

Preconception Clinical Care for Women Exposures



All women of reproductive age are candidates for preconception care; however, preconception care must be tailored to meet the needs of the individual. Given that preconception care ideally should occur throughout the reproductive years, some recommendations will be more relevant to women at specific stages in their lives and with varying levels of risk.

Alcohol, Tobacco, Illicit Substances

Alcohol

Controlling alcohol binge drinking or frequent drinking, or both, before pregnancy prevents fetal alcohol syndrome and other alcohol-related birth defects.

All women of childbearing age should be screened for alcohol use, and brief interventions should be provided in primary care settings, including advice regarding the potential for adverse health outcomes. Brief interventions should include accurate information about the consequences of alcohol consumption, such as the effects of drinking during pregnancy, information about effects beginning early during the first trimester, and warnings that no safe level of consumption has been established. Women who show signs of alcohol dependence should be educated about the risks of alcohol consumption; for women who are interested in modifying their alcohol use patterns, efforts should be made to identify programs that will assist them in achieving cessation and long-term abstinence. Contraception consultation and services should be offered and pregnancy should be delayed until it can be an alcohol-free pregnancy.

Tobacco

Completing smoking cessation before pregnancy can prevent smoking-pregnancy associated preterm birth, low birthweight, and other adverse perinatal outcomes.

In addition, secondhand smoke causes early death and disease among children and adults who do not smoke. Pregnant women who are exposed to secondhand smoke have 20% higher odds of giving birth to a low birthweight baby than women who are not exposed to secondhand smoke during pregnancy.



Tobacco (continued)

All women of childbearing age should be screened for tobacco use. Brief interventions should be provided to all tobacco users and should include brief counseling that describes the benefits of not smoking before, during, and after pregnancy; discussion of medication; and referral for more intensive services (individual, group, or telephone counseling) if a woman is willing to use these services. For pregnant women, augmented counseling interventions should be used.

Illicit Substances

A careful history should be obtained to identify use of illegal substances as part of the preconception risk assessment. Men and women should be counseled about the risks of using illicit drugs before and during pregnancy and offered information on programs that support abstinence and rehabilitation. Contraception services should be offered, and pregnancy should be delayed until individuals are drug free.

Environmental (Household, Workplace, Community)

Household Exposures

During a preconception visit, women should be asked about their home environment, as housing conditions can significantly affect an individual's health. If potential exposures are identified, consultation with an occupational medicine specialist might assist with a more detailed investigation regarding recommendations for modification of exposures.

Common household hazards and exposures are: dust mites, pests, mold, lead, pesticides, environmental tobacco smoke, radon, drinking water, and lack of home safety devices or detectors. State and local health programs can provide information about making homes healthier through programs such as:

- Lead hazard control to prevent lead poisoning
- Integrated pest management (IPM) to reduce asthma and pesticide exposure
- Comprehensive and tailored home-based asthma interventions
- Active sub-slab depressurization to reduce lung cancer from radon gas
- Smoke alarm installations to prevent injuries and death from residential fires
- Smoke free rules at home

Information on home hazards or healthy homes can be found on the CDC Healthy Homes website, <http://www.cdc.gov/healthyhomes>

Lead

Lead exposure remains a public health problem for certain groups of women of child-bearing age and for the developing fetus and nursing infant. Sources of lead exposure in the U.S. vary by population subgroup and geography, therefore, public health agencies should be consulted for community-specific risk data. Prenatal lead exposure has known influences on maternal health and infant birth and neurodevelopmental outcomes. Fetal exposure to lead through maternal bone lead mobilization is possible for women with significant prior lead exposure; however, most women with blood lead levels typical in the U.S. are unlikely to pass lead burdens to their infants.

Exposures

Lead (continued)

Health care providers should consider the possibility of lead exposure in individual women by evaluating risk factors for exposure as part of a comprehensive occupational, environmental, and lifestyle health risk assessment, and perform blood lead testing if a single risk factor is identified.

Common risk factors include:

1. Recent immigration status,
2. Practicing pica, (Pica appears to occur more frequently in sections of the South and in immigrant communities where this behavior is a culturally-acceptable practice.)
3. Occupational exposure,
4. Use of alternative remedies or cosmetics,
5. Use of traditional lead glazed pottery, and nutritional status.
6. Lead-based paint during renovation or remodeling in homes built before 1978.

Mercury

FDA currently advises that pregnant women and women of childbearing age who may become pregnant to limit their consumption of shark and swordfish to no more than one meal per month. Many state government agencies issue fish advisories and bans relating to mercury concentrations in locally caught fish.

Workplace Exposures

During a preconception visit, women should be asked about their workplace environment. Some workplace chemicals have been linked to adverse reproductive outcomes. Others are known to pass into breast milk, and could potentially be transmitted to an infant during breastfeeding. If potential exposures are identified, consultation with an occupational medicine specialist might assist with a more detailed investigation regarding recommendations for work modification.

Medications

Dietary Supplements

Health care providers should educate women of reproductive age about the need to discuss the use of dietary supplements before pregnancy (which include herbs, weight loss products, and sport supplements) and should caution women about the unknown safety profile of many supplements.

Over-the-Counter Medications

Health care providers should educate women of reproductive age about the need to discuss the use of over-the-counter medications with their provider when planning a pregnancy. Women should be advised specifically not to use aspirin if they are planning a pregnancy or become pregnant.

Prescription

As part of preconception care, all women should be screened for the use of teratogenic medications and should receive counseling about the potential effects of chronic health conditions and medications on pregnancy outcomes for mother and child. Whenever possible, potentially teratogenic medications should be switched to safer medications before conception. For women with chronic conditions with serious morbidity (to mother and infant), the fewest number and lowest dosages of essential medications that control maternal disease should be used. For women who do not desire pregnancy, a plan for contraception should be addressed and initiated.

More Information

This fact sheet is part of a series on the clinical content of preconception care for women. Other fact sheets in the series include:

- Health Promotion
- Personal History
- Nutrition
- Immunizations
- Infectious Diseases
- Medical Conditions
- Psychosocial Risks
- Special Populations

To see the complete list of the preconception clinical content and description of how the content was selected and rated, please visit: www.cdc.gov/preconception/careforwomen.