LAO PDR (2009):
MAP STUDY EVALUATING THE MARKET PENETRATION OF NUMBER 1 CONDOMS IN 7 PROVINCES AND 1-STOP STI TREATMENT KIT IN 3 PROVINCES.

ROUND ONE

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ROUND ONE

PSI Research Division
2009

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PSI uses GoogleEarth to monitor geographic coverage and availability of Number 1 condoms throughout Laos. Shown above: **Thakek District**, Khammouane Province.

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Laos, 2009
SUMMARY

BACKGROUND

PSI Laos is a non-profit NGO working on HIV/STI prevention, Malaria prevention, as well as Reproductive Health and other health issues in Laos since 1998. Currently, PSI’s programs include malaria prevention and education in malarial villages in southern Laos and HIV and STI prevention and education nationwide. PSI’s HIV and STI prevention targets two vulnerable populations: Female Sex Workers (FSW) in 11 province-level PSI program sites and Men who have Sex with Men (MSM), specifically katoey, male-to-female Transgender (TG), in 3 urban PSI program sites. Currently, rates of HIV prevalence are very low among the general population (0.02%)\(^1\), and still relatively low among FSWs (0.4%)\(^2\), but comparatively high among MSM/TG (5.6% in Vientiane Capital)\(^3\). STI rates among the general population are also currently low, but much higher among FSWs (20.9% tested positive for either Chlamydia or gonorrhea)\(^4\).

Social marketing of HIV and STI prevention and treatment products complements behavior change and outreach programs that aim to change behaviors in order to help prevent transmission of HIV and STIs and to promote treatment of STIs, particularly Chlamydia and Gonorrhea. PSI distributes Number 1 condoms, Number 1 water-based lubricant (packaged with condoms and branded Number 1 Deluxe Plus), and 1-Stop pre-packaged STI treatment kits for the treatment of male Gonorrhea and Chlamydia. To maintain the currently low prevalence of HIV and to lower STI prevalence among FSWs and MSM/TG, Number 1 condoms and 1-Stop kits are socially marketed, with a focus on making both products widely available at pharmacies and to make condoms widely available at other “non-traditional outlets” where FSWs and MSM/TG work and socialize, including nightclubs, beer shops, karaoke bars, guesthouses and hotels. This report discusses the latest results of that work, reporting on the availability and accessibility of both Number 1 condoms and 1-Stop kits at sales outlets throughout Lao PDR.

RESEARCH OBJECTIVES

MAP studies are a tool for the monitoring of product availability and accessibility, using pre-defined criteria for market penetration, quality standards and consumer access. There are two main objectives for this study:

1. Assess the market penetration, quality standards and access to PSI’s branded Number 1 condoms (Number 1 Deluxe, Number 1 Deluxe Plus, Number 1 Rose, Number 1 Strawberry, and Number 1 Dot Com) in traditional and non-traditional outlets, in urban and semi urban villages of the selected 7 provinces (Luangnamtha, Xayabouly, Bokeo, Vientiane Capital, Khammoane, Savannakhet and Champassak);

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\(^1\) WHO/UNAIDS/CHAS 2007.
\(^3\) Survey of HIV Risk Behavior Among Men Who Have Sex with Men, Dr. Chansy Phimaphachanh, CHAS, Lao PDR. August – September 2007.
2. Assess the market penetration, quality standards, and access to PSI’s 1-Stop STI treatment kits in traditional outlets (i.e. pharmacies) in 9 districts of the selected 3 provinces (Vientiane Capital, Luang Prabang, and Savannakhet).

In contrast to the broader evaluation of Number 1 condom distribution, the assessment of the availability of the 1-Stop kit will only focus on access through pharmacies in three provinces (Vientiane Capital, Luang Prabang and Savannakhet), selected for surveillance due to the high concentration of MSM/TGs and corresponding rates of HIV/STI recorded in those provinces. They are also the sites of PSI’s Peuan Mai (New Friends) Drop-in Centers for Transgenders (katoey) and their partners; surveillance will ensure that the social marketing of STI treatment kits supports PSI’s targeted outreach and support services for STI counseling and testing.

METHODOLOGY

This report will evaluate market penetration, the proportion of both traditional and non-traditional outlets that carry the product, as well as quality standards. Traditional outlets are defined as “outlets, including pharmacies, that specialize in selling health products” whereas non-traditional outlets are defined as “any outlet that does not specialize in selling health products, such as a guesthouse, hotel, karaoke/nightclub/bar, beer shop or mini marts”. Hand-held GPS (Global Positioning System) units were used to map outlet locations. PSI Laos also used the Google Earth and WHO HealthMapper software to map out and monitor availability of Number 1 condoms in proximity to hotspots where most at-risk populations, such as FSWs and MSM/TG tend to participate in high-risk sexual activity, to monitor access of high-risk groups to needed health products.

The sampling strategy is based on the Lot Quality Assurance Sampling (LQAS) approach, using a sample of 19 randomly selected villages per stratum. For Number 1 condoms, 19 urban and 19 semi-urban villages were selected from seven provinces (Luangnamtha, Xayabouly, Bokeo, Vientiane Capital, Khammoane, Savannakhet and Champassak), using the Probability Proportional to Size method (PPS). For surveillance of 1-Stop STI treatment kits, 9 districts were chosen from 3 provinces (Vientiane Capital, Savannakhet and Luang Prabang) where PSI has health interventions targeting MSM/TG populations. In each village for Number 1 and in each district for 1-Stop, a full census of relevant outlets was conducted.

Market penetration is the proportion of outlets of a given category in which a product is usually being sold. 90% of all outlets (both pharmacies and non-pharmacies) in a defined area must carry the product to meet the minimum standard for market penetration of Number 1 condoms. For the 1-Stop Kit, 70% of pharmacies must stock the product to meet the minimum standard. For both products, quality standards are met if the product is not expired and any of the two criteria listed below are achieved:
- Number 1 Promotional items (such as posters, stickers, or other materials) at outlets where the products are available;
- Number 1 condoms / 1-Stop kits are displayed in a visible place in the outlet;
- The price of Number 1 condoms / 1-Stop kits that the outlet pays to the supplier are in accordance with the recommended price from PSI Laos;
- Number 1 condoms / 1-Stop kits are properly displayed out of direct sunlight and are kept dry.

Data analysis was performed with SPSS Version 15, using frequency tables and other descriptive statistics to analyze market penetration and quality standards. The mapping and analysis of market penetration and access were done with HealthMapper and Google Earth.

MAIN FINDINGS

Number 1 Condoms

:: Overall Market Penetration: Overall market penetration for condoms in the surveyed areas of the 7 target provinces was 76%.

:: Market Penetration by Outlet Types: Pharmacies had the highest market penetration rate of the outlet types surveyed (98% stocked the product). The lowest rate of market penetration was seen among Karaoke bars, nightclubs, bars and pubs (25%).

:: Market Penetration by Brand Extensions: When penetration rates are broken down by brand extensions (the various different types of Number 1 condoms), the standard 3-condom pack Number 1 Deluxe had the highest overall market penetration. The very low rates of coverage for Number 1 Deluxe Plus are cause for concern; this is the only PSI condom packaged with water-based lubricant sachets to help reduce condom breakage among MSM/TGs (as extra lubrication is required to reduce the risk associated with dry anal sex) and the only brand extension to offer this added health benefit to consumers.

:: Quality Standards: 52% of outlets surveyed met the established quality standards, meaning the product was not expired and two out of the four criteria listed above were met. While promotional materials were common and almost all outlets stocked unexpired products and properly stored the product, pricing still needs to be standardized (only 33.8% of outlets paid the recommend price for the product). And non-pharmacy outlets need to be encouraged to display the product in a visible place. 90% of pharmacies surveyed had the condoms visibly displayed; in marked contrast, only 8% of guesthouses/hotels, 6% of beer shops/beer gardens, and 0% of night clubs/bars visibly displayed Number 1 condoms.
1-Stop STI Treatment Kit

:: **Market Penetration**: 38% of pharmacies surveyed in the 3 target provinces stocked PSI’s 1-Stop STI treatment kit. This falls short of the 70% coverage rate established as the minimum standard.

:: **Quality Standards**: 58% of outlets surveyed met the quality standards for product presentation, meaning the product was not expired and two out of the three criteria listed above were met. As for Number 1, the majority of outlets carried unexpired products and properly stored the product, but very few outlets (35%) paid the recommended price for the product. Visibility of product presentation varied across provinces and needs to be improved overall (38% in Luang Prabang, 44% in Vientiane, 58% in Savannakhet).

MARKET PENETRATION AND QUALITY STANDARDS: NUMBER 1 CONDOMS

Market Penetration

Overall availability of Number 1 condoms in the 7 provinces selected is at 76% of the 258 outlets surveyed, including both pharmacy and non-pharmacy outlets. Thus, current distribution of Number 1 is high but still falls short of meeting the ambitious 90% market penetration rate established as the minimum standard. It is also important to note that of the outlets surveyed, only 9% had a brand other than Number 1 available (see below). While PSI has not yet met the desired benchmark, Number 1 has achieved very wide distribution, well beyond any other condom brand in Laos.

<table>
<thead>
<tr>
<th>Number 1 Overall Market Penetration (N=258)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number 1 Available?</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Total: 258</td>
</tr>
</tbody>
</table>

Availability broken down by province reveals that penetration ranges from 63% in Luangnamtha and Savannakhet Provinces to 93% in Xayabouly Province. Given that the overall rate of coverage sits at the midpoint of this range, variance by province is fairly minor.

<table>
<thead>
<tr>
<th>Number 1 Market Penetration by Province (N=258)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
</tr>
<tr>
<td>Vientiane Capital (n=75)</td>
</tr>
<tr>
<td>Luangnamtha (n=22)</td>
</tr>
<tr>
<td>Bokeo (n=18)</td>
</tr>
</tbody>
</table>
However, there is wide variance in availability if broken down by outlet type; the highest rates (98%) seen in traditional outlets (i.e. pharmacies), followed by guesthouses/hotels (80%), beer shops (49%) and finally karaoke bars, night clubs, and bars (25%).

<table>
<thead>
<tr>
<th>Outlet Type</th>
<th>Total Surveyed</th>
<th>Outlets with Number 1 Condoms</th>
<th>Market Penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guesthouse, Hotel</td>
<td>91</td>
<td>73</td>
<td>80%</td>
</tr>
<tr>
<td>Beer shop</td>
<td>63</td>
<td>31</td>
<td>49%</td>
</tr>
<tr>
<td>Karaoke, Night club, Bar, Pub</td>
<td>12</td>
<td>3</td>
<td>25%</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>92</td>
<td>90</td>
<td>98%</td>
</tr>
</tbody>
</table>
Market Penetration by Brand Extensions

Currently, PSI markets and distributes five different types of Number 1 condom:

1. Number 1 Deluxe (3 standard condoms);
2. Number 1 Deluxe Plus (2 standard condoms & 2 sachets of water-based lubricant);
3. Number 1 Rose (3 rose-scented condoms);
4. Number 1 Strawberry (3 strawberry-scented condoms);
5. Number 1 Dot Com (3 strawberry-scented condoms with raised dots).

Number 1 Deluxe is the most commonly stocked brand extension, with a 100% market penetration rate among outlets with any Number 1 products in several provinces. The scented varieties of Number 1 condoms had the lowest rates of market penetration. These findings are fairly predictable, as Number 1 Deluxe is a standard condom distributed in larger numbers and given the niche appeal of scented condoms. Number 1 Deluxe Plus is the only PSI branded product that includes sachets of water-based lubricant to help reduce condom breakage especially among MSM/TGs where extra lubrication is required to reduce the risk associated with dry anal sex. PSI has focused distribution of Number 1 Deluxe Plus in Vientiane, Luang Prabang, and Savannakhet, where MSM/TG populations have high concentrations. However, the low rates of Number 1 Deluxe Plus availability in other sites (0% coverage in both Bokeo and Xayabouly, and 7% coverage in Luangnamtha) may indicate that better marketing of this product to sales outlets is needed.
Quality Standards

Overall quality standards survey a number of factors regarding product presentation, promotion and pricing. Benchmark quality standards are met if the products are not expired and if any 2 of these other 4 criteria are met:

1. presence of promotional materials;
2. proper pricing;
3. products visibly displayed;
4. products properly stored out of direct sunlight in a cool and dry place.

The overall quality index presents information on the rate of outlets that met these standards.

<table>
<thead>
<tr>
<th>Overall Quality Standard Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlets with Number 1 Condoms</td>
</tr>
<tr>
<td>197</td>
</tr>
</tbody>
</table>

Expiration Date

The proportion of outlets carrying unexpired condoms was nearly 100% by province, with the exception of Champassak where 3% of outlets had some expired condoms. The overall rate of outlets carrying unexpired condoms was 99.5%. Furthermore, only 7% of the condoms not yet expired had an expiration date less than 6 months away, indicating an overall healthy situation regarding the supply of quality condoms in the market place.
Promotional Materials
Number 1 branded posters were the most common form of promotional material in outlets selling Number 1 condoms (71%). Number 1 clocks (29%) and pens (21%) were the second and third most common promotional materials, followed by PSI brochures (14%). Posters and brochures contain programmatic content and can help promote positive behavior change among our target audiences; branded pens, clocks and t-shirts promote the Number 1 brand, instead of condom use behavior. Both are important in order to maintain people’s trust in the brand as well as to promote the specific targeted behaviors.

Price
PSI Laos can not fully control the final consumer price of the condoms. For the purposes of this study, only the sales agent or distributor’s selling price to the outlet (as reported by the outlet owner) was monitored. As shown in the table below, on average, 33.8% of outlets stocking Number 1 condoms paid the recommended price for the product. This indicates that outlets are willing to pay a higher price than PSI currently recommends, and sales agents and wholesalers who buy condoms from PSI and sell them to sales outlets capitalized on that willingness to pay to collect higher profit margins. Thirty-five percent of outlets surveyed buy their condoms from a wholesaler while 50% buy from a PSI sales agent.

<table>
<thead>
<tr>
<th>Number 1 Type</th>
<th>Recommended price per pack</th>
<th>Outlets Paying Recommended Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number 1 Deluxe</td>
<td>300 Lao Kip</td>
<td>44%</td>
</tr>
<tr>
<td>Number 1 Deluxe Plus</td>
<td>1600 Lao Kip</td>
<td>57%</td>
</tr>
<tr>
<td>Number 1 Rose</td>
<td>1200 Lao Kip</td>
<td>25%</td>
</tr>
<tr>
<td>Number 1 Strawberry</td>
<td>1200 Lao Kip</td>
<td>23%</td>
</tr>
<tr>
<td>Number 1 Dot Com</td>
<td>1200 Lao Kip</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total average</strong></td>
<td></td>
<td><strong>33.8%</strong></td>
</tr>
</tbody>
</table>
Visibility

Visibility of the condom at the point of sale is of the utmost importance in promoting both the Number 1 brand specifically and condom use behavior in general. In terms of overall visibility, 54% of all outlets surveyed had Number 1 condoms displayed in a place that was visible to the consumer.

The above findings suggest that there is much room for improvement in the presentation of the product in most provinces. The bulk of future efforts to promote visibility of Number 1 should focus on non-pharmacy outlets, specifically guesthouses, beer shops and nightclubs/bars. No improvement is necessary in the display of Number 1 in pharmacies, where 90% of outlets already display the product prominently.
Proper Storage

PSI monitors proper storage (i.e. products properly stored out of direct sunlight in a cool and dry place) to ensure that the product will maintain a certain level of quality so the product is both attractive to the consumer and remains undamaged. Damage could lead to higher rates of condom breakage, thereby reducing the condom’s effectiveness at preventing HIV/STI transmission and reducing unwanted pregnancy. In all provinces, 100% of outlets complied with storage standards, with the exception of Vientiane Capital where 8% of outlets surveyed failed to comply with standards. These findings indicate that Number 1 condoms sold through the private sector are likely reaching the consumer in proper condition and outlets are taking proper precautions to keep the product in good condition.

Reasons for Not Stocking Number 1

Outlets surveyed that did not stock Number 1 condoms were asked to cite their reasons for not stocking the product. The most frequently cited reason was the perception of a lack of demand for the product. The second most frequently voiced reason is that they had already sold out all stock of Number 1 but had yet to re-stock.
At the time of this survey, 7 sales agents working for PSI conducted most of the condom distribution throughout Laos, directly selling the product to the trade. Although this allowed a high degree of control over the presentation and sales of the product, it also significantly limited the possible geographic extent of distribution. PSI is now considering utilizing one or more independent, private sector distribution companies to expand the number of outlets where Number 1 condoms and other products are available.

**Other Condom Brands Available**

Currently, only Number 1 condoms are widely available, indicating that PSI has achieved a very high degree of market penetration as compared to any other condom brands. The chart below shows the extent of availability of condom brands other than Number 1.

Only two brands (Duo and Durex) appeared on the market in great numbers, with a wide range of other brands appearing in smaller numbers in 79% of outlets stocking condoms other than Number 1.

<table>
<thead>
<tr>
<th>Other Condom Brands Available in Outlets Surveyed (N=24)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Duo</td>
<td>17%</td>
</tr>
<tr>
<td>Durex</td>
<td>13%</td>
</tr>
<tr>
<td>Others: Classifit, Duomoung, Free, Latex, Lifestyles, Protector, UNIDUS</td>
<td>79%</td>
</tr>
</tbody>
</table>
MARKET PENETRATION & QUALITY STANDARDS: 1-STOP STI TREATMENT KIT

Market Penetration
Of all pharmacies surveyed in Luang Prabang, Vientiane Capital, and Savannakhet, overall availability of 1-Stop pre-packaged STI treatment kits was found to be 38%. Thus, the current distribution of 1-Stop pre-packaged STI treatment kits fails to achieve the established minimum standard of 70% of traditional outlets (i.e. pharmacies) in the selected provinces. When evaluated by province, the availability in Luang Prabang (64%) was found to be much higher and to have almost reached the 70% standard, compared to Vientiane Capital and Savannakhet provinces where availability was 36% and 38%, respectively.

Quality Standards
Quality standard benchmarking includes the number of criteria for product presentation, promotion and pricing. Overall quality standards are met if the product is not expired and if any other two criteria are met, namely: the presence of promotional materials, proper pricing, visible display, and proper storage out of direct sunlight in a cool and dry place.

<table>
<thead>
<tr>
<th>Outlets with 1-Stop</th>
<th>Outlets Meeting Quality Standard Benchmark</th>
<th>Quality Standard Benchmark Rate for 1-Stop</th>
</tr>
</thead>
<tbody>
<tr>
<td>158</td>
<td>93</td>
<td>58%</td>
</tr>
</tbody>
</table>

Although more work needs to be done to address substandard quality at outlets stocking 1-Stop, the most significant contributing factor to the low overall rate of outlets meeting PSI’s quality standards is the wide price variance paid for the product.
**Price**

PSI has a limited ability to control the final consumer price of the STI kits. Thus, for the purposes of this study, the price paid by the outlet to the sales agent or wholesaler for the product was monitored. PSI recommends that outlets pay 20,000 kip per package to purchase the product. Only 35% of outlets reported buying 1-Stop kits in accordance with PSI’s recommended price for the product, which indicates a higher-than-expected willingness to pay for the product of both customers and consumers.

**Expiration Date**

The proportion of outlets carrying unexpired 1-Stop treatment kits was nearly 100%.

**Visibility**

![Outlets with 1-STOP Visibly Displayed (Distribution by Province)](image)

Visibility is not as important for 1-Stop as it is for condoms because consumers buying the kit tend to do so as a planned purchase, whereas condoms, more often, are bought as impulse purchases. However, visibility could determine whether the consumer chooses 1-Stop instead of a lower quality, less effective treatment. Visibility of the product at outlets is fairly uneven, from 38% in Luang Prabang to 58% in Savannakhet.
Proper Storage

PSI expects vendors to store and display the product out of direct sunlight and in a cool, dry place to avoid sun or water damage to the packaging or contents. This maintains the quality of the product and the attractiveness of the product’s presentation. Almost 100% of outlets in all 3 provinces met these standards, with just one pharmacy in Chanthabuly District and one pharmacy in Xaythany District failing to meet the standards.

Reasons for Not Stocking 1-Stop

Given the fairly low rates of product availability in two of the three provinces surveyed, it is useful to consider the reasons given by pharmacy owners for not stocking 1-Stop STI treatment kits. Mirroring the results of the survey of outlet owners who did not stock condoms, the most commonly cited explanation was the perception that there was no customer demand for the product. The second most commonly cited explanation was that the outlet owner/pharmacy owner wanted to stock the product, but no sales agent had come to the outlet to sell the product.

Outlet Owner's Reason for Not Stocking 1-STOP
(Multiple Answers, N=255)

- No interest in stocking as no perceived demand: 51%
- Interested in stocking, but never visited by sales agent: 30%
- Product is too expensive: 8%
- Stocked product before but currently stocked out: 15%
- Have never stocked and have no interest in the product: 8%
MEASURING ACCESS PILOT: NUMBER 1 IN VIENTIANE CAPITAL

As part of this project, PSI Laos piloted the use of data collected from hand-held GPS units and WHO HealthMapper software to create a map to monitor the availability of Number 1 condoms in proximity to hotspots where most at-risk populations such as FSWs and MSM/TG participate in high-risk sexual activity. The map below shows in yellow triangles key hotspots – typically a bar/nightclub or hotel/guesthouse – where FSWs and/or MSM/TG congregate. A 1500-meter “hot zone,” indicated by a light green circle, surrounds each hotspot. The green squares represent retail outlets where Number 1 condoms were found to be available. The red squares represent retail outlets where Number 1 condoms were not available.

PSI’s goal is to ensure that each hot zone has at least 1 outlet where Number 1 condoms are available. The mapping analysis shows that 100% of hot zones achieved that minimum standard. Further, over 80% of all outlets surveyed within the hot zones stocked Number 1 condoms. Seven out of 11 hot zones had 100% Number 1 availability at all outlets surveyed. This method of analysis allows PSI to track availability of condoms and other products within zones where high risk HIV/STI behaviors are likely to happen.

Based on this initial pilot, PSI Laos will expand the use of mapping and monitoring access to essential health products within hot zones. In the next round of this MAP study, PSI will calculate the population of most-at-risk groups within these hot zones to present data regarding access per person. The goal will be to show whether or not the coverage is adequate, not just geographically, but also adequate to meet the needs of a certain population size.

<table>
<thead>
<tr>
<th>Hot Zone</th>
<th>Total # Outlets in Hot Zone</th>
<th># Outlets in Hot Zone Carrying Number 1</th>
<th>% Outlets in Hot Zone Carrying Number 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
<td>7</td>
<td>64%</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>4</td>
<td>12</td>
<td>12</td>
<td>100%</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td>9</td>
<td>90%</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>8</td>
<td>9</td>
<td>5</td>
<td>56%</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>2</td>
<td>67%</td>
</tr>
<tr>
<td>10</td>
<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
<td>3</td>
<td>100%</td>
</tr>
</tbody>
</table>
LIMITATIONS
The study surveyed 19 urban and 19 rural villages in total. With this sample size, the coverage analysis statistically possible would allow only for a comparison between urban coverage and rural coverage. As this information would not be particularly interesting or useful to PSI or other stakeholders, this MAP study focuses exclusively on market penetration and quality standards for the products.

This is the first MAP report to utilize Google Maps instead of Health Mapper to show market penetration; in the future, the PSI Research Team will expand their use of Google Earth mapping and GPS data tracking to allow for greater accuracy and to render more sophisticated graphic representations of market penetration.

The small scope of the access component of this survey is also a limitation. This survey piloted the use of GPS mapping and surveying techniques to determine the ability of most-at-risk populations to access needed health products. Hotspot areas were defined by setting a radius of 1,500 meters around sites FSWs or MSM/TG are known to frequent. However, this access pilot did not survey the at-risk population size to determine access in relation to population size. In future MAP studies, this component of the survey will be significantly expanded to all surveyed provinces to monitor PSI's market penetration of health products in areas where high risk behaviors are most likely to happen.

PSI currently has no information on the frequency of risk behaviors, or the density of MARPs, in relation to geographic areas. Therefore, PSI has no reliable data to define hotzones or hotspots. Were we to have this information, we would be able to reliably measure market penetration in areas where heightened risk activities occur. Currently, PSI addresses this limitation by visiting non-pharmacy outlets in all survey sites where risk activity might occur, relying on the assumption that high-risk sex occurs at or around guesthouses, nightclubs, bars and beershops. In the future, the program will expand the measuring access pilot to monitor size of the at-risk population in a given area and will use outreach staff input to define hotspots were market penetration should be prioritized.

With no recommended price to the consumer currently set, PSI chose not to survey consumer prices in outlets; after recommended prices have been set, consumer price will be monitored.

PROGRAMMATIC RECOMMENDATIONS
The report authors suggest the following programmatic recommendations to further improve the sales and distribution of Number 1 condoms and 1-Stop STI treatment kits.
:: Increase market penetration
PSI’s efforts to date have made condoms available at more than 70% of outlets in target provinces nationwide. Efforts should be continued until the standard of 90% penetration is achieved.

:: Improve regular supply of products to all outlets
Of outlets not carrying Number 1 and 1-Stop, many said the reason for not stocking the product was simply a failure to re-supply. PSI should ensure all outlets have continuous, unbroken access to sales agents, wholesalers, or distributors who can help them avoid stock out. Improving monitoring of sales activities, possibly including a sales database with monthly queries to prompt sales visits, would enable the sales team to track outlets not visited in a certain period of time.

:: Improve Outlet Staff Awareness of and Demand for Number 1 & 1-Stop kits
Outlet staff expressed a belief that demand for condoms or STI treatment is low or non-existent. PSI sales staff should address this misconception through improved communication with outlet staff, to help them understand the existing and growing demand for condoms and related HIV/STI prevention products among Lao people, especially those most at-risk of HIV/STI. More promotional items and promotional products could also help to further boost existing awareness of and demand for condoms among outlet owners.

:: Increase Market Penetration in Non-Traditional Outlets
While PSI has achieved very high levels of condom availability in traditional outlets (pharmacies) and, to a lesser extent, in guesthouses and hotels, condoms are still not widely available in non-traditional outlets such as beer shops and bars/nightclubs where high risk sexual behavior often occurs. PSI should improve sales and distribution strategies to make condoms more available in beer shops and bars/nightclubs.

:: Utilize Lao Private Sector Distributors
The study revealed that more than 30% of outlets are obtaining their condoms from wholesalers rather than from PSI sales representatives. This indicates that demand is strong enough to support private sector wholesalers and distributors to carry condoms as a viable commercial product. Several private sector distributors are now well-established in the Lao market, and are interested in Number 1 as a product with proven demand. PSI will explore the possibility of supplying the market with condoms using private sector distributors.
:: Revise Prices to:

Achieve Long-term Sustainability, Access and Equity: For many years, PSI has maintained a low selling price to reduce outlets resistance to stocking an initially unknown product, to encourage consumers to buy, and to ensure the poorest Lao people had access to the product. After 10 years of successfully building market demand, PSI needs to consider if natural market demand for condoms (both from outlets and consumers) is strong enough to accept a price increase. If prices are kept too low and condoms are sold below market value, Lao people will remain reliant on donor-funded condoms in order to meet the demand for condoms, leaving the country vulnerable to health epidemics if donor support is no longer available. While acknowledging the risk of artificially low prices, PSI should ensure, if prices are adjusted upwards, that one or more of the Number 1 condom brand extensions is kept at a relatively low price, to ensure that the poorest Lao people continue to have access to a high-quality, affordable condom.

Recouping More COGS: Only 33% of outlets that carry Number 1 condoms (and 35% of outlets carrying 1-Stop kits) paid the recommended price for the product. Number 1 Deluxe, the standard 3 condom pack, is now sold by PSI to outlets at the lowest price, allowing outlets to sell to consumers, reaping a higher profit than with other Number 1 brand extensions; this may help to explain the overwhelming popularity of Number 1 Deluxe, despite consumer preference for brand extensions. PSI has maintained longstanding low prices for Number 1 Deluxe, despite increasing outlet and consumer willingness to pay. However, there is now an opportunity to recoup more cost-of-goods-sold (COGS) by instituting and maintaining a pricing structure that allows outlets to maintain profits while also allowing PSI to recover more COGS, thereby reducing reliance on donor subsidies.

Encourage Brand Variety for Greater Consumer Choice: Revising prices will help to ensure that outlets sell the appropriate product to the appropriate consumer, rather than unnaturally encouraging sales of one particular product that affords a larger profit margin. Revising prices upwards could also help to ensure that Number 1 has a strong brand image among consumers; maintaining low prices could risk that the product is perceived as low quality. With this price revision, and all others in the future, it is imperative to maintain a low-cost, high-quality condom choice for Lao consumers to continue to ensure that price is not a barrier to use.

:: Limit free distribution of Number 1 condoms

The survey found that 8% of outlets were stocking PSI brand condoms that they had been supplied with through free distribution. PSI gives away nearly a million free condoms a year for distribution at community health centers and district hospitals, in addition to free distribution through PSI-run outreach programs with high-risk groups. The relatively high percentage of outlets then selling these
condoms suggests that not all of these condoms are reaching the intended target audience (i.e., those Lao people with no ability to pay for condoms in the private sector). Free distribution could be damaging the *Number 1* brand by artificially undercutting the prices that private sector competitors, as well as damaging the brand equity of *Number 1* built over the years with careful marketing and communications. In the future, PSI should develop a separate brand intended only for free distribution; this will help to maintain equity of access across all income groups while maintaining *Number 1* brand equity.

:: **Expand Distribution of *Number 1 Deluxe Plus*** to help address high risk sex among MSM/TG

*Number 1 Deluxe Plus* is a relatively unpopular product among outlet owners because it is a more expensive product and thus they can obtain a higher profit margin by selling *Number 1 Deluxe*. Expanding sales of condoms pre-packaged with lubricant sachets adds an important health benefit for consumers, especially MSM/TG who often have dry sex associated with higher risk of HIV/STI transmission. Many MSM/TG report they will not use condoms for anal sex if they do not have lubricant on hand. To address HIV/AIDS and STI transmission, PSI should consider how to better promote *Number 1 Deluxe Plus*, both to outlet owners and among MSM/TG.

:: **Improve Visibility of Condoms in Non-Traditional Outlets**

Condom visibility is low in all non-traditional outlets (8% in hotels/guesthouses, 6% in beer halls/beer gardens, 0% in karaoke halls/nightclubs/bars). Even in those non-traditional outlets that carry the condom, it is most often not openly displayed. Buying condoms is often an “impulse purchase”, especially in hot spots where people drink alcohol and meet sex partners, so lack of visibility could be one important barrier to condom purchasing. PSI should support non-traditional outlet owners to improve condom visibility, possibly through developing new merchandizing products for displaying condoms more visibly.

:: **Actively Monitor & Encourage Private Sector Condoms Coming into the Market**

Private sector condoms have a very low rate of penetration on the current market, with 76% of outlets carrying *Number 1* and only 9% of outlets carrying any non-PSI brand of condom. With an eye towards encouraging the expanded availability of quality, private sector condoms on the Lao market, PSI should actively monitor new private sector condoms coming on the market. Further, PSI should work with private sector condom suppliers to encourage greater distribution of high quality, affordable private sector condoms to expand the range of condom choices for Lao people. Revising prices of *Number 1* upwards could help encourage more reputable condom suppliers to expand their supply of quality condoms to the Lao market, to expand the total market for condoms in Lao PDR.
GOOGLE EARTH MAPS: AVAILABILITY OF NUMBER 1 AND 1-STOP

All districts surveyed in this report are available below via web link to GoogleMaps. The following pages present a sampling of satellite maps overlaid with outlet availability data from this survey. Sampled maps are noted in the index below.

**NUMBER 1 CONDOMS MAPS**

**VIENTIANE CAPITAL PROVINCE**
1. Chanthabouly District *(sampled)*
2. Hadxaifong District *(sampled)*
3. Sisattanak District
4. Saysettha District *(sampled)*
5. Sikhottabong District
6. Xaythany District *(sampled)*

**LUANGNAMTHA PROVINCE**
1. Luangnamtha District *(sampled)*

**BOKEO PROVINCE**
1. Huayxai District

**XAYABOULI PROVINCE**
1. Phien District
2. Xayabouli District

**KHAMMOUANE PROVINCE**
1. Mahaxay District
2. Thakek District *(sampled)*

**SAVANNAKHET PROVINCE**
1. Songkhone District
2. Outhoumphone District
3. Champhone District
4. Xayphouthong District
5. Kaisone District *(sampled)*

**CHAMPASSAK PROVINCE**
1. Bachiengchaleuen District
2. Phongthong District
3. Pakse District

**1-STOP STI KITS MAPS**

**VIENTIANE CAPITAL PROVINCE**
1. Chanthabuly District
2. Hadxaifong District
3. Nasaithong District
4. Sisattanak District
5. Saysettha District
6. Sikhottabong District
7. Xaythany District

**LUANGPRABANG PROVINCE**
1. Luangprabang District

**SAVANNAKHET PROVINCE**
1. Kaisone District

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**Meanings**

Green Indicates Product Available

Red Indicates Product Not Available

Pharmacy
Karaoke, Nightclub, Bar or Pub
Beer Shop
Hotel or Guesthouse
Vientiane Capital Province: Chanthabouly District

Vientiane Capital Province: Hadxaifong District
Vientiane Capital Province: Saysettha District

Vientiane Capital Province: Xaythany District
Luangnamtha Province: Luangnamtha District

Khammouane Province: Thakek District
Savannakhet Province: Kaisone District

Champassak Province: Pakse District
Appendix 1: List of Sampled Areas

### Urban villages audited for Number 1 condoms

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<thead>
<tr>
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<th>Urban Villages</th>
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### Semi-urban villages audited for Number 1 condoms

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