Los Angeles County’s HIV Epidemic: Current State and Future Directions

UCLA AIDS Institute
UCLA Center for AIDS Research
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Division of HIV and STD Programs
Briefing Overview

• Brief Epidemiologic Overview
• A Rapidly Evolving Response HIV/STDs
  • Catalysts for Change
  • Syndemic Planning and Geospatial Analysis
  • LAC Treatment Cascade Data
• Scaling Up HIV Casefinding Efforts
• Funding Picture and Outlook
• Steps Moving Forward
Division of HIV and STD Programs

L.A. County Board of Supervisors

Jonathan E. Fielding

Jonathan E. Freedman
Chief Deputy Director for Department of Public Health

Mario J. Pérez
Director
DIVISION OF HIV AND STD PROGRAMS

Sexually Transmitted Disease Program
HIV Epidemiology Program
Office of AIDS Programs and Policy
Brief Epidemiologic Overview
Diagnoses of HIV infection, 2009 - 40 states and 5 U.S. dependent areas
N = 42,959

Notes: Data include persons with a diagnosis of HIV infection regardless of the stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.


Confidential name-based HIV infection reporting not implemented by January 2006
Data classed using quartiles
AIDS diagnoses, 2009 - United States and 5 U.S. dependent areas
N = 34,993

Notes: All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.

Number
- 0 - 100
- 101 - 300
- 301 - 700
- 701 - 4,799
Persons living with an AIDS diagnosis, by Metropolitan Statistical Area (MSA) of residence, year-end 2008 - United States and Puerto Rico
N = 410,146

Notes: Only MSAs with over 500,000 population included. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.
Inset maps not to scale.
Estimated HIV Incidence, US, ‘06-’09

- 48,600 → 56,000 → 47,800 → 48,100

- 21% increase among 13-29 year olds, driven by....

- 34% increase among young MSM, driven by...

- 48% increase among young African-American MSM!!!
### Leading Causes of Premature Death, Los Angeles County, 1997 and 2006

<table>
<thead>
<tr>
<th>Cause of death</th>
<th>1997</th>
<th>2006</th>
<th>Percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coronary heart disease</td>
<td>875</td>
<td>641</td>
<td>-28</td>
</tr>
<tr>
<td>Homicide</td>
<td>542</td>
<td>440</td>
<td>-19</td>
</tr>
<tr>
<td>Motor vehicle crash</td>
<td>310</td>
<td>309</td>
<td>0</td>
</tr>
<tr>
<td>Liver disease</td>
<td>227</td>
<td>195</td>
<td>-14</td>
</tr>
<tr>
<td>Suicide</td>
<td>236</td>
<td>183</td>
<td>-22</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>291</td>
<td>189</td>
<td>-35</td>
</tr>
<tr>
<td>Stroke</td>
<td>212</td>
<td>176</td>
<td>-17</td>
</tr>
<tr>
<td>Drug overdose</td>
<td>169</td>
<td>165</td>
<td>-2</td>
</tr>
<tr>
<td>Diabetes</td>
<td>164</td>
<td>164</td>
<td>0</td>
</tr>
<tr>
<td>Breast cancer (female)</td>
<td>339</td>
<td>264</td>
<td>-22</td>
</tr>
<tr>
<td>HIV</td>
<td>241</td>
<td>113</td>
<td>-53</td>
</tr>
</tbody>
</table>

* YPLL = years of potential life lost before age 75, age-adjusted to year 2000 U.S. standard population
<table>
<thead>
<tr>
<th></th>
<th>Los Angeles County</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated living HIV/AIDS Cases</td>
<td>59,500</td>
<td>134,303*</td>
</tr>
<tr>
<td>Reported HIV/AIDS Cases</td>
<td>44,250</td>
<td>110,994</td>
</tr>
<tr>
<td>Estimated Undiagnosed HIV/AIDS Cases</td>
<td>12,800</td>
<td>23,309*</td>
</tr>
</tbody>
</table>

Data Source: Los Angeles County Department of Public Health, HIV Surveillance, 2011; California State Department of Public Health, State Surveillance Data, 2010

*133,705 calculated assuming 21% of HIV positive Californians are unaware of their status.
Los Angeles County

Data Source: U.S. Census Bureau, Topologically Integrated Geographic Encoding and Referencing system, 2009. Maps Drawn at 1:750,000 scale.
Overall, Race/Ethnicity

- Black: 13.3%
- Latino: 47.3%
- White: 30.1%
- Asian/PI: 8.8%
- NA/AI: 0.5%

Data Source: U.S. Department of Commerce, 2010; Los Angeles County Department of Public Health, HIV Surveillance, 2011

Population

<table>
<thead>
<tr>
<th>Population</th>
<th>Estimated HIV/AIDS Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>9,848,011</td>
<td>59,500</td>
</tr>
</tbody>
</table>
2012 Estimated Number of Persons Living with HIV and AIDS in LAC

![Graph showing estimated numbers of HIV/AIDS cases in LAC]

- **Unaware HIV**: 12,800
- **Pending HIV Cases**: 43,900
- **Reported Coded Living HIV**: 1,600
- **Reported Named Living HIV**: 1,200

**Source**: LAC Division of HIV and STD Programs, reported as of 12/31/2011.

1. Estimate that 21.5% of HIV+ in LA County are unaware of their infection; modified from CDC estimate.
2. Of 4,853 notifications pending investigation, estimate half of 2,400 who have detectable VL or confirmatory test to be unduplicated cases.
3. Of 3,200 code cases reported, half are thought to represent unduplicated cases.
Annual Diagnoses of AIDS and HIV Infection and Deaths of Persons with HIV Infection, Los Angeles County, 1991-2010

Number of Persons Reported Living with HIV Infection and AIDS by Year, LAC, 1991-2010

**Source:** HIV/AIDS Surveillance Summary, data as of December 2010.

* Data on persons living with HIV infection in year 2006 or earlier may be incomplete as non-AIDS HIV only became reportable by name in April 17, 2006. However, these numbers include both HIV or AIDS cases.

** Data are provisional for 2008-2010.
1. Number of new cases diagnosed each year.
2. Number of deaths occurred each year among persons reported with AIDS.
3. Number of persons living with AIDS at the end of each calendar year.
Persons Living with HIV/AIDS in LAC per 100,000 population* by Race/Ethnicity, as of December 2010

- **Black**: 951
- **AI/AN**: 652
- **White**: 473
- **Latino**: 339
- **A/PI**: 94

*Sometimes called “Prevalence Rate”; it is really a proportion.

Source: HIV/AIDS Surveillance Summary, data as of December 2010
Proportion of LAC PLWH/A Cases by Race/Ethnicity* & Diagnosis Year, 2001-10

*American Indian and Alaska Native are not presented here but consistently comprise <1% of cases, including 0.4% in 2010.
*Data are provisional due to reporting delay.
Source: HIV Epidemiology Program, LAC-DPH; data as of December 31, 2010
Percent of HIV/AIDS Diagnoses Among Adults/Adolescents, by Transmission Category* and Year of HIV Diagnosis, Los Angeles County, 1992-2010

* Persons with an undetermined transmission category are assigned a risk factor using multiple imputation (MI) methods (see technical notes in HIV/AIDS Surveillance Summary). Other risks include hemophilia or coagulation disorder, transfusion recipient, perinatal exposure, and confirmed other risk.

** Data are provisional due to reporting delay.

Source: HIV/AIDS Surveillance Summary, data as of December 2010
Trend in Proportion of Persons Living with AIDS by Age, 2001-2010

Note: Data for 2008, 2009, and 2010 are provisional.
Trend in Proportion of Persons Living with HIV by Age, 2002-2010

Data Source: HIV Surveillance Program. Note: Data for 2008, 2009, and 2010 are provisional.
Reported STIs and HIV/AIDS Cases Los Angeles County, 2009

- Over 55,000 STD /HIV were reported in 2009
  - 74% Chlamydia
  - 14% gonorrhea
  - 5% Syphilis
  - 7% HIV/AIDS

Source: STD Program/HIV Epidemiology Program Los Angeles County Department of Public Health
STI Rates per 100,000 Residents, 2009

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Syphilis</td>
<td>34.7</td>
<td>4.1</td>
<td>17</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>113.5</td>
<td>72.9</td>
<td>591</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>306.5</td>
<td>86.9</td>
<td>448.5</td>
</tr>
</tbody>
</table>

Source: STD Program Los Angeles County Department of Public Health
HIV/STD Co-morbidity Among HIV Cases Reported for Partner Services: LAC, 2009

- HIV 2,911
- Early Syphilis 1,032 (36%)
- Chlamydia 445 (15%)
- Gonorrhea 400 (14%)

Data Source: Sexually Transmitted Diseases Program, Partner Services Data 2009
Catalysts for Change
Catalysts for Change

- National HIV/AIDS Strategy
- Unsustainable disease burden
- ACA – LIHP - HWLA
- Improved Mapping
- Improved Use of Surveillance and Laboratory Information
- ECHPP and 12-City Initiative
Reducing HIV-Related Disparities and Health Inequities

Plan to Reduce HIV-Related Disparities and Health Inequities At-A-Glance

Disparities in HIV prevention and care persist among racial/ethnic minorities, as well as among sexual minorities. While working to improve access to prevention and care services for all Americans, the following steps will help to reduce inequities across groups:

The Opportunity

The transmission of HIV has long been concentrated in groups that have been marginalized or underserved. For persons living with HIV, this issue often transcends discrete measures such as incidence, morbidity and mortality rates, but speaks to a confluence of factors that lead to poorer health overall. In some communities, a major challenge is overcoming a sense of fatalism where people believe that they are destined to become infected with HIV. In other communities, although the threat of HIV is real, it is only one of many issues individuals face on a daily basis and
National HIV/AIDS Strategy: Three Primary Goals

1. Reduce New HIV Infections
2. Increase Access to Care and Improve Health Outcomes for People Living with HIV
3. Reduce HIV-Related Disparities and Health Inequities

To accomplish these goals, we must achieve a more coordinated national response to the HIV epidemic in the United States.
Unsustainable Disease Burden

• ~2,000 annual HIV infections
• ~12,800 HIV-undiagnosed persons
• ~55,000 annual STDs diagnosed
• Fewer resources
• Alarming health disparities, including diagnosis, linkage to care, retention and viral suppression
• High pharmaceutical and diagnostic costs
## Cost of Care for Persons Living with HIV/AIDS

<table>
<thead>
<tr>
<th>CD4 Count</th>
<th>&lt;50</th>
<th>51-200</th>
<th>201-500</th>
<th>&gt;500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual</td>
<td>$60,000</td>
<td>$30,000</td>
<td>$23,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>Cost*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Annual Cost of Care includes inpatient care, HIV medications, clinical visits, some ancillary services (home care)

Data Source: HIV Research Network, 2006
What’s Driving New Infections?

- High levels of undiagnosis
- Social and sexual networks
- Drug use, particularly alcohol and methamphetamine use
- Community viral load
- Poor economic and environmental conditions
- Homophobia, stigma, shame
Awareness of Serostatus Among People with HIV and Estimates of Transmission

- ~25% Unaware of Infection
  - Accounting for: ~54% of New Infections
  - People Living with HIV/AIDS: 1,039,000 - 1,185,000

- ~75% Aware of Infection
  - New Sexual Infections Each Year: ~32,000
  - Marks, et al AIDS 2006;20:1447-50

~46% of New Infections

CDC
Meth + Sex = PEP

Protect Your Negative Status

Are you...
• At least 18 years old?
• HIV negative?

Have you...
• Had sex with a new recently?
• Used methamphetamine recently?

If so, you may qualify to participate in a research study to decrease methamphetamine use and sexual risk behaviors for HIV.

If interested, you will be asked to...
• Submit blood samples weekly for 8 weeks.
• Attend one or more visits with a physician for a physical.

Your participation is voluntary and confidential. You may be able to earn up to $400 in incentives for your time and for submitting urine samples without evidence of methamphetamine use. You will also have access to free PEP (post-exposure prophylaxis) to be taken in case you ever have a sexual exposure to HIV during your study participation and to information on sexually transmitted infections.

If you are interested or have any questions, please call Paymon at 323-387-6079.

got PEP?

Having sex with Meth?
Are you keeping it safe?

Are you...
• At least 18 years old?
• HIV negative?

Have you...
• Had sex with a new recently?
• Used methamphetamine recently?

If so, you may qualify to participate in a research study to decrease methamphetamine use and sexual risk behaviors for HIV.

If interested, you will be asked to...
• Submit 3 urine samples a week for 8 weeks.
• Submit blood samples.
• Attend one or more visits with a physician for a physical.

Your participation is voluntary and confidential. You may be able to earn up to $400 for your time and for submitting urine samples without evidence of methamphetamine use. You will also have access to free PEP (post-exposure prophylaxis) to be taken in case you ever have a sexual exposure to HIV during your study participation and to information on sexually transmitted infections.

If you are interested or have any questions, please call Paymon at 323-387-6079.
The Local Epidemics Through a Syndemic Lens
HIV/STD Syndemic Planning

• Focuses on connections among cofactors of disease
  – HIV
  – Syphilis
  – Gonorrhea

• Considers those connections when developing health policies

• Next Steps include analysis of “upstream” determinants, e.g., poverty, substance use
HIV Positivity Rates by Service Planning Area (SPA), DHSP Testing Sites, 2007
Persons Living with an HIV Diagnosis in 2008, by Zip Code
Los Angeles County, CA

AIDSVu is an interactive, online map that allows users to visually explore the HIV epidemic in the U.S. alongside critical resources such as HIV testing center locations.

2008 Rate of persons living with an HIV diagnosis per 100,000 population
- 521+
- 304 to 520
- 190 to 303
- 130 to 189
- 0 to 129
- data not shown

www.AIDSVu.org
HIV Case Density, 2009, SPA 8

Source: 2009 New HIV Cases, HIV Epidemiology Program
Nearest Neighbor Hierarchical Clustering Summary

83.9% of HIV Cases in LAC

1Nearest Neighbor Hierarchical Clusters output at 1.0 standard deviations using fixed-distance band threshold
Los Angeles County

% of HIV/STI Cases Within 5 Cluster Areas

- HIV
- Syphilis+HIV
- Syphilis, no HIV
- GC + HIV
- GC, No HIV

Race/Ethnicity

- Black: 45.2%
- White: 25.8%
- Latino: 4.0%
- API: 24.6%
- Nat. Am.: 0.3%
### Disease Burden Summary

<table>
<thead>
<tr>
<th>Disease</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV</td>
<td>861</td>
<td>46.3%</td>
</tr>
<tr>
<td>Syphilis + HIV</td>
<td>642</td>
<td>58.5%</td>
</tr>
<tr>
<td>Syphilis no HIV</td>
<td>712</td>
<td>44.6%</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>3,330</td>
<td>42.1%</td>
</tr>
</tbody>
</table>

### Race/Ethnicity

- **Black**: 44.4%
- **White**: 27.8%
- **Latino**: 23.9%
- **API**: 3.3%
- **Nat. Am.**: 0.3%
New HIV Cases by Resident Zip Code,

Data Source: eHARS as of January 1, 2011
New Syphilis Cases by Resident Zip Code, 2009

Data Source: STD Surveillance, 2011
New Chlamydia Cases by Resident Zip Code, 2009

Data Source: STD Surveillance, 2011
Examining Care and Treatment from Multiple Data Sources
The Spectrum of Engagement in HIV Care and its Relevance to Test-and-Treat Strategies for Prevention of HIV Infection

Edward M. Gardner,1,2 Margaret P. McLees,1,2 John F. Steiner,2 Carlos del Rio,4,5 and William J. Burman1,2

1Denver Public Health and 2Kaiser Permanente Colorado, Denver, 3University of Colorado Denver, Aurora, Colorado, and 4Rollins School of Public Health of Emory University, and 5Emory Center for AIDS Research, Atlanta, Georgia

(See the editorial commentary by Lange, on pages 801–802.)

For individuals with human immunodeficiency virus (HIV) infection to fully benefit from potent combination antiretroviral therapy, they need to know that they are HIV infected, be engaged in regular HIV care, and receive and adhere to effective antiretroviral therapy. Test-and-treat strategies for HIV prevention posit that expanded testing and earlier treatment of HIV infection could markedly decrease ongoing HIV transmission, stemming the HIV epidemic. However, poor engagement in care for HIV-infected individuals will substantially limit the effectiveness of test-and-treat strategies. We review the spectrum of engagement in care for HIV-infected individuals in the United States and apply this information to help understand the magnitude of the challenges that poor engagement in care will pose to test-and-treat strategies for HIV prevention.
Spectrum of Engagement in Care in the United States

Number of Individuals

- HIV Infected: 1,106,400
- HIV Diagnosed: 79% of HIV Infected
- In HIV Care: 59% of HIV Diagnosed
- Retained in HIV Care: 40% of In HIV Care
- Need ART: 32% of Retained in HIV Care
- On ART: 24% of Need ART
- Undetectable VL: 19% of On ART

Gardner et al. Clinical Infectious Diseases 2011;52(6):793-800
Spectrum of Engagement in Care: US vs. Los Angeles County

<table>
<thead>
<tr>
<th>Category</th>
<th>USA</th>
<th>Los Angeles County</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV Infected</td>
<td>1,106,400</td>
<td>61,700</td>
</tr>
<tr>
<td>HIV Diagnosed</td>
<td>0.79</td>
<td>0.79</td>
</tr>
<tr>
<td>In HIV Care</td>
<td>0.59</td>
<td>0.44</td>
</tr>
<tr>
<td>Retained in HIV Care</td>
<td>0.40</td>
<td>0.35</td>
</tr>
<tr>
<td>Need ART</td>
<td>0.32</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>On ART</td>
<td>0.24</td>
<td>0.39</td>
</tr>
<tr>
<td>Undetectable VL</td>
<td>0.19</td>
<td>0.26</td>
</tr>
</tbody>
</table>

Gardner et al. CID 2011

Los Angeles County HIV Surveillance Data 2009-2010
Los Angeles County Conceptual Model for Continuum of HIV Services

- **No HIV, Low Risk**
  - Social marketing
  - Capacity building
  - Routine HIV testing

- **High Risk for HIV**
  - Targeted & Routine HIV Testing
  - HE/RR
  - Social Marketing
  - Syringe Exchange Programs
  - Biomedical (PEP)
  - Partner Services
  - STI Screening and Treatment
  - Substance use programs

- **HIV+, Unaware**
  - Targeted & Routine HIV Testing
  - Social Marketing
  - Partner Services
  - Substance use programs

- **HIV+ Aware, But Not in Care**
  - Outreach
  - Early Intervention Programs
  - Mental health and substance use programs
  - Ancillary support services
  - Social Marketing

- **PLWHAs Linked to Care**
  - STI screening and treatment
  - HIV medical care and ART
  - Treatment adherence
  - Ancillary services
  - Mental health and substance use programs
  - PS
  - HE/RR
  - Social marketing

- **PLWHAs Retained in Care**
  - Outreach
  - Early Intervention Programs
  - Mental health and substance use programs
  - Ancillary support services
  - Social Marketing
LAC Spectrum of Engagement in HIV Care

- **High Risk Individuals**
- **HIV Positive**
- **Linked to Care**
- **Engaged/Re-Engaged in Care**
- **Retained in HIV Care**
- **Adherent to ART Medication**
- **Suppressed VL and Reduced Transmission**

**Medical Home:**
- Medical Care Coordination
- Retention Case Management
- Youth Case Management

**Jails:**
- Transitional Case Management
- Peer NAV
- HIV Nurse Liaison

**HIV Negative**

**Customized Prevention Program:**
- Behavioral Risk Reduction
- Linkage to SA/MH Service
- Additional Prevention Service
- STI Diagnosis/Treatment
- Biomedical Prevention (nPEP, PrEP)
Prevention of HIV-1 Infection with Early Antiretroviral Therapy

Los Angeles County Treatment Cascade among PLWH in Care, 2009

Number of Individuals

- HIV Diagnosed: 41,059
- In Care: 27,396
- Retained in HIV Care: 80%
- On ART: Unknown at the County-level
- Undetectable VL: 58%

Los Angeles County HIV Surveillance Data 2009-2010
Ryan White “in Care” Treatment Cascade, 2009

Number of Individuals

- 5,000  10,000  15,000  20,000

RW System of Care: 18,345
RW Medical Care: 12,752
On ART: 90%
Retained in HIV Care: 74%
Undetectable VL: 65%

Ryan White Casewatch Data, January – December 2009 (CY2009)
Ryan White “in Care” Treatment Cascade, FY2010

Number of Individuals

-  5,000  10,000  15,000  20,000

RW System of Care: 19,228
RW Medical Care: 14,753
On ART: 90%
Retained in HIV Care: 87%
Undetectable VL: 75%

Ryan White Casewatch Data, March 2010 – February 2011 (Year 20)
## Linkage to Care by Test Year, 2006-08

### Linked to Care by Test Year, Jan 2006 - Dec 2008\(^1\) (n = 807)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linked to Care(^2)</td>
<td>528</td>
<td>65.4%</td>
</tr>
<tr>
<td><strong>2006 (n = 273)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within 3 months</td>
<td>123</td>
<td>45.1%</td>
</tr>
<tr>
<td>Within 6 months</td>
<td>18</td>
<td>6.6%</td>
</tr>
<tr>
<td>Within 1 year</td>
<td>23</td>
<td>8.4%</td>
</tr>
<tr>
<td><strong>2007 (n = 237)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within 3 months</td>
<td>138</td>
<td>58.2%</td>
</tr>
<tr>
<td>Within 6 months</td>
<td>17</td>
<td>7.2%</td>
</tr>
<tr>
<td>Within 1 year</td>
<td>8</td>
<td>3.4%</td>
</tr>
<tr>
<td><strong>2008 (n = 297)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within 3 months</td>
<td>177</td>
<td>59.6%</td>
</tr>
<tr>
<td>Within 6 months</td>
<td>13</td>
<td>4.4%</td>
</tr>
<tr>
<td>Within 1 year</td>
<td>11</td>
<td>3.7%</td>
</tr>
</tbody>
</table>
HIV-positive Individuals\(^1\) Linked to Care\(^2\), 2006-08 by Zip Code

\(^1\)Newly-diagnosed individuals tested at OAPP-funded sites, identified in HIV surveillance data

\(^2\)Matched cases in surveillance data not having a CD4 or viral load laboratory record, zip codes with small numbers not included in analysis
HIV-positive Individuals\(^1\) Linked to Care\(^2\), 2006-08 by Zip Code

Range by Provider\(^3\):
37% – 96%

SPA 2
82-89%

SPA 6
79-81%

SPA 4
37-96%

SPA 8
70-74%

\(^1\)Newly-diagnosed individuals tested at OAPP-funded sites, identified in HIV surveillance data

\(^2\)Matched cases in surveillance data not having a CD4 or viral load laboratory record, zip codes with small numbers not included in analysis

\(^3\)Linked to care: receiving a CD4 or VL test within one year of HIV positive test

Linked to care within 3 months

Retention in Care* by Resident Zip Code

Source: Casewatch YR 19 (Feb. '09 – Mar. '10):
Limited to Zip-Codes w/ > 10 RW clients.
* Defined as 2 MOP visits at least 90 days apart in a span of one year.

Range by Provider:
58% – 92%

SPA 2
80%-87%

SPA 4
58%-88%

SPA 6
78%-86%

SPA 8
87%-92%
Summary: Not Linked to Care in LAC

• Characteristics/factors associated with being unlinked to care\(^1\):
  – African American and Latino
  – Homeless
  – Transgender
  – Tested at Mobile Testing Unit (vs. fixed)

• Only 2/3 of those diagnosed w/ HIV in LAC are linked to care within 1 year of diagnosis

• Improving linkage to care = strategy to improve individual health outcomes as well as reduce HIV transmission

Scaling Up HIV Casefinding Efforts
### HIV Testing by Modality, 2010

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of HIV Tests N</th>
<th>HIV Positivity Rate n (%)</th>
<th>HIV New Positivity Rate n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grand Total</strong></td>
<td>100,686</td>
<td>1,203</td>
<td>1,024</td>
</tr>
<tr>
<td><strong>Public Health STD Clinics</strong></td>
<td>24,776</td>
<td>184</td>
<td>154</td>
</tr>
<tr>
<td><strong>Routine Testing in Healthcare Settings</strong></td>
<td>17,799</td>
<td>354</td>
<td>348</td>
</tr>
<tr>
<td><strong>Testing within Jail Settings</strong></td>
<td>12,932</td>
<td>73</td>
<td>25</td>
</tr>
<tr>
<td><strong>Targeted Testing</strong></td>
<td>45,179</td>
<td>592</td>
<td>497</td>
</tr>
</tbody>
</table>

**Data Source:** HIV Testing System (HTS) as of 10/14/11
# HIV Testing by Modality, 2010 cont.

<table>
<thead>
<tr>
<th>Modality</th>
<th>Number of HIV Tests</th>
<th>HIV Positivity Rate</th>
<th>HIV New Positivity Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>Targeted Testing cont.</td>
<td>45,382</td>
<td>594</td>
<td>1.31%</td>
</tr>
<tr>
<td>Storefront</td>
<td>27,829</td>
<td>334</td>
<td>1.20%</td>
</tr>
<tr>
<td>Mobile Testing Unit Program</td>
<td>9,262</td>
<td>90</td>
<td>0.97%</td>
</tr>
<tr>
<td>Multiple Morbidity Mobile Testing Units Programs</td>
<td>3,565</td>
<td>44</td>
<td>1.23%</td>
</tr>
<tr>
<td>Social Network Testing Program</td>
<td>707</td>
<td>55</td>
<td>7.78%</td>
</tr>
<tr>
<td>Bathhouses and Sex Clubs</td>
<td>1,984</td>
<td>33</td>
<td>1.66%</td>
</tr>
<tr>
<td>Court Ordered and Drug Expansion</td>
<td>1,832</td>
<td>36</td>
<td>1.97%</td>
</tr>
</tbody>
</table>

Data Source: HIV Testing System (HTS) as of 10/14/11
DPH HIV Testing Projections 2010-2015, Former HIV Testing Model

DHSP HIV Testing Projections 2010-2015, New Directions in HIV Testing

HIV-Positive, Aware of HIV Status (%)


Number of HIV Tests

Data Source: Division of HIV and STD Programs, HIV Testing Services Data, 2011
Division of HIV and STD Programs
HIV Tests and New Positive Tests By Year*

Data Source: Division of HIV and STD Programs, HIV Testing Services, 2011
*Includes all HIV testing supported by Public Health, HIV and STD Programs with projected numbers based on NHAS implementation (2011-15)
Rapid Testing Algorithm Study

• CDC-funded study

• Goal: Evaluate the impact and feasibility of using a sequence of up to 3 HIV rapid tests, to provide clients with information about their HIV status within 1 hour and link into care

• Los Angeles Sites: All OAPP-funded rapid HCT sites
  – RTA Intervention sites: 4 (MTUs, Storefronts, Community clinics)
  – Comparison sites: 12

• Project period: August 2007 – March 2009
Rapid HIV Testing in LAC

OraQuick HIV Rapid Test (Oral or finger stick)

- **Negative**
- **Preliminary Positive**
  - Confirmatory Testing EIA/WB
    - **Negative/Inconclusive**
    - **Confirmed Positive**
      - **Follow-up/ additional Testing**
      - **REFER TO CARE**

From OAPP 2008 HCT Data:
- 95.5% Received initial result *
- 48.7% Received a confirmed result *

Results: Intervention vs. Comparison Sites

Study Period: August 1, 2007 – March 31, 2009

RTA Intervention Sites

10,857 Testers

263 OraQuick + (2.42%)

94 RTA + (0.87%)

163 did not participate in RTA

6 RTA – (0.06%)

100% Received their result
100% RTA + referred to care on same day

Comparison Sites

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td># Tested</td>
<td>32,929</td>
</tr>
<tr>
<td># Screened Reactive</td>
<td>487 (1.48%)</td>
</tr>
<tr>
<td># False Positive</td>
<td>41 (0.12%)</td>
</tr>
<tr>
<td># Received Confirmatory Test Results</td>
<td>206 (42.3%)</td>
</tr>
<tr>
<td>Median # Days Referred to Medical Care</td>
<td>8 days</td>
</tr>
<tr>
<td>(range)</td>
<td>(1 – 55 days)</td>
</tr>
</tbody>
</table>
Results: Intervention Sites (Cont.)

- **RTA Intervention Sites**
  - 10,857 Testers
  - 263 OraQuick + (2.42%)
- **163 did not participate in RTA**
- **6 RTA – (0.06%)**
- **94 RTA + (0.87%)**
  - 100% Received their result
  - 100% RTA + referred to care on same day

- **163 + OraQuick RTA non-participants**
  - 106 (65.0%) provided a specimen for confirmatory testing
  - **29 (27.4%) False Positive**
  - **77 (72.6%) Confirmed True Positive**
  - **36 (46.8%)** Received their final result and were linked to medical care

**Site Challenges:**
- Client refused confirmatory test
- Phlebotomy capacity not consistently available

**Receipt of final results = Median of 8 days (range = 4 – 54 days)**
Results Summary

• At RTA Intervention Sites:
  – 100% of clients received their test results on the same day
  – All RTA reactive clients referred to care on the same day
  – 6 false positive results resolved on the same day
  – Receipt of confirmed results among non-RTA participants was similar to those at comparison sites (~42%)

• Comparison Sites:
  – 42% received confirmatory results
  – Median 8 days until referral to medical care
Dramatic Funding Shifts
Changes in the Way We Finance Our Response

- CDC FOA-mandated shifts
- Section 1115 Medicaid Waiver
  - Low Income Health Programs (LIHPs)/Healthy Way LA
- Redistribution of RW resources
- Blending of service categories across funding streams
CDC Funding Shifts

• Redistribution of funding
  – Increased allocation to MSA
  – Discontinue MSA funding via State

• 75% funding for required core components
  – HIV testing
  – Comprehensive Prevention with Positives
  – Condom distribution
  – Policy initiatives
California’s Section 1115 Medicaid Waiver and Federal Health Care Reform
Section 1115 Waiver Overview

- November 2010: 1115 Waiver approved by CMS
- Waiver is designed to be a bridge to implementation of health care reform in 2014

- Attempts to stabilize safety net provider systems
- Improves care coordination for certain vulnerable populations
- Expands coverage to uninsured adults
Implementation of the Patient Protection and Affordable Care Act

- <133% FPL: Full Scope Medi-Cal
- 134%-400% FPL: Subsidized insurance coverage through the insurance exchange
- >401% FPL: Insurance coverage through the insurance exchange (No Subsidy)
Healthy Way LA Transition Review

Medical Provider
- We expect that clients will be able to continue to be seen by their current HIV medical providers
- Medical Home

Prescription Drug Coverage
- Clients will have expanded access to medications
- DHS is creating an HIV pharmacy program (clinic and community pharmacies)
- Some clients will have to change pharmacies

Improved access to medical care
- Medical specialty
- Inpatient (hospital) coverage
- Access to non-HIV related care and treatment
- Emergency Care
- Urgent Care
- Ambulance
Local ECHPP Activities

• Syndemic Planning
  – Integrated use of HIV and STI surveillance data
• Identify optimal mix of HIV programming
  – Robust Decision Making to inform prioritization, scale, and optimal mix of HIV prevention interventions for LAC

Where should we focus our prevention efforts to make the largest impact with resources we have?
Paradigm Shifts, Pilot Projects and Next Steps
Evolving a Local Response

• Integrating HIV/STD prevention & treatment
• Integrating the prevention/care continuum
• Adopting the National HIV/AIDS Strategy
• Early detection, LTC and RIC
• Viral suppression for individuals in HIV care
• Evidence-based programming
• Changes in community planning
What is ECHPP?

- CDC-funded initiative intended to enhance the impact of HIV prevention efforts in 12 MSAs that represent 44% of the domestic epidemic

- Expectations of ECHPP grantees:
  - Align their prevention strategies with the NHAS
  - Develop a plan that addresses gaps and better supports strategies that have the greatest impact on reducing HIV incidence
What is the 12-Cities Project?

• A DHHS-supported project to accelerate comprehensive HIV/AIDS planning and cross-agency response in the 12 jurisdictions that bear 44% of HIV burden.

• Will serve as a proving ground to demonstrate how broad range of federally-supported HIV prevention, care and treatment activities can work together more effectively across organizational and program boundaries.
Pilot Projects

- TLC+
- Delivering Partner Services through multiple models (ARTAS, CEDIS)
- non-occupational Post-exposure Prophylaxis (nPEP)
- Jails Peer Navigation
- Integrating Mental Health and Substance Use Treatment into Primary Care Settings
Future of HIV Testing in Los Angeles County

- Increased Testing (Public/Private Sector)
- Performance Measure Enforcement
- Testing, Linkage to Care + (TLC+)
- Progressive Testing Algorithms
- Enhanced Partner Services and LTC
- Use of HIV Surveillance
Future of HIV Testing in Los Angeles County

- Decrease Repeat Positive Testers
- Enlist Private Sector Partners
- Expand Payer Base
- Change HEDIS Measures
- Mandatory Opt-Out Screening in CA?
- Diversify Testing Modalities
Broad Goals for Near Term

• Program redesign/evolution
  – Multiple morbidity screening and treatment
  – Improved casefinding capacity
  – Oral health expansion
  – Improved medical care coordination and other care wrap-around services
  – Holistic substance abuse treatment
  – Improved mental health treatment access
Broad Goals for Near Term

• System Changes
  – RWP/HWLA Migration
  – RWP Investment Refinement
  – Integrated Care, Prevention and Housing Planning

• Policy Items
  – RWP Continuation
  – Preservation of CA Investment Levels
Thank You!

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Questions and Answers