



Northeastern University

---

Center for Labor Market Studies Publications

Center for Labor Market Studies

---

October 01, 2007

# The labor market consequences of dropping out of school in Illinois

Northeastern University - Center for Labor Market Studies

---

## Recommended Citation

Northeastern University - Center for Labor Market Studies, "The labor market consequences of dropping out of school in Illinois" (2007). *Center for Labor Market Studies Publications*. Paper 14. <http://hdl.handle.net/2047/d10015425>

This work is available open access, hosted by Northeastern University.

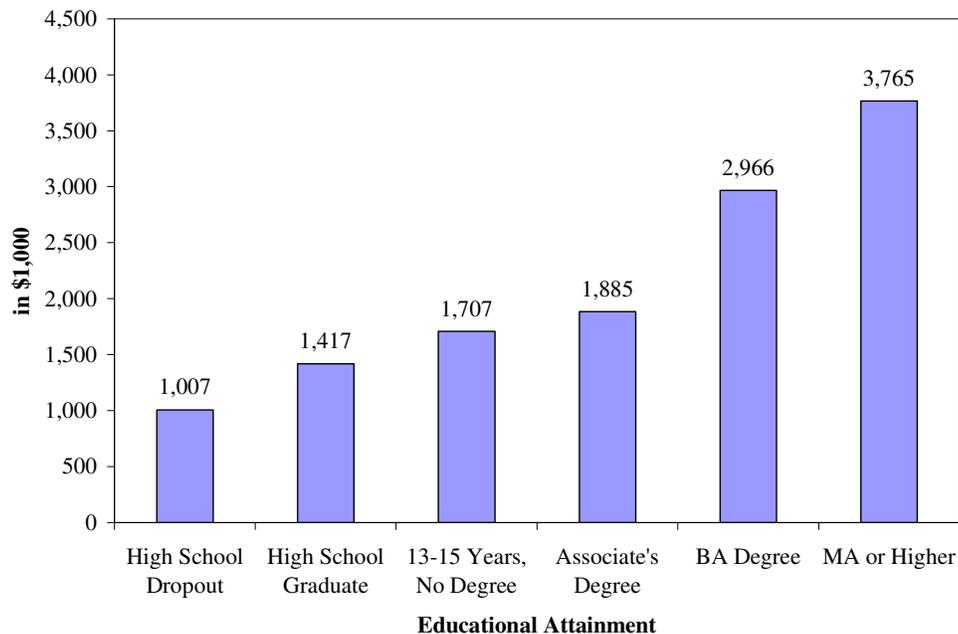
## **The Labor Market Consequences of Dropping Out of School in Illinois**

Dropping out of high school without obtaining a regular high school diploma has a number of adverse labor market consequences for adults in Illinois, especially for men whose employment rates and real annual earnings have been declining since the late 1970s. On every core measure of labor market success, adults (18-64 years old) in Illinois without high school diplomas are far worse off than their better educated peers. Employment rates of adults (men and women combined) in Illinois during calendar year 2005 were only 55% for high school dropouts versus 69% for high school graduates and 82% for those with a Bachelor's degree. As a consequence of their lower employment rates and their lower wages when employed, adult high school dropouts in Illinois had mean annual earnings of only \$15,650 in 2005 versus nearly \$23,000 for high school graduates and over \$50,000 for bachelor degree holders.

Over their entire working-life from ages 18-64, the mean expected lifetime earnings of dropouts (men and women combined) in Illinois were only \$723,000 versus \$1,078,000 for high school graduates, and \$2.210 million for four year college graduates. The absolute difference in mean lifetime earnings between high school graduates and dropouts in Illinois was \$355,000 and between bachelor degree holders and high school dropouts, the gap was closer to \$1.5 million.

Lifetime earnings differences by years of schooling are even larger for men in Illinois. Using available cross-sectional earnings data for males as of 2005, we estimate that male high school graduates in Illinois would earn \$410,000 more over their lifetime than their peers who failed to graduate from high school, and male bachelor degree holders would earn three times as much over their lifetime as high school dropouts, a difference of nearly \$2 million (Chart 1).

**Chart 1:**  
**Mean Lifetime Earnings of 18-64 Year Old Males in Illinois by Educational Attainment**  
(2005 Cross Sectional Results in \$1,000 of Dollars)

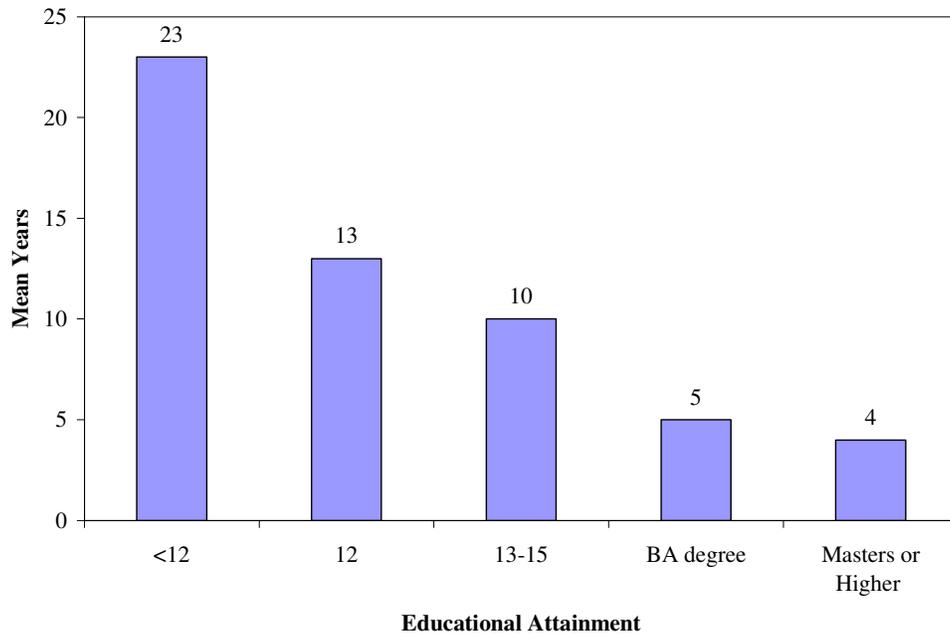


### **The Income Consequences of Dropping Out of High School in Illinois**

Due to their greater difficulties in finding steady employment, their lower weekly wages while employed, and their sharply lower marriage rates, Illinois adults without high school diplomas are far more likely to encounter income inadequacy problems than their better educated peers. In 2005, Illinois adults (18-64 years old) would be expected to spend 13 of these 47 years living in poverty or near poverty (125 percent of the poverty line) versus only 6 years for high school graduates and under 3 years for Bachelor degree holders.

Adults in Illinois without high school diplomas also were considerably more likely to be in a low income status, i.e., an annual family income less than two times the official poverty line. Over their working lives, high school dropouts would spend 23 years, or one half of their working life in a low income status versus 13 years for high school graduates, and only five years for those with a Bachelor's degree (Chart 2).

Chart 2:  
Expected Mean Years Living in a Low Income Family Among  
Illinois Adults (18-64) by Educational Attainment (2005)

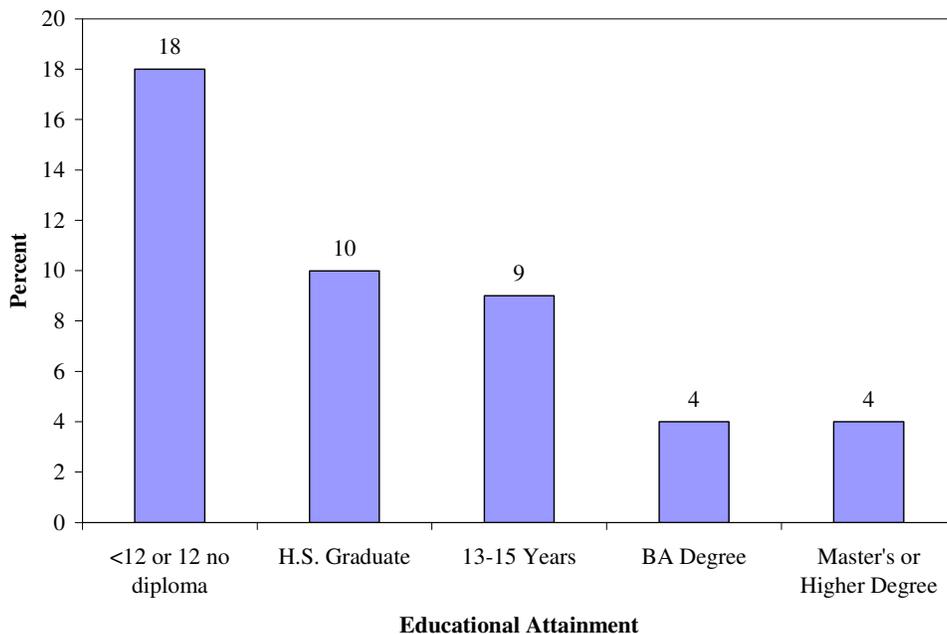


Due to their frequent low income problems, adult dropouts in Illinois in 2005 were the most likely to report receiving some cash public assistance income (TANF benefits, unemployment compensation, SSI disability, Social Security disability, general relief) to support themselves. Seventeen percent of the state’s adults without a high school diploma reported the receipt of some personal cash public assistance income to support themselves versus 12 percent of high school graduates, and only 6 percent of bachelor degree holders. High school dropouts also were far more likely than their better educated peers to report receiving in-kind public assistance (food stamps, rental subsidies, energy assistance, Medicaid insurance).

### **The Health Problems and More Limited Health Insurance Coverage of High School Dropouts in Illinois**

In addition to their higher incidence of labor market, earnings, income, and housing problems, high school dropouts in Illinois and the nation experience an above average incidence of health problems, lack health insurance coverage at an above average rate, and depend on the Medicaid system to provide their health care coverage, imposing high fiscal burdens on the rest of society.

Chart 3:  
Percent of 18-64 Year Old Adults in Illinois Reporting Their  
Health Status as Fair or Poor, March 2006



During 2006, over 18 percent of Illinois adults (18-64) without a high school diploma reported themselves to be in fair or poor health, nearly twice as high a share as high school graduates (10%) and nearly five times as high as four year college graduates (4%). One of every five adult dropouts in the state reported some type of physical or mental disability, an incidence nearly twice as high as among high school graduates (12 percent) and four times higher than Bachelor degree holders (5%).

Nearly 4 of every 10 non-elderly adult high school dropouts in Illinois indicated that they had no health insurance coverage in 2004, a non-coverage rate that was 50 percent higher than high school graduates and more than three times higher than four year college graduates. Only a minority (38 percent) of high school dropouts were covered by health insurance at their work sites, and 30 percent of them claimed that they obtained their health insurance coverage through Medicare or Medicaid. These non-elderly adult dropouts were twice as likely as high school graduates and ten times as likely as college graduates to be dependent on Medicaid or Medicare for their health insurance coverage. The high disability rates of dropouts and their much greater dependence on Medicaid/Medicare for their health insurance coverage imposes substantial fiscal burdens on the rest of society.

## **Marriage Rates, Out-of-Wedlock Childbearing, and the Family Income Position of High School Dropouts and Their Better Educated Peers in Illinois**

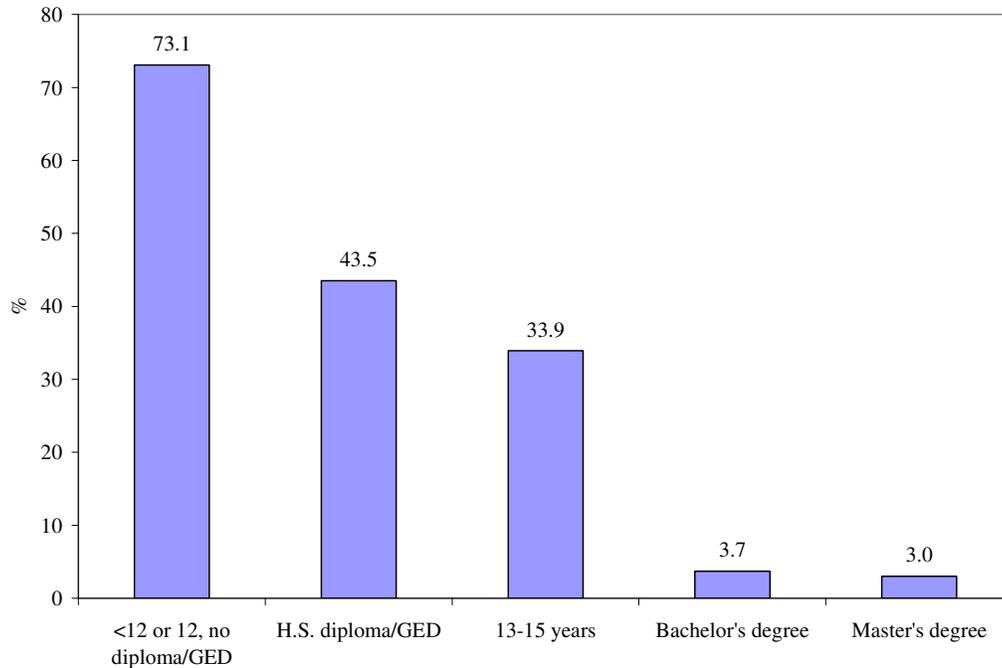
Over the past few decades, there have been steep declines in the real (inflation-adjusted) annual earnings of male high school dropouts in Illinois, and very limited gains in annual earnings among female dropouts. The substantial deterioration in the economic fortunes of many males with no high school diploma would be expected to reduce their attractiveness as marriage partners and increase the instability of their marriages. To identify changes in the marital status of Illinois men and women ages 20-64 in various educational attainment groups over time, we analyzed the findings of the decennial censuses from 1980 through 2000 and the 2005 American Community Surveys for the state of Illinois.

At the time of the 1980 Census, approximately 67 of every 100 native born males 20-64 years old in Illinois were married. By 2005, this ratio had declined to 57 of every 100. The declines in marriage rates were most severe among high school dropouts. Between 1980 and 2005, the structure of marriage rates among native born men by educational attainment in Illinois changed markedly. Male high school dropouts experienced a major decline (23 percentage points) in their rate of marriage between 1980 and 2005 followed by a sharp drop in marriage rates by high school graduates (-17 percentage points). Marriage rates of men in the other three higher educational groups either declined modestly or were unchanged over this 25 year period. The decline in marriage rates among adult high school dropouts in Illinois has not been confined to men. Adult women who failed to graduate from high school also have been characterized by very steep declines in their marriage rates over the past 25 years. This latter result is not surprising given the high rates of intermarriage among social classes.

The steep decline in marriage rates among poorly educated women has not been accompanied by anywhere near an equivalent decline in their rate of childbearing. As a consequence, however, a high and rising share of births to female dropouts in Illinois has been taking place out of wedlock. Findings of the 2005 American Community Surveys in Illinois were examined to identify the per cent of births to women (ages 15-50) that were out-of-wedlock. The share of births out-of-wedlock were estimated for native born women in five educational attainment subgroups. Statewide, 31 per cent of the births to women in the state were categorized as out-of-wedlock. However, among mothers lacking a high school diploma or a GED, 73 per cent of births took place out-of-wedlock in 2004-2005 (Chart 4). Out-of-wedlock births also

were quite high among female high school graduates (44%) in Illinois, but then fell very sharply for women with a Bachelor's or higher degree (3 to 4 per cent). The share of births to unmarried, native born women was 24 times higher among high school dropouts than among women with a Master's or more advanced academic degree.

Chart 4:  
Percent of Births to Native Born Women (15-50) That Were Out of Wedlock by Educational Attainment of the Mother, Illinois, 2005



Family structure also had an important independent effect on the percent of Illinois families with children that were poor or near poor. Married couple families in Illinois faced considerably lower rates of income inadequacy problems than single parent families. If the family headed by a high school dropout also was a single mother family, then the incidence of poverty/near poverty problems rose to 66 percent, or 2 out of every 3 of such families. Among married couple families headed by a dropout, only 28 percent were poor or near poor. Children raised in these low income families will face a series of adverse behavioral, cognitive, health, nutrition, and school performance problems for a sustained period of time. Those children raised in single parent families are also more likely to be subject to child abuse and commit more crimes as adolescents. These developmental problems will increase their risks of dropping out of

high school, becoming a teen parent, and becoming involved with the criminal justice system in their adolescent and early adult years.

## **Educational Attainment and the Mortality Rates of Young and Middle-Aged Adults**

In the preceding discussions, we have revealed that high school dropouts experience poorer health than their better educated peers, are less likely to be covered by any type of health insurance, are less affluent, and as a result are more likely to experience severe income inadequacy problems that affect their diet and nutrition. The combined effects of these health, nutrition, and medical care problems would be expected to increase mortality rates among less educated adults, thereby reducing their life expectancy.<sup>1</sup> To identify the links between the educational attainment of young and middle aged adults and their mortality rates over time, we analyzed the findings of the National Longitudinal Survey of Youth (1979) over a 25 year period, 1979-2004, to identify the numbers and characteristics of those sample members who had become deceased by the time of the 2004 followup interview.<sup>2</sup> There were approximately 12,700 14-21 year olds who were interviewed during the first round of the NLS surveys in 1979. The national sample was reduced in later years to approximately 7,000. Each followup survey included reasons for the inability to interview respondents, including death. The findings of the 1980 to 2004 followup interviews were analyzed to identify all those individuals who were deceased by 2004. Our sample estimates were weighted to reflect the potential population of 39-46 year olds in 2004.<sup>3</sup>

Overall, 3.5 per cent of the original population of 14-21 year olds in 1979 were deceased by 2004 (Table 1). Males were twice as likely to have died as females (4.5% vs. 2.3%). The mortality rates of this group of adults declined steadily and steeply with their years of educational attainment. Among those who left school before acquiring a high school diploma,

---

<sup>1</sup> Poorer less educated males are more likely to be the victims of violent crime, to commit crimes, and to spend more time in jail and prison with its attendant adverse consequences for future health and physical well-being.

<sup>2</sup> For a review of the design features of the original NLSY survey and early analyses based on its findings, See: (i) Michael E. Borus (Editor), Pathways to the Future: A Report on the National Longitudinal Survey of Youth Labor Market Experience, Youth Knowledge Development Report 2.7, U.S. Government Printing Office, Washington, D.C., 1980; (ii) Michael E. Borus (Editor), Youth and the Labor Market: Analyses of the National Longitudinal Surveys, W.E. Upjohn Institute for Employment Research, Kalamazoo, Michigan, 1984.

<sup>3</sup> The “potential population” includes those persons who were deceased in 2004 since we wish to calculate a mortality rate for key demographic subgroups of this population. The denominator includes all potential members in this age group.

7.4% were deceased by 2004 versus only 3.4% of high school graduates, 2% of Bachelor degree holders, and only slightly more than 1% of those who had completed some post-graduate work. High school dropouts were seven times more likely than their peers with post-graduate schooling to have died by 2004.

The statistical associations between levels of schooling and mortality rates were quite strong for both men and women (Table 1, Columns B and C). Approximately 9 per cent of male high school dropouts were deceased, a mortality rate twice as high as that of male high school graduates (4.2%) and 11 times as high as that of males who had completed some post-baccalaureate work. Among women, slightly over 5 per cent of those without a high school diploma were deceased, a mortality rate that was twice as high as that of high school graduates and four times higher than those of women who held a Bachelor's or higher academic degree.

Table 1:  
Death Rates Among U.S. Adults Who Would Have Been  
39-46 Years Old in 2004, All and by Gender  
(in %)

	(A)	(B)	(C)
Educational Attainment	All	Men	Women
High school dropout	7.4	8.8	5.2
High school diploma	3.4	4.2	2.5
1-3 years of college	2.7	4.1	1.6
Bachelor's degree	2.1	3.0	1.3
Post-graduate work	1.1	.8	1.4
Dropout/BA +	6.7*	11.0*	3.7*
All	3.5	4.5	2.3

Source: National Longitudinal Survey of Youth (1979), 1980-2004 survey rounds, tabulations by authors.

The death rates of males exceeded those of women both overall and in each educational attainment category except for those completing some graduate work. The mortality rates of males also varied by race-ethnic group with Black males experiencing the highest death rate (8.1%) versus a 5.5% mortality rate for Hispanics and a 3.6% mortality rate for Whites. For each group of males, mortality rates tended to decline with their level of schooling though not

uniformly.<sup>4</sup> In each race-ethnic group, male dropouts were the most likely to have died by 2004. The mortality rates of selected race-ethnic/educational attainment subgroups of males are displayed in Chart 5. The mortality rates ranged from a high of 11.6% among Black, male high school dropouts to 3.8% among Hispanic high school graduates to lows of .7 to 1.4 per cent among White and Black males who completed at least one year of schooling beyond the Bachelor's degree. The relative difference in mortality rates between Black, male high school dropouts and White males with some post-graduate schooling was nearly 17 times. Clearly, males who fail to graduate from high school face considerably shorter life expectancies in American society than their better educated peers. Life among many male dropouts, especially Blacks, tends to fit the description of Thomas Hobbes' view of life for man in an original state of nature as "short, nasty, and brutish".

---

<sup>4</sup> For example, among both Black and Hispanic males, those with a Bachelor's degree were characterized at times by higher mortality rates than high school graduates with no post-secondary schooling.

**Chart 5:**  
**Death Rates Among Selected Groups of 39-46 Year Old Males**  
**In the U.S. by Race-Ethnic Group and Educational Attainment in 2004**  
**(in %)**

