Live Long and Prosper: 
The Impact of Education on Mortality 

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Population Association of America
Krueger et al. (2015):

145,000 deaths attributed to U.S. adults having < HS education

550,00 deaths attributed to education < college education
Growing Importance of Education & Social Factors for Longevity

Why?

- Cruel Fate
- Random Accidents
- Bad Luck

Human Control
- Policies
- Knowledge
- Behaviors
“The rate of technological and human physiological change in the 20th century was remarkable” – Robert Fogel (2011)

Revolutionized (1) when we die, (2) the causes of death, and (3) the overall health of the U.S. population.
Rates of Childhood Mortality in United States, 1900-1999

Source: Guyer et al. 2000
Percent Deceased by Age, Born 1900 vs. Born 1940

Source: Berkeley Mortality Database 2015
The Growing American

A new book due out next month examines changes in body size of Western Europeans and Americans since the 1700s. The average height of native-born American men rose four inches between 1890 and 1980.

AVERAGE HEIGHT OF NATIVE-BORN AMERICANS

- 5 ft. 10"
- 5 ft. 9"
- 5 ft. 8"
- 5 ft. 7"
- 5 ft. 6"
- 5 ft. 5"
- 5 ft. 4"
- 5 ft. 3"
- 5 ft. 2"

*Data not available for women prior to 1910.

Source: “The Changing Body,” by Floud, Fogel, Harris and Hong
Mortality from Infectious Disease, USA, 1900 vs. 2010
(Rates per 100,000)

1900

Other Infectious Diseases
217.4

Pneumonia or Influenza
202.2

Tuberculosis
194.4

Gastrointestinal Infections
142.7

Diptheria
40.3

2010

16.2 (Pneumonia/Flu)
3.3 (GI)
2.4 (Other)
0.2 (TB)
0 (Diptheria)

46% of deaths in 1910 were from infectious diseases, compared to 3% in 2010.

Data: Centers for Disease Control
Mortality from Heart Disease and Cancer, USA, 1900 vs. 2010
(Rates per 100,000)

Heart disease and cancer have been leading causes of death for more than a century.

In 2010, they accounted for 47% of all deaths, compared to 12% in 1900.

Data Source: Centers for Disease Control
Mortality and Top 10 Causes of Death, USA, 1900 vs. 2010
(Rates per 100,000)

1900

All Causes: 1,719.1
Other, 620.1

Cancer, 64.0
Heart disease, 137.4
Senility, 50.2
Accidents, 72.3
Nephropathies, 88.6
Cerebrovascular disease, 106.9
Diphtheria, 40.3
Gastrointestinal infections, 142.7
Tuberculosis, 194.4
Pneumonia or Influenza, 202.2

2010

All Causes: 798.7
Other, 201.3

Cancer, 185.9
Heart disease, 192.9
Cerebrovascular disease, 41.8

Suicide, 12.2
Diabetes, 22.3
Noninfectious airways diseases, 44.6
Senility, 27.0
Accidents, 38.2
Nephropathies, 16.3
Pneumonia or Influenza, 16.2

Mortality from all causes declined 54% between 1900 and 2010.

Data Source: Centers for Disease Control
Larger Bodies, Longer Lives, Chronic Disease… and higher IQs?
“The nation’s current health trajectory is lower in success and higher in cost than it should be.”
- IOM (2013).

“When a population develops the wherewithal to avoid disease & death, individuals’ ability to benefit from that wherewithal is shaped by resources of knowledge, money, power, prestige, and beneficial social connections.”
- Link & Phelan (2011)