Quick Hits: Public Health

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IPA Philanthropy Leads Conference

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What is Public Health?
While access to healthcare is a crucial part of health, it actually makes up the smallest proportion of what makes us healthy (about 10%).

Instead, the vast majority of what determines our health is the environment we live in (20%) and our behaviors (50%).
Public Health specifically focuses on behaviors and the environment, yet the majority of the dollars spent toward health are spent on medical services (88%).

Not only are most medical resources directed at the determinant which has the smallest impact on overall health, the resources are often spent when an individual is already sick.

If those health dollars are instead invested earlier, in the form of public health protections and the prevention of illness, they would extend further.

Approximately 3% of national health expenditures are spent on governmental public health, despite that more than 75% of overall healthcare costs are attributable to preventable health conditions.
The World’s Most Disabling Conditions

1. Major Depression (up to 15% of population; 33-70% heritable)
2. Iron-deficiency anemia
3. Falls
4. Alcohol abuse (1/5 men, 1/9 women; 60-70% heritable)
5. Chronic obstructive pulmonary disease
6. Bipolar disorder (2-3% of population; 85% heritable)
7. Congenital anomalies
8. Osteoarthritis
9. Schizophrenia (1% of population; 50-70% heritable)
10. Obsessive-compulsive disorder (3% of population; 50% heritable)

In the period of the 20th century, the US has gained an additional 30 years in life expectancy. Twenty-five of those 30 years are attributed to public health efforts, including the 10 great public health achievements.
Expectations of a functioning public health system

The 10 Essential Public Health Services

Some activities are conducted primarily at the state level and or are state level components that provide the infrastructure - such as the reporting system - that locals will use to conduct their work.

Some of these system activities are conducted in collaboration with system partners.

The 10 Essential Services are system-wide and all-encompassing.
The Foundational Public Health Services are those services that have been nationally recommended to be provided at the local level. These are particularly important because the local level is where direct services are most commonly provided to communities.
Public health agencies connect and lead other community partners in the effort to promote and protect public health and specifically address social determinants of health.
Core Measure Impact
What is the Status of Public Health in Indiana?

Findings from the Public Health Systems Report
Indiana is near the bottom in health rankings

In 2019, AHR ranked Indiana as 41\textsuperscript{st} in overall health. Rank has trended downward from a high of 26 in 1991.

In 2021, US News and World Report ranked Indiana ranked as 40\textsuperscript{th}.
COVID-19 Vaccination Rates in Indiana

- Indiana
- United States

Percentage of total population who are fully vaccinated, defined as having received the second dose in a two-dose COVID-19 vaccine series or one dose of the single-shot J&J/Janssen COVID-19 vaccine.

Source: CDC, COVID Data Tracker
Compared to the US and our neighboring states, Indiana has the lowest COVID-19 vaccination rate.

![COVID Vaccination Rates](chart.png)
Evidence shows that when communities invest more in public health, they spend less on health care and live longer.
Indiana invests less in public health than neighboring states

Data from 2021 report
Indiana has particularly low rates of vaccinations for influenza, childhood vaccines, and adult and elderly vaccines.
One of the highest rates of adult smokers in the nation

At least 10% below the US average for preventable mortality such as infant deaths, accident deaths, and alcohol, drug, and suicide deaths

Scores in the bottom tier nationally on public health preparedness

Gray bands represent range of comparison states as percent change from the US rate (dotted line). A red dot indicates Indiana is at least 10% worse than the US rate, an orange dot indicates 5% worse, and a green dot indicates 10% better than the rate of the US overall. A grey dot indicates that Indiana is not significantly different from the US rate.
Evidence shows that when communities invest more in public health, they spend less on health care and live longer.

However, Indiana communities are less likely to be implementing nationally recommended public health activities compared to other states – those Foundational Public Health Services, in particular.
Further, Indiana’s communities receive less public health funding compared to neighboring, companion, or exemplar states.

National median is $41 per capita. All but 4 of Indiana’s counties are spending below the national 25% percentile of $23.
Indiana’s local health departments rely on local sources for the majority of their budgets

This is unlike most other US communities that rely equally on state and federal (passthrough) funding in addition to local funding. Less resourced communities that likely have a greater need for the protection and preventive services public health provides also have less funding and less capacity to ensure that they receive them.
In sum, although there is value in having direct local connections in every county, the current structure ensures that many of the 94 LHDs are able to provide only a fraction of the necessary public health services and expertise that should be available to all people living in Indiana.
These skills and tools facilitate an efficient and effective system but are not present in many of Indiana’s local settings, e.g. still relying on paper-based reporting systems and delays in routine outbreak identification and public health intervention.
Recommendations for Change
Key Recommendations

1. There needs to be a uniform approach to delivering the Foundational Public Health Services across the state.

2. One way to ensure that all communities, even those supported by small local health departments, are provided the foundational public health services is to create a district-level mechanism that will enable resource sharing in support of local health departments.

“So we have a district where we’re going to run out of beds much quicker than we thought we would. What are we going to do to set up a field hospital? Unfortunately, there’s no one person that we can go to, to rally by district...[the State Health Department] is sending out vaccines to different hospitals, but again this is uncoordinated. I think that having a district approach makes sense.”
Key Recommendations

3. The State Health Department’s oversight capabilities and its capacity to support the local public health delivery system need to be strengthened.

4. Under the auspices of the state board of health, a multi-disciplinary state-wide implementation committee should be created and tasked with executing the recommended implementation steps outlined in the report.

“As a state, the best thing would be if we came up with one IT system that connected everything together, and we made sure every local health or every county had a connection.”
**Important Workforce Considerations**

- Vast majority of public health workers do not have formal training in public health

- Recent workforce surveys indicate a wave of retirements is on the horizon, yet salaries and compensation are not competitive with the environment making the recruitment of skilled public health workers more challenging

The establishment of a tuition reimbursement program is needed to enhance formal training of public health staff across state and local public health agencies (Implementation Step #2) → Beneficial for existing workforce and recruitment.
Invest in Keeping People Healthy

There is a bidirectional relationship between health and wealth – for individuals and the communities in which they live.

Strategic investments in Indiana’s public health system can improve health among all Hoosiers and create opportunities for people and the communities that need it the most.

It costs far less to keep people healthy than to make them well again, but we have to invest in keeping people healthy.
## Implementation of public health activities, 1998-2020

<table>
<thead>
<tr>
<th>Activity</th>
<th>1998</th>
<th>2018</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Conduct periodic assessment of community health status and needs</td>
<td>71.5%</td>
<td>87.1%</td>
<td>21.8%</td>
</tr>
<tr>
<td>2. Survey community for behavioral risk factors</td>
<td>45.8%</td>
<td>71.1%</td>
<td>55.2%</td>
</tr>
<tr>
<td>3. Investigate adverse health events, outbreaks and hazards</td>
<td>98.6%</td>
<td>100.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td>4. Conduct laboratory testing to identify health hazards and risks</td>
<td>96.3%</td>
<td>96.1%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>5. Analyze data on community health status and health determinants</td>
<td>61.3%</td>
<td>72.7%</td>
<td>18.6%</td>
</tr>
<tr>
<td>6. Analyze data on preventive services use</td>
<td>28.4%</td>
<td>39.0%</td>
<td>37.3%</td>
</tr>
<tr>
<td>7. Routinely provide community health information to elected officials</td>
<td>80.9%</td>
<td>84.0%</td>
<td>3.8%</td>
</tr>
<tr>
<td>8. Routinely provide community health information to the public</td>
<td>75.4%</td>
<td>82.3%</td>
<td>9.1%</td>
</tr>
<tr>
<td>9. Routinely provide community health information to the media</td>
<td>75.2%</td>
<td>89.0%</td>
<td>18.3%</td>
</tr>
<tr>
<td>10. Prioritize community health needs</td>
<td>66.1%</td>
<td>83.6%</td>
<td>26.5%</td>
</tr>
<tr>
<td>11. Engage community stakeholders in health improvement planning</td>
<td>41.5%</td>
<td>68.8%</td>
<td>65.7%</td>
</tr>
<tr>
<td>12. Develop a community-wide health improvement plan</td>
<td>81.9%</td>
<td>87.9%</td>
<td>7.3%</td>
</tr>
<tr>
<td>13. Identify and allocate resources based on community health plan</td>
<td>26.2%</td>
<td>41.9%</td>
<td>59.9%</td>
</tr>
<tr>
<td>14. Develop policies to address priorities in community health plan</td>
<td>48.6%</td>
<td>56.8%</td>
<td>16.9%</td>
</tr>
<tr>
<td>15. Maintain a communication network among health-related organizations</td>
<td>78.8%</td>
<td>85.3%</td>
<td>8.2%</td>
</tr>
<tr>
<td>16. Link people to needed health and social services</td>
<td>75.6%</td>
<td>50.0%</td>
<td>-33.8%</td>
</tr>
<tr>
<td>17. Implement legally mandated public health activities</td>
<td>91.4%</td>
<td>92.4%</td>
<td>1.1%</td>
</tr>
<tr>
<td>18. Evaluate health programs and services in the community</td>
<td>34.7%</td>
<td>37.9%</td>
<td>9.4%</td>
</tr>
<tr>
<td>19. Evaluate local public health agency capacity and performance</td>
<td>56.3%</td>
<td>56.1%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>20. Monitor and improve implementation of health programs and policies</td>
<td>47.3%</td>
<td>46.4%</td>
<td>-1.9%</td>
</tr>
</tbody>
</table>

### Mean performance of assessment activities (#1-6)
67.0% 77.7% 15.9%

### Mean performance of policy and planning activities (#7-15)
63.9% 75.5% 18.3%

### Mean performance of implementation and assurance activities (#16-20)
61.1% 56.6% -7.3%

### Mean performance of all activities
63.8% 67.6% 6.0%
Indiana Governor’s Public Health Commission 2022
Report Recommendations
Indiana Governor’s Public Health Commission Report

The GPHC believes that Indiana must take action to transform the state’s public health system by modernizing our public health services, administrative and data supports, and delivery systems concurrent with the long-overdue investments that will strengthen our public health workforce to ensure that the state is prepared for future public health emergencies.

This report summarizes the Commission’s findings and recommendations in response to its charge in six subject-matter areas related to public health.
Recommendations for Governance, Infrastructure, and Services

• Establish baseline service standards for all local health departments.

• Expand IDOH resources to support LHDs and interlocal collaboration

• Assist LHDs to engage local businesses, health providers, schools, and other governmental and non-governmental organizations to promote public health in the community

• Update Local Health Board appointments to reflect current public health workforce and key community representation
Recommendations for Governance, Infrastructure, and Services (continued)

• **Ensure policy supports sharing of resources or consolidation of LHDs if desired by local partners**

• Promote delivery of public health services at the county level or higher, including allocation of funding

• Expand personnel eligible to serve as a Local Health Officer and require new appointees to complete public health training

• Provide financial and technical assistance to LHDs pursuing accreditation or reaccreditation
Recommendations for Public Health Funding

• Provide local health departments with stable, recurring, and flexible funding to build and sustain their foundational public health capacities

• Provide LHDs with administrative supports and other flexibilities to leverage all available funding sources

• Establish consistency in the tracking of the public health resources and calculate the return of investment of additional funding allocations
Recommendations for Workforce

- Coordinate current initiatives and provide a framework for the development of a state health workforce plan
- Ensure representation of public health on Indiana workforce initiatives
- Through the Health Workforce Council, enhance workforce reporting to understand public health and clinical workforce needs and the status of the talent pipeline
- Expand health workforce recruitment, training, placement, and retention into areas of need
Recommendations for Data and Information Integration

• Establish a State Public Health Data System Advisory Committee that includes local representation

• Formalize and strengthen the state’s relationship with a Health Information Exchange (HIE) partner to promote improved clinical outcomes and outbreak management

• Enhance data analytics tools and resources for local public health

• Maintain state-led digital transformation efforts to modernize public health systems and paper-based processes
Recommendations for Emergency Preparedness

• Increase utilization of IDOH’s EMResource tool across all Indiana hospitals, local public health departments, first responders and applicable government agencies

• Require LHDs to participate in the CDC Public Health Emergency Preparedness (PHEP) grant program

• Enhance IDOH’s emergency services and supplies capacity

• Ensure local level EMS readiness through expansion and sustainability of EMS workforce

• Improve regional coordination efforts to ensure a seamless emergency response
Recommendations for Child and Adolescent Health

- Support policies to increase the availability of school nurses
- Increase access to services to support whole child wellness
- Support evidence-based health education, nutrition, and physical activity in schools and early childhood education settings
- Support access to health screenings and services that can be appropriately delivered in school and early childhood education settings while maintaining parental/guardian consent mechanisms
Recommendations for Child and Adolescent Health (continued)

• Reinforce meaningful implementation of school wellness policies
• Support the development of SPHCs
• Increase provider awareness of public health initiatives, opportunities, and requirements
• Address childhood injury and violence prevention
Tobacco Interventions and Policies
More than 480,000 US deaths every year are from cigarette smoking.

- Lung Cancer: 137,989 (29%)
- Heart Disease: 158,750 (33%)
- Chronic Obstructive Pulmonary Disease: 100,600 (21%)
- Other Cancers: 36,000 (7%)
- Other Diagnoses: 31,681 (7%)
- Stroke: 15,300 (3%)
Secondhand Smoke

CHILDREN
- Middle ear disease
- Respiratory symptoms, impaired lung function
- Lower respiratory illness
- Sudden infant death syndrome

ADULTS
- Stroke
- Nasal irritation
- Lung Cancer
- Coronary heart disease
- Reproductive effects in women: low birth weight
Trends in Current Cigarette Smoking by High School Students* and Adults** — United States, 1965-2014

*Percentage of high school students who smoked cigarettes on 1 or more of the 30 days preceding the survey (Youth Risk Behavior Survey, 1991-2013).

**Percentage of adults who are current cigarette smokers (National Health Interview Survey, 1965-2014).
SOCIETY PAYS AND SO DO YOU
THE BURDEN OF DEATH, DISEASE, AND DISABILITY LIES BEYOND THE SMOKER

SOCIETY
TOBACCO-RELATED HEALTH CARE COSTS AND PRODUCTIVITY LOSS IN THE US

$289 BILLION

YOU

$6.36 AVERAGE PRICE PER PACK OF CIGARETTES IN THE US

$35 HEALTH-RELATED COSTS TO YOU PER PACK OF CIGARETTES
Tobacco Control Strategies

- Efforts to curb the availability of tobacco products
- Efforts to curb the use of tobacco products
- Efforts to educate about the harms of tobacco products and the tobacco industry
- Efforts to reduce exposure to tobacco smoke in public places
- Monitoring of tobacco distribution and use
- Examination of tobacco industry practices
Tobacco policies

- Taxes
- Smoke-free places
- Marketing/advertising regulations
- Age requirements
- FDA regulation
- Tobacco Cessation
Feeling inspired?

PLEASE RATE THIS SESSION BEFORE LEAVING