Public Health: A Primer – Part A

Script: The Michigan Public Health Training Center Welcomes you to this module, Public Health: A Primer-Part A, which will provide an introduction to Public Health.

Module Objectives

- · Define public health
- List examples of the public health field's impact on population health outcomes
- Identify the three core functions and ten essential services of public health

Script: This module will provide a basic definition of public health and identify how it is different from medical and primary care. This presentation will also give examples of how public health has impacted population health outcomes. And finally, this video explores the three core functions and ten essential services of public health. As a board of health member, it is important for you to understand the concept of public health in the local community, nationally, and globally as well as recognize the functions that you will be expected to support.

Define Public Health





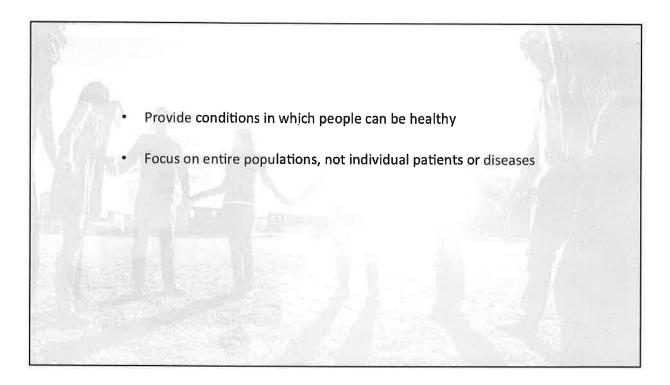


Script: Let's Start by learning what is meant by public health as well as recognizing the functions of public health agencies that boards of health are responsible for supporting.

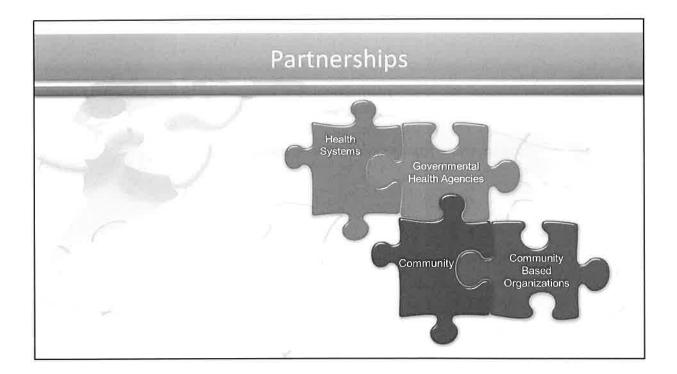
"...prevent disease, promote health, and prolong life among the **population as a whole**."

- World Health Organization (WHO)

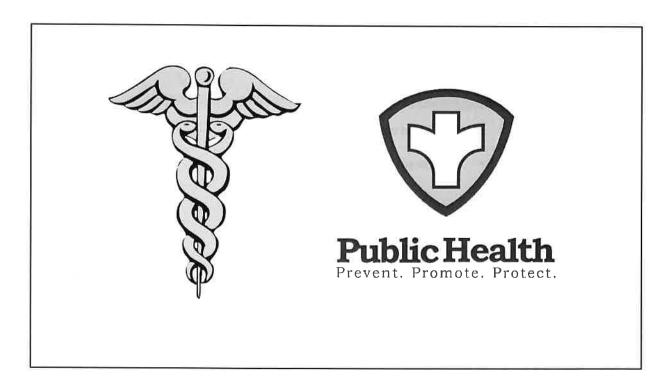
Script: According to the World Health Organization, public health is working to prevent disease, promote health, and prolong life among the population as a whole.



Script: It's activities aim to provide conditions in which people can be healthy and focus on entire populations, not on individual patients or diseases.



Script: The key to this work is partnerships between groups like governmental health agencies, health systems, and community based organizations. It is also important to engage the community to participate in any research or policy decisions that might impact their health and wellbeing.



Script: When learning how to define public health, it is also vital to understand the differences and relationship between medicine and public health.

Medical Care

- Individual care/one-on-one
- Treatment (prescription, testing, etc.)





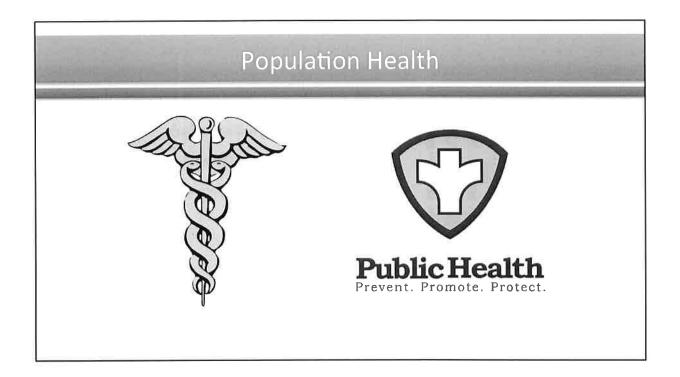




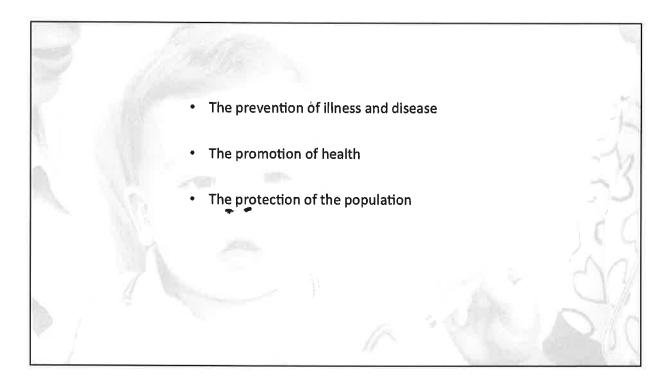
Script: Medical care is a one-on-one relationship. We go to a doctor when we feel sick and the doctor treats us. The treatment may be a prescription for medication, may require additional testing, or may involve specialists.

- Public Health
 - All people, not individuals
 - Preventing negative risk factors
 - Promoting social/environmental conditions

Script: Public health, as we have started to learn, focuses on the health of all people, not the individual. As we will discuss in later modules, public health is about preventing negative risk factors and health outcomes that require medical treatment in the first place and promoting the social and environmental conditions that support health.



Script: Within either medicine or public health, you may hear the term population health. This is an approach for addressing health outcomes for a defined group of people, though how the approach and group are defined may be different in the medical and public health contexts.



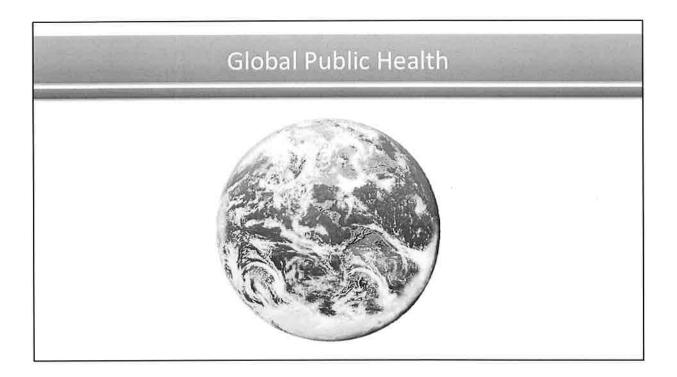
Script: In summary, we can define public health as the prevention of illness and disease, the promotion of health, and the protection of the population.



Script: When we expand our vision of public health to include not only our community, county, or state,



Script: but also the United States and the world



Script: We can begin to recognize the concept of public health as a global issue. To better understand what is meant by global public health, we first need to realize that there are influences affecting public health that come from outside city, county, and state boundaries.

- Influences might be social, cultural, or tangible products and environmental changes
- Response to public health issues may not be local
- Cross-border collaboration may be necessary

Script: These influences might be social, cultural, or tangible products and environmental changes. Widespread food recalls is one example of this. It is important to understand that public health governance and action may require cross-jurisdictional and interdisciplinary collaboration.

Public Health Impact







Script: Now that you have an understanding of what public health is, let's look at some examples of its impact on population health outcomes.

"...public health is credited with adding 25 years to the life expectancy of people in the United States..."

- Centers for Disease Control and Prevention

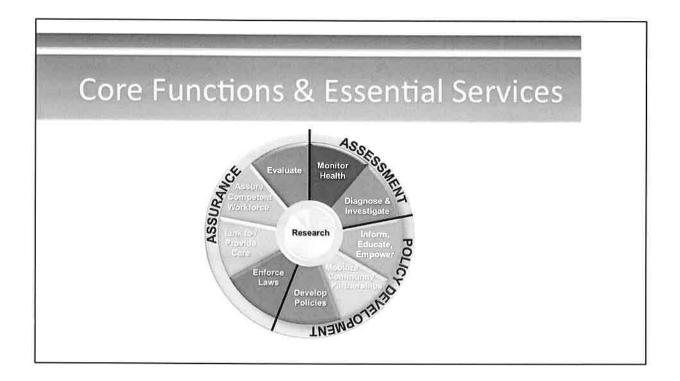
Script: The Centers for Disease Control and Prevention (CDC) tells us that "public health is credited with adding 25 years to the life expectancy of people in the United States" in the 20th century. Let's look at some of the ways this was accomplished.

Public Health Achievements in the 20th Century

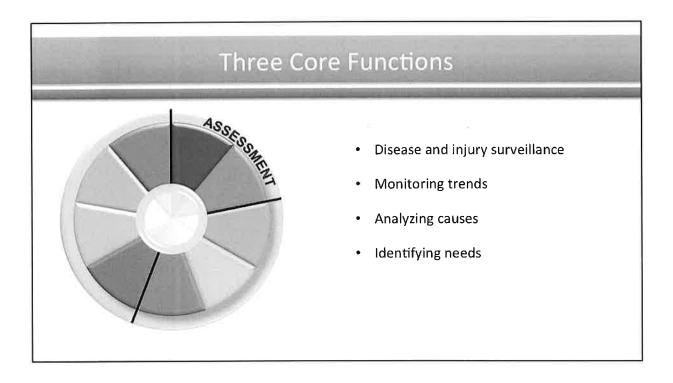
- Immunizations
- Motor vehicle safety
- Workplace safety
- Control of infectious diseases
- Declines in deaths from heart disease and stroke

- Safer and healthier foods
- · Healthier mothers and babies
- Family planning
- · Fluoridation of drinking water
- Tobacco as a health hazard

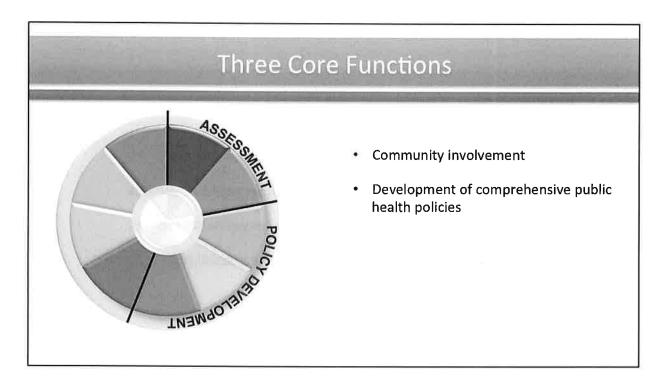
Script: The CDC describes ten major achievements of the public health field in the 20th century. These include Immunizations, Motor-Vehicle Safety, Workplace Safety, Control of Infectious Diseases, Declines in Deaths from Heart Disease and Stroke, Safer and Healthier Foods, Healthier Mothers and Babies, Family Planning, Fluoridation of Drinking Water, and Tobacco as a Health Hazard.



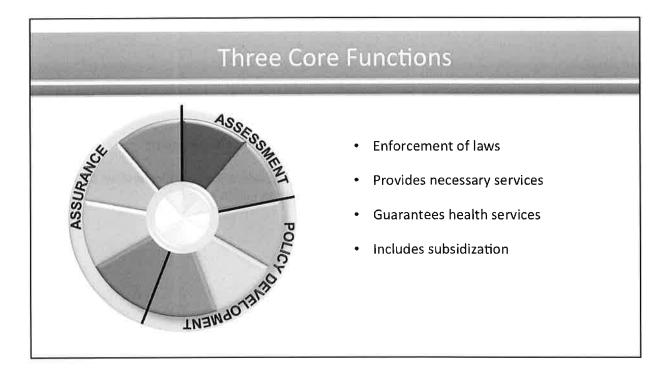
Script: Now that you have a better understanding what public health is and how it has impacted population health outcomes, let's look at the three core functions and ten essential services of public health. In the mid-1990s, the Public Health Functions Project was created to help clarify issues in the public health infrastructure and develop strategies and tools to address those issues. This project established the three core functions and the ten essential services of public health. As a board of health member, it is your job to help support health departments in their implementation of these services in the community.



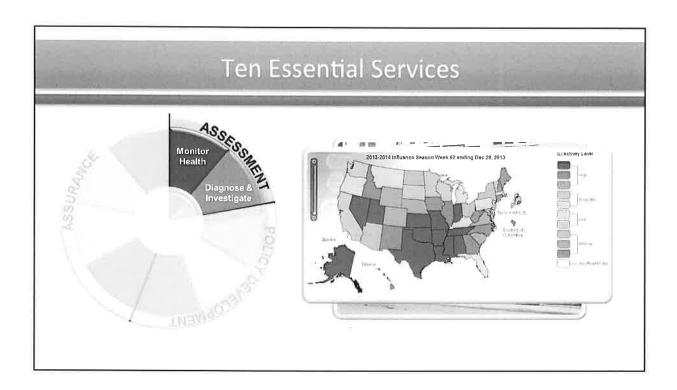
Script: The three core functions are: Assessment, which consists of disease and injury surveillance along with monitoring trends, analyzing causes, and identifying needs;



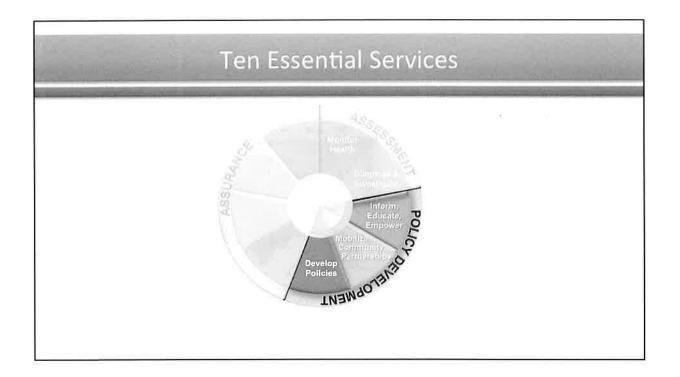
Script: Policy Development, which includes community involvement and the development of comprehensive public health policies;



Script: and Assurance, which sees to the enforcement of laws; encourages, requires, and provides necessary services; and guarantees health services, including subsidization for those unable to afford them. Next we will learn about the ten essential services.



Script: The Assessment function lines up with two of the essential services: Monitor Health Status, which gives public health agencies the opportunity to identify community health problems, and Diagnose & Investigate, which lets public health organizations keep track of local environmental health threats, problems, or hazards by examining causes and probing potential fixes.



Script: The Policy Development function is served by three of the essential services: Inform, Educate, and Empower; Mobilize Community Partnerships; and Develop Policies. We will look more closely at the essential services under the Policy Development core function, as they are most relevant to the work of boards of health.

Ten Essential Services: Inform, Educate, & Empower

- Communicate with the public about health issues
- Educate the public on how to prevent infection, promote healthy choices, and protect their health
- Use news, radio, billboards, and social media



Script: Inform, Educate, and Empower is where Public Health Agencies are expected to communicate with the public about health issues. When Public Health Organizations know what is happening in their community, they can then proceed to informing and educating the public about ways to prevent infection, promote healthy choices, and protect their health. Use media like T.V. news, radio, and billboards as well as social media to get the message out.

Ten Essential Services: Mobilize Community Partnerships



- · Identify and solve health problems
- Working with community partners = consistent communication
- Set up community clinics

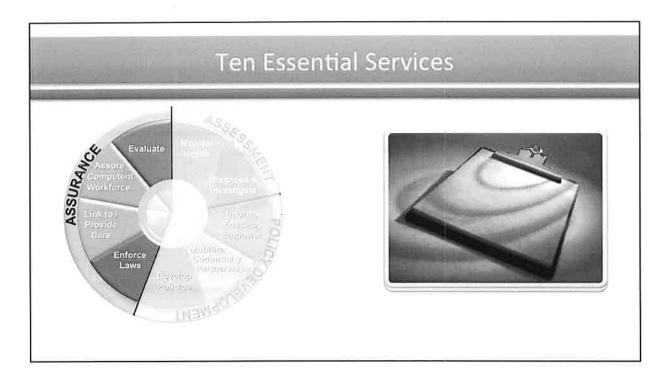
Script: Mobilize Community Partnerships is an essential service that allows Public Health Organizations to identify and solve health problems. When a flu outbreak is identified, community partners can help establish how severe the outbreak is. Additionally, working with community partners allows for consistent communication to the public and can help to set up community clinics in locations like gymnasiums.

Ten Essential Services: Develop Policies

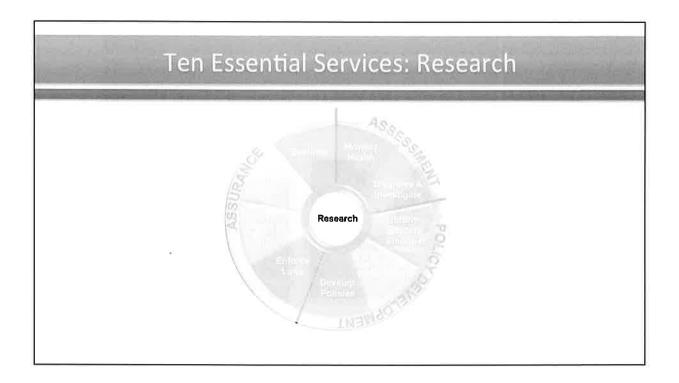
- Develop and implement policies and plans
- Support individual and community health efforts
- Continue to improve health goals



Script: Develop Policies is an essential service where Public Health Organizations develop and implement policies and plans to support individual and community health efforts along with individual strategies that will continue to improve health goals.



Script: The Assurance function lines up with four of the essential services: Enforce Laws, which is where Public Health Organizations help to protect health and ensure the safety of the population; Link to / Provide Care, which is a service that connects people in the community to needed personal health services and also guarantees the delivery of health care when it is otherwise inaccessible; Assure a Competent Workforce, which is when Public Health Organizations ensure that the public health and personal health care workforce are knowledgeable and able to fill their roles; and Evaluate, which is when the effectiveness, accessibility, and quality of the community's health services is measured. The three core functions and associated essential services are held together



Script: The three core functions and associated essential services are held together by the last essential service: Research, which allows for new insights and innovative solutions to health problems. Now that we have explored all of the module objectives,

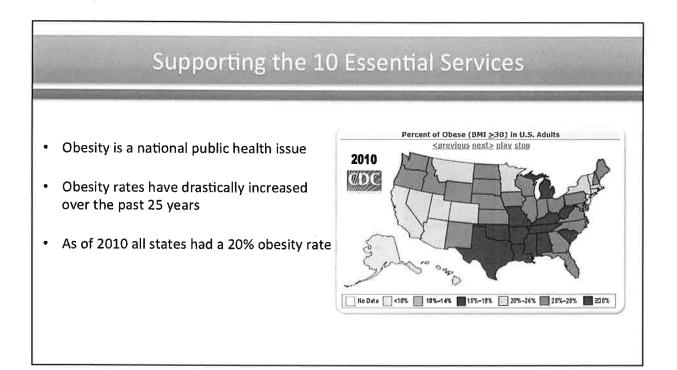
Effective Board of Health Example







Script: let's look at an example of how an effective board of health's actions line up with the core functions and essential services of public health. This is just one of many possible examples from various settings across the country of a board of health success.



Script: Obesity is a national public health issue, with the number of obese people in the U.S. drastically increasing in the past 25 years. According to the CDC, in 1990, each state had a prevalence of obesity less than 15 percent. By 2010, all states had an obesity prevalence of at least 20 percent, 36 states were higher than 25 percent, and 12 states were higher than 30 percent.

Supporting the 10 Essential Services



- 2006: NYC Board of Health requires restaurant calorie counts
- Associated with positive changes in
- consumers and restaurants; long-term
 2008: Health code amendment goes into effect evaluation is needed
- 2010: Federal law mandates restaurants with 20+ locations must list calorie counts and nutritional information

Script: In 2006, the New York City Board of Health decided to do something about obesity on a local level. They made it a requirement for restaurants to include calorie counts on their menus. After a two-year legal battle with the New York State Restaurant Association, the city health code amendment went into effect in 2008. It required any restaurants with at least 15 franchises to list the calories per serving next to each item on the menu. Along with the change in the health code, New York City also implemented a public health education drive to teach people about calories and obesity. The New York City Board of Health was the first governing agency in the U.S. to require restaurants to make this change. The initiative has now had a national impact. In 2010, federal law mandated that restaurants with 20 or more locations label their menus, menu boards, and drive-through menus with the calorie count for each item. It also requires that more complete nutritional information be made available upon request. So far, several studies across the U.S. have shown that calorie labeling on menus may influence consumer behaviors and what restaurants choose to offer, but long-term evaluation of the policy's effects on health and behavior is needed.

Core Function: Assessment

Action	Essential Service
Persistent rise in obesity	Monitor Health Status
Prevalence of eating fast food	Diagnose & Investigate



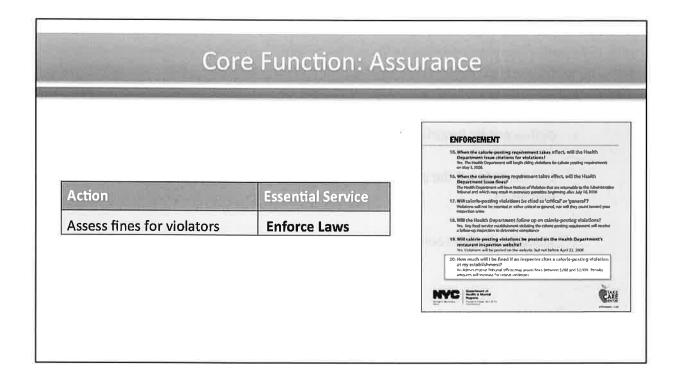
Script: We can see where the New York City Board of Health's actions line up with the core functions and essential services you learned about earlier in this module. In the assessment core function, the board monitored the persistent rise in obesity in their community and identified the prevalence of eating fast food as the cause.

Core Function: Policy Development

Action	Essential Service
Public service campaign	Inform, Educate, and Empower
Collaboration with experts	Mobilize Community Partnerships
Health code amendment	Develop Policies



Script: Thinking about the Policy Development core function, we can see that the board of health informed and educated the community with a public service campaign. Before they amended the city health code, the board of health collaborated with experts in chronic disease prevention, environmental health, nutrition, public health law, and communications. The resulting policy was the amendment to the city health code.



Script: Looking at the assurance core function, the health code amendment is enforced by the New York City Health Department. Restaurants found to be violating the requirement may be fined between \$200 and \$2000 dollars. To learn more about the actions the New York City Board of Health took in this initiative, see the references document for this module.

Public Health: A Primer – Part A

- Define public health
- List examples of the public health field's impact on population health outcomes
- Identify the three core functions and ten essential services of public health

Script: You have now completed this module, Public Health: A Primer – Part A. We learned a basic definition of public health and saw how it differs from medical and primary care. Next, we saw examples of how public health has impacted population health outcomes. And finally, the video explored the three core functions and ten essential services of public health. Please continue on to the next video in the series.

Training Provided By





HRSA Grant Number: UB6HP20200



Script: This training is provided by the Michigan Public Health Training Center at the University of Michigan School of Public Health, Office of Public Health Practice. Funding for this project was made possible by the Health Resources and Services Administration Bureau of Health Workforce. This training was developed in collaboration with the Michigan Public Health Institute.

Special Thanks To:

- National Association of Local Boards of Health (NALBOH)
- Ohio State University College of Public Health, Center for Public Health Practice
- Phyllis Meadows, PhD, MSN, RN, University of Michigan School of Public Health

Questions about this training? Contact:

Phoebe Goldberg, MPH, CHES Michigan Public Health Training Center mphtc@umich.edu 734-615-9439 This Course is in Memory of Marie Fallon

Photo References

- 01:56 13494 by CDC/Amanda Mills (2011) from CDC PHIL
- 01:59 13478 by CDC/Amanda Mills (2011) from CDC PHIL
- 02:03 13480 by CDC/Amanda Mills (2011) from CDC PHIL
- 02:06 13476 by CDC/Amanda Mills (2011) from CDC PHIL
- 02:49 14026 by CDC/Amanda Mills (2011) from CDC PHIL
- 03:59 9362 by CDC/Judy Schmidt (2006) from CDC PHIL
- 07:37 16608 by CDC/Emily Weyant; MSLIS; ORISE Fellow (2013) from CDC PHIL
- 11:46 15080 by CDC/Debora Caragena (2012) from CDC PHIL

References for Public Health: A Primer – Part A

- American Heart Association, Advocacy Department. (2013, February). Facts: Downsizing the epidemic menu labeling in restaurants. Retrieved from http://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm_304378.pdf
- Centers for Disease Control and Prevention (CDC). (1999, April 2). Ten great public health achievements United States, 1900-1999. MMWR Morbidity and Mortality Weekly Report, 48(12), 243-248. Retrieved from http://www.cdc.gov/mmwr/PDF/wk/mm4812.pdf
- Centers for Disease Control and Prevention (CDC). (1999, May 14). Achievements in public health, 1900-1999: Motor-vehicle safety: A 20th century public health achievement. *MMWR Morbidity and Mortality Weekly Report*, 48(18), 369-374. Retrieved from http://www.cdc.gov/mmwr/PDF/wk/mm4818.pdf
- Centers for Disease Control and Prevention (CDC). (1999, July 30). Achievements in public health, 1900-1999: Control of infectious diseases. *MMWR Morbidity and Mortality Weekly Report*, 48(29), 621-629. Retrieved from http://www.cdc.gov/mmwr/PDF/wk/mm4829.pdf
- Centers for Disease Control and Prevention (CDC). (1999, October 1). Achievements in public health, 1900-1999: Healthier mothers and babies. MMWR Morbidity and Mortality Weekly Report, 48(38), 849-858. Retrieved from http://www.cdc.gov/mmwr/PDF/wk/mm4838.pdf
- Centers for Disease Control and Prevention (CDC). (2011, January 4). Adult seat belt use in the US. *CDC Vitalsigns* [PDF file]. Retrieved from http://www.cdc.gov/vitalsigns/pdf/2011-01-vitalsigns.pdf
- Centers for Disease Control and Prevention (CDC). (2013, April 26). Ten great public health achievements in the 20th century. Retrieved from http://www.cdc.gov/about/history/tengpha.htm
- Centers for Disease Control and Prevention (CDC). (2014, March 28). Overweight and obesity: Adult obesity facts. Retrieved from http://www.cdc.gov/obesity/data/adult.html
- Centers for Disease Control and Prevention (CDC). (n.d.). Motor vehicle safety: Keep people safe on the road everyday. *Winnable Battles Progress Report 2010-2014* [PDF file]. Retrieved from
 - http://www.cdc.gov/winnablebattles/targets/pdf/winnablebattlesprogressreport.pdf

References for Public Health: A Primer – Part A

- Centers for Disease Control and Prevention (CDC). (n.d.). Teen pregnancy: Reduce teen pregnancy and its contribution to the cycle of poverty for teens and their families.

 Winnable Battles Progress Report 2010-2014 [PDF file]. Retrieved from http://www.cdc.gov/winnablebattles/targets/pdf/winnablebattlesprogressreport.pdf
- Farley, T.A., Caffarelli, A., Bassett, M.T., Silver, L., & Frieden, T.R. (2009). New York City's fight over calorie labeling. *Health Affairs*, 28(6), w1090-w1109. doi: 10.1377/hlthaff.28.6.w1098
- New York City Department of Health & Mental Hygiene. (n.d.). The requirement to post calorie counts on menus in New York City food service establishments (Section 81.50 of the New York City Health Code). Retrieved from http://www.nyc.gov/html/doh/downloads/pdf/cdp/calorie-compliance-guide.pdf
- Public Health Functions Project. (2008, May 1). Description. Retrieved from http://www.health.gov/phfunctions/project.htm
- Public Health Functions Project. (2008, May 1). Public health in America. Retrieved from http://www.health.gov/phfunctions/public.htm
- Taylor, H. (2008). Core functions and essential services [PDF file]. Retrieved from <u>http://ocw.jhsph.edu/courses/publichealthpractice101/PDF/Session4.pdf</u>
- The Ohio State University, Center for Public Health Practice, College of Public Health. (n.d.). PH 101: A short course | Lecturette 1: What is public health? [Online course]. Retrieved from https://www.cphplearn.org/Course_Files/c_109/01WhatisPH/player.html
- World Health Organization. (n.d.). Public health. Retrieved from http://www.who.int/trade/glossary/story076/en/