

The Link Between Education and Health



CENTER *for* POLICY
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AN OCTOBER 2008 REPORT RELEASED BY THE ROBERT WOOD JOHNSON FOUNDATION'S COMMISSION TO BUILD A HEALTHIER AMERICA PROVIDES COMPELLING EVIDENCE ABOUT THE LINK BETWEEN EDUCATION, INCOME AND CHILDREN'S HEALTH IN COLORADO. The national study, *America's Health Starts With Healthy Children: How Do States Compare?*, identified an enormous disparity in children's health that correlates with household income and parental educational achievement. Infant mortality rates for the least educated mothers increased by as much as 12 deaths per 1,000 live births compared to infant mortality rates for the most educated mothers, and babies born to mothers who did not complete high school were twice as likely to die before their first birthday than babies born to college graduates. Similarly, children in the poorest families were much more likely—as much as six times more likely in some states—to be in less than optimal health than children in the wealthiest families.

In Colorado, the disparity in children's health between well-educated, higher-income families and low-income, less educated households was more pronounced than the national average. The report found that:

- An estimated **38 percent of Colorado children living in low-income families were in less than optimal health**, compared to five percent of children in high income families and nine percent of children in middle income families.
- This **33 percent gap in health between Colorado's wealthiest and poorest children ranked the state 33rd in the nation**, significantly lower than the mere 6 percent gap in the highest ranked state—New Hampshire—and well below the 26 percent national average.

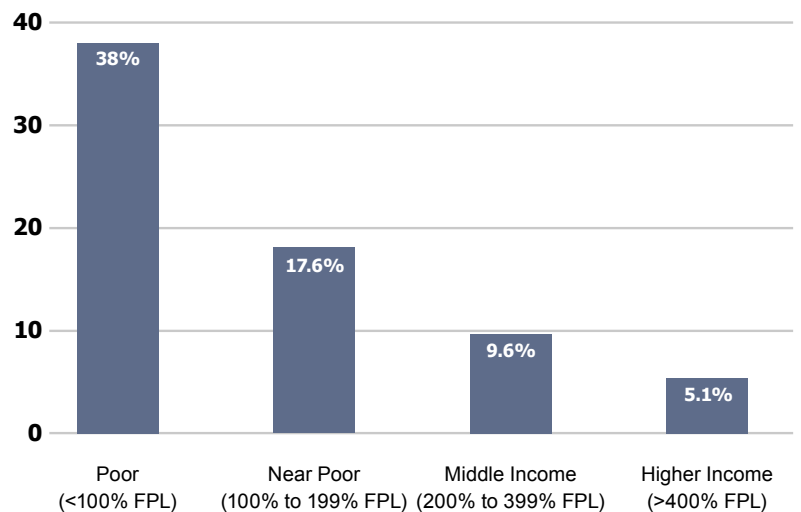
Even more striking, the report found that **Colorado children in households without a high school graduate parent are six times as likely to be in less than optimal health than children living with someone who has completed college.** Nearly 52 percent of Colorado children in households where the highest education level attained was less than a high school degree were not in optimal health. By comparison, fewer than 8 percent of children in households with at least some college education were in less than optimal health.

The study also indicates that parents' advanced postsecondary education and professional degrees can significantly affect the health of Colorado's children. **In Colorado, the infant mortality rate was highest for households with 0-11 years of school completed by the mother: 7.1 deaths per 1,000 live births.** Not surprising, the



Figure 1

Percent of Colorado Children in Less than Optimal Health by Household Income as Measured by the Federal Poverty Line (FPL)



Source: Robert Wood Johnson Foundation, October 2008

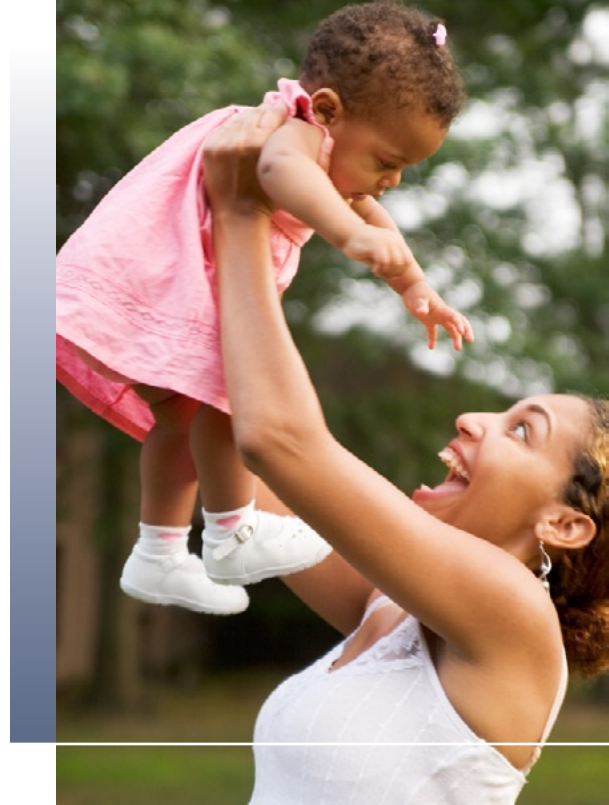
difference, when compared to infant mortality rates in Colorado's most educated households (those with 16 or more years of schooling), was large: 3.3 deaths per 1,000 live births. However, the mortality rate for babies born to mothers with 13-15 years of schooling—5.8 deaths per 1,000 live births—was also nearly twice the rate for more educated households, suggesting an even stronger link between postsecondary education and children's health.

Among the report's other key findings:

- Nationally, one third of children live in households where no one has education beyond high school. One third live with at least one person who has attended but not completed college. One third live with at least one college graduate.
- Educated parents are often better able to obtain good jobs with higher wages and increased access to health insurance.
- As educational achievement increases, non-marital births and the percentage of smokers decrease.
- Children in low-income families (below 100% of the Federal Poverty Level) and children in middle-income families (200-399% of the FPL) are more likely to be in less than optimal health than their higher-income peers.
- Children in households without a high school graduate are more than four times as likely to be in less than optimal health.

For minority communities, the report discovered that nationally, and in Colorado, education affected health outcomes even more dramatically. The study found that:

- **At each level of income, Hispanic and African American children are in worse health than non-Hispanic Caucasians.**



- Nationally, 32 percent of Hispanic/Latino adults with less than a high school diploma lack access to regular healthcare, compared with 19 percent of those with some college education.
- In Colorado, 34 percent of Hispanic/Latino children and 17 percent of African American children are in less than optimal health.
- By comparison, less than 7 percent of white, non-Hispanic children are in less than optimal health

Colorado's alarming gap in children's health between wealthy, well-educated households and low-income, less-educated households requires quick and bold action to improve both the state's educational attainment and children's health. By raising education levels, Colorado can dramatically affect the health and well-being of many of its residents.

In conjunction with the release of the report, the commission also unveiled an online calculator that vividly demonstrates the link between education and health. This interactive tool allows users to examine the current education levels in a state or

county and observe the affects of education on health in the jurisdiction.

The Education and Health Calculator is available online at:
<http://www.commissiononhealth.org/Calculator.aspx>

The Commission's full report and comparative state by state data are available online at:
<http://www.commissiononhealth.org/StateByStateData.aspx>

The Commission's report confirms other national data about the link between education and health. According to the Centers for Disease Control and Prevention (CDC), the reported occurrence of different diseases or medical conditions decreases as education levels increase, especially with bachelor's degree attainment or higher (see Table 1).

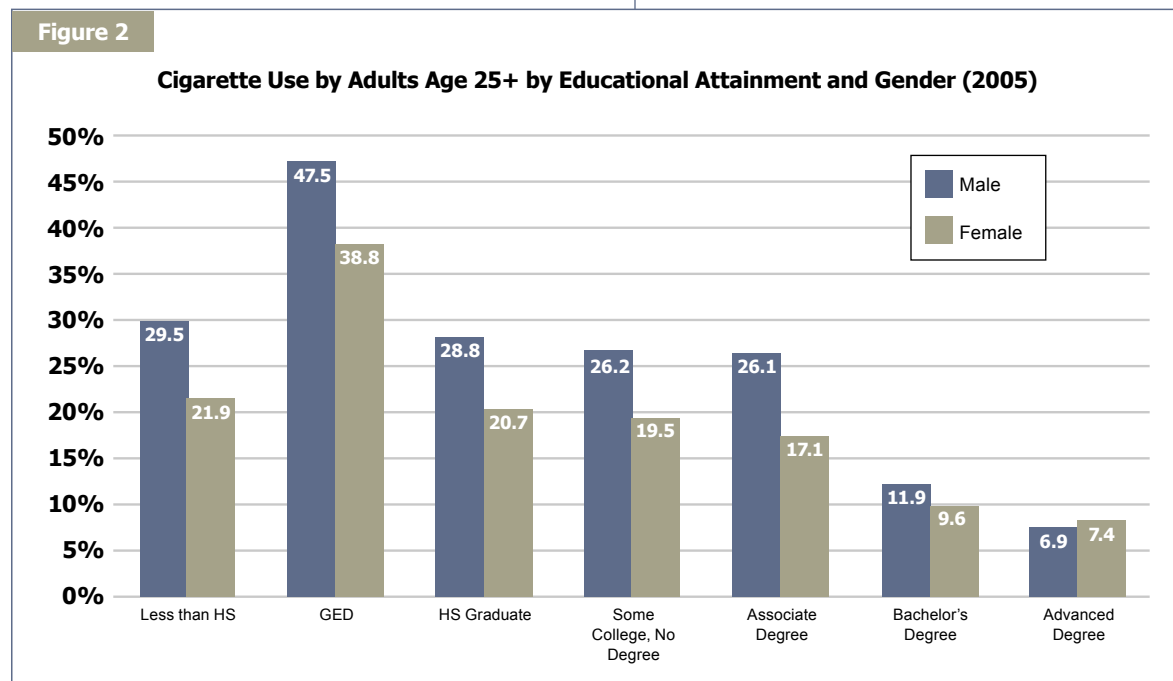
Additionally, overall death rates drop dramatically with increased education. In 2003, the CDC reported that the death rate for people with less than 12 years of education, age 25-64, was 720 per 100,000. By comparison, the death rate for individuals with 13 or more years of school

Table 1: Disease and Conditions of People Age 18+ (2005)

	Less than HS Graduate	HS Graduate	Some College	Bachelor's Degree or Higher
Coronary	10.1%	7.4%	7.3%	6.1%
Hypertension	28.3%	27.1%	26.1%	20%
Stroke	4%	2.9%	2.4%	1.9%
Diabetes	11.9%	8.6%	8.4%	5.9%
Ulcers	9.8%	8.1%	7.6%	6.0%
Kidney Disease	3.9%	1.8%	1.6%	1.1%
Liver Disease	2.1%	1.5%	1.5%	1.1%
Arthritis Diagnosis	25.9%	25.3%	25.9%	19.9%
Chronic Joint Symptoms	30.3%	29.4%	32.7%	25.4%
Migraines/Severe Headaches	17.5%	15.2%	16.2%	11.2%
Pain in Neck	17.0%	15.5%	18.2%	12.5%
Pain in Lower Back	34%	30.1%	33.2%	23.5%
Pain in Face or Jaw	5.1%	4.1%	5.6%	3.9%

Source: U.S. Department of Health & Human Services, Centers for Disease Control and Prevention, 2005.

completed was 214 per 100,000 people. The CDC also found that education dramatically reduces risky behaviors, such as cigarette smoking (Figure 2), and increases preventative health care including routine visits to the doctor and dentist. The consistent link between educational attainment and health demonstrates the critical importance of improving education in Colorado.



Source: U.S. Department of Health & Human Services, Centers for Disease Control and Prevention, 2005.

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Links

Robert Wood Johnson Foundation Commission to Build a Healthier America:
<http://www.commissiononhealth.org>

Centers for Disease Control and Prevention:
<http://www.cdc.gov>

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