MEETING OF THE TECHNICAL ADVISORY GROUP FOR CHIKUNGUYA VIRUS INTRODUCTION PREPAREDNESS AND RESPONSE IN THE AMERICAS

LIMA- PERU
21-23 JUL 2010
Areas at risk for Chikungunya transmission (WHO 2008)
Chikungunya
2007 outbreak in Italy
Chikungunya diagnosed in Travelers to Western Hemisphere

- Canada
- United States
- Martinique
- French Guyana

Many reported to be viremic
(Viremia lasts as long as 8 days post-onset)
Chikungunya risk assumed to be greatest in areas with:

• Competent vectors
• Endemic dengue
Distribution of potential CHIK vectors in the Americas

Aedes aegypti

Aedes albopictus
Countries at risk for Dengue (WHO 2009)

The contour lines of the January and July isotherms indicate areas at risk, defined by the geographical limits of the northern and southern hemispheres for year-round survival of Aedes aegypti, the principal mosquito vector of dengue viruses.

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 lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Public Health Information and Geographic Information Systems (GIS)
World Health Organization

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Travel time between potential CHIK origins and PAHO destinations
## Minimum Hours Travel Time Between Cities*

<table>
<thead>
<tr>
<th>City 1</th>
<th>Merida Mexico (MID)</th>
<th>Tegucigalpa Honduras (TGU)</th>
<th>Caracas Venezuela (CCS)</th>
<th>Lima Peru (LIM)</th>
<th>Rio de Janeiro Brazil (GIG)</th>
<th>San Juan Puerto Rico (SJU)</th>
<th>Santo Domingo Dominican Republic (SDQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangalore India (BLR)</td>
<td>28</td>
<td>28</td>
<td>23</td>
<td>29</td>
<td>24</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Bangkok Thailand (BKK)</td>
<td>27</td>
<td>28</td>
<td>27</td>
<td>28</td>
<td>26</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>Jakarta Indonesia (CGK)</td>
<td>30</td>
<td>32</td>
<td>27</td>
<td>32</td>
<td>31</td>
<td>29</td>
<td>29</td>
</tr>
</tbody>
</table>

*Travelocity and Expedia search for minimum travel duration between cities shown
*Travel date: August 1, 2010
*Search conducted: July 2, 2010
History of PAHO-CDC CHIK planning project

• Conceived in November 2008 in response to expanding CHIK outbreaks, anticipated risk of CHIK introduction/outbreak in PAHO region.

• Components:
  – Diagnostic training
  – Preparedness and Response Guidelines

• Diagnostic training
  – February 2009 in San Juan, Puerto Rico (CDC DEN Branch)
  – 8 PAHO region reference laboratories represented
  – IgG ELISA, IgM ELISA, RT-PCR
History of PAHO-CDC
CHIK planning project

• Guidelines development meeting for PAHO partners
  – Planned for May 2009
  – Interrupted by H1N1 epidemic

• Guidelines drafted by PAHO-CDC committee
Plan de Preparación y Respuesta frente a la posible introducción del virus Chikungunya en las Américas
Versión 2
11 de junio de 2010

Preparedness and Response for Chikungunya Virus Introduction in the Americas
Version 2
11 June 2010
Preparedness and Response for Chikungunya Virus Introduction in the Americas

Topics
• Epidemiology
• Clinical
• Laboratory
• Case Management
• Surveillance And Outbreak Response
• Vector Surveillance And Control
• Risk And Outbreak Communication
Meeting Objectives and Outcome

• Technical Advisory Group
  – Review
  – Revise
  – Rewrite
  – Recommend adoption and implementation by PAHO countries
Technical Advisory Group Agenda

Chikungunya Background
• Chikungunya Virus: Clinical and Epidemiological aspects.
  • USA CDC (Ann Powers)
• Laboratory Diagnosis of Chikungunya virus: An overview
  – USA CDC (Robert Lanciotti)
• Impact of a Chikungunya outbreak on public health: Experience of La Reunion
  – FRANCE ‘Laveran Military Hospital’ (Fabrice Simon)
• Chikungunya cases identified in the Americas: USA, Canada and French territories
  – USA CDC (Erin Staples)
  – CANADA ‘National Microbiology Laboratory-WHOCC’ (Michael Drebot)
  – FRENCH TERRITORIES (To be determined)
• Round table: Control of Aedes aegypti in The Americas: What has worked and not
  – PUERTO RICO CDC (Roberto Barrera)
  – USA CDC (Harry Savage)
  – PAHO/WHO (José Luis San Martín)
  – MoH Brazil (Irma Braga)
  – PAHO/WHO (Chris Frederickson)

Work Groups
Muchas Gracias

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Thank You