

# SAFE VOTING DURING THE COVID-19 PANDEMIC

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**A REPORT BY FREE SPEECH FOR PEOPLE**

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### Introduction

The SARS-CoV-2 coronavirus (“novel coronavirus”), which causes the Coronavirus Disease 2019 (“COVID-19”), has been spreading throughout the United States since approximately January 2020. There is currently no cure or vaccine for COVID-19. As of this writing, there are more than 360,000 reported cases of COVID-19 in the United States, with cases in all fifty states, the District of Columbia, and U.S. territories. More than 10,000 people in the United States have died from COVID-19. Unfortunately, both of these numbers are expected to increase dramatically over the next several months. On March 29, 2020, Dr. Anthony Fauci, the director of the National Institute of Allergy and Infectious Diseases, predicted that millions of Americans would be infected and 100,000-200,000 would die.<sup>1</sup>

As the novel coronavirus spirals out of control, it has become clear that our traditional Election Day practices are not suited for a pandemic. In response, some states have already begun to postpone primary elections. But elections—the foundation of our democracy—must be held, and we must make legal and policy changes now to ensure a safe, accessible, and trustworthy election in November.

This report summarizes best practices for safe voting in the 2020 elections, based on the generally accepted best practices for infectious disease control (including for the novel coronavirus in particular) as of this date.<sup>2</sup> As explained in more detail below, we recommend that every state and jurisdiction take the following actions:

- **Make vote-by-mail easy.** All voters should have the opportunity to vote by mail, or to complete their ballots at home and drop them off at a drive-through or walk-through drop-off location. The processing of mail-in ballots must be handled in a way that protects poll workers from virus transmission.

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<sup>1</sup> Susan Milligan, “Fauci: U.S. Coronavirus Deaths Could Near 200,000,” <https://www.usnews.com/news/national-news/articles/2020-03-29/anthony-fauci-us-coronavirus-deaths-could-near-200-000> (Mar. 29, 2020).

<sup>2</sup> The information in this report reflects best practices as of this writing. As knowledge of this virus is rapidly evolving, it is likely that, over time, this understanding will evolve.

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- **Minimize person-to-person contact at polling places.** Early voting should be expanded as much as feasible, to help limit the number of people who must vote on any one day, and the number of polling places should be increased. Voters should not be required to wait in long lines to vote. Polling places should be configured to allow at least six feet of distance between all voters and poll workers.
- **Minimize contact with commonly-used surfaces.** Polling places should be designed to ensure that voters are not required to touch common surfaces that are not disinfected. All voting-related equipment must be cleaned and disinfected regularly. Paper ballots are safer than voting machines and less likely to spread the novel coronavirus because fewer people must handle each ballot. The use of voting machines should be absolutely minimized, and used by only those voters who require them for accessibility purposes.
- **Design and manage polling places to protect the most vulnerable populations.** The location and staffing of polling sites should be carefully arranged to protect the most vulnerable populations, including older adults.

### Epidemiology of the novel coronavirus

The novel coronavirus is thought to spread mostly person-to-person through respiratory droplets produced by an infected person who sneezes or coughs within approximately a six-foot radius of another person or who touches and object that is then touched by another person.

However, the novel coronavirus can also be spread through surfaces or objects. If the novel coronavirus is present on a surface or object, a person may contract COVID-19 by touching that surface or object, and then touching their mouth, nose, or eyes. Other coronaviruses, including Severe Acute Respiratory Syndrome (SARS) coronavirus and the Middle East Respiratory Syndrome (MERS) coronavirus, have been found to persist on glass for 4-5 days, and to persist on plastic for up to 6 days, with one coronavirus strand surviving on plastic for up to 9 days.<sup>3</sup> An early study on the aerosol and surface stability of the novel

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<sup>3</sup> G. Kampf et al., "Persistence of Coronaviruses on Inanimate Surfaces and Their Inactivation With Biocidal Agents," 104 J. of Hospital Infection 246 (Mar. 2020), <https://doi.org/10.1016/j.jhin.2020.01.022>.

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coronavirus has determined that the novel coronavirus can remain viable on plastic for up to 3 days.<sup>4</sup>

In both cases, individuals infected with the novel coronavirus can shed the virus while appearing asymptomatic.

### The novel coronavirus and the voting process

While voting practices vary widely, many aspects of common voting processes in the United States pose a high risk of transmitting the novel coronavirus. Because individuals can spread the novel coronavirus through person-to-person contact, any dense grouping of people might result in person-to-person spread of COVID-19.

At many polling places, voters waiting to vote must stand in line with other voters, often indoors and in confined spaces, sometimes for extended periods of time. Once inside the polling location, the typical “flow” involves interacting with a poll worker to check in; proceeding to a semi-private voting booth or area that may be quite close to another voter’s voting booth; and then interacting with another poll worker to check out. All of these offer opportunities for an infected voter or poll worker to transmit the novel coronavirus directly to others.

Additionally, the novel coronavirus may be shed onto voting machines, voting booths, and other materials required for voting. The novel coronavirus could remain present on those materials for hours or days unless they are properly sanitized using disinfectants that are approved by the CDC for rendering the virus inactive.

### Infectious disease control best practices for elections

The best practices to control the spread of the novel coronavirus in the voting process are based on the following principles:

- a. Minimizing person-to-person contact via social distancing.

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<sup>4</sup> Neeltje van Doremalen et al., “Aerosol and Surface Stability of SARS-CoV-2 as Compared With SARS-CoV-1,” Letter to the Editor, New England Journal of Medicine (Mar. 17, 2020), <https://bit.ly/2Uibd28>.

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- b. Minimizing contact by multiple people with commonly used surfaces.
- c. Frequently disinfecting commonly used surfaces.
- d. Protecting the most vulnerable populations, including older adults.

The Centers for Disease Control and Prevention (“CDC”) issues and updates guidance on mass gatherings and large community events.<sup>5</sup> As of this writing, the CDC recommends that all U.S. events of 10+ people should be cancelled or held virtually. Many states and cities have imposed similar or even more stringent measures. Government authorities may revise these measures over time for various reasons. But from the perspective of infectious disease control, expert medical consensus is unlikely to change its view that minimizing large gatherings will be essential for months to come.

The CDC also issues and updates guidance specific to election polling locations.<sup>6</sup> The following best practices and recommendations are drawn from and reflect CDC and other expert medical guidance, as well as the professional expertise and judgment of Free Speech For People’s advisor on infectious disease control in the voting process, Dr. Joia Mukherjee.

### Voting by mail

**All voters should have the opportunity to vote by mail, or to complete their ballots at home and drop them off at a drive-through or walk-through dropoff location.** Voters should be able to request mail-in ballots up to the day before the election, to increase the likelihood that individuals who are diagnosed with COVID-19 or have been exposed to the novel coronavirus do not vote in person, and to ensure that individuals who wish to reduce their exposure to infection can do so. Envelope closures for mail-in ballots should use “no-lick” sealing methods such as pressure-sensitive gum.

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<sup>5</sup> See CDC, “Interim Guidance: Get Your Mass Gatherings or Large Community Events Ready for Coronavirus Disease 2019 (COVID-19),” [https://www.cdc.gov/coronavirus/2019-ncov/downloads/Mass-Gatherings-Documents\\_FINAL.pdf](https://www.cdc.gov/coronavirus/2019-ncov/downloads/Mass-Gatherings-Documents_FINAL.pdf) (revised Mar. 29, 2020).

<sup>6</sup> See CDC, “Recommendations for Election Polling Locations,” <https://www.cdc.gov/coronavirus/2019-ncov/community/election-polling-locations.html> (revised Mar. 27, 2020).

**Secure remote ballot marking options should be offered for voters with disabilities.** Voters with disabilities may not be able to mark a vote-by-mail ballot at home. Jurisdictions should offer remote accessible ballot marking systems that allow a voter to access a ballot electronically on her computer or device and use assistive technology to mark and print a paper ballot. These systems should always conform to recommendations from the National Institute of Standards and Technology to protect ballot privacy and security and not transmit any vote selection information over the Internet.<sup>7</sup>

**The processing of mail-in ballots must be handled in a way that protects poll workers from virus transmission.** Processing locations must be set up to ensure that poll workers maintain a distance of six feet from one another. Poll workers should be provided with protective equipment, and be able to practice hand hygiene frequently in accordance with CDC guidance.<sup>8</sup> Envelopes should be opened in a manner that does not require poll workers to touch the envelopes' adhesive. Finally, tabulation equipment must be routinely sanitized in accordance with the vendor's guidance.

### In-person voting

It may be impossible or not preferable for some voters to vote by mail. Therefore, all efforts must be made to ensure that voting locations are as safe and sanitary as possible.

### *Minimizing person-to-person contact at polling places*

Density of people at polling sites must be reduced. This involves several measures to spread voters out in both space and time.

**Early voting should be expanded as much as feasible, to help limit the number of people who must vote on any one day, and the number of polling places should be increased.** On Election Day itself, voting hours should be expanded, and voters should be encouraged to come during off-peak hours when

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<sup>7</sup> Computer Sec. Res. Ctr., Nat'l Inst. of Sci. & Tech., "Security Best Practices for the Electronic Transmission of Election Materials for UOCAVA Voters" (NISTIR 7711), <https://nvlpubs.nist.gov/nistpubs/Legacy/IR/nistir7711.pdf> (Sept. 2011).

<sup>8</sup> See CDC, "When and How to Wash Your Hands," <https://www.cdc.gov/handwashing/when-how-handwashing.html> (last visited Apr. 6, 2020).



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possible. Where possible, “curbside voting” (in which voters can vote without leaving their vehicles) should be made available, especially for voters with disabilities or who may be ill. Election officials should increase the number of available polling places, to ensure that fewer individuals are required to visit each polling location.

**Voters should not be required to wait in long lines to vote.** If short lines must form, voters must be able to maintain 6 feet of separation between one another. Voters should not be turned away at the polls to avoid long lines. Instead, long lines should be avoided by taking precautions recommended above, including expanded vote-by-mail, early voting options, and increasing the number of polling places to avoid dense crowds, as well as expanding the simultaneous voting capacity at polling places.

**Polling places should be configured to allow at least six feet of distance between all voters and poll workers.** In particular, voting booths must be configured to place at least 6 feet of separation between voters. The voting process should be set up to require only minimal interaction between voter and poll worker. Finally, voters and poll workers should be discouraged from bringing non-essential visitors such as minor children or grandchildren with them to the polls.

### *Minimizing contact with commonly used surfaces*

**Polling places should be designed to ensure that voters are not required to touch common surfaces that are not disinfected.** Poll workers should wear surgical gloves and masks while handling ballots, pens, and other voting equipment. Poll workers should change their gloves and masks and wash their hands regularly.

Polling locations should provide alcohol-based hand sanitizer (at least 60% alcohol) for use both before and after voting. Sanitizer should be placed near the entrance, at registration desks, near the exits, and at other visible, frequently used locations. If possible, polling places should be located near publicly accessible bathrooms, which should be frequently re-stocked with ample soap and disposable paper towels.

**All voting-related equipment must be cleaned and disinfected regularly.** CDC guidance advises that poll workers must “[c]lean and disinfect voting-associated equipment (e.g., voting machines, laptops, tablets, keyboards) routinely.”<sup>9</sup> However, the CDC does not define “routinely.” From a public health standpoint, the best practices are as follows:

- For any equipment that is used repeatedly but by only one individual (e.g., a poll book that is used by only one poll worker for an entire shift), disinfect at least once per hour.
- For any equipment that is directly touched by multiple voters or other individuals (e.g., voting machines or assistive technology), disinfect after each individual’s use.

**Paper ballots are safer than voting machines and less likely to spread the novel coronavirus because fewer people must handle each ballot.** Where possible, voters should be given their own disposable pen to mark the ballot and their own disposable writing surface. If not possible, each pen and writing surface must be thoroughly disinfected after each use.

Unfortunately, most voting machines are difficult to clean or sanitize properly in the middle of an election. The U.S. Election Assistance Commission has collected and published manufacturers’ recommended practices for cleaning some electronic voting machines.<sup>10</sup> They are difficult to properly clean, in many cases require specialized instruction or materials, and have small parts.

Several manufacturers warn that common disinfectants, or departing from the recommended cleaning technique, could damage the equipment. For example, Election Systems & Software (“ES&S”) warns that poll workers must be careful to not touch the sensors on the edges of the screen, “scratch touch screens,” or

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<sup>9</sup> See CDC, “Recommendations for Election Polling Locations,” <https://www.cdc.gov/coronavirus/2019-ncov/community/election-polling-locations.html> (revised Mar. 27, 2020).

<sup>10</sup> See Election Assistance Comm’n, “Coronavirus (COVID-19) Resources,” <https://www.eac.gov/election-officials/coronavirus-covid-19-resources> (last visited Apr. 6, 2020).



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allow moisture to “linger[] on the external surface.”<sup>11</sup> ES&S also warns poll workers not to apply cleanser directly to the screens, or to use too much cleaner on the cloth, or else the equipment may become “damaged during cleaning.”<sup>12</sup> As another example, Dominion Voting lists just six approved branded cleaning products for its touchscreen-based voting machines.<sup>13</sup>

In normal times, these products might all be readily available, but in the current situation, election officials might be unable to obtain them in sufficient quantities. They would then face the dilemma of either inadequately disinfecting the voting machines (which could then become disease vectors) or using unapproved products, possibly damaging expensive and hard-to-replace equipment in the middle of an election.

In many cases, manufacturers’ recommended cleaning guidelines—which may be reasonable in normal circumstances—are inconsistent with the twin public health mandates of frequent cleaning and avoiding buildup of long lines during a pandemic. For example, Dominion Voting warns that its touchscreen-based voting machines must be powered down before cleaning, noting that “[m]oist wipes may alter the touch sensitivity of screens until the moisture is removed. Additionally, some screen buttons may be inadvertently activated during wipe down.”<sup>14</sup> Powering down a voting machine before cleaning, and then restarting it after cleaning, takes time, especially because many machines will require a special administrator login after rebooting. Similarly, MicroVote cautions that after cleaning its Infinity electronic voting machine, poll workers must “[a]llow

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<sup>11</sup> ES&S, “Best Practices – Voting System,” at 1-2, [https://www.eac.gov/sites/default/files/electionofficials/coronavirus/ESS\\_BestPractices\\_Cleaning\\_Disinfecting.pdf](https://www.eac.gov/sites/default/files/electionofficials/coronavirus/ESS_BestPractices_Cleaning_Disinfecting.pdf) (last visited Apr. 6, 2020).

<sup>12</sup> *Id.* at 3.

<sup>13</sup> Dominion Voting, “Customer Notification: COVID-19 (‘Coronavirus’) Information,” at 4 (Mar. 9, 2020), [https://www.eac.gov/sites/default/files/electionofficials/coronavirus/DVS\\_CoronavirusCleaning\\_Notice\\_030920.pdf](https://www.eac.gov/sites/default/files/electionofficials/coronavirus/DVS_CoronavirusCleaning_Notice_030920.pdf).

<sup>14</sup> Dominion Voting, “Customer Notification: COVID-19 (‘Coronavirus’) Information,” at 1 (Mar. 9, 2020), [https://www.eac.gov/sites/default/files/electionofficials/coronavirus/DVS\\_CoronavirusCleaning\\_Notice\\_030920.pdf](https://www.eac.gov/sites/default/files/electionofficials/coronavirus/DVS_CoronavirusCleaning_Notice_030920.pdf).

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ample drying time after cleaning before operation.”<sup>15</sup> If sanitized after each voter’s use, consistent with infectious disease control best practices, these cleaning practices could lead to long lines that may create an increased risk of person-to-person transmission.

Furthermore, manufacturers’ recommended cleaning practices are often highly specific, with cautions regarding any deviations. ES&S, for example, specifies that a “trained poll worker” must clean the machines.<sup>16</sup> Poll workers, whether paid or volunteer, are generally only lightly trained (e.g., a single two-hour training) and it is unreasonable to expect flawless execution.

This could result in two distinct failure modes. First, a poll worker might fail to clean a voting machine adequately, rendering it a continued potential source of surface-to-voter transmission. Second, a poll worker might inadvertently deviate from the cleaning instructions and damage a machine. This will reduce polling place capacity and thus lead to longer lines, creating an increased risk of person-to-person transmission.

**Consequently, the use of voting machines should be absolutely minimized, and used by only those voters who require them for accessibility purposes.**

The machines will still have to be sanitized according to manufacturer and health authority instructions after every voter’s use, but by minimizing the number of voters who use these voting machines, this will be much less often than if most or all voters were required to use them.

There is a collateral public health benefit to reducing the usage of these voting machines. In many cases, polling places can physically accommodate more voters voting simultaneously on paper ballots than on voting machines, with less (or no) down-time due to equipment failures. This would enable a faster flow through the polling place, thus reducing time spent in lines and exposed to other voters.

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<sup>15</sup> MicroVote, “Cleaning and Disinfecting Infinity Voting Equipment,” [https://www.eac.gov/sites/default/files/electionofficials/coronavirus/MicroVote\\_CleanSanitize.pdf](https://www.eac.gov/sites/default/files/electionofficials/coronavirus/MicroVote_CleanSanitize.pdf) (last visited Apr. 6, 2020).

<sup>16</sup> ES&S, “Best Practices – Voting System,” at 1, [https://www.eac.gov/sites/default/files/electionofficials/coronavirus/ESS\\_BestPractices\\_Cleaning\\_Disinfecting.pdf](https://www.eac.gov/sites/default/files/electionofficials/coronavirus/ESS_BestPractices_Cleaning_Disinfecting.pdf) (last visited Apr. 6, 2020).

### *Protecting the most vulnerable populations*

**The location and staffing of polling sites should be designed and managed to protect the most vulnerable populations.** Polling sites should be relocated away from senior centers or residential facilities. Election officials should recruit extra poll workers to facilitate a more expeditious voting process and to account for potential absences due to sickness or prudent self-isolation. There is expected to be a large pool of recently-unemployed workers, many of whom are in lower-risk groups for serious infection, who could be recruited for this important civic task. Poll workers who are at higher risk of serious infection should be given opportunities to serve in areas that do not involve engaging directly with voters, such as processing vote-by-mail ballots.

### Conclusion

This year is the first federal election since 1918, and the nation's first-ever presidential election, conducted during a major global pandemic. In the midst of such a pandemic, we must have a president, governors, and mayors who have the consent of the governed. That requires a free, fair, and safe election. The recommendations in this report reflect best practices for ensuring a safe, accessible, and trustworthy election. Election officials should begin implementing these recommendations now, and continue to consult with public health experts to devise plans that limit transmission of the novel coronavirus without interfering with voters' ability to cast their votes. Our democracy demands no less.

### About the Authors

Dr. Joia Mukherjee is a physician, clinical researcher, and educator trained in Infectious Disease, Internal Medicine, Pediatrics, and public health at the Massachusetts General Hospital and the Harvard School of Public Health. She is an Associate Professor of Medicine at the Brigham and Women's Hospital in the Division of Global Health Equity and in the Department of Global Health and Social Medicine at Harvard Medical School. She founded and directs the Masters in Medical Science in Global Health Delivery at Harvard Medical School. Dr. Mukherjee mentors residents in the Global Health Equity program at the Brigham and Women's Hospital and fellows from Children's Hospital and other Harvard teaching hospitals. She teaches infectious disease, global health delivery, and human rights to health professionals and students from around the world. She is the author of *Introduction to Global Health Delivery: Practice, Equity, Human Rights*, a textbook published in 2017 by Oxford University Press. Dr. Mukherjee's academic scholarship focuses on the treatment of HIV, TB, mental health and the strengthening of health systems in impoverished settings. She is also a sought-after teacher in human rights. Since 2000, Dr. Mukherjee has served as the Chief Medical Officer of Partners In Health, an international medical charity with programs in the United States, Haiti, Rwanda, Lesotho, Malawi, Sierra Leone, Liberia, Peru, Mexico, Russia, Kazakhstan and the Navajo nation. As Chief Medical Officer of PIH, Joia coordinates and supports PIH's efforts to provide high quality, comprehensive health care to the poorest and most vulnerable. She advises various grassroots organizations throughout the world and has consulted for the World Health Organization and other international agencies on health systems strengthening, human resources for health, the treatment of HIV, and the treatment of drug resistant tuberculosis in impoverished settings. She has won numerous awards for her teaching and health delivery work, and holds four honorary degrees. She is a graduate of the University of Minnesota Medical School and also earned a Masters of Public Health from the Harvard School of Public Health. Dr. Mukherjee is a member of the Free Speech For People Board of Directors.

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### About Free Speech For People

Free Speech For People works to renew our democracy and our United States Constitution for we the people. Founded on the day of the Supreme Court's *Citizens United* ruling, Free Speech For People envisions a democratic process in which all people have an equal voice and an equal vote. We fight for free and fair elections, for reliable and secure voting systems, and for the bedrock principle that, in a democracy, all voters must have their votes properly counted. To learn more, please visit our website: [www.freespeechforpeople.org](http://www.freespeechforpeople.org).