

U.S. Department of Health and Human Services

Task Force on Research Specific to Pregnant and Lactating Women

Agency Activities: Agency for Healthcare Research and Quality (AHRQ)

Research

A key part of AHRQ's mission is to invest in research to improve safety and quality of health care (<https://www.ahrq.gov/research/ahrq-research.html>). AHRQ supports extramural and intramural research related to pregnant and lactating women, often using large population-based and claims data. AHRQ also provides research resources, including health services databases, that can be used to develop evidence about utilization and effectiveness of treatments and quality of care.

AHRQ supports some studies specifically related to the safety and effectiveness of medications and therapies in pregnant and lactating women. These studies address a variety of conditions that are common in pregnant women. Some examples include:

- Researchers supported by AHRQ are combining previously collected data on the management of lupus during pregnancy to yield new information about optimal medication therapies to control lupus and improve pregnancy outcomes. In addition, researchers will be obtaining information from community rheumatologists to identify better ways to integrate expert recommendations for lupus management into medical practice.
- AHRQ supports multiple projects on the safety and effectiveness of antidepressants in pregnancy. One of these projects is using a large population-based Medicaid claims database to conduct a comparative effectiveness study, incorporating both maternal and fetal outcomes. A two-stage cohort study, using a large claims database, is designed to assess whether treatment of depression during pregnancy reduces the risk of postpartum depression.
- Researchers are assessing risks of various asthma medications for the woman and the fetus when used during pregnancy. Asthma is one of the most common conditions requiring medication during pregnancy, yet there is insufficient information on safety of current asthma medications for pregnant women. A second demonstration project supported by AHRQ is combining data from multiple cohorts to identify the risks and relative safety of newly-introduced and older asthma medications with respect to relatively rare outcomes, including specific major birth defects.
- Using several large claims databases, researchers assessed the risk of adverse fetal outcomes following exposure to immunosuppressive drugs in pregnant women with chronic immune-mediated diseases.
- AHRQ-supported scientists are examining trends in the prevalence of pre-existing diabetes among pregnant women; assessing utilization and anti-diabetic drugs during pregnancy; and exploring the relative safety of three commonly utilized oral anti-diabetic drug classes in pregnant women.

AHRQ also has supported behavioral and educational intervention research in pregnant and lactating women. One AHRQ-funded project aims to help physicians encourage physical activity for pregnant women. Another team of AHRQ-supported researchers is developing a bilingual touch screen educational support program to promote breast feeding among Hispanics rural women living in rural Nebraska.

AHRQ's largest portfolio of research relevant to pregnant and lactating women is concerned with the quality, cost, and value of maternity and obstetric care. This portfolio includes research on variation across hospitals and providers in obstetric practice; acceptance and implementation of recommended therapies; matching the risks to mother and baby to higher levels of care; and risks and benefits of specific interventions such as cesarean section or labor induction. Specific examples of these research projects include:

- Although neonatal and trauma care is typically defined in terms of increasing levels of care, obstetric care has not yet fully adopted this approach. A team of researchers is describing how levels of care vary across hospitals in California, and assessing how circumstances and hospital characteristics are associated with both obstetric levels of care and maternal and neonatal outcomes. Another similar study is assessing obstetric levels of care in Georgia, focusing on high risk pregnant women.
- Using a large-scale administrative database from a chain of hospitals with varying staffing ratios and organizations, researchers are evaluating the relationship between nursing staffing levels and maternal and fetal pregnancy outcomes.
- Because pregnant women typically have sufficient time and strong motivation to consider their choice of hospital, they may become highly interested consumers of hospital quality information and reporting. AHRQ-supported scientists are designing and testing an interactive website concerning material hospital delivery, tailored to individuals from diverse racial and ethnic groups and women with limited English proficiency.
- Although a Healthy People 2020 goal is to immunize 80% of pregnant women for pertussis, immunization rates remain significantly lower, especially among Medicaid recipients. AHRQ-supported researchers are using a large Louisiana Medicaid database to evaluate how factors such as language preference, race and ethnicity, and characteristics of birthing facilities are associated with immunization.

Other AHRQ-supported studies describe utilization of health care services among pregnant women and prevalence of specific health conditions among pregnant women. For example, researchers analyzed data from Colorado to document trends in accidental overdoses and suicides among pregnant and postpartum women.

In addition to supporting research directly, AHRQ supports large databases that can be used by independent researchers, and some of this research is applicable to pregnant and lactating women. The [Medical Expenditure Panel Survey \(MEPS\)](#), which began in 1996, is a set of large-scale surveys of families and individuals, their medical providers (doctors, hospitals, pharmacies, etc.), and employers across the United States. MEPS collects data on the specific health services that Americans use, how frequently they use them, the cost of these services, and how they are paid for, as well as data on the cost, scope, and breadth of health insurance held by and available to U.S. workers. The [Healthcare Cost and Utilization Project \(HCUP\)](#) is the nation's most comprehensive source of hospital care data, including information on in-patient stays, ambulatory surgery and services visits, and emergency department encounters. HCUP enables researchers, insurers, policymakers and others to study health care delivery and patient outcomes over time, and at the national, regional, State, and community levels.

Clinical Practice Information and Recommendations

AHRQ does not directly support clinical care, but the agency creates materials to teach and train health care systems and professionals to help them improve care for their patients. Although these services and materials cover a variety of areas, several are focused on or include information related to pregnancy and lactation.

AHRQ is the lead federal agency for the U.S. Preventive Services Task Force (USPSTF), an independent, volunteer panel of national experts in prevention and evidence-based medicine (<https://www.uspreventiveservicestaskforce.org/Page/Name/home>). The Task Force works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services such as screenings, counseling services, and preventive medications. All recommendations are published on the Task Force's Web site and/or in a peer-reviewed journal. Task Force members come from the fields of preventive medicine and primary care, including internal medicine, family medicine, pediatrics, behavioral health, obstetrics and gynecology, and nursing. A total of 18 USPSTF recommendations are directly related to pregnancy and/or lactation, and 26 recommendations include a component related to pregnancy and/or lactation. USPSTF topics that relate most strongly to pregnancy and lactation include:

- [Hepatitis B Virus Infection in Pregnant Women: Screening](#)
- [Bacterial Vaginosis in Pregnancy to Prevent Preterm Delivery: Screening](#)
- [Breastfeeding: Primary Care Interventions](#)
- [Drug Use in Adolescents and Adults, Including Pregnant Women: Screening](#)
- [Elevated Blood Lead Levels in Childhood and Pregnancy: Screening](#)
- [Folic Acid for the Prevention of Neural Tube Defects: Preventive Medication](#)
- [Gestational Diabetes Mellitus, Screening](#)
- [Hepatitis B in Pregnant Women: Screening](#)
- [Human Immunodeficiency Virus \(HIV\) Infection in Pregnant Women: Screening](#)
- [Iron Deficiency Anemia in Pregnant Women: Screening and Supplementation](#)
- [Lead Levels in Childhood and Pregnancy: Screening](#)
- [Low-Dose Aspirin Use for the Prevention of Morbidity and Mortality From Preeclampsia: Preventive Medication](#)
- [Perinatal Depression: Interventions](#)
- [Preeclampsia: Screening](#)
- [Rh\(D\) Incompatibility: Screening](#)
- [Syphilis Infection in Pregnancy: Screening](#)
- [Tobacco Smoking Cessation in Adults, Including Pregnant Women: Behavioral and Pharmacotherapy Interventions](#)
- [Unhealthy Alcohol Use in Adolescents and Adults, Including Pregnant Women: Screening and Behavioral Counseling Interventions](#)

AHRQ worked with OASH, HRSA, SAMHSA, and Ohio State University on an initiative called the Healthier Pregnancy (<https://www.ahrq.gov/professionals/prevention-chronic-care/healthier-pregnancy/index.html>). The purpose of this initiative is to increase screening and referral for six preventive services in pre- and perinatal care settings. The 6 areas of focus include tobacco use, alcohol use, depression, intimate

partner violence, obesity, and breastfeeding. Continuing education modules are available for health professionals (<https://www.ahrq.gov/professionals/prevention-chronic-care/healthier-pregnancy/initiative/index.html>).

AHRQ's sponsors the development of various reports to assist public- and private-sector organizations in their efforts to improve the quality of health care in the United States. These reports provide comprehensive, science-based information on common, costly medical conditions and new health care technologies and strategies. The Evidence-Based Practice Reports review all relevant scientific literature on a wide spectrum of clinical and health services topics. For example, AHRQ supported and has made available the report "Antidepressant Treatment of Depression During Pregnancy and the Postpartum Period", which evaluates the benefits and harms of pharmacological therapy for depression in women during pregnancy or the postpartum period. (<https://www.ahrq.gov/research/findings/evidence-based-reports/er216-abstract.html>).

Communications

As described above, AHRQ focuses its communications efforts on providers and health service organizations, rather than the general public. However, AHRQ's web site does include facts sheets and infographics suitable for a broad public audience. For example, AHRQ uses infographics to describe information and statistics related to public health concerns, including the impact of substance abuse on pregnant women and infants (<https://www.ahrq.gov/sites/default/files/wysiwyg/research/data/data-infographics/images/neonatal-maternity.html>).

Other Collaborative Efforts

In addition to efforts noted above, AHRQ participates in the Federal Interagency Forum on Child and Family Statistics, an interagency group designed to improve both the quality and use of data on children and families by investigating questions of data quality, data measurement, and data integration and by coordinating the development and use of statistical data bases among Federal agencies (<http://childstats.gov>).