# Maternal, Infant, and Child Health

Knowledge Base Skills, Communication Skills, & Capacity-Building Skills

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By the end of this session, you will be able to:

- Describe the impact of generational maternal health on child and infant.
- Define how social determinants of health impact generational health.
- □ Evaluate facts relating to the impact of COVID-19 and vaccine hesitancy on pregnant women, infants, and children.
- Explore tools that can be used to increase awareness of education on generational health and evaluate effects of maternal health on child.

# Learning Outcomes



## **Health Risks ~ Maternal Health**

- High Blood Pressure (Hypertension)
- Cardiovascular (Heart) Disease
- High Blood Sugar (Diabetes)
- Tobacco, Alcohol, and Substance Use
- Unhealthy Weight
- Inadequate Nutrition
- Sedentary Lifestyle
- Sexually Transmitted Diseases (STDs)
- Depression
- Genetic Conditions
- Age





# ~Preconception Health

Preconception health refers to the health of women and men during their reproductive years. Focuses on taking steps **now** to **protect** the **health** of a **baby** they might have sometime in the **future**.

#### Discussion Question

#### Did you know???

There have been important advances in medicine and prenatal care in recent years. Despite these advances, birth outcomes are worse in the United States than in many other developed countries. Many babies are born early or have low birthweight. Among some groups of people, the problems are getting worse. Preconception health and preconception health care can make a difference.



## ~Preconception Health

Preconception health refers to the health of women and men during their reproductive years. Focuses on taking steps now to protect the health of a baby they might have sometime in the future.

- Think about health whether planning a pregnancy
  - Prepare at least 3 months prior (earlier if accommodations are needed)
  - Talk with your doctor include your partner and discuss their health as well
- Unplanned pregnancies
  - ½ of all pregnancies
  - Preterm birth
    - 1 in 8 babies are born too early
  - Low birth weight
- 5 Most Important Things to Boost Preconception Health
  - Folic Acid
  - Stop smoking and drinking alcohol
  - Stabilize medical conditions (diabetes, asthma, oral health, obesity, or epilepsy) and maintain control
  - Talk with doctor about any medications/supplements (prescription or over-the-counter), keep vaccines current
  - Avoid contact with toxic substances or materials that could cause infections either at work or home. No chemicals or cat/rodent feces.



## ~Preconception Health

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- Partner's role in preparing for pregnancy
  - Make decision together
  - Partner's lifestyle choices and health conditions make a difference
  - Partner's working conditions can impact exposure to chemicals and other toxins
- Genetic Counseling
  - Reasons
    - A family history of a genetic condition, birth defect, chromosomal disorder, or cancer
    - Two or more pregnancy losses, a stillbirth, or a baby who died
    - A child with a known inherited disorder, birth defect, or intellectual disability
    - A woman who is pregnant or plans to become pregnant at 35 years or older
    - Test results that suggest a genetic condition is present
    - Increased risk of getting or passing on a genetic disorder because of one's ethnic background
    - People related by blood who want to have children together



# ~(Inter)Generational Health

Describes ways in which our family history affects our health, and the ways our health affects future members of our family.

- Embryology (how a fetus develops)
  - Maternal Grandmother (Diet and Health Status)
    - Plays key role in brain formation and physical body of grandchildren
  - Genes & DNA
    - Grandparents share approximately 25% of their DNA with their grandchildren
    - Great-grandparents share approximately one-eight 1/8 of their DNA with their grandchildren
    - DNA Chromosomes vs. mtDNA

More research is needed.

Health Disparities <a href="https://youtu.be/xUUJIG0-SIA">https://youtu.be/xUUJIG0-SIA</a>



# ~(Inter)Generational Health

Describes ways in which our family history affects our health, and the ways our health affects future members of our family.

- Health Disparities
  - Women's health conditions help shape likelihood of behavior problems in subsequent generations.
  - Disadvantaged women's health conditions decrease children's health.
  - Health care differences such as accessibility, routine-preventative care, and health literacy gaps continue to impact generations.
  - In Texas, infant mortality rate is two (2) times higher for non-Hispanic Black infants compared to non-Hispanic White or Hispanic infants.
- Discussion Statements:
  - "We women do not create our babies we create our grandbabies when we become pregnant"
  - "The number one determining factor of longevity and quality of health is fetal nutrition...the mother's and the grandmother's"



# Social Determinants of Health (SDOH)

Maternal marital status, education level, multiple gestation, cesarean delivery, and other maternal risk factors were significantly associated with infant mortality.

https://youtu.be/bXBkOYMCAro



#### ~SDOH





# COVID-19





Impact on Pregnancy
Myth Busters
Facts versus Fiction
Vaccine Hesitancy



Your Health | COVID-19 | CDC



### ~COVID-19 Facts

Pregnant and recently pregnant people (for at least 42 days following end of pregnancy) are more likely to get very sick from COVID-19 compared with non-pregnant people...

#### **Points of Protection:**

| Get vaccinated and | stay up to date | on your COVID-1 | 9 vaccines |
|--------------------|-----------------|-----------------|------------|
|--------------------|-----------------|-----------------|------------|

- Wear a mask
- ☐ Stay 6 feet away from others
- Avoid poorly ventilated spaces and crowds
- ☐ Test to prevent spread to others
- Wash your hands often
- Cover coughs and sneezes
- Clean and disinfect
- Monitor your health daily
- □ Follow recommendations for quarantine
- Follow recommendations for isolation
- Take precautions when you travel
- □ Stay up to date on guidelines and protocols from a reputable source

Breastfeeding and Caring for
Newborns if You Have COVID-19 |
CDC - Guidelines

- -Home
- -Hospital
- -Breastfeeding
- -Monitor your newborn for COVID-19 symptoms



#### ~COVID-19 Facts

Pregnant and recently pregnant people (for at least 42 days following end of pregnancy) are more likely to get very sick from COVID-19 compared with non-pregnant people...

- Increased Risk of Severe Illness
  - Hospitalization
  - Admission into an intensive care unit (ICU)
  - Ventilator or special equipment to help breathe
- Effect on Pregnancy Outcomes
  - Preterm delivery (earlier than 37 weeks)
  - Stillborn infant
  - Other pregnancy complications

CDC Data COVID-19 during Pregnancy: Birth and Infant Outcomes
January 25, 2020 – December 31, 2021

- 51,761 People with COVID-19 who completed pregnancy
- 52,590 Birth outcomes among pregnant people with COVID-19 (multiple gestations)
- 52,085 Live born infants
- 505 Pregnancy Losses = 0.96% Less than 1%

COVID-19 Vaccine & Pregnancy Questions 1-866-686-6847 Chat Live or Send an Email to MotherToBaby



# ~COVID-19 Vaccine Hesitancy

Pregnant and recently pregnant people (for at least 42 days following end of pregnancy) are more likely to get very sick from COVID-19 compared with non-pregnant people...

#### What You Need to Know...

- COVID-19 vaccines are safe and effective.
- □ CDC recommends everyone ages 5 years and older get vaccinated as soon as possible to protect against COVID-19 and its potentially severe complications. CDC has updated its recommendation for COVID-19 vaccines with a preference for mRNA vaccines (Pfizer-BioNTech and Moderna).
- Millions of people in the United States have received COVID-19 vaccines under the most intense safety monitoring program in U.S. history.
- □ CDC, the U.S. Food and Drug Administration (FDA), and other federal agencies continue to monitor the safety of COVID-19 vaccines.
- Adverse events described on this page have been reported to the <u>Vaccine Adverse Event Reporting</u> <u>System (VAERS)</u>. Serious adverse events after COVID-19 vaccination are rare but may occur.



# ~COVID-19 Vaccine Hesitancy

Pregnant and recently pregnant people (for at least 42 days following end of pregnancy) are more likely to get very sick from COVID-19 compared with non-pregnant people...

- Hundreds of Millions of People Have Safely Received a COVID-19 Vaccine.
- Possible Common Side Effects After Vaccination
  - Swelling, redness, and pain at the injection site
  - o Fever
  - Headache
  - Tiredness
  - Muscle pain
  - o Chills
  - Nausea
- Serious Safety Problems Are Rare
- Benefits of Vaccination Outweigh the Risks

https://youtu.be/7bBmQaX2k4w



## ~Awareness & Education

What can CHWs and other health professionals do to increase awareness and education...

#### **Discussion:**

- "If every woman and man took action today, the health of future generations of children and grandchildren would benefit. In fact, we could even save the human race."
- How can each of us reduce health disparities intertwined in each generation?

#### Tools & Bridging the Gap:

- Quitting Smoking Programs
- Alcohol & Drugs Programs
- Depression & Mental Health Care
- Know your COVID-19 Community Level County Check
- Toolkit for Pregnant People and New Parents
- What You Can do if You Are at a Higher Risk PDF Handout
- Don't Delay: Test Soon and Treat Early PDF Handout







#### Community Health Workers..."Health for All"

"CHWs are increasingly being recognized as a critical resource for achieving national and global health goals."

Perry, B., Chowdhury, M., Were, M., LeBan, K., Crigler, L., Lewin, S., Musoke, D., Kok, M., Scott, K., Ballard, M., & Hodgins, S. (2021). Community health workers at the dawn of a new era: 11. CHWs leading the way to "health for all." *Health Research Policy and Systems*, 12(19)Supp 3: 111. https://doi.org/10.1186/s12961-021-00755-5.

**Questions & Answers** 

Thank you!

Make Healthy Living a Priority!

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#### Resources

- Smoking ~
  - Helpline 1-800-QUIT-NOW
  - Smokefree.gov (Free resources for Quitting Smoking)
  - Primary Care Physician
- Alcohol & Drugs ~
  - American Addiction Centers <a href="https://www.alcohol.org/resources/">https://www.alcohol.org/resources/</a>
  - Alcoholics and/or Narcotics Anonymous (Free and available in most areas)
     <a href="https://www.aa.org/">https://www.aa.org/</a>
     <a href="https://www.narcotics.com/narcotics-anonymous/">https://www.narcotics.com/narcotics-anonymous/</a>
  - SMART Recovery <a href="https://www.smartrecovery.org/">https://www.smartrecovery.org/</a>
  - Inpatient Rehab <a href="https://www.addictionresource.net/best-drug-rehab-centers/">https://www.addictionresource.net/best-drug-rehab-centers/</a>
- Depression & Mental Health ~
  - Stress and Coping Resources <a href="https://www.cdc.gov/mentalhealth/tools-resources/index.htm">https://www.cdc.gov/mentalhealth/tools-resources/index.htm</a>
  - Mental Health.gov <a href="https://www.mentalhealth.gov/">https://www.mentalhealth.gov/</a>
  - Suicide Prevention Lifeline 1-800-273-TALK (8255)
  - Veterans Crisis Line 1-800-273-8255 Press 1



Healthy Living~

Resources

- My Healthfinder <a href="https://health.gov/myhealthfinder">https://health.gov/myhealthfinder</a>
- How to Protect Yourself & Others from COVID-19 ~
  - https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html
- Learn how to have a health baby ~
  - https://www.cdc.gov/pregnancy/
- Pregnant and Just Had a Baby~
  - https://www.cdc.gov/coronavirus/2019-ncov/downloads/communication/COVID-19\_Pregnancy.pdf
- Emerging Threats to Mothers and Babies~
  - https://www.cdc.gov/ncbddd/set-net/index.html
- Toolkit for Pregnant People and New Parents~
  - https://www.cdc.gov/coronavirus/2019-ncov/communication/toolkits/pregnant-people-and-new-parents.html



#### Breastfeeding and Caring for Newborns if You Have COVID-19~

#### Resources

- https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/pregnancybreastfeeding.html#caring-for-newborns
- Know Your COVID-19 Community Level County Check~
  - https://www.cdc.gov/coronavirus/2019-ncov/your-health/covid-by-county.html
- What You Cand do If You Are at a Higher Risk of Severe Illness PDF Handout~
  - https://www.cdc.gov/coronavirus/2019-ncov/downloads/COVID19-What-You-Can-Do-High-Risk.pdf
- Don't Delay: Test Soon and Treat Early PDF Handouts English/Spanish~
  - https://www.cdc.gov/coronavirus/2019-ncov/downloads/communication/print-resources/Test-Soon-Treat-Early.pdf
  - <a href="https://www.cdc.gov/coronavirus/2019-ncov/downloads/communication/print-resources/COVID-19\_TestEarly\_Infographic\_ES.pdf">https://www.cdc.gov/coronavirus/2019-ncov/downloads/communication/print-resources/COVID-19\_TestEarly\_Infographic\_ES.pdf</a>
- COVID-19 Communication Resources~
  - https://www.cdc.gov/coronavirus/2019-ncov/communication/index.html



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