MATERNAL & CHILD HEALTH FACT SHEET

Nearly four million children are born in the United States each year.\(^{(1)}\) Many of the high costs associated with poor pregnancy outcomes are preventable and unnecessary. Due to mobility and low median family incomes, the pregnant agricultural worker woman and infant child face great obstacles in obtaining adequate and timely prenatal and postnatal care.

Likewise, once born, the health of agricultural worker children is one of the poorest of any group in the country and is a major concern within the agricultural worker health field. The mobile lifestyle, language barriers, poor living conditions, and a lack of sufficient financial resources or health insurance make access to healthcare and the continuity of care incredibly difficult.

**General Information**

In an average week, approximately 79,694 children are born in the United States.\(^{(1)}\) In 2014, nearly one in every ten children, or more than 380,000, are born preterm. The percentage of children born with low birth weight (less than 5 pounds 8 ounces) was 8.0 percent, an 18 percent increase from 1980.\(^{(2)}\) In the U.S., non-Hispanic Black women have the highest risk of giving birth to a low birth weight infant, and the risk varies substantially by country of origin for Latina women. Women of Mexican- and Central American-origin have the lowest likelihood of giving birth to a low birth weight infant, while women of Puerto Rican origin have the highest.\(^{(2)}\)

Seven percent of all live births, or 1 in 14 infants, are born to mothers who started prenatal care in the third trimester or who received no prenatal care at all.\(^{(3)}\) One in every thirty-three babies born in the U.S. each year has a birth defect, the leading cause of infant deaths.\(^{(4)}\) In an average week, more than 442 babies in the United States die before reaching their first birthday.\(^{(5)}\)

Births among unmarried women in 2014 were twice as high as in 1980, with 40.2 percent of all U.S. births to unmarried women.\(^{(1,6)}\) The United States has a birth rate of 12.5 births per 1,000 people and a 2.0 fertility rate.\(^{(7)}\) Fertility rate is the average number of children born to a woman during her lifetime. In comparison, Mexico has a fertility rate of 2.2, Guatemala 3.8, Honduras 3.0, while Canada has a fertility rate of 1.7, Germany 1.4, and France 2.0.\(^{(7)}\)

The U.S. infant mortality rate during 2013 was 6.0 deaths per 1,000 live births.\(^{(8)}\) Though the U.S. has the largest and most technologically powerful economy in the world, with a per capita GDP of $56,115,\(^{(9)}\) its infant mortality rate is higher than significantly poorer countries such as Cuba (4 deaths per 1,000 live births) and Slovenia (2 deaths per 1,000 live births).\(^{(10)}\) The 2014 mortality rate for children aged 1 to 4-years-old was 5,250 total deaths or 24.0 deaths per 100,000 children.\(^{(11)}\) The leading causes of death were unintentional injuries followed by congenital malformations and homicides.
Women in the U.S. experience a greater risk of dying from pregnancy or childbirth than women in other high income nations. Maternal mortality rates in the U.S. are now higher than those in Iran, Vietnam, and Romania.(12) The maternal mortality rate in U.S. doubled from 1990 to 2013, and now approximately 1,200 women die every year due to complications from pregnancy or childbirth.(13)

From 2010-2015, Latinas had the highest birth and fertility rates in the U.S.(14)

- Latina women had a fertility rate of 2.53 births per woman from 2010-2015, compared to 1.71 for non-Hispanic White women and 1.91 for non-Hispanic Black women.(14)
- Among Latinas, women of Central American origin had the highest birth rate of all populations, with 94.9 births per 1,000 women aged 15 to 44 years, followed by Mexican origin women, with 70.7 births per 1,000 women.(15)
- In 2013, Latina women had lower infant mortality rates than the national average, and only women of Puerto Rican origin had infant mortality rates higher than the rate of non-Hispanic White women.(16)

Balanced and complete nutrition is essential for both maternal and infant health. Excessive and inadequate intake of certain vitamins and minerals can hurt the mother and the growing fetus. Inadequate intake of folate or folic acid, a B vitamin, can lead to major birth defects such as neural tube defects. Pregnant women are advised to take 400 micrograms each day.(17) Likewise, in-take of vitamins A and D in the early stages of pregnancy have been linked to malformations in babies. Latina women have the highest rate of infants with birth defects caused by a folic acid deficiency, as they are less likely to eat foods that have been fortified with folic acid or take vitamins with folic acid.(17)

Iron deficiency and anemia is another health issue for young children and mothers. Three percent of children ages 0-4 years have anemia, and Latina and non-Hispanic Black women have a higher prevalence of anemia compared to non-Hispanic White women.(18) Anemia is particularly dangerous for young children, as it can impair cognitive development and can increase the risk of preterm labor and low birth weight.

In 2015, many Americans gained access to health insurance coverage through the Affordable Care Act.(19) Despite this increase in coverage, seventeen percent of Hispanics in the United States are uninsured, while 12.2 percent of African Americans and 8.1 percent of whites were without health insurance.(19) People with household incomes below poverty line, people of color, and adults are the most likely to be uninsured.

**Agricultural Worker Data**

An estimated 2.5 - 3 million agricultural workers live and work in the United States and 26 percent are women.(20)

57 percent of agricultural workers are parents and 63 percent are married, according to the National Agricultural Workers Survey findings from 2013-2014. (21)

It is estimated that there are between 300,000 and 500,000 children under the age of 18 laboring in U.S. agricultural fields.(22) These children may earn their own wages, or they may assist their parents to boost the earnings of the parents.

**Prenatal Care**

Extreme poverty, constant mobility, language differences and lack of transportation make it difficult for agricultural workers to have regular access to medical care.(23)
In a 2005 study, only 42 percent of agricultural worker women reported accessing prenatal care services early on in their pregnancy (within the first 3 months). Compare this with the 76 percent of women who access early prenatal care nationally.(24)

Early and regular prenatal care is extremely important to the health and wellbeing of the mother. Latina and African-American women have been found to have great barriers to accessing prenatal care in the U.S.(25,26) Inadequate prenatal care is associated with premature birth, stillbirth, and infant death.(27,28)

Data from the Pregnancy Nutrition Surveillance System found that of 4,840 agricultural worker women monitored, 52 percent (1,835) had less than the recommended weight gain throughout their pregnancies, 23.8 percent had undesirable birth outcomes, 6.7 percent had low birth weight, 9.9 percent had preterm births, while 6.5 percent were small for gestational age.(29)

**Pediatric Care**

Agricultural worker children face multiple health inequities, due to inadequate access to care, mobility, poverty, and higher exposure to harmful pesticides.(30–32) Children born to mothers who were exposed to high concentrations of certain types of pesticides have been found to be at an increased risk for learning delays and disabilities later in life.(32) Many children may be workers themselves, as approximately 10% of all agricultural workers are under age 18.(33) Malnutrition and dietary issues has long been a documented issue among agricultural worker children in addition to pesticide exposures. A survey of agricultural worker families in Ohio found that 70% of children lived in food insecure households.(31) Widespread malnutrition likely plays a role in the elevated overweight and obesity rates found among agricultural worker children as well.(34)

Another study found that 53% of agricultural worker children had an unmet medical need according to their caretakers. This is twenty-four times higher than that reported for U.S. children overall (2.2%), 29% times higher than that for non-Hispanic white children (1.8%), twenty times that of non-Hispanic Black children (2.7%), and fifteen to sixteen times higher than reports for both Mexican American (3.5%) and Hispanic (3.4%) children.(35)

**Nutrition**

Access to healthy foods and basic food security is a critical issue for many agricultural worker families. Research conducted in Georgia found that 63% of agricultural workers did not have enough to eat.(36) Food insecurity was found intermittently among pre-school aged children of agricultural workers in North Carolina, and those who travel for work were at greater risk for experiencing food insecurity.

A study examining the diet of Mexican-origin agricultural workers found that 61.2% of the diets were deficient in Vitamin A; 30.6% deficient in Vitamin C; 57.1% deficient in calcium, and 42.8% deficient in Riboflavin.(37)

A 2007 study of agricultural workers found that 82% of households experienced food insecurity, 49% of who additionally reported hunger.(38)

**Occupational Health & Safety**

The occupational hazards of agriculture work pose significant risks to pregnant women and children. Some of the occupational hazards faced by agricultural workers include prolonged standing and bending, overexertion, extremes in temperature and weather, dehydration, chemical exposure, and lack of sanitary washing facilities in
the fields. These occupational hazards can lead to spontaneous abortion, fetal malformation, or growth retardation and abnormal postnatal development.\(^{(39)}\)

High ambient temperatures can pose a great risk to a pregnant woman employed in agriculture, and pregnant farmworkers have reported multiple health issues as a result of heat stress.\(^{(40)}\) Hyperthermia in pregnant women can lead to severe health effects for the unborn child, and exposure to high maternal temperatures is similar to being exposed to ionizing radiation.\(^{(41)}\) Growth retardation, developmental delays, and even abortion can occur if the mother’s body temperature is elevated for a period of time.

Exposing pregnant agricultural workers to certain pesticides puts unborn children at risk for various severe physical and neurological developmental abnormalities such as facial/ cranial malformation and missing limbs.\(^{(42)}\)

Pesticide exposure commonly occurs in children via the take-home pathway.\(^{(43)}\) Parents working with pesticides often carry contaminated clothes, shoes and hats which then reaches children via household dust found in cars and common living areas. In a study involving urine samples, almost all children (88%) whose parents worked with pesticides tested positive for pesticide metabolites in their system.\(^{(43)}\) Further, children of agricultural worker families are exposed to the harsh and unstable environment related to having to travel to work: housing conditions are often poor, high levels of anxiety, depression and suicidal attempts are commonly present in women, and overwhelming occurrences of farm injuries in both adults and children have been documented.\(^{(44–46)}\)

**Health Insurance Access**

According to the findings of the latest NAWS from 2013 to 2014, just 11% of agricultural workers had been able to utilize employer-provided health insurance for their last medical visit, and only 12% had utilized Medicaid or Medicare.\(^{(21)}\) A third (34%) of agricultural workers paid for the care themselves. A study conducted by the Kaiser Foundation in 2005, found that 90% of agricultural worker children were uninsured compared to the 22% of nationally uninsured low-income children.\(^{(47)}\) A minority of agricultural families had access to Medicaid according to the 2013-2014 NAWs results, as just 37% had utilized Medicaid in the last two years.

Although many agricultural workers are eligible for Medicaid, few are able to take advantage of such benefits. The constant movement associated with migration prevents enrollment in State-administered public health insurance programs.\(^{(49)}\) Studies have proposed the idea of portable insurance plans, which are accepted across state borders where agricultural workers frequently travel.\(^{(50,51)}\)

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