



## A Socio-ecological Perspective on Two Public Health Issues: Women's HIV and Intimate Partner Violence Risk

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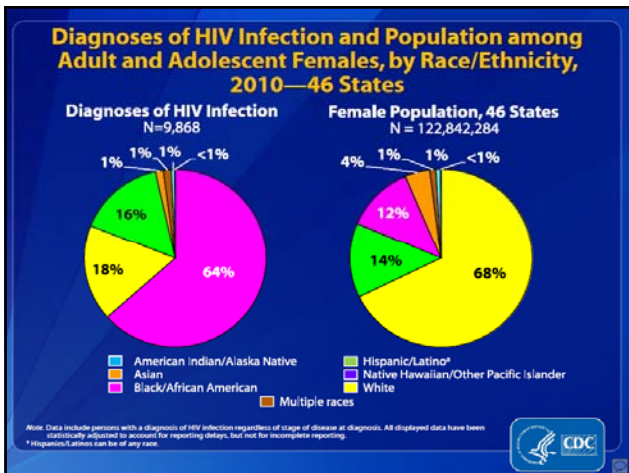


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## HIV/AIDS in Women

- Represent 24% of all HIV diagnoses in US
- Account for nearly 20% of cumulative AIDS diagnoses
- Black & Latinas disproportionately affected
- Primarily infected through heterosexual contact
- Lifetime treatment cost of HIV, estimated at \$379,668


CDC, 2012a



### Diagnoses of HIV Infection among Adult and Adolescent Females, by Transmission Category and Age at Diagnosis, 2010—46 States and 5 U.S. Dependent Areas

Transmission category	Age at Diagnosis (in years)				
	13-19	20-24	25-34	35-44	≥45
	N=474	N=1,110	N=2,574	N=2,603	N=3,407
	%	%	%	%	%
Injection drug use	8.0	9.7	12.5	13.7	18.0
Heterosexual contact <sup>a</sup>	92.0	90.2	87.4	86.2	82.0
Other <sup>b</sup>				0.1	0.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</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 risk factor information, but not for incomplete reporting.  
<sup>a</sup> Heterosexual contact with a person known to have, or at risk for, HIV infection.  
<sup>b</sup> Includes blood transfusion, perinatal exposure, and risk factor not reported or not identified.



## Intimate Partner Violence (IPV)

Annually,

- accounts for more injury to women than automobile accidents, muggings, and rapes combined
- is experienced by 4-6 million women
- accounts for 1.3 million rapes of women
- is associated with 81% women reporting significant short or long term impacts

(CDC, 2010)

## Adverse Impact of IPV

- \$8.3 B in annual cost, majority going to healthcare
- Health consequences
  - Physical
  - Psychological
  - Sexual
- Association with high-risk behaviors

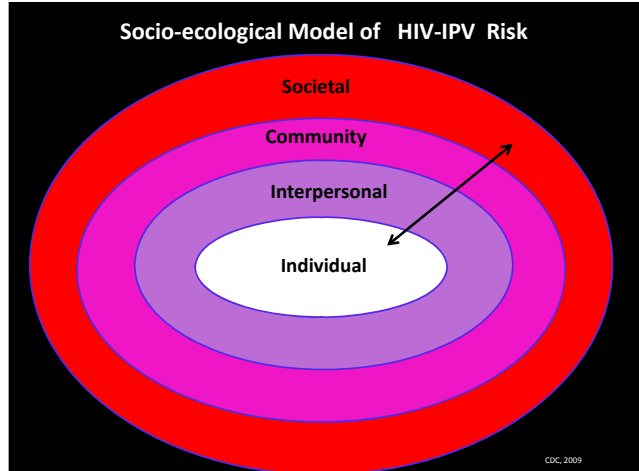
CDC, 2008

### The Intersection between HIV and IPV

Health condition <sup>1</sup>	Women	Men
Risk behavior	AOR <sup>2</sup> (95% CI) <sup>3</sup>	AOR (95% CI) <sup>3</sup>
<b>Health condition</b>		
Current use of disability equipment <sup>4</sup>	1.1 (0.9–1.3)	1.1 (0.9–1.4)
Arthritis <sup>5§</sup>	1.5 <sup>††</sup> (1.3–1.8)	1.5 <sup>††</sup> (1.2–1.9)
Current asthma <sup>6</sup>	1.7 <sup>††</sup> (1.6–1.9)	1.4 <sup>††</sup> (1.2–1.6)
Current activity limitations <sup>6*</sup>	1.6 <sup>††</sup> (1.4–1.8)	1.4 <sup>††</sup> (1.2–1.6)
Current activity limitations <sup>6*</sup>	2.1 <sup>††</sup> (1.9–2.3)	1.9 <sup>††</sup> (1.6–2.1)
Stroke <sup>6</sup>	1.8 <sup>††</sup> (1.4–2.2)	1.4 <sup>††</sup> (1.0–2.0)
High blood cholesterol <sup>6</sup>	1.3 <sup>††</sup> (1.1–1.4)	1.1 (1.0–1.3)
High blood pressure <sup>6</sup>	1.1 (1.0–1.2)	1.1 (1.0–1.3)
Heart attack <sup>6</sup>	1.4 <sup>††</sup> (1.1–1.7)	1.2 (0.9–1.6)
<b>Risk behavior</b>		
Risk factors for human immunodeficiency virus (HIV) or sexually transmitted diseases (STDs) <sup>7</sup>	3.1 <sup>††</sup> (2.4–4.0)	2.6 <sup>††</sup> (2.0–3.6)
Current smoking <sup>8</sup>	2.3 <sup>††</sup> (2.1–2.6)	1.9 <sup>††</sup> (1.7–2.2)
Current heavy or binge drinking <sup>8†††</sup>	1.7 <sup>††</sup> (1.5–2.0)	1.7 <sup>††</sup> (1.5–1.9)
Current body mass index <sup>8§§</sup> >25	1.1 (1.0–1.2)	1.0 (0.9–1.2)

<sup>1</sup> Includes: rheumatoid arthritis, or completed physical violence or unwanted sex by a current or former intimate partner.  
<sup>2</sup> Adjusted odds ratio. All models are adjusted for age, race/ethnicity, annual household income, and education level.  
<sup>3</sup> Confidence interval.  
<sup>4</sup> Told by a doctor, nurse, or other health-care professional that they had the health condition. Refers to lifetime occurrence unless indicated as current.  
<sup>5</sup> Use of disability equipment, such as a cane, wheelchair, or special bed.  
<sup>6</sup> Statistically significant (p<0.05) by Wald chi-square test.  
<sup>7</sup> Includes: arthritis, rheumatoid arthritis, gout, lupus, and fibromyalgia.  
<sup>8</sup> Activity limitations because of physical, mental, or emotional problems.  
<sup>9</sup> Respondents were considered to have risk factors for HIV infection or STDs if, during the preceding year, they had used intravenous drugs, had been treated for an STD, had given or received money or drugs in exchange for sex, or had participated in anal sex without a condom.  
<sup>10</sup> More than two drinks per day on average for men, more than one drink per day on average for women, or five or more drinks on one occasion during the preceding 30 days for men and women.  
<sup>11</sup> Weight (kg)/height (m)<sup>2</sup>.

CDC, 2008



### Multiple Levels of Intersecting Risk Factors

Individual Level	Interpersonal Level
<ul style="list-style-type: none"> <li>• Young age</li> <li>• Low education</li> <li>• Poverty</li> <li>• Childhood abuse</li> <li>• Prior/Present victimization</li> <li>• Depression</li> <li>• Alcohol/substance abuse</li> <li>• Injection drug use</li> </ul>	<ul style="list-style-type: none"> <li>• Couple conflict</li> <li>• Stressors of poverty</li> <li>• Family/peer norms</li> <li>• Condom use norms</li> <li>• High-risk partner</li> <li>• *alcohol &amp; substance use</li> <li>• *injection drug use</li> <li>• *multiple partners</li> </ul>

### Multiple Levels of Intersecting Risk Factors

Community Level	Societal Level
<ul style="list-style-type: none"> <li>• Neighborhood characteristics</li> <li>• Community norms supportive of violence</li> <li>• Weak community sanctions against violence</li> </ul>	<ul style="list-style-type: none"> <li>• Adherence to rigid gender roles (male dominance)</li> <li>• Acceptance of violence (for conflict resolution)</li> <li>• Linkage of masculinity to aggression and hypersexuality</li> </ul>

Global Coalition World Health Organization, 2010

### Intersection between

- High prevalence of IPV among women living/at-risk for HIV
- High prevalence of child sexual abuse among women with/at-risk for HIV
- Violent partners more likely to be at high-risk for HIV through substance abuse and multiple partners
- IPV, barrier to HIV risk reduction behaviors with women less likely to use a condom  
report escalation of violence with condom request  
less likely to access HIV testing

Marshall, 2011

### GUIDING PRINCIPLES of Prevention

<http://www.georgetowncollege.edu/about/eight-guiding-principles/>

1. Multiple levels of intervention
2. Multiple teaching methods and activities, including skills
3. Enough of a "dose effect" to change attitudes and behaviors
4. Based on theory and research
5. Occur at time of maximum impact
6. Culturally tailored for specific groups and communities
7. Systematic evaluation required to determine effectiveness

FCADV, n.d.

### Multiple Levels of Intervention for

Individual Level	Interpersonal Level
<ul style="list-style-type: none"> <li>• Screening for HIV/IPV</li> <li>• Screening for alcohol/drug use</li> <li>• HIV testing</li> <li>• Treatment, counseling, referral</li> <li>• HIV/IPV education (BKA)</li> </ul>	<ul style="list-style-type: none"> <li>• Couple testing</li> <li>• Healthy relationship education (BKA)</li> <li>• Education on impact on family</li> <li>• Treatment, counseling, referral</li> <li>• Strengthening of family networks</li> <li>• Support groups</li> </ul>

### Multiple Levels of Intervention for

Community Level	Societal Level
<ul style="list-style-type: none"> <li>• HIV-IPV cross-training of staff</li> <li>• Coalition building for shared resources</li> <li>• HIV-IPV campaigns to increase awareness</li> <li>• HIV-IPV screening and treatment policies</li> <li>• Strengthening of social norms</li> </ul>	<ul style="list-style-type: none"> <li>• Health and public policies supportive of :                             <ul style="list-style-type: none"> <li>* supportive of HIV-IPV prevention, screening, &amp; treatment</li> <li>* access to and funding for health care &amp; social services</li> <li>* funding evidence-based school IPV/HIV prevention programs</li> <li>* Mass media and public education campaigns to increase HIV-IPV awareness</li> </ul> </li> <li>• Public policies against:                             <ul style="list-style-type: none"> <li>* Racism/sexism/gender</li> </ul> </li> </ul>



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