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

**MALARIA SURVEILLANCE BULLETIN**

**JAN – DEC 2019**

<table>
<thead>
<tr>
<th></th>
<th>Cambodia</th>
<th>Lao PDR</th>
<th>Myanmar</th>
<th>Vietnam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspected cases tested</td>
<td>19,752</td>
<td>73,754</td>
<td>520,341</td>
<td>28,422</td>
</tr>
<tr>
<td>Confirmed positive cases</td>
<td>421</td>
<td>612</td>
<td>4,388</td>
<td>877</td>
</tr>
<tr>
<td>Positivity rate</td>
<td>2.1%</td>
<td>0.8%</td>
<td>0.8%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Private sector service outlets &amp; malaria volunteers</td>
<td>133</td>
<td>483*</td>
<td>4,216</td>
<td>828</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
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<th>Lao PDR</th>
<th>Myanmar</th>
<th>Vietnam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases tested (national)</td>
<td>612,759</td>
<td>568,336</td>
<td>3,653,389</td>
<td>1,973,095</td>
</tr>
<tr>
<td>Proportion of total national tests reported by PSI private sector outlets &amp; malaria volunteers</td>
<td>3.2%</td>
<td>13%</td>
<td>14.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Confirmed positive cases (national)</td>
<td>32,571</td>
<td>6,687</td>
<td>53,179</td>
<td>4,699</td>
</tr>
<tr>
<td>Proportion of total national caseload reported by PSI private sector outlets &amp; malaria volunteers</td>
<td>1.3%</td>
<td>9.2%</td>
<td>8.3%</td>
<td>18.7%</td>
</tr>
</tbody>
</table>

*PSI/Laos supported 474 formal providers enrolled in the PPM network and 9 shop-based volunteer malaria workers (SVMWs)
**Suspected Cases Tested with RDT by Channel**

- **Worksites**: 19,752
- **Communities**: 421

**Confirmed Positive Cases by Channel**

- **Worksites**: 115
- **Communities**: 18

**Average positivity rate**: 2.1%

**Positive cases by plasmodium species**
- Pf (14%)
- Pv (84%)
- Mixed (2%)

**Occupation among confirmed positive cases**
- Plantation worker (55%)
- Forest worker (14%)
- Construction/mine worker (1%)
- Military/police (6%)
- Other (24%)

**Quality of Case Management**

- **Suspected cases tested with RDT**
  - Worksites: 98.6%
  - Communities: 100%

- **Positive cases received ACT**
  - Worksites: 98.8%
  - Communities: 98.9%

**Referrals of confirmed positive cases due to ACT stock-out**: 0

*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.*
Lao PDR | Jan-Dec 2019

Malaria Surveillance Bulletin

Suspected Cases Tested & Confirmed Positive Cases

- **73,754** suspected cases tested
- **612** confirmed positive cases
- **0.8%** average positivity rate
- **474** formal providers enrolled in PPM network

**Suspected cases tested:**

- **73,754**

**Confirmed positive cases:**

- **612**

**Average positivity rate:**

- **0.8%**

**Formal providers enrolled in PPM network:**

- **474**

Characteristics & Distribution of Confirmed Positive Cases

- **Positive cases detected by outlets:**
  - **Confirmed positive cases:** 612
  - **Average reporting rate:** 100%
  - **Cases treated or referred according to guidelines:** 97.7%

- **Positive cases by Plasmodium species:**
  - **Pf (46.6%)**
  - **Pv (51.8%)**
  - **Mixed (1.6%)**

Quality of Case Management

- **100%** suspected cases tested with RDT
- **97.7%** cases treated or referred according to guidelines

*PSI/Laos supported an additional 9 shop-based volunteer malaria workers (SVMW).*
520,341 Suspected cases tested

4,388 Confirmed positive cases

0.8% Average positivity rate

4,216 Providers enrolled (all channels)

Suspected Cases Tested by Channel

Confirmed Positive Cases by Channel

Characteristics of Confirmed Positive Cases

Private Providers Enrolled by Channel

Reporting Rates by Channel

Quality of Case Management

*Over the course of 2019, the number of non-formal private outlets (AMTR) decreased 3,004 to 985.
**VIETNAM | JAN-DEC 2019**

**MALARIA SURVEILLANCE BULLETIN**

### Suspected Cases Tested & Confirmed Positive Cases

- **28,422** Suspected cases Tested
- **877** Confirmed positive cases
- **3.1%** Average positivity rate
- **828** Private outlets & worksites

<table>
<thead>
<tr>
<th>Month</th>
<th>Positive Cases</th>
<th>Cases Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Feb</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Mar</td>
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<td>Apr</td>
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<td>May</td>
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<td>Jun</td>
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<td>Jul</td>
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<td>Aug</td>
<td>0</td>
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<td>Sep</td>
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<td>Oct</td>
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<td>0</td>
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<tr>
<td>Nov</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dec</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Characteristics & Distribution of Confirmed Positive Cases

**Positive cases by Plasmodium species**
- **Pf (66.1%)**
- **Pv (32.4%)**
- **Mixed (1.5%)**

**Positive cases detected by outlets**

- **Southern Provinces**
- **Legend**
  - No. of positive cases
  - CMC
  - Pharmacy
  - Worksite/Community Event
  - Clinic

**Client’s location 14 days prior to fever among confirmed positive cases**
- **Forest (63%)**
- **Plantation or Farm (32%)**
- **Village of Residence (5%)**
- **Another Country (<1%)**

**Number of clinics reporting**
- **76.2%** Average reporting rate

**Quality of Case Management**

- **99.9%** Suspected cases received blood tests
- **92.6%** Cases treated or referred according to guidelines

**Treatment vs. referral among positive cases**
- **Treated according to guidelines at clinic (68.9%)**
- **Referred for treatment (24.6%)**
- **Not treated or referred according to guidelines (6.5%)**
PROVIDER QUALITY OF CARE ASSESSMENTS FOR MALARIA CASE MANAGEMENT

Cambodia Quality of Care Score*

Lao PDR Quality of Care Score

Myanmar Quality of Care Score

Non-formal Private Outlets (n=1,506 outlets assessed)

Community Health Workers (n=682 providers assessed)

Vietnam Quality of Care Score

*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.