. Partnerships focusing on multisectoral strategies are critical to strengthening the Region's surveillance systems, equipping the public health workforce and communities with the necessary skills to detect, respond and contain these public health threats. The 11th EDF Project reinforces CARPHA's existing relationship with the European Union to improve the Public health of the Caribbean by reducing the impact of illnesses associated with mosquito-borne diseases.



Climate Change and Vector Borne Diseases in the Caribbean

As planetary temperatures rise, climate-sensitive vectors such as mosquitoes are changing breeding patterns, increasing geographic spread, and becoming more competitive in terms of disease transmission. Small Island Developing States (SIDS) within the Caribbean are particularly susceptible to the effects associated with climate change. CARPHA will be collaborating with local and international partners to study the environmental factors that drive vector ecology and increase disease transmission risk to support outbreak prediction and management.

Highlights of Vector Control Activities in CARPHA Member States

CARPHA has engaged in Strengthening Institutional Capacity in Vector Control Programmes in CMS. This program includes training of CMS in the Implementation and Monitoring of Integrated Vector Management (IVM) Strategies, Advanced Entomological Surveillance Techniques to Support Insecticide Resistance Testing (IRT), and strengthened Entomological Surveillance using Geographic Information Systems. The CMS trained have made CARPHA-recommended changes to their vector control programs. Member states have seen significant improvements using entomological surveillance parameters to assess arboviral disease transmission. CARPHA continues to support the implementation of the recommended changes to improve the quality of life for persons living in the Caribbean. Training of additional CMS is ongoing.

New collaboration between CARPHA and the Global Vector Hub

The Caribbean Public Health Agency (CARPHA) and the Global Vector Hub (GVH) were pleased to announce a new partnership in the field of vector-borne diseases and capacity building in the Caribbean and surrounding regions. On Monday 22 November, a Memorandum of Understanding (MoU), establishing a framework for future collaborations was simultaneously signed by Dr. Joy St. John CARPHA Executive Director at CARPHA's headquarters in Trinidad, and by Professor James Logan in London. Given the strong overlap in the aims of building capacities for the strengthening of vector bone disease prevention and control, CARPHA and the GVH will share resources and network connections to facilitate an improved exchange of information and best practices on vector control.

Virtual Conferences

First Virtual Regional VBD conference to be held in June 2022: This one-day conference will be a virtual lead-up to the annual CARPHA Scientific conference in June 2022. Topics will include recent advances and new technologies in VBD surveillance, prevention, and control; current epidemiological patterns in Regional VBDs; breakthroughs in the clinical management of VBDs; case studies in VBD community engagement and behavioural change... and more!

Upcoming Events in 2022

January 2022

2nd Technical Working Group General Meeting
VOTE ! VOTE ! VOTE !
Election of incoming chairs for the CariVecNet TWGs

February 2022

2nd Steering Committee Meeting

For more information please visit our website at

http://carivecnet.carpha.org/

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