



## Maternal Stress in Florida, 2000

October 8, 2002

PRAMS Report # 11

### Findings at a Glance

- In 2000, 76.2% of new mothers in Florida experienced at least one stressful event during the 12 months before giving birth.
- The percentages of non-Hispanic Black women, at 81.2%, and Hispanic women, at 81.0%, who experienced a stressful event during the 12 months prior to giving birth were substantially higher than among non-Hispanic White women, at 72.6%.
- Stress among unmarried mothers, at 84.6%, was more prevalent than among married mothers, at 71.1%.
- Reports of stressful events during the 12-month period before giving birth among new mothers whose pregnancies were unintended, at 85.2%, was more prevalent than among new mothers whose pregnancies were intended, at 68.1%.
- Certain stressful events were found to be associated with maternal cigarette smoking both during and after pregnancy.
- Certain stressful events were found to be associated with low-birth-weight birth outcomes.

### Table of Contents

<b>Introduction</b>	<b>3</b>
<b>Part 1: Stress Among New Mothers</b>	
Maternal Race/Ethnicity	<b>4</b>
Maternal Age	<b>5</b>
Maternal Education	<b>5</b>
Annual Household Income	<b>6</b>
Marital Status	<b>6</b>
Intendedness of Pregnancy	<b>7</b>
<b>Part 2: Maternal Demographics of Selected Stress Factors</b>	
Finance	<b>8</b>
Death	<b>8</b>
Divorce or Separation	<b>8</b>
Substance Abuse	<b>8</b>
Physical Fight	<b>9</b>
Jail	<b>9</b>
Change of Address	<b>9</b>
Loss of Job	<b>10</b>
<b>Part 3: Stress and Maternal Smoking During and After Pregnancy</b>	<b>11</b>
<b>Part 4: Stress and Low Birth Weight</b>	<b>12</b>

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## **Additional Information**

For more information about Maternal and Child Health, please contact your local County Health Department, Healthy Start Coalition, or call The Maternal and Child Health Unit at the Florida Department of Health, (850) 245-4465, or write to us at Maternal and Child Health Unit, Florida Department of Health, 4025 Bald Cypress Way, Bin A-13, Tallahassee, FL 32399-1723.

For more information about the report, *Maternal Stress in Florida, 2000*, call the Bureau of Epidemiology at the Florida Department of Health, (850) 245-4401; or write to us at Bureau of Epidemiology, Florida Department of Health, 4052 Bald Cypress Way, Bin A-12, Tallahassee, FL 32399-1720; or contact us via the internet at the following website: [http://www.doh.state.fl.us/disease\\_ctrl/epi/topics/contact\\_epi.htm](http://www.doh.state.fl.us/disease_ctrl/epi/topics/contact_epi.htm).

For more information about the Florida PRAMS project, please contact Helen Marshall, Florida PRAMS Coordinator, by telephone at 850-245-2415, or by email at [helen\\_marshall@doh.state.fl.us](mailto:helen_marshall@doh.state.fl.us).

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## Introduction

Although pregnancy can be a special time for a woman and her family, it can also be a stressful time for some women. Studies suggest that maternal stress is associated with low-birth-weight births even after adjustment for maternal demographic and behavioral characteristics.<sup>1</sup> The purpose of this report is to describe: (a) the prevalence of stressful events experienced during the 12-month prenatal period among Florida women during 2000; (b) the association between certain stressful events and maternal cigarette smoking during and after pregnancy; and (c) the association between certain stressful events and low-birth-weight birth outcomes.

Analysis for this report is based on data from the 2000 Florida Pregnancy Risk Assessment Monitoring System (PRAMS). PRAMS is a joint surveillance project between the Florida Department of Health and the U. S. Centers for Disease Control and Prevention, designed to monitor the physical, economic, and social health of Florida's mothers and newborns. PRAMS is designed as a mail survey with telephone follow-up of a random sample of recent mothers of live-born infants, completed when the infant is approximately three months old. For PRAMS 2000, 2,065 surveys were completed, with a response rate of 75.7%. The demographic distribution of survey respondents is given in Table 1. The results presented are weighted to reflect the total population of Florida new mothers and infants in 2000. SAS-callable SUDAAN was used to analyze the data.

**Table 1: Number of survey respondents by demographic, Florida PRAMS 2000**

<b>Maternal Demographic</b>	<b>Overall</b>	<b>non-Hispanic White</b>	<b>non-Hispanic Black</b>	<b>Hispanic</b>	<b>Other</b>
<b>Overall</b>	2065	844	803	368	50
<b>Age Distribution</b>					
19 Years and Under	660	246	286	119	9
20 to 24 Years	440	152	208	78	2
25 to 34 Years	734	325	235	141	33
35 Years and Over	231	121	74	30	6
<b>Education</b>					
Less Than 12 Years	596	198	260	134	4
12 Years	727	280	315	121	11
13 to 15 Years	412	174	162	59	17
16 Years or More	321	190	59	54	18
<b>Annual Household Income</b>					
\$15,600 and Under	809	239	399	159	12
\$15,601 to \$25,200	368	149	136	71	12
\$25,201 to \$39,600	254	143	64	39	8
\$39,601 and Over	391	239	83	54	15
<b>Marital Status</b>					
Married	966	509	226	196	35
Not Married	1099	335	577	172	15
<b>Intendedness of Pregnancy</b>					
Intended	903	456	254	167	26
Unintended	1119	374	528	194	23

## Definitions

The Florida PRAMS survey assesses whether new mothers experienced stressful events either before or during pregnancy by asking the following question:

34. This question is about things that may have happened during the 12 months before your new baby was born. For each item, circle Y (Yes) if it happened to you or circle N (No) if it did not.
- a. A close family member was very sick and had to go into the hospital.
  - b. You got separated or divorced from your husband or partner.
  - c. You moved to a new address.
  - d. You were homeless.
  - e. Your husband or partner lost his job.
  - f. You lost your job even though you wanted to go on working.
  - g. You argued with your husband or partner more than usual.
  - h. Your husband or partner said he didn't want you to be pregnant.
  - i. You had a lot of bills you couldn't pay.
  - j. You were in a physical fight.
  - k. You or your husband or partner went to jail.
  - l. Someone very close to you had a bad problem with drinking or drugs.
  - m. Someone very close to you died.

**Stress:** The summary stress variable presented in part one of this report measures whether new mothers in Florida experienced some degree of stress during the twelve-month period prior to giving birth. New mothers were considered to have experienced some degree of stress if they responded "Y" (Yes) to at least one of the stress factors in the question above asking whether they experienced one or more of the stressful events listed.

**Cigarette Smoking:** Maternal cigarette smoking is defined as occurring either during the last trimester of pregnancy (during pregnancy) or at postpartum, when answering the PRAMS survey (after pregnancy).

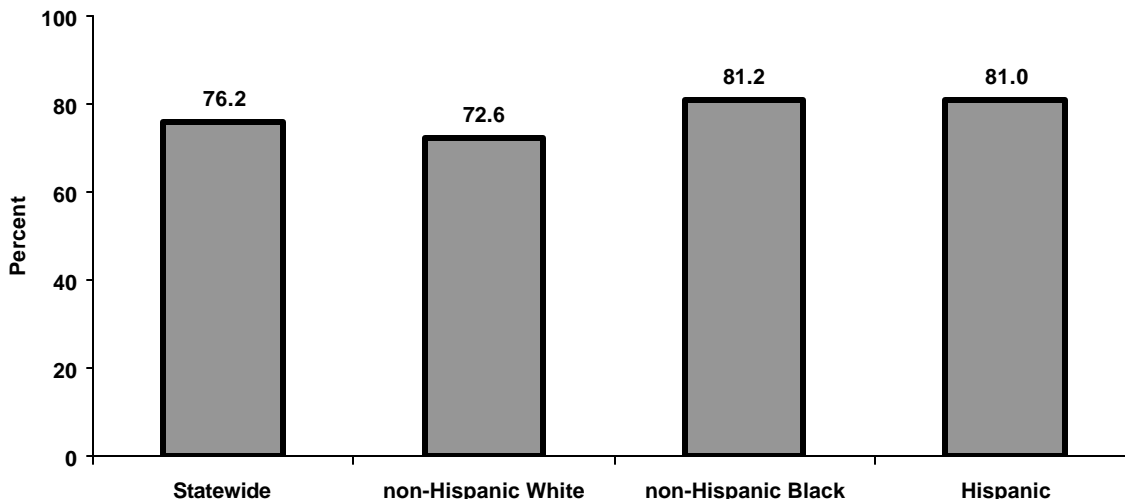
**Low Birth Weight:** Low birth weight is defined as the birth of a live infant weighing 2500 grams or less at birth.

## **Part 1: Stress Among New Mothers**

### Maternal Race/Ethnicity

Overall, 76.2% of new mothers in Florida reported experiencing some degree of stress during the 12-month prenatal period by answering Y (Yes) to at least one of the stress factors. During 2000, the prevalence of prenatal maternal stressful events among both non-Hispanic Black mothers (81.2%) and Hispanic mothers (81.0%) was substantially higher than among non-Hispanic White mothers (72.6%) (see Figure 1 & Table 2).

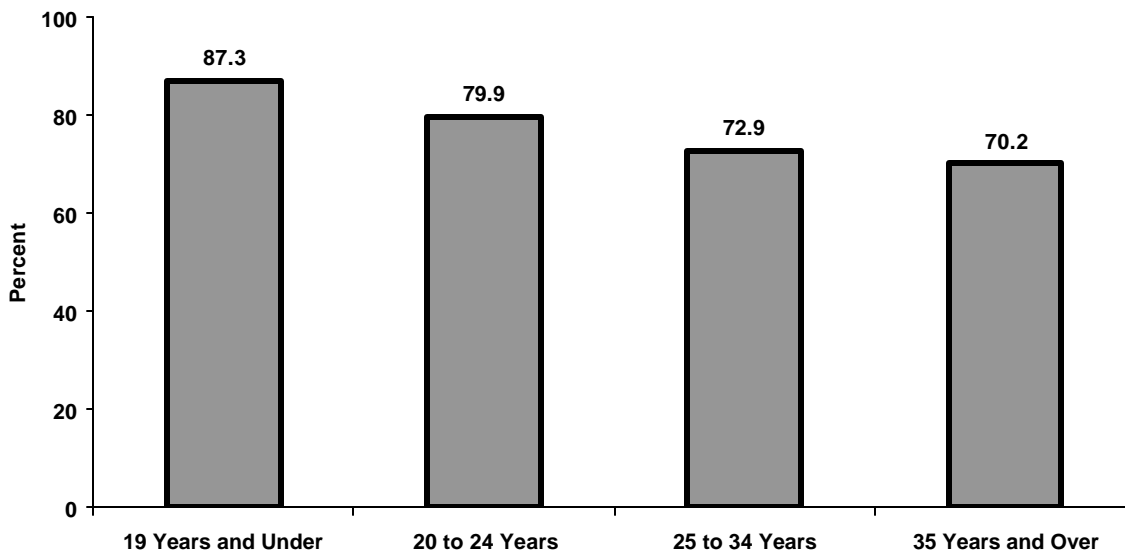
**Figure 1: Percentage of stressful events<sup>s</sup> among new mothers by race/ethnicity, Florida PRAMS 2000**



### **Maternal Age**

During 2000, the prevalence of prenatal maternal stressful events among new mothers in Florida decreased with increasing maternal age. Reported stressful events among mothers ages 19 and under (87.3%) was significantly higher than among new mothers belonging to all three older age groups (see Figure 2 & Table 2).

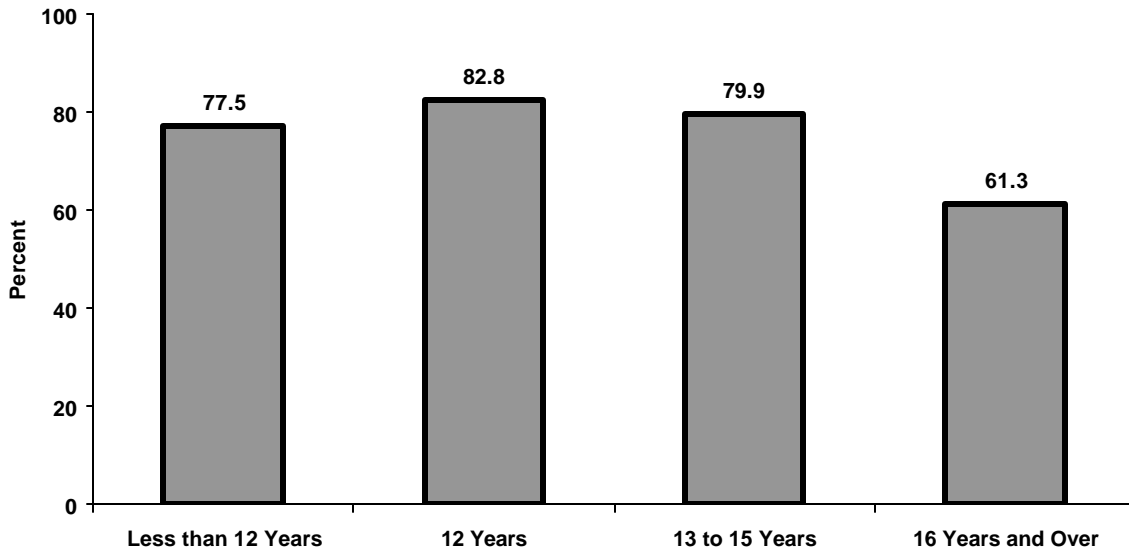
**Figure 2: Percentage of stressful events<sup>s</sup> among new mothers by age, Florida PRAMS 2000**



### **Maternal Education**

Maternal education was categorized into four groups. New mothers with the highest educational attainment (16 years and over) reported substantially fewer stressful events during the 12 months prior to giving birth than those with less education (see Figure 3 & Table 2).

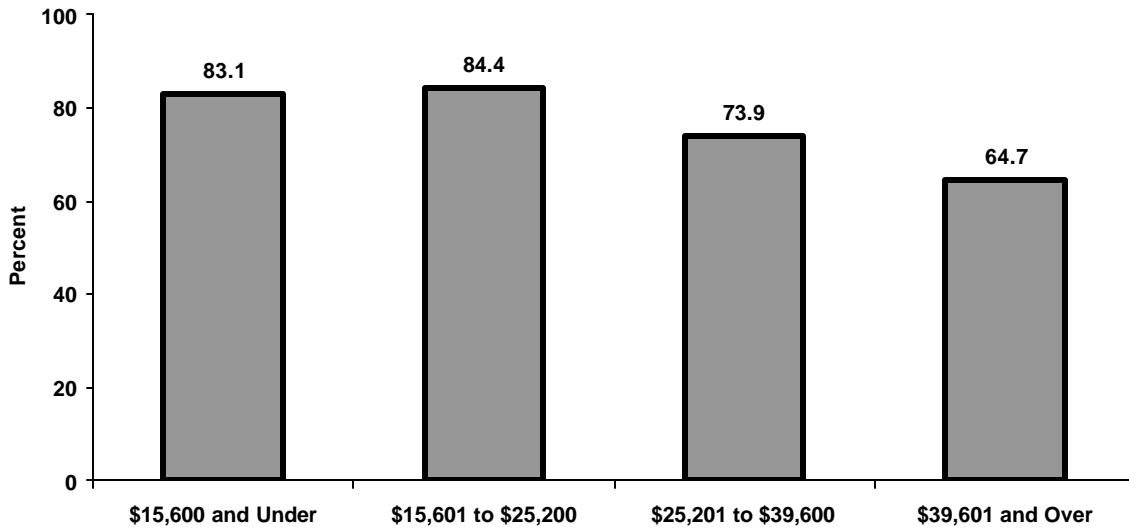
**Figure 3: Percentage of stressful events<sup>§</sup> among new mothers by education, Florida PRAMS 2000**



**Household Income**

Reported household income was grouped into four annual household income categories. New mothers from the two lowest household income groups (\$25,200 and under) reported more prenatal stressful events than those from the two highest annual household income groups (\$25,201 and over) (see Figure 4 & Table 2).

**Figure 4: Percentage of stressful events<sup>§</sup> among new mothers by annual household income, Florida PRAMS 2000**



§ Answered Y (Yes) to at least one of the stress factors

## Marital Status

The prevalence of prenatal stressful events was higher among new mothers who were not married (84.6%) than among those who were married (71.1%) (see Table 2).

## Intendedness of Pregnancy

The following Florida PRAMS survey question addresses the subject of intendedness of pregnancy:

- 10. Thinking back to just before you got pregnant, how did you feel about becoming pregnant?**
- a. I wanted to be pregnant sooner.
  - b. I wanted to be pregnant later.
  - c. I wanted to be pregnant then.
  - d. I didn't want to be pregnant then or at any time in the future.

An intended pregnancy is defined as one that was wanted either "sooner" or "then". An unintended pregnancy is defined as one that was wanted either "later" or "[not] then or at any time in the future." The prevalence of stressful events among mothers who reported their pregnancies as unintended (85.2%) was higher than among those who reported their pregnancies as intended (68.1%) (see Table 2).

**Table 2: Percentage of stressful events<sup>§</sup> among maternal social demographics, Florida PRAMS 2000**

<b>Maternal Demographic</b>	<b>Overall</b>	<b>non-Hispanic white</b>	<b>non-Hispanic black</b>	<b>Hispanic</b>
<b>Overall</b>	76.2	72.6	81.2	81.0
<b>Age Distribution</b>				
19 Years and Under	87.3	87.8	88.2	84.9
20 to 24 Years	79.9	82.4	81.0	73.2
25 to 34 Years	72.9	66.8	76.7	84.9
35 Years and Over	70.2	66.4	83.2	80.6
<b>Education</b>				
Less Than 12 Years	77.5	72.3	81.3	79.3
12 Years	82.8	82.7	82.9	82.5
13 to 15 Years	79.9	77.1	83.5	85.6
16 Years and Over	61.3	56.6	70.4	76.9
<b>Annual Household Income</b>				
\$15,600 and Under	83.1	84.7	84.7	79.2
\$15,601 to \$25,200	84.4	79.7	84.3	91.4
\$25,201 to \$39,600	73.9	73.2	89.6	74.8
\$39,601 and Over	64.7	62.5	73.9	76.1
<b>Marital Status</b>				
Married	71.1	67.3	77.5	80.1
Not Married	84.6	87.2	83.4	82.5
<b>Intendedness of Pregnancy</b>				
Intended	68.1	64.9	73.8	74.4
Unintended	85.2	83.5	86.1	87.7

§ Answered Y (Yes) to at least one of the stress factors

## **Part 2: Maternal Demographics of Selected Stress Factors**

Eight of the prenatal stress factors demonstrated statistically significant relationships with maternal cigarette smoking during pregnancy, after pregnancy, and/or with low-birth-weight birth outcomes.\* This section provides a detailed demographical analysis for each of these eight stress factors.

### **Finance**

Having bills they could not pay during the 12-month prenatal period was more prevalent among non-Hispanic Black mothers (33.2%) than among non-Hispanic White mothers (24.2%). Financial stress among mothers between the ages of 20 and 24 years (31.7%) was more prevalent than among those ages 19 and under (22.2%). New mothers with at least 16 years of education experienced less financial stress (13.1%) than their less-educated counterparts. Not surprisingly, the rate of financial stress was highest among mothers with the lowest household incomes (40.2%), and was lowest among mothers with the highest household incomes (9.9%). The prevalence of financial stress was higher among unmarried mothers (36.2%) than among married mothers (20.7%). Financial stress was more prevalent among mothers who reported their pregnancies as unintended (34.5%) than among those who reported their pregnancies as intended (19.6%) (see Table 3).

### **Death**

Stress due to the death of a very close friend or family member during the 12 months before giving birth was more prevalent among non-Hispanic Black mothers (24.0%) than among non-Hispanic White mothers (16.0%). Regarding age, mothers in the youngest age group were most likely to experience death-related stress (22.5%). Regarding education, new mothers with at least 16 years of education reported the lowest death-related stress rates (11.5%). Stress due to the death of a very close friend or family member was more prevalent among mothers with the lowest household incomes (21.9%) than among those with the highest household incomes (14.5%). The rate of death-related stress was higher among unmarried mothers (22.7%) than among married mothers (15.4%) (see Table 3).

### **Divorce or Separation**

Non-Hispanic Black mothers experienced the highest level of divorce or separation from a husband or partner in the 12 months before giving birth (16.9%). The rate of divorce or separation during that time period was higher among mothers ages 19 and under (17.3%) than among those ages 25 and over. Regarding education, new mothers with at least 16 years of education reported the lowest divorce or separation rate (2.9%). Regarding income, mothers in the lowest income group reported the highest rate of divorce or separation (20.6%). The rate of divorce or separation was higher among unmarried mothers (22.6%) than among married mothers (3.9%). Divorce or separation was more prevalent among mothers who reported their pregnancies as unintended (17.7%) than among those who reported their pregnancies as intended (5.4%) (see Table 3).

### **Substance Abuse**

Mothers in the youngest age group were most likely to report having been very close to a person

\*Statistically significant at ( $p < 0.05$ )

who had a bad problem with drinking or drugs during the 12-month prenatal period (23.2%). Regarding education, new mothers with at least 16 years of education were least likely to report this stressful event (3.7%), while those with less than 12 years of education were most likely to report this particular stressful event (19.3%). Substance abuse-related stress was more prevalent among mothers with the lowest household incomes (15.6%) than among those with the highest household incomes (7.6%). The prevalence of this stressful event was higher among unmarried mothers (19.8%) than among married mothers (6.0%). More mothers with unintended pregnancies (15.3%) reported such stress than those with intended pregnancies (7.4%) (see Table 3).

### **Physical Fight**

Among new mothers who reported having been involved in a physical fight during the 12 months before their babies were born, more than half (53.6%) also reported being physically hurt by their husbands or partners either before or during pregnancy. In contrast, among those who had not been involved in a physical fight during that time period, 3.6% reported being physically hurt by their husbands or partners either before or during pregnancy.

Stress due to having been involved in a physical fight during the 12 months before giving birth was more prevalent among non-Hispanic Black mothers (7.4%) than among non-Hispanic White mothers (5.2%), and Hispanic mothers (1.8%). Mothers who were 24 years of age and under were more likely to be involved in a physical fight during that time period than those who were at least 25 years of age. New mothers with less than 13 years of education were more likely to be involved in a physical fight than those with at least 13 years of education. Mothers with \$25,200 and under in annual household income were more likely to be involved in a physical fight during the 12 months before giving birth than those who reported incomes greater than \$25,200. This particular stressful event was more prevalent among unmarried mothers (8.9%) than among married mothers (2.7%). Involvement in a physical fight was more prevalent among mothers who reported their pregnancies as unintended (8.4%) than among those who reported their pregnancies as intended (2.1%) (see Table 3).

### **Jail**

The percentage of new mothers who reported that either they or their husbands or partners went to jail during the 12-month prenatal period was highest among non-Hispanic Black mothers (8.3%). New mothers who were 19 years of age and under were more likely to experience such a stressful event (14.1%) than their older counterparts. New mothers with less than 13 years of education were more likely to report this particular stressful event than those with at least 13 years of education. Among income levels, mothers in the lowest income group (\$15,600 and under) were most likely to report either they or their husbands or partners went to jail (11.0%). This stressful event was more prevalent among unmarried mothers (10.8%) than among married mothers (2.4%). Finally, among mothers whose pregnancies were unintended, 8.8% reported that either they or their husbands or partners went to jail during the 12 months prior to giving birth to their new babies. In contrast, 2.8% of those whose pregnancies were intended reported this stressful event (see Table 3).

### **Change of Address**

Mothers who were 24 years of age and under were more likely than those who were at least 25 years of age to report having a change of address during the 12 months before giving birth. Among income groups, mothers who reported income of \$39,601 and over were least likely to have a change of

address (26.5%) during that time. A change of address was more prevalent among unmarried mothers (44.3%) than among married mothers (33.0%). Fully 42.0% of mothers with unintended pregnancies had a change of address during that time period, while 33.6% of those with intended pregnancies had a change of address (see Table 3).

### **Loss of Job**

During the 12-month prenatal period, the percentage of new mothers who lost their jobs while wanting to continue working was higher among non-Hispanic Black mothers (17.5%) than among non-Hispanic White mothers (10.3%). Among all four levels of education, new mothers with at least 16 years of education were least likely to report losing their jobs (5.6%). Among income groups, mothers in the highest household income group were least likely to become unemployed during the 12 months before giving birth (2.9%). Unemployment-related stress was more prevalent among unmarried mothers (22.7%) than among married mothers (6.8%). Becoming unemployed while wanting to continue working was more prevalent among mothers with unintended pregnancies (18.9%) than among those with intended pregnancies (7.8%) (see Table 3).

**Table 3: Maternal demographics by stress factor percentage rates, Florida PRAMS 2000**

Maternal Demographics	Stress Factors							
	Finance	Death	Divorce or Separation	Substance Abuse	Physical Fight	Jail	Change of Address	Loss of Job
<b>Race/Ethnicity</b>								
Overall	26.5	18.1	10.9	11.1	5.0	5.6	37.2	12.8
non-Hispanic White	24.2	16.0	8.5	12.6	5.2	6.1	38.2	10.3
non-Hispanic Black	33.2	24.0	16.9	11.6	7.4	8.3	33.9	17.5
Hispanic	26.6	18.0	10.6	8.1	1.8	1.6	39.8	14.6
<b>Age</b>								
19 Years and Under	22.2	25.5	17.3	23.2	10.1	14.1	48.9	14.8
20 to 24 Years	31.7	18.0	15.6	14.3	8.9	8.2	46.1	15.5
25 to 34 Years	25.6	16.9	7.9	7.1	2.4	3.0	31.8	10.5
35 Years and Over	23.8	15.6	6.5	7.7	1.8	1.4	27.7	13.2
<b>Education</b>								
Less Than 12 Years	28.3	23.9	18.3	19.3	9.4	9.2	37.1	15.6
12 Years	29.8	18.4	13.5	12.1	8.2	7.4	39.9	15.4
13 to 15 Years	33.2	19.1	9.0	10.3	0.9	3.1	38.9	13.2
16 Years and Over	13.1	11.5	2.9	3.7	1.1	2.2	31.4	5.6
<b>Annual Household Income</b>								
\$15,600 and Under	40.2	21.9	20.6	15.6	9.5	11.0	41.6	24.3
\$15,601 to \$25 200	31.2	21.0	9.1	10.4	6.0	4.3	44.7	13.6
\$25,201 to \$39,600	24.5	15.0	5.8	10.3	1.8	2.2	41.8	6.6
\$39,601 and Over	9.9	14.5	3.7	7.6	1.2	1.8	26.5	2.9
<b>Marital Status</b>								
Married	20.7	15.4	3.9	6.0	2.7	2.4	33.0	6.8
Not Married	36.2	22.7	22.6	19.8	8.9	10.8	44.3	22.7
<b>Intendedness of Pregnancy</b>								
Intended	19.6	16.3	5.4	7.4	2.1	2.8	33.6	7.8
Unintended	34.5	19.5	17.7	15.3	8.4	8.8	42.0	18.9

## **Part 3: Stress and Maternal Smoking During and After Pregnancy**

Overall, maternal stress was found to be associated with maternal cigarette smoking both during and after pregnancy among Florida women during 2000. In particular, seven of the prenatal stress factors were found to be statistically significantly associated with maternal cigarette smoking during and/or after pregnancy.\*

### **Finance**

Among new mothers who reported having a lot of bills they could not pay during the 12 months before giving birth, 14.9% smoked cigarettes during pregnancy, while among those who reported no such financial stress, 7.0% smoked during pregnancy. The prevalence of postpartum cigarette smoking among those who had financial stress was 22.9%. In contrast, 12.1% of those who had no financial stress smoked cigarettes after their pregnancies (see Table 4).

### **Divorce or Separation**

Among new mothers who reported being separated or divorced from their husbands or partners during the 12 months before their babies' birth, 22.2% reported smoking cigarettes during their pregnancies. Among new mothers who reported no such stressful event, the prevalence of smoking during pregnancy was 7.6%. After pregnancy, 29.4% of new mothers who experienced separation or divorce smoked cigarettes, while 13.0% of those who did not report separation or divorce during the 12 months before giving birth smoked cigarettes postpartum(see Table 4).

### **Substance Abuse**

Fully 28.4% of new mothers who reported being very close to a person who had a bad problem with drinking or drugs also reported smoking cigarettes during pregnancy. Among those not reporting this stressful event, the prevalence of cigarette smoking during pregnancy was 6.8%. The prevalence of postpartum cigarette smoking among those who reported this particular stressful event was 36.6%, whereas 12.2% of new mothers who did not report being close to someone who had a bad problem with drinking or drugs smoked cigarettes after pregnancy (see Table 4).

### **Physical Fight**

Among new mothers who reported having been involved in a physical fight during the 12-month prenatal period, 30.3% smoked cigarettes during pregnancy, while 8.1% of those who had not been involved in a physical fight during that time smoked cigarettes during pregnancy. The highest prevalence of smoking (45.9%) was the postpartum smoking rate among new mothers who had been involved in a physical fight during the 12-month period prior to giving birth. In contrast, 13.4% of mothers who had not been involved in a physical fight smoked cigarettes postpartum (see Table 4).

### **Jail**

Among new mothers who reported either they or their husbands or partners went to jail during the 12 months prior to giving birth, 28.3% smoked cigarettes during pregnancy. Among those who reported

\*Statistically significant at ( $p < 0.05$ )

no such stressful event, the prevalence of cigarette smoking during pregnancy was 8.0%. Postpartum cigarette smoking among new mothers who experienced this particular stressful event was 31.3%, while 14.0% of new mothers who experienced no such stressful event smoked cigarettes postpartum (see Table 4).

### **Change of Address**

Among new mothers who reported a change of address during the 12 months before their babies were born, 12.9% smoked cigarettes during pregnancy. In contrast, 6.5% of those who reported no change of address smoked during pregnancy. Fully 19.4% of those who had a change of address during the 12 months previous to giving birth smoked cigarettes postpartum. Among those who did not have a change of address, 12.0% smoked cigarettes postpartum (see Table 4).

### **Loss of Job**

Among new mothers who became unemployed while wanting to continue working, 16.3% smoked cigarettes during pregnancy. The prevalence of cigarette smoking during pregnancy was 8.2% among new mothers who experienced no such loss of employment. (see Table 4).

## **Part 4: Stress and Low Birth Weight**

A low-birth-weight birth is defined as the birth of a live infant weighing 2500 grams or less at birth. During 2000, the overall percentage of low-birth-weight births among Florida mothers was 7.3%. Low birth weight is associated with many factors including maternal cigarette smoking, alcohol or drug abuse, and a poor diet<sup>2</sup>. Among Florida new mothers in 2000, maternal stress was also found to be associated with low-birth-weight births. The following five prenatal stress factors were found to be statistically significantly associated with low-birth-weight birth outcomes.\*

### **Finance**

Among new mothers who had a lot of bills they could not pay during the 12 months before giving birth, 8.5% had low birth weight infants, while 6.8% of those who had no such financial stress had low birth weight infants (see Table 4).

### **Death**

Among new mothers who experienced the death of a very close friend or family member during the 12-month prenatal period, 8.8% gave birth to low-birth-weight infants. Among those who experienced no such loss, 6.9% had low-birth-weight births (see Table 4).

### **Divorce or Separation**

The prevalence of low-birth-weight births was 9.5% among new mothers who were separated or divorced from their husbands or partners during the 12 months before giving birth, while 7.0% of

\*Statistically significant at (p < 0.05)

those who were not separated or divorced from their husbands or partners during that time period gave birth to low-birth-weight infants (see Table 4).

### **Physical Fight**

Among new mothers who had been involved in a physical fight during the 12 months before giving birth, 10.7% gave birth to low-birth-weight infants, while 7.0% of mothers who had not been involved in a physical fight during that time period had low-birth-weight infants (see Table 4).

### **Jail**

The highest percentage of low-birth-weight births in Florida during 2000 (11.5%) was among new mothers who reported either they or their husbands or partners went to jail during the 12-month prenatal period. The prevalence of low-birth-weight births among new mothers who did not report this stressful event was 7.0% (see Table 4).

**Table 4: Stress factor percentages by maternal cigarette smoking and low-birth-weight births, Florida PRAMS 2000**

Stress Factor	Maternal Cigarette Smoking		Low-Birth-Weight Births
	During Pregnancy	After Pregnancy	
<b>Finance</b>			
Yes	14.9*	22.9*	8.5*
No	7.0*	12.1*	6.8*
<b>Death</b>			
Yes	10.4	13.5	8.8*
No	8.8	15.3	6.9*
<b>Divorce or Separation</b>			
Yes	22.2*	29.4*	9.5*
No	7.6*	13.0*	7.0*
<b>Substance Abuse</b>			
Yes	28.4*	36.6*	7.5
No	6.8*	12.2*	7.2
<b>Physical Fight</b>			
Yes	30.3*	45.9*	10.7*
No	8.1*	13.4*	7.0*
<b>Jail</b>			
Yes	28.3*	31.3*	11.5*
No	8.0*	14.0*	7.0*
<b>Change of Address</b>			
Yes	12.9*	19.4*	7.5
No	6.5*	12.0*	7.1
<b>Loss of Job</b>			
Yes	16.3*	21.7	8.9
No	8.2*	14.1	7.1

\*Statistically significant at (p < 0.05)

## Discussion

### **Prenatal Maternal Stress, Cigarette Smoking, and Low-Birth-Weight Birth Outcomes**

This analysis indicates that most new mothers in Florida experience at least one major stressful event during the 12-month period before giving birth to their new babies. Findings in this report indicate that certain maternal demographic characteristics are associated with experiencing stressful events during this critical time period. Characteristics of new mothers who report experiencing higher levels of stressful events during this 12-month prenatal period include:

- Non-Hispanic Black or Hispanic ethnicity
- 19 years of age and under
- Less than 16 years of education
- Annual household income of \$39,600 and under
- Not married
- Unintended pregnancy

Furthermore, findings presented in this report identify associations between maternal cigarette smoking both during and after pregnancy and stress factors such as:

- Having a lot of bills they could not pay
- Experiencing the death of a very close friend or family member
- Experiencing a divorce or separation from a husband or partner
- Being very close to a person who had a bad problem with drinking or drugs
- Being involved in a physical fight
- Going to jail or having a husband or partner who went to jail
- Having a change of address
- Losing a job while wanting to continue working.

Women who experience these stress factors during the 12 months before giving birth report higher levels of cigarette smoking during and after pregnancy. Cigarette smoking during pregnancy exposes women to known health risks and is addressed in the Healthy People 2010 objectives (16-17c). Additionally, cigarette smoking during pregnancy exposes the baby to carbon monoxide and nicotine. Infant exposure to secondhand tobacco smoke has been associated with Sudden Infant Death Syndrome (SIDS) and respiratory illnesses in children.<sup>3</sup>

This report also identifies a relationship between certain stress factors and low-birth-weight birth outcomes. Even while controlling for maternal cigarette smoking during pregnancy, the following two stress factors maintain an independent association with low-birth-weight births outcomes

- Experiencing the death of a very close friend or family member
- Going to jail or having a husband or partner who went to jail.

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Florida Department of Health  
Bureau of Epidemiology  
4052 Bald Cypress Way  
Bin # A-12  
Tallahassee, FL 32399-1720

Reported by:  
Curtis A. Miller, BS; Marie Bailey, MSW; Kathleen Y. McDuffie, PhD, MPH  
Florida Department of Health  
Bureau of Epidemiology  
(850) 245-4401

Jeb Bush  
Governor

John O. Agwunobi, M.D., M.B.A.  
Secretary, Department of Health

Steven T. Wiersma, MD, MPH  
Bureau Chief, State Epidemiologist