Information Related to HIV/STI Prevalence in Cambodia

Annual Planning Workshop for NCHADS
21 – 25 May 2007

Surveillance Unit
Outlines

- Provide findings and recommendation from HSS 2003
- Discuss findings on HIV prevalence from Cambodia Demographic and Health Survey 2005.
- Present key findings and recommendation of the 2005 STI Sentinel Survey
Characteristics of HIV Epidemics

- **Generalized:**
  - HIV prevalence among the general adult population $\geq 1\%$
  - Transmission mostly heterosexual

- **Concentrated:**
  - HIV prevalence among the general adult population $< 1\%$
  - Most HIV infections concentrated in high risk groups; for example female sex workers, injecting drug user, MSM…

- **Cambodia:**
  - HIV prevalence among the general adult population $> 1\%$
  - Transmission mostly heterosexual
  - Most HIV infections **concentrated** in high-risk groups (female sex workers, their clients, and sex partners of clients)
Objectives

- To estimate prevalence of HIV infection in selected sentinel population groups;
- To estimate numbers of persons living with HIV and with AIDS, new HIV infections, and AIDS deaths;
  a. To monitor trends in the HIV epidemic; and
  b. To provide information needed for planning and evaluating HIV prevention, care, and treatment programs.
## HIV Sentinel Surveillance in Cambodia

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Adjusted HIV prevalence* among sentinel groups in 2003

*Adjusted for results of QA testing; values shown are point estimates and 95% confidence intervals

**ANC and police groups weighted by population size
How to make national HIV prevalence estimates

- National HIV prevalence estimates are based on ANC HSS data
- Estimation takes into account that:
  - ANC patients do not represent all pregnant women, and all pregnant women do not represent all Cambodian women
  - Risk behavior varies by age
  - Prevalence varies by residence (i.e., urban or rural)
  - M:F ratio of HIV-infected persons is changing
- Steps include estimating the number of HIV-infected:
  - Pregnant women who attend ANC clinics
  - Women in the general population
  - Men
  - FSW
### Estimated number* of adults living with HIV in Cambodia, by sex, 1990-2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Total current HIV</th>
<th>Men</th>
<th>Women</th>
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<tbody>
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<td>1990</td>
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<td>2003</td>
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</tbody>
</table>

*Estimates modeled from HSS data*
Estimated number* of persons aged 15-49 living with AIDS in Cambodia, 1996 through 2003

*Estimates modeled from HSS data
Cambodia Demographic and Health Survey 2005

- National household survey
- Achieved high response (95% of women and 90% of men)
- Preliminary results (0.6% national and 0.0% in some provinces) were controversial given previous general population estimates and the number of people currently known eligible for antiretroviral therapy
### Preliminary Results from Cambodia Demographic & Health Survey (CDHS), 2005

#### Table 17. HIV prevalence by province

Percentage HIV positive among women and men age 15-49 who were tested, and had a complete individual interview, Cambodia 2005-06

<table>
<thead>
<tr>
<th>Province</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>HIV positive</td>
<td>HIV positive</td>
<td>HIV positive</td>
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<tr>
<td>Banteay Meanchey</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Kampong Cham</td>
<td>0.5</td>
<td>0.6</td>
<td>0.6</td>
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<tr>
<td>Kampong Chhnang</td>
<td>1.2</td>
<td>0.4</td>
<td>0.8</td>
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<tr>
<td>Kampong Speu</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Kampong Thom</td>
<td>0.5</td>
<td>0.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Kandal</td>
<td>0.0</td>
<td>0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Kratie</td>
<td>0.2</td>
<td>0.6</td>
<td>0.4</td>
</tr>
<tr>
<td>Phnom Penh</td>
<td>1.5</td>
<td>2.0</td>
<td>1.7</td>
</tr>
<tr>
<td>Prey Veng</td>
<td>0.7</td>
<td>0.0</td>
<td>0.4</td>
</tr>
<tr>
<td>Pursat</td>
<td>0.7</td>
<td>0.3</td>
<td>0.5</td>
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<tr>
<td>Siem Reap</td>
<td>0.3</td>
<td>0.4</td>
<td>0.3</td>
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<tr>
<td>Svay Rieq</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Takeo</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Otdar Meanchey</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Battambang &amp; Krong Pailin</td>
<td>0.8</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Kampot &amp; Krong Kep</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
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<tr>
<td>Krong Sihanouk &amp; Kaoh Kong</td>
<td>1.7</td>
<td>0.7</td>
<td>1.3</td>
</tr>
<tr>
<td>Preah Vihear &amp; Steung Treng</td>
<td>0.2</td>
<td>0.3</td>
<td>0.2</td>
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<tr>
<td>Mondol Kiri &amp; Rattanak Kiri</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td><strong>Total (n=14, 671)</strong></td>
<td><strong>0.6</strong></td>
<td><strong>0.6</strong></td>
<td><strong>0.6</strong></td>
</tr>
</tbody>
</table>
Findings from household (HH) surveys for HIV in countries with concentrated epidemics are not a good representative of the general population

- Low prevalence and small sample size result in less power to detect significant differences in prevalence
- HH samples may underestimate HIV prevalence:
  - In concentrated epidemics a larger proportion of the total epidemic is expected *not* to be captured by a HH sample;
  - The epidemic is concentrated among individuals who:
    - Reside in settings excluded from the HH sampling frame (e.g., police and military barracks, brothels, dormitories)
    - Are more likely to be absent from the HH (mobile professions, hospitalized persons, clinic attendees)
Making a new estimation for HIV prevalence in 2006-07

**Sources of data**
- All HSS data till 2003
- HSS 2006-07
- CDHS 2005

**Methods**
- Consensus workshop will be organized in order to find the most appropriate method
STI Survey 2005

Objectives

- Behavioral risk factors
- Gonorrhea, Chlamydia, and syphilis in all sentinel groups, plus
- Rectal gonorrhea and Chlamydia and HIV among MSM
Key Findings for FSW

- STI prevalence in 2005 was not significantly different from that observed in the 2000 STI Survey

- Prevalence
  - Syphilis: 2.3%
  - Chlamydia: 14.0%
  - Gonorrhea: 13.0%
  - Any STI: 24.0%

- Significant differences in STI prevalence by age group were not observed
STI Survey 2005

Recommendations for FSW Programs

- 100% condom use with clients should remain a top priority
- Condom negotiation skills with all partners, including clients, sweethearts and casual partners, need to be increased
- The 100% CUP should maintain a high coverage of public STI clinic services for FSW
- Reproductive health services and safe abortion should be emphasized
- 100% CUP, outreach/peer education and STI management should be evaluated regularly
STI Survey 2005

Key Findings for Police

- STI prevalence in 2005 was not significantly different from that observed in the 2000 STI Survey

- Prevalence of:
  - Syphilis: 1.8%;
  - Chlamydia: 3.2%;
  - Gonorrhea: 1.0%;
  - Any STI: 3.2%

- Inconsistent condom use and having sex with sweetheart appeared to be risk factors for STI among police
STI Survey 2005
Recommendations for Police

- Consistent condom use should be promoted not only for sex with FSW, but also with sweethearts and casual partners.

- Public STI services should be promoted for policemen to reduce their dependence on pharmacies.
STI Survey 2005
Key Findings for MSM

- Overall MSM STI prevalence:
  - Syphilis: 0.9%;
  - Genital Chlamydia: 2.0%;
  - Rectal Chlamydia: 5.4%;
  - Genital gonorrhea: 0.6%;
  - Rectal gonorrhea: 1.1%;
  - Any STI: 8.6%;
  - HIV: 5.1%

- HIV prevalence was much higher in PNP (8.6%) than in the provinces (0.7%)
- No significant differences in STI prevalence between PNP and the provinces were observed
Recommendations for MSM Programs

- MSM-specific interventions are needed to prevent STI/HIV infection in this group.
- Prevention interventions are urgently needed to avert an HIV epidemic among MSM, including raising awareness that HIV can be transmitted between men and that condoms should be used consistently.
- STI services providers must be informed that rectal CT is the most common infection among Cambodian MSM; STI services for MSM should include rectal examination.
Conclusions

- HIV prevalence has declined among sex workers and police but appears to be stable among pregnant women attending ANC.

- Larger decline among young female sex workers compared with those older than 20 years suggests declining incidence in this group.

- Estimated national prevalence of HIV among persons aged 15-49 has declined from 2.1% in 2002 to 1.9% in 2003.
Programmatic Implications

- ANC data may be used by PMTCT program planners for estimating need and for monitoring and evaluation.
- Although prevalence is declining, a large number of Cambodians living with HIV are in need of care and treatment.
- Strategic planning is urgently needed if successes are to be sustained and additional epidemic waves prevented.
- Current intervention efforts on high-risk groups need to be sustained.
- Effective family intervention (husbands and wives) must be implemented, given that the HIV incidence among women is not declining.
Thank You!!