

Issues and Priorities in Program Science



CDC STD Prevention Conference 2012

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Sevgi's Question

- Top three issues/priorities for program science and why
- Initial steps in addressing priorities

Limitation: Focus on U.S.

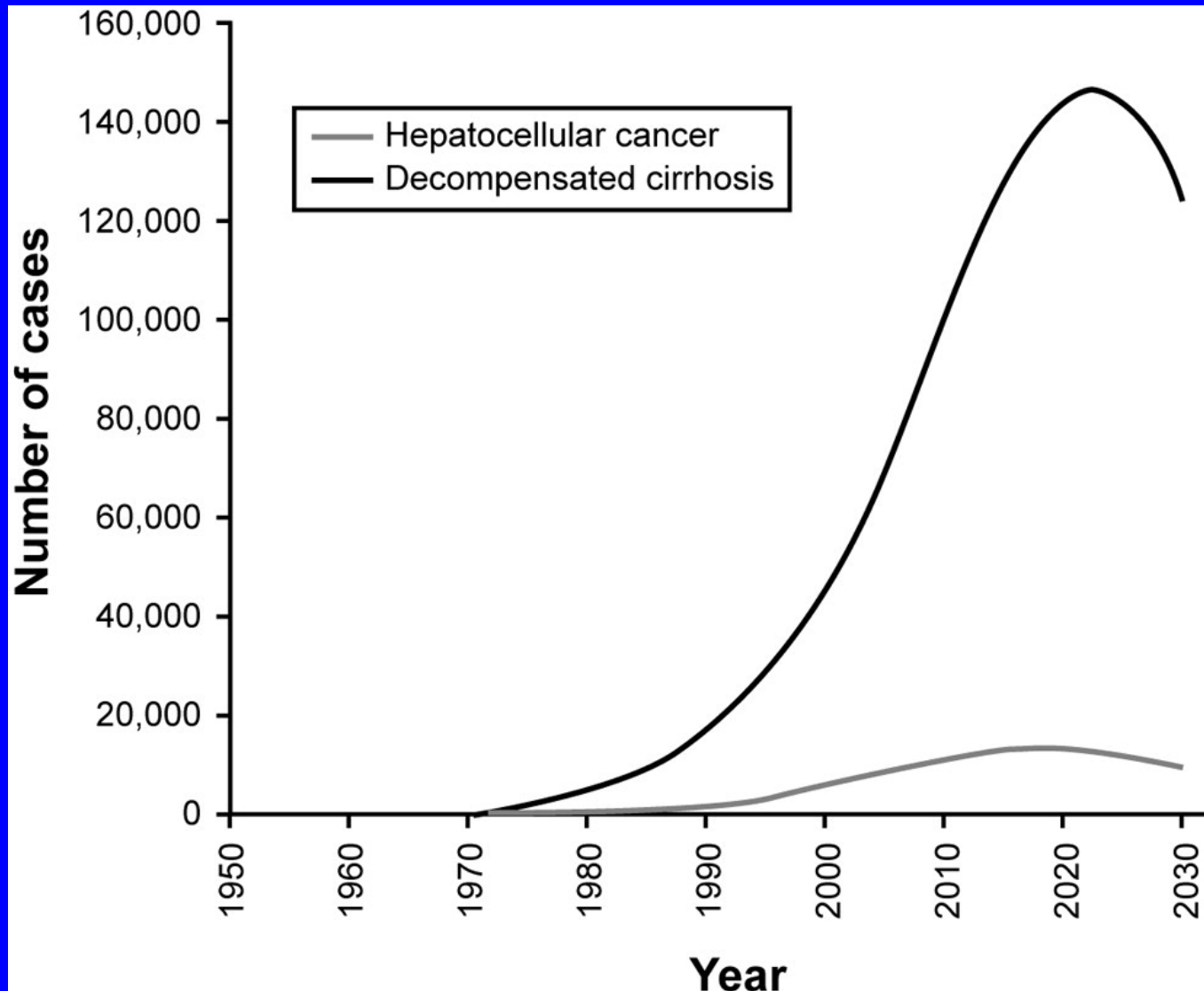
Defining Priorities

- 1) Morbidity and mortality associated with the condition
- 2) Ability to make a difference – missed opportunities
- 3) Trends – is the problem getting worse or do we face significant or uncertain risk or opportunities in the future
- 4) Values

Priority Diseases

- HIV
 - >1 million Americans infected
 - Fatal if untreated
 - Costly and often morbid when treated
- HCV
 - 4 million Americans infected
 - Often fatal if untreated – 300,000 deaths anticipated 2020-29
 - Costly and morbid

Anticipated Trends in Hepatitis C Associated Cirrhosis

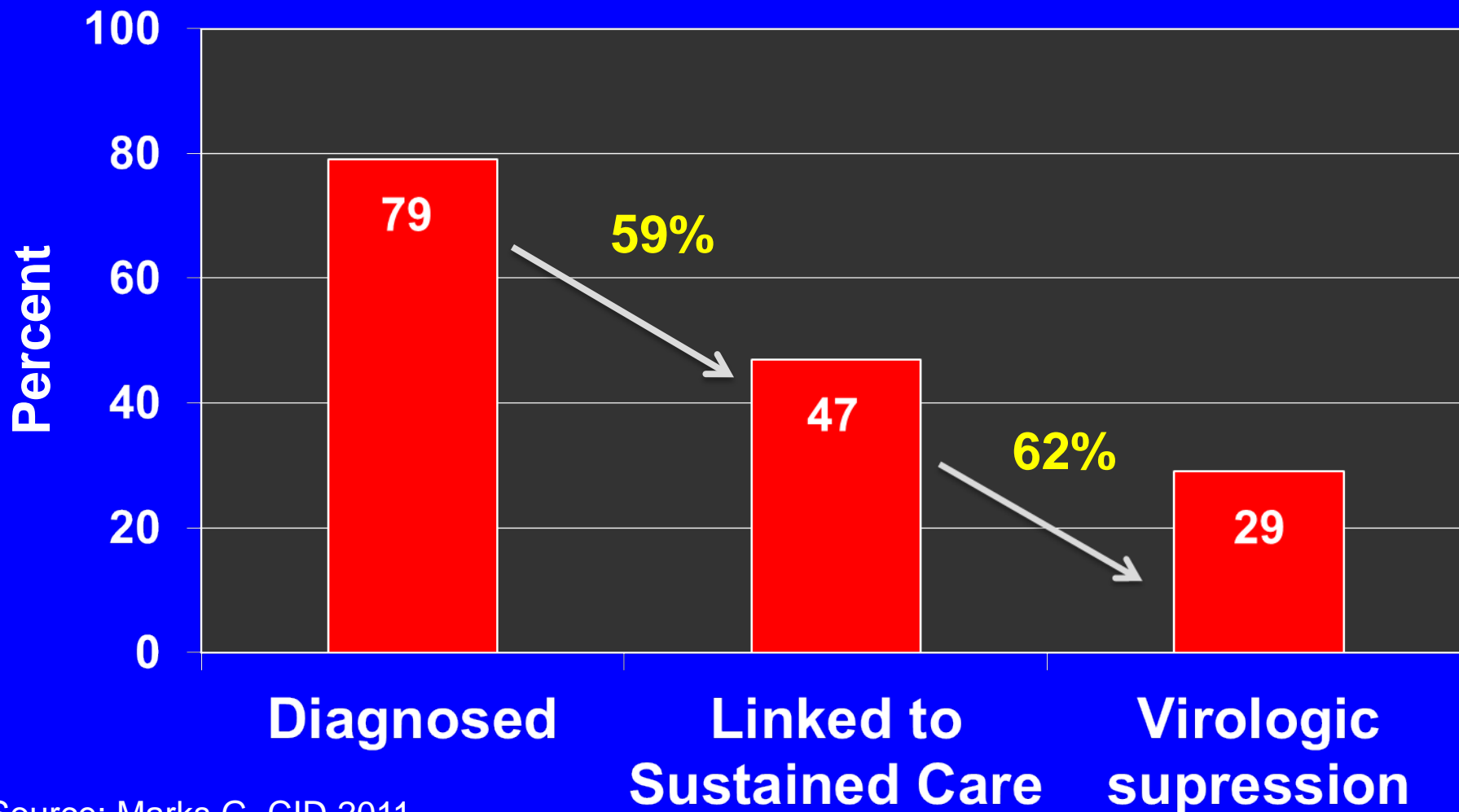


Source: Davis GL.
Gastroenterology
2010

Biggest Missed Opportunities

- HIV
- HCV
- HPV immunization

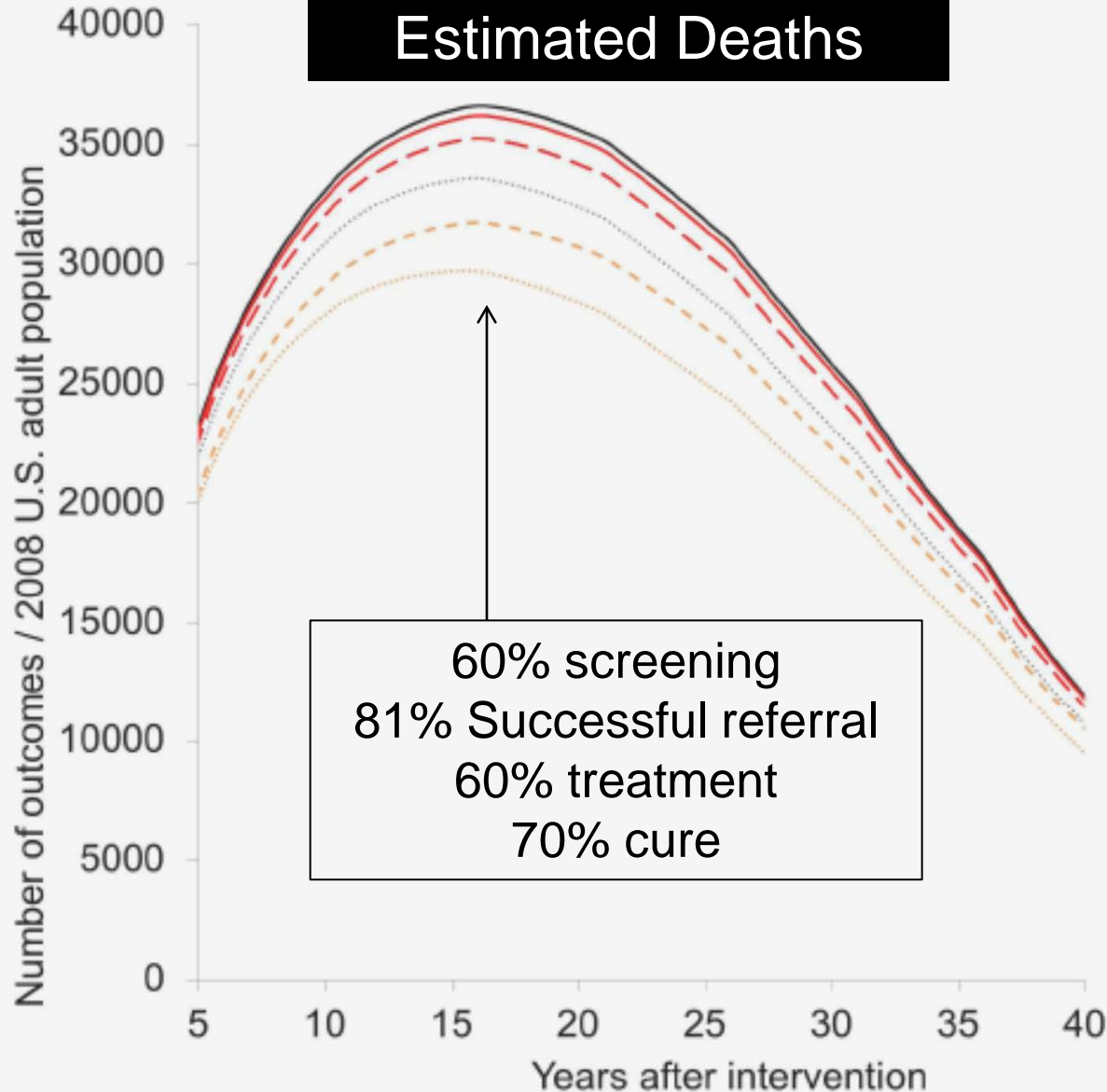
Estimated Percentage of Persons with HIV Infection Who Are Diagnosed, Linked to Sustained Care and On Effective Antiretroviral Therapy



Source: Marks G. CID 2011

Hepatitis C: Our Emerging Priority

Estimated Deaths



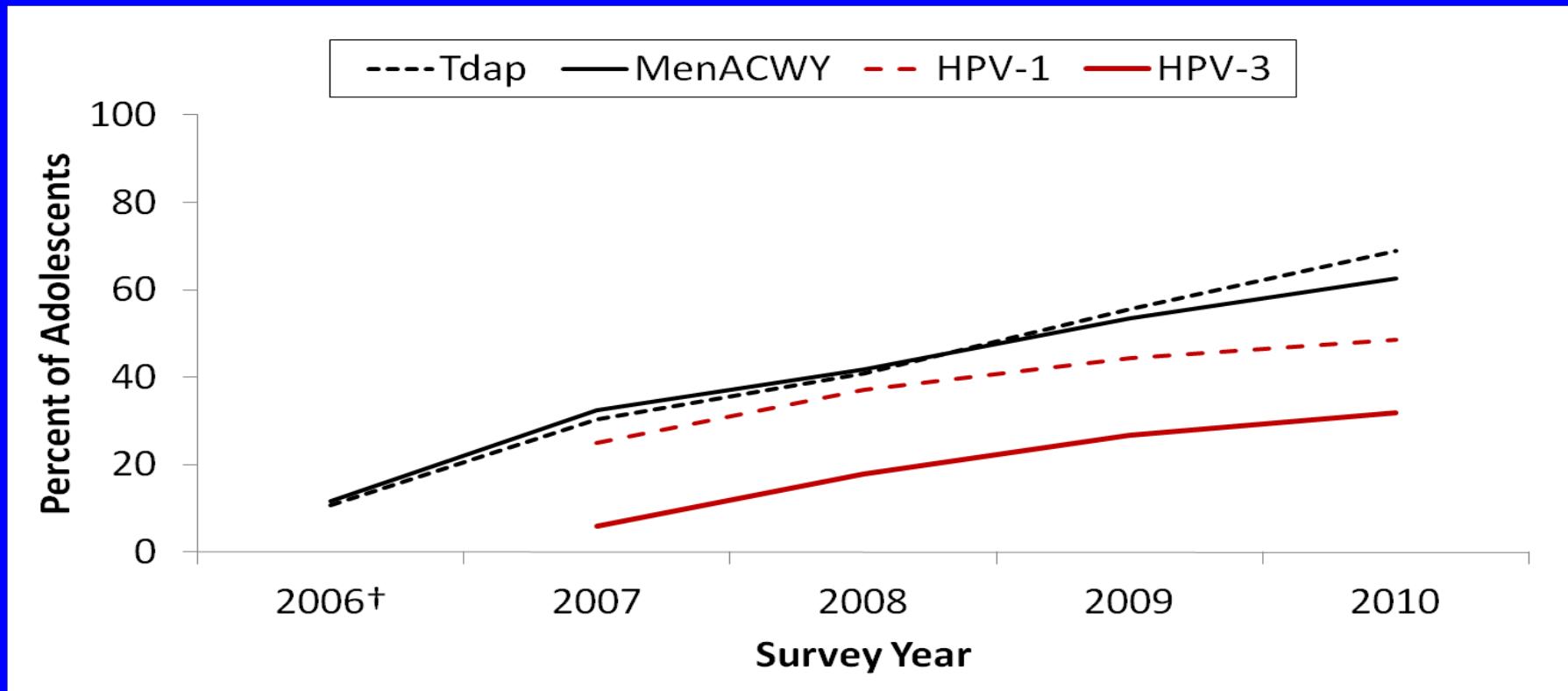
60% screening
81% Successful referral
60% treatment
70% cure

- Risk Factor Screening
- (plus increased referral/treatment/cure)
- General Pop Screening (15%)
- - - General Pop Screening (60%)
- - - (plus increased referral/treatment)
- (plus increased referral/treatment/cure)

Source P. Coffin.
CID (in press)

Estimated vaccination coverage among adolescents, 13-17 years

National Immunization Survey-Teen, 2006-2010

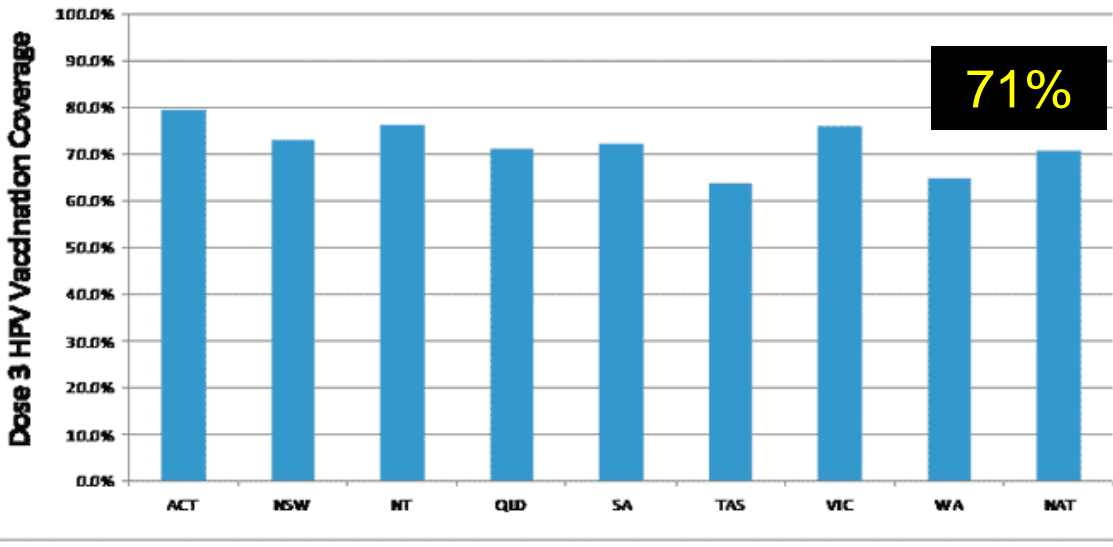


1.4% of males 13-17 years had received at least one dose of HPV vaccine

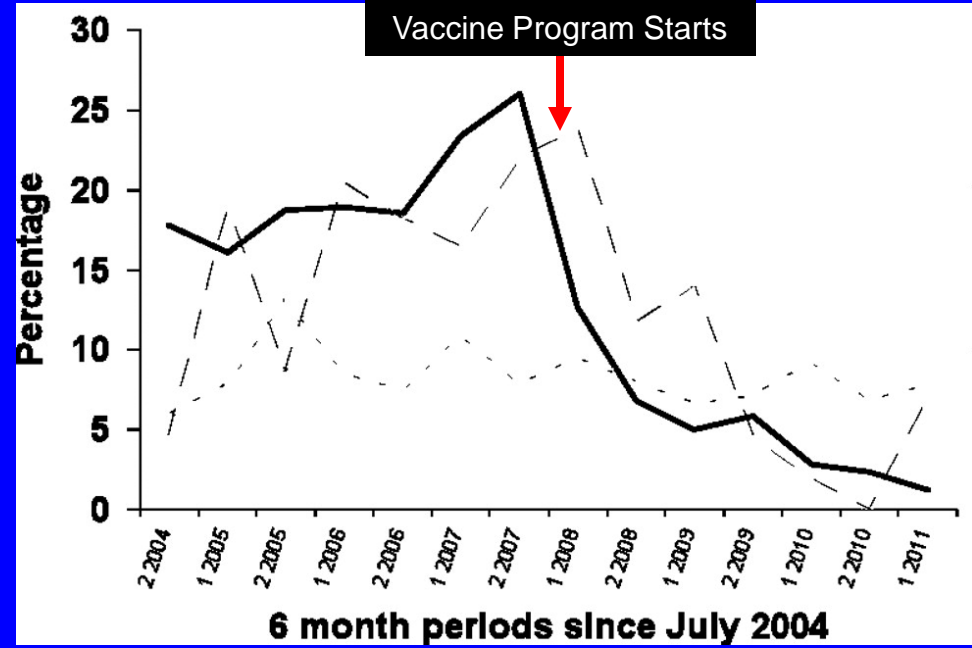
† HPV vaccination coverage was not available in 2006 because NIS-Teen was conducted before HPV vaccination recommendations were published in March 2007.

HPV Vaccination Coverage Among 15 Year Old Australian Girls, 2009

National HPV Vaccination Coverage (3 dose) for girls aged 15 years in 2009



Proportion of Melbourne STD Clinic Patients Diagnosed with Genital Warts



— <21 Female
 - - <21 Male
 . . . MSM

Source: Read TRH. STI 2011;87:544

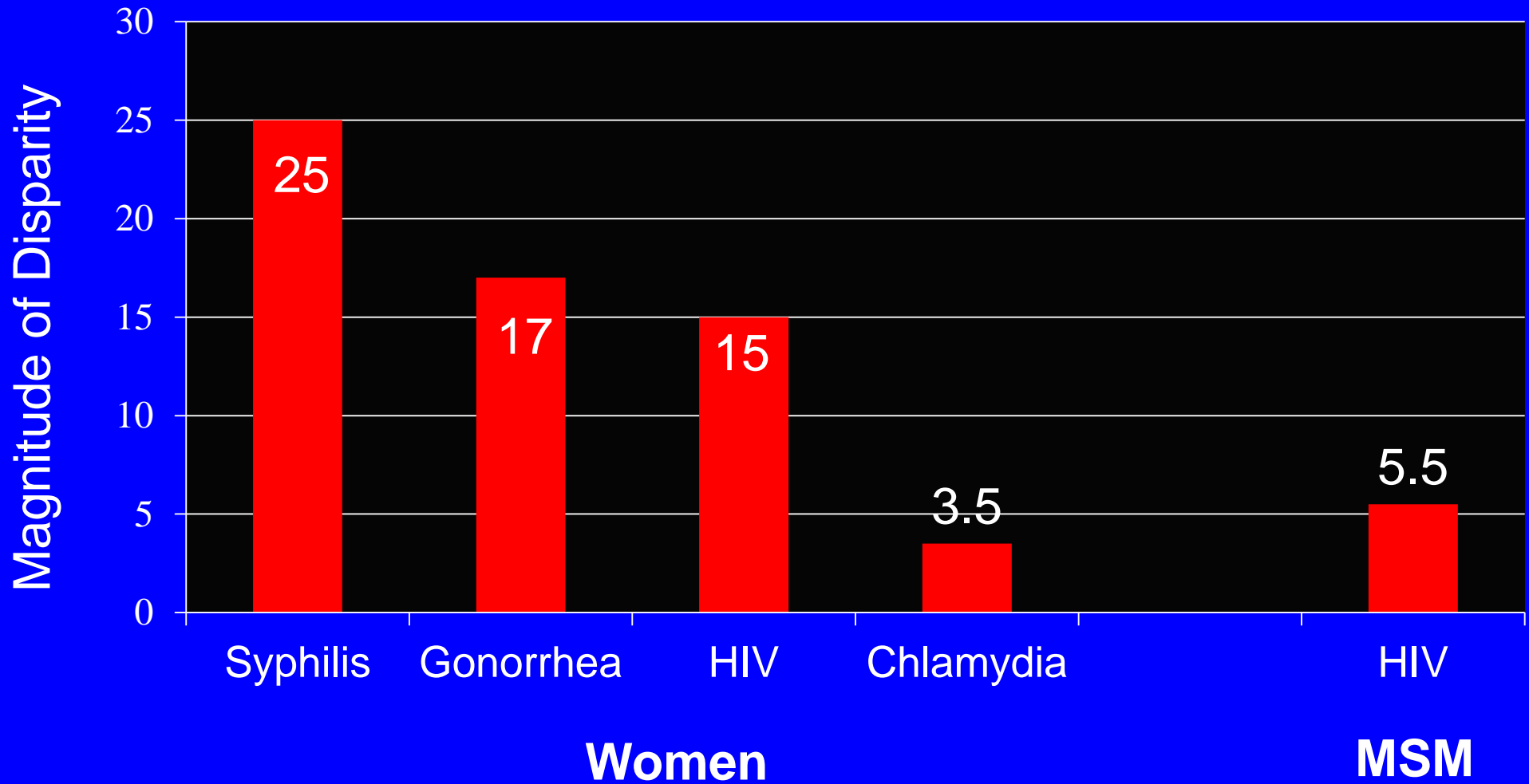
Emerging Issues

- Health Care Reform
- HCV
 - New CDC screening guidelines to be released this year
- Decreased susceptibility *Neisseria gonorrhoeae*

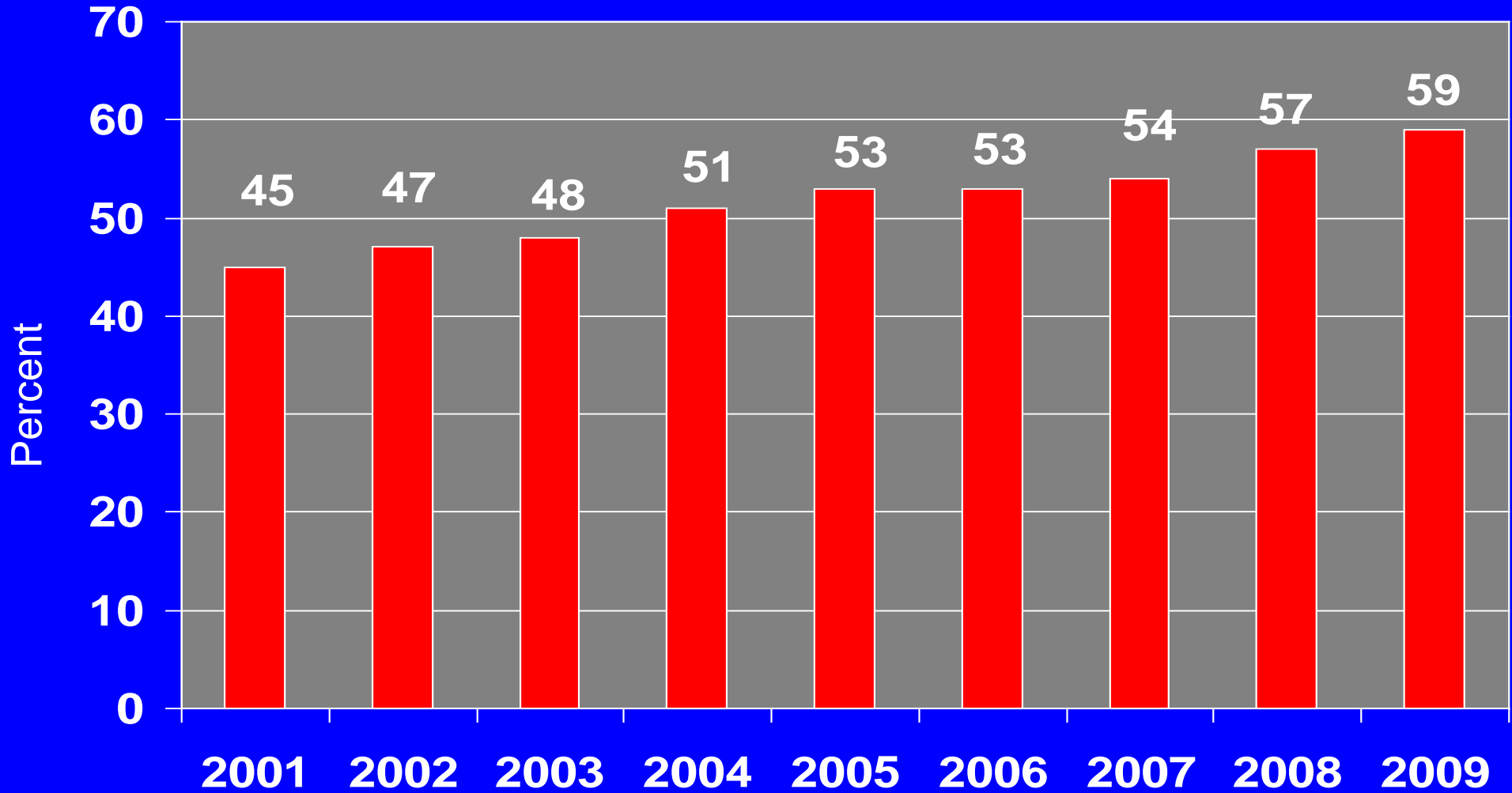
Values

- Promote equality and diminish disparities
- The need to strengthen our sense of common identity and purpose

Differences in Reported Rates of STI Between African Americans & Whites



Percentage of Reported HIV Cases Occurring in MSM in U.S. States with Named-Based Reporting*, 2001-2009



*The number of areas included increased from 33 to 40 between 2007 and 2009

Priority #1: Improve the Test & Treat Infrastructure for HIV/HCV: HIV

Strategic planning

- 1) Define Legal Environment and Existing Infrastructure
- 2) Build community support where possible
- 3) Establish baseline parameters

Program implementation & management

- 1) Eliminate exceptional testing consent Laws
- 2) Promote testing as part of care – how?
- 3) Increase testing frequency in highest risk - MSM
- 4) Enact mandatory CD4 & Viral Load Reporting
- 5) Build surveillance infrastructure with plan to use surveillance for outreach
- 6) Expand outreach infrastructure
- 7) Link surveillance and outreach staff

Priority #1: Improve the Test & Treat Infrastructure for HIV/HCV: HCV

Strategic planning

- 1) Define Existing Infrastructure – care, public health
- 2) Build basic knowledge and community support
- 3) Establish baseline parameters

Program implementation & management

- 1) Promote HCV testing as part of care – how?
- 2) Enact mandatory HCV testing and viral load reporting
- 3) Build Surveillance Infrastructure with plan to use surveillance for outreach
- 4) Build outreach infrastructure
- 5) Link surveillance and outreach staff

Priority #1: Improve the Test & Treat Infrastructure for HIV/HCV: Research Questions

- Evaluate effects of legal changes on case-finding
- Assess interventions to increase testing coverage and testing frequency on case-finding
 - Most cost-effective approaches
 - Variance by population
- Evaluate and optimize surveillance-based linkage, relinkage and retention efforts and compare these efforts to clinic-based interventions
 - Assess costs and cost-effectiveness
- Monitor health care system impacts – new bottlenecks
- Does test and treat decrease transmission?

Priority #2: Health Care Reform

Strategic planning

- 1) Define Existing HIV/STD Prevention and Care Infrastructure – care, public health
- 2) What are key partners doing to prepare? What do they want or need from public health?
- 3) Advocacy – funding for public health services (HIV/STD screening, partner services, epi)
- 4) Define a monitoring plan to assess impact of reform on outcomes
 - New opportunities - EMRs, lab-based surveillance (CT)

Program implementation & management

- 1) Prepare STD clinics - billing, define niche, FQHCs
- 2) Role of primary care – promotion of STD care
- 3) Ryan White Clinics
- 4) Work with community partners around advocacy – Medicaid coverage for HIV testing and ART
 - Retain Ryan White

Priority #2: Health Care Reform: Research Questions

- Evaluate effects of health care reform on STD care
- STD clinics – studies to improve clinic efficiency, define niche, direct services to key populations (e.g. MSM)
- Assess interventions to increase testing frequency
- Evaluate interventions to improve STD care in primary care
 - HIV/STD screening
 - Rescreening
- Costs
- Impact of changing insurance and care infrastructure on HIV/STD morbidity – who is left behind?

Priority #3: Diminish Disparities

Strategic planning

- 1) Define causes, particularly those amenable to intervention
- 2) Build community support and define what different communities want to do
- 3) Establish baseline parameters

Program implementation & management

- 1) Assess impact of improved access to care on morbidity in most affected groups - disparities
- 2) Develop models to explain observed disparities
 - What intensity of intervention might work?
 - Can we get there without broad changes in sexual behavior or mixing patterns?
- 3) Assess how changing social norms and variability in those norms nationally affect STI morbidity in MSM
- 4) Trial anti-homophobia campaigns
- 5) Define best mix of interventions to reach AA MSM – testing in clinical care vs. specific outreach