

Health Equity and Health Disparities Environmental Scan

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FINAL REPORT

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Introduction

The Office of Disease Prevention and Health Promotion (ODPHP) contracted with NORC at the University of Chicago (NORC) to conduct an environmental scan on how health equity and health disparities are defined and communicated within the field of public health. The environmental scan, in combination with other information and resources, will help inform the development and dissemination of health equity and health disparities content and new products for Healthy People 2030.

Methodology

In the summer of 2021, NORC used a three-pronged approach to identify relevant resources: 1) conducted a literature review to identify how health equity and health disparities are defined and discussed in peer-reviewed literature; 2) reviewed HHS agency and public health organization websites; and 3) reviewed state health department plans for references to health disparities and health equity. These sources were reviewed to understand how Healthy People partners, including state and national agencies and organizations, define and refer to these concepts, as well as how they conceptualize various approaches to working toward achieving health equity.

Peer-Reviewed Literature

For the peer-reviewed literature search, NORC developed a search term approach, which included health equity, health disparities, health inequity, as well as definition, framework, indicators, and measuring. The official search term was "((("health equity"[Title]) OR ("health disparities"[Title])) OR ("health inequity"[Title])) AND (definition OR framework OR indicators OR measuring)." NORC queried the keyword search terms through PubMed, limiting results to the past 10 years. This produced 877 results. Next, we imported the results into Covidence, a literature review software, to determine relevance. During the screening phase, 744 studies were excluded after reviewing abstracts for relevance. Studies were excluded that did not directly or indirectly discuss health equity, health disparities, or health inequity. We then assessed the remaining 133 full-text studies for eligibility and excluded 60 additional studies due to irrelevance. Given that the focus was on definitions, framework, indicators, and measurements, studies that only focused on identifying topic-specific disparities, those that had a clinical focus, those that were solely focused on interventions to reduce disparities, and those that had a focus on workforce training were not included. The remaining 73 studies were extracted from Covidence for in-depth review and information extraction. In the process of reviewing the 73 articles, 13 additional studies were excluded due to irrelevance. The remaining 60 studies were reviewed and analyzed. These studies covered health equity frameworks, tools to address health

equity, measuring health equity, health equity definitions, policies to achieve health equity, and health equity theory. Exhibit 1 provides a summary of the literature review process, and Exhibit 2 provides examples of studies excluded at each stage of the review process.

Exhibit 1. Process for Identifying Peer-Reviewed Literature

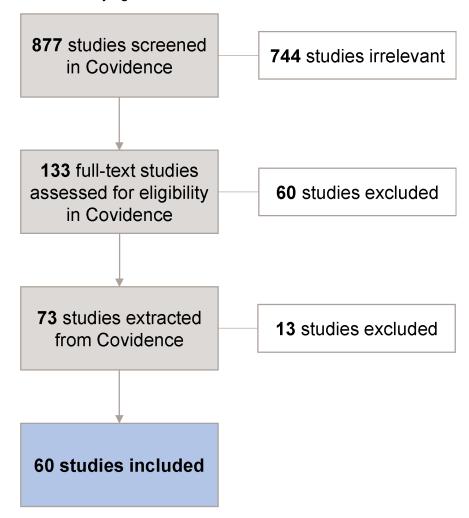


Exhibit 2. Examples of Excluded Peer-Reviewed Literature

Review Stage	Reason for Exclusion	Examples of Excluded Literature		
	Studies that did not	"Delayed and differential effects of the economic crisis in Sweden in the 1990s on health-related exclusion from the labour market: A health equity assessment."		
Screening phase: 744 studies removed	directly or indirectly discuss health equity, health disparities, or	"Can telemedicine address neurologic health disparities in rural Guatemala: A health promotor educational intervention study."		
	health inequities	"Integrating training in quality improvement and health equity in graduate medical education: Two curricula for the price of one."		
	Intervention-focused	"Empowerment praxis: Community organizing to redress systemic health disparities."		
Full tout reviews CO	Identifying specific disparities	"Use of geographic indicators of healthcare, environment and socioeconomic factors to characterize environmental health disparities."		
Full-text review: 60 studies removed	Clinical focus	"Applying a population health equity framework in the clinical setting: Incorporating social and behavioral determinants of health into estimations of risk."		
	Workforce training	"The training for health equity network evaluation framework: A pilot study at five health professional schools."		
Additional removal: 13 studies	Deemed irrelevant after reading full article	"Advancing coalition health equity capacity using a three-dimensional framework."		

HHS Agencies and Public Health Organizations Website Review

NORC conducted a review of relevant HHS agencies and other public health organizations (Exhibit 3) with the goal of understanding and comparing definitions and frameworks for health equity and health disparities. The selection of HHS agencies and public health organizations was determined based on feedback from ODPHP. Additionally, we identified useful resources and content related to health equity on these websites. To review the websites, we conducted key word searches using the website's search functionality, in addition to reviewing individual pages within the website. Key words used to search websites included health equity, health inequity, health disparities, and social determinants of health. Targeted searches included reviewing definitions, related reports, evidence-based tools, and communications methods (e.g., descriptive text, case studies, data bullets, graphics, and visualizations). However, the search was limited to major pages of a website, and therefore limited in scope. For example, we did not include definitions included in Funding Opportunity Announcements posted on agency websites. For large HHS agencies, such as CDC and NIH, we focused on reviewing the web pages for offices within those agencies that conduct work related to health equity and health

disparities, such as the CDC Office of Minority Health and Health Equity (OMHHE). However, we did not review the webpages of centers or divisions within these agencies if their work was not explicitly connected to health equity or health disparities. In addition to reviewing these organization websites, NORC reviewed Executive Orders to identify any references to health equity, health inequity, or health disparities. NORC extracted relevant information from the websites into an Excel tracking file.

Exhibit 3. HHS Agency and Public Health Organization Websites Reviewed

HHS Agencies	Healthy People Partners and Public Health Organizations
Office of the Assistant Secretary for Health (OASH)	Association of State and Territorial Health Officials (ASTHO)
Office of the Assistant Secretary for Planning and Evaluation (ASPE)	National Association of County and City Health Officials (NACCHO)
Office of the Assistant Secretary for Preparedness and Response (ASPR)	National Indian Health Board (NIHB)
Office of Disease Prevention and Health Promotion (ODPHP)	Public Health Accreditation Board (PHAB)
Office for Human Research Protections (OHRP)	American Public Health Association (APHA)
Office of Infectious Disease and HIV/AIDS Policy (OIDP)	Robert Wood Johnson Foundation (RWJF)
Office of Population Affairs (OPA)	National Network of Public Health Institutes (NNPHI)
Office of Minority Health (OMH)	de Beaumont Foundation
Office of Research Integrity (ORI)	Public Health Institute (PHI)
Office on Women's Health (OWH)	Public Health Foundation (PHF)
Administration for Children and Families (ACF)	Big Cities Health Coalition (BCHC)
Agency for Healthcare Research and Quality (AHRQ)	Trust for America's Health (TFAH)
Agency for Toxic Substances and Disease Registry (ATSDR)	National Association of Local Boards of Health (NALBOH)
Centers for Disease Control and Prevention (CDC)	FrameWorks Institute
Centers for Medicare & Medicaid Services (CMS)	
Food and Drug Administration (FDA)	
Health Resources and Services Administration (HRSA)	
Indian Health Service (IHS)	
National Institutes of Health (NIH)	
Substance Abuse and Mental Health Services Administration (SAMHSA)	

Review of State Health Improvement Plans

NORC searched health department websites for every state, the District of Columbia, and all U.S. territories to identify a current State Health Improvement Plan (SHIP), or any reports focused on health equity or the social determinants of health. Then, NORC scanned all available SHIPs or other reports, using search criteria, to understand health department goals, metrics, definitions, and frameworks related to health equity and health disparities. NORC searched each SHIP for mentions of Healthy People, relevant references to multi-sector collaboration, and visualizations that help communicate content related to social determinants of health. NORC also identified any references to racism, including structural and systemic, and discrimination.

Limitations and Challenges

Some limitations and challenges associated with this environmental scan are worth noting. First, the landscape around health equity research and language is constantly evolving, and therefore this environmental scan may not reflect all current published information. Additionally, it was often difficult to determine what constituted a formal definition for some of these topics and specifically whether the agency or organization was promoting a particular definition. Some organizations or HHS agencies may have multiple definitions used in different parts of their website. Information may be captured on another part of the site that was not returned by the specific search mechanisms deployed. For example, we did not include definitions of health equity that were referred to in Funding Opportunity Announcements posted on agency websites. Also, we searched for definitions solely on agency and organization websites and did not directly reach out to any points of contact to confirm our findings.

Regarding the SHIPs, the timeframe and publication date of the plans ranged widely from state to state. These timing differences may explain differences in definitions and frameworks referenced in the plans. Additionally, because some states adapted existing definitions of health equity or social determinants of health in their SHIPs, it was not always possible to determine the original definition referenced. These factors should all be taken into consideration when reviewing the findings of the environmental scan, particularly in terms of the definitions presented.

Findings

Summary of Content Identified

Key information was extracted from the literature, website, or SHIP. Below, we provide a brief summary of the type and frequency of content identified during the environmental scan.

Literature Review

The final list of peer-reviewed literature included 60 articles. Each article was categorized by the major theme it addressed, including health equity frameworks, tools to address health equity, measuring health equity, health equity definitions, policies to achieve health equity, and health equity theory. Of the 60 articles, 15 were non-U.S.-based articles, either focusing on health equity issues of another country or written by authors that were not based in the United States. Exhibit 4 provides examples of content included for each theme of the peer-reviewed literature. Additional information on these topics will be described in more detail later in the report.

Exhibit 4. Literature Review Summary

Theme	Number of Articles	Summary
Health equity frameworks	24	The frameworks discussed in the articles cover a wide range of topics, including research frameworks, measurement frameworks, incorporating health equity into health promotion and disease prevention, and others.
Tools to address health equity	11	Tools included: Health Impact Assessments, the Urban HEART tool, Community Health Improvement Plans, and Health Equity Assessment Toolkit Plus (HEAT Plus).
Measuring health equity	9	Four articles from international sources highlighted how other countries measure progress toward achieving health equity and reducing disparities. Other articles provided examples of how to measure health equity, in addition to a validation for self-reported measures of health.
Health equity definitions	8	These articles review existing definitions of health equity or propose new definitions. Four of eight articles focused on health equity definitions were authored by Paula Braveman.
Policies to achieve health equity	5	Articles discussed policies at the state and local level to advance health equity, how to integrate policy and health equity, and an overview of "Health in All Policies."
Health equity theory	3	Articles focused on racial health disparities and linking structural racism to health equity and health disparities.

Website Review

Health equity or health disparities were not explicitly defined on the majority of the HHS and public health organization websites reviewed. We identified definitions on 6 of 20 HHS agency websites and 4 of 14 public health organizations reviewed. Definitions of health equity, health disparities, and social determinants of health were excluded from our analysis if they were included within background sections of reports focused on topics not related to health equity or the social determinants of health. While not all websites provided explicit definitions, most websites addressed healthy equity or health disparities. Across HHS agency websites, most content focused on addressing health equity and health disparities through agency grant programs, workgroups, and taskforces. The public health organization websites included content explaining health equity and health disparities through factsheets, tools, and visuals. Many websites discussed health equity or health disparities in the context of COVID-19. Other topics mentioned related to health equity or health disparities included racism, women's health, behavioral health, tribal affairs, cultural competency, medical conditions, HIV/AIDS, oral health, environmental health, and education.

State Health Improvement Plans

We identified a SHIP, a state health profile, or an interactive website with data that would traditionally be included in a SHIP for all states and the District of Columbia. Most of the SHIPs had an end date of 2020 or later. There were only three states where we identified plans with an end date of 2017 or earlier. United States territories had differing versions of strategic plans that we reviewed for references to health equity and health disparities; however, there was limited information related to health equity and health disparities in these documents. In addition, we identified 15 state health equity reports and 6 reports or interactive maps focused on the social determinants of health. Exhibit 5 provides a summary of the states that included a definition for health equity, health inequity, health disparities, and the social determinants of health in their SHIP or other related documents. These definitions will be discussed in more detail later.

Exhibit 5. States that Included Key Definitions in Their SHIPs/Health Equity Plans*

Definition	Frequency	States
Health equity	22	CO, CT, DC, DE, GA, FL, IN, IA, KY, LA, MD, ME, MA, NJ, NC, OH, OR, PA, RI, VT, VA, WY
Health inequity	5	DC, ME MS, NE, VT
Health disparities	18	AZ, CA, CT, DC, FL, HI, IN, ME, MD, MI, MS, NJ, NC, OH, PA, RI, VT, VA
Social determinants of health	35	AL, CA, CO, CT, DC, DE, FL, GA, GU, HI, IL, IN, IA, KS, KY, LA, ME, MD, MI, MS, MO, NV, NH, NJ, NY, NC, OH, OK, OR, PA, SC, TN, VT, VA, VI

^{*}Based on reports from 50 states, District of Columbia, and U.S. territories.

The SHIPs and state reports also frequently included health equity and social determinants of health frameworks to better understand and address factors that affect health, including health inequities, in their communities. Many states use these models as guiding frameworks for health improvement planning. By understanding the relationship between health and social inequities, states are better able to prioritize objectives, with a focus on reducing health disparities, during the state health improvement planning process. As shown in Exhibit 6, the Social-Ecological Model (SEM) and the Social Determinants of Health framework from Healthy People 2020 were the most commonly cited health equity frameworks in the SHIPs. The Bay Area Regional Health Inequities Initiative (BARHII) Framework, the Framework for Health Equity, and the Population Health Model were all used in multiple SHIPs. Additionally, some states, like Colorado, have developed their own health equity frameworks. Some states, like New York and Maine, used multiple frameworks, while many other SHIPs did not mention any health equity related frameworks or models. Exhibit 6 provides a summary of the frequently used frameworks in SHIPs, which will be described in more detail later.

Exhibit 6. Health Equity Frameworks Referenced in SHIPs/Health Equity Plans*

Framework	Frequency	States
Social-Ecological Model	7	FL, MI, NH, NY, ME, VA, WA
Social Determinants of Health Framework (Healthy People 2020)	7	CO, CT, KS, ME, MT, NM, NY
The Bay Area Regional Health Inequities Initiative (BARHII) Framework for Reducing Health Inequities	3	OR, VT, WI
Framework for Health Equity	3	KY, OR, NM
The Population Health Model	3	FL, NC, RI
Health in All Policies	2	CO, SC
Colorado's Health Equity Model	1	СО

^{*}Based on reports from 50 states, District of Columbia, and U.S. territories.

Health Equity Definitions

Health Equity

The definition of health equity has been discussed within the public health field for the past two decades. Across all the definitions identified through the environmental scan, key phrases found in the definitions identified are:

- · "Attainment" or "striving for"
- "Highest level of health" or "full health potential" or "healthy as possible" or "optimal health"
- "Opportunity" or "fair and just opportunity"
- "Societal efforts" or "social conditions"
- "Absence of disparities" or "elimination of disparities in health"

Braveman and Gruskin (2003) originally defined health equity as "the absence of systematic disparities in health (or in the major social determinants of health) between social groups who have different levels of underlying social advantage/disadvantage." A seminal report by Whitehead and Dahlgren at the World Health Organization (2006) stated that "equity in health implies that ideally everyone could attain their full health potential and that no one should be disadvantaged from achieving this potential because of their social position or other socially determined circumstance." The report is the original source for many health equity definitions.

During the development of Healthy People 2020, the Secretary's Advisory Committee convened a subcommittee, including external experts, to define health disparity and health equity. The subcommittee defined health equity as "the attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities." As noted by the Healthy People 2030 Secretary's Advisory Committee in the health equity issue brief, public health researchers and practitioners have continued to build on and provide adaptations to this definition.

Specifically, newer definitions have incorporated the concept of "opportunity" to attain the highest level of health. For example, CDC adapted the World Health Organization definition of health equity to "when every person has the opportunity to 'attain his or her full health potential' and no one is 'disadvantaged from achieving this potential because of social position or other socially determined circumstances." Another simpler version of a health equity definition frequently used by CDC is "when everyone has the opportunity to be as healthy as possible," originally proposed as a "short form" abbreviation by the Robert Wood Johnson Foundation (RWJF) in 2017. The full definition proposed by RWJF is "Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care." In a 2019 op ed in Academic Medicine, Braveman supported the RWJF definition of health equity.

Braveman (2019) asserts that health equity has two core elements: 1) improving the health of those social groups who have historically been marginalized, excluded, or otherwise placed at a social disadvantage and 2) doing so by improving not only health care but also the social determinants of health that affect these groups. She adds that this should also include upstream determinants—including wealth, power, and discrimination. Her work strongly emphasizes the role of justice, which builds on another commonly used definition from Whitehead, originally developed in 1992, that health inequity should be defined as "differences in health that are unnecessary, avoidable, unfair, and unjust."

Exhibit 7 provides a summary of the most commonly used definitions of health equity, including how frequently each definition was referenced within the peer-reviewed literature and SHIPs or state health equity/social determinants of health reports.

Exhibit 7. Frequently Cited Definitions of Health Equity*

*Note: these were the definitions that most frequently appeared based on search results and is not an exhaustive list of definitions.

Health equity is	Source	Number	References		
Highest level of health for all people					
The attainment of the highest level of health for all people. Achieving		8 states	CO, CT, DC, FL, KY, ME, MA, VA		
health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities.	Healthy People [^]	5 articles	Braveman et al., 2011; Butler et al., 2018; Kleinman et al., 2021; Liburd et al., 2020; Penman-Aguilar, 2016		
The principle underlying a commitment to reduce and ultimately		1 state	NJ		
The principle underlying a commitment to reduce—and, ultimately, eliminate—disparities in health and in its determinants, including social determinants. Pursuing health equity means striving for the highest possible standard of health for all people and giving special attention to the needs of those at greatest risk of poor health, based on social conditions.	Braveman, 2014a	9 articles*	Braveman, 2014a, 2014b; Castillo & Harris, 2021; Hall et al., 2016; Moonesinghe et al., 2014; Narain et al., 2019; Santana et al., 2020; Solomon & Orridge, 2014; Zimmerman, 2019		
Opportunity					
When every person has the opportunity to "attain his or her full health potential" and no one is "disadvantaged from achieving this potential because of social position or other socially determined circumstances."	CDC	4 states	LA, NC, PA, RI		
Means that everyone has a fair and just opportunity to be as healthy as		1 state	PA		
possible. This requires removing obstacles to health such as poverty and discrimination and their consequences, including powerlessness and lack	RWJF, 2017	1 org	SAMHSA		
of access to good jobs with fair pay, quality education and housing, safe environments, and health care.		2 articles	Braveman, 2019; Kleinman et al., 2021		
Everyone has the opportunity to attain their highest level of health.	<u>APHA</u>	1 state	PA		
When everyone has the opportunity to be as healthy as possible.	CDC Office of Minority Health & Health Equity	1 org	Big Cities Health Coalition		
The equal opportunity for all Americans to enjoy optimal health.	<u>TFAH</u>	None			

Health equity is	Source	Number	References
Absence of disparities			
The absence of unfair and avoidable or remediable differences in health among population groups defined socially, economically, demographically or geographically.**	WHO	4 articles	Brooks et al., 2017; Cohen et al., 2013; Hall et al., 2016; Kovach, 2021
The absence of disparities or avoidable differences among socioeconomic and demographic groups or geographical areas in health status and health outcomes such as disease, disability, or mortality.	<u>HRSA</u>	None	

[^]Healthy People 2030 definition is the same as Healthy People 2020 definition, which was based on recommendations from the Secretary's Advisory Committee for Healthy People 2020.

^{*4} additional articles referenced earlier definitions of health equity by Braveman.

^{**}Some articles used older versions of the WHO health equity definition.

States often referenced these common definitions in their SHIPs and reports. The Healthy People 2020 definition was the most common definition cited by states. Some state SHIPs included their own definitions of health equity that were not attributed to another source. Similar to the frequently cited definitions, these state-developed definitions focused on avoiding inequities, correcting injustices, and removing obstacles for those at the greatest risk of poor health, especially those that have been disadvantaged due to their orientation in society. State definitions of health equity included:

- "We achieve equity when race, gender, class, sexual orientation, gender expression, and other dimensions of individual and group identity **no longer determines one's health outcomes**, as everyone has what they need to thrive." (Delaware)
- "All people can reach their **full health potential and well-being** and are not disadvantaged by their race, ethnicity, language, disability, gender, gender identity, sexual orientation, social class, intersections among these communities or identities, or other socially determined circumstances." (Oregon)
- "Health equity is the principle that all people deserve the **opportunity to achieve their optimal health**. It involves the reduction of health disparities within population groups such as people with disabilities, minorities, or rural/urban populations." (lowa)
- "Health equity exists when all people have a **fair and just opportunity to be healthy**—especially those who have experienced socioeconomic disadvantage, historical injustice, and other avoidable systemic inequalities that are often associated with social categories of race, gender, ethnicity, social position, sexual orientation, and disability." (Vermont)

Health Inequity

In 1992, Whitehead published "The Concepts and Principles of Equity and Health," where she stated that health inequity should be defined as "differences in health which are not only unnecessary and avoidable but, in addition, are considered unfair and unjust." In their article, Trinh-Shevrin, Islam, Nadkarni, Park, and Kwon (2015), built off the Whitehead definition and noted that "in contrast [to health inequality], a health inequity reflects the social justice lens of defining a disparity that is avoidable, unjust, and unfair." Braveman and Gruskin (2003) recommended that avoidability should not be a part of the health inequity definition, first because unjust and unfair imply avoidability and second because "certain health inequities may be extremely challenging to tackle because they require fundamental changes in underlying social and economic structures; one would not want the ease of avoidability to be a measure of inequity."

Health inequity was not defined often in SHIPs. Among the five states with definitions of health inequity, the sources included Whitehead (1992) and Truman et al. (2011), which defined health inequity as "a subset of health inequalities that are modifiable, associated with social disadvantages, and considered ethically unfair."

Health Disparities

Throughout the literature, experts broadly refer to health disparities as health differences that adversely affect socially disadvantaged groups. Multiple articles draw distinctions between health disparities and health equity and focus on the connection between the two. Penman-Aguilar, Talih, Huang, Moonesinghe, Bouye, and Beckles (2016) note that, while health disparities do not "imply that something is avoidable or unfair, we consider reductions in health disparities to generally reflect progress toward health equity." However, Zimmerman (2019) notes that health disparities have been used as a proxy for measuring health equity; however, Zimmerman argues against this practice. Zimmerman states that "a health equity metric should be distinct from a measure of health disparities, in that health equity should encompass the full array of social exclusion in a population. Health disparities, by contrast, focus on differences in health outcomes across specific groups defined by the researcher."

Health disparities and health inequity are used interchangeably by some organizations. Definitions of health disparities focus on how inequities lead to disparities and that the disparities stem from social, economic, or environmental factors that put individuals at a disadvantage. The Healthy People 2020 definition of health disparities, which was carried over into Healthy People 2030, was the most frequently cited source. Key phrases of the definitions of health disparities are:

- "Differences in health outcomes"
- "Social, economic, and/or environmental disadvantage"
- "Groups of people" or "certain populations"
- · "Avoidable" or "preventable"
- · "Inequitable"

Exhibit 8. Frequently Cited Definitions of Health Disparities*

*Note: these were the definitions that most frequently appeared based on search results and is not an exhaustive list of definitions.

Health disparities are	Source	Number	References		
Disadvantage					
		6 states	CT, FL, MS, ME, NJ, VA		
A particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage .	Healthy People [^]	3 articles	Braveman, 2014a; Kleinman et al., 2021; Moonesinghe et al., 2014		
Differences in health outcomes by social, demographic, economic, environmental, or		1 state	ME		
geographic attributes that are thought to reflect historic or current disadvantage . Progress toward health equity is measured through monitoring changes in health disparities over time.	Braveman, 2014a	2 articles*	Braveman, 2014a,2014b		
Groups of people or certain populations					
Differences in health outcomes and their determinants between segments of the	Truman et al.,	1 state	DC		
population as defined by social, demographic, environmental, and geographic attributes.	2011	1 article	Penman-Aguilar, 2016		
Differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions between specific population groups .	NIH, 2000	1 state	MI		
Differences in health outcomes and their causes among groups of people .	CDC	None			
Preventable differences in health outcomes that adversely affect certain populations .	NIH	None			
Demographic factors					
Differences in health status and outcomes between groups based on characteristics like race, ethnicity, gender, geography, educational attainment, and income.	NIH Intramural Research Program	1 state	NC		
Differences in health status between people related to social or demographic factors such as race, gender, income, or geographic region.	<u>APHA</u>	None			
Differences in health or its key determinants (such as education, safe housing, and freedom from discrimination) that adversely affect marginalized or excluded groups. Disparities in health and in the key determinants of health are the metric for assessing progress toward health equity.	RWJF, 2017	None			

Health disparities are	Source	Number	References
Differences in access to our availability of medical facilities and services and variation in rates of disease occurrence and disabilities between population groups defined by socioeconomic characteristics such as age, ethnicity, economic resources, or gender populations identified geographically.	<u>AHRQ</u>	None	

[^]Healthy People 2030 definition is the same as Healthy People 2020 definition, which was based on recommendations from the Secretary's Advisory Committee for Healthy People 2020.

^{*2} additional articles referenced earlier definitions of health disparities by Braveman.

Social Determinants of Health

In the peer-reviewed literature, there is more consistency in the definition of social determinants of health than of health equity and health disparities. Most articles with a definition for the social determinants of health (7 of 17) refer to the World Health Organization's definition of social determinants of health, originally developed in the early 2000s and further elaborated in the seminal report "Closing the gap in a generation: Health equity through action on the social determinants of health," published by the World Health Organization in 2008. An additional two articles refer to the Healthy People definition of social determinants of health. Both of these definitions are similar, in that they refer to "the conditions in which people live, work, and play."

The most frequently defined term, social determinants of health, was defined by 33 states. The World Health Organization definition of social determinants of health was the most frequently cited source, cited by ten states, seven articles, and one organization. The Healthy People 2020 and 2030 definition was cited by three organizations, nine states, and two articles. Key phrases of social determinants of health definitions reviewed include:

- "Conditions in which people..."
 - "are born, live, learn, grow, work, play, worship, and age"
- "Modifiable factors"
- · "Fundamental"
- "Economic, environmental, and historical forces or systems"

Exhibit 9. Frequently Cited Definitions of Social Determinants of Health*

*Note: these were the definitions that most frequently appeared based on search results and is not an exhaustive list of definitions.

Social determinants of health are	Source	Number	References
Conditions in the environments in which people are born, live, learn,		9 states	AL, DC, DE, FL, IN, KY, ME, NY, VT
work, play, worship, and age that affect	Healthy People [^]	3 organizations	HRSA; ASTHO; CDC
a wide range of health, functioning, and quality of life outcomes and risks.		2 articles	Hall et al., 2016; Kleinman et al., 2021
Conditions in which we live, work, and play. Conditions in which people are born,	<u>WHO</u>	10 states	CO, CT, GA, KS, LA, MD, ME, MS, OK, OR
		1 organization	AHRQ
grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life.		7 articles	Benfer, 2015; Brooks et al., 2017; Heller et al., 2014; Moonesinghe et al., 2014; Penman-Aguilar, 2016; Sohn et al., 2018; Trinh-Shevrin et al., 2015

[^]The Healthy People 2030 definition is the same as Healthy People 2020 definition, which was based on recommendations from the Secretary's Advisory Committee for Healthy People 2020.

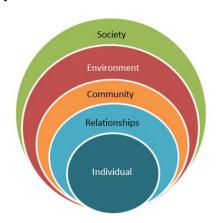
Health Equity Frameworks

Health equity frameworks were frequently included in SHIPs or other state plans to help guide health improvement planning. Overall, these health equity frameworks show a shift in health improvement planning from a focus on the medical model to an examination of social factors as determinants of health. While some of the models are circular and others more linear, they all convey the effects of upstream social factors, including structural inequities and social determinants, on downstream health status, such as disease and mortality. The frameworks also show how individual-level factors, such as health behaviors and risk factors, can be impacted by health education and access to health care and therefore result in varying health outcomes. Below, we describe in more detail some of the frameworks most frequently included in SHIPs. In addition to the frameworks described below, Appendix B provides additional examples of the graphics and frameworks identified throughout the environmental scan that may be useful to ODPHP.

Social-Ecological Model

The most commonly cited health equity framework is the Social-Ecological Model (SEM), with seven states using this framework. This framework uses a multi-level approach to illustrate the complex interplay among individual, relationship, community, and societal factors. The SEM can highlight relationships between "health and social inequities in education, income, employment, housing, environment, access to healthy foods, social support, and access to health care" to help us better understand key social determinants (Maine Social Determinants of Health report). As an example of a state using the SEM, Maine's Social Determinants of Health report highlights the four core principles that explain the ways that the socio-ecological model affects community health:

- 1. Health status, emotional well-being, and social cohesion are influenced by an individual's environment, as well as behavior, genetics, or psychology.
- 2. The same environment affects people differently.
- 3. Individuals and populations interact in multiple environments that influence each other. These environments might include the workplace, schools, neighborhoods, towns, counties, etc.
- Leverage points are places within a system where a change can improve health and well-being. Examples of these leverage points include the physical environment, available resources, and social norms.



Dahlberg, L. L., Krug, E. G. Violence: a global public health problem. In: Krug, E., Dahlberg, L. L., Mercy, J. A., Zwi, A. B., & Lozano, R., eds. World Report on Violence and Health.

Social Determinants of Health Framework

As described, Healthy People's social determinants of health definition are frequently referenced within the field of public health. Similarly, the social determinants of health framework developed as part of Healthy People 2020 were referenced in both the peer-reviewed literature and SHIPs or state reports. The Healthy People social determinants of health framework categorize social determinants of health into five key areas, as illustrated in Exhibit 10: 1) economic stability, 2) education, 3) social and community context, 4) health and health care, and 5) neighborhood and the build environment. Seven states include the social determinants of health framework in their SHIPs. Kansas, for example, uses this "place-based" organizing framework to outline the status of the relationship between health and each of the five key social determinants in Kansas.

Economic Stability

SDOH

Health and Health Care

Social and Community Context

Exhibit 10. Healthy People Social Determinants of Health Framework[^]

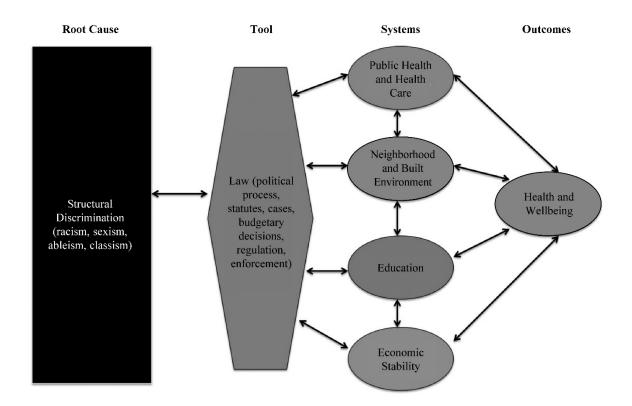
Healthy People 2020, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health

^The Healthy People Social Determinants of Health Framework was updated for Healthy People 2030 based on recommendations from the Secretary's Advisory Committee for Healthy People 2030

The Healthy People social determinants of health framework were also discussed in the peer-reviewed literature. Yearby (2020) provided a critique of the current framework, recommending that it be revised to include the root cause of racial health disparities and a multi-layered approach (Exhibit 11). Yearby asserts that, when using this revised framework, government and public health officials are more able to "make the connection between structural discrimination, law, systems, and racial health disparities." Suggested edits include:

- 1. changing key areas to systems, removing "health" from the health and health care area, and instead replacing it with public health
- 2. moving civic participation from social and community context to the neighborhood and linking incarceration to the built environment
- 3. deleting the social and community context, separating structural discrimination and law from the key systems
- 4. including individual and institutional discrimination in each of the four key systems

Exhibit 11. Yearby (2020) Modification to Healthy People 2020 Social Determinants of Health Framework

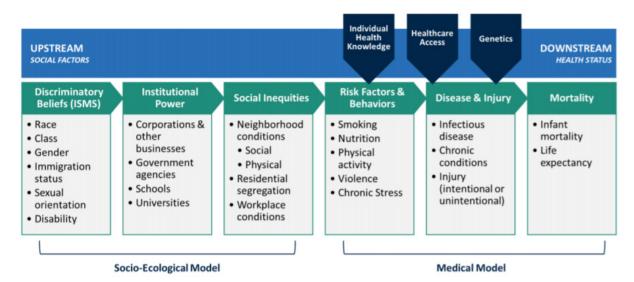


Yearby, R. (2020). Structural racism and health disparities: reconfiguring the social determinants of health framework to include the root cause. *The Journal of Law, Medicine & Ethics*, 48(3), 518-526.

Framework for Health Equity

The Framework for Health Equity (Exhibit 12), created by the Alameda County Public Health Department and adapted from BARHII, highlights social factors such as schools, neighborhoods, workplaces, gender, and class, as major contributors to health and health outcomes. This framework visually differentiates between upstream social factors and downstream health status. Oregon, New Mexico, and Kentucky use this framework as a lens through which to examine priority focus areas.

Exhibit 12. Framework for Health Equity

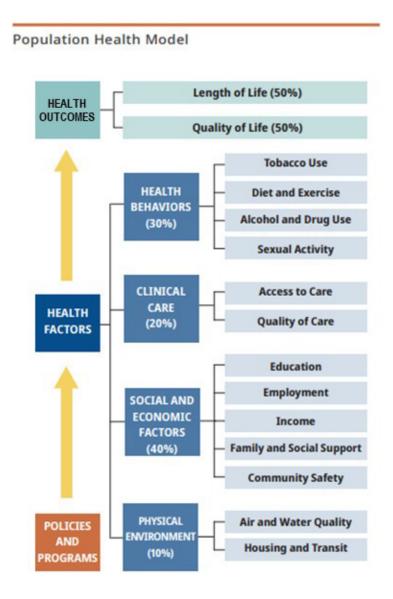


Alameda County Public Health Department. (2008). Life & death from unnatural causes: Health & social inequity in Alameda County. http://www.acphd.org/user/services/AtoZ PrgDtls.asp?PrgId=90

Population Health Model

Florida, North Carolina, and Rhode Island use the County Health Rankings Model to identify the primary drivers of health and their potential contributions to overall health outcomes. The Population Health Model (Exhibit 13) illustrates a shift in state health improvement planning from a focus on clinical and health behavior topics to a focus on health equity and overall drivers of health outcomes.

Exhibit 13. County Health Rankings Model

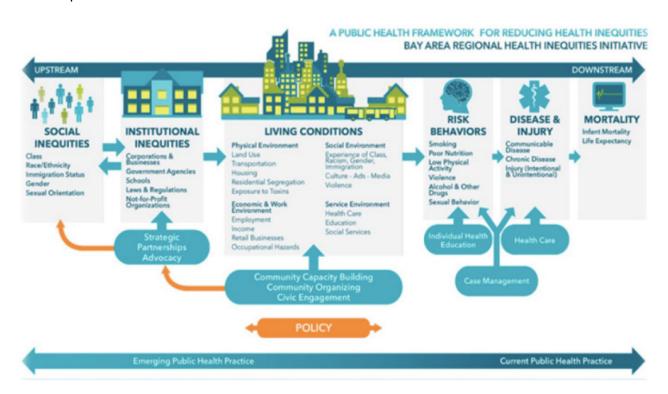


County Health Rankings Model, County Health Rankings & Roadmaps. https://www.countyhealthrankings.org/explore-health-rankings-model .

Bay Area Regional Health Inequities Initiative (BARHII) Framework for Reducing Health Inequities

Oregon, Vermont, and Wisconsin use the BARHII Framework for Reducing Health Inequities in their SHIPs. Oregon uses this framework to inform plans related to partnerships, policies, and investments that will improve health equity. As the visual shows, social determinants of health will affect downstream health outcomes. Therefore, the Oregon Health Authority (OHA) plans to increase access to personal and community resources and support positive health behaviors for coping with trauma and toxic stress as a result of oppression, discrimination, and inequity. Ultimately, OHA expects that these changes will reduce disparities in disease, injury, and death. *Healthy Wisconsin* relies on the BARHII Framework for Reducing Health Inequities, saying, "it illustrates the connection between social inequalities and health, and focuses attention on measures which have not characteristically been viewed within the scope of public health. This framework has been used widely as a guide to health departments undertaking work to address health inequities."

Exhibit 14. Bay Area Regional Health Inequities Initiative (BARHII) Framework for Reducing Health Inequities

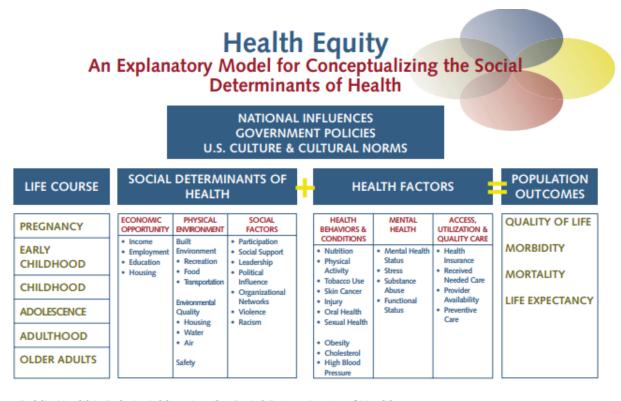


Bay Area Regional Health Inequities Initiative (BARHII). Framework for Reducing Health Inequities. https://www.barhii.org/barhii-framework

Colorado's Health Equity Model

The Colorado Department of Public Health and Environment developed their own health equity model (Exhibit 15) that is also promoted by the Association of State and Territorial Health Officials (ASTHO). Colorado's SHIP describes the visual framework by saying, "the Model recognizes that social determinants vary at every stage of life and have profound impacts on population health. Life expectancy, quality of life and other health outcomes are influenced by a variety of factors including genetics; the physical, economic and social environment; health behaviors; and access to quality health care."

Exhibit 15. Colorado Health Equity Model



Public Health's Role in Addressing the Social Determinants of Health

- Advocating for and defining public policy to achieve health equity
- Coordinated interagency efforts
- · Creating organizational environments that enable change
- Data collection, monitoring and surveillance
- Population-based interventions to address health factors
- · Community engagement and capacity building

Colorado Department of Public Health and Environment. (2015). Healthy Colorado: Shaping a state of health—Colorado's plan for improving public health and the environment. https://www.colorado.gov/pacific/sites/default/files/OPP 2015-CO-State-Plan.pdf

ETR's Health Equity Framework

In 2020, the behavioral non-profit ETR (Education, Training, and Research), developed their own health equity framework. They note, "where many models stack influencing factors or illustrate pathways from factors to health behaviors, the [framework] is designed to highlight the explicit and implicit interactions of multilevel influences on outcomes." The framework identifies four "spheres of influence"—relationships and networks, individual factors, systems of power, and physiological pathways—that are influential in health outcomes. Each sphere includes risk and protective factors, and they identify strategies to address each of the factors. This framework was presented in the peer-reviewed article by Peterson, Charles, Yeung, and Coyle (2020).

Exhibit 16. ETR's Health Equity Framework

ETR's Health Equity Framework.

Health and education outcomes are influenced by complex interactions between people and their environment.

etr.org

Relationships and Networks

Connections with family, friends, partners, community, school and workplaces that:

- Promote health equity through support systems that encourage health-promoting choices
- Intensify health inequities through social networks that enable health-harming behaviors

Individual Factors

A person's response to social, economic and environmental conditions that:

- Promotes health equity through attitudes, skills and behaviors that enable their personal and community's health
- Intensify health inequities through attitudes, skills or behaviors that cause harm to their personal or community's health



Systems of Power Policies, processes, practices that:

- Promote health equity through fair access to resources and opportunities that enable healthy lives.
- Intensify health inequities by allowing unfair social, economic or environmental advantages for some groups over others

Physiological Pathways Factors that:

- Promote health equity when a person's physical, cognitive and psychological abilities are maximized
- Intensify health inequities when a person's environment or experiences has impaired their physical, cognitive or psychological functions

Health Equity

Having the personal agency and fair access to resources and opportunities needed to achieve the best possible physical, emotional and social well-being.

Health Inequities

The preventable differences in health outcomes closely linked to social, economic and environmental conditions.



Peterson, A., Charles, V., Yeung, D., & Coyle, K. (2021). The health equity framework: A science- and justice-based model for public health researchers and practitioners. *Health Promotion* Practice, 22(6), 741-746. doi:10.1177/1524839920950730

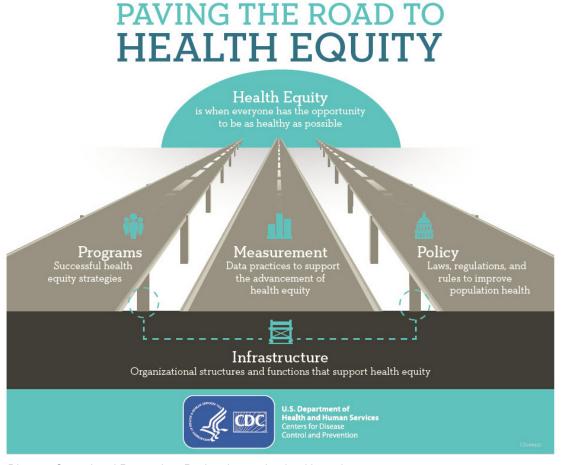
Strategies to Achieve Health Equity

While defining terms related to health equity and establishing frameworks to conceptualize and understand these concepts is important, a variety of strategies must be implemented in order to ultimately achieve health equity. Exhibit 17 shows the CDC approach to "paving the road to health equity," which NORC uses to organize findings for this section. This approach includes:

- Programs—successful health equity strategies
- Measurement—data practices to support the advancement of health equity
- · Policy—law, regulations, and rules to improve population health

In this section, we describe the federal- and state-level programs and initiatives (including multi-sector collaboration), measurement, and policy examples identified in the environmental scan.

Exhibit 17. CDC Road to Health Equity



Centers for Disease Control and Prevention. Paving the road to health equity https://www.cdc.gov/minorityhealth/publications/health-equity/index.html

Programs and Initiatives

Federal Government

During the HHS website review, we identified many ongoing efforts across the federal government to strive toward achieving health equity. These efforts included task forces, workgroups, grant programs, and other initiatives. Many of these programs were also focused on current public health topics, such as COVID-19. For example, an Executive Order from President Biden established the COVID-19 Health Equity Task Force. The Task Force's mission is "to provide specific recommendations to the President, through the Coordinator of the COVID-19 Response and Counselor to the President (COVID-19 Response Coordinator), for mitigating the health inequities caused or exacerbated by the COVID-19 pandemic and for preventing such inequities in the future." This Task Force is part of the government-wide effort to identify and eliminate health and social disparities that result in disproportionately higher rates of exposure, illness, hospitalization, and death related to COVID-19.

There are also examples of cross-agency collaboration on issues related to health equity. For example, the Interdepartmental Health Equity Collaborative (IHEC), led by the Office of Minority Health (OMH), includes representatives from federal agencies whose missions, priorities, programs, and practices impact the social determinants of health. The IHEC is engaged in "addressing health disparities and social determinants of health by building capacity for equitable policies, programs, and practices; promoting strategic partnerships; and sharing relevant models for action." The IHEC currently consists of two workgroups: one focused on data and the other on community health workers. The data workgroup's goal is "to identify existing policies and practices for improving access to data and use of data in support of policy development. The group also works collaboratively to promote data projects and applications that address social determinants of health and support efforts to advance health equity."

Several HHS agencies have a dedicated office focused on health equity. In 2010, six agencies at HHS established Offices of Minority Health: the AHRQ Quality Office of Extramural Research, Education and Priority Populations, the HRSA Office of Health Equity (OHE), the CDC Office of Minority Health & Health Equity (OHMHE), the SAMHSA Office of Behavioral Health Equity (OBHE), the NIH National Institute on Minority Health and Health Disparities, and the CMS Office of Minority Health. These offices establish strategic approaches to implementing programs and coordinating within and across agencies to address health equity.

Exhibit 18. Example HHS Health Equity Offices*

*Note: This table presents examples of HHS health equity offices and is not an exhaustive list. Others include AHRQ Quality Office of Extramural Research, Education, and Priority Populations; NIH National Institute on Minority Health and Health Disparities; and the CMS Office of Minority Health.

Office	About the Office	Examples of Efforts
HRSA Office of Health Equity (OHE)	OHE serves as the principal advisor and coordinator for the special needs of minority and disadvantaged populations, including American Indians/Alaska Natives, Asian Americans, African Americans or Blacks, Hispanics or Latinos, Native Hawaiians or Other Pacific Islanders, rural, urban, disabled, Lesbians, Gays, Bisexuals, and Transsexuals (LGBTs), and other groups that have disparate health outcomes.	 Serve as principal advisor across HRSA in matters related to health disparities, health equity, and minority and priority population health Articulate strategic direction on capacity building, program planning, and implementation for health equity, health disparities, and minority health Establish and manage an agency-wide data collection system for minority health activities and initiatives, including White House and departmental initiatives
CDC Office of Minority Health & Health Equity (OHMHE)	OMHHE advances health equity and women's health issues across the nation through CDC's science and programs. OMHHE also increases CDC's capacity to leverage its diverse workforce and engage stakeholders to this end.	 Focus on solutions for reducing health disparities, improving women's health, and ensuring a diverse and inclusive public health workforce Facilitate the implementation of policies and strategies across CDC that promote the elimination of health disparities in communities of highest risk Advance the science and practice of health equity Collaborate with national and global partners to promote the reduction of health inequalities
SAMHSA Office of Behavioral Health Equity (OBHE)	OBHE coordinates SAMHSA's efforts to reduce disparities in mental and/or substance use disorders across populations. Its work is organized around key strategies, including data, policy, and quality practice and workforce development.	 Utilize federal and community data to identify, monitor, and respond to behavioral health disparities Promote policy initiatives that strengthen the impact of SAMHSA programs in advancing behavioral health equity Expand the behavioral health workforce capacity to improve outreach, engagement, and quality of care for minority and underserved populations
HHS Office of Minority Health (OMH)	OMH promotes the development of health policies and programs that will help eliminate health disparities. Its priorities are to support states, territories, and tribes to promote health equity, expand the utilization of community health workers, and to improve cultural competence among health care providers.	 Promote the National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (CLAS) Provide resources on minority health literature, research, and referrals for the public Develop health policies and initiatives to address the elimination of health disparities

State Government

While there is substantial work ongoing at the federal level to address health equity, the efforts of state and territorial health departments are critical to making progress on this effort. ASTHO has a Center for Population Health Strategies, which includes a focus on addressing health-equity and social determinants of health. ASTHO's vision is "state and territorial health agencies advancing health equity and optimal health for all." The Center for Population Health Strategies shares proven and cost-effective population health improvement approaches with state and territorial health officials and their leadership teams.

In reviewing state plans and health equity reports, we identified several examples of programs and strategies to address health equity and health disparities. Several states discussed the importance of multi-sector partnerships to establish a coordinated focus on social determinants of health and health equity. For example, Pennsylvania described how they have formalized and maintained community relationships and mutual partnerships to advance health equity across current and emerging communities. Many of the states also described specific efforts related to improving equity in access to health care services and other preventive services, such as cancer screenings, maternal health services, and chronic disease self-management. In Vermont's report, they noted that they apply knowledge about bias, structural racism, and other forms of discrimination when developing programs, policies, and budgets. States also discussed the importance of developing and providing culturally competent resources and services to diverse and health disparate populations.

Measurement

Measuring health disparities is essential to identifying and supporting the advancement of health equity. In their SHIPs and health equity reports, many states provided data on health disparities for a wide range of indicators. Differences were often analyzed for different demographics, such as race/ethnicity, age, gender, income, and geography.

While measuring health disparities is common in state and federal reporting of health outcomes and indicators, determining a measure for health equity itself can be difficult. Nine of the peer-reviewed articles discussed ways in which to measure health equity, four of which come from international authors showcasing how other countries measure progress toward achieving health equity and reducing disparities. One article by Penman-Aguilar provides five best practices for measurement to achieve health equity, while seven other articles propose specific metrics to capture health disparities and progress toward equity—including measuring discrimination and urban health, as well as a "report card" on success in reducing inequities in key policy domains. Additionally, two of the nine articles provide validation for self-reported measures of health.

Several of the articles also describe tools to assess health equity. These tools included:

- Health Impact Assessments: a systematic process that uses an array of data sources and analytic
 methods and considers input from stakeholders to determine the potential effects of a proposed
 policy, plan, program, or project on the health of a population and the distribution of those effects
 within the population
- Health Equity Impact Assessments: the assessment of the potential differential impacts on health, where those differences would be considered to be avoidable and unfair
- Urban HEART tool: developed by the World Health Organization to combine quantitative data with community knowledge to evaluate and prioritize urban health inequities
- Community Health Improvement Plans: long-term, systematic efforts to address public health
 problems that are the result of conducting in-depth community health assessments and seek to
 serve agencies for at least three to five years; in general, these plans are meant to serve as guiding
 documents, focusing on how and where resources can be allocated to best meet needs and offering
 benchmarks and measurable objectives from which to gauge effectiveness

Policy

Policies are a necessary component of advancing health equity. In the peer-reviewed literature, five articles review ways to use policies to advance health equity. Two of the articles discuss policies at the state and local level to advance health equity, two provide a broad overview of integrating policy and health equity, and the final article provides an overview of the Health in All Policies approach to promote health equity. These articles broadly find that using social determinants of health framework with a health equity lens can identify structural and intermediary factors that shape an individual's health and identify where policy interventions can be effective at promoting health equity. The articles also discuss and recommend a Health in All Policies approach, integrating health into all sectors of government policy making, regardless of sector or policy area.

Health in All Policies is a strategy for addressing social determinants of health that emphasizes improving health for all by engaging across sectors, including government (Office of Disease Prevention and Health Promotion, n.d.). The American Public Health Association defines this approach as, "a strategy for addressing the complex factors that influence health and equity, also referred to as the social determinants of health, which include educational attainment, housing, transportation options, and neighborhood safety" (American Public Health Association, 2021). Several states, including South Carolina, Colorado, Delaware, and the District of Columbia, referred to a Health in All Policies approach in their SHIPs or health equity reports.

Other SHIPs provided examples of policy approaches related to health equity. For example, the California Reducing Disparities Project is a statewide policy initiative to develop strategies to transform the public mental health system and identify solutions for historically unserved, underserved, and inappropriately served communities. In North Carolina, their goals for policy change focused on the social determinants of health, including raising the minimum wage to \$15 per hour, expanding transit options in rural and low-income communities, and increasing access to affordable personal vehicles.

Other Topics Related to Health Equity

The theory-based peer-reviewed articles focused on racial health disparities and linking structural racism to health equity and health disparities. The Transdisciplinary Resistance Collective for Research and Policy et al. (2020) defines structural racism as a "multilevel system of ideologies, institutions, and processes that have created and reified racial/ethnic inequities." The article presents a "transformative racial equity framework," an extension of the ecological system framework that is designed to "help researchers understand how health inequity is embedded in multiple layers of society." Volpe et al. (2021) focuses on structural online racism and health disparities, and Butler et al. (2018) describes the Public Health Critical Race Praxis Institute and its related research surrounding critical race theory and racial and ethnic health disparities.

In our review of websites and SHIPs or state plans, we identified whether these resources included definitions of racism, structural racism, racial justice, or social justice. Of these terms, racism and discrimination were mentioned most frequently in the state reports, with approximately 20 states having at least one reference to racism or discrimination in their reports. Social justice and racial justice were referenced infrequently in state reports, as these terms appeared in less than 10 states. While racism and discrimination were mentioned in some of the state reports, more than half still did not reference these terms in the context of their SHIP.

Conclusion

This environmental scan highlights the seminal literature and history of the development of definitions and frameworks for health equity and health disparities. Over time, the definition of health equity has evolved, and more recently, definitions of health equity have included the concept of "opportunity" to achieve the highest level of health. For both health equity and the social determinants of health, the definitions provided by Healthy People are widely cited and referenced by other public health agencies, including state health departments in their SHIPs and other state reports. The environmental scan also identified commonly used health equity frameworks, including the social ecological model, social determinants of health framework, and the framework for health equity, among others. Lastly, the environmental scan provides a summary of the approaches to addressing health equity from federal, state, and other public health organizations. These include programs, policies, and measurement approaches. The resources identified in the environmental scan may be useful for ODPHP to examine when developing their own health equity and social determinants of health material and resources.

Appendix A: Healthy People Definitions

Health Equity

Healthy People defines **health equity** as "the attainment of the highest level of health for all people." Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities.

Health Disparities

Healthy People defines a **health disparity** as "a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage." Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.

Social Determinants of Health

Healthy People defies **social determinants of health (SDOH)** as "the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks."

The social determinants of health can be grouped into 5 domains:

- Economic stability
- · Education access and quality
- Health care access and quality
- Neighborhood and built environment
- Social and community context

Appendix B: Health Equity Infographics

Below, we provide several additional helpful health equity infographics identified in the scan.

Exhibit 19. Graphic Depicting Equality and Equity (RWJF)



Robert Wood Johnson Foundation. (2017) Visualizing health equity: One size does not fit all infographic. https://www.rwjf.org/en/library/infographics/visualizing-health-equity.html

Exhibit 20. Key Steps to Advancing Health Equity (RWJF)

Key Steps to Advancing Health Equity A strategy to achieve greater health equity may be most effective when it includes steps moving systematically from identifying health disparities to action to achieve greater health equity. (The steps may not always occur in the order depicted below.) 1 Identify important health disparities 2 that are of concern to key stakeholders, Change policies, laws, systems, especially those affected. Identify social environments and practices to inequities in access to the resources and eliminate inequities in the opportunities opportunities needed to be healthier and resources needed to be as that are likely to contribute to the healthy as possible. health disparities. The goal: Equity in health and its determinants Evaluate and monitor Reassess strategies to efforts using short-term plan next steps. and long-term measures.

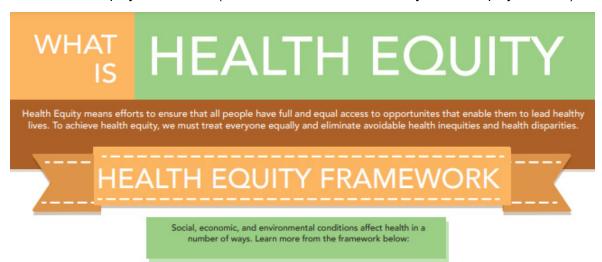
Braveman, P., Arkin, E., Orleans, T., Proctor, D., & Plough, A. (2017). What is health equity? And what difference does a definition make? Retrieved from Robert Wood Johnson Foundation website: https://www.rwjf.org/content/dam/farm/reports/issue_briefs/

Exhibit 21. Health Equity Infographic (San Francisco State University Health Equity Institute)



San Francisco State University Health Equity Institute. What are Health Disparities? https://dev-sfsu-healthequity.pantheonsite.io/sites/default/files/documents/what-are-health-disparities.pdf

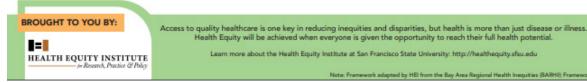
Exhibit 22. Health Equity Framework (San Francisco State University Health Equity Institute)





Health inequities are differences in health that are avoidable, unfair, and unjust.

Health disparities are differences in health among groups of people.



San Francisco State University Health Equity Institute. What are Health Disparities? https://dev-sfsu-health-equity-framework.pdf

Exhibit 23. Reaching for Health Equity (CDC Office of Minority Health)



CDC Office of Minority Health. (2016) Reaching for Health Equity Infographic. https://www.cdc.gov/minorityhealth/strategies2016/Equity_Infographic.pdf

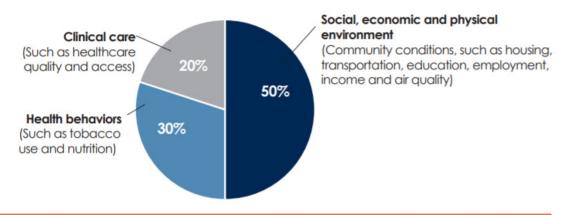
Exhibit 24. Graphic Depicting Equality and Equity (Oregon SHIP)

Figure 2: Equality, equity and liberation **Equality Equity** Liberation This image depicts EQUALITY. This image depicts EQUITY. This image depicts LIBERATION. All individuals are being treated The people are being treated The barriers have been removed equally with the same supports. equitably. It demonstrates that and supports are no longer needed. The inequity has As shown, not all start from the when different individuals are been addressed. same position; some have a given different supports, it height advantage. This challenges makes equal access possible for the assumption that everyone all of them. benefits from the same supports.

Oregon Health Authority. (2020) Healthier together Oregon: 2020–2024 state health improvement plan. https://healthiertogetheroregon.org/wp-content/uploads/2020/08/Healthier-Together-Oregon_fullplan-1.pdf

Exhibit 25. Graphic Depicting Factors that Influence Health (Ohio SHIP)

Figure 1.1. Factors that influence health*



Underlying drivers of inequity such as poverty, racism, discrimination, trauma, violence and toxic stress

Booske, B. C., Athens, J. K., Kindig D. A., Park, H., & Remington, P. L. (2010). County Health Rankings working paper: Different perspectives for assigning weights to determinants of health. University of Wisconsin Public Health Institute.

Exhibit 26. Social Determinants of Health (Maine SHIP)

Table 1. Examples of Social Determinants of Health				
Socioeconomic Status	Education	Physical Environment	Social Support Network	Access to Health Care
EmploymentIncomeExpenses	 Literacy Language Early childhood education Vocational training Higher education 	HousingTransportationSafetyParksPlaygroundsWalkability	 Social integration Support systems Community engagement 	 Health coverage Provider availability Provider linguistic and cultural competency Quality of Care
Health Outcomes Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations				

Maine Center for Disease Control and Prevention. (2016). Using data to promote health equity. https://www.maine.gov/dhhs/mecdc/phdata/MaineCHNA/documents/Health-Equity-Report-032017.pdf

Exhibit 27. Graphic Depicting Social and Structural Determinants of Health (Washington, DC SHIP)

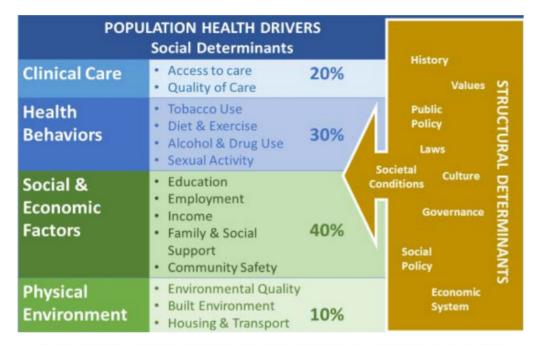


Figure 2.2: The Social and Structural Determinants of Population Health

District of Columbia Department of Health. (2018). Health equity report: District of Columbia 2018. https://app.box.com/s/yspij8v81cxqyebl7gj3uifjumb7ufsw

Exhibit 28. Graphic Depicting Key Drivers Toward Equitable Opportunities (Washington, DC SHIP)

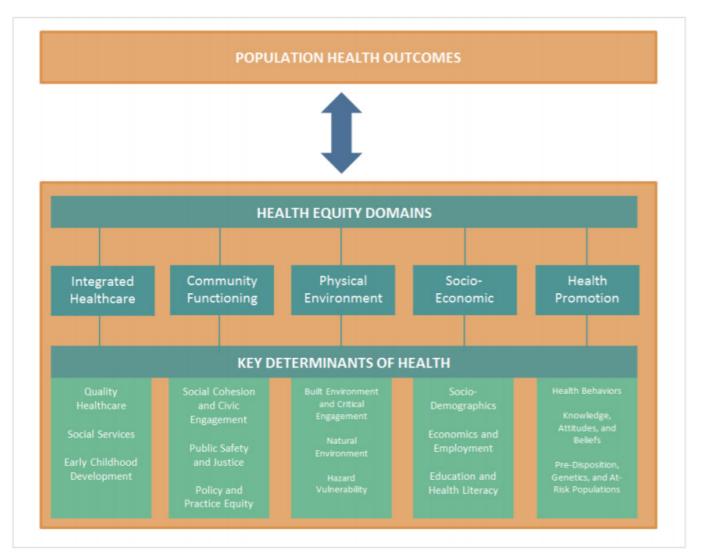
Leveraging the Key Drivers Towards Equitable Opportunities Figure 16: Collaborative Actions for Change/Multi-Sector Opportunity Levers



District of Columbia Department of Health. (2018). Health equity report: District of Columbia 2018. https://app.box.com/s/yspij8v81cxqyebl7gj3uifjumb7ufsw

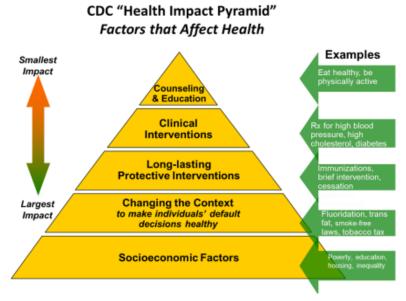
Exhibit 29. Graphic Depicting Health Equity Indicators (Rhode Island SHIP)

Figure 5: Health Equity Indicators Draft Model.



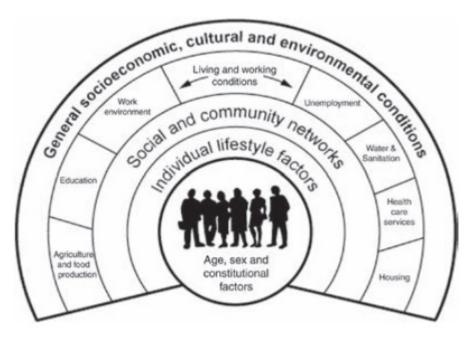
Rhode Island Department of Health. (2017). Rhode Island state health improvement plan. https://health.ri.gov/publications/reports/2017StateInnovationModelHealthAssessment.pdf

Exhibit 30. Health Impact Pyramid Depicting Factors that Affect Health (Massachusetts SHIP)



Frieden, T. R. (2010). A framework for public health action: the health impact pyramid. American journal of public health, 100(4), 590-595.

Exhibit 31. Dahlgren and Whitehead's Policies and Strategies to Promote Social Equity in Health (Rhode Island and Virginia SHIPs)



Dahlgren, G., & Whitehead, M. (1991). Policies and strategies to promote social equity in health. Background document to WHO-Strategy paper for Europe (No. 2007: 14). Institute for Futures Studies.

The Social Determinants of Health \$ **The Social Determinants** of Equity **Economic** Social & Stability Community Structural Contexts Racism Poverty Nativism Housing & Resources, Cissexism Ableism the Built Goods, & Environment Services Classism Heterosexism Ageism Education

Exhibit 32. Big Cities Health Coalition: Social Determinants of Health and Equity

Porter, J. (2021). We can strengthen communities by committing to equity. https://www.bigcitieshealth.org/we-can-strengthen-communities-by-committing-to-equity/

Bibliography

Peer-Reviewed Literature

Health Equity Frameworks

- Alberti, P. M., Lantz, P. M., & Wilkins, C. H. (2020). Equitable pandemic preparedness and rapid response: Lessons from COVID-19 for pandemic health equity. *Journal of Health Politics, Policy and Law*, 45(6), 921–935. https://doi.org/10.1215/03616878-8641469
- Alvidrez, J., Castille, D., Laude-Sharp, M., Rosario, A., & Tabor, D. (2019). The National Institute on Minority Health and Health Disparities Research Framework. *American Journal of Public Health*, 109(S1), S16–S20. https://doi.org/10.2105/AJPH.2018.304883
- Alcaraz, K. I., Sly, J., Ashing, K., Fleisher, L., Gil-Rivas, V., Ford, S., Yi, J. C., Lu, Q., Meade, C. D., Menon, U., & Gwede, C. K. (2017). The ConNECT Framework: A model for advancing behavioral medicine science and practice to foster health equity. *Journal of Behavioral Medicine*, 40(1), 23–38. https://doi.org/10.1007/s10865-016-9780-4
- Benfer E. A. (2015). Health justice: A framework (and call to action) for the elimination of health inequity and social injustice. *The American University Law Review*, *65*(2), 275–351.
- Brooks, D., Douglas, M., Aggarwal, N., Prabhakaran, S., Holden, K., & Mack, D. (2017). Developing a framework for integrating health equity into the learning health system. *Learning Health Systems*, *1*(3), e10029. https://doi.org/10.1002/lrh2.10029
- Chandanabhumma, P. P., & Narasimhan, S. (2020). Towards health equity and social justice: an applied framework of decolonization in health promotion. *Health Promotion International*, *35*(4), 831–840. https://doi.org/10.1093/heapro/daz053
- Cohen, B. E., Schultz, A., McGibbon, E., VanderPlaat, M., Bassett, R., GermAnn, K., Beanlands, H., & Fuga, L. A. (2013). A conceptual framework of organizational capacity for public health equity action (OC-PHEA). *Canadian Journal of Public Health = Revue canadienne de sante publique*, 104(3), e262–e266. https://doi.org/10.17269/cjph.104.3735
- Dover, D. C., & Belon, A. P. (2019). The health equity measurement framework: A comprehensive model to measure social inequities in health. *International Journal for Equity in Health*, *18*(1), 36. https://doi.org/10.1186/s12939-019-0935-0
- Dyck, L. A., Snelling, S., Morrison, V., Haworth-Brockman, M., & Atkinson, D. (2018). Equity reporting: A framework for putting knowledge mobilization and health equity at the core of population health status reporting. Intégrer la notion d'équité: création d'un cadre d'action pour placer la mobilisation du savoir et l'équité en santé au coeur des rapports sur l'état de santé des populations. *Health Promotion and Chronic Disease Prevention in Canada: Research, Policy and Practice*, *38*(3), 116–124. https://doi.org/10.24095/hpcdp.38.3.02

- Hahn, R. A., Truman, B. I., & Williams, D. R. (2018). Civil rights as determinants of public health and racial and ethnic health equity: Health care, education, employment, and housing in the United States. SSM Population Health, 4, 17–24. https://doi.org/10.1016/j.ssmph.2017.10.006
- Hill, C. V., Pérez-Stable, E. J., Anderson, N. A., & Bernard, M. A. (2015). The National Institute on Aging Health Disparities Research Framework. *Ethnicity & Disease*, *25*(3), 245–254. https://doi.org/10.18865/ed.25.3.245
- Hogan, V., Rowley, D. L., White, S. B., & Faustin, Y. (2018). Dimensionality and R4P: A health equity framework for research planning and evaluation in African American populations. *Maternal and Child Health Journal*, 22(2), 147–153. https://doi.org/10.1007/s10995-017-2411-z
- Janzen, C., Marko, J., & Schwandt, M. (2018). Embedding health equity strategically within built environments. *Canadian Journal of Public Health = Revue canadienne de sante publique*, 109(4), 590–597. https://doi.org/10.17269/s41997-018-0116-8
- Kent, A., Loppie, C., Carriere, J., MacDonald, M., & Pauly, B. (2017). Xpey' relational environments: An analytic framework for conceptualizing Indigenous health equity. Milieux relationnels Xpey': un cadre analytique pour conceptualiser l'équité en santé autochtone. Health Promotion and Chronic Disease Prevention in Canada: Research, Policy and Practice, 37(12), 395–402. https://doi.org/10.24095/hpcdp.37.12.01
- Kim, S. J., Ramirez-Valles, J., Watson, K., Allen-Mears, P., Matthews, A., Martinez, E., Odoms-Young, A., Daviglus, M., & Winn, R. A. (2019). Fostering health equity research: Development and implementation of the Center for Health Equity Research (CHER) Chicago. *Journal of Clinical and Translational Science*, 4(1), 53–60. https://doi.org/10.1017/cts.2019.415
- Lee, I. J., & Ahmed, N. U. (2021). The devastating cost of racial and ethnic health inequity in the COVID-19 pandemic. *Journal of the National Medical Association*, *113*(1), 114–117. https://doi.org/10.1016/j.jnma.2020.11.015
- Liburd, L. C., Hall, J. E., Mpofu, J. J., Williams, S. M., Bouye, K., & Penman-Aguilar, A. (2020). Addressing health equity in public health practice: Frameworks, promising strategies, and measurement considerations. *Annual Review of Public Health*, *41*, 417–432. https://doi.org/10.1146/annurev-publhealth-040119-094119
- Matsui, E. C., Perry, T. T., & Adamson, A. S. (2020). An antiracist framework for racial and ethnic health disparities research. *Pediatrics*, *146*(6), e2020018572. https://doi.org/10.1542/peds.2020-018572
- Morales, D. A., Barksdale, C. L., & Beckel-Mitchener, A. C. (2020). A call to action to address rural mental health disparities. *Journal of Clinical and Translational Science*, *4*(5), 463–467. https://doi.org/10.1017/cts.2020.42
- Peterson, A., Charles, V., Yeung, D., & Coyle, K. (2020). The Health Equity Framework: A science- and justice-based model for public health researchers and practitioners. *Health Promotion Practice*. https://doi.org/10.1177/1524839920950730
- Trinh-Shevrin, C., Islam, N. S., Nadkarni, S., Park, R., & Kwon, S. C. (2015). Defining an integrative approach for health promotion and disease prevention: A population health equity framework. *Journal of Health Care for the Poor and Underserved, 26* (2 suppl), 146-163.

- Woodward, E. N., Matthieu, M. M., Uchendu, U. S., Rogal, S., & Kirchner, J. E. (2019). The health equity implementation framework: Proposal and preliminary study of hepatitis C virus treatment. *Implementation Science: IS*, *14*(1), 26. https://doi.org/10.1186/s13012-019-0861-y
- Woodward, E. N., Singh, R. S., Ndebele-Ngwenya, P., Melgar Castillo, A., Dickson, K. S., & Kirchner, J. E. (2021). A more practical guide to incorporating health equity domains in implementation determinant frameworks. *Implementation Science Communications*, 2(1), 61. https://doi.org/10.1186/s43058-021-00146-5
- Yearby R. (2020). Structural racism and health disparities: Reconfiguring the social determinants of health framework to include the root cause. *The Journal of Law, Medicine & Ethics*, *48*(3), 518–526. https://doi.org/10.1177/1073110520958876

Tools to Address Health Equity

- Castillo, E. G., & Harris, C. (2021). Directing research toward health equity: A health equity research impact assessment. *Journal of General Internal Medicine*, *36*(9), 2803–2808. https://doi.org/10.1007/s11606-021-06789-3
- Hosseinpoor, A. R., Schlotheuber, A., Nambiar, D., & Ross, Z. (2018). Health Equity Assessment Toolkit Plus (HEAT Plus): Software for exploring and comparing health inequalities using uploaded datasets. *Global Health Action*, *11*(sup1), 1440783. https://doi.org/10.1080/16549716.2018.1440783
- Inderstrodt, J., Perrault, E. K., Hintz, E. A., & Hildenbrand, G. M. (2019). Addressing health disparities in America: Analysis of community health improvement plans. *Nursing Research*, *68*(5), 405–412. https://doi.org/10.1097/NNR.0000000000000364
- Mehdipanah, R., Israel, B. A., Richman, A., Allen, A., Rowe, Z., Gamboa, C., & Schulz, A. J. (2021). Urban HEART Detroit: The application of a health equity assessment tool. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, *98*(1), 146–157. https://doi.org/10.1007/s11524-020-00503-0
- Mehdipanah, R., Schulz, A. J., Israel, B. A., Gamboa, C., Rowe, Z., Khan, M., & Allen, A. (2018). Urban HEART Detroit: A tool to better understand and address health equity gaps in the city. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, *95*(5), 662–671. https://doi.org/10.1007/s11524-017-0201-y
- Pauly, B., Martin, W., Perkin, K., van Roode, T., Kwan, A., Patterson, T., Tong, S., Prescott, C., Wallace, B., Hancock, T., & MacDonald, M. (2018). Critical considerations for the practical utility of health equity tools: A concept mapping study. *International Journal for Equity in Health*, *17*(1), 48. https://doi.org/10.1186/s12939-018-0764-6
- Pennington, A., Dreaves, H., Scott-Samuel, A., Haigh, F., Harrison, A., Verma, A., & Pope, D. (2017). Development of an urban health impact assessment methodology: Indicating the health equity impacts of urban policies. *European Journal of Public Health*, *27*(suppl_2), 56–61. https://doi.org/10.1093/eurpub/ckv114
- Povall, S., Haigh, F., Abrahams, D., & Scott-Samuel, A. (2014). Health equity impact assessment. Health Promotion International, 29(4), 621-33. https://doi.org/10.1093/heapro/dat012

- Sadare, O., Williams, M., & Simon, L. (2020). Implementation of the Health Equity Impact Assessment (HEIA) tool in a local public health setting: Challenges, facilitators, and impacts. *Canadian Journal of Public Health, 111*, 212–219. https://doi.org/10.17269/s41997-019-00269-2
- Santana, P., Freitas, Â., Stefanik, I., Costa, C., Oliveira, M., Rodrigues, T. C., Vieira, A., Ferreira, P. L., Borrell, C., Dimitroulopoulou, S., Rican, S., Mitsakou, C., Marí-Dell'Olmo, M., Schweikart, J., Corman, D., & Bana e Costa, C. A., on behalf of the EURO-HEALTHY investigators. (2020). Advancing tools to promote health equity across European Union regions: The EURO-HEALTHY project. *Health Research Policy and Systems, 18*, 18. https://doi.org/10.1186/s12961-020-0526-y
- Sohn, E. K., Stein, L. J., Wolpoff, A., Lindberg, R., Baum, A., McInnis-Simoncelli, A., & Pollack, K. M. (2018). Correction to: Avenues of influence: The relationship between health impact assessment and determinants of health and health equity. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, *95*(5), 765. https://doi.org/10.1007/s11524-018-0305-z

Measuring Health Equity

- Blair, A., Siddiqi, A., & Frank, J. (2018). Canadian report card on health equity across the life-course: Analysis of time trends and cross-national comparisons with the United Kingdom. *SSM Population Health*, *6*, 158–168. https://doi.org/10.1016/j.ssmph.2018.09.009
- Buzeti, T., Madureira Lima, J., Yang, L., & Brown, C. (2020). Leaving no one behind: Health equity as a catalyst for the sustainable development goals. *European Journal of Public Health*, *30*(Suppl_1), i24–i27. https://doi.org/10.1093/eurpub/ckaa033
- Cislaghi, B., & Cislaghi, C. (2019). Self-rated health as a valid indicator for health-equity analyses: Evidence from the Italian health interview survey. *BMC Public Health*, *19*(1), 533. https://doi.org/10.1186/s12889-019-6839-5
- Cohen, B., Salter, K., Kothari, A., Janzen Le Ber, M., Lemieux, S., Moran, K., Wai, C., Antonello, D., Robson, J., & Salvaterra, R. (2018). Indicators to guide health equity work in local public health agencies: A locally driven collaborative project in Ontario. Indicateurs pour orienter l'action visant l'équité en matière de santé dans les organismes locaux de santé publique: le programme Projets locaux en Ontario. *Health Promotion and Chronic Disease Prevention in Canada: Research, Policy and Practice*, *38*(7-8), 277–285. https://doi.org/10.24095/hpcdp.38.7/8.02
- Corburn, J., & Cohen, A. K. (2012). Why we need urban health equity indicators: Integrating science, policy, and community. *PLoS Medicine*, *9*(8), e1001285. https://doi.org/10.1371/journal.pmed.1001285
- Heller, J., Givens, M. L., Yuen, T. K., Gould, S., Jandu, M. B., Bourcier, E., & Choi, T. (2014). Advancing efforts to achieve health equity: Equity metrics for health impact assessment practice. *International Journal of Environmental Research and Public Health*, *11*(11), 11054–11064. https://doi.org/10.3390/ijerph111111054

- Hidalgo, B., & Goodman, M. (2012). Validation of self-reported measures in health disparities research. *Journal of Biometrics & Biostatistics*, *3*(7), 1000e114. https://doi.org/10.4172/2155-6180.1000e114
- Penman-Aguilar, A., Talih, M., Huang, D., Moonesinghe, R., Bouye, K., & Beckles, G. (2016a). Measurement of health disparities, health inequities, and social determinants of health to support the advancement of health equity. *Journal of Public Health Management and Practice*, 22(Suppl 1), S33–S42. https://doi.org/10.1097/PHH.000000000000373
- Thrasher, A. D., Clay, O. J., Ford, C. L., & Stewart, A. L. (2012). Theory-Guided selection of discrimination measures for racial/ethnic health disparities research among older adults. *Journal of Aging and Health*, 24(6), 1018–1043. https://doi.org/10.1177/0898264312440322
- Zimmerman F. J. (2019). A robust health equity metric. *Public Health*, *175*, 68–78. https://doi.org/10.1016/j.puhe.2019.06.008

Health Equity Definitions

- Braveman P. (2014a). What are health disparities and health equity? We need to be clear. *Public Health Reports (Washington, D.C.: 1974)*, *129*(Suppl 2), 5–8. https://doi.org/10.1177/00333549141291S203
- Braveman P. (2014b). What is health equity: And how does a life-course approach take us further toward it? *Maternal and Child Health Journal*, *18*(2), 366–372. https://doi.org/10.1007/s10995-013-1226-9
- Braveman P. A. (2019). Swimming against the tide: Challenges in pursuing health equity today.

 **Academic Medicine: Journal of the Association of American Medical Colleges, 94(2), 170–171.
 https://doi.org/10.1097/ACM.000000000002529
- Braveman, P. A., Kumanyika, S., Fielding, J., Laveist, T., Borrell, L. N., Manderscheid, R., & Troutman, A. (2011). Health disparities and health equity: The issue is justice. *American Journal of Public Health*, 101(Suppl 1), S149–S155. https://doi.org/10.2105/AJPH.2010.300062
- Kleinman, D. V., Pronk, N., Gómez, C. A., Wrenn Gordon, G. L., Ochiai, E., Blakey, C., Johnson, A., & Brewer, K. H. (2021). Addressing health equity and social determinants of health through Healthy People 2030. *Journal of Public Health Management and Practice*, *27*(Suppl 6): S249-S257. https://doi.org/10.1097/PHH.000000000001297
- Moonesinghe, R., Bouye, K., & Penman-Aguilar, A. (2014). Difference in health inequity between two population groups due to a social determinant of health. *International Journal of Environmental Research and Public Health*, *11*(12), 13074–13083. https://doi.org/10.3390/ijerph111213074
- Narain, K., Zimmerman, F. J., Richards, J., Fielding, J. E., Cole, B. L., Teutsch, S. M., & Rhoads, N. (2019). Making strides toward health equity: The experiences of public health departments. *Journal of Public Health Management and Practice*, 25(4), 342–347. https://doi.org/10.1097/PHH.0000000000000852
- Solomon, R., & Orridge, C. (2014). Defining health equity. *Healthcare Papers*, *14*(2), 62–65. https://doi.org/10.12927/hcpap.2015.24112

Policies to Achieve Health Equity

- Berenson, J., Li, Y., Lynch, J., & Pagán, J. A. (2017). Identifying policy levers and opportunities for action across states to achieve health equity. *Health Affairs (Project Hope)*, *36*(6), 1048–1056. https://doi.org/10.1377/hlthaff.2017.0004
- Hall, M., Graffunder, C., & Metzler, M. (2016). Policy approaches to advancing health equity. *Journal of Public Health Management and Practice*, *22*(Suppl 1), S50–S59. https://doi.org/10.1097/PHH.0000000000000365
- Hall, R. L., & Jacobson, P. D. (2018). Examining whether the health-in-all-policies approach promotes health equity. *Health Affairs (Project Hope)*, *37*(3), 364–370. https://doi.org/10.1377/hlthaff.2017.1292
- Kovach, K. A., & Lipnicky, A. (2021). An analysis of how characteristics of local health department jurisdictions influence involvement in PHAB accreditation: Implications for health equity. *Journal of Public Health Management and Practice*, 27(5), 449–458. https://doi.org/10.1097/PHH.0000000000001248
- Richardson L. D. (2016). Integrating health equity into practice and policy. *Journal of Public Health Management and Practice*, *22*(Suppl 1), S107–S109. https://doi.org/10.1097/PHH.000000000000372

Health Equity Theory

- Butler, J., 3rd, Fryer, C. S., Garza, M. A., Quinn, S. C., & Thomas, S. B. (2018). Commentary: Critical race theory training to eliminate racial and ethnic health disparities: The Public Health Critical Race Praxis Institute. *Ethnicity & Disease*, *28*(Suppl 1), 279–284. https://doi.org/10.18865/ed.28.S1.279
- Transdisciplinary Resistance Collective for Research and Policy, Neely, A. N., Ivey, A. S., Duarte, C., Poe, J., & Irsheid, S. (2020). Building the Transdisciplinary Resistance Collective for Research and Policy: Implications for dismantling structural racism as a determinant of health inequity. *Ethnicity & Disease*, *30*(3), 381–388. https://doi.org/10.18865/ed.30.3.381
- Volpe, V., Hoggard, L. S., Willis, H. A., & Tynes, B. M. (2021). Anti-Black structural racism goes online: A conceptual model for racial health disparities research. *Ethnicity & Disease, 31*(Suppl 1), 311-318. https://doi.org/10.18865/ed.31.S1.311

HHS and Public Health Organization Websites

HHS Agencies

- Administration for Children and Families (ACF). (n.d.). U.S. Department of Health and Human Services. https://www.acf.hhs.gov/
- Agency for Toxic Substances and Disease Registry (ASTDR). (2021, September 2). Centers for Disease Control and Prevention. https://www.atsdr.cdc.gov/

- Behavioral Health Equity. (2021, June 10). Substance Abuse and Mental Health Services Administration (SAMHSA). https://www.samhsa.gov/behavioral-health-equity
- Centers for Medicare and Medicaid Services (CMS). (n.d.). https://www.cms.gov/
- Disparities. (n.d.). Agency for Healthcare Research and Quality (AHRQ) https://www.ahrq.gov/
- Equity Initiatives. (2021, March 2). Centers for Medicare and Medicaid Services Office of Minority Health. https://www.cms.gov/About-CMS/Agency-Information/OMH/equity-initiatives
- Food and Drug Administration (FDA). (n.d.). https://www.fda.gov/
- Health Equity. (2021, August 24). Centers for Disease Control and Prevention (CDC). https://www.cdc.gov/healthequity/index.html
- Health Equity Research. (2021, August 31). National Institute of Health (NIH). https://www.nih.gov/ending-structural-racism/health-equity-research
- Indian Health Service (IHS). (n.d.). https://www.ihs.gov/
- Office of the Assistant Secretary for Health (OASH). (n.d.). U.S. Department of Health and Human Services. https://www.hhs.gov/ash/index.html
- Office of the Assistant Secretary for Planning and Evaluation (APSE). (n.d.). U.S. Department of Health and Human Services. https://aspe.hhs.gov/
- Office of the Assistant Secretary for Preparedness and Response (ASPR). (n.d.). U.S. Department of Health and Human Services. https://www.phe.gov/about/aspr/Pages/default.aspx
- Office of Health Equity. (2020, October). Health Resources and Services Administration (HRSA). https://www.hrsa.gov/about/organization/bureaus/ohe/index.html
- Office of Infectious Disease and HIV/AIDS Policy (OIDP). (n.d.). U.S. Department of Health and Human Services. https://www.hhs.gov/oidp/index.html
- Office of Minority Health. (n.d.). U.S. Department of Health and Human Services. https://www.minorityhealth.hhs.gov/
- Office on Women's Health (OWH). (n.d.). U.S. Department of Health and Human Services. https://www.womenshealth.gov/

Public Health Organizations

- Achieving Health Equity. (n.d.). Robert Wood Johnson Foundation (RWJF). https://www.rwjf.org/en/library/features/achieving-health-equity.html
- de Beaumont Foundation. (n.d.). https://debeaumont.org/
- FrameWorks Institute. (n.d.). https://www.frameworksinstitute.org/
- Health Equity. (n.d.). American Public Health Association (APHA). https://www.apha.org/Topics-and-lssues/Health-Equity
- Health Equity. (n.d.). Association of State and Territorial Health Officials (ASTHO). https://www.astho.org/Programs/Health-Equity/
- Health Equity. (n.d.). Trust for America's Health (TFAH). https://www.tfah.org/initiatives/health-equity/
- Health Equity and Social Justice. (n.d.). National Association of County and City Health Officials (NACCHO). https://www.naccho.org/programs/public-health-infrastructure/health-equity#reading National Association of Local Boards of Health (NALBOH). (n.d.). https://www.nalboh.org/

National Indian Health Board (NIHB). (n.d.). https://www.nihb.org/

National Network of Public Health Institutes (NNPHI). (n.d.). https://nnphi.org/

Public Health Accreditation Board (PHAB). (n.d.). https://phaboard.org/

Public Health Foundation (PHF). (n.d.). http://www.phf.org/Pages/default.aspx

Public Health Institute. (n.d.). https://www.phi.org/

Social Determinants of Health. (n.d.). Big Cities Health Coalition. https://www.bigcitieshealth.org/issues-social-determinants-health/

State Health Improvement Plans and Other Reports

- Alabama Department of Public Health. (2015). 2015 state of Alabama community health improvement plan. https://www.alabamapublichealth.gov/accreditation/assets/chip 2015 revaugust.pdf
- State of Alaska Department of Health and Social Services & Alaska Native Tribal Health Consortium. (2020). *Healthy Alaskans 2030: State health improvement plan.*https://aws.state.ak.us/OnlinePublicNotices/Notices/Attachment.aspx?id=123856
- Arizona Department of Health Services. (2016). *Arizona health improvement plan.* https://azdhs.gov/documents/operations/managing-excellence/azhip.pdf
- Arkansas Chronic Disease Coordinating Council. (2013). *Healthy people 2020: Arkansas's chronic disease framework for action.*
 - https://www.healthy.arkansas.gov/images/uploads/pdf/HealthyPeople2020.pdf
- Let's Get Healthy California. (2012). Let's get healthy California task force final report.

 https://1pkqo242dqk52rxe3r22f9ts-wpengine.netdna-ssl.com/wp-content/uploads/2019/02/Lets-Get-Healthy-California-Task-Force-Final-Report.pdf
- Colorado Department of Public Health and Environment. (2015). *Healthy Colorado: Shaping a state of health—Colorado's plan for improving public health and the environment.*https://www.colorado.gov/pacific/sites/default/files/OPP 2015-CO-State-Plan.pdf
- Connecticut Department of Public Health. (2014). *Healthy Connecticut 2020. 2: State health improvement plan.* https://portal.ct.gov/-/media/Departments-and-Agencies/DPH/dph/state-health-planning/SHA-SHIP/hct2020/hct2020statehlthimpv032514pdf.pdf'-class='no-direct-text-content'
- District of Columbia Department of Health. (2018). DC healthy people 2020: Annual report and action plan 2017–2019.
 - https://dchealth.dc.gov/sites/default/files/dc/sites/doh/publication/attachments/DOH AnnualRep ort 011518 INTERACTIVE%20FINAL%20Reduced.pdf
- District of Columbia Department of Health. (2018). *Health equity report: District of Columbia 2018*. https://app.box.com/s/yspij8v81cxqyebl7gj3uifjumb7ufsw
- Delaware Department of Health and Social Services, Division of Public Health & Partnership for Healthy Communities at the University of Delaware. (2020). *Delaware state health improvement plan: 2020 annual report.* https://img1.wsimg.com/blobby/go/7298608e-3c37-4361-b78a-b30fff51587e/DE%20SHIP%202020%20Annual%20Report_FullReport.pdf

- Florida Department of Health. (2017). Florida state health improvement plan 2017–2021. http://www.floridahealth.gov/about/state-and-community-health-assessment/ship-process/FINAL_SHIP.pdf
- Georgia Department of Public Health. (n.d.). 2016–2021 State health improvement plan. https://dph.georgia.gov/document/document/gadph-ship-2017-final/download
- Hawaii Department of Health, Office of Planning Policy and Program Development. (n.d.) *Healthy Hawaii 2020: A community health plan.* https://health.hawaii.gov/opppd/ship/
- Idaho Division of Public Health. (n.d.) *Get healthy Idaho*. https://www.gethealthy.dhw.idaho.gov/intro
- Illinois Department of Public Health. (2016). *Healthy Illinois 2021: State health improvement plan.* http://www.healthycommunities.illinois.gov/documents/SHIP-FINAL.pdf
- Indiana State Department of Health. (2017). *Indiana state health assessment and improvement plan:*May 2018–December 2021. https://www.in.gov/health/files/Indiana State Health Plan ISHIP.pdf
- lowa Department of Public Health. (2019). *Healthy Iowans 2017–2021: Iowa's health improvement plan.*https://idph.iowa.gov/Portals/1/userfiles/91/Healthy%20Iowans/2019%20Revisions/Healthy%20Iowans/202019-8.pdf
- Kansas Department of Health and Environment. (2014). *Healthy Kansans 2020: Kansas health assessment and improvement plan*. https://www.kdhe.ks.gov/DocumentCenter/View/358/2014-State-Health-Improvement-Plan---Healthy-Kansans-2020-PDF
- Kentucky Department of Public Health. (2017). *Kentucky state health improvement plan 2017–2022*. https://chfs.ky.gov/agencies/dph/Documents/StateHealthImprovementPlan.pdf
- Louisiana Department of Health. (2016). *Creating a blueprint for our future: Louisiana state health assessment and improvement plan.* https://ldh.la.gov/index.cfm/page/2180
- Maine Center for Disease Control and Prevention. (2018). *State health improvement plan 2018–2020.* https://www.maine.gov/dhhs/mecdc/ship/SHIP-FINAL-3-30-2018.pdf
- Maine Center for Disease Control and Prevention. (2016). *Using data to promote health equity.*https://www.maine.gov/dhhs/mecdc/phdata/MaineCHNA/documents/Health-Equity-Report-032017.pdf
- Maine Center for Disease Control and Prevention. (2019). *The way health should be: Social determinants of health in Maine.*https://www.maine.gov/dhhs/mecdc/phdata/MaineCHNA/documents/SDOH-Report-11-15-2019.pdf
- Maryland Department of Health. (2020). *Maryland state health improvement process*. https://health.maryland.gov/pophealth/Pages/SHIP-Lite-Home.aspx
- Massachusetts Department of Public Health. (2014). *Massachusetts state health improvement plan.* https://www.mass.gov/doc/state-health-improvement-plan/download
- Michigan Department of Community Health. (2012). *Michigan's state health assessment and state health improvement plan 2012–2017.*https://www.michigan.gov/documents/mdch/MDCH_SHIP_FINAL_8-16-12_400674_7.pdf

- Minnesota Department of Health. (2018). *Healthy Minnesota 2022: Statewide health improvement framework.*
 - https://www.health.state.mn.us/communities/practice/healthymnpartnership/docs/2022HealthyMNFramework.pdf
- Mississippi State Department of Health. (2016). Building a healthier Mississippi from the ground up: State health assessment and improvement plan. https://uprootms.org/wp-content/uploads/2016/09/sha_ship_report_2016 smallest-1-1.pdf
- Missouri Department of Health and Senior Services. (2017). *Missouri health improvement plan 2013–2018*. https://health.mo.gov/data/pdf/mohealthimproveplan.pdf
- Montana Department of Public Health and Human Services. (2021). *Montana state health improvement plan 2019–2023*. https://dphhs.mt.gov/assets/publichealth/ahealthiermontana/2019SHIPfinal.pdf
- Nebraska Department of Health and Human Services, Division of Public Health. (2017). 2017–2021

 Nebraska state health improvement plan.
 - https://dhhs.ne.gov/CHPM%20Documents/SHIP%20Plan%20-%202017-2021.pdf
- Nevada State Health Division. (2011). Healthy people Nevada—moving from 2010 to 2020.

 https://www.google.com/url?q=http%3A//dpbh.nv.gov/Programs/OPHIE/Docs/HealthyPeople 20
 10_2020_Introduction_Mar2011/&sa=U&ved=0ahUKEwiuo_75vNTUAhUEPz4KHWAkBaUQFg
 gEMAA&client=internal-uds-cse&usg=AFQjCNH042BvZs9TbBtjQXR0LK9HO1M-Uw
- New Hampshire Department of Health and Human Services, Division of Public Health Services. (2013). New Hampshire state health improvement plan. https://www.dhhs.nh.gov/dphs/documents/nhship2013-2020.pdf
- New Jersey Department of Health. (2020). *New Jersey state health improvement plan*. https://www.state.nj.us/health/chs/hnj2020/documents/ship2020.pdf
- New Mexico Department of Health. (2018). 2020–2022 New Mexico state health improvement plan. https://www.nmhealth.org/publication/view/plan/5311/
- New York State Public Health and Health Planning Council & New York State Department of Health. (2018). New York's state health improvement plan prevention agenda 2019–2024. https://www.health.ny.gov/prevention/prevention_agenda/2019-2024/index.htm
- North Dakota Department of Health. (2019). *North Dakota state health improvement plan 2019–2021*. http://www.ndhealth.gov/phsp/documents/SHIP_Plan.pdf?v=3
- Ohio Department of Health & Health Policy Institute of Ohio. (2020). State health improvement plan Ohio 2020–2022. https://odh.ohio.gov/wps/portal/gov/odh/about-us/sha-ship
- Oklahoma State Department of Health. (2015). *Healthy Oklahoma: Oklahoma health improvement plan.* https://www.ok.gov/health2/documents/OHIP%202020.pdf
- Oregon Health Authority. (2020) *Healthier together Oregon: 2020–2024 state health improvement plan*. https://healthiertogetheroregon.org/wp-content/uploads/2020/08/Healthier-Together-Oregon fullplan-1.pdf
- Pennsylvania Department of Health. (2016). *Pennsylvania state health improvement plan 2015–2020*. https://www.health.pa.gov/topics/Documents/SHIP/2015-2020 PA SHIP.pdf

- Pennsylvania Department of Health, Office of Health Equity. (2019). *The state of health equity in Pennsylvania*.
 - $\frac{https://www.health.pa.gov/topics/Documents/Health%20Equity/The%20State%20of%20Health%20Equity%20in%20PA%20Report%20FINAL.pdf}{}$
- Puerto Rico Department of Health. (2012). *Puerto Rico healthy people 2020 strategic plan.* https://www.mindbank.info/item/5952
- Rhode Island Department of Health. (2017). *Rhode Island state health improvement plan*. https://health.ri.gov/publications/reports/2017StateInnovationModelHealthAssessment.pdf
- Rhode Island Department of Health & Rhode Island Commission for Health Advocacy and Equity. (2020). Rhode Island commission for health advocacy and equity legislative report.

 https://health.ri.gov/publications/reports/2020CommissionForHealthAdvocacyAndEquityLegislative.pdf
- Live Healthy South Carolina & Alliance for a Healthier South Carolina. (2018). State health improvement plan 2018–2023.
 - https://livehealthy.sc.gov/sites/default/files/Documents/SHA%20chapters/SHIP%20Chapter/ship full 11.13.18 singles revised 2 1 .pdf
- South Dakota Department of Health. (2021). *Strategic plan 2020–2025*. https://doh.sd.gov/documents/DOHStrategicPlan2020-25_FINAL.pdf
- Tennessee Department of Health. (2019). *Tennessee state health plan cognitive and brain health across the lifespan*. https://www.tn.gov/content/dam/tn/health/program-areas/state-health-plan/2019-State-Health-Plan.pdf
- Statewide Health Coordinating Council. (2016). 2017–2022 Texas state health plan.

 https://www.dshs.texas.gov/ConsumerandExternalAffairs/legislative/2017Reports/State-Health-Plan-Implement2017.pdf
- Utah Department of Health. (2021). *Public health outcome measures report*. https://ibis.health.utah.gov/ibisph-view/report/phom/Introduction.html
- Vermont Department of Health. (2018). *Vermont state health improvement plan 2019–2023.*https://www.healthvermont.gov/sites/default/files/documents/pdf/ADM State Health Improvem ent Plan 2019-2023.pdf
- Commonwealth of Virginia & Virginia Center for Health Innovation. (2016). *Virginia state health improvement plan*. http://www.vahealthinnovation.org/wp-content/uploads/2016/07/Virginia-State-Health-Innovation-Plan-06.01.2016.pdf
- Virginia Department of Health. (2012). Virginia health equity report 2012.
 - https://www.vdh.virginia.gov/content/uploads/sites/76/2016/06/Health-Equity-Report-2012.pdf
- Washington State Department of Health. (2015). *Washington state health improvement plan 2014–2018*. https://www.doh.wa.gov/Portals/1/Documents/Pubs/822-034_SHIPreport.pdf
- West Virginia Bureau for Public Health & West Virginia department of Health and Human Services. (2012). 2012 West Virginia state health profile.
 - https://dhhr.wv.gov/publichealthquality/statepublichealthassessment/Documents/2012%20State %20Health%20Profile%20Final%20May%202013.pdf

- Healthy Wisconsin. (2019). *Wisconsin state health improvement plan: 2019 annual report.* https://www.dhs.wisconsin.gov/publications/p01791.pdf
- Wyoming Department of Health, Office of Performance Improvement and Health Equity. (2020). State health assessment and improvement planning. https://health.wyo.gov/publichealth/office-of-performance-improvement-and-health-equity/sha/

Other Literature

- American Public Health Association. (2021). *Health in All Policies*. https://www.apha.org/topics-and-issues/health-in-all-policies
- Braveman, P., & Gruskin, S. (2003). Defining equity in health. *Journal of Epidemiology & Community Health*, *57*(4), 254-258. https://dx.doi.org/10.1136/jech.57.4.254
- Commission on Social Determinants of Health (CSDH). (2008). Closing the gap in a generation: Health equity through action on the social determinants of health. Geneva: World Health Organization. https://www.who.int/social_determinants/final_report/csdh_finalreport_2008.pdf Office of Disease Prevention and Health Promotion. (n.d.). Healthy People 2020. Washington, DC: U.S. Department of Health and Human Services. https://www.cdc.gov/nchs/healthy people/hp2020.htm
- Truman, B. I., Smith, K. C., Roy, K., Chen, Z., Moonesinghe, R., Zhu, J., Gorway Crawford, C., & Zaza S. (2011). Rationale for regular reporting on health disparities and inequalities-United States. *Morbidity and Mortality Weekly Report, 60*(Suppl 01), 3-10.

 http://www.cdc.gov/mmwr/preview/mmwrhtml/su6001a2.htm?s_cid=su6001a2_w
- Whitehead, M. (1992). The concepts and principles of equity and health. *International Journal of Health Services*, 22(3), 429-45. https://doi.org/10.2190/986L-LHQ6-2VTE-YRRN
- Whitehead, M., & Dahlgren, G. (2006). Concepts and principles for tackling social inequities in health: Levelling up part 1. In: *Studies on social and economic determinants of population health, No. 2.* Copenhagen: World Health Organization.