



CARIBBEAN PUBLIC HEALTH AGENCY

Zika – Strengthening Health Sector Response

Dr. Joy St. John

Zika Virus (ZIKV) has been identified in 20 countries in the Americas, including four CARPHA Member States (CMS) to date. Given the existence of the competent vector *Aedes aegypti* in most countries in the region, there is a high probability that ZIKV can and will spread to other countries in the Caribbean.

Public health surveillance is a key strategy in the fight against any disease and entails the ongoing scrutiny of all aspects of spread of a disease pertinent to effective control. Key is a high index of suspicion by health providers, e.g., to take a travel history in patients presenting with a Zika-like illness, as well as environmental surveillance.

Before an area or country is declared to be having local spread or an outbreak, the laboratory is critical to confirm the diagnosis.

In light of this possibility, CARPHA has developed the capacity for ZIKV testing and has been actively engaged in the testing of samples from many member states as they step up their surveillance activities focused on detecting the arrival of this virus to our collective shores. At this time, Polymerase Chain Reaction (PCR) testing, capable of identifying genetic material from ZIKV is the only reliable test for the virus. Antibody testing is less conclusive because a large proportion of the populations in our member states will have antibodies to another similar virus, the Dengue virus – endemic in many parts of the region – which can confuse test results. As a result, testing of samples is limited to those which have been collected early in the course of the illness (within the first 3 days) when levels of virus are highest in the bloodstream – when PCR testing can pick it up. Please ensure that there is adherence to our packing and shipping guidelines. As well if there are cases which need further discussion because of peculiar circumstances, we stand ready to provide clarification and guidance.

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16-18 JAMAICA BOULEVARD, FEDERATION PARK, PORT OF SPAIN, TRINIDAD

Tel: 868 622-4261 | Fax: 868 622-2792 | Email: postmaster@carpha.org | Website: www.carpha.org

It is important to note that the laboratory testing for ZIKV is not geared toward identifying EVERY SINGLE case of ZIKV which may occur in a country, as many persons may have mild disease and may not come to clinical care or require a test, at all. The numbers of clinically confirmed cases are therefore not intended to reflect the actual number of cases in any given country; rather, lab confirmation of ZIKV circulation is meant to keep track of the appearance of ZIKV in new areas and provide updates on the **spread** of the virus. In most cases, physicians will need to use clinical criteria (patients' signs and symptoms) as well as epidemiologic data on the circulation of ZIKV in the areas from which their patients present, in order to come to a diagnosis of suspected ZIKV.

Special attention is warranted in the follow-up of patients for varying types of neurological sequelae after ZIKV infection and particular attention should be paid to follow up of pregnant patients who present with febrile illness compatible with ZIKV, and their offspring, in light of current concerns regarding a potential connection between ZIKV infection in pregnancy and the development of microcephaly in infants of affected mothers. CARPHA is currently in the process of piloting systems to facilitate the documentation of such cases, should they occur, so as to detect any similar patterns of association, in the Caribbean region, as early as possible. Barbados has been chosen as a pilot site for this activity.

It is important that we follow the course of this disease in the Caribbean very closely from more than one perspective. The first is that it is new to this region and its potential impact is still largely unknown.

Second is that we must provide the best epidemiological data in order for countries to keep abreast of the best practices in addressing the clinical manifestations of the illness, as well as the best practices in vector control. To this end we are also requesting that countries send specimens for severe cases of Zika, especially hospitalised cases where Zika infection is suspected.

We will be working through the Ministries' vector control programmes to ensure that vector control around health centres is optimal and health care workers themselves are using the correct precautions.

Third is the potential for a negative economic impact on our heavily tourism dependant countries. Thus we partner with the regional tourism entities like CHTA and CTO to provide them with timely data and guidance to achieve the best approach to mitigating that negative impact.

CARPHA looks forward to maintaining an open channel of communication with the media and member states as the ZIKA epidemic unfolds and anticipates the cooperation of all stakeholders in ensuring the most evidence-based response to the developing situation.