

# Preconception Care



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# Objectives

**Define Preconception Care and explain why it is important**

**Identify essential components of Preconception Care**

**Describe ways in which Preconception Care is critical to and can be incorporated into the Healthy Start model**

# What Do We Mean By Preconception Care?

Identifying and intervening on risk factors that impact pregnancy **BEFORE** pregnancy occurs



Decreases maternal and infant mortality

Reduces the risk of birth defects

Promotes the healthiest mothers and babies

(Evidence-Based)

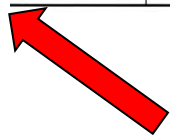
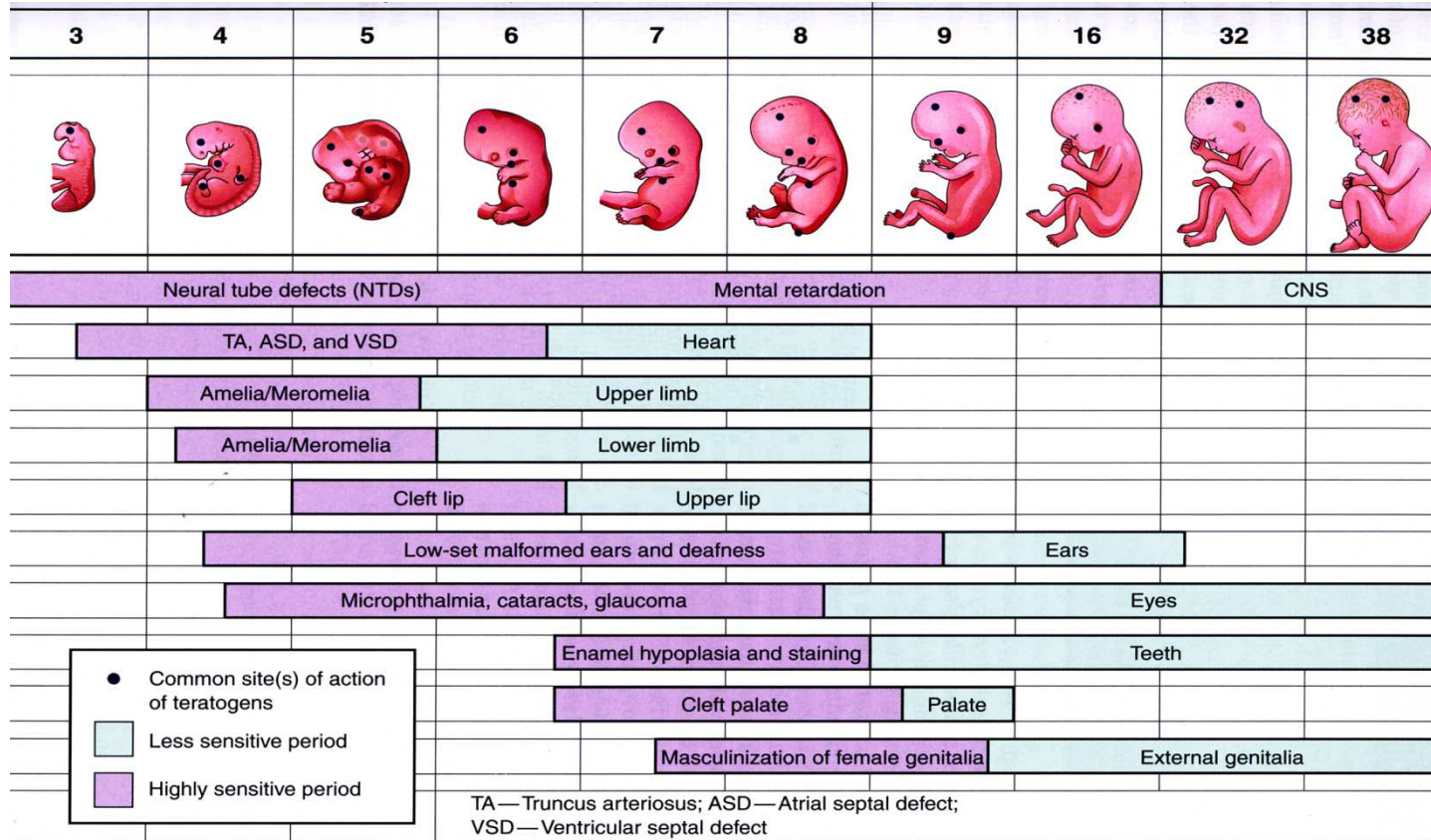


# Why Is It So Important?

- The embryo begins to develop at the same time a woman expects her next period to start – before she even knows she's pregnant!
  - Major birth defects can occur at that time
  - Brain and heart are the first organs to develop
- All major organs form in the first 2 months of development
- Prenatal care is often too late!

# Development of the Embryo

Weeks after Conception



The day a woman expects her period

# Components of Preconception Care

## **Before pregnancy occurs:**

1. Identification of risks
2. Provision of motivational education based on risks
3. Initiation of desired interventions

# Lifestyle

- Nutrition
- Exercise
- Healthy Weight
- Folic Acid 400  $\mu\text{g}$  every day
  - 73% ↓ in neural tube defects
  - ↓ miscarriages
  - May ↓ other birth defects as well

# Smoking

- **Responsible for:**
  - 7-10% of pre-term deliveries
  - 17-26% of low-birth-weight infants
  - 5-6% of perinatal deaths
- **Interventions proven effective**
  - Motivated women more likely to quit
- **All of the risks reduced if a woman stops**





# Alcohol

- No amount of alcohol should be considered safe\*

- **Fetal Alcohol Effects**

- Spontaneous abortion
- Fetal growth restriction
- Physical anomalies
- Neurologic deficits

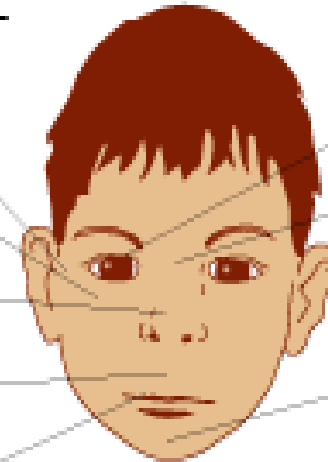
- **Most common preventable cause of mental retardation**

## Discriminating Features

Short palpebral fissures  
Flat midface  
Short nose  
Indistinct philtrum  
Thin upper lip

## Associated Features

Epicanthal folds  
Low nasal bridge  
Minor ear anomalies  
Micrognathia



**Fetal Alcohol Syndrome  
(4-6 drinks/day)**

\*American Academy of Pediatrics, November 2015

# Other Mood-Altering Substances

## ■ Opiates

- Neural tube defects
- Neonatal Abstinence Syndrome

## ■ Cocaine

- Can cause birth defects
- ↑ Placental abruption, preterm labor
- Neonatal withdrawal

## ■ Marijuana

- Possible effects on intellectual development

# Medications That Can Cause Birth Defects

Accutane for acne

Blood thinners

Cancer drugs

Drugs to lower cholesterol

Male hormones

Many seizure drugs

Some blood pressure medications

Some psychiatric drugs

# Stabilize Medical Conditions

- Diabetes
- High Blood Pressure
- Epilepsy
- Thyroid conditions
- Asthma
- Sickle Cell Disease
- Heart, Kidney, Blood, etc.

# Additional Factors

- Check for infectious diseases (esp. HIV)
- Immunizations up to date (esp. MMR, Flu)
- Pregnancy history (Has she lost a baby?)
- Dental care
- Social risks
  - Depression
  - Intimate partner violence

# How Do We Do All of This?

Remember that every woman from puberty to menopause is possibly preconception



- Help all women access health insurance and find a medical home
- Annual well woman visits
- Encourage planned pregnancies

# The Affordable Care Act – A Game Changer



# ACA Mandated Coverage

## For both men and women

- Cardiovascular screenings
  - Includes **blood pressure**, cholesterol, **testing for Type II diabetes**
- Cancer screenings
  - Includes breast, cervix, colorectal, prostate
- **Alcohol misuse screening and counseling**
- **Tobacco use screening and cessation tools**
- **Depression screening**



# ACA Mandated Coverage

- For both men and women (continued)
  - Obesity screening and counseling
  - STI testing for those at high risk
  - All recommended vaccines
- All policies must include maternity care
- Plus at least one well-woman preventive care visit annually

# ACA Mandated Coverage

- Screening for gestational diabetes
- Lactation counseling and support, including supplies
- Annual counseling on STI risk
- Counseling and screening for HIV
- Adding HPV test to Pap for women  $\geq 30$
- Screening and counseling for interpersonal/domestic violence
- Patient education, counseling, and availability of full range of contraceptive options

# Contraception

## Based on a woman's Reproductive Life Plan

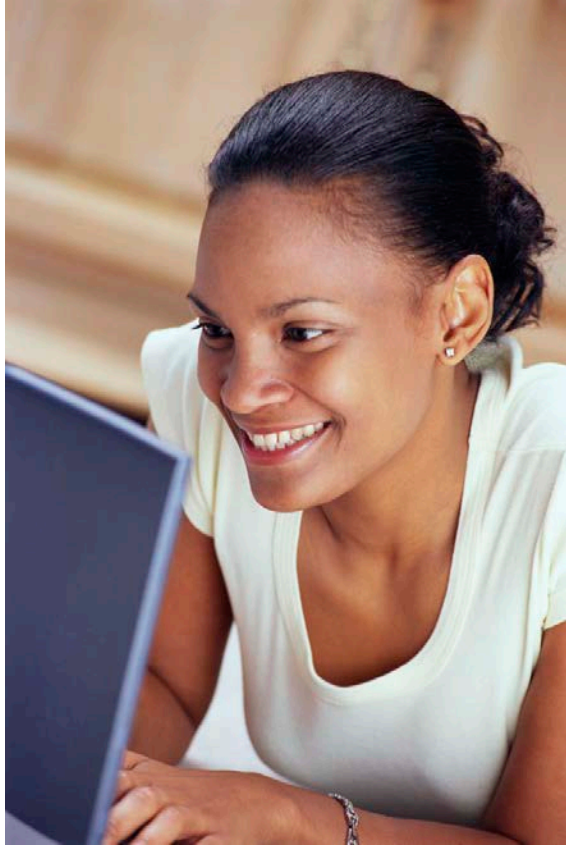
- Do you plan to have children?
- How many?
- When?

## Enables women to:

- Plan pregnancies
- Achieve optimal health before pregnancy
- Obtain preconception care
- Have the healthiest possible pregnancy!

# CASES

# Sharese



I heard about Preconception Care in my Health & Life Skills class at the Boys and Girls Club. I don't plan on getting pregnant any time soon, but if it happened I know it would be important to be as healthy as possible. What do I have to look out for?

# Counseling Sharese

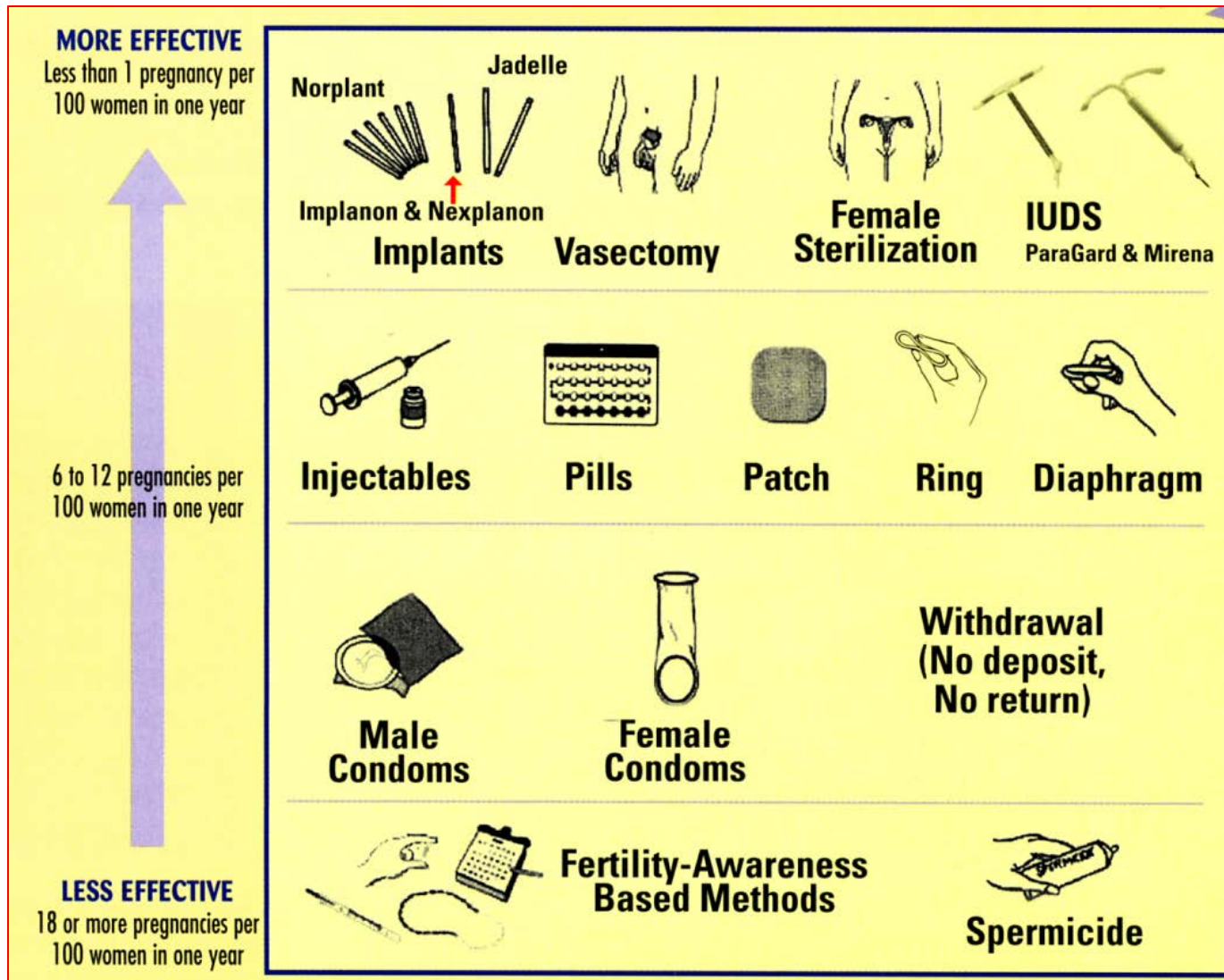
## ■ Reproductive Life Plan

- Do you plan to have children?
- How Many?
- When?

## ■ Contraception

- Counsel on options and effectiveness
- Refer to health care provider for method

# WHO Chart



# Counseling Sharese

- **Assess preconception risk factors**
- **Discuss additional health measures**
  - **Exercise and diet, including Folic Acid 400 µg**
  - **Tobacco, alcohol, mood-altering drug risks**
  - **Annual Well Woman check**
  - **Immunizations**
  - **IPV and depression screens**



# Tanya



Healthy Start sponsored a lecture at my Community College on what they called Preconception Care. They said that being overweight could cause problems for a pregnancy like high blood pressure or diabetes, and that there is even an increased risk of having a stillbirth or a baby with birth defects. My partner and I have been planning to have a baby when we finish school next year, but now I'm worried.

# Obesity in Pregnancy

## Assess or Refer for Assessment of BMI

If increased →

- Maternal risk of hypertension, diabetes, blood clots
- Fetal risk of congenital and growth abnormalities, stillbirth



- Test for diabetes (Glucose Tolerance Test) if BMI >30 or >25 with other risk factors
- Needs referral or specific suggestions for calorie control, exercise

# Counseling Tanya

High-risk preconception issue identified →  
Assign a case manager to work with Tanya

- Arrange for Glucose Tolerance Test
- Discuss and make plan for weight loss

Ask about Reproductive Life Plan

- Can she defer pregnancy until she loses some weight?
- Discuss contraception

Assess other preconception risk factors

# Tanya Follow –Up

Tanya's BMI was 34. Her Glucose Tolerance Test showed that she had Type 2 Diabetes

- Counsel about risk of fetal and maternal complications
- Inform about possible hospitalization during pregnancy and that she may also need insulin then
- **Tight preconception glucose control →**  
**3x ↓ risk of birth defects, ↓ stillbirth, ↓ miscarriage**
- **Much better to find this out BEFORE Pregnancy**

# Vanessa



Vanessa's mother participated in Healthy Start during her pregnancies 15-25 years ago. She has sent her daughter to you because Vanessa wants to have a baby but has been treated for epileptic seizures since childhood. Mom is sure you will know if this is a problem and if so be able to help her with it.

# Counseling Vanessa

Assign a case manager to work with Vanessa and partner with medical home to help with her care.

## Epilepsy

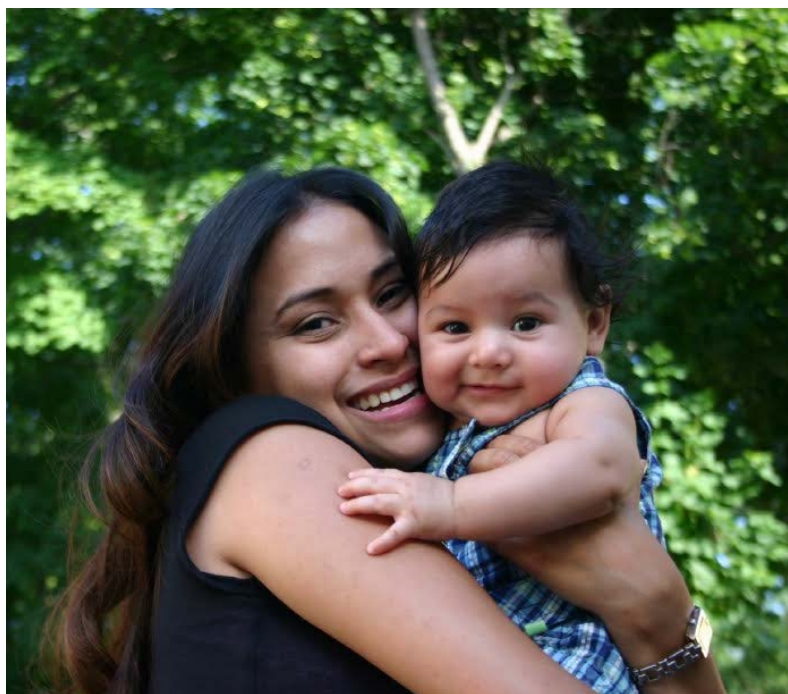
- Counsel about 2-3x increased risk of birth defects
  - May be due to the disease itself or medications treating it
- If no seizures for 2 years, often tried off medication
- If therapy required, meds that can cause birth defects stopped and lowest possible dose of one drug started
- **Folic acid 4 mg qd**

Contraception important until this is done

Assess other preconception risk factors



# Christina



Christina has been a Healthy Start participant since halfway through her pregnancy. She needed a C section because her baby weighed 9½ pounds at birth. Her doctors told her this was probably related to her Type 2 Diabetes, which she didn't know about until she was pregnant. Christina mentions that you'll likely be seeing her sister soon, because she is currently trying to have a baby too.

# Counseling Christina

**Control diabetes BEFORE pregnancy to avoid complications**

- Tight preconception glucose control → ↓ risk of large babies, stillbirth, and birth defects

**Counsel on spacing pregnancies at least 18 months apart**

- What is her Reproductive Life Plan?
- Does she need a referral for contraception?

**Suggest she refer her sister for Preconception Care, especially as she is also at risk for diabetes**





# Preconception Care Is for Men Too!



Make a Reproductive Life Plan

Prevent and treat STIs

Stop tobacco, alcohol, and drugs

Maintain a healthy weight

Learn about family history

Get help for violence

Stay mentally healthy

**Support your partner!**



# Why is Preconception Care Important to Healthy Start?

There is strong evidence that it can decrease perinatal mortality and improve maternal and child health

Life Course Theory means Continuum of Care across the entire life course

# Life Course Theory

“Much of current applications of the life course theory in MCH follow one or more of three major themes. First, there are early and **preemptive interventions**. A primary message of the life course theory is to **intervene when it counts the most, which in many cases may be earlier than what has been done in the past, such as preventing child obesity by improving prenatal nutrition, or preventing adverse birth outcomes by improving women’s preconception health.**”

# How does Preconception Care relate to Healthy Start's mission?

**Preconception Care directly affects the 5 Approaches and related Benchmarks**



# The First Approach

## ■ Improve Women's Health

- Increase proportion of HS participants with health insurance to 90%
- Increase proportion of HS participants who have a documented Reproductive Life Plan to 90%
- Increase proportion of HS participants who receive a postpartum visit to 80%
- Increase proportion of HS participants who have a medical home to 80%
- Increase proportion of well woman visits among HS participants to 80%

# The Second Approach

## ■ Promote Quality

- Increase abstinence from smoking among Health Start participants to 90%
- Reduce proportion of Healthy Start pregnancies conceived within 18 months of a previous birth to 30%

# The Third Approach

## ■ Strengthen Family Resilience

- Increase proportion of Healthy Start participants who receive depression screening to 100%
- Increase proportion of Healthy Start participants who receive intimate partner violence screening to 100%
- Increase proportion of Healthy Start grantees that demonstrate father and/or partner involvement to 90%

# Incorporating Preconception Care into Healthy Start Programs

## Utilize the CAN to promote and recruit

- Educate members about Preconception Care
- Partner with stakeholders to spread the word

Outreach to youth groups, faith-based initiatives, high schools, junior colleges, Job Corps, Boys and Girls Clubs, juvenile detention, shelters, etc.

Organize preconception discussion groups for women of reproductive age





# Incorporating Preconception Care into Healthy Start Programs

## Discuss importance of Preconception Care with

- All participants - and encourage them to educate friends, mothers, sisters, daughters, and other relatives about it
- All women of reproductive age that you encounter, including those that accompany participants
- Interconception participants

# Incorporating Preconception Care into Healthy Start Programs

Begin with the One Key Question: “Would you like to become pregnant in the next year?”

- If no, discuss and refer for contraception
- If yes
  - Schedule preconception visit
  - Assess preconception risk factors\*
  - Assign case manager if high risk
- If “whatever happens”
  - Reinforce healthy lifestyle, preconception habits
  - Assess preconception risk factors\*

\* May use “Gabby” in the future



# Finding the Time

## Focus on Factors with strongest evidence base

- Folic Acid Supplementation
- Smoking Cessation
- Alcohol Intervention
- Discontinuing Teratogenic Medications
- Diabetes Control
- HIV Testing
- Reduction of Obesity

# Resources

Additional ideas and resources available under Preconception in the Evidence-Based Inventory at [healthystartepic.org](http://healthystartepic.org)

## Excellent sites

- CDC
  - Preconception Health and Healthcare
  - Reproductive Life Plan
- <http://www.beforeandbeyond.org>



# Summary

## Healthy Men & Women Have Healthy Families!

