



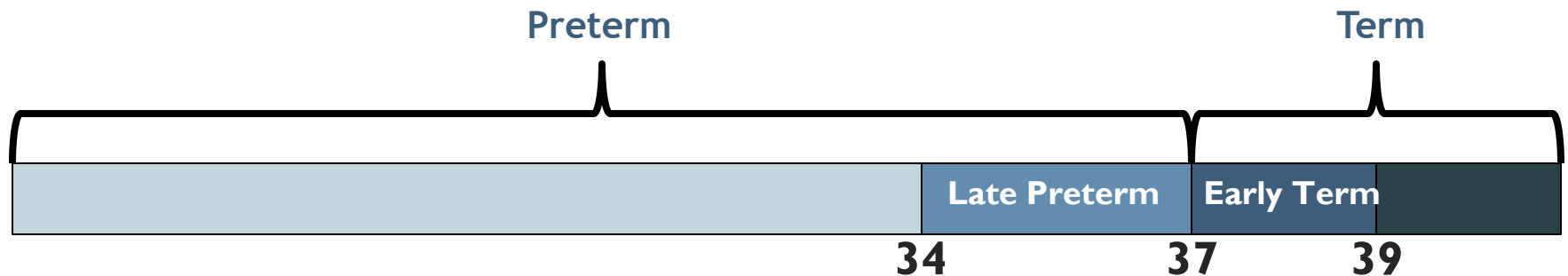
## Why the Last Weeks of Pregnancy are Important

Jennifer Salah, MS  
Northeast Florida Healthy Start Coalition

# Definitions

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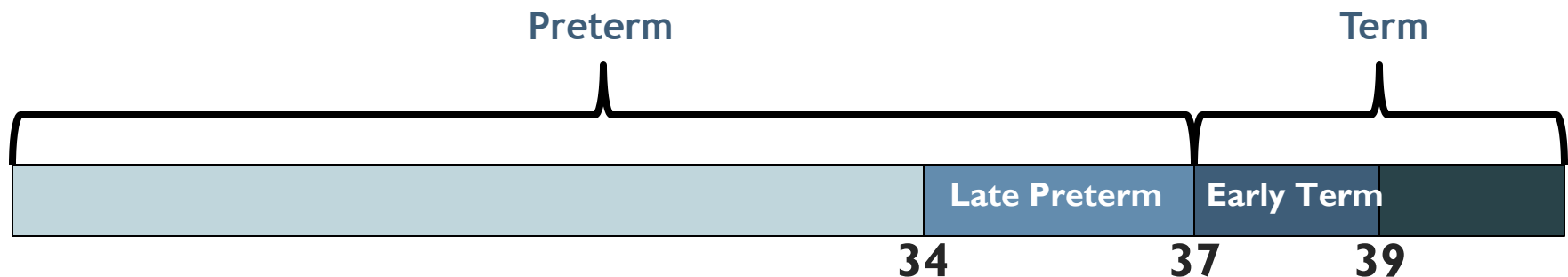
- ▶ Elective delivery
- ▶ Inducing labor
- ▶ Term birth
- ▶ Early term delivery
- ▶ Full term birth
- ▶ Preterm birth
- ▶ Late preterm birth



- ▶ March of Dimes (2010). Elimination of Non Medically Indicated Elective Delivery: Quality Improvement Toolkit.

# Problem

- ▶ Significant increase in number of elective deliveries between 37 and 39 weeks gestation
- ▶ U.S. labor induction rates more than doubled over the past decade
  - ▶ Majority are non-medically indicated
- ▶ Associated with increase in C-sections and late pre-term birth
- ▶ Misconceptions among pregnant women about term gestation and gestational age for safe delivery

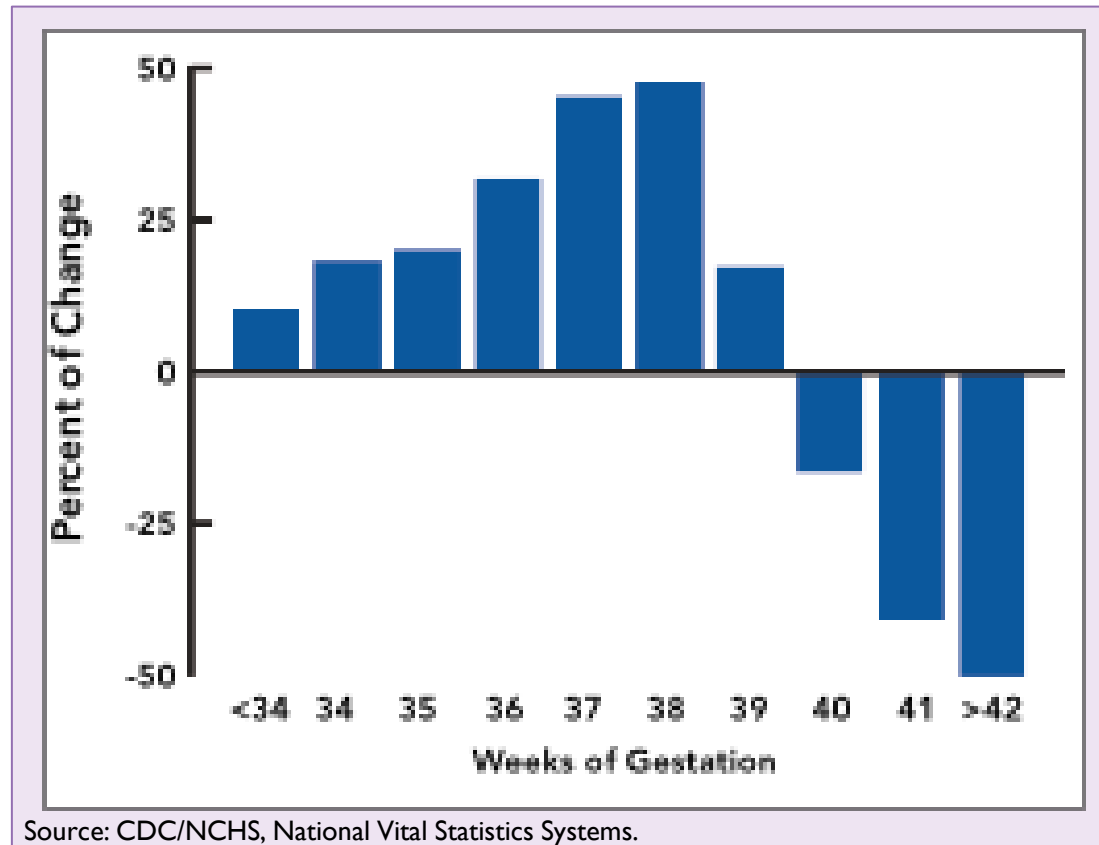


Martin JA, Hamilton BE, Sutton PD, Vendura SJ. Births: Final data for 2006. Natl Vital Stat Rep 2007, 57, no.7.

Signore C. No time for complacency: Labor inductions, cesarean deliveries, and the definition of "Term". Am J Obstet Gynecol, 116(1), July 2010, 4-6.

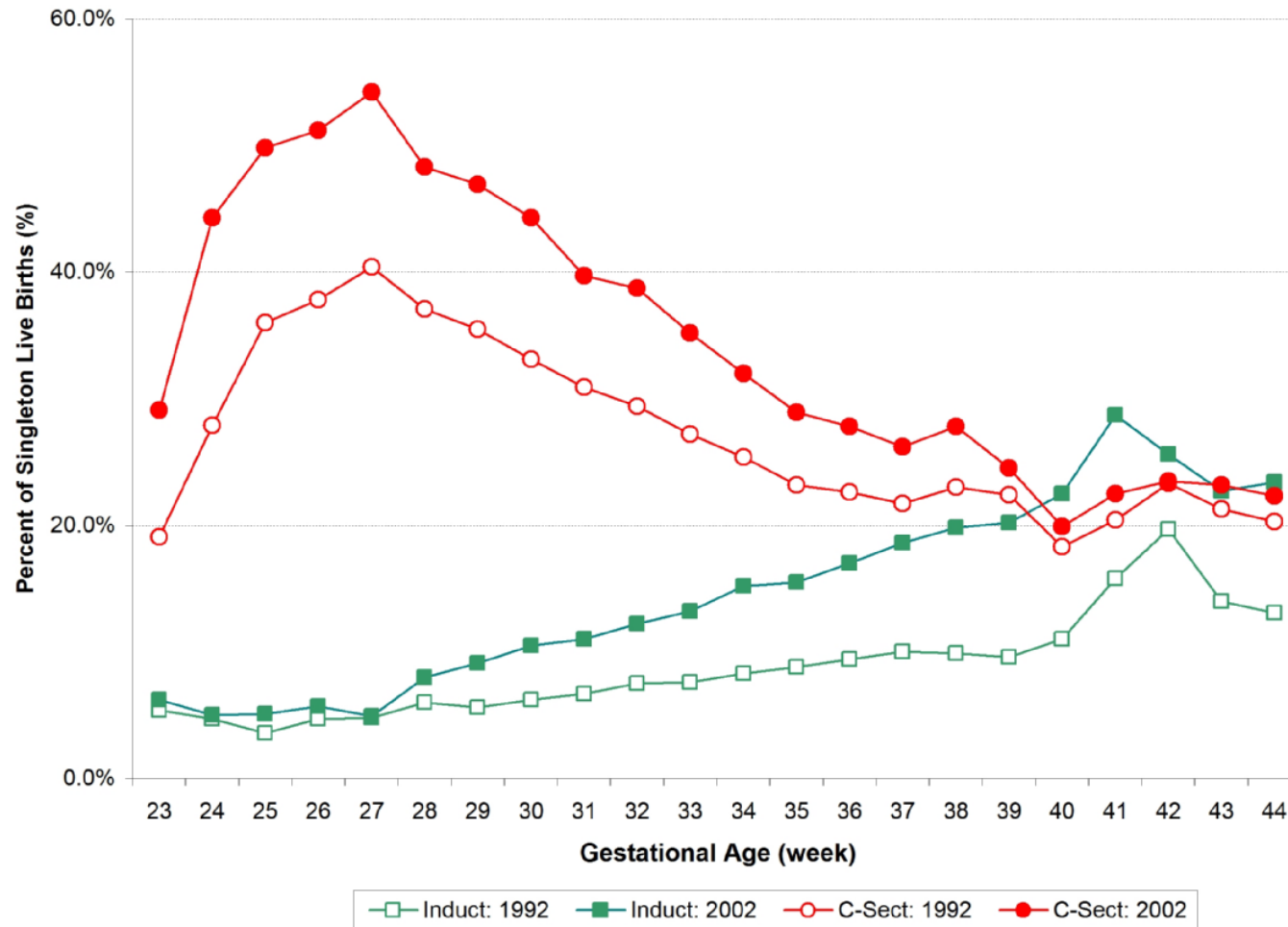
Zhang X, Joseph KS, Kramer MS. Decreased term and postterm birthweight in the United State: impact of labor induction. Am J Obstet Gynecol 2010; 203:124, e1-7.G. March of Dimes (2010). Elimination of Non Medically Indicated Elective Delivery: Quality Improvement Toolkit.

# Change in Distribution of Births by Gestational Age: United States, 1990-2006



Martin JA, Hamilton BE, Sutton PD, Ventura SJ, et al. Births: Final data for 2006. National vital statistics reports; vol 57 no 7. Hyattsville, MD: National Center for Health Statistics. 2009.

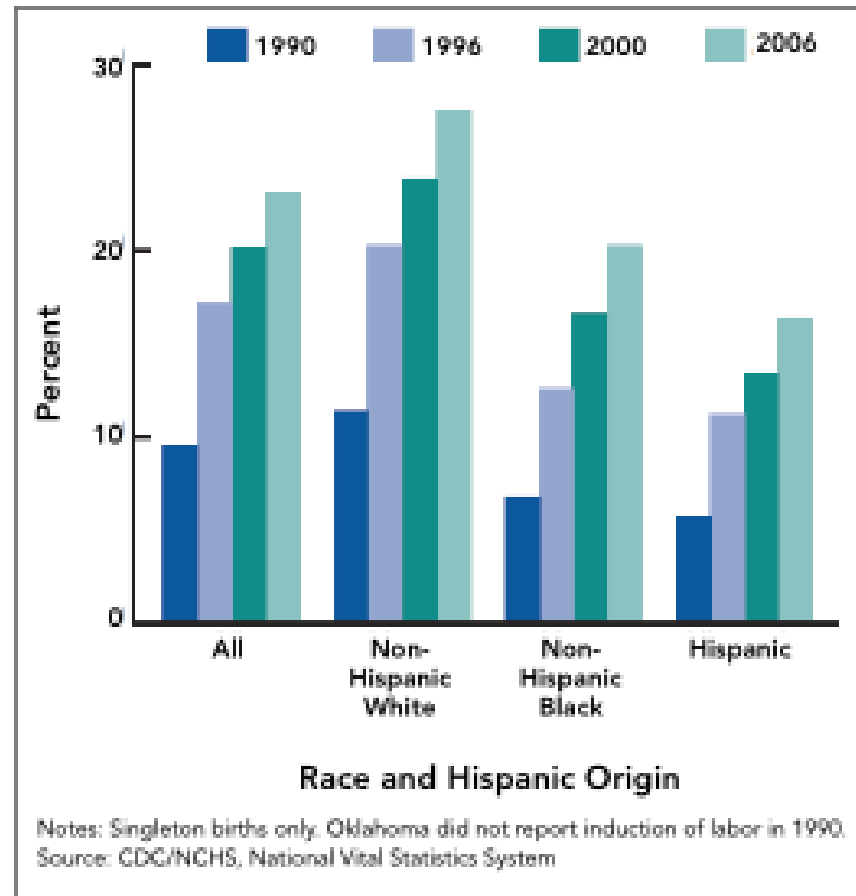
# U.S. Cesarean Section and Labor Induction Rates Among Singleton Live Births by Week of Gestation, 1992 and 2002.



Source: NCHS, Final Natality Data, Prepared by March of Dimes Perinatal Data Center, April 2006.

# Rates of Induction of Labor by Race and Hispanic Origin in the U.S.

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Martin JA, Hamilton BE, Sutton PD, Ventura SJ, et al. Births: Final data for 2006. National vital statistics reports; vol 57 no 7. Hyattsville, MD: National Center for Health Statistics. 2009.

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# Elective Induction: Sounds like a good idea...

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- Advanced planning
- Mother lives far away; history of quick labors
- Delivered by her doctor
- Maternal intolerance to late pregnancy
  - Excess edema, backache, indigestion, insomnia
- Prior bad pregnancy
- And, it's okay right?



# Inductions of Labor

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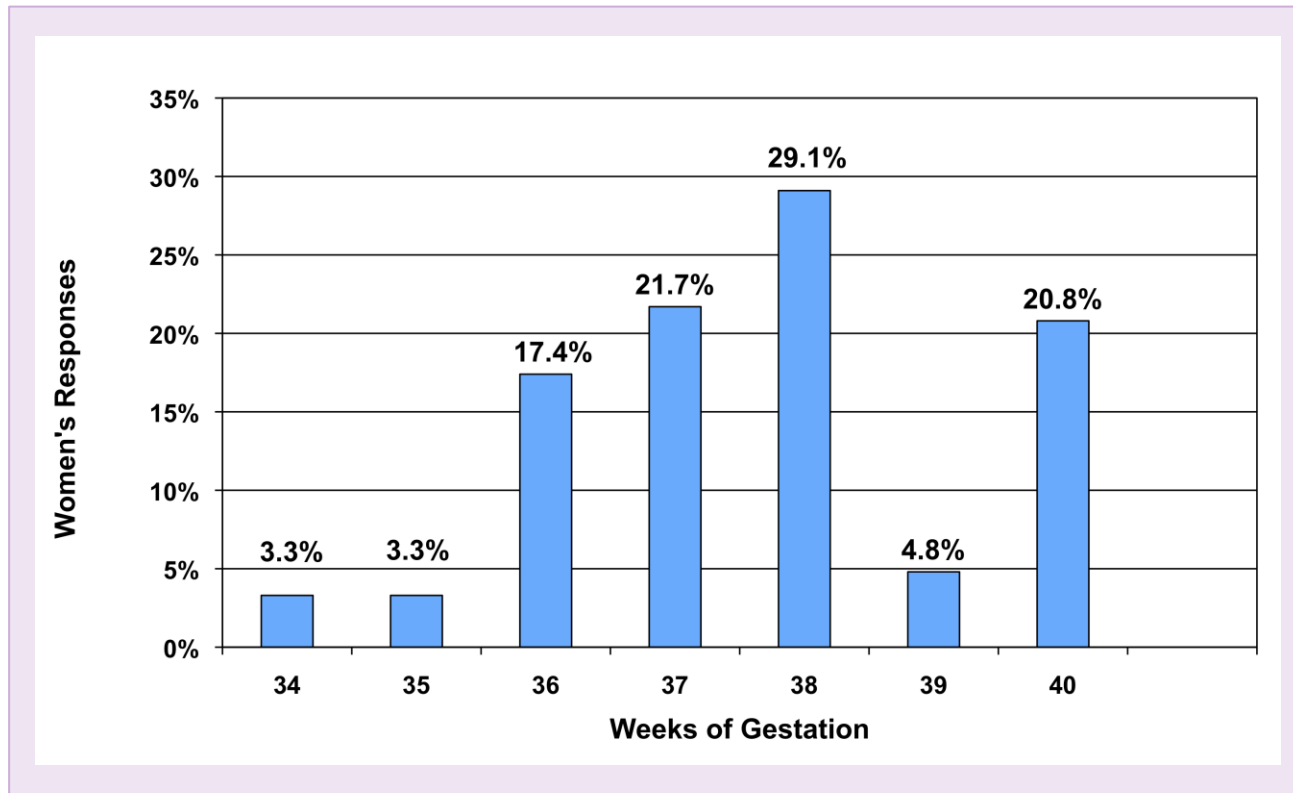
- ▶ Since 1979, the American Congress of Obstetricians and Gynecologists (ACOG) has cautioned against inductions before 39 weeks in the absence of a medical indication.





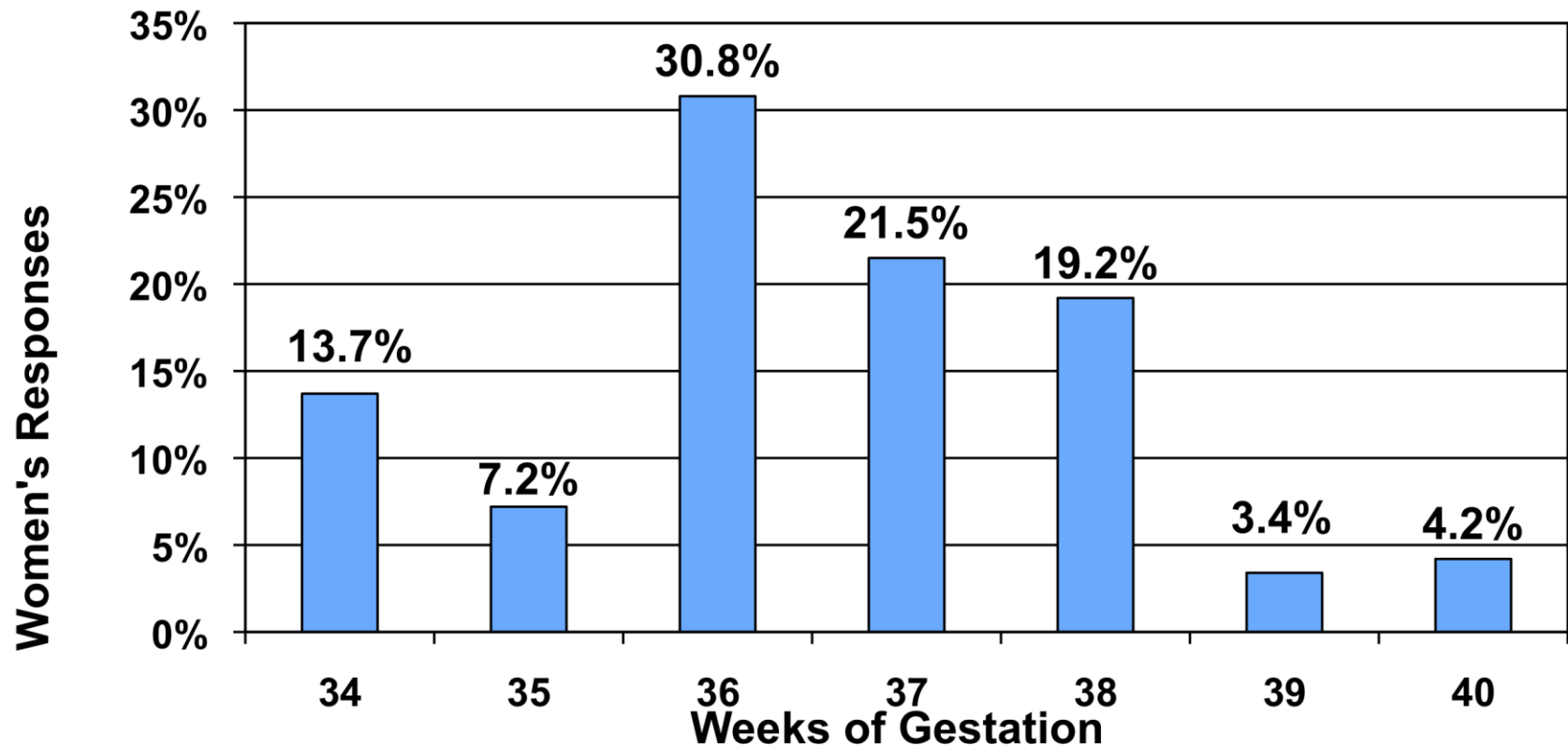
# The Gestational Age that Women Considered a Baby to be Full Term

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# Gestational Age that Women Considered it Safe to Deliver

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# Risks of Early Elective Delivery

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- ▶ Increased NICU admissions
- ▶ Increased Respiratory Issues
  - ▶ Transient tachypnea of the newborn (TTN)
  - ▶ Respiratory distress syndrome (RDS)
  - ▶ Increased ventilator support
- ▶ Increased suspected or proven sepsis
- ▶ Transition issues such as:
  - ▶ Poor temperature regulation
  - ▶ Hypoglycemia



# Risks of Early Elective Delivery

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- ▶ Increased feeding and/or breastfeeding challenges
  - ▶ Weak Suck
  - ▶ Difficulties staying awake
  - ▶ Poor stimulation of breastmilk production
- ▶ Increased Necrotizing Enterocolitis (NEC)
- ▶ Poor Immune Function
  - ▶ Pneumonia
  - ▶ Sepsis
  - ▶ Meningitis



# Risks of Early Elective Delivery

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## ▶ Post Discharge

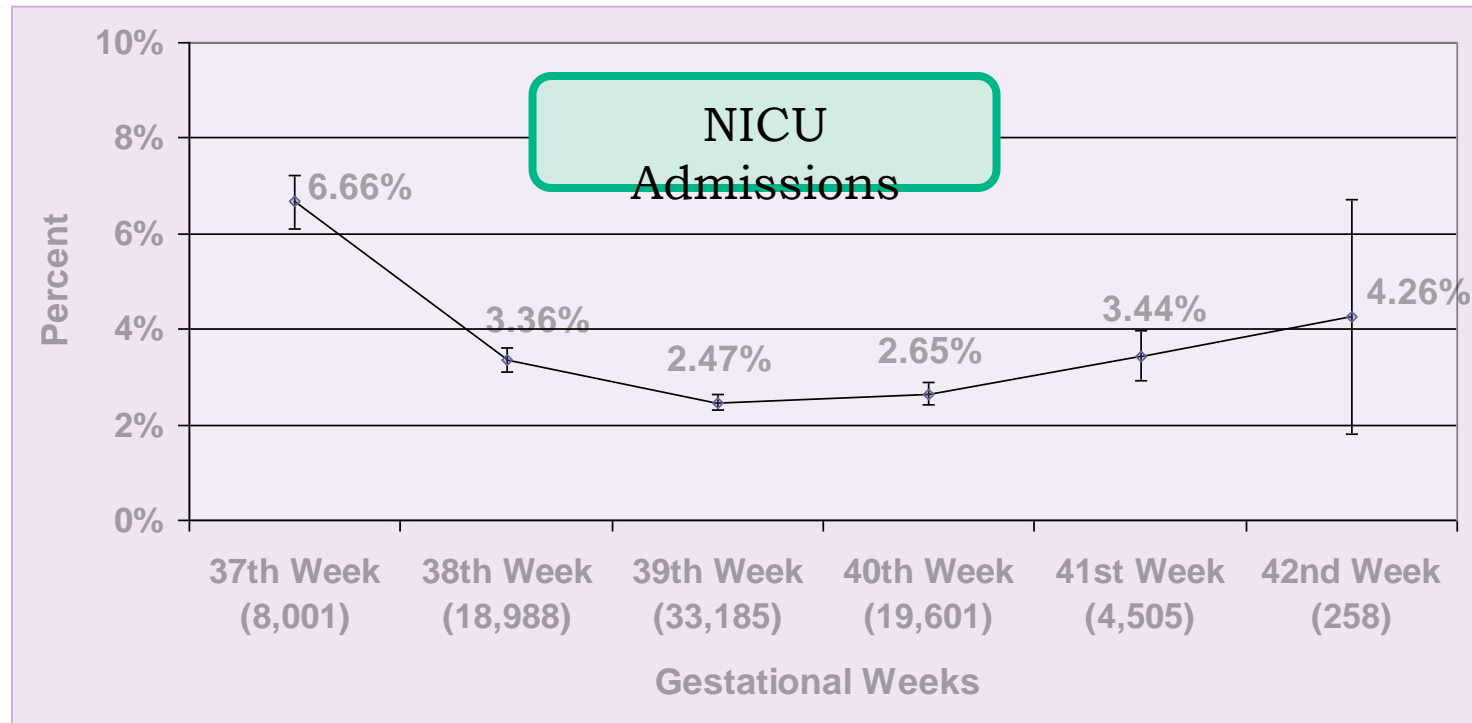
- ▶ Hospital readmission
- ▶ SIDS
- ▶ Developmental Delay

## ▶ Long-term

- ▶ Cerebral palsy
- ▶ Attention deficit hyperactivity disorder (ADHD)
- ▶ Serious behavior and learning problems requiring special education
- ▶ Increased risk for mental illness & long-term disability as adults

# NICU Admissions By Weeks Gestation

## Deliveries Without Complications, 2000-2003



# Timing of Fetal Brain Development

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- **A baby's brain at 35 weeks weighs only 2/3rds of what it will weigh at 40 weeks.**
- Brain volume increases 50 % between 29 and 41 weeks gestation.
- A 5-fold increase in myelinated white matter occurs between 35-41 wks gestation.
- Frontal lobes are the last to develop, therefore the most vulnerable.



# Other organs still developing...

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- ▶ Mouth – babies born even a few weeks early have problems properly sucking and swallowing
    - ▶ Leads to feeding problems
  - ▶ Lungs – Lungs are still developing in the last weeks of pregnancy
    - ▶ Can cause breathing difficulties immediately (ventilator, etc.) and later in life (asthma)
  - ▶ Ears/eyes – Babies born a few weeks early are more likely to have hearing and vision problems than those born at 39 weeks
  - ▶ Liver – continues to grow and develop until birth
  - ▶ Skin/Body Fat – babies born even a few weeks early weigh less and often have a hard time regulating temperature and keeping warm
- 





# Patient Education: Why scheduling an early birth can be a problem

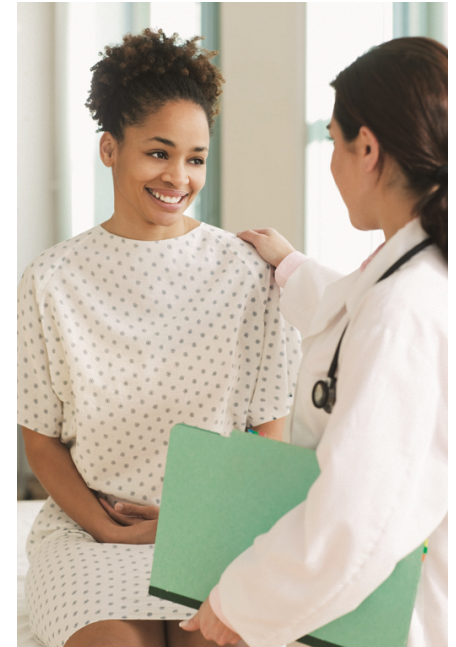
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- ▶ **A due date may not be exactly right.** Even with an ultrasound, a due date can be off by as much as 2 weeks.
- ▶ **Inducing labor may not work.**
- ▶ **A c-section can cause problems for baby.** Babies born by c-section may have more breathing and other medical problems than babies born by vaginal birth.
- ▶ **C-sections can cause problems in future pregnancies.**
- ▶ **A c-section is major surgery for mom.** C-sections have longer recovery times and can cause more complications than a vaginal birth.

# Patient Education: Questions to ask your provider

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- ▶ **If your provider recommends that you have your baby before 39 weeks:**
  - ▶ Is there a problem?
  - ▶ What is the problem?
  - ▶ Can I wait to have my baby until 39 weeks?
  - ▶ If not, then why not?



# Patient Education:

## Questions to ask your provider

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### ▶ **About inducing labor**

- ▶ Why do you need to induce my labor?
- ▶ What are my options?
- ▶ How will my labor be induced?
- ▶ What are the risks of inducing labor?
- ▶ What are the benefits of inducing labor?
- ▶ Will this increase my risk of a cesarean section?
- ▶ What are the risks of having a cesarean section?



# Questions to ask your provider

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## ▶ **About cesarean section**

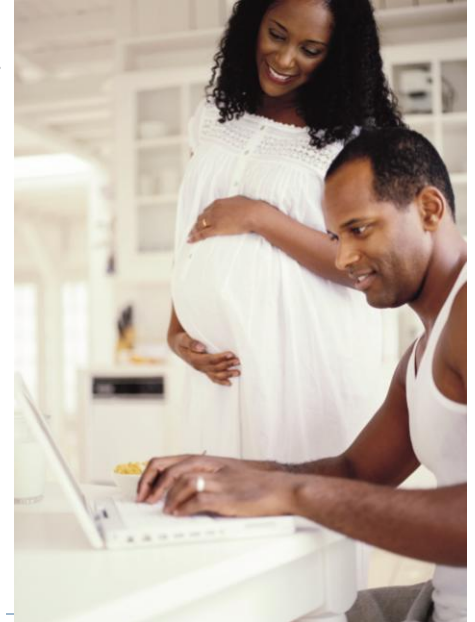
- ▶ Why do I need to have a cesarean section?
- ▶ What are the risks compared to a vaginal delivery?
- ▶ What problems can a cesarean section cause for me and my baby?
- ▶ Will I need to have a cesarean section in future pregnancies?



# What else can I do for a healthy pregnancy and delivery?

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- ▶ Consider writing a birth plan and discussing it with your care provider.
  - ▶ A birth plan is summary of your preferences for the birth of your child. Sharing your birth plan with your care provider will help you to discuss important decisions related to your birth with your care provider.
- ▶ Birth plan tools are available online for free at:
  - ▶ [Lamaze.org](http://Lamaze.org)
  - ▶ [ChildbirthConnection.org](http://ChildbirthConnection.org)



# MOD 39 Weeks/Healthy Babies are Worth the Wait National Campaign

Web Banner Ad



Consumer Website:  
[marchofdimes.com/39weeks](http://marchofdimes.com/39weeks)

Babies aren't fully developed until at least 39 weeks in the womb. Important development of their brains, lungs and eyes occurs in the last few weeks of pregnancy. If your pregnancy is healthy, wait for labor to begin on its own.

march of dimes  
[marchofdimes.com/39weeks](http://marchofdimes.com/39weeks)

Print Media



# Healthy Babies are Worth the Wait®

Really important things happen to a baby in the last few weeks of pregnancy. Babies need at least 39 weeks in the womb to fully grow and develop.

Here's what at least 39 weeks can do:

## brain:

In the last 6 weeks of pregnancy, the size of a baby's brain almost doubles. This helps with things like balance, learning and behavior as he gets older.

## mouth:

A baby has time to learn to suck and swallow so he can eat after he's born.

## liver:

The liver and other organs grow and develop.

## eyes and ears:

Babies born at 39 weeks or later are less likely to have vision and hearing problems than babies born early.

## lungs:

Babies born at 39 weeks or later are less likely to have breathing problems than babies born early.

More and more births are being scheduled a little early for non-medical reasons. This can cause problems for both mom and baby. If your pregnancy is healthy, it's best to stay pregnant until labor begins on its own.

For more information about a baby's growth and development, go to: [marchofdimes.com/39weeks](http://marchofdimes.com/39weeks)



The American College of  
Obstetricians and Gynecologists  
WOMEN'S HEALTH CARE PHYSICIANS

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(Photo) Baby provided by Breastfeeding at Full Circle

# New Campaign Materials 2012



## don't rush your baby's birth day

Your baby needs at least 39 weeks to grow and develop before she is born. If your pregnancy is healthy, wait for labor to begin on its own.

[marchofdimes.com/39weeks](http://marchofdimes.com/39weeks)




The American College of  
Obstetricians and Gynecologists  
WOMEN'S HEALTH CARE PHYSICIANS

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# Patient Education Tool

**If your pregnancy is healthy, it's best if your baby is born at 40 weeks.**

A baby's brain at 35 weeks weighs only two-thirds of what it will weigh at 40 weeks.



The illustration shows two cross-sections of a baby's head. The left head is labeled '35 weeks' and shows a smaller brain. The right head is labeled '40 weeks' and shows a larger brain. The brains are depicted in a light brown color with visible gyri and sulci.

**35 weeks**      **40 weeks**

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- In the last 6 weeks of pregnancy, your baby's brain adds connections needed for balance, coordination, learning and social functioning. During this time, the size of your baby's brain almost doubles.
- Babies born early have more learning and behavior problems in childhood than babies born at 40 weeks.
- Babies born early are more likely to have feeding problems because they can't coordinate sucking, swallowing and breathing as well as full-term babies.
- Babies born early are likely to have breathing problems, like apnea. Apnea is when a baby stops breathing.
- Babies born early are more likely to die of sudden infant death syndrome (SIDS). SIDS is when a baby dies suddenly and unexpectedly, often during sleep.

To order our catalog or multiple copies of our materials, call 1-800-367-6630.  
#37-2229-07 Late-preterm Brain Development Card 2/08

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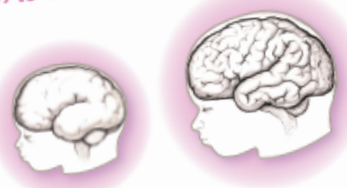
# MOD 39 Weeks/Healthy Babies are Worth the Wait National Campaign

If your pregnancy is healthy,  
it's best to stay pregnant  
for at least **39 weeks**.

Lots of important things are happening  
to your baby in the last few weeks of  
pregnancy:

- 1 Important organs, like your baby's brain,  
lungs and liver, are still developing and  
growing.

A baby's brain at 35 weeks weighs only  
two-thirds of what it will weigh at  
39 to 40 weeks.



35 weeks      39 to 40 weeks

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**march of dimes**  
pregnancy & newborn  
health education center\*  
marchofdimes.com

- 2 Your baby's eyes and ears are still  
developing, too. Babies born too early  
are more likely to have vision and  
hearing problems later in life.
- 3 Your baby is still learning to suck and  
swallow. Babies born early sometimes  
can't do these things.

39 weeks gives babies all the time they need  
to grow before they're born. Talk to your  
provider about things you can do to help you  
and your baby get to at least 39 weeks. Births  
scheduled before 39 weeks should only be  
for medical reasons.



To order our catalog or multiple copies of our materials, call (800) 267-4620.  
English: 800-267-4620 • Late Preterm Birth Awareness Flyer 13710  
Spanish: 800-267-4620 • Folleto del parto tardío y parto prematuro del 13710

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Check marchofdimes.com for updates of information.  
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# Florida's Consumer Campaign

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Think **39** WEEKS!

Healthy Babies Are Worth The Wait

[www.39weeksfl.org](http://www.39weeksfl.org)



# How You Can Get Involved

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- ▶ **Website:** [www.39weeksfl.org](http://www.39weeksfl.org)
  - ▶ Download MOD Provider Toolkit, CBE Supplement, Find out about Conferences and CEU Opportunities
  - ▶ Read and share our blog and resources for expectant parents
- ▶ **Social Media**
  - ▶ Like Us on Facebook: [www.facebook.com/39WeeksFL](https://www.facebook.com/39WeeksFL)
  - ▶ Follow Us on Twitter: @39WeeksFL
  - ▶ Follow Us on Pinterest: [www.pinterest.com/39WeeksFlorida](https://www.pinterest.com/39WeeksFlorida)



# Thank You!

To access the three PowerPoint presentations from today's training, visit [www.nefhealthystart.org](http://www.nefhealthystart.org)

Think **39** WEEKS!  
Healthy Babies Are Worth The Wait

