Answers to Post-test

#1

The term "Late Preterm Birth" refers to infants born during what period of gestation?

- Less than 32 weeks
- 34 to 36 weeks
- 34 to 39 weeks
- 36 to 39 weeks
- 37 to 39 weeks

The Late Preterm population is currently defined as infants who are born between $34^{0/7}$ and $36^{6/7}$ weeks. Infants born before $32^{0/7}$ weeks are defined as Very Preterm, and infants born at $37^{0/7}$ weeks and later are defined as Term.

2

Late Preterm infants make up what percent of all premature infants born each year?

- 12%
- 33%
- 54%
- 72%
- 98%

Based on 2005 Data from the CDC on singleton births, Late Preterm Births made up about 72% of all preterm births₂. This is an increase from about 69% of all preterm births in 1990. This means that about 3 out of every 4 infants born preterm in the U.S. is born in the late preterm period. If we could make a difference in this particular group of infants, we could make a BIG difference in the number of preterm infants born in the U.S. each year!

²2008 NCHS Data Brief: Recent Trends in Infant Mortality in the US

#3

Late Preterm births make up what percent of all live births in the United States each year?

- 0.2%
- 2%
- 5.7%
- 9.1%
- 20%

Based on 2005 data from the CDC, infants born in the Late Preterm period make up about 9.1% of all live births in the U.S. That means that almost 10% of all babies born in the U.S. are born during the late preterm period. All categories of preterm births combined make up about 12.7% of all live births.

In Washington D.C., rates of all preterm births (all categories of preterm births combined) are

- lower than the national average
- about the same as the national average
- higher than the national average

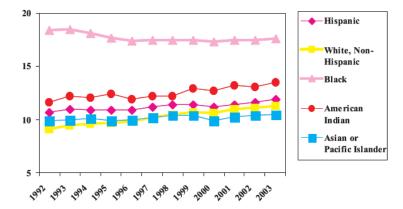
In D.C., the rate of preterm births in 2005 was **15.9%**, far above the national average of 12.7% ₁ The rate of **Late Preterm Births** was **10.4%**, also far above the national average, which was 9.1% for this subgroup ₁ 1National Center for Health Statistics, final natality data. Data prepared by the March of Dimes Perinatal Data Center, 2005.

5

What race has the highest rates of preterm births?

- White, not Hispanic
- African American
- Hispanic
- Native American
- Asian/Pacific Islander

Disparities exist among population subgroups: <u>Race</u>: in 2005, preterm birth rates were highest for African Americans (18.2%) in the District of Columbia, and this mirrors disparities seen across the United States.



#6

What age group of women gives birth to the greatest number of preterm infants?

- 20 years and younger
- 20 to 29 years
- 30 to 39 years
- 40 years and older
- about the same across all age groups

Disparities exist among population subgroups: <u>Age</u>: in 2005, preterm birth rates were highest for women ages 40 and older (19.8%), followed by women under age 20 (17.6%) in the District of Columbia, which also mirrors disparities seen across the U.S. (see below).

Health Indicators, United States ⁶										
	Maternal Race / Ethnicity			Maternal Age (years)				Plurality		All
	Non-Hispanic White	Non-Hispanic Black	Hispanic	<20	20-29	30-39	<u>></u> 40	Singleton	Multiple	
Preterm	11.5%	18.1%	12.0%	14.5%	11.9%	12.5%	16.6%	10.8%	61.6%	12.5%
Low Birthweight	7.2%	13.8%	6.8%	9.9%	7.7%	7.9%	11.3%	6.3%	58.7%	8.1%
Infant Mortality	5.7	13.6	5.6	10.1	6.8	5.7	8.4	6.0	31.0	6.8

#7

Compared to full term infants, infants born in the late preterm period:

- have lower rates of morbidity and mortality
- have about the same rates of morbidity and mortality
- have higher rates of morbidity and mortality
- have similar mortality rates but higher morbidity
- have similar morbidity rates but higher mortality

Morbidity and Mortality is higher for infants born between 34-36 weeks as compared to term infants. The infant mortality rate among late preterm infants (7.7 per 1,000 live births) is three times higher than the rate among term infants (2.5 per 1,000 live births). Late preterm infants also have greater morbidity, being at greater risk for complications as compared to term infants. These infants also incur greater costs and longer lengths of stay in neonatal intensive care units (NICU) and experience higher rates of re-hospitalization after neonatal discharge, as compared to term infants.

#8

Which of the following is NOT a cause of late preterm birth?

- smoking during pregnancy
- premature inductions of labor and c-sections for non-medical reasons
- incorrect gestational dating
- family history of premature labor
- personal history of premature labor
- inadequate spacing between pregnancies
- All of the above can be a cause late preterm birth

Smoking during pregnancy, family history of premature labor, premature labor with a previous pregnancy ("personal history"), and inadequate spacing between pregnancies (which can put stress on the mother's body and create maternal or fetal complications), can all increase the risk of a mother going into preterm labor resulting in a late preterm infant. Incorrect gestational dating (due to poor memory/history from Mom, and no

¹ National Center for Health Statistics. 2002 period linked birth/infant death data. Data prepared by the March of Dimes Perinatal Data Center, 2005. ² Late Preterm Birth: Every Week Matters, Medical Perspectives on Prematurity. Prepared by the Office of the Medical Director, March of Dimes. March 2006.

1st trimester ultrasound to confirm) can lead to the false assumption that a baby is already term, and therefore it is "ok" to go ahead and induce or perform a c-section. This often leads to an infant being born at what was thought to be 37 or 38 weeks, and upon physical exam at birth is found to be only 35 or 36 weeks. Clearly, inducing labor or performing a c-section for a non-medical reason when a patient is less than 37 weeks, such as for patient convenience due to travel distance or doctor preference, can be a direct cause of late preterm birth. ACOG has made several statements in recent years against performing inductions of labor or c-sections for any non-emergent cause before 37 weeks of gestation. (see citations below)

- ACOG committee opinion No. 404 April 2008. Late-preterm infants.
- ACOG Practice Bulletin. Number 10, November 1999. Induction of labor. Washington DC, American College of Obstetricians and Gynecologists, 1999.

#9

Which of the following are late preterm infants NOT at an increased risk of developing as compared to full term infants?

- hypoglycemia
- feeding difficulties
- SIDS
- developmental delay
- temperature instability
- jaundice
- Late preterm infants are at an increased risk of developing all of the above as compared to full term infants.

As a health care provider, it is important to remember that late preterm infants are not "near term" as they are not fully mature, and therefore have greater risk of complications (both immediate and long-term) as compared to term infants. It is important to watch them closely in the nursery, and transfer to the NICU for closer monitoring and for potential treatment if necessary. Early and appropriate treatment for complications, as well as good discharge planning, parent education, and arranging for appropriate follow up, are key to preventing more long-term complications and/or rehospitalization of the infant.

10

Which of the following is incorrect?

- Infants born as the result of a subsequent pregnancy are at a greater risk of being born during the late preterm phase than the first born child.
- Late preterm infants have longer lengths of stay in the hospital and incur greater costs than full term infants
- Late preterm infants have greater rates of re-hospitalization after discharge than full term infants.
- The infant mortality rate among late preterm infants is three times higher than the rate among term infants.
- Children born in the late preterm phase have greater rates of learning difficulties and school failures than their full term counterparts.
- At 35 weeks, an infant's brain is only 2/3 the size and maturation it will be at 40 weeks.

There is no concrete evidence to show that subsequent pregnancies are at an increased risk of preterm labor and delivery as compared to the first pregnancy, in the absence of any other risk factors. All the other statements listed are correct. Please see presentation for specific citations.

#11

Who holds the greatest responsibility for preventing late preterm births?

- Pediatricians
- Obstetricians
- Family Physicians
- Nurses
- Pregnant mothers
- Specialist Physicians
- Medical students
- We all share the responsibility equally!