

Informing Policy. Improving Health.

County Health Rankings & Roadmaps

Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

2017 Kansas County Health Rankings Role of social and economic drivers in shaping community health

Gianfranco Pezzino, M.D., M.P.H. April 13, 2017 | 11 a.m. to 2 p.m. Kansas Health Institute



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HELLO, I AM GIANFRANCO PEZZINO.



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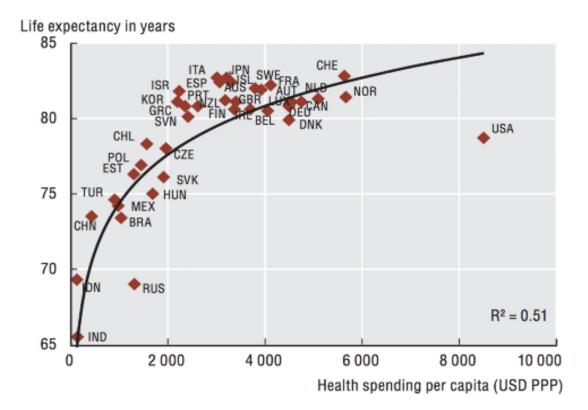
OVERVIEW

- Drivers of Health
- County Health Rankings: 2017 results
- Why is this relevant to partners outside of public health?
- How can we work together to improve health in Kansas?

DRIVERS OF HEALTH

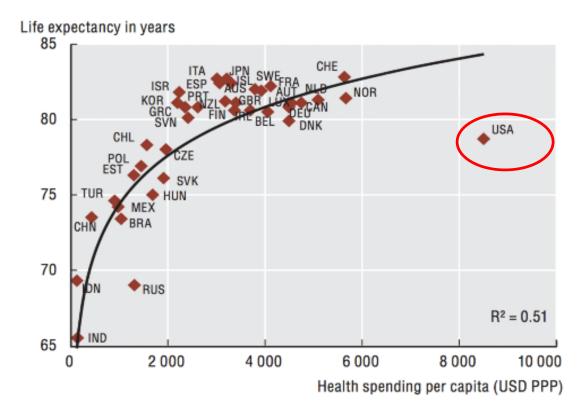
Life expectancy at birth vs. health spending per capita, 2011 (or nearest year)

Source: Health at a Glance 2013: OECD Indicators



Life expectancy at birth vs. health spending per capita, 2011 (or nearest year)

Source: Health at a Glance 2013: OECD Indicators



NATIONAL HEALTH EXPENDITURE **COMPONENTS**, 2015 **Prescription Drug** Expenditures 10% Public Health Activity 3% Other Health Expenditures* Research 23% 2% **Professional Services** Hospital care 26% 36%

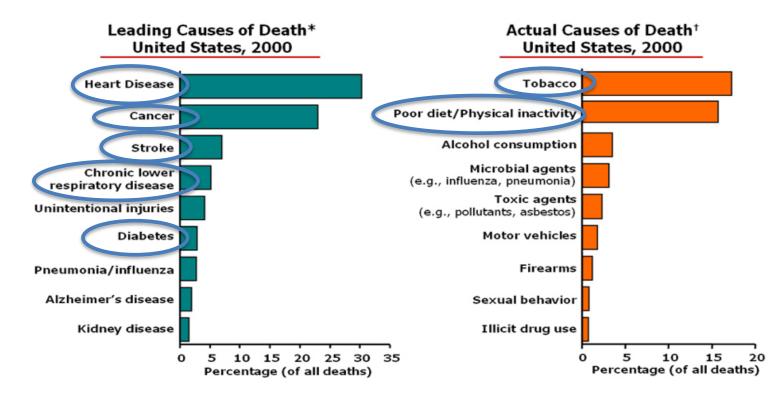
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Source: National Center for Health Statistics, CDC

PARTICULARLY PERPLEXING *IF* HEALTH CARE = HEALTH

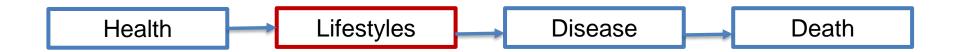
WHAT DO PEOPLE DIE FROM? "ACTUAL CAUSE" MODEL





* Miniño AM, Arias E, Kochanek KD, Murphy SL, Smith BL. Deaths: final data for 2000. National Vital Statistics Reports 2002; 50(15):1-120.
 † Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual causes of death in the United States, 2000. JAMA. 2004;291(10):1238-1246.

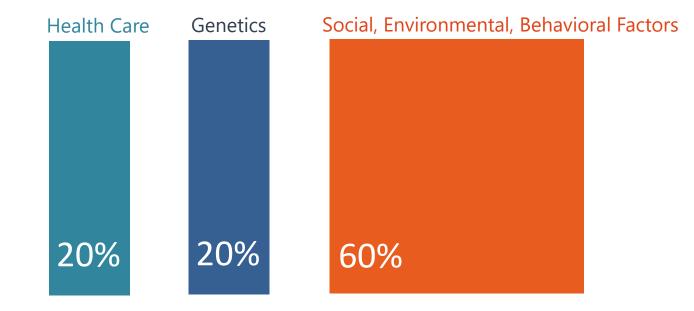
WHAT DO PEOPLE DIE FROM? "ACTUAL CAUSE" MODEL



THE ROOT CAUSES

- Why do people adopt unhealthy lifestyles?
- What drives individual decisions about personal health?
- Are there other factors that affect health outcomes?

WHAT DETERMINES HEALTH?

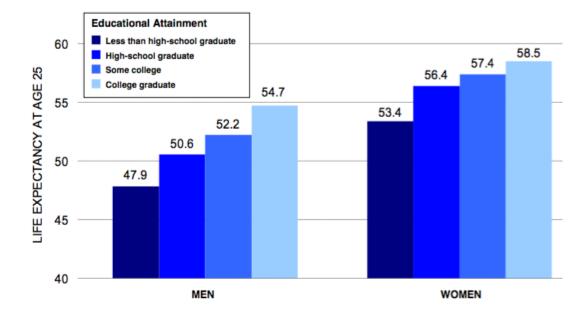


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EDUCATION

EDUCATION & HEALTH OUTCOMES: LIFE EXPECTANCY



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Source: Egerter S, Braveman P, Sadegh-Nobari T, Grossman-Kahn R, and Dekker M. Education and Health. Robert Wood Johnson Foundation, May 2011

PATHWAYS FROM EDUCATION TO HEALTH

- Better knowledge healthy lifestyles
- Income, housing, access to health care, living environment

better jobs

- Coping mechanisms
- Sense of control
- Problem solving

- better attitude

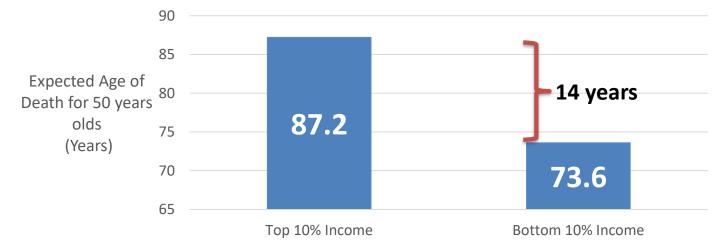




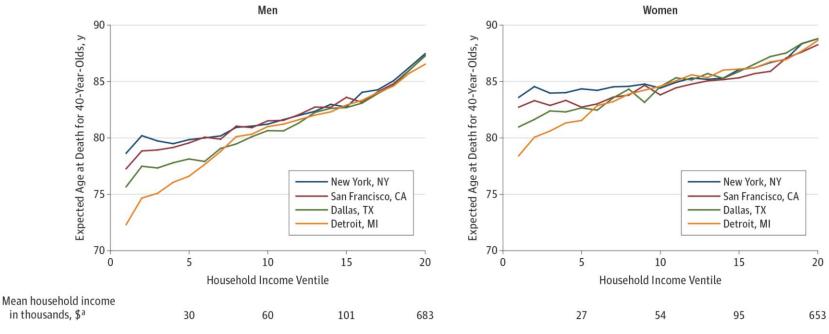
POVERTY

INCOME & HEALTH OUTCOMES: LIFE EXPECTANCY

Life Expectancy For Men Born in 1950 By Level of Income



WHERE YOU LIVE MATTERS (ESPECIALLY IF YOU ARE POOR...)



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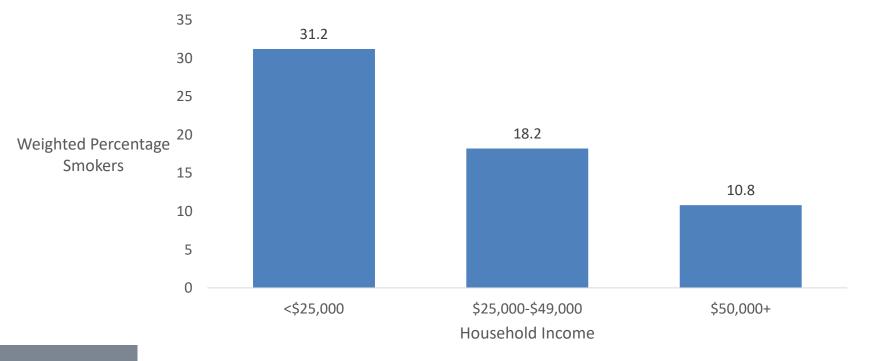
Copyright © 2016 American Medical Association. All rights reserved.

Source: JAMA. 2016;315(16):1750-1766. doi:10.1001/jama.2016.4226



SMOKING

SMOKING PREVALENCE BY ANNUAL HOUSEHOLD INCOME-KANSAS, 2014



WHY DO LOW-INCOME PEOPLE SMOKE MORE?



Aggressive marketing in low-income neighborhoods

- 3x as many brand ads
- Cheaper cigarettes, more retailers, larger ads





Less access to tobacco cessation programs

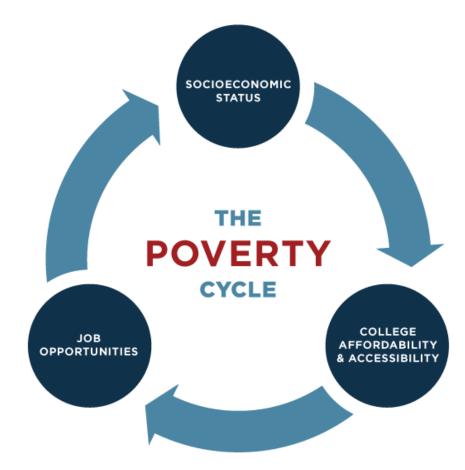


Social norm and peer pressure - Smoking more common and acceptable



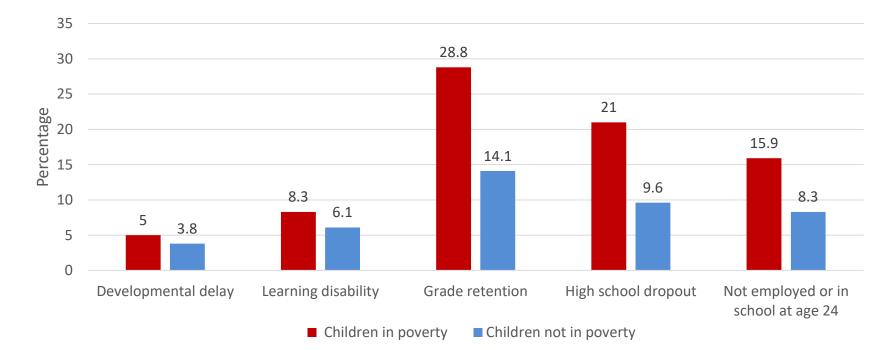
Stress management

- Exposure to violence
- Childhood adversity



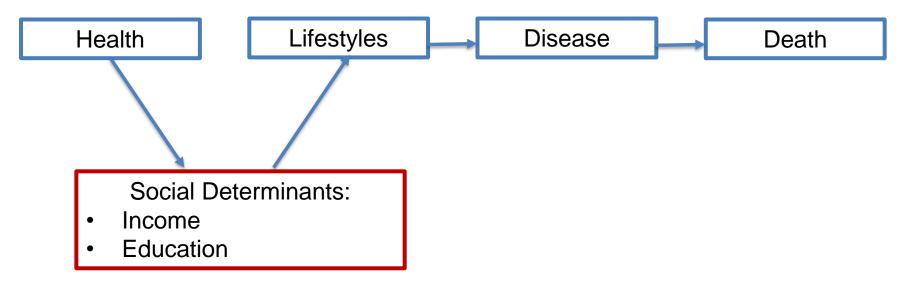
POVERTY AND EDUCATION HAVE SYNERGISTIC EFFECTS

POVERTY & COGNITIVE AND EDUCATIONAL DEVELOPMENT

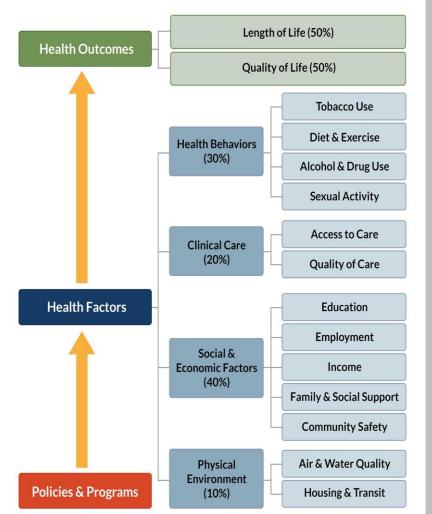


Kansas Health Institute Adapted from: Effect of Child and Family Poverty on Child Health in the United States. David Wood Pediatrics 2003;112;707

WHAT DO PEOPLE DIE FROM? "SOCIAL DETERMINANTS" MODEL



KANSAS COUNTY HEALTH RANKINGS 2017 RESULTS



County Health Rankings & Roadmaps

Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

35 public domain measures of important dimensions of health

Kansas Health Institute

County Health Rankings model © 2016 UWPHI

County	Rank	County	Rank	County	Rank	County	Rank
Allen	92	Finney	56	Logan	4	Rooks	80
Anderson	52	Ford	63	Lyon	50	Rush	45
Atchison	44	Franklin	54	Marion	21	Russell	36
Barber	69	Geary	74	Marshall	34	Saline	48
Barton	58	Gove	32	McPherson	12	Scott	31
Bourbon	85	Graham	55	Meade	13	Sedgwick	60
Brown	87	Grant	38	Miami	16	Seward	67
Butler	28	Gray	10	Mitchell	41	Shawnee	65
Chase	73	Greeley	30	Montgomery	93	Sheridan	57
Chautauqua	84	Greenwood	94	Morris	43	Sherman	89
Cherokee	97	Hamilton	81	Morton	90	Smith	77
Cheyenne	71	Harper	95	Nemaha	25	Stafford	22
Clark	83	Harvey	17	Neosho	72	Stanton	NR
Clay	27	Haskell	39	Ness	40	Stevens	24
Cloud	66	Hodgeman	NR	Norton	61	Sumner	59
Coffey	20	Jackson	11	Osage	35	Thomas	6
Comanche	53	Jefferson	23	Osborne	99	Trego	18
Cowley	91	Jewell	62	Ottawa	26	Wabaunsee	2
Crawford	76	Johnson	1	Pawnee	86	Wallace	NR
Decatur	37	Kearny	33	Phillips	82	Washington	9
Dickinson	49	Kingman	29	Pottawatomie	3	Wichita	68
Doniphan	15	Kiowa	47	Pratt	51	Wilson	98
Douglas	7	Labette	102	Rawlins	79	Woodson	88
Edwards	70	Lane	42	Reno	64	Wyandotte	101
Elk	96	Leavenworth	19	Republic	100		
Ellis	8	Lincoln	46	Rice	75		
Ellsworth	14	Linn	78	Riley	5		

SOME LIMITATIONS

Ranking position may change for many reasons

- Actual change in a county measures
- Change in other counties
- Random
- Change in methodology

Data timeliness

Information aggregated only at the county level

- Within-county disparities not shown

WHERE WE LIVE MATTERS

Health Factors 2017

CN		RA	DC	NT	PL	SM	JW	RP	WS	MS	NM	1 BF	R D	e contra a c
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	<u> </u>					13	EW	SA	DK -	MR		OS	DG	JO
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ST	GT	HS	GY	FO	КW	PR	КМ	SG		U		WL	NO	CR
							1				EK			Ch
MT	SV	SW	ME	CA	СМ	BA	HP	SU		L (CQ	MG	LB	СК
	Rank 1-26 Rank 27-51 Rank 52-76 Rank 77-102 Not Ranked													

Health Outcomes 2017

CN		RA	DC	NT	PL	SM	JW	RP	ws	MS	N	M BI	R D	e contra
SH		TH	SD	GH	RO	OB	МС	CD	CY	RL P	т	JA	AT (2
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GL	WH	SC	LE	NS	RH	ВТ	EW	SA		MR	LY	OS	FR	MI
НМ	KE	F	I) HG	PN	SF	RC	н		CS		CF	AN	LN
1 10-1		<u> </u>	GY	FO	ED		RN	SG	E	BU	GW	wo	AL	BB
ST	GT	HS			KW	PR	КМ		_		EK	WL	NO	CR
МТ	SV	SW	ME	CA	СМ	BA	HP	SU			CQ	MG	LB	СК
Rank 1-26 Rank 27-51 Rank 52-76 Rank 77-102 Not Ranked														

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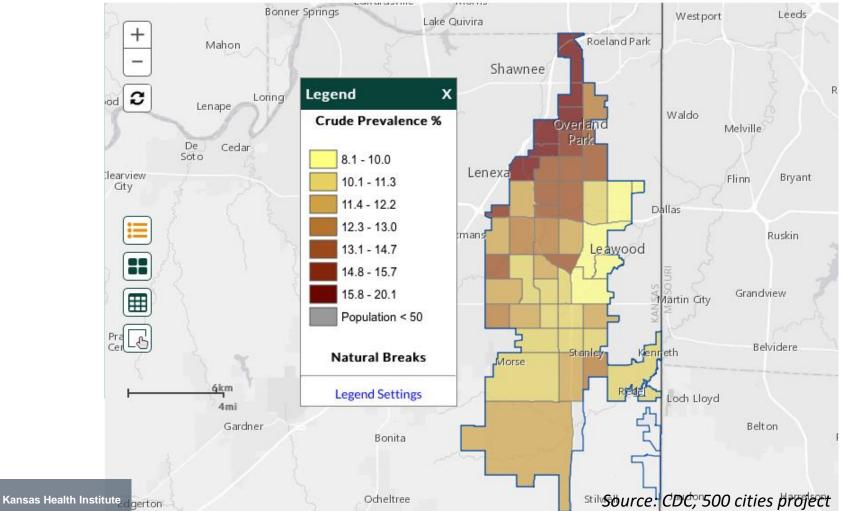
CHR DISPARITIES IN KANSAS, 2017

Measure	Kansas	Worst County Value	Best County Value
Adult Smoking	18%	22% Geary	11% Johnson
STIs	384.1	726.4 Wyandotte	71.1 Norton
Teen Birth rate	36	83 Seward	12 Douglas
Children with single parent	29%	46% Wyandotte	6.3% Scott

EXAMPLES OF KANSAS DISPARITIES

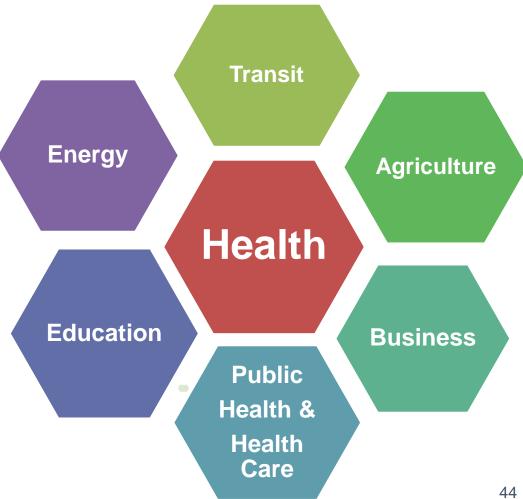
	Johnson	Shawnee	Wyandotte	Montgomery	Sedgwick	KS
Low birth weight	6.5	7.5	8.3	7.8	8.2	7.1
Violent crime rate	142	440	603	634	622	348
Children in poverty	7	20	32	28	21	17
High school graduation	90	80	73	85	82	86
% mammography screening	68	68	56	50	61	63
% adult smoking	11	19	21	20	18	17

Model-based estimates for current smoking among adults aged >=18 years - 2014



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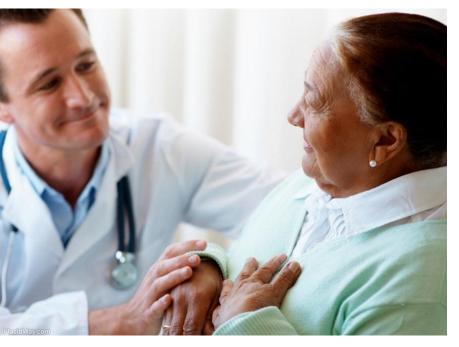
SECTORS THAT **IMPACT** HEALTH





WHAT'S IN IT FOR ME? ¿QUÉ OBTENGO YO DE TODO ESO?





VALUE-BASED MODEL: ONE PATIENT AT A TIME?





VALUE-BASED MODEL:

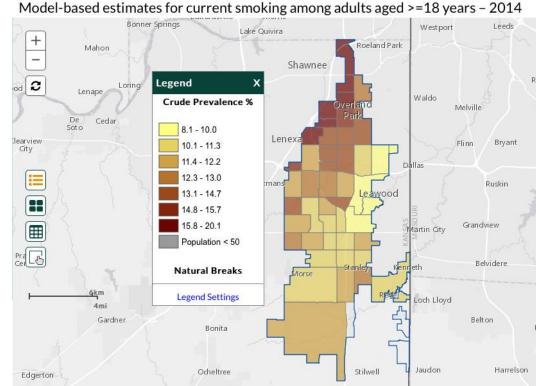
HOW DO WE GET THERE?

A	<mark>, </mark>	Plan - Diabetic Clinic		
Fil	e Home Create External Data Database Tools My control:	s		X 🖬 🗕 🕥 🛇
Navigation Pane	Plan of Action RecordID 2805 PIN 642 FirstName SecondName Score: 67 Patient Current Plan: Thyroxine Plan			Generate <u>P</u> rintable Patient Record
	Diagnoses	Prescription (Tablets) and Treatment	Follow Up Visit Schedule	S <u>w</u> itchboard
	Functional Status Hyper-Thyroidism Etiological Diagnosis Post Ablative Myxedema	Thyroid-related Drugs Thyroxine 50ug:	Next Visit 8/1/2012 (mm/dd/yyyy)	Back
	Known for : Patient was previously on Ablation Therapy Treatmen	Neomercazole 50mg Steroid(s):	Referrals	View <u>T</u> rends
	Stable Diagnosis 2	Other Drugs Medicine 1 Tab. Folic Act = 1 + 0 + 0	Cardiologist None Uphthalmologist None Surgery None	Trend in Weight DateOfVis - Weigh -
	Clinician's Diagnosis	Medicine 2 Tab. Inderal V 1 + 1 + 1	Gynaecologist None Nuclear Medicine None	7/25/2012 66 7/25/2012 58
	Re-Run Diagnostic Algorithm	Medicine 3 Tab. Pentoxc V 0 + 0 + 1 Investigations Advised :	Inmol for None	
	Instructions Instructions2: Instructions2: Investi	Investigation 1 ESR Investigation 2 CBC Investigation 3 FLP Investigation 4 TT3 Investigation 5 TT4 Investigation 6 TSH Investigation 7 Investigation 8 Investigation 9 Investigation 10		





You need contextual information beyond your patients' aggregate records





WHAT'S IN IT FOR ME? ¿QUÉ OBTENGO YO DE TODO ESO?



MORE THAN JUST A HEALTH OR MORAL ISSUE

- People and businesses prefer healthy communities => More growth
- Loss of productivity for health reasons => \$260B in reduced economic output
- 1 point increase in walkability score => property value increase from \$800 to \$3,000

Kansas Health Institute Source: International City/County Management Association (ICMA), 2016

BUSINESSES PREFER HEALTHY COMMUNITIES

- Healthier workforce
- Higher education
- Stronger local economy (healthier customers => more disposable income)

Kansas Health Institute Source: http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2016/rwjf428899



GOOD NEWS!



Keyword Search



Policies & Programs

All Policies & Programs

New or Updated Policies & Programs

Health Factors

Health Behaviors

Alcohol and Drug Use (35)

Diet and Exercise (73)

Sexual Activity (20)

Tobacco Use (18)

What Works for Health

Policies and programs that can improve health

Active recess Scientifically Supported

Establish a break from the school day, typically before lunch, that involves planned, inclusive, actively supervised games or activities; also called semi-structured, or structured recess Diet and Exercise

Activity programs for older adults Scientifically Supported

Offer group educational, social, or physical activities that promote social interactions, regular attendance, and community involvement among older adults Diet and Exercise - Family and Social Support

Administrative license suspension/revocation laws Scientifically Supported

Enable law enforcement officials to take an individual's drivers license when that individual refuses or fails a chemical test such as a breathalyzer Alcohol and Drug Use

School-based health clinics with reproductive health services

Evidence Rating



- **Health Factors**
- Education
- Sexual Activity

Decision Makers

Healthcare Professionals and Advocates

Educators

School-based health clinics provide a variety of health care services to attending students. Most middle and high school-based clinics offer reproductive services, which generally include contraception, abstinence and contraception counseling, and pregnancy and STI testing (SBHA-Data 2011). Such clinics also sometimes offer prenatal care (Strunk 2008). Clinics are located in urban, rural, and suburban schools; in 2010-11, about 70% of students attending schools with clinics were racial or ethnic minorities. In that same year, about half of all school-based health clinics were prohibited from dispensing contraception, most often by district policy (SBHA-Data 2011).

Expected Beneficial Outcomes (Rated)

- Reduced low birthweight births
- Improved student attendance
- Increased high school graduation

- Increased use of contraception
- Increased reproductive health care
- Reduced teen pregnancy
- Increased preventive care

Dropout prevention programs for teen mothers

Evidence Rating



Health Factors

Education

Decision Makers

Philanthropy and Investors

Healthcare Professionals and Advocates

Educators

Government

Community Members

Dropout prevention programs for teenage mothers typically offer multiple services such as remedial education, vocational training, case management, health care, transportation assistance, and child care. Some dropout prevention programs focus on attendance monitoring interventions, which can include contingencies or financial incentives for mothers to attend school, for example, making welfare receipt contingent on school attendance. Dropout prevention programs for teenage mothers are usually comprehensive and intense and last about a year. Such programs are also usually conducted in multiple community settings rather than exclusively at school (Campbell-Wilson 2011). In 2014, there were 24.2 births for every 1000 women between the ages of 15 and 19. Nationwide, half of all teenage mothers do not graduate from high school (CDC-Teen Pregnancy).

Expected Beneficial Outcomes (Rated)

Increased high school graduation

- Reduced teen pregnancy
- Improved health outcomes

Early childhood home visiting programs

Evidence Rating



Health Factors

- **Community Safety**
- Family and Social Support

Decision Makers

- Philanthropy and Investors
- Healthcare Professionals and Advocates
- Government
- Public Health Professionals and Advocates
- Nonprofit Leader

In early childhood home visiting programs, trained personnel visit parents and children in their homes. Visitors provide parents with information, support, and/or training regarding child health, development, and care. Programs vary widely; visitors can be nurses, social workers, paraprofessionals, lay workers from within the community, or others. Programs often begin prenatally and continue during the child's first two years of life, but may also begin after birth, last only a few months, or extend through entrance into formal schooling.

Expected Beneficial Outcomes (Rated)

- Reduced child maltreatment
- Reduced child injury
- Improved cognitive skills
- Improved social emotional skills

- Improved parenting
- Improved prenatal care
- Improved birth outcomes
- Reduced rapid repeat pregnancies
- Increased use of contraception

Individual incentives for public transportation

Evidence Rating



Health Factors

Housing and Transit

Decision Makers

Business

Government

Community Development

Offering incentives to encourage individuals' use of existing public transit options decreases consumer's cost for such transport. There are several types of individual incentives, including free or discounted bus, rail, or transit passes offered through deep discounting or transit pass incentive programs, and reimbursements, partial payments, or pre-tax payroll deductions offered through transportation subsidy programs.

Expected Beneficial Outcomes (Rated)

- Increased use of public transit
- Increased physical activity

- Increased active transportation
- Reduced obesity rates
- Increased mobility
- Reduced vehicle miles traveled
- Reduced emissions

Service-enriched housing

Evidence Rating



Some Evidence

Health Factors

Housing and Transit

Decision Makers

Government

Public Health Professionals and Advocates

Community Members

Community Development

Service-enriched housing is permanent, basic rental housing in which social services are available onsite or by referral through a supportive services program or service coordinator (Sturtevant 2015). Housing and services can be provided by nonprofit, private, or government organizations; housing options can be unsubsidized, government assisted, mixed income or a combination. Programs often support low income families, seniors, people with disabilities, or veterans (Castle 2014, Sturtevant 2015, Brown 2013b). Some service-enriched housing programs also assist families or individuals experiencing homelessness; programs that support households experiencing homelessness are often referred to as permanent supportive housing.

Expected Beneficial Outcomes (Rated)

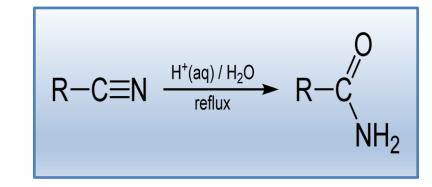
- Reduced homelessness
- Increased housing stability
- Reduced hospital utilization

- Improved health outcomes
- Improved mental health

ADDITIONAL RESOURCES FOR LOCAL INTERVENTIONS







TAKEAWAYS

- Where we live *matters to our health*
- Health is more than health care
- Promoting good health requires more than efforts from public health sector



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THANK YOU **Any questions?**



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