Healthy Birth Spacing and Inter-Conception Health Interventions

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March of Dimes Washington
Learning Objectives

1. Understand the challenges with prematurity in Washington today.

2. Describe the risk for adverse birth outcomes as it pertains to birth spacing and inter-conception health.

3. List and describe interventions that you can use in your work to improve birth spacing and inter-conception health.

4. Know where to go to find resources for implementing interventions that support healthy birth spacing and inter-conception health.
Our Mission

To improve the health of all babies by preventing birth defects, premature birth and infant mortality.
Why is U.S. Preterm Birth Urgent Today? #1 Cause of Infant Death

4 million babies born each year
380,000 babies are premature
1 in 10 babies are premature
8,470 babies die
$26 billion excess annual health costs
Average Expense to Employer
Newborn Care

Preterm birth rates

Preterm is less than 37 weeks gestation.

Prepared by March of Dimes Perinatal Data Center, September 2016.
2016 PREMATURE BIRTH REPORT CARD

WASHINGTON

The March of Dimes Prematurity Campaign aims to reduce preterm birth rates across the United States. Preterm Birth Report Card grades are assigned by comparing the 2015 preterm birth rate in a state or locality to the March of Dimes goal of 8.1 percent by 2020. The Report Card also provides county and race/ethnicity data to highlight areas of increased burden and elevated risks of prematurity.

COUNTIES

Counties with the greatest number of births are graded based on their 2014 preterm birth rates.

<table>
<thead>
<tr>
<th>County</th>
<th>Preterm birth rate</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark</td>
<td>8.3%</td>
<td>B</td>
</tr>
<tr>
<td>King</td>
<td>7.8%</td>
<td>A</td>
</tr>
<tr>
<td>Pierce</td>
<td>8.1%</td>
<td>A</td>
</tr>
<tr>
<td>Snohomish</td>
<td>8.3%</td>
<td>B</td>
</tr>
<tr>
<td>Spokane</td>
<td>9.3%</td>
<td>C</td>
</tr>
<tr>
<td>Yakima</td>
<td>8.4%</td>
<td>B</td>
</tr>
</tbody>
</table>

RACE & ETHNICITY IN WASHINGTON

The March of Dimes uses a Disparity Index score to measure and track progress towards the elimination of racial/ethnic disparities in preterm birth. The score represent the average percent difference in the preterm birth rate across all groups compared to the group with the lowest rate in the state. Index scores range from 0 (achievement of equity) to 44 (highest score in 2016).

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Disparity index</th>
<th>State rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>7.8</td>
<td>25</td>
</tr>
<tr>
<td>Hispanic</td>
<td>8.4</td>
<td>#27</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>8.5</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>13.1</td>
<td></td>
</tr>
</tbody>
</table>

In Washington, the preterm birth rate among American Indian/Alaska Native women is 49% higher than the rate among all other women.
RACE & ETHNICITY IN WASHINGTON

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Gestation age is based on obstetric estimate. Race categories include only women of non-Hispanic ethnicity. Source: National Center for Health Statistics, 2012-2014 natality data.
Population of women 15-44 years
Washington, 2014

Source: US Census Bureau. Population estimates based on bridged race
categories released by the National Center for Health Statistics.
Preterm is less than 37 completed weeks gestation. ** Suppressed due to missing data or insufficient numbers.

Source: National Center for Health Statistics, final natality data.
How is the March of Dimes improving birth outcomes?
5.5% - Proposed US Preterm Birth Rate Goal For 2030 By March Of Dimes

Fighting for the Next Generation: US Prematurity in 2030

Edward R.B. McCabe, Gerard E. Carrino, Rebecca B. Russell and Jennifer L. Howse

Pediatrics; originally published online November 3, 2014
What IS Working to Prevent Preterm Birth?

1. **Optimize birth spacing and pregnancy intentionality**
2. Eliminate non-medically indicated early elective deliveries (inductions and c-sections)
3. **Group prenatal care**
4. **Smoking cessation**
5. **Low-dose aspirin to prevent preeclampsia**
6. **Access to progesterone shots for women with a previous preterm birth**
7. **Vaginal progesterone and cerclage for short cervix**
8. **Reduce multiple births conceived through ART**

Bundle interventions through the Healthy Babies are Worth the Wait® Community Program.
Intervention Impact

Seven interventions described in Chang, et al, 2013 and McCabe et al, 2014

Risk Factor
Our Priorities in Washington

Reduce Preterm Birth Rate to 7.8% by 2020

• Expand access to group prenatal care statewide (Focus areas with high burden, high population)

• Tobacco Cessation for pregnant women

• Improve birth spacing and inter-conception care

**All priorities approached with a health equity lens.**
Time between a live birth and the conception of the next pregnancy

Birth spacing of less than 18 months increases the risk of preterm birth, low birthweight, and small for gestational age

33.1% of U.S. births have a short IPI (<18 months)

Risks increase as birth interval decreases, with birth spacing of less than 6 months having the highest risk.
For each month that birth spacing was less than 18 months,

- Preterm births increased 1.9%
- Low birthweight increased 3.3%
- Poor intrauterine growth increased 1.5%

Association between Interpregnancy Interval and Risk of Preterm Birth, California 2007-2010

Results from the Stanford Prematurity Research Center

<table>
<thead>
<tr>
<th>Interpregnancy Interval (months)</th>
<th>Adjusted Odds Ratio (aOR) for Preterm Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;6</td>
<td>1.71</td>
</tr>
<tr>
<td>6-11</td>
<td>1.20</td>
</tr>
<tr>
<td>12-17</td>
<td>1.06</td>
</tr>
<tr>
<td>18-23</td>
<td>Referent Group</td>
</tr>
<tr>
<td>24-29</td>
<td>1.00</td>
</tr>
<tr>
<td>30-35</td>
<td>1.05</td>
</tr>
<tr>
<td>36-47</td>
<td>1.07</td>
</tr>
<tr>
<td>48-59</td>
<td>1.12</td>
</tr>
<tr>
<td>≥ 60</td>
<td>1.28</td>
</tr>
</tbody>
</table>

Error bars represent 95% confidence intervals on adjusted odds ratios.


Prepared by March of Dimes Perinatal Data Center, November 2016.
Possible reasons short IPI might contribute to adverse outcomes

• Maternal nutritional depletion hypothesis

• Inadequate time to restore folate levels

• Inflammatory mediators / Intrauterine inflammatory milieu – endometritis, PPROM

• Postpartum changes in vaginal microbiome

Controlling for socioeconomic status, use of health care services, tobacco, alcohol and other exposures does not alter the finding that *interpregnancy intervals* exercise an independent influence on poor pregnancy outcomes.
Healthy People 2020 Birth Spacing Goal: Reduce the proportion of pregnancies conceived within 18 months of a previous birth by 10%, to 29.8%.

ACOG recommends that “women wait at least 18 months after having a baby before trying to get pregnant again in order to have the best health outcomes for both mom and baby.”
ACOG “encourages obstetrician-gynecologists and other health care providers to use every patient encounter as an opportunity to talk with patients about their pregnancy intentions and to support initiatives that promote access to and availability of all effective contraceptive methods.”
Intended pregnancy (PRAMS)

Washington, 2001-2011

Pregnancy intention: mother reported she wanted to be pregnant sooner or at that time. For more information about the availability of PRAMS data by state and year, refer to the [Calculations](http://www.marchofdimes.org/peristats/calculations.aspx) page.


Note: Vertical lines in graph represent 95% confidence intervals.
Intended pregnancy by race/ethnicity (PRAMS)

Washington, 2011

Note: Vertical lines in graph represent 95% confidence intervals.
Intended pregnancy by Medicaid status (PRAMS) Washington, 2011

Note: Vertical lines in graph represent 95% confidence intervals.
Birth spacing & interconception care

Important considerations

• Access to health insurance postpartum

• One Key Question®

• IMPLICIT® and other innovative models

• Access to contraception postpartum

• Education and support
One Key Question
I'M OK EITHER WAY

“I believe that a pregnancy will happen when it’s supposed to.”

We all know that pregnancies aren't always planned! Some women want to be surprised, or if it happens, it happens. You may not be actively trying to get pregnant but also not taking birth control regularly. If you're ok if you become pregnant this year, it's important you're as healthy as possible before you conceive so your baby can be healthy too.

Did you know? About 85 out of 100 sexually active women who do not use any birth control can expect to become pregnant in a year.

ONE KEY QUESTION®

By asking ONE KEY QUESTION®, health care providers can support your goals for your health, whether or not you want to become pregnant.

Start the conversation today!

Find a family planning clinic near you to schedule an appointment
www.hhs.gov/opa

Would you like to become pregnant in the next year?

unsure
yes
no
ok either way

info@onekeyquestion.org
PO Box 40472
Portland OR 97240
www.onekeyquestion.org

Oregon Foundation for Reproductive Health
Would you like to become pregnant in the next year?

I'M NOT SURE

"Honestly, I'm not sure if I want to become pregnant right now."

"Is it a good time for me? Do I have all the resources I need?"

Whether or not you want to become pregnant talk to your health care provider today. Learn how to prepare for a healthy pregnancy and how to prevent pregnancy until you are ready.

Emergency Contraception ("the morning after pill") is a second chance to prevent pregnancy. Take it as soon as possible after unprotected sex.

You can:
- Buy it over-the-counter at the pharmacy or store (up to 72 hrs)
- Get a prescription from your health care provider (within 72-120 hrs)

NO

If you want to prevent pregnancy, there are many safe and effective birth control options. When choosing a birth control, a few things to consider are:
- Your current health
- How often you have sex
- How often you can visit the health center
- How effective the method is at protecting against pregnancy

It’s important to learn about all birth control options so you can find the best method for your life and your body. Ask directions for how to use it and what to do if a mistake happens:
- The IUD (like Mirena, ParaGard, Skyla, Lilella)
- The Implant in the arm
- The Shot or "depot"
- The Vaginal Ring
- The Patch
- The Pill
- Condoms for men & women (use for STI protection too!)

IUDs and implants are 99% effective at preventing pregnancy and last for several years!

YES

Your health before you become pregnant is critical for a healthy pregnancy and baby. If you want to get pregnant soon, a few things to consider are:
- Start taking folic acid or a prenatal vitamin daily
- Make sure any health conditions, such as asthma or diabetes, are being managed
- Ask if the medications you are taking are safe during pregnancy

It’s best for your body and the health of your next baby to wait about 18 months after giving birth to become pregnant again. Talk with your partner about your goals for pregnancy and what steps you can take to be as healthy as possible.

You may also want to:
- Check that your vaccines are current
- Avoid smoking and drinking alcohol
- Get active – a healthy weight and regular physical activity can make a big difference!
OKQ Implementation

- Contact Oregon Foundation for Reproductive Health
  - onekeyquestion.org

- Face-to-Face or Webinar Orientation

- Implementation Webinar

- As needed special topic webinars and technical support
OKQ and March of Dimes

- Every Woman Washington
  - Regional group that would work on outreach, provider education, and sharing (Conceptual phase)

- Face-to-Face or Webinar Orientation
  - March of Dimes hosted Webinar

- March of Dimes Community Award Program 2018
  - Support implementation
    - Contact: Kasey Rivas - krivas@marchofdimes.org
IMPLICIT: An FMEC Collaborative

Interventions to Minimize Preterm and Low birth weight Infants using Continuous Improvement Techniques

“Preventing prematurity one woman at a time”
IMPLICIT ICC Model Rationale: *Incorporate maternal assessments into well child visits*

- Mothers bring children to WCV though may not seek care for themselves
- Mother’s health and behaviors directly impact child’s health – positively and negatively
  - Tobacco use, depression
- Women accept inquiry and advice about own health at pediatric visits
  - Even if not their provider

Kahn and Wise, Pediatrics, 1999
Gjerdingen et al., Ann Fam Med, 2009
Focus on 4 behavioral risks affecting future birth outcomes

- Smoking
- Depression
- Family planning & birth spacing
- Multivitamin with folic acid use

IMPLICIT ICC Model
Symptoms occur in 20-40% of women during or PP Depression has a peripartum recurrence of 40%

Screen women for depression with PHQ-2 → PHQ-9 if + PHQ-2

If positive risk for depression:

- Assess for safety and severity of symptoms
- Refer immediately if any suicidality or homicidality is present
- Arrange for follow-up and services

Unintended pregnancies and short interpregnancy interval increase risk of LBW/prematurity
Antenatal counseling not shown to increase contraception use
Many women miss postpartum visit

- Assess women for contraception use
- Educate about benefits of longer IPI
- Offer contraception or arrange appointment/referral (encourage LARC)

White lettering on a color block is especially effective for catching attention and for retention.

Routine folic acid supplementation reduces the rate of NTD by 66%, MVI even more. MVI w/folic acid assoc with many additional benefits for improved birth outcomes.

Only 24% of US women consume, less than 1 in 5 know.

- Assess women for MVI with folate use
- Educate about benefits
- Offer prescription to all women

**IMPLICIT® Implementation**

- **March of Dimes free IMPLICIT-ICC Toolkit**
- **2018 Community Award Program**
  - Support technical assistance and implementation
    - Contact: Kasey Rivas - krivas@marchofdimes.org
- **Can be used in Family Medicine and Pediatric practices**
- **Assessment can be done in waiting room via paper or electronic (i.e. Tablet), in exam room by the Medical Assistant/Nurse, or by the provider.**
  - Provider would prescribe, refer, etc.
Thank you