FOCI CLASSIFICATION AND RESPONSE

MALARIA ELIMINATION IN BHUTAN

APMEN Surveillance and Response Working Group
Bali, Indonesia
October 2016
System for malaria foci classification and response

Overall system

Case-based intervention in addition to normal activities

- Case detection by public health (PCD, ACD RACD) and private screening facilities and project-based clinics are considered.

- Admission for 3 days in public health for both the species and DOTs for *P. vivax* for rest 11 days by community VHWs and Teachers.

- All the cases detected within Bhutan are considered for admission for 3 days, treatment, notification, investigations, mapping of all local cases and follow-up till day 28.
System for malaria foci classification and response

- Case notification web-based + instant call to the program manager and real time Line-listing of all the cases
- Case and foci investigation, classification within 3 days of case detection.
- Case mapping and follow-up till day 28 with supervision of DOTs through community leaders engagement.

Community Action Group play important role at the chiwog (Sub-block) level:
- Net use inspection at night
- Refer fever cases to health center
- Larval source inspection and source reduction
Community Action Group/VHWs at Chiwog level actions
System for malaria foci classification and response

Surveillance guideline present based on WHO “Disease Surveillance for Malaria Elimination” Operational Manual – 2012

But

The VDCP with Technical Working Group (TWG) is under process of revisiting as per the WHO “Malaria Elimination” Operational Manual, which will be the latest surveillance Guide (Draft)

Capacity and resource requirements

– Foci classification is planned activities with budget allocation from GF.

– Need trainings and retraining of malaria-man at program, districts and field levels.
Investigation of transmission foci

How do Bhutan investigate?

Appearance of a local case is considered an outbreak

- Within 3 days of case detection by health centres
- Case mapping at the point of infection (Patient house)
- RACD within 1 Km radius; covering every individuals of H/holds.
- Vector surveillance and breeding site mapping
- IEC to the village communities
- Report submission to the Program
- Report review and sends feedback
- Weekly visits and fever surveillance by respective health centre.

(SOP including Foci Investigation Form present but under revision)
# Classification of transmission foci

## FOCI CLASSIFICATION

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Operational criteria</th>
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</thead>
<tbody>
<tr>
<td>Active foci</td>
<td>A focus with transmission</td>
<td>Indigenous cases detected currently or calendar year.</td>
</tr>
<tr>
<td>Non-active residual foci</td>
<td>No transmission currently but had 1-3 yrs. ago.</td>
<td>The last locally acquired case(s) detected in the previous calendar year or 3 years earlier.</td>
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<tr>
<td>Potential foci</td>
<td>No indigenous cases but with other cases.</td>
<td>Not classified as active or non-active residual. Imported, induced or relapsing cases detected.</td>
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</table>
Response to transmission foci

General availabilities in all health centers across the country:

- Have diagnostic facilities with microscopy/RDT
- Keep at least 2-3 doses of ACT, Chloroquine and primaquine
- Have national malaria treatment guideline, SOPs and forms.
- All health centers in 7 high risk districts (Of the Past) have trained Malaria Technicians for disease and vector surveillances.

Response is case-based
## Response to transmission foci

<table>
<thead>
<tr>
<th>Category</th>
<th>Health Center Level</th>
<th>District Level</th>
<th>Program Level</th>
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</thead>
<tbody>
<tr>
<td><strong>Active foci</strong></td>
<td>• LLIN, IRS if required&lt;br&gt;• Weekly surveillance in focus.&lt;br&gt;• IEC&lt;br&gt;• Alert CAG members for involvement in intervention activities.</td>
<td>• Coordinate RACD, IEC and investigations.&lt;br&gt;• Supervise respective HC implement required activities timely.&lt;br&gt;• Report to program weekly and whenever called via. telephole.</td>
<td>• Line listing of cases, validation of case/ foci classification.&lt;br&gt;• Supervise timeliness of activities.&lt;br&gt;• Visit at least once in transmission season&lt;br&gt;• Insecti. susceptibility studies&lt;br&gt;• Decide Special day observations (WMD)</td>
</tr>
<tr>
<td><strong>Non-active residual foci</strong></td>
<td>• LLIN and selective IRS&lt;br&gt;• Vigilance&lt;br&gt;• Regular IEC</td>
<td>• Monthly visits&lt;br&gt;• ACD in high risk areas during transmission season</td>
<td>• ACD once during T. Season in hot pops/spots.</td>
</tr>
<tr>
<td><strong>Potential</strong></td>
<td>• PCD for fever cases&lt;br&gt;• Treatment&lt;br&gt;• Reporting</td>
<td>• Supervision&lt;br&gt;• Coordinate ACD in high risk groups.</td>
<td>• Event surveillance.&lt;br&gt;• ACD in MWPs during transmission season</td>
</tr>
</tbody>
</table>
Take home concerns from this APMEN VxWG and SRWG meeting in Bali

1. G6PD deficiency prevalence vs. PQ/TQ treatment
2. Alternative to PQ with TQ and rolling out.
3. Deficiencies in present recommended diagnostic tools for subclinical malaria and options.
4. Asymptomatic malaria among migrants
5. Surveillance requirements during elimination phase
THANK YOU!