DOMAIN	INDICATOR GROUP	INDICATOR	MEASURES	SOURCE	Year (or Group of Years)	*Smallest* Planned Geographic Level of Analysis[1]
Opportunity Measures	Income	Income Distribution	Gini coefficient of income inequality	ACS	2006-2010	HCC geo groups
	Segregation	Housing Segregation	Gini coefficient of minority-headed households	ACS	2006-2010	HCC geo groups
Social, Economic, and Environmental Factors	Social and Economic Factors	Income	% children in poverty	ACS	2006-2010	HCC geo groups
		Education	Education distribution in adults older than 25	ACS	2006-2010	HCC geo groups
		Social Connection & Support	Social Capital	BRFS	2008-2010	HCC geo groups*
		Community Safety	Rate of violent crimes per person	MSP	2010 (+prior)	HCC geo groups
		Affordable Housing	Households who spend more than 30% of income on housing	ACS	2008-2010	HCC geo groups
		Quality of Primary Care	Rate of Ambulatory-Care Sensitive Hospitalizations (Preventable)	MDCH Vital Statistics	2010 (+ prior)	HCC geo groups
	Environmental Factors	Environmental Quality	% water wells w/evidence of significant nitrate contamination	Local Health Depts.	2011 (+prior)	HCC geo groups
		Built Environment	Food Desert Status	USDA	2006/2010 ACS	Census tract
Behaviors, Stress, and Physical Condition	Health Behaviors and Physical Condition	Obesity	Adult Weight Distribution (BMI Categories)	BRFS	2008-2010	HCC geo groups*
			Adolescent Weight Distribution (BMI Categories)	MiPHY	2010	County
		Tobacco Use	Current Smoking in adults	BRFS	2008-2010	HCC geo groups*
			Current Smoking in adolescents	MiPHY	2010	County
		Alcohol Use	Binge Drinking in adults	BRFS	2008-2010	HCC geo groups*
			Binge Drinking in adolescents	MiPHY	2010	County
	Clinical Care	Access to Care	Persons with a primary medical provider	BRFS	2008-2010	HCC geo groups*
			Ratio of population to the number of primary care physicians	County Health Rankings	2008	County
		Communicable Disease Prevention	% children 19-35 months who receive recommended immunizations	MCIR	2011	HCC geo groups*
	Stress	Mental Health	Poor mental health days in adults	BRFS	2008-2010	HCC geo groups*
			Adolescents with symptoms of depression in past year	MiPHY	2010	County
Health Outcomes	Illness (Morbidity)	Child Health	Asthma Hospitalization Rate in children 0-18	MDCH Vital Records	2010 (+ prior)	HCC geo groups
		Quality of Life	Perceived health status (good vs. poor)	BRFS	2008-2010	HCC geo groups*
		Adult Health	Diabetes-related Hospitalization Rate in adults 18+	Local Hospital Data	2011 (+prior)	HCC geo groups*
	Deaths (Mortality)	Premature Death	% deaths before age 75	MDCH Vital Records	2009 (+ prior)	HCC geo groups
		Maternal & Child Health	Infant Mortality Rate	MDCH Vital Records	2009 (+ prior)	HCC geo groups
		Chronic Disease	Deaths due to cardiovascular disease	MDCH Vital Records	2009 (+ prior)	HCC geo groups
		Safety Policies and Practices	Deaths due to accidental Injury	MDCH Vital Records	2009 (+ prior)	HCC geo groups

[1] HCC Geo Groups = 8 groups of census tracts, cities, and/or townships grouped by median home value and population density in Clinton, Eaton, and Ingham Counties.

*subject to reportable data availability; some areas may have too few responses/incidents to report

ACS = American Community Survey, conducted by the U.S. Census Bureau

BRFS = Behavioral Risk Factor Survey, conducted by local health departments

MCIR = Michigan Care Improvement Registry

MDCH = Michigan Department of Community Health

MiPHY = Michigan Profile for Healthy Youth Survey

MSP = Michigan State Police

USDA = United States Department of Agriculture

Healthy! Capital Counties℠
a community approach to better health
CLINTON • EATON • INGHAM

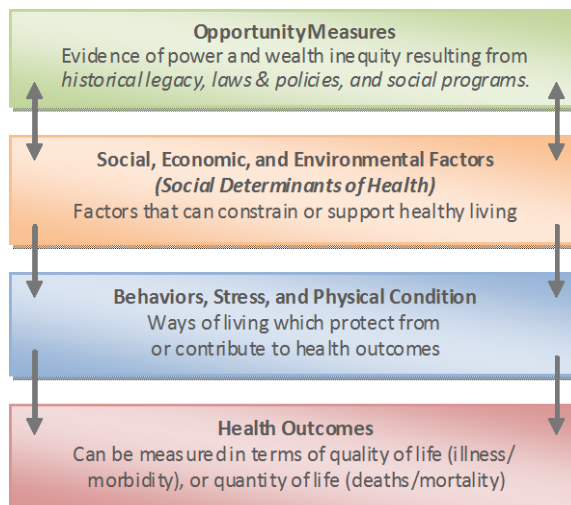Community Health Assessment and Improvement Planning Project
Indicator Selection

Ideal indicators should be…

- ✓ Valid and Accurate
- ✓ Stable, Reliable, Timely, and Consistent
- ✓ Representative of the health of the entire community
- ✓ Geo-code-able to the census tract level

- ✓ Meaningful
- ✓ Relevant
- ✓ Engaging to stakeholders
- ✓ Easy to understand

- ✓ Actionable
- ✓ Prompt discussion and debate
- ✓ Facilitate building coalitions
- ✓ Act as a catalyst for action
- ✓ Result in positive change

And finally…

- ✓ Contribute to a comprehensive picture of the health of the community.

Our working model for how health happens:

Opportunity Measures
Evidence of power and wealth inequity resulting from historical legacy, laws & policies, and social programs.

Social, Economic, and Environmental Factors
(Social Determinants of Health)
Factors that can constrain or support healthy living

Behaviors, Stress, and Physical Condition
Ways of living which protect from or contribute to health outcomes

Health Outcomes
Can be measured in terms of quality of life (illness/morbidity), or quantity of life (deaths/mortality)

Where did we look for potential indicators?
- *October 6 Healthy! Capital Counties Advisory Committee Brainstorming*
- *Healthy People 2020 Leading Health Indicators www.healthypeople.gov/2020/LHI*
- *County Health Rankings www.countyhealthrankings.org*
- *Health Indicators Warehouse www.healthindicators.gov*
- *Community Health Status Indicators www.communityhealth.hhs.gov*
- *Capital Area Behavioral Risk Factor Survey (Clinton, Eaton, Ingham)*
- *Michigan Department of Community Health Statistics (Vital, Disease, Hosp.)*

What is an 'indicator'? A thing, especially a trend or fact, that indicates the state or level of something: "an indicator of affluence".

Not all indicators included will meet all of the criteria, but the criteria may be used to help decide among indicators.

It's also important to note that the intention of this project is not to provide all of the data necessary to understand a specialized topic, but rather to provide a means to prioritize those areas which most contribute to ill health in the community.

NOT INCLUDED AS INDICATORS:

These indicators do not meet as many of the high quality indicator standards to be included in the main set but are still important and available.

INDICATOR	SOURCE	NOTES
(Social and Economic Determinants)		
Students who graduate high school with a regular diploma 4 years after starting 9th grade [LHI]	CEPI – by School District	school districts can't be mapped to census tracts or county (very well)
% children eligible for free/reduced lunch	County Health Rankings /CEPI	used poverty of all children instead of poverty + near poverty in school aged children
% illiterate	County Health Rankings / ACS	used educational attainment instead of this measure
Unemployment	County Health Rankings / BLS	chose to measure income inequality instead given volatility in this statistic
Children in single parents households	County Health Rankings/ACS	not clearly actionable
(Environmental Factors)		
Access to physical activity opportunities	County Health Rankings	Rate of Recreational Facilities per 100,000 – problem comparing rural/urban
Access to healthy foods	County Health Rankings	% zip codes with grocery store/produce stand – measures rural-ness.
% of labor force that drives alone to work	County Health Rankings / ACS	not clear what element rural-ness plays in this measure
Liquor store density	County Health Rankings	measures rural-ness more than exposure to liquor
(Health Care)		
Persons with medical insurance [LHI]	BRFS	we chose to measure utilization rather than access to payment source
Diabetic Screening	County Health Rankings	only of Medicare population; doesn't measure quality of care across population
Mammography Screening	County Health Rankings	only of Medicare population; doesn't measure quality of care across population
Medicaid enrollees with a dental visit in past year	Medicaid Data	difficult to obtain geo-code-able
(Health Outcomes / Morbidity)		
Low-birthweight births	MDCH Vital Statistics	chose to swap for measure of child morbidity (asthma) instead, since infant mortality
Hypertension rate in adults	BRFS	overlap with cardio. disease deaths; significant disparity for African Americans noted
Diabetes rate in adults	BRFS	overlap with cardiovascular disease deaths
STD /Chlamydia infection rate	MDCH Vital Statistics	STD infection rates not reliable, more a measure of access to testing
Preterm births	MDCH Vital Statistics	not as outcome-oriented as infant mortality
Percent of births to teenage mothers	MDCH	can be considered a social determinant, behavior, and outcome measure at same time
HIV Prevalence Rate	County Health Rankings / MDCH	numbers low at small geographic levels
Alcohol-related Traffic Crash Injuries	MSP/OHSP	chose to swap to make room for diabetes indicator
(Health Outcomes/Mortality)		
Homicide rate	MDCH Vital Statistics	too few events to compare at small geographic levels
Suicide rate	MDCH Vital Statistics	too few events to compare at small geographic levels

DATA GAPS:

These indicators are relevant but do not have adequate data available to include.

CATEGORY	INDICATOR	NOTES
(Social & Economic Factors)		
Transportation	Access to transportation	No clearly defined indicator – need more conversation to develop this
(Environmental Factors)		
Air Quality	Air Quality Index [LHI]	Could not identify air quality indicator specific to the municipality/census tract level.
	Children 3-11 exposed to secondhand smoke [LHI]	Data not available with current BRFS methodology.
(Health Behaviors/Health Care)		
Specialty Care Access	Access to specialty care services	Data not available
Nutrition	Total vegetable intake for persons over age 2 [LHI]	Not collected in BRFS separate from fruit
Physical Activity	Persons who get adequate physical activity [LHI]	Problem with the consistency of definition of adequate physical activity
Reproductive/Sexual Health	Sexually active females 15-44 who received reproductive health services [LHI]	Data not available at the population level.
	Persons living with HIV who know their serostatus [LHI]	Data not available at the population level.
Clinical Preventive Services	Percent of adults with colorectal cancer screening according to guidelines [LHI]	Data not available at the population level.
	Adults with hypertension whose blood pressure is under control [LHI]	Data not available at the population level.
	Adult diabetic population whose diabetes is not controlled [LHI]	Data not available at the population level.
Oral Health	Persons over age 2 who visited the dentist in past year [LHI]	Data not available at the population level.
Alcohol Use	Adolescents who used alcohol or any illicit drugs recently [LHI]	Data not readily available; possibly can get county level from MiPHY

LHI = Leading Health Indicators from Healthy People 2020