FOCUS ON MALARIA IN THE GUYANA SHIELD

Stephen Vreden, MD PhD, National Malaria Board/ RAVREDA Suriname
Border areas in the Guyana Shield: malaria transmission areas
Brazil - French Guyana - Guyana - Suriname

Trans-border Malaria Meeting

“Improving the efficiency of control and decreasing the burden of malaria towards elimination”

Hotel Torarica, Paramaribo, Suriname 21, 22 en 23 februari 2011
PARTICIPANTS

- Health representatives of:
  - Brasil
  - French Guyana
  - Guyana
  - Suriname
- WHO Geneva
- PAHO Washington and PAHO country offices
- Global Health Group (Elimination Initiative)
MAIN OBJECTIVES

- To share information on the malaria situation in the four countries
- To identify discrepancies between the countries that are affecting malaria control, specifically in the border areas
- To identify problems in the border areas and propose solutions
- To increase the knowledge in the latest tools for malaria control and elimination
- To develop bi-lateral work plans to address malaria border issues
Malaria control to elimination

Trans border malaria control and elimination

Improving efficiency of control and decreasing the burden of Malaria towards elimination

Shiva Murugasampillay
Global Malaria Programme
WHEN CROSS-BORDER MALARIA CONTROL

- Both countries moving in attack phase of scaling up control and seeking total coverage in target districts on both sides of border areas to reach <5/1000.

- Countries have done effective malaria control and have moved from attack phase to consolidation phase (API <1/1000) within the borders and require an attack phase on the other side of the border to reduce spill over.

- Countries moving to elimination with more imported cases from across the border as compared to Indigenous-local cases.
# Malaria Control and Elimination

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<th>Lines of control or elimination</th>
<th>Control</th>
<th>Elimination</th>
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<td>Malaria Program management and health system</td>
<td>Political commitment</td>
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<td>Integrated vector control</td>
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<td>Integrated parasite control</td>
<td>PCD</td>
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<td>Epidemics-Emergency, forecasting, prevention, preparedness and control</td>
<td>Outbreak containment</td>
<td>Case containment</td>
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- **PCD**: Polymerase Chain Reaction
- **ACD**: Agglutination Complement
- **RDT**: Rapid Diagnostic Test
PHASES IN CROSS-BORDER MALARIA CONTROL

- Phase 1. Joint preparation and planning
- Phase 2. Joint management and delivery
- Phase 3. Joint reporting on progress and performance
Countries are currently not in the same phase of control and elimination.

Therefore at national levels different strategies are implied.
PERCENTAGE CHANGE MALARIA CASES IN COUNTRIES SHARING GUYANA SHIELD (BASELINE 2000)

- **Brazil** (2009)  
  308,498 (-50%)

- **French Guiana** (2008)  
  3,264 (-12%)

- **Guyana** (2009)  
  13,673 (-43%)

- **Suriname** (2009)  
  1,658 (-85%)

- **Venezuela** (2009)  
  35,725 (+20%)

Source: Annual Country Reports to PAHO/WHO
GENERAL

- **Brazil;** specifically the bordering states should be involved, at regional/state level.

- **Venezuela** should be involved since:
  + It is part of the Guyana Shield
  + It shares two borders with significant malaria issues
  + Reported high incidence of resistance may impose a threat on malaria control in the rest of the Guyana Shield
Similarities:

- Microscopy is the standard
- RDT’s are being used when indicated and with caution (HRP2- deletion threat)
- First line treatment is similar, with exception of primaquine for *P. falciparum* (Fr. Guyana)
- Drug resistance surveillance is in place, (different method used in Fr. Guyana)
Discrepancies:

- ACD not generally used in outbreak management

Plans/Challenges:

- Exchange of data on epidemiology of HRP2-strains
- Sharing data on prevalence of G6PD deficiency
- Exchange of data on efficacy studies.
Discrepancies:
- Approach of case investigation

Challenges:
- Working towards joint actions upon alarming epidemiological situations in border areas
Challenges:

- Working towards a joint comprehensive research and intervention programme,
- Addressing legal and safety issues, specifically with regards to areas of illegal mining operations.
Main Outcome

Working Group Macro Vision Approach
Malaria in the Guyana

1: General: Focusing on the malaria in the Guyana shield

2: Specific: the challenges of cross-border areas and migration

3: Objectives:
- Reduce the malaria burden in mobile populations
- Prevent the expansion of malaria within permanent indigenous communities and groups
- Strengthen the health system in general by integrating services and building on existing capacity to combat malaria
- Harmonize malaria policies and strategies
- Facilitate and strengthen multi-sectoral collaboration in and between countries and with other stakeholders
**Countries in the Guyana shield**
- All five countries should be involved
- Ministries of Health should mandate representatives for this initiative/group
- Group could be a subgroup within already existing networks such as AMI/RAVREDA

**Strategy:**
PAHO formulates an official letter to all MoHs of the different countries seeking:
1. Commitment to this special groups and idea
2. First initiative meeting of this: Suriname offered to facilitate by June 2011

**Activities:**
- Will be defined based on the information provided by working groups 1, 2 and 3
Involving the WHO recommendations 2011 on cross border malaria control and elimination when designing a regional joint strategy.
Working towards further malaria control and elimination from the South-American continent is not just an option.

We should not lose the momentum.

NOW IS THE TIME
It is a must

WORKING NOW TOWARDS MALARIA ELIMINATION FROM THE SOUTH-AMERICAN CONTINENT IS NOT A PRIVATE PASSION
PRE-CONDITIONS FOR CROSS-BORDER MALARIA CONTROL

- Overall Development Bi-lateral collaboration - Political & spatial, development projects across borders and along river basins and environmental protection areas.
- Health Development Bi-lateral collaboration
- Communicable Disease Control Bi-lateral collaboration
- Malaria Bi-lateral collaboration
- Multi-Lateral policy facilitation by a sub-regional socio-economic bodies, development banks and international organizations technical and programmatic facilitation (PAHO-WHO)
TECHNIQUES OF MALARIA ELIMINATION

- Malaria Program performance review and re-orientation
- Difference between a control and elimination program
- *Case based surveillance and Rapid response*
- *Active and passive case screening and containment/
- Mapping of cases and malaria foci and elimination of foci
- Targeted and combined IRS, LLIN, LSM
- Cross border/ trans-border malaria control and elimination
- Malaria in migrants, travellers and special populations (Import and export)
- Institutional framework for elimination. (Field surveillance agents, districts surveillance officers)