



International Foundation
for Electoral Systems

Safeguarding Health and Elections



Safeguarding Health and Elections

Authors:

Fernanda Buriil, Ph.D.
Senior Research Officer, IFES

Staffan Darnolf, Ph.D.
Senior Global Electoral Operations and Administration Advisor, IFES

Muluken Aseresa, M.D.
Senior Technical Advisor, Management Sciences for Health

Lead Editor:

Erica Shein
Director of the Center for Applied Research and Learning, IFES

Editors:

Chad Vickery
Vice President of Global Strategy and Technical Leadership, IFES

Angela Canterbury
Director of Strategic Communication and Advocacy, IFES

IFES COVID-19 Briefing Series: Safeguarding Health and Elections
Copyright © 2020 International Foundation for Electoral Systems. All rights reserved.

Permission Statement: No part of this work may be reproduced in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage and retrieval system without the written permission of IFES.

Requests for permission should include the following information:

- A description of the material for which permission to copy is desired.
- The purpose for which the copied material will be used and the manner in which it will be used.
- Your name, title, company or organization name, telephone number, fax number, e-mail address and mailing address.

Please send all requests for permission to:

International Foundation for Electoral Systems
2011 Crystal Drive, Floor 10
Arlington, VA 22202
Email: editor@ifes.org
Phone: 202.350.6701

Contents

- [Foreword](#)..... 1**
- [Acknowledgements](#) 2**
- [Executive Summary](#)..... 3**
- [Introduction](#) 6**
 - [Public Health Emergencies and Elections](#) 6
 - [What is COVID-19?](#) 7
 - [Purpose and Structure of this Paper](#) 9
- [Major Findings and Recommendations](#)..... 10**
 - [General Considerations for Mitigating Public Health Risks During COVID-19](#) 10
 - [Coordination with Health Authorities and Other Relevant Institutions](#) 12
 - [Phase I: Pre-Electoral Activities](#)..... 12
 - [Phase II: Election-Day Activities and Post-Electoral Processes](#)..... 24
 - [Monitoring and Quality Control](#)..... 29

Foreword

The COVID-19 crisis has exacted a devastating toll on human lives, economies and health systems around the world. It has also arrived at a particularly difficult moment for democracy. For the first time in nearly two decades, a majority of countries – 92 according to the V-Dem 2020 Democracy Report¹ – are characterized as autocracies. This “third wave of autocratization” has affected even regions long assumed to be democratic strongholds. Now, the COVID-19 crisis has created new opportunities for would-be authoritarians to further cement their hold on government structures and erode the protection of human rights.

It is crucial that, during these challenging times, public authorities, political parties, candidates, civil society and the international community join efforts to protect the health of both citizens and their democracies. Elections are an essential element of this response, because they reinforce democratic institutions and the rule of law. Mishandling or manipulating elections during such crises can drive the long-term decay of fundamental freedoms, the consolidation of power and corruption. Electoral leaders addressing this crisis must act decisively and transparently, while planning for what comes next. If they wait, it may be too late to mitigate the risks to both public health and democratic rights due to postponed or poorly run elections.

As a trusted partner of election management bodies around the world, the International Foundation for Electoral Systems (IFES) is dedicated to providing accurate information and sound technical advice to guide their decision-making with the goal of administering elections that are safe and credible. This paper, produced in coordination and consultation with public health experts, is a product of our ongoing efforts to adapt to new challenges and grow with our partners. Together, as always, we will continue to overcome obstacles and build democracies that deliver for all.



Anthony N. Banbury
IFES President and CEO

1 Anna Lührmann, Seraphine F. Maerz, Sandra Grahn, Nazifa Alizada, Lisa Gastaldi, Sebastian Hellmeier, Garry Hindle and Staffan I. Lindberg. 2020. Autocratization Surges – Resistance Grows. Democracy Report 2020. Varieties of Democracy Institute (V-Dem). Retrieved from https://www.v-dem.net/media/filer_public/f0/5d/f05d46d8-626f-4b20-8e4e-53d4b134bfcb/democracy_report_2020_low.pdf

Acknowledgements

The authors would like to sincerely thank Management Sciences for Health Senior Director for Population Health Dr. Elke Konings, M.D., IFES Senior Country Director for Myanmar OBE Paul Guerin, IFES Program Adviser for Ukraine Meredith Applegate, IFES Senior Global Inclusion Advisor Virginia Atkinson, Senior Gender Program Officer Gina Chirillo, IFES Graphic Design Officer Keaton Van Beveren and IFES Communications Officer Janine Duffy for their review of this paper and invaluable contributions.

Note From the Authors

IFES has strived to make this guidance as comprehensive as possible while maintaining its applicability and usefulness across different electoral systems. The feasibility of implementing certain recommendations, however, depends to a large extent on each country's legal framework. It is also important to note that new evidence about how the novel coronavirus behaves and its effects on human health emerges every day. The guidelines offered here are based on the current knowledge of COVID-19 at the time of publication.

While these recommendations are expected to minimize the risks to public health and increase voters' and election officials' confidence to participate in elections, different contexts pose different levels of threat. Holding in-person elections might not always be the best option. Decisions regarding whether and how to hold electoral activities must always be informed by comprehensive risk assessments developed in coordination with credible and competent local health authorities. As elections are inherently political events, a country's discussion on going to the polls during public health crises is likely to be more successful if it involves political parties and civil society and is based on a common understanding of all risks involved.

Executive Summary

Introduction

Elections usually involve large, nationwide gatherings, not only on Election Day but also, for example, during campaign rallies and voter registration drives. These events increase human-to-human contact and the risks of direct and indirect disease transmission. Few election management bodies (EMBs) have comprehensive plans in place to manage these activities amid widespread disease outbreaks, leading to insufficient time, resources and information to make necessary adjustments and hold election events safely when public health crises suddenly materialize. This has proven to be the case with COVID-19, the disease caused by the novel coronavirus, which has, to this date, forced the postponement of national and subnational elections in nearly 60 countries and territories.¹ Several EMBs that did decide to move forward with elections amid the crisis largely failed to address public concerns² about health, leading to low voter turnouts, credibility issues, poll worker dropouts and even the infection of some electoral officials.³

To support EMBs around the world to navigate such complex environments, the International Foundation for Electoral Systems (IFES), in collaboration with Management Sciences for Health (MSH), has drafted this paper focusing on general public health considerations for all key electoral processes and recommendations to mitigate risks of the COVID-19 virus transmission. The recommendations presented in this white paper have been informed by general guidance from health authorities such as the World Health Organization (WHO) and the U.S. Centers for Disease Control and Prevention (CDC), the most recent evidence and scientific studies at the time of publication and best practices and successful measures implemented by EMBs in similar contexts.

Defining the Problem

As EMBs have limited time and resources to acquire supplies and incorporate new procedures to their processes, it is essential that risk-mitigation efforts are part of an overarching strategy that ensures optimization of resources and is informed by a contextualized COVID-19 risk assessment. If well executed, these measures can significantly mitigate the risk of virus transmission and reasonably reduce people's fear of infection during electoral processes, which otherwise could drastically reduce voter turnout and undermine the legitimacy of results.

It should also be noted that, while the recommendations offered in this paper will minimize the risks to public health and increase the confidence of voters and election officials, different contexts pose different levels of threat, and in-person elections might not always be the best course of action. Decisions regarding whether and how to hold various electoral activities will be more successful if they:

- Are informed by comprehensive risk assessments developed in coordination with competent public health authorities;
- Accommodate the perspectives of political parties and civil society representing the full spectrum of constituencies in the country; and
- Are based on a common understanding of all of the risks involved in holding elections amid the crisis.

Major Findings and Recommendations

According to the current available evidence from the WHO⁴ and CDC,⁵ the main form of transmission of the COVID-19 virus is person-to-person via viral droplets, but the virus can also be transmitted through indirect contact with fomites, which are objects or surfaces contaminated by the virus. More than 40 points in the electoral process involve the assembly of people or transfer of objects and therefore pose risks of virus transmission if no preventive measures are taken. These common interactions occur during all phases of the electoral cycle and are not limited to Election Day. Given these specific methods of transmission of the coronavirus, the following recommendations should apply to all electoral activities:

- **Communicate and coordinate with competent public health authorities** on risk analysis, decision-making, planning and effective implementation of risk-mitigation strategies
- **Prevent or mitigate person-to-person interaction:** Enforce safe physical distance, respiratory hygiene, use of personal protective equipment (PPE); when possible, adopt secure remote tools and mechanisms
- **Prevent or mitigate the contamination of common surfaces and objects:** Enforce the use of PPE such as face masks and respiratory hygiene; when possible, adopt touchless mechanisms
- **Prevent or mitigate individuals' exposure to contaminated surfaces or objects:** Encourage hand sanitization with soap and water or alcohol-based solutions; discourage touching of mouth, nose, and eyes; frequently disinfect surfaces and objects used by multiple people; enforce use of PPE; when possible, adopt touchless mechanisms

In addition to these important overarching measures, EMBs would benefit from considering the following recommendations for each electoral activity:

Figure 1: Considerations for Electoral Activities

Electoral Activity	Additional Considerations
Electoral and Resource Planning	When postponing elections, ensure compliance with legal provisions; conduct scenario planning to schedule elections as soon as possible, and make necessary adjustments to the operational calendar and budget; frequently communicate updates to the public
	When scheduling elections, consider disease spread, stage of outbreak, capacity of health care system and structure, weather/season
	Adjust processes and procedures to reduce transmission risks; identify and procure extraordinary or additional material, equipment and supplies; hire extraordinary or additional staff; monitor potential supply chain disruptions
	Secure funds for additional material, equipment, personnel and processes; prioritize needs and optimize resources with the highest mitigating power
Electoral Campaign	Streamline COVID-19 messaging and instructions with political parties, candidates, civil society and media; develop codes of conduct or incorporate COVID-19 issues in existing codes
	Detect and sanction individuals using COVID-19 disinformation for political gain
	Provide instructions on health precautions for public rallies, debates and other gatherings
	Adopt or expand access fairly to the media and other methods for remote campaigning

Voter Education	Provide clear, accessible and frequent information to voters about COVID-19, its modes of transmission, and ways of combating it; follow best practices in health literacy (short messages that use active voice, familiar words and culturally relevant visuals)
	Provide clear, accessible and frequent information to citizens about new electoral procedures and how to comply with them
	Address disease-related disinformation and hate speech against at-risk and marginalized groups
Recruitment and Training of Poll Workers and Other Staff	Where possible, use online platforms to receive and review staff applications; for in-person recruitment, use facilities with sufficient space to allow for required physical distance; encourage hand sanitization and use of face masks by recruiters and interviewees
	Release at-risk individuals and health care workers from poll-worker duty
	Incorporate COVID-19 information in training content, especially modes of transmission and preventive measures
	Incorporate instructions regarding new procedures adopted due to COVID-19
	Select training locations with sufficient space to allow for sufficient physical distance and ensure hand-sanitization protocols and relevant PPE are available for all participants during training sessions
	Ensure inclusivity and accessibility of new online and remote training options
	For online training, incorporate mechanisms to ensure successful completion
Voter Registration, Candidate Registration, Ballot Casting, Vote Count and Results Management	Select locations with sufficient space to allow for sufficient physical distance; locations should be far from areas where at-risk groups reside, although alternative measures should be taken to ensure participation of these groups
	Reduce number of individuals at facility at the same time: expand number of days or locations; assign groups to specific slots
	Develop and enforce COVID-19 risk-mitigating protocols for queueing, building entry and exit
	Prominently and publicly display COVID-19 information
	Provide sufficient hand-sanitization stations
	Encourage voters to bring and use their own pens
	Develop protocols for touchless identity verification
	Designate area for filling out forms complying with physical distance requirement
	Organize desks and chairs to comply with required distance for election officials, observers, party agents and media representatives; remove multiperson seating and other unnecessary objects from facilities; install plexiglass or other translucent shields for desks and counters across which voters and election officials interact.
	Contact equipment vendors and manufacturers to obtain proper cleaning and disinfecting instructions
	Collect and dispose of waste material safely
	For mail-in forms and ballots, use self-sealing envelopes where possible
Ensure inclusivity and accessibility of online and remote options	
Domestic and International Election Observation and Party Agents	While no eligible citizen should be deprived of the right to serve in elections as observers, in extraordinary circumstances like a public health crisis, release at-risk individuals and health care workers from being observers or party agents or warn them of all risks involved in participation
	For accreditation process, follow same precautions as "Voter Registration, Candidate Registration and Ballot Casting"

Introduction

Elections usually involve large, nationwide gatherings, not only on Election Day but also, for example, during campaign rallies and voter registration drives. These events increase human-to-human contact and the risks of direct and indirect – via infected surfaces – virus transmission. Holding such events amid a disease outbreak can pose serious risks to public health, but not holding them might also undermine hard-won stability and confidence in democratic institutions. Public officials facing such a dilemma might struggle to decide whether to move forward with elections and, if moving forward, to respond quickly to the new challenges the outbreak brings to the electoral context. Officials may need to make adjustments to the activity schedule, implement new and improved procedures that reduce the potential for virus transmission, and secure funds for and procure needed materials. They should also coordinate with stakeholders across the political divide to ensure all these changes are feasible and accepted, as amendments to electoral processes are much more likely to succeed and be accepted if they result from a consultative decision-making process.

Public Health Emergencies and Elections

The WHO defines a public health emergency as “an occurrence or imminent threat of an illness or health condition, caused by bioterrorism, epidemic or pandemic disease, or (a) novel and highly fatal infectious agent or biological toxin, that poses a substantial risk of a significant number of human fatalities or incidents or permanent or long-term disability.”⁶ Experts in public health crisis management also use a broad definition of crisis to reflect the importance of savvy decision-making in a complex context: A crisis is “a serious threat to the basic structures or the fundamental values and norms of a system which under time pressures and highly uncertain circumstances necessitates making critical decisions.”⁷ These critical decisions involve not only the health system of a country, but all activities that might contribute, directly or indirectly, to worsening the problem and overburdening the people and systems responding to the crisis.

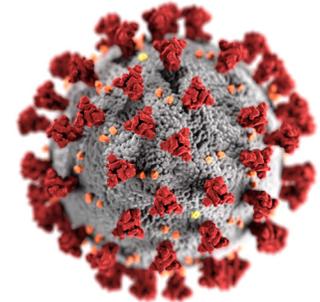
“...holding elections amid public health crises is possible, but considerable planning is needed to avoid exacerbating an already dire situation.”

As elections and their related activities usually involve mass gatherings, they can accelerate the spread of diseases whose transmission modes involve direct or indirect person-to-person contact. Without appropriate risk-mitigating strategies in place, election events can lead to spikes in the number of cases and bring an overtaxed health system closer to collapse. Despite the challenges, some countries have been able to power through public health crises and hold relatively successful elections, such as the U.S. during the Spanish flu pandemic in 1918,⁸ Liberia during the Ebola outbreak of 2014⁹ and, very recently, South Korea during the current COVID-19 pandemic.¹⁰ These countries have shown that holding elections amid public health crises is possible, but considerable planning is needed to avoid exacerbating an already dire situation.

What is COVID-19?

COVID-19, which stands for coronavirus disease 2019, is an infectious disease caused by the coronavirus SARS-CoV-2, a new strain first identified in humans in late 2019. The virus is believed to have been first transmitted to humans through bats or pangolins¹¹ sold in a seafood and poultry market in Wuhan, capital of the Hubei province in China. The outbreak quickly spread worldwide and was declared a pandemic by the WHO¹² on March 11, 2020.

At the time of this writing, almost 4 million cases of COVID-19 have been confirmed in 212 countries and territories, leading to more than 270,000 deaths.



Symptoms

According to the WHO,¹³ the most common symptoms identified in individuals with COVID-19 are fever, cough and shortness of breath or difficulty breathing. The U.S. CDC¹⁴ also added muscle pain, headache, sore throat, chills and new loss of taste or smell as potential symptoms of COVID-19.

Although numbers vary across studies, it is speculated that a large percentage of individuals infected with the novel coronavirus do not experience any symptoms or only experience mild symptoms. Evidence suggests that even presymptomatic – a few days before presenting the first symptoms – and mildly symptomatic individuals can transmit the disease,¹⁵ and it is possible that asymptomatic individuals positive for COVID-19 can also be “silent spreaders,”¹⁶ which complicates mitigation strategies. Current evidence suggests the incubation period – time from exposure to the virus to the development of symptoms – of SARS-CoV-2 is between two and 14 days.¹⁷

In severe cases, the infection can cause pneumonia, severe acute respiratory syndrome and death. Older adults and people with severe underlying medical conditions are at a higher risk of developing serious complications from the disease.¹⁸ At the time of publication of this paper, there is no approved vaccine or treatment for COVID-19, although several clinical trials are ongoing.

Modes of Transmission

According to the current available evidence shared by the WHO¹⁹ and CDC,²⁰ the main form of transmission of the coronavirus is from person to person. When people are physically close to each other, the virus can travel in respiratory droplets (when the infected person coughs, sneezes or talks) and enter another individual via his or her mouth, nose or possibly eyes. This makes COVID-19 a much more contagious disease during normal electoral activities than Ebola, for example, which was predominantly spread through more noticeable bodily fluids like sweat, vomit and blood.

Coronavirus transmission may also occur through indirect contact via fomites, which are objects or surfaces contaminated by the virus, when a healthy individual touches the contaminated area and then touches his or her mouth, nose or possibly eyes. Given the frequent exchange of documents, forms and other materials between election officials, voters, candidates and observers, and the use of common equipment such as fingerprint scanners or voting machines, the risks of indirect transmission are real and must be mitigated appropriately.

The longevity of SARS-CoV-2 on inanimate objects is similar to that of other coronaviruses and depends on the type of surface material, as the table below shows:²¹

Figure 2: Expected Longevity of Coronaviruses per Material

Material	Relevant Examples	Longevity
Aluminum	Cans, handrails	2-8 hours
Cardboard	Ballot boxes, booths	24 hours
Ceramics	Bathroom tiles, toilet bowls	5 days
Copper	Pipes, electrical equipment	4 hours
Glass	Windows, glasses, screens	≤5 days
Latex	Surgical gloves	≤8 hours
Metal	Doorknobs, gates	5 days
Paper	Ballots, ballot boxes, forms, ID cards, posters	1-5 days
Plastic	Pens, keyboards ID cards, tactile ballot guides	≤5 days
Stainless steel	Sinks, faucets	48 hours
Wood	Chairs, desks, doors, handrails	4 days

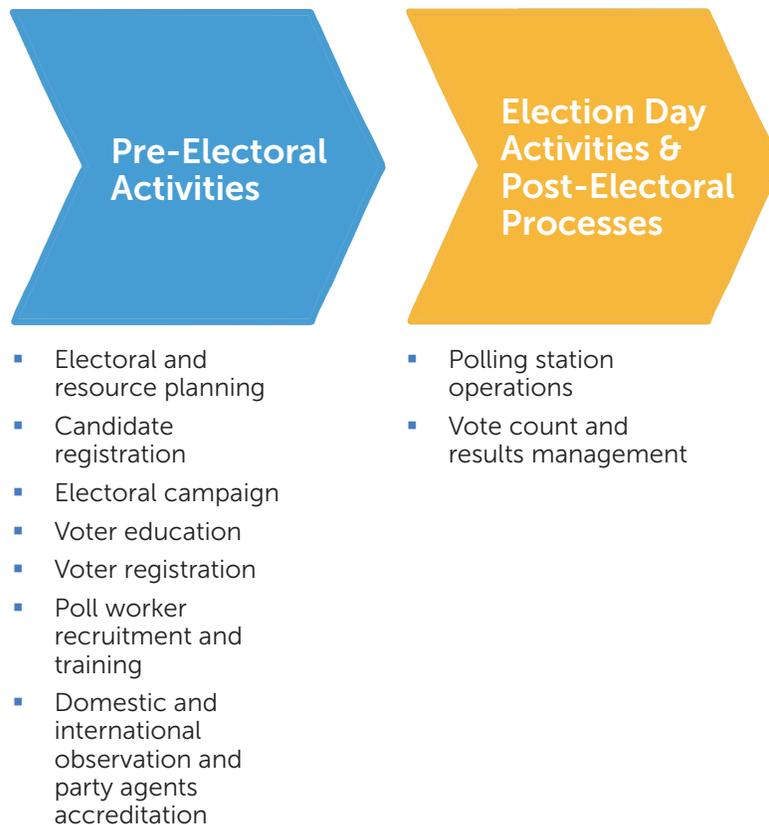
Based on information from Kampf G, Todt D, Pfaender S, Steinmann E.

Purpose and Structure

This paper, which reflects the experience of both electoral and public health experts, is intended to support EMBs to better plan and administer elections during health crises in general and during the COVID-19 pandemic in particular. It aims to reduce not only risks to voters' and election officials' health but also the potential risks to democracy brought by cancelations and postponements that are avoidable with proper planning. It will do so by:

- Providing a framework for EMBs to think through public health considerations in general for the different stages of the electoral process;
- Discussing the scope and nature of the public health challenge imposed specifically by COVID-19 during elections;
- Providing recommendations and strategies to mitigate public health risks during specific activities required to conduct a legitimate election;
- Identifying basic resources and supplies necessary to implement risk-mitigation strategies; and
- Outlining approaches to monitor and measure the quality of implementation of the proposed strategies.

The paper begins with general recommendations that should apply to all electoral activities and specific considerations for different stages of the electoral process, from the pre-electoral phase to Election Day and post-election activities. The paper concludes with a discussion of potential approaches to monitoring and evaluating the impact of implementation of these recommendations.



Major Findings and Recommendations

General Considerations for Mitigating Public Health Risks During COVID-19

Direct contact between individuals and between individuals and viral droplets and fomites can occur at several different points in the electoral process, potentially leading to the transmission of the coronavirus. An IFES analysis produced in the context of the Ebola outbreak in Liberia identified more than 40 points in the election process involving the assembly of people or transfer of objects and therefore increased risks of transmission. These common interactions occur during all phases of the election cycle and are not limited to Election Day.

Given the specific methods of transmission of the coronavirus, all instructions and recommendations discussed in the following sections intend to:

- Prevent or mitigate person-to-person interaction;
- Prevent or mitigate the contamination of common objects by infected individuals; and
- Prevent or mitigate individuals' exposure to contaminated objects.

It is important to note that authorities should plan electoral activities holistically and aim to achieve all three objectives mentioned above, as more precautions lead to fewer risks. However, EMBs have limited time and resources to acquire supplies and incorporate new procedures to their processes. It is therefore essential that risk mitigation efforts are part of an overarching strategy to optimize resources that is informed by a contextualized COVID-19 risk assessment. If well executed and communicated, these measures can significantly mitigate the risk of virus transmission and reasonably reduce people's fear of infection during the electoral process, which otherwise could drastically reduce voter turnout and undermine the legitimacy of results.



It is essential that risk mitigation efforts are part of an overarching strategy to optimize resources that is informed by a contextualized COVID-19 risk assessment.”

Preventing or Mitigating Person-to-Person Interaction

A safeguard for mitigating the risk of COVID-19 transmission is the simple practice of physical distancing, a conscious behavior that involves **avoiding interpersonal contact and maintaining a distance between people**. The required distance depends on how easy it is for a virus to spread. The WHO²² currently recommends approximately 3.3 feet (1 meter) of distance, while the CDC²³ recommends individuals maintain a distance of six feet (approximately 1.8 meters) from each other. If feasible, EMBs should opt for the larger distance requirements. However, even though six feet is considered a relatively safe distance, a recent study²⁴ has shown that viruses in droplets from coughs or sneezes can travel up to 27 feet (eight meters) in extreme conditions. This indicates that, besides the minimum physical distance requirements, it is also important that all individuals comply with **basic respiratory hygiene and cough etiquette**²⁵ (e.g., appropriately covering coughs and sneezes, using disposable tissues and properly disposing of them) and wear masks or other face protection when close to others. More details on specific requirements for masks can be found in the [“Electoral and Resource Planning”](#) section.

This physical distance recommendation might be difficult to enforce when voters need assistance, in enclosed spaces and in countries that are culturally accustomed to close contact and limited personal space. Transmission can be effectively mitigated, however, if individuals are vigilant, posters are displayed to remind them to maintain the required distance and the facilities' space and layout allow people to avoid direct contact with each other. These instructions also must be incorporated into training of election officials and in voter education campaigns. More details can be found in the "[Voter Education](#)" section.

Preventing or Mitigating the Contamination of Common Objects by Infected Individuals

Although the scientific community does not believe it to be the primary mode of transmission for the coronavirus, it is possible for a person to become infected by touching a surface or object that has the virus on it and then touching their own mouth, nose or possibly eyes. To minimize risks, EMBs can take measures to **reduce the need for touching and handling of objects**, implementing touchless mechanisms where possible, and **ensure that people are only touching or handling objects with sanitized hands**. The CDC and WHO recommend the following two options for hand sanitizing:

- Soap and water: washing hands thoroughly with soap and water for at least 20 seconds, and/or;
- Minimum 60 percent alcohol solution: using a solution of at least 60 percent alcohol to sanitize hands and surfaces.

Although chlorine solution (0.05 percent) has been used, particularly by some West African EMBs, to combat the Ebola virus during recent outbreaks, the WHO does not recommend its use for hand washing "because of potential harm to users and those making the solutions, as well as degradation of chlorine exposed to sunlight or heat."²⁶ The WHO has also found that respiratory symptoms have been reported²⁷ in patients, health workers and other users as a consequence of exposure to bleach or chlorine solutions used for environmental decontamination at a higher percentage of chlorine than the 0.05 percent required for hand sanitizing.

Preventing or Mitigating Individuals' Exposure to Contaminated Objects

In addition to the hand-sanitization techniques mentioned above, it is also important to ensure that objects and surfaces are disinfected to eliminate active pathogens. This can be done with soap and water or with other disinfecting solutions (e.g., solutions with 60 percent alcohol, 0.5 percent hydrogen peroxide, 0.1 percent sodium hypochlorite, or any other disinfecting product approved as effective against the coronavirus)²⁸ or leaving these objects or surfaces untouched for a certain period until the virus material is inactive. This period of isolation for objects and surfaces will depend on the type of material of which the objects or surfaces are made, as the table on [page 9](#) shows, as well as ambient temperature and humidity.²⁹

While disposable gloves are being used to increase protection against contaminated objects and surfaces, it is important to note that the virus can remain on the gloves and users should avoid touching their faces while wearing them, change gloves frequently and dispose of used gloves safely. EMBs must also ensure the appropriate PPE is made available in different sizes to properly fit men and women. Thorough and frequent hand sanitization is preferred over the use of gloves.

Coordination With Health Authorities and Other Relevant Institutions

EMBs often establish Joint Election Operations Centers ahead of elections to facilitate coordination with other state and local authorities. Traditionally, these centers have primarily hosted liaison officers from various security and intelligence organizations to ensure peaceful elections, although in some places a broader spectrum of government institutions take part. During public health crises, such as the COVID-19 pandemic, health authorities should assume an important role in these coordination centers.

Although the EMB often leads coordination efforts related to elections, given the pervasiveness of COVID-19's impact on all aspects of daily life, most countries have created special task forces involving their most senior executive offices. The benefits of task forces that involve the prime minister's or vice president's office are numerous, such as eliminating layers of bureaucracy and ensuring timely access to necessary funds. As these task forces can become politicized rather than strictly technical in nature, the EMB leadership should remain focused on its legal mandate to prepare and organize democratic elections.

There are three key tasks the EMB should focus on to maximize its contribution to and benefit from the coordination with other government institutions, irrespective of whether elections are ultimately held. The following three actions are of fundamental importance to all EMBs charged with organizing an electoral event during a public health crisis:

- **Conduct a joint public health risk assessment with competent local public health authorities and experts** covering all electoral processes and the transmission risks they involve. This is in addition to the risk assessments several EMBs already undertake from an electoral integrity perspective (i.e., to prevent fraud, systemic manipulation and malpractice).
- Based on the findings from the assessment and consultations with stakeholders – e.g., political parties, civil society organizations (CSOs) and observer groups – **develop a risk-mitigation plan** outlining in detail the necessary changes to regulations and procedures and additional material that needs to be procured for election officials and other stakeholders to fulfill their respective roles. In some instances, legal amendments might be considered.³⁰ EMBs will also need to develop a plan to conduct outreach and make the public aware of such risk-mitigation measures.
- Integrate the mitigation plan into an **updated EMB operational plan**. This will most likely also require updating the election calendar and budget.

Phase I: Pre-Electoral Activities

Electoral and Resource Planning

Considerations About Postponements and Other Modifications to the Electoral Calendar and Legal Provisions

As COVID-19 spreads across the world, nearly 60 countries and territories have announced postponements of national and subnational elections amid fears that large electoral events could accelerate transmission rates and that EMBs could not satisfactorily curb such risks. While these postponements might sometimes be the best decision to protect voters and election officials, they may also open the door to political manipulation and abuses of power.³¹ Leaders can use the public health crisis as an excuse to suspend electoral processes and expand their authority, damaging democratic principles during an already fragile moment. If postponements are the only feasible solution to protect citizens, EMBs and other public

authorities should obey legal provisions governing electoral postponements; develop risk assessments and plans in coordination with health authorities and electoral stakeholders to conduct elections at a later date; set up a new date, if possible, for the elections; and communicate the reasoning for such decisions to the public and the actions that will be undertaken to mitigate public health risks to all stakeholders.

Considerations About the Date of Elections

A number of factors are considered when setting election dates or ranges, including the weather. Elections might be scheduled, for example, during seasons with more moderate temperatures or less rain to permit voters to gather in the open air and avoid gatherings in enclosed spaces. If diseases are transmitted by vectors such as mosquitoes or other insects, authorities should also consider when these vectors are most active. Higher temperatures are less hospitable to viruses like influenza, which causes the common flu, and the spread of SARS in 2003 also declined with the arrival of higher temperatures. While some experts expect some modest declines in the contagiousness of COVID-19 in warmer, wetter weather³² in the U.S. and Europe, it is still unclear whether the slowdown will be significant, and the spread of the disease in the Southern Hemisphere indicates that higher temperatures are not enough to contain the coronavirus.

The decision on the dates for elections and electoral activities should also account for the spread of the disease. For the COVID-19 pandemic, the WHO has classified transmission scenarios in four categories:³³ 1) no cases; 2) sporadic cases; 3) clusters of cases; and 4) community transmission, the most severe category, in which multiple unrelated clusters have been identified in several areas of the country. Measures taken by governments in some of these most severe scenarios, such as mandatory lockdowns and severe travel restrictions, might make in-person elections unviable.

EMBs might also consider the stage of the outbreak in their country or region. Assuming credibility of reported data, looking at the case growth trajectory of a country or region should give authorities an idea of whether the number of infections is on an upward trajectory, has stabilized or is declining. While this variable alone cannot guarantee the safety of elections, as new spikes can occur, stable and declining numbers provide a more optimistic scenario for elections.

Finally, the capacity and structure of the country's health care system and the expected occupancy rates of hospitals at the time of elections should be considered. If the demand for hospital beds and ventilators is reaching the country's maximum capacity, holding elections can overburden the health care system and bring it closer to collapse, besides diverting crucial PPE supplies from hospitals to electoral facilities.

Considerations About Identification and Procurement of Additional Materials, Equipment and Supplies

If changing the modality of elections from in-person to remote alternatives, EMBs will need to make a series of changes to the material and/or equipment procured. For instance, where the legal framework allows, introducing or expanding mail-in or absentee ballots will require more envelopes, mailing fees and larger facilities to process ballots and recruit and train additional personnel. When electoral procedures are moved online, procurements for the development and maintenance of secure virtual platforms might be needed.

If moving forward with in-person elections, EMBs will still have to process additional procurements for a number of supplies intended to mitigate the risks of disease transmission during voter and candidate

registration and polling. It is essential that the appropriate resources are defined, suppliers identified and procurements completed as transparently and quickly as possible so everything arrives on time and in sufficient quantity. Especially in the case of large outbreaks, such as the COVID-19 pandemic, disruptions to the supply chain might occur because of large global demand for some products and because manufacturers might have to temporarily shut down. It is thus recommended that election officials ensure all necessary supplies are available and can be delivered on time before making the decision to hold elections. The supply chain for the necessary items should ideally piggyback on the supply chain for voting materials already being prepared in country.

As outlined earlier, to reduce the risks of transmission of COVID-19, polling stations will likely need the following supplies:

- **Soap or alcohol-based solution** to be used for cleaning and sanitizing hands and **other approved disinfecting products** for surfaces. The quantity of each product needed depends on the number of voters, polling stations and all other in-person activities the EMB envisions implementing (e.g., voter registration events, poll worker trainings). For Election Day, although voter turnout is unlikely to reach 100 percent, EMBs must make provisions for the maximum possible number of voters.
- **Face masks**, if properly made and worn, can capture a certain percentage of small respiratory particles of droplets and reduce the chance that others around the user will come in contact with such fluids. In optimal circumstances, assuming unlimited supplies of products, N95 respirators are a good option given their high effectiveness.³⁴ Surgical masks are also helpful, although they offer less protection than the N95 respirators. Given the global shortages of these supplies, health care workers should have absolute priority in getting both N95 respirators and surgical masks. If shortages remain common, EMBs must consider alternatives such as procuring cloth masks for poll workers, other electoral officials and – budget and availability allowing – voters. If cloth masks are used, proper washing instructions should be communicated, as applicable. If the EMB cannot afford to provide masks to the voters, it should encourage and instruct voters attending electoral activities to buy or make their own masks. The CDC has provided instructions for homemade masks.³⁵

For poll workers in direct contact with voters positive for COVID-19 and those who will assist voters and therefore cannot maintain the required physical distance, the use of translucent **face shields** could be considered. Translucent masks can also help voters who are deaf or hard-of-hearing read poll workers' lips.

- **Rope, string, twine, tape, stickers and tape measures** can help enforce physical distancing protocols in queues and during each electoral procedure. It is recommended to use one or more of these items at each polling station to maintain an orderly line of voters. This can probably be procured locally at little expense and the appropriate quantity is best measured by officials with previous experience in the voting process. Ribbons or pieces of string can be tied to the rope or twine at six-foot intervals to help reinforce appropriate distance between those standing in line and tape or stickers can be used on the floor where each person should stand at each step of the process. Queue controllers should still ensure compliance with the required physical distancing.

- **Plexiglass or other translucent shields**, if available, can create a protective barrier between poll workers and other electoral officials and voters during the different procedures – e.g., voter registration, voter verification, or signing of the voter roll – and help block droplets from one person from reaching another. These shields should also be frequently disinfected with appropriate products and people should avoid touching them.
- **Gloves** can be considered as a precaution for poll workers and other election officials to avoid direct contact with fomites and voters as long as wearers are instructed not to touch their faces, even while wearing the gloves. Each pair of gloves should be worn for only a short period. If supplies and resources allow, it is recommended to provide one box of gloves – usually 50 pairs per box – per polling station for poll workers. This will allow workers to change gloves often. All used gloves should be removed appropriately and safely disposed in closed containers. As voters’ individual exposure during all electoral procedures is comparatively small, gloves are not recommended for voters; hand sanitization before and after the electoral activity is feasible and more effective.³⁶ Gloves might also give people a false sense of security³⁷ and lead them to touch more surfaces or their own faces, make hand sanitization harder or more infrequent, and pose a risk if they are not disposed of properly, which is more likely to occur when millions of people are using them.
- **Educational materials** featuring hygiene instructions for voters and other participants in the electoral process are highly recommended at all public events. Posters should be displayed both inside and outside polling stations in the languages spoken in the country and with clear visuals. Election officials should collaborate with health authorities to determine which posters are most relevant and contact the agencies responsible for producing them. It is likely that many of these materials will be made available free of charge by national and international agencies.
- **Radio and TV messages and other public communications** pertaining to the election should contain simple, yet targeted, health instructions for voters before they arrive at the polls. More details can be found in the “Voter Education” section. These messages should be developed in collaboration with the health authorities to ensure consistency with other public service messages. If the messages are piggybacked onto messages and media already planned for the election the budget implications would be reduced. Messages should be produced in accessible formats, such as sign language and large font, as well as in local languages. Dissemination strategies should take advantage of existing channels likely to reach women, youth, people with disabilities and other traditionally underrepresented groups.

Although touchless thermometers proved useful during the Ebola outbreak in West Africa and some countries have been using them during the current COVID-19 outbreak, its use in the latter is much less helpful. Thermometers can yield false positives or false negatives³⁸ – especially if the individual is taking medication to control fevers – and they cannot detect signs of infection in individuals who are asymptomatic. While fever is one of the early symptoms of Ebola and infected individuals are not contagious until they present symptoms of the disease, recent evidence shows that people positive for COVID-19 can be asymptomatic and still transmit the virus to others.³⁹ Especially in contexts where resources are scarce, *thermometers should not be a priority.*

Considerations About Budgets and Additional Costs

EMBs must keep in mind that all the above-mentioned resources incur additional costs. Depending on how widespread the outbreak is, it is likely that other organizations in the country or in the region might need the same supplies, potentially leading to shortages and spikes in prices. Additionally, new supplies are not the only extraordinary costs that a public health crisis adds to elections. When electoral activities or procedures are implemented in person during the outbreak, EMBs must consider ways of reducing gatherings and maintaining required physical distancing between attendees. These solutions might include opening registration centers for more days, organizing and facilitating more poll worker training sessions to allow for smaller groups at any given time and renting larger venues to comply with required distancing. In addition, given amended procedures and new training requirements on proper use of various forms of PPE, the training programs will require additional time. All these options are likely to increase costs.

“ EMBs must consider all these additional costs and whether they can afford them, collaborate with other partners and agencies to cover what is beyond their budget, and coordinate with health authorities to identify the most pressing needs to prioritize measures.”

Finally, if EMBs decide to proceed with electoral activities and operations avoiding in-person gatherings, a number of other expenses might be associated with the remote alternatives. EMBs must, for instance, invest in online platforms, virtual trainings, forms and material to be mailed and security measures to ensure the legitimate use of these resources. EMBs must consider all these additional costs and whether they can afford them, collaborate with other partners and agencies to cover what is beyond their budget, and coordinate with health authorities to identify the most pressing needs to prioritize measures.

Candidate Registration

Considerations About Mail-In Candidate Registration

The candidate registration process enables political parties and independent candidates to officialize their participation in the elections. EMBs will produce the printed or electronic ballots to be used on Election Day using the party and candidate information submitted during registration. As the information submitted during registration will be used for ballots, it is extremely important that all information is correct as errors could impact eligibility and ballot production.

Depending on the country's electoral system and the legal framework governing candidate registration, the process can be largely completed either via registered mail or in person. The mail-in option presents fewer health risks for applicants and these risks are relatively simple to address, both for applicants and officials processing candidate registration applications. As discussed in more details under the [“Polling Station Operations”](#) section, individuals filling forms at home should sanitize their hands upon completing the process, and return envelopes should ideally be self-sealing. If no such envelopes are available, instructions should be printed on the envelope warning individuals not to seal envelopes using their saliva and suggesting safe alternatives: e.g., wet sponge to activate the adhesive. Officials receiving mailed-in applications should use gloves, follow hand-sanitization protocols, avoid touching their faces and respect physical distancing requirements in the facility.

Considerations About In-Person Procedures for Candidate Registration

Most candidate registration processes require the physical presence of the prospective candidates at a dedicated office at some point, whether to present original official documents, sign forms or have a photo taken for the ballot paper.⁴⁰ In some instances, a political party representative or witnesses are also required to be present, increasing the number of people congregating in the same facility. Hence, when choosing the location for in-person candidate registration, EMB officials should consider physical distancing for people waiting in line outside or inside the building, proper entry and exit protocols and sufficient spacing for the clerks to operate in a safe setting. Before entering the dedicated building, applicants should undergo proper hand sanitization protocols. Posters with related instructions should also be displayed.

EMBs are also increasingly integrating candidate registration systems with computerized ballot design, requiring candidates to sign off on the personal information entered into the system at the time of registration. Mitigating COVID-19 transmission risks in offices utilizing an integrated computerized candidate registration system would involve measures such as the ones outlined under the “Voter Registration” section when operating technical equipment, proper exchange of documentation, signing of forms and photo capturing. When developing guidelines for candidate registration, EMBs should include instructions to ensure proper physical distancing, hand sanitization and respiratory hygiene during the entire process. Both applicants and election officials are encouraged to use face masks and possibly gloves given repeated exchange of documents and proximity between individuals while capturing candidates’ photos.

Considerations About Supporting Signatures for Candidate Registration

It is common practice to require prospective candidates to present a minimum number of supporting signatures from eligible voters. Gathering thousands of signatures in person and handling the signature booklets poses several risks to coronavirus infection, as signature collectors and signers need to interact with each other and touch the same object. If possible, EMBs should consider reducing the number of required signatures or allow for signatures to be collected online using secure platforms.

Electoral Campaign

Considerations About Traditional and New Media Campaigns

Equal opportunities for electoral campaigning are important for fair elections. While incumbents will still have access to the media and likely receive additional exposure during public health crises, it might be more difficult for the opposition, new candidates and candidates with fewer resources to become known during times of limited public events or complete lockdowns. In many countries, incumbents for some positions will be predominantly men, and these campaign obstacles also might make it harder for women candidates to become known and be elected.

In this context, it becomes even more crucial that all candidates and parties have fair access to the media and that political finance regulations are enforced. EMBs could consider coordinating with both state-owned and private media outlets to facilitate parties’ and candidates’ access to media spots and to recommend that they organize more televised debates to give new candidates a chance to present their political platforms. EMBs can also consider incentives for candidates with fewer resources to compete in elections, such as waiving registration fees.

Where possible, EMBs could encourage political parties to coordinate with health authorities on specific risk-mitigating protocols for their activities and to make sure there is a consistent message regarding combating the disease. Debates, press briefings and other events broadcast via radio, television or online must follow special risk-mitigation precautions. Participants must sit at least six feet apart from each other, use PPE (particularly face masks) when around others and follow the hand-cleaning protocols described above. As lip reading is not possible when speakers are wearing masks, closed captions and sign language interpreters are even more important to make the content accessible. Electronic devices such as screens, keyboards and microphones must be sanitized according to manufacturer's instructions. Especially when events are broadcast via video, participants must be aware that their behavior is being observed and, as leaders or influencers, they must set a good example and model the appropriate precautions for mitigating the spread of the disease.

Considerations About In-Person Public Rallies

As most countries have imposed limits on the number of individuals permitted at gatherings to contain the spread of COVID-19, public electoral events such as campaign rallies have mostly been suspended. If allowed by authorities, these events must also follow a series of recommendations.

Public rallies and other campaign activities are difficult to control and are usually outside the direct purview of the EMBs. However, even when this is the case, the EMB or the political parties could sponsor an online forum, workshop or training in collaboration with health authorities where the basics of risk mitigation are covered and candidates have the opportunity to raise questions and issues. Also in coordination with health authorities, political parties should identify educational materials that are suitable to public events. The candidates and their teams must take responsibility for ensuring that required physical distancing is observed at all rallies, that at-risk individuals are protected and that building entry and exit protocols are observed for activities taking place within closed spaces. These protocols should include hand sanitization with water and soap or alcohol-based solutions before entry and at exit and orderly movement of individuals in and out of buildings to avoid contact. Attendees should also wear face masks. All invitations for public gatherings issued by parties and candidates should have a public health section outlining these guidelines for participation. Speakers taking the stage must also follow all precautions recommended by the health authorities, such as wearing masks when around others, avoiding shaking hands of supporters and not engaging in any other forms of direct contact.

Considerations About Door-to-Door Campaigning

People conducting door-to-door campaigns must also follow risk-mitigation measures to limit person-to-person interaction and mitigate risks from transferring leaflets and other campaign material. As discussed above, it is important that campaigners maintain a safe distance from others; wear masks or other protective equipment; and adopt ways of delivering material that reduce unnecessary touching (for example, leaving materials outside the door rather than handing them directly to residents).

Considerations About COVID-19 Disinformation and Disease-Related Narratives Being Used to Manipulate Turnout or Electoral Results

Messaging content is the other important aspect of electoral campaigns. During a public health crisis, both incumbents and opposition candidates might try to capitalize on changes to electoral processes and citizens' fears for political gain.⁴¹ For instance, candidates might try to exaggerate risks of contamination during elections to drive down voter turnout in certain regions where they do not poll well, or feed into narratives that associate the disease with specific groups to harm candidates associated with such groups. It is recommended that EMBs develop codes of conduct with political parties or introduce

COVID-19 sections to existing codes of conduct, sanction those who violate its principles and closely monitor electoral campaigns to be able to identify violators and enforce sanctions.

Voter Education

Considerations About Informing Voters of the Disease and Related Precautions

Education is crucial to ensure that people know how to proceed safely during electoral processes and to dissipate unfounded fears among election officials, voters and other stakeholders that could undermine participation. Voters need to understand the basics of the virus, how it is transmitted and how to prevent its transmission. EMBs must also be clear in explaining all actions and measures taken to reduce risks and protect voters' and other electoral stakeholders' health. Educational posters, videos and other public service announcements related to coronavirus transmission should be issued or displayed in public view at all places where people congregate throughout the election. Each voter registration location, candidate registration office, polling station and permanent EMB office should be given specific instructions on displaying posters and other public health messages.

When developing the educational material, EMBs should follow best practices in health literacy,⁴² such as:

- **Limiting the number of messages:** Discuss one idea at a time and provide no more than three or four instructions (e.g., reminders and instructions on hand sanitization, not touching one's face or unnecessary surfaces, practicing respiratory hygiene, wearing face masks).
- **Telling voters what to do:** Use an active voice and positive tone, focusing on actions and what voters should do rather than what they should not do (e.g., "Sanitize your hands before and after voting" rather than "Do not vote or leave the polling station without sanitizing your hands").
- **Choosing words:** For clarity, use short sentences and simple or familiar words, avoiding technical or scientific language and unnecessary abbreviations or acronyms. Language should also be culturally appropriate.
- **Selecting visuals:** Use fonts and sizes that are easy to read and images that illustrate the desired health-related behavior. Images should be in high resolution to allow for large prints, culturally relevant and sensitive.



Examples of voter education materials from Liberia during the 2014 Ebola outbreak.

EMBs should also tackle disinformation campaigns and hate speech against marginalized groups via voter education.

Considerations About Informing Voters of New Electoral Procedures

Not only must citizens be well informed about the virus and how it spreads, they must also understand every step of the electoral process that might have changed to comply with health precautions. If, for instance, voters are no longer handing their ID documents to poll workers to avoid potential fomites, the new instructions for voter verification must be clear and explained in advance via public service announcements and other campaigns, displayed at the polling station and restated by poll workers if needed. EMBs and CSOs should also coordinate with other organizations to ensure voter education reaches frequently marginalized communities and invest in making the messaging accessible, such as through captioning and sign language.

If using alternative methods for activities such as voter registration, candidate nomination or polling, EMBs must be even more mindful of how to communicate the new instructions to citizens. Online or mail-in forms should be as simple as possible, accompanied by detailed instructions, and followed by confirmations or other guarantees to citizens that their tasks have been completed appropriately. The introduction of new procedures and technologies might engender suspicion, especially in polarized environments where one or more parties might benefit from undermining the legitimacy of the process. Transparency of information and support to the public as they learn the new methods are thus crucial for the acceptance of results.

“The introduction of new procedures and technologies might engender suspicion, especially in polarized environments where one or more parties might benefit from undermining the legitimacy of the process. Transparency of information and support to the public as they learn the new methods are thus crucial for the acceptance of results.”

Voter Registration

Considerations About Voter Registration Facilities

Legal frameworks for conducting voter registration vary from country to country. The simplest process, used by around 36 percent of countries,⁴³ is when an EMB imports the information for the voter roll directly from the country’s civil registry or tax authority’s records. The EMBs then assign eligible voters to polling stations and inform them of their polling location by mail, text messaging or the EMB’s websites. In most countries, however, an exchange of information must take place between prospective voters and the election authority, which can be conducted either in person or indirectly, such as through mail-in forms or online voter registration.

Some voter registration processes can lead to gatherings, especially at the start and end of the registration period as the EMBs and political parties conduct drives to register voters. Although most risks involved in in-person voter registration processes are similar to the ones involved in in-person voting, they are considerably lower in the former as fewer people usually register on the same day. Furthermore, the number of EMB officials, media professionals, domestic and international observers, and party agents is also significantly lower during registration, which makes enforcing proper distancing easier. Still, if legal provisions allow, EMBs should consider extending the period of registration or assigning people to

different date ranges so as to avoid gatherings. Detailed recommendations regarding selecting locations, planning their layout and sanitizing facilities can be found in the "[Polling Station Operations](#)" section.

Considerations About Voter Registration Equipment and Supplies

Over the last two decades, countries have increasingly introduced biometric voter registration solutions to reduce the risk of fraud. This integrity-strengthening approach has improved public trust in the voter roll but has also made voter registration more complex and increased opportunities for disease transmission. In addition to operating laptops, digital cameras and fingerprint scanners for the new biometric component, registration officials are often still required to complete traditional registration forms. EMBs must be able to effectively mitigate the risk of coronavirus transmission whether they use paper-based processes or electronic equipment.

Individuals registering to vote are often required to present completed forms and official identity documents to the registration officials. These documents could remain infected by pathogens for hours or days, depending on the material,⁴⁴ so handling them should be avoided if possible. There are also fomite risks associated with sharing common office supplies, such as pens for completing and signing registration applications. EMBs should consider encouraging registrants to use their own pens, highlighting this request and any other requirements – on ink color, for example – in public outreach campaigns. The registration office must also make available a number of disposable pens and require that they are properly disposed of, as sanitizing pens after each registrant using disinfecting wipes is more time-consuming.

The other major transmission risk during this process is associated with proper distancing between the registrant and registration officials. A protocol should be developed in which registrants place their documents in a clean area on a dedicated desk before returning to the required distance of six feet – identified by markings on the floor or wall – so election officials can approach the document and verify names, photos and signatures. Alternatively, registrants and registration officials can be separated by translucent plexiglass shields that are frequently sanitized. Dedicated areas where registrants can complete forms should also be sanitized frequently and marked to maintain proper distance between individuals.

In countries using various forms of technologies to register voters, such as capturing biometric data via fingerprint scanners, digital cameras and iris capturing devices, certain additional protocols should be applied. EMBs must contact manufacturers to get detailed instructions on which products can be used and how to use them to sanitize the equipment without damaging it. The U.S. Election Assistance Commission has compiled a helpful list of resources from different vendors and manufacturers with guidance on how to clean voting machines and other electoral technology.⁴⁵ Touchless fingerprint technology and facial recognition devices, if available, are even better options, as they avoid the risk of fomites altogether. Newer facial recognition technology can identify voters even when wearing masks. Registration officials must also be mindful of physical distancing while photographing registrants or when capturing their irises. Obtaining a photo that can later be used for facial recognition purposes usually requires a shorter distance between camera and object than six feet. In some devices, the camera is an integral part of the biometric voter registration kit, forcing the operator to be close to the registrants. In such cases, registration officials should wear more robust PPE.

If more than one official is using a laptop or desktop to register voters, the machine should be disinfected at the end of each shift, as should all other peripheral equipment, such as mouse, printer and other office supplies routinely used by registration officials (e.g., staplers, marker pens, materials used to assemble voter registration cards).

Poll Worker Recruitment and Training

Considerations About Poll Worker Recruitment

While no eligible citizen should be deprived of the right to serve in elections as poll workers, in extraordinary circumstances like a public health crisis, EMBs should consider some restrictions or warnings as they initiate the recruitment process. The first of these considerations involves health care workers. During a public health crisis like COVID-19 that overwhelms hospitals and other health care facilities, health care workers are constantly occupied with the high influx of patients in need of care. Especially in countries where poll worker service is mandatory, EMBs should consider releasing all health care workers from this duty. Groups of people who are at a higher risk of infection or of having more severe symptoms and higher rates of mortality from the disease should also be released from poll worker service. In the case of COVID-19, it has been shown that older adults and people with serious underlying medical conditions are at a higher risk for severe illness. EMBs should consider releasing these individuals from the duty or, at a minimum, provide all the protective equipment and reasonable accommodations they need to perform effectively and safely.

Despite a potential decrease in voter turnout due to the health crisis, EMBs should consider training more rather than fewer poll workers. As several might fall ill, have to care for ill relatives or simply drop out for fear of the disease shortly before Election Day,⁴⁶ it is important that qualified, trained substitutes can replace them.

Considerations About In-Person Poll Worker Trainings

During a public health crisis, the routine training of poll workers and everyone involved in the election process should be supplemented by additional training on the basics of the virus, with a particular focus on its mode of transmission and methods to contain it. Poll workers must also receive special instructions on how to preserve their own health and that of voters during the electoral process, such as on how to wear masks and gloves when applicable, when and how to sanitize hands and surfaces, how to control queues and how to remind voters of appropriate behavior throughout the process. Training materials must be adapted to include this content and any special measures that poll workers and voters need to take.

EMBs must also keep in mind that even experienced poll workers will need additional attention if new procedures are introduced to the electoral process as a consequence of the public health crisis. All this new content must be clearly presented in training material and conveyed to poll workers to answer questions, make any necessary clarifications and ensure their understanding of the material. If the training sessions can be held in person, electoral officials must consider the class size (respecting the restrictions on how many people can gather at any given time) and distance between trainees, moving the training to larger venues if more space is needed. All supplies needed for hand and surface sanitization must be provided (see more details in "[Polling Station Operations](#)" section), and posters with instructions and reminders about hand sanitization and respiratory etiquette must be displayed throughout the venue.

Considerations About Remote and Virtual Trainings

If poll worker training can be held remotely, especially via virtual classes and online platforms, the issue of gathering can be solved, but a series of other challenges emerge. EMBs must ensure all poll workers can access the training easily, which requires high internet penetration and access to technology throughout the country and across social divisions. The training format must also be inclusive and

accessible to all, including people with disabilities and individuals less familiar with new technologies. EMBs can also consider making computers with internet access and assistants available for poll workers to complete their training. The venue hosting these trainees must comply with all standard sanitization and distancing practices (i.e., proper sanitization after each user and at least six feet between computer desks), and time slots should be considered to reduce the number of individuals in the facility at any given time.

In addition to these measures to protect poll workers receiving training, EMBs should also consider techniques to ensure individuals are actually completing the training and acquiring all necessary knowledge. As the sessions are conducted remotely, it might be harder for the EMB to know if trainees are watching the videos, reading the material and paying attention to the content. As the virtual material is developed, EMBs should consider introducing attention-checkers, quizzes and pre- and post-training tests to monitor the effectiveness of the training. Poll workers should be required to reach a certain score before receiving a certificate of completion.

Domestic and International Election Observation and Party Agents

Considerations About Recruiting and Deploying Election Observers

Election observers and party agents are an integral part of the electoral process and provide important safeguards against irregularities and fraud at the polling place. To reduce risks to these individuals, EMBs, observer organizations and political parties might consider reducing the number of observers and party agents in each facility or have them rotate to allow for a lower number of people in the same place at the same time. In addition to reducing their numbers, observers and party agents can mitigate health risks by avoiding direct physical contact with voters, election officials and electoral material and maintaining the recommended physical distance. Observers and party agents should also wear masks to reduce the risks of transmission.

Prior to deployment, and as with the trainings for poll workers, observer organizations and political parties should also provide observers and party agents with educational material and training about the coronavirus, its transmission and how to adequately wear protective equipment, sanitize hands and practice respiratory hygiene. EMBs, political parties and observer organizations should also release at-risk individuals and health care workers from participating in in-person election observation and ensure they are fully aware of the risks involved in participating.

Considerations About Observer and Political Party Agent Accreditation

Even though they play different roles, both election observers and party agents must almost always be accredited by the EMB before they can take up their respective duties. This often means that election officials must receive and process a large number of accreditation applications under a fairly limited time frame. This accreditation process has increasingly become more elaborate. Domestic organizations usually must first apply to the EMB to be certified as election observation entities. Once certified, the organization files applications for each individual observer. In some instances, this can be done online using a dedicated website.⁴⁷ Once approved by the EMB, accreditation badges are produced and returned to the observing entity for internal distribution. However, manual processes are more often used, requiring individual observers to appear in person at a dedicated EMB field office. At these offices, a team of officials receive and process application forms and issue badges carrying the individual's personal details, including a photo. In a number of countries, officials take the photo on the spot. Occasionally, a fee is also paid, requiring cash or card transfer from one person to another. Party agent accreditation is also often a two-step process, although EMBs usually consider parties or candidates

who successfully registered as automatically qualified to submit party agent applications. The level of person-to-person interaction in this process might be similar to the one for observers, as party agents often must show up in person to sign accreditation forms and have their photo taken for their badges.

Mitigating virus transmission risks in EMB offices responsible for accrediting election observers and party agents will require a combination of approaches used for voter registration and polling station operations. Where an integrated computerized accreditation system is used to capture personal information and photographs, standard protocols previously outlined for operating technical equipment should be considered. See the "[Voter Registration](#)" and "Polling Station Operations" sections for more details. Furthermore, proper exchange of documentation, signing of forms and disinfection of commonly used and touched areas at the facility should be performed throughout the accreditation process. If possible, the EMB should consider introducing or expanding an online accreditation process to reduce the need for in-person accreditation. EMBs should also incorporate all these public health considerations in their guidelines for accreditation of election observers and party agents.

Phase II: Election Day and Post-Electoral Processes

Polling Station Operations

The process of casting ballots on Election Day is usually where the highest number of people congregate and interact with each other, presenting the highest potential for virus transmission. It is also on Election Day that most people experience the process more closely and form their perceptions of it, including regarding appropriateness of procedures and integrity and credibility of the elections in general. Fortunately, the polling station is the environment over which EMBs can maintain most control, and efforts must be made to keep each station at near-zero risk. Even if no voters or poll workers experience any symptoms of COVID-19, if infected, they might still be able to transmit the virus to others while asymptomatic. Therefore, all precautions must be taken as if any person in the polling station could be infected.

Considerations About Polling Station Location

Even when taking seasonal aspects into consideration (see "[Electoral and Resource Planning](#)" section), bad weather can still impact elections and lead to a higher concentration of people indoors. Election officials must identify areas large enough for numerous people to congregate safely in case of rain and lightning. Ideally, the buildings will have open spaces or several windows and doors, allowing for as much natural ventilation as possible. If possible, sitting and queue arrangements should prevent the wind from carrying droplets from one person to another. These areas could be in public buildings and other public spaces, but they should be identified beforehand. Election officials must ensure selected

buildings are accessible and be aware of contingency plans, so they can direct voters to these covered areas while enforcing protocols for building entry, physical distancing, hand sanitizing and building exit.

Besides finding appropriately sized buildings with covered areas, EMBs also need to ensure the polling stations are located in safe, accessible areas and do not increase health risks to at-risk groups. If children are more vulnerable to the disease, for example, polling stations should move away from schools. In the case of COVID-19, given that older adults and people with serious underlying medical conditions are at a higher risk for severe illness, EMBs should consider moving polling stations away from areas where these at-risk groups congregate or reside, such as assisted living facilities and hospitals. It is important to note, however, that these changes cannot in any circumstance disenfranchise those at-risk groups. EMBs should consider, depending on their country's legal framework, alternative options such

as issuing automatic absentee or mail-in ballots for these voters, allowing proxy voting or dedicating specific times for these voters to cast their ballots so they do not spend as much time queuing and in potential contact with others.

Considerations About Polling Station Layout

The layout inside each polling station also must be carefully planned. The placement of the tables and the seats for poll workers should respect the required physical distance, and officials should control the flow of voters at each stage of the polling process to avoid person-to-person contact and allow time for sanitization of any equipment. EMBs should also consider eliminating any steps that might lead to unnecessary touching of objects. For instance, EMBs might prefer buildings with fewer doors or doors that open and close automatically to avoid handling of doorknobs and using fixed booths rather than curtains to avoid voters touching the cloth. Multiple-person seating, especially benches and side-by-side chairs, should be removed, and the polling place should have as few unnecessary objects and surfaces as possible. If available, plexiglass or other translucent shields can be installed in polling tables to add a protective barrier between poll workers and voters and help block viral droplets from being transferred from one person to another. These shields should be frequently disinfected.



Although curtains help keep the secrecy of the vote in Ukraine, they should be avoided during the COVID-19 crisis to reduce the chance of virus transmission.

Considerations About Protocols for Queueing and Entry and Exit Procedures

Since Election Day is the point of the process with the greatest number of people gathering, it is also the time of greatest risk. While general principles of physical distancing should be respected during all social gatherings, special provisions should be put in place on Election Day to ensure that personal distance is respected while standing in line using simple systems previously described, such as twine with small knots or ribbons at six-foot intervals, to assist monitoring officials in securing adequate spacing. Even better, to avoid touching of the twine, tape on the floor marking where each person should stand is recommended. In all situations that require standing in line, educational posters should focus on physical distancing and the modes of virus transmission, and poll workers should be tasked with enforcing physical distancing guidelines in queues.

To reduce the risks of person-to-person contact as people go through the voting process, EMBs should also consider developing protocols that delineate the path for voters from start to finish. In the case of COVID-19, these protocols should include hand sanitization at entry or before voting and possibly before exiting for additional precautions. Voters are encouraged to cover their mouths and noses during the entire process with masks to minimize the spread of respiratory droplets. Where professional masks are in short supply, voters can use simple homemade cloth masks made with tightly woven cotton, such as quilting fabric or cotton sheets.

People diagnosed with COVID-19 who are able to leave their homes to vote should be instructed to use dedicated polling stations, dedicated queues and booths or to visit the polling station at special time slots to avoid contact with healthy individuals. Poll workers assigned to these polling stations should be provided with additional PPE such as disposable gowns and medical face shields. EMBs should

also ensure poll workers are comfortable accepting such positions and consider increasing incentives to them.

EMBs should also consider allocating a certain time for at-risk voters to cast their ballots or organizing a special queue for those individuals to reduce the amount of time they have to spend in public.

Considerations About Voter Verification and Vote Casting

Different countries have different requirements for voter verification and different methods of vote casting. Voter verification methods might include, for example, scanning fingerprints, presenting a voter ID document or signing a voter list. Vote casting can be done by marking ballot papers or using electronic machines. Almost all of these require handling and touching objects. As with all other fomite-prevention measures, the mitigation recommendations for voter verification and vote casting processes are designed to reduce the need for handling and touching, ensuring infected individuals are not contaminating objects that need to be touched by others, or ensuring contaminated objects are sanitized before they can infect others.

With voter IDs, for example, unnecessary touching can be avoided by developing protocols through which each voter places his or her document in a clean area on the polling table before moving the required distance, so poll workers can approach the document and, without touching it, verify names, photos and signatures. When signatures are required for voter verification or when voters are required to mark ballot papers, EMBs can provide disposable pens, encourage voters to bring pens from home or sanitize the pens after every voter, which is a more time-consuming task. Hand sanitization before the procedures is still recommended to avoid contaminating the voter register itself. Voter should also allow their hands to completely dry to avoid damaging the paper.

Most biometric scanners and electronic voting machines require that voters touch a screen. Just like the recommendation for biometric voter registration devices, EMBs must contact manufacturers to get detailed instructions on which products can be used and how to use them to sanitize the equipment without damaging it. Touchless fingerprint technology and facial recognition devices, when available, are even better options as they avoid the risk of fomites altogether. Electronic voting machines usually

also require that voters touch screens or buttons, so EMBs must learn how to sanitize the equipment without damaging it or use disposable protective film or other translucent material to avoid direct contact with these surfaces.



Indelible ink can be applied by the poll workers or by voters directly. Applicators that reduce the need for human-to-human contact should be preferred.

Finally, if using indelible ink to mark voters who cast their ballots, EMBs should encourage voters to sanitize their hands using one of the recommended methods and

completely drying them before having the ink applied to their fingers and fingernails. Voters should also allow the ink to dry before sanitizing their hands again for better results. If possible, EMBs should consider ink products that come in self-applicating containers such as bottles to reduce the need for contact between poll workers and voters.⁴⁸

Considerations About Assisted Voting

Some voters, especially those with disabilities, may require assistive devices or assistance from another person to cast their ballots. If headphones, tactile ballot guides or other assistive devices are used to help voters with disabilities vote independently and secretly, this equipment or material should be properly sanitized after every voter who uses it. When the assistance of another person is requested, the required physical distance most likely cannot be followed, and both the assistant and the voter should wear PPE like face masks or shields and sanitize their hands before and after the ballot is cast.



A woman receives assistance to vote in Nepal. Physical distance requirements cannot always be followed during assisted voting and PPE is recommended

Considerations About Restroom Facilities

Toilet or restroom facilities present unique challenges during mass gatherings, as it is difficult to control behavior in secluded places and they are the area where an exchange of bodily fluids would most likely occur. Individuals who are feeling unwell are also likely to seek out this place when coughing. To allow for easier, more accessible handwashing and avoid gatherings inside restrooms, handwashing or hand-sanitizing stations with soap and water or alcohol-based solutions should be placed outside all toilet facilities and follow accessibility requirements. Depending on cultural expectations, these stations can be separated by gender to avoid intimidation of women voters. Where possible, gender-neutral restroom options should be provided as well. Posters with instructions and reminders on how to thoroughly sanitize hands should be displayed near these stations.

Considerations About the Security of Polling Stations

Several countries already deploy security forces to maintain peace and civility in polling stations during elections. During public health crises, the work of these security forces is complicated by the tensions and fears experienced by voters, potentially leading to escalation of conflict. The perception that every individual can pose a health threat contributes to this tension, and EMBs must take precautions to prevent voters and candidates from capitalizing on it. Security forces must receive special training on all risk-mitigation measures being introduced and how to enforce them without putting themselves or the violators at a health risk. It is critical that when enforcing physical distancing or other regulations, security forces do not use excessive force.

Considerations About Waste Material

While, to date, there is no evidence of transmission of the COVID-19 virus through handling of waste, including health care waste, all supplies used to sanitize individuals and surfaces and nonsanitized single-use objects (e.g., disposable pens, protective film) should be considered potential fomites and be appropriately collected in proper containers and bags.⁴⁹ The disposal of any potentially infected waste material should be done according to the country's health authority guidelines. During elections, tissue paper, disinfecting wipes, gloves, masks, disposable pens, protective film and other waste materials must be disposed in proper containers or bags. Poll workers and janitors collecting this waste material should wear heavy-duty gloves and masks to transport the waste to the nearest health facility, infectious waste disposal facility or other treatment sites. This process should be informed by direct guidance from local health authorities.

Considerations About Extending Voting Days

As mentioned earlier in this paper, queueing and other procedures within polling stations can put individuals at a higher risk of direct contact with each other or with respiratory droplets. Physical distancing during these procedures can be better managed if the number of individuals is reduced, but all voters must be enfranchised. Where legal provisions allow, EMBs can consider extending the voting period so a smaller number of voters visit the polling station each day. To ensure a balanced assignment of voters per day, EMBs can consider splitting the electorate by name initials or address, for example.

“Physical distancing can be better managed with fewer individuals, but all voters must be enfranchised.”

Considerations About Mail-In Ballots, Drop-Off Ballots and Absentee Votes

One way to avoid queues and the risks of infection during voting in countries whose legal frameworks allow is to permit voters to submit ballots by mail or to drop them off at curbside ballot boxes. While the risks of infection for voters and election officials are much lower with this method, EMBs should still consider a few factors. For instance, viruses and other pathogens can last a certain period in different surfaces, meaning some could survive on the ballots or in envelopes and infect voters or poll workers who receive and process the votes. In the case of the coronavirus, a recent study indicates that the virus can persist on paper between three hours to five days, although, even if active after days, the amount of active pathogens would be around 0.1 percent of the starting virus material.⁵⁰ As a precaution, voters should sanitize their hands thoroughly after handing the ballot and envelope and use a self-sealing envelope or a wet sponge to activate the envelope adhesive rather than licking it. Alternatively, they can leave the material untouched for at least five days before handling it.

Vote Count and Results Management

Considerations About Handling Ballots and Tally Sheets During Vote Count at Polling Station

In many countries, the core part of the election results process starts in the polling stations with the hand count of paper ballots by poll workers. Thereafter, the results sheets from individual polling stations are aggregated, often at the constituency level, and results announced by the returning officer. Other countries use direct-recording electronic voting machines in the polling stations that automatically calculate the numbers of votes and transmit the results to a central location for verification and aggregation. In some instances, voters mark their preference on paper ballots that are then scanned and processed.

Where poll workers count paper ballots in polling stations, several adjustments to the common process should be made to ensure their safety. One consideration is the desk space required for counting ballots while maintaining physical distance among the scrutineers. As party agents and observers are also to perform their duties during this critical part of the results process, each individual ballot should be shown to them, without allowing them to touch it, before being placed in its respective pile. This will increase transparency but also



During the vote count, poll workers should show each ballot to observers and party agents from a distance.

slow down the count. Once all the ballots are counted and the results for the polling station determined, the tally sheets need to be signed by a number of officials, party agents and observers. Each signer should use his or her own pen and sign the document one at a time while maintaining physical distance.

Considerations About Transporting Ballots and Other Electoral Materials

Sensitive election material such as results sheets, voter lists and ballot papers are normally transported from polling stations to a central location for aggregation and results announcement. These materials are commonly moved in plastic tamper-evident bags and stored in sealed ballot boxes. While in transit, this material is often accompanied by a number of representatives from the polling station staff, observers, party agents and police. To reduce transmission risks while moving the sensitive election material in vehicles, all personnel involved should be wearing masks. When possible, EMBs should also consider installing monitoring tools such as cameras and GPS trackers to allow for observers and party agents to monitor the transportation of material remotely.

Considerations About Results Aggregation Processes and Facilities

The operations in the central location dedicated for results aggregation often require an extensive number of staff to receive, process, aggregate and store election material from a large number of polling stations. The number of security personnel can sometimes be significant as well. In general, maintaining physical distance is important during each of the stages of the results management process. Polling station teams often experience a backlog during handover of their material to the intake clerks, which creates queues. Once the material is checked in, staff transfers them to verifiers and, once everything is accounted for and logged, the material is temporarily stored before actual aggregation begins. When results are finally aggregated and validated, results forms are signed and scanned for transmission to EMB headquarters. In some cases, an online system is utilized for results aggregation. Each of these processes entails handing over multiple paper forms for review and signatures, as well as the use of computers for data entry, scanners for transmission of results and projectors to display progressive results for observers and party agents. Standard recommendations outlined in the previous sections for physical distancing, sanitization of hands and equipment and use of PPE apply.

Monitoring and Quality Control

An EMB's monitoring and evaluation activities should focus on monitoring the degree to which these risk-mitigation methods are implemented. Event-specific monitoring checklists should be developed and completed by designated election officials, especially on Election Day. If possible, data recorded in checklists should be verified by higher-level supervisors through spot checks. This way, compliance can be systematically monitored and data can be collected at a central level to identify breakdowns in the system, providing lessons for future large-scale events.

Although it is not possible to prove exactly how many new cases of COVID-19 were avoided as a result of effective implementation of risk-mitigation methods, normal or lower patterns of new cases within 14 days of the electoral events should indicate that they did not contribute to transmission spikes.

Endnotes

- 1 Global Impact of COVID-19 on Elections. (March 20, 2020). Retrieved from <https://www.ifes.org/publications/global-impact-covid-19-elections>
- 2 Buriil, F. Darnolf, S. Low Voter Turnouts, Fear, Disinformation and Disrupted Supply Chains: How Election Commissions Are Unprepared for COVID-19 (2020, March 27). IFES. Retrieved from <https://www.ifes.org/news/low-voter-turnouts-fear-disinformation-and-disrupted-supply-chains>
- 3 Keilman, J. (2020, April 13). "After Chicago poll worker dies from COVID-19 and others test positive, city warns voters they might have been exposed to virus at polling places. *Chicago Tribune*. Retrieved from <https://www.chicagotribune.com/coronavirus/ct-chicago-poll-worker-dies-covid-cornavirus-20200413-rz-55vqpo6jfbxn7e4i6vkj6n2y-story.html>
- 4 Modes of transmission of virus causing COVID-19: implications for IPC precaution recommendations. (n.d.). World Health Organization. Retrieved from <https://www.who.int/news-room/commentaries/detail/modes-of-transmission-of-virus-causing-covid-19-implications-for-ipc-precaution-recommendations>
- 5 How Coronavirus Spreads. (2020, April 13). U.S. Centers for Disease Control and Prevention. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html>
- 6 Definitions: emergencies. (2014, November 17). World Health Organization. Retrieved from <https://www.who.int/hac/about/definitions/en/>
- 7 Rosenthal U, Charles MT, & 't Hart, P. (Eds). (1989). *Coping with crises: the management of disasters, riots and terrorism*. Springfield: Charles C. Thomas.
- 8 Marisam, J. (2010). Judging the 1918 election. *Election Law Journal*, 9(2), 141-152.
- 9 Banbury, A. (2020, April 8). Opinion: Elections and COVID-19 - what we learned from Ebola. *Devex*. Retrieved from <https://www.devex.com/news/opinion-elections-and-covid-19-what-we-learned-from-ebola-96903>
- 10 Delury, J. (2020, April 16). How Democracy Won the World's First Coronavirus Election. *New York Times*. Retrieved from <https://www.nytimes.com/2020/04/16/opinion/south-korea-election-coronavirus.html>
- 11 Taylor, D. B. (2020, April 28). How the Coronavirus Pandemic Unfolded: a Timeline. *The New York Times*. Retrieved from <https://www.nytimes.com/article/coronavirus-timeline.html>
- 12 WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020. (n.d.). Retrieved from <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>
- 13 What is a coronavirus? World Health Organization Sri Lanka. Retrieved from https://www.who.int/docs/default-source/inaugural-who-partners-forum/coronavirus-poster-english-srilanka.pdf?sfvrsn=289dedc3_0
- 14 Symptoms of Coronavirus. (2020, March 20). U.S. CDC. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>
- 15 Huang, P. (2020, April 13). What We Know About The Silent Spreaders Of COVID-19. *NPR*. Retrieved from <https://www.npr.org/sections/goatsandsoda/2020/04/13/831883560/can-a-coronavirus-patient-who-isnt-showing-symptoms-infect-others>
- 16 Mandavilly, A. (2020, April 20). Infected but Feeling Fine: the Unwitting Coronavirus Spreaders. *The New York Times*. Retrieved from <https://www.nytimes.com/2020/03/31/health/coronavirus-asymptomatic-transmission.html>
- 17 Columbia Health, & Columbia Health. (2020, March 26). COVID-19 (Novel Coronavirus): Frequently Asked Questions. Retrieved from <https://preparedness.columbia.edu/news/2019-novel-coronavirus-frequently-asked-questions>

- 18 Symptoms of Coronavirus. (2020, March 20). Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>
- 19 Modes of transmission of virus causing COVID-19: implications for IPC precaution recommendations. (n.d.). WHO Retrieved from <https://www.who.int/news-room/commentaries/detail/modes-of-transmission-of-virus-causing-covid-19-implications-for-ipc-precaution-recommendations>
- 20 How Coronavirus Spreads. (2020, April 13). U.S. CDC. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html>
- 21 Based on information from Kampf G, Todt D, Pfaender S, Steinmann E. Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. *J Hosp Infect.* 2020;104(3):246–251. doi:10.1016/j.jhin.2020.01.022. The longevity of the virus was measured at room temperature (20–22 °C or 68–72 °F)
- 22 Advice for public. (n.d.). WHO. Retrieved from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>
- 23 Social Distancing, Quarantine, and Isolation. (2020, April 4). U.S. CDC. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html>
- 24 Bourouiba, L. (2020). Turbulent gas clouds and respiratory pathogen emissions: potential implications for reducing transmission of COVID-19. *Jama.*
- 25 Frequently Asked Questions About Respiratory Hygiene/Cough Etiquette. Virginia Department of Health. Retrieved from https://www.vdh.virginia.gov/content/uploads/sites/3/2016/01/RespiratoryHygiene-CoughEtiquette_FAQ.pdf
- 26 Interim recommendations on obligatory hand hygiene against transmission of COVID-19. (n.d.). WHO. Retrieved from <https://www.who.int/who-documents-detail/interim-recommendations-on-obligatory-hand-hygiene-against-transmission-of-covid-19>
- 27 Hand hygiene in health care in the context of Filovirus disease outbreak response. (2020, March 12). WHO. Retrieved from <https://www.who.int/csr/resources/publications/ebola/hand-hygiene/en/>
- 28 List N: Disinfectants for Use Against SARS-CoV-2. (2020, April 24). Retrieved from <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>
- 29 Chan, K. H., Peiris, J. S., Lam, S. Y., Poon, L. L. M., Yuen, K. Y., & Seto, W. H. (2011). The effects of temperature and relative humidity on the viability of the SARS coronavirus. *Advances in virology*, 2011.
- 30 The legal aspects of election postponements are discussed in a forthcoming paper in this series, Legal and Constitutional Considerations for Postponing or Modifying Election Processes
- 31 Ellena, K. The Legal Quagmire of Postponing or Modifying Elections. (2020, April 14). IFES. Retrieved from <https://www.ifes.org/news/legal-quagmire-postponing-or-modifying-elections>
- 32 Lipsitch, M. (2020). Seasonality of SARS-CoV-2: Will COVID-19 go away on its own in warmer weather? Center for Communicable Disease Dynamics. Retrieved from <https://ccdd.hsph.harvard.edu/will-covid-19-go-away-on-its-own-in-warmer-weather/>
- 33 Global surveillance for COVID-19 caused by human infection with COVID-19 virus – Interim guidance. (2020, March 20). WHO. Retrieved from <https://apps.who.int/iris/bitstream/handle/10665/331506/WHO-2019-nCoV-SurveillanceGuidance-2020.6-eng.pdf>
- 34 Palca, J. (2020, March 6). Respirators Key To Coronavirus Battle But They Must Be Worn Correctly. *NPR*. Retrieved from <https://www.npr.org/2020/03/06/812789168/respirators-key-to-coronavirus-battle-but-they-must-be-worn-correctly>
- 35 Use Cloth Face Coverings to Help Slow Spread. (2020, April 13). U.S. CDC. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html>
- 36 Groth, L., & Groth, L. (2020, April 8). Your Gloves Probably Aren't Helping You Prevent Coronavirus at the Grocery Store. Retrieved from <https://www.health.com/condition/infectious-diseases/coronavirus/should-you-wear-gloves-to-the-grocery-store>

- 37 Steussy, L., & Weiss, S. (2020, April 22). Why wearing gloves to the grocery store isn't fighting coronavirus. Retrieved from <https://nypost.com/2020/04/22/why-wearing-gloves-to-the-grocery-store-isnt-fighting-coronavirus/>
- 38 Rauhala, E. (2020, March 14). Some countries use temperature checks for coronavirus. Others don't bother. Here's why. *The Washington Post*. Retrieved from https://www.washingtonpost.com/world/coronavirus-temperature-screening/2020/03/14/24185be0-6563-11ea-912d-d98032ec8e25_story.html
- 39 Saey, T. H. (2020, April 16). COVID-19 may be most contagious one to two days before symptoms appear. Retrieved from <https://www.sciencenews.org/article/coronavirus-covid-19-infection-contagious-days-before-symptoms-appear>
- 40 In addition to the photograph, candidate registration applications often include information related to party affiliation, symbols, and proof of supporting signatures; and payment of candidate fees.
- 41 A comprehensive analysis of the relationship between COVID-19 and disinformation campaigns is upcoming in this series.
- 42 Niebaum, K., Cunningham-Sabo, L., & Bellows, L. (2015). Developing Effective Educational Materials Using Best Practices in Health Literacy. *Journal of Extension*, 53(4), n4.
- 43 How is the national electoral register created? (n.d.). International IDEA. Retrieved from <https://www.idea.int/data-tools/question-view/735>
- 44 Identity documents come in wide variety of designs and materials, including simple paper-based booklets, cold laminated temporary ID cards, and more traditional flexible polyvinyl chloride composites material. In some places, like Zimbabwe, national ID cards are made out of metal.
- 45 Vendor and Manufacturer Guidance on Cleaning Voting Machines and Other Election Technology: U.S. Election Assistance Commission. (n.d.). Retrieved from <https://www.eac.gov/election-officials/vendor-and-manufacturer-guidance-cleaning-voting-machines-and-other-election>
- 46 Behrens, C.; Rouan, R. (2020, March 12). Ohio elections boards frantically seeking poll workers due to coronavirus outbreak. *The Columbus Dispatch*. Retrieved from <https://www.dispatch.com/news/20200312/ohio-elections-boards-frantically-seeking-poll-workers-due-to-coronavirus-outbreak>
- 47 For a web-based accreditation process, see the [2019 Presidential election in Afghanistan](#) (accessed April 19, 2020).
- 48 More details on mitigating the risks of using indelible ink can be found in IFES' article "Indelible Ink in Elections: Mitigating Risks of COVID-19 Transmission While Maintaining Effectiveness" Available at <https://www.ifes.org/news/indelible-ink-elections-mitigating-risks-covid-19-transmission-while-maintaining-effectiveness>
- 49 Water, sanitation, hygiene, and waste management for the COVID-19 virus: interim guidance, 19 March 2020. (1970, January 1). WHO. Retrieved from <https://apps.who.int/iris/handle/10665/331499>
- 50 How Long Does Coronavirus Last on Cardboard and Paper? (2020, April 10). Retrieved from <https://www.uprinting.com/blog/how-long-does-coronavirus-last-on-cardboard-and-paper/>



International Foundation
for Electoral Systems