**PUBLIC HEALTH IN THE UNITED STATES: HISTORY, STRUCTURE, AND DEBATES**

by

**Tyra Hudgens**

BA, BS, University of Pittsburgh, 2007, 2007

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**ABSTRACT**

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This essay is submitted

by

**Tyra Hudgens**

on

**December 10, 2018**

and approved by

Essay Advisor:

Martha Terry, PhD

Associate Professor

Behavioral and Community Health Sciences

Graduate School of Public Health

University of Pittsburgh

Essay Reader:

Kathleen Musante, PhD

Professor

Anthropology

Dietrich School of Arts and Sciences

University of Pittsburgh

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This paper critically examines the literature on public health in the United States to dissect the differences between ‘public health’ as imagined and as realized. By tracing the development of U.S. public health from the time of the Marine Hospital for Merchant Seamen to Healthy People 2020 initiatives, the issues in defining ‘public health’ in the United States are shown. These issues of definition foster the continued fragmentation of U.S. public health structure and, therefore, its inability to achieve many of its stated goals. This paper contends that the difference between the everyday manifestation of public health in the United States and the vision of itself it purports, fundamentally influences the perception of public health in the United States and assessment of its achievements. The critical examination of U.S. public health that follows is of public health significance because critical self-reflection and examination of the situation of public health in the United States is key in any assessment of U.S. public health achievement.

Martha Terry, PhD

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# introduction

This paper examines the literature on public health in the United States in order to describe and discuss the current position of public health as a field. Based on the long history of what can be called ‘public health’ and its varied nature in the United States not only at present, but also in the past, the boundaries of this examination must be clearly defined. To understand public health, its current position and construction, it is necessary to focus attention on not only what it was and is, but also how and why it came to be that way. Therefore, the history, focus, theoretical underpinnings, key social movements, and major critiques of public health in the United States will be explored.

Currently, U.S. public health has a number of issues with which to contend. Constant reassessing of whether public health is fulfilling its duty, along with responding to critiques on the utility of public health, brings into question the purpose of public health in the United States. Assertions that the breadth of topics under public health domain diminishes or obfuscates what exists at the core, combined with difficulties in making public health visible to the public, foster questions about the exact nature of public health in the U.S. context. At the root of these issues lie the multiple ways that public health has defined itself, and the disconnections between the narrative *of* public health and the narrative *from* public health; that is, the story of what public health *is* differs from the story public health *tells*.

An examination of U.S. public health must take into account certain things. The first is that public health in the United States does not occur in a vacuum. To discuss the U.S. public health experience is to give our attention to the direction public health has taken in one country, even as national, international and global health issues have influenced and continue to affect one another ([Brown, et al. 2006](#_ENREF_15)). Second, we must also understand the variety of items that can be part of the discussion of public health in the U.S. context. Part of the variety and part of what complicates public health, in the United States at least, is the fact that *public* *health[[1]](#footnote-1)* as a term has at least two distinct referents. The first is the measured state of the health of a population, or the public’s health ([Szreter 2002](#_ENREF_92)). The second is a “historical, self-conscious social and scientific movement” (Szreter 2002 p722) The first is often the focus of the second; that is, the historical, social and scientific movement (the field of public health) has been centrally concerned with the health of a population (the public’s health). While it is the second referent—the field of public health-- that is the subject of this paper, the first referent, due to its presence in definitions and discussions of public health, is also important.

This paper, in exploring the formation of public health as a current U.S. institution, seeks to describe and delineate what public health has come to be and mean in present-day discussions. It involves a critical examination of the differences between what public health is -- its compositions, actors, actions, and structure—and what it is said to be—its descriptions, goals, and public presentations. The narrowing of this focus to the U.S. public health context provides insight into how we might examine public health in any country and allows an understanding of current conflicts and perspectives in light of the motivations of the past ([Krieger and Bun 1988](#_ENREF_51)).

Charting the course of public health in the United States requires some form of defining what is meant by the term *public health*, and it is in seeking that (or those) definitions that the difficulties begin. By introducing the difficulties present in defining public health, not only currently, but also through time, the first section raises the question of how we define public health and what the implications for these definitions might be. In the second section, a broad overview of the development of the institutions of public health and its proposed successes are described. The third section highlights the position of public health with respect to other disciplines in order to critically examine the relative standing of public health in the United States at present. Given the diversity of definitions and of ways of defining public health, the second and third sections explore two ways of understanding public health in the United States. Examining current critical issues, the fourth section analyzes and understands these debates as related to, and, in many cases, stemming from, the identity issues discussed. “Identity issues” refers to the ways in which the narratives differ and how the question of “what is public health” is ever-present.

# UNDERSTANDING PUBLIC HEALTH

## Introduction

Before beginning a discussion of public health in the United States it is important to determine just what is meant by the term *public health*. This is true not only for the purpose of this paper, but also for any who discuss the topic. Given the great number of topics, fields and actions that can fall under such a heading, and the long and widespread history public health has had in the United States ([Duffy 1992](#_ENREF_23)), defining *public health* is not a simple endeavor. However, without a clear definition or a clear marking of the boundaries of public health it becomes somewhat difficult to determine just where public health in the United States started and what it is taken to be. In order to tell the history of it, in order to critically examine its present state, it is first necessary to establish what it is.

It is in the pursuit of establishing what public health is that difficulties arise. *Public health* has meant different things at different times to various people. In addition, *public health* has meant different things at the same time to the same people. In order to understand the diversity within public health, another difference in meaning must be noted. Public health can be defined in at least two ways: by its goals or mission; and by the topics fields and actions that fall under its domain. Public health is the application of an amalgamation of disciplines to a goal of better health ([Gebbie, et al. 2002](#_ENREF_34); [IOM 1988](#_ENREF_45)) and if that goal is not present or directly related, then it is not public health ([Savitz, et al. 1999](#_ENREF_88)). Public health itself, then, is not a proper discipline, nor located in any of the disciplines it uses**.** Understanding public health as defined by its goals accounts for many of the current definitions of public health that abound.

The second way of defining focuses on the scope of public health—the topics that are under its purview and the boundaries of it as a field. It becomes problematic because of what is usually called the ‘boundary problem’ of public health:

Public health is sometimes viewed as being so expansive in its compass as to have no real core, no institutional, disciplinary, or social boundaries. Everything from war, terrorism, and crime to genetic predisposition to disease; from environmental and occupational hazards to income inequality; and from personal behavior to natural disasters has been claimed as a public health problem ([Powers and Faden 2006 p83](#_ENREF_73))

The breadth of issues public health takes under its domain makes it such that what is at the core is often lost. If everything from war to environmental hazards is understood as a topic of public health, then what is central to public health becomes difficult envision.

The diversity in ways of defining coupled with the multiplicity of definitions have made for consistent attempts at clarification by public health scholars, leaders, and those who are considered outside of the field ([Duffy 1992](#_ENREF_23)). The decision as to whether a pediatrician is ever a public health worker, or is only a public health worker when giving immunizations but not when treating an ear infection ([Tilson and Gebbie 2004](#_ENREF_99)), is in many ways a discussion of what way of defining should be privileged. If we define public health as a mission, then by doing that mission (e.g. giving immunizations), one is engaged in public health. If we define public health by its boundaries, we have the added difficulty of deciding what boundaries matter. In the case of the pediatrician giving immunizations, immunizations might be a topic in public health, but the setting (doctor’s office) and the professional field (medicine) where the act is taking place are not usually considered part of public health. Therefore in establishing boundaries as a way of defining public health there is the added difficulty of the potential permeability of these boundaries. A wide variety of topics and fields may belong to public health, but there is little evidence that they do so exclusively.

To better understand the difficulties in defining public health, it is important to distinguish between definitions and boundaries. It is evident that the multiplicity of definitions of public health relate back to the idea of a public health mission. It is then important to distinguish whether the goal by which public health is defined is actually the same goal across definitions as that has great bearing on current discussion of the progress of public health. Analyzing the boundaries of U.S. public health makes the delineation of what public health is more concrete and allows the examination of many of the critiques of U.S public health.

## Definitions

Defining categories such as *disease* or *medicine* is a difficult enterprise, as there is neither uniformity nor constancy within them ([Warner and Tighe 2001](#_ENREF_105); [Weindling 1992](#_ENREF_106)). The same difficulty of definition is found in *public health*, in part because of the variation through time and space of categories like *medicine* and *disease* to which *public health* is fundamentally related ([Mann 1997](#_ENREF_58)). If *public health* is about the public’s health, medicine and disease are important components of any understanding achieved.

The development through time of the scope and authority of *medicine*, or understandings of *disease* have been the subject of a great deal of work that must deal with continued changes in these concepts ([Ackerknecht 1982](#_ENREF_3); [Brandt 2001](#_ENREF_14); [Rosenberg 1986](#_ENREF_83)). *Disease* has at times been seen as a real entity, a biological substance, and a social construct ([Rosenberg 1986](#_ENREF_83)). *Medicine* has been understood as both a science and an art, and encompasses a wide span of current specializations. The term *medicine*  also becomes problematic because it has been used to describe healing systems as well as items of healing in those systems (i.e. the field of medicine has medicines) ([Ackerknecht 1982](#_ENREF_3); [Rosenberg 1974](#_ENREF_82)). These different ways of conceptualizing *medicine* and *disease* both relate to, and stem from, political and social issues that influence the field of health as broadly understood. As *public health* relates to health as well, it is subject to these same political and social influences.

Much of the variety in definitions of *public health* can be attributed to the composite terms—how one defines either the term *public* or the term *health* have great bearing on what the scope of public health is said to be. Whether *public* is understood as individuals as opposed to the larger population and whether *health* is seen as the absence of disease or the attainment of a better quality of life influences public health greatly. This also does not exclude the locating of *public* or *health* in some place between or outside of the two options previously mentioned, allowing for numerous definitions of *public health* that can, and do, exist. Nor does it imply that any of the terms, *larger* *population* for example, have an uncontested, unambiguous meaning.

Given that the function and scope of public health has occupied the minds of many scholars and health officials ([Petersen and Lupton 1997](#_ENREF_72); [Rosen 1958](#_ENREF_80)), an attempt to understand the definition of public health requires examination of multiple definitions that have been constructed and used. John Duffy defined public health simply and across time by saying:

Essentially it means—and always has meant—community action to avoid disease and other threats to the health and welfare of individual and the community at large. To this may be added the current view, which emphasizes a more positive approach—that public health policy should actively promote health rather than simply maintain it ([Duffy 1992 p1](#_ENREF_23)).

Duffy’s definition provides an understanding of both the term *public* and that of the term *health*: *public* is to be understood as both individuals and the “community at large” and *health* is both the absence of disease and a heightened promotion of the healthy state. The Institute of Medicine (IOM) differs by defining public health as the ways in which society collectively acts that provide the conditions for people to be healthy ([IOM 1988](#_ENREF_45)). For the IOM *public* is ‘society collectively’ or ‘people’, and *health* is understood as ‘healthy’.

The IOM definition contrasts with the one provided by Duffy as there is little explanation that “people” or “society collectively” means and is understood in the same way as “individual” and “community at large”. Even allowing that “society collectively” and “community at large” might be ways of saying the same thing, and that “people” and “individuals” might allude to the same understandings (or some combination thereof), the differences in phrasing suggest ambiguity in what is referenced. If these are the various meanings of *public*, it becomes clear why public health has a boundary problem.

The two definitions may be seen to agree on the concept of *health* given that they both use ‘health’ in their definitions. However, that use—without explanation—is indicative of the great ambiguity the term evokes. Since defining health and definitions of health are neither static nor universal ([Dubos 1965](#_ENREF_21)), the unexplained use of “health” in this manner contributes to the broadness of what is included under the title of a public health action. It is not clear who defines what is health or healthy, health for one person or community might look quite different than health for another, and the overarching idea of health—as absence of disease, as wellbeing, as tied of some sort of physicality—differs by time and place. Therefore, agreement that health is a concern, as if ‘health’ is unequivocal and understandable by all, invites the inclusion of a broad range of activities that might not command the same agreement.

A third example that helps to highlight problems in defining public health is the definition as provided by aptly titled website [www.whatispublichealth.org](http://www.whatispublichealth.org) sponsored by the Association of Schools of Public Health (ASPH). It reads:

Public health is the science and art of protecting and improving the health of communities through education, promotion of healthy lifestyles, and research for disease and injury prevention.

Public health helps improve the health and well-being of people in local communities and around the globe.

Public health works to prevent health problems before they occur. ([ASPH 2012](#_ENREF_5))

The above is a three-sentence definition of public health, in which all three sentences are goal-like. It must also be mentioned that in noting that public health is both an art and a science, a parallel is drawn to the field of medicine which is often described both science and art (Handbook 1995). Making a parallel to medicine in this way prompts thinking of the boundaries of public health, which will be discussed in the next section. However, it also brings up the somewhat artificial separation between mission and boundary definitions. In daily public health they may overlap a great deal.

To understand the three-sentence definition above, especially with respect to the definitions provided by the IOM and Duffy (1992), first requires an understanding of the relationship between the three sentences. The absence of a word to link these sentences and their appearance on separate lines might tempt the interpretation that they are joined by an “or”. That is, either the first or second or third sentence is public health. An example would be defining ‘having a child’ as the physical process of giving birth, or being the parent of a child. In this instance both together do not make up the concept “having a child,” but both giving birth and being a parent can be glossed as “having a child”. However, making the tentative assumption that the word “and” links these three sentences invites the idea that this is a listing of all public health must include—that when these things are all present, that is what makes up public health. For example, if *art* is defined as something that exists in some sort of material form, that has a symbolic aspect, and has no practical purpose, none of these individual aspects alone encapsulates what is meant by *art*. Is public health whenever something “works to prevent health problems before they occur” only when it works through “education, promotion of healthy lifestyles, and research”?

Added to the issue of the relationship between the three sentences, the use of terms such as c*ommunity, people* and *health* in order to describe public health allows potential issues with the first two definitions to reemerge. The ASPH definition uses variants on the word *health* four times across its three sentences, as if understandings of health were unambiguous, uncontested, and unproblematic. There is not, within the definition, any elaboration as to what “health” or “healthy” encompasses, or even that it means the same in all three sentences. At the same time, *public* can be understood as communities and/or people (whether local or global) in communities. Excluding the fact that the term *community* has been problematized as being overused and under-examined ([Clark 1973](#_ENREF_17); [Talen 2000](#_ENREF_93))[[2]](#footnote-2), the term *public* can have and has had many different referents when speaking of public health ([Frenk 1993](#_ENREF_33)).

When *public health* was first coined as a recognizable term in the nineteenth century, it referred to the actions that “governments and societies—as opposed to individuals” ([Krieger and Bun 1988](#_ENREF_51)) took and should take with respect to the health of the people. The *public* in public health referred to those whose responsibility it was. However, *public* has also been used as a marker of the non-personal, such that public health is “those services which cannot be appropriated by a specific individual” ([Frenk 1993 p471](#_ENREF_33)), or in reference to the broader public that is the recipient of it. More recently *public* has been used to denote the level of the problem undertaken, that it has a population level of analysis as opposed to fields that do not ([Frenk 1993](#_ENREF_33)). In simply taking these three understandings of *public* that have been applied to public health, we begin to see the various meanings both within and across how we define *public health*.

For Duffy (1992) and the Institute of Medicine (1988), it seems that *public* most clearly relates to our first understanding; it refers to the government, society, community, collective that is responsible for these actions. In adding “the community at large” ([Duffy 1992](#_ENREF_23)), we might say that Duffy implies that public also extends to our second understanding. In examining the ASPH definition, the agent of public health is obscured. Repeated use of the term *public health* does not explain who is to improve or prevent actions. Therefore, it is unclear whether *public* is to refer to the agents or those that are acted upon, or even the level of the problem.

However, people manage to ‘do’ public health and link their actions to these definitions. As such, it is generally understood that some aspect of public must be involved and that which is done must be concerned with health and promoting and increasing health. Given that this understanding does not help to clarify much about what public health is, or, specifically, what public health does, a delineation of the boundaries of public health is often offered as a way to clarify just what *public health* means.

## Boundaries

The issues present in defining public health are not an artifact of choosing the definitions above. The definitions, two of which are exceedingly popular, exemplify the larger issue of ambiguity in public health. They provide an interesting example of the need for definition of terms within the definition of public health. Saying *public* *health* invokes a multitude of meanings in the minds of those who are exposed to it, especially when we consider the items that could be included under its heading. Yet, the term is treated in many everyday assertions as unambiguous and unproblematic in and of itself ([Verweij 2007](#_ENREF_101); [Warner and Tighe 2001](#_ENREF_105))(cite). For those who have explored issues with the definition, the boundaries of public health come into question in an attempt to define public health by designating what it is not.

Understanding the boundaries of public health differs from understanding its definition in two ways: first, *boundary* implies a more clearly defined area of study more than *definition*; second, *boundary* implies what something is not more clearly than *definition* does. Delineating boundaries may be a way of defining, but it is not the same. In the case of public health there is a ‘boundary problem’ in part because of the relationship of the field of public health to the fields of medicine, social medicine and preventive medicine.

### **Medicine**[[3]](#footnote-3)

Public health and medicine in the United States are fundamentally related. The connection of the health of the public to medicine has necessitated a consistent connection to the medical profession in defining public health as a field. At the same time, the connection between the health of the public and medicine has also necessitated a distance from the discipline of medicine in designating what the field of public health is to be. The boundaries of the field of public health are drawn in reference to the field of medicine—that which public health is not ([Mann 1997](#_ENREF_58)).

In the nineteenth century the alliance between public health and medicine was strong ([Brandt and Gardner 2000](#_ENREF_13); [Fee and Brown 2000](#_ENREF_26)). The same could not be said of the eighteenth century, when public health as we currently know it was beginning ([Duffy 1979](#_ENREF_22); [Duffy 1992](#_ENREF_23)), and by the twentieth century medicine and public health were distant once more ([Brandt and Gardner 2000](#_ENREF_13); [Fee and Brown 2000](#_ENREF_26)). The tensions between public health and medicine in the twentieth century were a product of the relationship of the two in their original development ([Brandt and Gardner 2000](#_ENREF_13); [Duffy 1979](#_ENREF_22)).

The origins of public health and medicine have been traced to times before the designation of either as a fully-formed field. As fields they developed distinctly but in ways that were highly connected. In eighteenth century U.S. colonial times both the idea of sanitation as well as the idea of a healer for acute disease existed ([Ackerknecht 1982](#_ENREF_3); [Duffy 1992](#_ENREF_23)). These ideas have been seen as the precursors to the field of public health and of medicine respectively, allowing an understanding of the start of the two as being unconnected. Those who promoted ideas of sanitation and those who provided healing were not the same nor were they in dialogue with one another. In the nineteenth century the relationship between the two began to strengthen as something with greater resemblance to the current ideas of public health and medicine came to be ([Brandt and Gardner 2000](#_ENREF_13); [Fee and Brown 2002](#_ENREF_28)).

By the nineteenth century, with the formation of the new United States of America, the connections between public health and medicine were clearer. Public health (though not necessarily understood as that at the time) was concerned with the broad social picture of health, while medicine claimed the individual and acute diseases as its domain of study and expertise ([Mann 1997](#_ENREF_58)). They were seen as two interrelated parts of the same story ([Duffy 1979](#_ENREF_22)). For both, health as broadly understood was vital, and their identities as applied sciences were used to legitimate the actions they could take. Public health was not seen as separate from medicine, but rather was seen in many ways to be a part of medicine as showcased by numerous physicians being trained in public health and formal public health training being somewhat limited to medical schools ([Brandt and Gardner 2000](#_ENREF_13); [Duffy 1979](#_ENREF_22); [Viselten 1988](#_ENREF_102)).

The end of the nineteenth century into the beginning of the twentieth century, however, marked a change in the relationship between public health and medicine in the United States. Medicine became more centralized and gained in stature, doctors gained greater authority, and the modern hospital came into being, all serving to strain the relationship between public health and medicine ([Ackerknecht 1982](#_ENREF_3); [Brandt and Gardner 2000](#_ENREF_13); [Rosenberg 1974](#_ENREF_82)). With the new bacteriological emphasis in medicine and the separation of public health education from medical education that started after 1915, an “institutional schism” formed that was and is difficult to repair ([Brandt and Gardner 2000](#_ENREF_13); [Fee and Acheson 1991](#_ENREF_27)). This “schism” is seen in many ways as the beginning of a public health field and as the source of one of the major problems in current public health. As such, it will be discussed further in the section of this paper that compares public health development to medical development.

Reasons for the split between medicine and public health mainly link to changes in medicine. The increased dominance in medicine of the “biomedical paradigm” ([Brandt and Gardner 2000](#_ENREF_13)), with its concentration on disease agents and disinterest in larger social issues, led to increased tension between public health and medicine. As the prominence of the biological reductionism of medicine grew in the mid-twentieth century ([Krieger 1994](#_ENREF_50)), public health could not align with the new direction. At the same time, the lack of objectivity to be found in public health dealings in politics, individual whims of compliance, and social and cultural diversity was not what the medical field wanted to explore ([Brandt and Gardner 2000](#_ENREF_13); [Duffy 1979](#_ENREF_22); [Fee and Acheson 1991](#_ENREF_27)). For medicine, public health was too social and too messy and for public health, medicine was oversimplified.

The distancing from medicine by substantiating interest in the social and the messy provides a way of seeing public health boundaries in opposition to that of medicine. Differences would not be of topics, or even of disciplines put to their respective purposes, but in the approach they would take. As medicine was identified with the idea of curing disease and public health with the idea of prevention, their developmental overlap is not surprising ([Mann 1997](#_ENREF_58)). In examining health, in taking health as one’s topic, overlap must happen and tension must arise. However, in gaining authority in and staking a claim to expertise in the health field the distance between public health and medicine became clear, and was solidified. As Rosen writes of the relationship between public health and medicine in the early twentieth century:

Accommodation was possible because the problems with which public health practitioners were concerned did not impinge on private practice, or affected specific groups of the population, most of which were poor and unable to afford private care, or because the official health agency provided services useful to private practitioners… [Public health acts] could be accepted as long as these services did not affect the sphere which the private practitioner considered his own. ([Rosen 1975 p54](#_ENREF_81))

Rosen here not only describes the boundaries of the two—that public health and medicine were considered distinct—but also the relationship between those boundaries. Public health and medicine were to be considered distinct, but public health could be better understood as what medicine was not, what medicine did not claim, what medicine did not want. This asserts the position of public health relative to medicine is, at least in the early twentieth century United States, one in which equality is not assumed. Public health as a bounded entity could be understood as taking that which was left after medicine had claimed its authority, making the position of public health subservient to that of medicine.

Essentially, public health was to look at the social and political, and medicine at the objective. Public health would examine the broad population and eventually prevention, while medicine would attend to individuals and cure (Rosen; Cite). Medicine would be in the laboratory while public health worked in the community, however defined. These distinctions were made with the implicit understanding that public health was somehow lesser—in a lesser position of authority as it were—than medicine (cite). If the story of public health and medicine was one of these clear distinctions between the social, political, and broad prevention and the objective, acute, and individual treatment, the boundary problems of public health would be greatly decreased. It may still be unclear what fields and topics were under the domain of public health, or who the agents were, but it would elucidate the approach public health would take and a number of the problems it would address. However, examining the fields of social medicine and preventive medicine begin to problematize these distinctions.

### Social Medicine

The rise of social medicine in the United States can be traced to the time between 1930 and 1950 (Viseltear in Porter 1997). The origin of an idea of socialized medicine globally, however, was much earlier and, depending on how we understand the meaning of *social medicine,* could be traced to an earlier time in the United States (Porter in Porter). The relationship of social medicine to medicine and public health allows for questioning of the division between medicine and public health.

Social medicine can be understood as embracing the idea of health as a social good and that social conditions have a causal link to disease states (Porter in Porter 1997). This idea can be traced to the mid-1800s and is most famously discussed in the work of Rudolph Virchow. Virchow, a cellular pathologist, saw a connection between the problems in society and illness in the population. For Virchow, who popularized the term “social medicine”, the economic, cultural and social forces were key in understanding, preventing, and treating the ill health of the population. ([Rather 1988](#_ENREF_75); [Rather 1990](#_ENREF_76); [Taylor and Rieger 1985](#_ENREF_95); [Waitzkin 2006](#_ENREF_103)). Instead of advocating for more research, labs, or hospitals, he saw implementing large-scale employment, increased education and higher wages as the way to combat ill health. The idea of connecting a social mission to health was not as popular in the United States as it was in other countries. While we can see it in the work of those like Beauchamp and Krieger who call for public health to situate itself in a movement of social justice, or return to its social justice roots, that sort of work is minimal. The current focus on social determinants in public health is a quite recent occurrence and is considered only superficially connected to the understanding that underlies social medicine ([Waitzkin 2006](#_ENREF_103)).

An understanding of social medicine, as linking the societal conditions to illness and seeking to make those available for treatment, intersects with an understanding of public health as a mission. We might be convinced that public health is not social medicine or that public health is more than the term *social medicine* conveys. The second would bring into question what exactly would be meant by more. The first, that public health is not social medicine, begs the question of where this ‘not’ is located. If public health is not social medicine because ‘social’ in the sense that social medicine is, guided by an acknowledgement and an activism to treat the ills of society, then what sort of ‘social’ is it? Or is public health that sort of ‘social’, but distinguished from social medicine in that it is not medicine? We will turn again to medicine but it has already been suggested that the distinctions between public health and medicine are blurred. Examining preventive medicine as a field helps to further show that blurriness.

### Preventive Medicine

The relationship between preventive medicine and public health leads to questions of the validity of distinctions between public health and medicine. This occurs because the relationship between public health and preventive medicine is not completely understood. There are a number of works that dispute the idea that they should be seen as the same which supports the assertion that there is recognition of their similarity and potential sameness. Whether preventive medicine and public health are the same, are separate, or preventive medicine is a part of public health is not consistently agreed upon. For example, in questions about the public health work force the question arose of whether all the doctors who worked in public health should be considered part of the public health workforce, or only those who had received certification in preventive medicine ([Tilson and Gebbie 2004](#_ENREF_99)). The question was not about certification in public health, attendance to schools of public health, or membership in the American Public Health Association. It made a connection between doctors in preventive medicine and public health, a connection that might lead to the belief that preventive medicine is part of public health.

While the idea of a separation between public health and medicine is clear in the literature that discusses their relationship, public health has adopted and adapted a great deal of medical thought ([Brandt and Gardner 2000](#_ENREF_13); [Brandt 2001](#_ENREF_14)). The use of the term *preventive medicine* to talk of public health makes the exact nature of the relationship between public health and preventive medicine unclear. For many who discuss preventive medicine and/or public health, the connection between the two is seen as straightforward as evinced by the lack of discussion of the relationship between terms ([Ackerknecht 1982](#_ENREF_3); [Brandt and Gardner 2000](#_ENREF_13); [Rosen 1975](#_ENREF_81)).

In Erwin Ackerknecht’s *A Short History of Medicine* (1982) he describes the development of medicine from ancient times to his present day. He devotes one chapter of his brief but detailed history to public health, entitled “Public Health and Professional Developments in the Nineteenth Century.” However, throughout the chapter he uses the term *preventive medicine* while the term p*ublic health* has been restricted to the chapter title. Upon further examination, the term “public health” cannot be found in the index. There is no mention of the idea that public health might contain more than what is described as preventive medicine, inviting the idea that public health and preventive medicine are the same. We might suggest that since he is writing a history of medicine, that he chose only those aspects of public health that directly related to the development of medicine. However, there is no mention of the idea that public health might contain more than this, nor explanation of how preventive medicine would be part of public health. If public health is understood as a field in Ackerknecht’s chapter title, then he restricts understanding of it to preventive medicine.

If another approach is taken and Ackerknecht’s use of public health is taken to mean the health of the public, the issue persists. Not only does it make problematic the target of public health—that it shares the same population as preventive medicine--but it also makes the focus problematic. He writes that the “great preventive medicine movement of the eighteenth century” ([Ackerknecht 1982 p211](#_ENREF_3)), was in direct response to the need to do something about public health. In referring to sanitation as a preventive medicine movement, Ackerknecht claims for preventive medicine what has been considered the start of public health. Sanitation as both part of preventive medicine and public health confuses thoughts of differences between them.

Elizabeth Fee and Dorothy Porter (1992) take a different stand on the relationship between public health and preventive medicine. Basing their stance on the fact that public health as a field was never assimilated into medicine, and, because of this, its focus remained broader than the limits of medicine, they conclude that public health entails much more than the term *preventive medicine* indicates ([Fee and Porter 1992](#_ENREF_29)). This analysis bases the distinction between the two on the distinction between public health and medicine, with public health as a separate entity from medicine that has a broader focus. We can infer, then, for Fee and Porter social medicine would be subject to the same analysis—as not the same as public health because it is broader than, and not subsumed under, medicine. As Gordon (1966) writes of current public health, preventive medicine is “for the individual” and that it complements “the mass measures for community protection, which is the classical public health” (p894).

This distinction between the two, common when they are discussed as different, requires a recognition of medicine as individualistic and an understanding of public health as not. *Public* in the term *public health* should then be taken to refer to the targets of public health. Therefore, when public health works for individuals, is it then preventive medicine?

## Summary

The large amount of overlap between the fields of public health and medicine creates a constant attention to the ways in which they differ. The differences between the two—public health’s focus on large social political issues and prevention and medicine’s aims of curing the individual—form the center of definitions of them. Even though public health is a field separate from medicine, they both take health as their center, thereby leading to a competition of perspectives. The development of public health in the United States, then, must relate in certain ways to that of medicine.

This relationship is one such that while the history of public health as written often provides a great degree of the history of medicine, the reverse is not also true ([Leavitt and Numbers 1985](#_ENREF_54); [Warner and Tighe 2001](#_ENREF_105)). Therefore, the relationship between public health and medicine is not only tension-filled, but also one in which public health is seen as a lesser relation ([Ackerknecht 1982](#_ENREF_3)).

For the purpose of examining the current landscape of public health, I take public health as what it says it is. It is a mission to help people (broadly defined) be healthy (broadly defined). It is not about individuals, except when it is. It is “enchanted with a concept of prevention” ([Gordon 1966 p890](#_ENREF_36)), but not in the sense of preventive medicine. It focuses on health, (however defined) and things that relate to health wherever they may lead. It is social, but not (or at least not exclusively) in the sense of social justice, or social medicine where ‘social’ involves understanding and involvement in correcting the perceived ills of society.

I will turn to medicine among other fields and issues to see if this is the case later. First, however, armed with the idea that public health is an entity that is broad, social and political as opposed to medicine’s objective, individual focus, and that focuses on prevention while medicine takes cure, I will examine the history and formative governmental structures of public health in an effort to show what public health has been and how it perceives its own history.

# History and Structure of U.S. Public Health

## Introduction

Public health (i.e. the historical movement called such) can be said to have started at various times in the United States ([Konold 1947](#_ENREF_49); [Rosen 1953](#_ENREF_79)). The definition to which one subscribes and the distinctions one makes between public health and medicine lead to differing perspectives on the origin of public health. Whether one considers the beginning of U.S. public health as the start of efforts in sanitation, a preoccupation with prevention, as health outside of medicine, as health including medicine, as government actions, or as the formation of a formal field alters the start date of public health in the United States. The start has important implications for and is a product of ideas of defining public health. What the mission of public health is held to be and what the boundaries are said to encapsulate allows the beginning to be found. At the same time it is the beginning one has imagined for public health that helps to construct understandings of its mission and purview. What are often agreed upon are the social movements that critically affected the structure and function of the field. That agreement allows an idea of what public health is said to be and where and when it may have started. Therefore, what follows is a discussion of some of these key social movements and of the structure of public health in the United States in order to provide insight into not only what public health is, but also how it came to be.

## Key Social Movements

### Introduction

In order to chart the history of public health to form a basic understanding of what public health was and currently is, the examination of key events is integral. By key events, what is meant are those happenings, whether they be the emergence of a disease or of a perspective, that have had great impact on the development of public health, or provide evidence of fundamental changes in the structure of public health in the United States. The events chosen are not meant to be an exhaustive list. That is both improbable for the limited scope of this paper and impossible given the breadth of activities which the term *public health* encompasses. Therefore, it is fully acknowledged that there may be disagreement on the choices made, and that these differences are, in part, due to differing perceptions of public health. As such, an effort has been made to detail the reasons for the inclusion of these events as important to public health history and how examining these events shows the relation between the unfolding of public health and historical, political and social happenings in the United States. For these reasons I will discuss the following:

* The U.S. Public Health Service
* Sanitation and the sanitary movement
* Epidemiological transition and the rise of environmental health

### Public Health Service

The number and names of agencies, councils, committees, boards, and groups that can be connected to modern public health practice exceed common ability to mentally manage. However, in the eighteenth century, public health as an institution existed in the United States only in the form of temporary boards of health that were established in response to, and faded after the control of, emergency disease situations such as outbreaks of cholera ([Duffy 1992](#_ENREF_23)). The end of the eighteenth century brought about an additional institution. That addition, which began as the Marine Hospital Service and would later be known as the Public Health Service (PHS), had very humble beginnings ([Hamowy 2007](#_ENREF_42); [Mullen 1989](#_ENREF_64)).

The Marine Hospital Service was formed to provide care for injured, sick, and disabled merchant seamen in U.S. ports. Created in 1798 with the signature of President John Adams on the Marine Hospital Service Act, the earliest hospitals under this Service were along the eastern coast of the United States ([1923](#_ENREF_1); [Hamowy 2007](#_ENREF_42); [Straus 1950](#_ENREF_89)). The authority of the Marine Hospital Service was restricted to seamen, and, due to the nature of sea commerce, it was under the domain of the U.S. Department of the Treasury ([1923](#_ENREF_1)).

By 1878 multiple yellow fever outbreaks led to an act of Congress that granted the Marine Hospital Service control over quarantine for those attempting to enter the United States ([Straus 1950](#_ENREF_89)). Prior to this act, quarantine was solely a privilege of each individual state, left to temporary health boards, committees, and agencies that formed and disbanded in accordance with disease threat ([Duffy 1992](#_ENREF_23)). While the Marine Hospital Service was required to work with state cooperation, the added responsibility for quarantine was a result of the reorganization of the Service from a network of hospitals, locally and loosely controlled, to a more centralized body with the added position of Supervising Surgeon ([Hamowy 2007](#_ENREF_42); [Straus 1950](#_ENREF_89)).

The reorganization in the 1870s was in response to the expansion of the hospitals and of services provided, showing the shift in priorities the Service was undergoing. From the late nineteenth century onward the allocation of greater responsibility was gradually broadening the priorities of the Service beyond U.S. seamen. It was also during this time that Congress made the Marine Hospital Service responsible for interstate quarantine, allowing a farther reach than the sea. The added authority to influence the states, instead of having to work completely with their permission, highlighted the shift from the care of seamen as the most important duty of the Service. As a reflection of the shift in importance in the duties assigned, in 1902 Congress renamed the Marine Hospital Service the Public Health and Marine Hospital Service ([1923](#_ENREF_1); [Hamowy 2007](#_ENREF_42); [Straus 1950](#_ENREF_89)). The name lasted ten years before it was altered once more to reflect an even greater shift in priority. This final alteration occurred in 1912 with the shortening of the name to the Public Health Service, with the acronym PHS ([Fee and Brown 2002](#_ENREF_28); [Hamowy 2007](#_ENREF_42)). As the care of U.S. seamen became less important with respect to other issues, the Public Health Service came to be ([1923](#_ENREF_1)).

The importance of the Marine Hospital Service and what it later became is shown in its changing development. As the name was altered to reflect additional duties, the changes are indicative of what issues were most central at times during public health development. As issues with the control of tuberculosis grew, the number of hospitals under the Public Health Service grew as well ([1923](#_ENREF_1); [Hamowy 2007](#_ENREF_42)). With the end of World War I the care of soldiers dramatically increased the reach of the Public Health Service. With the removal of the care of soldiers from the purview of the PHS and the distribution of many of its hospitals to the newly created Veterans Bureau in 1922 to care for those soldiers, the Public Health Service became greatly diminished ([Hamowy 2007](#_ENREF_42)). It would not be until the Public Health Service was moved out of the Department of the Treasury and the federal government took a more prominent role in public health endeavors that the PHS would gain in stature once more ([Wright 2005](#_ENREF_108)).

However, the development of the Marine Hospital Service and its transition into the Public Health Service showcases only part of the development of public health as we may currently understand it. The development of the eventual PHS tells the story of the beginnings of U.S. government involvement in public health, something that would grow to be considered the most extensive system of government involvement in health in the world ([Hamowy 2007](#_ENREF_42)). The other part of the development of public health as we currently see it pertains to public health before it was formally defined as such, that is, the story of sanitation.

### Sanitation and Public Health

Understanding the relationship of public health of the past to individual states in the United States requires the discussion of sanitation. As the marine hospitals came to be, the sanitation movement gained ground. Sanitation and the terms *sanitary movement* and *sanitary reform* are highly prevalent when examining discussions of the history of public health ([Wright 2005](#_ENREF_108)). The title of John Duffy’s (1992) narrative history of U.S. public health, *Sanitarians: The History of American Public Health,* shows the deep connection presumed between the beginning of public health and sanitary efforts. The history of public health in the United States can be seen through a discussion of the history of U.S. sanitation efforts ([Duffy 1992](#_ENREF_23)).

The first ‘preventive medicine’ movement of the nineteenth century United States was the sanitary movement ([Ackerknecht 1982](#_ENREF_3)). In the 1800s the idea of preventing disease became linked to the idea of sanitation, usually in the form of quarantine and waste management. Edwin Chadwick of England had pioneered modern public health there and provided a model for reform for other European countries. The United States, then, achieved a relatively late start in sanitary reform ([Ackerknecht 1982](#_ENREF_3); [Duffy 1992](#_ENREF_23); [Fee and Porter 1992](#_ENREF_29)). It was not until 1850, with Lemuel Shattuck’s Report of the Massachusetts Sanitary Commission that U.S. sanitary reform was said to have started ([Ackerknecht 1982](#_ENREF_3); [Fee and Brown 2002](#_ENREF_28)).

Describing Shattuck’s 1850s report as the start of sanitation reform does not preclude the importance of sanitation prior to this time. Prior to the 1850s sanitation was a great worry in the United States, usually with respect to the spread of infectious disease ([Duffy 1992](#_ENREF_23)). The cholera epidemics of the 1830s made a strong case for sanitation and for state and city boards of health to deal with such issues ([Rosenberg 1987](#_ENREF_84)). Fear of cholera was a driving factor of sanitary reform ([Duffy 1992](#_ENREF_23); [Rosenberg 1987](#_ENREF_84)), although the effective execution of such reform cannot be seen until the 1870s. Health reformers had pursued the goal of founding state and city boards of health since the early 1800s and in the late 1800s this was finally achieved ([Tomes 1990](#_ENREF_100)).

Sanitary reform was also responsible for the provision of water treatment and sewage centers, in addition to local boards of health. It dealt with the yellow fever and cholera epidemics that swept the United States at various times, although more people died of diseases like tuberculosis on which the sanitary movement had little influence ([Kohler 1993](#_ENREF_48)). While public health as sanitation was highly effective, it becomes clear that it requires public support to have success.

### Epidemiologic transition and environmental health

Perhaps sanitation and sanitary reform would be the story of public health, if not for the shift in the disease picture that occurred in the twentieth century. The idea of an ‘epidemiologic transition’ in disease, at least in the United States, marks the idea that there is a difference in the cause of disease and death in the population ([Omran 1971](#_ENREF_68); [Terris 1979](#_ENREF_96)). The recognition that there was a decrease in death from infectious disease occurred toward the end of the nineteenth century ([Dubos 1965](#_ENREF_21)) and the start of the twentieth ([Omran 1971](#_ENREF_68); [Terris 1979](#_ENREF_96)) (Bartlett et al). There are considered to be at least three transitions, the first marking the rise of infectious disease, the second marking the decline of infectious disease and the rise of chronic disease. The third would mark the emergence of new infectious disease and the reemergence (or the acknowledgement of the continued relevance) of previously known infectious disease ([Barrett, et al. 1998](#_ENREF_8)).

The epidemiologic transition from infectious to chronic is seen as analogous to a demographic transition—from large families with rates of high mortality to, in the early twentieth century, smaller families with low mortality ([Weindling 1992](#_ENREF_106)). In the 1900s the time of infectious disease as then understood was waning. While there was still infectious disease and contagion continued to be worrisome, the time of quarantine and sanitation was ending. Seeing growing concern with chronic diseases for which efforts of communicable disease management would not be successful led to a shift in public health priority ([Swain 1962](#_ENREF_91)).

At the same time, and in part because of the same forces that highlighted the rise of chronic disease conditions, a focus on the environment that surrounded the public became critical ([Dubos 1965](#_ENREF_21)). While previously a focus on sanitation brought attention to the man-made environment, germ theory caused a blurring of that focus by attending to natural microbes. The environment was interesting as the place where microbes were and where aspects of the man-made environment helped them to flourish. The triadic understanding of agent, host, and environment limited environmental concerns to ideas of contagious disease ([Tesh 1990](#_ENREF_97)). The change from microbial water pollution to chemical air pollution as the focus of ill health created new areas of concern ([Dubos 1965](#_ENREF_21)). The 1960s and 1970s saw the passage of items such as the Clean Air Act ([Fee and Brown 2002](#_ENREF_28)), and the creation of Earth Day ([Dunlap and Mertig 1991](#_ENREF_24)), indicating public attention toward larger environmental effects ([Ruckelshaus 1985](#_ENREF_86)).

The publication of Rachel Carson’s *Silent Spring* (1962) exemplifies the changing thoughts of the U.S. public. Carson, a popular nature writer and a marine biologist, was considered the foremost expert on the environment she described. Her writing also enjoyed a great degree of popularity with the non-scientific public. That popularity transferred to her work that warned about the indiscriminate use of pesticides, and the literary devices she drew on gave it presence and acclaim outside of science writings ([Carson 1962](#_ENREF_16); [Lear 1993](#_ENREF_53)).

The reaction to *Silent Spring* led then president John F. Kennedy to call for an investigation into pesticide use ([Lear 1992](#_ENREF_52); [Lear 1993](#_ENREF_53); [Wang 1997](#_ENREF_104)). With the added substantiation of Carson’s argument by the report, stricter laws that controlled, and in some cases prohibited, the use of certain toxic substances were called for and implemented ([Lutts 1985](#_ENREF_57)). However, that was neither the only nor even the largest contribution of Carson’s work. In conjunction with Carson’s prior articles, the publication of *Silent Spring* led to increased public scrutiny of the potential dangers of chemical substances that had been so widely used. More critically, Carson’s work provided the public with a way of gaining knowledge of governmental actions, and showed that public knowledge had a place in influencing decisions in the upper levels of government policy. The eventual banning of DDT was in response to public awareness of and outcry about its harmful effects. As government involvement in public health had grown extensively, this was no small matter.

### Summary

As Dubos (1965) writes when considering the importance of the environment, “the public health services themselves, despite their misleading name, are concerned less with health than with the control of the specific diseases considered important in the communities they serve. They do little to define, recognize, or measure the healthy state (p363). Public health, before ideas of environmental health and a strong focus on chronic disease, had many parallels with medicine and the other health fields. Disease and the laboratory helped to shape what public health was interested in and acted upon ([Viselten 1988](#_ENREF_102)). Therefore, as Dubos (1965) explains, public health at that time was public—in the sense of government actions to protect the population—but not much concerned with broad ideas of health. The twentieth century marked a suggestion of a broader purpose to public health, one that suits its name. However, while proclaiming more interest in health and more support for improvement of health through environmental acts for example, a broad understanding of health is what allows many topics to be subsumed under public health.

Understanding *health* as including the prevention of the spread of disease allows an understanding of sanitation as one of public health’s successes. Understanding health as providing conditions for a ‘healthier’ state allows seeing environmental actions as helping to fulfill the public health mission, and, therefore, be a public health success. The recognition of a transition from worry over infectious disease to a preoccupation with chronic disease was an opportunity for public health to reflect on itself and change. In essence it did not: it stayed public health but added a greater ambiguity and muddiness to already barely defined items by expanding its focus. Sanitation could be pointed to and PHS workers could be seen. And, eventually at least, they both had ties to government. By the mid-twentieth century in the United States, the consolidation and expansion of the PHS, and concerns with health promotion blurred the vision of public health.

## Structure of Public Health in the United States

Currently, the involvement of the federal government in U.S. public health is vast. Widespread interest and participation are recent developments with respect to the history of U.S. public health ([Hamowy 2007](#_ENREF_42); [Wright 2005](#_ENREF_108)). When the care of merchant seamen was the main concern of what would become the Public Health Service, and temporary state boards of health responded to emergency situations, federal government involvement in the public health enterprise was limited ([Hamowy 2007](#_ENREF_42)). The prominence of the idea of state rights led to federal government reluctance to be involved in health matters ([Fee and Brown 2002](#_ENREF_28); [Marcus 1979](#_ENREF_59)). The federal agencies presently known to take an active role in public health are all relatively recent additions, most marking expanded functions of the Public Health Service now under the Department of Health and Human Services (DHHS) ([Hamowy 2007](#_ENREF_42)).

The 1922 downsizing of the Public Health Service was offset by the creation of a number of agencies dedicated to health between 1933 and 1938. Following the removal of veteran care from PHS into the Veterans Bureau, other agencies were created ([Fee and Brown 2002](#_ENREF_28)). In 1939 the PHS itself was transferred to the newly formed Federal Security Agency (FSA), which had been created to house these agencies. This would become the Department of Health, Education and Welfare (HEW) in 1953 ([Wright 2005](#_ENREF_108)) and eventually, once education fell out of its purview, the Department of Health and Human Services (DHHS). Other agencies and bureaus were later created, reshaped or simply moved to be part of the PHS and/or the FSA. For example, the Food and Drug Administration (FDA) was transferred to the FSA in 1945. This was 15 years after the FDA had officially become called by that name. That 1945 move, however, did not make the FDA part of the PHS. It was not until 1968, after the FSA had become the HEW, that the FDA was included in the list of agencies that were part of the PHS ([Wright 2005](#_ENREF_108)).

Currently, eight Public Health Service agencies are usually considered key in the current federal structure of public health ([Hamowy 2007](#_ENREF_42)). Of these, two are widely known and seen as key parts of the public health enterprise. These two agencies are the Centers for Disease Control and Prevention (CDC) and the National Institutes of Health (NIH) ([Etheridge 1992](#_ENREF_25); [Swain 1962](#_ENREF_91)). The other six agencies, while charged with important responsibilities, are not strongly linked to public health in the public mind. These are the Food and Drug Administration (FDA); the Health Resources and Service Administration (HRSA); the Indian Health Service (IHS); the Agency for Healthcare Research Quality (AHRQ); the Agency for Toxic Substances and Disease Registry (ATSDR); and the Substance Abuse and Mental Health Service Administration (SAMHSA) ([Etheridge 1992](#_ENREF_25); [Hamowy 2007](#_ENREF_42); [Harden 1986](#_ENREF_43)). Further attention will be devoted to the CDC and NIH in particular[[4]](#footnote-4).

The CDC was first created in 1946. On July 14 in Atlanta, Georgia, the Office of Malaria Control in War Areas became the Center for Disease Control and was made part of the Public Health Service ([Etheridge 1992](#_ENREF_25)). With a focus beyond malaria and communicable diseases, the new name and new responsibilities would shape the development of the CDC. Almost 40 years after this creation, the breadth of CDC issues required the adjustment from a singular *center* to a plural *centers*, making it the Centers for Disease Control in 1981. The final modification of the name occurred approximately 10 years later. With the expansion of the purview of the center to promotion and prevention of health problems, the name was amended to the Centers for Disease Control and Prevention, although the acronym remained unchanged ([Etheridge 1992](#_ENREF_25); [Hamowy 2007](#_ENREF_42)). The CDC currently is responsible for surveillance in its efforts to prevent disease from the general public.

In 1930 the Ranshell Act created the National Institute of Health as a name and function expansion of a center originally dedicated to hygiene. Considered to be the research arm of the U.S. Public Health Service, creation of the National Institute of Health (abbreviated NIH) was a response to the realization by the PHS that acute, infectious disease was fading, and that more federally sponsored medical research needed to occur ([Harden 1986](#_ENREF_43); [Swain 1962](#_ENREF_91)). Under President Roosevelt, the PHS and all under it were moved to the newly formed Federal Security Agency (FSA) and out of the Department of the Treasury ([Fee and Brown 2002](#_ENREF_28); [Hamowy 2007](#_ENREF_42); [Swain 1962](#_ENREF_91)). With the creation of the National Cancer Institute (NCI) in 1937, the NIH had its prototype for the other institutes to come ([Swain 1962](#_ENREF_91)). Currently, it is the National Institutes of Health, reflecting a 1948 name modification that took into account the growth of its responsibilities ([Grob 1996](#_ENREF_40)) and the formation of the NCI, the National Institute of Mental Health (NIMH), and the National Dental Research Institute ([Hamowy 2007](#_ENREF_42)). The NIH, through its 27 institutes and centers, funds over two-thirds of medical research in the United States ([Price 1992](#_ENREF_74)).

This formation, expansion, and eventual acceptance of these agencies show a public face of public health. With institutional backing and power came political and bureaucratic responsibility. The government formations of public health are examples of both public health seeking to be public—that is publically recognized and seen--and defining what it is supposed to be. The NIH, in its beginnings as a hygiene laboratory in 1902, became the start of federal government continued involvement in public health. Previous attempts at national boards of health had been unsuccessful so these sustained agencies (i.e. NIH and CDC), even as they faced threats of being disbanded (Etheridge 1992), marked a federal recognition of responsibility for the health of the public. However, the continuous name and function changes, exemplified by the CDC and NIH in particular, show the problems in this endeavor. Not only does it mirror the quest for public health in general to define its scope and mission, but continued name and function changes showcase the influences of politics, funding, and public sentiment on the authority of public health. Wars and public preoccupations with cancer, in addition to needs to spend effectively, helped to shape the development of these agencies and to give them their place in the structure of U.S. federal government.

As federal government responsibility in public health was being realized through the consolidation, formation, and expansion of these agencies, state and local public health organizations were growing as well. Present since the days of temporary health boards in response to yellow fever and cholera epidemics in the United States, state and local management of public health was the original practice ([Marcus 1979](#_ENREF_59)). The organization of services differs from state to state but most have made provisions for agencies that deal with the environment, mental health, and child and family health. There are also a number of non-governmental agencies, such as the American Heart Association and the American Cancer Society ([Hamowy 2007](#_ENREF_42)) who address specific health problems across states. Additionally there are philanthropic foundations that provide funding for public health efforts and local agencies that are formed in municipalities and communities to accomplish specific tasks. There are currently a large quantity of groups and people involved in public health and in the health of the public in the United States.

Taking the vast number of federal agencies along with the state and local structures involved in public health provides us with insight into one of the issues here. For example, the National Cancer Institute (whose website is [www.cancer.gov](http://www.cancer.gov)) and the American Cancer Society (whose website is [www.cancer.org](http://www.cancer.org)) both take cancer as their area of interest. One is a national research institute and the other is a national organization of community volunteers, but if both are included in public health then it becomes crucial that similarity and effective communication between them is achieved. Public health then, because of the breadth of agencies and groups involved, must deal with the added issue of cooperation, communication, and consensus among these groups.

## Summary

A relatively brief examination of certain events in public health in the United States provides an example of the constant redefinition that has characterized U.S. public health. This redefinition—of who is responsible to whom and for what—is a key part of establishing the public health mission; a mission whose success is made problematic by the constant modifications to it. Each successive structure and name change reflects the desire to clarify or change the mission of public health through the modification of the structures that are supposed to be responsible. This allows public health to be both successful, such as in the case of environmental policies, and still unknown to the general populace. More than this, the modifications, redefinitions, and questioning of who is responsible to whom and for what allow public health to claim to be a broad, social and preventative field that fulfills its mission in health, while at the same time allowing and inviting critiques of public health for lacking a cohesive core and distinctive and delineated area of expertise, and failing to be broad, social, and preventative.

# INTERSECTIONS WITH OTHER FIELDS

## Introduction

The previous section, in discussing the key events and structures involved in public health, makes some claim to the identity of public health. It has worked on infectious and chronic disease, exists at multiple levels within and outside government, and is seen as having certain successes (e.g. DDT) and certain challenges (e.g. dealing with chronic disease). It has been, in some respects, public health fulfilling its first type of definition—its mission. However, we now turn back to the other type, the bounded definition that proclaims public health as broad, preventive, social and political.

To examine this other definition, and whether it does actually define public health in the United States, the question of what public health is—what is its scope or area of expertise, who does it serve, what does it do—reemerges. In order to see this, and critically assess how public health has fulfilled its definition, three other fields of study become relevant. By examining the relationship between public health and medicine, public health and epidemiology, and public health and the social sciences respectively, it becomes clear that every aspect of that definition—broad, social, preventive, and political—is questioned.

## Public Health and Medicine

### Introduction

A deeper discussion of the relationship between public health and medicine becomes necessary in order to understand how public health took its current form. The close association that can and has been made between the two, their somewhat parallel development, and the tension between the two not only clarify public health structure and development, but part of why public health has some of its aforementioned issues. By examining the professionalization of public health it becomes clear that the distance from medicine that public health claims is not clearly manifested. The development of training programs, professional groups, academic journals, advisory boards and other factors involved in making public health be a profession are similar to the professional development of medicine. To make sanitary reformers into public health workers and those workers into public health professionals was and is not a simple task. In order to understand why it was not simple, it becomes necessary to talk once again of medicine, not only of public health’s relation to it, but also the rise of medicine, of the medical model, and of medical dominance.

### Professionalization

Professionalization in public health becomes important in its designation as a field of study. *Profession* as a term and as a concept came under sociological scrutiny during the mid-twentieth century, most notably in the work of Eliot Freidson and his critics ([Freidson 1986](#_ENREF_32); [Hafferty and Castellani 2011](#_ENREF_41)). Describing profession as a special type of occupation whereby the profession claims it is “the most reliable authority on the nature of the reality it deals with” ([Freidson 1970 pxv](#_ENREF_31)), Freidson takes medicine as the prototypical profession. In many ways it has become what other occupations aspire to be. The sociological understanding of profession presents a way of understanding the current structure of public health as an academic field one studies and a job one performs.

Key in Freidson’s understanding of the medical profession is that medicine as a profession, “a kind of occupational organization in which a certain state of mind thrives and which by virtue of its authoritative position in society, comes to transform if not actually create the substance of its own work” (Freidson 1970 pxvii), something that has a form of dominance other ‘professions’ cannot claim. For Freidson (1970), then, these things are limited in their ability to be professions. For him, it is not the trappings of a profession—the certifications or the schools—but the claim to exclusive authority that provides medicine with dominance over other, subordinate professions.

In recent discussions about credentialing the public health workforce we see public health following the medical model of profession through attempts at certification. Partially, this is a result of the recognition that “certification is common for professions represented in the public health workforce (such as medicine, nursing, health education, and engineering); however, the field of public health lacks its own standards for educational attainment, continuing competency, and career achievement” ([Tilson and Gebbie 2004 p310](#_ENREF_99)). Few states require public health officials to be credentialed and there is little standardization of the credentialing process. Another reason for the current focus on certification is the idea that it will help to provide public health workers, and we might add public health in general, with a status that is comparable to other workers in the health field ([Gebbie, et al. 2002](#_ENREF_34); [Tilson and Gebbie 2004](#_ENREF_99)). If public health as a bounded entity contains professions, it becomes somewhat necessary to have the acknowledgement of public health as having at least similar status.

The question is raised, then, of whether public health is a profession at all ([Tilson and Gebbie 2004](#_ENREF_99)). The breadth of the work and the multitude of people who can be seen as being engaged in public health once again raise the question of what public health is. The definition that results from the answer to the question of ‘what is public health’ helps to answer part of the question of ‘is it a profession’. It must provide answers to questions of whether engagement in health work is enough for status, and whether, through becoming a professional, are nonprofessionals and the work they do no longer part of public health. The second part relies on an understanding of public health as, similar to other professions, following the medical model. As public health follows the model it must confront the fact that it follows in the footsteps of the field it claims to be the closest too and which offers, in the public health mind at least, its strongest opposition. The question becomes can public health ever be a profession when medicine is the prototype, medicine is dominant, and medicine shares its subject of health? And what sort of profession can public health be as it confronts the system of hierarchical authority other health professions have been placed in under medicine? I turn to examine another part of how public health shows itself as a field—the organization and the training to see the connections with medicine and conclude by returning to these ideas.

#### Professional Associations

The American Public Health Association (APHA) was founded in 1872 and was modeled after the formation of the American Medical Association (AMA) ([Brandt and Gardner 2000](#_ENREF_13)). Most of the early presidents of the APHA were members of the AMA ([Fee and Brown 2002](#_ENREF_28)), and AMA members also constituted the majority of membership in the APHA through to the beginning of the twentieth century ([Brandt and Gardner 2000](#_ENREF_13)). A decrease in the proportion of APHA members who were also AMA members did not occur until public health itself became a profession with formal training. The profession of public health developed in the United States in the early twentieth century ([Fee and Porter 1992](#_ENREF_18)), and, as such, membership profiles shifted.

#### Public Health Training

Both the connection between public health and medicine and the use of looking at medicine when attempting to understand the formation of public health as a field are clarified through the examination of public health training. What is considered necessary to know, how one goes about learning that knowledge, and what that knowledge allows them to do forms some of the deepest connections between public health and medicine. In discussing public health training, however, it is important to note that:

A wide range of institutional settings, including not only schools of public health but also degree-granting programs in public health, medical schools, schools of nursing, other professional schools (e.g., law), and local, state, and federal public health agencies, play important roles in public health education, training, research, and leadership development” ([Gebbie, et al. 2002](#_ENREF_34)).

The diversity in training opportunities leads to two items to note. First, it illustrates an aspect of the boundary problem of public health whereby schools of public health are not necessarily the proper, and obviously not the only, way of attaining training. Without exclusive control over how one learns ‘public health’ there must be a degree of flexibility in what is learned. Second, the lack of exclusive control over public health training means that examining the schools of public health, which this paper aims to do below, will only highlight certain aspects in the story of public health training.

This diversity in training opportunities is not a recent occurrence; public health has had numerous ways of gaining legitimated expertise since its very start. The sanitarians who pushed for water purification and sewage systems, state boards of health, and individual measures against ill health initially consisted of those non-medically trained ([Duffy 1992](#_ENREF_23); [Fee and Porter 1992](#_ENREF_29)). Public health workers were united in mission, not necessarily in training.

The early twentieth century saw the first courses in public health in the university, although it was not until 1912 that the first U.S. degree in public health was awarded ([Winslow 1925](#_ENREF_107)). Those who worked in the Marine Hospital Service, and later the Public Health and Marine Hospital Service were chosen for various capabilities that were not necessarily linked to training in public health measures, especially as the Service expanded its care to soldiers ([1923](#_ENREF_1)). It was not until after 1915 that actual schools of public health surfaced and were structured in ways that were attentive to definitions of public health.

A look at the formation and structure of three accredited schools of public health offers a chance to understand the variety of interpretations the teaching of public health has allowed. It becomes evident that training in public health is diverse and that a great deal of this diversity has to do with the different definitions of public health people operate under. Therefore we will take under consideration the schools of public health at Johns Hopkins University, Yale University and the University of Pittsburgh. All accredited schools of public health focus on and have training in the five core topics of public health which are biostatistics, epidemiology, environmental sciences, health management, and the social and behavioral sciences ([Gebbie, et al. 2002](#_ENREF_34)), and offer a M.P.H. degree. As such, we will focus on how these three schools interpret these areas and apply them to the pursuit of that degree.

The Johns Hopkins School of Public Health (JHSPH) was the first school of public health, developed by Welch and Rockefeller in direct response to the Welch-Rose report of 1915 ([Brandt and Gardner 2000](#_ENREF_13); [Krieger 1994](#_ENREF_50)). Chosen because Johns Hopkins University already had a strong school of medicine, it was to stand as the prototypical school of public health ([Blockstein 1977](#_ENREF_11)). What it became, was the largest school of public health in the world and one of the highest ranked. Public health at JHSPH is deeply rooted in the idea of diversity in what comprises public health, something reflected in its comprehensive program.

For students at JHSPH, an M.P.H. is only possible if one first has two years of professional experience in a, otherwise they offer an MSPH (Master of Science in Public Health) as a form of focused study in a specific area for people without that experience. Core coursework for an MPH occurs in a series format. Requiring 80 credits of coursework where courses are approximately 3 to 5 credits, completing any combination of the required series will result in a maximum of 43 credits, leaving at least 37 for a further focus that is customizable to the individual students. The series format does not mandate the specific courses, leaving students able to customize that as well. For example students are required to either take 2 courses in biostatistical reasoning, three in biostatistical methods, or four in somewhat advanced biostatistical methods, depending on their choice. What is required based on an understanding of the series is at least two courses in biostatistics, one course in environmental health, epidemiology, management science, policy/problem solving, public health biology, and social and behavioral science respectively (http://www.jhsph.com).

The MSPH degree does not require as broad a training, with only one year of coursework and a minimum of six months of field placement. Each program varies, but generally 60 credits are required before field placement. For example the MSPH in Health, Behavior, and Society requires 64 credits, and following the same series method, requires one course in epidemiology, environmental health, and management each, and two in biostatistics. Other courses are specific to its training area (http://www.jhsph.com). The MSPH then provides education in the five core areas to a lesser degree than the MPH.

The story of public health at Yale University must be situated in a broader understanding of the university. Yale University in the 1900s offered a prestige that did not necessarily translate into academics. Attending Yale had social meaning, but its academic system was considered merely acceptable (Viseltear in Porter 1997). By the 1920s the dean of the medical school came to see medicine as a social science and needed to connect with the graduate school. Medicine, as he saw it, needed to be integrated with ideas in law and economics, understandings of items such as crime and divorce, so that understandings of the whole person could be achieved. Schools like Yale where graduate students in social fields and medical students were to work and study and learn together fell under criticism in the wake of the Flexner Report. Medicine was based in science and science was “fundamentally and in the end always an affair of the individual” (Viseltear in Porter), so individualistic understandings were to be privileged in medical schools. Public health and preventive medicine within the school of medicine then suffered indifference as changes in Yale’s curriculum reflected a resurgence of individual and technical work. With new preoccupations with infectious disease and pharmacology what mattered “was not prevention, but cure; not the community but the patient; not health but sickness” (Viseltear in Porter p51). This situation led to the duality of public health at Yale: it is both a department in the school of medicine, which traces its history back to this time, and an accredited independent school since 1946. The current M.P.H. program requires one course in each of the five core subjects (http://publichealth.yale.edu). Compared to JHSPH, Yale’s M.P.H. appears most similar to the M.S.P.H. there offered, and the connection to medicine is obvious.

Former Surgeon General Thomas Parran wanted to establish a school of public health that was neither within nor entangled with the medical school; this school would have more connection to other schools that were not physically or theoretically linked to medicine (Brandt 2000). The University of Pittsburgh’s Graduate School of Public Health (GSPH), founded in 1948, had its funding entwined with the eventual accreditation by the APHA and the integration of the school into the established Medical Center that had its home in Pittsburgh. It was connected to a strong medical center as opposed to a strong medical school. Parran, as the first dean of GSPH, thought it was necessary that the new school be in close relation to the schools of medicine and of nursing, in addition to those of engineering, social work, and the departments of fields such as psychology ([Blockstein 1977](#_ENREF_11)). The school thus became independent, but affiliated with the University of Pittsburgh and its other schools, departments, and the medical center.

Currently GSPH offers a core curriculum that every student must take with minor exceptions. A core course in each area—biostatistics, epidemiology, environmental and occupational health, health policy and management, and behavioral and community health sciences—corresponds to their understanding of the five core areas. They also add a mandatory overview, capstone on problem solving, and a public health biology course. Therefore, all students who matriculate with an MPH degree from GSPH must take the specific course listed in each of these areas with two exceptions. Students who receive their MPH in biostatistics or epidemiology must take a required course in statistical methods, not the statistical reasoning required for everyone else, and students in behavioral and community health science and environmental and occupational health do not take the core course in their own subject area (http://www.publichealth.pitt.edu).

The three schools all train students in public health, whether to be public health workers, researchers, or use their gained knowledge in pursuit of other educational goals. However, they come to be because of different circumstances of creation with divergent ideas of what is required. The location of schools of public health affiliated with universities that have schools of medicine is a lasting influence of the first school of public health. Yale University provides the idea that a connection to medicine is obvious, necessary, and in some ways entrenched, even as it has promoted the social (i.e. social medicine and justice) more than the others. The University of Pittsburgh GSPH shows a concern of connection to a medical center and the entire university enterprise, different from a concern with the medical school. Similar in foundation, they and other schools of public health

followed a range of models, each with distinct goals and specific needs…The result was a group of schools heterogeneous in nature and design, serving a myriad of functions…The breadth of public health as a field created strong tensions at these institutions between practice and research, between the academy and public bureaucracy. The variation in public health training both within and across schools, was impressively wide ([Brandt and Gardner 2000](#_ENREF_13)).

The diversity in training emerges as a result of different understandings of what was central to the public health enterprise. Therefore, definitions of public health have a large influence on how public health training is shaped, and the shape public health training takes has similarly large influence on how public health is defined..

### Summary

The relationship between public health and medicine has been seen as one of distance; public health stands in contrast to medicine by being what it is not. In discussing how public health was not preventive medicine, the distinction mainly relied on how public health was not medicine. By examining the turn toward professionalism, and the rise of schools of public health directly following the reformulation of medical schools and in places located near to those same schools, the difference between public health and medicine is less distinct. As public health strives to follow the medical model of professionalism in a field of health, the distinction becomes more critical. At the same time, in constructing schools and training in public health, the broadness and the boundary issues of public health become important as they result in a diversity of perspectives and a diversity of training. The next two sections focus on items within this training in order to assess these issues.

## Public Health and Epidemiology

### Introduction

Epidemiology is described as the study of “the distribution and determinants of disease in human populations” ([Savitz, et al. 1999](#_ENREF_88)). Epidemiology, then, is understood as a scientific discipline on which public health draws ([Penna 1997](#_ENREF_71); [Savitz, et al. 1999](#_ENREF_88)). This is seen not only in the inclusion of departments of epidemiology in schools of public health, but also numerous articles that draw on linkages between public health and epidemiology (([Lomas 1998](#_ENREF_56); [Pearce 1996](#_ENREF_70); [Penna 1997](#_ENREF_71)). However, epidemiology and its place within the public health establishment exemplifies not only the ways in which the boundary problem of public health is important, but also how challenges to the definition of public health—as social, broad, preventive, and political—are underexamined within public health.

### Epidemiology as Public Health

The relationship between public health and epidemiology is both uncontested and unclear. It is uncontested in the sense that there is widespread agreement that public health and epidemiology are related ([Penna 1997](#_ENREF_71)), however the exact nature of that relationship remains unclear. Epidemiology has been described as the “basic science of public health” ([Lomas 1998](#_ENREF_56); [Sandler 2003](#_ENREF_87)), although there is disagreement on whether that is the case (Savitz 1997). It has been often written “public health and epidemiology” ([Lomas 1998](#_ENREF_56); [Pearce 1996](#_ENREF_70); [Rather 1988](#_ENREF_75)) or “epidemiology and public health” ([Lomas 1998](#_ENREF_56)), which shows us that they are linked and separate. The relationship, through which epidemiology supports and give evidence to interventions becomes problematic for many in the location of responsibility. The question of whether public health or epidemiology is responsible, or if that is a false distinction, has great bearing on not only the critiques leveled, but also the responses to these critiques.

### Critiques

The multicausal or multifactorial ([Tesh 1990](#_ENREF_97)) shift in epidemiology has been considered problematic because it does not acknowledge the politics or ideology involved in it or that stems from it. Starting in 1960, epidemiology shifted from a model of disease that focused on a triadic relationship between agent, host, and environment, to a multi-causal model understood using the metaphor of a web ([Krieger 1994](#_ENREF_50)). Using this understanding of risk and protective factors that circle around a central problem, epidemiologists have employed complicated statistical analyses and modeling to show these factors. The problems with this relate to the politics or ideology involved in it, when questioning how the web is made and understood, and the issues that stem from it, when questioning the usefulness of the web concept.

Nancy Krieger, in potentially the most famous critique of the web model, considers the underlying theory of the model which she sees as biomedical individualism. Models have underlying theories that guide their formation ([Krieger 1994](#_ENREF_50)). At the same, time metaphors, which carry meaning across domains, invite a connection between those domains. Therefore, to use a web is to invoke potentially unforeseen connections, something Krieger examines. In calling for attention to the nature of the web that does little to challenge unexamined understandings of epidemiology, she points out that by using a web all factors appear at the same level ([Krieger 1994](#_ENREF_50); [Tesh 1990](#_ENREF_97)). This evenness of levels has led to some discussion in epidemiology about what sorts of cases to focus on, but not much critical reflection on the underlying theory.

In addition, in providing insight for policy or program implementation, what the model suggests is not feasible; intervening in every aspect is beyond the capacity of most programs or budgets. The model allows is for the idea that all causes are alike, or equal, such that attention can be directed to certain causes to the exclusion of others. The causes where attention are directed are those that are more epidemiologically understandable, that are not subject to numerous confounders like social determinant, and which do not, like some social determinants, require large scale social change (Tesh 1990). Therefore, in advocating the multi-causal web as the alternative to the triad model of before, little is actually changed about the programs and implementations that stem from it.

Responses have drawn on the idea that epidemiology is not public health. Calling public health a mission and epidemiology a scientific discipline, Savitz and colleagues (1997) deny epidemiology as the basic science of public health. Drawing on one critical factor of public health –that it is political or policy-oriented, the authors proceed to show that epidemiology, as an information-gathering sciences, cannot be public health because it is not about actions or implementations. Epidemiology only gathers basic data ([Rosen 1975](#_ENREF_81)). Others, such asComstock, contend that epidemiology has to be the basic science of public health, but has drifted far away from that (Sandler 2002) to the perceived detriment of both. In designing the school of public health in Pittsburgh, Parran saw epidemiology as the center and other fields as circling it. This allowed him to conceptualize epidemiology as the basic field in which all in public health should be trained. Its connection to public health then, is not new ([Blockstein 1977](#_ENREF_11)). Yet it is this connection to public health that provides epidemiology and public health with the ability to deflect problems on to the other. Epidemiology can attempt to claim a de-politicized nature such that problems are public health problems, but that fails to recognize the long history of epidemiology within public health. Responses in public health have been more varied, but usually appeal to the addition of a social approach (see *Healthy People* below). However, as epidemiology can claim to be un-political and to not fulfill the mission, by at least part of the definition of public health, it can be excluded. And with the blurriness of the boundaries, and professionalization of epidemiology separate to that of public health, there is support for this distance.

### Summary

Epidemiology becomes directly entrenched in the definition of public health for it is that definition that allows or disallows the location of public health problems in the basic foundations of epidemiology. The critique must be of both epidemiology and of public health epidemiology (what public health does with epidemiology) because the multiplicity of definitions allows epidemiology to selectively exclude itself from public health. Further, the use of epidemiology as the basic science of public health, something still in practice, distances public health from the broad social political and preventative ideas it uses to help define itself. The economics involved in choosing where to intervene (Dubos 1965), or in deciding something is a problem, both relate to much more than basic objective data. Without that understanding, public health will continue to face scrutiny and dismay in its stance and interventions.

## Public Health and Social Science

### Introduction

The relationship between public health and social science becomes relevant for at least three reasons. The first is that in calling schools of public health graduate and professional schools, there is a supposed linkage between the training between public health and other areas of graduate study ([Blockstein 1977](#_ENREF_11)). The social sciences, then, seem the most obvious of places for this linkage to exist. The second is that in defining itself as social, the discussions of the social sciences appear to be the closest ways of analyzing whether public health is in fact social. The social sciences also provide many of the critiques of this definition of public health. The third reason draws on the fact that it is to the social sciences that public health looked when it was establishing itself as a broad, social, preventative enterprise.

To look at social science in relation to public health requires two caveats. The first is that the designation ‘social science’ for the purposes of this paper will include psychology, sociology and anthropology. This is a broad grouping, but one public health itself encourages as it devotes one of its core areas to social and behavioral sciences. Psychology, usually part of what is called behavioral sciences, is included in this manner in large part because it has taken the role of a social science in public health. The second caveat is that to discuss social science and public health is to talk of this relationship in at least two ways—social science *in*  public health and social science *of* public health.

The distinction between *in* and *of* is borrowed from Straus’ (1957; 1999) famous designation between sociology in medicine and the sociology of medicine. Straus’s distinction is between use of sociology within medicine and the use of sociology to analyze, examine, and critique medicine. In borrowing from Strauss, it is important to note that this way of thinking about the relationship between social science and public health has important implications for the way public health is understood and defined.

By taking the difference between *in* and *of*, we examine both the structure and form of public health (through the *in*) and the way in which public health is practiced and understood (through the *of*). Epidemiology does not offer much in the way of critique of public health as it focuses on the collection of data and has an unclear relationship to public health structure (see above). A turn to the social sciences further explains the landscape of public health and offers a critical look at the composition of that landscape.

### Public Health and Psychology

Beginning with psychology, and moving through to sociology and anthropology mimics the way in which they were noticed by the public health enterprise. Psychology, which is considered to focus on behavior, is often separated from the social sciences because of this focus. It is surprising then that what is often pointed to as ‘social’ in public health is psychological in origin ([Arrivillaga-Quintero 2009](#_ENREF_4)).

In the early 1950s and 1960s public health in the United States underwent a change that made the lack of social (and behavioral) perspectives available in public health apparent. In sending out a call for those perspectives, most of what public health received was psychological ([Green 2006](#_ENREF_39)). Given psychology’s popularity at the time, it is not as surprising that in that answer psychology found itself woven into the fabric that would from part of the basis of public health. However, the psychology that came was not the entire field. Psychology is and was composed of many schools of thought, and the major idea of thought that came to public health follows the school of behaviorism. Behaviorism, which links to such theorists as Bandura, and ideas of beliefs and conditioning, provide a good deal of the discourse of present day public health. The preoccupation with life style as a concept traces its history back to psychology, even as it has undergone changes since being adopted by public health ([Coreil, et al. 1985](#_ENREF_20)).

While psychology brought about an increase in critical thinking on behavior and many theories can be traced directly to psychological thoughts (e.g. Health Belief Model and Social Cognitive Theory), psychology is and was individualistic. It is not a field of group or systemic research even as there are parts of the psychological field that are devoted to that. The use of psychology by public health has then been considered as a return to individualism and reductionism, that which the call for social perspectives was supposed to ameliorate (Green 2006; Arrivilaga-Quintera 2009).

The Health Belief Model (HBM) was created in the 1950s by social psychologists, and while it has fallen into some disuse today, its ideas about attitudes, beliefs, and behaviors have not. The additional Social Cognitive Theory (SCT), stemming directly from Bandura also has its ties directly in psychology. These have had various critiques for their understandings of individual behavior, and widespread use as they are individual and interpersonal models of behavior. A brief focus on a higher level model should provide a way of engaging with those critiques and refining newer ones. Focusing on Diffusion of Innovations (Haider 2004) as a model in public health as a way of understanding how new ideas spread, it still focuses on behavior adoption (something that relates back to ideas of conditioning in psychology). It continues to reflect a preoccupation with the attitudes and beliefs of people and connecting those attitudes and beliefs to behavior (Becker 1970). Lomas (1998) provides a way of seeing ideas of social capital as a way in which social structure and settings become integral to individual behavior. It is this legacy of concern with behavior and the individual that psychology has brought to public health.

Seeing psychology as providing a critique of public health is difficult as this critique would not be explicit. However, the burgeoning field of health psychology begins to make strides in that direction as it questions itself and its relationship to public health. In writing of the connections between the two in order to understand Colombian public health better, Arrivilaga-Quintera (2009) explains that

In order to integrate the scientific goals of psychology and the goals of Public health, their models and basis of knowledge need more debate and discussion than they actually receive. It is evident that the integration would help both fields develop a legitimate body of theories and methodologies that would allow influence on decisions about the health of the public, and, in general, about health systems. (Arrivillaga-Quintero, 2008 my translation)

The recommendation of more debate and discussion shows that connections between public health and psychology cannot be finished, as psychology is a changing field with various explanations of human thought and behavior. As such, and in recognizing its own individualistic nature “psychology has the ethical responsibility to turn to its strengths in order to address the public and collective, [and] public health should also redefine the manner in which it integrates levels of individual analysis, beyond considering biomedical or behavioral concepts” (Arrivilaga-Quintero 2009 my translation). By acknowledging what psychology in its individualism must do in order to be more useful to public health, this substantiates the idea that public health is supposed to be public and collective. By discussing public health’s focus on individual analysis, biomedical, and behavioral (psychological behavioral) concepts, she is showing how what public health is not completely that. It continues to rely on biomedical or behavioral concepts that are individual and not in keeping with its social and collective proclamations. And the presence of the field of behavioral medicine ([Matarazzo 1980](#_ENREF_60); [Rimer 1997](#_ENREF_77)) in addition to health psychology makes it such that public health must be clear about where it stands.

### Public Health and Sociology

Sociology began as a prescriptive field, concerned with outlining the ways in which normal and pathological function both came to be and interacted with one another. Society, the main focus of the field, was likened to an organism, and therefore could have an ideal or a more harmonious state. Sociology, then, would not only describe this “organism”, and the harmonious or normality it strove for, but also have very strong ties to policy because it led to views on what should be (Porter in Porter 1997). Given that the rise of the social sciences in the academy coincided with the brief surge in social medicine perspectives in the United States, the idea emerged that if a social perspective of something meant that it would be reformatory—that whatever it was attached to would be analyzed and restored in some way. This connection was then seen as always necessitating a political aspect. It is for this reason that the connection between sociology and medicine, then, was confused with the idea of social or socialized medicine (Porter in Porter 1997), and perhaps why the connection between medicine and sociology seems much clearer ([Levine 1987](#_ENREF_55)) than that between sociology and public health.

Straus ([Straus 1957](#_ENREF_90)), in delineating between the sociology of medicine and sociology in medicine, provides a way of understanding sociology and its relationship to public health. Sociology has had much more influence within public health than it has had to public health, that is the sociology in public health can be seen more easily than the sociology of it. Sociologists have engaged in a sort of “social epidemiology” that widens the view of epidemiology, but does not challenge it ([Petersen and Lupton 1997](#_ENREF_72)). This idea of a widened etiology of disease for which sociology is known can be seen through the ecologic model sociology is considered to have provided (Sallis 2008; Stokols 1996). This however does not break with idea of theories as models, but provides an additional model to the public health repertoire. Using sociology to help to find ways to measure social aspects of multicausal webs and control for confounding (Green 2006) brings sociology into public health, but only partway.

Sociology of public health, then, must have particular concerns that led to its development. We can see medical sociology as developing in two ways. The first way of development is by way of concerns about or investigations in sociology of deviance, which grew out of the analogy of society to organisms and the identification of normal and pathological (Turner in Porter 1997). The second way is as an effort for sociology to gain in stature—to get funding (Green2006), and as a natural progression of sociology commenting on all aspects of society of which medicine happened to be a large part of the time (Porter in Porter 1997). The second might be the social conditions that produced it, the first as the reason it looked the way it did. In Rogers (1968) call for social perspectives he was speaking to sociology, and as the sociology of deviance gained popularity in the 1960s, it is not surprising that when sociology eventually answered, parts of that came along. Sociology as added into, but not a foundational part of public health, allows it to be seen in pieces within public health. The idea of social and behavioral sciences as a part of training in schools in public health indicate this sort of idea. Social and behavioral understandings are not written into every field of study in public health, as the social and behavioral studies have applied themselves to understanding them. They are seen as an additional aspect to be mastered.

Sociology could have contributed a discussion of professionalism to medical discourse and, as such, could contribute to the discussion of profession public health now finds itself involved in ([Fox, et al. 1989](#_ENREF_30); [Gebbie, et al. 2002](#_ENREF_34); [Hafferty and Castellani 2011](#_ENREF_41)). It could provide a critical reflection on the ideas of community that proliferate the public health literature ([Clark 1973](#_ENREF_17); [Talen 2000](#_ENREF_93)). However, it is mainly relegated to social determinants of disease etiology.

### Public Health and Anthropology

Anthropology was late to be incorporated into the public health enterprise ([Price 1992](#_ENREF_74)), which might explain how its role is limited to the surface. While the role of psychology is so ingrained in public health as to be almost invisible to the general public and sociology is the first to come to mind when thinking of bringing or looking for social sciences in public health ([Rogers 1968](#_ENREF_78)), anthropology is seen as relatively minor to the story of U.S. public health development.

One of the pieces of anthropology that has made it into public health is the idea of ‘culture’, although it exists in a form that has critical differences from its role in anthropology ([Taylor 2003](#_ENREF_94)). Culture, in public health, becomes somehow equivalent to belief and understood as a barrier to be overcome or taught against. In Byron Good’s discussion of the Health Belief Model, he contends that one of the major problems with that model is its lack of understanding of culture. As health beliefs are evaluated “for their proximity to empirically correct knowledge concerning the serious of particular disorders or the efficacy of particular behaviors or therapies. The wealth of meanings associated with illness in local cultures is thus reduced to a set of propositions held by individual actors, which are in turn evaluated in relation to biomedical knowledge” ([Good 1994](#_ENREF_35)). Calling this a narrow understanding of culture allows us to see that taking the word culture into public health does not mean that the theoretical underpinnings of such a concept have also been adopted by public health.

The idea of culture has led to the ideas of ‘cultural competence’. Cultural competence has gained primacy as a concept in the health fields since the 1990s, not only public health. Culture here is made static and essential, and competence in it as something that can be understood as “a set of stereotypes about what ‘they’ think, or a bunch of rules about how to deal with ‘them’, like so many specialized tools to be stashed in a briefcase and trotted out each time one of ‘them’ shows up” (Taylor 2003, 179). In an effort to move beyond this essentialist formation of culture research has turned attention to structural determinants of health, research on race and racism, and *“cultural confidence”* as a way of emphasizing reflexivity and deemphasizing a few of culture as a discrete item on can obtain competence in. However, this research is recent ([Thomas, et al. 2011](#_ENREF_98)).

Anthropology in U.S. public health can also be seen to have a relatively minor role because anthropology itself does not focus on prevention or prediction of behavior (Ames and Janes 1987). In an effort to work in public health anthropology has not brought what exists at its core, the methodology and theoretical underpinnings that define it as a discipline. Anthropologists in public health have worked more with survey questionnaires, and studies of specific health problems ([Bibeau 1997](#_ENREF_10)), than bringing in their own more qualitative methodologies and broader understandings of people. Anthropological qualitative research has been made faster through techniques of rapid assessment for the public health enterprise.

A study on NIH funding practices and the biologic individualism that underlies the conception of knowledge that goes into them, can only go so far as anthropologists also intend to receive funding for it ([Price 1992](#_ENREF_74)). Current urges for anthropologists to examine policymaking (Rock 2003), recent focus on problems of understanding race in the census ([Nobles 2000](#_ENREF_66)), help to move anthropology away from its incorporation and toward a critique. However, it is still limited by a privileging of other ways of knowing over anthropologically preferred ones. In discussing the numerous problems with data on Native American Health it is mention that the IHS has limited data. In addition to problems with the determination of death on death certificates, there is a dearth of epidemiologically supported data on the Native American population in the United States ([Young 1997](#_ENREF_109)). As such, Young (1997) has written, and is not alone in surmising, that public health either uses this data or has no data upon which to base its programs. Anthropologists, who have written on Native American populations since the beginning of anthropology as a field are not mentioned. Therefore, anthropology has had difficulty even being incorporated into public health as another form of knowledge.

Anthropology, however, has had to prove its utility to public health. Biological anthropology has attempted to show its connections to basic public health ([Ice 2005](#_ENREF_44); [Omenn 2011](#_ENREF_67)) and cultural anthropology has had difficulties. The anthropological critique of medicine has achieved greater clarity and strength than that of public health. The field of medical anthropology, and critical medical anthropology as a subfield of that, provide insight into how public health might be examined. Even as there is debate over the medicalization of anthropology much as there was of sociology ([Morgan 1990](#_ENREF_63)), there are specific ways of understanding medicine anthology has put forth. Analyzing aspects of disease and healing anthropologists have studied those who do not believe in the medical (Western biomedical) understanding of disease. For that reason they are in a position to gain knowledge about local people their personal understandings of illness and healing ([Bibeau 1997](#_ENREF_10)). They have problematized concepts of disease and illness ([Kleinman 1995](#_ENREF_46)), knowledge and belief (Good 194) and analyzed the power that is used in medical co-optation of other professional fields ([Baer 2004](#_ENREF_6)). This all serves to show what anthropologists could say about public health, but does not.

### Summary

In distinguishing schools of public health from schools of medicine it is mentioned that they (schools of public health) do use the social sciences in such fields as administration, and the organization of interventions, while medical schools do not (Handbook Sociology). However, this also brings to the forefront the limits of social science use in public health. As Peterson (1997) writes “the perspectives offered by the humanities and social sciences, poststructuralist or otherwise, have been frequently marginalized, at best treated as ‘add-ons’ to an already crowded curriculum”. Psychology, by being brought in toward the beginning has had the greatest integration into public health, even as it faces limitations.

## Summary

The intersections between public health and other fields provides a way of examining the formation, current status, and critiques of public health. The sociology of health and illness was created in response to perceived problems in theoretical development of medical sociology (Turner in Porter). This was a within-discipline critique, not a response to a recognition of public health for it has not been as well-connected to the social sciences as medicine has. What has been taken into public health, similarly to that of medicine, is what has been explicitly deemed health related. There is a great deal of research in the social sciences on group behavior, immigration and acculturation that has not found its way into public health ([Abraido-Lanza, et al. 2006](#_ENREF_2)). This is similar to the understanding of sociology’s position of studying not only the behavior surrounding disease, but also elements of its etiology ([Freidson 1986](#_ENREF_32)). And this marked the result of a call to bring in the methods of sociology, to which psychology was the first to answer, because of the growing understanding of the presence of chronic disease (Green 2006; Rogers 1968). Sociology, however, has a better history than anthropology of being accepted into public health (Lambert and Mckevitt 2002), even as it also struggles for a lack of accepting its theoretical bases along with the parts that appear health-specific.

Public health then, as seen by questions over epidemiology as the basic science and by the construction of schools like the one developed in Pittsburgh ([Blockstein 1977](#_ENREF_11)), puts epidemiology somewhere at its core. At Johns Hopkins in particular, epidemiology can be split into two different MSPH degrees—one for chronic and one for infectious disease epidemiology, but the social and behavioral sciences are all contained within one. This arraignment, in addition to the “adding-on” of social perspectives shows how public health can be problematized as being less social and broad than it claims. Reliance on medical schools for school locations, on epidemiology for causation and data (sometimes to the exclusion of other forms of data), and seeing social science as another topic to be incorporated rather than an underlying understanding to help structure each topic makes the distinction between public health and medicine blurry and presents ample opportunities to question just what is social and broad about public health.

# CURRENT ISSUES IN PUBLIC HEALTH

## Introduction:

Current issues in U.S. public health reflect not only the development of public health into its present form, but also the difficulties in definition that have persisted since its beginning. Directing attention to current U.S. public health policy and the Healthy People documents as a case in point elucidates the connections between the two types of defining and highlights the relevancy of the critiques that have been leveled against public health. Healthy People agenda-setting and policy clearly showcase the mission aspect of public health as goals and objectives are a necessary first step in success or failure. They also illustrate how the second type of definition of public health has deep implications for the results of its mission.

## Healthy People

### Introduction: Policy

For some ([Rothstein 2002](#_ENREF_85)), government actions form and should form the core definition of public health. Here, understanding laws as a critical component of public health policy, but still only a component and only of its policy, brings into light other ways in which public health sets is agenda and sets about change. The problem of “boundlessness” ([Rothstein 2002](#_ENREF_85)), or the boundary problem in public heath makes it difficult to assess the agenda of public health. However, the production since the late 1970s of an obvious public agenda through the formation and dissemination of the *Healthy People*  reports, elucidates what U.S. public health is supposed to do and what it is, at least, purported to be.

There is little disagreement with the assertion that laws are a critical component to effective public health practice ([Gostin 2002a](#_ENREF_37); [Ruckelshaus 1985](#_ENREF_86)). However, there is great disagreement on the form those laws should take. The relationship between public health and policy in the United States is often contentious as public health comes into contact with ideas of individual freedom. Given the option of laws and policies which mandate for all or health campaigns for the voluntary few, there is a struggle in public health over which method is best.

Public health also presents an issue for law as the discussion over the definition of public health has great relevance in what law can and cannot mandate. In a special issue of the journal of Law, Medicine, and Ethics in 2002, articles were gathered that discussed the changing face of public health law. However, there first needed to be a discussion of what public health law and public health itself were and should be. For most ([Clayton 2002](#_ENREF_18); [Gostin 2002b](#_ENREF_38); [Parmet 2002](#_ENREF_69); [Rothstein 2002](#_ENREF_85)), public health was to be considered the actions government could and should take, and other definitions of public health were to be ousted. Articles such as these show the tension in how public health is to be.

Existing public health laws are problematic. The inconsistency of measures, both within and between states, is often cited as one of the reasons for lack of effectiveness in eliminating health threats ([Gostin 2002a](#_ENREF_37)). In addition, difficulties with understanding and applying decades old law to current issues and in deciding what exactly is considered a public health issue makes working in the field of public health law challenging. When one takes into account the number of people involved in making public health measures, the inconsistency between them is not surprising ([Gostin 2002b](#_ENREF_38)).

The *Healthy People* documents show how public health agendas are set and how public health sees its mission (Zoller 2002). While Healthy People 2010 mentioned laws as a critical part of health infrastructure generally and public health infrastructure in particular (DHHS 1979; Neubauer and Pratt 1981), the documents, now four in number, provide an example of the non-legal aspects of public health. Public health may have once referred to actions taken by the government, which would normally be in the form of laws. With the popularity of this new way of agenda-setting, laws are seen as a part of the larger public health enterprise.

### 1979

In 1979 a report titled *Healthy People: The Surgeon General’s Report on Health* promoted the idea that setting specific and measureable health goals and priorities would help improve health in the United States. Based stylistically on previous reports of the Surgeon general, this was the largest report so far. It started a trend that is attested to by the significantly updated versions that followed in 1990, 2000, and 2010, setting goals for the years 2000, 2010, and 2020 respectively. This trend is one of setting forth measurable, objective health goals for the public health enterprise to meet ([Koh 2010](#_ENREF_47)).

The original 1979 *Healthy People* report drew on two major issues of note. The first was the idea that chronic disease, injury, environmental and behavioral issues were now important to decrease ill health, and that “further improvements in the health of the American people can and will be achieved—not alone through increased medical care and greater health expenditures—but through a renewed national commitment to efforts designed to prevent disease and promote health” (Chapter 1p1). Convinced that the time of infectious disease as waning, and recognizing large health expenditures usually for treatment did not have great health returns, the writers of this report saw it as a crucial time for health promotion and disease prevention ([Michael 1982](#_ENREF_62)). The second issue drawn upon for the creation of the document was a 1974 report by the Canadian government that conceptualized four contributing elements to all death and disease: behavioral factors or unhealthy lifestyles; inadequacies in the existing health care system; environmental hazards; human biological factors. By adopting and adapting this framework to 1976 U.S. data, it was found that the major cause of most death and disease was lifestyle or behavioral factors, environmental and biological factors were about equal, and problems with the health care system accounted for only about ten percent (Ch1p3).

In order to put these two issues and the resulting report in the correct framework, it is important to be reminded of the happenings of the time. The National Institutes of Health (NIH) had built a number of agencies based on the National Cancer Institute (NCI). With the NCI as the prototypical agency, and cancer being a chronic disease upon which a war had been declared, understanding cancer and its chronic disease counterparts was already a growing concern ([Swain 1962](#_ENREF_91)). Additionally, psychology and the behaviorism it brought had recently been incorporated into public health, along with the ecological analysis that sociological perspectives provided. A concern with the environment—thorough psychological concepts of “life styles” ([Coreil, et al. 1985](#_ENREF_20)), sociological ecology, and the passage of a number of environmental acts to influence the physical environment—was gaining popularity in public health and the federal government was noting the issues with the sustained expenditures on health care. Perhaps, however, most important in the formation of this document, was the understanding of smoking that directly preceded it.

The Surgeon General’s reports on smoking (in 1964 and 1979) (DHHS 1979) marked a difference in the concept of disease. Brandt (1997), in writing of this phenomenon, explains how the idea of disease as caused by microbes allows items like alcoholism to no longer be a moral disease. Even as there is no microbe to cause alcoholism, the idea of locating disease causality in microscopic entities allows concerns about morality to be diminished. With the idea of life-styles and risk that came with the idea of smoking, individuals had choice ([Brandt 1997](#_ENREF_12)). As such, if one had a responsibility, then one became responsible—that is choices led to ill health, then one could be blamed for one’s choices and one’s diseases. Not only did this moralize disease once more, but it allowed for the individualization of it ([Brandt 1997](#_ENREF_12); [Brandt 2001](#_ENREF_14)). Understanding smoking as leading to cancer, and smoking as a choice invited an understanding of many chronic diseases in this manner. If choices led to disease then people need to make better choices. This leads to an understanding that public health should help people (by here we can infer individuals) make better choices. The warning labels on cigarettes, as a way of explaining the risk to people, allows cigarette smoking to be understood as a ‘voluntary risk’, one people choose, and makes the individual who picks up the pack responsible for the disease that may follow.

Stemming from all of the above, and based in part on the popularity of the health belief model and research on attitudes ([Green 2006](#_ENREF_39)), the connection between beliefs and behaviors is established, at least in the public health mind. The ideas of health promotion and disease prevention through education directly follow this understanding, and it is during this time that the first Healthy People is established.

The original 1979 Healthy People has been subject to a number of critiques from its purpose to execution. As the main idea of the report was that “the health of [United States] citizens can be significantly improved through actions individuals can take themselves, and through actions decision makers in the public and private sector can take to promote a safer and healthier environment for all Americans at home, at work and at play” (1-12), a major criticism is its emphasis on individual responsibility. It “argues that the foremost causes of illness are lodged in individual behavior” ([Neubauer and Pratt 1981](#_ENREF_65)) and that when recommendations are made for what is to be done, *Healthy People* “places most of the burden for action on reforming individual rather than social or economic behavior” ([Neubauer and Pratt 1981](#_ENREF_65)). Even as it examines the social determinants of disease, it recommends change on the individual level (1-12). It sees federal, state and local responsibility to encourage “more careful behavior, and provide safer environments”, environments which seem to refer exclusively to the physical as air, water, food, and occupation are mentioned in specificity. As such, the *Healthy People* report promotes a shift in concern to the actions of individuals, something that will continue to be present in successive reports.

The 1979 *Healthy People* report also shows a trend of locating public health problems in the statistically quantifiable. Using morbidity and mortality rates, locating support in charts and graphs, and relying on the field of epidemiology for ideas of causality masks the subjectivity of this sort of choice. Sanitation efforts gained popularity for cholera even as tuberculosis took more lives ([Kohler 1993](#_ENREF_48)). In the new public health the data, by which was meant ‘objective’ quantifiable data, would show where public health problems were to be found. This not only privileges a certain understanding of data, but in some ways diminishes the public health focus on items not quantifiable. Public health had always responded to crises ([Fee and Brown 2002](#_ENREF_28)). Now crises would need statistical and epidemiological support.

### 2000 and Beyond

Following this 1979 document, Healthy People 2000, 2010 and 2020 came to be. We will take a critique of 2010 and my own of 2020 to see where public health has gotten since the 1979 document. We can look at the 2020 version to see if the problems have been dealt with, what changes have been implemented, and what new problems may have arisen.

 Healthy People (HP) 2000 and 2010, created in the years 1990 and 2000 respectively, build upon the ideas established in the first *Healthy People* report. The original report however had failed to note that even with whatever lifestyle behaviors that may cause ill health, a great number of people in the United States were living seventy years and beyond (Harper 1980). This was partially addressed with the new focus on health disparities that appeared strongly in *HP2010.* What was not addressed however were two underlying issues: The first issue was the unsubstantiated notion that the consensus method of generating objectives and targets was sensible (Allison et al 1999; Harper 1980). The second, deeper issue is the idea that individual action can reduce the need for treatment for disease such that with prolonged longevity or prevention/treatment of certain diseases will not lead to others (Harper 1980). Putting aside those two, our attention turns to the 2000 and 2010 versions to understand their new focus on certain populations.

HP 2000 with its 298 objectives an HP 2010 with 467 objectives both seek to bring the focus more fully to certain groups, and for HP 2010 with the idea of health disparities and benchmarks that relied on data. HP 2000 was perceived as problematic in its lack of attention to political issues (Tesh 1990). HP 2010 fared no better as the supposed neutrality of its epidemiological discourse was brought into question.

HP 2010 recognizes issues with previous versions and, by focusing on disparities and ideas of community, attempts to move beyond the lifestyle focus it had established in 1979 (DHHS 2010). However, Zoller (2005) contends that even as the ideas of non-individual actions are mentioned, in the sections dedicated what will be suggested, individual is once again central. Objectives for reducing cancer, for instance, focus on smoking cessation, improving diet, and compliance while items like poverty levels are missing.

It seems then, what HP 2010 does is provide even more objectives, not subordinating or removing the individual ones, but providing additional objectives. In the end what is privileged is again those that rely on individual behavior. Beyond this, in speaking of disparities there is a lack of questioning of why such disparities exist. It might mention that certain groups have higher rates, but does not suggest why the rates are higher (DHHS 2010). Zoller, in her feminist critique, makes mention of the use of selective data, data that privileges certain understandings of disease. Heart disease, she contends, manifests and has somewhat different causality in men and women. The health of women in HP2010 seems restricted to maternal and child health—as if women’s health is only a concern when they are producing children—and suggestions for objectives to help decrease the rate of heart disease consist of items that have not been shown to make a difference in rates in women ([Zoller 2005](#_ENREF_110)). In turning to HP 2020, we will see if that is the case.

Healthy People 2020, an interactive website, tells us that

[h]istorically, many health fields have focused on individual-level health determinants and interventions. *Healthy People 2020* should therefore expand its focus to emphasize health-enhancing social and physical environments. Integrating prevention into the continuum of education—from the earliest ages on—is an integral part of this ecological and determinants approach.

This provides an acknowledgement of the critiques of the past documents, or at least the actions that resulted from the past documents, and seeks to show that the social and ecological will be taken into account. However, it also states that “by working to establish policies that positively influence social and economic conditions and those that support changes in individual behavior, we can improve health for large numbers of people” (DHHS 2020). This shows that the focus has not been shifted, but broadened to include the social and ecologic in addition to the individual level. Public health, through *Healthy People* is to examine social determinants because understanding those social determinants helps them to change individual behavior.

A focus on social determinants is a step away from a focus on the physical environment as seen in the 1979 document and toward an focus on the social that has been called for at least since 1994 (Krieger 1994). It also, by making itself a website instead of a document, attempts to be more accessible. With over 600 objectives and the statement that as the decade progresses more objectives might be determined, that seems a valid concern. The question then becomes how far do these many objectives go toward understanding and addressing this new social focus.

A relatively brief examination of a few of these topics and objectives shows that ‘social’ is limited in this new formulation of Healthy People. For example, in talking of maternal and child health, physical determinants mentioned include lack of access to appropriate care and that environmental factors can influence a woman’s pregnancy, affecting her health or her ability to engage in healthy behaviors. Not only does this show the idea of individual behaviors is still present—by talking of the healthy behaviors of pregnant women, but it does not hold much difference to the discussion of social determinants that precedes it. Social determinants, *Healthy* *People* 2020 contends, include pregnancy health behaviors and status, which are influenced by a variety of factors such as access to health care. There seems to be little if any distinction between what is social and what is physical, as if ‘social’ means those aspects of the physical environment that are influenced by something outside of the individual.

In addition, there is little if any recognition that defining the problems in these ways is a subjective endeavor. For example, unintended teen pregnancies become a problem under the topic of Family Planning. Those with unintended teen pregnancies are less likely to attain a high school diploma or GED by the time they are thirty, and other such issues are mentioned. However, what is not explained is why this is an issue of family planning and not education—that is, why this not cause for public health to assess processes by which the possession of such a degree might be linked to better health, and to assess, or coordinate with those who assess, about the process of attaining those degrees. Why is the problem one of teen pregnancy and therefore family planning, not of education reform? Locating the problem in that group, in a behavior that group has, is a subjective choice that individualizes. The problem is not located in the system, but in the behavior of individuals so even the ‘social’ added on to it is only an addition to an already individualized problem. The social is added on by way of better access to family planning clinics, limited transportation, and lack of awareness, but this still requires the fostering of conditions in which individuals can make other behavioral choices.

As a final example, in the case of cancer, it is written that socioeconomic status, through income, education level, occupation among others, helps to understand cancer rates. And that it also appears to play a role in behavioral factors like smoking, and rates of screenings. The objectives, however only focus on reducing the rates, increasing the screenings, increase the proportion of people who participate in behaviors that help decrease their exposure to cancer causing agents. There is no mention of SES in the objectives. It may be partially that changes in SES are not measurable and quantifiable and therefore not part of the document, or that it should be inferred that working to change SES would lead to a decrease in rates or increase in screenings. However, it serves to show that changes in SES are not what public healthy cares about as they would matter only if they met the objective of increasing the screening. Therefore, HP 2020 while seeking to be more social than the other documents, still falls short.

Finally, and perhaps most static of all HP has tried to do, HP2020 increases the objectives into over 600 in number. This increase in objectives in some ways mimics the multicausal web, and its problems. By increasing the number of objectives, public health is assured some level of success. And yet certain items, like health disparities in general, or cigarette smoking in particular (Koh 2010) have yet to be eliminated as the agenda has striven for. The multiplicity of objectives, and quantifiable and measurable ones at that, allows the focus to be shifted to those that appear most amenable to achievement, at the same time as it allows an equalizing among all objectives as if they require the same degree of effort and have the same degree of positive benefits. There is no most important objective, no discussion of the objective whose success would have wide-reaching benefits across areas, and no discussion of what putting these objectives in discrete categories serves to do to them. Instead of a retrospective assessment of the objectives from the past three HP documents, examinations of why they were not met, and the solidification and consolidation of less objectives that would address what had not been successful, HP 2020’s interactive website provides the public health enterprise with over 600 things to focus on until 2020.

### Summary: What people, what issues?

As was mentioned previously, deciding what issues to research or address is political ([Sandler 2003](#_ENREF_87)). What people and what issues is always going to be political. Where to intervene when looking at a web, and even as we see from Krieger (1994) and Tesh (1990), the construction of the web itself involves a political aspect. Setting an agenda privileges certain types of data, and privileging certain types of data sets up the formation of a certain agenda. By looking to fields like medicine and epidemiology, and drawing theoretical underpinnings from fields like psychology, the individual is entrenched. Therefore, the solutions and the very problems are located in the individual—the non-social, and non-broad individual.

An issue that resurges with great frequency, whether explicitly or as an implicit part of some stated problem, is one of an individual or a broad societal population focus for public health. This seems strange if public health is defined by its central concern with the larger population. From its distancing from medicine, and from certain understandings of the meaning of the term *public* in public health, it becomes clear that public health is what it is because it is about more than the individual. Yet, numerous critiques of the individual focus of public health abound. We see it in the agenda setting in Healthy People, and the critiques of epidemiology as the basic science of public health. We recognize it in the assertions that public health’s uses of ‘culture’ is somehow synonymous with belief ([Good 1994](#_ENREF_35); [Taylor 2003](#_ENREF_94)), which locates culture in individuals. When it does seek to be broad, it is also problematic. Questions of what ‘population’ or ‘environment’ means, and criticism for being individualized in that---that environment relates to lifestyles, or the individuals physical environment, and that populations are aggregations of individuals also surface. A brief look at the resurgence of the Mckeown thesis helps to show the struggle over individual and broad has not yet been successfully dealt with by public health..

Beginning in 1955 and refined through the 1970s, Thomas Mckeown’s thesis attempted to explain the declining mortality rate seen in the nineteenth and twentieth centuries. Mckeown’s explanation was that the decline was not the result of advancements in science, nor the result of medical intervention or public health initiatives per se, but rather was attributable to widespread economic and social improvements in overall living conditions ([Colgrove 2002](#_ENREF_19); [McKeown 1980](#_ENREF_61)). Considered disproved in the 1980s through advancements in demographic research and critical examinations of Mckeown’s analysis ([Szreter 2002](#_ENREF_92)), the thesis continued to be influential. Colgrove (2002) explains:

McKeown’s influence has continued to be felt because his research posed a fundamental question that has lost none of its relevance in the decades since he began writing in the post-World War II era: Are public health ends better served by narrow interventions focused at the level of the individual or the community or by broad measures to redistribute the social, political, and economic resources that exert such a profound influence on health status at the population level.

The idea that medicine with its individual focus had made little contribution to health improvements, and that broad, population level changes were to be credited with these improvements (DHHS 1979) sets up a situation in which the individual and the larger population are held in opposition. As Colgrove (2002) states above, and as public health policy has shown, the question whether the individual or broad population should be central has had much debate in public health, even as its distinction from medicine hinged on its privileging a broad social approach ([Beauchamp 1974](#_ENREF_9); [Brandt and Gardner 2000](#_ENREF_13); [Mann 1997](#_ENREF_58)). Yet Mckeown adds a second level of individual v broad, with the idea that individual and community are lumped together as individual, and broad for Mckeown might come closer to what is understood as ideas of social justice ([Krieger 1994](#_ENREF_50); [Krieger and Bun 1988](#_ENREF_51)).

That redistribution, however, is not part of public health. *HP2020* discusses the legal support of discrimination against those identified as LGBT, but in suggesting or mentioning possible interventions, it mentions items such as suicide support and special LGBT health clinics. Not only does the idea of making special health clinics separate those who are considered LGBT from the rest of the population, but it also, along with suicide support, are individual actions. There is not mention of ways public health can or does attempt to change legal support of discrimination, or even that something of that nature might be in the purview of public health. Therefore ideas like those professed in *HP 1979* must be true even as Mckeown’s thesis must be disproved or else public health has little foundation on which to stand: public health expenditures are justified over those of medicine because public health is supposed to have greater returns in health for less money, but broad social change of the type public health is not involved in cannot do more than focus at the individual and community level.

## Summary: Understanding the Issues

Excluding the broad field of health promotion/communication with its own efforts at professionalism, as obviously individualized, public health as a field has been said to and can be seen as privileging the idea of the individual. The very idea of education implies a focus on individuals. If one educates, one gives knowledge to people. It implies that people are unknowledgeable or misinformed about something. And the necessary corollary of that is that these people, once aware, will do something. So the focus remains on changing behavior. That focus entails an invalidation of other claims or ways of knowing, and an understanding of belief as connected to behavior in ways studies in fields like epidemiology, psychology, and sociology have not born out.

However, it is individual in another way—individual as opposed to organizational. There are many more articles on physical activity in fighting obesity than forcing industry to limit the number of calories in food. There is more research and more interventions that focus on labels on food, or educating people, than on challenging media images of the body. This understanding of weight loss as something easily modified (Zoller 2005) is then linked to items like heart disease, convincing people that it is something relatively minor that they themselves can fix (DHHS 1979; DHHS 2010), and that, therefore, they themselves are responsible for. In the case of teen pregnancy and family planning, *HP 2020*  does not question the construction of a society that might prohibit teens from obtaining well-paying jobs while they attend school, or the construction of ‘teen’ as a cultural category that imbues them with certain rights and responsibilities. I suggest that seeing it as a problem located in teens and education of teens, providing family planning to teens, and encouraging prenatal support for teens is still individualistic because it does not challenge societal dictates about who can go to school, does not reimagine how we construct ‘teen’, does not question how education is structured and for whom nor and how society allocates funds. Even in the idea of social determinants that is added in the newest version of *Healthy People*, there is missing a close link to its social medicine or social justice history, and broad understandings of culture or society that occupy current social science. So the social and the broad of public health become sites of critique and struggle in the definition of public health because of the lack of social and broad perspectives in public health.

# Final Thoughts

In researching the public health workforce Tilson and Gebbie (2004) write:

Defining, enumerating, measuring, and evaluating the workforce all require a firm definition of the nature, scope, and extent of the work it does. Thus, in the spirit of “form follows function,” it is critical to agree upon the function as a first step. Again, the concept is deceptively simple: Public health workers do public health work, but by whose definition? ( p342)

The above asks a “deceptively simple” question, in many ways tied to the fundamental question of this paper: what is public health? If “public health workers do public health work”, not only is there the problem of whose definition is privileged—whether by setting, or type or credentials of the performer do we deem it public health work—but more deeply, and more critically, what do we consider public health to be? In discussing medical anthropology, Singer writes of how in the 1960s there was no medical anthropology. That the work that might be called it was spread across a number of journals, that it had no specifically defined subject, and that had no coherent professional identity for its practitioners (Singer 1989). If that is the case, there is no public health. It is clear that there are journals and schools devoted to public health. However, these are not the only spaces where public health is and public health is not the sole authority on any subject that it claims. Current strides are being made for a professional identity of public health, but these strides are hampered by questions of who is a professional and, more critically for public health, whether public health is a profession at all (Tilson and Gebbie 2004).

 Making public health a profession, or recognizing it as such, requires a clear delineation of what public health is, what public health does, and why public health matters. The status of public health as a profession, in addition to its recognition by the public as an entity, is a current trend in public health (Baker Jr, et al. 2005). Yet, after three decades of Healthy People documents, nearly 100 years of public health schools, it would be surprising that there is still a call to clarify public health to the public. Logically, this surprise requires the question of why such a clarification matters and why it has not occurred. This paper, through showing the unfolding of public health in the United States and its critics, maintains that the clarification matters because a clear idea of public health is central to achievement and this clear picture has not been transmitted because it has not been developed.

Public health finds itself in its current situation in part because it has been static even as it has changed. The mission has remained but the amount of topics, fields, people, actions, and agencies to which that mission applies has expanded beyond most other fields. Public heath did not become something different, something concrete, relatively small, and visible. Public health did not stay something with a specific purpose focused on sanitation and merchant seaman. It has been steadily adopting more topics, fields, people, actions, and agencies along the way. Public health may have been broad and social to medicine’s individual preoccupation, when social was understood as actions that involved population level changes, and, eventually, government action (Rothstein 2002). It may have taken prevention as its purview while medicine focused on treatment, which allowed distinction between public health workers and those in the field of medicine. It may have been led by its mission of health most clearly when health was seen as the absence of disease. However, with the expansion of its mission to encourage, promote or provide health, however defined, it broadens itself to allow numerous interpretations. That broadness has allowed for the incorporation of items such as bioterrorism (Gostin 2002a) and genetics (Clayton 2002), items who seem to be linked only through that connection of health.

 Understanding public health as both defined by its goal, and as defined by the items included within it, helps to show how the very definition of public health has become so broad as to become problematic. It has been seen as a discipline, or an amalgamation of disciplines, described among others by aspects it claims to have as it is simultaneously problematized for not having those same aspects. It attempts to be a profession in much the same way as the disciplines or core components that comprise it are, but faces the daunting task of dealing with a lack of validated expertise and internal coherence that most, if not all, professions have. To be defined in terms of one’s goal is to make boundless the items that can fall under public health domain (Rothstein 2002), an issue seen in the boundary problem of public health. Public health is, or at least was to be, social, broad, political and preventive. Much of the current debate in, and directed toward, public health relates directly to these claims.

 Public health is not social in the sense of social medicine or social justice. It does not seem to focus on broad-based societal changes. Its sociality with respect to the social sciences is also in question—the items it has adopted are items with little resemblance to the originals. It has not taken the theoretical underpinnings, the reflexivity, and the very questioning of the constructions of problems for which the social sciences are known. It is broad in terms of all the items it takes under its domain, and yet the perspective it takes is considered by many to be narrow. The vast array of agencies involved in public health, especially in the federal government, show the political aspect of public health. However the sheer number of agencies invites the question of whether they can all function together. The constant renaming and restructuring of agencies, coupled with the move toward documents like Healthy People and a lack of social justice perspectives show that in other ways public health politics is minimal. In the end, public health might be preventative, but its difference from preventive medicine hinges on public health being different from medicine. That difference is something public health attests to, but in discussions of who comprises the public health workforce it is clear that there are problems with that distinction.

 The problems in defining public health make it such that its mission is always successful and always a failure. Public health in the United States will always succeed as the broadness of what it does, the numerous objectives it seeks to complete, the multitude of items it is involved in help to secure some sort of victory. However, it will always fail, not only to eradicate something completely, but because the mission definition of public health in its very broadness sets up failure. To ensure that people are healthy, can be healthy, and generally promote health, and the constant adoption of newer ‘threats’ and ‘problems’ means public will never succeed:

The concept of perfect and positive health is a utopian creation of the human mind. It cannot become reality because man will never be so perfectly adapted to his environment that his life will not involve struggles, failures, and sufferings. Nevertheless, the utopia of positive healht constitutes a creative force because, like other ideals, it sets goals and helps medical science to chart its course toward them. The hope that disease can be completely eradicated becomes a dangerous mirage only when its unattainable character is forgotten (Dubos 1965 p 346)

Above, Dubos (1965) is speaking of medical science. However, his idea of seeing perfect health as an impossible goal can be related to U.S. public health. U.S. Public health is never going to achieve perfect health. However, more than this, it is difficult for it to approach perfect health if the agreement on public health’s role is nebulous, and the definitions of both the terms ‘public’ and ‘health’ are constantly questioned.

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1. Words in italics that do not refer to published works refer to words that are used as teystyrms. [↑](#footnote-ref-1)
2. The term *community* has undergone periods of resurgence and reexamination in sociology. Public health (as defined by those who identify as being in public health) has had little to say on the matter. [↑](#footnote-ref-2)
3. It is important to note that the relationship between public health and medicine is both long in history and complicated in nature. As such, this discussion pertains to the connections between the two that are relevant in drawing the boundary of public health. Later discussion will explore other intersections of the two. [↑](#footnote-ref-3)
4. The Indian Health Service (IHS) will become important when discussing current issues in public health. As such, its structure and function will be included in that section. [↑](#footnote-ref-4)