

# Routine HIV Testing in Health Care Settings: State of the State

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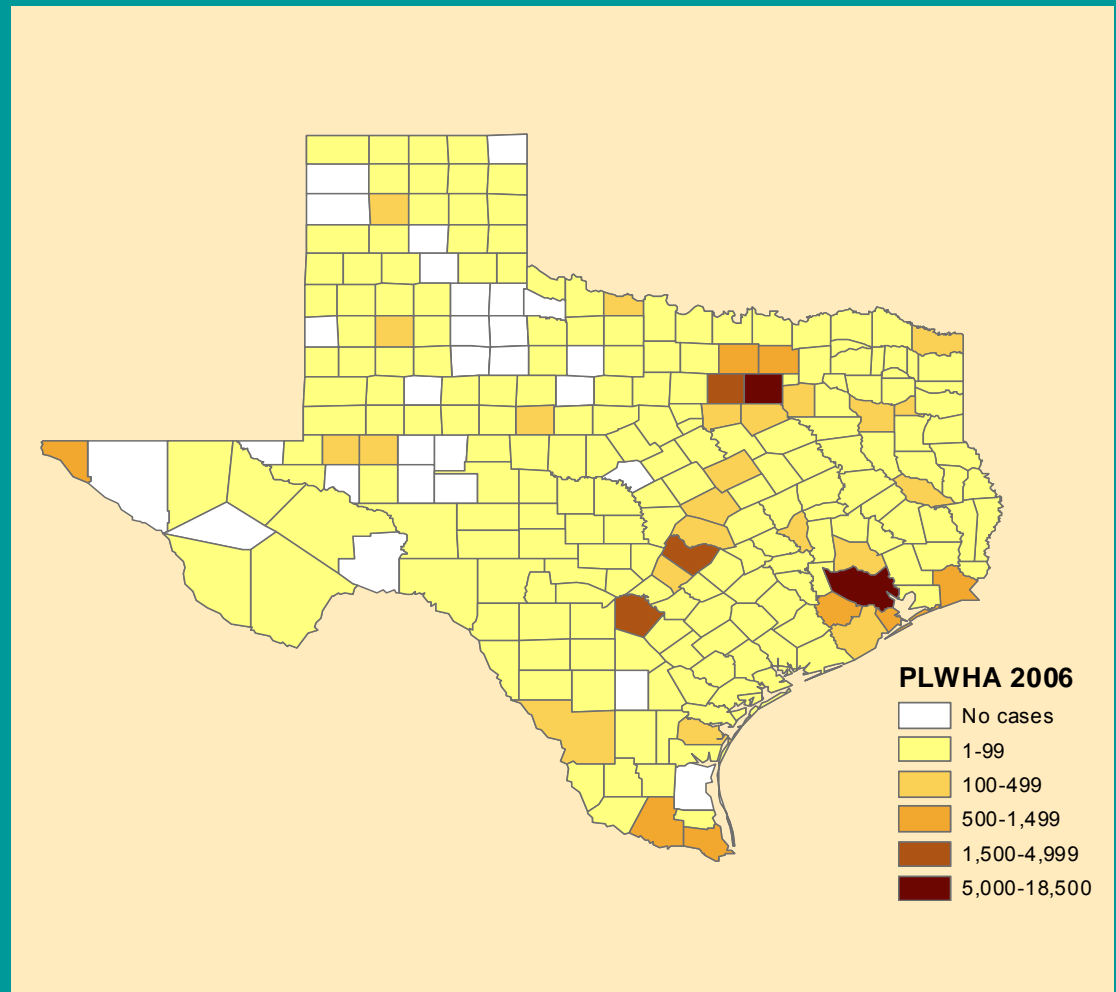
Test Texas Coalition Meeting

June 2009

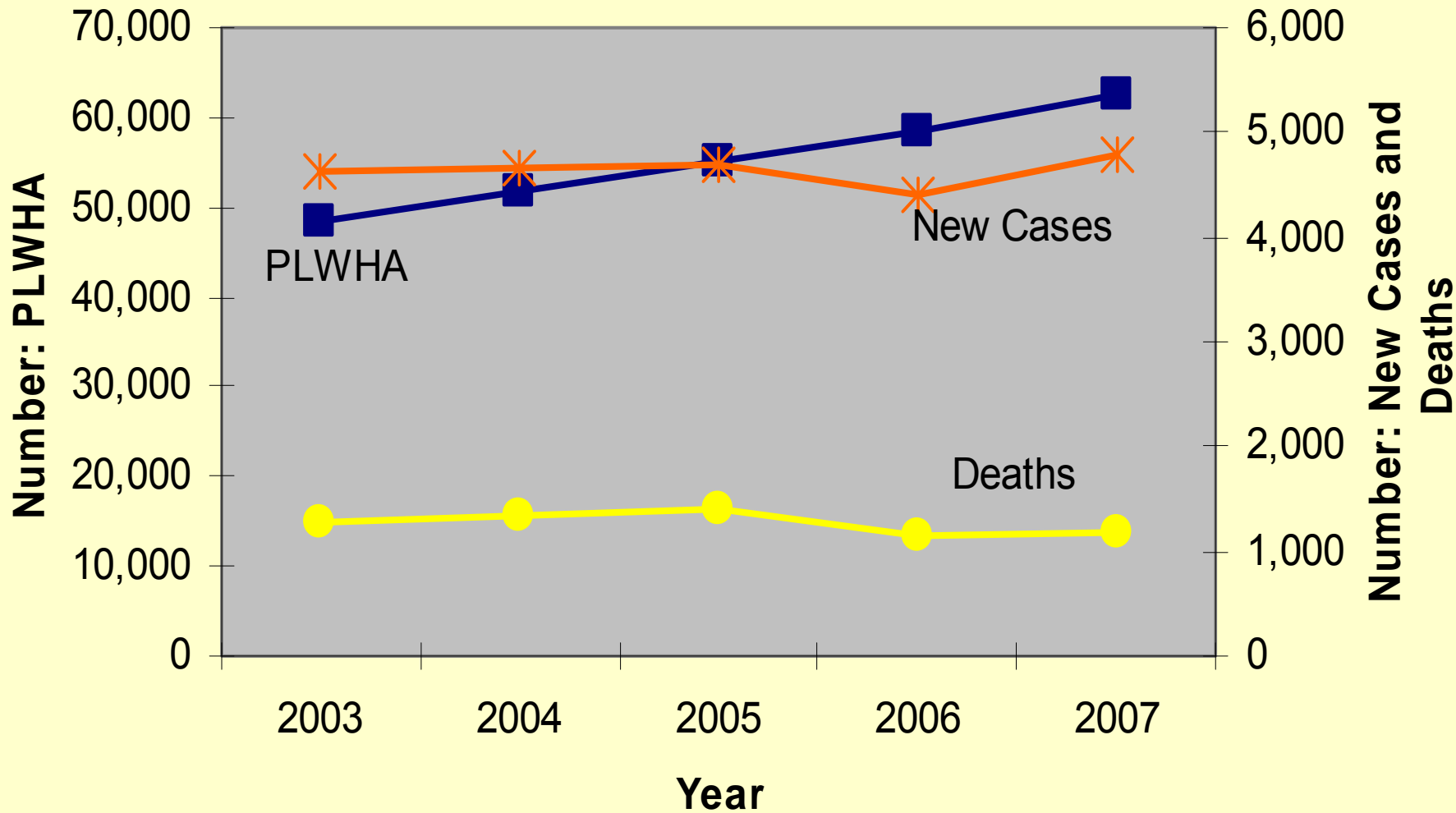


# HIV Prevalence in Texas, 2007

- 62,014 persons reported living with HIV
- Over half cases in Dallas and Houston areas



# Persons Living with HIV/AIDS, New Diagnoses of HIV/AIDS, and Deaths among those with HIV/AIDS



The rate of living HIV cases among Blacks in Texas is 3 to 4 times higher than the rate in Whites or Latinos.

One in...are Living with HIV/AIDS

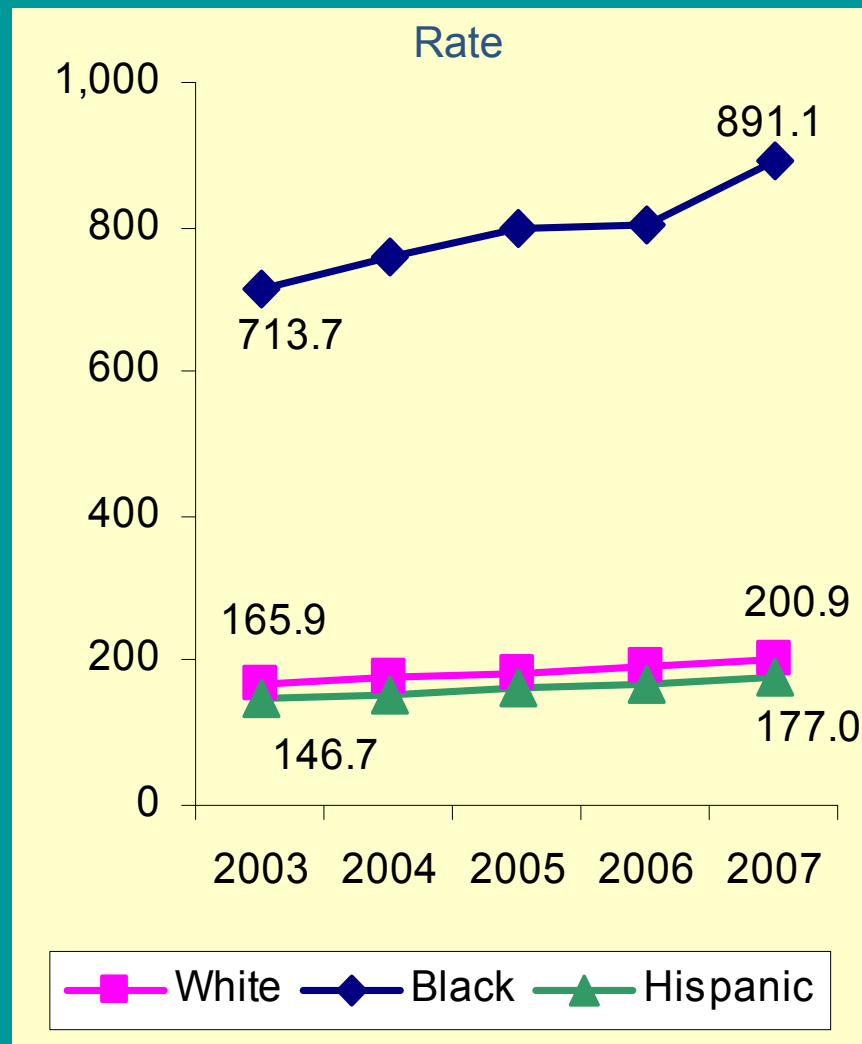
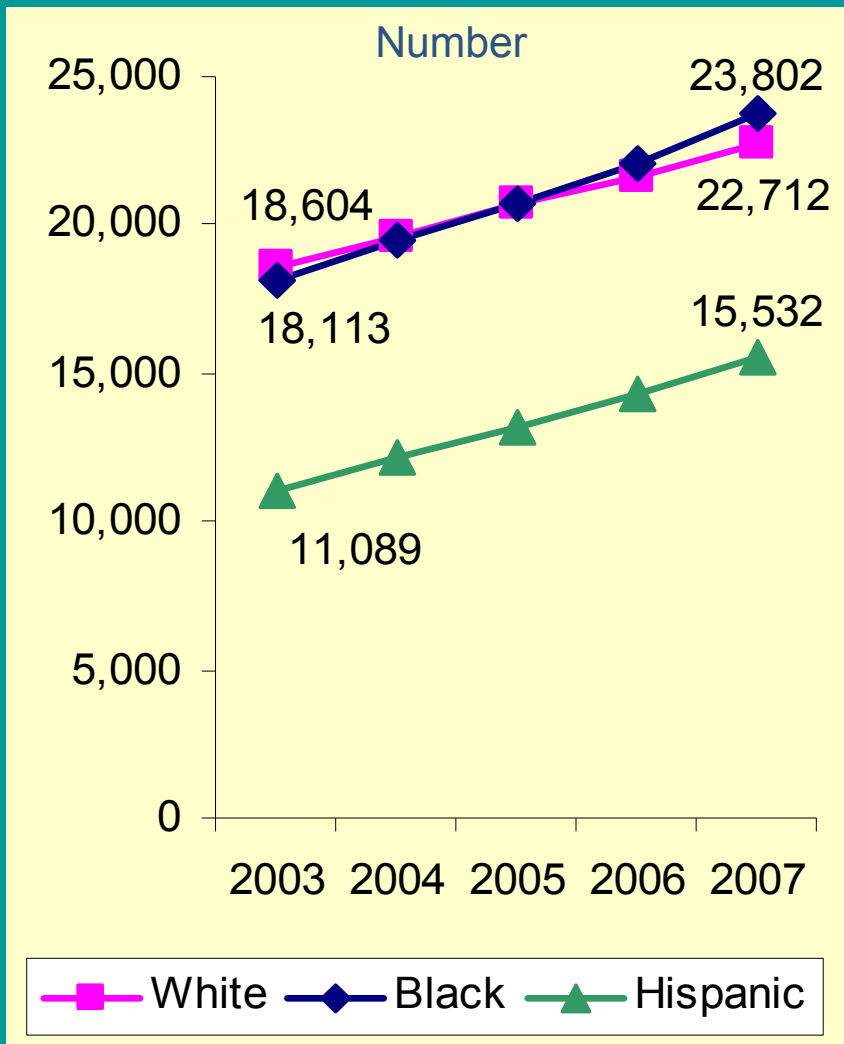
One in 378 of all Texans

One in 498 of White Texans

One in 565 of Hispanic Texans

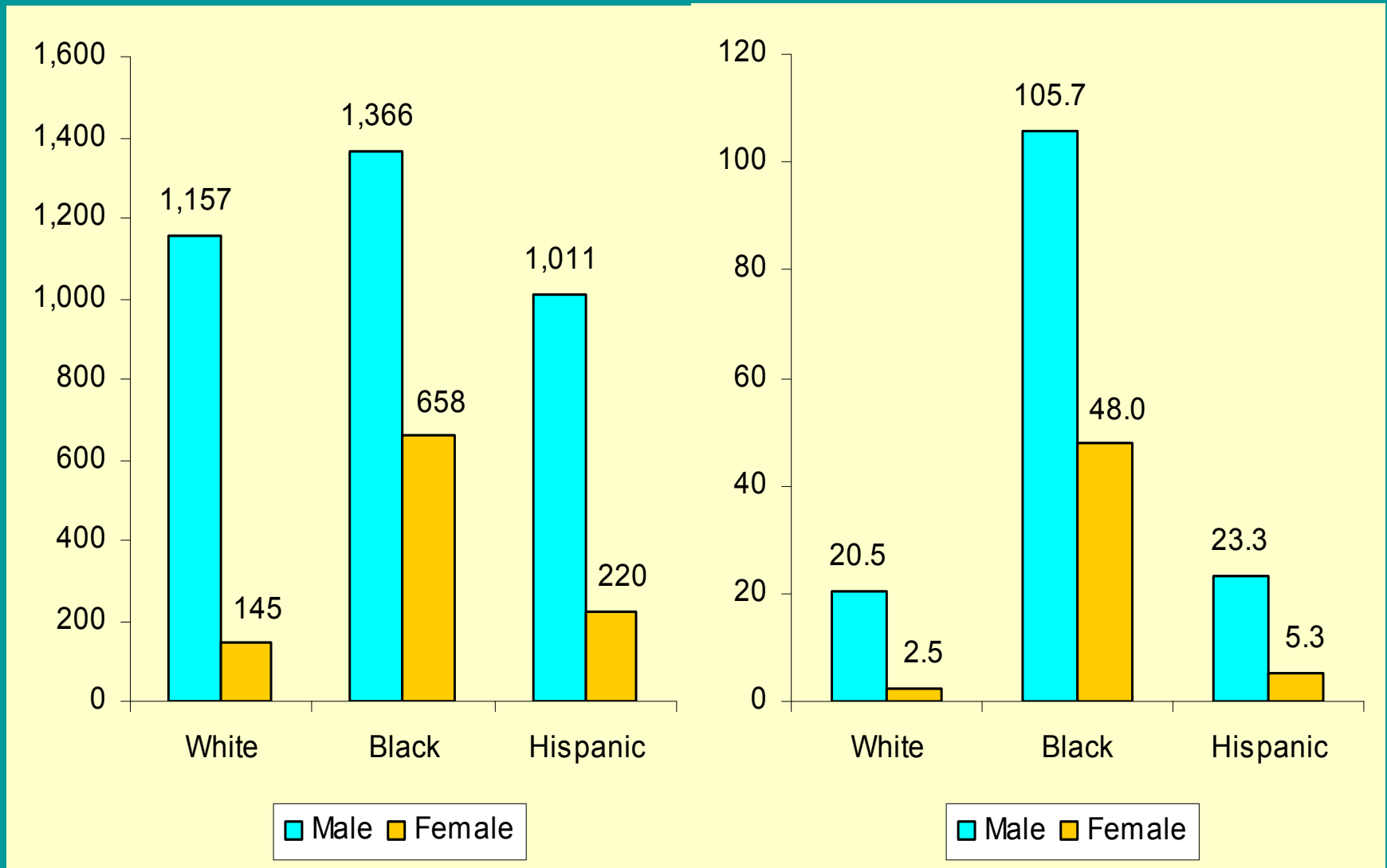
One in 112 of Black Texans

# Number and Rate of PLWHA by Race/Ethnicity, 2003-2007



The number of black persons living with HIV/AIDS surpassed that of whites in 2005. The rate in 2007 was 4-5 times higher for blacks than for others.

# New Diagnoses, Number and Rate, by Sex and Race/Ethnicity, 2006



# The case for more testing

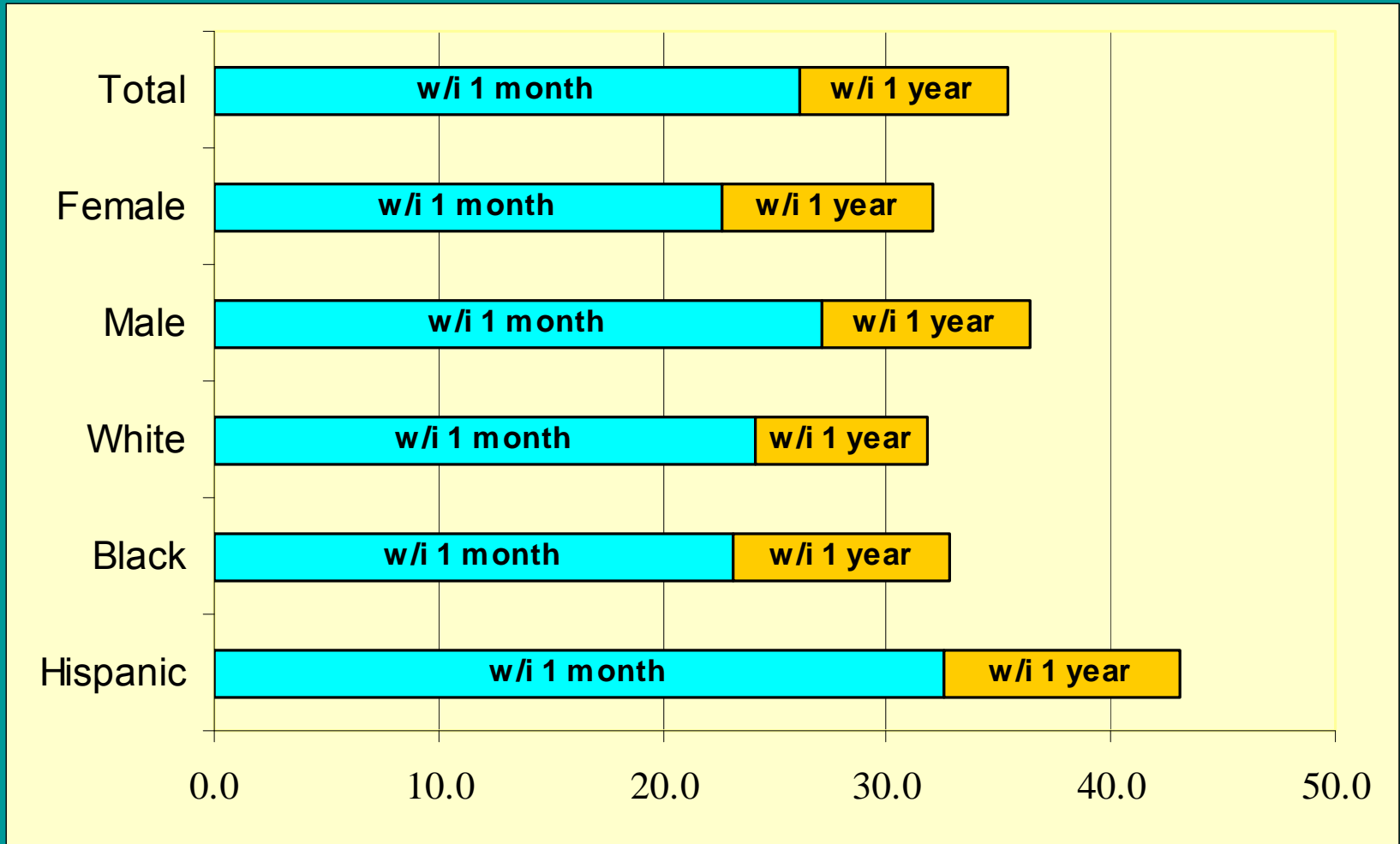
# Late HIV Testing

- Among 281,421 persons with AIDS,
  - 38.3% were first diagnosed HIV-positive within 12 months of AIDS diagnosis (“late testers”)
  - 45% within 3 years
- Late testers
  - Older
  - Latino (42%) Asian (44%) Black (38%)
  - Male (42%)

■ MMWR June 26, 2009

1 in 3 Texans with HIV was  
diagnosed with AIDS within 1  
year of first HIV + test

# % of Texans with HIV and AIDS Diagnoses within 1 Month and 1 Year



# HIV Incidence in 2007: Estimated Percentage Unaware of Status

Hispanic	64%
Black	55%
White/Other	58%
Overall	59%

# BRFSS: HIV Testing Behavior

Ever Tested for HIV among persons aged 18-64 years, Texas, 2007

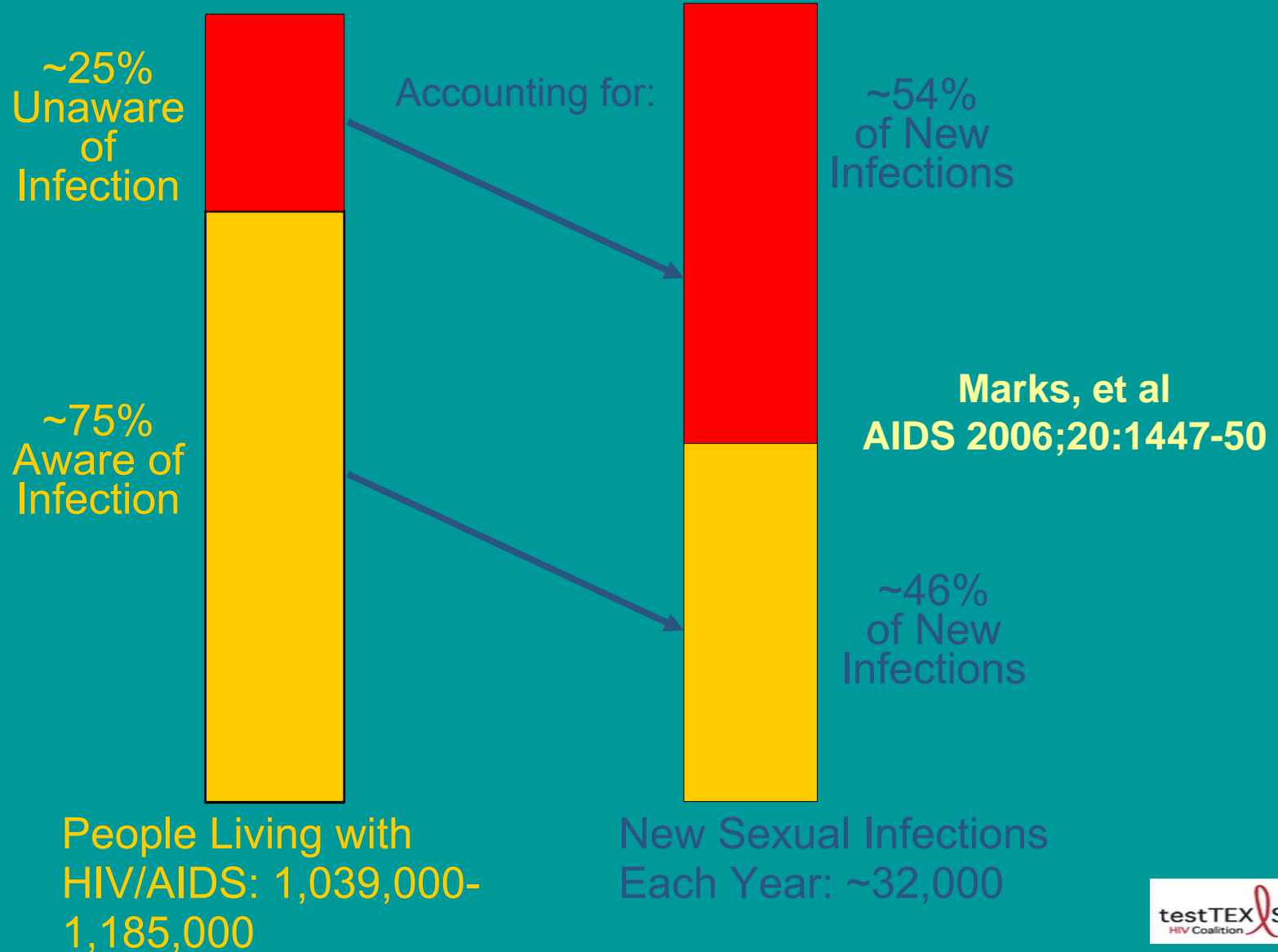
	<b>HIV Testing History</b>	
	<b>Ever</b>	<b>In Past Year</b>
Hispanic	41%	15%
Black	64%	28%
White	41%	10%

# HIV Prevalence and Proportion of Unrecognized HIV Infection Among 1,767 MSM, by Age Group and Race/Ethnicity NHBS, Baltimore, LA, Miami, NYC, San Francisco

Age Group (yrs)	Total Tested	HIV Prevalence		Unrecognized HIV Infection	
		No.	%	No.	%
18-24	410	57	(14)	45	(79)
25-29	303	53	(17)	37	(70)
30-39	585	171	(29)	83	(49)
40-49	367	137	(37)	41	(30)
≥ 50	102	32	(31)	11	(34)
<b>Race/Ethnicity</b>					
White	616	127	(21)	23	(18)
Black	444	206	(46)	139	(67)
Hispanic	466	80	(17)	38	(48)
Multiracial	86	16	(19)	8	(50)
Other	139	18	(13)	9	(50)
<b>Total</b>	<b>1,767</b>	<b>450</b>	<b>(25)</b>	<b>217</b>	<b>(48)</b>

MMWR June 24, 2005

# Awareness of Serostatus Among People with HIV and Estimates of Transmission



# Knowledge of HIV Infection and Behavior

After people become aware they are HIV-positive, high-risk sexual behavior is reduced.

Reduction in Unprotected Anal or  
Vaginal Intercourse with HIV-neg partners:  
HIV-pos Aware vs. HIV-pos Unaware

**68%**

HIV infections could be reduced by >30% if all  
persons infected knew their status

Meta-analysis of high-risk sexual behavior in persons  
aware and unaware they are infected with HIV in the U.S.

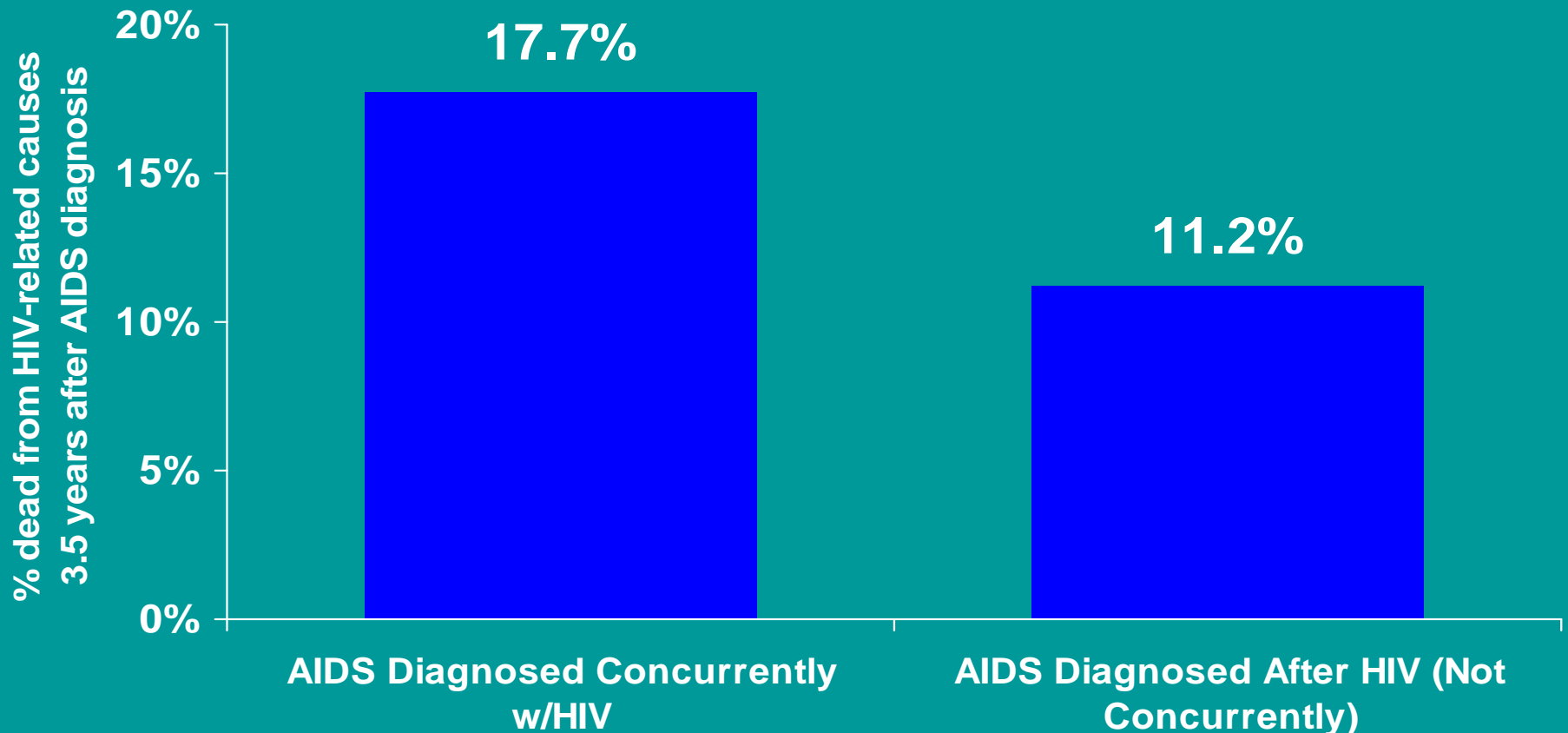
*Marks G, et al. JAIDS. 2005;39:446*

# Late Diagnosis Drives Up Costs of Care

- Late diagnosis means more expensive treatments
  - Direct care costs in the year following HIV diagnosis were more than 200% higher for patients who presented late\*\*

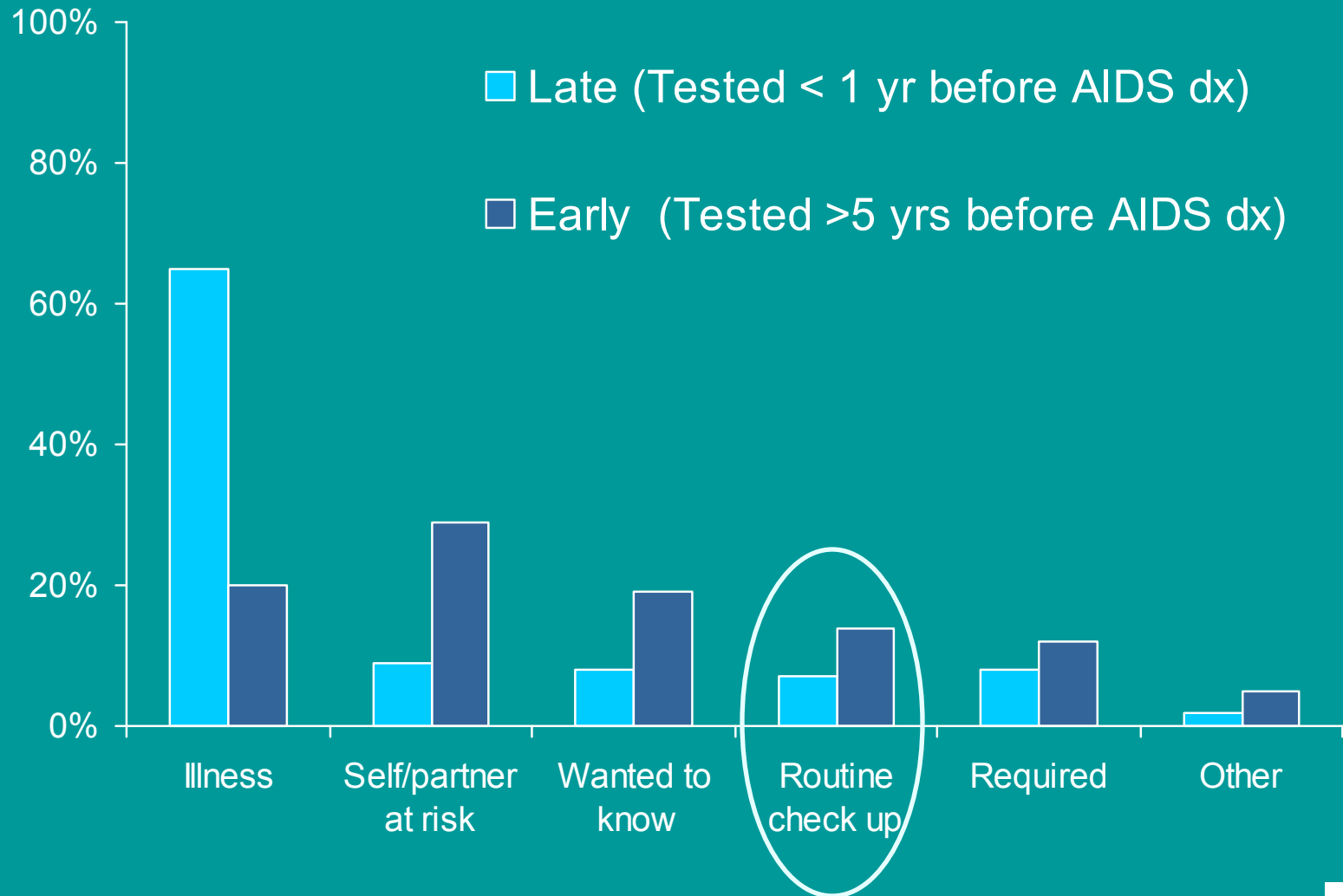
\* Marks G, et al JAIDS, 2005;39:446  
\*\*\*HB Krentz, MC Auld, MJ Gill (2004)

# Late Diagnosis of HIV Increases Risk of Death from AIDS by Two Thirds



# Reasons for testing: late versus early testers

Supplement to HIV/AIDS Surveillance, 2000-2003



# HIV Testing Until Now

# Source of HIV Tests and Positive Tests

- 38% - 44% of adults age 18-64 have been tested
- 16-22 million persons age 18-64 tested annually in U.S.

	HIV tests*	HIV+ tests**
Private doctor/HMO	44%	17%
Hospital, ED, Outpatient	22%	27%
Community clinic (public)	9%	21%
HIV counseling/testing	5%	9%
Correctional facility	0.6%	5%
STD clinic	0.1%	6%
Drug treatment clinic	0.7%	2%

\*National Health Interview Survey, 2002

\*\*Suppl. to HIV/AIDS surveillance, 2000-2003

# Previous CDC Recommendations Adults and Adolescents

- Routinely recommend HIV screening in settings with high HIV prevalence ( $\geq 1\%$ )
- Targeted testing based on risk assessment
- Routinely recommend HIV Testing seeking treatment for STDs
- Annual testing for sexually active MSM

# HIV Testing Practices in EDs

- Survey of 154 ED providers
  - Average: 13 STD patients per week
  - Only 10% always recommend HIV test
- Reasons for not testing for HIV:
  - 51% concerned about follow up
  - 45% not a “certified” counselor
  - 19% too time-consuming
  - 27% HIV testing not available

*-Fincher-Mergi et al, 2002: AIDS Pat Care STDs*

# Recommendations Are Not Having Their Intended Effect in Acute Care Settings

- EDs account for 10% of all ambulatory care visits

	2002	2003	2004
ED visits	110 million	114 million	110 million
Age 15-64	69.6 million	71.6 million	71.5 million
HIV serology	163,000	239,000	268,000

*National Hospital Ambulatory Medical Care Survey, National Center for Health Statistics*

# The Status Quo

- Has brought us a long way, but we are currently stalled
- Late diagnosis is frequent, especially of socio-economically disadvantaged persons
- Numerous missed opportunities for earlier diagnosis, treatment, and prevention

# Rationale for Revising Recommendations

- Many HIV-infected persons access health care but are not tested for HIV until symptomatic
- Effective treatment available
- Awareness of HIV infection leads to substantial reductions in high-risk sexual behavior
- Inconclusive evidence about prevention benefits from typical counseling for persons who test negative
- Great deal of experience with HIV testing, including rapid tests

# The Case for HIV Screening

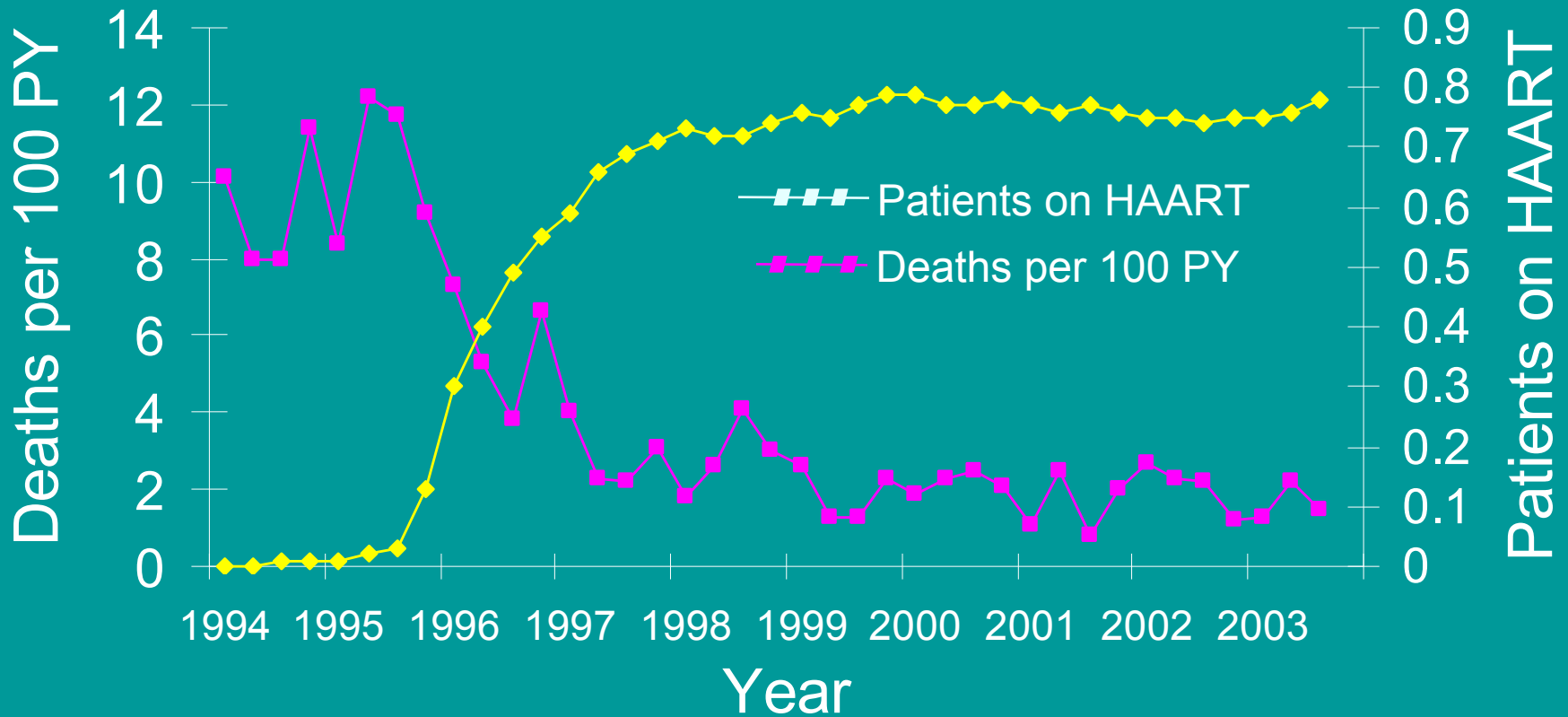
# Criteria that Justify Routine Screening

1. Serious health disorder that can be detected before symptoms develop
2. Treatment is more beneficial when begun before symptoms develop
3. Reliable, inexpensive, acceptable screening test
4. Costs of screening are reasonable in relation to anticipated benefits

*Principles and Practice of Screening for Disease*  
*-WHO Public Health Paper, 1968*

# Mortality and HAART Use Over Time

## HIV Outpatient Study, CDC, 1994-2003



# Terminology

- *Diagnostic testing:* performing an HIV test based on clinical signs or symptoms
- *Targeted testing:* performing an HIV test on subpopulations of persons at higher risk based on behavioral, clinical or demographic characteristics
- *Screening:* performing an HIV test for all persons in a defined population
- *Opt-out screening:* performing an HIV test after notifying the patient that the test will be done; consent is inferred unless the patient declines

# We miss opportunities to diagnose HIV earlier by testing only those who say they have risks or symptoms for HIV infection

- 4,315 reported HIV cases in South Carolina between 2001-2005
  - 3,157 (73%) made 20,271 health-care visits prior to their first positive HIV test
- Diagnosis codes at 15,648 (77%) of prior visits would not have prompted an HIV test

*MMWR 55:47, December 1, 2006*

# Opt-Out Screening

## Prenatal HIV testing for pregnant women:

- RCT of 4 counseling models with opt-in consent:
  - *35% accepted testing*
  - *Some women felt accepting an HIV test indicated high risk behavior*
- Testing offered as routine, opportunity to decline
  - *88% accepted testing*
  - *Significantly less anxious about testing*

*Simpson W, et al, BMJ June, 1999*

# Cost Effectiveness

- Cost-effectiveness of screening for HIV in the era of HAART. *Sanders G, et al. NEJM 2005;352:570.*

**“The cost-effectiveness of routine HIV screening in health care settings, even in relatively low-prevalence populations, is similar to that of commonly accepted interventions, and such programs should be expanded.”**

1% HIV prevalence: \$15,078 per QALY

>0.05% prevalence: <\$50,000 per QALY

# Cost Effectiveness

- Expanded screening for HIV in the U.S. – an analysis of cost effectiveness. *Paltiel AD, et al. NEJM 2005;352:586.*

“In all but the lowest-risk populations, routine, voluntary screening for HIV once every 3 to 5 years is justified on both clinical and cost-effectiveness grounds. One-time screening in the general population may also be cost-effective.”

# Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings

MMWR 2006;55(No. RR-14):1-17

Published September 22, 2006

<http://www.cdc.gov/mmwr/pdf/rr/rr5514.pdf>

# Revised Recommendations Adults and Adolescents - I

- Routine, voluntary, opt out HIV screening for all persons 13-64 in health care settings, not based on risk
- All patients with TB or seeking treatment for STDs should be screened for HIV
- Repeat HIV screening of persons with known risk at least annually
- When acute retroviral infection is a possibility, use an RNA test in conjunction with an antibody test

# Revised Recommendations Adults and Adolescents - II

- When acute retroviral infection is a possibility, use an RNA test in conjunction with an HIV antibody test
- Settings with low or unknown prevalence:
  - Initiate screening
  - If yield from screening is less than 1 per 1000, continued screening is not warranted

# Revised Recommendations Adults and Adolescents - III

- Opt-out HIV screening with the opportunity to ask questions and the option to decline testing
- Separate signed informed consent should not be required
- Prevention counseling in conjunction with HIV screening in health care settings should not be required

# Revised Recommendations Adults and Adolescents - IV

- Screening is voluntary
- Inform patients orally or in writing that HIV testing will be performed unless they decline.
- Arrange access to care, prevention, and support services for patients with positive HIV test results

Will this work in Texas?

# Texas STD Clinics: Reasons

- Seroprevalence studies: ~50% of HIV-positive clients were not tested in some STD clinics
- Only 50% of clients accepted opt-in HIV testing
- Routine opt-out testing is effective and has been the norm for other STD screening historically
- Early detection of HIV can help communities, STD clinicians and especially clients (Early Intervention)

# Texas STD Clinics: Focus Groups

- Pre-test counseling identified as a deterrent to HIV testing
- Many clients thought they were tested routinely and assumed they were HIV negative after their STD clinic visit
- Focus group participants strongly recommended making routine HIV testing part of STD screening

# Routine Opt-Out HIV Testing Texas STD Clinics, 1996-97

	Opt-In N (%)	Opt-Out N (%)	% change
<b>STD Visits</b>	<b>31,558</b>	<b>34,533</b>	<b>+9</b>
<b>Eligible Clients</b>	<b>19,184 (61)</b>	<b>23,686 (69)</b>	<b>+23</b>
<b>Pre-test counsel</b>	<b>15,038 (78)</b>	<b>11,466 (48)</b>	<b>-24</b>
<b>Tested</b>	<b>14,927 (78)</b>	<b>23,020 (97)</b>	<b>+54</b>
<b>Post-test counsel</b>	<b>6,014 (40)</b>	<b>4,406 (19)</b>	<b>-27</b>
<b>HIV-positive</b>	<b>168 (1.1)</b>	<b>268 (1.2)</b>	<b>+59</b>

*Texas Department of State Health Services, 2005*

# Other Experience?

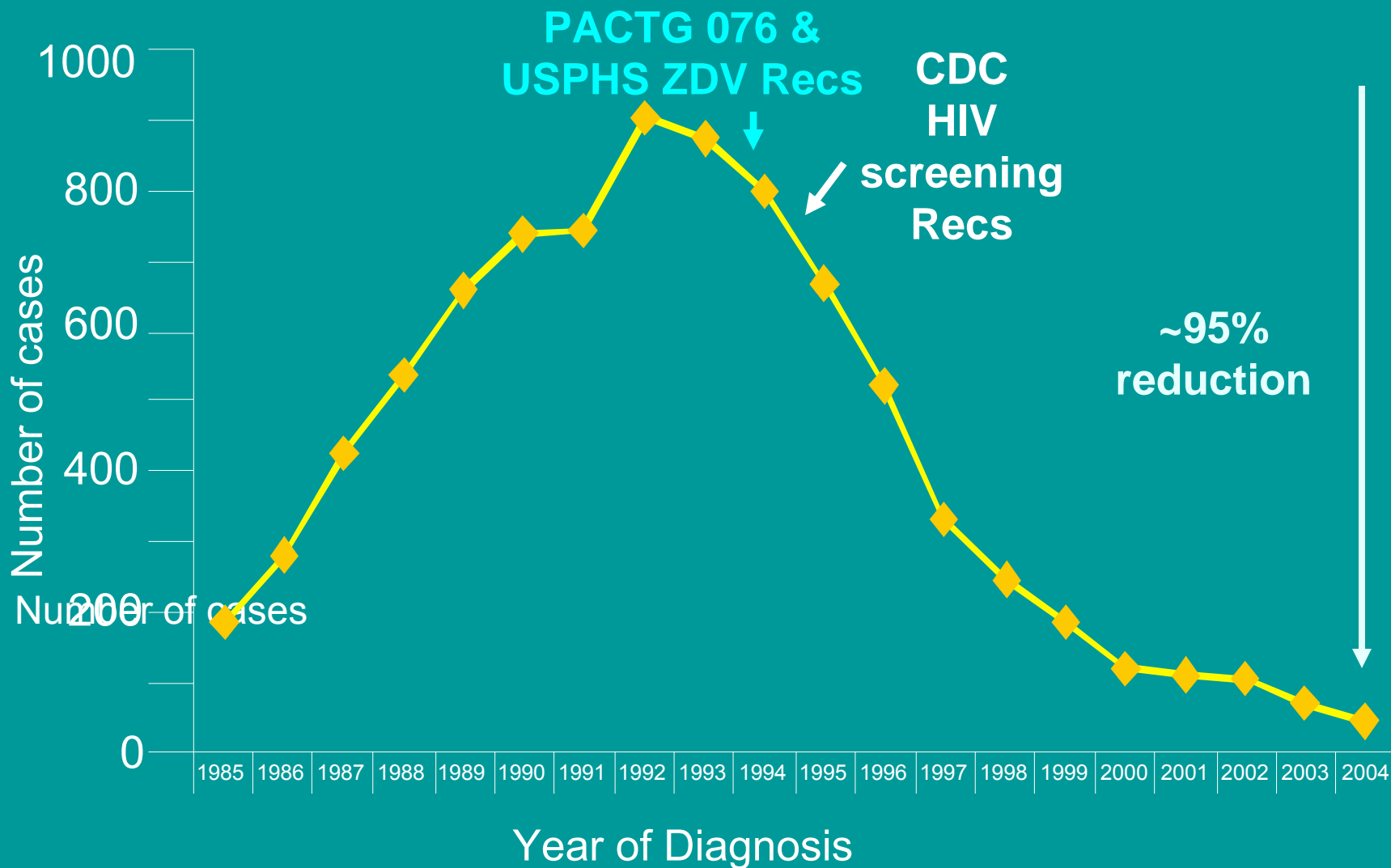
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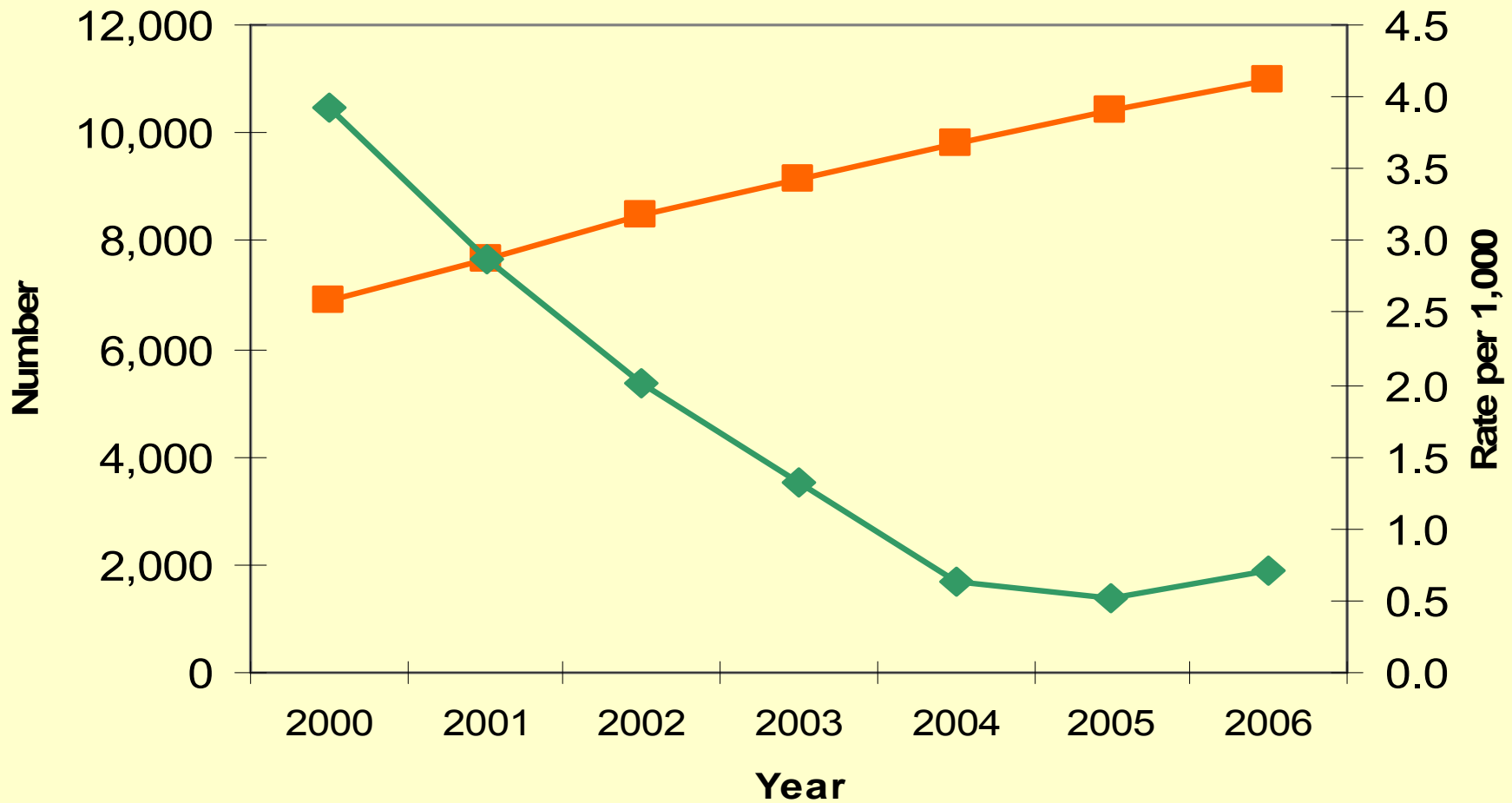
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# Estimated Number of Perinatally Acquired AIDS Cases, by Year of Diagnosis, 1985-2004 – United States



# HIV/AIDS among Childbearing Women & Perinatal Infections



- Prevalent Cases in Child Bearing Women
- Perinatal Infections per 1000 Women of CB age

# Attitudes, Opinions, Knowledge, and Experience

Kaiser Family Foundation  
2009 Survey of Americans on HIV/AIDS: Summary of  
finding on the Domestic Epidemic

<http://www.kff.org/kaiserpolls/posr042809pkg.cfm>

# Acceptance

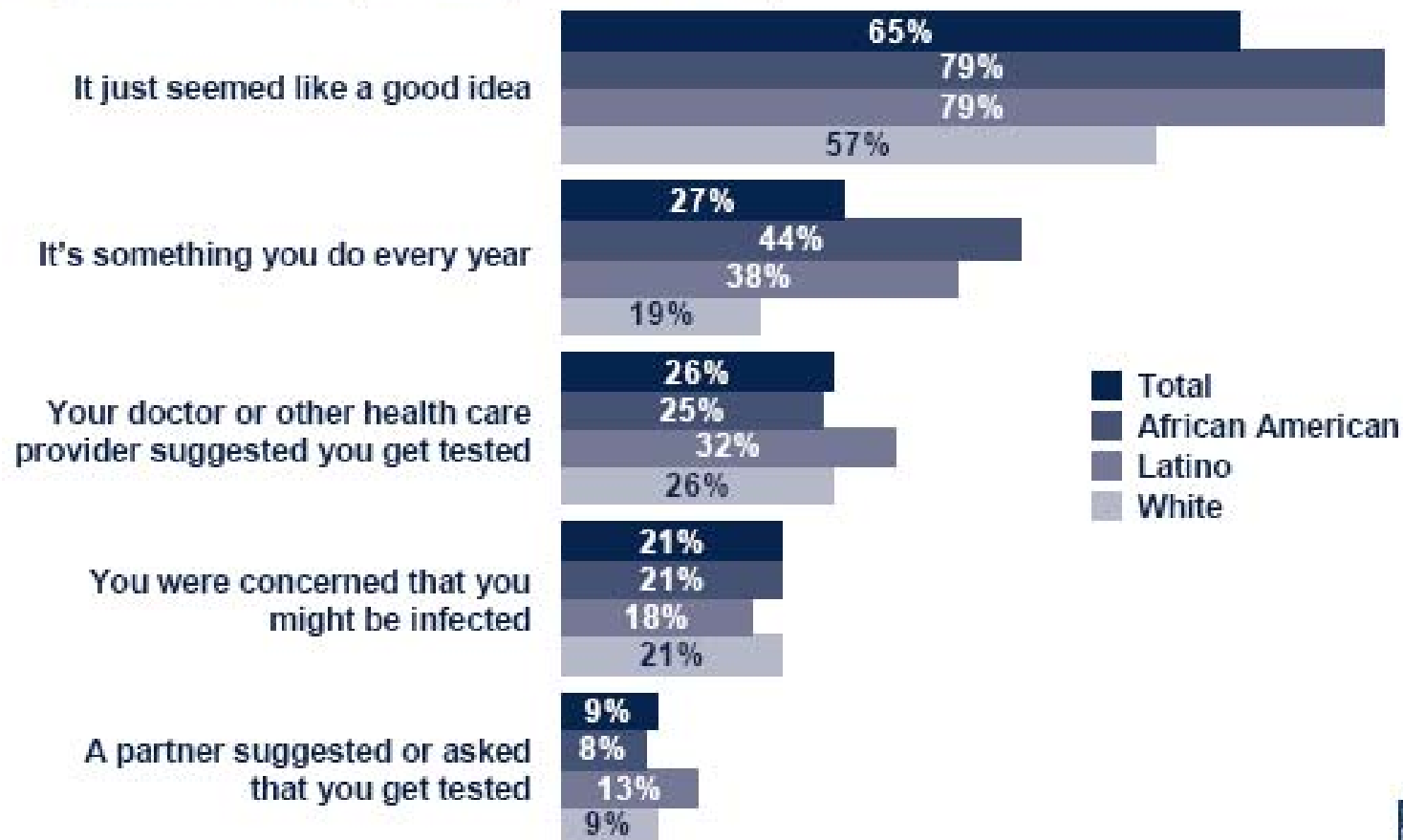
- 69% say that their peers would not think differently about them if they knew they had been tested for HIV.
- This has slightly increase from 2006 at 62%
- Decline from the negative – people would think negatively 21% to 16%

## Percent who report being tested for HIV by age and race/ethnicity

	Among all adults					Among those ages 18-64			
	Total public	Ages 18-29	Ages 30-49	Ages 50-64	Ages 65+	Total	African American	Latino	White
Percent saying they have ever been tested	47	54	61	40	16	53	73	60	48
Percent saying they have been tested in the past 12 months	16	30	20	10	2	19	40	28	14

# Reported Reasons for Being Tested by Race/Ethnicity

Percent saying each of the following is a reason they got tested for HIV  
(Among the 47% who report being tested for HIV)

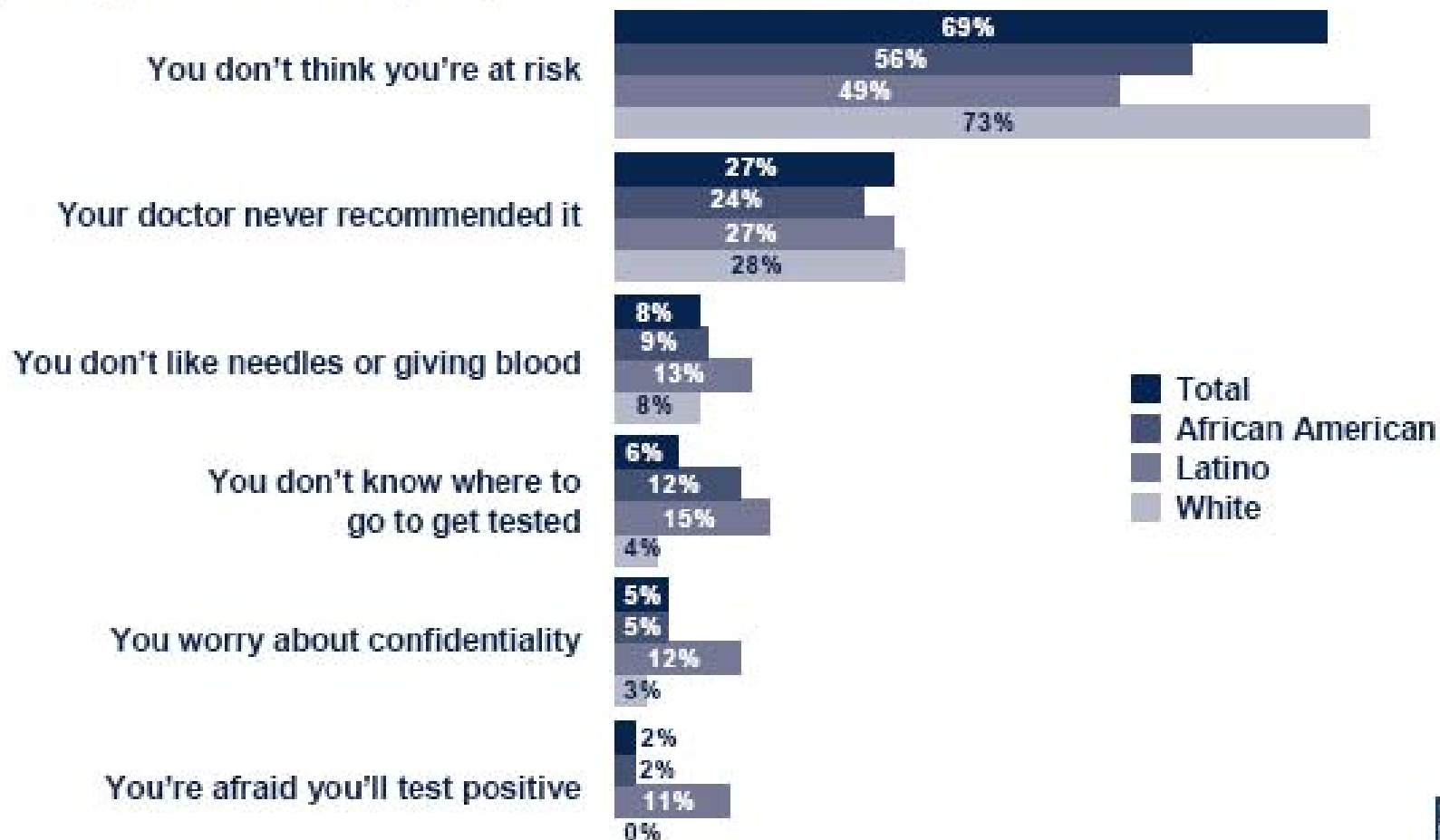


Source: Kaiser Family Foundation Survey of Americans on HIV/AIDS (conducted Jan. 26-March 8, 2009)



# Reported Reasons for Not Being Tested by Race/Ethnicity

Percent saying each of the following is a reason they haven't been tested for HIV  
(Among the 51% who say they have never been tested)



Source: Kaiser Family Foundation. Survey of Americans on HIV/AIDS (conducted Jan. 26-March 8, 2009)



What does Texas Law have to  
say about it?

# Texas Informed Consent Law

- Sec. 81.105. Informed Consent.
  - (a) Except as otherwise provided by law, a person may not perform a test designed to identify HIV antibody without first obtaining the informed consent of the person to be tested.

# Texas General Consent Law

- Sec. 81.106. General Consent.
  - (a) A person who has signed a general consent form for the performance of medical tests is not required to also sign a specific consent form relating to medical tests to determine HIV infection that will be performed on the person during the time in which the general consent form is in effect.

# HIV + Results

- **§ 81.109. COUNSELING REQUIRED FOR POSITIVE TEST RESULTS.**
- (a) A positive test result may not be revealed to the person tested without giving that person the immediate opportunity for individual, face-to-face post-test counseling about:
  - (1) the meaning of the test result;
  - (2) the possible need for additional testing;
  - (3) measures to prevent the transmission of HIV;
  - (4) the availability of appropriate health care services, including mental health care, and appropriate social and support services in the geographic area of the person's residence;
  - (5) the benefits of partner notification;
  - (6) the availability of partner notification programs.

# What is being done?

# Texas HIV Expanded Testing Project

- DSHS Began October 1, 2008.
- CDC funded
- Provide technical assistance and guidance to support **Routine, Integrated and Sustainable** HIV testing in health care settings.

# Texas Sites

- 5 Emergency Departments
- 3 Community Health Clinics
- 8 Corrections facilities
- 3 STD clinics

# Performance

- Houston successes with 24/7 testing in ED labs
- Corrections and Community Clinic testing increasing
- EDs added in 2008 – 2009 are ramping up.

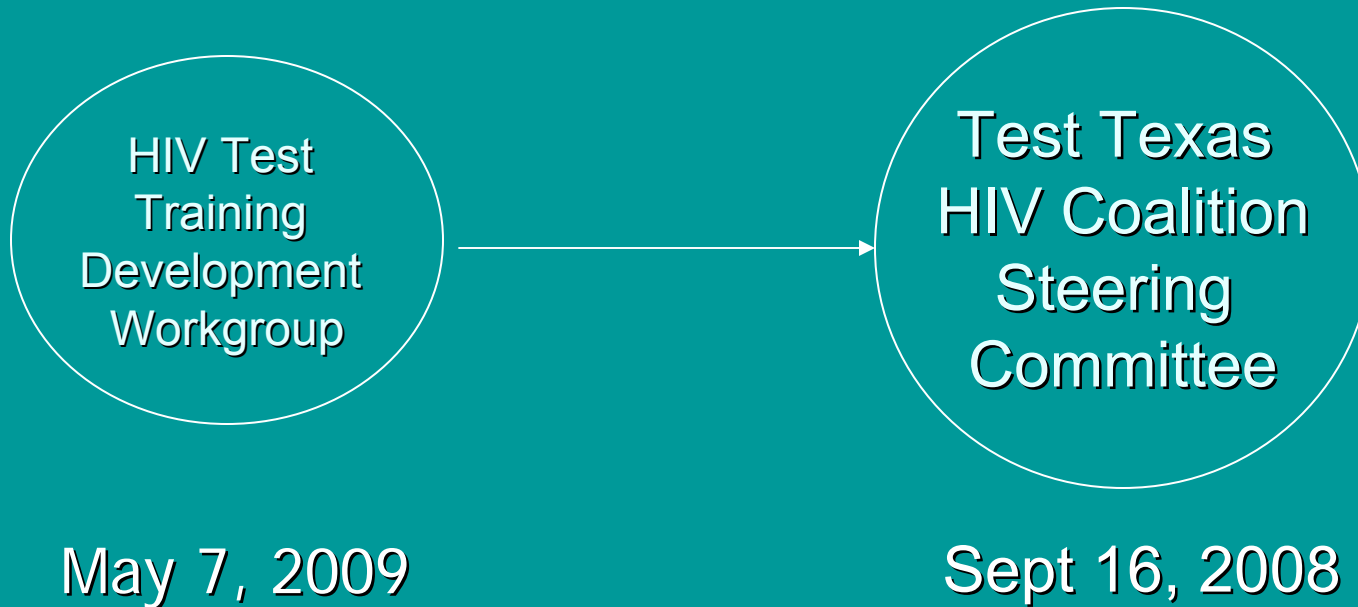
# Summary

- There is an urgent need to increase the proportion of persons who are aware of their HIV-infection status
- Expanded, routine, voluntary, opt-out screening in health care settings is needed
- Such screening is cost-effective
- Revised recommendations: September 2006
- Several jurisdictions have already begun

# TEST TEXAS HIV COALITION

## Phase I

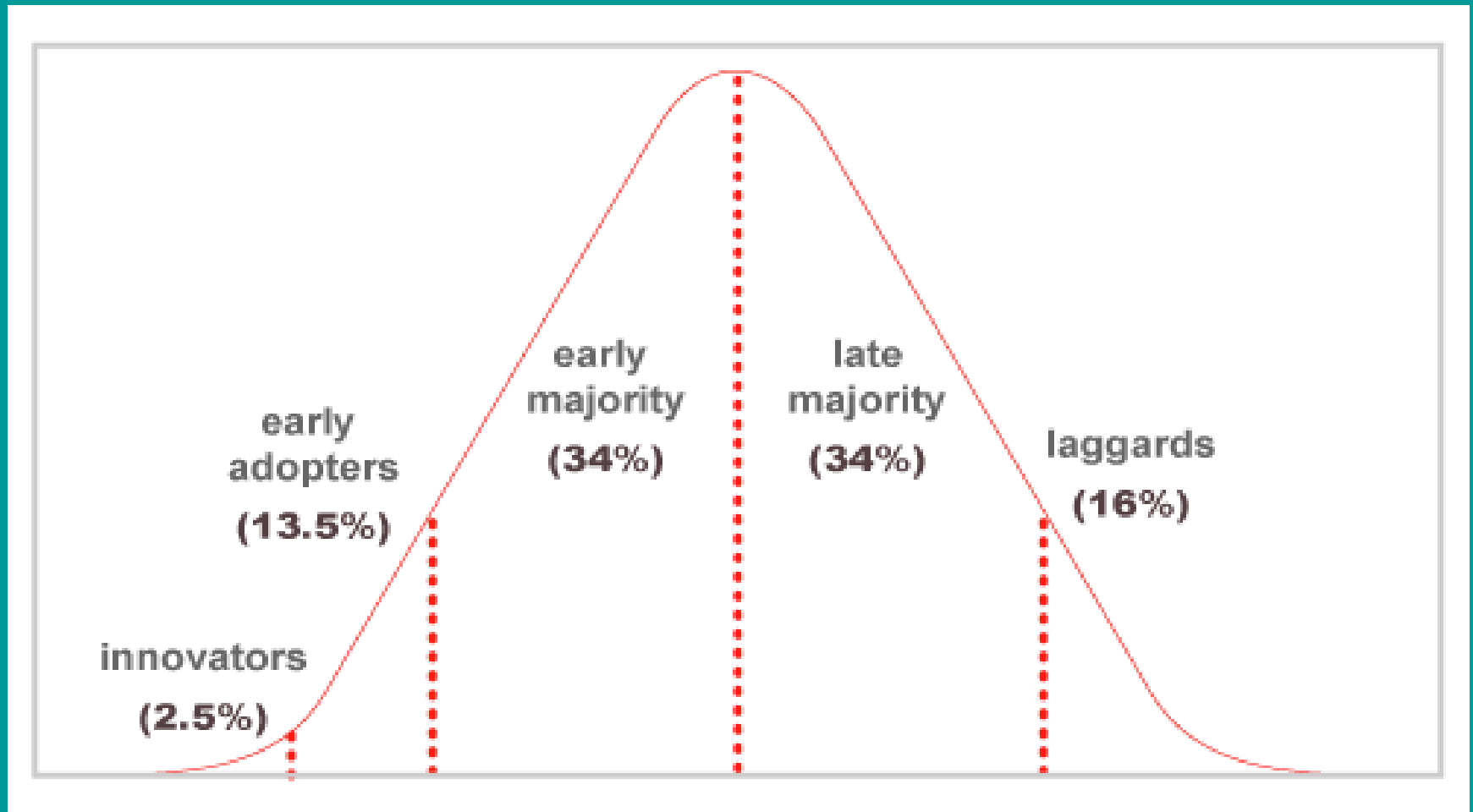
If We Build It, They Will  
Come?



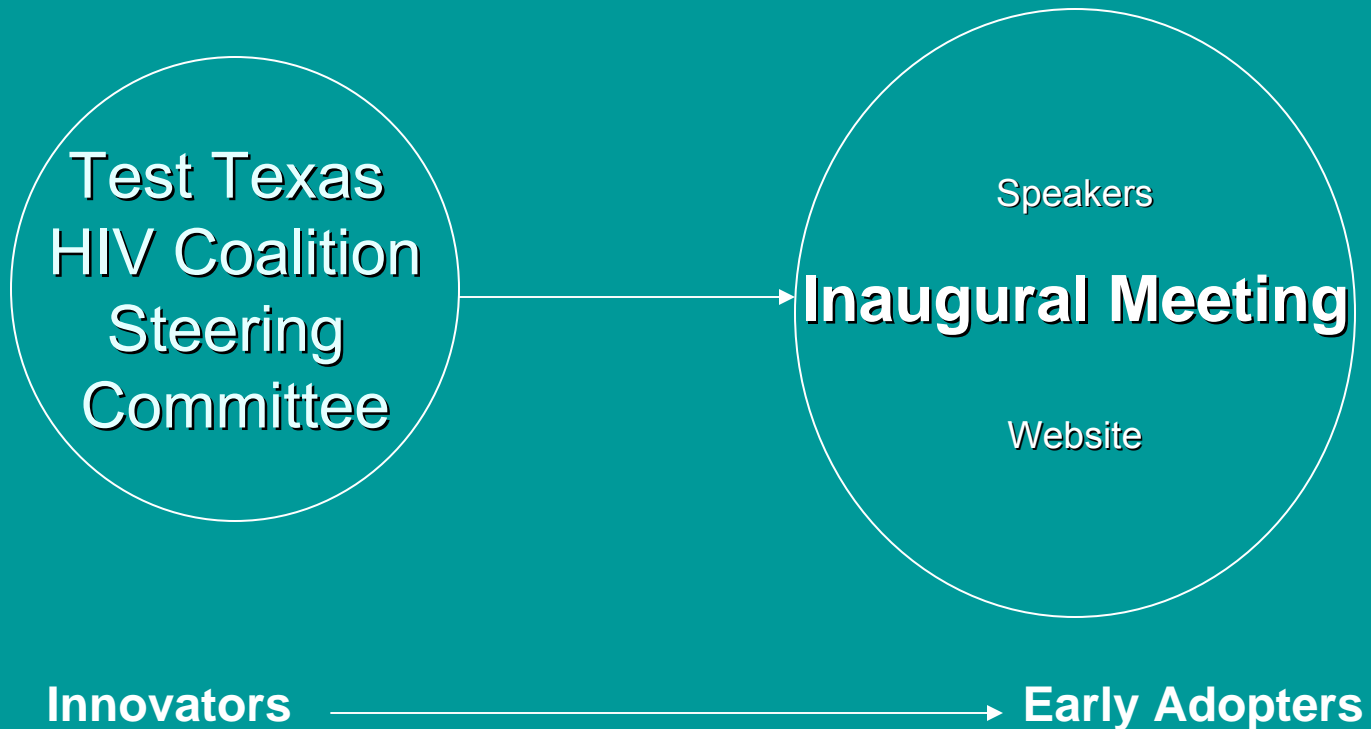
How it all began...

# “Diffusion of Innovation”

Everett M. Rogers (1962)

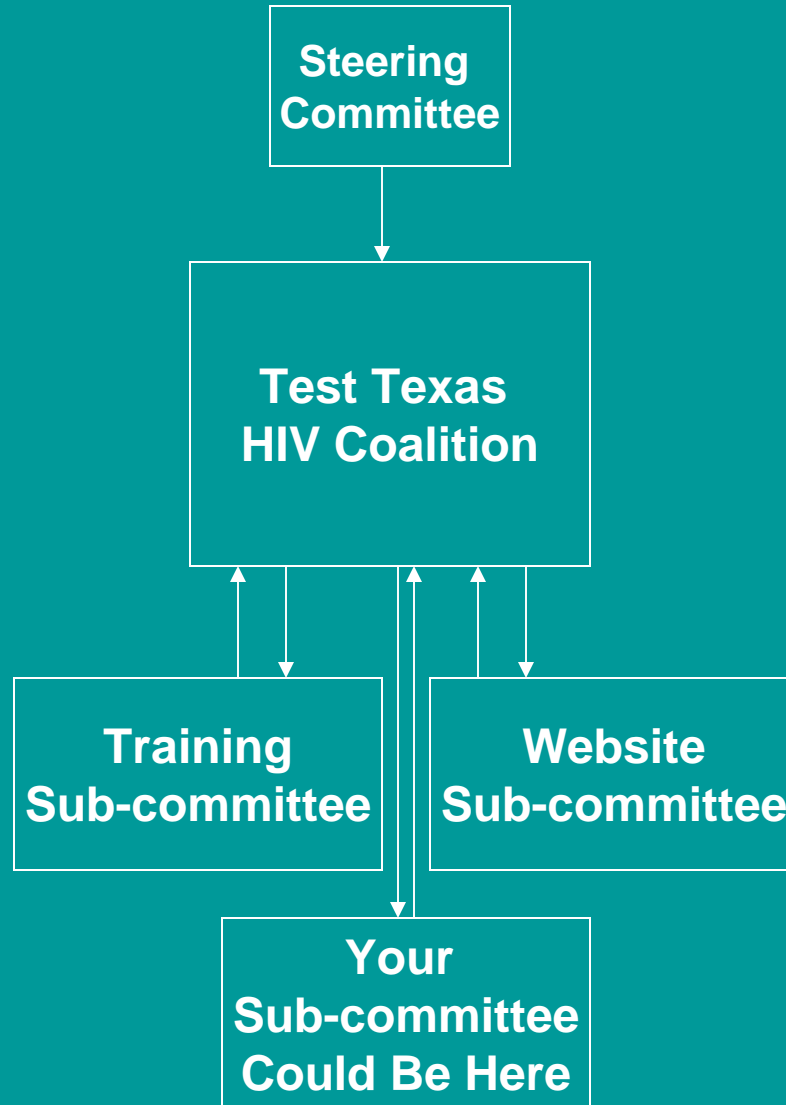


# TEST TEXAS HIV COALITION

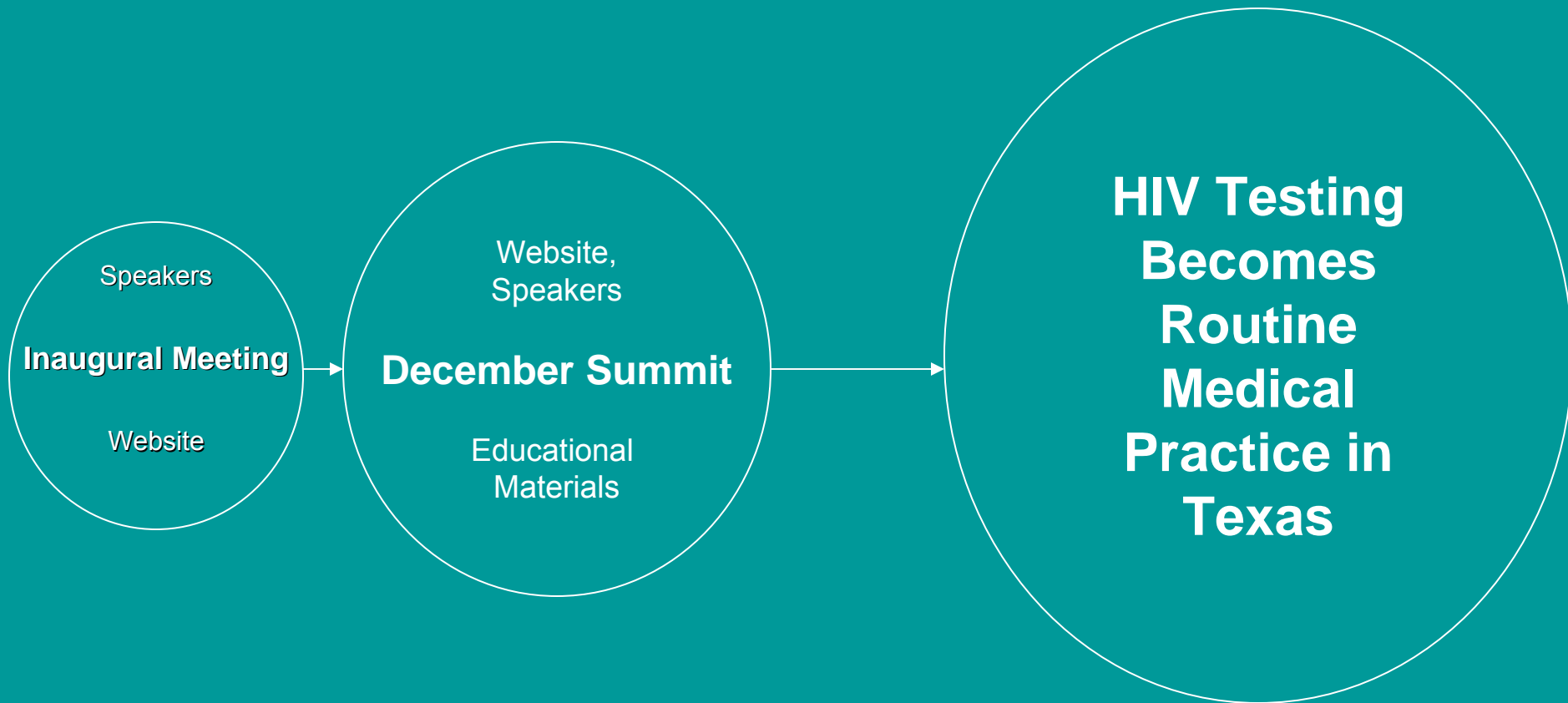


# Test Texas HIV Coalition

## July 1, 2009



# TEST TEXAS HIV COALITION



Innovators → Early Adopters → Early Majority, etc. →