

# Civic Engagement and Population Health Compendium

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## EXECUTIVE SUMMARY

The Civic Engagement and Population Health Compendium is a concise collection of research and materials on civic engagement and population health. It includes key concepts, indicators, and datasets related to civic engagement, broadly and comprehensively defined, measured at the individual and group level, and across varied geographic scales.

It is by now widely recognized that population health is shaped not only by clinical care, but also by community conditions such as affordable housing, quality education, living wage jobs, and even more broadly by social and economic factors such as poverty and discrimination, and policy-related factors like immigrant integration and exclusion. This shift in our understanding has been based on a deep body of empirical research and built on theoretical and conceptual frameworks involving social determinants and policy contexts affecting health outcomes.

Over the last decade, there has been a growing recognition that voting and other forms of civic engagement are also connected to population health and health disparities. And yet, the theoretical and empirical connections between civic engagement, community and policy conditions, and population health outcomes have not been well established. This compendium is part of a larger project, funded by the Robert Wood Johnson Foundation, that aims to improve research and understanding of the range of civic engagement measures and their connections to community conditions and population health and equity.

The focus of this compendium is to articulate the broad array of concepts and measures relevant to civic engagement that extend far beyond voter registration and voter turnout. These have been measures that are most broadly available, and that most often have been used to illustrate connections to health. When it comes to policy influence, activities like contacting officials, making campaign contributions, and attending public hearings can be much more consequential than voting. Ultimately, policies are shaped not only by individuals and groups that vote, but also by those that continue to engage between elections and campaigns. Thus, groups and/or communities that experience fewer barriers to involvement in various forms of civic engagement are more likely to have their needs addressed than those groups that have limited opportunities to participate, or that otherwise face barriers to civic engagement.

While there is more to be studied on the causal pathways and institutional conditions that connect civic engagement to health and equity, this compendium offers

a window into one side of this complex relationship with a focus on the varieties of civic engagement. Instead of limiting attention to voter registration and voter turnout, we expand the scope to consider other forms of electoral participation such as making campaign contributions; non-electoral forms of political participation such as attending public meetings and contacting public officials; and forms of civic participation including boycotting products, volunteering for a charitable organization, and working with others to solve community problems. We also consider the media contexts and institutional rules—ranging from absentee ballot provisions to voter registration rules and voter identification laws—that shape participation and have the potential to exacerbate civic inequity. Finally, the compendium also provides a parsimonious set of population health concepts and metrics that can be used in subsequent analyses that relate particular types of civic engagement (and inequities in civic engagement) to inequities in various health outcomes.

## INDIVIDUAL BEHAVIOR

Political behavior is a subfield of political science that originated in the United States in the postwar period alongside the development of scientific surveys of public opinion (Campbell et al. 1960, Almond and Verba 1963). From voting in elections to participating in social movements, scholars have come to understand that political behavior is concerned about the motivations and attitudes of people who participate and, alternatively, those who do not participate.

Individual behavior includes formal as well as informal types of political participation. Formal participation tends to work within political structures and maintain existing political orders while informal participation tends to work outside political structures, and often challenges existing political orders. Examples of formal participation include: voting, attending public meetings, contacting public officials, and activism in social groups. Informal acts of political participation can range from peaceful protests and other acts of civil disobedience, to more violent forms of action including riots, rebellions, and revolutions.

## ATTENDING PUBLIC MEETINGS

Local governments hold regularly scheduled meetings to discuss and decide on public issues. These meetings also provide opportunities for citizens to voice their opinions, on matters ranging from process to substance. Members of the public are usually given two to three minutes to speak and are prohibited from engaging other residents or officials in dialogue.

**FIGURE 1 - MEASURES & TYPES OF CIVIC ENGAGEMENT**

<b>CIVIC &amp; COMMUNITY</b>	<b>CAMPAIGNS &amp; ELECTIONS</b>	<b>POLITICAL VOICE</b>
Community problem solving	Voting	Contacting officials
Volunteering for a community organizations	Influencing others to vote	Contacting media
Membership in a group/association	Campaign contributions	Protesting
Participation in fundraising efforts/charity	Volunteering for candidates or political organizations	Email/ online petitions
Running for political office	Canvassing	Boycotting
	Registering voters	

There are some questions about whether this form of participation has any influence over agenda setting or decision making. While critics have argued that there are limits to what members of the public can expect from participating in from structured public meetings (Checkoway 1981, Cole and Caputo 1984, Arnstein 1969), other scholars believe that public meetings serve an important democratic function (e.g., allowing citizens the opportunity to convey information to public officials, influence public opinion, attract media attention, set future agenda items, delay decisions, and communicate with other citizens). Participation in public meetings can also take forms other than public comment, including participation in town halls, participatory budgeting workshops and charettes. These types of meetings provide a different kind of interaction with those running the meeting and those participating, and have shown varying degrees of effectiveness in facilitating engagement (Brody et al. 2003, Laurian & Shaw 2009).

Participation in public meetings does not require does not require a high time commitment nor significant disposable income (Schlozman, Verba, and Brady 2012), and provides opportunities to participate for citizens and noncitizens alike (Barreto and Munoz 2003). At the same time, residents who have long commutes, work evening hours, lack access to child care, and encounter language barriers, are less likely to be able to participate in public meetings unless jurisdictions provide sufficient accommodations and support (Ramakrishnan et al. 2008)

### **CONTACTING PUBLIC OFFICIALS**

Contacting government officials is an important way for constituents to make their policy preferences known (Lee 2002), as well as for getting assistance in navigating government processes and procedures. Constituents can contact public officials through several means, including through text messages, emails, social media channels, phone calls, or sending letters (Gainous and Wagner 2013). Research indicates that, apart from voting, U.S. citizens are more likely to contact public officials than they are to engage in any other political act (Verba et al., 1995). Research also indicates that these acts of political participation tend to be influential, especially when they take the form of personal phone calls or written communications rather than mass mailing efforts sponsored by interest groups or issue campaigns (Wong et al., 2011, Taylor and Kent 2004). Finally, contacting public officials is also an important means of constituent service requests, and field experiment research has shown that members of Congress are more responsive to constituent requests from members of their own racial group than from others (Grose 2014).

Although contacting public officials is a relatively prevalent form of civic engagement, there are also several barriers and inequities. Some inequities emanate from disparities in civic skills, money, and time (Verba, Schlozman and Brady 1995); variations in the sense of empowerment and influence among different social groups (what political scientists refer to as internal efficacy—the sense that politics and policy are too



complicated to understand—and external efficacy, the sense that elected officials and government agencies are unresponsive to the person or group’s preferences or interests); and institutional/structural barriers such as lack of language support and access to particular means of contact (Brown 2014). Research has also shown that campaign contributions and donations can influence the level of access that constituents have with respect to contact with elected representatives (Kalla and Bookman 2015; Barber 2016; Stimson and Bartels 2009). These barriers prevent many constituents and constituent groups from accessing information and being able to communicate and act on it, thus reducing the ability of individuals to raise their voice regarding issues that impact them and their communities.

## **PARTICIPATING IN PROTESTS AND CONSUMER ACTIVISM**

Protests and consumer activism are two avenues that groups, particularly those who are marginalized, have used to create visibility to issues as well as influence policy. Protests are organized, public efforts to raise awareness on specific grievances (Van Leeuwen, Klaundermans, and Van Stekelenberg 2015), and are often specifically intended to challenge core aspects of policy systems (Meyer 2002). The most common goal is to either directly gain the attention of policymakers, or to indirectly through media coverage and public opinion (Voss and Bloemraad 2011). Consumer activism is typically marked by pledges or refusal to support businesses in order to gain leverage (Glickman 2009; Holt 2002). Notably, both are engagement mechanisms that tend to operate outside of standard political institutions and processes (Wong, Ramakrishnan, Lee, and Junn 2011), have high visibility, and are accessible regardless of citizenship status (Dobard et al. 2016).

When compared to voting, protesting is a much rarer mode of political participation that tends to have higher levels of participation among communities of color than among non-Hispanic Whites (Barroso and Minkin 2020). Comparative racial data on consumer activism is more rare, but findings from the Current Population Survey Civic Engagement Supplement indicate higher levels of boycott activity among non-Hispanic Whites than among communities of color (Dobard et al. 2016).

The history of peaceful protest among Black communities predates the 1960s Civil Rights Movement by several decades, with the 1917 silent protest parade in Harlem following the St. Louis massacre where White mobs killed dozens of Black residents and rendered thousands homeless (Barnes, 2008), and continues to the present with the Black Lives Matter movement (Wil-

liamson et al. 2018). Other communities of color have had more sporadic bursts in protest activity connected to immigrant rights (Voss and Bloemraad 2010, Knickmeyer 2018) and more recently against acts of racial violence targeting Asian American communities (Cohen 2021).

Participating in protests carries risks as well as benefits. Protests can harm participants if they turn violent, either through the actions of some protesters or through police repression. Violent protests can also spark backlash and reduce White support for civil rights causes (Wasow 2020). At the same time, protests have the power to change patterns of long-term and systemic discrimination linked to health and health outcomes (Williams, Neighbors, & Jackson 2003; Paradies 2006). Protests, given the right context, can also have a strong influence on community health by drawing attention to unjust conditions and practices. For example, protests foster greater attention to disenfranchised people in ways that affect the social determinants of health, like exposure to police violence. Policy changes catalyzed by protest activity can also push and confer positive identity. For example, providing access to the benefit from legal marriage and the rights and privileges that come with this recognition. Research also indicates positive mental health outcomes from increased recognition, including being considered a person worthy of respect and of equal value in society, and from reductions in social ostracism, which is linked to poor health outcomes (Link and Phelan 2006, Hatzenbuehler et al. 2013).

## **DISCUSSING POLITICS WITH FAMILY AND FRIENDS**

According to Mason (2018) discussing politics with family and friends is a rapidly growing form of civic participation, and one that is facilitated through the expanded use of social media. This type of participation can have significant effects on policy knowledge, political attitudes, and political behavior including voter turnout and vote choice. Decades of work indicate that people who report voting were more likely to talk about politics with other people (e.g., Campbell et al. 1960; Verba, Schlozman and Brady 1995; Huckfeldt et al. 2007). . Discussing politics tends to be especially critical for youth growing up in homes where their parents or caregivers discuss politics. Further, growing up in a household where discussing politics in homes with close family and friends has been shown to lead to greater involvement in political activities and civic activities over an individual’s lifespan (Verba et al. 1995, McIntosh, Hart, and Youniss 2007).

## EXPRESSING VIEWS ON POLITICS AND POLICY ON SOCIAL MEDIA

As social media use has expanded across generations and various demographic groups, so too has the expression of political views on social media. The use of social media for political expression has also expanded the tools available to study political behavior—in addition to self-reported survey data on participation, researchers are also able to approach the study of political expression through “big data” approaches that involve scraping content and analyzing them with respect to their timing, location, targets, and content. . This is particularly beneficial to understanding the dynamic relationship between political events, actions taken by political elites, news coverage, political expression and political behavior. Indeed, research indicates that engaging in politics through social media has contributed to an increase in voter turnout. (Settle et al. 2016, Bond et al. 2013).

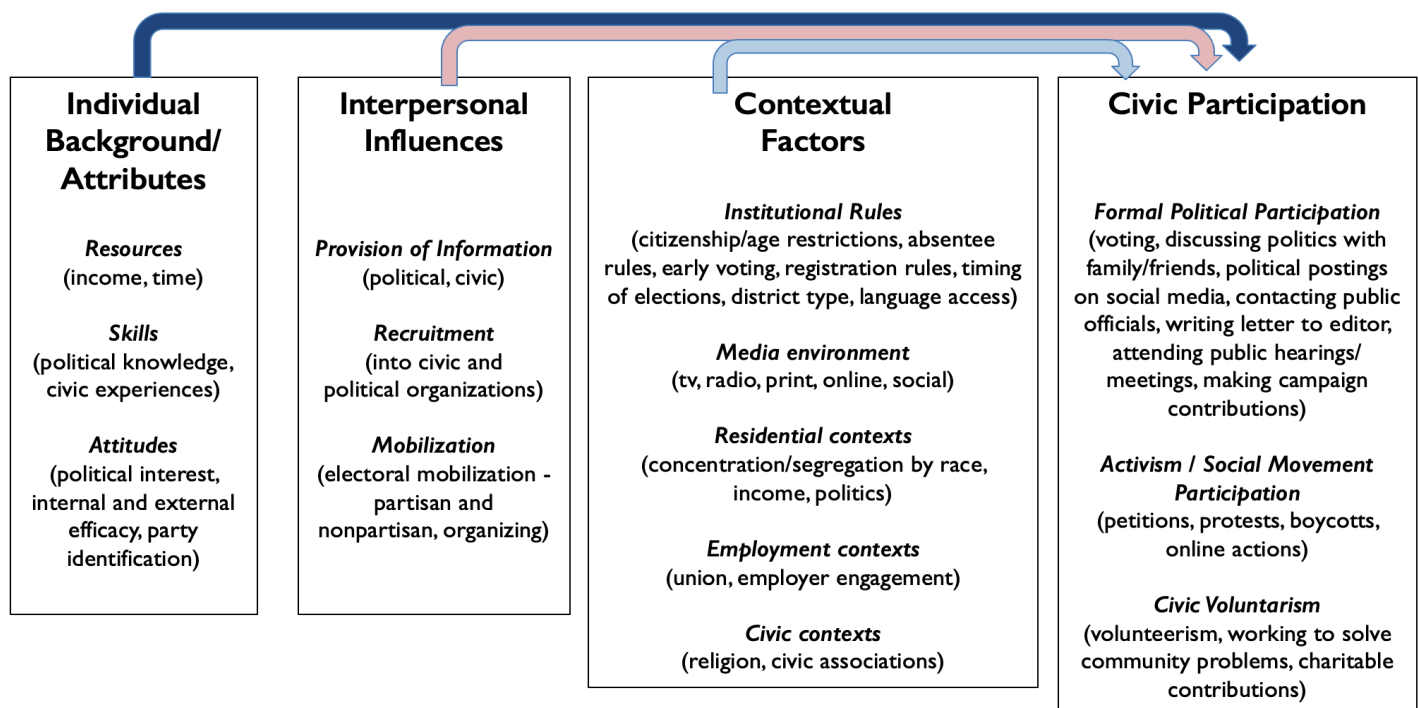
Over the last decade or so there have been many powerful political movements organized through social media. Perhaps the earliest prominent example was the Occupy Wall Street movement, which was initially given short shrift by traditional news media, but went viral through nascent social media platforms like Facebook and Twitter (DeLuca et al. 2012). Social media was also critical to the growth of Black Lives Matter, both with

respect to sharing viral videos of anti-Black violence and by enabling social movement activists to organize protest actions virtually and in person (Mundt et al. 2018). While organizing and expressing political views on social media tends to be greater among younger generations (Cohen et al. 2012), recent prominent examples also suggest heightened use of political participation and organizing via social media among white conservatives (Daniels 2018, Zuckerman 2019) as well as conservatives in Asian American communities (Poon et al. 2019).

## SIGNING PETITIONS

Signing petitions is an important form of political participation, and particularly so in many states in the American West that make extensive use of direct democracy mechanisms such as ballot initiatives and legislative referenda. In these states, citizens who are disproportionately represented among petition signers have more influence on agenda-setting than those who do not participate (Dobard et al. 2017). At the same time the modern-day version of signature gathering has moved far from its Progressive Era ideals of enabling grassroots challenges to corporate power, to becoming a form of legislative agenda-setting that is underwritten by millions of dollars spent on signature gathering by for-profit enterprises (Ellis 2003).

**FIGURE 2 - PREDICTORS OF CIVIC PARTICIPATION**



The inclusion of electronic petitions can also be a major mechanism in areas where surveys are cost-prohibitive (Dobard et al. 2017). Research on civic engagement in California has shown that while political affiliation bear a significant relationship to petition signing, the well-educated are more likely to sign them, and racial gaps in petition signing are significant, whether done in person or electronically (Ramakrishnan and Baldassare 2004, Dobard et al. 2017).

## WRITING LETTERS TO THE EDITOR

When compared to voting or contacting public officials, writing letters to the editor is a rarer form of civic participation that nevertheless has a long history in the United States (Hart 1970). According to Cooper and colleagues (2009), writing letters to the editor is both an important and poorly understood form of voluntary political participation. The opinion section of newspapers is one of the few outlets for members of the public to publish their opinions and have them read by civic leaders and other members of the public. Letters to the editor are typically authored by expert members of a community or a certain industry who express their beliefs and provide explanations and a call to action. This makes letters to the editor an important component of civic participation where a diversity of opinions are represented. Although anyone is free to write a letter to the editor, most newspapers restrict length and require the writer to allow the letter to be edited.

Although letters to the editor represent an important mode of civic participation, they are also marked by significant biases and barriers to participation. For example, Cooper and colleagues (2009) found that published letters to the editor were significantly older, more White, and more male than the voter population. Letters to the editor are also structured and controlled by gatekeepers of the public sphere (i.e., the editors who select which letters will be published). Editorial practices, by their very nature, have the capacity to advance, suppress, or warp the ways in which the public discusses politics (Wahl-Jorgensen 2001). Empirical research finds that editors privilege the type of letters that are considered “good” for the community. Additionally, many editors see this section of the paper as the “customer service” portion that can boost the newspaper’s financial success or uphold their reputation. So although this act of civic engagement holds great potential, there are barriers to individuals expressing real issues that may not be in alignment with the newspaper’s goals, and thus also barriers to individuals reading about others’ opinions.

## VOTER REGISTRATION

In the United States, many citizens over the age of 18 are entitled to vote in federal and state elections, but voting was not always a right for most Americans. To this day, voting is considered one of the most important indicators of the health of a democracy. Voting embodies the minimal expectations of citizenship and is necessary for the legitimacy and proper functioning of a representative democracy (Wong, Ramakrishnan, Lee, & Junn 2011). Additionally, voting is the most common type of political participation in the United States.

Before an individual is able to vote, however, they need to register to vote. Some voter registration requirements include having a physical address, form of photo identification, and proof of U.S. citizenship. Voters are also expected to re-register when they change addresses, and several states also purge voter registration records after periods of inactivity, meaning lack of voter turnout. Voter registration forms can also be difficult to fill out and are not standardized across states. Additionally, the mechanics and rules of voter registration are not typically covered in civic education (Kahne and Spote 2008, Flanagan and Levine 2010, Levine 2009). A growing number of Americans become disenfranchised every year due to barriers surrounding voter registration. These can be traced to issues such as simple errors made by individuals on registration forms and failure to re-register after moving to a new address, to institutional rules ranging from registration deadlines and party eligibility requirements to rules on the provision of identification and qualification based on citizenship and incarceration status (Weiser and Norden 2011). Voter registration tends to be lower among lower income individuals and those that rent versus own their own home (Ramakrishnan, 2005). These lower rates of registration are largely due to the fact that voter registration is not automatic in most states, and that it takes an additional cost and effort to do so (Ramakrishnan, 2005). More recently, some states have moved to make it easier for people to register (same day registration (see p.13, this report), automatic voter registration (p.19), and the pre-registration of 16/17 year olds (p.19)). At the same time, other states have moved in the opposite direction, making it more difficult to register (purging inactive voters from voter rolls (p.17), making it more difficult for the formerly incarcerated to register (p.17), etc.). This drastic difference between states has created a situation in which a person’s ability to exercise their right to vote is very much dependent upon which state they happen to live in.

## VOTING AND VOTER TURNOUT

Research indicates that voting is habit-forming, meaning that voting in one election increases the likelihood of voting in future elections (Coppock and Green 2015). Any act of political participation has the ability to provide someone with instrumental, expressive, and/or intrinsic benefits (Highton 2004). People who do vote report experiencing expressive or intrinsic benefits, such as the feeling that one has fulfilled their obligation and duty to society. Democratic theory suggests that voting in regular elections is a vital means for keeping elected officials accountable to both the desires and policy preferences of constituents (Wong, Ramakrishnan, Lee, & Junn 2011).

There has historically been a multitude of barriers in voter turnout, ranging from limited numbers of polling places and restricted voting times, to citizens receiving inadequate information, contact, and assistance with ballot technology and transportation to the polls. To overcome these barriers, partisan and nonpartisan efforts alike engage in Get Out The Vote (GOTV) campaigns to motivate, educate, mobilize, and assist voters to ensure effective turnout.

Political scientists have conducted a multitude of field experiments to gain insight into which GOTV initiatives are effective among various types of voters. Overall, in-person attempts at voter engagement tend to perform better than engagement by email or direct mail, personal phone calls work better than automated calls (often referred to as “robocalls”), and the quality of the message and the race of the messenger all matter (Gerber and Green 2017, Green et al. 2013).

Voting is important for a variety of reasons for Americans and people across the globe alike, and, even though one’s individual vote cannot elect any one official, the collective action of voting matters when it comes to electoral results. Low voter turnout, whether it is on a federal or local level, means that a limited group of voters are determining important issues. Similar to voter registration qualifications, health and healthy environments are not equally distributed throughout society (Nelson, Sloan, & Chandra 2019). On a macro level, voting can have effects on health and the outcomes of policy. If those with higher status have greater access to voting then they have a stronger influence over policies that promote health equity. This will benefit those with higher status while serving as a detriment to those with lower status in society, and the cycle continues (e.g., Navarro & Shi 2011) Voting can contribute to the political action that drives a broad band of policies affecting the social determinants of health, like housing, labor, and environment.

## INSTITUTIONAL RULES/BARRIERS

Institutional rules and barriers have received significant attention in recent years, particularly with respect to voter registration and voter turnout. Arguments about the effects of voting rules on voter fraud and voter turnout have generally fallen along partisan lines (Ansolabehere and Persily 2007), while there is a large scholarly consensus that voter fraud is relatively rare (Minnite 2010, Ahlquist et al. 2014, Cottrell et al. 2018) and mixed evidence on whether removing barriers significantly increases voter turnout (Gronke et al. 2007, Burden et al. 2014).

## EARLY VOTING

Early or convenience voting can be considered as relaxed administrative rules and procedures by which one casts a ballot at a time and place other than the precinct on Election Day (Gronke, Galanes-Rosenbaum, and Miller 2007). Reformers of voting laws tend to prioritize maximizing turnout as a primary goal. The way to accomplish this goal is by reducing barriers between voters and the poll. Arguments in favor of voting by mail, early in-person voting, and relaxed absentee requirements share this characteristic. While there are sound theoretical reasons, mostly drawn from the rational choice tradition, to believe that early voting reforms should increase turnout, the empirical literature has found decidedly mixed results. Some empirical research suggests that voting by mail is associated with a 10% increase in turnout, while other studies find smaller — but still statistically significant — increases in turnout associated with other convenience voting methods (Gronke et al. 2007). More recently, some states have passed laws restricting early voting due to the political backlash from unsubstantiated claims of voter fraud and irregularities in the 2020 Presidential election (Hinkle and Dybdahl, 2021), and the effects of these laws on turnout remain to be seen.

## VOTE BY MAIL RULES, OPTIONS

Absentee voting is one way to address low voter turnout, as absentee laws are designed to make voting easier. For instance, relaxing eligibility requirements for absentee voters and allowing permanent absentee status so that voters can cast their ballots by mail are reforms designed to make voting easier and in turn increase turnout. Initially, absentee laws were intended for those who would otherwise not be able to vote in person, like servicemembers away from home and, later, persons with disabilities and older persons. Over the last three decades, an increasing number of states have relaxed restrictions, to make absentee voting more convenient



for everyone (Karp and Banducci 2001), resulting in a substantial increase in the number of voters choosing to vote by mail or vote early in person.

Election administrators and policymakers have grappled with understanding the impact of vote-by-mail options on individual registration turnout. While all states technically allow voters to vote by mail under certain circumstances, more states across the nation are considering moving to (and move to) some form of vote-by-mail system, and are curious as to whether or not this does increase turnout (Bergman and Yates 2011). In 2011, Oregon was the only state that conducted all elections by mail. Before the pandemic struck the U.S., five states — Colorado, Hawaii, Oregon, Utah and Washington — had moved to conducting their elections using some type of vote-by-mail system. Sixteen required voters to provide reasons for those preferences before their applications were approved. For the 2020 presidential election, the restrictions were significantly relaxed with many states actively working to expand options for voting by mail in an attempt to minimize the spread of coronavirus and exposing people unnecessarily (Kamarck, 2020).

In a backlash to 2020's historic voter turnout and baseless claims of voter fraud and irregularities, several states have introduced bills aimed at making voting more restrictive. According to the Brennan Center for Justice, as of March 2021 legislators have introduced 361 bills with restrictive provisions in 47 states. Many include provisions that would restrict access to both mail and absentee voting (Baum et al., 2021). Many bills also would add voter ID requirements to the mail ballot process, restrict assistance in returning ballots, bar election officials from affirmatively mailing out ballot applications, and limit or eliminate mail ballot drop boxes (Hinkle and Dybdahl 2021).

## CITIZENSHIP AND VOTER ID REQUIREMENTS

Most state and local jurisdictions restrict voting to citizens of the United States. This restriction might appear self-evident and universal, but there are certain localities in the country that do not require voters to be citizens of the United States (Hayduk 2004). Indeed, from the mid-1800s through the early 1990s, several states in the Midwest allowed White declarant citizens (i.e., those who had declared their intention to apply for U.S. citizenship) to vote in state, local, and occasionally, federal elections (Raskin 1992). Most of these rights disappeared after World War I, and today the only jurisdictions allowing non-U.S. citizens to vote are a handful of municipalities and school districts (Hayduk and Coll 2018). Indeed, several states, including Arizona, Kan-

sas, and Alabama, now require documentation of U.S. citizenship such as birth certificates or certificates of naturalization in order to obtain state voter registration (Colbern and Ramakrishnan 2020).

The debate over voter identification often comes down to how to balance the goals of access and integrity (Ansolabehere 2009). Strict authentication procedures, such as photographic identification and proof of citizenship, effectively ensure that voters are legally allowed to do so. However, these same procedures can create barriers to voting for those who are in fact eligible. Effectively, while many argue the reasonableness of requiring identification to address eligibility and ensure that voters are in the right polling place, others point to historical inequities and the use of disqualification via voter ID rules for political purposes (Ansolabehere 2007).

Voter ID laws have been challenged in court. The typical argument against voter ID laws is that they place undue burden on voters and have discriminatory consequences; those in favor point to their role in ensuring the legitimacy of elections. As a comparative case in point, the State of Missouri found a photo identification law to be unconstitutional based on its state constitution (Harwin 2013, Montgomery 2007) and the Supreme Court struck down Arizona's citizenship ID law in 2013 as it applied to voter registration for federal offices (Arizona et al. v. Inter Tribal Council of Arizona, Inc. et al. 2013), but left the door open for citizenship documentation requirements for registration for state and local races, which Arizona subsequently implemented (Peters 2014). The U.S. Supreme Court allowed strict voter ID laws to stand in (Crawford et al. vs. Marion County et al. 2008) but federal courts have also left the door open for potential further challenges to identification laws in other contexts (Ansolabehere 2009).

## VOTE REGISTRATION PURGING RULES

The National Change of Address (NCOA) program through the US Postal Service is used by states to identify people who have moved. This system processes about 40 million permanent change-of-address notices yearly, with daily updates. The National Voter Registration Act (NVRA; 1993) requires that individuals who move within the same county be automatically re-registered at their new address and their old address and registration purged from the database. The NVRA also incorporates various "fail-safe" voting procedures, which direct states to allow voting, at either their old or new precincts. In 1992, Kentucky and Louisiana used NCOA to purge movers, and did not incorporate re-registration into the process (Mullins, 1992). That same

year California used NCOA to both purge movers and reregister movers within the same county (Wolfinger and Highton, 1995). In total, all but nine states purged registrants who had not voted. In some cases this was due to no vote having been cast in a two-year period, whereas others put the cutoff at up to eight years. Notably, research has shown that purging has a modest negative effect on turnout (Wang 2012), although community mobilization against voter purges can help increase voter turnout in the short term (Biggers and Smith 2020).

## FELON / EX-FELON VOTING RULES

Voting rights for felons and ex-felons tend to vary substantially from state to state. For example, formerly incarcerated individuals living in states like Vermont or Maine, experience no voter disenfranchisement for people with criminal convictions (Brennan Center for Justice, 2021). In contrast, other states like Alabama and Florida, have permanent disenfranchisement for at least some people with criminal convictions, unless the government specifically approves their restoration of voting rights (Brennan Center for Justice, 2021). According to the National Conference of State Legislatures (2021), currently in 48 states convicted felons can not vote while incarcerated, but could regain the right to vote upon their release or at some point thereafter. Generally, governors across the United States may exercise the executive authority to

Felony disenfranchisement has a long tradition in the United States, with opinions about it falling mostly amongst party lines (Manza et al. 2004). In recent years, more states have moved towards reinstating voter eligibility for people with felony histories. The ACLU estimated that disenfranchisement laws throughout the country prevent 5.85 million Americans from voting each year (ACLU, 2021). Political organizations and activists across the ideological spectrum hotly debate how and when to restore voting rights, and to whom get that right restored (Meredith and Morse, 2015). Unfortunately, these persistent disenfranchisement policies have a disproportionate impact on marginalized groups, specifically Black Americans (Jaffe, 2021).

## AUTOMATED VOTER REGISTRATION

There are several barriers, especially for communities of color, to voter registration (Mann and Bryant, 2020; Hall, 2013). Similarly, voter registration can stand as a significant obstacle for disenfranchised communities to access the ballot box (Merivaki and Smith, 2020). Generally, an Automatic Voter Registration system (AVR) means that eligible voters are automatically regis-

tered to vote whenever they interact with government agencies (e.g., departments of motor vehicles). In this system, eligible voters would be registered by default, although they may request not to be registered.

The goal of AVR is to streamline voter registration, with the hope of making it simpler and more efficient for eligible citizens to register to vote. AVR would allow eligible citizens to be automatically registered to vote or have their information updated, unless they opt-out (Brennan Center for Justice, 2019).

The benefits of AVR can extend beyond increasing the number of people registering (McGhee and Romero, 2019; Gujar 2020; Griffiths, 2019). The policy keeps voter rolls more accurate by creating a constant stream of updates between registration agencies and election officials and by reducing the odds of mistakes caused by processing paper registration forms by hand. Cleaner rolls reduce errors that cause delays on Election Day and prevent eligible voters from casting regular ballots. AVR also lowers costs.

## PRE-REGISTRATION FOR 16- AND 17 YEAR-OLDS

Pre-registration is a process that allows individuals younger than 18 years of age to register to vote, so they are eligible to cast a ballot when they reach 18, the voting age for all state and federal elections. Typically, a pre-registrant will fill out an application and be added to the voter registration list with a “pending” or “pre-registration” status (Cherry 2011). Upon turning 18, the individual is added to the voter registration list and able to cast a ballot.

Pre-registration states vary in terms of their registration age limits. Some allow 16-year-olds to pre-register, and others allow 17-year-olds to pre-register. The remaining pre-registration states do not establish a specific pre-registration age limit. Instead, these states allow youth to register to vote before the age of 18, provided that they will be of voting age by the time of the next general election.

Fourteen (National Conference of State Legislatures, 2019) states across the country allow sixteen year olds to pre-register to vote, while another four allow seventeen year olds to pre-register. Voter pre-registration was designed to increase access to the voting process. Recognizing younger eligible voters were not registering to vote, states adopted legislation that would foster a sense of civic duty before reaching adulthood. Research has noted people form their civic identity through their adolescent socialization, thus preparing students to

become civic participants requires aiding and assisting them through steps such as this one. Various organizations committed to advancing civic participation have also noted the benefits that come from pre-registration.

Research has shown pre-registration has positive effects on political participation. There is evidence that suggests voting is habit forming and when introduced in adolescent socialization (Gerber, Green, and Shachar 2003). Individuals are more likely to continue voting in their adulthood. One study (Holbein 2014) showed that pre-registration increased voter turnout amongst young residents, further providing evidence for the positive benefits of early registration. Those who register early report having greater self efficacy in regards to voting. States that adopted pre-registration have seen an increase in their voter roll as well.

### SINGLE-VOTE VS. RANKED-CHOICE VOTING

Most US elections operate under a system called plurality voting, which effectively results in a winner-take-all situation under a single-vote scenario that only allows one choice of candidate. In comparison, ranked-choice voting (RCV) means that voters are allowed to rank candidates in order of preference rather than vote for just one person (Anest 2009). Under this type of preferential voting, if the first-choice candidate does not get enough votes to win the election, then the second choice will be counted toward determining who wins, and so on until a majority is decided. This system is also often referred to as “single-transferable voting” because voters’ choices can be transferred from losing candidates to others that remain viable until a majority winner is produced (Kimball and Anthony 2016). RCV is also often known as “instant runoff voting” because it precludes the need for a runoff election when no candidate achieves majority support, and research indicates that it tends to boost voter turnout for the winning candidate by avoiding runoff elections, which historically tend to have low turnout (Kimball 2016).

### AT LARGE VS. DISTRICT ELECTIONS

There has been ongoing debate about the relationship between election structures and voting patterns. At-large elections are based on a system in which voters are tasked with electing individuals to represent an entire population. In comparison, district-based systems are based on a smaller geographic unit. Whereas the majority of elections used to be at-large, there has been a growing shift to do a combination of the two.

When considering the link between structure and representation, district elections are often thought to provide

greater opportunities for broader representation (Welch 1990; Fraga, Meier, and England 1986; Karnig and Welch 1982), though questions remain about to what extent this pattern remains true for various types of office, and to what degree have at-large elections negatively impacted minorities and other underrepresented groups (Welch and Karnig 1978). The Voting Rights Act of 1965 has often been used as a tool to move from at-large to district-based or mixed systems, as it can address the issue of residential segregation and the tendency of at-large systems to under-represent minorities (Bezdek, Billeaux, and Huerta 2000). Under Section 5 of the Voting Rights Act, the Department of Justice also had the power to review changes from district to at-large systems under a system of pre-clearance for jurisdictions that had a historical legacy of voting rights violations prior to 1965. In 2013, however, the Supreme Court struck down Section 5 as unconstitutional in its decision on *Shelby County, Alabama v. Holder*, paving the way for Southern jurisdictions to shift away from districts without requiring pre-authorization from the U.S. Department of Justice.

While district systems in municipal elections are generally seen as improving the voting rights of racial minorities, the drawing of Congressional and state legislative districts can dilute minority voting power. In particular, the proportion of seats in the legislature belonging to a party may be very different from the proportion of voters supporting that party in the overall population; this is known as the “referendum paradox” (Nurmi 1999). Further, the disparity between the popular vote and the district vote has been a source of contention in US elections, by redistricting constituencies. Called gerrymandering, this political process of manipulating electoral district boundaries creates a constituency that favors one political party over the other. Because political parties have manipulated elections (Issacharoff 2002; Erikson 1972), the US Voting Rights Act of 1965 includes several provisions that require change in congressional districts in several states to be approved by federal authorities (Schuck 1987). Moreover, such a discrepancy is caused not only by gerrymandering, but is built into district-based mechanisms.

### MEDIA

Media can have a profound role in how the public views policy, political parties, and other components of public interest. From newspapers to social networking sites, news media plays a crucial role in our civic engagement and knowledge. Media sources tasked with providing relevant information hold a great responsibility and research has shown a symbiotic relationship between

public opinion and media (McCombs and Shaw 1972). The increasingly complicated role of media in framing and pushing out narratives has had a growing impact on the public's perception of issues (Nelson, Clawson, and Oxley 1997), but also the public's decision to either engage or disengage with public discourse (Reese Gandy and Grant 2001).

Media plays an important role in an individual's understanding of politics. While Americans are less reliant on television for their news (Matsa, 2018), it is still a dominant source of information. Consumption of television news varies by age, with younger adults being less reliant on this source. Young adults tend to use social media as their primary source of news, though use by older adults is steadily increasing (Pew Research, 2021). Boydston (2013) found that news media occupies two general modes when it relates to politics. The first is alarm mode, which is used for breaking stories and is usually initiated when introducing a new policy. The second is patrol mode, which is used for a more in-depth understanding of policy implications. Both are used by political parties to gain information about how the public may receive new legislation.

## MOBILIZING CONTEXTS

Political mobilization is a group of activities that intend to motivate masses of organized and unorganized participants to express themselves and to undertake a particular political action (Bond et al. 2012). Political parties, interest groups, and community social groups are all considered agents of mobilizations. They occupy an important role in organizing individuals for collective action. Information persuasion and electoral accountability are the primary goals of mobilizing. It enhances the political process because it brings people together with similar interests by making them a part of the process of holding elected officials accountable.

As noted by Green and Schwam-Baird (2016), the publication of Stephen J Rosenstone and John Mark Hansen's *Mobilization, Participation, and Democracy in America* in 1993 marked an important shift in the study of political participation. Previous research tended to focus on the differences in class and how indicators like education and income predict political participation (Verba and Nie, 1972; Gosnell, 1927). In comparison, research done by Rosenstone and Hansen (1993) examine the interpersonal influences that induce people to take action. For example, citizens participate based on the personal costs and benefits of doing so, but they also participate when politicians mobilize them. Additionally, politicians are often strategic in deciding whom to mobilize and when (Gerber and Green, 2017).

Rosenstone and Hansen (1993) found that despite the method of participation, white/wealthy/educated people participate far more than their share, and that as more people participate, participation becomes less biased.

Political mobilization can also have direct impacts on policy and policy agendas. For example, Lee (2002) challenges the conventional view that public opinion is solely shaped by elites. Instead, he argues that grassroots organization, community organizations, and the power of the mobilization of "ordinary" people can push demands for social change into the policy realm (Lee 2002).

## COMMUNITY ORGANIZING

Community organizing can be described as the "coordination of cooperative efforts and campaigning carried out by local residents to promote the interests of their community." (Alinsky 1946). In practice, community organizing can be a powerful tool for rallying mass momentum for social change and Han, McKenna, and Okakawa (2021) argue that this type of grassroots organizing and collective action has always been fundamental to American democracy. Community organizing helps marginalized groups get a seat at the table before important decisions are made (Bobo 2001), and can aid in the development of a robust and organized local democracy (Shragge 2013).

In terms of youth, participation in community organizing can have an impact on education and civic participation later in life. For example, Rogers and Terriquez (2013) found that youth organizing alumni were more likely than comparable peers to enroll in four-year colleges and universities and engage in various civic activities in early adulthood. They also found that alumni of youth organizing groups were much less likely than their peers to be out of school and unemployed. Additionally, Rogers et al. (2008) notes that the parents of youth, especially immigrant youth, often participate in local community organizing and engagement when their children are involved in school.

Another method for community organizing is Integrated Voter Engagement or (IVE). In fact, some research has shown that nonpartisan IVE is among the most effective ways to increase voter turnout (Lin, Ito, Wander, and Pastor, 2019; Paschall, 2016). Groups that utilize IVE train local community members to reach out to their peers, in continuous and ongoing efforts. This work includes activities like adding new people to voter registration rolls, educating voters about election issues, and helping to combat voting barriers like misinformation and intimidation. In addition, IVE groups work to have



long-term impacts by cultivating local leaders and engaging more people in shaping public policy decisions that ultimately can affect their lives.

## FAITH-BASED ORGANIZING

Religion can be a source of civic engagement (Uslaner 2002). An early observer of civic engagement in the United States, Alexis de Tocqueville saw religious values as a primary motivating factor to put self-interest aside in favor of communal work. In addition, research on the Black Civil Rights Movement identified the central importance of churches in helping to recruit, educate, and mobilize members to register, vote, and engage in protests and other acts of civil disobedience (Morris 1986, Calhoun-Brown 2000).

Religious institutions continue to play an important role in civic participation and political participation today. Clergy tend to motivate people into religious and social action, while active membership in churches or synagogues helps members practice and develop skills that translate into civic engagement, like letter writing and organizing (Verba et al. 1995). Individuals who donate to charities believe that it is their moral obligation to do so, and tie their beliefs to religious ideals (Uslaner 2002). Although religion might inspire individuals to actively participate in their community, it may also covertly restrict those of some religious faiths to engage only with those of their own faith or similar demographics. Additionally, people engaging in religious-based efforts might be wary of engaging with others who don't share their own principles.

## LABOR ORGANIZING

Labor unions have long been noted as important political actors, mobilizing voters, shifting members' attitudes, and influencing representation and economic inequity (Macdonald 2019). For example, Radcliff and Davis (2000) found that aggregate rates of turnout were affected by labor movement strength. In fact, when analyzing each state, they found that the greater the share of workers represented by a union, the greater the state's voter turnout. They argue that this effect occurs indirectly through labor's ability to move the ideological position of parties appealing to low- and middle-SES citizens farther to the left.

Labor coalitions and union participation in election activities can also result in a large number of nonunion worker votes (Frymer 2011). That level of influence is possible because of the high level of engagement union members typically have with politics. Union members are more likely to vote than non-union members (Flavin

and Radcliff 2011). Union members in general also tend to be more politically savvy than nonunion voters, and are usually better informed of where candidates and parties stand on key issues (Macdonald 2019). These high levels of knowledge and engagement can have a serious effect on mobilization, especially during an election. Although labor organizers work together to educate others and promote increased voter turnout, their success can be highly dependent upon local contexts and situations (DeGraauw et al. 2020).

## CONCLUSION

Participation clearly goes well beyond voting. Indicators have been standardized for many of these, and the advent of online options to engage has created new means of participation and new measures. There are also a variety of ways in which engagement can become more inclusive, such that more individuals have greater opportunities to voice their concerns as well as indicate their preferences to policymakers as well as to their communities and peers. In particular, the increasing understanding of the role social determinants of health plays in overall well-being sheds timely light on the importance of civic engagement - but also the perception of individual and collective agency - to community health. The field continues to evolve.

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## APPENDIX A - EXISTING INDICATORS & DATA SETS

### AMERICAN NATIONAL ELECTION STUDIES

The American National Election Studies (ANES) are academically-run national surveys of voters in the United States, conducted before and after every presidential election. ANES seeks to provide informed social science research on why people vote, election outcomes, and other questions regarding political behavior.

Version Date: Sep 19, 2020

Principal Investigator(s): University of Michigan; Stanford University; List of Principal Investigators

### Demographics

- Race, Gender, Sexuality, Ethnicity, Nativity, Age, Education, Income
- State, City, Regional characteristics, housing density

### Voter Registration

- Variables
  - V045018X: C3. Vote and registration status
    - Question: Summary: vote and registration status
  - V045019: C4. Is R registered in county of residence
    - Question: Your residence is located in {PRELOADED COUNTY}. Are you registered to vote in {PRELOADED COUNTY}?

### Voting and Voter Turnout

- Variables
  - Did R vote 2000?
    - Question: In 2000 Al Gore ran on the Democratic ticket against George W. Bush for the Republicans and Ralph Nader as the Reform party candidate. Do you remember for sure whether or not you voted in that election? INTERVIEWER INSTRUCTION: ----- {DO NOT PROBE 'DK' RESPONSE}
  - V043003: A1a1. Recall of last President vote choice
    - Question: Which one did you vote for?
  - V045023: C5. Did R vote on election day or before
    - Question: Did you vote on election day -- that is, November 2nd 2004, or did you vote at some time before this?
  - V045018: C2. Nonvoter: registered to vote in this election
    - Question: Were you registered to vote in this election?

- V045026: C6a. Voter: R's vote for President
  - Question: Who did you vote for?
- V045026: C6a. Voter: R's vote for President
  - Question: Who did you vote for?
- V045017A : C1a. Did R vote (standard version)
  - Question: In talking to people about elections, we often find that a lot of people were not able to vote because they weren't registered, they were sick, or they just didn't have time. How about you--did you vote in the elections this November?
- V045017B: C1b. Did R vote (experimental version)
  - Question: In talking to people about elections, we often find that a lot of people were not able to vote because they weren't registered, they were sick, or they just didn't have time. Which of the following statements best describes you: One, I did not vote (in the election this November); Two, I thought about voting this time - but didn't; Three, I usually vote, but didn't this time; or Four, I am sure I voted?
- V045024: C5a1. Did R vote in person or by absentee ballot
  - Question: Did you vote in person or by absentee ballot?
- V045243: Q8. CSES Who people vote for makes a difference
  - Question: Now turning to page 15 in the booklet. Some people say that no matter who people vote for, it won't make any difference to what happens. Others say that who people vote for can make a difference to what happens. Using the scale on this card, (where one means that voting won't make a difference to what happens and five means that voting can make a difference), where would you place yourself?
- V045025: C6. Voter: did R vote for President
  - Question: How about the election for President? Did you vote for a candidate for PRESIDENT?
- V045032X: C7bx1. Summary: vote for party House of Representatives
  - Question: Who did you vote for? / Who did you vote for? Which party was that? INTERVIEWER INSTRUCTION: -----  
----- [IWER: If respondent answers with a number such as 'the first one' be sure to ask for the candidate name, as the order of the names may be different on your screen.]/
- V045037X: C8bx. Summary: Did R vote for Senate
  - Question: {INTERVIEWER: SHOW BALLOT CARD} How about the election for the United States Senate? Did you vote for a candidate for the U.S. SENATE?/ How about the election for the United States Senate? Did you vote for a candidate for the U.S. SENATE? INTERVIEWER INSTRUCTION: -----  
----- {INTERVIEWER: DO NOT SHOW BALLOT CARD}
- V043202: Q1. Does R think will vote this November
  - Question: (Not looking at the booklet now.) So far as you know now, do you expect to vote in the national elections this coming November or not?
- V045031X: C7bx. Summary: Did R vote for House of Representatives
  - Question: {INTERVIEWER: SHOW BALLOT CARD} Here is a list of candidates for the major races in this district. How about the election for the House of Representatives in Washington. Did you vote for a candidate for the U.S. HOUSE OF REPRESENTATIVES?/ How about the election for the House of Representatives in Washington. Did you vote for a candidate for the U.S. HOUSE OF REPRESENTATIVES? INTERVIEWER INSTRUCTION: -----  
-- [IWER: If respondent answers with a number such as 'the first one' be sure to ask for the candidate name, as the

order of the names may be different on your screen.}/ {INTERVIEWER: DO NOT SHOW BALLOT CARD}}

- V045027: C6b. Voter: how long before election decision on Pres vote
  - Question: How long before the election did you decide that you were going to vote the way you did? INTERVIEWER INSTRUCTION: ----- {PROBE IF NECESSARY: WOULD THAT HAVE BEEN A FEW DAYS BEFORE THE ELECTION, A WEEK, OR LONGER THAN THAT?}
- V045246: Q9a. CSES Party of Pres vote -party performance past 4 years
  - Question: You've indicated that you voted for the >NAME OF MAJOR PARTY< Presidential candidate/Presidential candidate from the >NAME OF OTHER PARTY< party] in 2004. How well has the [>NAME OF MAJOR PARTY< party/ that party] performed over the past four years? Has it done a very good job? a good job? A bad job? A very bad job? INTERVIEWER INSTRUCTION: ----- {INTERVIEWER: DO NOT PROBE DON'T KNOW}

SOMEWHAT, NEITHER AGREE NOR DISAGREE, DISAGREE SOMEWHAT, or DISAGREE STRONGLY with this statement?)

- Did you go to any political meetings, rallies, speeches, dinners, or things like that in support of a particular candidate?
  - Yes, no
- During the past 12 months, have you contacted or tried to contact a member of the U.S. Senate or U.S. House of Representatives, or have you not done this in the past 12 months?
  1. Have done this in past 12 months
  2. Have not done this in the past 12 months
- Which of these did you contact? A U.S. Senator from your state, a U.S. Senator from another state, the member of the U.S. House of Representatives from your district, or another member of the U.S. House of Representatives?
  - {ENTER ALL THAT APPLY}
  - 1. U.S. Senator from Respondent's state
  - 2. U.S. Senator from another state
  - 3. U.S. House Representative from Respondent's district
  - 4. Another member of the U.S. House of Representatives
- Discussing Politics with Family and Friends
  - V045010: B3. Campaign: R try to influence vote of others
    - Question: We would like to find out about some of the things people do to help a party or a candidate win an election. During the campaign, did you talk to any people and try to show them why they should vote for or against one of the parties or candidates?
  - V045235: Q1a. CSES Did R talk to others to persuade how to vote
    - Question: Here is a list of things some people do during elections. Which if any did you do during the most recent

### Other Types of Civic Participation

- Consumer Activism (Boycotting and Buycotting)
  - During the past 12 months, have you joined in a protest march, rally, or demonstration, or have you not done this in the past 12 months?
- Contacting Public Officials
  - V045167: J8b. Contacted public official to express views
    - Question: During the PAST TWELVE MONTHS, have you telephoned, written a letter to, or visited a government official to express your views on a public issue?
  - V045201: M2a. Public officials don't care what people think
    - Question: (Looking at page 10 in the booklet) 'Public officials don't care much what people like me think.' (Do you AGREE STRONGLY, AGREE

election? ...talked to other people to persuade them to vote for a particular party or candidate? INTERVIEWER INSTRUCTION: ----- {INTERVIEWER: DO NOT PROBE DON'T KNOW}

- V045235A: Q1a1. CSES How often R talked to others about how to vote
  - Question: How often did you do this? Would you say frequently? Occasionally? Rarely? INTERVIEWER INSTRUCTION: ----- {INTERVIEWER: DO NOT PROBE DON'T KNOW}
- Expressing Views on Politics and Policy on Social Media
  - During the past 12 months, have you ever posted a message on Facebook or Twitter about a political issue, or have you never done this in the past 12 months?
- Making Campaign Contributions
  - V045014: B7. Contributions: R contribute to candidate
    - Question: During an election year people are often asked to make a contribution to support campaigns. Did you give money to an INDIVIDUAL CANDIDATE running for public office?
  - Did you give money to a political party during this election year?
    - To which party did you give money?
    - Did you give any money to any other group that supported or opposed candidates?
- Protests
  - V045169: J8d. R taken part in Protest or march in last year
    - Question: Aside from a strike against your employer, in the past twelve months, have you taken part in a protest, march, or demonstration on some national or local issue?
  - V045267: Q25b. CSES Has R taken part in protest or demonstration
    - Question: (Over the past five years or so, have you done any of the following things to express your views about something the government should or should not be doing?) ...Taken part in a protest, march or demonstration? INTERVIEWER INSTRUCTION: ----- {INTERVIEWER: DO NOT PROBE DON'T KNOW}
- Signing petitions
  - During the past 12 months, have you signed a petition on the Internet or on paper about a political or social issue, or have you not done this in the past 12 months?
- Working with others to solve community problem
  - During the past 12 months, have you worked with other people to deal with some issue facing your community?
  - During the past 12 months, did you attend a meeting about an issue facing your local community or schools?
- Writing Letters to the Editor
  - Variables (N/A)
- Volunteerism
  - V045171:J10. Able to devote time to volunteer work in last 12 months
    - Question: Many people say they have less time these days to do volunteer work. What about you, were you able to devote any time to volunteer work in the last 12 months or did you not do so?
    - Did you do any (other) work for one of the parties or candidates?
    - Many people say they have less time these days to do volunteer work. What about you, were you able to devote any time to volunteer work in the past 12 months or did you not do so?

### Predictors of Participation

- Questions
  - As you know, the political parties try to talk to as many people as they can to get them to vote for their candidate. Did anyone from one of the political parties call you up or come around and talk to you about the campaign this year?



- Other than someone from the two major parties, did anyone (else) call you up or come around and talk to you about supporting specific candidates in this last election?
- During the campaign this year, did anyone talk to you about registering to vote or getting out to vote?
- We would like to find out about some of the things people do to help a party or a candidate win an election.
- During the campaign, did you talk to any people and try to show them why they should vote for or against one of the parties or candidates?
- Did you wear a campaign button, put a campaign sticker on your car, or place a sign in your window or in front of your house?

usually call this a “Green Card” but the color can also be pink, blue, or white.”] 1 YES 2 NO 3 APPLICATION PENDING -7 REFUSED -8 DON'T KNOW

## CALIFORNIA HEALTH INTERVIEW SURVEY (CHIS)

The California Health Interview Survey (CHIS) is the nation’s largest state health survey and a leading source of data on Californians as well as on the state’s various racial and ethnic groups. Policymakers, researchers, health experts, members of the media and others utilize CHIS for credible and comprehensive data on the health of Californians.

Principal Investigator: Dr. Ninez Ponce, University of California Los Angeles for Health Policy Research in Collaboration with the California Department of Public Health

Version: Adult, Online, 2019

### Demographics

- Race, Gender, Sexuality, Ethnicity, Nativity, Age, Education, Income
- State, City, Regional characteristics, housing density

### Voter Registration

- Variables (N/A)
  - Are you a citizen of the United States? 1 YES 2 NO 3 APPLICATION PENDING -7 REFUSED -8 DON'T KNOW
  - ‘QA19\_G5’ [AH40] - Are you a permanent resident with a green card? Your answers are confidential and will not be reported to Immigration Services. [IF NEEDED, SAY: “People

### Voting and Voter Turnout

- ‘QA19\_P1’ [AP73] - How often do you vote in presidential elections? 01 Always 02 Sometimes, or 03 Never? -7 REFUSED -8 DON'T KNOW
- QA19\_P2’ [AP74] - How often do you vote in state elections, such as for Governor or state proposition? 01 Always 02 Sometimes, or 03 Never? -7 REFUSED -8 DON'T KNOW
- QA19\_P3’ [AP75] - How often do you vote in local elections, such as for Mayor or school board? 01 Always 02 Sometimes, or 03 Never? -7 REFUSED -8 DON'T KNOW
- ‘QA19\_P4’ [AP80] - For the most recent election that you did not vote in, what is the main reason why you did not vote? 01 I dislike politics 2 Voting has little to do with the way real decisions are made 03 I did not like any of the candidates on the ballot. 04 My one vote is not going to affect how things turn out. 5 I was not informed enough about the candidates or issues to make a good decision. 6 I did not see a difference between the candidates or parties. 7 I was not interested in what is happening in government. 8 I just did not think about doing it. 9 I forgot 10 I had to work 11 I did not have transportation 91 Other (Specify: \_\_\_\_\_) -7 REFUSED -8 DON'T KNOW

### Other Types of Civic Engagement

- Consumer Activism (Boycotting and Buycotting)
  - Variables ((N/A)
- Contacting Public Officials
  - Variables (N/A)
- Discussing Politics with Family and Friends
  - Variables
- Expressing Views on Politics and Policy on Social Media
  - Variables (N/A)
- Making Campaign Contributions
  - Variables (N/A)
- Protests
  - Variables (N/A)
- Signing petitions

- Variables (N/A)
- Writing Letters to the Editor
  - Variables (N/A)
- Volunteerism
  - Variables (N/A)

## COLLABORATIVE MULTI-RACIAL POST-ELECTION SURVEY (CMPS), 2008

The 2008 Collaborative Multi-racial Post-election Survey (CMPS) is a national telephone survey of registered voters, with comparably large samples of African Americans, Asian Americans, Latinos, and Whites. The telephone survey, conducted between November 9, 2008 and January 5, 2009, was the first multiracial and multilingual survey of registered voters across multiple states and regions in a presidential election.

Version Date: Aug 21, 2014

Principal Investigator(s): Matt A. Barreto, University of Washington-Seattle; Lorrie Frasure-Yokley, University of California, Los Angeles; Ange-Marie Hancock, University of Southern California; Sylvia Manzano, Latino Decisions; S. Karthick (Subramanian Karthick) Ramakrishnan, University of California, Riverside; Ricardo Ramirez, University of Notre Dame; Gabriel Sanchez, University of New Mexico; Janelle Wong, University of Maryland

### Demographics

- Race, Gender, Sexuality, Ethnicity, Nativity, Age, Education, Income
- State, City, Regional characteristics, housing density

### Voter Registration

- Variables
  - Asked to register to vote
    - 20. [ALL] Over the past 12 months, were you asked to register or to vote by a candidate for office or a person working for a candidate, a representative of a political party, or someone from an organization working in your community?

### Voting and Voter Turnout

- Voted on Election Day
  - 7. [ALL] In talking to people about elections, we often find that people are too busy, did

not have enough time to vote, or just forgot it was Election Day. How about you? If we checked the official voter statistics, would it say that you voted in the Presidential election on November 4th, or did you not get around to voting this year?

- Presidential vote, 2008
  - 8. [IF 7=1] In the 2008 election for President, did you vote for [READ AND ROTATE \_Republican John McCain, \_Democrat Barack Obama] or someone else?
- Congressional vote, 2008
  - 9. [IF 7=1] And how about in the election for the House of Representatives in your district. Did you vote for [READ AND ROTATE: The Republican candidate OR the Democratic candidate] or some other candidate for U.S. Congress?
- Senate vote, 2008
  - 10. [IF 7=1] And this year, [STATE NAME] had a U.S. Senate election. Did you vote for [READ AND ROTATE: The Republican candidate OR the Democratic candidate] or some other candidate for U.S. Senate?
- Voting method
  - 7a [IF 7=1] And did you vote by mail, vote early, vote by absentee ballot, or did you vote at the polls on Election Day November 4th
- Ethnic specific ads among Whites
  - 29B. [IF WHITE] In the weeks leading up to the November 4th election, did you see any campaign commercials by the presidential candidates specifically addressing [ASIAN/LATINO/BLACK] voters?
- Ethnic specific ads among non-white
  - 29A. [IF S3=NON WHITE] In the weeks leading up to the November 4th election, did you see any campaign commercials by the presidential candidates specifically addressing [INSERT ETHNIC GROUP] voters?
- Follow news about 2008 election
  - 1. [ALL] Thinking back to October and November of this year, how closely did you follow news about the 2008 presidential race? Did you follow the race very closely, somewhat closely, not too closely, or not closely at all?

- Ideology
  - D12. When it comes to politics, do you usually think of yourself as a Liberal, a Conservative, a Moderate, or have you not thought much about this? [If “Liberal/Conservative” reply, WAIT AND ASK: Would you call yourself very [Conservative/Liberal] or not? If “Moderate” reply, ASK: Would you say that you are slightly Liberal, slightly Conservative, or neither?]
- Party
  - Closer to Republican or Democratic party
    - 14b. [IF 14 = 3 - 99] If you had to pick, do you think of yourself as closer to the Republican or Democratic Party?
- Party ID 1
  - 14. [ALL] Generally speaking, do you think of yourself as a [ROTATE: Republican, Democrat, Independent] some other party, or do you not think in these terms?
  - Strong/Not strong party
  - 14a. [IF 14 = 1 OR 2] Do you consider yourself to be a strong [INSERT ANSWER TO 14] or not so strong?
  - 2. [ALL] People rely on different sources for political information. Do you read newspapers for information about politics?
  - 17. [ALL] During the primary or general election for President, did you sign up to receive updates or information from any candidates such as through their websites, at events, or by providing your email address, cell phone number for text messages, or your home phone number or address?

### Other Types of Civic Participation

- Consumer Activism (Boycotting and Buycotting)
  - Variables (N/A)
- Contacting Public Officials
  - Variables
- Participation: Wrote a letter, email
  - 25F. [ALL] Okay, now I’d like to ask you about different ways people participate in politics. Most people we talk to are too busy to do any of these acts, while others have done one or two. Thinking about over the past 12 months, please tell me if you participated in any of the following: Wrote a letter, or sent an email, to an elected official
- Discussing Politics with Family and Friends
  - Variables
- Participation: Convince friends/family to vote
  - 25E. [ALL] Okay, now I’d like to ask you about different ways people participate in politics. Most people we talk to are too busy to do any of these acts, while others have done one or two. Thinking about over the past 12 months, please tell me if you participated in any of the following: Tried to convince your friends or family to vote?
- Expressing Views on Politics and Policy on Social Media
  - Q5 Use Internet for political information
    - 5 [ALL] Do you use the Internet for political information?

### Predictors of Civic Participation

- Participation: Read or posted comments about politics
  - 25G.1. [ALL] Okay, now I’d like to ask you about different ways people participate in politics. Most people we talk to are too busy to do any of these acts, while others have done one or two. Thinking about over the past 12 months, please tell me if you participated in any of the following: [IF 25G=1] Visited and read the website of a presidential candidate?
  - 25G.2. [ALL] Okay, now I’d like to ask you about different ways people participate in politics. Most people we talk to are too busy to do any of these acts, while others have done one or two. Thinking about over the past 12 months, please tell me if you participated in any of the following: [IF 25G=1] Read or posted a comment about politics on a blog or website?
- Participation: Used Internet to learn about politics
  - 25G. [ALL] Okay, now I’d like to ask you about different ways people participate in politics. Most people we talk to are too busy to do any of these acts, while others have done one or two. Thinking about over the past 12 months, please tell me if you participated in any of the following: Used the Internet or Email to talk or learn about politics?

- Participation: Used social networking/list-servs
  - 25G.3. [ALL] Okay, now I'd like to ask you about different ways people participate in politics. Most people we talk to are too busy to do any of these acts, while others have done one or two. Thinking about over the past 12 months, please tell me if you participated in any of the following: [IF 25G=1] Used a social networking page or listserve to talk about politics?
- Making Campaign Contributions
  - Variables
- Participation: Donated money
  - 25C. [ALL] Okay, now I'd like to ask you about different ways people participate in politics. Most people we talk to are too busy to do any of these acts, while others have done one or two. Thinking about over the past 12 months, please tell me if you participated in any of the following: Donated money to a candidate, political party or political organization?
- Protests
  - Variables
- Participation: Protest
  - 25D. [ALL] Okay, now I'd like to ask you about different ways people participate in politics. Most people we talk to are too busy to do any of these acts, while others have done one or two. Thinking about over the past 12 months, please tell me if you participated in any of the following: Taken part in a protest or demonstration?
- Signing petitions
  - Variables (N/A)
- Writing Letters to the Editor
  - Variables (N/A)
- Volunteerism
  - Participation: Worked as volunteer
    - 25B. [ALL] Okay, now I'd like to ask you about different ways people participate in politics. Most people we talk to are too busy to do any of these acts, while others have done one or two. Thinking about over the past 12 months, please tell me if you participated in any of the

following: Worked as a volunteer for a particular candidate or political party?

## ELECTION ADMINISTRATION AND VOTING INSTRUMENT (2018)

This survey collects information on election administration issues in local election offices that are responsible for the administration of the November 2018 general election. All data should be reported at the level of the local jurisdiction. However, the state- or territorial-level election office may fill out any or all of the information on behalf of the local election offices under its jurisdiction

### Demographics

- Race, Gender, Sexuality, Ethnicity, Nativity, Age, Education, Income
- State, City, Regional characteristics, housing density

### Voting and Voter Registration

- Section A: Voter Registration
  - A1. Total Number Registered and Eligible Persons, Active and Inactive
  - A2. Same Day Voter Registration
  - Registration Forms Processed: Questions A3–A7
  - A3. Total Registration Forms Processed: 2016 to 2018
  - A4–A7. Total Registration Forms Processed, by Source
  - Confirmation of Registration Notices and Removals: Questions A8 and A9
  - A8. Total Confirmation of Registration Notices Sent to Voters
  - A9. Total Voters Removed from Registration Rolls: 2016 to 2018
- Section B: Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA)
  - UOCAVA Voters Registered and Eligible: Question B1
  - B1. Total Registered and Eligible UOCAVA
  - Voters FPCAs Received, Accepted, and Rejected: Questions B2–B4
  - B2. Federal Post Card Applications



- B3. Federal Post Card Applications Rejected
- B4. Federal Post Card Applications Rejected Because Late
- UOCAVA Ballots Transmitted: Questions B5–B8
- B5–B8. UOCAVA Ballots Transmitted to Voters
- UOCAVA Ballots Returned: Questions B9–B12
- B9–B12. Transmitted Ballots Returned by Voters: Postal Mail, Email, Other
- B13: Ballots Returned Undeliverable
- UOCAVA Ballots Counted: Questions B14–B17
- B14–B17. Transmitted Ballots Counted: Postal Mail, Email, Other
- UOCAVA Ballots Rejected: Questions B18–B22
- B18–22. Total Number of UOCAVA Ballots Rejected and Reasons for Rejection
- Federal Write-in Absentee Ballots: Questions B23–B26
- B23–B26. Federal Write-in Absentee Ballots Received, Counted, and Rejected
- Section C: Domestic Civilian By-Mail Voting
  - Transmitted Civilian By-Mail Ballots: Questions C1–C2
  - C1. Total By-Mail Ballots Transmitted
  - C2. Ballots Sent to Permanent By-Mail Voter Returned and Rejected Ballots: Questions C3–C4
  - C3. Total Number of By-Mail Ballots Returned and Counted
  - C4. Number of By-Mail Ballots Rejected, by Reason Rejected
- Section D: Total Votes Cast and In-Person Voting
  - Total Votes Cast: Question D1
  - D1. Total Votes Cast
  - Total In-Person Voting: Question D2
  - D2. Total In-Person Voting
  - Precincts and Polling Places: Questions D3–D5
  - D3. Total Number of Precincts
  - D4–D5. Total Number of Physical Polling Places (Election Day and Early Voting) Poll Workers: Questions D6–D8
  - D6–D7. Total Number of Poll Workers
  - D8. Age of Poll Workers
  - D9. Ease of Recruiting Poll Workers
- Section E: Provisional Ballots
  - Questions E1 and E2
  - E1. Total Provisional Ballots Submitted and Adjudication
  - E2. Reasons Provisional Ballots Rejected
- Section F: Voter Participation and Election Technologies Questions F1 and F2
  - F1. Total Participation in the 2018 Election
  - F2. Source of Data on Total Participation in the 2018 Election
  - Poll Books: Questions F3–F4
  - F3–F4. Use of Electronic and Paper Poll Books
  - Voting Technologies: Questions F5–F11
  - F5–F11. Voting Equipment Used
  - Location of Vote Tally: Question F12
  - F12. Location for Where Votes are Talled
  - F13. General Comments

## GENERAL SOCIAL SURVEY 2018

The General Social Survey (GSS) is a nationally representative survey of adults in the United States conducted since 1972. The GSS collects data on contemporary American society in order to monitor and explain trends in opinions, attitudes and behaviors. Among the topics covered are civil liberties, crime and violence, inter-group tolerance, morality, national spending priorities, psychological well-being, social mobility, and stress and traumatic events.

### Demographics

- Race, Gender, Sexuality, Ethnicity, Nativity, Age, Education, Income

### Other Types of Civic Participation

- Consumer Activism (Boycotting and Buycotting)
  - Variables (N/A)
- Contacting Public Officials
  - Variables (N/A)
- Discussing Politics with Family and Friends
  - Variables (N/A)
- Expressing Views on Politics and Policy on Social Media
  - Variables (N/A)
- Making Campaign Contributions
  - Variables (N/A)
- Protests
  - Variables (N/A)
- Signing petitions
  - Variables (N/A)
- Writing Letters to the Editor
  - Variables (N/A)
- Volunteerism
  - Variables (N/A)

### Voter Registration

- U.S. Citizenship
  - Now we would like to ask you about U.S. citizenship. Are you...IF RESPONDENT SAYS S/HE IS "NATURALIZED," CODE "A U.S. CITIZEN."Categories: {\_1} A U.S. Citizen, or{\_2} Not a U.S. Citizen?{\_3} A U.S. CITIZEN BORN IN PUERTO RICO, THE U.S. VIRGIN ISLANDS, OR THE NORTHERN MARIANAS ISLANDS (IF VOLUNTEERED) {\_4} BORN OUTSIDE OF THE UNITED STATES TO PARENTS WHO WERE U.S. CITIZENS AT THAT TIME (IF VOLUNTEERED) {dontknow} DON'T KNOW {refused} REFUSED
  - FUCITZN: Categorical (Single) Are you... Categories: {\_1} Currently applying for U.S. citizenship {\_2} Planning to apply for U.S. citizenship, or {\_3} Not planning to apply for U.S. citizenship? {\_4} NOT ELIGIBLE TO BECOME A U.S. CITIZEN (IF VOLUNTEERED) {dontknow} DON'T KNOW {refused} REFUSED

### Voting and Voter Turnout

- VOTE12: Categorical (Single) In 2012, you remember that Obama ran for President on the Democra-

tic ticket against Romney for the Republicans. Do you remember for sure whether or not you voted in that election? Categories: {voted} Voted {did\_not\_vote} Did not vote {ineligible} Ineligible {dontknow} DON'T KNOW {refused} REFUSED

- PRES12: Categorical (Single) Did you vote for Obama or Romney? Categories: {obama} Obama {romney} Romney {other\_candidate\_specif y} OTHER CANDIDATE (SPECIFY) {didn\_t\_vote\_for\_president} DIDN'T VOTE FOR PRESIDENT {dontknow} DON'T KNOW {refused} REFUSED
- PR12SPEC: Text SPECIFY OTHER CANDIDATE:
- IF12WHO: Categorical (Single) Who would you have voted for, for President, if you had voted? Categories: {obama} Obama {romney} Romney {other} Other {dontknow} DON'T KNOW {refused} REFUSED
- VOTE16: Categorical (Single) In 2016, you remember that Clinton ran for President on the Democratic ticket against Trump for the Republicans. Do you remember for sure whether or not you voted in that election? Categories: {voted} Voted {didnot\_vote} Did not vote {ineligible} Ineligible {refusedto\_answer} REFUSED TO ANSWER {dontknow} DON'T KNOW {refused} REFUSED
- PRES16: Categorical (Single) Did you vote for Clinton or Trump? Categories: {clinton} Clinton {trump} Trump {other\_candidate\_specif y} OTHER CANDIDATE (SPECIFY) {didn\_t\_vote\_for\_president} DIDN'T VOTE FOR PRESIDENT {dkcr} DON'T KNOW, CAN'T REMEMBER {dontknow} DON'T KNOW
- PR16SPEC: Text SPECIFY OTHER CANDIDATE:
  - Who would you have voted for, for President, if you had voted? Categories: {clinton} Clinton {trump} Trump {other} Other {dontknow} DON'T KNOW {refused} REFUSED

### Predictors of Civic Participation

- PRTYPREF: Categorical (Single) Generally speaking, do you usually think of yourself as a Republican, Democrat, Independent, or what? Categories: {republican} Republican {democrat} Democrat {independent} Independent {other\_specify} Other (SPECIFY) {no\_preference} NO PREFERENCE {dontknow} DON'T KNOW {refused} REFUSED
- PRTYSPEC: Text SPECIFY OTHER PARTY
- Would you call yourself a strong {response to PRTYPREF} or not a very strong {response to PRTYPREF}? Categories: {strong} Strong {not\_

very\_strong} Not very strong {dontknow} DON'T KNOW {refused} REFUSED

- PRTYIND: Categorical (Single) Do you think of yourself as closer to the Republican or Democratic Party? Categories: {republican} Republican {democrat} Democrat {neither} NEITHER {dontknow} DON'T KNOW {refused} REFUSED
- POLVIEWS: Categorical (Single) We hear a lot of talk these days about liberals and conservatives. I'm going to show you a seven-point scale on which the political views that people might hold are arranged from extremely liberal--point 1--to extremely conservative--point 7. Where would you place yourself on this scale? Categories: {\_1} 1. Extremely liberal {\_2} 2. Liberal {\_3} 3. Slightly liberal {\_4} 4. Moderate, middle of the road {\_5} 5. Slightly conservative {\_6} 6. Conservative {\_7} 7. Extremely conservative {dontknow} DON'T KNOW {refused} REFUSED
- COLDEG1: Categorical (Single) What is the highest degree you have earned? Categories: {\_1} Associate's {\_2} Bachelor's {\_3} Master's {\_4} MBA {\_5} Law {\_6} PHD {\_7} MD MDDtoDOC - GSS2018 Ballot 1 - English {\_8} Other {dontknow} DON'T KNOW

### Health Variables

- HLTHSTRT: Categorical (Single) WOULD YOU SAY THE RESPONDENT'S HEALTH, IN GENERAL, IS EXCELLENT, GOOD, FAIR, OR POOR? Categories: {excellent} EXCELLENT {good} GOOD {fair} FAIR {poor} POOR
- HEALTHISSP\_D: Categorical (Single) [HANDCARD D17] In general, would you say your health is excellent, very good, good, fair, or poor? FI INSTRUCTION: IF RESPONDENT ASKS WHY S/HE IS BEING ASKED THIS QUESTION AGAIN, EXPLAIN THAT THIS VERSION OF THE QUESTION IS BEING ASKED IN OTHER COUNTRIES ON AN INTERNATIONAL STUDY AND USES A DIFFERENT LIST OF RESPONSES THAN THE EARLIER VERSION. Categories: {excellent} 1. Excellent {verygood} 2. Very good {good} 3. Good {fair} 4. Fair {poor} 5. Poor? {cantchoose} CAN'T CHOOSE
- QUALLIFE: Categorical (Single) [HANDCARD G1] In general, would you say your quality of life is: {excellent} 1. Excellent {verygood} 2. Very good {good} 3. Good {fair} 4. Fair, or {poor} 5. Poor? {dontknow} DON'T KNOW {refused} NO ANSWER
- UNHAPPY: Categorical (Single) [HANDCARD E26] During the past 4 weeks how often... a. Have you felt unhappy and depressed? Categories: {never} 1. Never {rarely} 2. Rarely {sometimes} 3. Sometimes {often} 4. Often, or {veryoften} 5. Very often?
- HLTHPHYS: Categorical (Single) [HANDCARD G1] In general, how would you rate your physical health? Categories: {excellent} 1. Excellent {verygood} 2. Very good {good} 3. Good {fair} 4. Fair, or {poor} 5. Poor? {dontknow} DON'T KNOW {refused} NO ANSWER
- HLTHMNTL: Categorical (Single) [HANDCARD G1] In general, how would you rate your mental health, including your mood and your ability to think? Categories: {excellent} 1. Excellent {verygood} 2. Very good {good} 3. Good {fair} 4. Fair, or {poor} 5. Poor? {dontknow} DON'T KNOW {refused} NO ANSWER
- HYPERTEN: Categorical (Single) Now I would like to ask you some questions about general health conditions. Has a doctor, nurse or other health professional EVER told you that you had... Hypertension or high blood pressure? Categories: {yes} Yes {no} No {dontknow} DON'T KNOW {refused} REFUSED
- ARTHRITIS: Categorical (Single) (Has a doctor, nurse, or other health professional EVER told you that you had...) Arthritis or rheumatism? Categories: {yes} Yes {no} No {dontknow} DON'T KNOW {refused} REFUSED
- DIABETES: Categorical (Single) (Has a doctor, nurse, or other health professional EVER told you that you had...) Diabetes or high blood sugar? Categories: {yes} Yes {no} No {dontknow} DON'T KNOW {refused} REFUSED
- DEPRESS: Categorical (Single) (Has a doctor, nurse, or other health professional EVER told you that you had...) Depression? Categories: {yes} Yes {no} No {dontknow} DON'T KNOW {refused} REFUSED
- PHYSHLTH: Long [0 .. 30] Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good? FI INSTRUCTION: IF 'NONE', ENTER 0. NUMBER OF DAYS IN PAST 30 DAYS:
- MNTLHLTH: Long [0 .. 30] Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good. FI INSTRUCTION: IF 'NONE', ENTER 0. NUMBER OF DAYS IN PAST 30 DAYS:
- HLTHDAYS: Long [0 .. 30] During the past 30 days, for about how many days did your poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

- NUMBER OF DAYS IN PAST 30 DAYS: STRESS: Categorical (Single)
- [HANDCARD I-16] How often do you find your work stressful? Categories: {always} 1. Always {often} 2. Often {sometimes} 3. Sometimes {hardly\_ever} 4. Hardly ever {never} 5. Never {dontknow} DON'T KNOW {refused} REFUSED
- During the past 30 days, about how many days did you miss work due to your mental or physical health? NUMBER OF DAYS IN PAST 30 DAYS
- <http://www.gss.norc.org/Documents/quex/GSS2018%20Ballot%201%20-%20English.pdf>

### **NATIONAL ASIAN AMERICAN SURVEY (NAAS) PRE-ELECTION SURVEY, [UNITED STATES], 2016 (ICPSR 37024)**

The National Asian American Survey (NAAS) Pre-Election Survey, 2016 contains nationally representative data from telephone interviews of adult U.S. residents who self-identified as Asian/Asian American, Native Hawaiian or Pacific Islander, White, African American/Black, Hispanic/Latino, and Multiracial. The survey included sizable samples of Asian Americans in 9 Asian national origin groups (Chinese, Filipino, Indian, Vietnamese, Korean, Japanese, Hmong, Cambodian), as well as Native Hawaiian/Pacific Islanders.

The survey instrument included questions about immigrant background, social identities, social attitudes, political behavior, and policy attitudes. Demographic information included age, race, language, gender, country of birth, religion, marital status, educational level, employment status, citizenship status, household income, and size of household.

Principal Investigator(s): S. Karthick (Subramanian Karthick) Ramakrishnan, University of California, Riverside; Jennifer Lee, University of California, Irvine; Taeku Lee, University of California, Berkeley; Janelle Wong, University of Maryland

Version Date: May 2, 2018

#### **Demographics**

- Race, Gender, Sexuality, Ethnicity, Nativity, Age, Education, Income
  - S10.1 Do you consider any part of your background to be Asian or Asian-American, such as Chinese, Filipino, Indian, or Pacific Islander like Native Hawaiian or Samoan?
    - S10.2 [IF S10.1 = 0] What racial or ethnic groups describe you? {DO NOT

ACCEPT DK, REF, TERMINATE IF RESPONDENT INSISTS ON DK, REF} {Choose all that apply}{IF MORE THAN ONE CHOICE, HIDDEN VARIABLE RACE AND RACES CODED IN S10.3}

- S10.3 [IF S10.2 HAS MORE THAN ONE CHOICE, BUT DO NOT ASK IF S10.2=9] Which racial group do you most identify with?

#### **Voting and Voter Turnout**

- Vote
  - Question: Q2.4 Thinking back to this November's presidential elections, did you vote? ([If NONELIG is 0] Thinking back to this November's presidential elections, did you vote? [Read choices])
  - Question: Q2.4A Thinking about the past November election for PRESIDENT, did you vote for Hillary Clinton, Donald Trump, or some other candidate?
  - Question: Q2.6 Did anyone from one of the political parties call you up or come around and talk to you about the campaign this year?
    - [If CITIZEN is 1=yes] As you know, the political parties try to talk to as many people as they can to get them to vote for their candidate. Did anyone from one of the political parties call you up or come around and talk to you about the campaign this year?
  - Question: Q2\_5A: Q2.5A Thinking about the past November election for the U.S. House of Representatives in your Congressional district, did you vote for the [Republican candidate/ Democratic candidate/ Some other party/ Don't know/ Refused]
  - Question: B8: In talking to people about elections, we often find that a lot of people are not able to vote because they aren't registered, they are sick, or they just don't have time. How about you - [will/did] you vote in the election this November?
  - Question B9: If you [are not going to/did not] vote in the presidential election, what is the main reason you [will/did] not vote?
    - (DO NOT READ)



- 01. NO TIME
  - 02. NOT INTERESTED IN ELECTION AND/OR CANDIDATES
  - 03. DID NOT THINK MY CANDIDATE WOULD WIN
  - 04. ILLNESS OF SELF OR FAMILY MEMBERS
  - 05. I NEVER VOTE
  - 06. NOT REGISTERED
  - 07. NO TRANSPORTATION TO GET TO POLLS
  - 08. NOT AWARE OF ELECTION
  - 09. NOT A U.S. CITIZEN
  - 10. OTHER (PLEASE SPECIFY): \_\_\_\_\_
  - 99. REFUSED
  - DK (DO NOT PROBE)
- Voter Registration
    - Q2.3 Are you currently registered to vote or not?
      - Question: ([If CITIZEN is 1] Next, I would like to ask you about your views on politics and the past November elections. Are you currently registered to vote or not?)

### Other Types of Civic Participation

- Consumer Activism (Boycotting and Buycotting)
  - Bought or boycotted a certain product or service because of a social or political issue?
- Contacting Public Officials
  - Have you contacted your representative or a government official?
- Discussing Politics with Family and Friends
  - Next, here are some issues other people have mentioned as challenges they face. Please tell me how serious of a problem each is for you and your family: Not at all serious, not very serious, fairly serious, or very serious. The long time it takes for people to get visas.

- Did your parents or other family members ever tell you that you have to be better than White Americans to get as far as White Americans in life?
- Donating Money
  - Donated money to a religious or charitable cause?
- Making Campaign Contributions
  - Have you contributed money to a candidate, political party, or some other campaign?
- Protests
  - Attended a protest, march, demonstration, or rally?
- Signing petitions
  - Have you signed a petition?
- Working with others to solve community problem
  - Have you worked with others in your community to solve a problem?
- Attending Meetings
  - Attended a public meeting, such as for school board or city council?

### Predictors of Civic Participation

- Questions
  - As you know, the political parties try to talk to as many people as they can to get them to vote for their candidate. Did anyone from one of the political parties call you up or come around and talk to you about the campaign this year?
  - Other than someone from the two major parties, did anyone else call you up or come around and talk to you about this election?
  - Was that contact by an ethnic organization or some other organization?
  - Was that contact by an ethnic organization or some other organization?

### NATIONAL ASIAN AMERICAN SURVEY (NAAS) POST-ELECTION SURVEY, [UNITED STATES], 2016

The National Asian American Survey (NAAS) Post-Election Survey, 2016 contains nationally representative data from telephone interviews of adult U.S. residents who self-identified as Asian/Asian American, Native

Hawaiian or Pacific Islander, White, African American/Black, Hispanic/Latino, and Multiracial. The survey included sizable samples of Asian Americans in 9 Asian national origin groups (Chinese, Filipino, Indian, Vietnamese, Korean, Japanese, Hmong, Cambodian), as well as Native Hawaiian/Pacific Islanders. The survey instrument included questions about immigrant background, social identities, social attitudes, political behavior, and policy attitudes. Demographic information included age, race, language, gender, country of birth, religion, marital status, educational level, employment status, citizenship status, household income, and size of household. The study contains 2 data files, public-use and restricted-use versions of the same dataset (386 variables, 6448 cases).

Version Date: Jan 30, 2020

Principal Investigator(s): S. Karthick (Subramanian Karthick) Ramakrishnan, University of California, Riverside; Jennifer Lee, Columbia University; Taeku Lee, University of California, Berkeley; Janelle Wong, University of Maryland

### Demographics

- Race, Gender, Sexuality, Ethnicity, Nativity, Age, Education, Income
  - S10.1 Do you consider any part of your background to be Asian or Asian-American, such as Chinese, Filipino, Indian, or Pacific Islander like Native Hawaiian or Samoan?
    - S10.2 [IF S10.1 = 0] What racial or ethnic groups describe you? {DO NOT ACCEPT DK, REF, TERMINATE IF RESPONDENT INSISTS ON DK, REF} {Choose all that apply}[IF MORE THAN ONE CHOICE, HIDDEN VARIABLE RACE AND RACES CODED IN S10.3]
    - S10.3 [IF S10.2 HAS MORE THAN ONE CHOICE, BUT DO NOT ASK IF S10.2=9] Which racial group do you most identify with?

### Voting and Voter Turnout

- Vote
  - Question: Q2.4 Thinking back to this November's presidential elections, did you vote? ([If NONELIG is 0] Thinking back to this November's presidential elections, did you vote? [Read choices])
  - Question: Q2.4A Thinking about the past November election for PRESIDENT, did you vote

for Hillary Clinton, Donald Trump, or some other candidate?

- Question: Q2.6 Did anyone from one of the political parties call you up or come around and talk to you about the campaign this year?
  - [If CITIZEN is 1=yes] As you know, the political parties try to talk to as many people as they can to get them to vote for their candidate. Did anyone from one of the political parties call you up or come around and talk to you about the campaign this year?
- Question: Q2\_5A: Q2.5A Thinking about the past November election for the U.S. House of Representatives in your Congressional district, did you vote for the [Republican candidate/ Democratic candidate/ Some other party/ Don't know/ Refused]
- Question: B8: In talking to people about elections, we often find that a lot of people are not able to vote because they aren't registered, they are sick, or they just don't have time. How about you - [will/did] you vote in the election this November?
- Question B9: If you [are not going to/did not] vote in the presidential election, what is the main reason you [will/did] not vote?
  - (DO NOT READ)
  - 01. NO TIME
  - 02. NOT INTERESTED IN ELECTION AND/OR CANDIDATES
  - 03. DID NOT THINK MY CANDIDATE WOULD WIN
  - 04. ILLNESS OF SELF OR FAMILY MEMBERS
  - 05. I NEVER VOTE
  - 06. NOT REGISTERED
  - 07. NO TRANSPORTATION TO GET TO POLLS
  - 08. NOT AWARE OF ELECTION
  - 09. NOT A U.S. CITIZEN
  - 10. OTHER (PLEASE SPECIFY): \_\_\_\_\_

- 99. REFUSED
- DK (DO NOT PROBE)
- Voter Registration
  - Q2.3 Are you currently registered to vote or not?
    - Question: ([If CITIZEN is 1] Next, I would like to ask you about your views on politics and the past November elections. Are you currently registered to vote or not?)

### Other Types of Civic Participation

- Consumer Activism (Boycotting and Buycotting)
  - Bought or boycotted a certain product or service because of a social or political issue?
- Contacting Public Officials
  - Have you contacted your representative or a government official?
- Discussing Politics with Family and Friends
  - Next, here are some issues other people have mentioned as challenges they face. Please tell me how serious of a problem each is for you and your family: Not at all serious, not very serious, fairly serious, or very serious. The long time it takes for people to get visas.
  - Did your parents or other family members ever tell you that you have to be better than White Americans to get as far as White Americans in life?
- Donating Money
  - Donated money to a religious or charitable cause?
- Making Campaign Contributions
  - Have you contributed money to a candidate, political party, or some other campaign?
- Protests
  - Attended a protest, march, demonstration, or rally?
- Signing petitions
  - Have you signed a petition?
- Working with others to solve community problem
  - Have you worked with others in your community to solve a problem?

- Attending Meetings
  - Attended a public meeting, such as for school board or city council?

### Predictors of Civic Participation

- Questions
  - As you know, the political parties try to talk to as many people as they can to get them to vote for their candidate. Did anyone from one of the political parties call you up or come around and talk to you about the campaign this year?
  - Other than someone from the two major parties, did anyone else call you up or come around and talk to you about this election?
  - Was that contact by an ethnic organization or some other organization?
  - Was that contact by an ethnic organization or some other organization?

### Predictors of Civic Participation

- Questions
  - As you know, the political parties try to talk to as many people as they can to get them to vote for their candidate. Did anyone from one of the political parties call you up or come around and talk to you about the campaign this year?
  - Other than someone from the two major parties, did anyone else call you up or come around and talk to you about this election?
  - Was that contact by an ethnic organization or some other organization?
  - Was that contact by an ethnic organization or some other organization?

### NATIONAL LONGITUDINAL SURVEY OF YOUTH (NLS), 1997

The NLSY97 Cohort is a longitudinal project that follows the lives of a sample of American youth born between 1980-84; 8,984 respondents were ages 12-17 when first interviewed in 1997. This ongoing cohort has been surveyed 18 times to date and is now interviewed biennially. Data are now available from Round 1 (1997-98) to Round 18 (2017-18).

The NLS, sponsored by the U.S. Bureau of Labor Statistics, are nationally representative surveys that follow

the same sample of individuals from specific birth cohorts over time.

### Demographics

- Race, Gender, Sexuality, Ethnicity, Nativity, Age, Education, Income

### Voter Registration

- Variables (N/A)

### Voting and Voter Turnout

- Variables (N/A)

### Other Types of Civic Participation

- Consumer Activism (Boycotting and Buycotting)
  - Variables (N/A)
- Contacting Public Officials
  - Variables (N/A)
- Discussing Politics with Family and Friends
  - Variables (N/A)
- Expressing Views on Politics and Policy on Social Media
  - Variables (N/A)
- Making Campaign Contributions
  - Variables (N/A)
- Protests
  - Variables (N/A)
- Signing petitions
  - Variables (N/A)
- Writing Letters to the Editor
  - Variables (N/A)
- Volunteerism
  - Variables (N/A)

### Health Variables

- Questions
  - Now, I'd like to ask you some questions about your general state of health.
  - In general, how is your health? 1 Excellent 2 Very good 3 Good 4 Fair 5 Poor
  - [[age on 12/31/96] =13] COMMENT: Check if sample member is 13 years old as of December 31, 1996 1 CONDITION APPLIES ...(Go To YHEA-400)0 CONDITION DOES NOT APPLY

- In a typical [week/school week], how many days do you eat breakfast? (DO NOT COUNT THE WEEKEND.) Enter Number:
- In a typical week, how many days do you eat at least some green vegetables or fruit? Enter Number:
- In a typical week, how many days do you engage in exercise that lasts 30 minutes or more?
- When you are riding in a car driven by someone else, what percent of the time do you wear a seatbelt?1 ENTER A PERCENT (Enter percent on next screen.) ...(Go To YHEA-800) 0 NEVER 999 Do not ride in a car
- (When you are riding in a car driven by someone else, what percent of the time do you wear a seatbelt?) (ENTER PERCENT)
- The next questions ask for your opinions on the effects of using different substances
- Does smoking one or more packs of cigarettes per day, INCREASE THE RISK (chance) of ..... getting heart disease? 1 Yes 0 No... getting AIDS?1 Yes 0 No
- Does having 5 or more drinks of alcohol once or twice each week, INCREASE THE RISK (chance) of .... . damaging the liver?... getting heart disease? 1 Yes 0 No 1... getting arthritis?... becoming addicted to alcohol? 1 Yes 0 No... harming an unborn child? 1 Yes 0 No
- Here are three of the many methods of preventing pregnancy.
- Which of these three is the most effective for preventing pregnancy? 1 1 Withdrawal 2 Condom 3 Birth Control Pill
- Which of these same three methods is the most effective for preventing sexually transmitted diseases like AIDS or gonorrhea: 1 Withdrawa 2 Condom 3 Birth Control Pill
- When during the female monthly cycle of menstrual periods is pregnancy most likely to occur? Please look at the card and tell me the number corresponding to your answer.1Right before the period begins 2 During the period 3 About a week after the period begins 4. About two weeks after the period begins 5



Anytime during the month, makes no difference 6 Don't know

- Are you covered by health insurance that includes physician or hospital care through any of the following? 1 1. Your or someone else's job, union or business? 2 2. A direct purchase from an insurance company or through a professional association or retirement association? 3 3. MediCAID (OR STATE NAME FOR MEDICAID), the state-sponsored program to provide health care to low income people? 4 4. Medicare, the plan for people 65 or older and some younger disabled people that is sponsored by the federal government? 5 5. A military-related health plan such as CHAMPUS (which covers both active duty retired military personnel, their dependents and survivors), CHAMPVA (which covers disabled veterans, their dependents and survivors), or are you eligible for VA hospital care? 6 6. Anything else or are you not covered? 0 NONE
- Can you tell me approximately what your height is? PRESS <F5> FOR "REFUSE", <F6> FOR "DON'T KNOW".) Enter Number:
- Can you tell me approximately what your weight is?

## NATIONAL POLITICS STUDY, 2008

The primary goal of the National Politics Study (NPS) was to gather comparative data about individuals' political attitudes, beliefs, aspirations, and behaviors at the beginning of the 21st century. This study has important implications for understanding the nature of political concerns in the United States; policy, party, and candidate choices; and political participation in the American democratic process. Sample View help for Sample From September 5, 2008 through December 15, 2008, a total of 1,477 respondents participated in the survey. The breakdown by racial and ethnic group is: 519 Non-Hispanic Whites, 329 African Americans, 444 Hispanics, 88 Asian Americans, and 97 Caribbean Blacks. Data Source View help for Data Source The sample includes a combination of panel respondents surveyed for the 2004 and 2006 data collections (n=663) as well as new respondents found using a random digit dial methodology (n=814). Eight hundred eight respondents were interviewed before the election and 669 after the election.

Principal Investigator(s): James S. (James Sidney) Jackson, University of Michigan. Institute for Social

Research; Vincent L. Hutchings, University of Michigan. Institute of Social Research; Cara Wong, University of Michigan. Institute of Social Research; Ronald Brown, Wayne State University

### Demographics

- Race, Gender, Sexuality, Ethnicity, Nativity, Age, Education, Income
- State, City, Regional characteristics, housing density

### Voting

- In talking to people about elections, we often find that a lot of people are not able to vote because they aren't registered, they are sick, or they just don't have time. How about you - [will/did] you vote in the election this November?

### Other Types of Civic Participation

- Consumer Activism (Boycotting and Buycotting)
  - In the past 12 months, have you taken part in a protest, march or demonstration on some national or local issue aside from a strike against an employer?
- Contacting Public Officials
  - QB11\_A Expressed your view on an issue?
  - In the past 12 months, have you telephoned, written a letter, or visited a government official to express your views on a public issue?
  - QE6\_C Religious leader suggest action on political issue?
  - Has a member of the clergy, or someone in an official position, ever suggested that you take some action on a political issue- such as sign a petition, write a letter, attend a protest, march, or demonstration, or get in touch with a public official?
  - In the past 12 months, have you attended a meeting about an issue facing your community or schools?
  - In the past 12 months, have you attended a meeting about an issue facing your community or schools?
- Discussing Politics with Family and Friends
  - QB3\_B Ever Persuaded Vote Choice?
  - Did you talk to any people and try to show them why they should vote for or against one of the parties or candidates?

- Expressing Views on Politics and Policy on Social Media
  - Variables (N/A)
- Making Campaign Contributions
  - QB3\_A Work for Political Party or Campaigned for a Candidate
  - Have you ever worked for a political party or campaigned for a political candidate?
- Protests
  - QB11\_B Protested on an issue?
  - In the past 12 months, have you taken part in a protest, march or demonstration on some national or local issue aside from a strike against an employer?
- Signing petitions
  - QB11\_C1 Signed a petition
  - In the past 12 months, have you signed a petition in support of or against something?
- Working with others to solve community problem
  - QE6\_C Religious leader suggests action on political issue?
  - Has a member of the clergy, or someone in an official position, ever suggested that you take some action on a political issue- such as sign a petition, write a letter, attend a protest, march, or demonstration, or get in touch with a public official?
  - QB11\_C Attended meeting about an issue facing community/schools?
  - In the past 12 months, have you attended a meeting about an issue facing your community or schools?
  - QB11\_D Worked with others to deal with an issue?
  - In the past 12 months, have you worked with other people to deal with some issue facing your community?
  - In the past 12 months, have you participated in any groups or organizations, including your place of worship, that are working to improve the conditions of racial or ethnic minorities?

- Agree or Disagree? It is important for people to work together to improve the position of their racial or ethnic group.

- Writing Letters to the Editor

- Variables (N/A)

- Volunteerism

- Variables (N/A)

### Predictors of Civic Participation

- QB5 Liberal or Conservative

- We hear a lot of talk these days about liberals and conservatives. When it comes to politics, do you usually think of yourself as liberal or conservative

- QB5C Extreme or Slightly Conservative?

- If you had to choose, would you consider yourself as extremely conservative or slightly conservative?

- QB5B Extreme or Slightly Liberal?

- If you had to choose, would you consider yourself as extremely liberal or slightly liberal

- QB5A Choose Liberal or Conservative

- If you had to choose, would you consider yourself a liberal or a conservative?

- QB6B Closeness to Party Preference

- Do you think of yourself as closer to the Republican party or to the Democratic party?

- QB6A Strength of Party Preference

- Would you call yourself a strong [democrat/ republican] or a not very strong [democrat/ republican]?

- QD3\_D Important to vote

- How important is it to vote?

- QB8A President vote choice

- Who was your President vote choice?

- Have you ever worked for a political party or campaigned for a political candidate?

### YOUTH PARTICIPATORY POLITICS PANEL SURVEY

Conducted between 2011 and 2015

Survey citation: Cohen, Cathy J., and Kahne, Joseph. Youth Participatory Politics Survey Project, United States, 2013 and 2015 Panel Data. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2018-12-03. <https://doi.org/10.3886/ICPSR37188.v1>

### Other Types of Civic Participation

- Measures for Online Participatory Politics

- Q - People use a variety of methods to gather and share information about political candidates, campaigns or political issues. Please tell us how often you have done the following during the past 12 months:
  - (Answer options: never, less than once a month, once or twice a month, once a week, several times a week.)
  - Forwarded, retweeted, or posted someone else's article, blog, picture, or video about a political campaign, candidate or issue.
  - Created and circulated your own article, blog, picture, or video about a political campaign, candidate, or issue on an online site.
  - Commented online or tweeted about an article, blog, picture, or video you saw about a political campaign, candidate, or issue.
  - Posted a status update or sent an e-mail, Tweet, or instant message about a political campaign, candidate, or issue.

- Measures for Friendship-Driven Online Activity

- Q - People interact with family and friends through a variety of online methods. How often would you say you interact with your friends and family by:(Answer options: never, less than once a month, at least once a month, at least once a week, daily.)
  - Sending messages, sharing status updates, or chatting online using social network services like Twitter or Facebook?
  - Sharing links or forwarding information or media through social network services like Twitter or Facebook?

- Tagging friends and family members in posts, photos, or videos on social networking sites?

- Commenting on something a friend or family member posted on a social networking site?

- Visiting websites and other online material that friends or family members have posted or circulated?

- For an article that uses these scales and provides conceptual explanations of the scales see: <http://www.civicsurvey.org/publications/286>

- Measures for Interest-Driven Online Activity

- Q - People have a variety of interests (gaming, sports, music, fandom, crafting, etc.). Thinking about your major interests, how often do you typically do the following? (Answer options: never, less than once a month, at least once a month, at least once a week, daily.)

- Participate in an online forum or group related to your interests.

- Give help, advice or suggestions to others online related to your interests.

- Use the Internet to organize an online group, discussion, or website.

- Create your own media to share online, like blogging, fiction, podcasts, music, videos, art, or games.

- Post an online comment, review, or critique of someone else's media. For an article that uses these scales and provides conceptual explanations of the scales see: <http://www.civicsurvey.org/publications/286>

- Measures for Digital Engagement Learning Opportunities

- Q- During the 2014-2015 school year, how often have you learned about how to create and share digital media as part of... Your classes or schoolwork?" (Answer options: Never (0), Once (.33), 2 or 3 times (.67), More than 3 times (1).)

- Q - During the 2014-2015 school year, how often have you discussed how to effectively share your perspective on social or political

issues online (for example, by blogging or tweeting) as part of... Your classes or school-work?" (Answer options: Never (0), Once (.33), 2 or 3 times (.67).

- Measures for Media Literacy Learning Opportunities (focused on credibility judgments)
  - Q - Thinking back to the last school you attended, how often did you have a class where you discussed the importance of evaluating the evidence that backs up people's opinions? (Never, Once, A few times, Often).
  - Q - Thinking back to the last school you attended, how often did you have a class where you discussed how to tell if the information you find online is trustworthy? (Never, Once, A few times, Often).
- Measures for Targeted Political Pressure
  - Q - Many people try to have influence in ways that aren't directly related to campaigns or elections. Please indicate whether you have done the following in the past 12 months:
    - Signed an email, Facebook, or other online petition" (Answer options: yes (1), no (0).)
    - In the past 12 months, have you contacted your local, state or federal government by sending an email, tweet, or instant message, or by posting a comment on its website or Facebook page?" (Answer options: yes (1), no (0).)
    - In the past 12 months, have you contacted a corporation, company, or business to protest its practices or policies by sending an email, tweet, or instant message, or by posting a comment on its website or Facebook page? (Answer options: yes (1), no (0).)
    - In the past 12 months, have you contacted an organization doing work in your community by sending an email, tweet, or instant message, or by posting a comment on its website or Facebook page? (Answer options: yes (1), no (0).)

## APPENDIX B HEALTH CONCEPTS AND EXAMPLE

### METRICS

#### Health Outcomes

Health Outcomes represent how healthy a county is right now. They reflect the physical and mental well-being of residents within a community through measures representing not only the length of life but quality of life, as well.

#### Length of Life

By exploring a county's data related to Length of Life, a critical question can be answered: Are people living long, healthy lives? The answer to that question can highlight important indicators about a community's health. It also reveals if people in one community are dying earlier than those in other communities.

Example metrics: Premature death (YPLL), Life expectancy, premature age-adjusted mortality, child mortality, infant mortality

#### Quality of Life

Examining quality of life can tell a lot about how people perceive their health – whether they feel healthy and satisfied. When communities have higher rates of those who do not feel healthy, it can influence other factors of health including mortality rates, unemployment, poverty, and the percentage of adults who did not complete high school. Getting this sense of the physical and mental health of a community can also bring to light inequities and help monitor trends, as well as identify risk factors and policies to address those risk factors.

Example metrics: Poor or fair health, Poor physical health days, Poor mental health days, Low birthweight, Frequent physical distress, Frequent mental distress, Diabetes, HIV prevalence

#### Health Factors

There are many things that influence how well and how long communities live. Everything from education to the environment impacts health. Health Factors represent those things that can be modified to improve the length and quality of life for residents. They are predictors of how healthy communities can be in the future.

#### Health Behaviors

Health behaviors are actions individuals take that affect their health. They include actions that lead to improved health, such as eating well and being physically active, and actions that increase one's risk of disease, such as smoking, excessive alcohol intake, and risky sexual behavior.

#### Tobacco Use



Each year, smoking kills 480,000 Americans, including about 41,000 from exposure to secondhand smoke. Smoking causes cancer, heart disease, stroke, lung diseases, diabetes, and chronic obstructive pulmonary disease which includes emphysema and chronic bronchitis. On average, smokers die 10 years earlier than nonsmokers [1]. Tobacco is not only smoked. Smokeless tobacco, while less lethal than smoked tobacco, can lead to various cancers, gum and teeth problems, and nicotine addiction. Almost 6% of young adults use smokeless tobacco and half of new users are younger than 18 [2]. Tobacco use has real economic impacts for individuals and communities. It costs the nation about \$170 billion annually to treat tobacco-related illnesses, and another \$156 billion in productivity losses. In 2006, over \$5 billion of that lost productivity was due to secondhand smoke [1]. Researchers estimate that tobacco control policies have saved at least 8 million Americans [3]. Yet about 18% of adults still smoke. Each day, nearly 3,200 youth smoke their first cigarette, and 2,100 transition from occasional to daily smokers [1]. Continuing to adopt and implement tobacco control policies can motivate users to quit, help youth choose not to start, and improve the quality of the air breathed by all.

Example metrics: Adult smoking

*Tobacco use end notes:*

[1] Centers for Disease Control and Prevention (CDC). *Smoking & tobacco use*. Last reviewed February 6, 2019. Accessed March 12, 2019. [2] American Cancer Society (ACS). *Smokeless tobacco*. Last reviewed November 13, 2015. Accessed February 28, 2018. [3] Robert Wood Johnson Foundation. *Fifty years after first surgeon general's report on smoking and health, tobacco advocacy groups pledge to "end the tobacco epidemic for good."* *NewPublicHealth* blog. January 8, 2014. Accessed March 3, 2014.

## Diet & Exercise

Balanced nutrition and physical activity are essential for health, yet only one-third of adults engage in the recommended amount of weekly physical activity and many American diets exceed calorie recommendations while being insufficient in servings of fruits and vegetables.[1] Poor nutrition can hinder growth and development, while excessive calorie consumption can lead to obesity, especially when paired with too little physical activity. Inadequate physical activity also contributes to increased risk of conditions such as coronary heart disease, diabetes, and some cancers.[2] When performed routinely, exercise has been shown to lower symptoms of depression, reduce risk of chronic disease and premature death, and delay age-related cognitive decline. [3-5] However, nearly 73% of high school students in

the US do not meet the CDC's recommended physical activity levels.[2] As of 2013, 29 million Americans lived in a food desert, without access to affordable, healthy food.[6] Poor diet can lead to both malnutrition and obesity. More than two-thirds of American adults and approximately one-third of children and adolescents are overweight or obese. Obesity is one of the biggest drivers of preventable chronic diseases in the US. Being overweight or obese increases the risk for many health conditions, including type 2 diabetes, heart disease, stroke, hypertension, cancer, Alzheimer's disease, dementia, liver disease, kidney disease, osteoarthritis, and respiratory problems.[6] Adults with more balanced diets are shown to have better mental and physical health outcomes, with recent studies finding similar trends in adolescent mental health.[7] Unhealthy food intake and insufficient exercise have economic impacts for individuals and communities. Current estimates for obesity-related health care costs in the US range from \$147 billion to nearly \$210 billion annually, and productivity losses due to obesity-related job absenteeism cost an additional \$4 billion each year.[6] Inadequate physical activity results in \$117 million annually in additional healthcare costs.[5] Increasing opportunities for exercise and access to healthy foods in neighborhoods, schools, and workplaces can help children and adults eat healthy meals and reach recommended daily physical activity levels.

Example metrics: Adult obesity, Food environment index, Physical inactivity, Access to exercise opportunities, Food insecurity, Limited access to healthy foods

*Diet & exercise end notes:*

[1] US Department of Health and Human Services. *Facts & Statistics*. Last reviewed January 26, 2017. <https://www.hhs.gov/fitness/resource-center/facts-and-statistics/index.html> [2] Centers for Disease Control and Prevention. *Physical Activity Facts*. Last reviewed April 9, 2018. Accessed March 13, 2019. [3] Stanton R, Reaburn P. *Exercise and the treatment of depression: a review of the exercise program variables*. *J Sci Med Sport*. 2014;17(2):177-182. doi:10.1016/j.jsams.2013.03.010 [4] Deslandes A, Moraes H, Ferreira C, et al. *Exercise and mental health: many reasons to move*. *Neuropsychobiology*. 2009;59(4):191-198. doi:10.1159/000223730 [5] Centers for Disease Control and Prevention. *Physical Activity Builds a Healthy and Strong America*. Accessed January 27, 2020. [6] Christopher G, Harris CM, Spencer T, et al. *F as in fat: How obesity threatens America's future*. Washington, DC: Trust for America's Health (TFAH); 2013. [7] O'Neil A, Quirk SE, Housden S, et al. *Relationship between diet and mental health in children and adolescents: a systematic review*. *Am J Public Health*. 2014;104(10):e31-e42. doi:10.2105/AJPH.2014.302110

## Alcohol & Drug Use

Excessive alcohol consumption considers both the amount of alcohol consumed and the frequency of drinking. Prescription drug misuse includes taking a drug in a manner other than prescribed and taking drugs that have been prescribed to another person. Although moderate alcohol use is associated with health benefits such as reduced risk of heart disease and diabetes [1], excessive alcohol use causes 88,000 deaths in the US each year [2]. More than 46 people died every day from drug overdoses involving prescription opioids in 2016 [3]. In 2015, 27% of people ages 18 and older reported binge drinking in the past month, while 7% reported heavy alcohol use in the past month [4]. Over time, excessive alcohol consumption is a risk factor for high blood pressure, heart disease, fetal alcohol syndrome, liver disease, and certain cancers [5]. In the short-term, excessive drinking is also linked to alcohol poisoning, intimate partner violence, risky sexual behaviors, and motor vehicle crashes [2,5]. Alcohol-impaired crashes accounted for nearly one-third of all traffic-related deaths in 2016—more than 10,000 fatalities [6]. From 1999 to 2017, overdose deaths from prescription painkillers have increased fivefold, with 218,000 deaths from overdoses related to prescription opioids during this time period. Prescription drug misuse now accounts for over 35% of opioid drug overdose deaths [3]. Since 2002, rates of use for cocaine and hallucinogens have either declined or remained steady, while rates of marijuana and heroin use have increased [7,8]. As of 2018, more teens smoke marijuana than cigarettes [9] and in 2012, 156,000 people reported starting to use heroin, nearly double the number starting in 2006 [8]. Marijuana, now legal in some states, is the most frequently used illicit drug. Teenagers account for over half of all new illicit drug users. Alcohol and drug use have significant economic costs. Excessive alcohol use costs \$249 billion in lost productivity, health care, and criminal justice expenses each year, whereas illicit drug use costs \$193 billion related to crime, health care, and lost productivity [10]. Adopting and implementing strategies to reduce excessive use of alcohol and abuse of prescription drugs can improve the health and well-being of communities.

Example metrics: Excessive drinking, Alcohol-impaired driving deaths, Drug overdose deaths, Motor vehicle crash deaths

*Alcohol & drug use end notes:*

- [1] Mayo Clinic. *Alcohol use: If you drink, keep it moderate.* Last reviewed August 30, 2016. Accessed March 5, 2018.  
 [2] National Center for Chronic Disease Prevention and Health Promotion. *Excessive alcohol use: preventing a*

*leading risk for death, chronic disease, and injury.* Atlanta: Centers for Disease Control and Prevention (CDC); 2015.  
 [3] Centers for Disease Control and Prevention. *Prescription Drug Overdose Data* Last reviewed December 19, 2019. Accessed March 13, 2019. [4] National Institute on Alcohol Abuse and Alcoholism. *Alcohol Facts and Statistics.* Last reviewed June 2017. Accessed February 21, 2018. [5] Centers for Disease Control and Prevention. *Fact Sheets – Alcohol Use and Your Health.* Last reviewed January 3, 2018. Accessed March 13, 2019. [6] Dept of Transportation (US), National Highway Traffic Safety Administration (NHTSA). *Traffic Safety Facts 2016: Alcohol-Impaired Driving.* Washington (DC): NHTSA; January, 2018. [7] National Institutes of Health, National Institute on Drug Abuse. *DrugFacts: Nationwide trends.* Last reviewed June 2015. Accessed March 13, 2019. [8] National Institute on Drug Abuse (NIDA). *NIDA Research report series: Heroin.* National Institute of Health; 2018. NIH Publication No. 14-0165. [9] National Institutes of Health, National Institute on Drug Abuse. *DrugFacts: High School and Youth Trends.* Last reviewed December 2018. Accessed March 13, 2019. [10] National Institutes of Health, National Institute on Drug Abuse. *Trends and statistics: Costs of substance abuse.* Last reviewed April 2017. Accessed March 13, 2019.

## Sexual Activity

High risk sexual practices such as unsafe sex and higher numbers of lifetime sexual partners can lead to sexually transmitted infections (STIs) and unplanned pregnancies, which can affect immediate and long-term health as well as the economic and social well-being of individuals, families, and communities. Recent data show increasing rates of syphilis, gonorrhea, and chlamydia infections. Young people, gay men, and bisexual men are at higher risk for STIs, which can have severe reproductive health complications, particularly for young women [1]. Human papillomavirus (HPV) causes almost all cervical and anal cancers, as well as the majority of vaginal, vulvar, penile and oropharyngeal cancers [2]. Some STIs, such as HIV and herpes, cannot be cured. There are approximately 3 million unintended pregnancies in the US each year. Rates are highest among poor, minority, young, and cohabiting women. Unintended pregnancy is associated with delayed prenatal care [3]. The teen pregnancy rate is falling, but as of 2016, there were still over 200,000 teen pregnancies annually [4]. Pregnant teens are less likely than older women to receive recommended prenatal care [5], and more likely to have pre-term or low birthweight babies [6]. Teen mothers are often at increased risk for STIs and repeat pregnancies [7], are less likely than their peers to complete high school, and more likely to live below the poverty level and rely on public assistance [8]. Risky sexual behaviors can have high economic

costs for communities and individuals. STIs cost the US health care system almost \$16 billion every year [1] and, in 2010, the costs of teen childbearing were estimated at over \$9 billion [4]. Communities, schools, and families can work together to adopt and implement policies and programs that reduce STIs and unplanned pregnancies, to the benefit of all.

Example metrics: Sexually transmitted infections, Teen births

*Sexual activity end notes:*

[1] Centers for Disease Control and Prevention. 2017 Sexually Transmitted Disease Surveillance. Reported STDs in the United States, 2017. Last reviewed September 2018. Accessed March 14, 2019. [2] National Cancer Institute. HPV and Cancer. Last reviewed March 1, 2019. Accessed March 14, 2019. [3] Guttmacher Institute. Unintended pregnancy in the United States. New York: Guttmacher Institute; 2016. [4] National Campaign to Prevent Teen and Unplanned Pregnancy. National & state data. 2017. [5] Lee SH, Lee SM, Lim NG, et al. Differences in pregnancy outcomes, prenatal care utilization, and maternal complications between teenagers and adult women in Korea: A nationwide epidemiological study. Desapriya, E, ed. *Medicine*. 2016. [6] Chandra PC, Schiavello HJ, Ravi B, Weinstein AG, Hook FB. Pregnancy outcomes in urban teenagers. *Int J Gynaecol Obstet*. 2002;79:117-122. [7] Meade CS, Ickovics JR. Systematic review of sexual risk among pregnant and mothering teens in the USA: Pregnancy as an opportunity for integrated prevention of STD and repeat pregnancy. *Soc Sci Med*. 2005;60:661-678. [8] National Campaign to Prevent Teen Pregnancy. *Why it Matters: Teen childbearing, education, and economic well-being*. July 2012.

## Sleep

Sleep is an important part of a healthy lifestyle, and a lack of sleep can have serious negative effects on one's own health as well as the health of others. Ongoing sleep deficiency has been linked to chronic health conditions including heart disease, kidney disease, high blood pressure, and stroke, as well as psychiatric disorders such as depression and anxiety, risky behavior, and even suicide. Sleepiness can lead to motor vehicle crashes and put the lives of others in jeopardy. Sleep duration has also been found to be inversely related to diabetes mellitus.[1]

Example metrics: Insufficient Sleep

*Sleep end notes:*

[1] Seixas AA, Gyamfi L, Newsome V, Ranger-Murdock G, Butler M, Rosenthal DM, Zizi F, Yousef I, McFarlane SI,

Jean-Louis G. Moderating effects of sleep duration on diabetes risk among cancer survivors: analysis of the National Health Interview Survey in the USA. *Cancer Management and Research*. 2018; 10: 4575-4580.

## Clinical Care

Access to affordable, quality, and timely health care can help prevent diseases and detect issues sooner, enabling individuals to live longer, healthier lives. While part of a larger context, looking at clinical care helps to understand why some communities can be healthier than others.

## Access to Care

Together, health insurance, local care options, and a usual source of care help to ensure access to health care. Having access to care allows individuals to enter the health care system, find care easily and locally, pay for care, and get their health needs met. In 2016, 28 million Americans younger than age 65 were uninsured, nearly a 16 million decrease since 2013.[1] Health insurance reforms, such as the Affordable Care Act (ACA), helped to extend coverage to many previously uninsured individuals. By the end of the 2015 enrollment period, 11.7 million Americans were reported as having chosen an insurance plan through the ACA Marketplace.[2] Medicaid expansion states saw insurance rates that declined 52.5% from 2013 to 2015, while states that did not adopt expansion saw only a 30.6% decline in uninsured.[2] The uninsured are much less likely to have primary care providers than the insured; they also receive less preventive care, dental care, chronic disease management, and behavioral health counseling. Those without insurance are often diagnosed at later, less treatable disease stages than those with insurance and, overall, have worse health outcomes, lower quality of life, and higher mortality rates.[3] However, insurance by itself does not remove all barriers in access to care. Language barriers, distance to care, and racial disparities in treatment present further barriers to care.[4-6] Nationally, many counties lack sufficient providers to meet patient needs; as of 2017, there were about 6,900 primary care, 5,000 mental health, and 5,700 dental federally designated "Health Professional Shortage Areas" in the US.[7] Having a usual primary care provider is associated with a higher likelihood of appropriate care, and a usual source of care is associated with better health outcomes. In 2010, 86% of Americans had a usual source of care, but those with low incomes were less likely to than those with higher incomes, and the uninsured were twice as likely as the insured to lack a usual care source.[3] Additionally, neighborhoods with low health insurance rates often have fewer providers, hospital beds and emergency resources than areas



with higher rates. Even the insured have more difficulty getting care in these areas.[8] Cost can be a barrier to care even for those who have insurance. In 2009, 17% of people younger than 65 had premium and out of pocket costs totaling more than 10% of their family income. From 2010 to 2012, over half of Americans with chronic illness reported that cost was a barrier in access to care.[9] Those with private, non-group insurance were three times as likely as those with employer-sponsored insurance to face such costs.[3] Adopting and implementing strategies that reduce barriers to care and better match providers to community needs can increase access to care, improving health and well-being.

Example metrics: Uninsured, Primary care physicians, Dentists, Mental health providers, Uninsured adults, Uninsured children, Other primary care providers.

Access to care end notes:

[1] Kaiser Commission on Medicaid and the Uninsured. *Key facts about the uninsured population*. Henry J. Kaiser Family Foundation; November 2017. Fact sheet. [2] Serakos M, Wolfe B. *The ACA: Impacts on Health, Access, and Employment*. Forum Health Econ Policy. 2016;19(2):201–259. [3] Clancy C, Munier W, Brady J, et al. *2012 National healthcare quality report*. Rockville, MD: Agency for Healthcare Research and Quality (AHRQ); 2013. [4] Maina IW, Belton TD, Ginzberg S, Singh A, Johnson TJ. *A decade of studying implicit racial/ethnic bias in healthcare providers using the implicit association test*. Soc Sci Med. 2018 Feb;199:219–229. [5] Buzza, C., Ono, S.S., Turvey, C. et al. *J GEN INTERN MED* (2011) 26(Suppl 2): 648. <https://doi.org/10.1007/s11606-011-1762-1> [6] Steinberg EM, Valenzuela-Araujo D, Zickafoose JS, Kieffer E, DeCamp LR. *The “Battle” of Managing Language Barriers in Health Care*. Clin Pediatr (Phila). 2016 Dec;55(14):1318–1327. [7] US Department of Health and Human Services. *Health Resources and Services Administration (HRSA). Shortage Areas*. Last reviewed September 30, 2018. Accessed March 14, 2019. [8] Robert Wood Johnson Foundation (RWJF). *What is the link between having health insurance and getting adequate health care?* Princeton: Robert Wood Johnson Foundation (RWJF); August 2011. Health policy snapshot.

### Quality of Care

Evidence-based decisions, performance assessment, and explicit efforts to improve quality, reduce errors, and involve patients in care decisions are often components of high quality health care. Such care requires providers, health systems, and others to work together to improve health outcomes and patient satisfaction while containing costs [1]. Despite efforts towards higher quality care, an estimated 30% of patients did not receive recommended preventive care or treatment in

2009. Poor care coordination within and among facilities can lead to poor health outcomes and readmissions; about 20% of discharged elderly patients return to the hospital within 30 days [1]. Hospital acquired infections killed about 100,000 Americans in 2007, and between 44,000 and 98,000 Americans are estimated to die from medical errors each year [2]. Quality varies widely by state, race, ethnicity, and income [2,3]. Blacks, Hispanics, American Indians, and those with low incomes often get lower quality care than non-Hispanic whites and those with high incomes [2]. One study found that women and minorities get lower quality care than their counterparts even when insurance status, income, and condition are accounted for [3]. Even with the highest per capita health care spending in the world, the US has shorter lifespans and higher infant mortality rates than other wealthy nations [4]. Several studies estimate that at least 30% of US health expenditures are on practices and procedures that do not improve health [1]. Preventable hospitalizations cost \$26 billion in 2009, and in 2008, medical errors cost nearly \$20 billion [2]. Adopting and implementing initiatives to improve the quality of healthcare in all settings can help everyone get the care they need when they need it, leading to longer, healthier lives, and healthier, more productive communities.

Example metrics: Preventable hospital stays, Mammography screening, Flu vaccinations

Quality of care end notes:

[1] Cosgrove D, Fisher M, Gabow P, et al. *A CEO checklist for high-value health care*. Washington, DC: Institute of Medicine (IOM); June 2012. [2] Clancy C, Munier W, Brady J, et al. *2012 National healthcare quality report*. Rockville, MD: Agency for Healthcare Research and Quality (AHRQ); 2013. [3] *Aligning Forces for Quality (AF4Q). Improving health care quality: Why you should get involved and how you can make a difference*. Princeton: Robert Wood Johnson Foundation (RWJF); 2010. [4] Robert Wood Johnson Foundation (RWJF). *What we’re learning: Clinicians are using data from public reports on their performance to improve care*. Princeton: Robert Wood Johnson Foundation (RWJF); 2013. Quality Field Notes Issue Brief No 2.

### Social and Economic Factors

Social and economic factors, such as income, education, employment, community safety, and social supports can significantly affect how well and how long people live. These factors affect the ability to make healthy choices, afford medical care and housing, manage stress, and more.

### Education

More schooling is linked to higher incomes, better employment options, and increased social supports that, together, support opportunities for healthier choices. Yet in 2017, about 10% of adults older than 24 had not graduated high school, and of those who had graduated high school, an additional 32% had no education beyond high school [1]. As of 2012, 14% of Americans had only basic literacy and 4% lacked even basic literacy [2]. Many more also lack health literacy, making it difficult to navigate health care. Higher levels of education can lead to a greater sense of control over one's life, which is linked to better health, healthier lifestyle decisions, and fewer chronic conditions [3]. Education is also connected to lifespan: on average, college graduates live nine more years than high school dropouts [4]. Researchers estimate that each additional year of schooling leads to about 11% more income annually. Higher paying jobs are more likely than lower paying jobs to provide workers with safe work environments and offer benefits such as health insurance and sick leave. More educated workers also fare better in economic downturns [3]. Parental education is linked to children's health and educational attainment. Children whose mothers graduated from college are twice as likely to live past their first birthday. Stress and poor health early in life, common among those whose parents have lower levels of education, is linked to decreased cognitive development, increased tobacco and drug use, and a higher risk of cardiovascular disease, diabetes, depression, and other conditions [3]. Communities and educators can work together to increase educational attainment for children and adults, better preparing the individuals and families of today and tomorrow to live long, healthy lives.

Example metrics: High school graduation, Some college, Disconnected youth, Reading scores, Math scores

*Education end notes:*

[1] US Department of Commerce. *Educational Attainment of the Population 18 Years and Over, by Age, Sex, Race, and Hispanic Origin: 2017*. US Bureau of the Census; 2017. [2] Organisation for Economic Co-operation and Development (OECD). *OECD Skills outlook 2013: First results from the survey of adult skills*. Washington, DC: OECD Publishing; 2013. [3] Egerter S, Braveman P, Sadegh-Nobari T, Grossman-Kahn R, Dekker M. *Education and health*. Princeton: Robert Wood Johnson Foundation (RWJF); 2011. *Exploring the Social Determinants of Health Issue Brief No. 5*. [4] Center on Society and Health. *Education: It matters more to health than ever before*. Richmond: Center on Society and Health, Virginia Commonwealth University (VCU); 2014.

## Employment

Most adults spend nearly half their waking hours at work. Working in a safe environment with fair compensation often provides not only income, but also benefits such as health insurance, paid sick leave, and workplace wellness programs that, together, support opportunities for healthy choices. These opportunities, however, are greater for higher wage earners - usually those with more education. The estimated 10 million workers who are part of the "working poor" face many challenges: they are less likely to have health insurance and access to preventive care than those with higher incomes, and are more likely to work in hazardous jobs. Working poor parents may not be able to afford quality child care, and often lack paid leave to care for their families and themselves [1,2]. Those who are unemployed face even greater challenges to health and well-being, including lost income and, often, health insurance. Unemployed individuals are 54% more likely to be in poor or fair health than individuals who are employed, and are more likely to suffer from increased stress, high blood pressure, heart disease, and depression. Racial and ethnic minorities and those with less education, often already at-risk for poor health outcomes, are most likely to be unemployed [1,2]. Some jobs pose risks to mental and physical health. Lack of control over working conditions and non-standard hours are associated with increased illness, injury, and mortality. Thousands of fatal work-related injuries occur each year. Nonfatal work-related injuries number in the millions, and cost billions of dollars in lost income, workers compensation, and productivity [1]. Employers and communities can work together to create opportunities to increase job skills for their residents, enhance local employment opportunities, and create supportive and safe work environments - to the benefit of the entire community.

Example metrics: Unemployment

*Employment end notes:*

[1] An J, Braveman P, Dekker M, Egerter S, Grossman-Kahn R. *Work, workplaces and health*. Princeton: Robert Wood Johnson Foundation (RWJF); 2011. *Exploring the Social Determinants of Health Issue Brief No. 4*. [2] Robert Wood Johnson Foundation. *How does employment - or unemployment - affect health?* Princeton; March 2013. *Health Policy Snapshot Issue Brief*. Accessed March 8, 2018.

## Income

Income can come from jobs, investments, government assistance programs, or retirement plans. Income allows families and individuals to purchase health insurance and medical care, but also provides options



for healthy lifestyle choices. Poor families and individuals are most likely to live in unsafe homes and neighborhoods, often with limited access to healthy foods, employment options, and quality schools. While the starkest difference in health is between those with the highest and lowest incomes, this relationship persists throughout all income brackets. Adults in the highest income brackets are healthier than those in the middle class and will live, on average, more than six years longer than those with the lowest incomes [1]. The ongoing stress and challenges associated with poverty can lead to cumulative health damage, both physical and mental. Chronic illness is more likely to affect those with the lowest incomes, and children in low income families are sicker than their high income counterparts. Low income mothers are more likely than higher income mothers to have preterm or low birthweight babies, who are at higher risk for chronic diseases and behavioral problems [1]. Income inequality is a measure of the divide between the poor and the affluent. Income inequality in our communities affects how long and how well people live and is particularly harmful to the health of poorer individuals [2]. Income inequality within US communities can have broad health impacts, including increased risk of mortality, poor health, and increased cardiovascular disease risks. Inequalities in a community can accentuate differences in social class and status and serve as a social stressor. Communities with greater income inequality can experience a loss of social connectedness, as well as decreases in trust, social support, and a sense of community for all residents. Communities can adopt and implement policies that help reduce and prevent poverty, now and for future generations. The greatest health improvements may be made by increasing income at the lower levels, where small increases can have the greatest impacts.

Example metrics : Children in poverty, Income inequality, Median household income, Children eligible for free or reduced price lunch

*Income end notes:*

[1] Braveman P, Egerter S, Barclay C. *Income, wealth and health*. Princeton: Robert Wood Johnson Foundation (RWJF); 2011. *Exploring the Social Determinants of Health Issue Brief No. 4*. [2] Lynch J, Smith GD, Harper S, Hillemeier M. *Is income inequality a determinant of population health? Part 2. U.S. National and regional trends in income inequality and age- and cause-specific mortality*. *Milbank Q*. 2004;82(2):355-400.

### **Family & Social Support**

Social support stems from relationships with family members, friends, colleagues, and acquaintances. So-

cial capital refers to the features of society that facilitate cooperation for mutual benefit, such as interpersonal trust and civic associations [1]. Individual social support and cohesive, capital-rich communities help to protect physical and mental health and facilitate healthy behaviors and choices [2]. Socially isolated individuals have an increased risk for poor health outcomes [3]. Individuals who lack adequate social support are particularly vulnerable to the effects of stress, which has been linked to cardiovascular disease and unhealthy behaviors such as overeating and smoking in adults, and obesity in children and adolescents [2]. Residents of neighborhoods with low social capital are more likely to rate their health status as fair or poor than residents of neighborhoods with more social capital [1], and may be more likely to suffer anxiety and depression [4]. Neighborhoods with lower social capital may be more prone to violence than those with more social capital and often have limited community resources and role models. Socially isolated individuals are more likely to be concentrated in communities with limited social capital [1]. Individuals with higher educational attainment and higher status jobs are more likely to have greater social support than those with less education and lower incomes [5]. Adults and children in single-parent households, often at-risk for social isolation, have an increased risk for illness, mental health problems and mortality, and are more likely to engage in unhealthy behaviors than their counterparts [6-10]. Adopting and implementing policies and programs that support relationships between individuals and across entire communities can benefit health. The greatest health improvements may be made by emphasizing efforts to support disadvantaged families and neighborhoods, where small improvements can have the greatest impacts.

Example metrics: children in poverty, Income inequality, Median household income, Children eligible for free or reduced price lunch

*Family & social support end notes:*

[1] Kawachi IK, Bruce P, Glass R. *Social capital and self-rated health: A contextual analysis*. *Am J Public Health*. 1999;89:1187-1193. [2] Egerter S, Braveman P, Barclay C. *Stress and health*. Princeton: Robert Wood Johnson Foundation (RWJF); 2011. *Exploring the Social Determinants of Health Issue Brief No. 3*. [3] House JS. *Social isolation kills, but how and why?* *Psychosom Med*. 2001;63:273-274. [4] Braveman P, Cubbin C, Egerter S, Pedregon V. *Neighborhoods and health*. Princeton: Robert Wood Johnson Foundation (RWJF); 2011. *Exploring the Social Determinants of Health Issue Brief No. 8*. [5] Braveman P, Egerter S, Barclay C. *What shapes health-related*

behaviors? Princeton: Robert Wood Johnson Foundation (RWJF); 2011. *Exploring the Social Determinants of Health Issue Brief No. 1*. [6] Fergusson DM, Boden JM, Horwood LJ. Exposure to single parenthood in childhood and later mental health, educational, economic, and criminal behavior outcomes. *Arch Gen Psychiatry*. 2007;64:1089-1095. [7] Wille N, Bettge S, Ravens-Sieberer U, BELLA Study Group. Risk and protective factors for children's and adolescents' mental health: Results of the BELLA study. *Eur Child Adolesc Psychiatry*. 2008;17:133-147. [8] Rahkonen O, Laaksonen M, Karvonen S. The contribution of lone parenthood and economic difficulties to smoking. *Soc Sci Med*. 2005;61:211-216. [9] Ringbäck Weitoft G, Burström B, Rosén M. Premature mortality among lone fathers and childless men. *Soc Sci Med*. 2004;59:1449-1459. [10] Weitoft GR, Haglund B, Hjern A, Rosén M. Mortality, severe morbidity and injury among long-term lone mothers in Sweden. *Int J Epidemiol*. 2002;31:573-580.

## Community Safety

Community safety reflects not only violent acts in neighborhoods and homes, but also injuries caused unintentionally through accidents. Many injuries are predictable and preventable, yet about 30 million Americans receive medical treatment for injuries each year [1], and more than 243,000 died from these injuries in 2017 [2]. In 2017, unintentional injuries were the leading cause of death among individuals ages 1 through 44. Among these unintentional injury deaths, drowning was the leading cause of death for children ages 1-4, motor vehicle traffic accidents were the leading cause of injury death for individuals ages 5-24, and unintentional poisoning was the leading cause of injury death for individuals ages 25-64. Unintentional injury was the fifth leading cause of death for infants, and among these deaths, suffocation was most common [2]. In 2016, approximately 5.7 million violent crimes such as assault, robbery, and rape, were committed [3]. Each year, 19,000 children and adults are victims of homicide and more than 1,700 children die from abuse or neglect [1,4]. Children in unsafe circumstances can suffer post-traumatic stress disorder and exhibit more aggressive behavior, alcohol and tobacco use, and sexual risk-taking than peers in safer environments [5]. The chronic stress associated with living in unsafe neighborhoods can accelerate aging and harm health. Unsafe neighborhoods can cause anxiety, depression, and stress, and are linked to higher rates of preterm births and low birth weight babies, even when income is accounted for. Fear of violence can keep people indoors, away from neighbors, exercise, and healthy foods. Companies may be less willing to invest in unsafe neighborhoods, making jobs harder to find [5]. One in four women experiences intimate partner violence (IPV)

during their life, and more than 4 million are assaulted by their partners each year [5]. IPV causes 2,000 deaths annually and increases the risk of depression, anxiety, post-traumatic stress disorder, substance abuse, and chronic pain [1]. Injuries sustained in one year will generate more than \$794 billion in lifetime costs [1]. Communities can help protect their residents by adopting and implementing policies and programs to prevent accidents and violence.

Example metrics: Violent crime, Injury deaths, Homicides, Suicides, Firearm fatalities, Juvenile arrests

Community safety end notes:

[1] Levi J, Segal LM, Kohn D. *The Facts Hurt – A State-by-State Injury Prevention Policy Report*. Trust for America's Health. Robert Wood Johnson Foundation. June 2015. [2] Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. *Web-based Injury Statistics Query and Reporting System (WISQARS) Fatal Injury Data*. Updated January 18, 2019. Accessed March 14, 2019. [3] Morgan RE, Kena G. *Criminal Victimization, 2016*. Bureau of Justice Statistics (BJS). December 2017. NCJ 251150. [4] Centers for Disease Control and Prevention. *Child Abuse and Neglect Prevention*. Updated April 10, 2018. Accessed March 14, 2019. [5] Egerter S, Barclay C, Grossman-Kahn R, Braveman P. *Violence, social disadvantage and health*. Princeton: Robert Wood Johnson Foundation (RWJF); 2011. *Exploring the Social Determinants of Health Issue Brief No. 10*.

## Physical Environment

The physical environment is where individuals live, learn, work, and play. People interact with their physical environment through the air they breathe, water they drink, houses they live in, and the transportation they access to travel to work and school. Poor physical environment can affect the ability of individuals and that of their families and neighbors to live long and healthy lives.

## Air & Water Quality

Clean air and water support healthy brain and body function, growth, and development. Air pollutants such as fine particulate matter, ground-level ozone, sulfur oxides, nitrogen oxides, carbon monoxide, and greenhouse gases can harm our health and the environment [1]. Excess nitrogen and phosphorus run-off, medicines, chemicals, lead, and pesticides in water also pose threats to well-being and quality of life [2]. In 2016, 43 million people—more than 1 in 8 Americans—had been diagnosed with asthma [3]. Air pollution is associated with increased asthma rates and can aggravate asthma, emphysema, chronic bronchitis, and other lung diseases.

es, damage airways and lungs, and increase the risk of premature death from heart or lung disease. Using 2009 data, the CDC's Tracking Network calculates that a 10% reduction in fine particulate matter could prevent over 13,000 deaths per year in the US [4]. While drinking water safety is improving, a 2012 study estimates that contaminants in drinking water sicken up to 1.1 million people per year [5]. Improper medicine disposal, chemical, pesticide, and microbiological contaminants in water can lead to poisoning, gastro-intestinal illnesses, eye infections, increased cancer risk, and many other health problems [2]. Poor surface water quality can also make lakes unsafe for swimming and wild fish unsafe for consumption. Nitrogen pollution and harmful algae blooms create toxins in water, which can lead to rashes, stomach or liver illness, respiratory problems, and neurological effects when people ingest or come into contact with polluted water. Water pollution also threatens wildlife habitats [2]. Communities can adopt and implement various strategies to improve and protect the quality of their air and water, supporting healthy people and environments.

Example metrics: Air pollution- particulate matter, Drinking water violations

*Air & water quality end notes:*

[1] Environmental Protection Agency. *Learn about air*. Last reviewed December 4, 2018. Accessed March 14, 2019. [2] Environmental Protection Agency. *Learn about water*. Last reviewed December 4, 2018. Accessed March 14, 2019. [3] Centers for Disease Control and Prevention. *Asthma: 2016 National Health Interview Survey*. Last reviewed May 18, 2018. Accessed March 14, 2019. [4] Centers for Disease Control and Prevention. *Outdoor Air: Health Impacts of Fine Particles in Air*. Last reviewed August 2, 2018. Accessed March 14, 2019. [5] Lambertini E, et al. *Risk of Viral Acute Gastrointestinal Illness from Nondisinfected Drinking Water Distribution Systems*. *Environ. Sci. Technol.* 2012; 46 (17):9299–9307.

## Housing & Transit

People's homes, and those of their neighbors, play a critical role in shaping their health and the health of the whole community. Housing is related to health through several pathways [1]. First, the safety and quality of homes are correlated with health. Exposure to lead from pipes and paint can irreversibly harm brain and nervous system development. Improper insulation can expose occupants to extreme temperatures associated with increased mortality, especially among the very young, old, or sick. Asthma can be exacerbated by indoor allergens such as mold and dust, and residential crowding has been linked to both physical illness (e.g.,

infectious disease) and psychological distress. The affordability and stability of housing are also important determinants of health. Housing is a substantial expense, reflecting the largest single monthly expenditure for many individuals and families. In 2015, 38.9 million American families were considered "cost burdened" spending more than 30% of their income on housing, and nearly half of those (18.8 million) were "severely cost burdened" spending 50% or more. For low-income families, being cost burdened decreases the likelihood of being able to pay utility bills, to have a usual source of medical care, or having a sufficient supply of food or prescribed medicines. Having low income and being cost burdened also increases the likelihood of housing instability and homelessness. Foreclosure has been found to be associated with poor health outcomes such as psychological distress, increased alcohol use, and suicide. Homelessness has many long-standing psychological and physical adverse impacts on health and well-being. Even children who experienced homelessness only while in utero are more likely to be hospitalized or suffer worse health, compared to their peers. Lastly, the neighborhoods in which homes are located can have a profound impact on health. The availability and accessibility of resources such as public transportation, grocery stores, and safe spaces to exercise are all correlated with improved health outcomes. A neighborhood's social characteristics, including residential segregation, crime and social capital can affect health, as well. For instance, residential segregation can widen health disparities through determining access to schools, jobs, and health care; influencing health behaviors; and increasing crime rates in neighborhoods of color. Working together, however, communities can adopt policies and programs that ensure access to safe, quality housing for everyone. Transit includes public systems such as city or regional buses, subway systems, and trams as well as cars and bikes, sidewalks, streets, bike paths, and highways. Together, this varied and complex system connects people to each other, and to the places where they live, learn, work, and play. Local transit options can support active, energy-efficient travel. Too often, however, neighborhoods lack sidewalks, safe crossings, or shared transit services that support these choices. Across the US, people depend heavily on motorized travel, especially cars, to get from place to place: in 2017, the average American drove more than 10,000 miles [2]. Most of the nation's workers (nearly 88%) get to work in a car. And, they often drive very short distances; almost half of all trips in America are two miles or less, and 74% of these are traveled by car [3]. Dependence on driving leads to 40,000 traffic-related deaths annually and exposes individuals to air pollution, which has been linked to asthma and other

respiratory illnesses, cardiovascular disease, pre-term births, and premature death. It also contributes to physical inactivity and obesity—each additional hour spent in a car per day is associated with a 6% increase in the likelihood of obesity, whereas each added kilometer walked per day is associated with a nearly 5% reduction in obesity risk [3]. Creating and adopting policies that support active travel and encourage shared transportation can not only help to increase physical activity and reduce obesity, but also reduce traffic-related injuries and deaths and improve the quality of the environment.

Example metrics: Severe housing problems, Driving alone to work, Long commute- driving alone, Traffic volume, Homeownership, Severe housing cost burden

*Housing & transit end notes:*

[1] Braveman P, Dekker M, Egerter S, Sadegh-Nobari T. *Housing and health*. Princeton: Robert Wood Johnson Foundation (RWJF); 2011. *Exploring the Social Determinants of Health Issue Brief No. 7*. [2] U.S. Department of Transportation, Federal Highway Administration. *Summary of Travel Trends: 2009 National Household Travel Survey*. Report No. FHWA-PL-11-022 June 2011. [3] Robert Wood Johnson Foundation (RWJF). *How does transportation impact health?* Princeton: Robert Wood Johnson Foundation (RWJF); 2012. *Health Policy Snapshot Public Health and Prevention Issue Brief*.

### Social Norms & Culture

Cultural and social norms, or rules and expectations of behavior within a specific cultural or social group, govern what is (and is not) acceptable and coordinate interactions between individuals. They do not necessarily correspond with an individual's attitudes and beliefs, but individuals are discouraged from violating norms by threat of social disapproval or punishment.[1] Cultural and social norms can impact health through every factor area in the CHR&R model. Health behaviors, like smoking, alcohol and drug abuse, and the use of contraceptives, as well as attitudes towards obesity and physical activity, are all influenced by social norms and culture.[2] So too are social and economic factors, like attitudes towards education, employment, and family roles (e.g. the expectation of school-aged girls to marry or work in some societies), and the acceptance of different forms of violence in a society.[1] From a clinical health perspective, cultural and social norms can affect how illness and death are perceived, beliefs about the sources of disease, where patients seek help, and the type of treatment they receive.[3] Lastly, environmental challenges that are related to human activity and can have significant impacts on community health, such as climate disruption, pollution of air and water,

and the spread of emerging diseases, are influenced by attitudes and beliefs about reproduction, material consumption, alternative energy, and land use, for example.[4]

*Social norms & culture end notes:*

[1] World Health Organization, *Changing Cultural and Social Norms Supportive of Violent Behavior*, World Health Organization, Geneva, Switzerland, 2009. [2] Ball K, Jeffery RW, Abbott G, McNaughton SA, Crawford D. *Is healthy behavior contagious: associations of social norms with physical activity and healthy eating*. *International Journal of Behavioral Nutrition and Physical Activity*. 2010 Dec 1;7(1):86. [3] Canadian Paediatric Society. *How Culture Influences Health*. Edited by Maureen Mayhew. Last updated: March, 2018. Retrieved from <https://www.kidsnew-tocanada.ca/culture/influence> [4] Kinzig AP, Ehrlich PR, Alston LJ, et al. *Social Norms and Global Environmental Challenges: The Complex Interaction of Behaviors, Values, and Policy*. *Bioscience*. 2013;63(3):164-175. doi:10.1525/bio.2013.63.3.5 *Hate crimes, Domestic violence prosecutions per convictions, Smoke-free policies, Inclusionary zoning, Gender Pay Gap, Mean age at marriage, Child abuse, Self-identified LGBT individuals, Employment in cultural occupations*

### Historical Trauma & Psychosocial Experiences

Historical trauma is the complex and collective trauma imposed on a group, manifesting from the past treatment of that group. This persisting form of structural and systemic racism still shapes opportunities, risks, and health outcomes of these groups today.[1] For example, the forced relocation of Native Americans to reservations with limited resources continues to affect physical and mental health in these communities. A variety of health mechanisms have been identified in the literature that link racism to health outcomes such as mental health, cardiovascular disease, and birth defects.[1] Many communities have been left traumatized from historical institutional and governmental practices and left with a legacy of racism and segregation. Understanding and accounting for this historical trauma can help inform strategies and approaches for engaging and empowering communities for positive structural community change in order to address health and health inequity.[2] Positive psychosocial environments enable better health. Poor psychosocial environments are damaging to the health of individuals and communities and contribute to health inequalities.[3] For instance, children who are exposed to more adverse childhood experiences (ACEs) are more likely to face health risk factors such as smoking and obesity as well as poor health outcomes such as cancer, cardiovascular disease, and diabetes later in life.[4] Differences in ACEs,



stress, and trauma by race and social and economic status have been documented, affecting school performance, health outcomes, and ultimately leading to increased disparities.[1]

*Historical trauma & psychosocial experiences end notes:*

[1] Baciu A, Negussie Y, Geller A, Weinstein JN, National Academies of Sciences, Engineering, and Medicine. *The Root Causes of Health Inequity. In Communities in Action: Pathways to Health Equity 2017 Jan 11. National Academies Press (US).* [2] Davis R. *Measuring what works to achieve health equity: metrics for the determinants of health. Prevention Institute, USA. 2015.* [3] Egan M, Tannahill C, Petticrew M, Thomas S. *Psychosocial risk factors in home and community settings and their associations with population health and health inequalities: a systematic meta-review. BMC public health. 2008 Dec 1;8(1):239.* [4] Bellis MA, Hughes K, Ford K, Rodriguez GR, Sethi D, Passmore J. *Life course health consequences and associated annual costs of adverse childhood experiences across Europe and North America: a systematic review and meta-analysis. The Lancet Public Health. 2019 Oct 1;4(10):e517-28. Trauma, Adverse childhood experiences, Community trauma, Coping strategies, Stress management, Seeking care when needed, Presence of historic properties, Presence of tribal lands, Redlining, Segregation, Bank lending, Hate crimes*

### **Policy, Power, & Rights**

Policies and programs at the local, state, and federal levels play an important role in influencing health and health factors. By implementing strategies that target the specific health challenges of a community, there is an opportunity to influence how long and how well people live. There is a wide range of policies, programs, systems, and environmental changes that can make a difference locally. Some interventions target individual behaviors, such as influencing dietary choices, exercise levels, or alcohol consumption. Other strategies try to tackle systems and structures, such as enhancing opportunities for education, stimulating economic development, and increasing neighborhood safety. No single strategy will ensure that everyone in the community can be healthier, and many policies and practices in the past have marginalized groups of residents, such as people of color, keeping them from the resources and supports necessary to thrive. The nation's collective health and well-being depends on building opportunity for everyone. Fundamentally, inequity in health is disparity in power and rights, with those with less power experiencing worse health.[1] The unequal distribution of power, such as in the form of resources, services, and social attention, creates unequal societal conditions, which in

turn directly impact health. These inequities are also passed from generation to generation, contributing to intergenerational transfers of advantage or disadvantage.[2] Having less power and fewer rights can lead to disenfranchisement of individuals and communities from decision-making processes and other opportunities, which is associated with poor health and increased disparity.[1]

*Policy, power, & rights end notes:*

[1] Davis R. *Measuring what works to achieve health equity: metrics for the determinants of health. Prevention Institute, USA. 2015.* [2] Baciu A, Negussie Y, Geller A, Weinstein JN, National Academies of Sciences, Engineering, and Medicine. *The Root Causes of Health Inequity. In Communities in Action: Pathways to Health Equity 2017 Jan 11. National Academies Press (US).* *Smoke-free policies in place, Living-wage policies in place, Alternatives to incarceration, Inclusionary zoning, School designation, Gerrymandering, Campaign finance, Rates of incarceration by race, Percent of residents from traditionally marginalized communities in positions of influence, Tribal lands, Voter restriction laws, Income inequality, Gender pay gap, Voter participation, Census response, Non-profit organizations, Volunteerism, Collective efficacy*

### **Government Funding & Resource Allocation**

How local governments spend their money can have significant impacts on the health of the community; whether those funds primarily target health, or the spending is on other social services. However, given the complexities of the public health delivery system and a scarcity of up-to-date spending data, the link is not well described. A systematic review by Singh et al. found 9 out of 10 studies found positive relationships between public health spending and at least some of the examined population health outcomes.[1] For example, several studies using the same data found local health department spending to be associated with infectious disease morbidity, years of potential life lost, infant mortality, and deaths due to major chronic health conditions. The two studies that examined local health department spending and racial health disparities did not find conclusive evidence of a relationship but did find that family planning services were associated with reductions in the black-white female mortality gap.[1] This suggests that government spending outside of the health department might be impactful to health and health disparities, as well. Relatedly, McCullough et al. found counties in the top quartile of Health Factor ranks from the County Health Rankings spent a larger proportion of their annual budgets not only on community health care and public health, but also on parks and recreation, sewerage, fire protection, protective



inspections, libraries, and housing and community development.[2] They also found that increased spending in public health and social services like k-12 education, corrections, and libraries was associated with improvement in Health Factor ranks.

*Government funding & resource allocation end notes:*

[1] Singh SR. *Public health spending and population health: a systematic review. Am J Prev Med.* 2014;47(5):634-640. doi:10.1016/j.amepre.2014.05.017. [2] McCullough JM, Leider JP. *Government Spending In Health And Nonhealth Sectors Associated With Improvement In County Health Rankings. Health Aff (Millwood).* 2016;35(11):2037-2043. doi:10.1377/hlthaff.2016.0708

### Climate Change

The climate and climate change are an established public health risk with the potential for mass exposures. Current climate challenges, such as natural disasters (e.g. extreme heat, hurricanes, floods, etc.) and future changes to the global climate through increased build-up of greenhouse gases in the atmosphere — which will intensify those challenges and contribute to new ones (e.g. rising temperatures, atmospheric CO<sub>2</sub> levels, and sea levels) — have the ability to affect the health of communities.[1] The mechanisms of the link between the climate and climate change can be direct (e.g. injury, death, and disease) or through deleterious impacts to the social and economic and physical environments. According to the CDC, rising temperatures can lead to increased extreme weather and heat events. In addition to destroying homes, medical facilities, and other essential services, more extreme weather can worsen air pollution and increase vector borne disease like malaria. Rising sea levels can increase the presence of respiratory allergens, negatively impact water quality through water borne illnesses like cholera, and displace entire populations from their communities. Increased CO<sub>2</sub> in the atmosphere could cause shortages in the food and water supplies and environmental degradation, leading to forced migration and civil conflict. According to the WHO, climate change is expected to cause approximately 250,000 additional deaths per year, globally, from malnutrition, malaria, diarrhea, and heat stress alone between 2030 and 2050.[2] The climate is also a contributing factor to health disparities, especially by socioeconomic class and race/ethnicity, and climate change will exacerbate these differences. Certain communities are more vulnerable to the climate than others through differences in exposure, sensitivity to the challenge, and the capacity to adapt.[1] Examples of this can be seen in the outcome and aftermath of Hurricane Katrina – where poor, black communities in New Orleans were more likely to be severely impacted and less

likely to recover – and the effects of the melting polar ice caps, which directly impacts the economic, mental, and physical health of Inuit populations in Canada [3,4].

*Climate change end notes:*

[1] Melillo, Jerry M., Terese Richmond, and Gary W. Yohe (eds.) *Climate Change Impacts in the United States: The Third National Climate Assessment. U.S. Global Change Research Program, 2014.* [2] USGCRP, 2016: *The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment.* Crimmins, A., J. Balbus, J.L. Gamble, C.B. Beard, J.E. Bell, D. Dodgen, R.J. Eisen, N. Fann, M.D. Hawkins, S.C. Herring, L. Jantarasami, D.M. Mills, S. Saha, M.C. Sarofim, J. Trtanj, and L. Ziska, Eds. *U.S. Global Change Research Program, Washington, DC, 312 pp.* <http://dx.doi.org/10.7930/JOR49NQX>. [3] Toldson IA, Ray K, Hatcher SS, Louis LS. *Examining the long-term racial disparities in health and economic conditions among Hurricane Katrina survivors: policy implications for Gulf Coast recovery. J Black Stud.* 2011;42(3):360-378. doi:10.1177/0021934710372893. [4] Ford JD, Willox AC, Chatwood S, et al. *Adapting to the effects of climate change on Inuit health. Am J Public Health.* 2014;104 Suppl 3(Suppl 3):e9-e17. doi:10.2105/AJPH.2013.301724



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*The Center for Social Innovation provides a credible research voice that spurs civic leadership and policy innovation. Its reputation is built on the key pillars of social science, strategic policy awareness, innovation mindsets, and deep community partnerships. CSI integrates researchers, community organizations, and civic stakeholders in collaborative projects and long-term partnerships that strengthen shared values of resilience, inclusion, sustainability, and equity (RISE). Importantly, the Center seeks to shift away from a “problem” narrative to an “opportunity” narrative for marginalized communities and localities.*

*The UW Population Health Institute advances health and well-being for all by developing and evaluating interventions and promoting evidence-based approaches to policy and practice at the local, state, and national levels. The Institute works across the full spectrum of factors that contribute to health. A focal point for health and health care dialogue within the University of Wisconsin-Madison, and a convener of stakeholders, the Institute promotes an exchange of expertise between those within the university and those in the policy and practice arena.*

## **ABOUT THIS COMPENDIUM**

*This compendium is a concise collection of research and materials on civic engagement and population health including: key concepts, measures, and datasets related to civic engagement, broadly and comprehensively defined, at the individual and group level and across varied geographic scales.*

*This compendium was created in preparation for the Civic Engagement and Population Health Initiative, a joint project of the University of California, Riverside and the University of Wisconsin Population Health Institute.*

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