

ISSUES FACING GEORGIA

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INFANT MORTALITY IN GEORGIA AND THE NATION

by

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INTRODUCTION

Among industrialized nations, the United States, which once ranked near the top, now ranks near the bottom in expectation of life at birth. The reason for this dramatic decline and dismal showing involves infant mortality, which is crucial in determining the average length of life. At least 16 industrialized nations have lower rates of infant mortality (defined as deaths under the age of 1 per 1,000 live births) than the United States, and so too do Taiwan, Hong Kong, and the Sultanate of Brunei. Japan, which in recent years has led the world in economic growth, has the world's lowest rate— 5.3, half the U. S. rate of 10.2 in 1986 (see Table 1).

Just as there is variation among nations, there is also variation among states, and within states among counties. Georgia ranks 48th among the 50 states for the highest infant mortality rate, and within Georgia there are 147 counties with an infant mortality rate greater than the U.S. average. Ten counties have a rate that is twice that of the national average, and there are four times that of Japan.¹

Comparisons are never as simple as they seem. In fact, comparisons among nations, states, and counties can be misleading unless a host of factors such as time, place, population composition, and social and economic status are taken into consideration. In this brief report only a few of the more important considerations will be mentioned.

Definitions of infant deaths vary over time and from place to place. In the moments following birth it is not always clear whether there was life or whether there was a late fetal death. Then, too, there is the temptation to make out a certificate for fetal death rather than a birth and a death certificate for a child that gave few indications of independent life.

Black and White Comparisons

Some of the lowest rates are found in countries or areas with homogeneous or similar populations as in Japan, the world's leader, or in Finland, Europe's leader. The United States, however, has a heterogeneous population with many races and cultures represented. Thus, the

European nations, the United States' position rises by several notches. Similarly, Georgia's lowly position in regard to the nation and other states is changed radically if separate calculations are made for whites and blacks. Actually, Georgia's position of 30th from the top is better than its ranking in terms of percent in poverty or median years of school completed, both important factors of infant mortality.

County Comparisons

Turning to a consideration of rates for counties, racial differences must be kept in mind. For the nation as a whole, 12 percent of the population is black, yet 16 percent of all births are black. For Georgia, approximately one quarter of the population is black, but blacks account for 35 percent of all births. In 40 Georgia counties over half of all births are to black women.

When examining counties with as few as ten births of whites or blacks in a given year, annual rates cannot be used because small numbers of births are statistically unreliable. Therefore the live births and infant deaths for a 12-year period, (1976-87) were used to compute an average annual rate. Even so, reliable rates for some counties cannot be computed because in the twelve year study period some counties had fewer than 1000 births, which is too few to compute a statistically reliable rate.

The low number of births occurring in these counties is cause for concern because counties losing population face major problems in providing fundamental public services such as education and health care as the tax base shrinks. When these services are poor, it is difficult to hold young people and nearly impossible to attract new industries.

In Figure 5 the rates for the total population are presented, omitting only 11 of 159 counties due to their low number of births. It is immediately apparent that most of the counties with low rates are suburban counties surrounding the Atlanta Metropolitan Area³ or the mountain counties north of I-85. But running across the state from northeast to southwest is an almost unbroken stretch of counties with very high rates of infant mortality. Rates are highest in Southwest Georgia, but only three contiguous Southwestern counties - Stewart, Randolph, and Terrell - have higher rates than Washington, D.C. Of special interest in South Georgia are Wilcox and Wilkinson, counties where income is low and the percentage of black births high. While surrounded by counties with high total rates of infant mortality, these counties have rates that are among the ten lowest for the state.

Information in Figure 6 reveals rates for whites and completely reverses the notion that North Georgia is

an area of low infant mortality rates. That is true only if the near absence of blacks in this area is ignored. Rather than being an area of low infant mortality, North Georgia is an area of exceptionally high rates for whites, the main exceptions being Rabun County and the suburban counties in the Chattanooga Metropolitan Area. Still, only one county in Georgia, Union, has a rate of infant mortality for blacks that is higher than the rate for Washington, D.C. In 1986, Union County ranked 140 out of 159 counties for the lowest per capita income in Georgia⁴.

Offsetting this view for whites is the large number of counties that have quite low white rates. Lowest of all is the rate for Oconee County, a suburb of Athens. Its rate of 5.4 is barely above that for Japan. There are 15 counties with white rates below eight per 1,000. Among all states only Hawaii has a lower rate for whites, and only the smaller European countries have equally low rates. In general, counties with low rates for whites are suburban, but there are surprising exceptions. Bulloch County is one. With a per capita income of only two-thirds of that for the nation and with almost half of its adult population without a high school degree in 1980, Bulloch County has an infant mortality rate for whites of only 6.8, the third lowest in the state.

Rates for black Georgians are shown in Figure 7. Here the counties of North Georgia are mostly blank because of the absence of black residents and black births. Counties for which rates could be computed are mostly metropolitan or in the middle of the state. Especially high rates are found in Southwestern Georgia, but other counties with high rates stretch up into the Piedmont. Eighty-seven counties have higher black infant mortality rates than the District of Columbia (20.8). Pierce County has the highest rate of 40.6 per 1000 live births, but ranks above 30 are found in Pierce, Grady, Echols, Terrell, Hart, Greene, Taylor, Pike, Randolph, Upson, Stewart, and Marion Counties.

Counties with relatively low or moderate rates for blacks tend to be metropolitan counties, but there are nonmetropolitan counties with surprisingly low rates for blacks. In Wilkinson County where income is low, where 60 percent of the population did not have a high school education in 1980, and where 55 percent of births were black, only 9.6 deaths per 1,000 live births of blacks occurred. This rate compares favorably with the rates for whites in Pennsylvania and Idaho or with Ireland or Italy.

Also of special interest are the counties where rates for whites are low while those for blacks are relatively high. In Bulloch County, for example, the rate for

situation in the United States will not equal the achievements of Scandinavia or Taiwan in reducing infant deaths as long as some groups lag far behind the general population in education, income, and acceptance. Thus, wherever blacks, American Indians, and Mexicans form a large part of the population or wherever a large portion of the population, regardless of race, is poor or uneducated, it is not unusual to find relatively high rates of infant mortality.

The truth of this observation is made clear by examining the rate shown in Figure 1 for the United States separately for whites and for a combination of blacks and other races. Actually blacks so numerically dominate the second group that the figure can be considered as the rate for blacks. The figure is not, however, representative of Asian-Americans who have even lower rates than whites, and their inclusion lowers the true rate for blacks, but by an insignificant amount.

While the information in Figure 1 reveals that rates for blacks have always been higher than those for whites, it also shows that enormous progress has been made within the lifetime of millions of older Americans. At the beginning of World War I, about one in five black babies died before the age of one, and the same was true of one in ten white babies. In just 70 years there was a 90 percent reduction for both whites and blacks— from 100 to nine for whites and from 180 to 18 for blacks. The decrease, however, was not even for either race. For both there were long periods of stagnation or gradual decline interspersed with periods of sharp reduction. The periods of sharpest decline were those marked by war. From 1915 to 1920, the period around World War I, the rate for whites fell by 24 percent and that for blacks by 40 percent. In 1915 there was an 82 point gap between the rates for whites and blacks; by 1920 it had been cut to 36. Again in the six-year World War II period, 1940-1946, both black and white rates decreased by 30 percent. From 1940 to 1946 the gap was narrowed from 31 to 18 and now stands at nine. In sum, since 1915 the rate for whites has fallen by 90 deaths per 1000 live births and that for blacks by 163 per 1000. Still, a black baby is almost twice as likely as a white baby to die before the first birthday.

In Figures 2, 3, and 4 rates for total, white, and black populations of Georgia are compared with those for the United States and the District of Columbia. The nation's capital is included because it has a rate of infant mortality for the total population that is far higher than that for any state. Of late Washington, D.C., has become known as "the murder capital of the United States" because of its high homicide rate, but to that title one might add "the city of infant death".

Since Georgia did not enter the birth and death registration arena until 1928, earlier rates are not available. The rates, however, for the total population of Georgia have always been higher than those for the nation, in pre-World War II years by as much as 20 points. During the war years, the difference was reduced sharply and in 1985 was separated by only two points. Perhaps more interesting is the comparison with the District of Columbia. After World War II the rate for the nation's capital rose sharply and has remained well above the rate for Georgia since the middle 1950's.

For white Georgians the rate has always been above that for the nation and only in a few recent years has it been below the widely fluctuating rate for the District of Columbia. Before World War II there were years when the rate for whites in Georgia was about 30 points above that for the nation, but after World War II the difference was greatly decreased. Today it is separated by only two tenths of a point.

For blacks the comparisons are very different. Rates for black Georgians have never been much different from those for the nation, and in the early years were sometimes lower. In previous years rates for blacks in the District of Columbia fluctuated wildly because of the small number of black births. Since the middle 1970s, however, rates for blacks in the District of Columbia have been higher than those of Georgia or the nation.

As already noted, Georgia had a higher rate of infant mortality in 1985 than any other state except South Carolina and Mississippi.² The ranking of 48th among 50 changes radically, however, when separate comparisons are made for whites and blacks. No fewer than 19 states have higher rates of white infant mortality than Georgia, and among them are Indiana, Delaware, Idaho, Washington, Idaho, and Alaska. Pennsylvania and Georgia are tied for the 30th rank in ascending rates for whites.

A similar situation occurs when comparing rates for black Georgians. Of the 47 states for which 1985 rates were published for blacks, 16 had higher rates than Georgia.² Among these were the New England States of Massachusetts, Connecticut, and New Hampshire; the Middle Atlantic State of Pennsylvania; and the Middle Western States of Illinois and Michigan. Again, Georgia ranks 30th rather than being at the bottom.

Clearly infant mortality rates for the total population of the United States are near the bottom among industrialized nations because of the high rates for the underprivileged, especially the black population. When the rates for white Americans are compared with those for

whites is 6.8 while that for blacks (22.5) is three times as high. Similar differences are found in Monroe, Screven, Morgan, and Clarke Counties. In Banks County, however, a rate of 8.1 for whites is more than matched by one of 7.6 for blacks.

Conclusion

Why are black infant mortality rates low in Wilkinson County, even though the usual socioeconomic indicators point toward a high rate? Why does Clarke County, with a major university, two reputable hospitals, and a large number of doctors, have a black infant mortality rate two and a half times that for whites? Why does Towns County, with no black births over the twelve year study period, have a white infant mortality rate almost twice the state average? Answers to these questions require an in-depth analysis beyond the nature and scope of this investigation. A preliminary explanation, however, for Georgia's standing in the nation and for the wide variation among counties can be developed without a detailed, case by case investigation.

The commonly advanced explanation for high infant mortality is the lesser availability of prenatal care to disadvantaged segments of society. Others include the high proportion of low birth weight babies, births to unmarried mothers, and births to mothers who are themselves children, often as young as 11 or 12. These are all plausible explanations, yet they are not the most basic. Some years ago, at a meeting called to discuss the high rate of infant mortality in the United States, the question was raised as to what it would take to bring the infant mortality rate in the United States down to the level of The Netherlands. A Dutch scholar answered tersely, "Three generations of educated mothers".⁵ This now appears to be an exaggeration. Reducing infant mortality can be accomplished with only one generation of educated mothers, as has been shown in Japan, Hong Kong, and Singapore. Income depends upon education. Together, education and income largely determine nutrition and the acquisition of proper medical care. Thus, one of the wages of poor education is early death.

Finally, beyond basic educational efforts, programs to reduce infant mortality are needed at the local, state and national levels. At the local and state levels, cooperation between health care professionals, state agency personnel, elected officials, business and religious leaders and community residents are important. Institutional partnerships where the management, financial and client relationships are extended across a number of communities and agencies should be encouraged, funded and developed. At the national

level, programs aimed at reducing infant mortality should consider that infant mortality is interrelated with overall socioeconomic well-being. Additional information on this topic will be reported as information becomes available.

FOOTNOTES

¹The 1989 *Britannica Book of the Year*, Encyclopaedia Britannica, Chicago, 1989.

²U.S. Bureau of the Census. *Statistical Abstract of the United States: 1987*, (107th edition), Washington, D.C., 1987.

³In 1989 Georgia had 38 metropolitan and 121 nonmetropolitan counties and eight Metropolitan Statistical Areas (MSA's). The general concept of a Metropolitan Statistical Area is one of a large population nucleus together with adjacent counties which have a high degree of economic and social integration with that nucleus. These areas are typically surrounded by nonmetropolitan counties. Areas qualifying for recognition as Metropolitan Statistical Areas have either a city with a population of at least 50,000 or a Bureau of the Census urbanized area of at least 50,000 and a total Metropolitan Statistical Area population of at least 100,000.

⁴Bureau of Economic Analysis, Regional Economic Information System, 1986, U.S. Department of Commerce, Washington, D.C..

⁵Dutch scholar????

Table 1
Selected Infant Death Rates: 1986

Australia	8.8
Austria	10.3
Brunei	7.4
Canada	7.9
China	33.0
Congo	81.0
Cuba	13.3
Denmark	8.2
Egypt	70.5
Finland	5.8
France	7.6
Germany, East	9.2
Germany, West	8.9
Hong Kong	7.5
Ireland	10.1
Italy	10.3
Japan	5.3
Malaysia	27.0
Netherlands, The	6.4
New Zealand	11.2
Norway	8.5
Pakistan	120.0
Poland	17.3
Singapore	7.4
Sweden	5.9
Switzerland	6.8
Taiwan	6.3
U.S.S.R.	25.4
United Kingdom	9.5
United States	10.2

Source: 1989 Britannica Book of the Year.
Encyclopaedia Britannica, Chicago.

Table 2

Live Births, Infant Deaths and Infant Death Rates: 1976-1987

Table with columns for Year (1976, 1987), Total, White, Black, and Percent for Live Births and Infant Deaths. Rows list various counties including APpling, Baldwin, Banks, Barrow, Bartow, Ben Hill, Berrien, Bibb, Blount, Brantley, Brooks, Bryan, Buckhead, Butts, Calhoun, Camden, Gwinnett, Habersham, Hancock, Haralson, Hart, Heard, Henry, Houston, Irwin, Jasper, Jeff Davis, Jones, Jenkins, Johnson, Lamar, and Wilkes.

Table 2 (Continued)

Live Births, Infant Deaths and Infant Death Rates: 1976-1987

County	1976-1987				1976-1987				1976-1987			
	Total	White	Black	Rate	Total	White	Black	Rate	Total	White	Black	Rate
LANTIER	1140	754	66.1	381	33.4	23	14	60.9	9	39.1	20.2	26.7
LAURENS	7295	3984	54.6	3297	45.2	43	32.8	88	62.2	18.0	10.8	26.7
LEE	2628	1848	70.3	778	29.6	32	14	43.8	18	56.3	18.0	10.8
LIBERTY	12069	7164	59.4	4459	36.9	167	94	56.3	71	42.5	13.8	15.9
LINCOLN	1195	538	45.0	657	55.0	23	7	30.4	16	69.6	13.8	15.9
LONG	1315	984	74.8	316	24.0	21	15	71.4	6	28.6	16.0	20.9
LOWMEDES	14792	8914	60.3	5740	38.8	200	195	47.5	105	52.5	13.5	10.7
LUMPKIN	1780	1179	97.1	43	2.4	20	19	95.0	1	5.0	11.0	10.7
MACON	2866	963	33.6	1899	14.1	52	9	17.3	43	82.7	18.1	22.6
MADISON	3181	2732	85.9	447	16.1	23	9	79.3	6	20.7	9.1	8.4
MARION	914	385	42.1	529	57.9	21	5	23.8	16	76.2	16.4	24.6
MCINTOSH	3728	1892	50.8	1831	49.1	61	16	26.2	45	73.8	16.4	24.6
MENDEL	1315	713	54.2	602	45.8	7	7	41.2	10	58.8	12.9	18.6
MENNINGER	4044	1674	41.4	2367	58.5	24	24	35.3	44	64.7	16.8	18.6
MILBER	1456	1031	70.9	420	29.2	15	15	16.5	22	89.5	8.5	25.6
MONTGOMERY	1267	825	65.2	433	33.9	16	8	50.0	22	68.8	13.0	25.6
MORGAN	2311	1267	54.8	1039	44.0	10	10	32.3	21	67.7	13.4	21.3
MURRAY	3776	3759	99.5	10	0.3	45	45	100.0	0	0.0	11.9	20.2
MUSCOGEE	35813	20383	56.9	15065	42.1	595	262	44.0	332	55.8	12.9	22.0
NEWTON	7263	5037	69.4	2213	30.5	95	45	47.4	50	52.6	8.9	22.6
OCONEE	2231	2052	91.9	274	11.8	18	11	61.1	7	38.9	7.7	5.4
OGLETHERPE	1489	891	59.8	597	40.1	26	9	34.6	17	65.4	17.5	21.8
PAULDING	5426	5118	94.3	295	5.4	65	61	93.8	4	6.2	12.0	11.9
PEACH	3796	1534	40.4	2256	59.4	63	28	34.9	41	65.1	13.4	18.2
PICKENS	2095	2047	97.7	43	2.1	28	22	100.0	0	0.0	13.7	14.3
PIERCE	1218	1823	82.2	394	32.4	37	21	56.8	16	61.5	16.7	11.5
PIKE	1563	1052	67.3	507	32.8	26	10	38.5	16	61.5	16.6	9.5
POLK	5798	4644	80.1	1136	19.6	79	62	78.5	17	21.5	13.6	15.0
PULASKI	1489	819	55.0	668	44.9	18	3	16.7	15	83.3	12.1	19.6
PUNNAM	2115	1039	49.1	1074	50.8	33	12	36.4	21	63.6	15.6	11.5
QUITMAN	441	126	28.6	314	70.2	11	2	18.2	9	81.8	12.1	19.6
RASTON	1539	1358	88.3	6	0.4	15	15	100.0	0	0.0	9.8	31.2
RAVEN	1778	524	29.5	1251	70.2	45	6	13.3	39	86.7	25.3	31.2
RICHMOND	38398	20102	52.4	17716	46.1	519	211	40.7	302	58.2	10.5	17.0
ROCKDALE	6853	5960	87.0	851	12.4	86	74	86.0	12	14.0	13.5	17.0
SCHLEY	592	323	54.6	269	45.4	8	2	25.0	6	75.0	12.5	17.0
SCREVEN	2802	1184	42.3	1609	57.4	45	9	20.0	35	77.8	16.1	21.8
SEMIWOLE	1637	826	50.5	808	49.4	29	10	34.5	19	65.5	17.7	21.8
SPALDING	8948	5507	61.5	3410	38.1	132	52	39.4	79	59.8	14.8	23.2
STEPHENS	3757	3159	84.1	579	15.4	48	38	79.2	10	20.8	12.8	12.0
STEWMANT	1053	278	26.4	773	73.4	30	6	20.0	24	80.0	28.5	23.2
SUMTER	6223	2638	42.4	3568	57.3	108	33	30.6	11	73.3	17.4	21.0
TALBOT	1057	293	27.7	764	72.3	15	4	26.7	15	73.3	14.2	12.5
TALIAFERRO	409	110	26.9	298	72.9	8	1	12.5	7	87.5	12.1	18.5
TATTNALL	3464	2154	62.2	1297	37.4	50	26	52.0	24	48.0	14.4	18.5
TAYLOR	1405	593	42.2	810	57.0	30	4	13.3	26	86.7	21.4	18.5
TELEPAIR	2518	1454	57.7	1062	42.2	42	22	52.4	20	47.6	16.7	18.8
TERNETT	2519	658	26.1	1858	73.8	67	4	6.0	63	94.0	26.6	33.9
THOMAS	8106	4122	51.1	3953	48.8	158	53	33.5	105	66.5	19.5	26.6
TIFT	7024	4467	63.6	2528	36.0	97	46	47.4	51	52.6	13.8	20.2
TOombs	4767	3152	66.1	1601	33.6	65	31	47.7	34	52.3	13.6	10.3
TRENTON	1158	648	56.0	508	43.9	15	5	33.3	10	66.7	13.0	16.8
TURNER	9902	6061	61.2	3803	38.4	122	58	47.5	64	52.5	12.3	16.8
TURNER	2142	903	42.2	1239	57.8	39	5	12.8	34	87.2	18.2	27.4
UNION	1890	831	44.0	1057	55.9	31	9	29.0	22	71.0	16.4	20.8
UPSON	4187	2693	64.3	1481	35.4	76	30	39.5	46	60.5	18.2	31.1
WALKER	9813	9354	95.3	447	4.6	120	112	93.3	8	6.7	12.2	12.0
WALTON	6295	4464	70.9	1821	28.9	112	63	56.3	49	48.8	14.1	26.9
WARREN	1250	287	23.0	963	77.0	26	3	11.5	23	88.5	20.8	22.2
WASHINGTON	3766	1459	38.7	2202	61.1	67	12	17.9	55	82.1	17.8	23.9
WAYNE	4320	3044	70.5	1266	29.3	63	37	58.7	26	41.3	14.6	20.5
WEBSTER	408	168	41.2	240	58.3	6	6	16.7	5	83.3	12.2	12.2
WHEAT	1672	552	32.6	343	38.3	8	6	75.0	2	25.0	15.0	14.5
WHITE	12599	12061	95.7	512	4.1	134	122	91.0	11	8.2	10.6	10.1
WILCOX	1363	773	56.7	589	43.2	12	3	25.0	9	75.0	8.8	20.0
WILKINSON	1973	871	44.1	1098	55.2	30	9	26.7	22	73.3	15.2	20.0
WORTH	3712	2008	54.1	1702	45.9	62	18	29.0	44	71.0	16.7	25.9
OTHER/MILITARY	6485	3857	59.5	2451	37.8	67	36	53.7	31	46.3	10.3	12.6
GEORGIA	1087393	694273	63.8	384951	35.4	15402	7409	48.1	7941	51.6	14.2	20.6

-- Too few births to compute a statistically reliable rate

* Metropolitan County

Figure 6

WHITE INFANT DEATH RATES 1976--1987



 LOW

 MEDIUM

 HIGH

 INSUFFICIENT DATA

LOW = 5.4 to 9.8

MEDIUM = 9.8 to 12.0

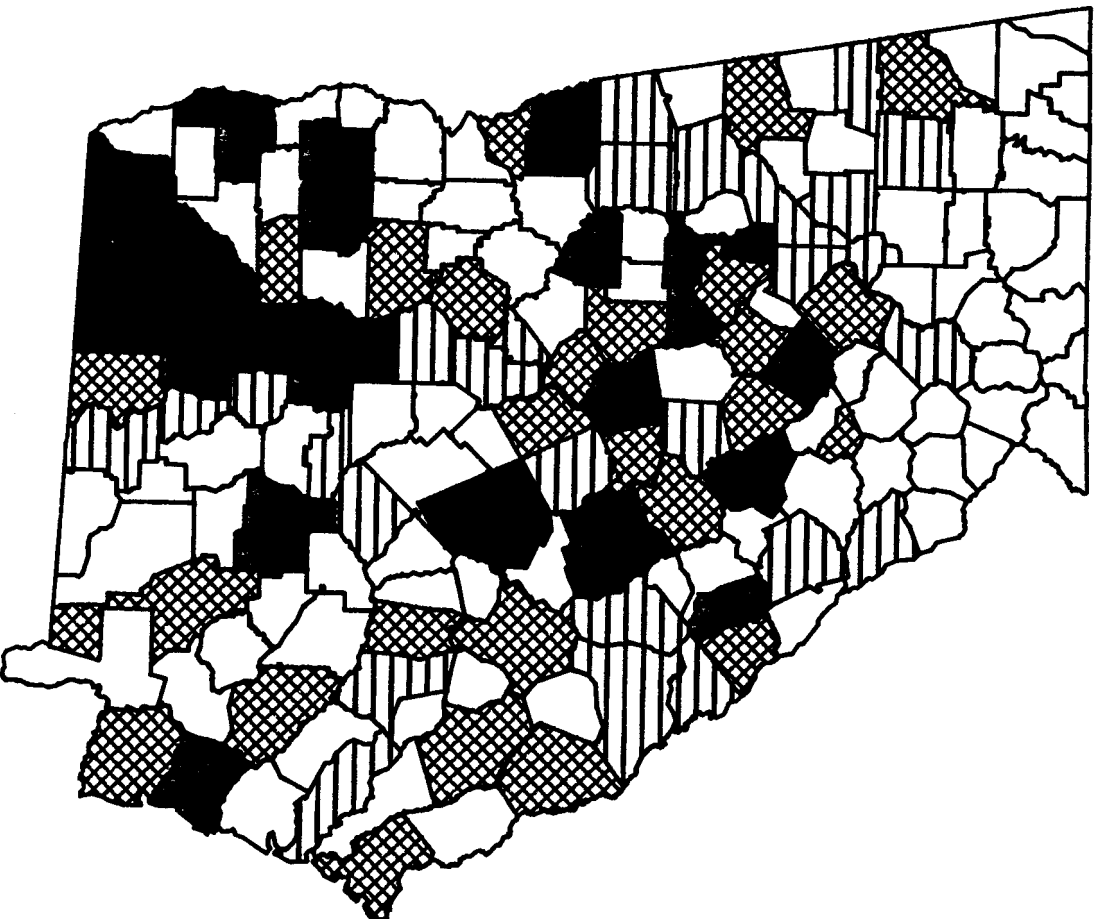
HIGH = 12.0 to 18.2

GA RATE = 10.7

Figure 7

BLACK INFANT DEATH RATES

1976-1987



LOW

MEDIUM

HIGH

INSUFFICIENT DATA

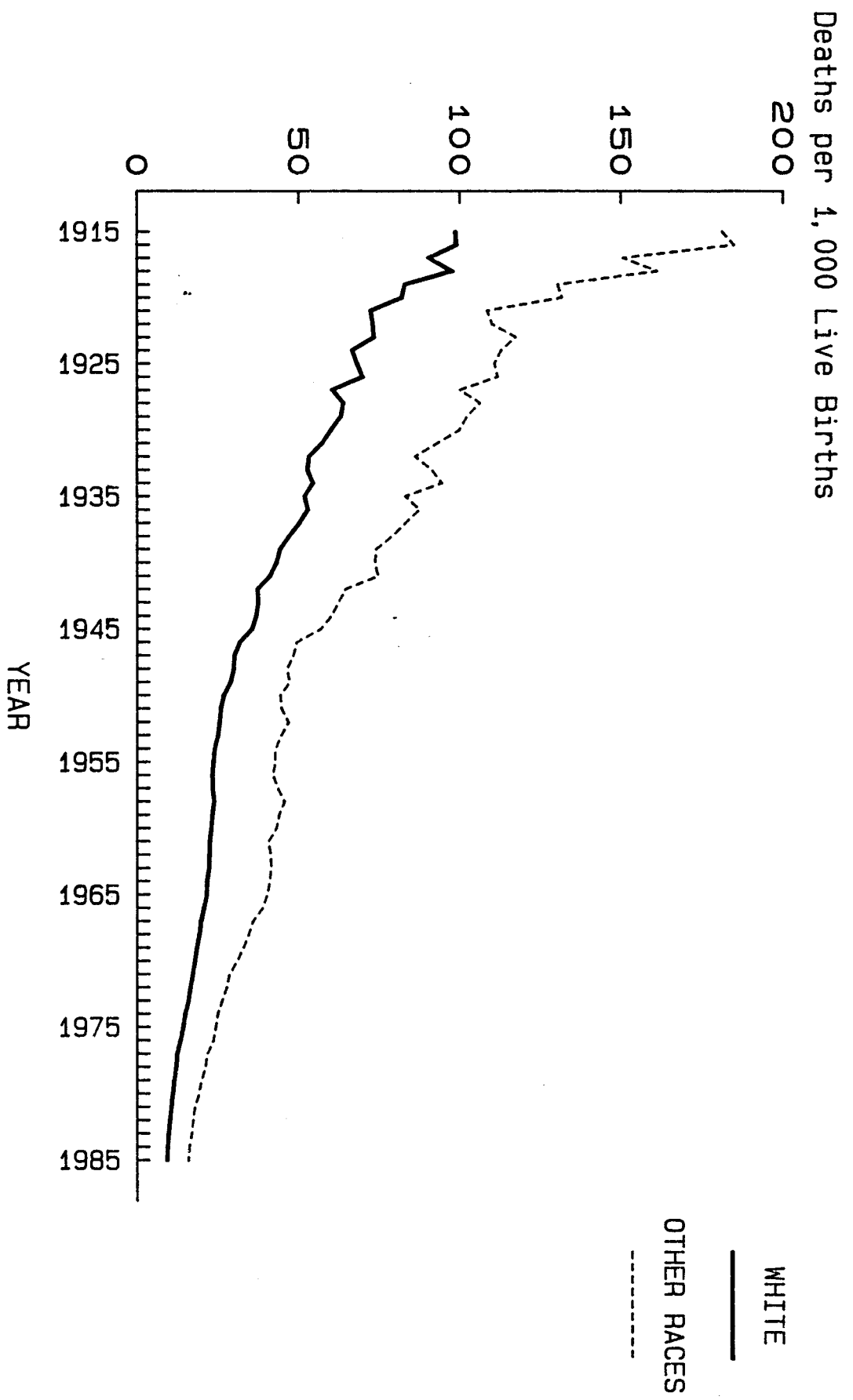
LOW = 9.6 to 20.2

MEDIUM = 20.2 to 20.8

HIGH = 22.8 to 37.9

GA RATE = 20.6

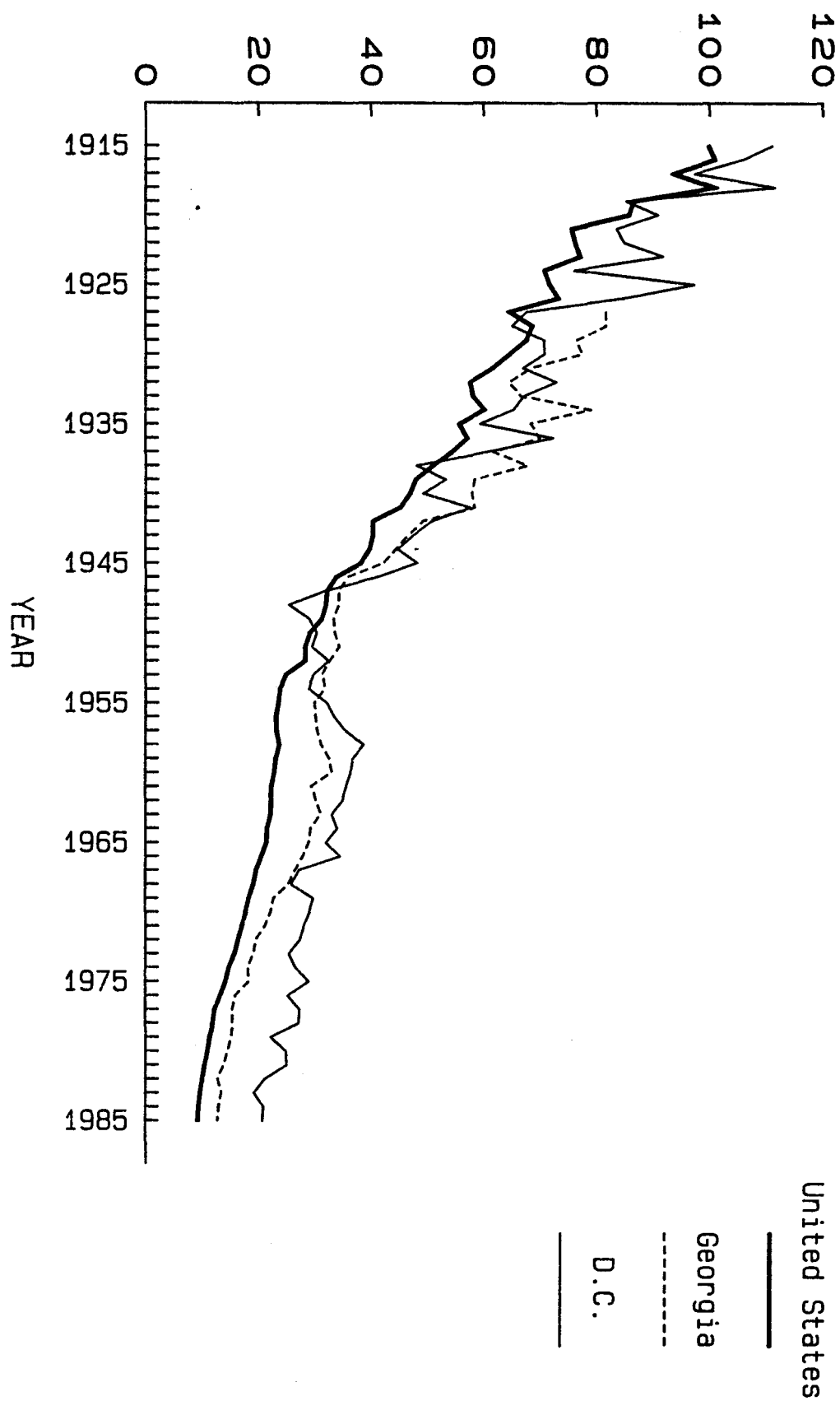
FIGURE 1
INFANT MORTALITY RATES BY RACE
UNITED STATES: 1915-1985



Source U.S. Vital Statistics

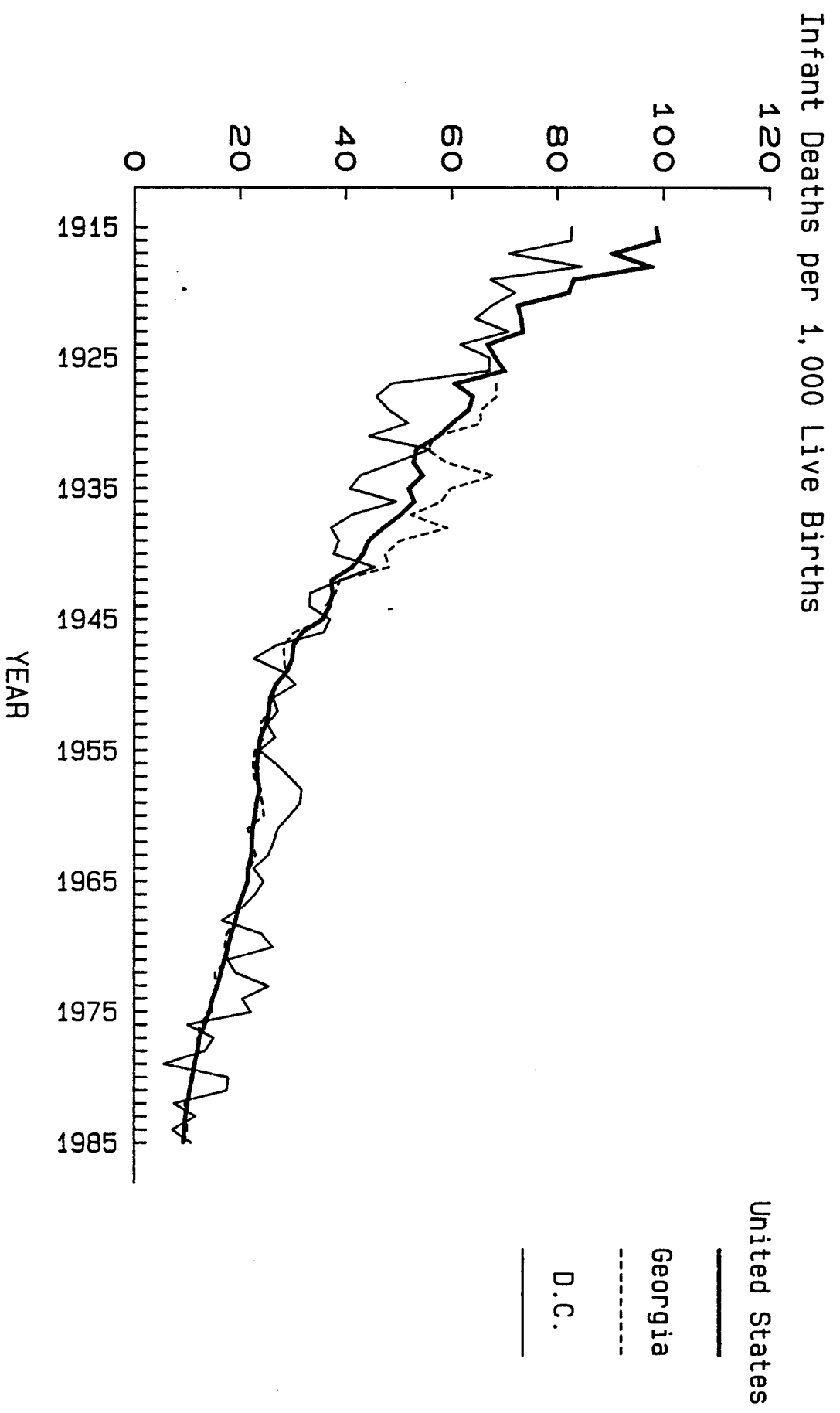
FIGURE 2
INFANT MORTALITY RATES: TOTAL POPULATION
GEORGIA, U.S., D.C.: 1915-1985

Infant Deaths per 1,000 Live Births



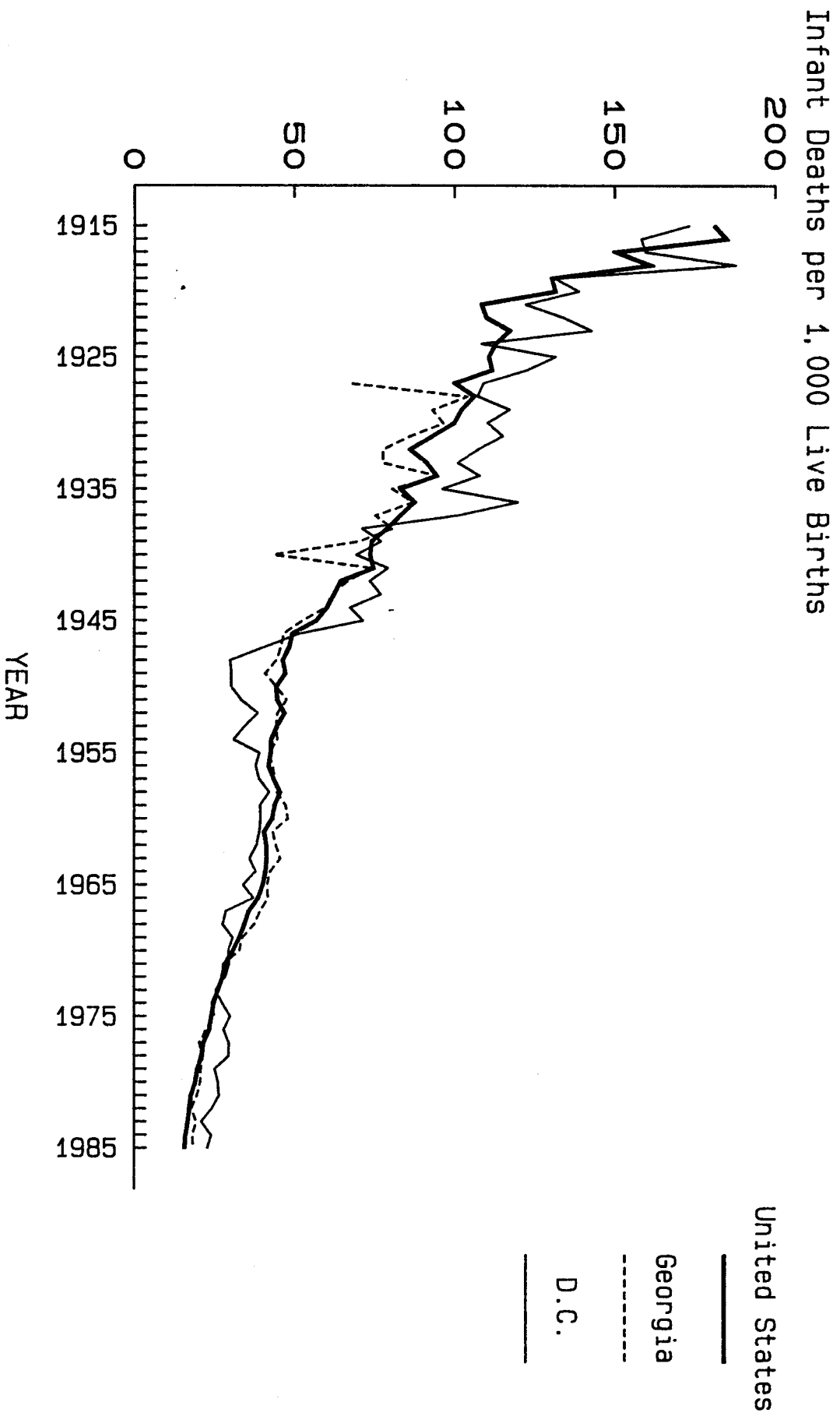
Source U.S. Vital Statistics

FIGURE 3
 INFANT MORTALITY RATES: WHITES
 GEORGIA, U.S., D.C.: 1915-1985



Source U.S. Vital Statistics

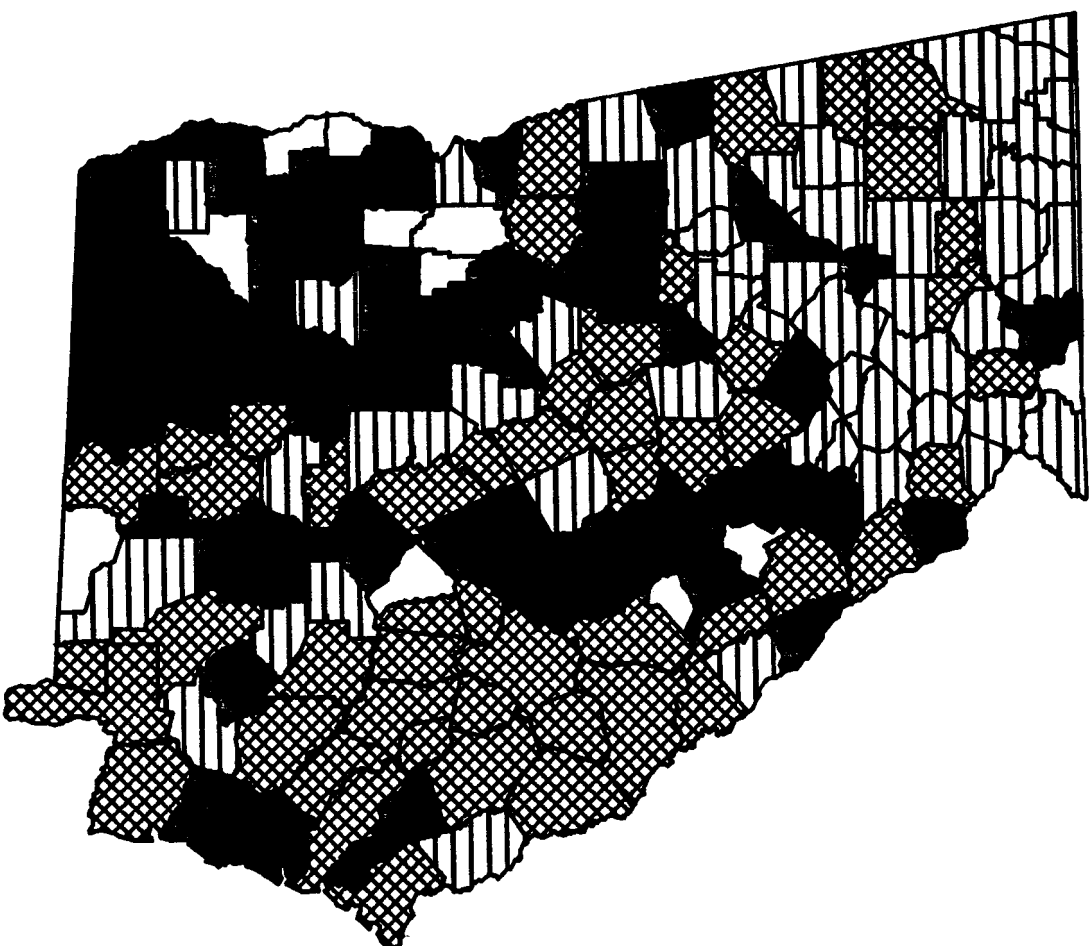
FIGURE 4
 INFANT MORTALITY RATES: BLACKS AND OTHER RACES
 GEORGIA, U.S., D.C.: 1915-1985



Source U.S. Vital Statistics

Figure 5

TOTAL INFANT DEATH RATES 1976-1987



INSUFFICIENT DATA

HIGH

MEDIUM

LOW

LOW = 7.6 to 12.9
MEDIUM = 12.9 to 16.5
HIGH = 16.5 to 28.5

GA RATE = 14.2

ISSUES FACING GEORGIA

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