

Role of Epidemiologists in Community Health Assessment (CHA) and Community Health Improvement Planning (CHIP)

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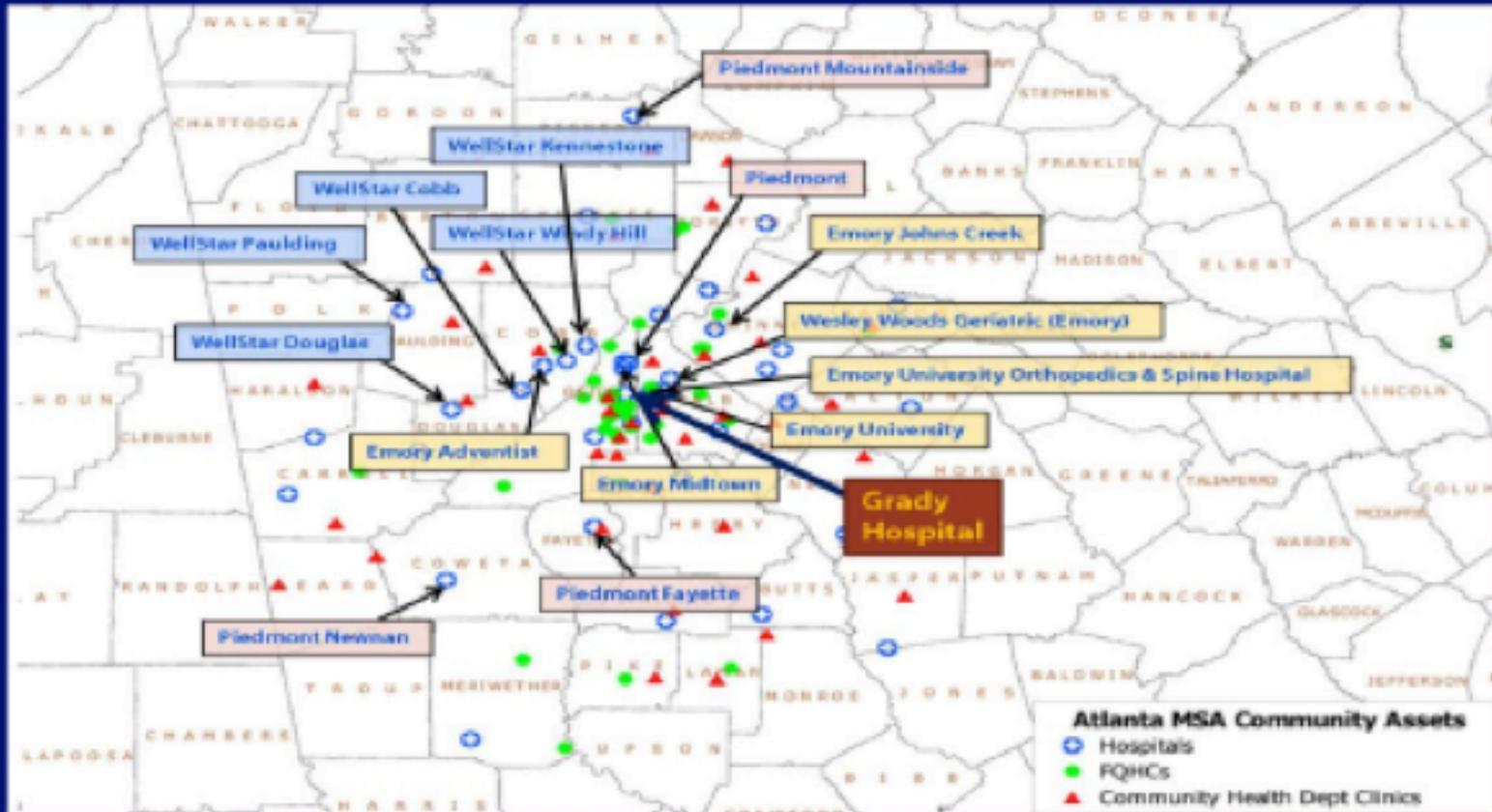
Objectives

- Explain the current CHA/CHIP drivers
- Identify four products of effective CHA/CHIPs
- Identify available epidemiological resources and tools
- Articulate the role of epidemiologists in CHA/CHIPs

Community Health Assessment and Improvement Plans – Drivers

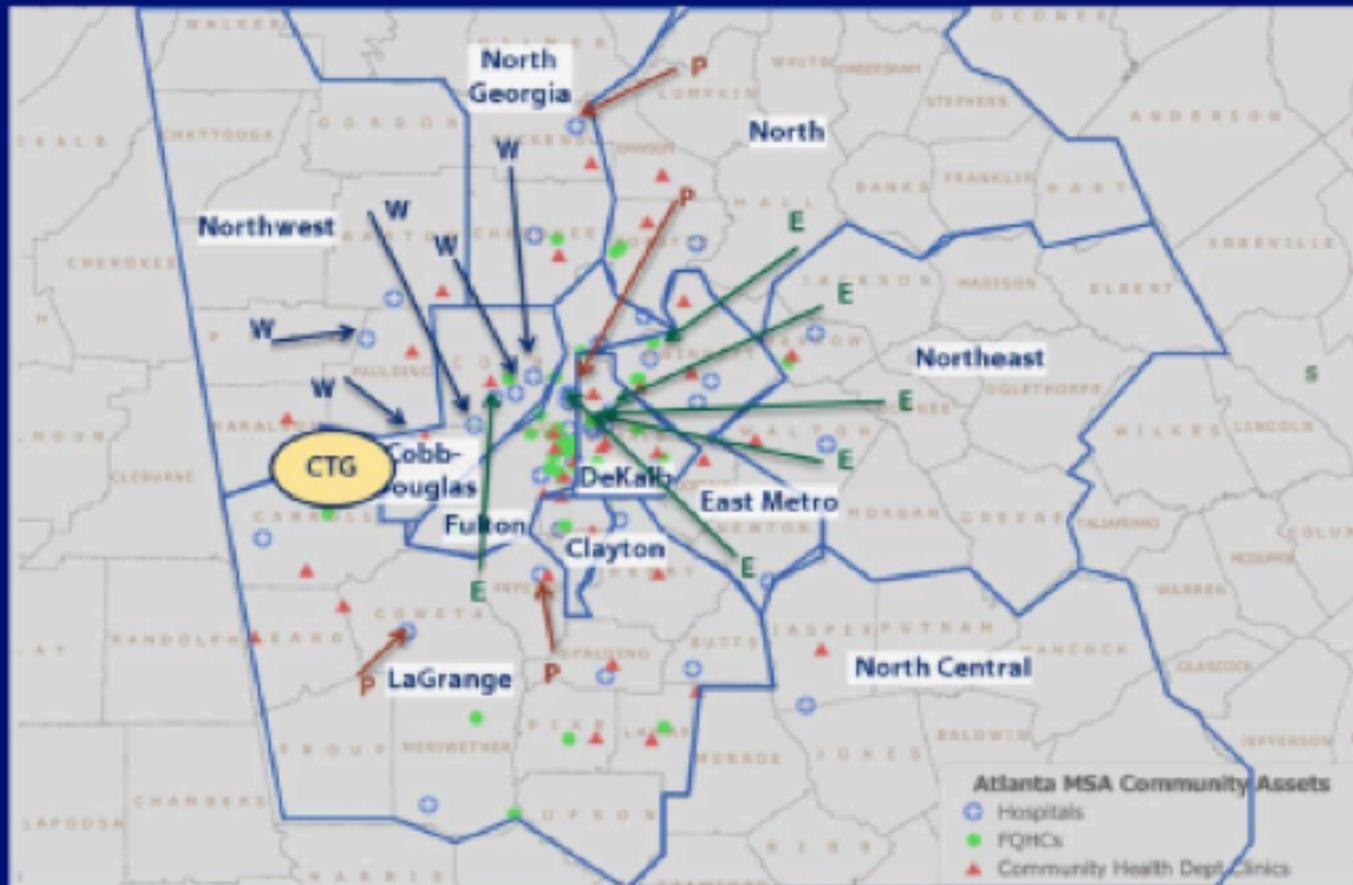
- ❑ National voluntary public health department accreditation (PHAB) (n~2,400)
- ❑ Tax-exempt hospitals and community benefit requirements for IRS (n>3,000)
- ❑ Federally Qualified Health Centers (FQHC) (n>1,200)
- ❑ Healthy People 2020/National Prevention Strategy
- ❑ Other state requirements for needs assessment
- ❑ Grant requirements or grant-related activities
- ❑ Participation in planning led by other sectors

Not-for-Profit Hospitals, Atlanta, 2011



Source: Karen Minyard, GSU NNPHI

Local Health Jurisdictions, Atlanta, 2011



Source: Karen Minyard, GSU NNPHI

Principles to Consider for the Implementation of a Community Health Needs Assessment Process (Rosenbaum)

1. Maximum transparency to improve community engagement and accountability
2. Multisector collaborations that support shared ownership of all phases of community health improvement
3. Proactive, broad, and diverse community engagement
4. Definition of community (broad while addressing disparities)
5. Use of the highest quality data pooled from, and shared among, diverse public and private sources
6. Use of evidence-based interventions and innovative practices with evaluation
7. Evaluation to inform a continuous improvement process

Common Elements in Community Health Improvement Process Models

- ❑ Prepare and organize
- ❑ Engage the community
- ❑ Develop a goal or vision
- ❑ Conduct community health assessment(s)
- ❑ Prioritize health issues
- ❑ Develop community health improvement plan
- ❑ Implement community health improvement plan
- ❑ Evaluate and monitor outcomes

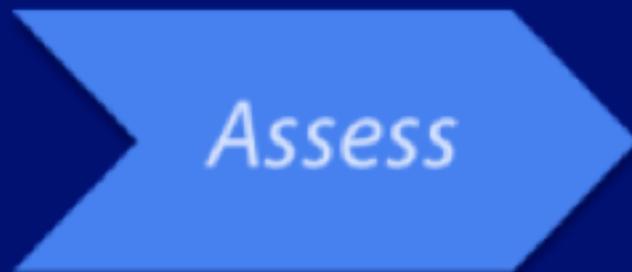
Examples of Health Assessment and Improvement Models or Frameworks

- ❑ PRECEDE-PROCEED (1970s)
- ❑ Healthy Communities (1980s)
- ❑ Planned Approach to Community Health (PATCH) (1983)
- ❑ Assessment Protocol for Excellence in Public Health (APEXPH) (1991)
- ❑ Institute of Medicine CHIP framework (1997)
- ❑ Mobilizing for Action through Planning and Partnerships (MAPP) (2001)
- ❑ Association for Community Health Improvement (ACHI) Toolkit
- ❑ Catholic Health Association
- ❑ ASTHO/CDC State Health Improvement Planning framework (2011)
- ❑ State-specific models/frameworks

Community Health Assessment and Improvement (CHA/CHIP)



CHA/CHIP Data Driven Steps



- Systematic, collaborative process
- Profile Characterizes (IOM 1997)
 - Current Health Status
 - Disparities
 - Modifiable Health Determinants
 - Community Perspectives
 - System Assets and Resources
- Data Analysis (CHA 2011)
 - Primary & Secondary Data
 - Most prevalent, severe, and important outcomes and related determinants

IOM (1997). *Improving Health in the Community: A Role for Performance Monitoring*

Catholic Health Association (2011). *Assessing & Addressing Community Health Needs Discussion*

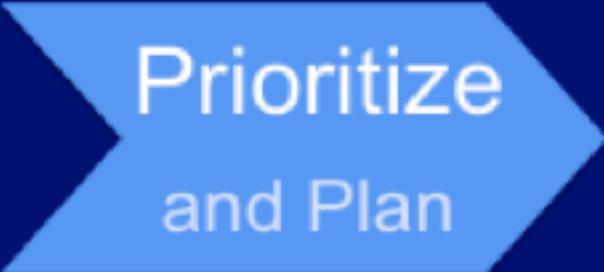
Effective Community Health Assessments

□ 4 Products

- **Secondary data analysis** (already collected and analyzed data)
 - Compare outcome and determinant indicators against peer communities, national averages, HP 2020 benchmarks)
 - Examine trends
 - Identify the most prevalent, severe and important subset of health outcomes and determinants
- **Community opinions**
 - Primary data (qualitative and quantitative)
 - Collected through key interviews, town halls, listening sessions, and surveys
 - Identify community's prioritized set of outcomes and determinants
- **Assessment of health disparities**
 - Examine secondary data by sex, race/ethnicity, SES, and geography
- **Assets of the Health System and Community**

CHA/CHIP Data Driven Steps

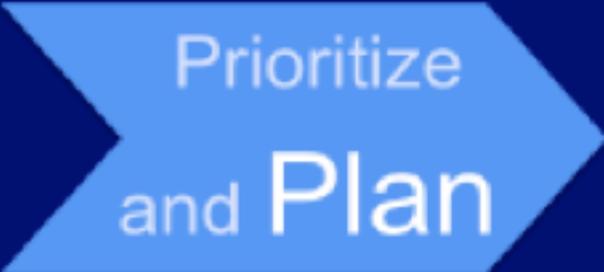
Prioritize - transparent consensus-oriented process with objective criteria



Prioritize
and Plan

- Magnitude of the problem
 - % Population affected
- Seriousness of the problem
 - Mortality, morbidity, quality of life
- Community Priority
- Feasibility of a successful intervention
 - Knowledge exists
 - Intervention exists
 - Resources exist
 - Acceptable to community

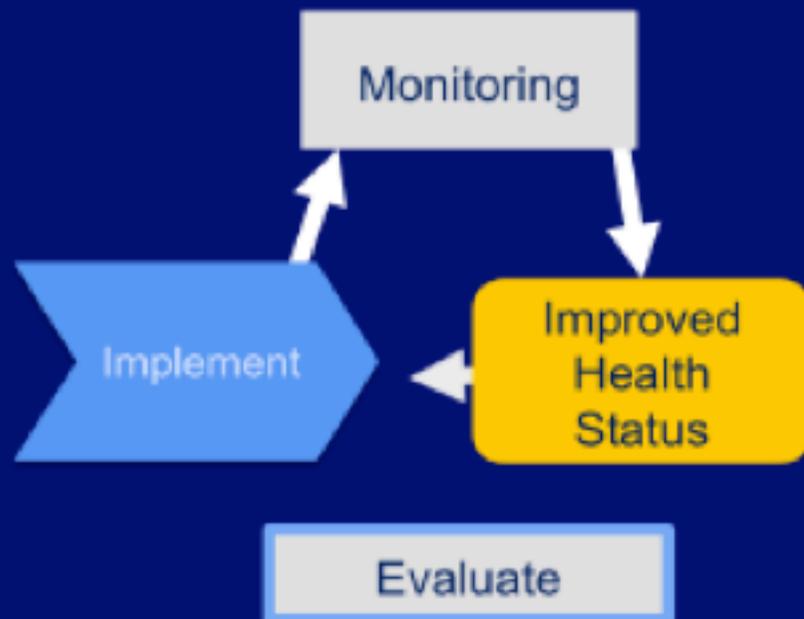
CHA/CHIP Data Driven Steps



Prioritize
and Plan

- ❑ Community Health Improvement Plan
- ❑ Describe Priority Outcomes
 - Upstream Determinants
 - Disparities
- ❑ Actions - evidence-based or “best practices”
- ❑ Outcome-based goals and SMART objectives
- ❑ Targeted Population
- ❑ Agency & Partner Roles & Responsibilities

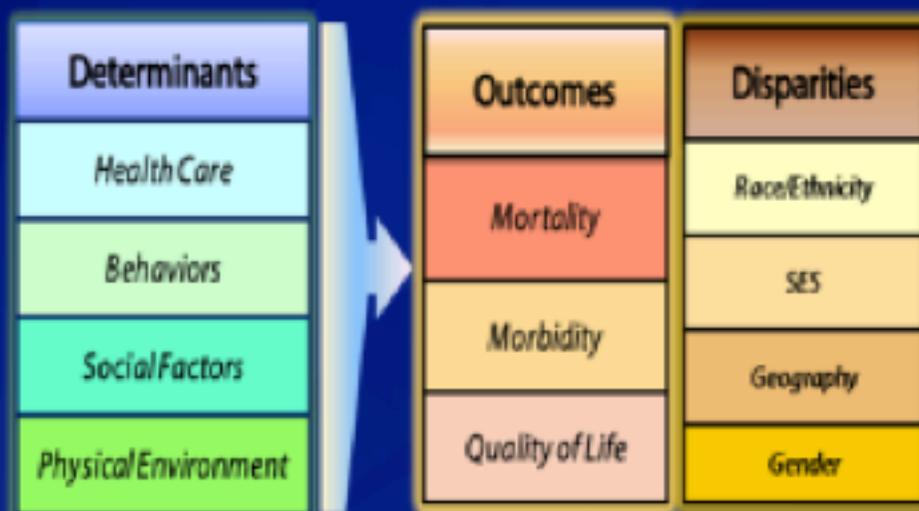
CHA/CHIP Data Driven Steps



- On-going monitoring
- Formal evaluation
 - Process - *measures the process of delivering an intervention.*
 - Outcome/Impact - *used to measure intermediate (impacts) and longer-term (outcomes) effects of an intervention or program. This measures whether the intervention is having an impact on target population*

Population Health Framework

Data and Analytic Tools



Data reflects holistic model of population health where health outcomes and disparities are the result of complex interactions between health determinants and individual biology and genetics.

Modifiable Determinants + Genetics + Individual Biology

Adapted from: Kindig DA, Asada, Y, Booske B. (2008). A Population Health Framework for Setting National and State Health Goals. JAMA, 299(17), 2081-2083

IDENTIFYING AND ANALYZING SECONDARY DATA

CHA Outcomes & Determinants

- Synthesized 10 seminal sources
 - 2 IOM Reports
 - 3 Published Guidance Reports
 - 2 Professional Organization Web-based Guidance
 - 3 State Health Department Web-based Guidance
- 42 Most Frequently Recommended
 - Health Outcomes
 - Mortality
 - Morbidity
 - Health Determinants
 - Health Care Access/Quality
 - Personal Behaviors
 - Social Factors
 - Physical Environment

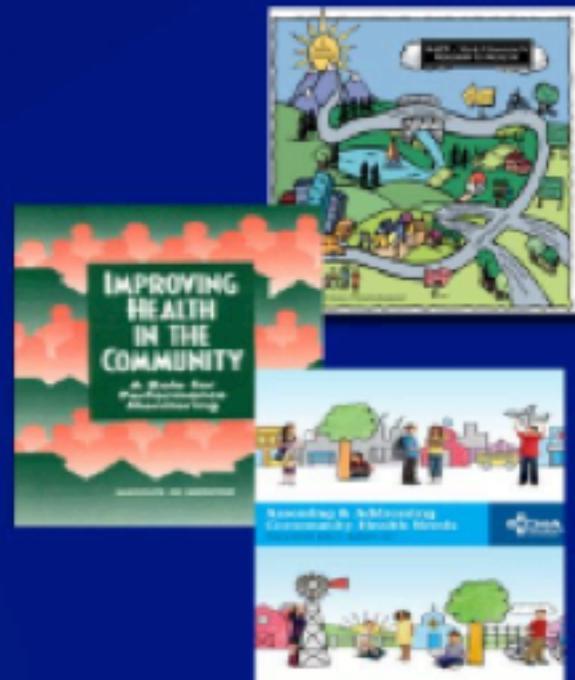


Table 1: Community Health Assessment for Population Health Improvement: Most Frequently Recommended Health Metrics*

Health Outcome Metrics		Health Determinant and Correlate Metrics			
Mortality	Morbidity	Health Care (Access & Quality)	Health Behaviors	Demographics & Social Environment	Physical Environment
Mortality - Leading Causes of Death (9)	Obesity (6)	Health Insurance Coverage (6)	Tobacco Use/ Smoking (8)	Age (9)	Air Quality (4)
Infant Mortality (6)	Low Birth-weight (3)	Provider Rates (PCPs, Dentists) (5)	Physical Activity (5)	Sex (6)	Water Quality (3)
Injury-related Mortality (3)	Hospital Utilization (4)	Asthma-Related Hospitalization (4)	Nutrition (4)	Race/Ethnicity (9)	Housing (5)
Motor Vehicle Mortality (3)	Cancer Rates (4)		Unsafe Sex (3)	Income (9)	
Suicide (4)	Motor Vehicle Injury (4)		Alcohol Use (4)	Poverty Level (6)	
Homicide (4)	Overall Health Status (4)		Seatbelt Use (3)	Educational Attainment (6)	
	STDs (chlamydia, gonorrhea, syphilis) (4)		Immunizations and Screenings (5)	Employment Status (6)	
	AIDS (3)			Foreign Born (3)	
	Tuberculosis (4)			Homelessness (3)	
				Language Spoken at Home (3)	
				Marital Status (3)	
				Domestic Violence and Child Abuse (3)	
				Violence and Crime (4)	
				Social Capital/Social Support (4)	

* Numbers in parenthesis indicate the number of 10 Guidance Documents that recommended that specific outcome or determinant/correlate.

CHA MOST FREQUENTLY RECOMMENDED HEALTH OUTCOMES AND DETERMINANTS

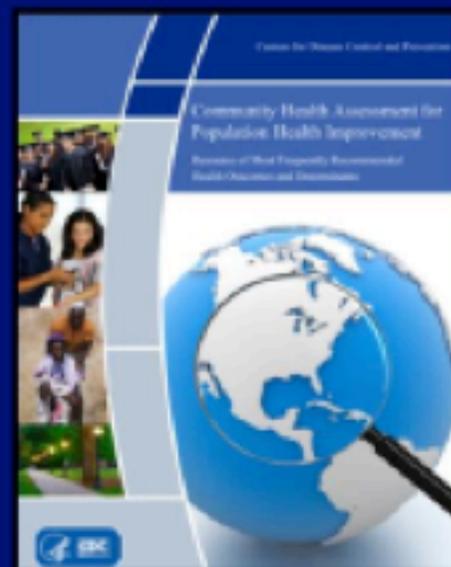
- ❑ **Health Outcomes & Determinants Linked to Indicator Sources**
 - Comparable, Valid, Reliable
 - MSA, County, Sub-county

- ❑ **History and Need for a Common Set of Metrics**

- ❑ **Utility of Population Health Framework**

- ❑ **Methods & Sensitivity Analysis**

- ❑ **IOM Call for Research & Consensus Process**



Available at <http://stacks.cdc.gov/view/cdc/20707>

IDENTIFYING AND ANALYZING COMMUNITY OPINION DATA

Community Opinion Surveys

EPI INFO 7

Community Health Module



Validated Questions

Formats

- Web-based
- Face to Face
- Mail-out
- Tele-phone (late 2013)

Data Display

- Charts
- Graphs
- Maps

**NEW SOURCE OF SECONDARY DATA:
REDESIGN OF THE COMMUNITY HEALTH
STATUS INDICATORS (CHSI)**

First – Check with your State or Local Health Department

- State and local Indicators
 - Lower geographic resolution
 - More frequently updated
 - More extensive
 - Multiple years
 - Pre-analyzed



Public Health Resources: State Health Departments



Click on a region above or choose a state to go to its health department's site:

CHSI Goals

The goals of the redesigned CHSI are to:

1. Improve the ability of stakeholders to comprehensively assess community health status and needs;
2. Promote a shared understanding of the factors that drive health;
3. Catalyze public/private partnerships to work collaboratively with the community towards population health improvement.

CHSI Stakeholders

- **Primary**
 - Organizations conducting community health assessments (CHA)
 - State, local, tribal and territorial health departments – for accreditation
 - Non-profit hospitals (for IRS-required CHNA)
 - FQHCs, United Way and community organizations conducting CHNAs
- **Secondary**
 - Legislatures, policy makers, government agencies, and business leaders
 - Community Members, general public

CHSI Background

- Produces health profiles for each of the 3,141 counties in the U.S.
- 1998 Collaboration led by HRSA
 - Included the Public Health Foundation (PHF), ASTHO, and NACCHO
- First released in individual hard copy formats in 2000
- Steering Committee convened to evaluate, update, and further develop the CHSI in 2004
 - HRSA, CDC, the National Library of Medicine (NLM), PHF, faculty from Johns Hopkins
 - Advisory partners: NACCHO, ASTHO, National Association of Local Boards of Health (NALBOH)
- Converted to an on-line format – 2008 and updated in 2009

Redesigned CHSI

- **Targeted for launch – Summer 2014**
 - Updated & refined set of peer counties
 - Reorganized in a population health framework
 - New and updated indicators
 - Peer county comparisons for all indicators
 - Summary comparison page
 - Census tract data for hot spots and disparities, where available
 - Improved user interface
 - Improved indicator visualization

- **Proposed Annual Release Strategy**
 - Biannual updated data release
 - Biannual improved functionality release



**COMMUNITY HEALTH ASSESSMENT for POPULATION HEALTH IMPROVEMENT:
MOST FREQUENTLY RECOMMENDED HEALTH METRICS***

Health Outcomes Metrics		Health Correlates and Determinates Metrics			
Mortality	Morbidity	Health Care (Access & Quality)	Health Behaviors	Demographics & Social Environment	Physical Environment
Mortality - Leading Causes of Death (8)	Obesity (6)	Health Insurance Coverage (6)	Tobacco/Smoking (8)	Age (9)	Air Quality (4)
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Motor Vehicle Mortality (3)	Cancer Rates (4)		Unsafe Sex (3)	Income (9)	Access to Healthy Food
Suicide (4)	Motor Vehicle Injury (4)		Alcohol Use (4)	Poverty (5)	Access to Recreation
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				Violence and Crime (4)	
				Social Capital/Social Support (4)	

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Joaquin Hernandez

Zachary Welch

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CHSI DEVELOPMENT SITE DEMO

www.nd.cdc.gov/communityhealth2014

Intervention Resources

Public Health:

- Community Guide to Preventive Services at www.thecommunityguide.org
- Cochrane Reviews at www.thecochranelibrary.com/view/0/index
- County Health Rankings, What Works for Health
www.countyhealthrankings.org/what-works-for-health
- Canadian Best Practices Portal at <http://cbpp-pcpe.phac-aspc.gc.ca>
- CDC Prevention Status Reports (PSR) www.cdc.gov/stltpublichealth/psr

Healthcare:

- AHRQ Health Care Innovations Exchange: www.innovations.ahrq.gov
- US Preventive Services Task Force Recommendations:
www.uspreventiveservicestaskforce.org/recommendations.htm

National Health Assessment and Improvement Planning Resources

- Association of State and Territorial Health Officials. State Health Assessment Guidance and Resources <http://www.astho.org/Programs/Accreditation-and-Performance/ASTHO-Publishes-State-Health-Assessment-Guidance-and-Resources/>
- Association of State and Territorial Health Officials. Accreditation Resources www.astho.org/Programs/Accreditation-and-Performance/Accreditation/Preparing-for-Accreditation/
- Centers for Disease Control and Prevention. Community Health Assessment and Health Improvement Planning <http://www.cdc.gov/stltpublichealth/cha/index.html>
- Catholic Health Association. Assessing & Addressing Community Health Needs <https://www.vha.com/AboutVHA/PublicPolicy/CommunityBenefit/Documents/AssessingAddressingCH.pdf>
- IOM (Institute of Medicine). Improving Health in the Community: A Role for Performance Monitoring http://books.nap.edu/catalog.php?record_id=5298
- National Association of County and City Health Officials. Mobilizing for Action through Planning and Partnerships (MAPP) <http://www.naccho.org/topics/infrastructure/mapp/framework>
- National Association of County and City Health Officials. CHA/CHIP Resource Center <http://www.naccho.org/topics/infrastructure/CHAIP/chachip-online-resource-center.cfm>
- National Research Council. For the Public's Health: The Role of Measurement in Action and Accountability https://download.nap.edu/catalog.php?record_id=13005

Selected State Health Assessment and Improvement Planning Resources

- Minnesota Department of Health. Local Public Health Assessment and Planning
<http://www.health.state.mn.us/lphap/>
- Missouri Department of Health. Missouri Information for Community Assessment (MICA).
<http://health.mo.gov/data/mica/MICA/>
- North Carolina Division of Public Health Office of Healthy Carolinians and Health Education and the State Center for Health Statistics. Community Health Assessment Guide Book
http://www.healthycarolinians.org/library/pdf/CHA_Guide_Book1-2011.pdf
- New York State Department of Health. 2010-2013 Community Health Assessment Guidance
<http://www.health.ny.gov/statistics/chac/nysguidance.htm>

Federally Sponsored Secondary Data

- ❑ [American Fact Finder](#) (U.S. Census Bureau) - An interactive database that is searchable for data from multiple data sources.
- ❑ [CDC Division for Heart Disease and Stroke Prevention's Data Trends & Maps](#) (CDC) - Online tool to search for and view health indicators related to heart disease and stroke prevention.
- ❑ [CDC Wonder](#) (CDC) - Wide-ranging Online Data for Epidemiologic Research. Access statistical research data published by CDC; Public-use data sets about deaths, cancer incidence, HIV and AIDS, tuberculosis, vaccinations, births, census data and many other topics are available for query.
- ❑ [CMS Community Utilization & Quality Indicators](#) (CMS) - CMS has assembled measures from Medicare claims data at the state level and for 306 Hospital Referral Regions.
- ❑ [Community Health Status Indicators](#) (HRSA, CDC, NLM, PHF) - This web-based tool provides local public health agencies access to county health status profiles for improving community health by identifying resources and setting priorities.
- ❑ [County Health Rankings](#) (RWJF and University of WI) - This interactive website provides access to 50 state reports with rankings of each county within each state according to its health outcomes and health determinants.
- ❑ [Health Indicators Warehouse \(HIW\)](#) www.healthindicators.gov is a user-friendly web-accessible database of pre-tabulated national, state, and local health indicators, reflecting multiple dimensions of population health, health care, and health determinants.
- ❑ [Quick Health Data Online](#) (HHS Office of Women's Health) - This system provides state- and county-level data for all 50 states, the District of Columbia, and US territories and possessions.
- ❑ [US Food Environment Atlas](#) (USDA) - Presents a spatial overview of a community's ability to access healthy food.
- ❑ [WISQARS \(Web-based Injury Statistics Query and Reporting System\)](#) (CDC) - An interactive database system that provides customized reports of injury-related data.

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



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