

Connecting the Dots: A Roadmap for Improving Public Health in Maine

Jennifer Gunderman-King, MPH
and Mark Griswold, MSc
Office of Local Public Health, Maine CDC/DHHS
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What we'll be discussing

- Public health concepts
- The PH system in Maine
- Examples of public health data
 - Maine CDC Public Health Indicator data
 - District Performance Reports
 - County Health Rankings
- Public Health in the Mid Coast District
- Ways for you to become involved

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Public Health Approach

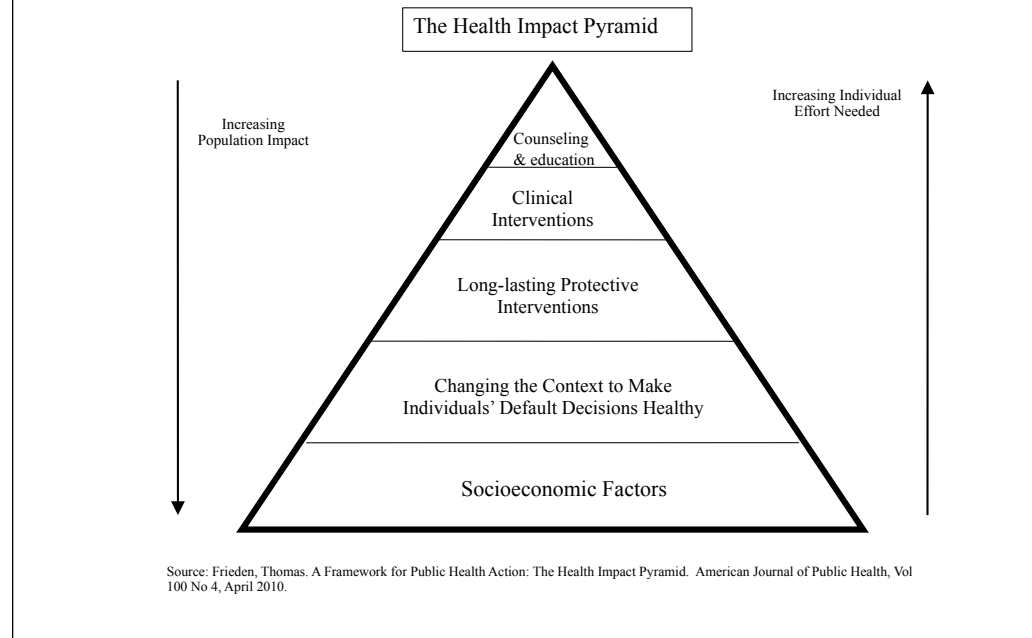
**Public Health
Model**

Versus

**Medical
Model**



What is Public Health?



“The science and art of preventing disease, prolonging life and promoting health and efficiency through organized community efforts” (Winslow, 1920)

“Fulfilling society’s interest in assuring conditions in which people can be healthy” (IOM report, 1988)

A 5-tier pyramid best describes the impact of different types of public health interventions and provides a framework to improve health. At the base of this pyramid, indicating interventions with the greatest potential impact, are efforts to address socioeconomic determinants of health. In ascending order are interventions that change the context to make individuals' default decisions healthy, clinical interventions that require limited contact but confer long-term protection, ongoing direct clinical care, and health education and counseling.

Interventions focusing on lower levels of the pyramid tend to be more effective because they reach broader segments of society and require less individual effort. Implementing interventions at each of the levels can achieve the maximum possible sustained public health benefit.



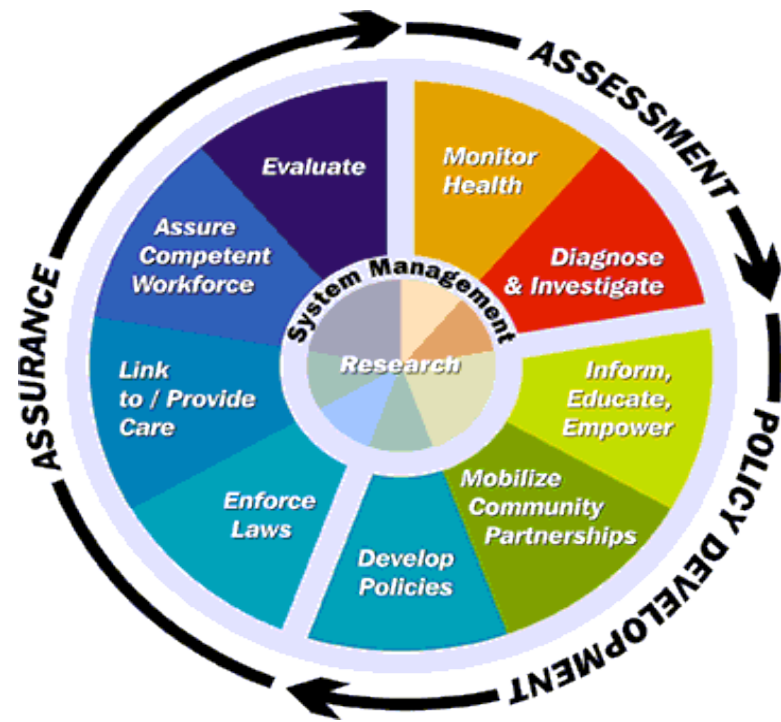
Essential Services of Public Health

- Monitor health status
- Diagnose and investigate
- Inform, educate, and empower
- Mobilize community partnerships
- Develop policies and plans
- Enforce laws and regulations
- Link people to needed services / assure care
- Assure a competent workforce
- Evaluate health services
- Research

Source: <http://www.cdc.gov/od/ocphp/nphsp/Documents/Essential%20Services%20Presentation.ppt#561>

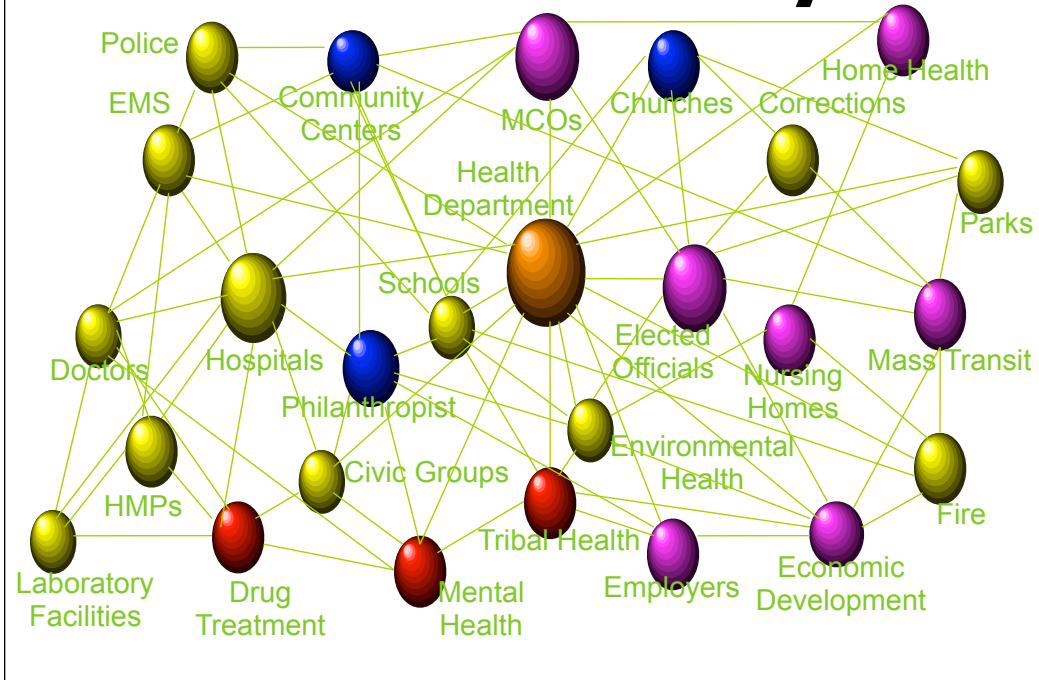
1. *Monitor health status to identify and solve community health problems*
2. *Diagnose and investigate health problems and health hazards in the community*
3. *Inform, educate, and empower people about health issues*
4. *Mobilize community partnerships to identify and solve health problems*
5. *Develop policies and plans that support individual and community health efforts*
6. *Enforce laws and regulations that protect health and ensure safety*
7. *Link people to needed personal health services and assure the provision of health care when otherwise unavailable*
8. *Assure a competent public and personal health care workforce*
9. *Evaluate effectiveness, accessibility, and quality of personal and population-based health services*
10. *Research for new insights and innovative solutions to health problems*

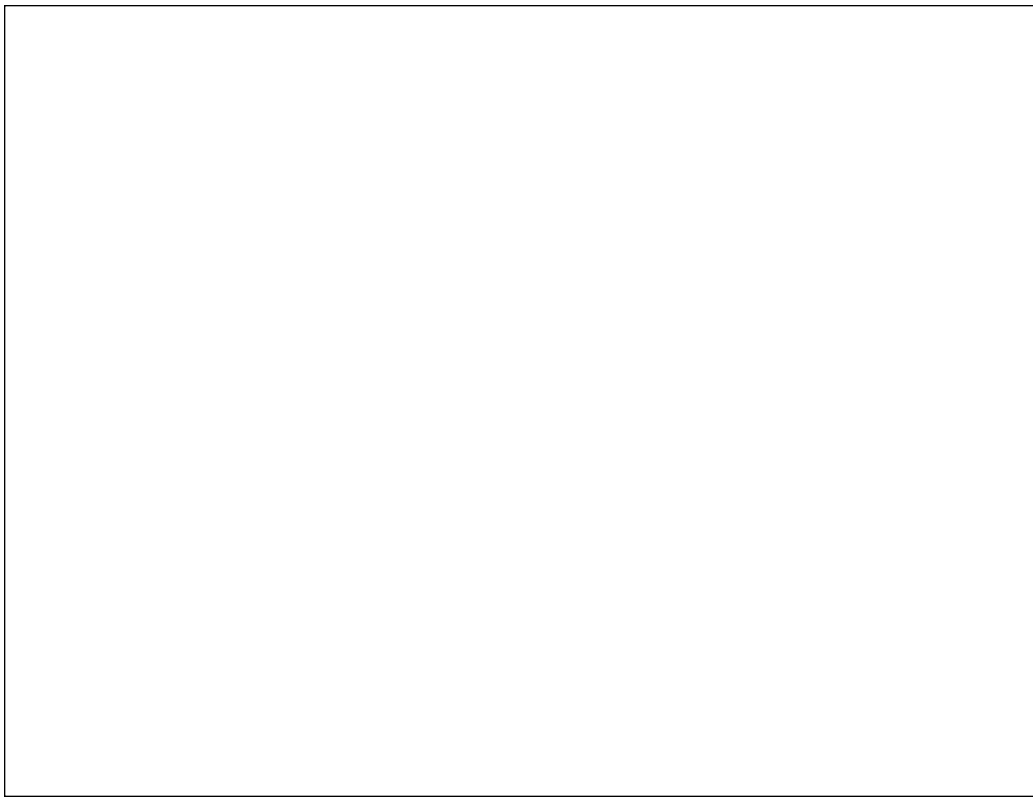
Basically, any public health activity can fit into one of these ten categories. So for example, Essential Service #1 includes activities such as data collection, community health assessments and the maintenance of population health registries. As another example, Essential Service #7 includes personal health care services as well as transportation and other enabling services and assuring the availability of culturally appropriate personnel and materials. Since the release of the ten Essential Services, numerous initiatives have explored the utility and feasibility of these services and have found them to be a good descriptor of public health.



Source: <http://www.cdc.gov/od/ocphp/nphsp/Documents/Essential%20Services%20Presentation.ppt#561>

The Public Health System





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Maine's Public Health Infrastructure Development

Historically (pre-2007):

- Regional MCDC staff unconnected to each other; different divisions/programs use different geographic divisions
- Many unlinked local contractors deliver public health services through a patchwork quilt of contracts.
- Outdated Local Health Officer Statutes, lack of support for LHOs

2005-2007: Public Health Work Group [PHWG]

- led by Governor's Office of Health Policy & Finance
- 40 voting members and broad representation/input from stakeholders

2007: Revision of Title 22 Ch 153

- Streamlined and clarified LHO appointment and duties

2008: LD 1363 signed into state law

- codifies recommendations of the PHWG and elements of the local public health infrastructure
- PHWG continues as State Coordinating Council
- Office of Local Public Health created within MeCDC

Emerging Public Health Infrastructure: Existing players, new coordination framework

At District/Local Level:

8 DHHS Districts and 1 Tribal Public Health district

- District Coordinating Councils (DCCs)
- District Public Health Units (MCDC)
- District Liaisons (MCDC-OLPH)
- In some districts, Tribal Liaisons

Healthy Maine Partnerships

Specific core public health functions
(2-6 HMPs per district)

Local Health Officers

Strengthened LHO System (492 municipalities)
with increased support from DLs/OLPH

Two Municipal Health Departments

(City of Portland, City of Bangor)

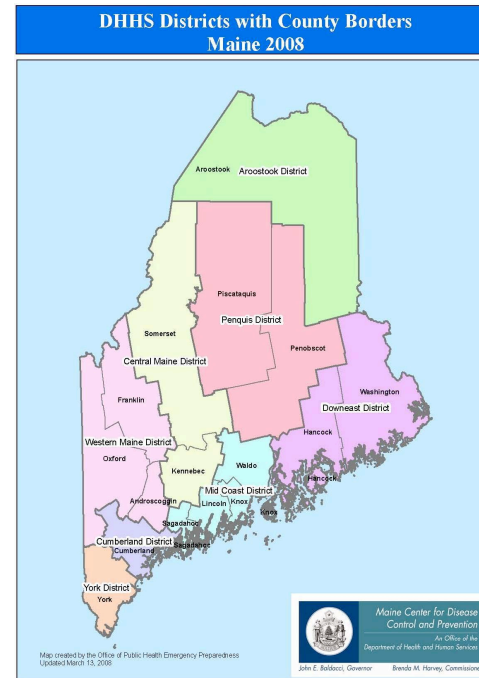
At State Level:

Maine CDC Administration

- Office of Local Public Health
- Office of Minority Health

5 Divisions:

- Infectious Disease



Start by reviewing infrastructure

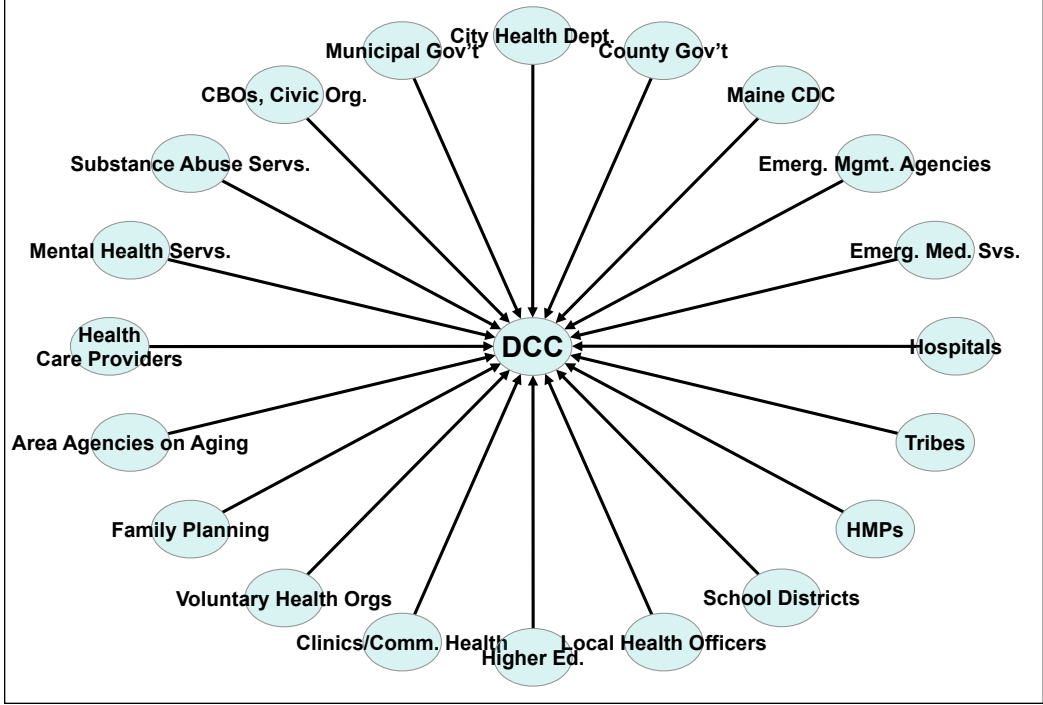
MCDC Public Health Units

Co-locate MCDC staff in each district...

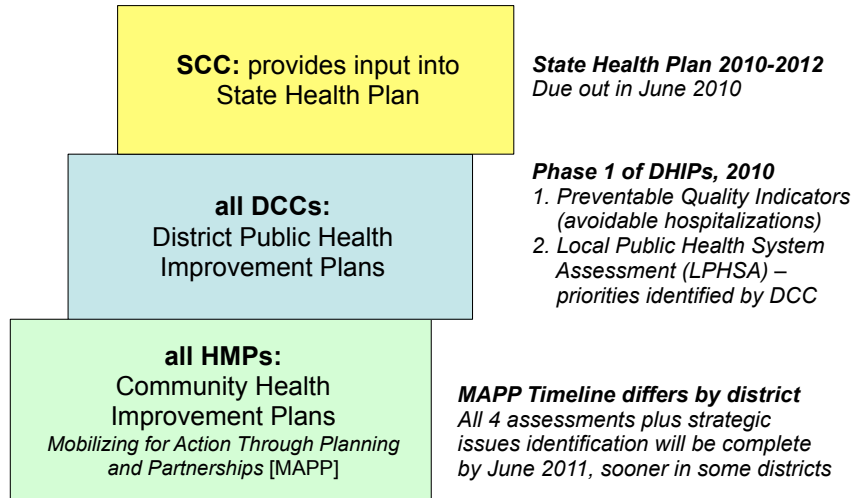
- **District Liaison**
- **Field Epidemiologist (Infectious Disease)**
- **Public Health Nurses**
- **Health Inspector(s)**
- **Drinking Water Inspector(s)**

“Shall help to improve the efficiency of the administration and coordination of state public health programs and policies and communications at the district and local levels and shall ensure that state policy reflects the different needs of each district.” (from Title 22)

DCC = PH partners convene at the district level



Aligned Population Health Improvement Planning [a simplified view!]



Placeholder for Dora's graphic

So what does a District Liaison do anyway?

- Ensure that H1N1 (and Seasonal Flu) vaccine is widely available to all priority populations
 - Convene and coordinate the MCDC District Public Health Unit
 - Work with district partners to continue development of the DCC, Local (District) Public Health System Assessment, and District Health Improvement Plan
 - Provide technical assistance to the Healthy Maine Partnerships for conducting the MAPP process (Mobilizing for Action through Planning and Partnerships)
 - Provide training, technical assistance, oversight, support to Local Health Officers
 - Build relationships and provide communication linkages among all public health partners and stakeholders in the district
 - Based upon protocols, staff county emergency operations centers in the district during public health emergencies; participate in emergency preparedness activities & exercises as appropriate
 - All other duties as assigned...
- To find out who your DL is: www.mainepublichealth.gov/olph

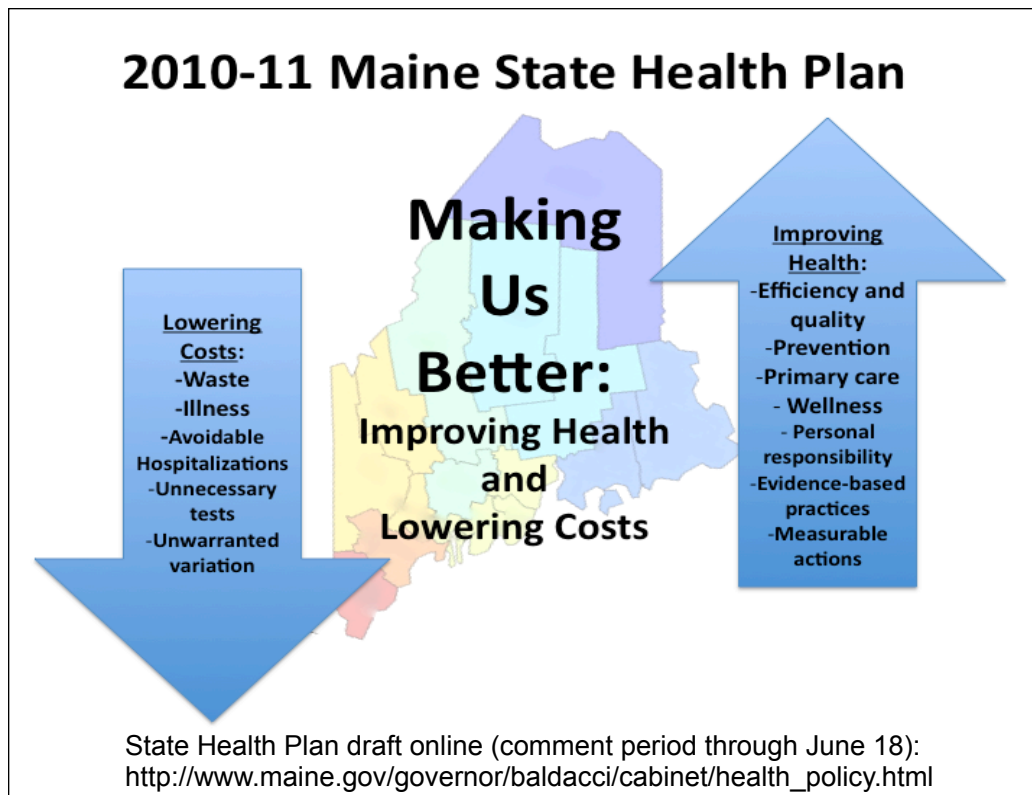
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Maine CDC Data

- Public health indicators are gathered by Maine CDC Programs, compiled in comparison tables
 - District, state, national data, benchmark states
- Broad array of categories:
 - Population demographics
 - Maternal and child health
 - Health and wellness
 - Chronic disease
 - Environmental health
 - Injury and violence
 - Substance abuse and mental health
 - Access to care
 - Emergency preparedness
 - Preventable hospitalization data
 - Infectious diseases

- Web access to Maine CDC Data:
 - www.mainepublichealth.gov
 - Look to left-hand column: “Health Indicator Comparison Tables”



Produced by the Governor's Office of Health Policy and Finance

Goals include both health services and public health

State Health Plans in the past have made significant recommendations for improving public health, including implementation of the new public health infrastructure described earlier.

This plan features makes an effort to align population health and primary care—one way it does this is through District Performance reports.

A Call to District Action: Linking Public Health Strategies to Reduction of Avoidable Hospitalizations

PENQUIS DISTRICT,
MAINE (2010)

GOALS: To reduce avoidable hospitalizations by 50% by 2015 (through prevention, proper management, and appropriate treatment of disease).

Prevention Quality Indicators (PQI's) that measure the potentially avoidable hospitalization rates that are major cost drivers in the state of Maine [*] :		Current Rates (Adjusted rate of admissions per 100K)	Goal (Reduction by 50% by 2015)	Cost savings in District given a 50% reduction by 2015
Respiratory Infections				
1	Adult asthma admission rate [*]	109	55	\$378,115
	Bacterial pneumonia admission rate [*]	468	234	\$2,274,200
	Chronic obstructive pulmonary disease admission rate [*]	268	134	\$1,152,350
Heart Failure				
2	Congestive heart failure admission rate [*]	375	188	\$1,808,230
	Hypertension admission rate [*]	25	13	\$79,605
Diabetes				
3	Diabetes short-term complication admission rate [*]	45	23	\$174,720
	Diabetes long-term complication admission rate [*]	91	46	\$585,280
	Uncontrolled diabetes admission rate [*]	3	2	\$5,710
	Rate of lower-extremity amputation among patients with diabetes [*]	33	17	\$326,360
			Total potential cost savings for Penquis District:	\$6,784,570

Focus on chronic disease.

Chronic Diseases

Leading causes of death and disability

~75% of Mainers will die from 1 of 4 diseases – CVD, Cancer, Diabetes, Chronic Lung Disease

Mostly preventable – Tobacco and Obesity

Direct health care costs = 40% of Maine's Health Care Budget

Population Health Indicators: If these indicators are addressed comprehensively by the system, there will be a measureable reduction in the rates of avoidable hospitalizations.

		Penquis District	Maine	Goal (Movement of trend)
1,2,3	Percent of adults overweight or obese [2008]	68	62	↓
2,3	Percent of high blood pressure among adults [2008]	33	31	↓
2,3	Percent of high cholesterol among adults [2008]	44	41	↓
2,3	Prevalence of diabetes among adults (%) [2008]	10	8	↓
3	Percent of adults with diabetes who have received a Hemoglobin A1c test at least once yearly [2008]	97	93	↑
1	Percent of adults with asthma [2008]	13	10	↓
1,2,3	Adult smoking prevalence (% current smokers) [2008]	20	18	↓
1,2,3	Adolescent smoking prevalence, 6-12 graders (%) [2008]	13	12	↓
1,2,3	Percent of high school youth that are overweight or obese [2007]	n/a	26	↓
2,3	Previous 30-day alcohol use, 9th-12th graders (%) [2008]	33	35	↓
1	Percent of child and youth asthma, <18 years old [2007]	n/a	9	↓
1,2,3	Percent of adults reporting fair or poor health status in last 30 days [2008]	14	13	↓
1,2,3	Percent of adults with >=14 days of frequent mental distress in past month [2008]	10	10	↓
1	Percent ever had Pneumococcal vaccine, >=65 Years [2008]	82	72	↑
1	Percent, Influenza vaccine past year for adults >65 years [2008]	79	75	↑
1,2,3	Access to primary care physician (population to physician ratio) [2004]	939:::1	978:::1	↑
2,3	Percent of adults with a routine dental visit in past year [2008]	69	70	↑
1,2,3	Number of visits to KeepMEWell.org (count)	n/a	125,000	↑

Context: Socioeconomic status.

	Penquis District	Maine
Total population [2008]	165,612	1,316,456
Percent individuals living in poverty [2007]	13	12
Population density (people per mi ²) [2008]	23	43
Percent of population non-white [2008]	5	5
Percent of population between the ages of 18-64 years old [2008]	66	65
Percent 65 years and older [2005-07]	14	14
Percent of adults with lifetime educational attainment less than high school [2000]	15	15
Percent of householders >=65 Living Alone [2000]	10	11
Percent of adults with no health insurance [2008]	9	11
Percent of children age 0-18 years without health insurance [2006]	7	7

* Prevention Quality Indicator (PQI): Risk adjusted for age and sex, number of admissions per 100,000 population. Generated by the Maine Quality Forum using a tool created by the Agency for Healthcare Research and Quality (AHRQ). See back for further detail.

Focus on chronic disease.

Chronic Diseases

Leading causes of death and disability

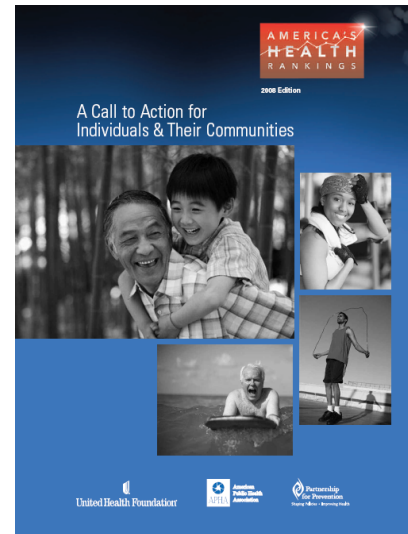
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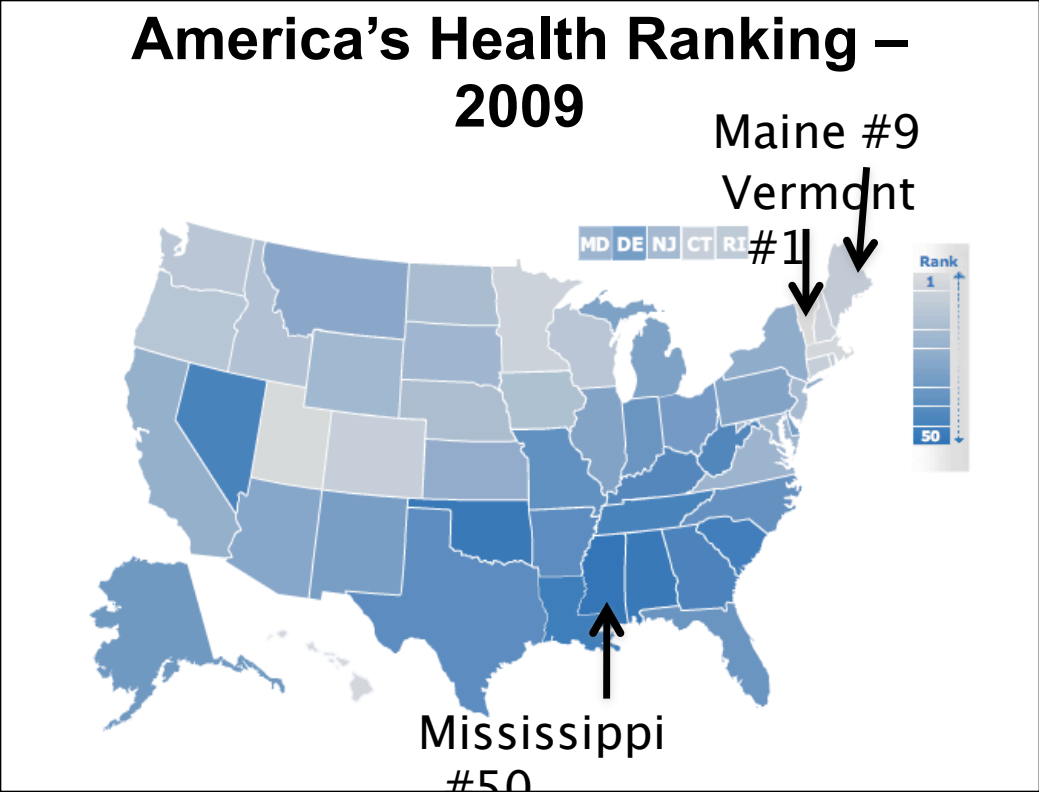
America's Health Rankings

- Ranks the overall health of all 50 states, from healthiest to least healthy.
- First published in 1990 and annually thereafter.
- Uses a model that summarizes the overall health of each state.

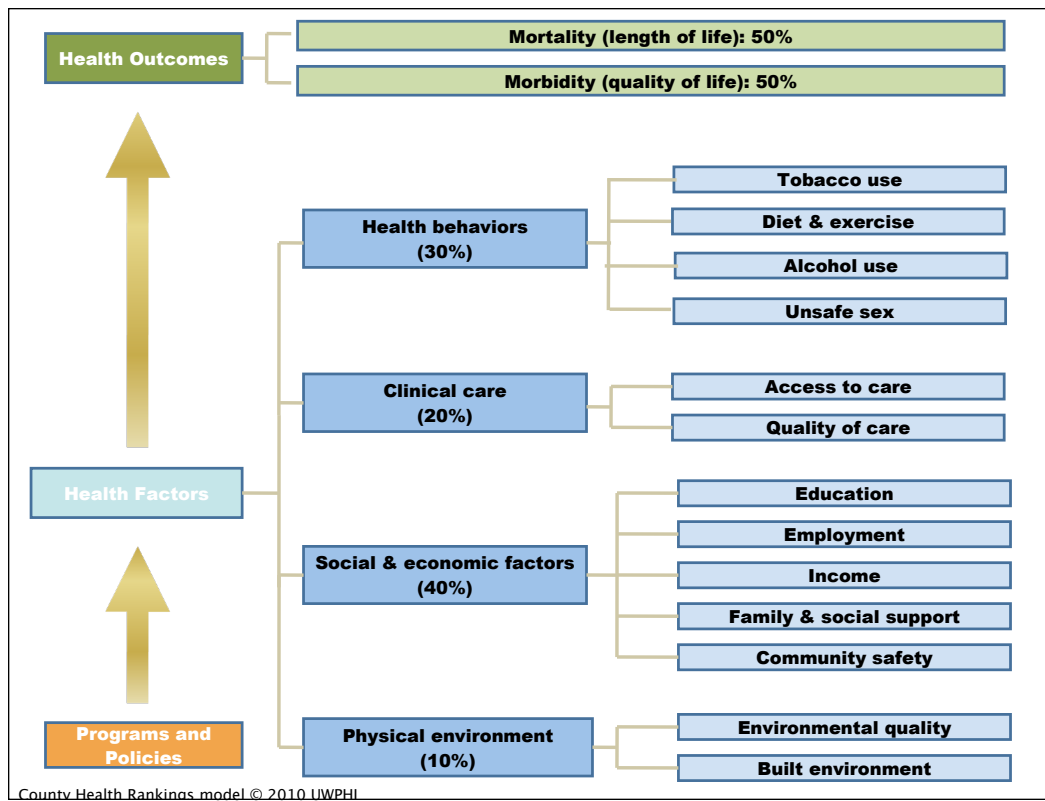


Our work builds upon the work of the United Health Foundation's "America's Health Rankings"

America's Health Ranking – 2009



This slide shows the results from last year's State Health Ranking.



County Health Rankings model © 2010 UWPHI

Overall Rankings

Rank	Health Outcomes	Rank	Health Factors
1	Franklin	1	Cumberland
2	Hancock	2	Sagadahoc
3	Cumberland	3	York
4	Lincoln	4	Lincoln
5	York	5	Kennebec
6	Knox	6	Knox
7	Sagadahoc	7	Franklin
8	Kennebec	8	Hancock
9	Waldo	9	Penobscot
10	Penobscot	10	Waldo
11	Androscoggin	11	Androscoggin
12	Piscataquis	12	Aroostook
13	Aroostook	13	Oxford
14	Somerset	14	Piscataquis
15	Washington	15	Washington
16	Oxford	16	Somerset

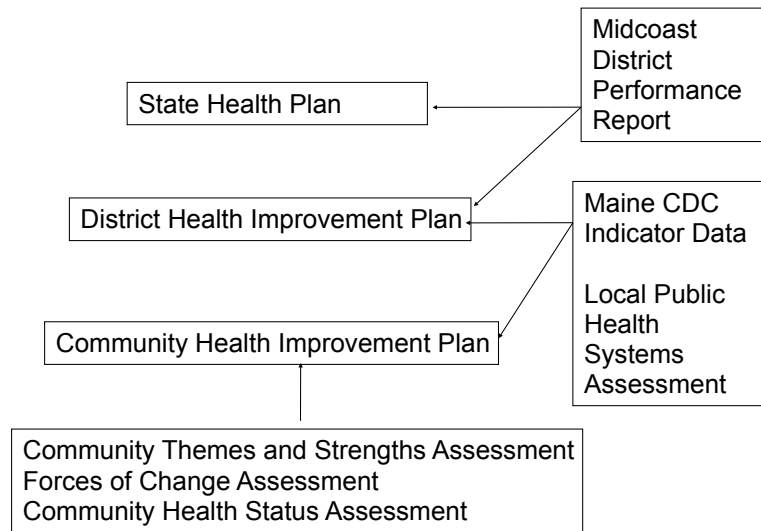
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Midcoast District Coordinating Council (DCC)

- 45 Members (Full and Associate)
- Accomplishments in past 2 years:
 - Solidified Structure
 - Completed Local Public Health Systems Assessment
 - Established Midcoast Transportation Task Force
 - Facilitated efficient and effective communication and collaboration for H1N1 efforts
 - Linkage with islands
- Presentations/Discussions- 211 Maine, Health Disparities, UW Mental Health Initiative, “Hot Topics”
- Currently working on District Health Improvement Plan

Midcoast District Health Improvement Plan (DHIP)



Midcoast DHIP Process

- Step 1: Prioritize Local Public Health Systems Assessment Essential Public Health Service
 - EPHS 4 (mobilize partners) & EPHS 7 (link to health services).
- Step 2: Consider Population Health Indicators from Midcoast District Report Card
 - Focus on access to care and services (potential to impact all indicators)
- Step 3: Inventory District Activities/Potential Activities
 - Results:EPHS 4: Membership Directory
 - EPHS 7: Midcoast Transportation Task Force; Linking to 211 Maine; Seasonal Flu Clinics; FQHC and rural health clinic capacity; United Way's mental health initiative; Disparate populations- fishing community

Midcoast DHIP Process cont'd

- Step 4: Develop draft strategies.
- **Step 5: *Meet with stakeholders***
- Step 6: Draft District Health Improvement Plan.
- Step 7: Present at September DCC meeting and get feedback –September
- Step 8: Final revisions and vote

Using District and County Data

- Priority areas as identified in data:
 - Substance Abuse among youth
 - Lead screening and elevated blood lead levels
 - Lyme Disease
 - Uninsured children
 - Female Cancer Screening
 - Suicide
- Positive data indicators
 - Hospitalization rates- myocardial infarction
 - ED rates- asthma
 - Deaths- Diabetes
- Possible differences across district
 - Example: Teenage pregnancy

Midcoast Linkages to Health Care

- District Health Improvement Plan
- Influenza vaccine efforts
 - School and community clinics
- Pen Bay Health Island Network Initiative
- Medication Collections
- Public Health Emergency Planning
- Healthy Maine Partnerships
- Public Health Unit
 - Public Health Nurses
 - Infectious Disease Epidemiologist

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Ways to become involved

- Health Alert Network (HAN)
 - www.mainepublichealth.gov, complete the HAN enrollment form
- DCC
 - Become a member or interested party
- Healthy Maine Partnership
 - Find out more about your local HMP
 - www.healthymainepartnerships.org
- Maine CDC Updates
 - Email Mark and I'll put you on the list to receive bi-weekly updates
- SHP feedback
 - http://www.maine.gov/governor/baldacci/cabinet/health_policy.html

Your thoughts...

- When examining your district and county data, what stands out (important, challenging, better or worse in comparison with the state-level data)?
- How can you, as a clinician, impact public health indicators in your area?
- How have you interacted with and/or participated in various elements of the developing public health infrastructure in your district?
- How can health care and public health work together most effectively to improve the health of people in Maine communities?

For More Information/Contacts

www.mainepublichealth.gov/olph

Mark Griswold, M.Sc.
Director, Office of Local Public Health (Augusta)
Maine Center for Disease Control and Prevention/DHHS
Ph: 207-287-6262
Email: Mark.Griswold@maine.gov

Jennifer Gunderman-King, M.P.H.
Mid Coast District Public Health Liaison (Rockland)
Maine Center for Disease Control and Prevention/DHHS
Ph: 207-596-4278
Email: Jennifer.Gunderman-King@maine.gov