Health Profile of Georgia's Children and Youth
On behalf of Healthcare Georgia Foundation, I would like to express my sincere thanks to Emory University, especially, Julie Gazmararian, Laura Gaydos and Aileen Beltran at the Rollins School of Public Health for their dedication and commitment to preparing this invaluable report. The depth of data and insight into the health needs of children in Georgia outlined in this report will certainly provide us with the solid underpinnings necessary to help the Foundation and its grantees be most effective in addressing these health challenges.

Gary D. Nelson, PhD
President
Healthcare Georgia Foundation

Acknowledgments

Ariadne DeSimone, Undergraduate Intern, Amherst College

Recommended Citation: Health Profile of Georgia’s Children and Youth, Julie Gazmararian, Laura Gaydos, and Aileen Beltran at the Rollins School of Public Health at Emory University, Healthcare Georgia Foundation, Publication #22, September 2007
Executive Summary

Healthcare Georgia Foundation seeks to advance the health of all Georgians by expanding access to affordable, high quality healthcare for underserved individuals and communities. To assist the Foundation in their mission, Emory University has developed this user-friendly inventory of selected health indicators of Georgia’s children and youth. The purpose of this report is to assist in identifying the needs of Georgia’s children and youth, and to assist the Foundation in strategic planning, allocating funding, and setting priorities.

In addition to being of value to the Foundation, this report will help researchers and public health practitioners plan for future surveillance efforts related to improving the health status of Georgians. Collectively, we will identify critical gaps in our knowledge and methods that should be targets for future research proposals and initiatives.

This summary report, Health Profile of Georgia’s Children and Youth, is an effort to compile notable data related to the health of Georgia’s children and youth. Data are grouped under six major areas: 1) Demographics; 2) Health insurance coverage and access; 3) Health behaviors; 4) Teen pregnancy; 5) Child health status; and 6) Infant outcomes. Snapshots of 18 health indicators are shown using graphics, maps and statistics.

Introduction
Demographic factors, such as age, race, education and income, are important to consider when examining health factors. Priority health indicators likely vary by age and race/ethnic groups. Lower status on many of these indicators is typically associated with lower utilization of preventive services, greater risk of disease and increased death rates. Georgia typically lags behind the rest of the country in terms of lower educational levels and income levels.

Age

- Nearly 28% of Georgians are aged 18 years and younger; 51% males and 49% females.
- In 2006, the approximate percentage of children in Georgia fell into the following age ranges: 28% of children were 0 to 4 years old, 39% of children 5-11 year olds, 16% of children 12-14 years old, and 16% of children 15-17 year olds.

Race

- Georgia’s children come from diverse racial and ethnic backgrounds.
Education

- In 2005-2006, 71% of all Georgia students who entered high school graduated.\textsuperscript{[4]}
- Georgia graduation rates vary by race and ethnicity.\textsuperscript{[4]}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{georgia_high_school_graduation.png}
\caption{Georgia High School Graduation by Percentage (2005-2006)}
\end{figure}

- In 2004, Georgia ranked forty-second in the country in percent of teens not attending school and not working (Georgia 11%, U.S. 9%).\textsuperscript{[5]} Georgia remains slightly higher than the national average of high school drop out rates; however, the percentage of teens who are high school drop outs have declined over the past five years in Georgia (from 16% to 10%) and nationally (from 11% to 7%).\textsuperscript{[6]}
- Over the past five years, in Georgia, the percentage of:
  - children enrolled in nursery school, preschool, or kindergarten has increased more (from 59% to 61%) than the national average (remained at 57%).\textsuperscript{[7]}
  - young adults enrolled in or having completed college have remained lower (from 26% to 29%) than the national average (from 36% to 40%).\textsuperscript{[5]}

Poverty

- In 2004, Georgia ranked thirty-ninth in the nation for percent of children in poverty (Georgia 20%, U.S. 18%).\textsuperscript{[6]}
- In 2004, 88% of Georgia’s children were food secure,\textsuperscript{a} 12% were food insecure: 9% without hunger and 3% with hunger.\textsuperscript{[8]}
- Poverty is more prevalent in African-American and Latino children than in Caucasian children.\textsuperscript{[9]}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{children_in_poverty.png}
\caption{Children in Poor Families in Georgia, by Race (2006)}
\end{figure}

\textit{a Food security for a household means that all members of the household has access at all times to a sufficient amount of food necessary to live a healthy life. The U.S. Department of Agriculture monitors the food security of the nation.}
Nationally, children with private health insurance (61%) are more likely to be in excellent health than children with Medicaid or other public coverage (41%).[10] Those children who depend on public programs such as PeachCare for health coverage in Georgia, may face losing their benefits due to funding shortfalls.

- In 2004, Georgia ranked forty-fourth in the nation for the proportion of children (0-17 years) that are covered by employer based insurance (GA 54%, US 61%).[2]
- Approximately 30 percent of Georgia children are covered by public insurance (PeachCare, Medicaid).[11]
- As of March 2006, 247,000 children were enrolled in PeachCare, well above the national average.[12]
- More Georgia children (32%) are covered by Medicaid than the national averages (26%).[13, 14]
- Approximately 65% of poor children in Georgia were covered by Medicaid compared to 59% in the U.S.[14]
Overweight and Obesity

Obesity is a growing problem for adults and children throughout the United States. Obese children are at an increased risk for various medical conditions including: hypertension, diabetes, asthma, decreased well-being (self-esteem), and sleep apnea.

- The percentage of overweight and obese children in Georgia has increased steadily over the past few decades. Among WIC children age 2 to <5 years, the percentage has risen from 21% in 1993 to 26% in 2002.[16]
- In 2003, Georgia was ranked thirty-sixth in the nation in percent of children and teens (age 10-17) who were obese or overweight (GA 32%, U.S. 31%).[6]
- Overweight or obesity is more common in males than females, middle school aged than high-school aged, African-Americans than Caucasians.[16, 17]

Prevalence of at Risk for Overweight and Overweight Among Students by School Type, Race and Sex, Georgia, 2003 [21]

<table>
<thead>
<tr>
<th></th>
<th>At risk for overweight*</th>
<th>Overweight†</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>Middle School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WM</td>
<td>15</td>
<td>20%**</td>
</tr>
<tr>
<td>WM</td>
<td>20</td>
<td>39%</td>
</tr>
<tr>
<td>BF</td>
<td>24</td>
<td>41%</td>
</tr>
<tr>
<td>WM</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>WM</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>BF</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>WM</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>WM</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>BF</td>
<td>41%</td>
<td></td>
</tr>
</tbody>
</table>

High School |                       |             |
| WM         | 19                      |             |
| BM         | 16                      |             |
| BF         | 24                      |             |
| BM         | 23                      |             |
| BF         | 29%                     |             |
| BM         | 33%                     |             |
| BF         | 13                      |             |
| BM         | 33%                     |             |
| BF         | 14                      |             |
| BM         | 19                      |             |

- Body mass index for age ≥ 85th percentile but <95th percentile
- Proportions may not add up due to rounding
- Body mass index for age ≥ 95th percentile
- Source: Georgia Students Health Survey

Health Behaviors
Physical Activity

Youth in Georgia do not get enough physical activity, leading to problems of obesity and chronic health issues.

- Youth in Georgia do not get enough physical activity. Georgia middle school students are more vigorously active\(^b\) (71%) than Georgia high school students (10%). However, both are still below the national Healthy People 2010 goal which aims to reach 85% across all sex, race, and grade levels.\(^{18}\)

![Percent of Youth Who are Vigorously Active in Georgia, 2005 \(^{17}\)](image)

- In Georgia, physical activity is more common among males than females and Caucasians than African-Americans.\(^{19}\)

Substance Abuse

- During the last decade (1993-2003) in Georgia, there have been overall decreases in the rates of substance abuse, especially among African-American students (38% to 27%); and 10\(^{th}\) grade students (47% to 36%).\(^{17}\)

- In Georgia, slightly more male high school students (49%) than female high school students (41%) had one drink of alcohol on one or more of the past 30 days in 2005.\(^{20}\)

- Approximately 17% of female students and 20% of male students had used marijuana one or more times during the past 30 days in 2005.\(^{20}\)

- Georgia students in the eighth grade have a higher percentage of lifetime\(^c\) alcohol (47%) and marijuana (13%) use than students in the sixth grade (27% life time alcohol, 5% lifetime marijuana).\(^{21}\)

---

\(^b\) Vigorous Activity: At least 20 minutes of physical activity that resulted in heavy breathing on 3 or more days per week.

\(^c\) Students have tried alcohol or drug at least once in their lifetime.
Alcohol and Other Drug Use by Race/Ethnicity in Georgia [20]

Tobacco

- Overall, male students are more likely to be smokers than female students; Caucasians and Latinos are more likely to be smokers than African-Americans,[22] and high school students are more likely to be smokers than middle school students.[23]

- From 1993-2003, there were significant decreases in the percentages of Georgia students who smoked a whole cigarette for the first time before age 13 among:
  - High school students overall: from 27% to 19%
  - Males students: from 29% to 22%
  - Female students: from 25% to 16%
  - Caucasian students: from 31% to 21%
  - Ninth grade students: from 29% to 18%.[17]

- However, there were no significant decreases between 1993-2003 in current cigarette and tobacco usage (chewing tobacco, snuff, or dip) among Georgia high school students (from 10% to 8%).[17]
Teen Pregnancy

Teen pregnancy rates throughout the United States have continuously declined over the past decade. However, the United States still faces one of the highest teen pregnancy rates in the world among developed nations. Preventing teen pregnancy is one of the most strategic ways to improve overall child wellbeing, in particular to reduce child poverty. Teen pregnancy is also closely linked to a host of other critical social issues including welfare dependency, responsible fatherhood, school failure, and workforce development.

- Georgia was ranked forty-first (close to the bottom) in teen pregnancy rate with 95 pregnancies per 100,000 teenage girls, compared to the national rate (84 per 1,000).[25]
- Latinos and African-Americans have higher rates than Caucasians in Georgia and the nation.[26]

While teen pregnancies have decreased across all racial groups in Georgia, African-American teens have shown the greatest decrease (34% compared to 15% percent for Caucasians and 24% for Latinas), but continue to maintain the highest rate of teen pregnancies.[26]
Child Mortality

Child mortality is a universal tragedy. However, impoverished children are significantly more likely to die than wealthier children, particularly due to injuries and accidents. The leading causes of child mortality are presented below.[27]

Georgia – 10 Leading Causes of Death, 2003, Both Sexes, All Races

<table>
<thead>
<tr>
<th>&lt;1 year</th>
<th>1–4 years</th>
<th>5–9 years</th>
<th>10–14 years</th>
<th>15–24 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Short gestation</td>
<td>Unintentional injury</td>
<td>Unintentional injury</td>
<td>Unintentional injury</td>
<td>Unintentional injury</td>
</tr>
<tr>
<td>2 Congenital anomalies</td>
<td>Homicide</td>
<td>Malignant neoplasms</td>
<td>Homicide</td>
<td></td>
</tr>
<tr>
<td>3 SIDS</td>
<td>Congenital anomalies</td>
<td>Congenital anomalies</td>
<td>Malignant neoplasms</td>
<td>Suicide</td>
</tr>
<tr>
<td>4 Maternal pregnancy complications</td>
<td>Heart disease</td>
<td>Homicide</td>
<td>Congenital anomalies</td>
<td>Heart disease</td>
</tr>
<tr>
<td>5 Unintentional injury</td>
<td>Influenza &amp; pneumonia</td>
<td>Heart disease</td>
<td>Heart disease</td>
<td>Malignant neoplasms</td>
</tr>
<tr>
<td>6 Respiratory distress</td>
<td>Malignant neoplasms</td>
<td>Suicide</td>
<td>Congenital anomalies</td>
<td>Congenital anomalies</td>
</tr>
<tr>
<td>7 Bacterial Sepsis</td>
<td>Chronic lower respiratory disease</td>
<td>Chronic lower respiratory disease</td>
<td>Influenza &amp; pneumonia</td>
<td>HIV</td>
</tr>
<tr>
<td>8 Circulatory system disease</td>
<td>Meningitis</td>
<td>Cerebrovascular</td>
<td>Cerebrovascular Cerebrovascular</td>
<td>Cerebrovascular</td>
</tr>
<tr>
<td>9 Perinatal Period</td>
<td>Diabetes mellitus</td>
<td>Meningococcal infection</td>
<td>Complicated pregnancy</td>
<td>Complicated pregnancy</td>
</tr>
<tr>
<td>10 Placenta cord membranes</td>
<td>Anemias</td>
<td>HIV</td>
<td>Diabetes mellitus</td>
<td>Diabetes mellitus</td>
</tr>
</tbody>
</table>

Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control

- Georgia’s child (23 per 100,000) and teenage (74 per 100,000) death rates are higher than the national data (21 per 100,000 and 66 per 100,000 respectively).[28, 29]
- Georgia ranked twenty-ninth in child mortality rates.[30]
- Between 1999 and 2003, Georgia’s child mortality rate (rate per 100,000) decreased from 27 to 23 percent and nationally as well from 23 to 21 percent; A decline was also seen in Georgia’s teen mortality rate (rate per 100,000) from 82 to 66 percent and nationally from 69 to 66 percent.[6]
Asthma

Asthma is one of the most common chronic diseases of childhood, affecting nearly four million children nationally. While asthma cannot be cured, it can be controlled in virtually all cases. However, many children continue to face significant morbidities from their asthma due to lack of treatment or poor adherence to treatment, making asthma the leader in causes of school absenteeism and a source of thousands of pediatric emergency department visits.

- In 2005, Georgia ranked 13\textsuperscript{th} in percentage of children suffering from asthma problems, with 15.9\% compared to 16.2\% nationally.[31]
- Around 10\% of children 17 and younger in Georgia have asthma. Of these children, 15\% are in middle school and 16\% are in high school.[32, 33]
- In 2005, female students (17\%) are more likely to have asthma than male students (15\%).[32, 33]
- Nationally, more African-American children (8\%) have asthma than Caucasians (5\%) and Latino (4\%) children.[34]

**Asthma Hospitalizations by Age Group, Georgia, 2004** [35]
Diabetes

Diabetes mellitus is a growing problem among children and adults in Georgia. In recent years, the number of children with type II diabetes – associated with obesity and lack of physical exercise – has increased drastically and has begun to be recognized as an emerging health crisis. The development of diabetes during childhood increases the likelihood of developing complications as a young adult as well as premature mortality.

- In Georgia, the current statewide prevalence of pediatric diabetes is unknown. However, in the United States, the percentage of children with type II diabetes ranges from 8% to 45%.[34]
- Although data are not available in children, in general, minorities are more likely than Caucasians to have diabetes or diabetes-related complications.[34]
- In recent years, the number of children with type 2 diabetes has significantly increased.[36]
- Among children in the U.S. who have diabetes, many of them are girls between the ages of 10-19 who have type II diabetes, which is related to inactivity and obesity; they usually belong to ethnic groups that are at higher risk for diabetes, have a family history of type II diabetes, are overweight or inactive, or have acanthosis nigricans (AN)- darkening of pigmentation and thickening of skin that can appear on various parts of the body, most common on the neck.[36]
Immunizations

- In 2004, Georgia was ranked thirteenth in the percent of children (aged 19-35 months) who are immunized (Georgia 85%, U.S. 81%).[12]
- In 2004, 93% of kindergarten children receive the polio, diphtheria, tetanus, and pertussis (DPT), measles, hepatitis B, and varicella vaccines.[38]
- A population-based study conducted in Georgia in 2004 showed that most childhood immunizations (70%) were administered in the private sector, while county health departments immunized 14%, and the sources for 16% were unknown.[39]
- In the 2005 Georgia Immunization Study, there were minimal differences in the immunization status of children by the race and education of their mothers.[37]

Hospitalizations

- The majority of children in the South,[4] come in contact with a health care professional every year.[10]
- In 2005, of the 26,700,000 children in the South, 609,000 children (2%) had unmet medical need and 1,034,000 (4%) had delayed care due to cost.[10]
- In 2005:
  - 2,089,000 children (8%) in the South had two or more visits to the emergency room in the past 12 months.
  - 10,973,000 children (74%) (aged under 18) in the South had last had a contact with a health care professional in the past 6 months or less.
  - 2,763,000 (16%) had last had a contact with a health care professional more than 6 months, but not more than 1 year.
  - 1,228,000 (7%) had last had a contact with a health care professional more than 1 year, but not more than 2 years.
  - 472,000 (1%) had last had a contact with a health care professional more than 2 years, but not more than 5 years.
  - 502,000 (1%) had last had a contact with a health care professional more than 5 years.[40]
Dental

Low-income children are more likely to have dental disease than children in higher income families and are less likely to have regular dental care. Poor oral health can have a significant impact on children’s overall health, growth and development, and learning. The Georgia Medicaid program implemented the “Take Five” program in October 2000 to encourage dental providers to serve at least five children enrolled in Medicaid per year.\textsuperscript{[41]}

\begin{itemize}
  \item Georgia has 3,900 private practice dentists. Eighteen counties (and parts of 10 other counties) are designated by the federal government as Dental Health Professional Shortage Areas.\textsuperscript{[42]}
  \item Among Georgia 3\textsuperscript{rd} grade children:
    \begin{itemize}
      \item More than half (56\%) have caries\footnote{Dental caries: cavities or holes in the outer two layers of a tooth—the enamel and the dentin. Dental caries are caused by bacteria which metabolize carbohydrates (sugars) to form organic acids which dissolve tooth enamel. If allowed to progress, dental caries may result in tooth decay, infection, and loss of teeth.} experience
      \item Approximately a quarter (27\%) have untreated dental decay
      \item Approximately 40\% have dental sealants
      \item Around 1 in 4 (26\%) need either early (22\%) or urgent (4\%) dental care
      \item Around 1 in 8 (13\%) could not get dental care when needed.\textsuperscript{[43]}
    \end{itemize}
  \item Only about a quarter of Medicaid and PeachCare insured children were able to see a dentist in FY 2000, because many dentists will not accept public insurance.\textsuperscript{[44]}
  \item Children from metropolitan Atlanta (20\%) are less likely to have untreated dental decay compared to children from rural areas (36\%).\textsuperscript{[43]}
  \item African-American children in Georgia are in more need of dental care than Caucasians (29\% and 24\% respectively).\textsuperscript{[43]}
\end{itemize}

\textbf{Percent of 3rd Grade Children Who Need Dental Care* by Sex, Race, and SES**, Georgia, 2000}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{percent.png}
\caption{Percent of 3rd Grade Children Who Need Dental Care* by Sex, Race, and SES**, Georgia, 2000}
\end{figure}

* Includes children who need early or urgent dental care  
** Based on Free and Reduced School Lunch Program eligibility
**Infant Health**

**Infant Mortality**

Infant mortality is used to compare the health and well-being of populations across and within countries. The infant mortality rate, the rate at which babies less than one year of age die, has continued to steadily decline over the past several decades, from 26 per 1,000 live births in 1960 to 7 per 1,000 live births in 2000. The United States ranks 36th in the world in infant mortality, driven largely by racial and income health care access disparities.

- In 2004, Georgia ranked forty-first in percent of infant mortality (infant deaths per 1,000 live births) with a higher mortality rate (8.4) than the U.S. (6.6).[^45]

- The African-American population has a higher infant mortality rate than the Caucasian population.[^46] There was an average of 12 African-American infant deaths per 1,000 live births and 4.7 Caucasian infant deaths per 1,000 live births in Georgia from 1994-2002.[^47] Due to the small numbers of deaths among Asians and Latinos, this data is not available for Georgia.

- In Georgia, the overall infant mortality rate declined approximately 13% between the years 1992-2002.[^48] However, the infant mortality rate of Caucasians has increased 84% from 3.5 deaths per 1,000 live births in 1994 to 6.8 deaths per 1,000 live births in 2002.[^47]

**Low Birth Weights and Preterm Births**

Preterm (< 37 weeks gestation) and low birth-weight (< 2,500 grams) babies face an increased risk of death and serious medical complications such as cerebral palsy, mental retardation and learning problems, chronic lung disease, and vision and hearing problems. Half of all neurological disabilities in children are related to premature birth. Despite decades of research, scientists have not yet developed effective ways to help prevent premature delivery. In fact, the rate of premature birth increased almost 31 percent between 1981 and 2003 (9.4 to 12.3%).[^49]

- In 2004, Georgia ranked forty-fourth in percent of low birth weight babies (Georgia 9.3% and U.S. 8.1%).[^49]
From 1990-2003 Georgia has shown an increased percentage of low birth weight births (from 8.7% to 9.0%) and remains higher than the national average; national percentages have also increased (from 7% to 7.9%).

Following national trends, African-American women in Georgia are more likely to give birth to babies of low birth weight than Caucasian or Asian women and are more likely to be preterm than Caucasian and Latino babies.

In 2004, 11% of Caucasian births (11.5% nationally), 17% of African-American births (17.9% nationally), and 10% of Latinos birth (12.0% nationally) were preterm births in Georgia.
Sudden Infant Death Syndrome

Sudden Infant Death Syndrome (SIDS) is the “sudden death of an infant under one year of age which remains unexplained after a thorough case investigation.” SIDS cases have continuously decreased with better understanding of infant sleeping positions. However, Georgia faces an extremely high SIDS rate compared to the national average, perhaps due to a failure of some healthcare providers and parents to accept the “back to sleep” recommendation for infants.

- Over the past two decades, Georgia’s rate (107 per 100,000 live births in 2001) of SIDS has consistently been higher than the U.S. rate (57 deaths per 100,000 births in 2001).\[^{52}\]
- Although the U.S. rate of SIDS has decreased over the past decade, Georgia’s rate has continued to increase.\[^{52}\]

![Infant Deaths Due to SIDS \[^{52}\]](image_url)


11. K Thorpe, Primary Data Analysis. 2007, Department of Health Policy and Management, Rollins School of Public Health, Emory University.


References


39. Georgia Department of Human Resources. *Immunization in Georgia*. Fact Sheets: Children Services 2004. Available from: http://dhr.georgia.gov/portal/site/DHR/menuitem.24259484221d3c0b50c8798dd03036a0/?vgnextoid=56c8e1d09cb4ff00VgnVCM100000bf01010aRCRD.


42. Georgia State Health Policy Center, *Child Policy Brief: Dental Care*. 2007, Andrew Young School of Policy Studies, Georgia State University.

44. Andrew Young School of Policy Studies: Georgia State University. *Dental Care: Child Policy Brief* [cited 2/21/07]; Available from: http://www2.gsu.edu/~wwwghp/publications/children/childpolbrf/cpdbdenhealth0101.pdf.


46. Georgia Department of Human Resources. *Infant Mortality* Fact Sheets: Children Services 2004. Available from: http://dhr.georgia.gov/portal/site/DHR/menuitem.24259484221d3c0b50c8798dd03036a0/?vgnextoid=56c8e1d09cb4ff00VgnVCM100000bf01010aRCRD.


