

## US adolescent pregnancy rates: declining, but more progress is needed

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### Abbreviation

**NSFG** National Survey of Family Growth

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Adolescent pregnancy rates in the USA are among the highest in the Western industrialized world; these rates are at least double the rates in Canada and Western Europe, and many times higher than the rates in the Netherlands and Japan – the two countries having the lowest such rates [1]. Widespread support exists in the USA for the concept that pregnancy during adolescence is not optimal. Adolescent pregnancies affect individual adolescents, their families, their children and us as a society. Thus, a focus on decreasing adolescent pregnancy rates is appropriate. Recently reported data from the CDC's 2002 National Survey of Family Growth indicate that progress *is* being made [2]. Adolescent pregnancy rates in the USA have declined markedly since the 1950s (see Fig. 1). The declines beginning in the 1960s were undoubtedly due to the availability of new contraceptive technologies, most notably oral contraceptive pills.

Recent changes in contraceptive behaviors have resulted in further declines in adolescent pregnancy since recent benchmark high levels of the 1990s; an estimated 34% of teens, however, will still experience a pregnancy by age 20 [3•]. Those changes in contraceptive behaviors have included the greater use of long-lasting methods of contraception that require less active compliance, such as the injectable progestin depot medroxyprogesterone acetate; increasing rates of dual-use of both a hormonal method of contraception and condoms; and increasing use of contraception at the time of first intercourse [4]. Other changes in sexual behaviors such as delayed initiation of sexual intercourse have also contributed to declining rates of adolescent pregnancies; controversy, however, exists over estimating and measuring the extent to which contraception and increasing abstinence each contributes to the decline. It has been estimated that

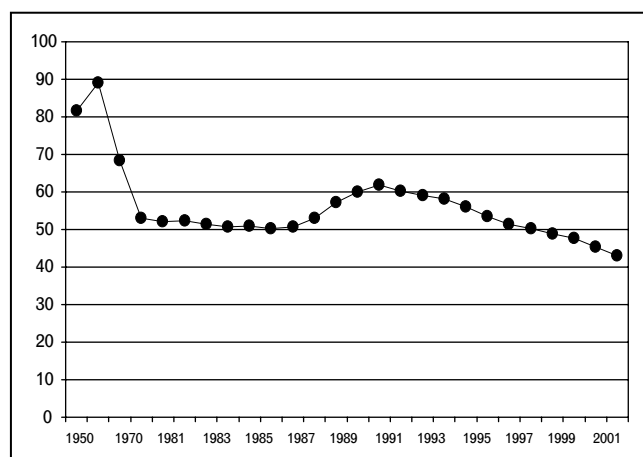
changes in contraceptive behaviors account for 50–75% of the decline [5,6].

An approach to adolescents that promotes the postponement of sexual activity until an individual adolescent is developmentally capable of participating in a mature, healthy, mutually respectful relationship while also encouraging responsible sexual behavior that incorporates effective contraception is a goal that clinicians, parents, teachers and other responsible adults can support. Widespread support for sexuality education has been documented among US adults [7].

Suggested explanations for the difference in adolescent pregnancy rates between the USA and other developed countries include: (a) better sexuality education in these other developed countries; (b) better reproductive health services with easier access to care; and (c) better use of birth control, including oral contraceptives in particular [2].

National organizations, including the American Medical Association (AMA) and the American Academy of Pediatrics (AAP), have established preventive services guidelines for adolescents that include the routine and confidential assessment of sexual activities and need for contraception. Adolescents typically wait a year or more after initiating intercourse to seek medical contraceptive advice, so such a pro-active approach by primary clinicians is critical [8]. The AMA developed the Guidelines for Adolescent Preventive Services [9], and the American College of Obstetricians and Gynecologists developed a 'tool kit' for physicians to facilitate preventive guidance and services designed to routinely screen for sexual activity and to counsel about the potential risks of unintended pregnancy and sexually transmitted diseases (STDs) [10]. While discussion about the evidence for the effectiveness of current screening recommendations and the provision of preventive guidance exists, detecting adolescents at risk is essential for the provision of medical contraception and for providing preventive guidance aimed at minimizing the risks of unintended pregnancies and STDs.

The Healthy People 2010 Guidelines established by the US Department of Health and Human Services include the goal of reducing adolescent pregnancies and the target that 100% of those who are at risk for

**Figure 1. Birth rates (per 1000) for females aged 15–19 years, 1950–2002**

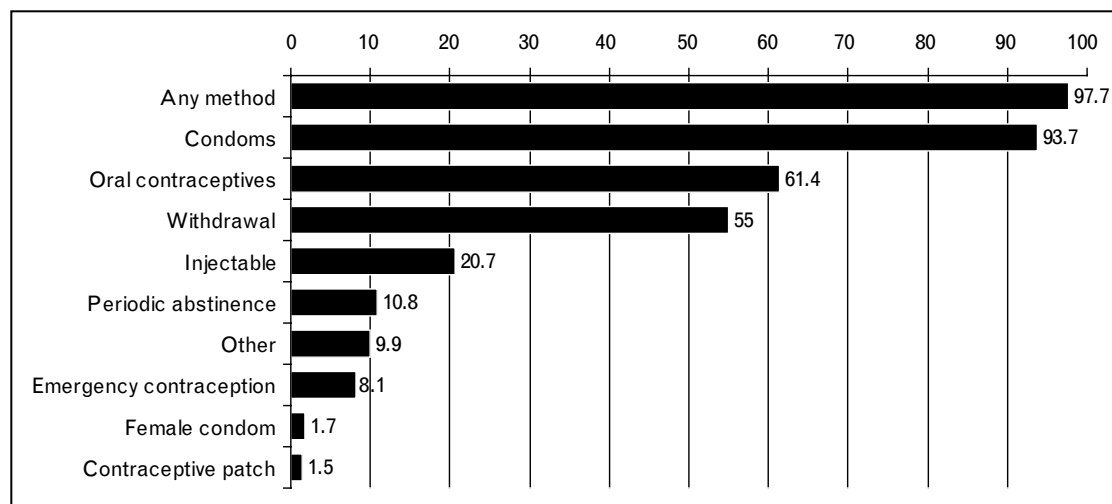
Data from National Center for Health Statistics. Health, United States, 2004 with Chartbook on Trends in the Health of Americans; Hyattsville, MD, 2004, pp. 43–44.

unintended pregnancy would use contraception; currently, approximately 80% of adolescents at risk use contraception [11]. Another goal is to increase to 90% the percentage of adolescents who receive reproductive health information, including information about birth control, prior to age 18 years. The 2002 National Survey of Family Growth (NSFG) indicated that 76.5% of 19-year-olds reported that they had received such instruction [2].

National data from the NSFG and the Youth Risk Behavior Surveillance provide information about contraceptive use [2,11]. The 2002 NSFG statistics indicate that most adolescents who are sexually active are attempting

to prevent unintended pregnancies. Nearly 98% of all adolescents reported that they had used some method of contraception previously [2]. Condoms are the most frequently used method of contraception; 94% reported having using condoms in the past, and 54% used condoms at the time of last intercourse. Condoms are the most frequently used method of contraception at the time of first intercourse, used by 66%; 26% reportedly used no method at the time of first intercourse. Oral contraceptive use at last intercourse, which had declined from 1988 to 1995, increased somewhat in 2002 to 34%, but was less than the 42% who relied on oral contraceptive in 1988 [2]. Other trends (see Fig. 2) included an increasing percentage of adolescents who had, on at least one occasion, ever relied on withdrawal for contraception – a method that has a high failure rate and that may be particularly difficult for sexually inexperienced adolescents to practice effectively.

A wide range of factors influence adolescents' contraceptive behaviors – from personal characteristics, to family context, to social support, to knowledge about and access to contraception. Improving knowledge about contraception and counseling about successful contraceptive use can be helpful in decreasing the remarkably high US rates of adolescent pregnancy. Encouraging the postponement of sexual activity until an individual adolescent is developmentally capable of participating in a mature, healthy, mutually respectful relationship that incorporates effective contraception is clearly a goal that clinicians, parents, teachers and other responsible adults can support. Contraceptive technologies that incorporate delivery systems that are 'user-friendly' and long-acting will also help to further lower US adolescent pregnancy rates that are currently among the highest in the world.

**Figure 2. Ever use of contraception by sexually active adolescents aged 15–19 years**

Data from NSFG, 2002.

## References and recommended reading

Papers of particular interest, published within the annual period of review, have been highlighted as:

- of special interest
- of outstanding interest

- 1 Darroch JE, Frost J, Singh S, *et al.* Teenage sexual and reproductive behavior in developed countries: can more progress be made? New York, NY: The Alan Guttmacher Institute; 2001.
- 2 Abma JC, Martinez GM, Mosher WD, Dawson BS. Teenagers in the United States: sexual activity, contraceptive use, and childbearing, 2002. Vital Health Stat: National Center for Health Statistics; 2004.
- 3 National Campaign to Prevent Teen Pregnancy. How is the thirty-four percent calculated? [fact sheet]. Vol. 2004. Washington, DC: National Campaign to Prevent Teen Pregnancy; 2004.
- Thirty-four per cent of girls will become pregnant at least once before age 20 years (statistical calculation taking into account a drop from 40% to lower adolescent pregnancy rates).
- 4 Hillard PJA. Contraceptive behaviors in adolescents. *Pediatr Ann* 2005; in press.
- 5 Darroch J, Singh S, Frost J. Differences in teenage pregnancy rates among five developed countries: the roles of sexual activity and contraceptive use. *Fam Plann Perspect* 2001; 33:244–250; 281.
- 6 Santelli JS, Abma J, Ventura S, *et al.* Can changes in sexual behaviors among high school students explain the decline in teen pregnancy rates in the 1990s? *J Adolesc Health* 2004; 35:80–90.
- 7 The Henry J. Kaiser Family Foundation. Sex education in America: a view from inside the nation's classrooms. Menlo Park, CA: Kaiser Family Foundation; 2000.
- 8 The Alan Guttmacher Institute. Sex and America's Teenagers. New York, NY: The Alan Guttmacher Institute; 1994.
- 9 American Medical Association. Guidelines for Adolescent Preventive Services (GAPS): American Medical Association; 1997. p. 8.
- 10 American College of Obstetricians and Gynecologists. Tool kit for teen care. In: Care CoAH, ed. Washington, DC: American College of Obstetricians and Gynecologists; 2003.
- 11 Grunbaum J, Kann L, Kinchen S, *et al.* Youth Risk Behavior Surveillance: United States, 2003. Surveillance Summaries. Atlanta, GA: CDC; 2004. pp. 1–95.