Surveillance and Epidemiology of HIV and AIDS in Los Angeles County

Presentation to the
Los Angeles County Commission on HIV
March 7, 2013

Douglas Frye
Division of HIV and STD Programs
Annual Diagnoses of HIV (Reporting Incidence)
Rates of Diagnoses of HIV Infection among Adults and Adolescents, 2011—United States and 6 Dependent Areas

N = 50,007
Total Rate = 19.1

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

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Comparison of Cumulative HIV Cases (n=80,115) and Cases Diagnosed in 2011 (n=1,880), by Age at Diagnosis – LA County
Percent Perinatal HIV Transmission by Birth Year, LA County, 1996 – 2012

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Diagnoses of HIV Infection among Adults and Adolescents, by Sex, 2008–2011—United States and 6 Dependent Areas

Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.
<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>Transgender</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>88.6%</td>
<td>10.5%</td>
<td>1.9%</td>
</tr>
<tr>
<td>2009</td>
<td>88.6%</td>
<td>10.5%</td>
<td>1.9%</td>
</tr>
<tr>
<td>2010</td>
<td>88.6%</td>
<td>10.5%</td>
<td>1.9%</td>
</tr>
<tr>
<td>2011*</td>
<td>88.6%</td>
<td>10.5%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

* Data provisional due to reporting delay.

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Diagnoses of HIV Infection among Adults and Adolescents, by Race/Ethnicity, 2008–2011—United States and 6 Dependent Areas

- Black/African American
- White
- Hispanic/Latino
- Native Hawaiian/other Pacific Islander
- Asian
- American Indian/Alaska Native
- Multiple races


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

*Hispanics/Latinos can be of any race.
Percent of HIV Diagnoses Among Adults/Adolescents, by Race/Ethnicity* and Year of HIV Diagnosis, LAC, 2008-2011

** Data provisional due to reporting delay.

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Diagnoses of HIV Infection among Adults and Adolescents, by Sex and Race/Ethnicity, 2011—United States and 6 Dependent Areas

Males
N = 39,495
- 2% American Indian/Alaska Native
- 2% Asian
- <1% Native Hawaiian/other Pacific Islander
- <1% Multiple races
- 30% Black/African American
- 23% Hispanic/Latino
- 42% White

Females
N = 10,512
- 1% American Indian/Alaska Native
- 1% Asian
- <1% Native Hawaiian/other Pacific Islander
- <1% Multiple races
- 17% Black/African American
- 17% Hispanic/Latino
- 63% White

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

* Hispanics/Latinos can be of any race.
Comparison of Persons Diagnosed with HIV in 2011, by Sex at Birth and Race/Ethnicity - LAC

Male (n=1,698)*
- 46% White
- 25% Latino
- 22% Asian
- 1% Black
- 5% AI/AN

Female (n=182)**
- 48% White
- 37% Latino
- 11% Asian
- 1% Black

*Includes 36 Transgender cases.
**A/PI and Am. Indian/AK Native with fewer than 5 cases each.

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Rates of Diagnoses of HIV Infection among Adults and Adolescents, by Sex and Race/Ethnicity, 2011—United States

Note: Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting. Rates are per 100,000 population.

* Hispanics/Latinos can be of any race.
Rate (per 100,000 pop.) of Diagnoses of HIV Among Adults/Adolescents, by Sex and Race/Ethnicity– 2011, LAC

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.

* Unstable rate due to small numbers
Rates of HIV Diagnoses Among Adult/Adolescent Men, by Race/Ethnicity*, LAC, 2006-2011

* American Indian and Alaskan Native are not presented due to small numbers that may cause unstable estimates.
** Data are provisional due to reporting delay.

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Rates of HIV Diagnoses Among Adult/Adolescent Women, by Race/Ethnicity*, LAC, 2006-2012

* American Indian and Alaskan Native are not presented due to small numbers that may cause unstable estimates.

** Data are provisional due to reporting delay.

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Diagnoses of HIV Infection among Adults and Adolescents, by Transmission Category, 2008–2011—United States and 6 Dependent Areas

- Male-to-male sexual contact
- Heterosexual contact\(^a\)
- Injection drug use (IDU)
- Male-to-male sexual contact and IDU
- Other\(^b\)

Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays and missing transmission category, but not for incomplete reporting.

\(^a\) Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

\(^b\) Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.
Persons with undetermined transmission category are assigned risk factor using multiple imputation (MI) methods. Other risks include hemophilia or coagulation disorder, transfusion recipient, perinatal exposure, and confirmed other risk.

** Data provisional due to reporting delay.

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Adults and Adolescents Living with Diagnosed HIV Infection, by Sex and Transmission Category, Year-end 2010—United States and 6 Dependent Areas

**Males**
- Male-to-male sexual contact: 67%
- Injection drug use (IDU): 14%
- Male-to-male sexual contact and IDU: 11%
- Other: 7%
- <1%:
- N = 665,872

**Females**
- Heterosexual contact: 72%
- Perinatal exposure: 25%
- Other: 1%
- N = 223,045

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

a Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

b Includes hemophilia, blood transfusion, and risk factor not reported or not identified.
Transmission Category* for Persons Diagnosed with HIV, by Sex at Birth in Los Angeles County, 2011**

** Persons with undetermined transmission category are assigned risk factor using multiple imputation (MI) methods. Other risks include hemophilia or coagulation disorder, transfusion recipient, perinatal exposure and confirmed other risk.

** Data are provisional due to reporting delay.

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
New HIV Diagnoses in 2009-2011 by Zip code and Service Planning Area in LAC as of Dec. 31, 2012 (N=6,612)
Persons Living with HIV (Prevalence)
2013 Estimated Number of Persons Living with HIV in Los Angeles County

- Estimate that 18.1% of HIV+ in LA County are unaware of their infection; from CDC estimate.
- Of 4,200 notifications pending investigation, estimate about 2,000 who have detectable VL or confirmatory test to be unduplicated cases.

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
## Reported Persons living with HIV Infection

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>No. living with HIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. (50 states)</td>
<td>872,990*</td>
</tr>
<tr>
<td>California</td>
<td>117,695**</td>
</tr>
<tr>
<td>LA County</td>
<td>45,474***</td>
</tr>
</tbody>
</table>

**Reported as of 12/31/12, California Office of AIDS, HIV/AIDS Surveillance Section.
***Reported as of 12/31/12, LAC Division of HIV/STD Prgms.
Number of Persons Reported Living with HIV Infection and AIDS by Year, LAC, 1992-2012

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Percent Persons Living with AIDS and HIV Whose Current Age is 50+ Years – by Year, LAC, 2005-12

HIV 39%
AIDS 48%

* Data provisional due to reporting delay.

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Comparison of Persons Living with HIV, by Gender and Race/Ethnicity, 2011 - LAC

Male (n=40,314)
- 36% Latino
- 40% White
- 19% Black
- 3% Asian
- <1% AI/AN

Female (n=5,159)
- 45% Latino
- 36% White
- 15% Black
- 3% Asian
- <1% AI/AN

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Proportion of Persons Living with HIV/AIDS by Race/Ethnicity and Sex, LAC 2011

- **White**: 95% Male, 5% Female
- **Black**: 80% Male, 20% Female
- **Latino**: 88% Male, 12% Female
- **A/PI/AI/AN**: 91% Male, 9% Female

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
American Indian/Alaskan Natives Living with HIV by Sex, Age and Risk LAC 2011 (N=212*)

Sex
- Male: 87%
- Female: 13%

Age
- <30 yo: 11%
- 30-49 yo: 32%
- 50+yo: 57%

Risk
- Hetero: 6%
- MSM/IDU: 18%
- IDU: 10%
- MSM: 64%

*Estimated number low due to misclassification.

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Persons Living with HIV in LAC per 100,000 population* by Race/Ethnicity, 2011

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Prevalence per 100,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>988</td>
</tr>
<tr>
<td>AI/AN</td>
<td>768</td>
</tr>
<tr>
<td>White</td>
<td>486</td>
</tr>
<tr>
<td>Latino</td>
<td>379</td>
</tr>
<tr>
<td>A/PI</td>
<td>109</td>
</tr>
</tbody>
</table>

*PLWH = Prevalence.

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Prevalence (per 100,000 pop.) of Persons with HIV by Sex and Race/Ethnicity – LAC, 2010

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Comparison of Persons Living with HIV with HIV Diagnoses in 2011, by Race/Ethnicity

Living with HIV/AIDS

- 41%
- 34%
- 21%
- 3%
- <1%

Diagnosed in 2011

- 46%
- 24%
- 24%
- 5%
- <1%

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Comparison of Persons living with HIV and HIV Diagnoses in 2011, by Transmission Category*

Living with HIV/AIDS

- MSM: 77%
- IDU: 11%
- MSM/IDU: 6%
- Heterosex: 5%
- Other**: 1%

Diagnosed in 2011

- MSM: 3%
- IDU: 3%
- MSM/IDU: 9%
- Heterosex: <1%
- Other**: 85%

*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, and perinatal exposure.

Source: LAC Division of HIV and STD Programs, reported as of 12/31/2012.
Persons Living with HIV per 100,000 Population, by Zip Code and Service Planning Area in LAC as of Dec. 31, 2012 (N=45,474)
Indicators of Treatment
LA COUNTY HIV EPIDEMIOLOGY PROGRAM

Estimate number of PLWH in LAC (N=51,570), includes PLHW diagnosed by 12/31/09 and living as of 12/31/10 plus 18.1% estimated to be unaware of their status per CDC methodology.

1. Linked to care ≤3 months of diagnosis among 2,192 persons diagnosed in 2010.
2. ≥1 Viral Load reported in 2010.
3. ≥2 Viral Load reported in 2010 at least 3 mths apart.
4. Viral Load suppression define as VL <200.

Among Persons Estimated to have HIV*, Treatment Cascade – LAC, 2010

*Estimate number of PLWH in LAC (N=51,570), includes PLHW diagnosed by 12/31/09 and living as of 12/31/10 plus 18.1% estimated to be unaware of their status per CDC methodology.

(1) Linked to care ≤ 3 months of diagnosis among 2,192 persons diagnosed in 2010.
(2) ≥1 Viral Load reported in 2010. (3) ≥2 Viral Load reported in 2010 at least 3 mths apart. (4) Viral Load suppression define as VL <200.

Source: LAC DHSP, HIV Surveillance database, reported as of 12/31/2012.
Among Persons *Reported* in LAC with HIV*, Treatment Cascade, 2010

- **Linked (1)**: 79%
- **≥1 Visit (2)**: 66%
- **Retained (3)**: 56%
- **Suppressed (4)**: 52%

*Number of PLWH in LAC (N=42,237) diagnosed by 12/31/09 and living as of 12/31/10.

(1) Linked to care ≤ 3 months of diagnosis among 2,192 persons diagnosed in 2010.
(2) ≥1 Viral Load reported in 2010.
(3) ≥2 Viral Load reported in 2010 at least 3 months apart.
(4) Viral Load suppression define as VL <200.

Source: LAC DHSP, HIV Surveillance database, reported as of 12/31/2012.
Among Persons *Reported* in LAC with HIV*, Treatment Cascade by Sex, 2010

*Number of PLWH in LAC (N=42,237) diagnosed by 12/31/09 and living as of 12/31/10. (1) Linked to care ≤ 3 months of diagnosis among 2,192 persons diagnosed in 2010. (2) ≥1 Viral Load reported in 2010. (3) ≥2 Viral Load reported in 2010 at least 3 months apart. (4) Viral Load suppression defined as VL <200.

Source: LAC DHSP, HIV Surveillance database, reported as of 12/31/2012.
Among Persons *Reported* in LAC with HIV*, Treatment Cascade by Age Group (Years), 2010

*Number of PLWH in LAC (N=42,237) diagnosed by 12/31/09 and living as of 12/31/10.
(1) Linked to care ≤ 3 months of diagnosis among 2,192 persons diagnosed in 2010.
(2) ≥1 Viral Load reported in 2010. (3) ≥2 Viral Load reported in 2010 at least 3 months apart. (4) Viral Load suppression defined as VL <200.

Source: LAC DHSP, HIV Surveillance database, reported as of 12/31/2012.
LA COUNTY HIV EPIDEMIOLOGY PROGRAM

*Number of PLWH in LAC (N=42,237) diagnosed by 12/31/09 and living as of 12/31/10.

1. Linked to care ≤ 3 months of diagnosis among 2,192 persons diagnosed in 2010.
2. ≥1 Viral Load reported in 2010.
3. ≥2 Viral Load reported in 2010 at least 3 months apart.
4. Viral Load suppression defined as VL <200.

Among Persons Reported in LAC with HIV*, Treatment Cascade by Race/Ethnicity, 2010

Source: LAC DHSP, HIV Surveillance database, reported as of 12/31/2012.
LA COUNTY HIV EPIDEMIOLOGY PROGRAM

*Number of PLWH in LAC (N=42,237) diagnosed by 12/31/09 and living as of 12/31/10. (1) Linked to care ≤3 months of diagnosis among 2,192 persons diagnosed in 2010. (2) ≥1 Viral Load reported in 2010. (3) ≥2 Viral Load reported in 2010 at least 3 months apart. (4) Viral Load suppression define as VL <200.

Among Persons Reported in LAC with HIV*, Treatment Cascade by Transmission Mode, 2010

*Number of PLWH in LAC (N=42,237) diagnosed by 12/31/09 and living as of 12/31/10.

(1) Linked to care ≤3 months of diagnosis among 2,192 persons diagnosed in 2010.
(2) ≥1 Viral Load reported in 2010.
(3) ≥2 Viral Load reported in 2010 at least 3 months apart.
(4) Viral Load suppression define as VL <200.

Source: LAC DHSP, HIV Surveillance database, reported as of 12/31/2012.
Contact Information

Douglas Frye, MD, MPH
DHSP/HIV Epidemiology
Phone: (213) 351 – 8190

For HIV Statistics and to Report a Case:
http://publichealth.lacounty.gov/hiv/
Report: *Los Angeles County Transgender Population Estimates 2012*

- Input from 4 reports and Transgender Community
- Estimate 14,428 transgender persons living in LAC (Range 7,214 - 21,642)
- 7,214 Transgender Men; HIV prevalence 0.6%
- 7,214 Transgender Women; HIV prevalence 15.1%
  - African American/Black (48.3%)
  - Native Americans (26.9%)
  -Latinas (17.1%)
  - Whites (4.6%)
  - Asian/Pacific Islanders (3.7%)