

# Overview of CDC Activities

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

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August 21, 2017

National Center for Chronic Disease Prevention and Health Promotion

Division of Reproductive Health



# Overview

- ❑ **CDC's Mission**
- ❑ **Research**
  - ❑ Assessing Risks for Mother/Baby During Pregnancy and Lactation
  - ❑ Specific Illnesses AND their Treatments
  - ❑ Global Health
  - ❑ Surveillance and Data Collection
- ❑ **Clinical Practice Information and Recommendations**
- ❑ **Communications**
- ❑ **Other Collaborative Efforts**

# CDC Mission

- ❑ As the nation's health protection agency, CDC saves lives and protects people from health threats.
- ❑ To accomplish our mission, CDC conducts critical science and provides health information that protects our nation and responds when health threats arise.



# CDC Research—Assessing Risk Factors During Pregnancy and Lactation

- ❑ **Centers for Birth Defects Research and Prevention**
  - National Birth Defects Prevention Study
  - Birth Defects Study to Evaluate Pregnancy Exposures
- ❑ **Cohort Studies of Occupational Exposures**
- ❑ **Epidemiological Studies of Medication Use during Pregnancy**
- ❑ **Study to Explore Early Development**



## Research – National Birth Defects Prevention Study

- ❑ The National Birth Defects Prevention Study is one of the largest studies on birth defects ever undertaken in the U.S.
- ❑ Researchers collected information about babies born between 1997 and 2011
- ❑ Over the course of 14 years of interviews, 43,000 women from 10 states took part in the study
- ❑ More than 200 scientific papers have been published from NBDPS data



## Research – Birth Defects Study to Evaluate Pregnancy ExposureS

- ❑ Next step – the Birth Defects Study to Evaluate Pregnancy ExposureS (BD-STEPs) began collecting data on children born on or after January 1, 2014
- ❑ Interviewers talk with women (via telephone) about their pregnancy experience and general overall health
- ❑ BD-STEPs collect information on 17 birth defects that are common and can incur high costs, including cleft lip and cleft palate, gastroschisis, heart defects, and spina bifida



# Research-Regarding Specific Illnesses and Treatments

## □ Research on Immunizations

- Pregnancy Vaccine Effectiveness Network
- Internet Panel Survey of Pregnant Women
- Conducts Surveillance for vaccine preventable and selected respiratory diseases in pregnant and postpartum women and neonates
- Monitors and evaluates the safety and effectiveness of vaccines in pregnant and postpartum women and neonates
- Recommendations for vaccines in pregnant and postpartum women and neonates, including modeling of vaccine impact – using Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) approach – and economic evaluation

# Research-Regarding Specific Illnesses and Treatments

## ❑ Behavioral and Educational Intervention Research

- Brief Screening and education to prevent congenital CMV
- Efficacy of intervention addressing depression in pregnancy and postpartum

## ❑ Document Impacts of Opioid Use

- Pilot projects on incidence, severity, and outcomes associated with neonatal abstinence syndrome (NAS)
- Tracking trends in prescription opioid use



## Research – Immunizations

### ❑ **Pregnancy Vaccine Effectiveness Network**

- Established in April 2016 to estimate incidence of influenza and vaccination rates, describe epidemiologic characteristics associated with illness, and estimate influenza vaccine effectiveness

### ❑ **Internet Panel Survey of Pregnant Women**

- Conducted in November and April of each year to monitor vaccination trends in pregnant women
- Includes topical questions on current areas of special interest (such as Zika Virus)

## **Research-Regarding Specific Illnesses and Treatments: Zika**

- ❑ **CDC's Zika Pregnancy and Birth Defects Task Force conducts research and implements programs to reduce the risk and impact of Zika virus infection in pregnant women, infants, and children.**
  - Established U.S. Zika Pregnancy and Infant Registries
  - Enhanced surveillance of pregnant women in Colombia, in collaboration with Colombia's Instituto Nacional de Salud
  - Collaborates with Colombia's INS on a cohort study to identify risk factors for Zika virus transmission; the full spectrum of adverse maternal, fetal, and infant health outcomes associated with Zika virus infection; and risk factors for occurrence of these outcomes
  - Conducted more than 300 clinical outreach presentations; released more than 35 scientific publications, 13 clinical guidance updates, and 10 Health Alert Network (HAN) advisories

## **CDC Research—Improving Outcomes around the World**

- ❑ Sub-Saharan Africa: Researchers aim to reduce mother-to-child transmission of HIV and improve outcomes for HIV-infected people**
- ❑ Kenya: Vaccine demonstration project using an Inactivated Influenza Vaccine to vaccinate pregnant women in a high HIV prevalence and malaria-endemic setting**
- ❑ Thailand: Randomized placebo-controlled trial testing safety and efficacy of a short course antiviral therapy during pregnancy to prevent transmission of HBV to their babies**
- ❑ China: Randomized controlled trial among HIV-HBV co-infected women to test the safety of tenofovir during pregnancy**

## **CDC Research—Surveillance and Data Collection**

- ❑ Pregnancy Risk Assessment Monitoring System (PRAMS)**
- ❑ Maternity Practices in Infant Nutrition and Care (mPINC) Survey**
- ❑ National Vital Statistics System**
- ❑ National Health and Nutrition Examination Survey (NHANES)**
- ❑ National Survey of Family Growth (NSFG)**
- ❑ National Health Interview Survey (NHIS)**
- ❑ Research on other databases: Truven Marketscan, HealthCare Cost and Utilization Project**

# Clinical Guidance

- ❑ **Treating for Two initiative**
- ❑ **U.S. Medical Eligibility Criteria for Contraceptive Use**
- ❑ **Environmental exposure information for providers**
  - Prenatal Assessment of Environmental Risks
  - Pediatrics Environmental Health Specialty Units
  - Guidelines for identifying and managing lead exposure in pregnant and lactating women
- ❑ **Advisory Committee on Immunization Practices**
- ❑ **Ten Steps to Successful Breastfeeding**



# Clinical Guidance – CDC's Treating for Two Initiative



BETTER  
RESEARCH

Expand and accelerate research to fill knowledge gaps



RELIABLE  
GUIDANCE

Evaluate evidence to facilitate reliable guidance



INFORMED  
DECISIONS

Deliver up-to-date information to support decision making among prescribers, pharmacists, and consumers

## **Clinical Guidance – Breastfeeding**

**CDC supports evidence-based strategies in hospitals to help women who choose to breastfeed start and continue breastfeeding**

# CDC's Three Strategies to Support Breastfeeding

1

Improve Hospital Support for Breastfeeding

2

Improve Support for Employed Women

3

Improve Community Support for Breastfeeding

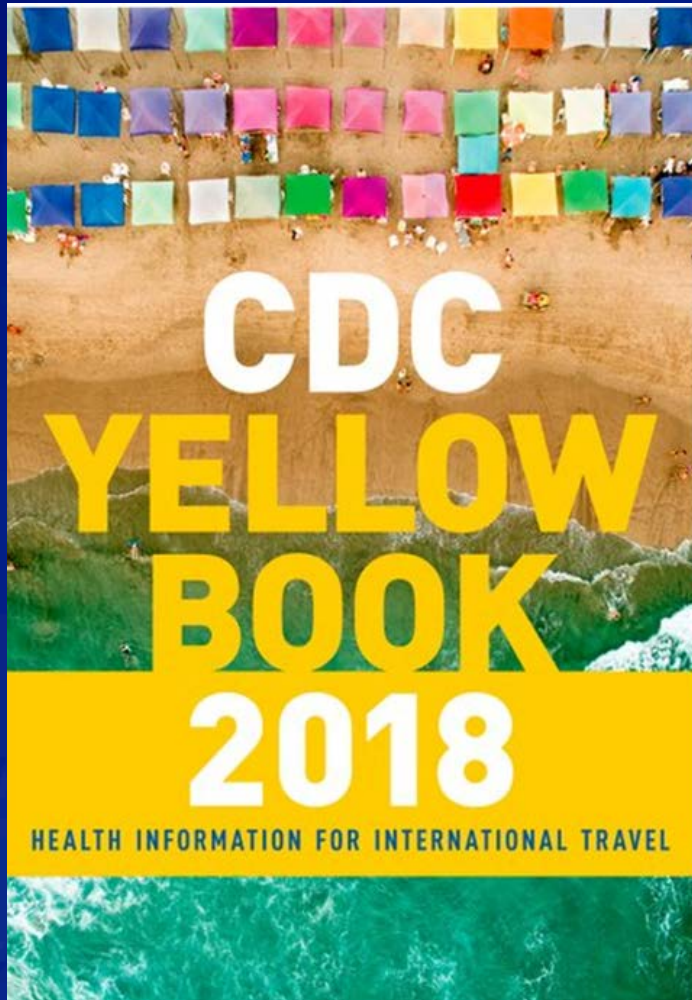
## Our Goal



Ensure that when a mom wants to breastfeed, she has the supports in place to successfully initiate and meet her goals



## Clinical Guidance Materials – CDC Yellow Book



- ❑ Includes the latest information about new emerging infectious disease threats including Zika, Ebola and others
- ❑ Written for the health professionals who care for international travelers
  - Includes special guidance for pregnant and lactating women who are traveling internationally
- ❑ Definitive guide to staying safe and healthy anywhere in the world

# Clinical Guidance Materials – U.S. Medical Eligibility Criteria for Contraceptive Use

The U.S. Medical Eligibility Criteria for Contraceptive Use are evidence-based clinical guidelines that provide information for healthcare providers on the safety of contraceptive methods for women with certain characteristics or medical conditions, including postpartum and lactating women

Centers for Disease Control and Prevention



Morbidity and Mortality Weekly Report

Recommendations and Reports / Vol. 65 / No. 3

July 29, 2016

## U.S. Medical Eligibility Criteria for Contraceptive Use, 2016

Summary Chart of U.S. Medical Eligibility Criteria for Contraceptive Use

Condition	Sub-Condition	Cu IUD	LNG IUD	Implant	MMPA	POP	COC
Age	Menarche	no	no	no	no	no	no
	10-19 yrs	2	2	2	2	2	2
	20-29 yrs	1	1	1	1	1	1
	30-39 yrs	1	1	1	1	1	1
	40-49 yrs	1	1	1	1	1	1
	≥50 yrs	1	1	1	1	1	1
Anatomical abnormalities	a) Distorted uterine cavity	4	4				
	b) Other abnormalities	2	2				
Anemias	a) Phthalocyanosis	2	1	1	1	1	1
	b) Sickle cell disease	2	1	1	1	1	2
	c) Iron deficiency anemia	2	1	1	1	1	1
Benign ovarian tumors	(including cysts)	1	1	1	1	1	1
	a) Unruptured mass	1	2	2*	2*	2*	2*
	b) Simple benign disease	1	1	1	1	1	1
	c) Family history of cancer	1	1	1	1	1	1
Breast disease	a) Current	1	4	4	4	4	4
	b) Past and no evidence of current disease for 5 years	1	3	3	3	3	3
	a) < 21 days postpartum		2*	2*	2*	2*	4*
	b) ≥ 21 days postpartum		2*	2*	2*	2*	3*
Breastfeeding	a) Without other risk factors for VTE		2*	2*	2*	2*	3*
	b) 25-42 days postpartum		1*	1*	1*	1*	3*
	c) ≥ 42 days postpartum		1*	1*	1*	2*	2*
	d) Without other risk factors for VTE		1	1	1	1	1
Cervical cancer	Awaiting treatment	4	2	2	2	1	2
	Completed treatment	1	2	2	2	1	2
Cervical ectropion	Cervix at intraepithelial transition	1	1	1	1	1	1
	Cervix at columnar ectopy	1	1	1	1	1	1
Cervical fibrosis	a) Mild (uncomplicated)	1	1	1	1	1	1
	b) Severe (decompensated)	1	1	1	1	1	1
Deep venous thrombosis (DVT)/Pulmonary embolism (PE)	a) History of DVT/PE, not receiving anticoagulant therapy	1	2	2	2	2	4
	b) Higher risk for recurrent DVT/PE	1	2	2	2	2	3
	c) Acute DVT/PE	1	2	2	2	2	3
	d) DVT/PE and established anticoagulant therapy for at least 3 months	2	2	2	2	2	2
Depressive disorders	a) Higher risk for recurrent DVT/PE	2	2	2	2	2	4*
	b) Lower risk for recurrent DVT/PE	2	2	2	2	2	2
	c) Family history (≥1st-degree relatives)	1	1	1	1	1	1
	d) Major surgery	1	2	2	2	2	4

1. Restrictions (marked on cell). 2. Advantage generally outweighs theoretical or proven risks. 3. Hazardous or proven risks usually outweigh the advantages. 4. Unacceptable health risk (marked on cell).

# Communication

CDC's website provides a broad array of consumer information on issues relevant for pregnant and lactating women, including:

- ❑ Gestational diabetes
- ❑ Zika Infections
- ❑ Folic acid
- ❑ Preventing birth defects
- ❑ Safe medication use in pregnancy
- ❑ Pregnancy & opioid pain medication
- ❑ Blood pressure
- ❑ Breastfeeding

## PREGNANT OR THINKING ABOUT GETTING PREGNANT?

Prevent to Protect: Prevent Infections for Baby's Protection.

Some infections before and during pregnancy can hurt you and your baby. They can cause serious illness, birth defects, and lifelong disabilities, such as hearing loss or learning problems. Here are some examples of how you can reduce your risk of getting infection during pregnancy to help protect your baby.

### Properly prepare food.



- Wash your hands before and after preparing food.
- Do not eat raw or runny eggs or raw sprouts.
- Avoid unpasteurized (raw) milk and cheese, and other foods made from them.

### Talk to your healthcare provider.



- Talk to your healthcare provider about what you can do to prevent infections such as Zika virus.
- Make sure that you are up-to-date with vaccinations (shots) before getting pregnant.
- Talk to your healthcare provider about vaccinations that you should receive during pregnancy.

### Protect yourself from animals and insects known to carry diseases such as Zika virus.



- When mosquitoes are active:
  - Wear long-sleeved shirts and long pants when outside.
  - Use Environmental Protection Agency (EPA) registered insect repellents with one of the following active ingredients: DEET, picaridin, IR3535, or oil of lemon eucalyptus (para-menthane-3,8-diol).
- Stay away from wild or pet rodents, live poultry, lizards and turtles, and do not clean out litter boxes while pregnant.

### Maintain good hygiene.



- Wash your hands often with soap and water especially:
  - Before preparing or eating foods
  - After handling raw meat, raw eggs, or unwashed vegetables
  - After being around or touching pets, and other animals
  - After changing diapers or wiping runny noses
- Do not put a young child's food, utensils, drinking cups, or pacifiers in your mouth.

For more information on preventing birth defects, please visit: <http://www.cdc.gov/ncbddd/birthdefects/prevention.html>



U.S. Department of  
Health and Human Services  
Centers for Disease  
Control and Prevention

# Communication Materials



## WHILE PREGNANT, BE CAREFUL WITH QUESO FRESCO

Maria and her friend Isabela are sitting in Isabela's kitchen discussing the baby shower Maria will be hosting for her friend, Lucinda. Maria shares the plan for a baby shower for her sister, she offered to

Isabela, thank you for helping me plan Lucinda's baby shower!



No problem, Maria. I just hosted my sister's baby shower, so I'm an expert now!

My neighbor has a special queso fresco that she gave me for the party. But, I'm not sure what to do with it. It's wrapped in plastic wrap with no label.



Maria, you must be very careful. Pregnant women shouldn't eat soft cheeses, like queso fresco, unless the label says they were made with "pasteurized" milk.



U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention

## CHECK THE CHEESE, AVOID LISTERIA



Soft cheeses sometimes carry *Listeria* (a rare but deadly germ).



*Listeria* infection in pregnant women can cause miscarriage, stillbirth, or death of the newborn.



**24x**  
Pregnant Hispanic women are about 24 times more likely than the general population to get a *Listeria* infection.

### Reduce your risk of infection during pregnancy to protect your baby

- ✔ Only buy soft cheeses with the word "pasteurized" on the label.
- ✔ Avoid soft cheeses made with unpasteurized milk.
- ✔ Be aware that soft cheeses made in unclean places have caused *Listeria* infections.



Types of Hispanic-style soft cheeses include queso fresco, queso blanco, queso

## Pregnant Travelers



Although there are some special considerations for women who travel while pregnant—especially if they are going to a developing country—most pregnant women can travel safely with a little advance preparation. If you are pregnant and planning an international trip, follow these tips so that you and your baby stay safe and healthy.

## CDC's Response to Zika

### PREGNANT AND IN AN AREA WITH RISK OF ZIKA?\*

WARNING: ZIKA IS LINKED TO BIRTH DEFECTS



### Protect Your Pregnancy

#### From getting Zika from mosquito bites



**Protect Yourself from Bites Day and Night**  
Mosquitoes that spread Zika virus bite during the day and night.

#### Use Insect Repellent

It's safe and it works! Read the label and follow the directions.



#### Cover Your Skin

Wear long-sleeved shirts and long pants.



#### Mosquito-Proof Your Home

Use screens on windows and doors. Use air conditioning when available. Eliminate standing water.



#### From getting Zika from sex



#### Don't have Sex

Don't have sex during your pregnancy.

#### OR

#### Use a Condom

Use a condom the right way every time you have vaginal, anal, oral sex, or share sex toys during your pregnancy.



### Talk to your Healthcare Provider

If you think you or your partner may have or had Zika, tell your healthcare provider.



There is No Vaccine to Prevent Zika Virus Infection

For more information: [www.cdc.gov/chikungunya](http://www.cdc.gov/chikungunya)

\*Visit [www.cdc.gov/zika/geo/index.html](http://www.cdc.gov/zika/geo/index.html) for more information on areas with risk.

CS263275A August 3, 2017

Pregnant or thinking about pregnancy? Talk to your doctor about any medications you are taking.



[www.cdc.gov/treatingfortwo](http://www.cdc.gov/treatingfortwo)

Safer Medication Use in Pregnancy

## **Other Collaborative Efforts**

- ❑ CDC 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.**
- ❑ CDC co-chairs the Federal Interagency Breastfeeding Work Group, an interagency group designed to increase sharing of information and expertise, prevent duplication, and increase collaboration on projects and initiatives with mutual goals.**

## Other Collaborative Efforts

**The American Board of Obstetrics and Gynecology and the CDC Foundation established the American Board of Obstetrics and Gynecology/CDC Larry Gilstrap, MD, Fellowship**

- Provides training opportunities for obstetricians and gynecologists at the CDC focusing on infectious diseases and sexually transmitted diseases in women and in pregnancy
- Fellowship assigned within CDC's Division of Sexually Transmitted Disease Prevention and collaborates with the Division of Reproductive Health

# Thank you

**For more information, please contact Centers for Disease Control and Prevention**

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

