

MY HEALTH, MY RESPONSIBILITY, OUR COMMUNITY

State of Community Health Report

on

Pregnancy and Prenatal Care

This is the sixth in a series of monthly reports from the

Chattanooga-Hamilton County Regional Health Council

Viston Taylor, Chairman

William Hicks, Vice Chairman

August 2000

The Regional Health Council is a community-based organization designated by the Tennessee Department of Health to be responsible for community health assessment, regional health planning, and providing input on funding decisions for health and health-related initiatives. Council members are appointed by the County Executive and the Hamilton County Commission.

The Council identified and prioritized the key health issues facing the community and is developing targeted strategies to address each issue. The five key preventable health issues are: obesity, poor diet and lack of exercise; tobacco use; risky sexual behavior; alcohol and drug use; and lack of involvement in health screenings and other preventive measures.

Data in the report comes from the Tennessee Department of Health, the March of Dimes Birth Defects Foundation, and the Centers for Disease Control.

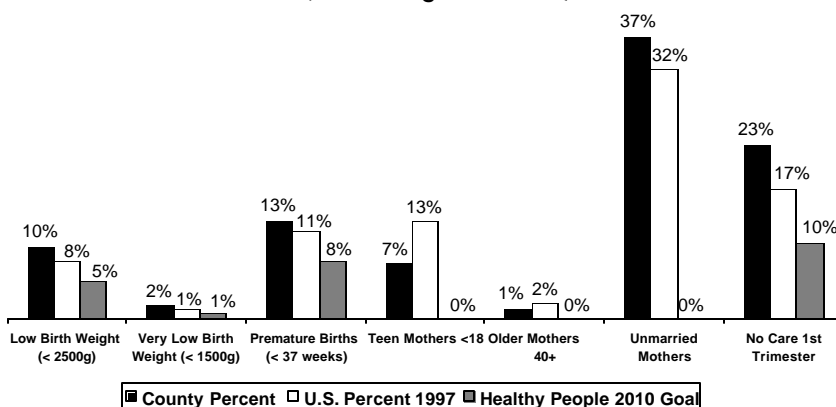
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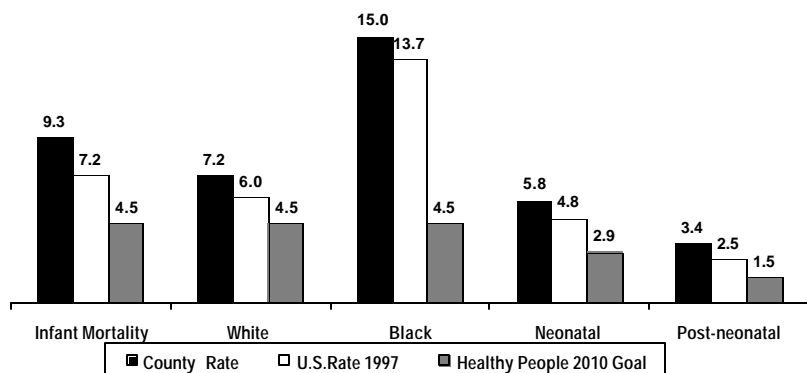
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Hamilton County Birth Measures (Percentage of Births)



Source: Tennessee Department of Health

Hamilton County Infant Mortality



Source: Tennessee Department of Health

Hamilton County Birth Trends

	1998 Rate or %	Change 1990-1998
Positive Changes		
Teen Pregnancy Rate (per 1,000 females 10-17)	19.0	- 30.4%
Infant Mortality Rate (per 1,000 Live Births)	7.3	- 8.8%
% Births w/ Adequate Prenatal Care	75.8%	+ 0.9%
Negative Changes		
% Very Low Wgt. Live Births (< 3.3 lbs.)	1.1%	+37.5%
% Low Wgt. Live Births (< 5.5 lbs.)	9.6%	+ 21.5%
Older Adult Pregnancy Rate (per 1,000 females 35-44)	17.7	+ 14.6%
% Premature Births Delivered (< 37 weeks)	10.9%	+ 3.8%

Source: Tennessee Department of Health

Neural Tube Defects

Each year neural tube defects (NTDs) affect about 2,500 babies born in this country, and about 40 babies born in Tennessee.

What are NTDs?

NTDs, such as spina bifida and anencephaly, are the most common disabling birth defects in the United States.

- **Spina bifida** causes varying degrees of lower body paralysis, bladder and bowel control problems and sometimes learning disabilities.
- **Anencephaly** is a fatal condition in which the brain fails to develop or is entirely absent. Babies born with anencephaly live only a few days after birth.

What is the cost?

- The average total lifetime cost for each infant born with spina bifida is \$532,000.
- Applying this average cost to Tennessee, lifetime total costs of about \$21 million are added to healthcare expenditures each year.

How can NTDs be prevented?

- Folic Acid (a B vitamin) can prevent 50% - 70% of these defects if taken before and during pregnancy. The March of Dimes recommends that all women of child-bearing age take 400 micrograms of synthetic folic acid daily, in addition to consuming food folate from a varied diet.
- Vitamins containing folic acid can be purchased for as little as \$1.00 per month per woman.

Source: March of Dimes Birth Defects Foundation

1998 Hamilton County Substance Use During Pregnancy

Tobacco Use in Pregnancy

Babies born to mothers who used **tobacco** (14.9%) were:

- 47.2% more likely to have an abnormal condition (29.0% vs. 19.7%),
- 44.8% more likely to have low birthweight (13.9% vs. 9.6%), and
- 16% more likely to be born prematurely (13.6% vs. 11.4%)
... than the average baby.

Alcohol Use in Pregnancy

Babies born to mothers who used **alcohol** (1.4% of mothers) resulted in babies who were:

- 190% more likely to have low birthweight (18.2% vs. 9.6%), and
- 180% more likely to be born prematurely (20.2% vs. 11.4%)
... than the average baby.

Other Substance Use in Pregnancy

Babies born to mothers who used **substances other than tobacco and alcohol** during pregnancy (1.1% of mothers) resulted in babies who were:

- 300% more likely to have low birthweight (28.6% vs. 9.6%),
- 242% more likely to have an abnormal condition (47.6% vs. 19.7%), and
- 230% more likely to be born prematurely (26.2% vs. 11.4%)
...than the average baby.

Source: Tennessee Department of Health

Leading Categories of Birth Defects in the United States

Birth Defects	Estimated Incidence per Number of Births
Structural/Metabolic	
Heart and circulation	1 in 115
Muscles and skeleton	1 in 130
Club foot	1 in 735
Cleft lip/palate	1 in 930
Genital and urinary tract	1 in 135
Nervous system and eye	1 in 235
Anencephaly	1 in 8,000
Spina bifida	1 in 2,000
Chromosomal syndromes	1 in 600
Down syndrome	1 in 900
Respiratory tract	1 in 900
Metabolic disorders	1 in 3,500
Phenylketonuria (PKU)	1 in 12,000
Congenital Infections	
Congenital syphilis	1 in 2,000
Congenital HIV infection	1 in 2,700
Congenital rubella syndrome	1 in 100,000
Other	
Rh Rh disease	1 in 1,400
Fetal alcohol syndrome	1 in 1,000

Source: March of Dimes Perinatal Data Center, 1997

Note: Figures are based on the best available data, which underestimates the incidence of many birth defects.

Costs for Perinatal Care

Delivery Costs

- Costs for complicated births range from \$20,000 to \$400,000 per baby, compared to about \$6,400 for a "normal" uncomplicated delivery.

Birth Defects

- The estimated lifetime costs for 18 of the most clinically significant birth defects in the United States were \$8 billion in 1992.
- The lifetime costs of specific birth defects ranged from \$75,000 to \$532,000 per new case. The cost from a child with severe spina bifida could exceed \$1,000,000.

Low Birthweight/Prematurity

- Babies born too small can require increased hospital and provider resources, including time in a neonatal intensive care unit (NICU) at a cost ranging from \$1,000 to \$2,500 per day. A severely ill newborn may spend several weeks or months in a NICU depending on the complexity of the health problem.
- The lifetime medical costs for one premature baby are conservatively estimated at \$500,000.

Source: March of Dimes Birth Defects Foundation, Centers for Disease Control

What Women Should Know

- 1. Practice Healthy Habits.** Many prenatal problems can be avoided if women avoid tobacco, alcohol, and all drugs except those prescribed or recommended by their physicians.
- 2. Take a Multivitamin That Contains 400 Micrograms of Synthetic Folic Acid Daily.** Research has shown that folic acid can help prevent **50% to 70%** of birth defects of the brain and spinal cord if taken before and during early pregnancy. These birth defects occur during the 17th and 30th day of pregnancy -- before a woman even knows she is pregnant. Folic acid is recommended for all women of childbearing age because 50% of pregnancies in this country are unplanned. The expectant mother's health care provider will recommend about prenatal vitamins for other increased nutritional needs during pregnancy, including calcium and iron.
- 3. Prenatal Care Visits.** Prenatal care visits should begin as soon as pregnancy is suspected, and always during the first trimester. Regular prenatal visits should continue throughout pregnancy.
- 4. Eat a Well Balanced Diet.** The March of Dimes recommends daily food choices that include:
 - 6-11 servings of grain products.
 - 3-5 servings of vegetables.
 - 2-4 servings of fruits.
 - 4-6 servings of milk and mild products.
 - 3-4 servings of meat and protein foods.
 - 6-8 glasses of water, fruit juice or milk.
 - Limited fatty foods and sweets.
- 5. Regular Physical Activity.** Regular physical activity during pregnancy can have special benefits, like lessening discomfort and fatigue, enhancing well-being and promoting early recovery after delivery. Always check with the health care provider before beginning any type of exercise.
- 6. What to Avoid.**
 - Alcohol, tobacco products and illicit drugs. Consult the a health care provider before taking any over-the-counter medications.
 - Sauna, hot tubs, or steam rooms.
 - Caffeine, found in tea, coffee, soft drinks and chocolate.
 - X-rays.
 - Handling cat litter or eating undercooked meat. They can cause toxoplasmosis, an infection that can harm the baby.

Source: *March of Dimes Birth Defects Foundation*

Local Resources

Birth Defects Information

The Walter E. Boehm Birth Defects Center at T.C. Thompson Children's Hospital, 423/778-2222

March of Dimes Birth Defects Foundation, 423/267-7172

Prenatal Health Care Services

Chattanooga-Hamilton County Health Department, 423/209-8050

Alton Park Community Health Center, 423/778-2700

Dodson Avenue Health Community Health Center, 423/778-2800

Prenatal / Parenting Education

Building Blocks, 423/265-8098

First Steps, 423/778-6691

Invest in Children, 423/752-0318

Parent's Place, 423/629-4174 ext 19

Parents Are First Teachers, 423/209-6837

Partnership for Children, 423/265-7991

Project HUG, 423/209-8080

Tennessee Early Intervention System, 423/785-2120

Tennessee Infant-Parent Service, 423/344-3010