“Ironically it may require greater intimacy to discuss sex than to engage in it.”

The Hidden Epidemic, Institute of Medicine 1997
Why Should We Test?

- 1/4 of all HIV-infected persons are unaware of their status
  - In 2000, 31% did not return for results of HIV-positive conventional tests at publicly funded sites
- Earlier treatment could increase wellness
- Prevalence of unprotected anal or vaginal intercourse was 68% lower for HIV-infected persons who were aware of their status than it was for HIV-infected persons who were unaware of their status
- Transmission is 3.5x higher among persons who are unaware of their infection
Why Should We Test?

- Need for immediate information or referral for treatment choices
  - Perinatal settings
  - Post-exposure treatment settings

- Because I say so ...?
  - Among reasons for HIV testing provided by 528 adolescents who had primary care providers, 58% cited their provider's recommendation as their reason for testing
Late HIV Testing is Common

Supplement to HIV/AIDS Surveillance, 2000-2003

- 4,127 persons with AIDS*
  - 45% were first diagnosed HIV-positive within 12 months of AIDS diagnosis ("late testers")

- Late testers, compared to those tested early (>5 yrs before AIDS diagnosis) were more likely
  - Younger (18-29 yrs)
  - Heterosexual
  - Less educated
  - African American or Hispanic

*16 states

MMWR  June 27, 2003
Reasons for testing: late versus early testers

Supplement to HIV/AIDS Surveillance, 2000-2003

- Late (Tested < 1 yr before AIDS dx)
- Early (Tested > 5 yrs before AIDS dx)

- Illness
- Self/partner at risk
- Wanted to know
- Routine check up
- Required
- Other
Who Should We Test?

- Should be performed at least once for all patients aged 13-64 years (CDC)
- High risk patients should be tested annually
- All patients seeking treatment for STDs
Who Should We Test?

- Separate written consent for HIV testing should not be required
  - General consent for medical care should be considered sufficient to encompass consent for HIV testing
How Do We Incorporate Testing?

- Incorporate into routine medical care

- Prevention counseling/written consent not recommended

- Pregnant women
  - Opt-out testing
  - Repeat screening in 3rd trimester in areas with high rates of HIV infection among pregnant women
Testing Basics

- ELISA Initial screening test
  - Highly sensitive but not specific
  - High incidence of false positives
- Positive tests should be repeated and confirmed by a Western Blot
- Negative tests should be repeated in 6 months
Testing Technology

- OraQuick Advantage HIV-1/2®
  - CLIA-waived 20 minute
  - fingerstick/oral fluid ELISA test
  - Confirmation testing still required

- May capture patients who do not report for initial test results
Testing Technology

- Collect oral fluid specimens by swabbing gums with test device.
- Waste not biohazardous
Testing Technology

- Insert device; test develops in 20 minutes
Testing Technology

- Read results in 20 – 40 minutes

![Image of OraQuick ADVANCE HIV-1/2 test strips]

- Reactive HIV-1/2
- Reactive Control
- Reactive
- Negative
Rapid HIV Testing: Delivering a Preliminary Positive Result

- Assess how patient is coping.
- Explain meaning of result.
- Emphasize importance of confirmatory testing.
- Underscore importance of avoiding transmitting infection.

Smith-Bankhead 2010
### Source of HIV Tests and Positive Tests

- 38% - 44% of adults age 18-64 have been tested
- 16-22 million persons age 18-64 tested annually in U.S.

<table>
<thead>
<tr>
<th>Source</th>
<th>HIV tests*</th>
<th>HIV+ tests**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private doctor/HMO</td>
<td>44%</td>
<td>17%</td>
</tr>
<tr>
<td>Hospital, ED, Outpatient</td>
<td>22%</td>
<td>27%</td>
</tr>
<tr>
<td>Community clinic (public)</td>
<td>9%</td>
<td>21%</td>
</tr>
<tr>
<td>HIV counseling/testing</td>
<td>5%</td>
<td>9%</td>
</tr>
<tr>
<td>Correctional facility</td>
<td>0.6%</td>
<td>5%</td>
</tr>
<tr>
<td>STD clinic</td>
<td>0.1%</td>
<td>6%</td>
</tr>
<tr>
<td>Drug treatment clinic</td>
<td>0.7%</td>
<td>2%</td>
</tr>
</tbody>
</table>

*National Health Interview Survey, 2002
**Suppl. to HIV/AIDS surveillance, 2000-2003
## Kentucky STD Rates 2004-2008

### Rates per 100,000 Population

<table>
<thead>
<tr>
<th>STD</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Syphilis</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Total</td>
<td>3.6</td>
<td>3.1</td>
<td>4.5</td>
<td>3.6</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>11.4</td>
<td>11.2</td>
<td>12.3</td>
<td>13.6</td>
<td>15.3</td>
</tr>
<tr>
<td><strong>Chlamydia</strong></td>
<td>156.1</td>
<td>200.1</td>
<td>212.5</td>
<td>207.4</td>
<td>286.8</td>
</tr>
<tr>
<td>U.S. Total</td>
<td>316.5</td>
<td>329.4</td>
<td>344.3</td>
<td>367.5</td>
<td>401.3</td>
</tr>
<tr>
<td><strong>Gonorrhea</strong></td>
<td>66.5</td>
<td>70.3</td>
<td>77.9</td>
<td>81.3</td>
<td>107.2</td>
</tr>
<tr>
<td>U.S. Total</td>
<td>112.4</td>
<td>114.6</td>
<td>119.7</td>
<td>118.0</td>
<td>111.6</td>
</tr>
</tbody>
</table>

CDC 2008
HIV Testing in ED’s

• Survey of 95 Academic EDs

• For patients with suspected STDs:
  • 93% screen for gonorrhea
  • 88% screen for chlamydia
  • 58% screen for syphilis
  • 3% screen for HIV
STD/HIV Connection

** HIV is an STD!

- People with STDs who are HIV-negative are more susceptible to HIV:
  - Genital ulcers provide portal of HIV entry
  - Non-ulcerative STDs cause inflammation, which increases target cells for HIV

- People with STDs who are HIV-positive are more infectious:
  - Presence of another STD increases amount of HIV in genital secretions
SAMPLE PATIENT FLOW MODEL

- Registration
- Waiting Room
- Rapid HIV Test
- Exam Room
- Medical Visit
- Confirmatory Test
- Discharge & Referral
Barriers to HIV Testing

- Stigma
  - Gay disease
  - Substance users
  - “BAD” people
- Fear of Getting tested/HIV Test Results
- Lack of Knowledge and Information about HIV/AIDS
- Lack of Knowledge and Information about HIV Care and Treatment Services
- Physiology/Lack of Symptoms

RISE Coalition Training Manual, 2009
Barriers to HIV Testing

- Lack of Control in Relationships
  - Communication with partner
  - Lacking negotiation skills
  - Infidelity in relationships
  - Abuse/Violence

- Socioeconomic Issues

- Role as Caregivers

- Substance Use and Abuse

- Recognition of risk in partners

RISE Coalition Training Manual, 2009
Delivering Results

- Ask patient if ready to hear result.
- Provide result promptly; don’t make patient guess.

**PAUSE BRIEFLY**

- Explain result simply and clearly.
- Don’t focus on technical information.
- Use counseling skills.

Smith-Bankhead 2010
Delivering Results

● Have a plan for resources/referrals.
● Refer client to more information, counseling, services, and/or treatment, as needed.
● How you deliver your message is important!
● Explain how to obtain additional information.
● Remain non-judgmental & avoid value statements.

Smith-Bankhead 2010
Confidentiality Issues

- **Cannot disclose any info of patient or result to anyone **EXCEPT:**
  - HCW responsible for health & welfare of pt
  - HCW consulting for diagnosis & treatment
  - Cabinet for reporting controlling spread of disease
  - HCW dealing with body parts/fluids of deceased
Confidentiality Issues

- Cannot disclose any info of patient or result to anyone *EXCEPT:*
  - Health facility staff committees for conducting, monitoring, & evaluating programs
  - Authorized medical or epidemiological researchers
  - Parent, foster parent, or legal guardian of a minor
  - Person allowed access by a court order
Kentucky Reporting Requirements

- Physicians & Medical Laboratories must report:
  - Within 5 business days
  - CD4+ assay
  - HIV detectable Viral Load Assay
  - A positive serological test result
  - A diagnosis of AIDS that meets the proper criteria and use the proper forms
Kentucky Reporting Requirements

- Positive report must include:
  - Patient’s full name
  - Date of birth, Gender, Race
  - Risk factor
  - County of residence
  - Name of facility submitting report
  - Date & type of HIV test performed
  - Results of CD4+ cell counts
  - Results of viral load, and TB testing
  - PCR, HIV culture, HIV antigen, if performed
  - HIV status of partner, spouse or children
Kentucky Reporting Requirements

- Reports of AIDS:
  - Must be made regardless of previous HIV infection
  - If pt. was never reported as having HIV, AIDS report will serve

- Must include subsection:
  - The patient’s complete address
  - Opportunistic infections diagnosed
  - Date of onset of illness
Case study: Jessica

- Jessica:
  - 19 yr. old comes to your clinic as a walk-in for a pregnancy test
  - Has 2 yr. old daughter from previous partner
  - Has new partner since last visit 5 months ago
  - Uses condoms inconsistently
  - Ran out of her birth control pills one month ago
  - Missed her last appointment with you

Richardson 2010
Case Study: Jessica

- She tells you that she was recently seen in the ER for the worst cold she has ever had.
- She was discharged with a diagnosis of “the flu”.
- You offer her a rapid HIV test with an oral swab (Why?)
- Her results are preliminary positive.

Richardson 2010
Young Women and HIV/STD Risk

Young women are at increased risk for HIV infection because:

- They have an immature genital tract
- They are less able to negotiate safer sex with an older partner
- They may feel invincible
- They may be more worried about pregnancy than about STDs and HIV
Case Study: Jessica

- Her Western blot is negative
- You review risk factors for HIV:
  - Denies drug/alcohol use; 5 lifetime partners; No history of STDs
- She tells you she has a vaginal discharge now
- Her wet mount is negative; KOH positive for hyphae; you treat with terconazole
- Two days later her chlamydia test comes back positive

Richardson 2010
Case Study: Jessica

- In three months Jessica returns for a repeat HIV test.
- Again she reports a vaginal discharge.
- Her KOH is positive and you again treat with terconazole, this time for 7 days.
- Jessica’s HIV test is again preliminary positive, and this time her Western blot results come back positive.

Richardson 2010
Jessica

- You call Jessica to come in to discuss her results face-to-face.
- You have developed a network with your local Ryan White HIV clinic, and call them to connect Jessica to medical care.
- The RW case manager schedules an intake appointment for Jessica in one week, followed by a medical visit the following week.

Richardson 2010
Case Study: Jessica

- You recommend testing of Jessica’s partner, and offer an appointment for him to come to your clinic.
- You advise her to schedule an HIV test for her daughter, either here or at the RW clinic.

Richardson 2010
Case Study: Jessica

- Jessica has made a good connection with the HIV clinic
- However, she wants to continue to see you for her primary care/family planning/gyn care
- She is now taking antiretroviral medications
- Jessica requests contraception to prevent pregnancy

Richardson 2010
Precautions

- Safer Sex
  - anal
  - vaginal
  - oral sex
- Latex condoms (female/male)
- Barrier techniques (dental dams)
- IDU Harm Reduction
  - Needle/syringe programs, risk reduction counseling, drug dependence treatment programs
- Standard precautions
- Abstinence
- Education
1.) To consult on HIV care with an ID specialist or pharmacist:
   Call KY AETC Warm Line: 866.777.9969
   Call UK MD (24/7): 859.257.6845

2.) To refer a new HIV patient to care:
   Lexington Area: 859.323.1688
   Louisville Area: 502.561.8844
   Paducah Area: 270.444.8183
   Henderson Area: 270.826.0200

3.) To discuss Clinical Trials available for HIV:
   Call: 859.323.6327

Kentucky AIDS Education Training Center
Chandler Medical Center, MN672
Lexington, Kentucky 40536
(P) 859.323.9969 ~ (F) 859.257.3477
Online: www.mc.uky.edu/kyaetc