

Preconception Care

Interventions To Improve Women's Health and Pregnancy Outcomes

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Recommendations to Improve Preconception Health and Health Care — United States

Centers for Disease Control and Prevention

**A Report of the CDC/ATSDR Preconception Care
Work Group and the Select Panel
on Preconception Care**

Preconception Care

◆ INTERVENTIONS

- ◆ Biomedical- chronic disease, nutrition, timing of births
- ◆ Behavioral- e.g. drugs, ETOH, Tobacco
- ◆ Social- e.g. education, employment, spouse support
- ◆ Which *will result* in improvement of a woman's *health* and the *outcome* of her future pregnancies

4 GOALS

◆ IMPROVEMENT KNOWLEDGE

- Public attitudes and behaviors

◆ UNIVERSAL ACCESS

- Preconception Care Services for improved outcomes

◆ REDUCE KNOWN RISKS

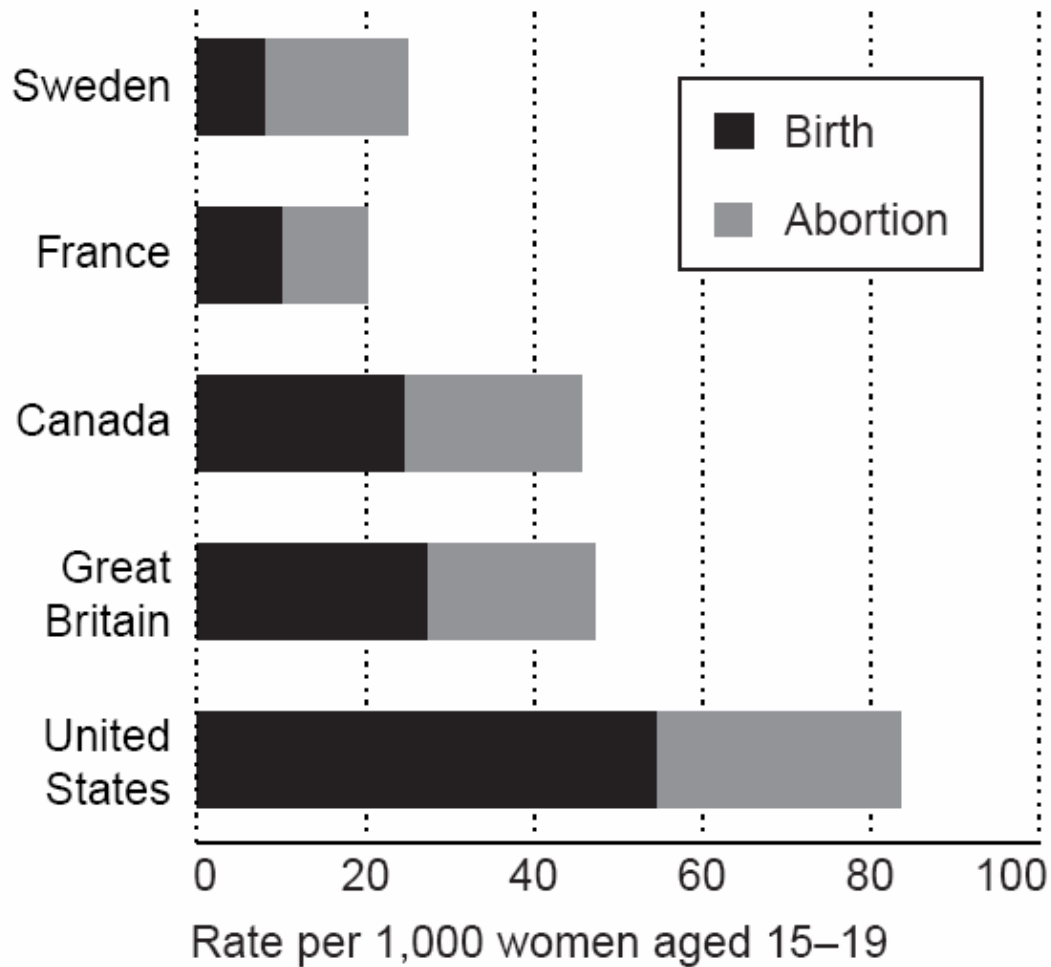
- Through **INTERVENTIONS** *before* conception

◆ REDUCE DISPARITIES

- In adverse pregnancy outcomes

chart a

U.S. teenagers have higher pregnancy rates, birthrates and abortion rates than adolescents in other developed countries.



Note: Data are for mid-1990s.

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Why Public Health Campaign?

- ◆ Prevention makes sense
 - most providers don't provide it
 - most insurers don't pay for it
 - most consumers don't ask for it.
- ◆ Supporting Evidence: Folic Acid campaign success and shortfall
 - By 2002, rates for deficiency of folic acid were at 20% from 30% from pre-1992 rates (30% vs 40% Short)

TEN RECOMMENDATIONS: To Whom do they Apply?

- ◆ Consumers
- ◆ Public health professionals
- ◆ Clinical providers, public and private
- ◆ Researchers
- ◆ Policy makers
- ◆ Communities
- ◆ Governments– local, state, federal
- ◆ Professional Organizations

Recommendations

1. **Individual responsibility**
2. Consumer awareness campaigns
3. Preventive visits
4. Interventions for identified risks
5. Interconception care
6. Prepregnancy checkup
7. Health insurance coverage
8. Public Health programs, strategies
9. Research
10. Monitoring

1. Individual responsibility Across the Life Span

- **Review Reproductive Life Plan**
timing, number, spacing of children
- Individualize health education to help patients identify and reduce their risks in order for them to successfully reach their goals.

2. Consumer awareness

campaigns to influence public attitudes

- ◆ Reduce tobacco, alcohol use
- ◆ Healthy diet, optimal weight
- ◆ Multivitamin, 0.4 mg Folic Acid
- ◆ Importance of prenatal care starting preconception

3. Preventive Visits

Integration of preconception risk assessment screening into primary care (EPSDT). Interventions to optimize pregnancy outcomes.

3(a) SCREENING/RISKS

- ◆ Reproductive History
 - Previous fetal loss
 - Previous premature delivery
 - Previous small for dates baby
 - Previous surgery on uterus or cervix

3(b) SCREENING/RISKS

- ◆ Environmental toxins and teratogens
 - Hot tubs, temperature extremes
 - Toxic chemicals, organic solvents, pesticides, heavy metals
 - X-rays
 - Cats and Toxoplasmosis
 - Check OSHA data sheets at workplace

3(c) SCREENING/RISKS

- ◆ Medications that are known to cause birth defects or miscarriage
 - Isotretinoins * (Accutane ®) and Vitamin A
 - Anti-epileptic drugs * – 4 mg Folic Acid
 - Warfarin *, ACEI, ARBs, Statins
 - Methylnxate – psoriasis, arthritis, chemotherapy
 - Misoprostol – NSAID protection in arthritis
 - Ergotamines – Migraine
 - Sex steroids
 - Lithium
 - Alcohol *

* See AAP or ACOG for evidence for the effectiveness of preconception care and guidelines

3(d) SCREENING/RISKS

- ◆ Nutrition, folic acid, weight management
 - Obesity *
 - Underweight
 - Folic acid/MV supplements at least 3 months preconception *
 - Avoid excess Vitamin A (3000 IU), Vitamin D (400 IU)
 - Calcium, iron deficiency

* See AAP or ACOG for evidence for the effectiveness of preconception care and guidelines

3(e) SCREENING/RISKS

- ◆ Genetic conditions and family history
 - Phenylketonuria (PKU) *
 - Hx NTDs – 4 mg Folic Acid *
 - Ethnic Hemoglobinopathies, Tay-Sachs
 - Cystic Fibrosis
 - Age related chromosomal abnormalities
 - Muscular dystrophy
 - Hemophilias
 - X-linked mental retardation

* See AAP or ACOG for evidence for the effectiveness of preconception care and guidelines

3 (f) SCREENING/RISKS

- ◆ Substance Use
 - Prescription drugs
 - Habit forming, addictive, hallucinogenic drugs
 - Smoking cessation *
 - Alcohol avoidance *

* See AAP or ACOG for evidence for the effectiveness of preconception care and guidelines

3(g) SCREENING/RISKS

- ◆ Chronic diseases
 - Diabetes * HgbA1C 10% = 20-25% anomaly
 - Polycystic ovary syndrome –obesity, anovulation, hirsutism, insulin resistance
 - Hypothyroidism *
 - Dental caries
 - Cardiac disease
 - Hypertension
 - Asthma
 - Thrombophilia, Lupus
 - Seizure disorder – 4 mg Folic Acid *
 - Anemia

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3(h) SCREENING/RISKS

- ◆ Infectious diseases and vaccinations.
 - Hepatitis B vaccination *
 - HIV/AIDs *
 - Rubella vaccination *
 - HPV vaccination – try to avoid destructive Rx for low grade CIN, particularly in young nulliparous.
 - Varicella vaccination
 - STD early screening and treatment *
 - Influenza
 - Tdap
 - Toxoplasmosis
 - Tuberculosis

* See AAP or ACOG for evidence for the effectiveness of preconception care and guidelines

3(i) SCREENING/RISKS

◆ Family planning

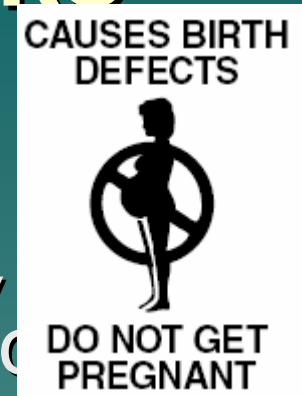
- Preparing for parenthood education, marriage, employment, health insurance
- Importance of wide range of methods
- Infertility

3(j) SCREENING/RISKS

- ◆ Social and mental health concerns
 - Depression
 - Social Support
 - Domestic Violence
 - Housing

4. Interventions for risks

- ◆ Assess for teratogens: anticonvulsants, anticoagulants, isotretinoins (iPLEDGE compliance)
- ◆ Optimize control of chronic conditions: diabetes, epilepsy, hypothyroidism, hypertension, heart disease, rubella sero-negativity, thrombophilias, dental disease, obesity.
- ◆ Targeted interventions for smoking, alcohol, illicit drug use.
- ◆ Family history of genetic disorders.



5. Interconception care

- ◆ Interventions in the interconception period for those with infant death, fetal loss, birth defects, low birth weight, or preterm birth.
 - Federal Healthy Start
 - WIC nutrition sites
 - Home visiting programs
 - Family planning programs

6. Prepregnancy checkup

- ◆ Use consolidated professional guidelines
- ◆ Modify rules to allow 3rd party payment
- ◆ Educate women and couples regarding availability and value

7. Health insurance coverage

- ◆ for women with low incomes to improve access

8. Integration with Public Health Programs and Strategies

- [GetFitTN](#)
- [Neonatal Mortality – 1 For ALL](#)
- [Alcohol and Drugs](#)
- [Breast and Cervical Cancer Screening](#)
- [Community Services](#)
- [Local Health Departments](#)
- [Maternal and Child Care](#)
- [Nutrition Services](#)
- [Office of Disparity Elimination](#)
- [Rural Health](#)
- [Sexually Transmitted Disease \(STD/HIV\)](#)
- [Tennessee Primary Care Association](#)
- [Women's Health Programs](#)

9. Research

- Increase the evidence base
- Promote use of evidence base for improvement

10. Monitoring – public health surveillance

- Pregnancy Risk Assessment Monitoring System (PRAMS)
- Behavioral Risk Factor Surveillance System (BRFSS)
- National Survey of Family Growth (NSFG)
- Perinatal Periods of Risk
- Fetal-Infant Mortality Review
- Maternal and Child Health Bureau