**Suspected Cases Tested & Confirmed Positive Cases**

- **Confirmed positive cases**: 268
- **Suspected cases tested**: 45,045
- **Positive cases**: 0.65%
- **Outlets transitioned to NMP**: 655

**Characteristics & Distribution of Confirmed Positive Cases**

- **Positive cases by Plasmodium species**
  - P.f. (76%)
  - P.v. (23%)
  - Mixed (1%)

- **Positive cases detected by outlets**
  - Forest (66%)
  - Plantation or Farm (20%)
  - Village of Residence (14%)

**Reporting**

- **Number of clinics reporting**
  - Average reporting rate: 77%
  - **Positive cases detected by outlets**
    - Clinic
    - Community Event
    - Pharmacy
    - CMC

**Quality of Case Management**

- **Suspected cases received blood tests**: 99%
- **Cases treated or referred according to guidelines**: 91.8%
- **Treatment vs. referral among positive cases (n=246)**
  - Treated according to guidelines at clinic (47%)
  - Referred for treatment (44.8%)
  - Not treated or referred according to guidelines (8.2%)

GEMS+ NETWORK TRANSITION TIMELINE

GEMS+ | JANUARY – DECEMBER 2020
GEMS+ NETWORK TRANSITION TIMELINE: VIETNAM

GEMS+ NETWORK TRANSITION TIMELINE

- **828 OUTLETS**
  - January 2020

- **745 OUTLETS**
  - April 2020

- **655 OUTLETS**
  - December 2020

Outlets currently part of the network
Outlets disassociated from the network

VIETNAM
PRIVATE SECTOR COVERAGE

- Private clinics are authorized to provide testing and treatment (n=227).
- Pharmacies (n=476), community malaria champions (n=63) and fast-moving consumer goods outlets (FMCGs, n=45) are trained and supported by PSI to provide RDT service and refer positive cases. Binh Phuoc collaborated with PSI to pilot 10 pharmacies in Bu Gia Map for ACT provision. Testing, referral service and SBC activities are also available on 13 highly targeted worksites.
- Additional active case detection through community screening events are conducted in targeted areas including worksites and communities located near forests.

CASE SURVEILLANCE

<table>
<thead>
<tr>
<th>Year</th>
<th>No. private outlets supported</th>
<th>No. suspected cases tested</th>
<th>No. confirmed positive cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2017</td>
<td>632</td>
<td>3,771</td>
<td>188</td>
</tr>
<tr>
<td>2018</td>
<td>618</td>
<td>18,152</td>
<td>626</td>
</tr>
<tr>
<td>2019</td>
<td>828</td>
<td>28,422</td>
<td>877</td>
</tr>
</tbody>
</table>

Confirmed cases reported by PSI networks (2019)

- Forest (63%)
- Plantation or Farm (32%)
- Village of Residence (5%)
- Another Country (<1%)

Positive cases by Plasmodium species (2019)

- Pf (66%)
- Pv (32%)
- Mixed (2%)

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%)

Confirmed cases reported by GEMS+ PPM network, by month
SUPPLY CHAIN & CASE MANAGEMENT

- PSI has negotiated access to RDTs through national Global Fund supply chain; PSI also procures a supply of RDTs and first-line treatment for direct distribution to private outlets due to unreliable access.
- Clinics are authorized to provide malaria treatment; pharmacies, community malaria champions and fast-moving consumer goods/non-health outlets test and refer cases for treatment.
- 30% of positive cases were referred for treatment since community malaria champions (CMCs)/Pharmacies are not allowed to provide treatment. Some referrals are due to the nature of the case (severe cases, children under 3 years old, pregnant women and those treated for malaria 14 days prior); traditional medicine and external clinics also tend to refer positive cases.

PRIVATE SECTOR REPORTING AND INTEGRATION WITH NATIONAL SURVEILLANCE

- Providers report case data to PSI monthly by sending a picture of reporting logbook form via Zalo chat app.
- PSI compiles reports into National Institute of Malariology, Parasitology and Entomology (NIMPE) format and submits to provinces, including line listing of positive cases.
- Private sector case detection was integrated to national reporting system for Dak Lak and Binh Phuoc provinces.
- The status of NIMPE’s new malaria information system (MIS) is unclear; PSI has no access to the MIS to confirm integration of data and check data quality. There are concerns about duplicate reporting of positive cases detected by pharmacies, CMCs, and FMCGs who refer cases to nearby public health centers.
- Challenges in routine reporting among non-health outlets targeted for improvement.

ELIMINATION PROTOCOLS

- By the end of 2019, 53 clinics in 4 provinces have been trained on case notification protocols and submit a photo of a shortened Case Notification form to district and PSI within 48 hours via Zalo app. In 2019, 53 providers notified the government of 651 cases by phone/SMS/Zalo.
- PSI supported Dak Lak CDC to conduct 7 investigation sessions for cases found by private sector.

EVIDENCE, ADVOCACY & OTHER INITIATIVES

- Binh Phuoc province has requested PSI to support community-based foci-by-foci clearance approach.
- Ethnographic research was conducted in Binh Phuoc with the institute of Tropical Medicine (ITM), which generated robust qualitative data to inform an Empathy-Insights-Prototyping co-design process with communities in Phuoc Long in 2019.
- PSI Vietnam has designed and executed the Zero Malaria (Sot Ret) SBC campaign to support NIMPE, targeting forest goers and communities in high risk areas.
- Provider motivation survey has been documented and shared with NIMPE and sub-national partners.
- During 2019, PSI Vietnam participated in a series of workshops held by MOH/NIMPE to provide inputs for the new period of malaria national strategy 2020-2025 advocating for strengthening the role of private health facilities in malaria elimination.
- Sub-national cross border collaboration is underway in Binh Phuoc, where province has requested PSI to assess 14 border police posts for cross-border intervention, and in Dak Lak where the MOH has asked PSI to partner in their work with army medical unit along borders.

COMPLEMENTARY MALARIA PROGRAM FUNDING

- Global Fund RA2E (2018-2020): Complementary funding supports expansion of the private sector network and community malaria champions in Gia Lai, Dak Lak and Binh Phuoc provinces, as well as RDT and hammock net distribution to forest-goers.