|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| DOMAIN | INDICATOR GROUP | INDICATOR | MEASURES | SOURCE | Year (or Group of Years) | ***Smallest*** Planned Geographic Level of Analysis¹ |
| **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 Environ-mental 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 |



**2012 Indicators**

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



Community Health Assessment and Improvement Planning Project

**Indicator Selection**

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*](http://www.healthypeople.gov/2020/LHI)
* *County Health Rankings* [*www.countyhealthrankings.org*](http://www.countyhealthrankings.org)
* *Health Indicators Warehouse* [*www.healthindicators.gov*](http://www.healthindicators.gov)
* *Community Health Status Indicators* [*www.communityhealth.hhs.gov*](http://www.communityhealth.hhs.gov)
* *Capital Area Behavioral Risk Factor Survey (Clinton, Eaton, Ingham)*
* *Michigan Department of Community Health Statistics (Vital, Disease, Hosp.)*

Ideal indicators should be… Our working model for how health happens:



* + 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.

**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 CEPI – by School District school districts can’t be mapped to census tracts or county (very well)

regular diploma 4 years after starting 9th grade LHI

% 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 controlLHI 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