The Safety Net of Perinatal HIV Prevention in Illinois

Ann Bryant MD, MSc
Mardge Cohen, MD
Patricia Garcia, MD, MPH
Yolanda Olszewski, MPH, MSc
Anne Statton, BA

1Dept of Ob-Gyn, Northwestern University Fienberg School of Medicine
2Core Center, Cook County Bureau of Health Services, Chicago, Illinois
3Pediatric AIDS Chicago Prevention Initiative
Prevention of Perinatal Transmission of HIV

HIV + women

HIV + pregnant women

HIV acquisition

HIV + infant

Participate in Prenatal Care

Offer and Accept an HIV test

Offer, Accept and Adhere to HIV ART

Achieve viral suppression

Delivery Plan

Avoid Lactation

Offer, Accept and Adhere to Neonatal ART

Link to maternal care (HIV/Family Planning) and neonatal care

HIV - pregnant women
The Safety Net of Perinatal HIV Prevention in Illinois

Rapid Testing

24/7 Perinatal HIV Hotline

Perinatal HIV Enhanced Case Management
Status of Perinatal HIV Counseling and Testing - Chicago

- 66 hospitals surveyed
- 1999 9,115 /10,063 women
- 2002 5,031/6,135

Peripartum Survey of Laboring/Delivered Women*

*Staff-administered, Patient-reported
Illinois Timeline

- **Aug 2003**: ILL Perinatal Prevention ACT passed
- **Nov 2003**: IDPH buy-in
- **Jan 2004**: PRTII formed
- **July 2004**: Needs Assessment: Survey/ Focus Groups
- **Sept 2004**: IDPH funding begins
- **Aug 2004**: Regional Trainings
- **July 2004**: Pilot Projects
- **Sept 2004**: Binder development
- **Sept 2005**: Hospital Rapid Testing Implementation
- **June 2006**: Revised ILL Perinatal Prevention ACT signed

**Evaluation plan developed**
**Evaluation plan implemented**
**Complete Monthly Data Collection**
**CDC/IDPH On-line data entry**
All pregnant women in Illinois will be counseled and offered an HIV test as early in pregnancy as possible.

HIV test results will be documented in prenatal, L&D and newborn pediatric chart.

If there is no documented maternal HIV status on arrival to L&D, the patient will be offered a Rapid HIV test (opt-in).

If maternal status not known at delivery, newborn will be given rapid HIV test unless mother declines (opt-out).
New law effective July 1, 2007:  

Current Illinois law, June 2006:  
www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=2483&ChapAct=410%26nbsp%3BILCS%26nbsp%3B35%26nbsp%3B35%2F&ChapterID=35&ChapterName=PUBLIC+HEALTH&ActName=Perinatal+HIV+Prevention+Act%2E

Original legislation, 2003:  
Needs Assessment

• In March 2004, surveys mailed to all 137 Illinois Birthing Hospitals
• Surveys were collected via State Perinatal Network Coordinators

Primary Outcome: Hospital Readiness

1) Components of Hospital Readiness to Prevent Perinatal HIV
   • Hospitals reporting >75% patients has HIV status documented on arrival L&D
   • L&D staff routinely document HIV status L&D chart
   • Pediatric staff routinely document maternal results in newborn chart
   • L&D staff routinely order HIV test woman in labor if HIV status not available
   • AZT (syrup and IV) is available

2) Level of Hospital Readiness
   • Overall Ready - Hospital meets all 5 components of readiness
   • Minimal Ready - Hospital has at least AZT availability and >75% HIV status documentation but not all 5 components
   • Not ready - Hospital does not meet at least the minimal defined level of readiness

Secondary Outcome: Barriers to HIV Status Identification
Needs Assessment - Hospital Readiness to Prevent Perinatal HIV

- Overall Ready: 12.4%
- Minimal Ready: 11.6%
- Not Ready: 75.9%
Needs Assessment - Components of Hospital Readiness to Prevent Perinatal HIV

- Syrup and IV AZT Available: 61% (n=84)
- >75% documented HIV results on arrival L&D: 47% (n=64)
- L&D staff document HIV status in L&D chart: 72% (n=99)
- If no HIV status on L&D, HIV test is ordered: 39% (n=53)
- Document Maternal HIV status in newborn chart: 66% (n=90)
Statewide Focus Groups

Focus Groups

- 8 Focus Groups completed
- Diverse hospital size, location urban vs rural
- OB, Pediatrics, Nursing, Administration, Lab participants
- Discussion of steps to rapid testing implementation: barriers and recommendations
- AHA partnership
Focus Group Hospitals

- **Rockford Memorial Hospital, Rockford (6/2/04)**
  - Level III, 2023 births

- **St. Francis Medical Center, Peoria (5/13/05)**
  - Level III, 2417 births

- **St. Francis Hospital, Litchfield (5/12/04)**
  - Level I, 277 births

- **Touchette Regional Hospital, East St. Louis (4/23/04)**
  - Level II, 668 births

- **Vista-Victory Memorial Hospital, Waukegan (5/19/04)**
  - Level II, 2288 births

- **Northwestern Memorial, Chicago (4/16/04)**
  - Level III, 8993 births

- **Provena-United Samaritans Medical Center, Danville (5/27/04)**
  - Level II, 860 births

- **St. Mary’s Good Sam., Mt Vernon (5/12/04)**
  - Level I, 677 births

Source: Illinois Department of Public Health
Focus Groups - Barriers Identified

- Transfer of prenatal records to L&D
- Documentation of HIV test results
- Laboratory reluctance for point of care testing
- 24/7 lab availability, test result turn around time
- Physician awareness of testing & documentation
- Counseling script for L&D staff needed
- Fear of False Positives / Preliminary Positives
- Inadequate familiarity with care of HIV infected women in labor
- AZT 24/7 availability
- Hospital reimbursement
- System for follow up of HIV infected mothers / exposed infants: referral/ confirm result/ infant AZT
- Need for Public awareness
- State perinatal HIV surveillance plan
PRTII Implementation Plan

- Statewide framework

- Regional trainings

- Hospital specific implementation and training
  - CEO Introductory Materials
  - Key Players Meeting
  - PRTII Binder
  - Staff Training and Implementation Support
Pilot Projects: 12 Sites

- Aim to assess level of intervention needed for implementation
  - Full
  - Intermediate
    - key player meeting, but no in hospital trainings
  - Basic Intervention
    - only materials and regional training
- Selected for # births, urban vs rural and rate of HIV status documentation
- Given opt out to full implementation option if unable to move forward
  - 2/4 basic converted to full
  - 2/4 intermediate converted to full
Pilot Hospitals Time to Live Start by Implementation Model Used

Days Elapsed from Hospital Key Players Meeting to Live Start Date

- Full: 84 days
- Partial: 189 days
Time to complete statewide implementation: 133/133 (100%) hospitals rapidly testing HIV undocumented women on L&D as of Sept 2005.
Statewide implementation of RHT in a timely manner is feasible using a hospital specific, resource-intensive strategy.

Within 14 months, 100% of Illinois birthing hospitals had implemented rapid HIV testing.

More resources, and specifically in-hospital support, resulted in faster RHT implementation.

While RHT was more quickly implemented in small hospitals, those in rural locations and those with predominantly white patient populations; universal implementation is the key to eliminating missed opportunities to prevent perinatal transmission of HIV.
<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2005 %</th>
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<th>2007</th>
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<tbody>
<tr>
<td>Total reported deliveries</td>
<td>141,773</td>
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<td>175,248</td>
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<td>175,160</td>
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<tr>
<td>Documentation at presentation</td>
<td>125,198</td>
<td>88.30%</td>
<td>162,329</td>
<td>92.60%</td>
<td>164,481</td>
<td>93.90%</td>
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<tr>
<td>Women eligible for RHT</td>
<td>16,575</td>
<td>11.70%</td>
<td>12,909</td>
<td>7.40%</td>
<td>10,679</td>
<td>6.10%</td>
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<tr>
<td>Women accepting RHT</td>
<td>11,625</td>
<td>70.10%</td>
<td>10,979</td>
<td>85.00%</td>
<td>10,498</td>
<td>98.30%</td>
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<td>Infants rapidly tested</td>
<td>242</td>
<td>5.90%</td>
<td>192</td>
<td>9.90%</td>
<td>128</td>
<td>75.30%</td>
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<td>Total Preliminary Positive RHT @ delivery</td>
<td>31</td>
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<td>14</td>
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<td>Total confirmed positive RHT @ delivery</td>
<td>23</td>
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<td>9</td>
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<td>Total additional confirmed positive RHT, outpatients on L&amp;D</td>
<td>0</td>
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<tr>
<td>Documentation at discharge</td>
<td>137,065</td>
<td>97.30%</td>
<td>173,500</td>
<td>99.00%</td>
<td>175,107</td>
<td>99.97%</td>
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</table>
Percentage of women presenting to deliver with documented HIV status

- August-September 2004: 73.6%
- October-December 2004: 79.8%
- January-March 2005: 82.5%
- April-June 2005: 85.8%
- July-September 2005: 90.1%
- October-December 2005: 91.1%
- January-March 2006: 91.7%
- April-June 2006: 92.7%
- July-September 2006: 93.3%
- October-December 2006: 92.9%
- January-March 2007: 93.3%
- April-June 2007: 94.2%
- July-September 2007: 94.1%
- October-December 2007: 94.0%
Percentage of women accepting rapid testing at labor and delivery

Year 2006: Jan-Mar 78.6%, Apr-Jun 76.4%, Jul-Sep 89.3%
Year 2007: Oct-Dec 97.1%, Jan-Mar 97.9%, Apr-Jun 98.2%, Jul-Sep 98.6%, Oct-Dec 98.7%
HIV Documentation at discharge

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<td>Q4</td>
<td>86%</td>
<td>91%</td>
<td>94%</td>
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</table>

Percentage: 99.93% 99.87% 99.89% 99.92% 99.97%
IDPH Performance Standards and cumulative 2007 results

Documentation at presentation
- Minimal acceptable rate of documentation 80% - Target documentation rate 95% (2007 = 93.9%)

Acceptance of rapid testing at delivery
- Minimum acceptable testing acceptance 89% - Target rate 95% (2007 = 98.3%)

Decline rate for testing
- Minimum acceptable decline rate 10% - Target decline rate 5% (2007 = 1.0%)

Women missed for rapid testing at labor and delivery
- Minimum acceptable rate of women missed for rapid testing 1% - Target rate 0% (2007 = 0.7%)

Newborns with no refusal and not tested
- Target rate of newborns with no maternal refusal, not rapid tested 0 (2007 = 25)

Documentation at discharge
- Minimum acceptable discharge documentation standard 95.5% - Target rate 100% (2007 = 99.97%)
## Preliminary Positive Rapid Tests
### 10/04 to 12/07

<table>
<thead>
<tr>
<th></th>
<th>Statewide (Illinois)</th>
<th>Cook-Chicago (only)</th>
<th>Cook-Suburban</th>
<th>Outside Cook</th>
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<tbody>
<tr>
<td>Total</td>
<td>102</td>
<td>58</td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td>Preliminary positives</td>
<td>102</td>
<td>58</td>
<td>17</td>
<td>25</td>
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<tr>
<td>True positives</td>
<td>75</td>
<td>46</td>
<td>12</td>
<td>13</td>
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<tr>
<td>False positives</td>
<td>27</td>
<td>12</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>False positive rate</td>
<td>26.5%</td>
<td>20.7%</td>
<td>29.4%</td>
<td>48.0%</td>
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</tbody>
</table>
PRTII 2007-2008

- QA Follow Up Visits for all Birthing Hospitals
- Link poor-performing hospitals to interventions
- Statewide surveillance / evaluation electronic database linked to IDPH
- Non-Birthing Hospital / Emergency Department Implementation
Illinois Non-Birthing Hospitals

Jan 07 – Dec 07
as of 02/19/08

Presenting pts

1,923

Documented
355 (18.5%)

Undocumented
1,568 (81.5%)

Missed
419 (26.7%)

Declined
974 (62.1%)

Tested
283 (18.1%)

Prelim Pos
1

Neg
278

FalsePos
0

Indet WB
0

Delivered (7)

Undocumented
6

Documented
1 (14.3%)

Missed
5 (83.3%)

Declined
0 (0%)

Tested
1 (16.7%)

Prelim Pos
0

Neg
1

FalsePos
0

Indet WB
0

Fetal demise
2

Undocumented Babies
3

No refusal Untested
3 (100.0%)

Refused Untested
0 (0%)

Tested
0 (0%)

Prelim Pos
0

Neg
0

Infant transfer
0

Babies discharged w/o HIV status
3

Babies discharged w/o HIV status
3

TruePos
1

Indet WB
0

FalsePos
0

Indet WB
0

Illinois Non-Birthing Hospitals
Jan 07 – Dec 07
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3

Babies discharged w/o HIV status
3

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Indet WB
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FalsePos
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Indet WB
0
The Safety Net of Perinatal HIV Prevention in Illinois

Baseline expectations for all RW CM of pregnant women

Enhanced case management
- outreach and case finding
- chaperoned visits / transportation
- wrap-around services
- DOT (hospital-based / community-based)

HIV-specific Prenatal Classes

Perinatal HIV
Enhanced Case Management
The Safety Net of Perinatal HIV Prevention in Illinois

24/7 Perinatal HIV Hotline

Technical Assistance

Real-Time linkage to care (statewide resource mapping)

Real-time reporting / case finding

Perinatal HIV Enhanced Case Management
Acknowledgments

The safety net of prevention would not be possible without the participation and support of the Illinois Department of Public Health, the PRTII regional coordinators, PACPI enhanced case managers, Illinois perinatal network administrators, Northwestern Memorial Hospital Hotline staff, Dr. Pat Garcia, Dr. Mardge Cohen, Sinai Urban Health Institute, AIDS Foundation of Chicago and all the nurse managers and staff on labor & delivery at all birthing hospitals in Illinois.
Anne Statton
Project Director
Pediatric AIDS Chicago Prevention Initiative & Perinatal Rapid Testing Implementation Initiative in Illinois
pacpi2000@aol.com
Tel: 312-334-0974