Technical Strategy for Prevention and Control of Sexually Transmitted Infections

National AIDS and STI Control Programme
Ministry of Health

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1. Richard Steen, WHO, Scientist and HIV/STI team in SEARO.
2. And HIV/STI team in SEARO.
3. Dr. Gampo Dorji, Sr. Programme Officer, DoPH.

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Summary

STIs are important cofactors that facilitate HIV transmission. In countries like Bhutan with low HIV prevalence, a focus on controlling STIs can be an effective strategy for reinforcing prevention and ensuring that conditions remain unfavourable for HIV.

STIs are also sensitive markers of sexual transmission. If STI trends are declining, it is likely that prevention programmes are working. If, however, STIs remain high or are increasing, it is likely that prevention programmes are weak, and HIV may also spread rapidly once introduced into the population.

The National AIDS and STI Control Programme has made strong initial efforts to strengthen HIV prevention within a broader context of controlling sexually transmitted infections. These efforts have been carried out with active support from several sectors. The primary channels for STI/HIV interventions are health care facilities, multi-sectoral task forces (MSTF) and health information and service centres (HISC). While the first two have broad coverage, the latter is appropriately targeted to a few districts where risk of STIs and potential for HIV transmission are greatest.

This technical strategy includes three areas of focus.

1. STI services for the general population
   - Raising awareness of STIs among the population is a first step for increasing access to STI prevention and treatment. People should realize that STIs are common and can cause serious consequences including infertility, ectopic pregnancy, congenital infection and death. Part of raising awareness is promoting health care seeking behaviour – encouraging people to seek qualified medical care if they have symptoms or risk of infection. In Bhutan, health workers and multi-sectoral task forces (MSTF) have been effective in raising awareness of HIV and STIs, and can be used to promote greater use of STI services.
   - STI services for general population should be easily accessible, effective and standardized. Bhutan has revised syndromic STI management guidelines and trained health care workers to manage STIs at first point
of care using simple and effective algorithms. These efforts should be strengthened through supportive supervision and monitored using basic STI case reporting.

- **STI screening for pregnant women.** Similarly, all pregnant women should be screened for syphilis at first antenatal care visit and prevalence rates monitored by the MoH as a marker of sexual transmission.

- **Referral and laboratory support.** Regional and national hospitals can provide additional laboratory support to ensure that STI guidelines remain effective. Based on a study of antibiotic sensitivity, national treatment guidelines were recently updated to include highly effective antibiotics.

### 2. STI services for high-risk groups

- **For STI control efforts to be effective, they must include outreach to populations at highest risk.** There is little information about the extent of sex work, sex between men or drug use in Bhutan. However, high-risk activity is known to be more common in areas of high population mobility including border areas. Mapping of entertainment venues, outreach and peer education should be conducted in identified high transmission areas. Existing outreach and condom distribution efforts through HISC can be strengthened.

- **STI detection and treatment for populations at highest risk.** In addition to outreach, peer education and condoms, people engaged in commercial sex should have easy access to special STI services, which should offer regular screening, counseling and condoms. Sex workers should be encouraged to attend clinics regularly for checkups to detect and treat STIs and to reinforce preventive behaviours. Since HISC staff are already doing outreach to high-risk venues, conducting an STI screening clinic for high-risk groups at HISC several times a week should be considered.

### 3. Reliable data to guide control efforts

- **STI surveillance** is an important programme component that needs strengthening. Reliable information about STI rates and risk behaviour is needed to guide prevention and control efforts. Countries in the region that have successfully responded to HIV epidemics have included strong STI services with ongoing **STI case reporting.** This source of data has
been useful to monitor reductions in sexual transmission before changes
in HIV rates were detectable.
Initial targets for each area of focus have been set.

1. **STI services for the general population**
   • Raising awareness & promoting STI services: 100% of MSTF & health
     workers.
   • STI syndromic case management: 100% of health facilities with trained
     health workers and STI drugs in stock.
   • ANC syphilis screening: conducted at 100% hospital & BHU-I.

2. **STI services for high-risk groups**
   • Outreach and prevention to HR populations: expand HISC model to 4
     towns.
   • Condom use among sex workers: increase from estimated 50% to 90%.
   • SW syphilis prevalence by RPR: 50% reduction (baseline to be measured).

3. **Reliable data to guide control efforts**
   • Syndromic STI reporting: 90% of hospitals reporting by end of year 1.
   • ANC syphilis reporting: 90% of BHU reporting by end of year 3.
   • Sentinel laboratory reporting: All 5 sites reporting by end of year 1.
1. Introduction

Worldwide, nearly one million curable sexually transmitted infections (STIs) occur each day, half of them in Asia. Where they are common, STIs are among the major causes of serious preventable conditions such as infertility, ectopic pregnancy, cancer and congenital infections. Millions more incurable STIs add to the heavy burden of morbidity and mortality for women, men and children. STIs (excluding HIV) have been estimated to cause up to 9% of disease burden in women and 1.5% in men aged 15-45 years. STIs are also important cofactors that facilitate spread of HIV. For these reasons, interventions to control STIs are among the most cost-effective public health measures.

All STIs are preventable and many are curable. Moreover, several developing countries have shown that it is possible to reduce STI prevalence on a national scale and to eliminate some infections completely. In doing so, they have reduced complications due to STIs, and slowed or reversed HIV epidemics.

In countries like Bhutan with low HIV prevalence, a focus on controlling STIs can thus be an effective strategy for reinforcing prevention and ensuring that conditions remain unfavourable for HIV transmission. STIs are also sensitive markers of sexual transmission. If STI trends are declining, it is likely that prevention programmes are working. If, however, STIs remain high or are increasing, it is likely that prevention programmes are weak, and HIV may also spread rapidly. Despite very low HIV prevalence, rates of other STIs and of risk behaviours are high in Bhutan. Syphilis rates as high as 13% have been documented in community-based surveys. [ref] Syphilis prevalence was more than 2% by RPR/TPHA among pregnant women screened at the National Referral Hospital. [ref] Syphilis prevalence as high as 5% has been reported in the military. [ref] High rates of gonorrhoea have also been reported. [ref] In one survey, 90% of respondents knew that condoms could prevent HIV but only 36% knew they could prevent STIs. [ref]

The National AIDS and STI Control Programme has made strong initial efforts
to strengthen HIV prevention within the broader context of controlling sexually transmitted infections. These efforts have been carried out with active support from several sectors. The primary channels for STI/HIV interventions are health care facilities, multi-sectoral task forces (MSTF) and health information and service centres (HISC). While the first two have broad coverage, the latter is appropriately targeted to a few districts where risk of STIs and potential for HIV transmission are greatest.

An assessment was conducted which included site visits to Thimphu and Phuentsholing as well as to several district hospitals and BHU in more remote locations. At all sites, there are clear signs that HIV and STIs are being taken seriously.

Principle findings and gaps related to STI prevention and control include:

• Health care facilities prominently display basic awareness and prevention messages focusing on limiting numbers of partners and using condoms. There is less attention to STIs, their symptoms and availability of treatment, however.

• Health care workers appear to be well informed and prepared to provide syndromic STI management. There is now a need to assess the effectiveness of training and the quality of services provided, which should be feasible through ongoing monitoring and supervision using simple checklists.

• Antenatal services are being strengthened which provides an opportunity for STI prevention, and specifically for syphilis detection and treatment. ANC syphilis screening is a feasible and highly cost-effective intervention that is not yet carried out at all district hospitals and is not available to women receiving antenatal care at BHU level.

• Populations at highest risk of STI/HIV are being reached with prevention counseling and services through outreach to hotels and entertainment venues conducted by HISC in Phuentsholing and Thimphu. The HISC appears to be a highly appropriate model which can be strengthened and expanded to new areas.

• Collection, analysis and use of STI data to improve programming can be greatly strengthened. A first step would be to strengthen existing reporting
systems to collect routine service delivery data on STI syndromes and syphilis serology.

- Programme efforts are appropriately targeted to districts and towns with the greatest risk of STI/HIV transmission. In future, STI reporting and ANC syphilis prevalence data can be analyzed by district to help guide targeting of programme efforts.

In summary, Bhutan already has many elements needed for comprehensive STI prevention and control. This technical strategy focuses on strengthening existing efforts as well as introducing several new intervention and surveillance components.
A Technical Strategy for Prevention and Control of STIs

Bhutan’s health care infrastructure and strong public health orientation are important assets in STI prevention and control. This technical strategy covers three principle areas of focus. By strengthening the STI services provided in health care facilities and promoting utilization of those services, anyone in the population should be able to access prevention advice, diagnosis or treatment if needed. By intervening effectively with populations at highest risk, current STI prevalence rates can be further reduced. By collecting and analyzing data on STI rates, disease trends can be monitored, emerging transmission detected and control efforts strengthened. The following figure outlines these areas of focus and the health facilities and agencies implicated.

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<td>• RPR/TPHA</td>
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This technical strategy outlines the components of such a three-pronged approach adapted to the context of Bhutan. It complements the *National Strategic Plan for the Prevention and Control of STIs and HIV/AIDS 2007-2011* by expanding on strategy 3.1 (Accelerating prevention of sexual transmission of STI and HIV). For brevity, the guiding principles behind the strategy are not repeated here.
1  STI services for the population  (health care facility focus)

Everyone should have access to quality STI preventive and curative services when they need them. This component of the strategy includes activities to raise awareness about STI symptoms and complications, promote early health care seeking behaviour, and improve the quality of preventive and curative services provided through health care facilities.

STI services are being upgraded throughout Bhutan with nationwide training in new STI management guidelines. The guidelines recommend that syndromic STI management always be used at a patient’s first contact for an STI complaint regardless of the level of health care facility. (see Box 1 under laboratory support)

STIs are frequently asymptomatic, particularly in women. As efforts are made to strengthen MCH services, a focus on preventing, detecting and treating STIs and RTIs (reproductive tract infections), would contribute to reducing maternal and perinatal morbidity and mortality. The first priority is antenatal syphilis screening.

The priority for laboratory services is syphilis screening with RPR, which should ideally be done once during each pregnancy. Additionally, at regional and national hospitals, samples from symptomatic STI patients will be collected for aetiologic testing. These data (sentinel laboratory-based surveillance) will be analyzed to periodically evaluate and update STI management guidelines.

This component will strengthen health care services with the following areas of focus.

1.1  Awareness and health care seeking behaviour

Raising awareness of STIs among the population is a first step for increasing access to STI prevention and treatment. People should realize that STIs are common and can cause serious consequences including infertility, ectopic pregnancy, congenital infection and death. Part of raising awareness is improving
health care seeking behaviour – encouraging people to seek qualified medical care if they have symptoms or risk of infection. In Bhutan, health workers and multi-sectoral task forces (MSTF) have been instrumental in raising awareness of HIV and STIs, and can be used to promote greater use of STI services. There is visible evidence (billboards in towns, posters in clinics, hotels, bars, etc) of these efforts to raise awareness of HIV and other STIs. The focus has largely been one of raising awareness and promoting prevention, however.

**Planned actions:**

- Future awareness campaigns and related activities involving MSTF and others will include information on STI symptom recognition and promotion of early treatment to prevent STI-related complications.
- Information on STI symptoms and complications will be disseminated to communities by health workers as part of their clinic and community outreach work. Availability of STI treatment and the importance of seeking care early will be emphasized.

### 1.2 STI case management

STI services for the general population should be easily accessible, effective and standardized. Bhutan has revised syndromic STI management guidelines and trained health care workers to manage STIs at first point of care using simple and effective algorithms. These efforts should be continued and monitored through basic STI case reporting. Similarly, all pregnant women should be screened for syphilis at first antenatal care visit and prevalence rates monitored by the MoH as a marker of sexual transmission.

Regional and national hospitals can provide additional laboratory support to ensure that STI guidelines are effective. Based on a study of antibiotic sensitivity, national treatment guidelines were recently updated to include highly effective antibiotics.

Nearly all health care workers have recently been trained in STI management using the syndromic flowcharts in the new national guidelines and effective antibiotics (conforming to treatment guidelines) have been procured.
Planned actions:

- Ensure ongoing programme support – including supervision, STI drugs and supplies (condoms, screening reagents), etc – to health workers particularly at peripheral levels.
- Supportive supervision should be developed to reinforce health care worker competencies in STI case management. Supportive supervision involves case review and mentoring, and is linked to monitoring of case reports. Regional examples, guidelines and tools are available.

1.3 Maternal and child health care

STIs and other reproductive tract infections (RTIs) contribute significantly to women’s ill-health by increasing risk of infertility, ectopic pregnancy, cervical cancer, spontaneous abortions and HIV infection. STI prevention, detection and early treatment are thus key elements in women’s health services. Maternal and child health, and family planning clinics serve many women of reproductive age and can greatly extend the reach of STI services. Health education and counselling about STIs are effective in promoting prevention, awareness of symptoms, and early treatment seeking behaviour. Screening methods exist to detect asymptomatic STIs and sequelae (such as syphilis, cervical infection and cervical dysplasia) and treatment can avert many complications including adverse pregnancy outcomes. Important areas of focus include:

- Antenatal syphilis screening (see 1.4) – women should be screened at first antenatal visit.
- Screening and treatment of STIs and other RTIs, and counselling on dual protection, should be part of MCH/FP services. Endogenous RTIs (bacterial vaginosis and candidiasis) are the most common causes of vaginal discharge, and often mistaken for STI.
- Promotion of safe transcervical procedures – women should be screened or treated for STIs before insertion of the intra-uterine contraceptive device (IUD) or performance of other procedure through the cervix.
- Related health and social services – addressing sexual and gender-based violence including treatment of STIs, emergency contraception, post-
exposure HIV prophylaxis and psycho-social support services. Sensitive approaches to STI partner notification are needed to prevent partner violence.

1.4 **Syphilis screening**

Screening of pregnant women for syphilis is one of the most cost-effective public health interventions available. In addition, syphilis screening with RPR should be considered for STI patients and any identified high-risk populations (military, migrant workers, etc).

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**Box 1. The role of the laboratory in STI case management (case example)**

A 25 year old male patient presents to the OPD at Regional Hospital with complaint of urethral discharge and dysuria.

After taking a history and performing examination, the doctor takes a sample of the discharge for Gram stain and culture. He then immediately treats the patient syndromically with ceftriaxone and doxycycline, and counsels him about the treatment, partner notification and condoms.

*Questions*...

Why did he not wait for the laboratory results before treating?

- Gram stain and/or culture may be positive for gonorrhoea, but this does not rule out co-infection with chlamydia. It is always better to treat men with drugs to treat both infections.
- Culture takes 48-72 hours. If the patient leaves without treatment, he may continue having sex and infect others. Also, some patients do not return for lab results. It is safer to provide effective treatment at the first visit.

So what is the point of taking lab samples?

- It is important to monitor the number of STI cases and their aetiologies. This information is important for updating treatment guidelines. Laboratory tests also provide information about the sensitivity of gonorrhoea to commonly used antibiotics.

Are the laboratory results ever relevant for patient care?

- Certainly. Some patients (usually <5%) will continue to have symptoms at the follow-up appointment. While treatment failure is rare, the doctor can consult the lab results in deciding on second-line treatment.
Currently syphilis screening using RPR is conducted at many of the 29 national, regional and district hospitals. Logistical concerns have limited extension to BHU although most (Grade 1 for example) have the necessary requirements including refrigeration.

**Planned actions:**
- Extend syphilis screening to BHU level progressively as feasible.
- Routinely screen all STI patients with RPR where available.
- Consider implementing syphilis screening in high-risk occupations.
- Take steps to prevent periodic reagent stockouts.
- Implement quality assurance for RPR (and TPHA where performed).

### 1.5 Laboratory support

Laboratory services have an important role to play in STI control, particularly in supporting surveillance and evaluating national guidelines. It is important, however, that the availability of laboratory services does not undermine recommended STI management per national guidelines. For example, at hospitals with capacity for culturing *Neisseria gonorrhoeae*, male patients with urethral discharge should always be treated at the first visit for both gonorrhea and chlamydia. Gram stain and culture should be performed and results reported as part of sentinel STI surveillance. In the case of apparent treatment failure, laboratory results can be considered (see Box 1 below).

Syphilis screening using RPR is conducted at many of the 29 national, regional and district hospitals. Gonorrhoea culture is available at regional hospital level. Microscopy is available at hospitals. Advanced technology (PCR) is planned for laboratory in new hospital.

**Planned actions:**
- Ensure availability of RPR at district hospital and above (29 hospitals).
- Ensure availability of TPHA at regional hospital and above (5 hospitals).
- Ensure availability of Gram stain at district hospital and above (29
hospitals).

- Ensure availability of culture for gonorrhoea at regional hospital and above (5 hospitals).
- Plan for use of PCR technology (when available) for STI prevalence surveys of high-risk populations.

### 1.6 Supportive supervision

Training alone is not sufficient to build capacity of health workers and improve quality of services. Health workers also require periodic assessment and ongoing support which can be provided through regular monitoring and supervision. It is currently the responsibility of the DMO to monitor and supervise district health workers. Guidelines and tools for supervision of STI management have not yet been developed.

**Planned actions:**

- Guidelines and tools for conducting supportive supervision for STI programmes are available in the region. These can be adapted to Bhutan context.
- Training should be followed by assessment and continued capacity building support.
2  STI control with high-risk groups

For STI control efforts to be effective, they must include outreach to populations at highest risk. In any population, STI epidemics spread disproportionately through population groups, such as sex workers and their clients, with high rates of partner change. Unless STI transmission in these networks is controlled, STIs will continue to spread and it will be difficult to reduce STI prevalence in the general population.

There is little information about the extent of sex work, sex between men or drug use in Bhutan. However, high-risk sexual activity is known to be more common in areas of high population mobility including border areas. Mapping of entertainment venues, outreach and peer education should be conducted in identified high transmission areas where more intensive prevention efforts are needed.

This component addresses interventions to reduce STI transmission and prevalence among sex worker and high-risk male populations.

2.1  Mapping sex work venues in priority districts

The national programme has identified priority districts and towns and has established Health Information and Service Centres (HISC) in Phuentsholing and Thimphu, with plans to expand to several more sites soon. MSTF are distributed more widely.

HISC staff in both these towns has mapped hotels, bars and other entertainment establishments. The number of sex workers is also monitored in Phuentsholing. It is apparently more difficult to identify sex workers in Thimphu. There is little information or mapping related to MSM or drug users.

Planned actions:

- The NASCP should continue to target districts and towns with higher risk of transmission. Mapping of major towns (with significant trade/mobility) should be conducted to identify potential high-risk venues and
populations in need of interventions. Data on behaviours and STIs should be used to inform decisions about targeting.

- HISC staff would benefit from capacity building to develop skills in mapping, identifying and enumerating high-risk populations. There are several potential learning sites in the region.

### 2.2 Outreach

Sex workers are marginalized and may avoid contact with official venues including health care services. Programmes need a strategy for making contact with sex workers, gaining trust, promoting services and involving them in interventions. Without a feasible plan for reaching at least the most active sex workers, prevention will have little impact.

Important outreach to potential sex work venues is being conducted by HISC staff in Phuentsholing and Thimphu. Counselors were well known to manager/owners of hotels visited. Outreach is conducted several times per week.

**Planned actions:**

- Prioritize outreach work of HISC and build capacity of staff. There are several model intervention sites in the region that could provide useful learning opportunities.
- Develop contacts on the Indian side of the border and work to improve coordination and collaboration. The objective would be to support extension of outreach and prevention work to Jaigaon.

### 2.3 Peer education

The most effective outreach involves sex workers themselves working to promote condoms and services to their peers. Presently, there is only one trained peer educator in Phuentsholing. It is unclear whether sex workers can be identified in Thimphu to be trained as peer educators. More effort should be made to identify contacts who know the environment and can help.

Taxi drivers are reportedly asked by male customers to find sex workers, and also by sex workers who are looking to identify customers.
Planned actions:

- **New activity** – peer educator training should be conducted beginning with Phuentsholing where dozens of sex workers are being reached by HISC. As sex workers are identified in other sites (and due to high turnover of sex workers trained as peer educators), plans should include provision for annual training.
- Select recommendations in the report on sex work (Feb 2007), particularly relating to peer support and reducing vulnerability, should be implemented.
- Training taxi drivers, hotel/bar managers, etc to provide prevention information and condoms could be an effective way to reach people at high risk. Current training of drivers on HIV/STI awareness could be extended to include peer education and condom distribution.

### 2.4 Condom promotion and distribution

The most important outcome to reduce sexual transmission in commercial sex networks is to achieve high rates of condom use. With condom use greater than 90%, there is little opportunity for STI transmission and prevalence falls quickly. Condom supply and promotion are important but not enough. In commercial sex settings, every effort should be made to influence the structure of sex work to make condom use the norm for all clients.

A number of appropriate condom distribution strategies are already in place including regular outreach and condom provision to hotels and entertainment venues (HISC).

Planned actions:

- Strengthen existing condom distribution activities of HISC and extend to new sites.
- Explore innovative ways – such as involving taxi drivers (see above) – to distribute condoms in high risk settings.
2.5  **STI screening services**

In addition to outreach, peer education and condoms, people engaged in commercial sex should have easy access to special STI services, which should offer regular screening, counseling and condoms. Sex workers should be encouraged to attend clinics regularly for checkups to detect and treat STIs and to reinforce preventive behaviours. Since HISC staff is already doing outreach to high-risk venues, conducting an STI screening clinic for high-risk groups at HISC several times a week should be considered.

**Planned actions:**
- **New activity** – provide STI screening to sex workers through HISC. Regional guidelines and tools for clinical/laboratory screening and presumptive treatment of sex workers can be adapted.

2.6  **Enabling environment**

There are many factors that work against prevention of STI and HIV in sex work settings. Sex work is illegal and police action or interference from organized crime can prohibit access or disrupt interventions. Sex workers themselves may be isolated and have little power to decide whether condoms are used or how sex is performed. Sex work interventions should thus include advocacy to explain the public health objectives of the interventions to police, managers and others involved in sex work. Activities to progressively involve sex workers in outreach and other activities are important to build a sense of common norms and behaviour.

Advocacy work with police through MSTF has resulted in a generally supportive attitude of police towards preventative work. It is important to ensure that this support is replicated at local levels of police cadre particularly in high-risk areas. Similarly, regular contact with hotel and entertainment venue owners/managers has also been effective in gaining access to venues where sex work is negotiated or takes place. An identified weakness in border towns such as Phuentsholing is the lack of coordination with public health authorities or interventions on the other side of the border.
Planned actions:

- Develop cross-border coordination with health authorities or NGOs in Jaigaon and other border areas in West Bengal and Assam.

**Behaviour monitoring**

Behavioural indicators – such as condom use during last sex and numbers of partners – should be defined for prevention programmes. Behavioral indicators should be easy to measure. For example, data collected from outreach or clinics as part of routine services are usually compiled monthly and permit monitoring of trends over time.

Planned actions:

- New activity – adapt simple monitoring tools to assess risk behaviours (condom use, partner numbers) among sex workers and other high-risk populations (MSM, drug users, high-risk male occupational groups).

**Coverage and outcome targets**

STI control programmes should estimate needs and set targets to increase the coverage of priority interventions. This requires information about existing services, geographical distribution and the size of the populations in need. With this information, the programme can set coverage and outcome targets that can be used to guide programme activities and monitor progress.

Planned actions:

- Set coverage targets for high-risk interventions based on mapping and other data available to programme
- Select key outcome targets for high-risk populations
- New activity – implement basic monitoring system (linked to services) to track information on coverage and outcomes.
3 Reliable data to guide control efforts

STI surveillance is an important programme component that needs strengthening. Reliable information about STI rates and risk behaviour is needed to guide prevention and control efforts. Countries in the region that have successfully responded to HIV epidemics have included strong STI services with ongoing STI surveillance. This source of data has been useful to monitor reductions in sexual transmission before changes in HIV rates were detectable. Ideally, both behavioural and STI trends would be monitored to ensure that prevention programmes are achieving desired outcomes.

This component includes three systems based on routine reporting from health facilities. In addition, behavioural monitoring in select high-risk populations should be carried out.

3.1 STI reporting

The national Morbidity Report form for 2006 includes two STI categories that

### STI surveillance

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<th>Prevalence monitoring</th>
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<td><strong>General population</strong></td>
<td><strong>Universal reporting</strong> Syndromic (GUD, UD, VD, LAP)</td>
</tr>
<tr>
<td>Sentinel reporting</td>
<td>Syndromic plus select aetiologic (syphilis, Ng)</td>
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<tr>
<td><strong>High-risk Groups</strong></td>
<td><strong>Population-based STI surveys</strong></td>
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<td>Sex workers</td>
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are not consistent with current STI management approaches. The programme has proposed revision of the Morbidity Report to replace existing STI categories with 4 syndromic diagnoses.

**Planned actions:**
- Universal syndromic STI surveillance based on monthly reporting
- ANC syphilis surveillance based on monthly reporting
- Sentinel STI laboratory surveillance based on monthly reporting
- *New activity* – Pilot for 1-2 years, evaluate and integrate into Morbidity and MCH reports.

### 3.2 Data collection and management

STI data can be managed and reports produced using simple epidemiologic software packages (such as EpiInfo).

HMIS coordinates the Morbidity Report and Monthly Activity Report from MCH.

**Planned actions:**
- Work with HMIS to build system capacity for timely and complete STI reporting.

### 3.3 Analysis capacity

Once monthly STI data get to central level, there should be a realistic plan to compile reports and analyze patterns and trends. As there are currently few STI data reported, there is limited programme experience with analyzing STI rates and trends and using data to improve programmes.

**Planned actions:**
- WHO/SEARO to provide technical assistance in STI data analysis, including assessment of experience with STI reporting after one year in operation.
3.4 **Other STI data needs**

Gonococcal antimicrobial susceptibility testing has been performed in 2005 and data used to revise STI treatment guidelines.

There are no data on STI prevalence in key population groups such as sex workers or high-risk male occupations.

There is no regular monitoring of key behavioural indicators in high-risk populations.

**Planned actions:**

- Gonococcal antimicrobial susceptibility testing will be continued as a key activity of the sentinel laboratory surveillance network (5 national/regional hospitals) with report every 1-2 years.

- STI surveys should be planned for important high-risk populations (sex workers, high-risk male occupations), initially for syphilis using RPR/TPHA. As national laboratory develops capacity to perform PCR, prevalence of *Neisseria gonorrhoeae* and *Chlamydia trachomatis* (using urine samples) can be added.

- Behaviour monitoring should incorporated into outreach work (with sex workers), and linked to STI surveys in same groups.
# Targets

Initial targets for implementation follow.

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<td>ANC syphilis screening</td>
<td>100% hospital &amp; BHU-I</td>
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<table>
<thead>
<tr>
<th>2. STI services for high-risk groups</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Outreach and prevention to HR pops</td>
<td>Expand HISC model to 4 towns</td>
</tr>
<tr>
<td>Condom use among sex workers</td>
<td>From estimated 50% to 90%</td>
</tr>
<tr>
<td>SW syphilis prevalence by RPR</td>
<td>50% reduction</td>
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<tr>
<th>3. Reliable data to guide control efforts</th>
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<tbody>
<tr>
<td>Syndromic STI reporting</td>
<td>90% hospitals reporting by end of year 1</td>
</tr>
<tr>
<td>ANC syphilis reporting</td>
<td>90% BHU reporting by end of year 3</td>
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<tr>
<td>Sentinel laboratory reporting</td>
<td>All 5 sites reporting by end of year 1</td>
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</table>
1. STI services for general population

<table>
<thead>
<tr>
<th>1.1 STI awareness and health care seeking behaviour</th>
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<tbody>
<tr>
<td>Future awareness campaigns and related activities will include information on STI symptom recognition and promotion of early treatment to prevent STI-related complications. Information on STI symptoms and complications will be disseminated to communities by health workers as part of their clinic and community outreach work. Availability of STI treatment and the importance of seeking care early will be emphasized.</td>
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<tr>
<th>1.2 STI case management</th>
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<tbody>
<tr>
<td>Ensure ongoing programme support – including supervision, STI drugs and supplies (condoms, screening reagents), etc – to health workers particularly at peripheral levels. Supportive supervision should be developed to reinforce health care worker competencies in STI case management. Supportive supervision involves case review and mentoring, and is linked to monitoring of case reports. Regional examples, guidelines and tools are available.</td>
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<tr>
<th>1.3 STI/RTI services through MCH</th>
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<tbody>
<tr>
<td>Antenatal syphilis screening (see 1.4) – women should be screened at first antenatal visit. Screening and treatment of STIs and other RTIs, and counselling on dual protection, should be part of MCH/FP services. Endogenous RTIs (bacterial vaginosis and candidiasis) are the most common causes of vaginal discharge, and often mistaken for STI. Promotion of safe transcervical procedures – women should be screened or treated for STIs before insertion of the intra-uterine contraceptive device (IUD) or performance of other procedure through the cervix. Related health and social services – addressing sexual and gender-based violence including treatment of STIs, emergency contraception, post-exposure HIV prophylaxis and psycho-social support services. Sensitive approaches to STI partner notification are needed to prevent partner violence.</td>
</tr>
<tr>
<td>1.4 Syphilis screening</td>
</tr>
<tr>
<td>---</td>
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<tr>
<td>1.5 Laboratory support</td>
</tr>
<tr>
<td>1.6 Supportive supervision</td>
</tr>
</tbody>
</table>

### 2. STI services for high-risk populations

<p>| 2.1 Mapping | The NASCP should continue to target districts and towns with higher risk of transmission. Mapping of major towns (with significant trade/mobility) should be conducted to identify potential high-risk venues and populations in need of interventions. Data on behaviours and STIs should be used to inform decisions about targeting. HISC staff would benefit from capacity building to develop skills in mapping, identifying and enumerating high-risk populations. There are several potential learning sites in the region. |</p>
<table>
<thead>
<tr>
<th>2.2 Outreach</th>
<th>Prioritize outreach work of HISC and build capacity of staff. There are several model intervention sites in the region that could provide useful learning opportunities. Develop contacts on the Indian side of the border and work to improve coordination and collaboration. The objective would be to support extension of outreach and prevention work to Jaigaon.</th>
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<tbody>
<tr>
<td>2.3 Peer education</td>
<td><strong>New activity</strong> – peer educator training should be conducted beginning with Phuentsholing where dozens of sex workers are being reached by HISC. As sex workers are identified in other sites (and due to high turnover of sex workers trained as peer educators), plans should include provision for annual training. Select recommendations in the report on sex work (Feb 2007), particularly relating to peer support and reducing vulnerability, should be implemented. Training taxi drivers, hotel/bar managers, etc to provide prevention information and condoms could be one way to reach people at high risk. Current training of drivers on HIV/STI awareness could be extended to include peer education and condom distribution.</td>
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<tr>
<td>2.4 Condom promotion and distribution</td>
<td>Strengthen existing condom distribution activities of HISC and extend to new sites. Explore innovative ways – such as involving taxi drivers (see previous) – to distribute condoms in high risk settings.</td>
</tr>
<tr>
<td>2.5 STI screening</td>
<td><strong>New activity</strong> – provide STI screening to sex workers through HISC. Regional guidelines and tools for clinical/laboratory screening and presumptive treatment of sex workers can be adapted.</td>
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<tr>
<td>2.6 Enabling environment</td>
<td>Develop cross-border coordination with health authorities or NGOs in Jaigaon and other border areas in West Bengal and Assam.</td>
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</table>
### 2.7 Behaviour monitoring

*New activity* – adapt simple monitoring tools to assess risk behaviours (condom use, partner numbers) among sex workers and other high-risk populations (MSM, drug users, high-risk male occupational groups).

### 2.8 Coverage and outcome targets

Set coverage targets for high-risk interventions based on mapping and other data available to programme. Select key outcome targets for high-risk populations.

*New activity* – implement basic monitoring system (linked to services) to track information on coverage and outcomes.

### 3. Data to guide response

#### 3.1 STI reporting

Universal syndromic STI surveillance based on monthly reporting.
ANC syphilis surveillance based on monthly reporting.
Sentinel STI laboratory surveillance based on monthly reporting.

*New activity* – pilot for 1-2 years, evaluate and integrate into Morbidity and MCH reports.

#### 3.2 Data collection and management

Work with HMIS to build system capacity for timely and complete STI reporting.

#### 3.3 Analysis capacity

*New activity* – WHO/SEARO to provide technical assistance in STI data analysis, including assessment of experience with STI reporting after one year in operation.
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<tr>
<th>3.4 Other data needs</th>
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<tr>
<td>Gonococcal antimicrobial susceptibility testing will be continued as a key activity of the sentinel network (5 national/regional hospitals) with report every 1-2 years. STI surveys should be planned for important high-risk populations (sex workers, high-risk male occupations), initially for syphilis using RPR/TPHA. As national laboratory develops capacity to perform PCR, prevalence of <em>Neisseria gonorrhoeae</em> and <em>Chlamydia trachomatis</em> (using urine samples) can be added. Behaviour monitoring should incorporated into outreach work (with sex workers), and linked to STI surveys in same groups.</td>
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