## GREATER MEKONG SUB-REGION ELIMINATION OF MALARIA (GEMS)

### MALARIA SURVEILLANCE BULLETIN

**JAN – DEC 2018**

<table>
<thead>
<tr>
<th></th>
<th>Cambodia</th>
<th>Lao PDR</th>
<th>Myanmar</th>
<th>Vietnam</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cases tested</strong></td>
<td>60,063</td>
<td>45,611</td>
<td>698,081</td>
<td>18,152</td>
</tr>
<tr>
<td><strong>Positive cases</strong></td>
<td>6,575</td>
<td>1,370</td>
<td>9,718</td>
<td>626</td>
</tr>
<tr>
<td><strong>Positivity Rate</strong></td>
<td>10.9%</td>
<td>3.5%</td>
<td>1.4%</td>
<td>3.4%</td>
</tr>
<tr>
<td><strong>Private sector service outlets &amp; malaria volunteers</strong></td>
<td>846</td>
<td>525</td>
<td>7,306</td>
<td>618</td>
</tr>
</tbody>
</table>

### PSI Contribution to National Testing & Caseload Data*

<table>
<thead>
<tr>
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<th>Myanmar</th>
<th>Vietnam</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cases tested (national)</strong></td>
<td>284,900</td>
<td>280,546</td>
<td>2,204,618</td>
<td>1,926,252</td>
</tr>
<tr>
<td><strong>Proportion of total national tests reported by PSI private sector outlets &amp; malaria volunteers</strong></td>
<td><img src="21%25" alt="21%" /></td>
<td><img src="16%25" alt="16%" /></td>
<td><img src="32%25" alt="32%" /></td>
<td>&lt;1%</td>
</tr>
<tr>
<td><strong>Confirmed positive cases (national)</strong></td>
<td>67,564</td>
<td>8,903</td>
<td>50,578</td>
<td>4,811</td>
</tr>
<tr>
<td><strong>Proportion of total national caseload reported by PSI private sector outlets &amp; malaria volunteers</strong></td>
<td><img src="10%25" alt="10%" /></td>
<td><img src="15%25" alt="15%" /></td>
<td><img src="19%25" alt="19%" /></td>
<td><img src="13%25" alt="13%" /></td>
</tr>
</tbody>
</table>

*Source of public sector data for Cambodia, Myanmar and Vietnam: UNOPS RSC meeting, 2019. This data is not yet officially released by NMCPs and is subject to change. Lao PDR data was extracted from HMIS February 2019.*
**CAMBODIA | JAN-DEC 2018**

**MALARIA SURVEILLANCE BULLETIN**

- **60,063** Suspected cases tested
- **6,575** Confirmed positive cases
- **10.9%** Average positivity rate
- **680** Formal private providers (PPM)*
  - **166** Worksites

### Suspected Cases Tested with RDT by Channel

- **PPM**
- **Worksite**

### Confirmed Positive Cases by Channel

- **PPM**
- **Worksite**

### Reporting

- **98%** Average reporting rate among private providers (Jan-May 2018)
- **98%** Average reporting rate among worksites

### Characteristics & Distribution of Confirmed Positive Cases

#### Positive cases by plasmodium species

- **Pf (42%)**
- **Pv (56%)**
- **Mixed (2%)**

#### Occupation among confirmed positive cases

- **Plantation worker (52%)**
- **Forest worker (33%)**
- **Construction/mine worker (1%)**
- **Military/police (2%)**
- **Other (12%)**

### Quality of Case Management

- **Suspected cases tested with RDT**
  - **PPM**: 99.8%
  - **Worksite**: 98.8%

- **Positive cases received ACT**
  - **PPM**: 76.4%
  - **Worksite**: 96.2%

### Referrals of confirmed positive cases due to ACT stock-out

- **1,261**

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*In compliance with an MoH directive issued in April 2018, PSI is no longer supporting private sector outlets to test, treat and report malaria cases. Data above reflects Jan – May 2018. The number of worksites supported reduced to 121 at the end of December 2018.*
MALARIA SURVEILLANCE BULLETIN

**LAO PDR | JAN-DEC 2018**

- **45,611** Suspected cases tested
- **1,370** Confirmed positive cases
- **3.5%** Average positivity rate
- **525** Formal private providers enrolled in PPM network

### Suspected Cases Tested & Confirmed Positive Cases

<table>
<thead>
<tr>
<th>Month</th>
<th>Suspected cases tested</th>
<th>Confirmed positive cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 18</td>
<td>1,000</td>
<td>200</td>
</tr>
<tr>
<td>Feb 18</td>
<td>1,100</td>
<td>210</td>
</tr>
<tr>
<td>Mar 18</td>
<td>1,200</td>
<td>220</td>
</tr>
<tr>
<td>Apr 18</td>
<td>1,300</td>
<td>230</td>
</tr>
<tr>
<td>May 18</td>
<td>1,400</td>
<td>240</td>
</tr>
<tr>
<td>Jun 18</td>
<td>1,500</td>
<td>250</td>
</tr>
<tr>
<td>Jul 18</td>
<td>1,600</td>
<td>260</td>
</tr>
<tr>
<td>Aug 18</td>
<td>1,700</td>
<td>270</td>
</tr>
<tr>
<td>Sep 18</td>
<td>1,800</td>
<td>280</td>
</tr>
<tr>
<td>Oct 18</td>
<td>1,900</td>
<td>290</td>
</tr>
<tr>
<td>Nov 18</td>
<td>2,000</td>
<td>300</td>
</tr>
<tr>
<td>Dec 18</td>
<td>2,100</td>
<td>310</td>
</tr>
</tbody>
</table>

### Characteristics & Distribution of Confirmed Positive Cases

- **Positive cases detected by outlets**
  - **Northern Provinces**
    - Low 1-6: 150
    - Medium 6-11: 180
    - High 11-600: 38
  - **Southern Provinces**
    - Low 1-6: 130
    - Medium 6-11: 170
    - High 11-600: 30

- **Confirm positive cases by Plasmodium species**
  - Pf (52%)
  - Pv (46%)
  - Mixed (2%)

### Quality of Case Management

- **100%** Suspected cases tested with RDT
- **99.3%** Cases treated or referred according to guidelines
MALARIA SURVEILLANCE BULLETIN

**698,081** Suspected cases tested

**9,718** Confirmed positive cases

**1.4%** Average positivity rate

**7,306** Providers enrolled (all channels)

### Suspected Cases Tested by Channel

<table>
<thead>
<tr>
<th></th>
<th>Non-formal providers</th>
<th>Community health workers</th>
<th>Private clinics</th>
<th>Worksites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providers</td>
<td>3,004</td>
<td>3,226</td>
<td>953</td>
<td>123</td>
</tr>
<tr>
<td>Cases tested</td>
<td>178,087</td>
<td>466,498</td>
<td>39,163</td>
<td>14,333</td>
</tr>
<tr>
<td>Positive cases</td>
<td>2,641</td>
<td>5,708</td>
<td>1,295</td>
<td>74</td>
</tr>
<tr>
<td>Positivity rate</td>
<td>1.5%</td>
<td>1.2%</td>
<td>3.3%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

### Confirmed Positive Cases by Channel

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<tbody>
<tr>
<td>Positives by Plasmodium species</td>
<td>Pf (45%)</td>
<td>Pv (49%)</td>
<td>Mixed (6%)</td>
<td></td>
</tr>
</tbody>
</table>

### Reporting Rates by Channel

- **69%** Non-formal providers
- **74%** Community health workers
- **39%** Private clinics
- **55%** Worksites

### Quality of Case Management

- **87%** Non-formal providers
- **98%** Community health workers
- **93%** Private clinics
- **96%** Worksites
VIETNAM | JAN-DEC 2018
MALARIA SURVEILLANCE BULLETIN

18,152 Suspected cases Tested
626 Confirmed positive cases
3.4% Average positivity rate
618 Private outlets & worksites

Suspected Cases Tested & Confirmed Positive Cases

Characteristics & Distribution of Confirmed Positive Cases

Positive cases by Plasmodium species

Confirmed Positive Cases

Reporting

Number of clinics reporting

97% Average reporting rate

Quality of Case Management

99.9% Suspected cases received blood tests
93.3% Cases treated or referred according to guidelines

Treatment vs. referral among positive cases

Client’s location 14 days prior to fever among confirmed positive cases

Positive cases detected by outlets

Positive cases detected by channel

Legend

No. of positive cases

Low 1 - 6 (31)
Medium 6 - 11 (11)
High 11 - 600 (18)
1 - 43.8 (11)
43.8 - 86.8 (3)
86.8 - 129.4 (1)
129.4 - 172.2 (0)
172.2 - 215 (1)
**PROVIDER QUALITY OF CARE ASSESSMENTS FOR MALARIA CASE MANAGEMENT**

**Cambodia Quality of Care Score***

![Graph showing quality of care scores for Cambodia](image)

- **PPM**: Class A (4%) | Class B (56%) | Class C (41%)
- **Worksite**: Class A (22%) | Class B (64%) | Class C (15%)

**Lao PDR Quality of Care Score**

- Class A (36%) | Class B (45%) | Class C (19%)

**Myanmar Quality of Care Score**

- Non-formal providers (n=1,506 providers assessed): Class A (29%) | Class B (36%) | Class C (35%)
- Community health workers (n=682 providers assessed): Class A (38%) | Class B (37%) | Class C (26%)

**Vietnam Quality of Care Score**

- Class A (10%) | Class B (47%) | Class C (43%)

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*In compliance with an MoH directive issued in April 2018, PSI is no longer supporting private sector outlets to test, treat and report malaria cases in Cambodia. Data above reflects Jan – May 2018. The number of worksites supported reduced to 121 at the end of Dec 2018.*

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**HNQIS app**

- HNQIS app was rolled out in November 2018
- 150 clinics received baseline assessments

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*These results represent baseline quality data. Quality of care will be monitored over the course of 2019 for continuous quality improvement.*