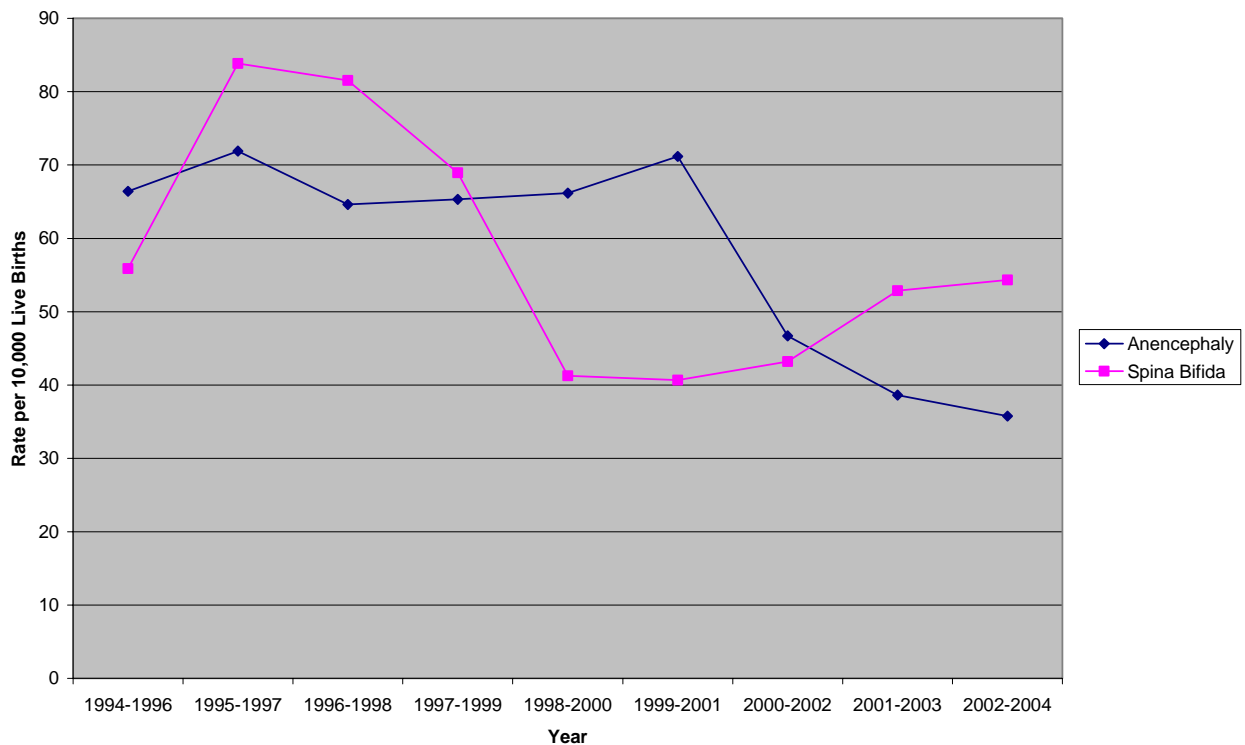


Neural Tube Defects in Georgia

Each year between 50 and 80 infants in Georgia¹ are born with neural tube defects compared to approximately 2,500 infants in the United States². In 2002 the rate of spina bifida was 24 per 100,000 live births³ in Georgia compared to the U.S which was 20.09 per 100,000 live births⁴. Anencephaly rates in Georgia were 23.2 per 100,000 live births³ compared to the U.S which was 9.4 per 100,000 live births⁴. Women can prevent some of these developmental defects with adequate folic acid intake prior to becoming pregnant. The benefits of folic acid have been well recognized and there is evidence to suggest the rates of NTDs have declined since mandatory fortification in 1998. A review of Georgia's data reinforces the importance of continuing to provide educational and training activities to all race/ethnic groups.

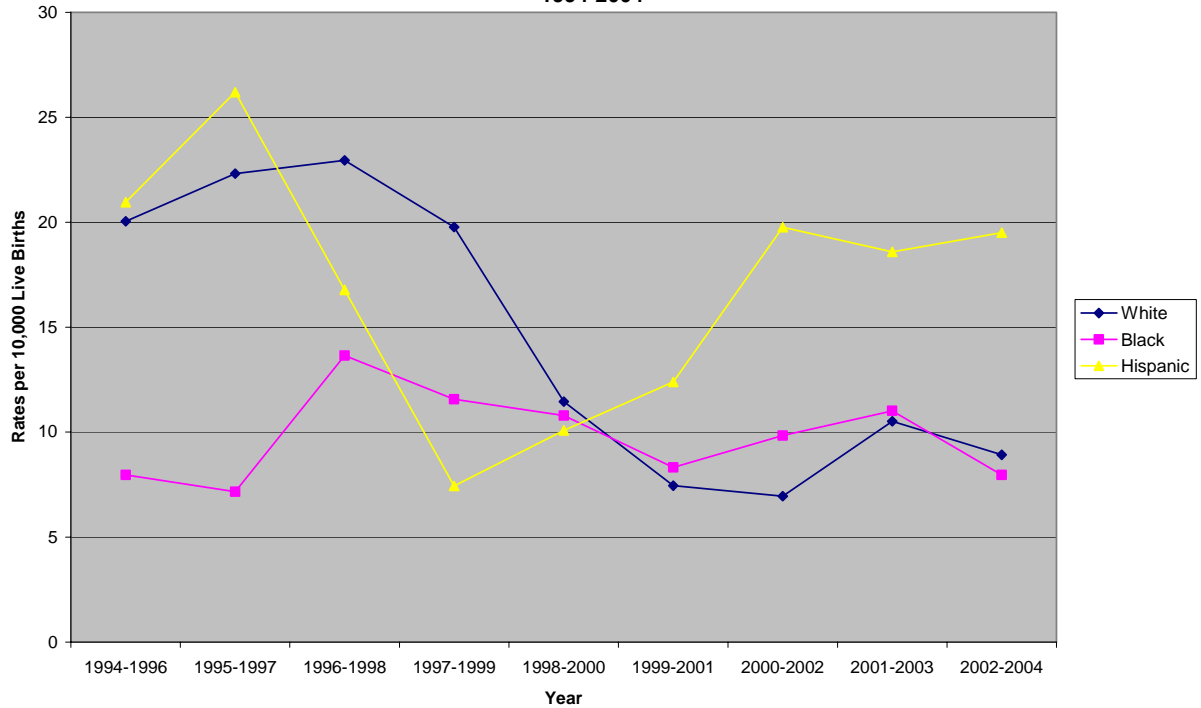
Figure 1. Three Year Moving Averages of Projected* Rates of NTDs in Georgia 1994-2004



NTD by Year 1994-2004 (Fig. 1)

The graph illustrates a three-year moving average of projected rates of NTDs. The annual rate for an event with small numbers can vary greatly from year to year. A moving average provides a way to reduce large year-to-year fluctuations and provide a clearer view of any long-term trends. The rates of spina bifida have decreased post-fortification however; these rates have shown a slight increase in the last few years. In contrast there is a gradual decline in anencephaly births in Georgia.

Figure 2. Three Year Moving Average of Projected* Rates of Spina Bifida by Race in Georgia 1994-2004

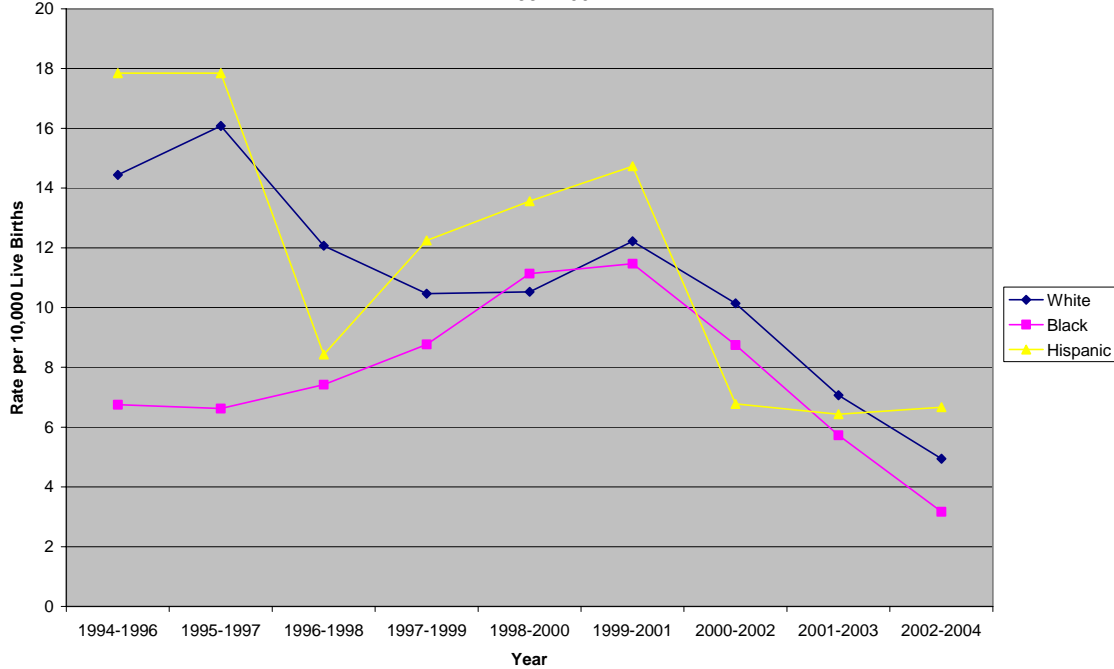


*Data source: CDC's MACDP data used to calculate state based projections 1994-2004

Spina Bifida by Race/Ethnicity 1994-2004 (Fig. 2)

The rates of spina bifida were much higher among the Hispanic population even after mandatory fortification. It is therefore beneficial to continue to target efforts amongst the Hispanic population. Post-fortification rates in the white population decreased but have fluctuated in the last few years. Similar trends have been illustrated among the African-American population.

Figure 3. Three Year Moving Averages of Projected* Rates of Anencephaly by Race in Georgia 1994-2004



*Data source: CDC's MACDP data used to calculate state based projections 1994-2004

Anencephaly by Race/Ethnicity 1994-2004 (Fig. 3)

The rates of anencephaly were highest among the Hispanic and White populations. Anencephaly births have mostly declined after fortification.

References

1. Data source: CDC's MACDP data used to calculate state based projections.
- 2 Centers for Disease Control. Recommendations for the use of folic acid to reduce the number of cases of spina bifida and other neural tube defects. MMWR 1992;41 (No. RR-14); 001
3. Data Source: GA Department of Human Resources, Division of Public Health, Office of Health Information and Policy
4. National Vital Statistic System, NCHS, CDC

3,4 .Data Disclaimer: The data for this analysis was derived from birth and fetal death certificates. Previous studies have shown that this data source can under estimate the number of defects by as much as 50%.