

# U.S. Department of Health and Human Services

## Task Force on Research Specific to Pregnant and Lactating Women

### Agency Activities: Department of Defense (DoD)

#### Research

DoD supports research related to pregnant and lactating women through extramural grants and via the efforts of scientists in several branches of the military. This research portfolio addresses a range of topics of special interest to the military. A few key examples include:

- To reduce adverse pregnancy outcomes due to obstructive sleep apnea, researchers supported by the DoD are conducting a randomized controlled trial that examines the use of continuous positive airway pressure (CPAP) therapy compared with standard prenatal care only, in high risk pregnant women.
- DoD supports a range of studies designed to explore how both fetal exposures and pregnancy may affect the long-term risks for breast cancer. For example, DoD is supporting a team of scientists who are looking to determine whether epigenetic changes from in utero estrogenic exposures are the cause for Tamoxifen resistance.
- Disruptions in maternal-fetal interactions during the prenatal period can result in fetal neuropsychiatric disorders. The objective of one DoD-funded study is to gain more knowledge about the effect of inflammation during pregnancy on placental tryptophan metabolic pathways and the impact on serotonin-relevant circuits and fetal brain development.
- In the 2000s, DoD researchers assessed the impact of anthrax vaccination of pregnant women and their offspring. The military health system has established registries to follow families where anthrax or smallpox vaccines were given during pregnancy (<https://health.mil/vaccines>).
- Serotonin Selective Reuptake Inhibitor (SSRI) antidepressants used by pregnant women have been linked to an increased risk of autism spectrum disorder in offspring. One DoD-funded research study aims to assess the changes to the behavioral and serotonin systems of rat offspring exposed to two SSRI drugs (Celexa and Prozac) versus a non-SSRI drug (Wellbutrin) to demonstrate the disruptive effect that SSRI antidepressants have on brain development.
- DoD has developed a large database linking medical records of women who gave birth in the military health system and their offspring. Among the matched singleton live birth pregnancies, 7 percent of mothers were dispensed an antidepressant at any point during pregnancy, and about 1.3 percent of mothers were given an antiepileptic drug.
- Several military branches have studied questions related to military physical fitness assessments in the pregnancy and postpartum periods.
- DoD has supported several studies describing prenatal and obstetric practice in military settings or by military physicians.
- DoD physicians have described support for breastfeeding in the military (on at least one occasion, in cooperation with VA researchers).

#### Clinical Care

DoD provides health care services to pregnant and lactating women through TRICARE, the health care system for active duty military, dependents, and retirees (<https://www.tricare.mil>). In FY 2015, about 120,000 babies were born in the military health system (<https://www.tricare.mil/About/Facts>). The

military health system provides comprehensive coverage that includes substance abuse and mental health services, breast pumps and lactation support as well as maternity care (<https://tricare.mil/tricareu/PublicCourses.aspx>). Special military health programs related to pregnancy or lactation include:

- The Family Advocacy Program is designed to promote healthy family relationships and prevent family violence ([http://www.militaryonesource.mil/phases-military-leadership?content\\_id=266712](http://www.militaryonesource.mil/phases-military-leadership?content_id=266712)).
- The New Parent Support Program (NPSP) offers home visitation, parenting education, and other services to help young families provide a safe and nurturing environment for their children ([http://www.militaryonesource.mil/phases-military-leadership?content\\_id=266712](http://www.militaryonesource.mil/phases-military-leadership?content_id=266712)).

Related to its health care services programs, DoD provides policies, regulations, and guidance related to the health impacts of therapies on pregnant and lactating women and their offspring. DoD has also developed case definitions to support surveillance of pregnancy-related conditions in military populations. These policies and guidance help women and their clinicians make informed decisions about medication in pregnancy. VA and DoD have together implemented a clinical practice guideline on management of pregnancy ([https://www.healthquality.va.gov/guidelines/WH/up/mpg\\_v2\\_1\\_full.pdf](https://www.healthquality.va.gov/guidelines/WH/up/mpg_v2_1_full.pdf)).

## Communications

DoD's military health websites provide resources to pregnant and lactating women and their health care providers. DoD seeks to inform a wide range of audiences about medication use and safety among pregnant and lactating women. DoD is a federal partner in Text4Baby, a text messaging application free to pregnant women and women with infants to inform them of a variety of pregnancy- and lactation-related health issues (<https://partners.text4baby.org/index.php/about/partners>).

## Other Collaborative Efforts

Collaborations noted above include DoD's work with VA on practice guidelines and with other federal agencies on Text4Baby. Other collaborations include:

- DoD 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>).
- In 2016, DoD partnered with NIH, FDA, CDC, and SAMHSA to sponsor a workshop addressing critical gaps in research on opioid misuse and pregnancy. Topics included (1) Screening for opioid use in pregnancy (2) Complications of pregnancy associated with opioid use (3) Most appropriate treatment of pregnant women with opioid use disorders given risks and benefits (4) Treatment and management of infants with neonatal abstinence syndrome; and (5) long-term effects of prenatal opioid exposure on children and the role of preventive interventions to improve childhood outcomes for this high-risk population.