



# Correlates of STD Infection Among Young African-American Women

*Preliminary Results*

Dallas Young Women's Survey

1999 - 2000

# Authors & Contributors



**Douglas Henry, PhD, Sherry Lipsky, PA, MPH, PhC,  
Douglas Shehan, Regina Waits**

*With Special Thanks to the Young Women's Survey Team:  
Tarnesha Meshack, Sandra McClanahan, and Kimberly Jones*

**Community Prevention and Intervention Unit  
AIDS Prevention Project  
Department of Internal Medicine  
University of Texas Southwestern Medical Center of Dallas**

# Background - I

## Dallas Young Women's Survey 1999 – 2000

- African Americans disproportionately affected by HIV/AIDS in the U.S.
- Majority of new HIV/AIDS cases among women occur in African American women
- African American women most likely infected as adolescents or young adults through sexual contact
- African American women infected at rates 4-6 times higher than among women of other race/ethnicity in Dallas County (HIV seroprevalence surveys 1990-7)

# Background - II

Dallas Young Women's Survey 1999 – 2000

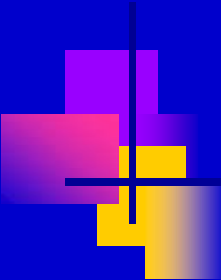


---

- Though higher HIV/AIDS rates among young African American women are well documented, little is known about factors that may influence HIV risk taking
- To learn more about HIV risk behaviors and life situations that might predict risk-taking, UT Southwestern, in collaboration with CDC and TDH, conducted the Dallas Young Women's Survey (YWS)

# Background – III

Dallas Young Women's Survey 1999 – 2000

- 
- Primary objectives of YWS:
    - Estimate prevalence of STD infection and risk behaviors for STD/HIV
    - Examine association between:
      - Demographic and psychosocial factors and STD/HIV risk behaviors
      - STD/HIV risk behavior and STD infection
      - Psychosocial and HIV/STD risk behaviors
  - Current STD infection used as surrogate marker for potential HIV infection



# Methods - I

---

- Clinic-based study at 3 Dallas FP clinics
- Staff consecutively sampled and determined eligibility:
  - Female age 15-24 years
  - African-American
  - Presenting for initial or routine FP services
  - Sexually active in the past 12 months
  - No previous participation



# Methods - II

---

- Survey staff trained in counseling, crisis intervention
- Interviews done on-site
- Informed consent obtained
- Monetary incentive provided
- Targeted HIV/ STD risk reduction planning/counseling session provided

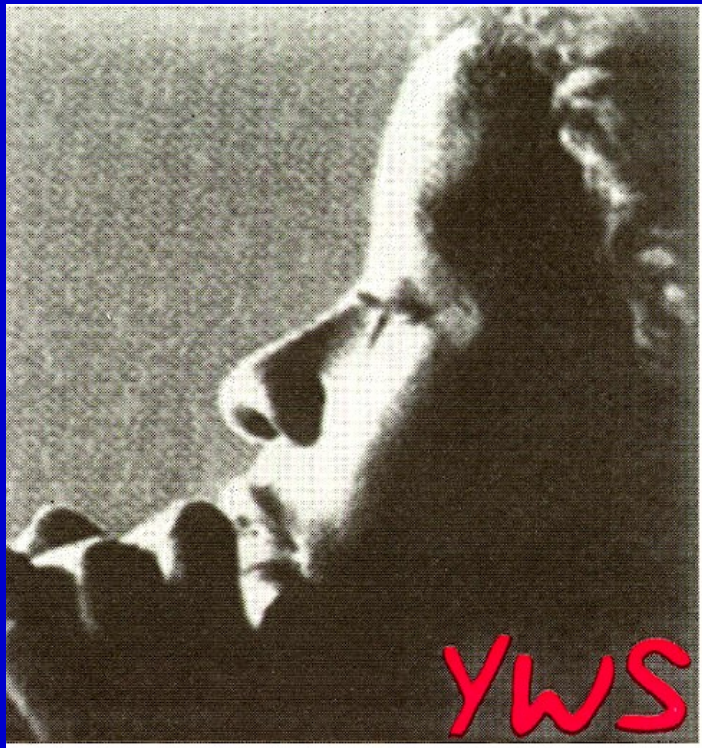


# Methods - III

---

- Survey instrument:
  - sociodemographics, life situations, sex and drug use behaviors, health history, psychosocial factors
- STD test results abstracted from clinic medical records
- Women with a current STD infection (CT, GC, or syphilis) compared with participants testing negative for all 3 infections

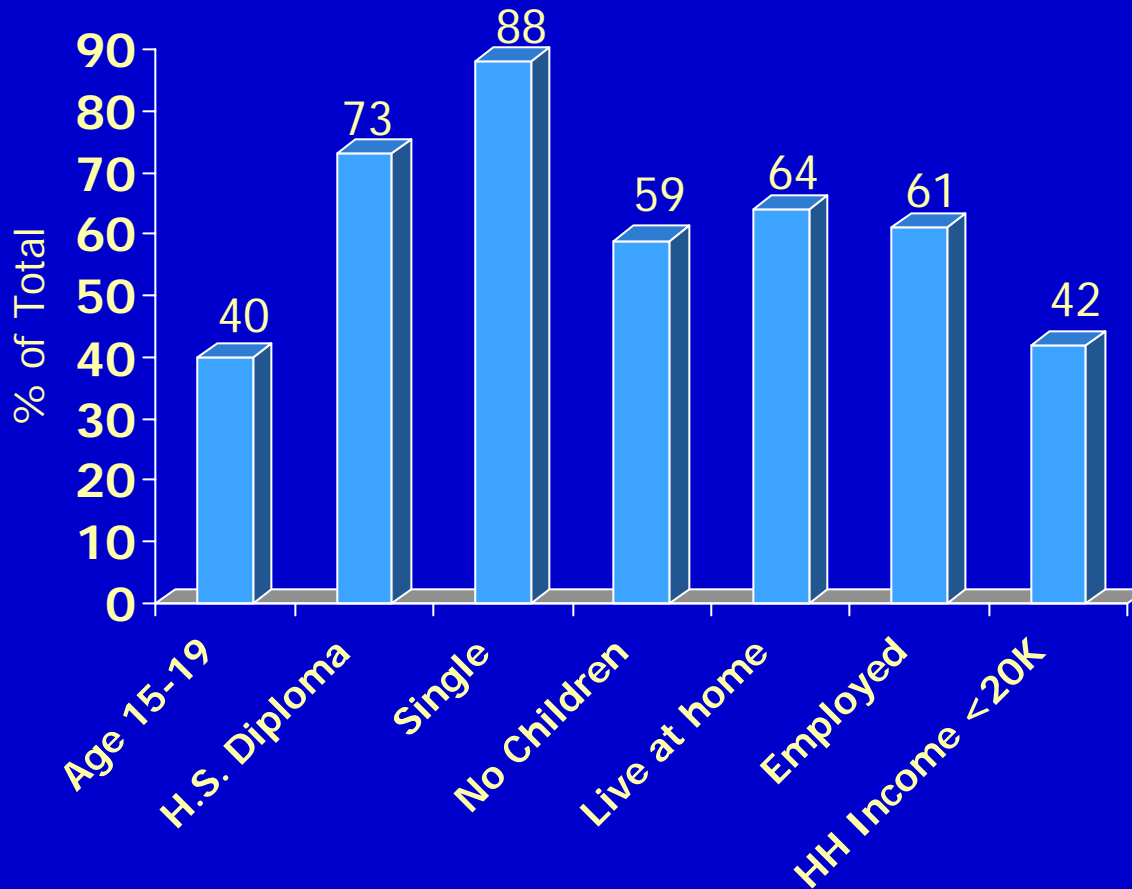
# Sampling/Enrollment



- >150 sampling events (days)
- 306 eligible women enrolled
- >70% enrollment rate

# Demographic Characteristics

## Dallas Young Women's Survey 1999 - 2000





## Demographic Characteristics - I

### Dallas Young Women's Survey 1999 - 2000

	<b>Total Sample</b>		<b>Current STD</b>	
	<b>n</b>	<b>(%)</b>	<b>n</b>	<b>(%)</b>
<b>Age, y (mean=20)</b>				
15-19	122	(39.9)	33	(57.9)
20-24	184	(60.1)	24	(42.1)
<b>Education Level</b>				
<High School/GED	82	(26.8)	23	(40.3)
High School diploma/GED	105	(34.3)	22	(38.6)
>High School/GED	119	(38.9)	12	(21.1)
<b>Marital Status</b>				
Single	268	(87.6)	52	(91.2)
Married/Living with partner	29	(9.5)	4	(7.0)
Divorced/Separated	9	(2.9)	1	(1.8)
<b>Number of Children (mean=0.6)</b>				
0	180	(58.8)	34	(59.6)
1	79	(25.8)	16	(28.1)
>1	47	(15.4)	7	(12.3)



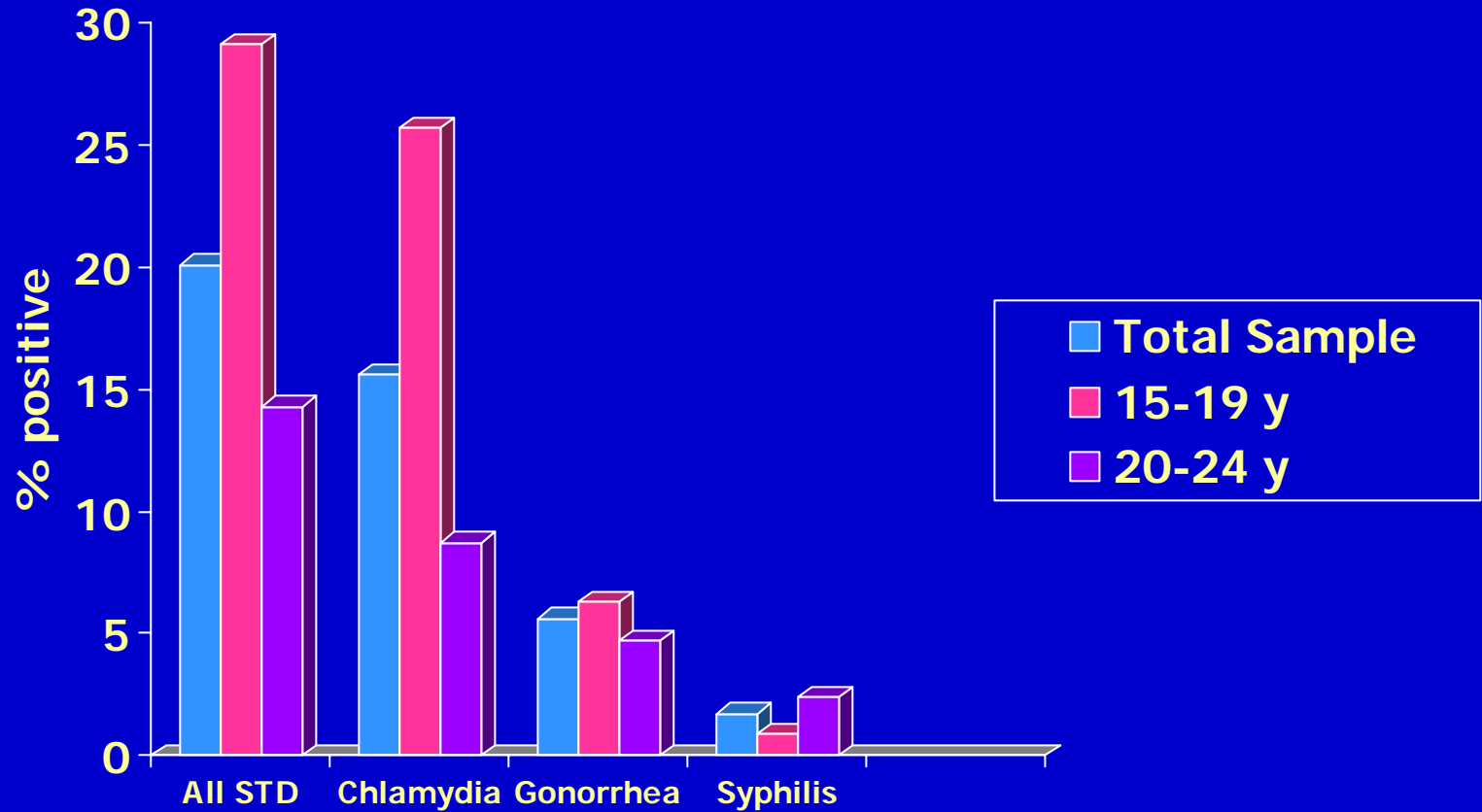
## Demographic Characteristics – II

### Dallas Young Women's Survey 1999 - 2000

	<b>Total Sample</b>		<b>Current STD</b>	
	<b>n</b>	<b>(%)</b>	<b>n</b>	<b>(%)</b>
<b>Current Living Situation</b>				
With parents/relatives	194	(63.6)	39	(68.4)
With spouse/partner	47	(15.4)	8	(14.0)
With self/child	49	(16.1)	8	(14.0)
With friends/others	15	(4.9)	2	(3.5)
<b>Employment Status</b>				
Unemployed	118	(38.6)	30	(52.6)
Employed	188	(61.4)	27	(47.4)
Full-time	137	(44.8)	15	(26.3)
Part-time	51	(16.7)	12	(21.1)
<b>Household Income</b>				
≤10,000	47	(20.9)	13	(32.5)
11,000 – 20,000	47	(20.9)	10	(25.0)
20,000 – 30,000	72	(31.9)	11	(27.5)
>30,000	59	(26.2)	6	(15.0)

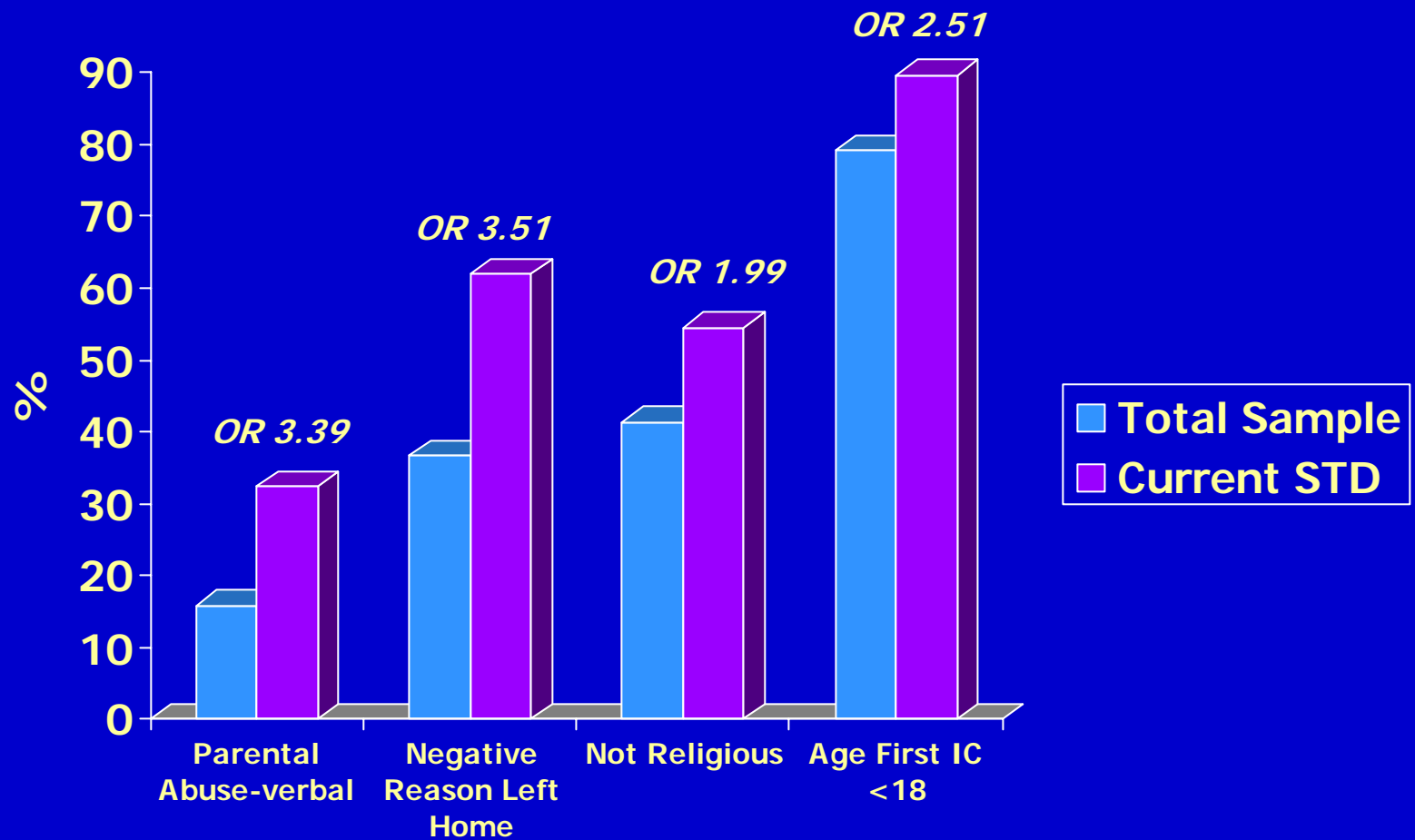
# Prevalence of STD

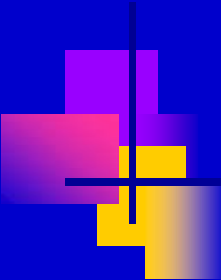
Dallas Young Women's Survey 1999 - 2000



# Factors Associated with STD

Dallas Young Women's Survey 1999-2000

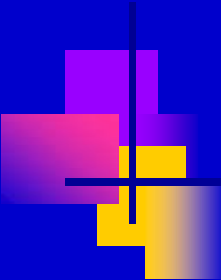




# Demographic Characteristics and Association with STD Status- I

## Dallas Young Women's Survey 1999 - 2000

	Current STD OR (95% CI)	Current STD (Age Adjusted) OR (95% CI)
<b>Age, y</b>		
15-19	2.52 (1.40, 4.57)	...
20-24	...	
<b>Education Level</b>		
<High School/GED	2.18 (1.18, 4.03)	1.52 (0.76, 3.03)
>=High School diploma/GED	...	...
<b>Marital Status</b>		
Single/Divorced/Separated	1.52 (0.50, 4.57)	1.10 (0.35, 3.43)
Married/Living with partner	...	....
<b>Number of Children</b>		
0	1.05 (0.58, 1.90)	0.79 (0.42, 1.49)
1-3	...	...



# Demographic Characteristics and Association with STD Status – II

## Dallas Young Women's Survey 1999 - 2000

	<b>Current STD OR (95% CI)</b>	<b>Current STD (Age Adjusted) OR (95% CI)</b>
<b>Current Living Situation</b>		
With parents/relatives	1.17 (0.63, 2.17)	0.72 (0.35, 1.47)
With self/child/others	...	...
<b>Employment Status</b>		
Unemployed	<b>2.12 (1.18, 3.82)</b>	1.71 (0.92, 3.17)
Employed	...	...
<b>Household Income</b>		
≤20,000	<b>2.33 (1.15, 4.70)</b>	<b>2.17 (1.06, 4.44)</b>
>20,000	...	...

# Social Environment Factors and Association with STD Status - I

## Dallas Young Women's Survey 1999 - 2000

	Total Sample		Current STD		Current STD OR (95% CI)
	n	(%)	n	(%)	
<b>Parental Abuse - Verbal only</b>					
Yes	29	(15.9)	12	(32.4)	<b>3.39 (1.43, 8.05)</b>
No	153	(84.1)	25	(67.6)	...
<b>Parental Abuse – Physical</b>					
Yes	123	(40.3)	20	(35.1)	0.74 (0.41, 1.36)
No	182	(59.7)	37	(64.9)	...
<b>Sexual abuse &lt;18 years</b>					
Yes	60	(19.9)	9	(16.4)	0.96 (0.46, 2.01)
No	242	(80.1)	46	(83.6)	...
<b>IPV<sup>1</sup> – Verbal only</b>					
Yes	49	(17.1)	7	(13.2)	0.67 (0.28, 1.59)
No	237	(82.9)	46	(86.8)	...
<b>IPV<sup>1</sup> - Physical</b>					
Yes	41	(13.5)	7	(12.5)	0.91 (0.38, 2.21)
No	262	(86.5)	49	(87.5)	...
<b>IPV<sup>2</sup> – Sexual</b>					
Yes	17	(5.6)	3	(5.3)	0.89 (0.25, 3.23)
No	5	(94.4)	54	(94.7)	...

<sup>1</sup> IPV=Intimate Partner Violence; references last sexual partner in past 12 months

<sup>2</sup> References any sexual partner or date

# Social Environment Factors and Association with STD Status -II

## Dallas Young Women's Survey 1999 - 2000

	Total Sample		Current STD		Current STD
	n	(%)	n	(%)	OR (95% CI)
<b>Substance abuse in home</b>					
Yes	49	(16.0)	7	(12.3)	0.66 (0.28, 1.57)
No	256	(83.7)	50	(87.7)	...
<b>Reason for leaving home</b>					
Negative	40	(36.7)	13	(61.9)	<b>3.51 (1.29, 9.54)</b>
Neutral/positive	69	(63.3)	8	(38.1)	...
<b>Ever Associated with Gang</b>					
Yes	11	(3.6)	2	(3.5)	1.13 (0.23, 5.58)
No	295	(96.4)	55	(96.5)	...
<b>Ever Jailed/Incarcerated</b>					
Yes	34	(11.1)	10	(17.5)	1.86 (0.83, 4.17)
No	272	(88.9)	47	(82.5)	...
<b>How Religious</b>					
Not at all - somewhat	126	(41.3)	31	(54.4)	<b>1.99 (1.11, 3.58)</b>
Fairly - very	179	(58.7)	26	(45.6)	...

# Behavioral Risk Factors and Association with STD Status - I

## Dallas Young Women's Survey 1999 – 2000

	Total Sample		Current STD		Current STD OR (95% CI)
	n	(%)	n	(%)	
<b>Alcohol Use - 6 months</b>					
Frequent	27	(8.8)	6	(10.5)	1.43 (0.54, 3.82)
Infrequent/Never	279	(91.2)	51	(89.5)	...
<b>Marijuana Use - 6 months</b>					
Frequent	27	(8.8)	8	(14.0)	1.99 (0.81, 4.87)
Infrequent/Never	279	(91.2)	49	(86.0)	...
<b>Number SPs - 12 months</b>					
>1	92	(30.1)	18	(31.6)	1.06 (0.57, 1.98)
1	214	(69.9)	39	(68.4)	...
<b>Number SPs – Lifetime (median=4)</b>					
5+	65	(37.1)	13	(44.8)	1.50 (0.67, 3.39)
1-4	110	(36.3)	16	(55.2)	
<b>History of STD</b>					
Yes	128	(42.0)	26	(45.6)	1.20 (0.67, 2.16)
No	177	(58.0)	31	(54.4)	...
<b>Age First Intercourse</b>					
<18	242	(79.1)	51	(89.5)	<b>2.51 (1.02, 6.17)</b>
≥18	64	(20.9)	6	(10.5)	...

# Behavioral Risk Factors and Association with STD Status - II

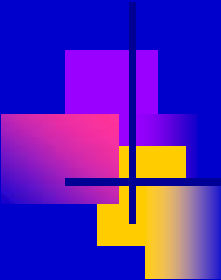
## Dallas Young Women's Survey 1999 -2000

	Total Sample		Current STD		Current STD OR (95% CI)
	n	(%)	n	(%)	
<b>Age Last SP</b>					
≥5 years older	72	(23.6)	11	(19.6)	0.77 (0.37, 1.58)
Younger or <5 years older	233	(76.4)	45	(80.4)	...
<b>Non-Monogamous<sup>1</sup></b>					
Yes	88	(31.7)	17	(35.4)	1.23 ( 0.63, 2.37)
No	190	(68.3)	31	(64.6)	...
<b>Condom Use with Last SP<sup>2</sup></b>					
Sometimes/never	217	(71.9)	38	(66.7)	0.80 (0.43, 1.49)
Always	85	(27.8)	19	(33.3)	...
<b>Condom Used in LSE<sup>3</sup></b>					
No	156	(51.5)	19	(33.9)	<b>0.45 (0.24, 0.83)</b>
Yes	147	(48.5)	37	(66.1)	...
<b>Substance Use with LSE</b>					
Yes	25	(11.6)	4	(10.3)	0.88 (0.28, 2.75)
No	191	(88.4)	35	(89.7)	...

<sup>1</sup> Respondent non-monogamous with last SP or thought SP non-monogamous

<sup>2</sup> Condom or latex barrier during vaginal sex (includes one respondent with female SP)

<sup>3</sup> LSE=Last sexual encounter with last SP in past 12 months



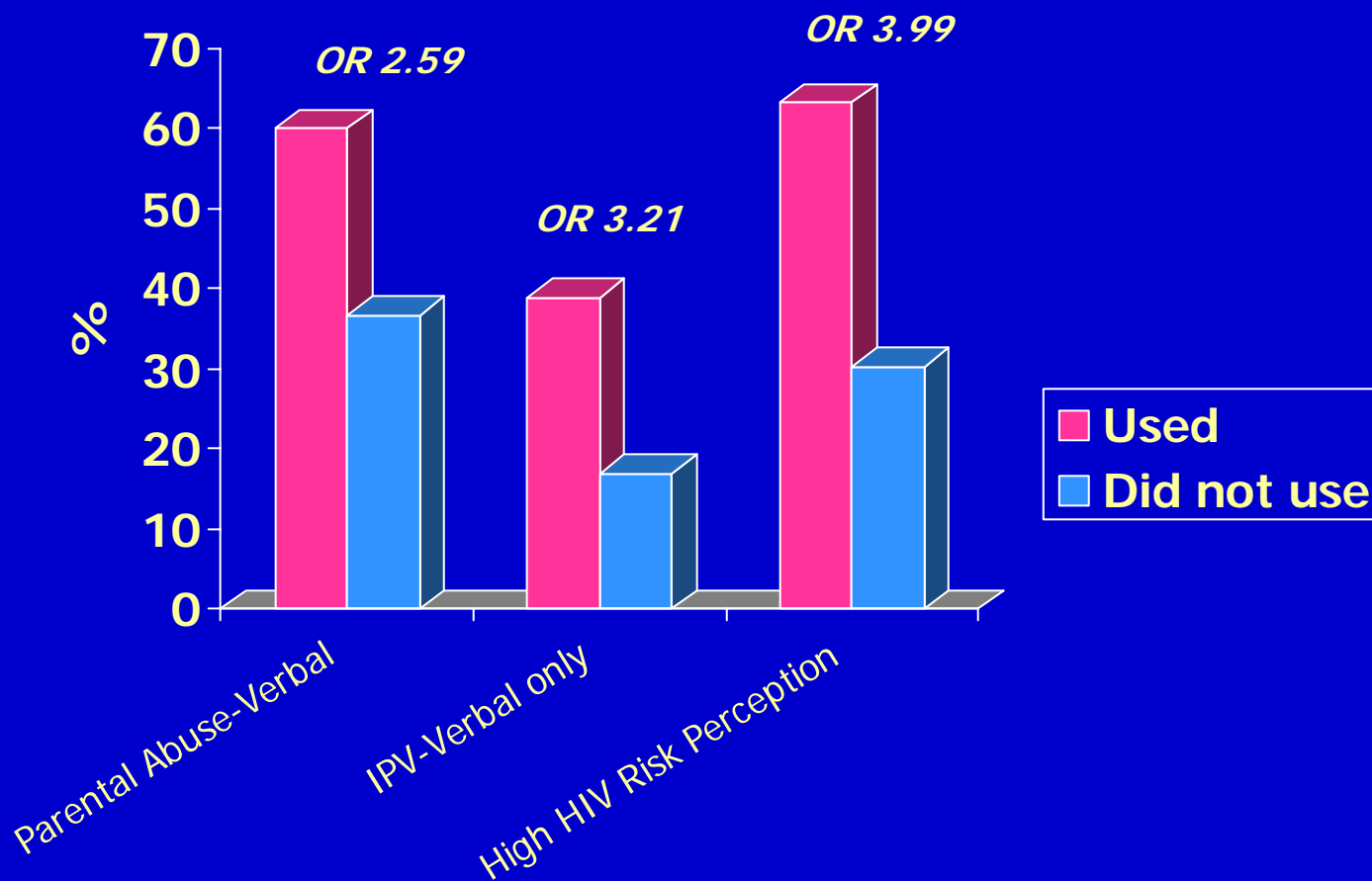
# Other Psychosocial Factors and Association with STD Status

## Dallas Young Women's Survey 1999 - 2000

	<b>Total Sample</b>	<b>Current STD</b>	<b>Current STD</b>
	<b>n (%)</b>	<b>n (%)</b>	<b>OR (95% CI)</b>
<b>Suicide Ideation/attempt</b>			
Sometimes/often	56 (18.3)	14 (24.6)	1.65 (0.82, 3.31)
Rarely/never	250 (81.7)	43 (75.4)	...
<b>Feelings of</b>			
<b>Hopeless/helplessness</b>			
Sometimes/often	61 (20.0)	14 (24.6)	1.33 (0.67, 2.63)
Rarely/never	244 (80)	43 (75.4)	...
<b>Current Perception of</b>			
<b>HIV Risk</b>			
Likely/very likely	86 (36.6)	20 (46.5)	1.61 (0.82, 3.17)
Unlikely/very unlikely	149 (63.4)	23 (53.5)	...

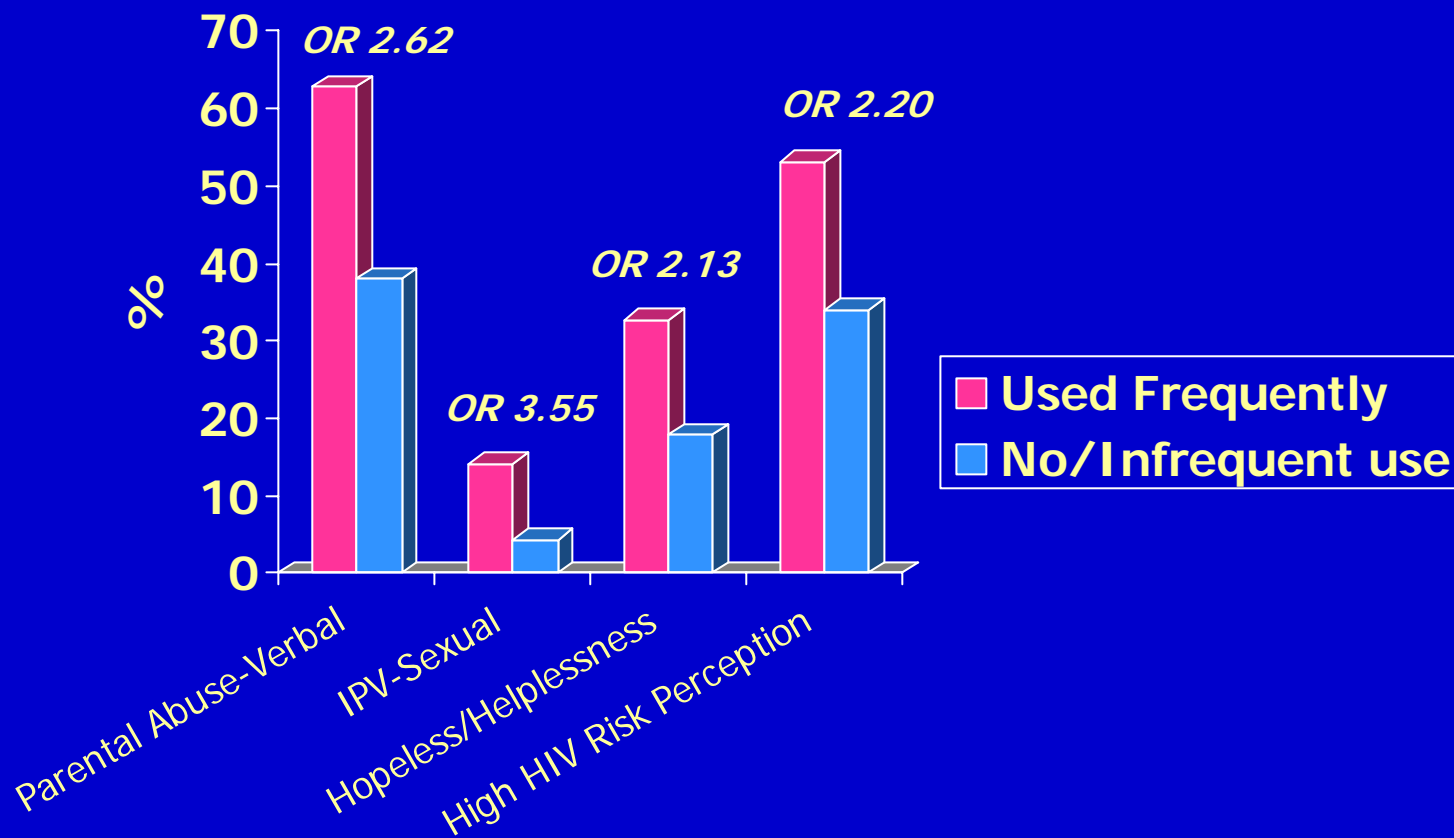
# Factors Associated with Substance Use with Last Sexual Encounter

## Dallas Young Women's Survey 1999-2000



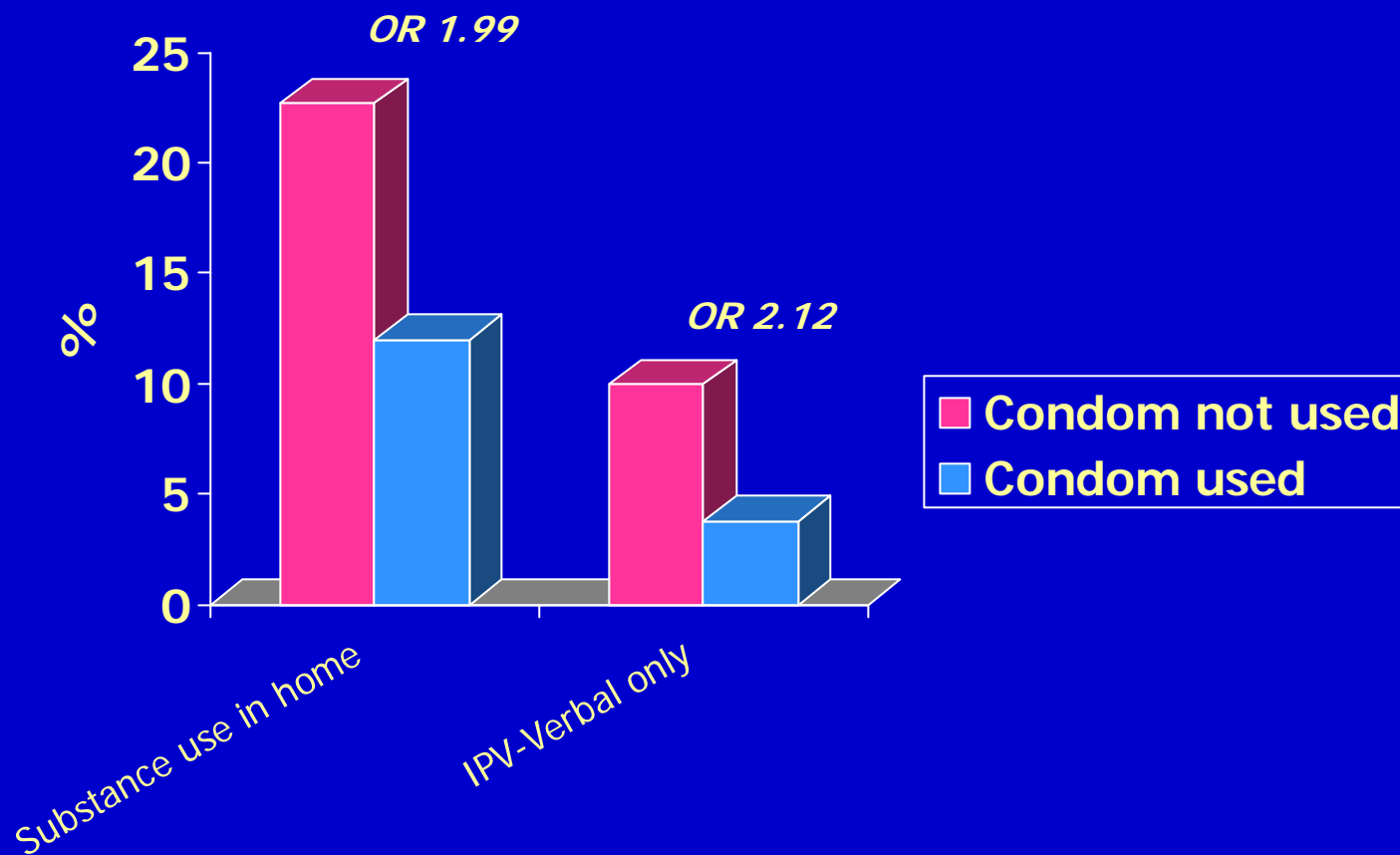
# Factors Associated with Substance Use in Past 6 Months

Dallas Young Women's Survey 1999-2000



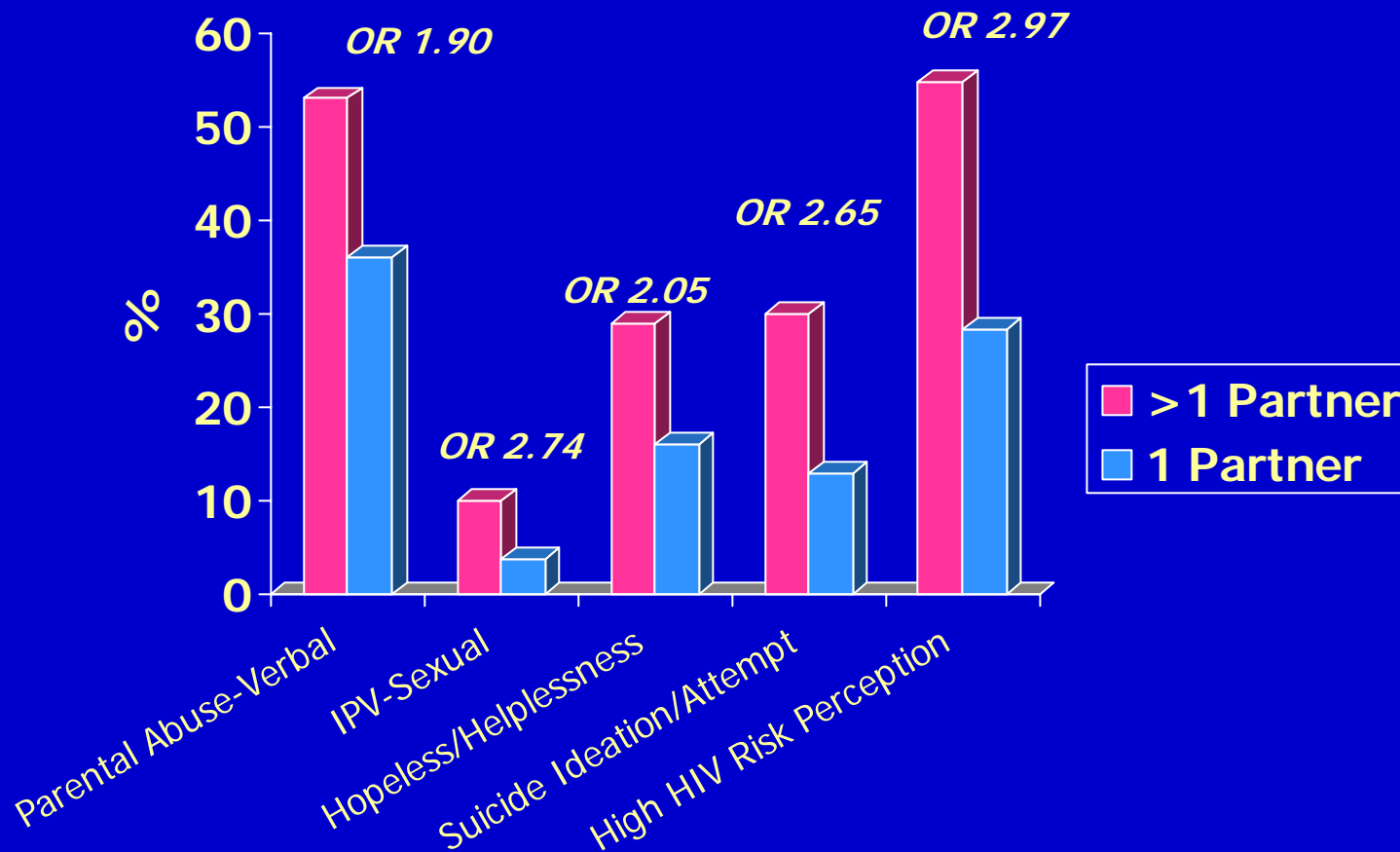
# Factors Associated with No Condom Use with Last Sexual Encounter

## Dallas Young Women's Survey 1999-2000



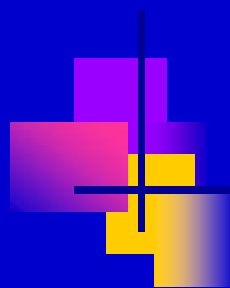
# Factors Associated with Multiple Sex Partners in Past 12 Months

## Dallas Young Women's Survey 1999-2000



# Life Events and Psychosocial Factors Associated with STD/HIV Risk Behaviors - I

## Dallas Young Women's Survey 1999 - 2000



Factor	Risk Behaviors		
	Substance use with LSE	Substance Use Past 6 m	No Condom with LSE
Substance Use in Home	2.25 (0.86, 5.89)	1.96 (0.91, 4.20)	<b>1.99 (1.05, 3.77)</b>
Parental Abuse - Verbal	<b>2.59 (1.11, 6.08)</b>	<b>2.62 (1.36, 5.04)</b>	1.29 (0.81, 2.04)
Parental Abuse - Physical	2.18 (0.94, 5.07)	1.20 (0.54, 2.67)	1.17 (0.74, 1.85)
Sexual Abuse <18 y	1.34 (0.54, 3.43)	1.88 (0.92, 3.87)	1.65 (0.92, 2.94)
IPV-Verbal only	<b>3.21 (1.27, 8.13)</b>	1.30 (0.56, 3.02)	<b>2.12 (1.12, 4.03)</b>
IPV-Physical	1.67 (0.61, 4.51)	1.52 (0.65, 3.56)	1.77 (0.90, 3.50)
IPV - Sexual	1.72 (0.35, 8.46)	<b>3.55 (1.24, 10.15)</b>	1.23 (0.45, 3.42)

# Life Events and Psychosocial Factors Associated with STD/HIV Risk Behaviors - II

## Dallas Young Women's Survey 1999 - 2000

### Risk Behaviors

Factor	Inconsistent Condom Use 12 m	>1 SP Past 12 m
Substance Use in Home	0.84 (0.43, 1.64)	1.76 (0.94, 3.31)
Parental Abuse - Verbal	0.89 (0.53, 1.57)	<b>1.90 ( 1.16, 3.12)</b>
Parental Abuse - Physical	0.80 (0.48, 1.33)	1.21 (0.73, 1.98)
Sexual Abuse <18 y.o.	1.34 (0.69, 2.60)	1.56 (0.86, 2.81)
IPV-Verbal only	1.99 (0.92, 4.31)	1.21 (0.62, 2.33)
IPV-Physical	1.72 (0.76, 3.90)	1.39 (0.70, 2.76)
IPV- Sexual	1.90 (0.53, 6.80)	<b>2.74 (1.02, 7.34)</b>

# Life Events and Psychosocial Factors Associated with STD/HIV Risk Behaviors – III

## Dallas Young Women's Survey 1999 - 2000

Factor	Risk Behaviors		
	Substance use with LSE <sup>1</sup>	Substance Use Past 6 m <sup>2</sup>	No Condom LSE
Not Religious	1.51 (0.65, 3.49)	1.36 (0.71, 2.58)	0.91 (0.58, 1.44)
Suicide attempt/ideation	2.25 (0.90, 5.66)	1.86 ( 0.89, 3.89)	1.50 (0.75, 3.02)
Hopeless/ Helplessness	2.42 (0.98, 5.94)	<b>2.13 (1.05, 4.32)</b>	1.02 (0.55, 1.91)
High HIV Risk Perception	<b>3.99 (1.47, 10.82)</b>	<b>2.20 (1.04, 4.67)</b>	1.53 (0.83, 2.81)

<sup>1</sup> Includes alcohol or any drug; LSE=Last Sexual Encounter with last sexual partner (within past 12 months)

<sup>2</sup> Once weekly or more vs. never to a few times per month (includes alcohol or marijuana use only)



# Life Events and Psychosocial Factors Associated with STD/HIV Risk Behaviors – IV Dallas Young Women's Survey 1999 -2000

## Risk Behaviors

Factor	Inconsistent Condom Use <sup>1</sup>	>1 SP Past 12 m
Not Religious	0.77 (0.47, 1.28)	1.07 (0.65, 1.75)
Suicide attempt/ideation	1.50 (0.75, 3.02)	<b>2.65 (1.46, 4.81)</b>
Hopeless/ Helplessness	1.02 (0.55, 1.91)	<b>2.05 (1.14, 3.66)</b>
High HIV Risk Perception	1.53 (0.83, 2.81)	<b>2.97 (1.68, 5.24)</b>

<sup>1</sup> Sometimes or never ( vs always) with last sexual partner



# Summary of Findings- I

---

- Majority of respondents single, without children, and lived at home
- Association of STD & demographics related to age (except household income)
- Factors related to STD:
  - Young age (15-19 years old)
  - Negative reason for leaving home
  - Not religious
  - Young age at first intercourse (<18 years old)



# Summary of Findings- II

---

- **Significant relationships found between:**
  - Home life and later substance use, condom use, and # SPs
  - Verbal IPV and substance use, condom use
  - Sexual IPV (rape) and substance use, # SPs
  - Self-efficacy and substance use, # SPs
  - Suicide (ideation/attempt) and # SPs
  - High HIV risk perception and substance use, # SPs



# Possible Study Limitations

---

- Sampling bias:
  - Clinic population
- Response bias:
  - Reporting of child abuse was mandatory
  - Income was “sensitive” in a clinic, or else not known
  - Clinic setting may have been intimidating



# Implications

---

- Behavioral change research recognizes importance of self-esteem in developing self-efficacy as it relates to decision-making in sexual & physical health
- Factors influencing self-esteem and self-efficacy were explored in YWS and found to be significantly associated with STD/HIV behavioral risk factors
- In addition, social-demographic factors such as age, history of jail/incarceration, substance use, religiousness, and age at sexual initiation may also be important risk factors
- These factors should be considered in developing and improving prevention programs and interventions targeting young African American women



# Next Steps

---

- Incorporate unique characteristics of this population into prevention efforts
- Develop prevention plans in partnership with counselor and client
- Develop REALISTIC Prevention plans
- Audience suggestions