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Diagnoses of HIV Infection and Population by Race/Ethnicity—United States, 2017

Note. Data for the year 2017 are considered preliminary and based on 6 months reporting delay.

Hispanics/Latinos can be of any race.

HIV Care Continuum Outcomes, by Race/Ethnicity—United States, 2015

Note. Receipt of medical care was defined as ≥1 test (CD4 or VL) in 2015. Retained in continuous medical care was defined as ≥2 tests (CD4 or VL) ≥3 months apart in 2015. Viral suppression was defined as <200 copies/mL on the most recent VL test in 2015. Asian includes Asian/Pacific Islander legacy cases. Hispanics/Latinos can be of any race.

Research Gap

• Non-US-born persons with diagnosed HIV are more likely to be prescribed antiretroviral therapy, retained in care, and virally suppressed compared with US-born persons


• Limited studies of HIV outcomes among Hispanics/Latinos by birth place

Objective

To compare HIV care outcomes among non-US-born (NUB) and US-born (UB) Hispanics/Latinos
Methods
Medical Monitoring Project

- A CDC surveillance system
  - Monitor clinical outcomes and behaviors of adults with diagnosed HIV infection in the United States
  - Annual cross-sectional data
  - Nationally and locally representative

- Two-stage sampling
  - Project areas
  - Participants
Medical Monitoring Project (Cont.)

- **MMP Eligibility**
  - Persons with diagnosed HIV infection reported to the National HIV Surveillance System
  - Aged ≥18 years

- Collects data each year from June to the following May

- Combines behavioral and medical data
  - Interview
  - Medical record abstraction
MMP Data Used

- Data combined from two MMP cycles: 2015 and 2016
- Data collected
  - June 2015–May 2017
- Adjusted response rates
  - Project area: 100% for both cycles
  - Persons: 40% in 2015 cycle and 44% in 2016 cycle
- Data were weighted to represent
  - All adults with diagnosed HIV infection living in the United States
Inclusion Criteria

- **Place of birth categorization**
  - Persons born in the United States and its six dependencies were categorized as UB and those born elsewhere as NUB.

- **7,617 adults with diagnosed HIV participated**
  - 1,619 identified as Hispanic/Latino
    - 1,006 UB
    - 613 NUB
Variables

Interview

- Demographics
- Incarceration
- Education
- Household poverty level
- Healthcare coverage
- Medical care
- Sexual behavior
- Alcohol* and drug use
- Depression** and anxiety**

Medical Record Abstraction

- Number of outpatient visits
- Care facility Ryan White HIV/AIDS Program funding
- Viral load data
- ART prescription

All interview measures were self-reported.
Time period was 12 months prior to interview unless otherwise noted.
*In the past 30 days
**In the past 2 weeks.
Results

37% Non-US-born

- 49% were born in Mexico
- 78% immigrated to the United States at age 18 or older
- 90% had lived in the United States for ≥ 10 years
- 63% spoke English well or very well
Time of HIV Diagnosis Relative To Migration

<table>
<thead>
<tr>
<th>Time of HIV Diagnosis</th>
<th>Percentage of NUB Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥5 yrs before arrival</td>
<td>5</td>
</tr>
<tr>
<td>1-4 yrs before arrival</td>
<td>4</td>
</tr>
<tr>
<td>Same year as arrival</td>
<td>4</td>
</tr>
<tr>
<td>1-4 yrs after arrival</td>
<td>14</td>
</tr>
<tr>
<td>5-9 yrs after arrival</td>
<td>20</td>
</tr>
<tr>
<td>≥10 yrs after arrival</td>
<td>54</td>
</tr>
</tbody>
</table>

Percentage of NUB Persons at different time intervals relative to migration.
Sociodemographic Characteristics by Place of Birth

**Gender**

- Non-US-born: 80% Male, 19% Female
- US-born: 78% Male, 22% Female

**Age**

- Non-US-born: 14% 18-34 yrs, 29% 35-44 yrs, 36% 45-54 yrs, 21% ≥55 yrs
- US-born: 19% 18-34 yrs, 22% 35-44 yrs, 32% 45-54 yrs, 27% ≥55 yrs

**Education**

- Non-US-born: 36% <High School, 23% High School, 22% >High School
- US-born: 41% <High School, 23% High School, 25% >High School

**P-values**

- Gender: $P = 0.19$
- Age: $P < 0.01$
- Education: $P < 0.001$
Sociodemographic Characteristics (Cont.)

At or below federal poverty level

$P = 0.98$

Non-US-born: 50%
US-born: 50%

Non-US-born: 8%
US-born: 7%

Homelessness

$P = 0.83$
Healthcare Coverage by Place of Birth

Healthcare Coverage

Non-US born

US-born

\[ P < 0.0001 \]
## Behavioral Characteristics and Mental Health by Place of Birth

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Non-US born</th>
<th>US-born</th>
<th>(P)-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binge drinking(^*)</td>
<td>17</td>
<td>20</td>
<td>0.21</td>
</tr>
<tr>
<td>Used non-injection drugs</td>
<td>15</td>
<td>30</td>
<td>0.0001</td>
</tr>
<tr>
<td>Engaged in any high-risk sex(^**)</td>
<td>29</td>
<td>33</td>
<td>0.26</td>
</tr>
<tr>
<td>Major or other depression(^***)</td>
<td>17</td>
<td>26</td>
<td>(&lt;0.01)</td>
</tr>
<tr>
<td>Moderate to severe anxiety(^***)</td>
<td>12</td>
<td>21</td>
<td>(&lt;0.001)</td>
</tr>
</tbody>
</table>

*In the past 30 days; **Vaginal or anal sex with at least 1 HIV-negative or unknown status partner while not durably virally suppressed, a condom was not used, and the partner was not known to be using pre-exposure prophylaxis; ***In the past 2 weeks.
Clinical Characteristics by Place of Birth

**Length of time since HIV diagnosis (Years)**

- **P** = 0.06
- Non-US born: 22%, 22%<br>US-born: 18%, 20%

**Geometric mean CD4 count (cells/microliter)**

- **P** = 0.11
- Non-US born: 8%, 13%, 20%<br>US-born: 6%, 10%, 18%

**Stage 3 classification (AIDS)**

- **P** = 0.06
- Non-US born: 56%, 62%<br>US-born: 59%, 66%
## HIV Care Outcomes by Place of Birth

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Non-US born</th>
<th>US-born</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Col %</td>
<td>Col %</td>
<td></td>
</tr>
<tr>
<td>ART prescription</td>
<td>90</td>
<td>84</td>
<td>0.16</td>
</tr>
<tr>
<td>Retention in care</td>
<td>86</td>
<td>85</td>
<td>0.84</td>
</tr>
<tr>
<td>Viral suppression (recent VL)</td>
<td>77</td>
<td>73</td>
<td>0.37</td>
</tr>
<tr>
<td>Durable viral suppression (all VL)</td>
<td>70</td>
<td>64</td>
<td>0.15</td>
</tr>
</tbody>
</table>
Discussion
Findings

- NUB and UB Hispanics/Latinos did not differ on most sociodemographic measures and HIV outcomes
- NUB Hispanics/Latinos reported a higher prevalence of:
  - Less than high school education
  - Reliance on the Ryan White HIV/AIDS Program
- NUB Hispanics/Latinos were less likely to:
  - Use non-injection drugs
  - Have depression
  - Have anxiety
Conclusions

Although non-US-born persons may face barriers (e.g., language & immigration) that can cause health disparities, we found no differences in HIV care outcomes

- Lower drug use and better mental health status
- Greater reliance on the RWHAP as a safety net

Recommend assessment of whether disparities exist for subgroups of Hispanic/Latinos

- Country of birth, immigration status, length of time in United States, English proficiency
Disclaimer

The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
Questions?