



# Babyline

## 1990-2004 Trend Report

Community Service Council | Tulsa, Oklahoma | Fall 2006

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This report is available online: [www.csctulsa.org](http://www.csctulsa.org).

The Appendices are available separately, online under Data—Babyline Reports.

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# Babyline: 1990-2004 Trend Report

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# Babyline: 1990-2004 Trend Report

## **INTRODUCTION**

Babyline is a centralized prenatal appointment service designed to help low-income, minority, and teen women in Tulsa County and the surrounding communities gain early access to prenatal care and awareness of local perinatal services. Since Babyline's beginning in November 1989, referral specialists have provided personalized and confidential assistance to thousands of pregnant women looking for affordable prenatal care. In total, from 1990 through 2004, Babyline scheduled 48,090 prenatal appointments for pregnant women.

Babyline grew out of the work of the Tulsa Coalition on Perinatal Care (TCPC), a coalition of 25 health and human service agencies serving pregnant and/or postpartum women in the Tulsa area. (TCPC, sponsored by the Community Service Council of Greater Tulsa, is now the Family Health Coalition.) In a 1989 report, "Helping Mothers, Helping Babies: Improving Access to Prenatal Care in Tulsa County," TCPC identified the need for easier access to public prenatal services. It was believed that many low to moderate income women did not know where to receive affordable prenatal services or found it difficult to navigate the maze of accessing clinic services and securing Medicaid. The TCPC, having worked closely with each of the public maternity clinics since its inception in 1987, asked each clinic to allow a fraction of its initial (or first) prenatal visit appointments to be scheduled through the Babyline centralized system.

Today, five key prenatal care providers participate in Babyline: the Oklahoma State University College of Osteopathic Medicine (OSUCOM), the University of Oklahoma Women's Clinic (OUWC), the University of Oklahoma Family Practice Clinic (OUFP), Planned Parenthood of Arkansas and Eastern Oklahoma, Inc. ([PPAEO] 4 clinic sites), and the Tulsa Health Department (THD). Other prenatal care providers participate with Babyline, offering fewer appointment slots; these include Green Country Women's Health, Morton Comprehensive Health Services, Inc., and Indian Health Care Resource Center.

Babyline operates 26 hours per week: 9:00 a.m. to 3:00 p.m. on Monday, Wednesday, Thursday and Friday; and 9:00 a.m. to 5:00 p.m. on Tuesday. Babyline have staff members who are Spanish/English bi-lingual in order serve the Tulsa area's growing Hispanic population. All Babyline services are free to clients.

During the scheduling process, a significant amount of data is captured regarding the health and social needs of the client. This data has become a rich source of information regarding low to moderate income women seeking prenatal services in Tulsa. This report is a compilation of data from the first 15 years of Babyline operation. The data includes demographics, medical and social risk factors, gestational age, and need for social support. Through analysis of this data, trends can be identified which may be helpful in planning future services.

# BABYLINE CLIENTS DEMOGRAPHIC PROFILE

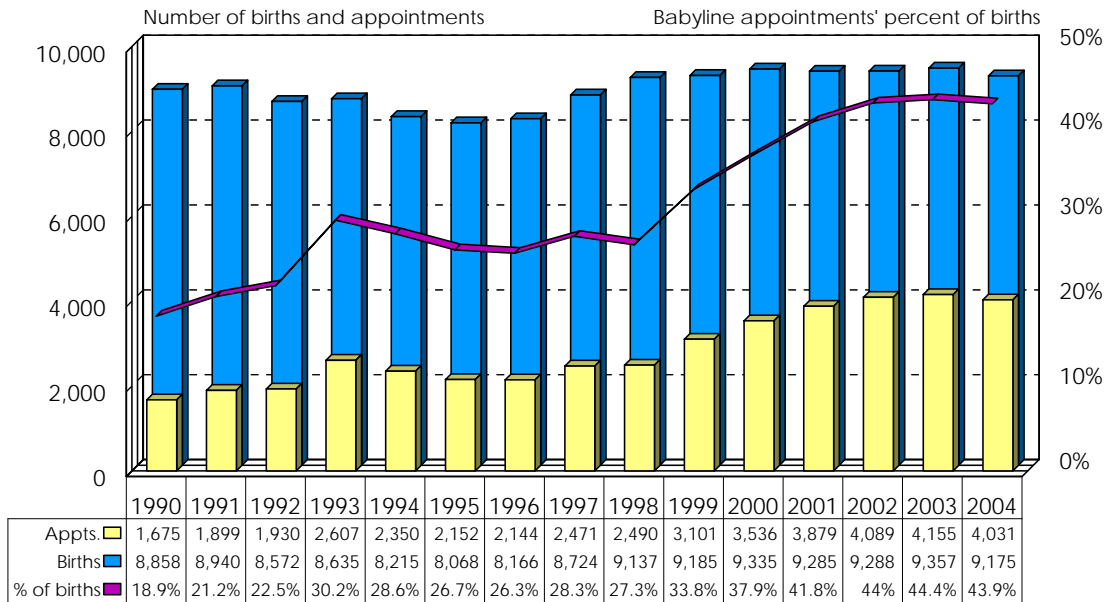
Babyline has helped a growing number of women find the prenatal care they need (See Chart 1).

In 2004, Babyline scheduled 4,659 prenatal appointments for pregnant women, an increase of 133% from the 1,997 appointments Babyline scheduled in 1990, the first full year of the program.

The percentage of the total resident births scheduled by Babyline has increased from 18.9% in 1990 to 43.9% in 2004.

Chart 1:

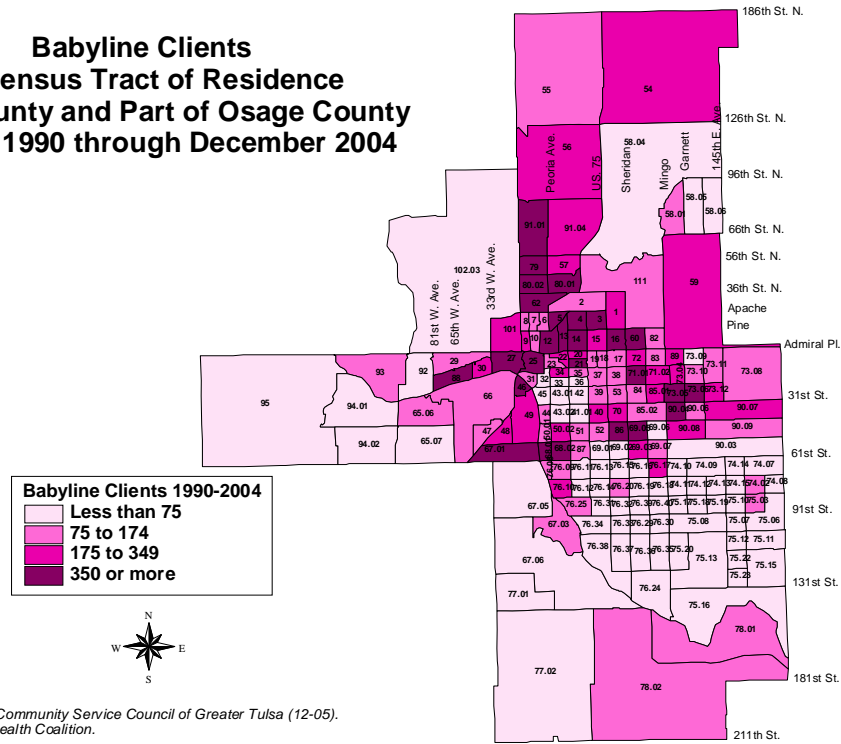
**Babyline Prenatal Appointments Scheduled for Tulsa County Residents and Tulsa County Resident Births 1990 - 2004**



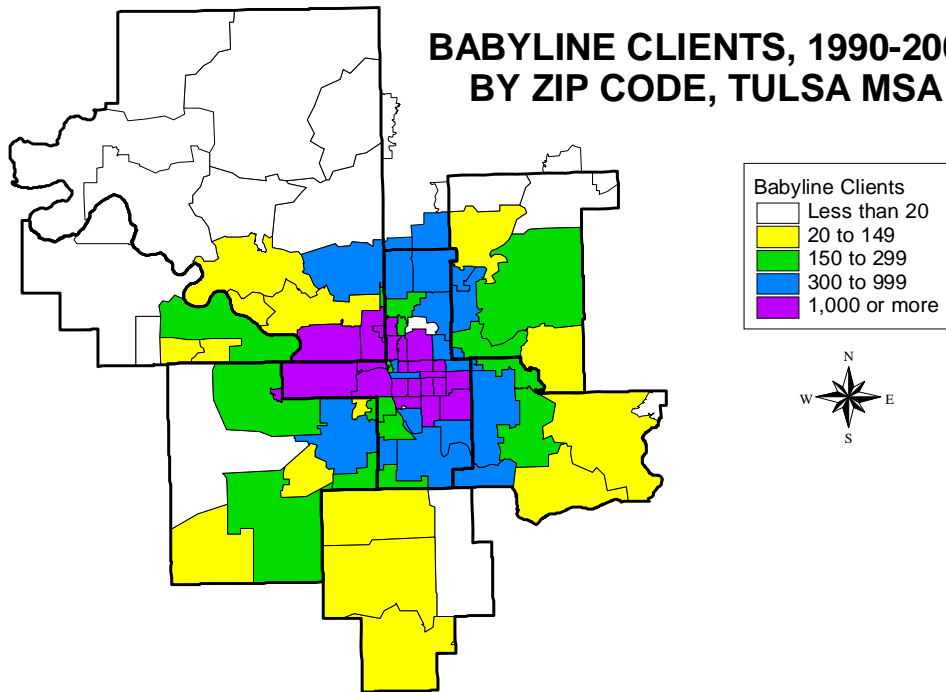
Source: Family Health Coalition; Oklahoma State Department of Health.

# Residence by Census Tracts and Zip Codes

## Babyline Clients by Census Tract of Residence Tulsa County and Part of Osage County January 1990 through December 2004



## BABYLINE CLIENTS, 1990-2004 BY ZIP CODE, TULSA MSA

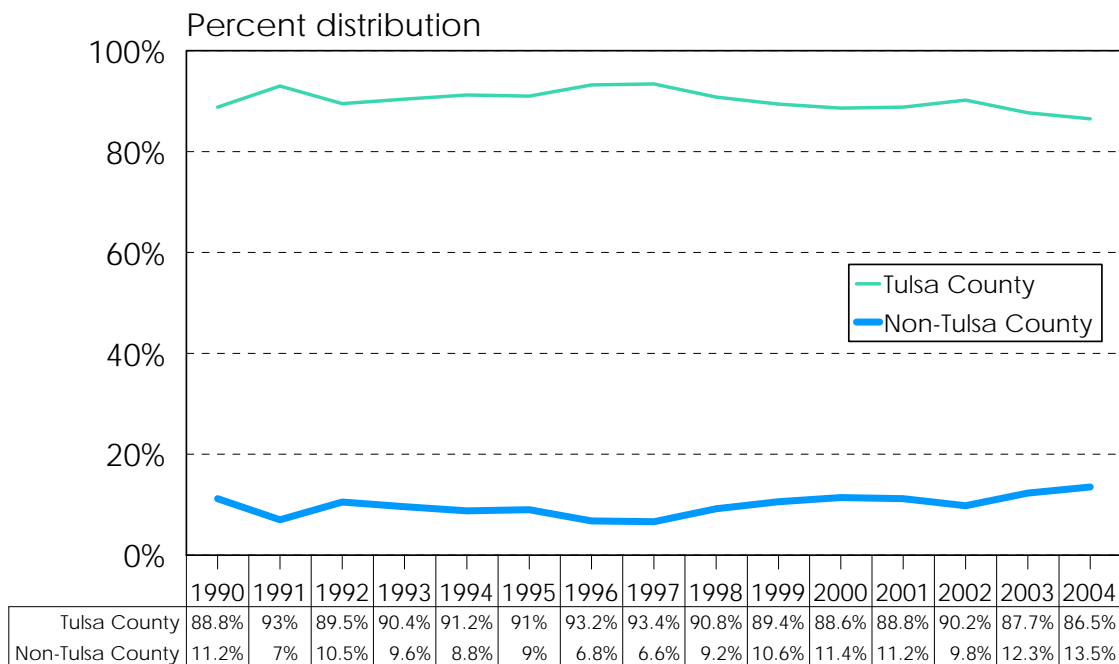


## County of Residence

The majority of Babyline prenatal clients have been Tulsa County residents; the range has been 86.5% to 93.4%, and the average is 90.2% (See Chart 2). The non-Tulsa County residents are seeking prenatal care in Tulsa County. Though the percentage of clients who were non-Tulsa County residents has been very steady over time and averages to 9.8%, five years (1990, 2000, 2001, 2003, and 2004) had more than 11% of clients from non-Tulsa counties. Variations in client participation from non-Tulsa counties could be due to changes in the number and costs of prenatal care providers in different areas; however, there is inadequate longitudinal data on this issue.

**Chart 2:**

### County of Residence: Part 1 Tulsa County and Non-Tulsa County Babyline Prenatal Clients, 1990 - 2004

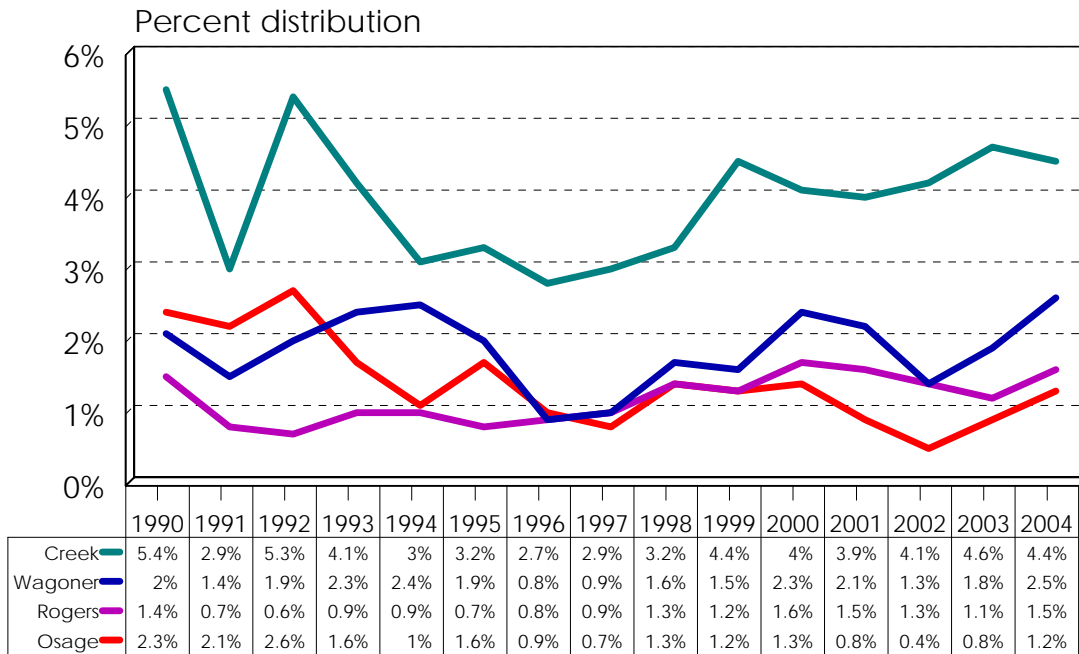


Source: Family Health Coalition

Of non-Tulsa counties, Creek County has had the highest percentage of Babyline clients in each year, yet its percentage has declined from approximately 5.4% of Babyline clients in 1990 to approximately 4.3% in 2004 (See Chart 3). The percentages of Babyline clients from Wagoner, Rogers, and Osage Counties have fluctuated in a range between approximately 0.5% and 2.5%. The percentages from Pawnee, Okmulgee, Muskogee, and all other non-Tulsa Counties have slightly increased over time but remain just above or below 1% in 2004. Fluctuations after 1996 can be correlated to changes in Medicaid (SoonerCare) and the availability of providers to conduct prenatal care in their county of residence.

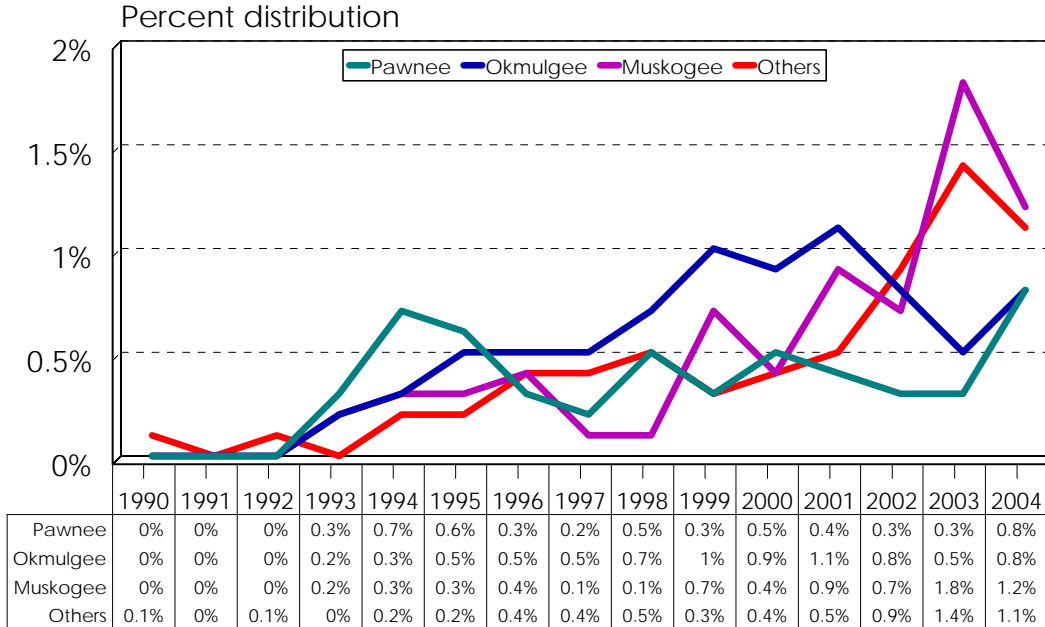
**Chart 3:**

**County of Residence: Part 2**  
**Creek, Wagoner, Rogers and Osage Counties**  
 Babyline Prenatal Clients, 1990 - 2004



Source: Family Health Coalition

## County of Residence: Part 3 Pawnee, Okmulgee, Muskogee and other Counties Babyline Prenatal Clients, 1990 - 2004



Source: Family Health Coalition

## Race

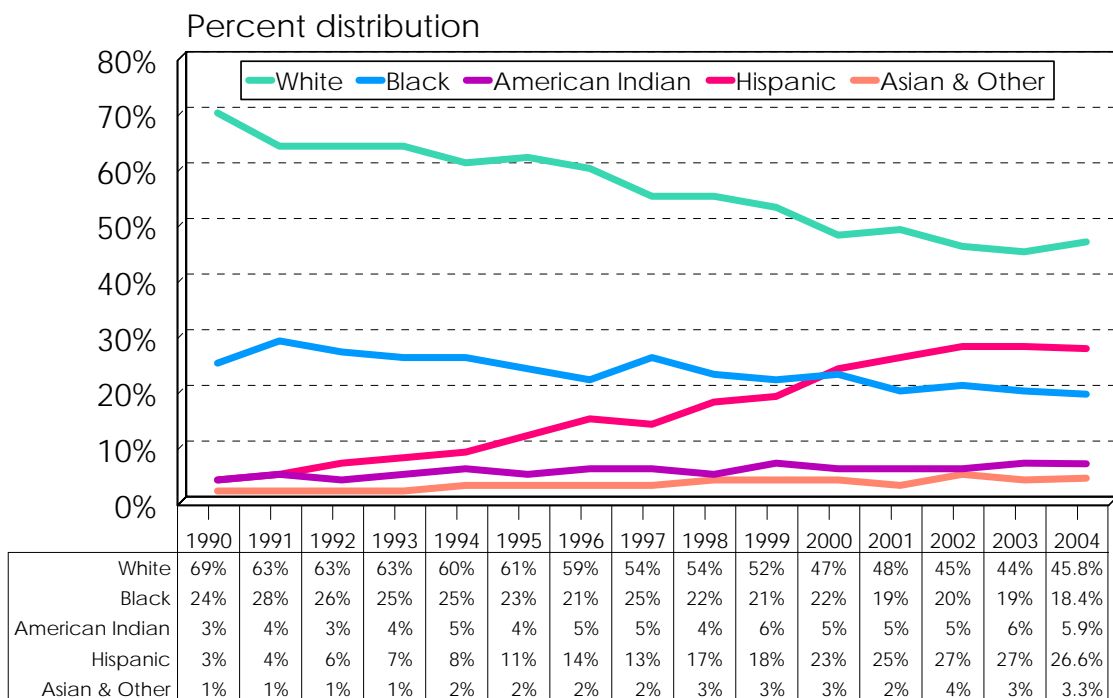
Babyline has adhered to a policy of defining race according to client self-report. As a result, being of Hispanic ethnicity is recorded as a race. Between 1990 and 2004, the percentage of Babyline prenatal clients who identified as Hispanic increased from approximately 5% in 1990 to nearly 30% in 2004 (See Chart 4). This follows a county growth of people of Hispanic origin from 1997 to the present.

The percentage of clients who identified as White or Black decreased over that time period, with the greatest decrease in the percentage of clients who were White (from approximately 70% to approximately 45%). The proportion of clients who identified as American Indian, Asian, or Other Race remained very steady with percentages below 10% over the fifteen year period. The number of American Indian clients is lower than the Tulsa County population. This discrepancy may be attributed to the ready access to prenatal services through Indian Health Services, tribal clinics, and the Indian Health Care Resource Center (IHCRC).

**Chart 4:**

## Race

Babyline Prenatal Clients, 1990 - 2004



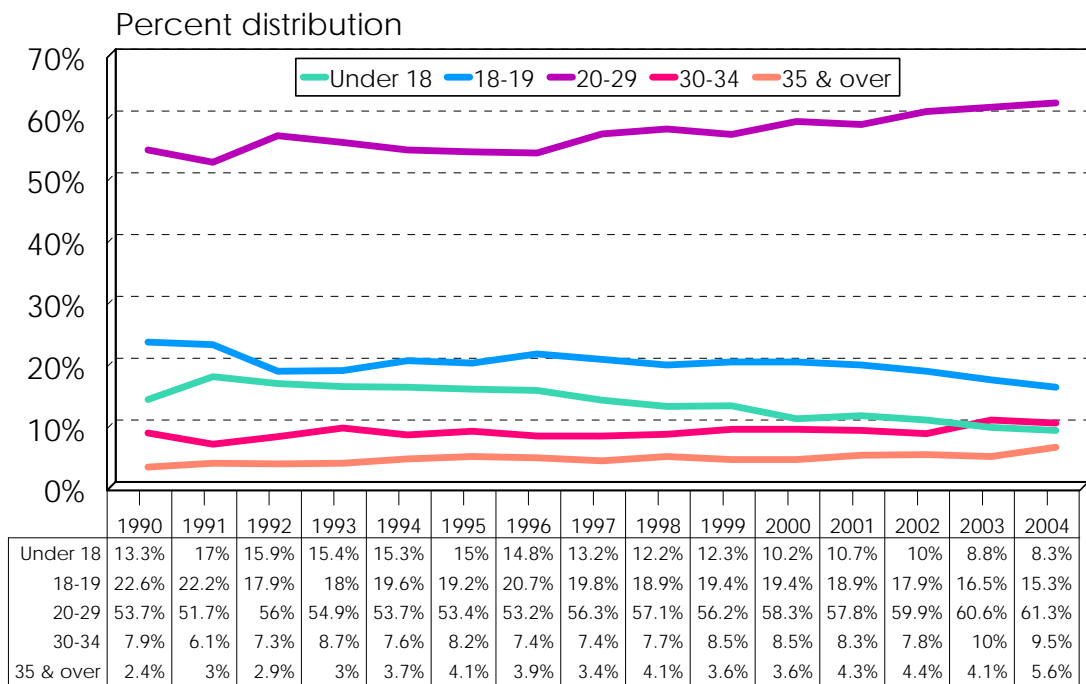
Source: Family Health Coalition

## Age Groups

Between 1990 and 2004, there were increases in the proportions of Babyline clients that were ages 20 to 29 and ages 35 and over (See Chart 5). The proportions of clients that were age 18 to 19 and under 18 declined slightly after a peak in 1991. The decrease in the teen population follows a state and county trend of decreases in numbers of teen births and decrease in teen birth rate from 1980 to 2004 (See Chart 6).

Chart 5:

### Age Groups Babyline Prenatal Clients, 1990 - 2004

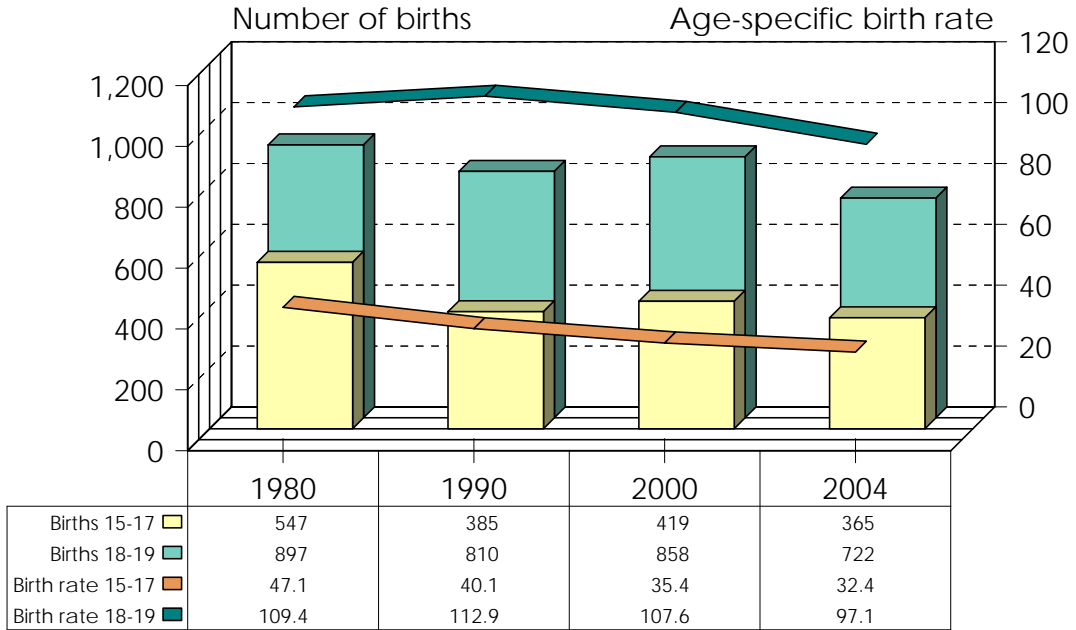


Source: Family Health Coalition

**Chart 6:**

**Resident Births to Teens Age 15-17 and 18-19**

Tulsa County, 1980, 1990, 2000 and 2004



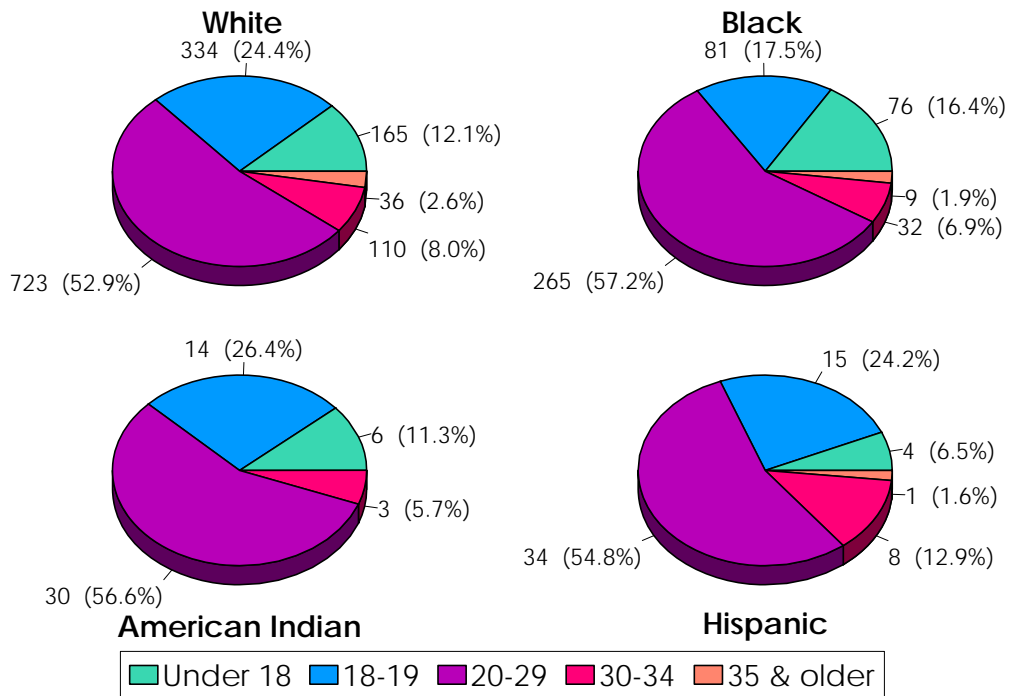
*Note: The birth rates shown on graph and in table are age-specific birth rates. An age-specific birth rate is calculated as the number of births to females in specific age group per 1,000 females in same age group.*  
 Source: Oklahoma State Department of Health.

In each racial/ethnic category in 1990, the majority of Babyline prenatal clients were ages 20 to 29 (See Chart 7). The percentage of prenatal clients who were under 18 was greater than 10% among White, Black, and American Indian clients, with Black clients having the greatest proportion (16.4%). Black clients had the smallest proportion of clients age 18 to 19 (17.5%); the percentage of clients who were age 18 to 19 was at or above 24% among White, American Indian, and Hispanic clients.

**Chart 7:**

### Age Distribution by Race and Hispanic Origin

Babyline Prenatal Clients 1990

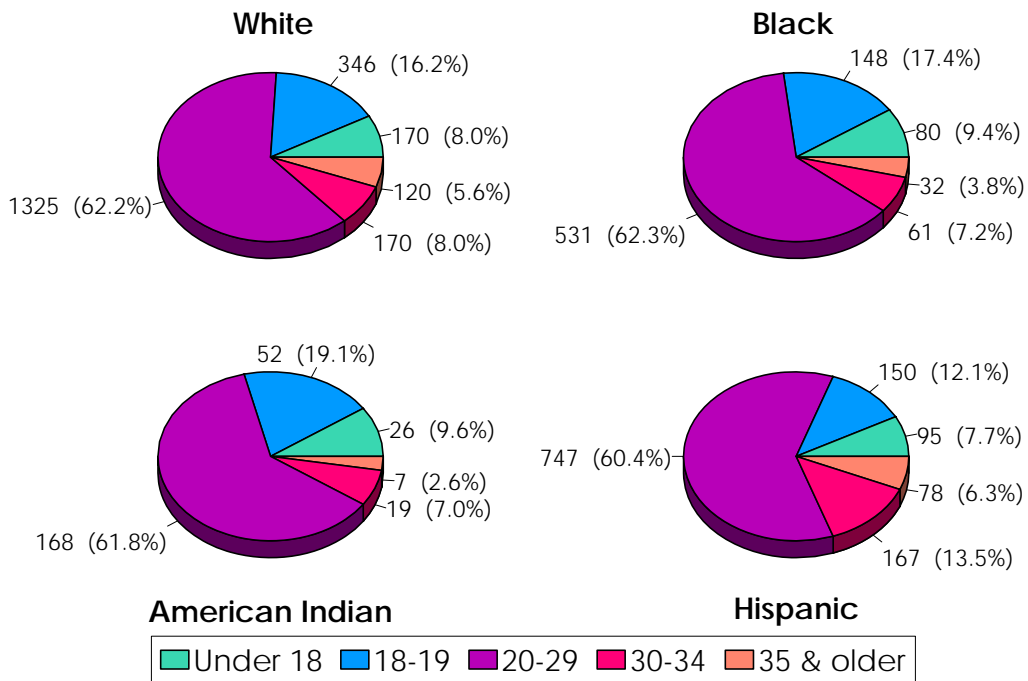


Source: Family Health Coalition

By 2004, the percentage of clients who were age 20 to 29 increased in each racial/ethnic category to more than 60% (See Chart 8). From 1990 to 2004, the percentage of clients who were under 18 decreased in each category except among Hispanic clients, in which there was a small increase. The percentage of clients who were ages 18 to 19 decreased in each racial/ethnic category except among Black clients that remained at its 1990 level. Among all racial/ethnic categories, there was an increase in the percentages of clients who were age 30 and above.

**Chart 8:**

### Age Distribution by Race and Hispanic Origin Babyline Prenatal Clients 2004



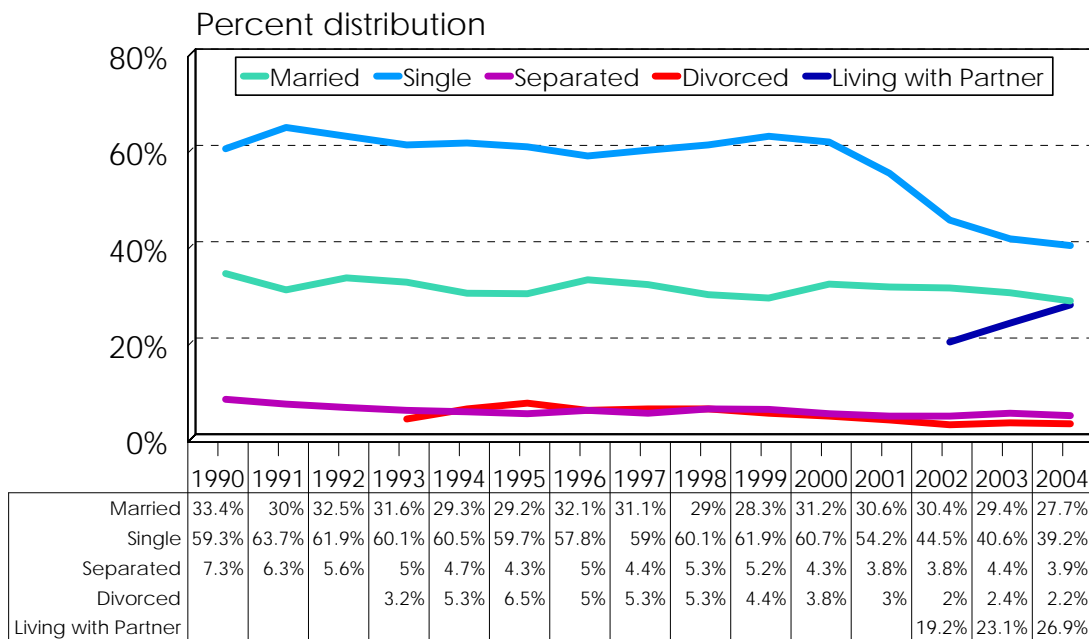
Source: Family Health Coalition

## Marital Status

In each year between 1990 and 2004, approximately 30% of those calling Babyline were married (See Chart 9). The percentage of clients who were separated or divorced remained steady through the years at around 5%. The percentage of clients who were single has had a large decrease beginning approximately in the year 2000; most of the decrease occurred during the time since the category “living with partner” was added as an option. In 2004, when adding clients “living with partner” and single, the group would account for over 65% of all calls to Babyline. During the same period, Tulsa County’s decrease in married couple households correlates closely with the decrease in Babyline married clients (See Chart 10).

Chart 9:

### Marital Status Babyline Prenatal Clients, 1990 - 2004

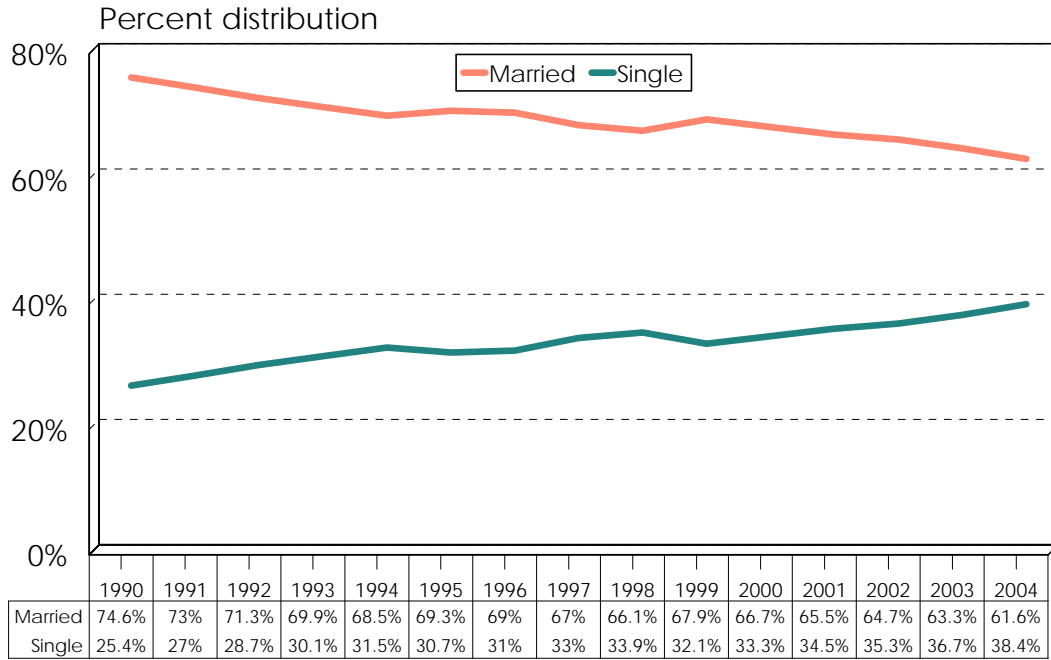


Notes: Prior to 1993, Babyline's "single" category included both never-married and divorced women. The category "living with partner" was added in July, 2001.

Source: Family Health Coalition

**Chart 10:**

**Marital Status**  
Tulsa County Resident Births, 1990 - 2004



Source: Oklahoma State Department of Health.

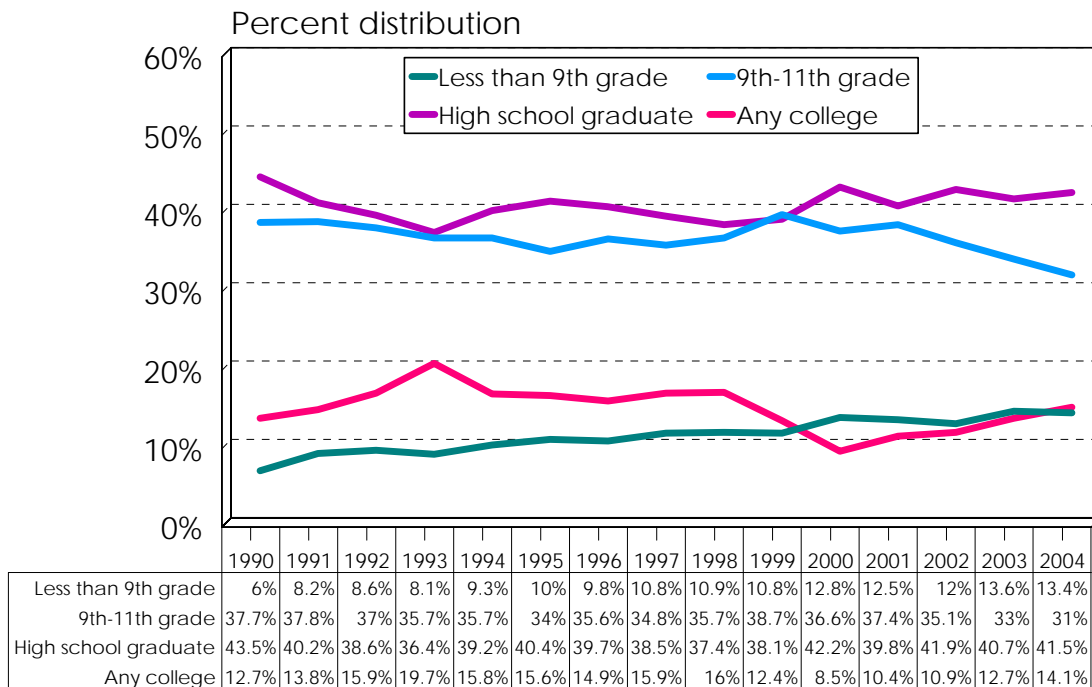
## Level of Education

The largest proportion of Babyline prenatal clients have been high school graduates (See Chart 11). However, the proportion of clients who have a 9th to 11th grade education was just slightly below the proportion of high school graduates between 1990 and 2001, but has declined since 2001 as the percentages of clients with either less than a 9th grade education or some college increased. The first generation Hispanic immigrants have contributed to the increase in Babyline clients with less than a 9<sup>th</sup> grade education. The level of education of Tulsa County resident births has remained stable in the last five years (See Chart 12).

Chart 11:

### Level of Education

Babyline Prenatal Clients, 1990 - 2004



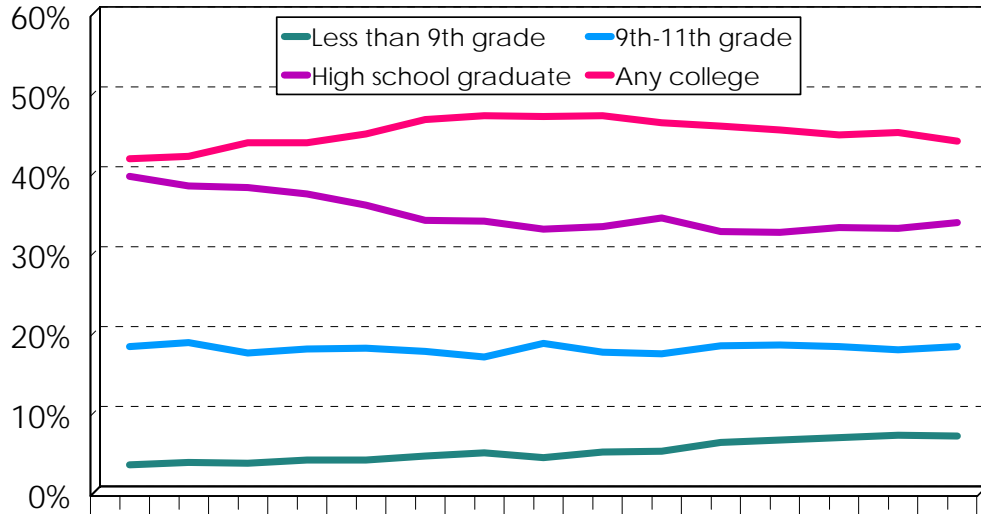
Source: Family Health Coalition

**Chart 12:**

**Level of Education**

Tulsa County Resident Births, 1990 - 2004

Percent distribution



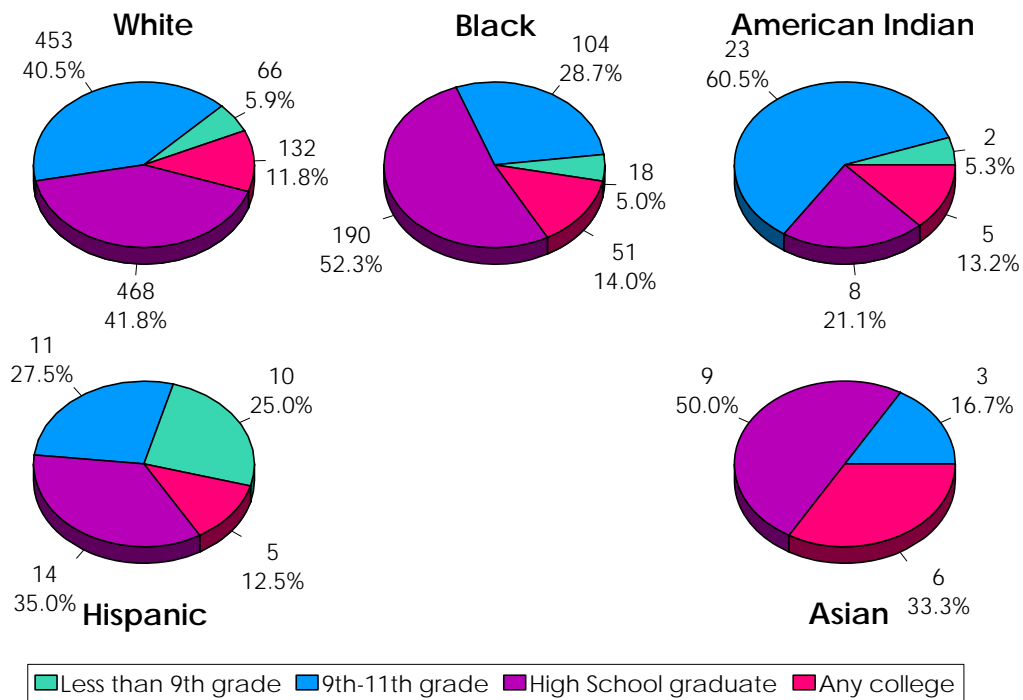
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Less than 9th grade	2.7%	3%	2.9%	3.3%	3.3%	3.8%	4.2%	3.6%	4.3%	4.4%	5.5%	5.8%	6.1%	6.4%	6.3%
9th-11th grade	17.5%	18%	16.7%	17.2%	17.3%	16.9%	16.2%	17.9%	16.8%	16.6%	17.6%	17.7%	17.5%	17.1%	17.5%
High school graduate	38.8%	37.6%	37.4%	36.6%	35.2%	33.3%	33.2%	32.2%	32.5%	33.6%	31.9%	31.8%	32.4%	32.3%	33%
Any college	41%	41.3%	43%	43%	44.1%	45.9%	46.4%	46.3%	46.4%	45.5%	45.1%	44.6%	44%	44.3%	43.2%

Source: Oklahoma State Department of Health.

In 1990, in each racial/ethnic category except American Indian, clients were most likely to be high school graduates (See Chart 13). Among American Indians, the majority of clients had a 9th to 11th grade education. No information is available by race from the Oklahoma State Department of Health on Tulsa County.

**Chart 13:**

**Level of Education by Race and Hispanic Origin**  
 Babyline Prenatal Clients, 1990



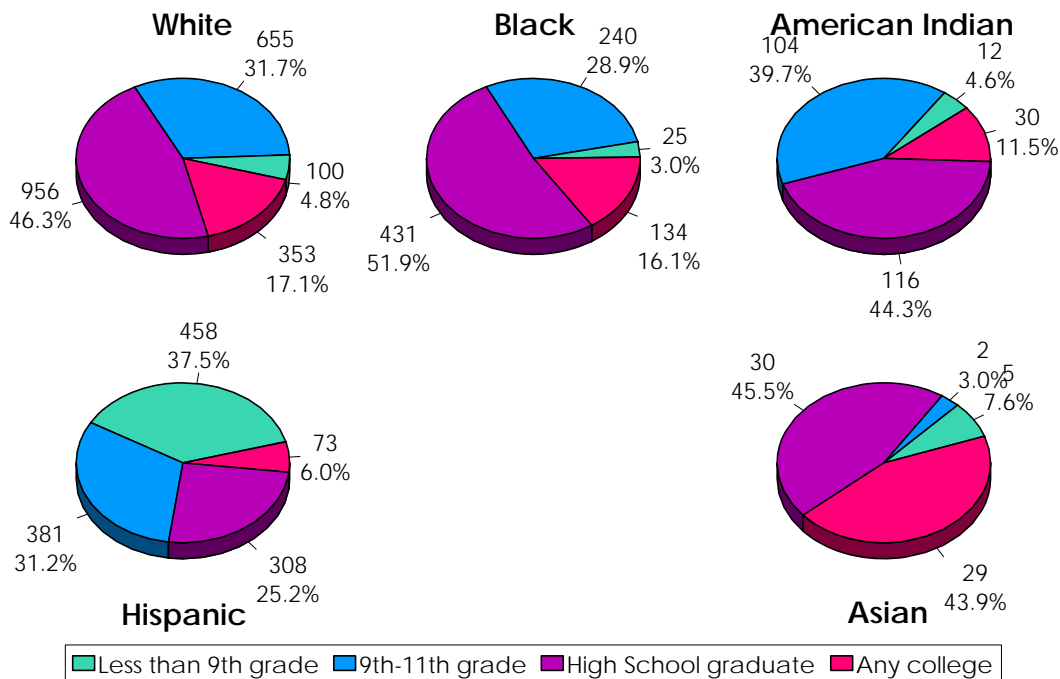
Source: Family Health Coalition

For Whites and Blacks it appears that there has been an increase in the level of education from 1990 to 2004; more clients have some college education and fewer have less than a 9th grade education (See Chart 14). American Indian clients have also shown a dramatic improvement in the level of education; the percentage of American Indian clients who are high school graduates has more than doubled from 1990 to 2004.

The Hispanic population is the only group to have shown a decrease in the level of education from 1990 to 2004. Over one-third of the Hispanics who called Babyline in 2004 had less than a 9<sup>th</sup> grade education, while almost 70% were not a high school graduate.

**Chart 14:**

**Level of Education by Race and Hispanic Origin**  
Babyline Prenatal Clients, 2004



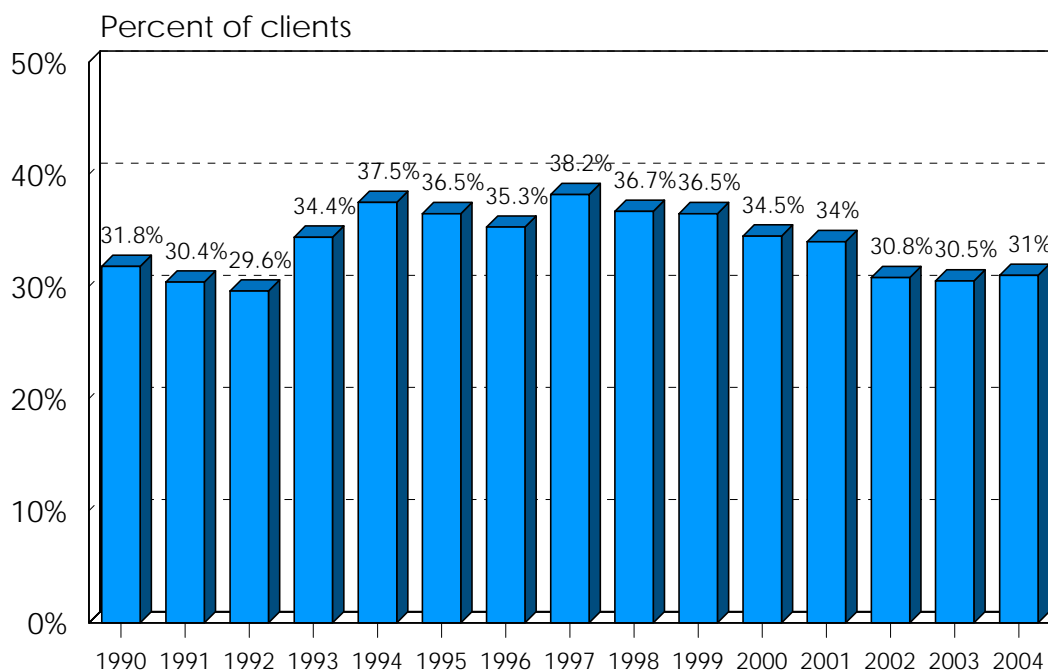
Source: Family Health Coalition

## Employment Status

In 2004, the level of employment was similar to that in 1990 following a small upward trend from 1993 through 2001 (See Chart 15). Approximately one-third of Babyline clients report some level of employment. Comparison data from the Oklahoma State Department of Health is not available for Tulsa County.

Chart 15:

### Employment Status Babyline Prenatal Clients, 1990 - 2004



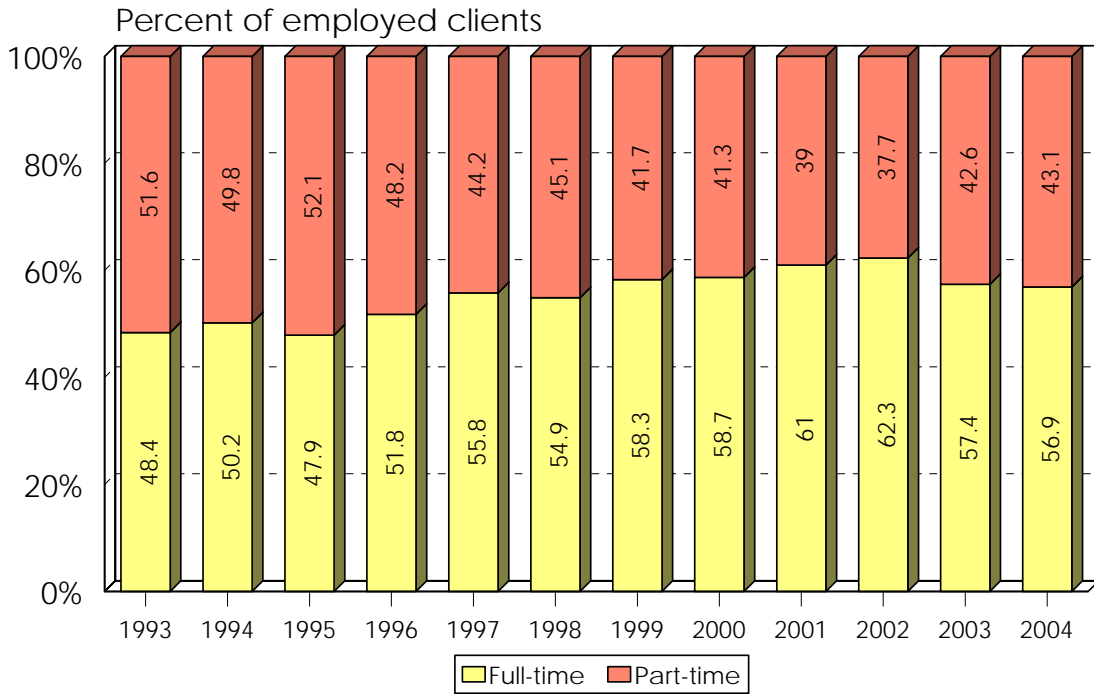
Source: Family Health Coalition

Since 1993, of those who are employed, there has been an increase in the percentage of clients with full-time employment (See Chart 16). The percentage of clients with full-time employment peaked in 2002 and declined slightly in 2003 and 2004. Comparison data from the Oklahoma State Department of Health is not available for Tulsa County.

Tulsa County had a significant recession from 2001-2003 with an overall job loss of 32,000 jobs (Metro Tulsa Chamber of Commerce, 2005). This was the second largest job loss in the United States. Recovery from the recession began in 2004 with an anticipated complete recovery in 2006; however, jobs that have replaced lost jobs are not as high paying.

**Chart 16:**

**Level of Employment**  
 Babyline Prenatal Clients, 1993 - 2004



Source: Family Health Coalition

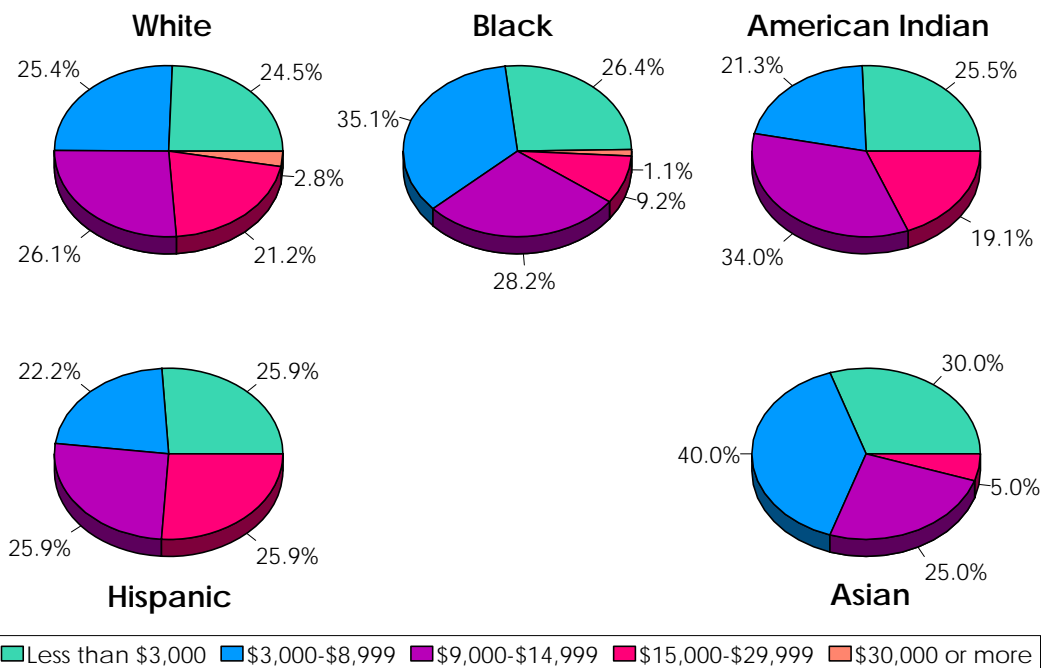
## Income

In 1990, most Babyline clients were extremely poor. At least 25% of Babyline clients of each race and of Hispanic origin had average annual family incomes less than \$3,000, in 2004 adjusted wages (See Chart 17). Between 21% and 40% of Babyline clients in each racial group had average annual incomes between \$3,000 and \$8,999.

Furthermore, at least 25% of Babyline clients of each race and of Hispanic origin had average annual family incomes between \$9,000 and \$14,999. No American Indian, Hispanic, or Asian Babyline clients had adjusted average annual family incomes of \$30,000 or more; just 2.8% of White Babyline clients and 1.1% of Black Babyline clients had adjusted average annual family incomes of \$30,000 or more. (All dollars are in adjusted wages calculated by the US Department of Labor)

**Chart 17:**

### Average Annual Family Income, in Real 2004 Dollars, by Race and Hispanic Origin Babyline Prenatal Clients, 1990



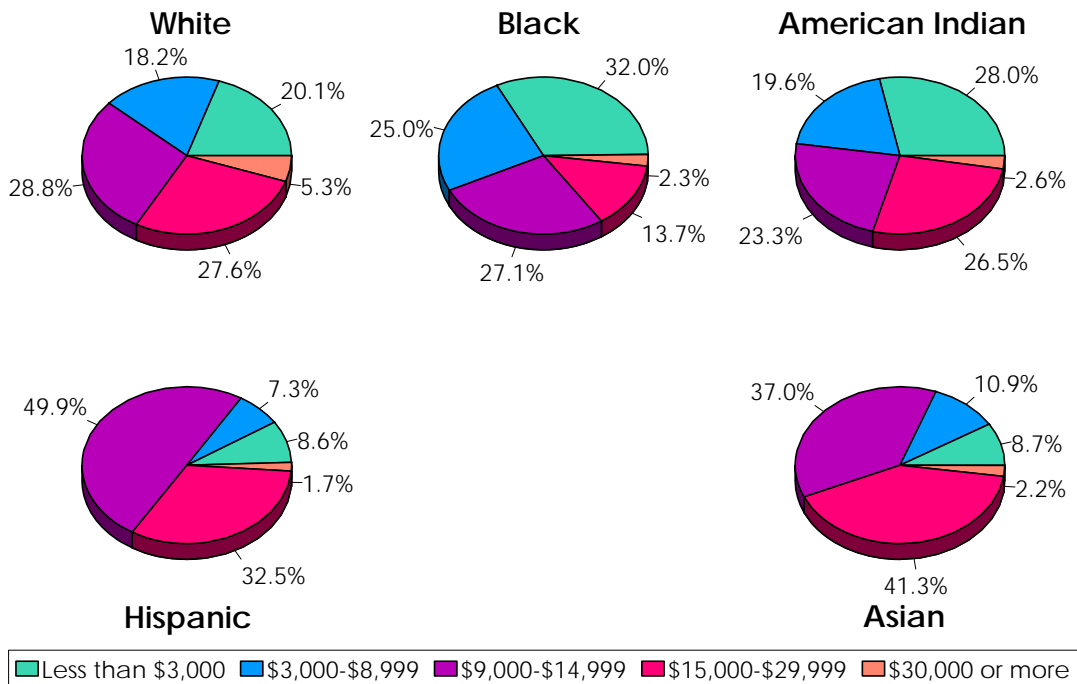
Source: Family Health Coalition

By 2004, most Babyline clients were still extremely poor, but there had been strides in the number reporting the lowest level of income (See Chart 18). For the White population, the number of clients reporting less than \$9,000 per year decreased from 49.9 to 38.3%, Blacks from 61.5 to 57% and for Hispanics from 48.1 to 15.9%. The percentage of Native Americans reporting less than \$9,000 remained fairly stable at 46.8% in 1990 to 47.4% in 2004.

Greater percentages had average annual family incomes of \$30,000 or more and between \$15,000 and \$29,999, in 2004 dollars.

**Chart 18:**

**Average Annual Family Income, in Real 2004 Dollars,  
by Race and Hispanic Origin  
Babyline Prenatal Clients, 2004**

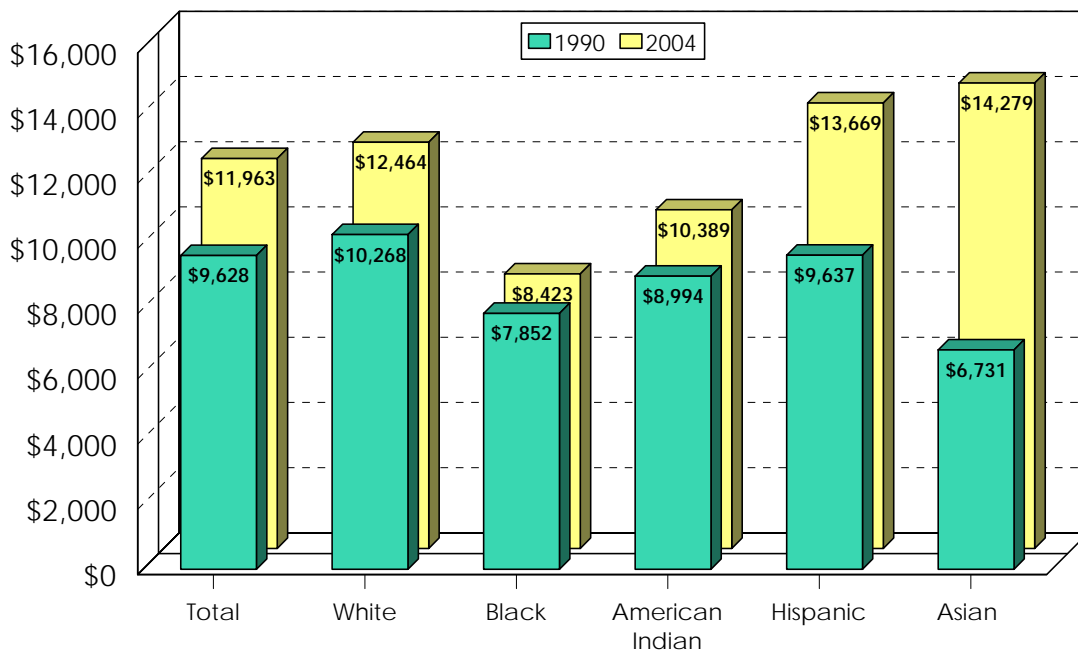


Source: Family Health Coalition

Among each racial group, the adjusted mean family income increased from 1990 to 2004. However, the mean family income increased less than \$500 (in 2004 real adjusted wage) among Black and American Indian clients from 1990 to 2004 (See Chart 19). Overall, the mean family income for Babyline prenatal clients increased approximately \$2,000 in adjusted dollars between 1990 and 2004.

**Chart 19:**

**Mean Family Income, in Real 2004 Dollars,  
by Race & Hispanic Origin**  
Babyline Prenatal Clients, 1990 & 2004



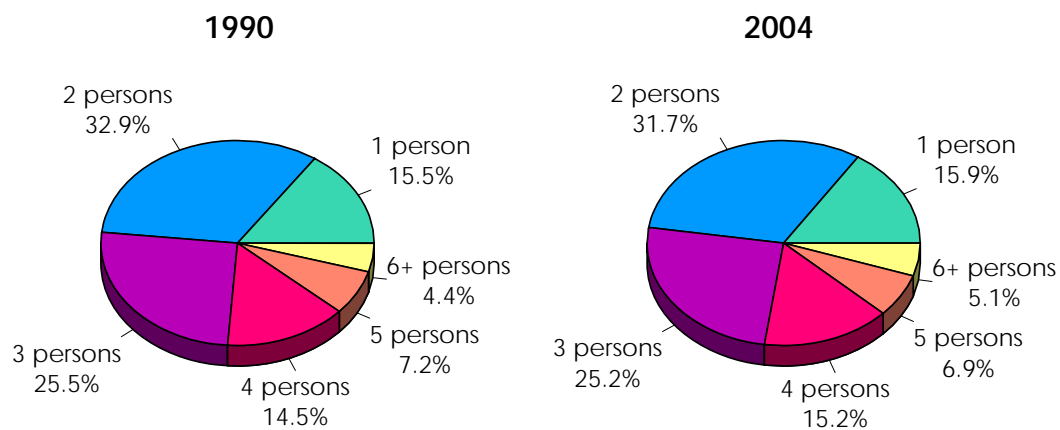
Source: Family Health Coalition

## Household Size

Household size has shown very little change since 1990 (See Chart 20). Over 50% of callers to Babyline in 1990 and in 2004 were in households of 3 or more members at the time of the call. The average household size in 2004 per was 2.48 according to 2004 American Community Survey (Census Bureau, 2006).

Chart 20:

### Household Size Babyline Prenatal Clients, 1990 & 2004



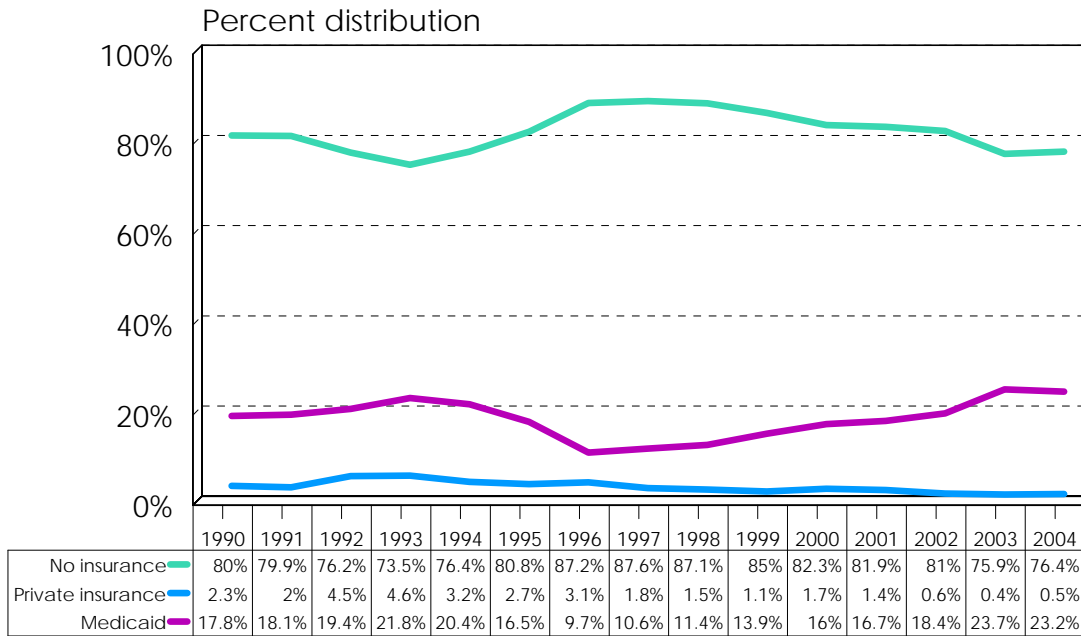
Source: Family Health Coalition

## Health Insurance

Overall, since 1990, approximately 80% of those calling Babyline have had no health insurance (See Chart 21). The percentage of those with Medicaid remained stable at approximately 20% between 1990 and 1995, dipped in 1996 to about 10%, then gradually increased back to approximately 20%. Very few clients have had private insurance.

**Chart 21:**

### Type of Health Insurance/Method of Payment Babyline Prenatal Clients, 1990 - 2004



Source: Family Health Coalition

## CLIENT CHOICES

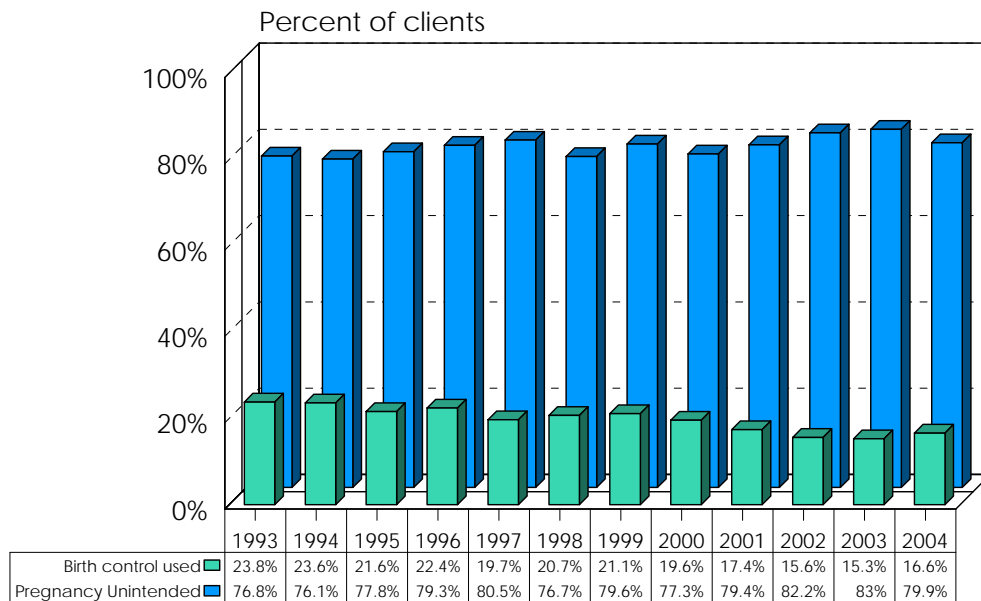
The Babyline system strives to promote healthy behavior that will increase the likelihood of a healthy baby. Healthy behaviors include use of birth control, appropriate birth spacing, and early entry into prenatal care. Babyline surveys the rate of unintended pregnancies, free pregnancy test usage, and the number of previous births.

### *Birth Control and Unintended Pregnancies*

The percentage of unintended pregnancies among Babyline clients has remained between 76% and 83% since 1993, while the percentage of clients reporting birth control use has remained under 25% and, beginning in 2000, under 20% (See Chart 22). Whites, Blacks, American Indians and Hispanics have all shown some decrease in birth control use since 1993 (See Chart 23). There has been substantial variation in the percentages for both the American Indian (approximately 15% difference from the highest to lowest point) and for Blacks (approximately a 12% range from highest to lowest) over the time span. The percentage of clients who are Asian and Other Races that used birth control at the time of conception has been extremely erratic; however, there is a small number of clients in that racial category, which could make the data less valid.

**Chart 22:**

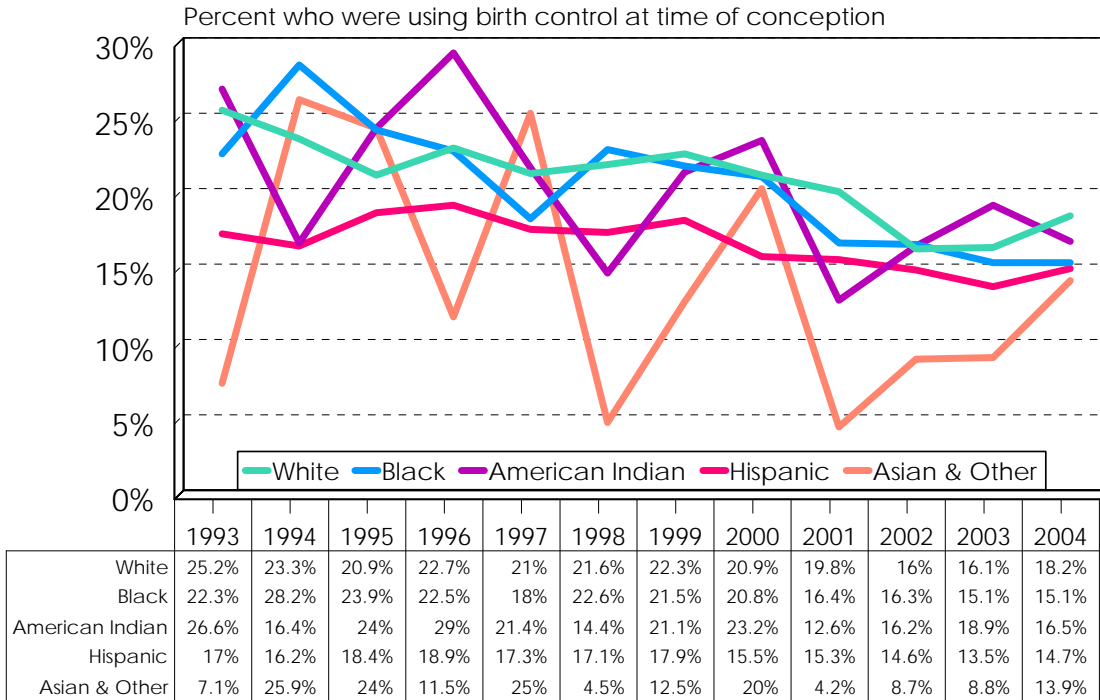
### Use of Birth Control and Pregnancy Unintendedness Babyline Prenatal Clients, 1993 - 2004



Source: Family Health Coalition

**Chart 23:**

**Use of Birth Control by Race and Hispanic Origin**  
 Babyline Prenatal Clients, 1993 - 2004

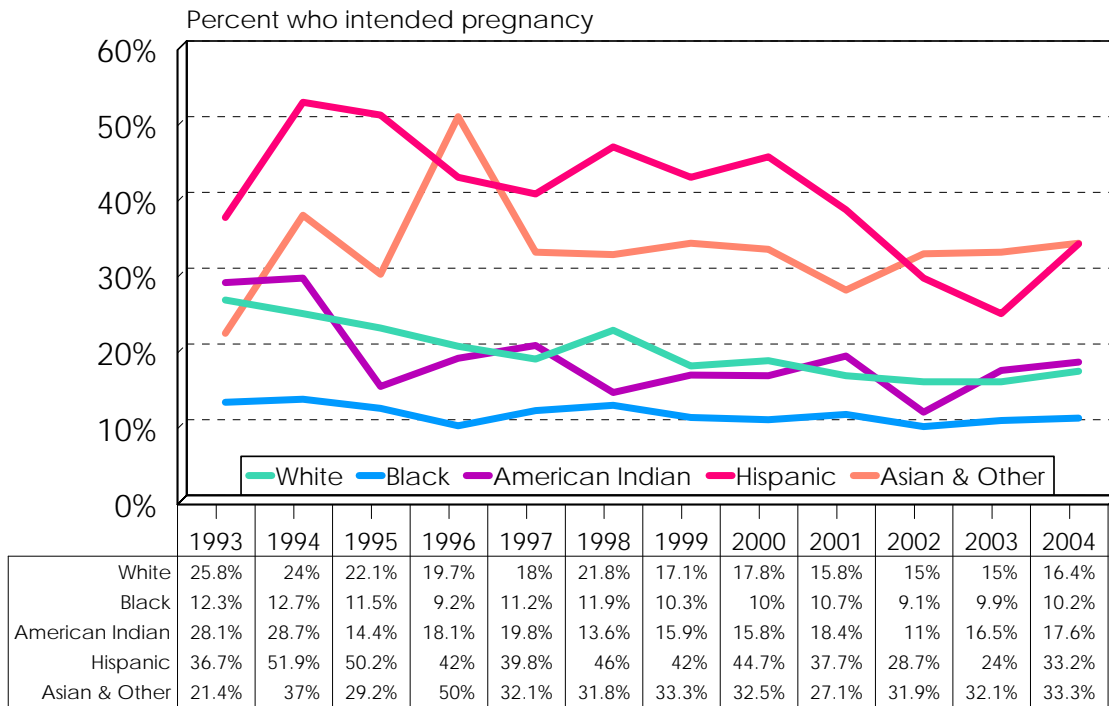


Source: Family Health Coalition

Throughout Babyline’s history, Hispanic clients were more likely than Whites, Blacks, and American Indians to report that their pregnancies were intended (See Chart 24). Black clients were least likely to report that their pregnancies were intended. Among Hispanic, White, and American Indian clients, there has been a downward trend in the percentage of intended pregnancies since 1993.

**Chart 24:**

**Pregnancy Intended by Race and Hispanic Origin**  
Babyline Prenatal Clients, 1993 - 2004



Source: Family Health Coalition

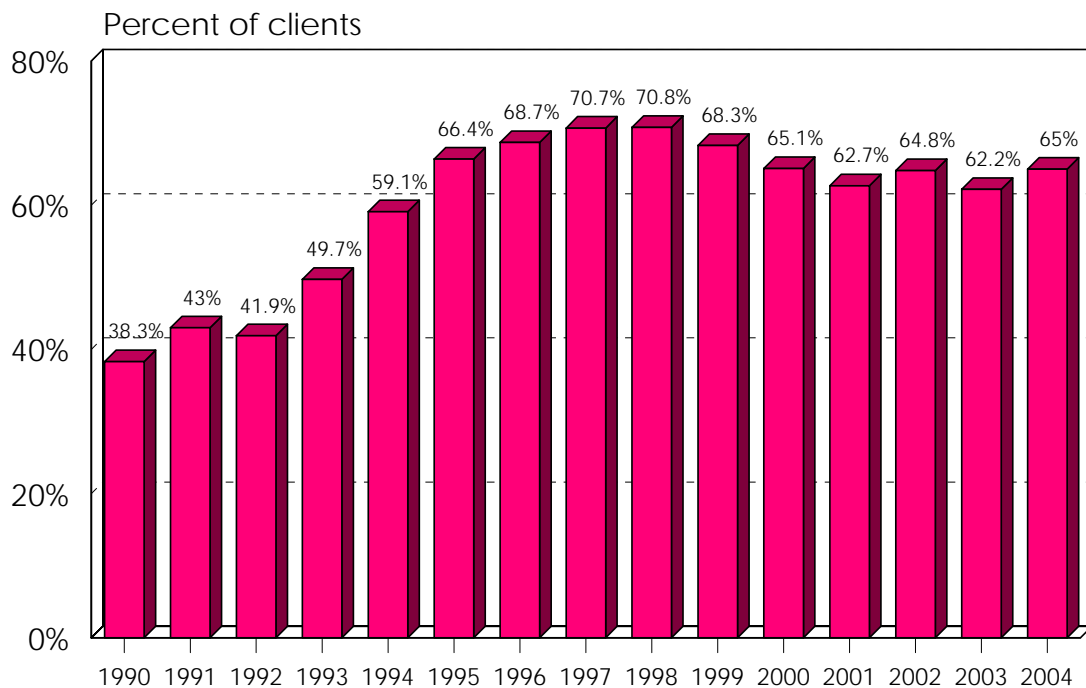
## ***Free Pregnancy Test Usage***

The percentage of clients who used the Free Pregnancy Test Program increased between 1990 and 1998 from 38.3% to 70.8% (See Chart 25). Since 1998, the percentage has been variable with a range of 62.2% to 65% in 2004. Increases in usage of free pregnancy tests have been attributed to increases in community awareness of the program.

The American Red Cross established the Free Pregnancy Test Program in 1990 for the early identification of pregnant women and referral to prenatal care. The program has been supported by the Margaret Hudson Program since 1998, and has been a joint program of the Margaret Hudson Program, Planned Parenthood of Arkansas and Eastern Oklahoma, and the Family Health Coalition since 2004. The program currently serves over 6,000 women annually.

**Chart 25:**

### **Free Pregnancy Test Babyline Prenatal Clients, 1990 - 2004**



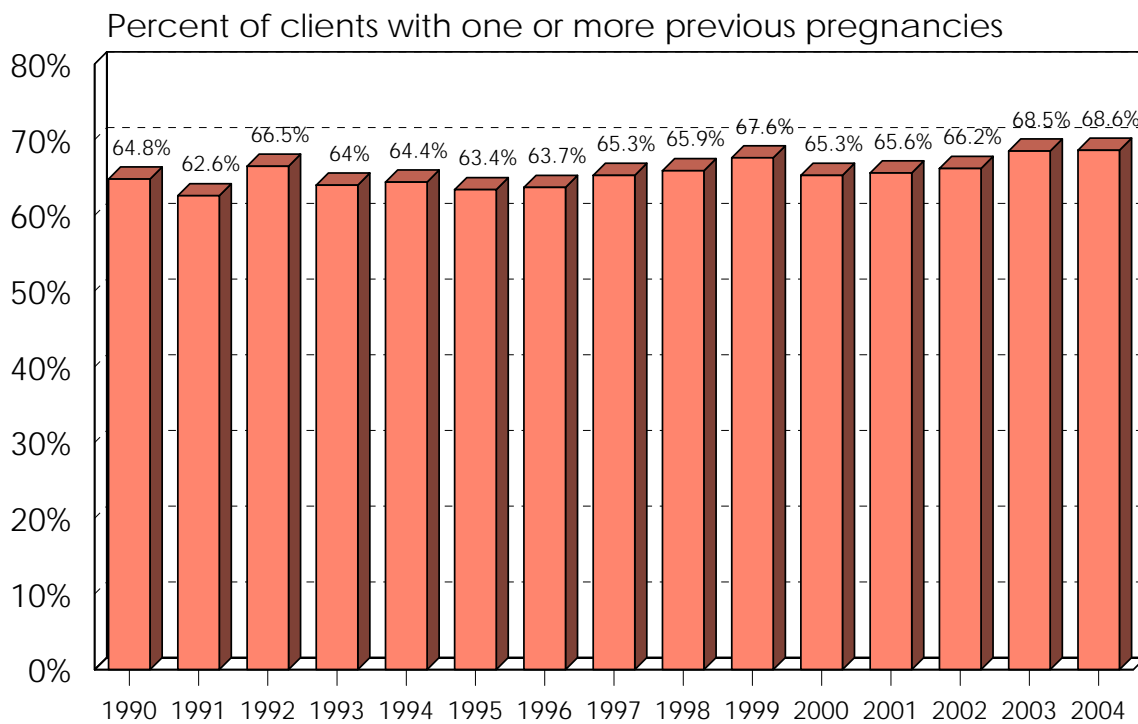
Source: Family Health Coalition

## Previous Pregnancies

The percentage of clients with one or more previous pregnancies has remained relatively consistent between 1990 and 2004 (See Chart 26). The lowest percentage was 62.2% in 1991 and the highest percentage was 68.6% in 2004. Babyline clients are more likely to have had a previous birth than the Tulsa County resident births for all comparative years (See Chart 27).

Chart 26:

### Previous Pregnancies Babyline Prenatal Clients, 1990 - 2004

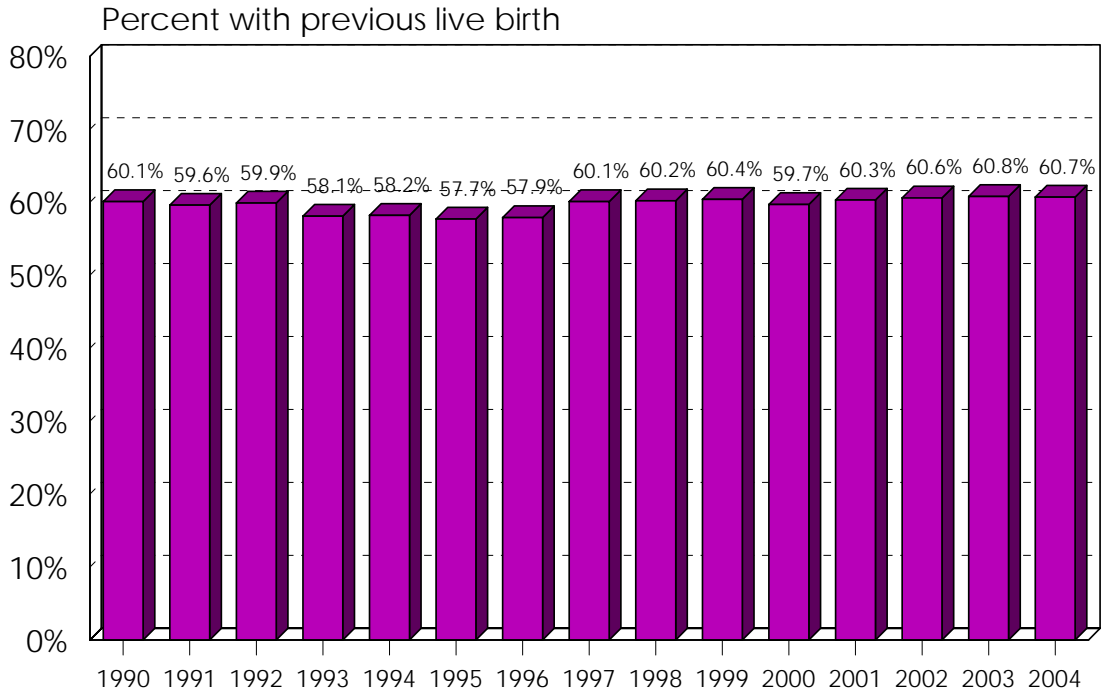


Source: Family Health Coalition

**Chart 27:**

## Previous Live Births

Tulsa County Resident Births, 1990 - 2004



Source: Oklahoma State Department of Health.

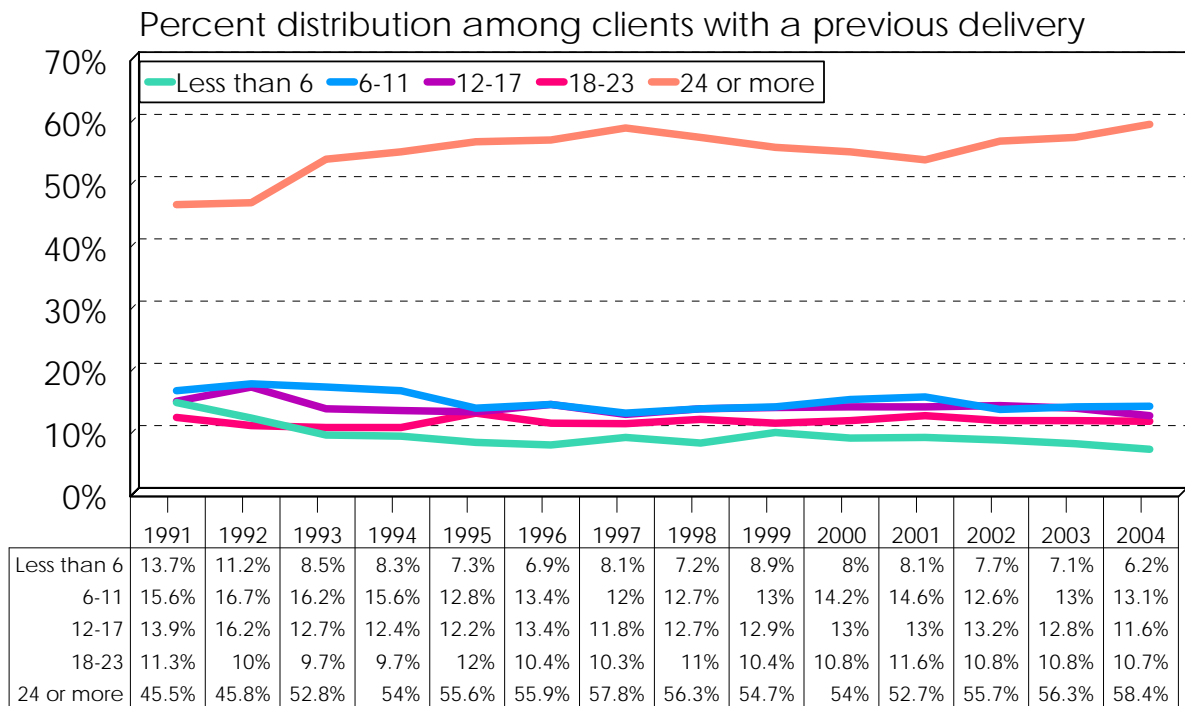
## Birth Spacing

Most clients who gave birth before had an interval of at least 24 months between the last birth and the beginning of their current pregnancy; this percentage has increased between 1991 and 2004 from about 45% to about 60% (See Chart 28). The percentages of clients who had less than 24 months but more than 6 months between their last birth and their current pregnancy were stable between 1991 and 2004. The percentage of clients who had less than 6 months between the previous birth and the current pregnancy had a small but steady decline over the years.

The relevance of birth spacing in relationship to infant mortality and morbidity has been a topic of current research by the Centers for Disease Control and Prevention. Birth spacing of second order and higher births have a reduced potential for mortality and morbidity if the spacing is at least 24 months from birth to birth, and 18 months from birth to birth for the African-American (AHRQ, 2005).

Chart 28:

### Interval between Last Birth and Beginning of Current Pregnancy Babyline Prenatal Clients, 1991 - 2004



Source: Family Health Coalition

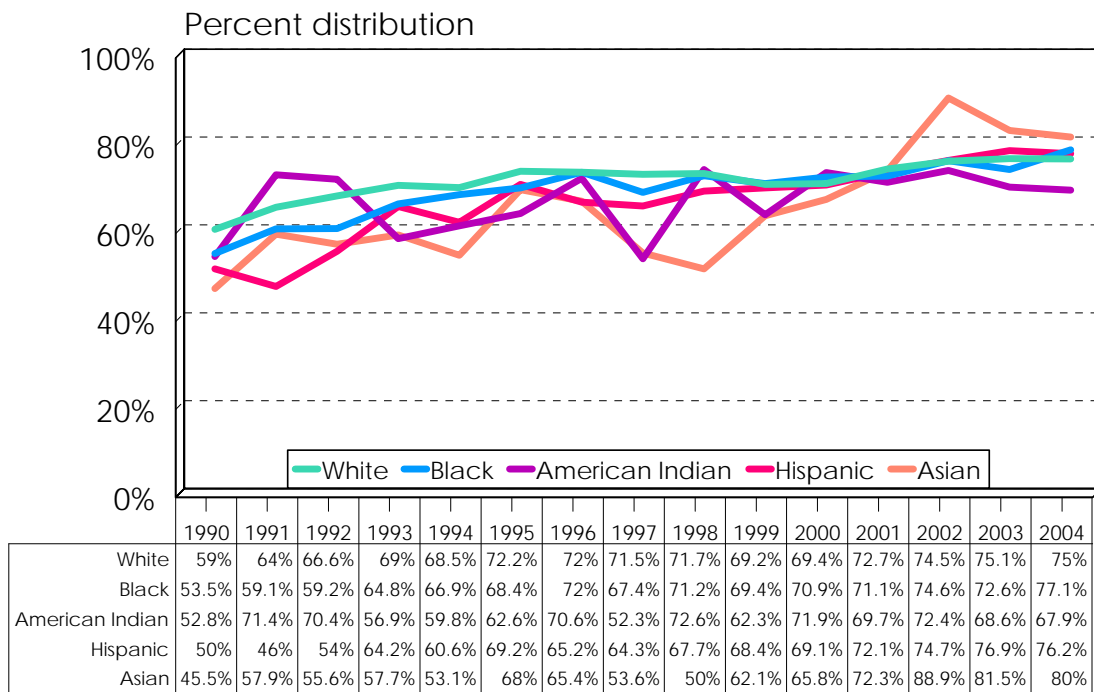
## *Trimester of Call*

The percentage of clients who called Babyline in their first trimester increased from 57.1% in 1990 to 75.2% in 2004. This is a measure of social marketing, outreach, education, and case management efforts.

In the past 15 years, clients of all races and ethnicities have shown improvements in the proportion who call for an appointment during the first trimester (See Chart 29). Over the past 4 years that trend has slowed down among American Indian clients. Over the entire time period, the rates of calls during the first trimester for American Indians show a more erratic pattern than other racial groups, except Asian Americans. Changes in the behavior of American Indians and Asian Americans may appear more variable because of the small number of Babyline clients in these racial groups.

**Chart 29:**

### First Trimester Call to Babyline by Race and Hispanic Origin Babyline Prenatal Clients, 1990 - 2004



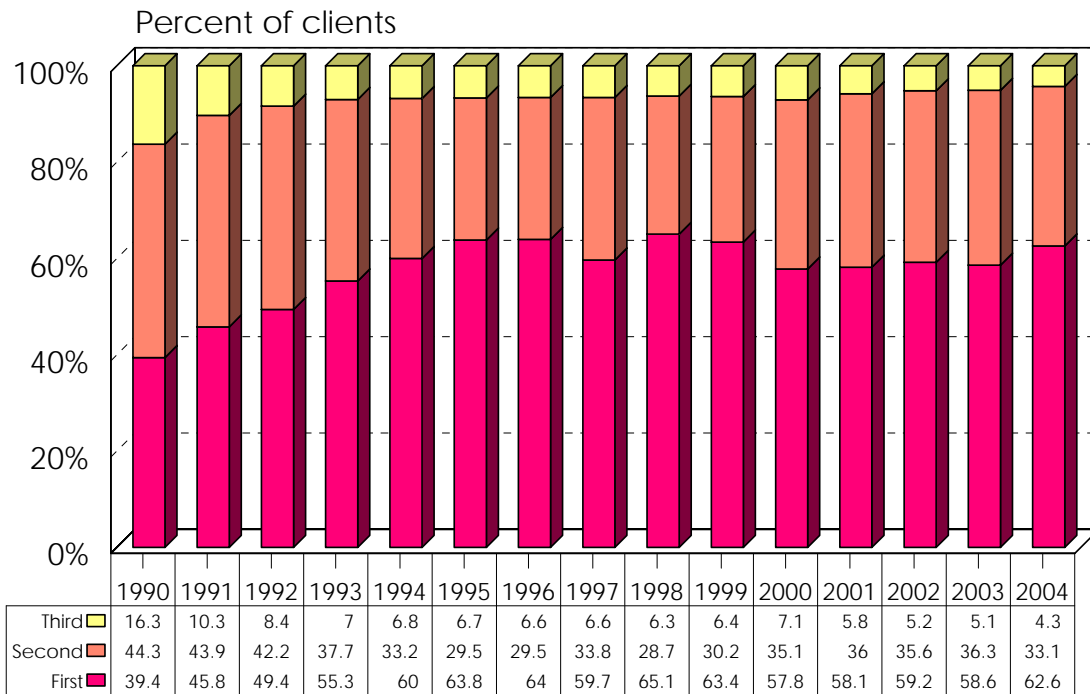
Source: Family Health Coalition

## Early Entry into Prenatal Care

There have been large improvements regarding the trimester in which Babyline clients enter into prenatal care. Between 1990 and 1996, the percentage of clients who entered prenatal care in their first trimester increased from 39.4% to 64% (See Chart 30). Improvements have leveled off since then, perhaps due to systemic issues of access. Babyline clients enter prenatal care at a consistently lower percentage than does the Tulsa County resident birth population over the 15 years (See Chart 31).

**Chart 30:**

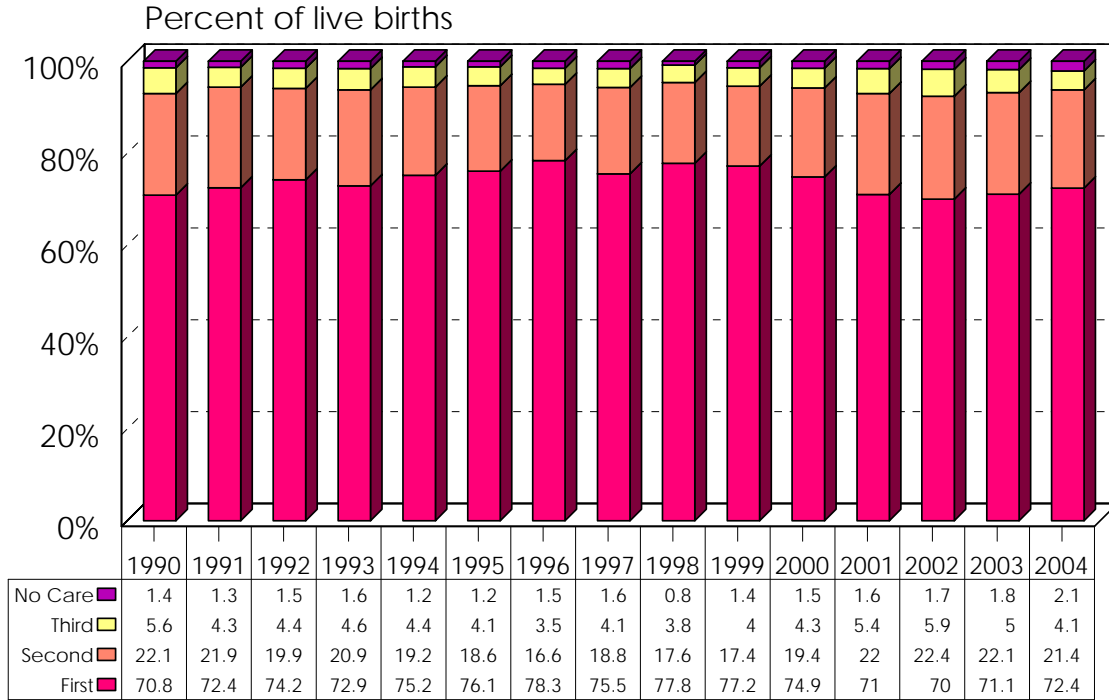
### Trimester of Entry into Prenatal Care Babyline Prenatal Clients, 1990 - 2004



Source: Family Health Coalition

**Chart 31:**

**Trimester of Entry into Prenatal Care**  
Tulsa County Resident Births, 1990 - 2004



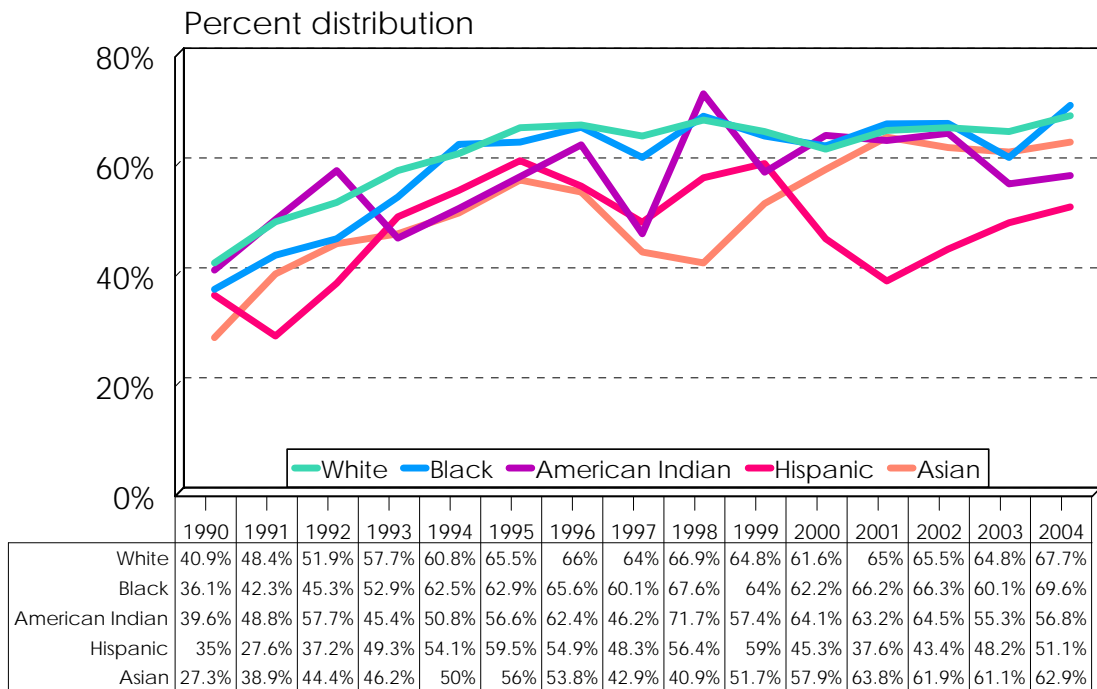
Source: Oklahoma State Department of Health.

The rate of first trimester entry into care has increased among clients of all races and ethnicities (See Chart 32). However, there have been many peaks and valleys among American Indian clients.

Among Hispanic clients, there was a large decline in 2000 and 2001 in the proportion that had first trimester care; yet, the proportion increased in 2001 through 2004. The Hispanic client is more likely to enter prenatal care during the second or third trimester than other minority populations. Two reasons have been documented through Tulsa Healthy Start case management follow-up with Hispanic clients that enter the Tulsa Healthy Start program. The first is limited access to health care providers because of their lack of insurance and lack of money to pay for initial visits and doctor visits, even if the payment is on a sliding scale. The second reason cited is the desire to wait for available appointments with the Tulsa Health Department and Planned Parenthood of Arkansas and Eastern Oklahoma because of the client perception that they are more culturally responsive (Tulsa Healthy Start Impact Report, 2005).

**Chart 32:**

### First Trimester Entry into Care by Race and Hispanic Origin Babyline Prenatal Clients, 1990 - 2004



Source: Family Health Coalition

## PRENATAL CARE PROVIDERS

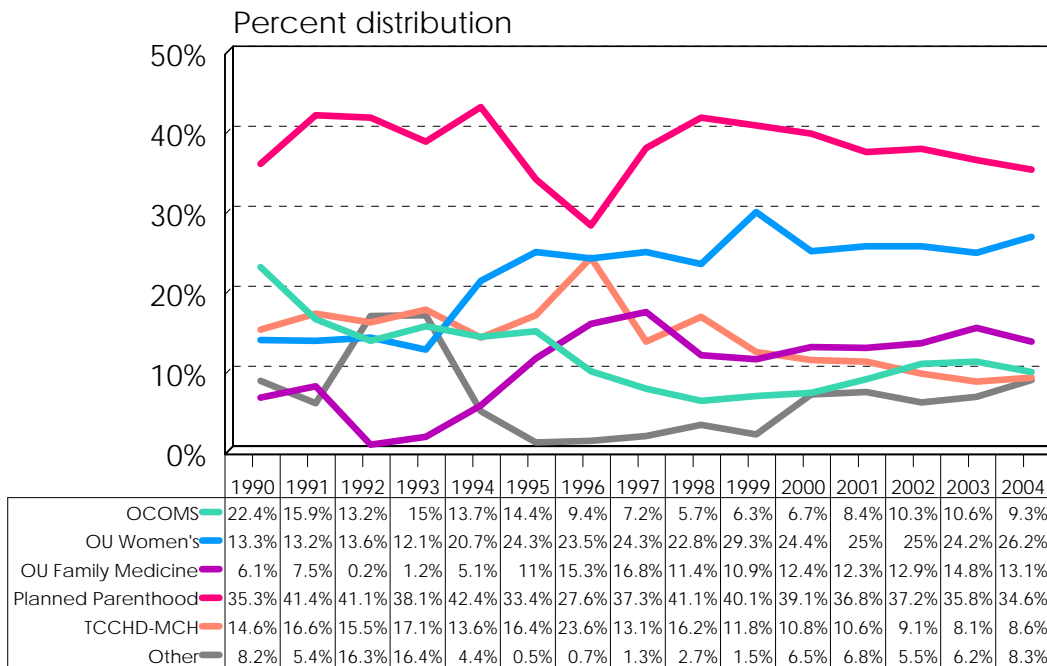
Babyline clients are scheduled to local clinics for their initial appointment. The majority of clients receive appointments at one of five prenatal care providers: Oklahoma State University (OSU) College of Osteopathic Medicine, the University of Oklahoma (OU) Women’s Clinic, the University of Oklahoma (OU) Family Practice Clinic, Planned Parenthood (PPAEO), or Tulsa Health Department (THD).

Each year throughout the entire 15 year period, a greater proportion of Babyline clients scheduled appointments with Planned Parenthood than any other clinic (See Chart 33). Since 1997, the OU Women’s Clinic has received the second highest proportion of Babyline clients. Overall, the percentages of Babyline clients who scheduled their initial appointment with the other three main providers have all been roughly similar since 2000, though the OU Family Practice Clinic experienced an increase between 1990 and 2004 while OSU and THD had decreases in Babyline clients during that period.

Other prenatal care providers who have participated with Babyline over the years, including the Indian Health Care Resource Center and Green Country Health Care for Women, have had fluctuations in the percentage of clients who scheduled their initial appointments with them over the 15 year period, but the proportions were approximately the same in 2004 as in 1990.

**Chart 33:**

### Clinic Scheduled for Initial Appointment Babyline Prenatal Clients, 1990 - 2004



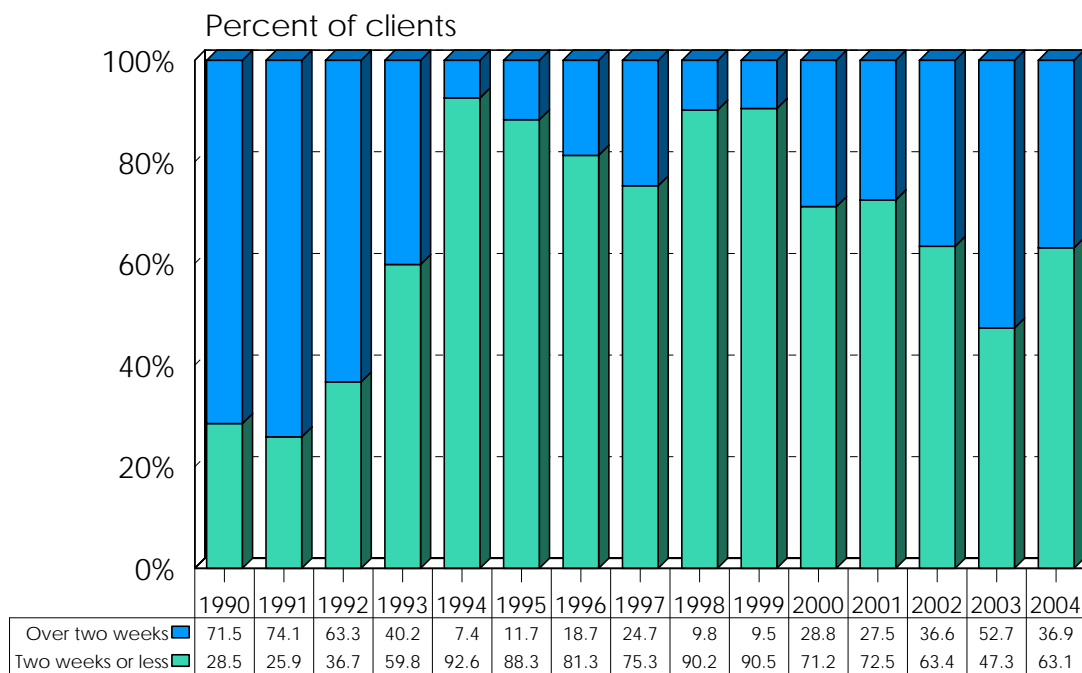
Source: Family Health Coalition

## Wait Periods

With so few prenatal care providers offering affordable services, some Babyline clients wait a few weeks or more for an initial appointment. The percentage of women having to wait over two weeks for a prenatal appointment has certainly decreased since Babyline began in 1990 (See Charts 34 and 35). However, since 1999, an increasing percentage of clients have had to wait more than two weeks for an appointment, with improvements seen in 2004 with the elimination of SoonerCare Plus. The increase in wait periods may be partly due to systemic issues regarding turnover in the health maintenance organizations (HMOs) serving the population of women using Medicaid. Many clinics providing prenatal care only accepted clients enrolled in specific HMO programs. Furthermore, many Hispanic clients choose to wait for an appointment at THD and PPAEO due to their lower costs for services (sliding scale).

**Chart 34:**

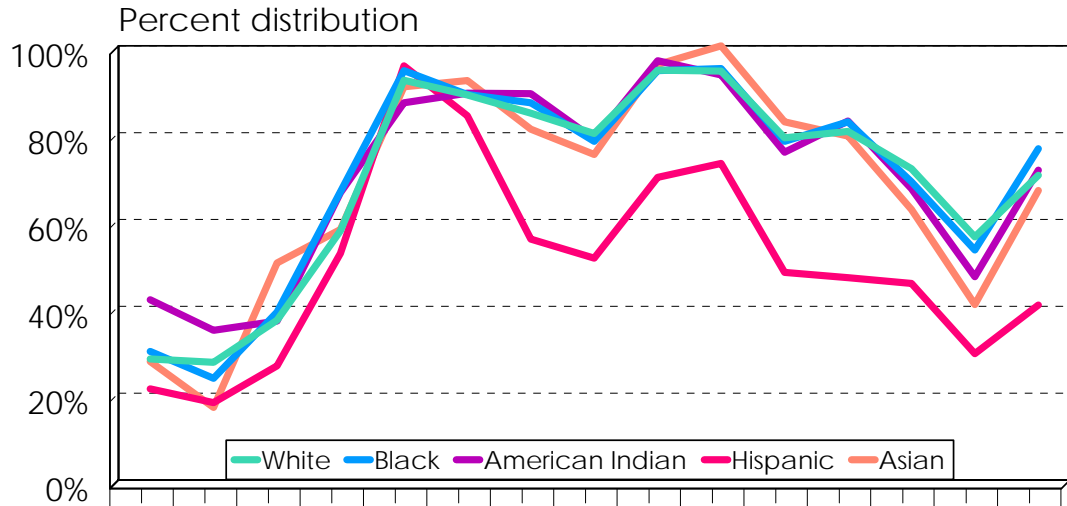
### Wait Period between Call to Babyline and Original Appointment Babyline Prenatal Clients, 1990 - 2004



Source: Family Health Coalition

**Chart 35:**

**Appointment Wait of 2 Weeks or Less  
by Race and Hispanic Origin**  
Babyline Prenatal Clients, 1990 - 2004



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
White	27.9%	27.1%	36.8%	57.4%	92.1%	88.7%	84.5%	79.8%	94.4%	94.2%	78.8%	80.3%	71.7%	56%	70.2%
Black	29.6%	23.4%	38.7%	66.4%	94.3%	88.8%	86.9%	78%	94.3%	94.8%	78%	82.5%	68.7%	53%	76.3%
American Indian	41.5%	34.5%	36.6%	66.2%	86.9%	89.1%	89%	78.5%	96.6%	93.3%	75.5%	82.7%	67.1%	46.8%	71.4%
Hispanic	21%	17.8%	26.3%	52.2%	95.4%	83.9%	55.5%	51.1%	69.7%	72.9%	47.8%	46.6%	45.3%	29.1%	40.3%
Asian	27.3%	16.7%	50%	57.7%	90.6%	92%	80.8%	75%	95.7%	100%	82.5%	79.2%	62.3%	40.4%	66.7%

Source: Family Health Coalition

# BEHAVIORAL HEALTH

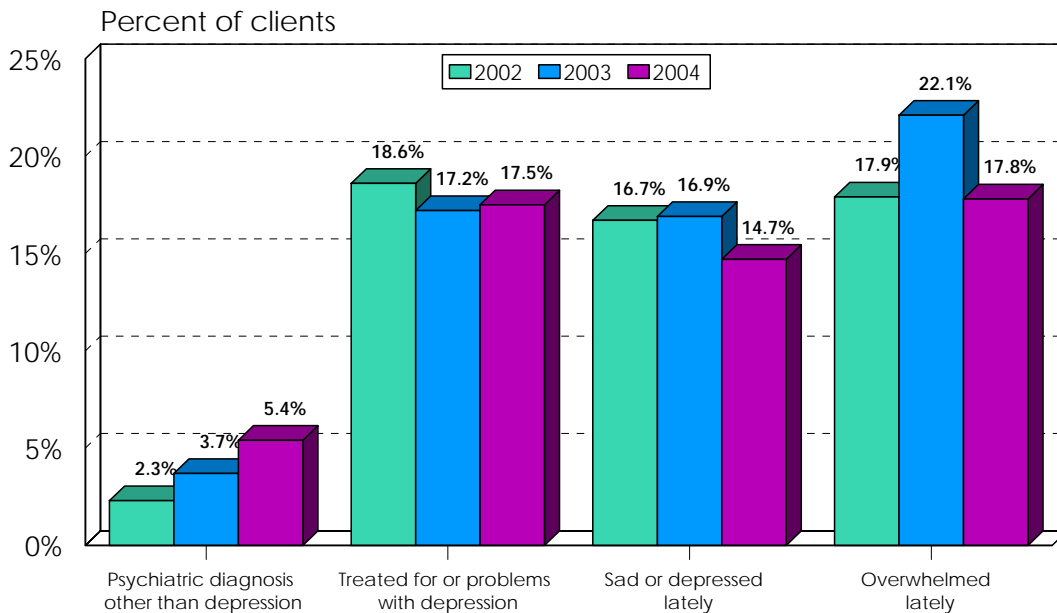
In 2002, Babyline began asking behavioral health questions as a part of the intake protocol. Ira Chasnoff, MD of the Children's Research Triangle has established a screening tool for behavioral risk factors, the 4P+. This tool has been adapted for use with Babyline. It is difficult with only 3 years of data to identify trends, but the information is helpful in understanding the scope of behavioral health problems and identifying possible resources.

## Risk Factors

The percentage of women reporting a psychiatric problem other than depression has increased from 2.3% in 2002 to 5.4% in 2004 (See Chart 36). Three questions dealing with depression all peaked in 2003 and returned at or below 2002 levels in 2004.

Chart 36:

**Behavioral Risk Factors Reported by Babyline Clients**  
Babyline Prenatal Clients, 2002 - 2004



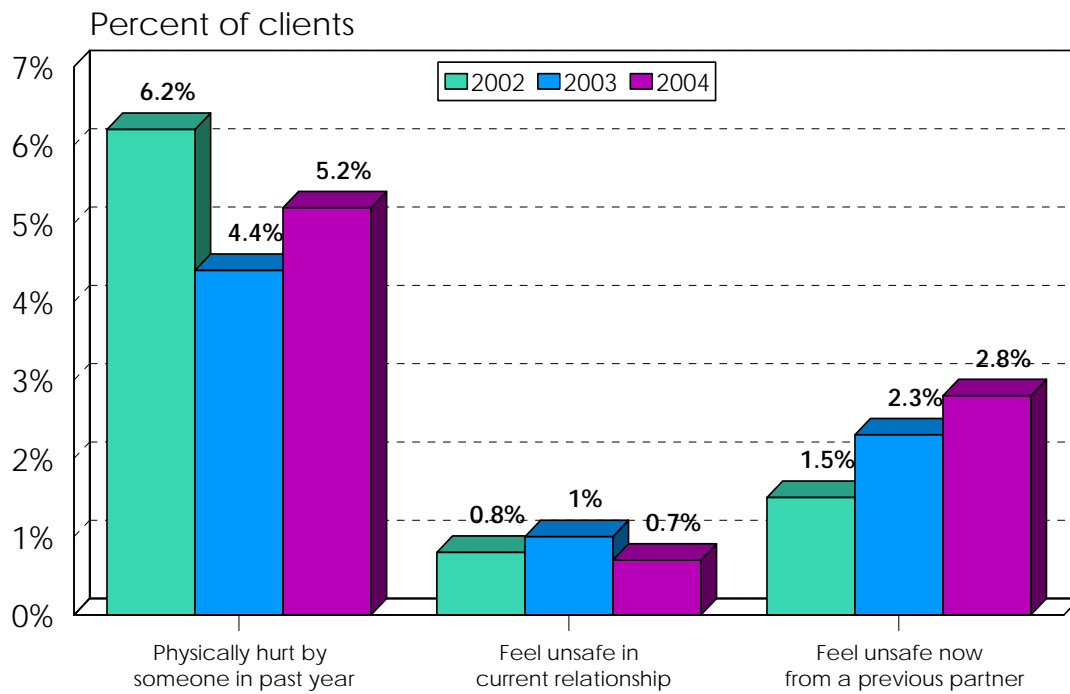
Source: Family Health Coalition

## Violence

Three questions dealing with violence have shown various patterns; there is insufficient data to suggest any trend at this time (See Chart 37).

Chart 37:

### Violence Reported by Babyline Clients Babyline Prenatal Clients, 2002 - 2004



Source: Family Health Coalition

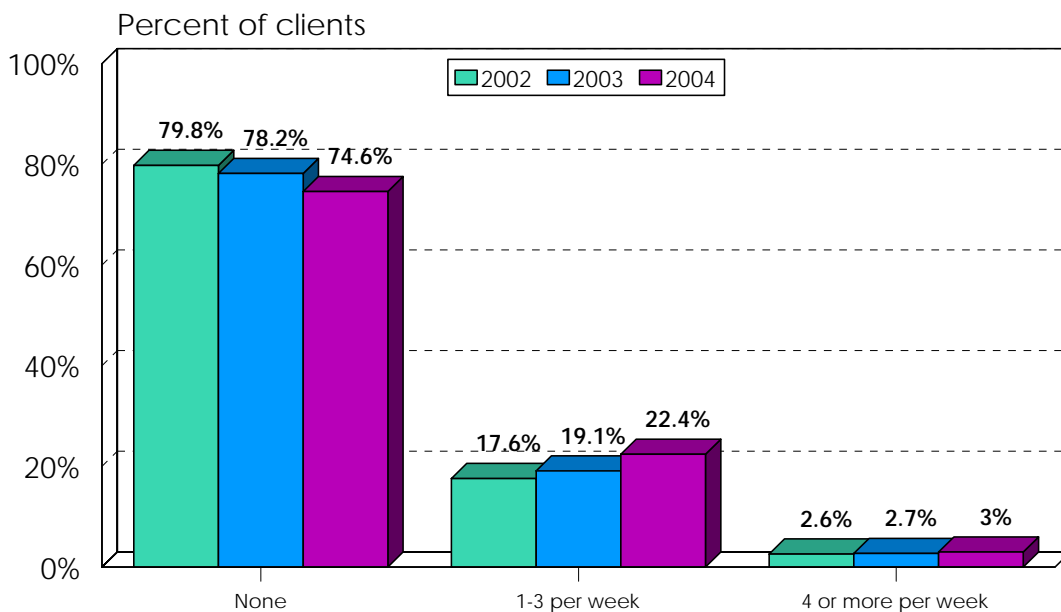
## Alcohol and Tobacco Use

There has been a slight increase in the past 3 years in the percentage of women reporting some alcohol and tobacco use in the month before they knew they were pregnant (See Chart 33 and 34).

Chart 38:

### Average Weekly Alcohol Consumption during Month before Pregnancy was Known

Babyline Prenatal Clients, 2002 - 2004



Source: Family Health Coalition

In 2002, 106 babies (2.6%) were born to mothers who drank 4 or more drinks per week in the month before they knew they were pregnant. In 2003, there were 112 and in 2004, 121 women drank 4 or more drinks per week in the month before they knew they were pregnant (See Chart 38).

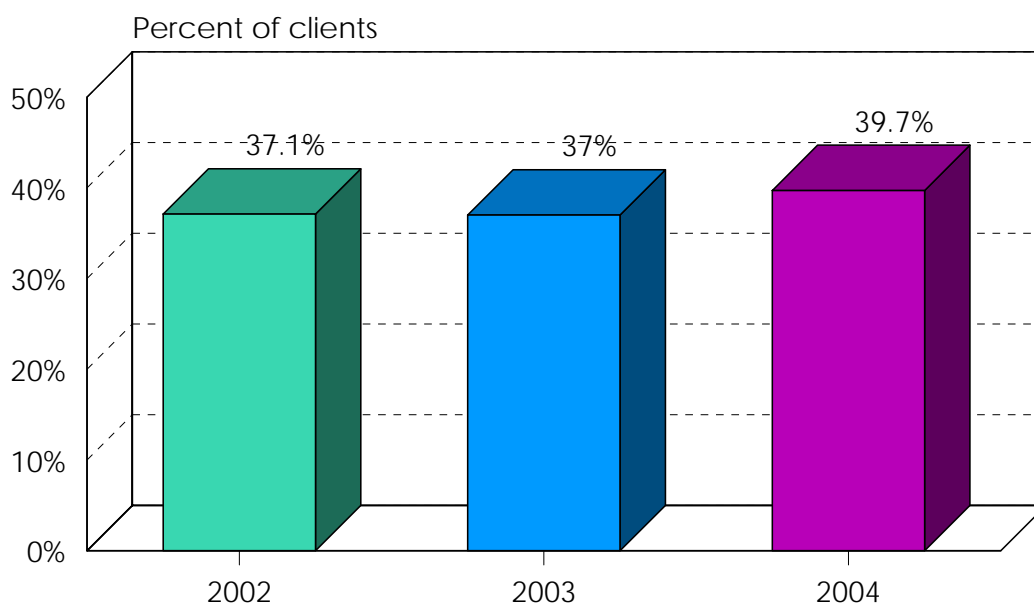
## ***Cigarette Smoking***

In 2002, 1,517 women smoked in the month before they knew they were pregnant. In 2003, there were 1,537 and in 2004, 1,600 women who smoked during the month before they knew they were pregnant (See Chart 39).

**Chart 39:**

### **Cigarette Smoking during Month before Pregnancy was Known**

Babyline Prenatal Clients, 2002 - 2004



Source: Family Health Coalition

In 2004, 5.4% of women clients reported a psychiatric diagnosis (other than depression), while approximately 17% reported some problems with or concern about depression (See Chart 36). 5.2% of clients reported being physically hurt by someone in the past year (See Chart 37). 3% reported drinking on average 4 or more drinks per week in the month before they knew they were pregnant (see Chart 38) and approximately 40% reported smoking cigarettes in the same time period (See Chart 39).

## 1990 GOALS AND OUTCOMES

Babyline was established to improve access to, and therefore, utilization of early prenatal care by low to moderate-income women.

In 1990, Babyline's goals were:

### 1. Decrease the length of wait for initial prenatal appointments at public clinics.

Outcome: The percentage of women waiting two weeks or less between their call to Babyline and their first appointment has varied from a low of 25% in 1991 to a high of 92% in 1994. The trend has improved, declined, then improved and declined again over the entire 15 years of this report. In 2004, 63% of women calling Babyline had a 2-week or less wait time rebounding from a decline of 47% in 2003 (Chart 34).

Discussion: There has been a steady increase in the number of women calling for services while still in their first trimester of pregnancy (Chart 34). Therefore, the problems of wait time seem more likely to be related to systemic issues. Subjective experience indicates that some of the issues related to longer wait time may include a client's preference to deliver at a particular hospital, and uninsured (primarily Hispanic) women's choice to wait a longer period of time in order to be seen at a clinic receiving Title V funding thus allowing lower medical fees and sliding scale payment.

### 2. Encourage early entry into prenatal care (particularly for minority women and teens) by providing a link to a prenatal clinic immediately after confirmation of pregnancy.

Outcome: There has been tremendous progress in women seeking prenatal care early in their pregnancy. The percentage of women calling for a prenatal appointment in their first trimester has increased from 57% to 75%. Even more encouraging, is that this trend is consistent among all races and ethnicities (Chart 35). More women have actually received prenatal care in their first trimester of pregnancy. Between 1990 and 1996 the percentage of Babyline clients who entered care in their first trimester increased from 39% to 64%; unfortunately, improvements have leveled off since that time. Since 1996, 7 out of 8 years have actually shown a slight decrease from the percentage of 64% in 1996 (Chart 30).

Discussion: Early entry into prenatal care is desired by a growing number of women. In 1990, there was a difference of 18% (57% called and 39% received first trimester care). In 2004, the difference shrank to 11% (75% called and 64% received care). No additional progress has been reported. A significant disparity occurs between Hispanic and non-Hispanic women in first trimester entry compared to call time. Hispanic women request care in the first trimester but are often unable to enter care until the second trimester due to preference of clinic (uninsured and preference for culturally appropriate services) or limited high risk slots for obstetrical care (OUWC and OSUCOM).

### 3. Encourage patient compliance in keeping appointments by offering follow-up and linkage to services.

Outcome: In 2003, Babyline scheduled 4,795 prenatal appointments and rescheduled 1,544 and in 2004, 4,659 appointments were scheduled with 1,405 rescheduled. (Rescheduled client numbers are not an unduplicated number.) Babyline checks with each clinic for missed appointments and initiates follow-up calls. Babyline staff informs and refers clients to a wide variety of social services. Finally, Babyline participates with the three primary case management programs in the community (Tulsa Healthy Start, Children First, and Healthy Families Oklahoma) in a triage process to assure that women do not “fall between the cracks” of the social service system.

Discussion: In many respects, the Babyline program has become central in the prenatal care system. No other program or service interacts with as great a number of low and moderate income women who are pregnant and gathers this amount of information for analysis of community trends and needs.

## TRENDS

### *Positive...*

There has been a 133% increase in the number of first prenatal appointments scheduled by Babyline from 1990 to 2004. Babyline targets low to moderate-income women. Based on the 2003 number of resident births in Tulsa County (9,357) and that approximately 65% of all births are eligible for Medicaid, Babyline scheduled 79% of first prenatal appointments for women at 185% percent of poverty or below.

From 1990 to 2004, the percentage of Babyline clients who were under 18 years of age declined within each race (there was a small increase for Hispanic women). The percentage of clients who were 18 to 19 years of age decreased in each racial and ethnic group except among Black clients which remained at its 1990 level.

Among White and Black clients, there has been an increase in the level of education from 1990 to 2004; more clients have some college education and fewer have less than a 9<sup>th</sup> grade education.

Although the level of employment among Babyline clients has not increased (approximately one-third of clients report some level of employment), there is a greater percentage that report full-time employment though there has been a decrease in the past 2 years.

The adjusted mean family income has increased for all races and ethnicities from 1990 to 2004. Unfortunately, these increases are much less for African American and Native American families.

Of the clients who had a previous birth, most had an interval of at least 24 months between the last birth and their current pregnancy. The percentage with a 24 month or greater interval increased from 45% to

almost 60% and the percentage of clients who have less than 6 months interval has shown a small but steady decline.

In general, women are calling and receiving prenatal care earlier and waiting less than when the Babyline program was instituted (see discussion in Outcomes Section).

### ***Negative...***

There has been an increase in the percentage of appointments set for women living outside of Tulsa County from a low in 1997 of 6.6% to a high in 2004 of 13.5%. Although these percentages are not above what occurred in the early 1990's, this might signal a need to investigate access issues in the outlying areas.

The percentage of Hispanic clients to Babyline has increased from 5% to 30%. This is listed as "negative" only because of the challenges faced by providers to offer culturally appropriate services and the lack of funding available for uninsurable women. Both of these issues have been considerable barriers to care for Hispanic women.

The Hispanic population has been the only group to show a decrease in the level of education from 1990 to 2004. Over one-third of the Hispanics who called Babyline in 2004 had less than a 9<sup>th</sup> grade education, while almost 70% were not a high school graduate.

There remains a high level of unintended pregnancies (a range of 76% to 83%) and low levels of birth control use (a range of 15% to 23%). Alarming, the past 4 years have shown the lowest rates of birth control use. There is optimism that the Family Planning Waiver enacted in April 2005 will substantially change these trends. The Family Planning Waiver makes available family planning services for women and men whose family income does not exceed 185% FPL (Federal Poverty Level).

The Free Pregnancy Testing Program has grown significantly since its inception in 1990. Ironically, barriers to prenatal care contribute to the success of the program. In an effort to reduce costs, many public prenatal clinics will not see a woman unless she has "written proof of pregnancy." The Free Pregnancy Testing Program is the only community resource where a woman can obtain "written proof" without incurring a substantial cost.



## RECOMMENDATIONS

1. Provide a funding mechanism for prenatal health care for Hispanic women and women whose income exceeds 185% FPL but who do not have insurance or are underinsured for prenatal care.
2. Monitor the implementation of the Family Planning Waiver and its impact on unintended pregnancies and the use of birth control. If significant reductions are not seen, continue to seek alternate interventions.
3. Continue to support teen pregnancy prevention programs.
4. Continue to support education regarding early prenatal care and appropriate birth spacing.
5. Continue to support efforts that would reduce the waiting time for entry into care.
6. Request that the Oklahoma Health Care Authority examine the provider trends to decline appointments for prenatal care until “proof of pregnancy” is established and postpone entry into prenatal care (second trimester).
7. Examine potential for Babyline clients to have access to prenatal vitamins at time of call rather than waiting for first appointment. The critical period of fetal growth and potential impact of lack of essential vitamins (folic acid) is during the period of time many women are waiting for available appointments.
8. Continue monitoring behavioral health risk factors and explore effective means of referral for intervention.



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