Promoting Science-based Approaches to Prevent Teen Pregnancy, HIV and STDs: Creativity, Capacity, and Partnerships

> American Public Health Association Annual Meeting & Exposition Washington, D.C. November 3-7, 2007

Carla P. White

Myriam Hernandez-Jennings

**Brigid Riley** 



# Objectives

- Understand CDC's definition of science-based approaches to teen pregnancy, STD and HIV prevention.
- Articulate the need to build capacity for science-based approaches promoting adolescent sexual and reproductive health.
- Identify opportunities to build partnerships and policy support at the state and community level to promote science-based approaches to preventing teen pregnancy, STDs, and HIV.



# Teen birth rates, U.S., 1990-2004



Martin JA, Hamilton BE, Sutton PD, et al. Births: Final data for 2004. National vital statistics reports; vol 55 no 1. Hyattsville, MD: National Center for Health Statistics. 2006.

http://www.cdc.gov/nchs/data/nvsr/nvs r55/nvsr55\_01.pdf



Copyright 2007, Carla Poindexter White, carlawhite@cdc.gov

### Birth Rates Among Females Aged 15--19 Years, by State – U.S., 2004



Source: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5551a6.htm



Figure 4. Pregnancy, birth, abortion, and fetal loss rates for teenagers 15-19 years, by race and Hispanic origin: 1990, 1995, 2000, and 2002





# Birth Rates per 1,000 females age 15 – 19 years by Race and Hispanic Ethnicity, and males by race: U.S., 2004



Copyright 2007, Carla Poindexter White, carlawhite@cdc.gov

### STDs among teens



CDC. Trends in Reportable Sexually Transmitted Diseases in the United States, 2005. http://www.cdc.gov/nchstp/dstd/Stats\_Trends/Stats\_and\_Trends.htm



### HIV/AIDS among teens

**Estimated number** of HIV/AIDS cases in the 33 states with confidential name-based HIV infection reporting, person's age at time of diagnosis (2005):

Under 13	168
Age 13-14	43
Age 15-19	1,213
Age 20-24	3,876
Age 25-29	4,581

CDC HIV/AIDS Statistics and Surveillance <u>http://www.cdc.gov/hiv/topics/surveillance/basic.htm</u>



### What's behind the downward trend?

### Santelli et al, 2007: 1995 and 2002 NSFG data on 15-19 year old women

Overall: 14% of decline due to decrease in percentage of sexually active women age 15-19 years 86% due to increased contraceptive use

15-17 year olds: 23% of decline due to decline in percentage of sexually active young women77% due to increased contraceptive use

18-19 year olds: All change due to increased contraceptive use

Santelli JS, Lindberg LD, Finer LB, Singh S. Explaining recent declines in adolescent pregnancy in the United States: the contribution of abstinence and improved contraceptive use. American Journal of Public Health 2007; 97(1):150-156.

# CDC's Promoting Science-based Approaches to Prevent Teen Pregnancy, STDs and HIV (PSBA)

#### Science-based Approach

- Using demographic, epidemiological and social science research to identify populations at risk of early pregnancy and/or sexually transmitted infections, and to identify the risk and protective factors for those populations.
- Using health behavior or health education theory for selecting risk and protective factors that will be addressed by the program, and guide the selection of intervention activities.
- Using a logic model to link risk and protective factors with program strategies and outcomes.
- Selecting, adapting if necessary, and implementing science-based programs.
- Conducting process and outcome evaluation of the implemented program, and modifying approach based on results.



### Science-Based Program (SBP)

Research has shown program to be effective in:

- Delaying sexual initiation
- Reducing the frequency of sexual intercourse
- Reducing the number of sexual partners

Increasing the use of condoms and other contraceptives



# SBP: Evaluated using Rigorous Research Design

Experimental/quasi-experimental evaluation design

➢ Knowledge, attitude, and behavior

Adequate sample size

➢ Follow-up data

Results published



### How are programs identified in PSBA?

- National Campaign to Prevent Teen Pregnancy: What Works: Curriculum-Based Programs that Prevent Teen Pregnancy\*
  - Definition and programs from *Emerging Answers: Research Findings on Programs to Reduce Teen Pregnancy*, D. Kirby 2001\*\*
  - 2007 update funded through PSBA

\*http://www.teenpregnancy.org/works/default.asp

\*\*http://www.teenpregnancy.org/resources/data/report\_summaries/emerging\_answers/



# How are programs identified in PSBA?

- Advocates for Youth: Science & Success
  - Uses CDC definition of SBP, but specify change in ≥ 2 behaviors
  - 2003 = 16 sex ed and 3 youth development
  - 2006 Supplement added 5 more programs, including 4 clinic-based
  - Review of research done by Advocates staff
  - Not funded through PSBA



#### 2006 added

1. Teenstar (school-based curriculum)

2. SiHLE

3. Tailoring Family PlanningServices to the SpecialNeeds of Adolescents

4. HIV Risk Reduction for African American and Latina Adolescent Women

5. Project SAFE—Sexual Awareness for Everyone

Advocates for Youth, 2003 http://www.advocatesforyo uth.org/publications/Scien ceSuccess.pdf

PROGRAMS	BEHAVIORAL OUTCOMES					HEALTH IMPACTS		
	Delayed Initiation of Sex	Reduced Frequency of Sex	Reduced Number of Sex Partners	Reduced Incidence of Unprotected Sex	Increased Use of Condoms	Increased Use of Contra- ception	Decreased Incidence of STIs	Decreased Number or Rate of Teen Pregnancy / Birth
1. Reducing the Risk	*			*		*		
2. Postponing Sexual Involvement (Augmenting a Five-Session Human Sexuality Curriculum)	*	*				*		
3. Postponing Sexual Involvement, Human Sexuality & Health Screening	*					*		
4. Safer Choices					*	*		
5. Reach for Health Community Youth Service	*	*			*	*		
6. AIDS Prevention for Adolescents in School			*		*		*	
7. Get Real about AIDS			*		*			
8. School / Community Program for Sexual Risk Reduction among Teens	*				*			*
9. Self Center (School-Linked Reproductive Health Center)	*			*		*		*
10. California's Adolescent Sibling Pregnancy Prevention Project	*					*		*
11. Adolescents Living Safely: AIDS Awareness, Attitudes & Actions		*	*		*			
12. Becoming a Responsible Teen	*	*		*	*			
13. Children's Aid Society—Carrera Program	*				*	*		*
14. Be Proud! Be Responsible! A Safer Sex Curriculum		*	*		*			
15. Making Proud Choices!	*	*		*	*			
16. Poder Latino: A Community AIDS Prevention Program for Inner-City Latino Youth	*		*					
17. Seattle Social Development Project	*		*		*			*
18. Abecedarian Project								*
19. Teen Outreach Program								*
								· · · ·

Note: Blank boxes indicate either: 1) the program did not measure, nor aim at, this particular outcome / impact; or 2) the program did not achieve a significant positive outcome

### **Promising Program**

- Has not been formally evaluated
- Has most of the 17 Characteristics of Effective Sex and STD/HIV Education Programs (Kirby et al, 2006)

http://www.etr.org/recapp/programs/SexHIVedProgs.pdf





### Many programs, many lists...

- Advocates for Youth *Science & Success* <a href="http://www.etr.org/recapp/programs/SexHIVedProgs.pdf">http://www.etr.org/recapp/programs/SexHIVedProgs.pdf</a>
- National Campaign to Prevent Teen Pregnancy What Works <u>http://www.teenpregnancy.org/works/default.asp</u> and *Emerging Answers: Research Findings on Programs to Reduce Teen Pregnancy*

http://www.teenpregnancy.org/resources/data/report\_summaries/emerging\_answers/

- Program Archive on Sexuality, Health & Adolescence (PASHA) <u>http://www.socio.com/pasha.htm</u>
- DHAP/CDC's Compendium of HIV Prevention Interventions
   with Evidence of Effectiveness
   <a href="http://www.cdc.gov/hiv/pubs/HIVcompendium/HIVcompendium.htm">http://www.cdc.gov/hiv/pubs/HIVcompendium/HIVcompendium.htm</a>



# Gaps in Programs Identified

- Promising programs (Wise Guys, Plain Talk publication in peer reviewed journal can be difficult)
- Youth development
- Clinical
- Secondary teen pregnancy prevention
- Replication in diverse populations/communities
  - Race, ethnicity
  - Rural vs. urban
  - LGBTQ youth
  - Youth in foster care



### **Dissemination: PSBA Cooperative Agreement**

### Purpose

 Increase the capacity of state and local organizations to promote and use science-based approaches (SBA), including to select, implement and evaluate sciencebased programs (SBP)





### **PSBA** Cooperative Agreement

Three National Organizations:

(National Campaign to Prevent TP, Advocates for Youth, Healthy Teen Network) Identify & promote use of SBA
Develop capacity-bldg materials
Training, tech assistance to state and local organizations

Nine State Teen Pregnancy Coalitions (CO, HI, MA, MN, NC, OK, PA, SC, WA) Four Title X Regional Training Centers

(MA-Reg. 1, PA-Reg. 3, IN-Reg. 5, WA-Reg. 10)

Youth-serving Local Organizations

Work with local (and state) organizations to:

- Increase awareness of SBA
- Build capacity to use SBA

Plan, implement and evaluate science-based adolescent reproductive health programs, or adapt a promising progr

### **Dissemination & Implementation**

- I. Create more supportive environment for SBA
- Policy-makers, program decision makers, funders

### II. Increase capacity at Local Level to implement and sustain SBP

Knowledge of SBA and SBP Behavioral and health education theory Risk and protective factor data Logic models Community fit Characteristics of effective programs Program evaluation Belief that SBA is important Confidence to use SBA

Board / leadership support Financial resources



# Dissemination & Implementation: Getting to Outcomes (PSBA-GTO)



Copyright 2007, Carla Poindexter White, carlawhite@cdc.gov

## Evaluation

- Desired outcomes
  - Increased # of local orgs have implemented and can sustain science-based program
  - Increased # of youth served by SBP, positive changes in sexual and reproductive health behaviors
- Model for lower cost capacity-building, dissemination, and implementation
- Initially no implementation funds provided for local organizations
  - Year 3 some funds added for state coalitions, RTCs to provide incentives to locals to participate



### Contact

### Carla White <u>CarlaWhite@cdc.gov</u>

