

Social Determinants of Health

In recent years, epidemiologists and other researchers concerned with improving the public's health have placed great emphasis on social and behavioral conditions affecting health. These determinants include 1) the social environment—the level and quality of connectedness with friends, family, and community along with socio-economic conditions such as unemployment and job control, income inequality, and race/ethnicity, and the availability of resources to meet basic daily needs; 2) the physical environment—the natural environment such as improved water and sanitation and the built environment—buildings, spaces, transportation systems, and products created or modified by people. The social and physical environmental levels are significantly interconnected; multi-level interventions that change policies and improve the social and physical environments can have a long-lasting impact on outcomes.

Two powerful social determinants of health are income and education. Both relate to health care access. The National Longitudinal Mortality Study cited in the Institute of Medicine's report, *The Future of the Public's Health*, found that mortality was associated with income, education, and occupation. Another 16-year study, also cited in the report, found that median family income in one's zip code of residence was predictive of death from a variety of causes.

There is a strong relationship between social and economic status and risk-related health behaviors such as smoking, physical inactivity, less nutritious diet, and heavy alcohol consumption. After reviewing a number of studies, the Institute of Medicine report concluded that those with more economic and social resources tend to adopt health-promoting behaviors and reduce risky behaviors at a faster rate than those who had fewer resources.

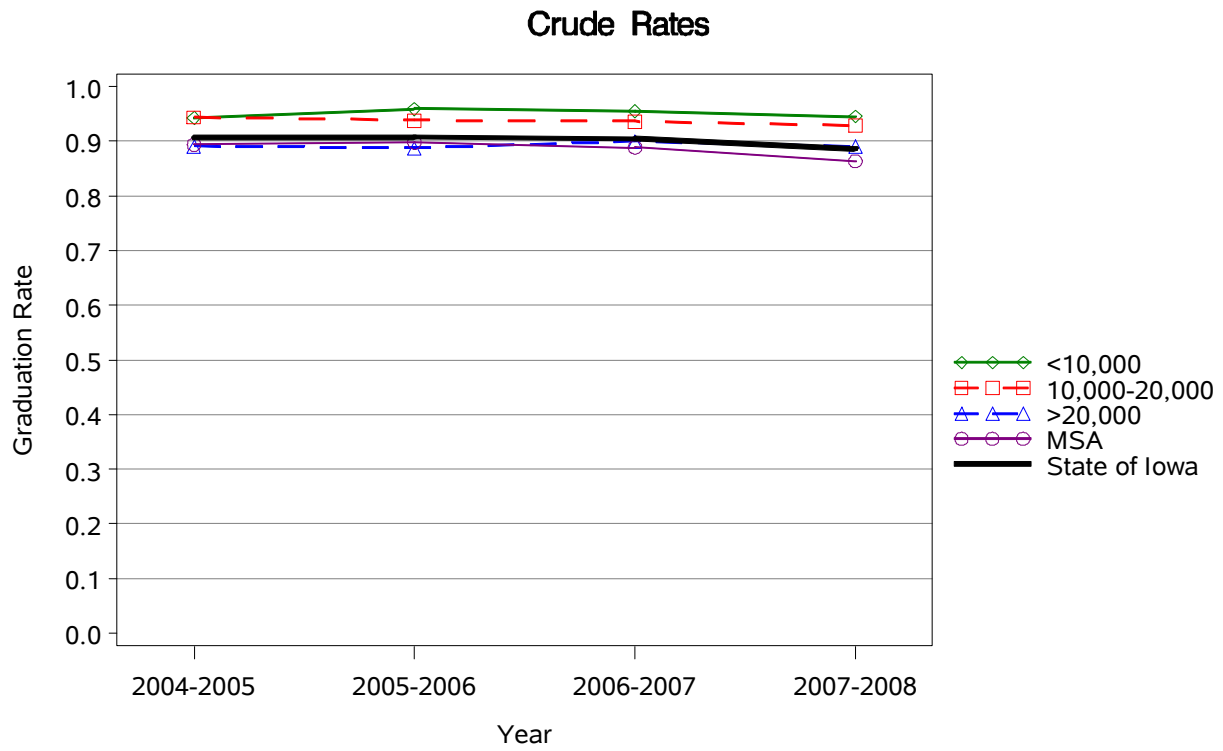
Source: Institute of Medicine, The Future of the Public's Health in the 21st Century, pp. 58-60

High School Graduation Rates 2007-2008

	County	# Diplomas	Crude	County	# Diplomas	Crude	
Counties with Average Population < 10,000	Adair	83	0.95	Lucas	103	0.97	
	Adams	68	1.00	Monona	128	0.96	
	Audubon	83	0.93	Monroe	81	0.91	
	Clarke	128	0.94	Osceola	68	0.91	
	Davis	103	0.95	Palo Alto	147	0.99	
	Decatur	67	0.96	Pocahontas	108	0.96	
	Fremont	117	0.94	Ringgold	52	0.91	
	Greene	115	0.95	Taylor	75	0.89	
	Howard	182	0.92	Van Buren	90	0.96	
	Humboldt	131	0.92	Wayne	99	0.94	
	Ida	123	0.97	Worth	100	0.94	
				Total	2,251	0.95	
	Counties with Average Population 10,000 – 20,000	Allamakee	218	0.97	Hardin	213	0.93
		Appanoose	162	0.96	Iowa	230	0.97
Buena Vista		263	0.89	Jefferson	151	0.90	
Butler		146	0.99	Keokuk	149	0.97	
Calhoun		174	0.96	Kossuth	156	0.92	
Cass		210	0.90	Louisa	218	0.85	
Cedar		276	0.90	Lyon	146	0.97	
Cherokee		150	0.96	Mitchell	146	0.99	
Chickasaw		156	0.98	Montgomery	140	0.89	
Clay		210	0.91	O'Brien	200	0.87	
Clayton		207	0.96	Page	213	0.94	
Crawford		254	0.92	Poweshiek	215	0.89	
Delaware		272	0.97	Sac	151	0.99	
Dickinson		217	0.97	Shelby	159	0.94	
Emmet		125	0.94	Tama	159	0.89	
Floyd		199	0.86	Union	136	0.91	
Franklin		164	0.98	Winnebago	204	0.92	
Hamilton		232	0.88	Wright	200	0.96	
Hancock		167	0.94	Total	6,988	0.93	
Counties with Average Population > 20,000	Boone	317	0.90	Lee	387	0.84	
	Buchanan	227	0.96	Mahaska	211	0.91	
	Carroll	221	0.92	Marion	459	0.95	
	Cerro Gordo	480	0.91	Marshall	466	0.81	
	Clinton	584	0.90	Muscatine	485	0.85	
	Des Moines	446	0.81	Plymouth	319	0.96	
	Fayette	353	0.93	Sioux	328	0.94	
	Henry	247	0.90	Wapello	446	0.86	
	Jackson	239	0.94	Webster	390	0.83	
	Jasper	444	0.92	Winneshiek	229	0.98	
				Total	7,278	0.89	
MSA Counties	Benton	301	0.93	Linn	2,278	0.89	
	Black Hawk	1,168	0.82	Madison	209	0.95	
	Bremer	425	0.98	Mills	183	0.93	
	Dallas	713	0.93	Polk	4,083	0.80	
	Dubuque	1,025	0.88	Pottawattamie	1,050	0.81	
	Grundy	210	0.96	Scott	1,804	0.84	
	Guthrie	189	0.97	Story	818	0.95	
	Harrison	242	0.96	Warren	638	0.96	
	Johnson	1,023	0.94	Washington	254	0.97	
	Jones	262	0.93	Woodbury	1,170	0.82	
				Total	18,045	0.86	
State Total		34,562	0.89				

Source: Iowa Department of Education, Bureau of Planning, Research, Development, and Evaluation, Project EASIER

High School Graduation Rates 2007-2008



Poverty Levels 2007

	County	%	% Margin of Error ¹	County	%	% Margin of Error ¹	
Counties with Average Population < 10,000	Adair	11.3	2.4	Lucas	13.9	3.1	
	Adams	10.8	2.5	Monona	13.4	2.9	
	Audubon	10.2	2.2	Monroe	10.4	2.3	
	Clarke	11.4	2.6	Osceola	8.3	2	
	Davis	12.9	3	Palo Alto	9.9	2.1	
	Decatur	19.3	4	Pocahontas	11.2	2.6	
	Fremont	11.4	2.5	Ringgold	14	3.1	
	Greene	10.3	2.3	Taylor	11.1	2.3	
	Howard	12	2.5	Van Buren	13.3	3	
	Humboldt	9.5	2.2	Wayne	15.6	3.4	
	Ida	9.4	2.3	Worth	9	2.1	
				Total			
	Counties with Average Population 10,000 – 20,000	Allamakee	10.2	2.3	Hardin	9.6	2.1
		Appanoose	18.5	4.1	Iowa	6.2	1.4
Buena Vista		10.6	2.3	Jefferson	12.2	2.7	
Butler		9.7	2	Keokuk	12.1	2.6	
Calhoun		11	2.4	Kossuth	9	1.8	
Cass		13	2.7	Louisa	10.6	2.3	
Cedar		7.4	1.6	Lyon	7	1.6	
Cherokee		8.3	2	Mitchell	9	2	
Chickasaw		8	1.7	Montgomery	11.1	2.5	
Clay		10.2	2.3	O'Brien	8.4	1.9	
Clayton		10.9	2.2	Page	12.2	2.6	
Crawford		11.3	2.4	Poweshiek	10.6	2.3	
Delaware		9.9	2.2	Sac	10.6	2.3	
Dickinson		7.3	1.6	Shelby	9.5	2.1	
Emmet		11	2.5	Tama	10.8	2.2	
Floyd		12.1	2.6	Union	13.3	2.9	
Franklin		10.1	2.3	Winnebago	9.3	2.1	
Hamilton		8.4	1.9	Wright	11.1	2.4	
Hancock		8.4	1.8	Total			
Counties with Average Population > 20,000	Boone	10.7	2	Lee	13.7	2.8	
	Buchanan	10.3	2.3	Mahaska	13.5	2.6	
	Carroll	8.6	1.7	Marion	10	2	
	Cerro Gordo	11.4	2.2	Marshall	14.1	2.3	
	Clinton	11.5	2.2	Muscatine	10.7	2.2	
	Des Moines	13.1	2.6	Plymouth	6.4	1.4	
	Fayette	11.9	2.3	Sioux	7	1.4	
	Henry	11.8	2.6	Wapello	17.7	3.3	
	Jackson	10.8	2.2	Webster	13.3	2.6	
	Jasper	8.8	1.8	Winnesiek	10.4	2.1	
			Total				
MSA Counties	Benton	7.2	1.6	Linn	9.9	1.2	
	Black Hawk	16.9	2.3	Madison	7.4	1.7	
	Bremer	6.8	1.6	Mills	12.6	2.2	
	Dallas	5.3	1.1	Polk	9.4	1	
	Dubuque	8.8	1.6	Pottawattamie	10.9	2	
	Grundy	6	1.4	Scott	11.4	1.6	
	Guthrie	9	2	Story	14.4	2.1	
	Harrison	10.2	2.2	Warren	6.9	1.6	
	Johnson	15.5	1.8	Washington	8.2	1.7	
	Jones	10	2.4	Woodbury	14.3	2.3	
			Total				
State Total		11	0.3				

¹Based on 90% confidence intervals

Source: U.S. Census Bureau, Small Area Income & Poverty Estimates

Uninsured (Under 65) 2005

	County	%	% Margin of Error ¹	County	%	% Margin of Error ¹	
	Counties with Average Population < 10,000	Adair	13.9	2.3	Lucas	8.6	1.9
Adams		12.5	2.4	Monona	11.4	2.3	
Audubon		17.5	3.1	Monroe	9.5	2.0	
Clarke		11.0	2.2	Osceola	12.5	2.5	
Davis		15.9	2.6	Palo Alto	12.2	2.6	
Decatur		13.7	2.6	Pocahontas	14.7	2.6	
Fremont		11.9	2.3	Ringgold	15.3	2.9	
Greene		11.2	2.2	Taylor	15.4	2.8	
Howard		11.0	2.4	Van Buren	13.1	2.6	
Humboldt		10.2	2.0	Wayne	14.0	2.7	
Ida		14.6	2.6	Worth	13.3	2.3	
				Total	12.6		
Counties with Average Population 10,000 – 20,000		Allamakee	17.5	3.0	Hardin	12.2	2.3
		Appanoose	9.6	1.6	Iowa	12.0	2.2
	Buena Vista	16.2	2.8	Jefferson	12.4	2.3	
	Butler	13.6	2.4	Keokuk	14.0	2.5	
	Calhoun	13.2	2.5	Kossuth	12.4	2.5	
	Cass	8.9	1.7	Louisa	15.5	2.6	
	Cedar	10.8	2.0	Lyon	15.2	2.7	
	Cherokee	11.4	2.1	Mitchell	11.5	2.1	
	Chickasaw	12.5	2.4	Montgomery	9.1	1.9	
	Clay	10.1	2.1	O'Brien	11.0	2.2	
	Clayton	15.9	2.9	Page	8.0	1.7	
	Crawford	14.3	2.6	Poweshiek	10.2	2.0	
	Delaware	12.7	2.4	Sac	15.9	2.8	
	Dickinson	12.1	2.3	Shelby	11.0	2.1	
	Emmet	12.3	2.4	Tama	12.4	2.5	
	Floyd	9.6	2.0	Union	8.7	1.9	
	Franklin	14.7	2.6	Winnebago	8.4	1.8	
	Hamilton	10.1	1.8	Wright	12.0	2.2	
	Hancock	12.8	2.4	Total	12.2		
Counties with Average Population > 20,000	Boone	8.7	1.8	Lee	8.0	1.7	
	Buchanan	10.8	2.2	Mahaska	7.7	1.5	
	Carroll	9.7	1.9	Marion	8.5	1.7	
	Cerro Gordo	8.2	1.7	Marshall	9.9	1.8	
	Clinton	7.2	1.6	Muscatine	8.8	1.6	
	Des Moines	7.2	1.5	Plymouth	10.8	1.9	
	Fayette	10.5	2.1	Sioux	13.9	2.4	
	Henry	8.4	1.8	Wapello	9.3	1.6	
	Jackson	11.3	2.3	Webster	8.7	1.5	
	Jasper	8.4	1.7	Winneshek	12.5	2.4	
				Total	9.1		
MSA Counties	Benton	10.8	2.1	Linn	9.3	1.4	
	Black Hawk	8.5	1.6	Madison	11.4	2.1	
	Bremer	9.7	1.8	Mills	9.4	1.8	
	Dallas	11.1	2.0	Polk	9.1	1.2	
	Dubuque	8.9	1.8	Pottawattamie	10.0	1.7	
	Grundy	15.3	2.5	Scott	8.5	1.4	
	Guthrie	15.5	2.6	Story	16.8	2.6	
	Harrison	9.5	1.8	Warren	8.7	1.6	
	Johnson	13.0	2.2	Washington	12.4	2.4	
	Jones	11.2	2.2	Woodbury	10.5	1.7	
				Total	10.0		
State Total		10.4	0.6				

¹Based on 90% confidence intervals

Source: U.S. Census Bureau, Small Area Health Insurance Estimates

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