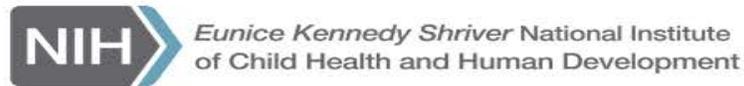


NIH Activities Related to Therapies for Pregnant and Lactating Women

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Overview of Presentation

- NIH Activities Related to Pregnancy and Breastfeeding
 - Research
 - Clinical Practice
 - Communications
 - Collaborative Efforts





NIH Research on Pregnancy

- 21 of NIH's 27 ICs support research related to pregnancy
- The majority of NIH's pregnancy research grants (~87%*) are directly applicable to the Task Force
- Remaining grants are related to pregnancy but are not applicable to therapies for pregnant and lactating women
 - Ex: Research on the impact of short pregnancy intervals on maternal and child health





NIH: Examples of Pregnancy Research Networks

- The Obstetric-Fetal Pharmacology Research Unit Network studies the safety and effective use of therapeutic drugs in women during pregnancy and lactation
- The Maternal Fetal Medicine Units Network reduces maternal, fetal, and infant morbidity related to preterm birth, fetal growth abnormalities, and maternal complications, and provides the rationale for evidence-based, cost-effective obstetric practice
- The Chronic Hypertension and Pregnancy (CHAP) project evaluates the comparative effectiveness and safety of pharmacologic treatment of mild chronic hypertension in pregnancy





NIH: Examples of Investigator-Initiated Pregnancy Grants

- Assess how pregnancy-related hormones and/or growth factors affect specific enzymes and placental drug transporters during pregnancy
- Evaluate how *in utero* malaria exposure affects immune tolerance in offspring
- Explore how maternal arsenic exposure and micronutrient deficiencies alter immune function following influenza vaccination
- Assess the impact of pharmacogenomics on the pharmacokinetics and pharmacodynamics of risperidone, an antipsychotic drug used to treat bipolar disorder and schizophrenia in pregnant women





NIH Research on Breastfeeding, Lactation, and Breast Milk

- 19 of 27 ICs support breastfeeding research
- NICHD, NIAID, NIDDK support the most NIH grants on breastfeeding and lactation
- The majority (~56%*) are directly applicable to the Task Force mission
- Remaining grants are related to breastfeeding but are not applicable to therapies for pregnant and lactating women
 - NIH supports some research on the most effective ways to promote breastfeeding in general, particularly in underserved communities





NIH: Examples of Investigator-Initiated Grants on Breastfeeding, Lactation, and Breast Milk

- Evaluate levels of influenza-specific antibodies and cellular immunity in breast milk
- Study the effect of selective serotonin reuptake inhibitors (SSRIs) on maternal bone health to avert a decrease in long-term bone mineral density in breastfeeding women
- Examine the relationship between breast milk and necrotizing enterocolitis, including characterizing the effects of breast milk on intestinal epithelial cell proliferation and mucosal healing
- Test a passive-active immunization strategy to protect newborns from HIV-1 infection through maternal immunization, hypothesizing that passive antibody transfer in breast milk and *in utero* will help protect infants once maternal antibodies decline



NIH Research Informs Clinical Practice

- Research funded by NIH provides scientific evidence to help inform clinical practice guidelines
- NIH works with the AHRQ to inform the U.S. Preventive Services Task Force recommendations
 - 18 are directly related to pregnancy and/or lactation
 - 26 include a component related to pregnancy and/or lactation





NIH Communications Related to Pregnancy and Lactation

- Public Health Campaigns
 - Moms' Mental Health Matters
 - Know Your Terms
 - Safe to Sleep®
- PregSource™ (NICHD)
- LactMed (NLM)
- Many NIH ICs – including NINDS, NIDDK, NHLBI, NIMH – have fact sheets or information about pregnancy or lactation on their web sites





NIH: Examples of Collaborative Efforts

- NIH staff participate in thousands of interagency collaborations – around 650 within HHS alone in 2016
- Committees, Advisory Groups, Working Groups
- Meetings, Conferences, and Workshops
 - Opioid Use in Pregnancy and Lactation
- Health Surveys
- Research Initiatives and Resource Development
 - Antiretroviral Registry
 - PregSource™
- Public Education Campaigns
- More details tomorrow on Research Coordination and Collaboration



THANK YOU!