HIV/AIDS in China: Epidemiology and Control Strategy

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Chinese Center for Disease Control and Prevention
TOPICS

• Update HIV/AIDS Epidemics
• Strategy Change in past years
• Achievements in 2007
• Key Challenges
The Trends of Epidemic

By report

Testing Campaign

<table>
<thead>
<tr>
<th>Year</th>
<th>AIDS</th>
<th>HIV/AIDS</th>
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<tbody>
<tr>
<td>85-90</td>
<td>5</td>
<td>492</td>
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<td>7909</td>
<td>44005</td>
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<tr>
<td>2007</td>
<td>8860</td>
<td>40005</td>
</tr>
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</table>
The Trends of Epidemic

By report and by estimated time of infection

![Graph showing the trends of epidemic by report and estimated time of infection. The x-axis represents years from 1985 to 2007, and the y-axis represents the number of detections and infections. The graph shows a significant increase in infections from 1985 to 1995, followed by a peak in 2001 and a decline in 2005.]
Distribution by Province
HIV/AIDS
Distribution by Province
AIDS Cases
## Distribution by Age Groups

<table>
<thead>
<tr>
<th>Age group</th>
<th>HIV infection</th>
<th>AIDS Cases</th>
<th>AIDS Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007*</td>
<td>Cumulatively **</td>
<td>2007*</td>
</tr>
<tr>
<td>0～</td>
<td>1.3</td>
<td>1.1</td>
<td>1.6</td>
</tr>
<tr>
<td>10～</td>
<td>3.0</td>
<td>3.5</td>
<td>2.2</td>
</tr>
<tr>
<td>20～</td>
<td>33.3</td>
<td>34.2</td>
<td>20.8</td>
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<tr>
<td>30～</td>
<td>39.5</td>
<td>35.8</td>
<td>37.9</td>
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<tr>
<td>40～</td>
<td>13.5</td>
<td>12.2</td>
<td>20.1</td>
</tr>
<tr>
<td>50～</td>
<td>5.2</td>
<td>4.4</td>
<td>10.1</td>
</tr>
<tr>
<td>60～</td>
<td>4.2</td>
<td>2.2</td>
<td>7.3</td>
</tr>
<tr>
<td>Unknown</td>
<td>0.0</td>
<td>6.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*：2007年1-10月全国报告艾滋病病毒感染者、艾滋病病人和艾滋病死亡者
**：截止2007年10月底，全国累计报告艾滋病病毒感染者、艾滋病病人和艾滋病死亡者
## Distribution by Gender

<table>
<thead>
<tr>
<th>Sex</th>
<th>HIV infection</th>
<th>AIDS Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007*</td>
<td>Cumulatively **</td>
</tr>
<tr>
<td>Male</td>
<td>70.5%</td>
<td>71.3%</td>
</tr>
<tr>
<td>Female</td>
<td>39.5%</td>
<td>28.7%</td>
</tr>
</tbody>
</table>

*: 2007年1-10月全国报告艾滋病病毒感染者、艾滋病病人
**: 截止2007年10月底，全国累计报告艾滋病病毒感染者、艾滋病病人
Update Statistics on HIV/AIDS

- **Newly reported HIV infections**: From January to November, 2007,
  - 34,451 HIV infections newly reported
  - 3,000 per month on average

- **New Estimation**: By the end of 2007:
  - 700,000 people living with HIV/AIDS
  - 85,000 people suffer with AIDS
  - In 2007:
    - 50,000 newly infected with HIV
    - 20,000 died of AIDS in 2007
New Infections in 2007

Among 50,000 newly infected with HIV

- Heterosexual: 44.7%
- MSM: 12.2%
- IDU: 42.0%
- MTCT: 1.1%
Transmission mode

Cumulative (Until Aug 2007)

- Sex: 17.7%
- IDU: 39.1%
- Blood: 4.3%
- Plasma: 19.9%
- MTCT: 1.2%
- Other: 0.5%
- Unknown: 17.4%

New reported in 2007 (Jan-Aug, 2007)

- Sex: 40.9%
- IDU: 29.9%
- Blood: 4.9%
- Plasma: 6.8%
- MTCT: 1.6%
- Others: 0.9%
- Unknown: 15.1%

Increased sex transmission
HIV Increase in MSM

- Rapid increase in MSM
- Dual stigmas:
  - AIDS,
  - Homosexuality

成都市MSM人群2003－2007年HIV感染率变化趋势
资料来源：四川省疾病预防控制中心
Reported new cases in Dehong Yunnan, Jan.-Sept. 2007

- **Sex**: 600, 60.4%
- **IDU**: 202, 20.3%
- **MTCT**: 20, 2.0%
- **Unknown**: 160, 16.1%
Transmission mode change

![Bar chart showing transmission mode change from 1985-2003, 2004, 2005, 2006, and 2007 October. The chart indicates a significant increase in transmission modes over the years, with a peak in the 1985-2003 period.](chart_image)
Strategy Change - commitment

President Hu Jingtao visited You-an Hospital, Beijing in 2004

Again, President Hu visited Chaoyang District, Beijing in 2007
Strategy Change - commitment

2003

2004

2005

2006

2007
Strategy Change - Testing

- Testing as an important strategy for controlling HIV/AIDS
- Testing as entry point for prevention & treatment
- Expanding VCT
- Provider initiated Testing & Counselling
Benefits of Testing Campaign

- Identifying the reservoir is the first step for controlling an infectious disease epidemic
- Henan: almost 6-times the number identified than in previous 10yrs
  - Identifying 12,259 sero-discordant couples
HIV Transmission Potential

<table>
<thead>
<tr>
<th>Known + Intervention</th>
<th>Known</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cases transmitted</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of cases transmitted

The bar chart shows the number of cases transmitted, with categories for known, known + intervention, and unknown.
Proportion of HIV positive being informed results

图1 广西项目执行前后流调率的比较

Investigation rate

2006年1月-12月 2007年1月-8月

29.39% 60.44%

时间
Strategy Change: 
Scale-up all effective strategies

Prevention:
- Sex: primary Edu, SW, MSM, HIV+
- Drug users: MMT + Needle Exchange Program
- MTCT

Treatment:
- ARV for adults
- ARV for children

Anti-stigma:
- Media campaign
- Role model
- Health care settings
Real-Time Reporting System
Strategy Change:
Proportion of HIV Infected, Tested and Served

- 700,000 Infected
- 220,000 tested
- 60,000 ± Served
- 31% Tested
- 9% Managed
检测发现的感染者仅占感染者总数的很小比例。

- 已发现：22万
- 未发现：69%
检测发现与未发现的比例

采供血感染

注射吸毒感染

母婴传播

性传播

已发现

未发现

经血传播
城市与农村感染者管理的比例

城市

农村

管理

未管理
艾滋病控制策略
感染者/病人“管理”

“管理”：

1. 保持联系；
2. 精神、情感、社会支持；
3. 预防性服务；
4. 治疗服务；
Strategy Change:
Increasing Proportion of Tested and Served

700,000 Infected

Increase Identification

Serve more Patients
Strategy Change:

Management Strategies

Chain from identification to follow-up services

HIV Testing → Follow-up CD4 → ARV Treatment → Monitor Resist → Death
Achievement in 2007

新发现HIV/AIDS人数及流调情况

Notification rate:
44.8% in 2006
71.2% in 2007

Increased 26.4%
Achievement in 2007

**MMT**

- By end of 2007, MMT clinics reaches 503, serve 97,554 drug users, retention 72%

**NEP**

- In 2007, 775 NEP operate in 405 counties, served 45,000 injecting drug users

**MMT+NEP:** coverage 10%
Achievement in 2007

- Outreach covered about **430,000** sex workers each month
- Coverage **40%** in 2007
- Condom use rate increased from **41%** 2006 to **46%** in 2007
Achievement in 2007

• Detected HIV increase in MSM

• Developed national plan for prevention HIV in MSM, 2007-2010

• Developed national survey plan, 61 cities, recruit 23,000 subjects

• Month cover MSM 70,000, coverage 9%.
Achievement in 2007

- ARV cover 41,777 AIDS, increased by 32.2% vs. 2006
- ARV cover 799 children AIDS, increased by 23.3% vs. 2006
- Mortality keep decline
Achievement in 2007

- Integrated 7 independent AIDS data system
- Officially operate in Jan 2008
Key Challenges

• Strengthen Personnel Capacity
• Detection of HIV infected who are unaware
• Primary Prevention among people at risk
• Improve the quality of ARV
• Social management of people with HIV/AIDS to provide continuous services
• More social and other supports to people at risk and people with HIV/AIDS
• Anti-stigma