CHLAMYDIA PREVENTION: CHALLENGES AND STRATEGIES FOR REDUCING DISEASE BURDEN

- **Sami L. Gottlieb, MD, MSPH**
  - *Chlamydia: Magnitude of the Problem and Opportunities for Prevention*
- **Catherine L. Satterwhite, MSPH, MPH**
  - *Chlamydia Prevention Challenges and Strategies to Address Them*
- **Raul A. Romaguera, DMD, MPH**
  - *Addressing Health System Issues, Societal and Individual Challenges*
- **Gail Bolan, MD**
  - *Chlamydia Prevention at the State Level: The California Experience*
- **Gale R. Burstein, MD, MPH**
  - *CDC Partners Address Chlamydia Prevention*

CHLAMYDIA: MAGNITUDE OF THE PROBLEM AND OPPORTUNITIES FOR PREVENTION

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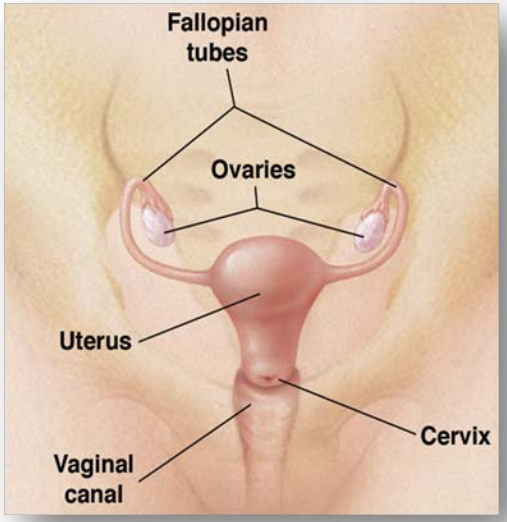
CHLAMYDIA: MAGNITUDE OF THE PROBLEM AND OPPORTUNITIES FOR PREVENTION

- **Clinical features of chlamydia and risk for adverse reproductive outcomes**
- **National burden and associated costs**
- **Chlamydia prevention interventions**

Chlamydia: Clinical Manifestations

- **Chlamydia: Sexually transmitted infection caused by the bacterium *Chlamydia trachomatis***
- **Vast majority asymptomatic**
- **Lower genital tract infection**
  - Cervicitis – discharge, cervical friability
  - Urethritis – dysuria, discharge
- **Can ascend to the upper genital tract**
  - Men – epididymitis
  - Women – pelvic inflammatory disease (PID)



Female genital tract

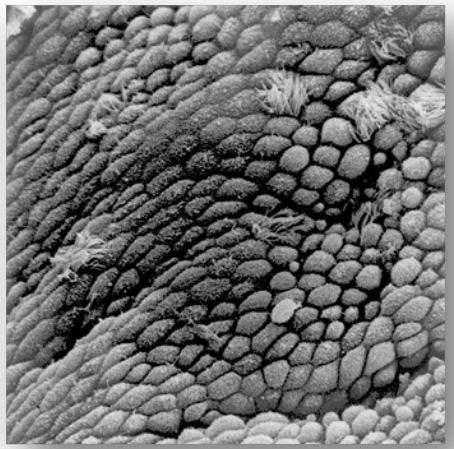
Pelvic Inflammatory Disease (PID)

- **Infection/inflammation of uterus, fallopian tubes, ovaries**
- **Clinical diagnosis imprecise: Lower abdominal pain AND uterine OR adnexal OR cervical motion tenderness**
- **Multiple etiologies**
  - *Chlamydia trachomatis*
  - *Neisseria gonorrhoeae*
  - Bacterial vaginosis
- **Symptoms can be mild; subclinical tubal infection and inflammation occur**

Long-term Reproductive Complications

- **Tubal inflammation can result in scarring, loss of function**
- **Long-term sequelae**
  - Tubal factor infertility
  - Ectopic pregnancy
  - Chronic pelvic pain
- **Tubal factor infertility: Inability to conceive due to fallopian tube damage**

Normal tubal tissue, 1200x

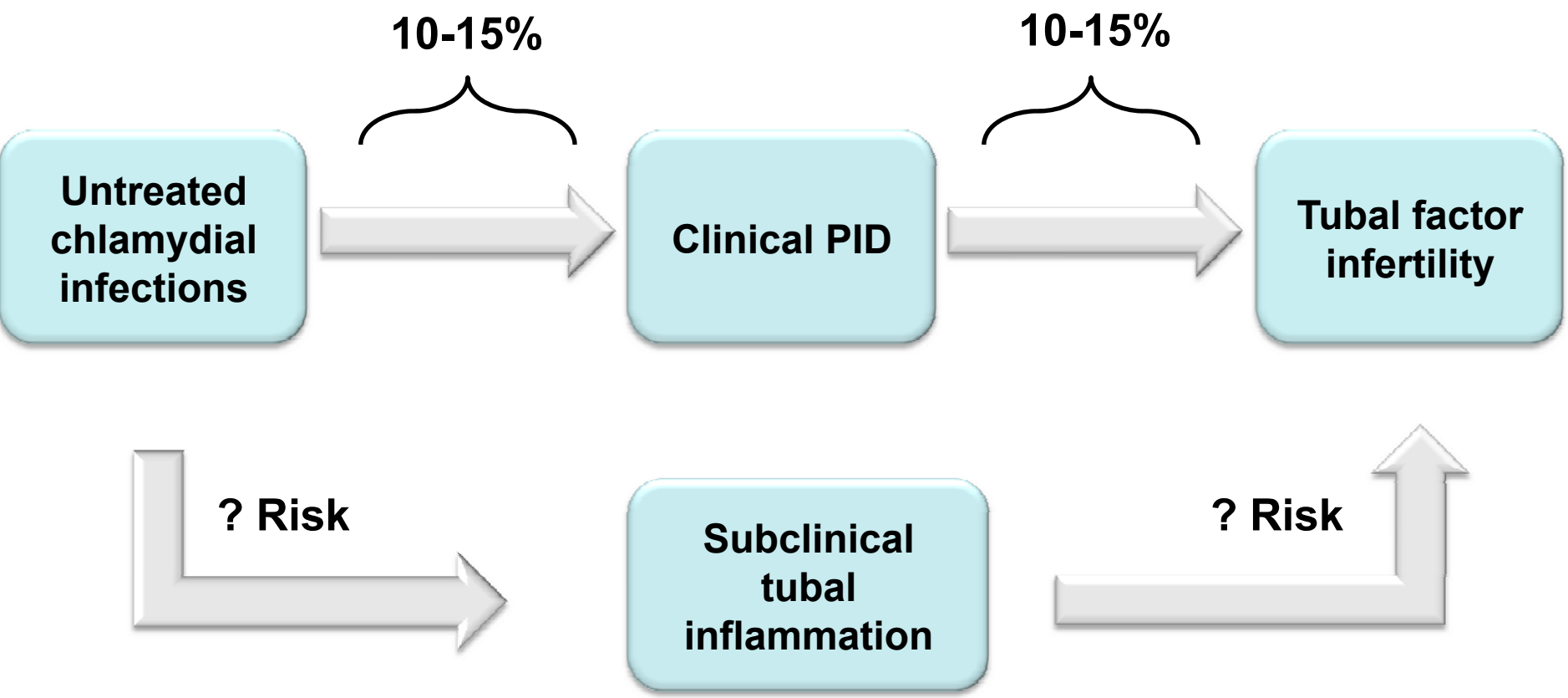


Post-PID, 1200x

Chlamydia is the leading preventable cause of tubal factor infertility

Scanning electron microscopy photos courtesy of Dorothy L. Patton, University of Washington, Seattle, WA

Risk for Sequelae in Women



Oakeshott et al, BMJ 2010
Weström et al, Sex Transm Dis 1992
Ness et al, Am J Obstet Gynecol 2002
Land et al, Hum Reprod Update 2010

Diagnosis and Treatment

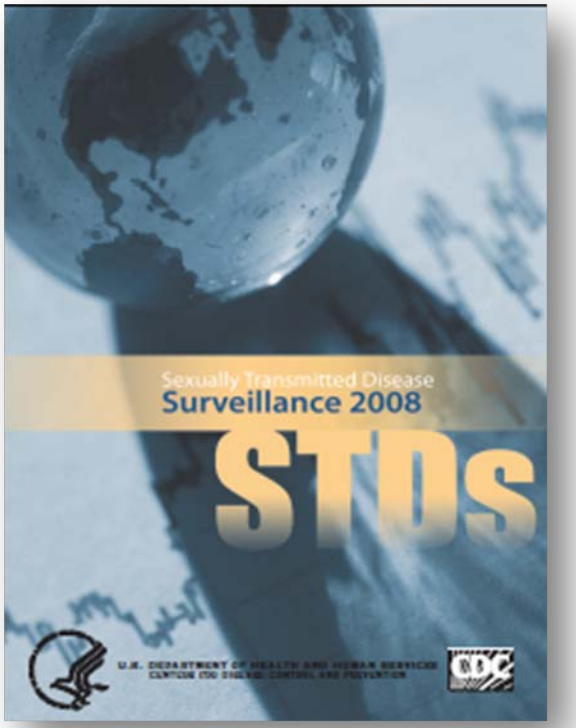
- **Diagnosis**
  - Nucleic acid amplification tests (NAATs)
    - Sensitivity ~96%, specificity >98%
    - Specimens: Urine; vaginal, cervical, and urethral swabs
- **Treatment**
  - Simple and efficacious: Single-dose oral azithromycin

CHLAMYDIA: MAGNITUDE OF THE PROBLEM AND OPPORTUNITIES FOR PREVENTION

- **Clinical features of chlamydia and risk for adverse reproductive outcomes**
- **National burden and associated costs**
- **Chlamydia prevention interventions**

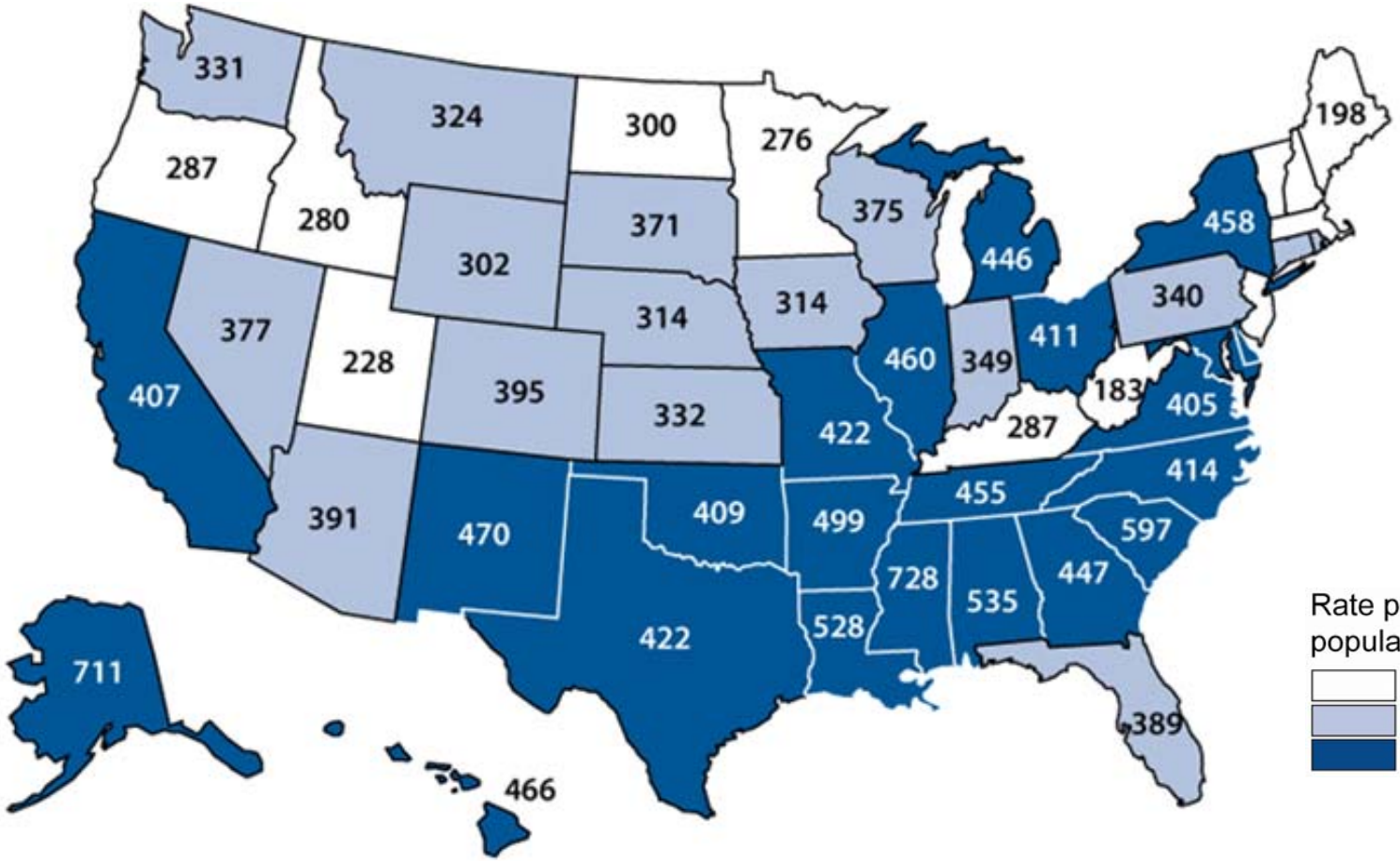
Burden of Chlamydial Infection

- **Most commonly reported nationally-notifiable disease**
  - Over 1.2 million cases reported in 2008
  - Many infections not detected
- **Estimated 2.8 million cases occur each year**
- **Direct medical costs: $678 million/year**



CDC *Sexually Transmitted Disease Surveillance, 2008*. Atlanta, GA: U.S. Department of Health and Human Services; November 2009
Weinstock H, Berman S, Cates W Jr. Perspect Sex Reprod Health 2004
Chesson HW, et al. Perspect Sex Reprod Health 2004

Chlamydia Case Report Rates by State, 2008



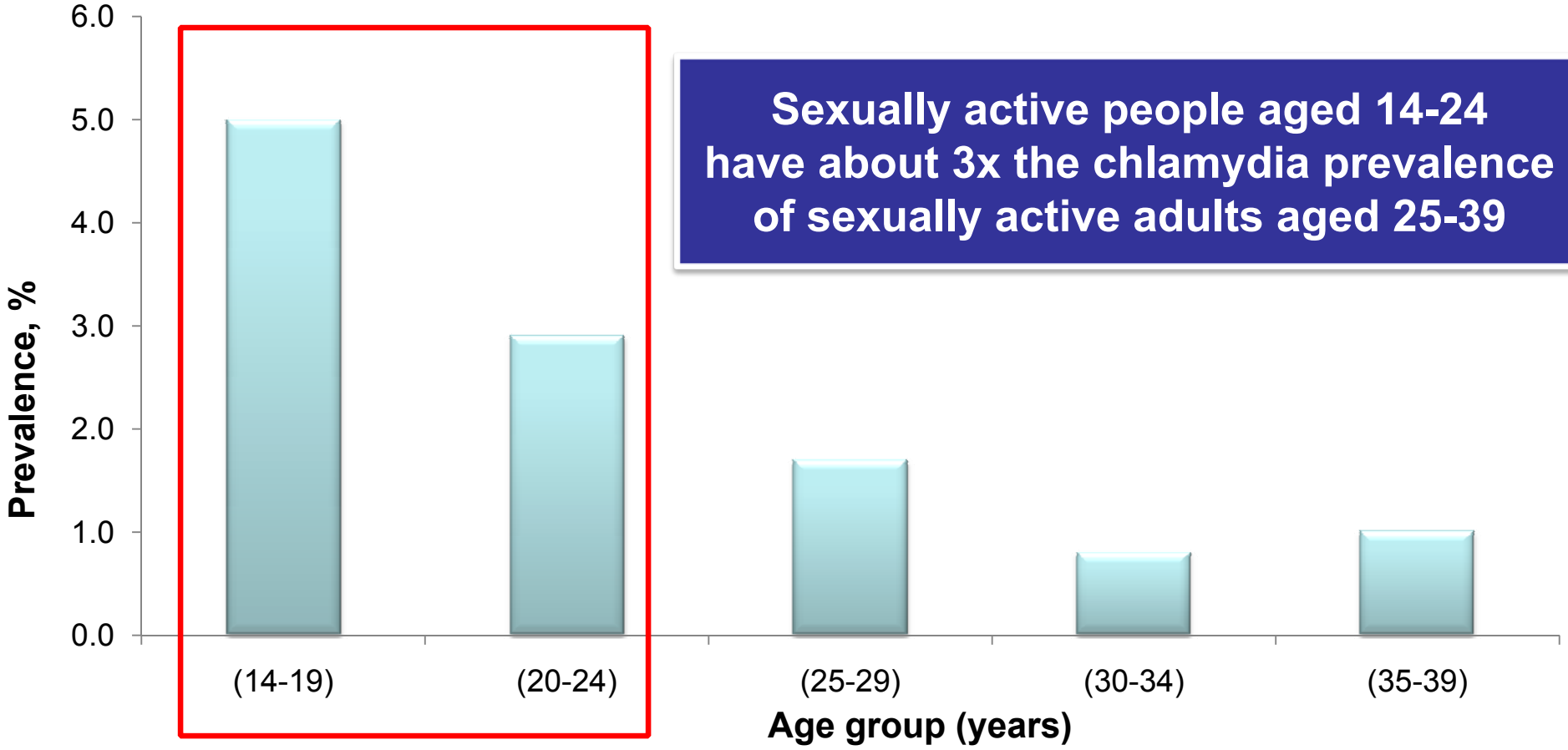
VT	192
NH	160
MA	271
RI	314
CT	357
NJ	258
DE	447
MD	439
DC	1177

Rate per 100,000 population

≤300.0	(n=12)
300.1 - 400.0	(n=16)
>400.0	(n=23)

CDC *Sexually Transmitted Disease Surveillance, 2008*. Atlanta, GA: U.S. Department of Health and Human Services; November 2009

Burden of Infection Highest Among Sexually Active Adolescents and Young Adults



Sexually active people aged 14-24 have about 3x the chlamydia prevalence of sexually active adults aged 25-39

NHANES, National Health and Nutrition Examination Survey, 1999-2008
Sexual activity ="yes" response to "Have you ever had sex?"
Sex = vaginal, anal, or oral sex

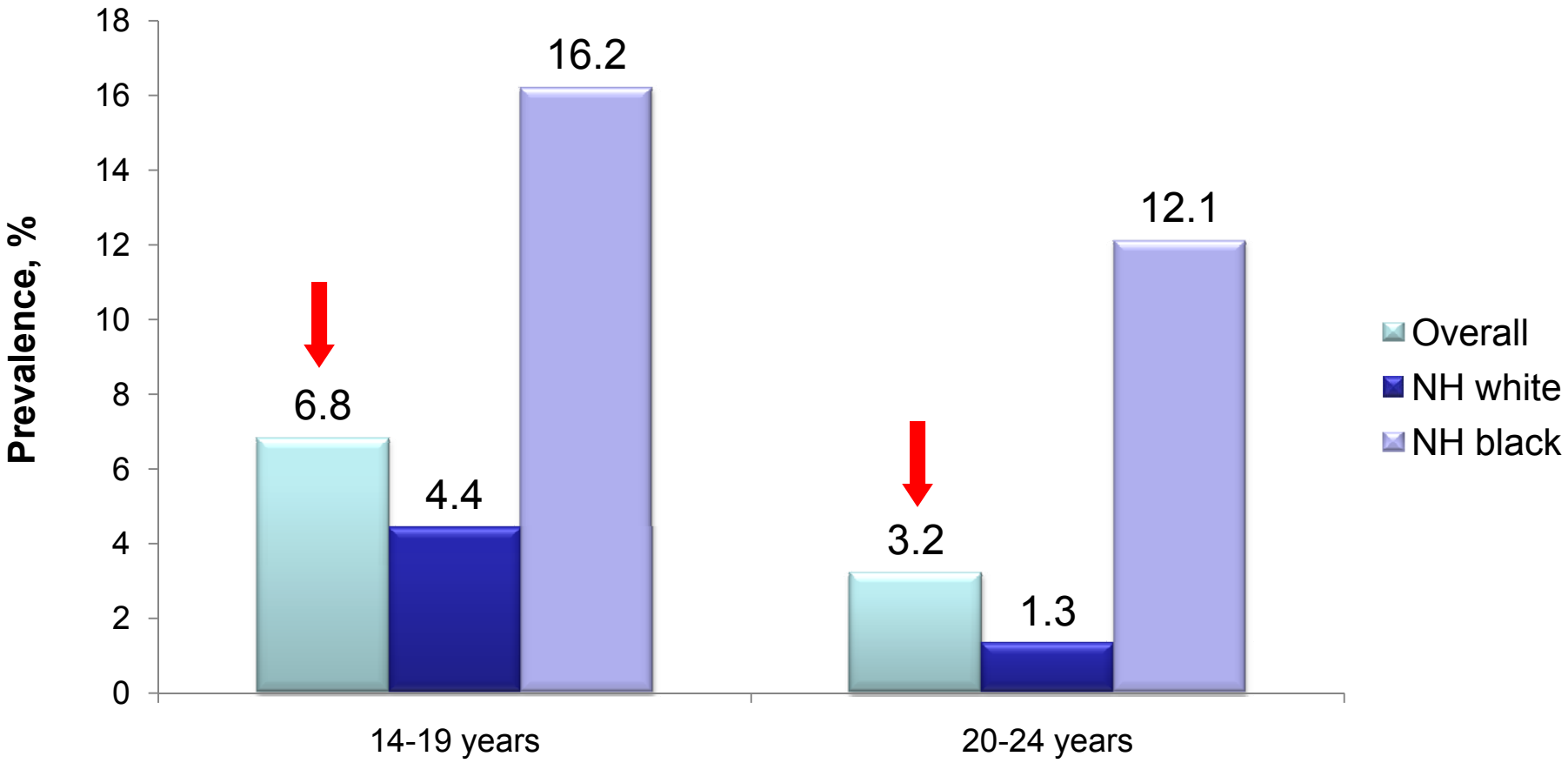
Large Racial Disparities In Chlamydial Infection

Non-Hispanic Blacks

Non-Hispanic Whites

NHANES, National Health and Nutrition Examination Survey, 1999-2008
Analysis of sexually active14-39 year-olds; Sexual activity =“yes” response to “Have you ever had sex?”
Sex = vaginal, anal, or oral sex

Chlamydia Prevalence in Sexually Active Females Aged 14-24 in the United States



NHANES, National Health and Nutrition Examination Survey, 1999-2008
Sexual activity ="yes" response to "Have you ever had sex?"
Sex = vaginal, anal, or oral sex

Burden of Chlamydia-Associated Sequelae: PID

- **Over 750,000 cases of PID occur each year**
- **Burden of chlamydia-related PID difficult to determine**
  - Diagnosis subjective, non-specific
  - Multiple causes
  - Proportion associated with chlamydia may vary
    - Older studies: ~1/3 of PID cases
    - May be higher now due to lower gonorrhea prevalence

Sutton et al, Sex Transm Dis 2005

Burden of Chlamydia-Associated Sequelae: Infertility

- **In 2002, 7.4% of married women aged 15-44 were infertile (failure to conceive ≥12 months)**
  - Almost 1 in 5 women aged 40-44 reported they had received a medical service for infertility
- **Proportion of infertility that is tubal factor varies by clinical setting**
  - Ranging from 10%-40%
  - Higher among blacks
- **Costs of infertility exceed $5 billion/year**

National Survey of Family Growth, 2002
Macaluso et al, Fertility and Sterility 2008

CHLAMYDIA: MAGNITUDE OF THE PROBLEM AND OPPORTUNITIES FOR PREVENTION

- Clinical features of chlamydia and risk for adverse reproductive outcomes
- National burden and associated costs
- Chlamydia prevention interventions

Rationale for Chlamydia Prevention Programs

- **High burden of chlamydia in young women**
- **Chlamydia is a major preventable cause of PID, infertility, and other adverse outcomes**
  - Associated with substantial costs
- **Chlamydia is easily diagnosed and treated**

Chlamydia Prevention Programs

- **Main goal: Reduce reproductive sequelae**
  - Treating infected women before infection progresses (secondary prevention)
  - Reducing transmission in the population (primary prevention)
- **Main intervention: Screening women for asymptomatic chlamydial infection**

Screening Women for Chlamydia: Current Recommendations

- **Recommendations by CDC, United States Preventive Services Task Force (USPSTF), medical associations**
  - Screen all sexually-active females aged <25 years annually
  - Screen women aged ≥25 years if at increased risk
- **USPSTF: A-rated recommended preventive service**

Population	Non-Pregnant Women			Pregnant Women		
	24 yrs & younger	25 yrs & older		24 yrs & younger	25 yrs & older	
	Includes adolescents	Not at increased risk	At increased risk	Includes adolescents	Not at increased risk	At increased risk
Recommendation	**A** Screen if Sexually Active	**C**	**A** Screen if Sexually Active	**B** Screen	**C**	**B** Screen

http://www.ahrq.gov/clinic/uspstf/uspschlm.htm

Screening Women for Chlamydia: Evidence

- **Three randomized controlled trials: Chlamydia screening can reduce incidence of PID**
  - Seattle HMO: Women with one-time screening had >50% reduction in PID at 1 year (RR 0.44, 95% CI 0.2-0.9)
- **Secondary prevention benefit to infected women**
  - In addition to potential role in primary prevention through reducing burden in population

Scholes et al, NEJM 1996
Østergaard et al, Clin Infect Dis 2000
Oakeshott et al, BMJ 2010

RR, Relative risk
CI, Confidence interval

Chlamydia Prevention Programs

- **Main goal: Reduce reproductive sequelae**
  - Treating infected women before infection progresses (secondary prevention)
  - Reducing transmission in the population (primary prevention)
- **Main intervention: Screening women for asymptomatic chlamydial infection**
- **Other prevention interventions**
  - Behavioral risk-reduction efforts
  - Finding and treating male sex partners
  - Screening women for repeat infection

Expedited Partner Therapy (EPT)

- **CDC and medical associations endorse expedited partner therapy (EPT)**
- **EPT: Providing prescriptions or medications to the patient to take to her partner**
  - Without examining partner first
- **Two RCTs: EPT useful in assuring partner treatment and reducing repeat infections**

Denver “partner pack”

Schillinger et al, Sex Transm Dis 2005
Golden et al, NEJM 2005
Photo courtesy of Dr. Cornelis A. Rietmeijer, Denver Public Health Department

Re-screening After a Chlamydial Infection

- **Recommendations from CDC**
  - Re-screen 3 months after initial infection
- **Rationale**
  - Repeat infection common: Peak reinfection rate 20% at 1 year
  - Repeat infections may be more harmful

Hosenfeld et al, Sex Transm Dis 2009

Opportunities for Prevention

- Large burden of chlamydia in the United States
- Major preventable cause of PID and infertility
- Evidence-based prevention interventions available

CHLAMYDIA PREVENTION CHALLENGES AND STRATEGIES TO ADDRESS THEM

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NCHHSTP

Screening Women for Chlamydia: Current Recommendations

- **Chlamydia screening recommended for sexually active females under 25 as an A-rated preventive service**
- **Ranked by National Commission on Prevention Priorities**
  - 1 of the 10 most beneficial and cost-effective USPSTF-recommended preventive services
  - Among most under-utilized (<50% women screened)

Priorities Among Effective Clinical Preventive Services

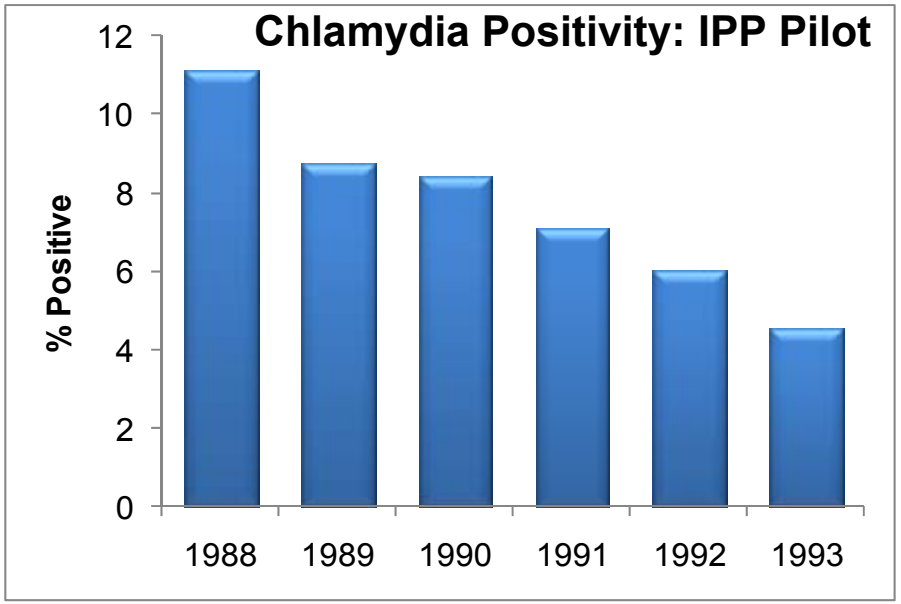
Results of a Systematic Review and Analysis

Michael V. Maciosek, PhD, Ashley B. Coffield, MPA, Nichol M. Edwards, MS, Thomas J. Flottemesch, PhD, Michael J. Goodman, PhD, Leif I. Solberg, MD

USPSTF, U.S. Preventative Services Task Force
Maciosek et al, Am J Prev Med 2006

History of Chlamydia Screening: The Infertility Prevention Project (IPP)

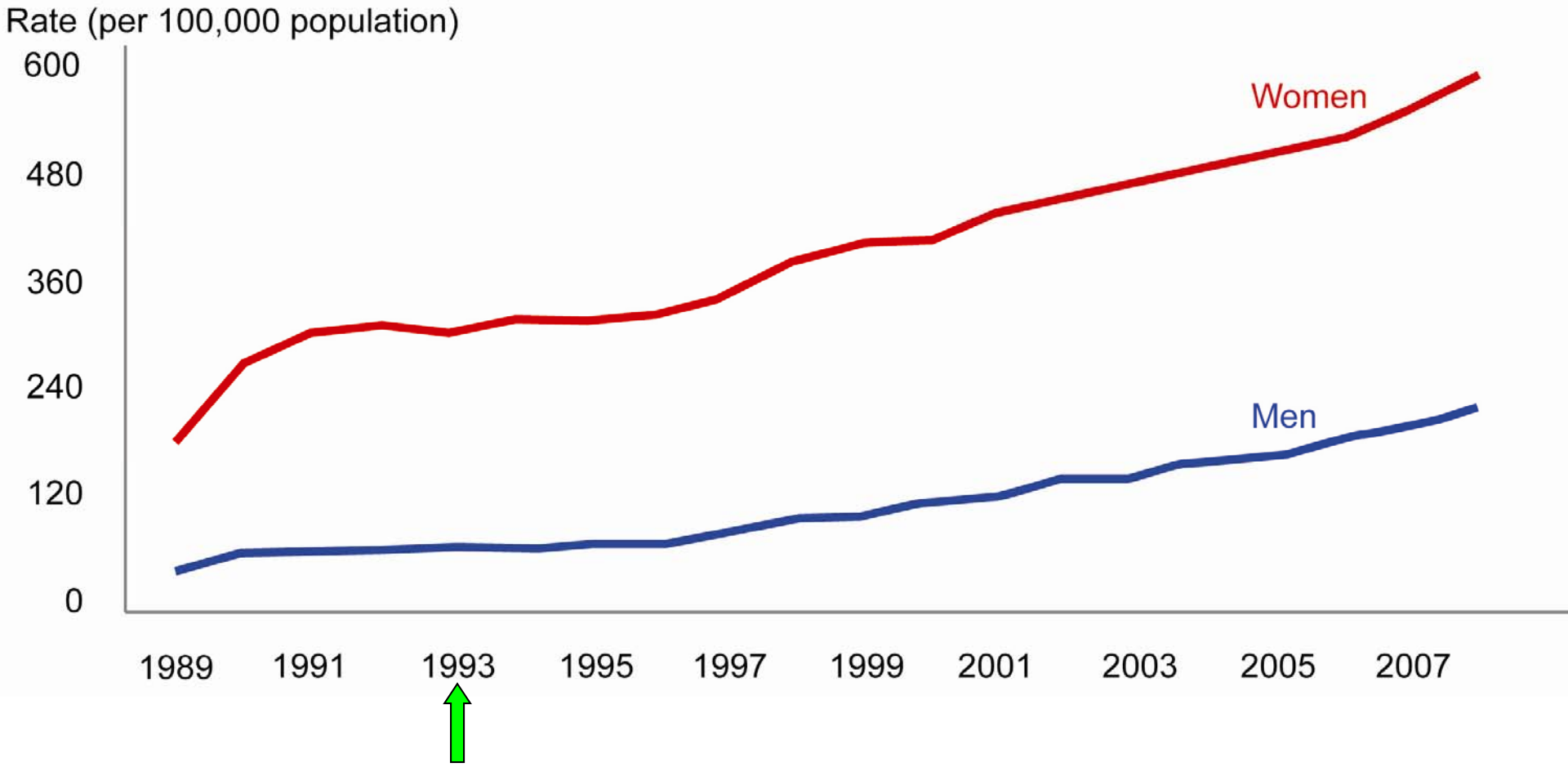
- **Pilot in 1988: Detect and treat chlamydia and gonorrhea infections among young women to prevent infertility**
- **Screening recommendations in 1993**
- **Nationally implemented by 1995**
  - Congressionally mandated
  - Publicly-funded family planning clinics
  - >3.5 million test results reported annually



CHLAMYDIA PREVENTION CHALLENGES AND STRATEGIES TO ADDRESS THEM

- **How successful are programs?**
  - Evaluate impact: Trends in chlamydia burden and adverse outcomes
  - Evaluate implementation: Chlamydia screening coverage
- **Next steps: Areas for program improvement**

Chlamydia Case Rates: United States, 1989–2008



Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance, 2008. Atlanta, GA: U.S. Department of Health and Human Services; November 2009

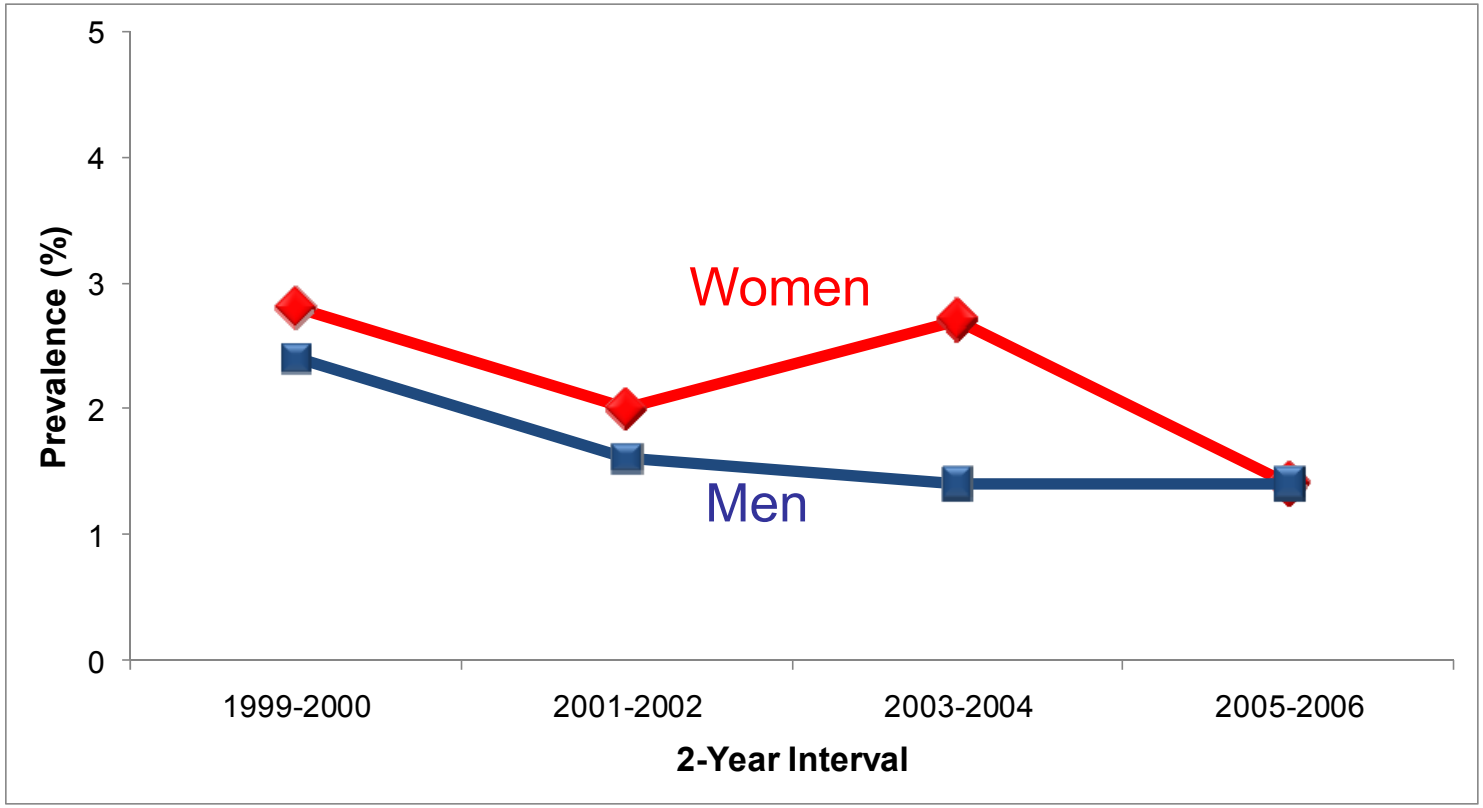
Assessing Chlamydia Trends: Which Data Should Be Used?

- **Case report data currently problematic for trends**
- **Reported chlamydia cases expected to increase as more cases are detected**
  - Positive measure of program impact

Must rely on other data sources to assess national chlamydia trends

Other Sources for Chlamydia Prevalence Data

- **National Health and Nutrition Examination Survey (NHANES): Chlamydia Prevalence by Sex*, 1999-2006**



Datta et al. Presented at4 8th Annual ICAAC/IDSA 46th Annual Meeting, Washington, D.C., 10/25-28/2008.
*Ages 14-39 years

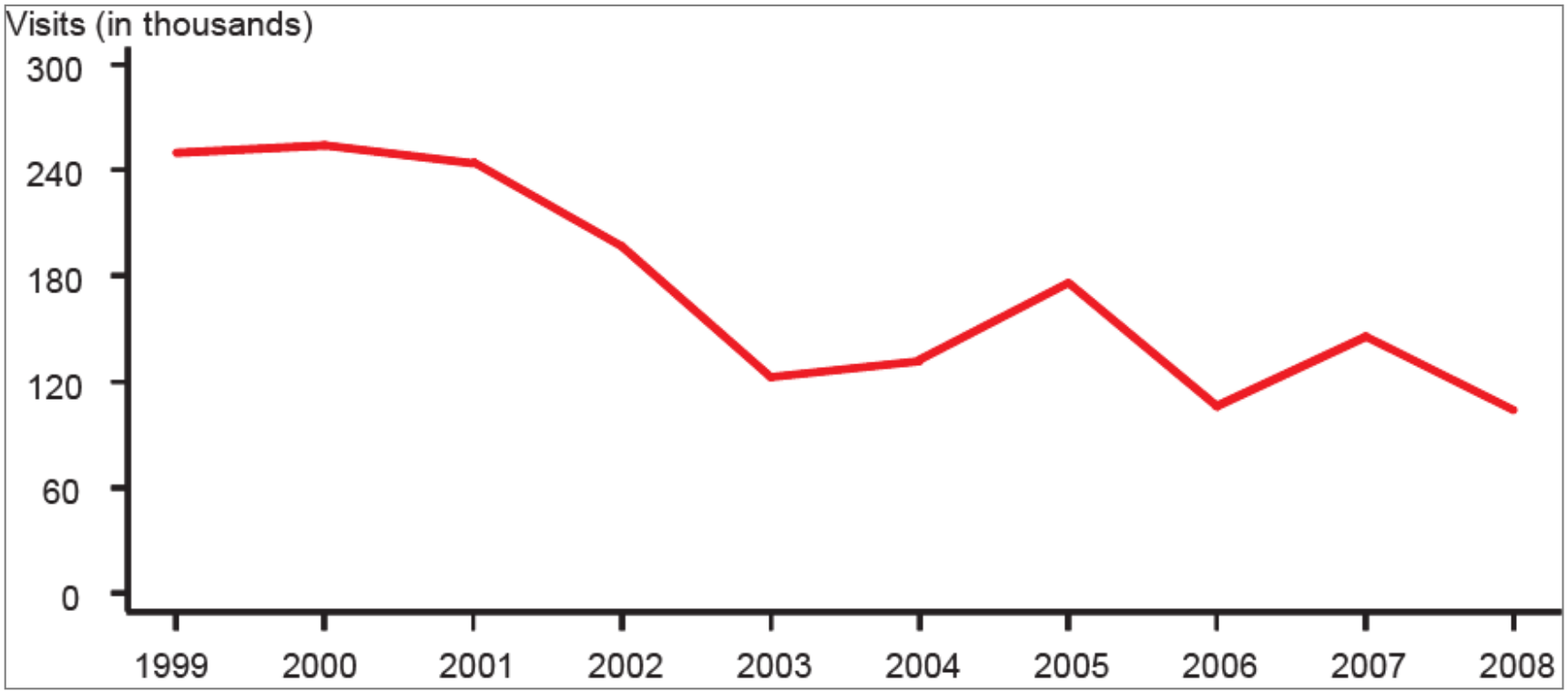
Other Sources for Chlamydia Prevalence Data

- **National Job Training Program**
  - High-risk women and men, aged 16-24 years
  - Screened for chlamydia at program entrance
  - Prevalence decreased, 2003-2007
    - Women: 19% decrease
    - Men: 8% decrease
- **Infertility Prevention Project (IPP)**
  - Women tested in family planning clinics, aged 15-24 years
  - No change in positivity rates, 2003-2007

Chlamydia prevalence stable or decreasing, NOT increasing

NJTP Source: Satterwhite et al. Sex Transm Dis 2010;37(2):63-37
IPP Source: Satterwhite et al, unpublished data

PID: Initial Visits to Physicians' Offices by Women Aged 15-44 Years: United States, 1999–2008



IMS Health, Integrated Promotional Services, IMS Health Report, 1966-2008 Hardcopy
National Disease and Therapeutic Index (NDTI)
Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance, 2008. Atlanta, GA: U.S. Department of Health and Human Services; November 2009

Assessing Adverse Outcomes: Do We Have the Appropriate Data?

- **PID**
  - No national trend data on chlamydia-associated PID
  - PID diagnosis subjective, insensitive, non-specific
- **Infertility**
  - No data on chlamydia-associated infertility
  - Limited trend data on overall infertility
- **Ecologic comparisons**
  - PID and infertility have multiple causes

No chlamydia-specific data available to monitor adverse outcomes

Strategies to Improve Measurement of Trends in Chlamydia Burden and Adverse Outcomes

Strategies to Improve Measurement of Trends in Chlamydia Burden and Adverse Outcomes

- **Monitoring pregnant women to minimize impact of health care seeking behaviors**
- **Engaging with CMS to pilot implementation of Medicaid Sentinel System**
- **Collaborating with non-traditional partners (e.g., HMOs) to develop improved methodologies to measure trends**
- **Developing national action plan for prevention, detection, and management of infertility**
  - Emphasis on improving infertility surveillance

How Successful Are Chlamydia Prevention Programs in Reducing Disease Burden?

- **Chlamydia prevalence stable or decreasing**
- **Data suggest decreases in PID**
- **Are high-risk populations being impacted?**
  - Chlamydia prevalence extremely high in young, black women

Current chlamydia prevention programs are having some impact, but not enough

CHLAMYDIA PREVENTION CHALLENGES AND STRATEGIES TO ADDRESS THEM

- **How successful are programs?**
  - Evaluating impact: Trends in chlamydia burden and adverse outcomes
  - Evaluating implementation: Chlamydia screening coverage
- **Next steps: Areas for program improvement**

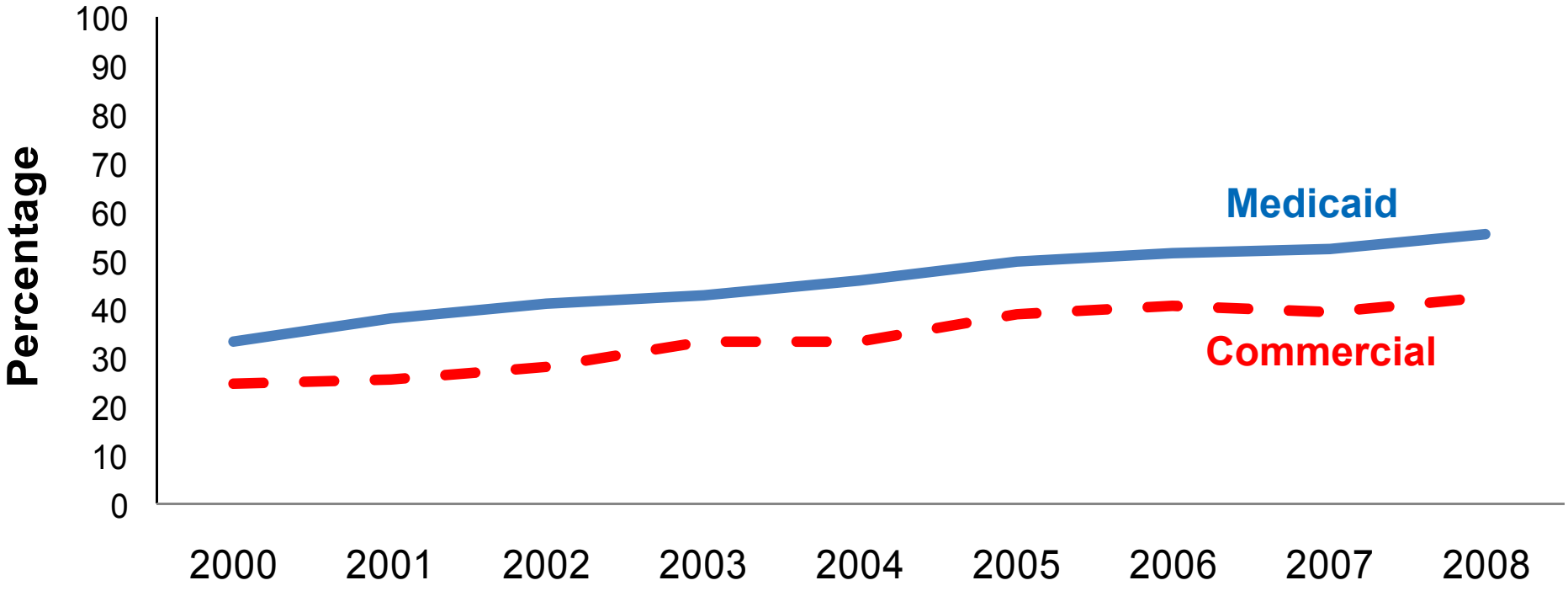
Program Implementation: Chlamydia Screening Coverage

- **Healthcare Effectiveness Data and Information Set (HEDIS)**
  - Performance measurements to assess quality of care in managed care organizations (MCOs)
  - 90% of MCOs report on HEDIS measures
  - Chlamydia screening measure implemented in 2000
    - Proportion of eligible women tested within calendar year

http://www.ncqa.org/Portals/0/Newsroom/SOHC/SOHC_2009.pdf

Chlamydia Screening Coverage

Percentage of Enrolled, Eligible Women Aged 16-24* Years Screened for Chlamydia, by Health Plan Type, HEDIS, 2000-2008



*16-26 years during 2000-2002, 16-25 years during 2003-2007
MMWR, April 17, 2009/58(14);362-365

Chlamydia Screening Coverage: Measurement Challenges

- **Coverage among health care seeking population**
  - Population-based screening coverage
  - Addressing the challenge: develop approaches to estimate community levels of screening coverage
    - Critical for future intervention strategy research
    - Use existing data sources: reproducibility
- **Frequency of screening**
  - Annual screening recommended
  - Data suggest very few women screened annually
- **Defining denominator: Determination of sexual activity**

How Successful Are Chlamydia Prevention Programs in Implementing Interventions?

- **Screening coverage among health care seeking population is low, but improving**
- **No national data available to evaluate other interventions**
  - Partner treatment
  - Rescreening

CHLAMYDIA PREVENTION CHALLENGES AND STRATEGIES TO ADDRESS THEM

- **How successful are programs?**
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  - Evaluating implementation: Chlamydia screening coverage
- **Next steps: Areas for program improvement**

What is the Best Strategy for Reducing Disease Burden?

- **Increasing screening coverage?**
  - Broadly
  - Targeted screening (e.g., venue-based)
- **Increase use of other interventions?**
- **Combined approach?**
  - How to allocate resources?

What About Men?

- **Limited resources**
- **Screening men**
  - No substantial secondary prevention
  - Men difficult to reach due to limited health care seeking
- **Highest risk: Partners of chlamydia-infected females**

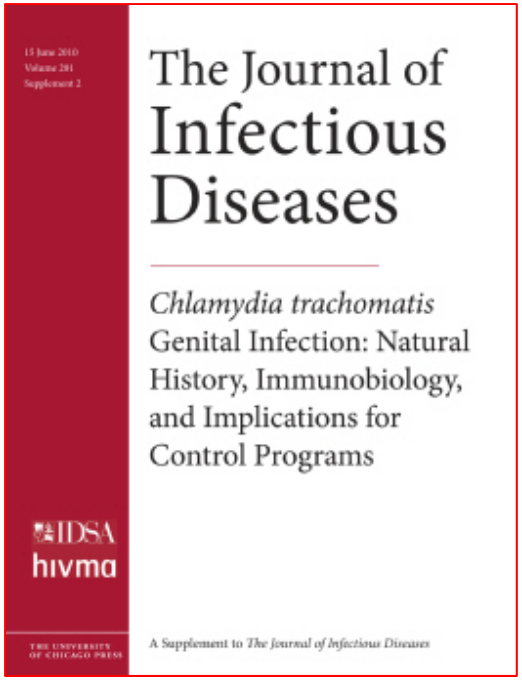
Determining the Best Strategy for Chlamydia Prevention

- **Mathematical modeling**
  - Combination of intervention strategies may be most effective
  - Increase routine screening of young, sexually-active women and increase partner notification and treatment efforts
  - Male screening: Limited impact on prevalence among women
- **Partner treatment interrupts transmission**
  - Reduction in repeat infections

Partner treatment is an essential component of chlamydia prevention

Chlamydia Prevention Programs: Next Steps

- **Expansion of intervention strategies**
- **Improving measurement of impact and implementation**
- **Research to determine optimal program structure**
  - Mathematical modeling
  - Chlamydia natural history
    - Chlamydia Immunology and Control Expert Advisory Meeting (April 2008)
    - Special JID issue (June 2010)
- **Practice-based evidence**
  - Community-level assessments



2010; 201(Suppl 2)

ADDRESSING HEALTH SYSTEM ISSUES, SOCIETAL, AND INDIVIDUAL CHALLENGES

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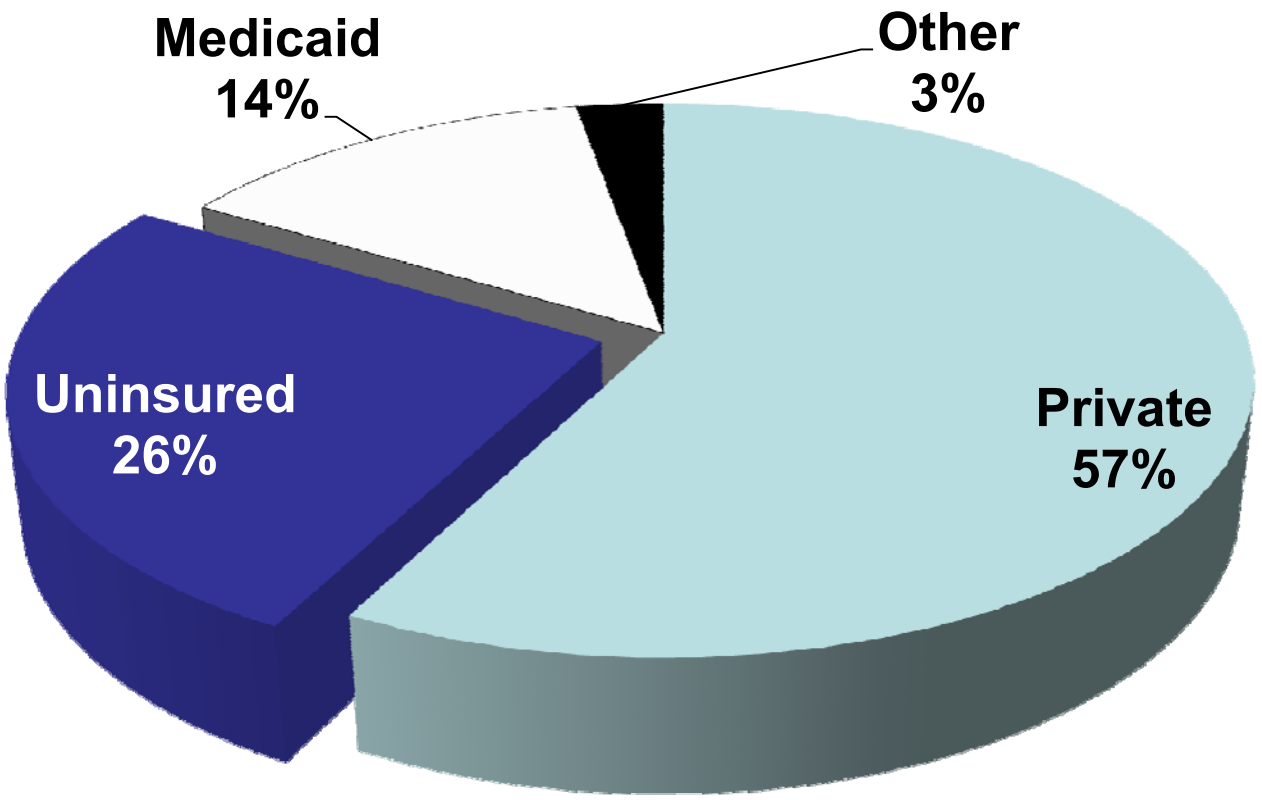
NCHHSTP

Health Insurance Status of Women Aged 20-29 Years, 2008



CDC, NCHS Data Brief, No 29, February 2010

Health Systems Issues:
Factors that Limit Access to Chlamydia Screening

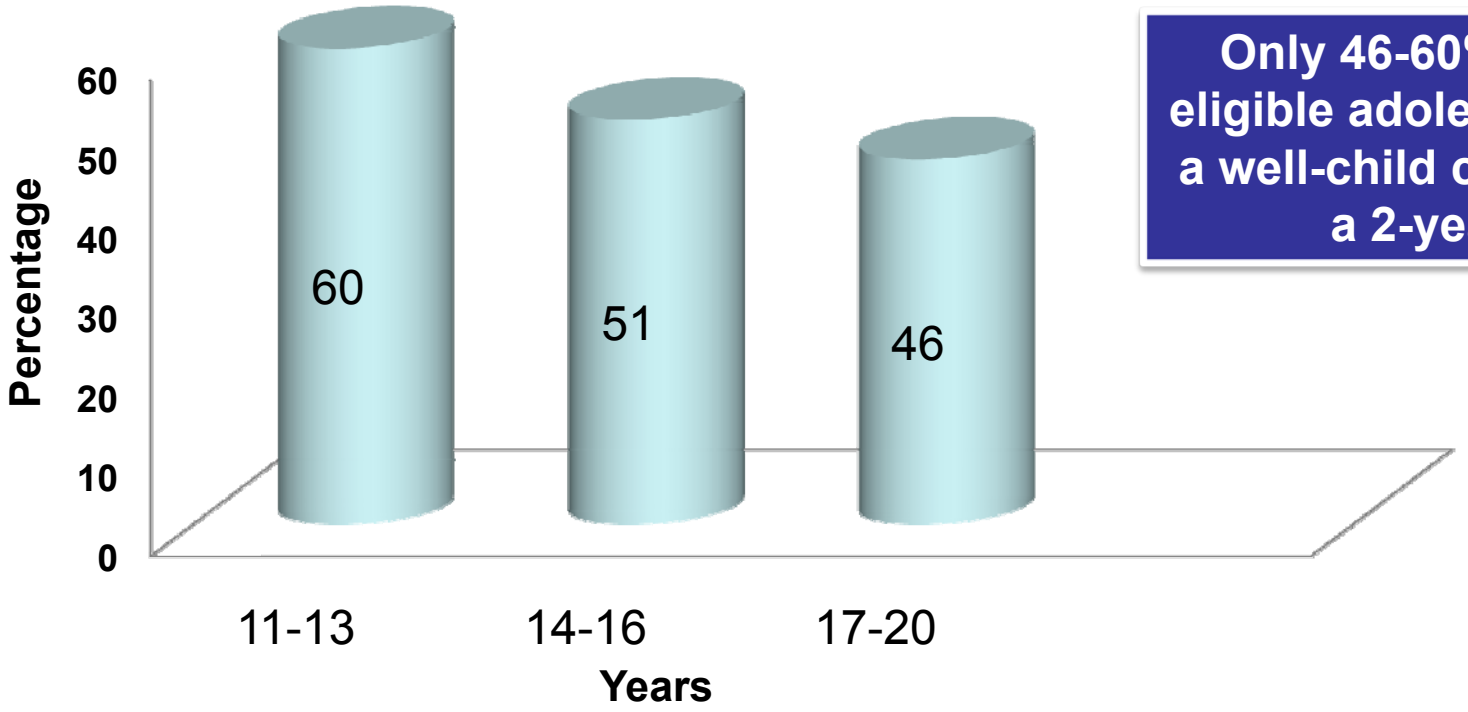
- **Availability of providers**
  - Providers' willingness to screen
- **Insurance payment for clinical preventive services**
  - Insurance coverage/adequate reimbursement
  - Medicaid not required to cover preventive services for persons ≥21 years
    - Unless pregnant or covered by Medicaid family planning waiver
- **Patient utilization**
  - High co-pays and deductibles
  - Access to confidential adolescent health services

Health System Issues: Adolescent Healthcare Visits

- **More preventive services recommended for adolescents than any other age group**
- **Evidence not available for many clinical preventive services recommended for adolescents**
- **Novel service delivery models are needed**
  - Based on scientific evidence and comparative effectiveness research
  - Taking into consideration productivity issues and patient flow

Health System Issues: Adolescents Have Few Preventive Care Visits

Adolescents in Medicaid Receiving a Well-child Check Up During a 2-year Period by Age



Only 46-60% of Medicaid eligible adolescents received a well-child check-up during a 2-year period

GAO Report, Medicaid Preventive Services, August 2009

Other Health System Issues: Study of High and Low Performing Plans

- Deductibles and co-pays are still a main barrier
- What the plans do to influence provider behaviors may not be as important as what becomes standard of practice in the community

Increasing public awareness and demand may be better strategy to influence provider behaviors

- Employers' interest in covering chlamydia screening must be increased

Improving Chlamydia Screening, NCQA 2007

Societal Challenges:
Providers' Knowledge, Attitudes, and Screening Practices

- **Primary care physicians: Limited knowledge about STDs**
  - Only 6/10 answered correctly 75% or more of questions representing common STD scenarios
- **General practitioners' reasons for low screening**
  - Lack of information about disease rates in their community
  - Belief that their patients are not at risk
  - Cannot offer confidential services to adolescents
  - Believe chlamydia is not an urgent medical condition; easily treated

Wiesenfeld et al, Sexually Transm Dis 2005

Opportunities Offered by the Patient Protection and Affordable Care Act of 2010

- Increases access to health insurance
- Improves access to clinical preventive services
- Creates incentives to increase utilization of electronic health records
- Increases emphasis on quality of care

Societal Challenges: Stigma

- **Individual: Shame, fear**
  - Stigma about STDs may influence patients' disclosure of sexual behaviors to healthcare providers
- **Social: People are judged or condemned**
- **Political: Lack of support by politicians and the general public**

Challenges at the Individual Level

- **Limited knowledge about the causes of infertility in women**
  - Among 12-17 year olds from low-income African-American neighborhood, 58% thought that they had no control over fertility problems
- **Low perception of risk among adolescent females**

Trent et al, J Adolescent Health 2006
Ethier et al, Sexually Transm Infect 2003

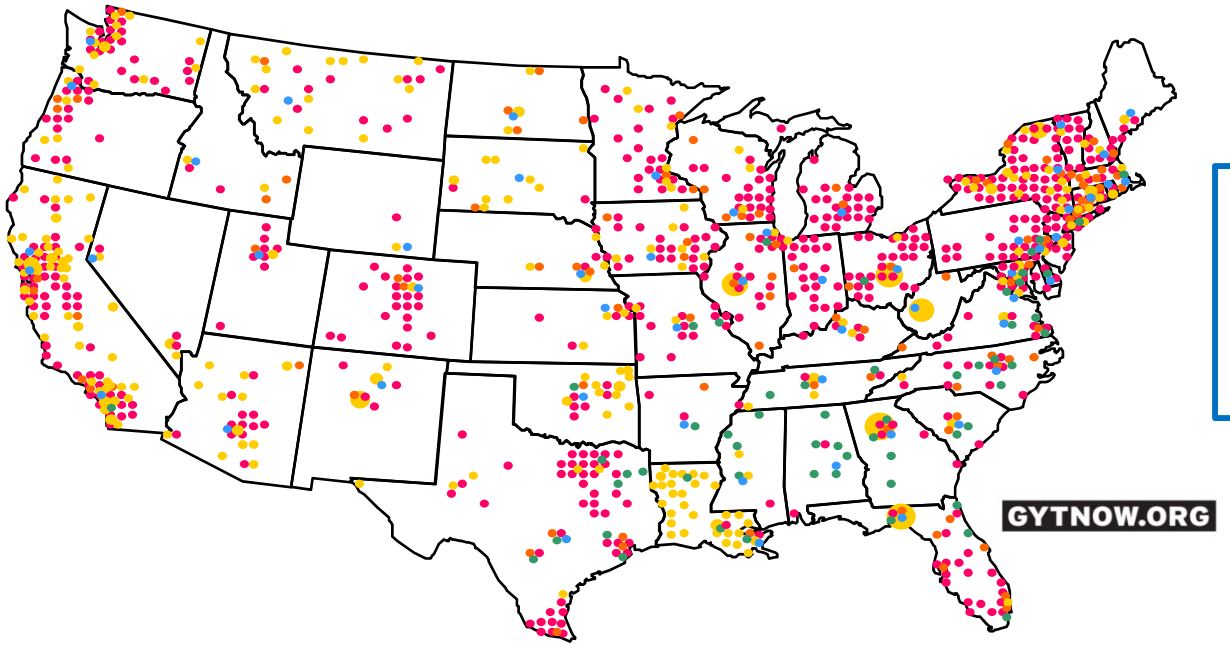
Addressing Challenges at the Individual Level:
Partnering with the Media: Get Yourself Tested

- **Partners**
  - CDC, MTV, the Kaiser Family Foundation, and Planned Parenthood
- **The goal**
  - Increase awareness and normalize conversations about STD prevention and sexual health among adolescents and young adults

- **Components**
  - Public service announcements,
  - Videos & “How To” segments for mobile phones
  - Website with digital toolkits, posters, banners, logos, and postcards
  - Tips on ways to generate a conversation about STD testing with health care providers and with sex partners

MTV, Music Television

Community Outreach



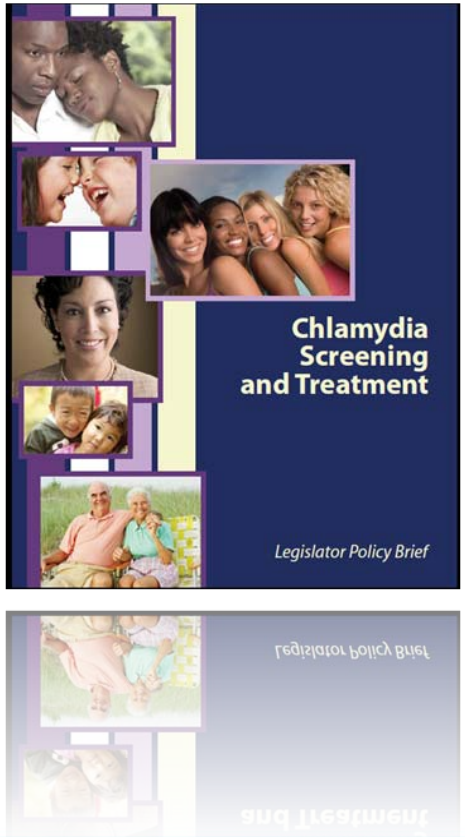
4,000 GYT kits distributed to clinics, health centers, community organizations, and others

- **National Coalition of STD Directors (65 full members)**
- **CDC Partners (2,600+ kits distributed through 330+ health clinics)**
- **Planned Parenthood (840+ health centers)**
- **American College Health Association (115+ health centers)**
- **mtvU (140+ schools)**

Map includes partners in the contiguous United States
Additional partners in Alaska, Hawaii, and U.S. territories not shown

Collaboration with the Council of State Governments

- **Legislator Policy Brief on Chlamydia Screening and Treatment**
  - EPT: Prescribe antibiotics to partners
  - Expand screening to women receiving a pregnancy test
  - Require health insurance coverage of chlamydia screening



Healthy States, Council of State Governments
http://www.healthystates.csg.org/NR/rdonlyres/62DCD744-4CD2-406B-8540-08C690F2493B/0/chlamydia.pdf

Collaboration with Other National Organizations

National Committee of Quality Assurance

- Assess chlamydia screening coverage
- Develop CT screening measure for accreditation of plans

National Association of Community Health Centers

- Normalize chlamydia screening
- Improve collaboration between centers and departments

Office of Population Affairs and Title X Regional Family Planning Training Centers

- Implement Infertility Prevention Project & provider training

National Chlamydia Coalition (>40 national organizations)

- Address high burden of chlamydial infections in adolescents
- Develop tools and resources for various audiences

http://www.ncqa.org
http://www.hhs.gov/opa
http://www.nachc.org
http://ncc.prevent.org/index.html

CHLAMYDIA PREVENTION AT THE STATE LEVEL: THE CALIFORNIA EXPERIENCE

Gail Bolan, MD
Chief, STD Control Branch
California Department of Public Health

CHLAMYDIA PREVENTION AT THE STATE LEVEL: THE CALIFORNIA EXPERIENCE

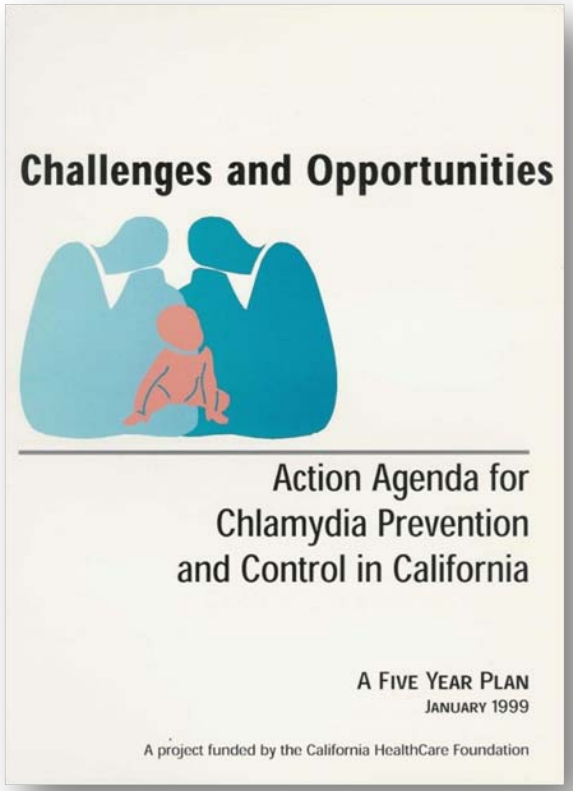
- **In 1997, chlamydia was the most common communicable disease reported**
  - Over 75% of cases were seen in the private sector
- **Public and private providers were interested in developing a chlamydia prevention plan**
- **In 1998, the California Chlamydia Action Coalition was formed and a plan was developed**
  - Successes
  - Remaining challenges and opportunities

California Chlamydia Action Coalition (1998)

- **State-wide public-private partnership funded by the California HealthCare Foundation**
  - State and local health departments
  - Health care organizations
  - Private providers and professional medical societies
  - Family planning, school-based, and correctional programs
  - Women's health and community-based organizations
  - Laboratories and university researchers
  - Diagnostic and pharmaceutical companies
  - Policymakers and the public

California Chlamydia Action Coalition

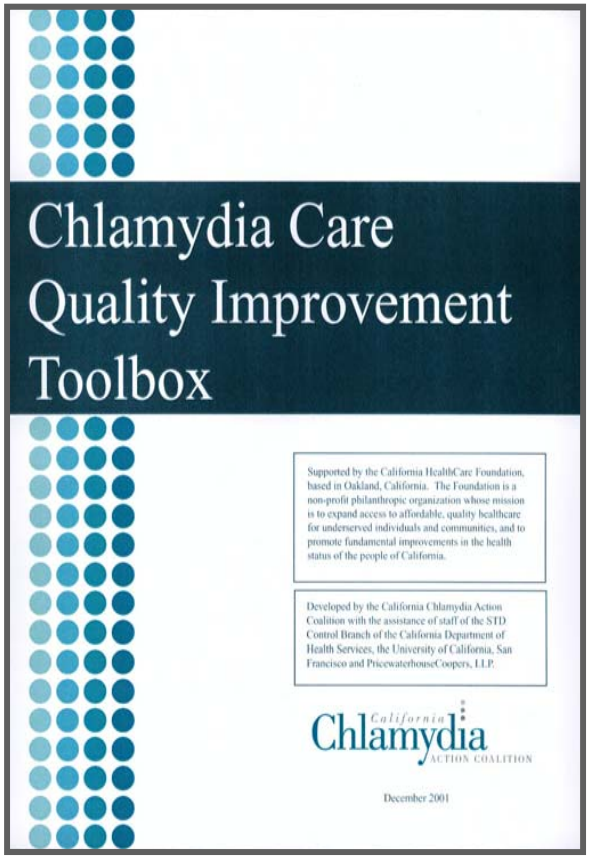
California Chlamydia Prevention Program Framework (1999)



- **Strategic goals**
  - Increase access to screening
  - Increase partner treatment
  - Promote awareness
  - Enhance health information systems

Chlamydia Care Quality Improvement Toolbox (2001)

- **For health plans, medical groups and provider organizations to**
  - Educate physicians and patients about chlamydia screening, diagnosis, treatment, and public health laws
  - Provide practice guidelines to promote compliance with chlamydia screening and treatment

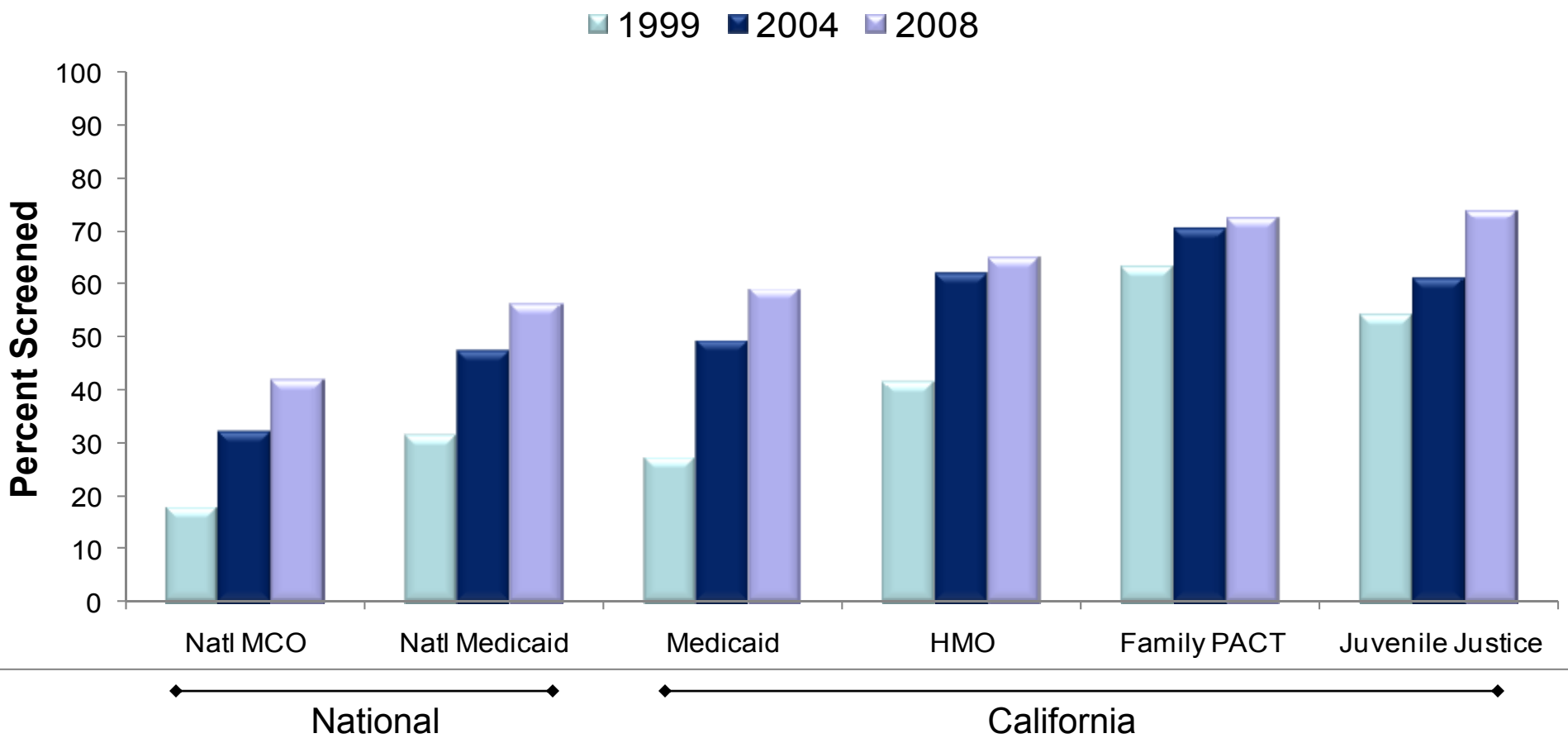


California Chlamydia Prevention Program Successes

- **Increase access to screening**
  - ✓ Increased screening rates and NAATs utilization
- **Increase partner treatment**
  - ✓ First state to legalize EPT in 2001
- **Promote awareness**
  - ✓ Increased public awareness
- **Enhance health information systems**

Estimated Chlamydia Screening Coverage (HEDIS)

Females 16–25 Years Old , United States and California, 1999–2008



National Committee on Quality Assurance; California DHCS Division of Medi-Cal Managed Care; Kaiser Permanente Northern CA; California DPH Office of Family Planning and STD Control Branch
Family Planning, Access, Care, and Treatment

Family PACT Laboratory Services FY 07/08

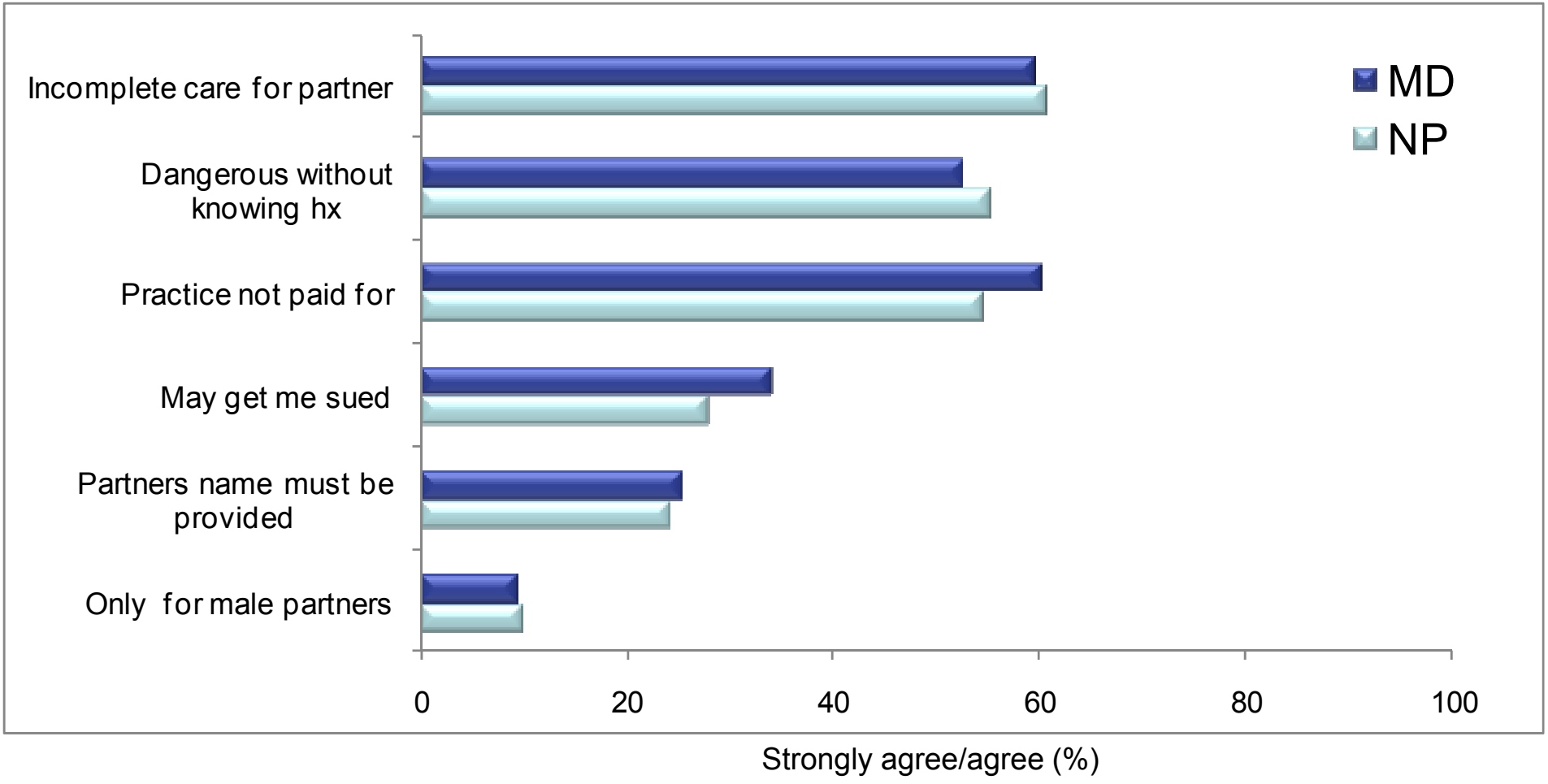
Test Type	Test Volume	Reimbursement	% of Total Reimbursement
STD Tests	3,025,235	$87,329,853	**74.0**
Chlamydia	**1,063,700**	**$40,074,801**	**34.0**
Gonorrhea	1,043,638	$38,280,447	32.4
Syphilis	423,576	$1,960,803	4.5
Other STDs	494,321	$1,670,748	3.1
Pap Tests	1,340,533	$18,167,989	**15.4**
Pregnancy Tests	848,977	$3,689,850	**3.1**
Other Lab Services	N/A	$8,837,655	7.5
Total		$118,025,346	100.0

Family PACT Claims Data in Annual Report, http://www.familypact.org/en/Research/reports.aspx

Partner Treatment

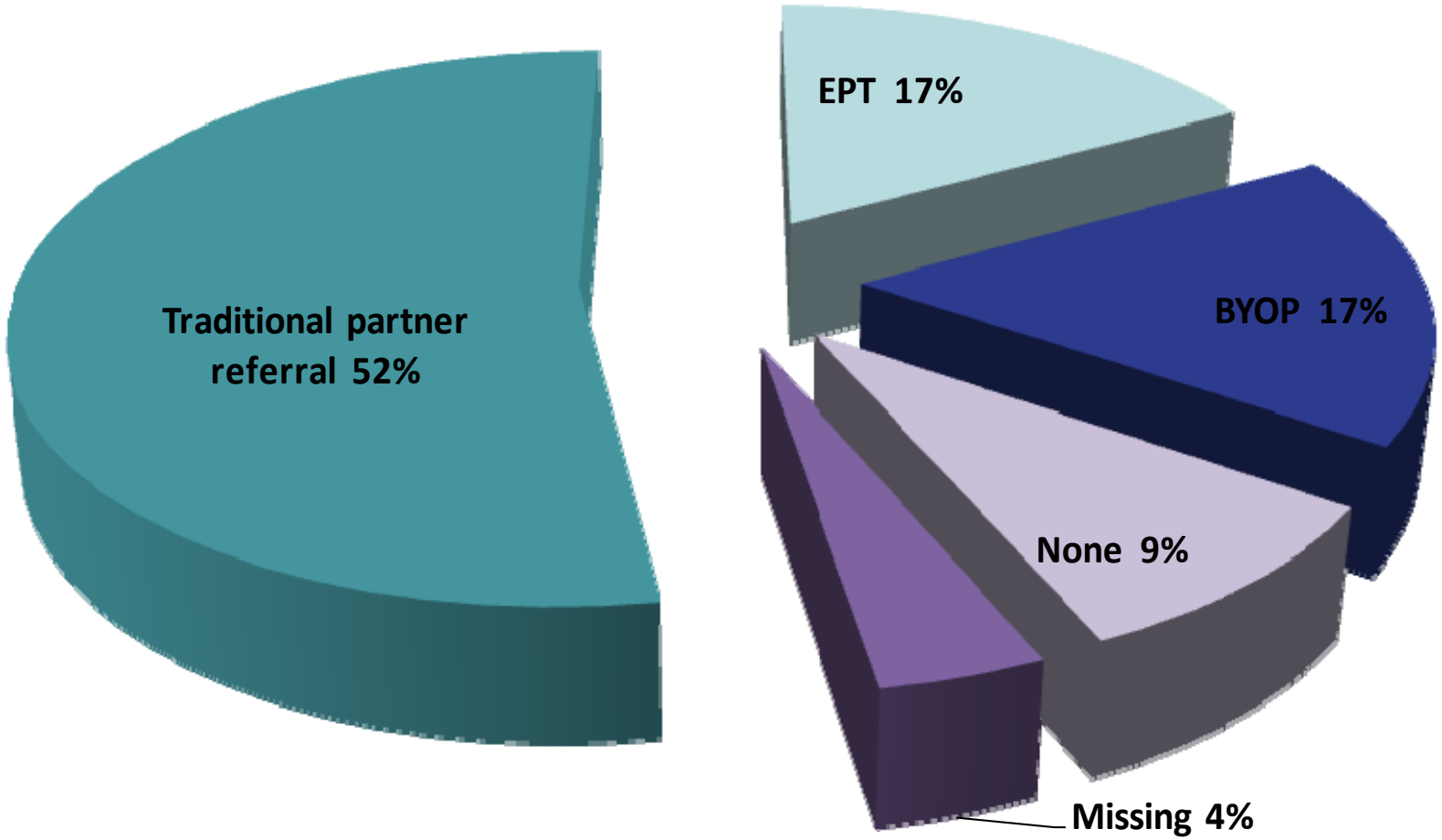
- **Expedited partner therapy (EPT) was allowable in 2001**
  - Sponsored by health care organizations who had no mechanisms to easily treat partners outside of the health plan
  - Set forth exceptions to the laws that require examination before prescribing
- **Prior to 2001, traditional partner referral was used**
  - Health department follow-up of partners was rare because of low staffing levels and large number of cases

Provider Barriers to EPT, CA 2002



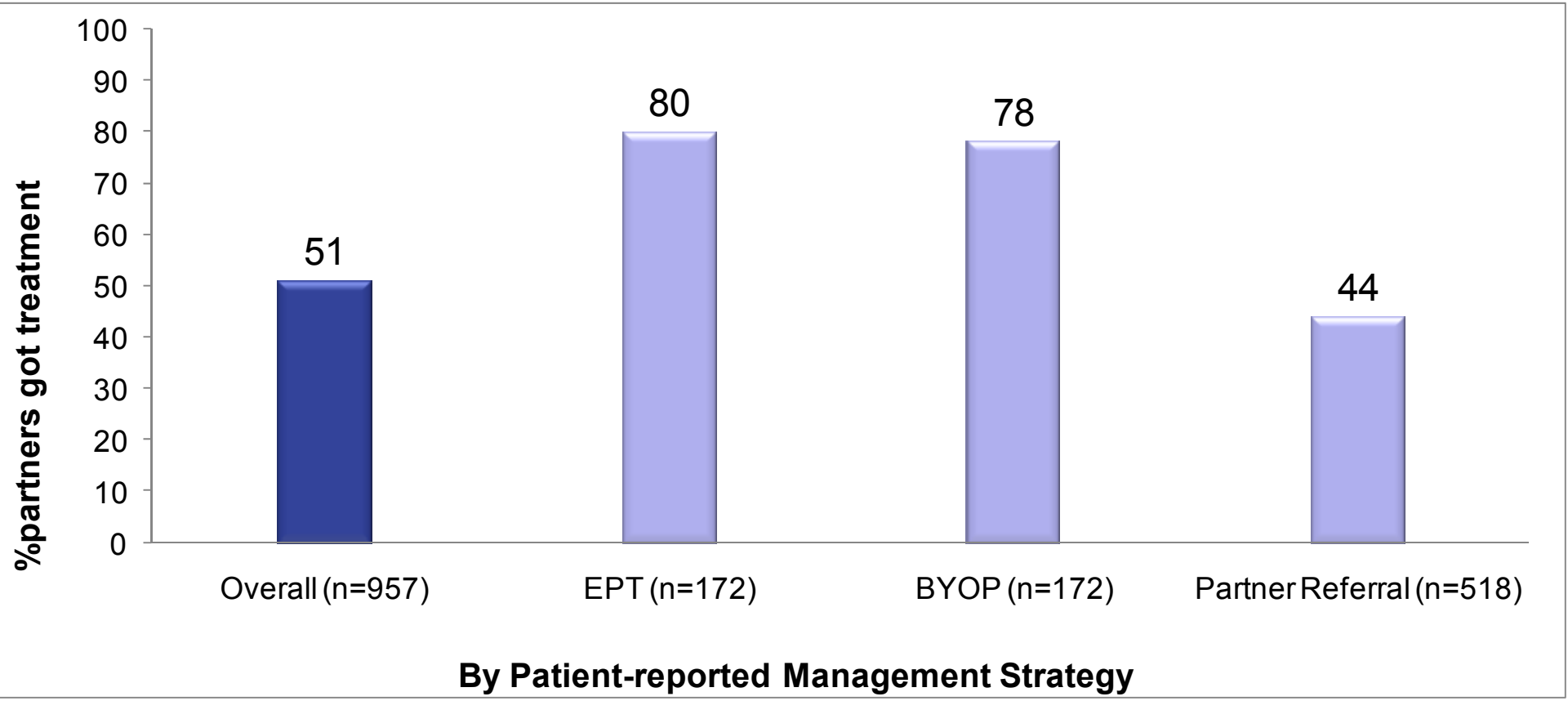
Packel LJ et al, Sex Trans Dis 2006; 33:458-463
NP, Nurse practitioner

Partner Management Strategies Offered in Family Planning Clinics, CA 2005-2006



BYOP, Bring your own partner

Patient-Report That Partner Received Treatment, by Partner Management Strategy Offered

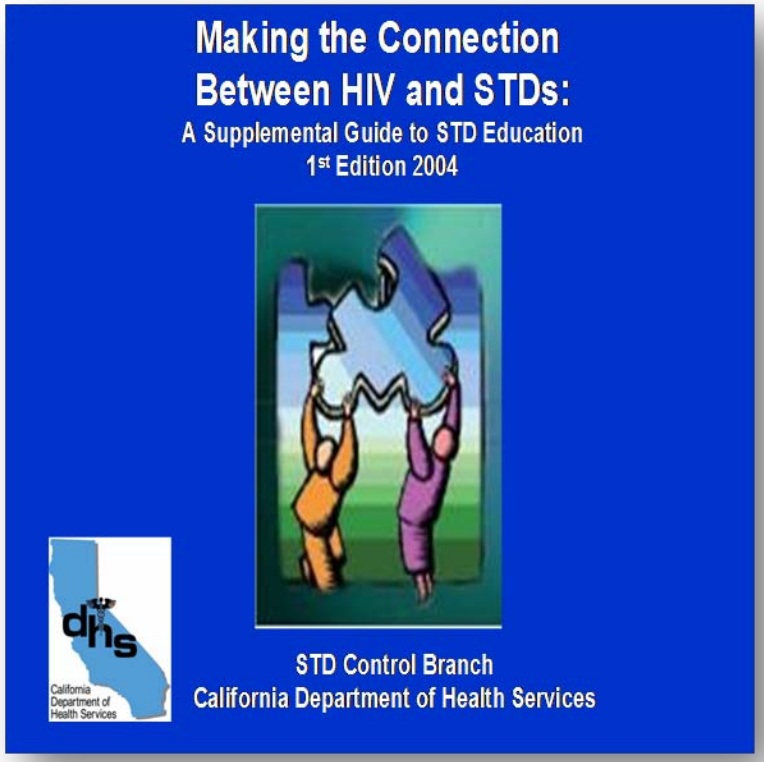


BYOP, Bring your own partner

Chlamydia Community Awareness and Health Promotion Activities

- **Established partnerships with youth-serving agencies**
- **Improved interagency communication and sharing of resources**
- **Co-founded the California Adolescent Sexual Health Work Group**
- **Developed social marketing projects**
  - Youth Encouraging Safer Sex (YESS!)
  - Hookup Text Messaging
  - Youth Social Marketing Toolkit

Resources for Educators

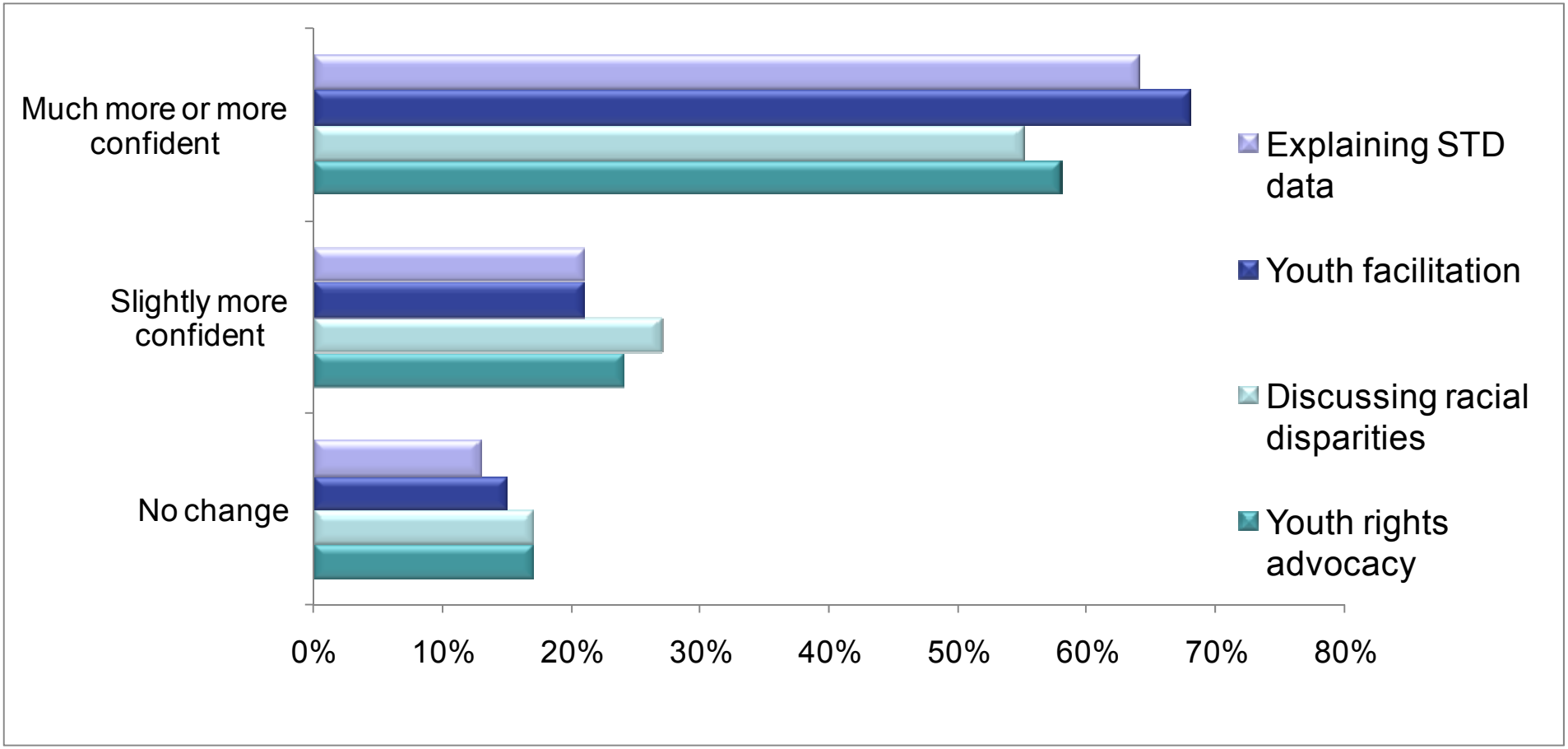


Sexually Transmitted Diseases (STDs):
What you need to know to stay healthy

STD 101 for Teens

California STD/HIV Prevention Training Center, www.stdhivtraining.org

Changes in Educators Confidence in Various Skills after STD Training Activities, 2009



STD Community Intervention Project on-line survey of 396 community educators serving over 200,000 youth in 11 high priority local health jurisdictions in California
Prepared by California Department of Public Health STD Control Branch

Chlamydia Prevention at the State Level: Remaining Challenges

- High Medicaid reimbursement rates of NAATs screening tests
- No federal reimbursement for EPT
- Competing priorities
- Declining public health infrastructure

CDC PARTNERS ADDRESS CHLAMYDIA PREVENTION

Gale R. Burstein, MD, MPH, FAAP, FSAHM
Adolescent Medicine Physician
University at Buffalo Pediatrics Associates
Buffalo, New York

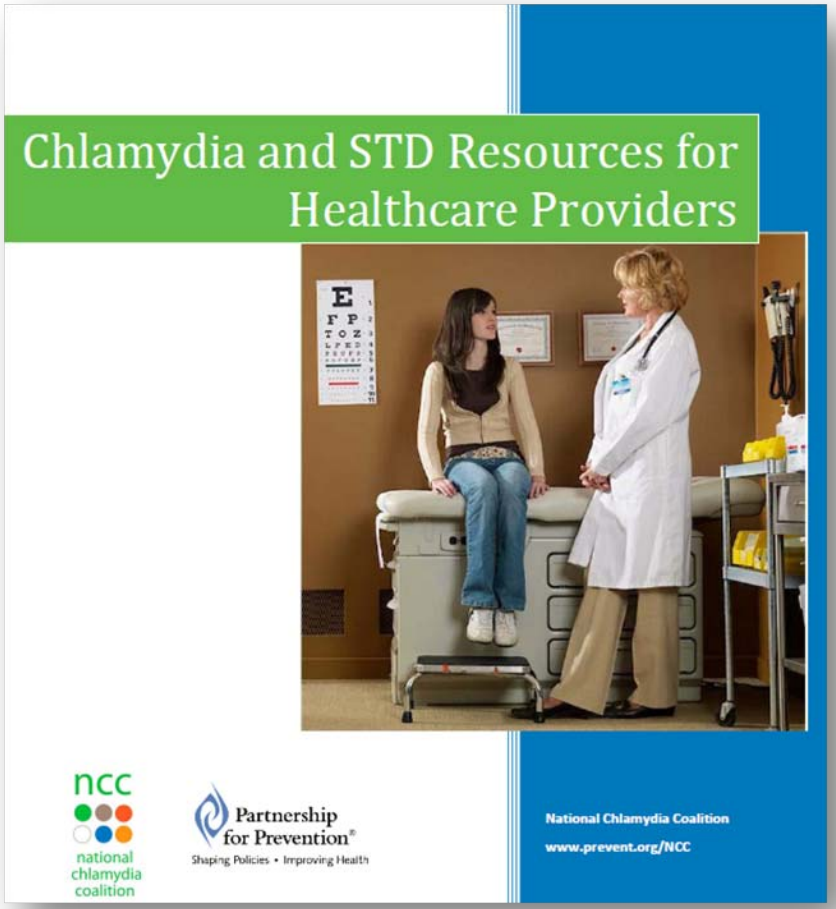
DISCLOSURE: Dr. Burstein has received honoraria from Merck Inc. and GlaxoSmithKline for speaking and consultancy engagements

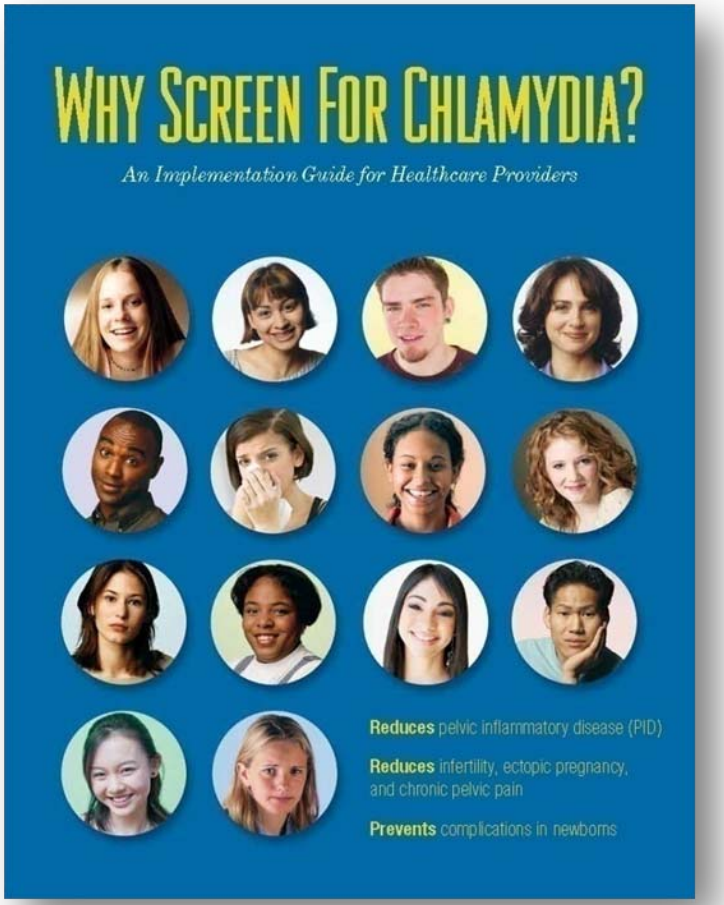
Strategies to Change Provider Practices to Consistently Screen for Chlamydia

- **Training medical professionals**
- **Endorsing screening by professional medical associations**
- **Developing tools to facilitate office-based chlamydia screening**
- **Disseminating information**
- **Promoting quality measures to improve care of adolescents**
  - NCC: New chlamydia screening measure for accreditation of commercial and Medicaid plans - effective in 2010
  - AAP, American Board of Pediatrics: Chlamydia screening quality improvement activity as part of the recertification in adolescent medicine

NCC, National Chlamydia Coalition
AAP, American Academy of Pediatrics
NCQA, National Committee for Quality Assurance

Collaboration with Professional Organizations and Health Plans





http://ncc.prevent.org/providers.html

Providing Confidential Sexual Health Care Services

- **All states and the District of Columbia currently allow minors to consent for STD diagnosis and treatment**
  - No state requires parental consent
- **An explanation of benefits (EOB) listing services rendered and reimbursed by the health plan may be sent to the primary insured**
  - EOB may disclose confidential services
- **AAP and SAHM developed billing/coding guidance to minimize billing statement disclosures**

AAP, American Academy of Pediatrics, www.aap.org
SAHM, Society for Adolescent Health and Medicine, www.adolescenthealth.org

Addressing Health Systems Barriers to Confidentiality

- **Tools to enhance confidential service delivery (AAP and SAHM)**
  - "Atraumatic parentectomy"
- **Disclosure of confidential services through health plan billing statements (AAP and SAHM)**
- **Disclosure of confidential services through billing (AAP NYS Chapter and CDC's Infertility Prevention Project in NYS)**

AAP, American Academy of Pediatrics
SAHM, Society for Adolescent Health and Medicine
The Center for Adolescent Health & the Law, www.cahl.org/web
Infertility Prevention Project, www.cdc.gov/std/infertility/ipp.htm

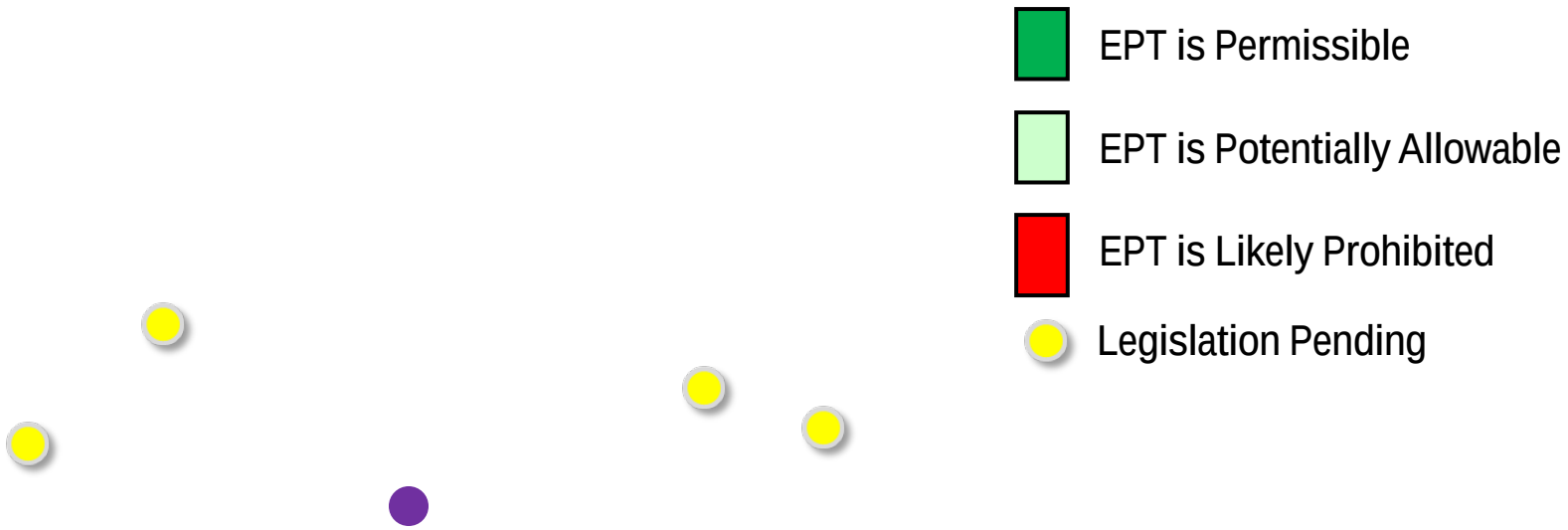
Implementing Expedited Partner Therapy (EPT)

- **CDC partners' formal endorsement**
  - SAHM and AAP: Position paper supporting EPT
- **Developing tools to assist states interested in removing legal and health systems barriers**
  - Professional medical organizations, CDC and the Public Health Law and policy Program
- **Advocacy in legislative and policy development at the state level**
  - AAP, SAHM, and ACOG
- **Planning to work with CMS and HRSA to assure coverage of all EPT services in states where EPT is legal**

AAP, American Academy of Pediatrics
SAHM, Society for Adolescent Health and Medicine
ACOG, American College of Obstetrics and Gynecology
CMS, Centers for Medicare and Medicaid Services
HRSA, Health Resources and Services Administration

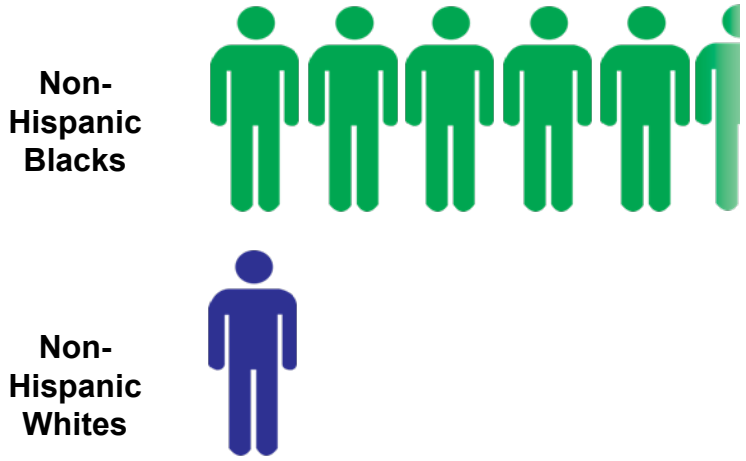
J Adolesc Health 2009;45:303-9

Evolving Landscape of EPT: Legal Status at the State Level



Addressing Health Disparities of Chlamydia

- NCC diverse membership attempts to partner with organizations serving minorities, women, and youth
- 10 small grants to develop community-level prevention approaches aimed at increasing chlamydia screening among those populations at risk



Chlamydia Prevention: Summary

- **Chlamydia is a major preventable cause of infertility**
- **Effective prevention interventions are under-utilized**
- **Programs having some effect, but need to do better by**
  - Increasing screening, partner treatment (EPT), and awareness
  - Reaching disproportionately-affected populations
  - Improving measurement
- **Many challenges, but also opportunities**
  - Progress in addressing public health, societal and individual challenges
  - Health care reform: Engagement in evolving health care delivery systems to address barriers at federal, state, and local levels

PUBLIC HEALTH GRAND ROUNDS

Office of the Director

May 20, 2010