Improving Pregnancy Outcomes

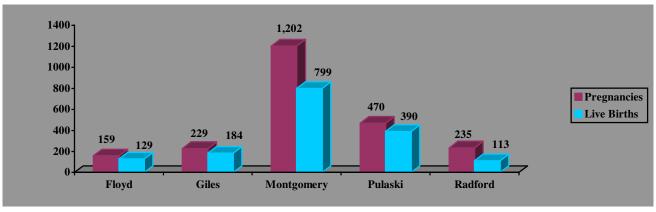
One of the key measuring tools for determining the well-being of any community is the assessment of maternal-child health. Indicators used both locally and throughout the Nation to assess maternal-child health include infant mortality, low birth weight, nonmarital births, teenage pregnancy, and early entry into prenatal care. As can be seen in this Report Card, these indicators are interrelated and often influenced by numerous variables.

Psycho-social and environmental factors play an important part in promoting the well-being of women and children. When babies are unplanned or born into families that are unable to offer emotionally and financially stable environments, they are more likely to suffer from the lack of adequate medical care, both prenatally and during childhood. They are also more likely to experience emotional neglect and physical abuse, therefore decreasing the chance that these infants grow into physically and emotionally healthy children.

The use of drugs, alcohol, and tobacco by pregnant women directly increases the occurrence of low birth weight infants, as well as increases infant morbidity and mortality rates. Economic factors, welfare reform, and managed care must be considered when tracking maternal-child health indicators. Poverty and difficulty accessing prenatal and pediatric care have long-term effects on individuals, families, and communities. Pregnancy outcomes can be improved through the use of technical advances. Preventing unintended pregnancies, promoting healthy lifestyles, and improving access to health care for childbearing women and children can also make a difference. Localities in the New River Health District must make long-term commitments to improve pregnancy outcomes. Healthy children are vital to the health and well-being of our communities.

Preliminary data indicates that 2,295 pregnancies occurred in the New River Health District in 1996. The following graph represents the distribution of pregnancies and live births in the localities of the New River Health District.

Number of Pregnancies and Live Births by Locality New River Health District 1996 (Preliminary)



Source: Stats Brief, Virginia Center for Health Statistics, Virginia Department of Health, October 1997.

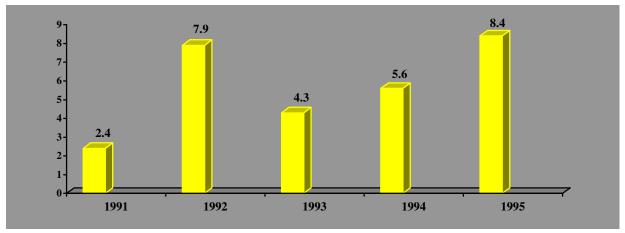
Objective: Reduce the infant mortality rate to no more than 7 infant deaths per 1,000 live births.

The infant mortality rate is defined as the number of infants who die between birth and one year of age per 1,000 live births. The infant mortality rate is a reliable indicator of overall infant health and is an important factor in the overall quality of life within a community.

The leading causes of death for infants are congenital anomalies, sudden infant death syndrome (SIDS), respiratory distress syndrome, and disorders relating to short gestation. Improvement in perinatal services, including advanced technology of newborn intensive care units, high quality prenatal care, and use of obstetrical diagnostic and treatment technologies has helped Virginia reach a five-year low of 7.7 infant deaths per 1,000 live births. However, during the same five-year period, the infant mortality rate *rose* in the New River Health District from 2.4 in 1991 to 8.4 in 1995. Three of the five localities in the District had rates higher than the Year 2000 Objective. Giles County had a rate of 20.7 in 1995, the highest infant mortality rate in the New River Health District. In 1995, the infant mortality rate was higher in the New River Health District (8.4) than in the neighboring health districts of Alleghany (5.8), Roanoke City (6.6), and Mount Rogers (6.3). It is important to note that all of the 1995 infant deaths in the New River Health District were in the White population.

Preliminary data for 1996 reveals that the New River Health District suffered three infant deaths representing an infant mortality rate of 1.9. Floyd, Montgomery, and Pulaski counties each reported one infant death reflecting rates of 7.8, 1.3, and 2.6, respectively. Giles County and Radford City reported no infant deaths during 1996.

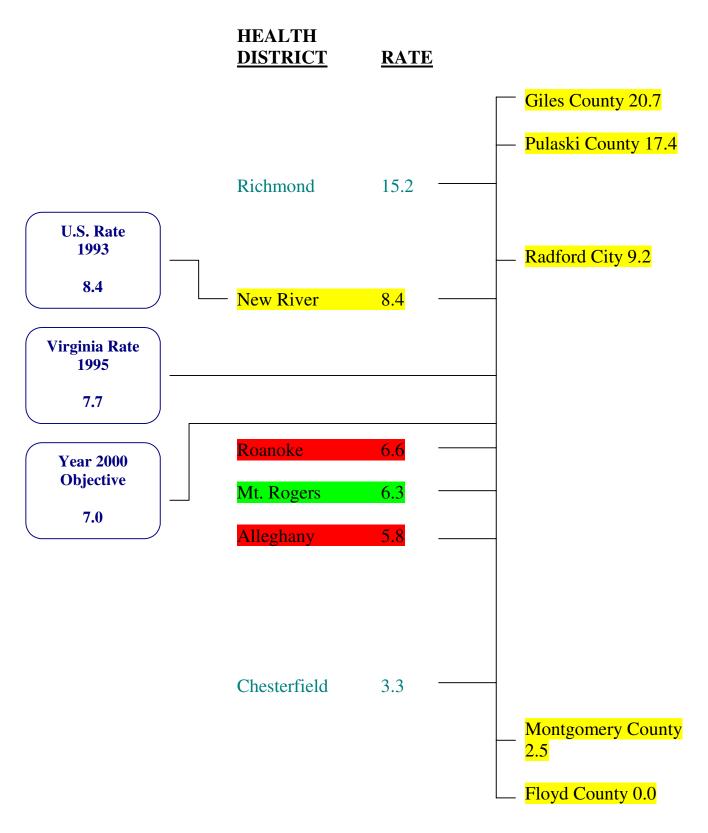
Infant Mortality Rates Per 1,000 Live Births New River Health District 1991 - 1995



Source: Virginia Health Statistics 1995, Center for Health Statistics, Virginia Department of Health, January 1997.

- □ **If you are of childbearing age, maintain a healthy lifestyle.** Practice good nutrition. Abstain from drugs, alcohol, and tobacco.
- □ If you become pregnant, seek early and regular prenatal care.
- □ Make certain that your infant(s) and children receive regular well-child check-ups with the doctor.
- □ Remember that infants who sleep on their backs are less likely to die from SIDS--spread the word to family and friends.
- Support school and community efforts that focus on curtailing tobacco use.

Infant Mortality Rate Per 1,000 Live Births Selected Health Districts, New River Health District and Localities 1995



Low Birth Weight

Objective: To reduce the incidence of low birth weight infants to no more than 5% of live births.

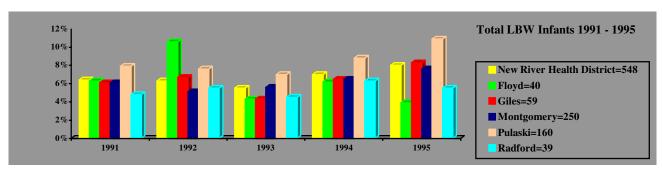
Infants born weighing less than 2,500 grams (5½ pounds) regardless of the length of pregnancy are considered to be low birth weight (LBW). These infants have a higher infant mortality rate. If they survive, they are much more likely to spend an extended time in the hospital. They are also more likely to suffer from life-long disorders such as neurodevelopmental disabilities, learning disorders, behavioral problems, and respiratory problems. Infants with a low birth weight, who may have one or more of these life-long disabilities, often contribute to long-term emotional and financial strain for both the family and the community.

Factors associated with increased risk for delivering a low birth weight infant include maternal age younger than 18 years or older than 35 years. High parity, history of a previous low birth weight infant, low socioeconomic status, low level of education, late entry into prenatal care, low pregnancy weight gain or low prepregnant weight, and smoking and substance abuse also increase the chance of having a low birth weight baby. Twenty to 30% of all low birth weight infants in the United States have mothers who smoked while pregnant. Recent studies show that women who use marijuana or cocaine while pregnant also have significantly smaller infants than nonusers.

As seen in the following graph, the percent of low birth weight infants for the New River Health District was slightly higher than the percent for Virginia in 1995. Within the District, the percentage of low birth weight infants ranged from 3.9% (6) in Floyd County to 10.9% (44) in Pulaski County in 1995. In fact, Pulaski County had the highest percentage of low birth weight infants in the District in four of the five years between 1991 and 1995. Overall, for the New River Health District in 1995, the occurrence of low birth weight infants rose from 106, or 6.4% of live births in 1991 to 133, or 8.0% of live births. In 1995, the percent low weight births was higher in the New River Health District (8.0) than in the neighboring health districts of Alleghany (6.6) and Mt. Rogers (6.6), and slightly lower than Roanoke City (8.5).

Efforts to improve nutrition and to eliminate alcohol, drug, and tobacco use during pregnancy, along with early and continual prenatal care can reduce the incidence of low birth weight infants in our communities.

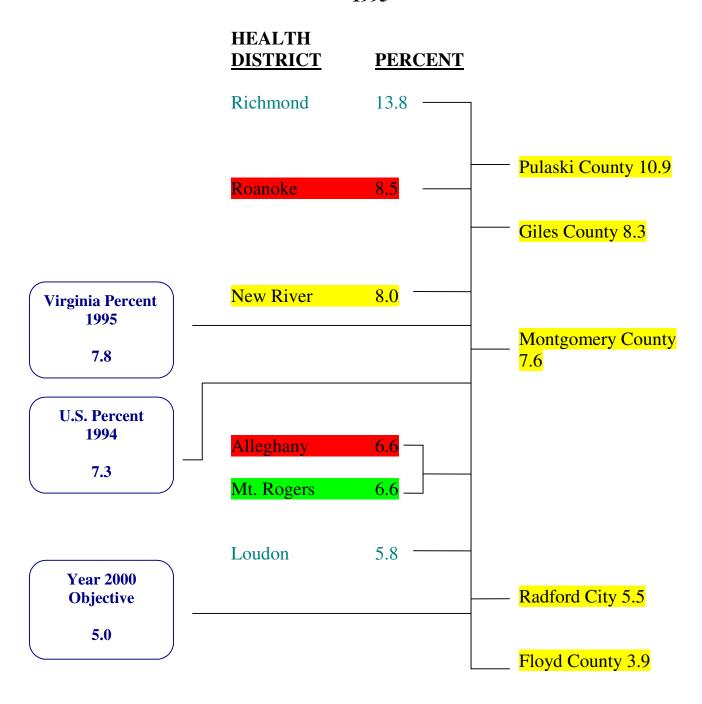
Percentage and Number of Low Birth Weight Infants New River Health District and Localities 1991 - 1995



Source: Virginia Health Statistics 1995, Center for Health Statistics, Virginia Department of Health, January 1997.

- □ **Maintain a healthy weight.** Develop healthy eating habits prior to becoming pregnant.
- □ **Stop smoking.** Encourage family members to quit.
- Avoid drugs and alcohol if you are pregnant or considering pregnancy.
- □ Seek early and continual prenatal care.
- □ If you are pregnant, follow your doctor's advice to prevent preterm labor.

Percent Low Weight Live Births Selected Health Districts, New River Health District and Localities 1995

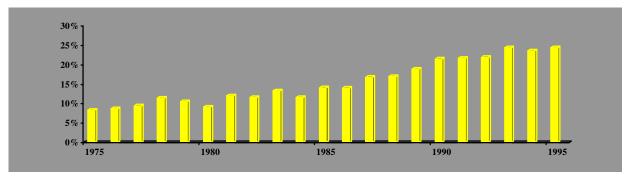


Objective: Reduce the percentage of nonmarital births to 21.8% of the total live births.

In 1995, 32% of births in the United States and 29.3% of births in Virginia were to unmarried parents, making Virginia twenty-third in its percent of nonmarital births when compared to other states in the Nation. Specifically, there were 26,961 nonmarital births in Virginia in 1995. This is the equivalent of one nonmarital birth every 20 minutes.

The New River Health District has experienced a steady and alarming increase in nonmarital births over the past 20 years. As can be seen by the following graphs, the percent of nonmarital births, when compared to total live births, rose from 8.3% in 1975 to 21.7% in 1991 and then to 24.4% in 1995. Nonmarital births in the New River Health District have tripled during this twenty-year period, reaching 405 in 1995. The percent increase of nonmarital births in our District from 1975 to 1995 ranges from a 134% increase in Pulaski County to a 550% increase in Floyd County. Of the 405 nonmarital births in 1995, 355 (88%) were to Whites and 50 (12%) were to Non-Whites. The number of nonmarital births to single parents ages 20 and over during 1995 was 264 or 65% of the total 405, with the remaining 141 or 35% to teenagers. According to the Virginia Preliminary Data Release, 384 (23.8% of total live births) nonmarital births occurred in the New River Health District in 1996.

Nonmarital Births as a Percentage of Total Live Births
New River Health District
1975 - 1995

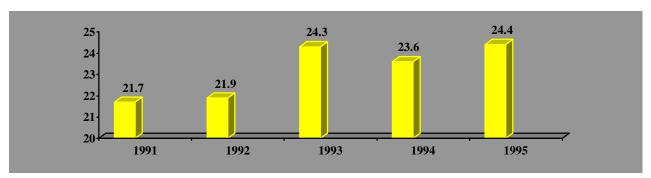


Source: Virginia Health Statistics 1995, Center for Health Statistics, Virginia Department of Health, January 1997.

Nonmarital Births as a Percentage of Total Live Births

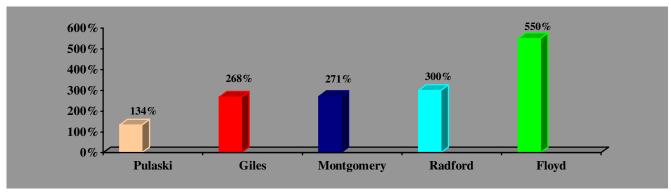
New River Health District

1991 - 1995



Source: Virginia Health Statistics 1995, Center for Health Statistics, Virginia Department of Health, January 1997.

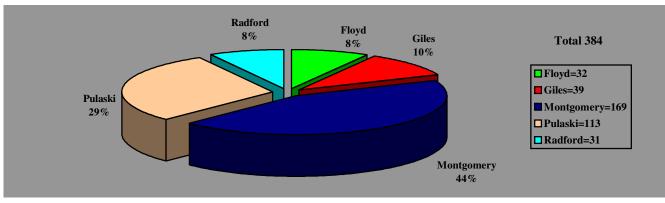
Percent Increase in Nonmarital Births by Locality New River Health District 1975 - 1995



Source: Virginia Health Statistics 1995, Center for Health Statistics, Virginia Department of Health, January 1997.

The distribution of out-of-wedlock births within the New River Health District is described in the following graph. Montgomery County had 169 nonmarital births or 44% of the total number of nonmarital births for the District in 1996. Pulaski County was next with 113 nonmarital births or 29% of the total births for the District, followed by Giles County with 39 or 10% of births in the District, and then Floyd County with 32 out-of-wedlock births or 8% of the District total. Radford City had the lowest actual number of nonmarital births with 31 or 8% of the total in the New River Health District.

Percent Distribution and Number of Nonmarital Births by Locality
New River Health District
1996 (Preliminary)



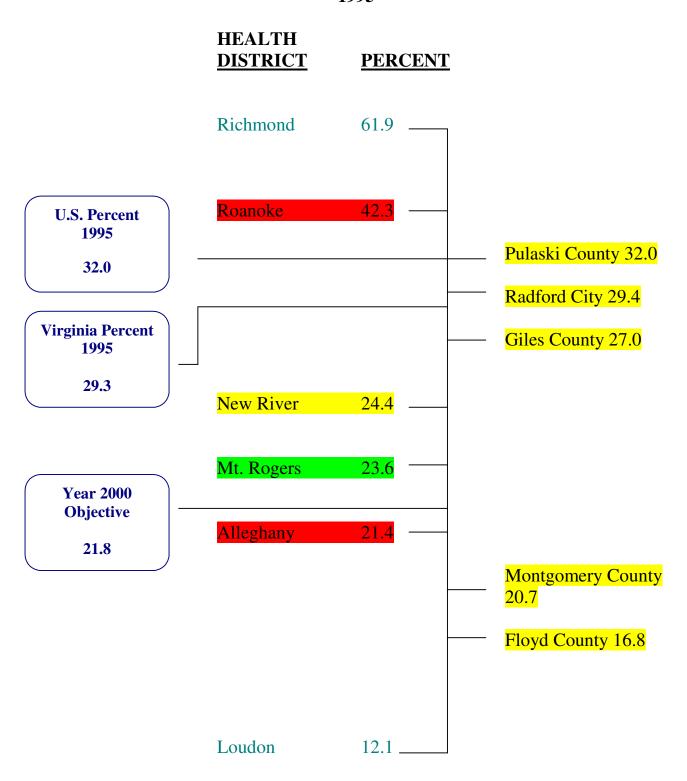
Source: Stats Brief, Virginia Center for Health Statistics, Virginia Department of Health, October 1997.

These women are less likely to seek early and adequate prenatal care. They are more likely to engage in risk behaviors such as the use of drugs, alcohol, and tobacco during their pregnancies. These babies are at increased risk for low weight at birth and infant mortality. As these infants progress through childhood, they suffer more health and emotional problems than children whose parents are married. They are more likely to be abused, more likely to live in poverty, and they are more likely to become out-of-wedlock parents themselves. Fathers often assume a less active role in the lives of these children than do fathers in traditional family households.

The Partners in Prevention Initiative, a national effort to lower the incidence of out-of-wedlock births, is supported by the New River Health District, local governments, and communities. This initiative is designed to reduce unintended nonmarital births, therefore, giving children a better start in life.

- Make each pregnancy a desired and planned event.
- □ Support agencies that offer family planning counseling and birth control for those people who are sexually active, but not currently desiring a pregnancy.
- Support educational efforts that are goal-oriented and promote planned pregnancies.
- **Become active in the Partners in Prevention Initiative.**

Percent Nonmarital Births Selected Health Districts, New River Health District and Localities 1995



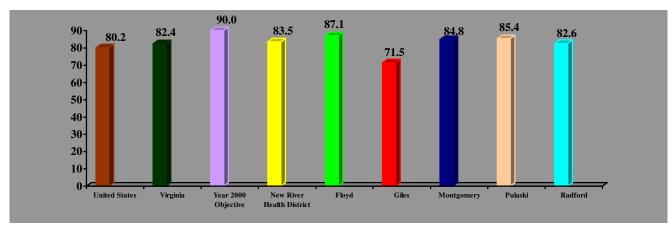
Objective: Increase to at least 90% the proportion of all pregnant women who receive prenatal care in the first trimester of pregnancy.

Prenatal care should ideally begin with preconception counseling. The identification of medical illness or genetic disorders prior to conception provides prospective parents the opportunity for counseling, appropriate treatment, pregnancy planning, early prenatal care, or avoidance of pregnancy. Families have the opportunity to modify personal behaviors, lifestyles, or change environmental conditions that are known to impact pregnancy outcomes.

Early pregnancy diagnosis and high quality prenatal care are directly related to the delivery of healthy babies. The first trimester of pregnancy is a critical time for fetal development. Prenatal care within the first 13 weeks of pregnancy effectively improves pregnancy outcomes. Women who plan their pregnancies are more likely to seek obstetrical care within the first trimester. However, almost 60% of all pregnancies in the United States each year are either unplanned or mistimed. Other maternal characteristics associated with receiving late or no prenatal care include low income, less than a high school education, teenage pregnancy, and already having a large number of children. In the United States, 14 million women of reproductive age have no health insurance to cover maternity care. In the New River Health District, 24,000 people are either underinsured or have no health insurance at all. This lack of insurance, changing Medicaid guidelines, and low income often prevent women from seeking prenatal care in a timely manner.

In 1995, 83.5% of pregnant women in the New River Health District received prenatal care in the first trimester, falling below the Year 2000 Objective of 90%. The numbers are even more troublesome in Giles County where only 71.5% of women received care in the first 13 weeks of pregnancy. Educating our communities of the importance of early and consistent prenatal care is only part of the solution. Prenatal care must be made more accessible to women of childbearing age to ensure the well-being of our next generation.

Percent Beginning Prenatal Care in the First Trimester United States, Virginia, Year 2000 Objective, New River Health District and Localities 1995

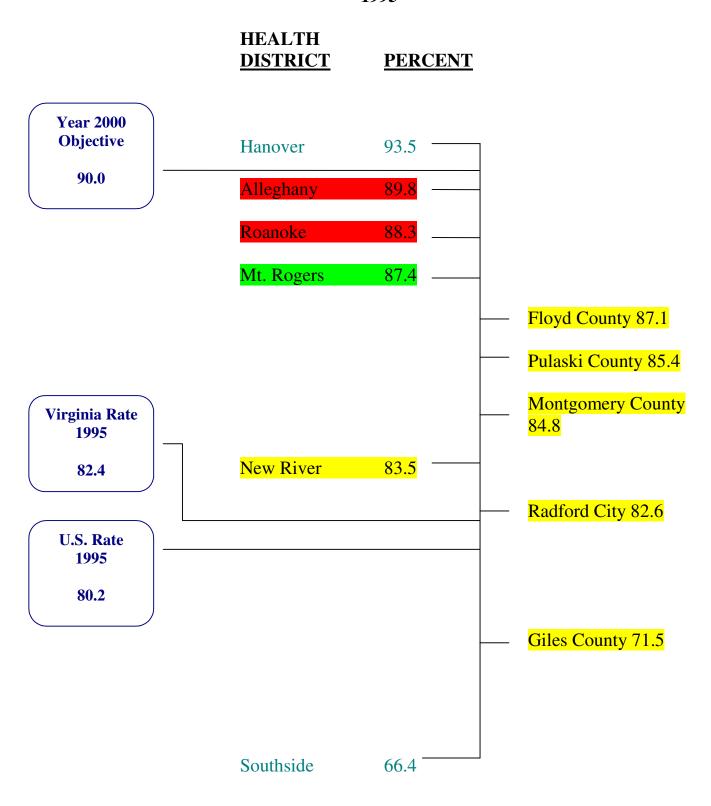


Source: Virginia Health Statistics 1995, Center for Health Statistics, Virginia Department of Health.

What	you	can	do:
------	-----	-----	-----

- □ Make each pregnancy a planned event.
- See a doctor within the first 13 weeks of pregnancy.
- □ Encourage health insurance providers to offer health plans that cover prenatal care.
- □ Help to educate the community that early and adequate prenatal care for all increases the chances of positive pregnancy outcomes and is also cost effective.
- □ **Stop smoking.** Encourage family members to quit.
- Avoid drugs and alcohol if you are pregnant or considering pregnancy.

Percent Beginning Prenatal Care in the First Trimester Selected Health Districts, New River Health District and Localities 1995



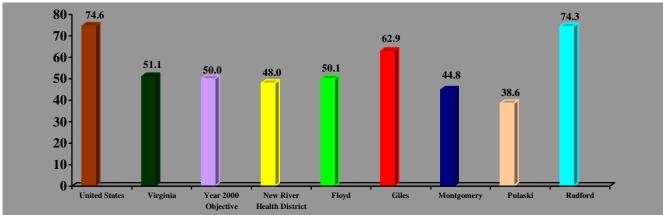
Objective: Reduce pregnancies among females ages 15 - 17 years to no more than 50 per 1,000 adolescents.

Teen pregnancy is a critical public health issue with long-term consequences for the teen parents, the baby, and the community as a whole. One in 10 young women age 19 or younger becomes pregnant each year. Virtually all young people are at risk due to peer and other social pressures. Teenagers are more likely to become sexually active if they are from low socioeconomic households, if they have low self-esteem, and/or if they view themselves to be in poor communication with their families. Three-fourths of sexually active youths use no form of birth control. Teens who are sexually active are at risk for sexually transmitted diseases, including HIV. They are also likely to engage in other high-risk behaviors such as the use of illegal drugs, alcohol, and tobacco.

Girls who become parents as teenagers are often unaware of or unable to access community resources. Consequently, prenatal care often is initiated late in pregnancy and is sporadic at best, increasing the chance of complications for both mom and baby. Teen moms often suffer interruption in their formal education and are more likely to experience life-long economic strife. Many have not completed the developmental process themselves and are emotionally, intellectually, and economically unprepared to parent a child. Many lack the support of the baby's father, as evidenced by the 141 out-of-wedlock births to teens during 1995 in the New River Health District. As these babies grow, they are also more likely to suffer health problems and cognitive delays than other children. They are also at increased risk for abuse and neglect.

During 1995, 78 females ages 15 - 17 in the New River Health District became pregnant. This represents a pregnancy rate of 48.0 per 1,000 adolescents which was less than Virginia's 1995 rate (51.1). As can be seen on the following graph, Radford City has the highest (74.3) teenage pregnancy rate among females ages 15 - 17, followed by Giles County (62.9), Floyd County (50.1), Montgomery County (44.8), and Pulaski County (38.6), respectively. Preliminary data for 1996 indicates that 87 pregnancies to teens ages 15 - 17 occurred in the New River Health District. Only 54 live births resulted from the 87 pregnancies to 15 - 17 year-olds.

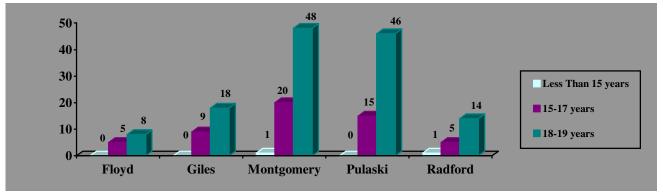
Pregnancy Rates Per 100,000 Females Ages 15 – 17
United States, Virginia, Year 2000 Objective, New River Health District and Localities
1995



Source: Virginia Health Statistics 1995, Center for Health Statistics, Virginia Department of Health.

Preliminary data reveals that while 350 teenagers became pregnant in the New River Health District in 1996, only 190 resulted in live births. During 1996, 11.8% of all births in the District were to females ages 10-19 years. As can be seen on the following graph, Floyd County had the lowest number of births to teens in 1996 with 13. Montgomery County had the highest (69), with Pulaski County following closely (61). Giles County had a total of 27 infants born to teens, and Radford City had 20.

Number of Teenage Live Births by Age by Locality New River Health District 1996 (Preliminary)

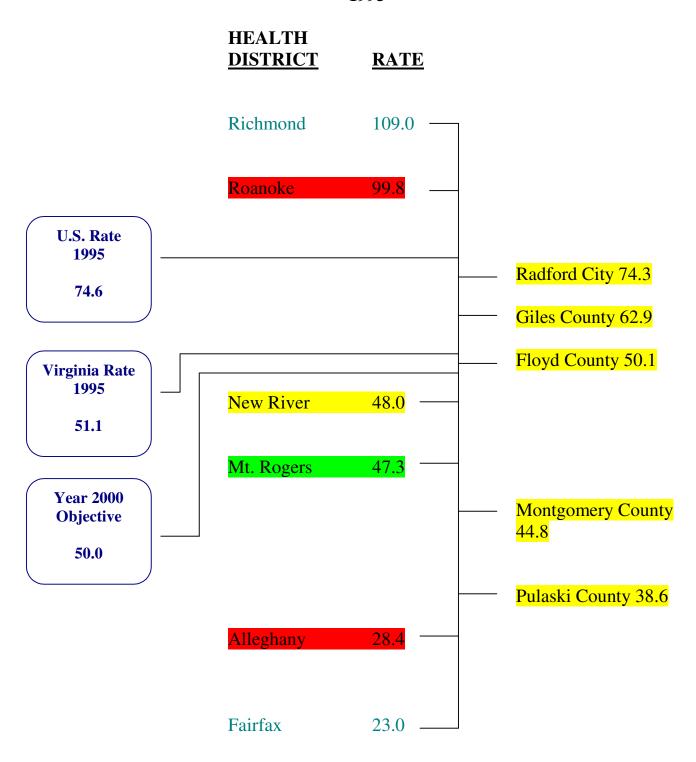


Source: Stats Brief, Virginia Center for Health Statistics, Virginia Department of Health, October 1997.

Delaying sexual activity and pregnancy until our adolescents reach adulthood is advantageous in many ways. Efforts that are designed to address self-esteem, relationship building, behavior modification, and role modeling for both male and female adolescents must be promoted in our communities.

- □ Parents--be a positive role model for your children and their friends.
- **□** Encourage your children's involvement in extra-curricular activities.
- Communicate with teenagers to educate them about the risks of sexual activity and teach them the skills to abstain.
- Promote mentoring programs in the community and schools.

Teenage Pregnancy Rates Per 1,000 Female Adolescents Ages 15 - 17 Selected Health Districts, New River Health District and Localities 1995



Summary

Pregnancy and childbearing in the last quarter of the twentieth century is generally thought to be a healthy and happy choice made by many families. Unfortunately, in the New River Health District, too often this is not the case. The District has fallen short of the acceptable goals in four of the five Year 2000 Objectives addressed in this Report Card. Infant mortality, low birth weight infants, and nonmarital births have risen during the five-year period of 1991-1995.

As a community, the New River Health District must renew its commitment to improving the health and well-being of all citizens. While past efforts should be evaluated, new and innovative measures to improve maternal and child health must be explored.

Pregnancies should be planned long before they become a reality. Education to promote healthy lifestyles for both men and women of childbearing age is the first step. Alcohol, drugs, and tobacco use must be discouraged in those at risk of pregnancy. Promoting abstinence and delaying sexual activity should be promoted as acceptable options to our teenagers and young adults. Access to public and private providers of family planning services should be improved, as well as access to prenatal care.

The community can help. Necessary steps include practicing responsible behaviors, thus setting positive examples for children and their friends. Mentors are needed for both the male and female teens. Supporting the school systems, churches, businesses, and agencies that encourage our young people in preparing for their future is vital.

Education to promote prenatal care, parenting issues, and children's health can be addressed in the classroom, by the media, health care providers, day care centers, and private businesses that serve customers and employees of childbearing age.

Involving the male population is essential. The family benefits as a whole when fathers participate in planning pregnancies and play an active role in the parenting of their children. Communities can support fathers by working to change old attitudes that child rearing is a woman's job. Concentration on preparing men for parenthood through education and support has been long overlooked. Local employers can help by adding educational programs that address parenting issues to their company inservice and health promotion programs.

Health care providers can increase outreach efforts for families, publicize services available, and work cooperatively with other agencies and health care providers to promote family health.

Teens must be encouraged to set goals for themselves. Every effort should be made to keep young people active in both academic and after school activities. Promoting career-training programs is a key to a successful future.

Improving pregnancy outcomes is a benefit to all aspects of the community. The solutions are not easy ones, and our goals cannot be achieved without the commitment and cooperation of all the members of the community. What could be a better reward for these efforts than a population of well planned, healthy, and happy children that are born into families that can economically care for their needs?