Public Health 3.0
21st Century Public Health Infrastructure

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Public Health 3.0 Learning Objectives

1. Explain the difference between Public Health 1.0, 2.0 and 3.0

2. Describe the factors that led to a call for Public Health 3.0

3. Understand the implications for Public Health managers working in a PH 3.0 environment.
Why We Need Public Health 3.0*

- ZIP codes remain a more accurate determinant of health than our genetic codes
- Public Health has the responsibility to improve the health of ALL members of our communities
- Silos result in missed opportunities to leverage critical knowledge of communities
(Sheiham & Watt, 2000)
Public Health 1.0, 2.0 and 3.0
Public Health 1.0

- Late 19th Century - much of the 20th century
- Public health became an essential governmental function
- Systematized sanitation, improved food and water safety, expanded our understanding of diseases, developed powerful new prevention and treatment tools such as vaccines and antibiotics
- Expanded capability of epidemiology and laboratory science
- All this led to comprehensive public health prevention
**Pre-Vaccine Era Estimated Annual Morbidity in the U.S.**

<table>
<thead>
<tr>
<th>Disease</th>
<th>Decrease</th>
<th>Most Recent Reports of Cases in the U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphtheria</td>
<td>100%</td>
<td>0</td>
</tr>
<tr>
<td>H. Influenza</td>
<td>99%</td>
<td>243</td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>91%</td>
<td>11,049</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>83%</td>
<td>11,269</td>
</tr>
<tr>
<td>Measles</td>
<td>99%</td>
<td>61</td>
</tr>
<tr>
<td>Mumps</td>
<td>99%</td>
<td>982</td>
</tr>
<tr>
<td>Pertussis</td>
<td>89%</td>
<td>21,291</td>
</tr>
<tr>
<td>Pneumococcal Disease</td>
<td>74%</td>
<td>4,167</td>
</tr>
</tbody>
</table>
Public Health 2.0

- Emerged in second half of 20th century
- Shaped by the 1988 IOM report “The Future of Public Health”
- Recognized that public health was unprepared to address the rising burden of chronic diseases and new threats such as HIV/AIDS.
- Led to development of core functions and essential services of public health
10 Essential Services of Public Health

Public Health Functions Project, U.S. Dept. of Health and Human Services
Public Health 3.0

- In October 2016, the US Dept of HHS Office of the Assistant Secretary for Health released a set of recommendations to achieve Public Health 3.0
- PH3.0 recommendations seek to shift the responsibilities of public health upstream
PH 3.0 Transforming Public Health

- Public health faces extreme public health funding challenges, changing population health demands, ACA, mounting data on disparities
- New model of public health will build on historic success at health improvement by adding greater attention to the social determinants of health in order to achieve health equity
- This will happen through deliberate collaboration across both health and non-health sectors
Health Impact Pyramid

- Increasing Population Impact
  - Counseling and Education
  - Clinical Interventions
  - Long-Lasting Protection Interventions
  - Changing the Context to Make Individuals’ Default Decisions Healthy
  - Socioeconomic Factors

- Increasing Individual Effort Needed

Frieden T. American Journal of Public Health | April 2010, Vol 100, No. 4
Health Equity*

“In order to solve the fundamental challenges of population health, we must address the full range of factors that influence a person’s overall health and well-being. From education to safe environments, housing to transportation, economic development to access to healthy foods—the social determinants of health are the conditions in which people are born, live, work, and age.”

“Resolving the fundamental challenges of population health will require shifts further upstream to integrate narratives and actions that confront institutionalized racism, sexism, and other systems of oppression that create the inequitable conditions leading to poor health.”
SOCIAL DETERMINANTS
FACTORS THAT INFLUENCE YOUR HEALTH

The conditions in which you live, learn, work and age affect your health. Social determinants such as these can influence your lifelong health and well-being.

HOUSING

HEALTHY FOOD

6.5 million children live in low-income neighborhoods that are more than a mile from a supermarket.

INCARCERATION

The incarceration rate in the U.S. grew by more than 220% between 1980 and 2014, though crime rates have fallen.

POVERTY

GRADUATION

ENVIRONMENT

HEALTH COVERAGE

LITERACY

ACCESS TO CARE

More than 89% of U.S. adults had health coverage in 2014. But 33 million Americans still lacked insurance.

The NATION’S HEALTH

A PUBLICATION OF THE AMERICAN PUBLIC HEALTH ASSOCIATION

www.thenationshealth.org/sdoh
Strategies to Achieve PH3.0

1. Public health leaders should embrace the role of Chief Health Strategist for their communities.

2. Public Health Departments should engage with community stakeholders—from both the public and private sectors—to form vibrant, structured, cross-sector partnerships.

3. Public Health Accreditation Board (PHAB) Accreditation for public health departments should be strengthened to ensure that every person in the United States is served by nationally accredited health departments.

4. Timely, reliable, granular-level (i.e., sub-county), and actionable data should be made accessible to communities throughout the country, and clear metrics should be developed to document success in public health practice.

5. Funding for public health must be enhanced and substantially modified.
Social Determinants of Health

HI-5

Changing the Context
Making the healthy choice the easy choice

1. School-Based Programs to Increase Physical Activity
2. School-Based Violence Prevention
3. Safe Routes to School
4. Motorcycle Injury Prevention
5. Tobacco Control Interventions
6. Access to Clean Syringes
7. Pricing Strategies for Alcohol Products
8. Multi-Component Worksite Obesity Prevention

1. Early Childhood Education
2. Clean Diesel Bus Fleets
3. Public Transportation System
4. Home Improvement Loans and Grants
5. Earned Income Tax Credits
6. Water Fluoridation

Health Impact in 5 Years
Public Health Managers in a Public Health 3.0 Environment

- Draw on leadership from both the public and private sectors that impact community health—
  - for example, housing, education, and economic development.
- Empower local leaders to be the chief health strategists in their communities. (That means you!)
1. Public Health Leaders Should Embrace The Role Of Chief Health Strategist For Their Communities.

- Chief Health Strategists:
  - Can be a public health agency, the elected official, the hospital, major business employer, etc. in the area
  - Should work with all relevant partners to address environmental, economic, and social determinants of health
  - Must acquire and strengthen their knowledge base, skills, and tools in order to meet the evolving challenges to population health
  - Must be skilled at building strategic partnerships
2. Public Health Departments Should Engage With Community Stakeholders—From Both The Public And Private Sectors—To Form Vibrant, Structured, Cross-Sector Partnerships

- These partnerships should:
  - Share a vision for creating health, equity, and resilience in a community over the long term
  - Include employers and payers among the key partners
  - Organize in order to share governance, set shared vision and goals, blend and braid funding, and capture savings for reinvestment upstream.
Changing the Context
Making the healthy choice the easy choice

Social Determinants of Health

HI-5
HEALTH IMPACT IN 5 YEARS

School-Based Programs to Increase Physical Activity
School-Based Violence Prevention
Safe Routes to School
Motorcycle Injury Prevention
Tobacco Control Interventions
Access to Clean Syringes
Pricing Strategies for Alcohol Products
Multi-Component Worksite Obesity Prevention

Early Childhood Education
Clean Diesel Bus Fleets
Public Transportation System
Home Improvement Loans and Grants
Earned Income Tax Credits
Water Fluoridation
Activity - 10 minutes

- You are pulling your team together to begin action on public health 3.0 by addressing 2 of the HI-5 Initiatives:
  - Early Childhood Education
  - Home Improvement Loans and Grant

- Discussion:
  - For each initiative who are the partners that you know would need to be part of this initiative? Who will you need to meet?
  - What would bring them to the table?
  - What are some potential barriers and/or opportunities to collective action

- Brief Report Back - great idea; interesting observation; concern; insightful strategy
Acknowledgements

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