Role of MaineHealth Health Index Initiative

- **Inform population health efforts** - *Turn Data into Action*
  - Strategic directions (system-wide and local)
    » Aligning community health needs assessment and strategic planning activities as much as possible.
    » Allocation of resources
  - Movement toward patient/family centered and accountable care
  - Formation of partnerships

- **Routine monitoring & evaluation** - *Are We On Course?*
  - Update priority population health issues as needed
  - Update targets for each priority as needed- *(new FY28 targets)*
  - Revise strategies to maximize effectiveness
<table>
<thead>
<tr>
<th>MaineHealth Health Index Initiative</th>
<th>Community Health Needs Assessments/Implementation Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>When started</strong></td>
<td>2009; by MaineHealth BOT</td>
</tr>
<tr>
<td></td>
<td>2012-13; required via ACA</td>
</tr>
<tr>
<td><strong>Purpose:</strong></td>
<td><em>Using Data to Inform Strategies &amp; Actions</em></td>
</tr>
<tr>
<td></td>
<td>• Select priority population health issues</td>
</tr>
<tr>
<td></td>
<td>• Identify strategies to address</td>
</tr>
<tr>
<td></td>
<td>• Measure progress</td>
</tr>
<tr>
<td><strong>Scope of Priorities</strong></td>
<td><em>System-wide priorities</em></td>
</tr>
<tr>
<td></td>
<td><em>Primarily MH Service Area</em></td>
</tr>
<tr>
<td></td>
<td><em>Hospital priorities</em></td>
</tr>
<tr>
<td></td>
<td><em>Primarily Hospital Service Area</em></td>
</tr>
<tr>
<td><strong>Who selects priorities?</strong></td>
<td><em>Leaders from MH orgs</em></td>
</tr>
<tr>
<td></td>
<td><em>Public Health Partners</em></td>
</tr>
<tr>
<td></td>
<td><em>Leaders from MH orgs</em></td>
</tr>
<tr>
<td></td>
<td><em>Public Health Partners</em></td>
</tr>
<tr>
<td></td>
<td><em>Community stakeholders</em></td>
</tr>
<tr>
<td></td>
<td><em>Representation from disparate populations</em></td>
</tr>
<tr>
<td>Reports/information disseminated</td>
<td>MaineHealth Health Index initiative</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>• Annual Health Index Updates</td>
<td>• Hospitals’ CHNA reports created every 3 years</td>
</tr>
<tr>
<td>• Website- ongoing</td>
<td>• Annual progress report (for IRS)</td>
</tr>
</tbody>
</table>

| Organizations who use information/reports | MaineHealth member and affiliate organizations, External partners, primarily in the 12-county MaineHealth Service Area | Organizations throughout Maine: |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------|• All nonprofit hospitals |
|                                           | • Maine Health Health Index update                                                                                     | • Maine DHHS/ ME-CDC |
|                                           | • Website- ongoing                                                                                                      | • Portland & Bangor Public Health Departments |
|                                           | • Focused- metrics pertaining to 10 Health Index priorities                                                 | • Community Organizations |
|                                           | • Data for both community and patient populations                                |                                |
|                                           | • Health Index web content also highlights actions being taken- (clinical, community and policy strategies) |                                |

<table>
<thead>
<tr>
<th>Data included in Reports/website content</th>
<th>Broader- 197 measures about many more health topics.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Focused- metrics pertaining to 10 Health Index priorities</td>
<td>• All these data at the community population level (e.g. county)</td>
</tr>
<tr>
<td>• Data for both community and patient populations</td>
<td>• Summary of community input for selecting priorities</td>
</tr>
<tr>
<td>• Health Index web content also highlights actions being taken- (clinical, community and policy strategies)</td>
<td>• Action plan in CHNA;</td>
</tr>
<tr>
<td></td>
<td>• Actions taken in progress reports</td>
</tr>
</tbody>
</table>
Cardiovascular death rates

Age-adjusted rates per 100,000 population

U.S. CDC WONDER database (2000-2019) ICD I00-I78, 3-year rolling averages

2028 MaineHealth target: 175 or less
Cardiovascular death rates in the MaineHealth Service Area

Age-adjusted rates per 100,000 population; by type

U.S. CDC WONDER database (2000-2019) 3-year rolling averages

2028 MaineHealth target (all cardiovascular deaths): 175 or less
Cancer
Cancer death rates

Age-adjusted rates per 100,000 population

U.S. CDC WONDER database (2000-2019) 3-year rolling averages

2028 MaineHealth target: 140 or less

MaineHealth service area
Maine
U.S.
Best state: Utah
Worst State: Kentucky

2000-2002
2001-2003
2002-2004
2003-2005
2004-2006
2005-2007
2006-2008
2007-2009
2008-2010
2009-2011
2010-2012
2011-2013
2012-2014
2013-2015
2014-2016
2015-2017
2016-2018
2017-2019
Cancer death rates in the MaineHealth Service Area

Age-adjusted rates per 100,000 population; by type

U.S. CDC WONDER database (2000-2019) 3-year rolling averages

2028 MaineHealth target (all cancer deaths): 140 or less

- Lung and bronchus
- Other tobacco related*
- Colon and rectum
- Prostate (males)
- Breast (females)

* Tobacco-related cancers excludes: Lung/bronchus and Colorectal cancers, includes: cancers of the Oral Cavity/Pharynx, Esophagus, Stomach, Pancreas, Larynx, Cervix, Urinary Bladder, Kidney and Renal Pelvis, Acute Myeloid Leukemia, Liver, and Bladder
Cancer vs. all cardiovascular death rates

Age-adjusted rates per 100,000 population

U.S. CDC WONDER database (2000-2019) 3-year rolling averages

Cancer death rates

All cardiovascular death rates

MaineHealth service area

Maine

U.S.

Best state: Utah

Best state: Minnesota

MaineHealth
Cancer vs. heart disease death rates

Age-adjusted rates per 100,000 population

U.S. CDC WONDER database (2000-2019) 3-year rolling averages

Cancer death rates

Heart disease death rates

MaineHealth service area
Maine
U.S.
Best state: Utah

MaineHealth service area
Maine
U.S.
Best state: Minnesota


212 210 197
147

251 222 208
163 144 141 118


MaineHealth service area
Maine
U.S.
Best state: Utah

MaineHealth service area
Maine
U.S.
Best state: Minnesota

Cancer death rates

Heart disease death rates
Cancer incidence in Maine

Age-adjusted rates per 100,000 population; by type

U.S. CDC WONDER database (2000-2018) 3-year rolling averages

2028 MaineHealth target (all cancer types): 450 or less

* Tobacco-related cancers excludes: Lung/bronchus and Colorectal cancers, includes: cancers of the Oral Cavity/Pharynx, Esophagus, Stomach, Pancreas, Larynx, Cervix, Urinary Bladder, Kidney and Renal Pelvis, Acute Myeloid Leukemia, Liver, and Bladder
PSA testing in Maine

% men aged 40+ who have had a PSA test within the past two years

Behavioral Risk Factor Surveillance System (2002-2020) estimated percentage

MaineHealth
Diabetes
Adults with diabetes in Maine

% of 18+-year-olds ever told by provider that they have diabetes


2028 MaineHealth target: 9% or less

Note: Percentages do not include adults who reported gestational diabetes.
Obesity and diabetes rates among adults in Maine

% of 18+-year-olds with a body mass index ≥30
% of 18+-year-olds ever told by provider that they have diabetes

Behavioral Risk Factor Surveillance System (1996-2020) estimated percentage

2028 MaineHealth target: 26% or less

Note: Due to improvements in survey methods, obesity estimates for 2011-18 are considered more accurate than those made in previous years, particularly data from 2004–2010. Percentages do not include adults who reported gestational diabetes.
Adults with diabetes in Maine

% of 18+-year-olds ever told by provider that they have diabetes


2028 MaineHealth target: 9% or less

**Note:** Percentages do not include adults who reported gestational diabetes.
Adults with diabetes in Maine by age

% of 18+-year-olds ever told by provider that they have diabetes

Behavioral Risk Factor Surveillance System (2010-2020) estimated percentage

Note: The true rate among ALL adults in Maine is within the range of the 95% confidence interval, represented by the black line at the top of each bar.
Behavioral Health
Substance Misuse and Dependence
Mental Health Conditions
Drug overdose death rates in MaineHealth Service Area

Age-adjusted rates per 100,000 population

U.S. CDC WONDER database (1999-2019) 3-year rolling averages

2028 MaineHealth target: 12 or less

MaineHealth
Drug overdose death rates in U.S.

Age-adjusted rates per 100,000 population

U.S. CDC Wonder database (2010 vs. 2019) estimated percentage

2028 MaineHealth target: 12 or less

- 2010
- 2019 Rate is statistically WORSE than the 2010 rate (39 states)
- 2019 Rate is statistically BETTER than the 2010 rate (0 states)
- 2019 Rate is NOT statistically better or worse than the 2010 rate (11 states)
Drug overdose deaths in Maine

Total drug deaths per year

Drug overdose death rate

Number of drug overdose deaths, by county


Note: Data for Maine counties is from the 2020 Maine Drug Death Report and data for Carroll county (New Hampshire) is from the U.S. CDC WONDER database. As a result, the number of drug overdose deaths in 2020 in Carroll county were not available.
Drug overdose death rates in MaineHealth Service Area

Number of drug overdose deaths

<table>
<thead>
<tr>
<th>Year</th>
<th>MaineHealth Service Area</th>
<th>Non-MHSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>269</td>
<td>85</td>
</tr>
<tr>
<td>2019</td>
<td>291</td>
<td>89</td>
</tr>
<tr>
<td>2020</td>
<td>350</td>
<td>154</td>
</tr>
</tbody>
</table>
Suicide rate in MaineHealth Service Area

Age-adjusted rates per 100,000 population

U.S. CDC WONDER database (1999-2019) 3-year rolling averages

2028 MaineHealth target: 14 or less
Suicide rate in U.S.

Age-adjusted per 100,000 population, by state

U.S. CDC WONDER database (2010 vs. 2019) *estimated percentage*

2028 MaineHealth target: 14 or less
Drug overdose death vs. suicide rates

**Age-adjusted rates per 100,000 population**

U.S. CDC WONDER database (2000-2019) 3-year rolling averages

**Suicide rates**

**Drug overdose death rates**

---

**MaineHealth Service Area**

<table>
<thead>
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</thead>
<tbody>
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<td>2000-2001</td>
<td>12</td>
<td>10.7</td>
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<td>2008-2010</td>
<td>14.1</td>
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**Maine**

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</table>
Suicide & overdose death rate increases: ME

Age-adjusted rates per 100,000 population; by gender & age

CDC WONDER (2005‒2009 vs 2015‒2019; Maine)

Males by age group

Females by age group

* Due to small numbers, rates were unreliable for one or more time periods and/or categories for certain age groups.
Suicide & overdose death rate increases: MHSA

Age-adjusted rates per 100,000 population; by gender & age

CDC WONDER (2005–2009 vs 2015–2019; MaineHealth Service Area)

- 2005-2009 (suicide)
- 2005-2009 (drug overdose)
- 2015-2019 (suicide)
- 2015-2019 (drug overdose)

Males by age group

Females by age group

* Due to small numbers, rates were unreliable for one or more time periods and/or categories for certain age groups.
Different patterns across Maine for death rates due to drug overdoses vs. suicide
Healthy Aging: Falls Prevention
Falls among 65+ year olds in Maine

% 65+ year olds reported falling 1+ times in the past 12 months

Behavioral Risk Factor Surveillance System (2012-2018) estimated percentage

2028 MaineHealth target: 26% or less
Tobacco & Nicotine Dependence
Tobacco use among adults in Maine

% of 18+-year-olds who smoke daily or some days

Behavioral Risk Factor Surveillance System (1990-2020) estimated percentage

2028 MaineHealth target: 14% or less

Note: Due to improvements in survey methods, estimates for 2011-2020 are considered more accurate than those made in previous years, particularly data from 2004-2010.
Tobacco use among adults in Maine

% of 18+-year-olds who smoke daily or some days

Behavioral Risk Factor Surveillance System (2017, 2020) estimated percentage

2028 MaineHealth target: 14% or less

Tobacco use

% of adults who who smoke daily or some days
Behavioral Risk Factor Surveillance System (2017)

Maine’s rate: 17.3%

county’s rate is significantly worse than Cumberland County’s rate
Smoking among Maine adults 2012-2020

% of 18+-year-olds who smoke daily or some days

Behavioral Risk Factor Surveillance System (2012-2020) estimated percentage

2012 2014 2016 2018 2020

2012 2014 2016 2018 2020

2012 2014 2016 2018 2020

2012 2014 2016 2018 2020

2012 2014 2016 2018 2020

2012 2014 2016 2018 2020

2012 2014 2016 2018 2020

Note: The true rate among ALL adults in Maine is within the range of the 95% confidence interval, represented by the black line at the top of each bar. Due to improvements in survey methods, estimates for 2011-2017 are considered more accurate than those made in previous years, particularly data from 2004-2010.
Tobacco use among high school students in Maine

% of high school students who used any tobacco or vaping product in the past 30 days Maine Integrated Youth Health Survey (2009-2019) estimated percentage

- 2009: 17.6%
- 2011: 18.4%
- 2013: 28.7%
- 2015: 2019 Rate is statistically BETTER than the 2017 rate
- 2017: 2019 Rate is statistically WORSE than the 2017 rate
- 2019: 7.1%

2028 MaineHealth target (tobacco and EVP): 20% or less

Cigarettes: Orange line
Electronic vapor products (was not a survey question until 2015): Dark blue line

MaineHealth
High school students’ tobacco use in Maine

% of high school students who used cigarettes in the past 30 days

Youth Risk Behavior Surveillance System (2003-2019) estimated percentage

2028 MaineHealth target (tobacco and EVP): 20% or less

Note: Utah did not have a representative data sample in 2015, so data could not be weighted to represent the population.
State Tax vs. Cigarette Use by High School Students

% of students who smoked cigarettes on 1 or more of the past 30 days

Youth Risk Behavior Surveys (1995-2019); Campaign for Tobacco-Free Kids

Maine, U.S., Rhode Island, West Virginia

State Tobacco Taxes as of 2018:
- RI - $4.25 (4th highest)
- ME - $2.00 (16th) - Not raised since 2005!
- WV - $1.20 (34th)

1997: Maine had the 5th highest rate out of 24 states
2007: Maine had the 4th lowest rate out of 39 states
2019: Maine had the 15th highest rate out of 43 states

Cigarette use from Youth Risk Behavior Surveillance System (2000-2019) estimated percent
High school students’ tobacco use in Maine

% of high school students who used electronic vapor products in the past 30 days Youth Risk Behavior Surveillance System (2015-2019) estimated percentage

- 16.8% in 2015
- 24.1% in 2017
- 31.2% in 2019

MaineHealth target (tobacco and EVP): 20% or less

Note: Utah did not have a representative data sample in 2015, so data could not be weighted to represent the population.
High school students’ tobacco use in Maine

% of high school students who ever used electronic vapor products

Youth Risk Behavior Surveillance System (2015-2019) estimated percentage

2028 MaineHealth target (tobacco and EVP): 20% or less

Note: Utah did not have a representative data sample in 2015, so data could not be weighted to represent the population.
Obesity
Obesity rates among adults in MaineHealth Service Area

% of 18+ year-olds with a body mass index ≥30

Behavioral Risk Factor Surveillance System (1990-2020) estimated percentage

2028 MaineHealth target: 26% or less

Note: Due to improvements in survey methods, estimates for 2011-18 are considered more accurate than those made in previous years, particularly data from 2004–2010.
Obesity rates among high school students in Maine

% of high school students with a body mass index ≥30


2028 MaineHealth target: 13% or less

Next slide is same graph with Mississippi removed—given that Miss has so few years of data.

Note: Utah did not have a representative data sample in 2015, so data could not be weighted to represent the population. Mississippi did not have representative data samples in 2005 or 2017, so data could not be weighted to represent the population.
Obesity rates among high school students in Maine

% of high school students with a body mass index ≥30

Youth Risk Behavior Surveillance System (2003-2019) *estimated percentage*

2028 MaineHealth target: 13% or less

Note: Utah did not have a representative data sample in 2015, so data could not be weighted to represent the population.
### Obesity rates among students in Maine

<table>
<thead>
<tr>
<th>Year</th>
<th>Middle School Students</th>
<th>High School Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>10.1%</td>
<td>11.4%</td>
</tr>
<tr>
<td>2011</td>
<td>15.5%</td>
<td>12.9%</td>
</tr>
<tr>
<td>2013</td>
<td>14.2%</td>
<td>12.7%</td>
</tr>
<tr>
<td>2015</td>
<td>14.3%</td>
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</tr>
<tr>
<td>2017</td>
<td>15.3%</td>
<td>15.0%</td>
</tr>
<tr>
<td>2019</td>
<td>15.1%</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

2009-2019 Maine Integrated Youth Health Survey (estimated percentage)

2028 MaineHealth target: 13% or less

*MaineHealth*
Social Determinants of Health
Households experiencing food insecurity in Maine

% of households experiencing food insecurity

U.S. Census (2001-2018) estimated percentage

2028 MaineHealth target: 11% or less
% of households that lack access, at times, to enough food for an active, healthy life for all households members or that have limited or uncertain availability of nutritionally adequate food. (Feeding America: Map the Meal- 2015)