

### Healthy Weight Gain During Pregnancy. Results from the 2010 Los Angeles Mommy and Baby (LAMB) Project

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## Background

- A particular concern for pregnant women is maintaining a healthy weight.
- · Women who gain too little or too much weight may be at risk of a preterm birth, low birth weight, macrosomia (>90th percentile) or cesarean delivery.
- Providers and health care workers can help women by:
- 1. Increasing patient knowledge of pregnancy-related risk factors and healthy behaviors in the pre- and interconception periods.
- 2. Providing self-help materials that encourage goal setting and self-monitoring.
- 3. Providing clarity/emphasis on weight gain recommendations in pregnancy.

## **Methods**

### Participants:

Women who recently had a live birth in Los Angeles County in 2010.

### Design:

The LAMB survey asks mothers who recently delivered a live birth in Los Angeles County about events that happened before, during, and after their pregnancy.

Questions on self-reported height, pre-pregnancy weight, and predelivery weight were used to determine weight status and weight gain during pregnancy.

A total of 6,593 mothers participated in the 2010 LAMB project.

#### Institute of Medicine (IOM) Pregnancy Weight Gain Recommendations

These guidelines are specific to the Body Mass Index (BMI) of a woman just before she becomes pregnant. BMI is calculated from self-reported height and pre-pregnancy weight.

Pre-pregnancy BMI	Weight Gain Guidelines
Low (<18.5)	28-40 lbs.
Normal (18.5 - 25.0)	25-35 lbs.
High (25.0 - 30.0)	15-25 lbs.
Obese (>30.0)	11-20 lbs.

Table 1. Pregnancy Weight Gain Guidelines, 2009 IOM

## **Data Analysis**

Sample Size: A total of 6,593 women completed the 2010 LAMB survey (adjusted response rate = 57%). Data analyses were weighted to represent the experiences of all women who delivered a live birth in 2010.

Limitations: The LAMB project data is based on self-reported participant responses about three to seven months after delivery. This may affect recall of pre-delivery weight. Among mothers who had prenatal care discussions with their providers on pregnancy weight gain, it is difficult to determine content of the counseling and whether it explicitly referred to IOM guidelines. The current report includes only mothers with full-term, singleton births on whom pre-pregnancy BMI could be determined.

## **Results**

- In 2010, 36% of Los Angeles County mothers gained weight within the recommended ranges according to their prepregnancy BMI. Twenty-three percent of women gained less and 41% gained more than the recommended weight.
- Fifty-seven percent of overweight mothers and fifty-one percent of obese mothers gained more weight than recommended. (Figure 1.)

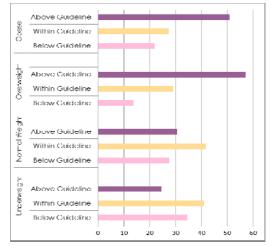


Figure 1. Pregnancy Weight Gain Distribution of Los Angeles County Mothers by Pre-Pregnancy BMI, 2010 Los Angeles Mommy and Baby Survey

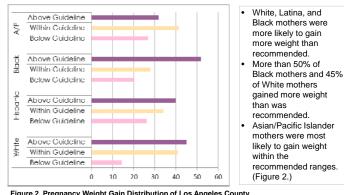


Figure 2. Pregnancy Weight Gain Distribution of Los Angeles County Mothers by Race/Ethnicity, 2010 Los Angeles Mommy and Baby Survey

# **Demographic Factors**

- Mothers who reported ever eating less than they should during pregnancy due to financial difficulties were less likely to gain weight within the recommended ranges (23.0%) compared to their food secure counterparts (36.5%).
- Mothers who reported any smoking during pregnancy were also less likely to gain weight within the recommended ranges compared to mothers who did not smoke in pregnancy (25.8% v. 36.1%).
- Access to prenatal care (PNC) also played a role in maternal weight gain. Thirtyseven percent of mothers who received PNC early gained weight within the recommended ranges compared to 27.3% of mothers who received PNC late.

## Discussion

#### Summarv

- In 2010, only one in three pregnant women in Los Angeles County who gave birth (to a singleton, full-term infant) gained the recommended amount of weight during their pregnancy.
- Adherence to IOM guidelines was lowest among mothers who: • were overweight or obese before their pregnancy
- were African American
- · were not married
- · reported food insecurity at any point in their pregnancy
- · had lower educational attainment
- Mothers who enter prenatal care early had a higher likelihood of meeting IOM pregnancy weight gain recommendations compared to mothers who entered prenatal care later in their pregnancies.

### Next Steps

- The 2010 LAMB project was supported by grants from the State of California Department of Public Health, Maternal, Child, & Adolescent Health Branch through the Los Angeles County Department of Public Health and First 5 LA.
- Trend analysis will be conducted at the conclusion of the 2014 LAMB survey cycle.