Gathering Evidence on the Effect of the COVID-19 Pandemic on People Who Are Blind or Have Low Vision: Looking Back and Moving Forward, With Recommendations for Future Disasters

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Undoubtedly, most people can remember the events of March 2020 and recall a last trip outside of the home for a restaurant meal or the final day of working in an office or school setting before the lockdowns started. They may remember the feelings of uncertainty about the future and, of course, the shortages of toilet paper and cleaning supplies in stores.

The COVID-19 pandemic impacted all individuals in many ways, but the effects were unique for people of all ages who are blind or have low vision. Over the past 2 years, researchers at the American Foundation for the Blind (AFB)’s Public Policy and Research Institute (PPRI), of which I am a member, have conducted several studies to examine the experiences of Americans who are blind or have low vision in a variety of areas during the pandemic. The first two surveys were conducted in the spring of 2020: Flatten Inaccessibility, which looked at the experiences of adults with visual impairments (Rosenblum et al., 2020a); and the first Access and Engagement survey, which focused on the educational experiences shared by parents and teachers of children with visual impairments (Rosenblum et al., 2020b). Later surveys were conducted to gather additional information at various points during the pandemic, including the Journey Forward survey, conducted in the summer of 2021 (Rhoads et al., 2022) and two additional follow-up surveys to the Access and Engagement survey (Rosenblum et al., 2021; Silverman et al., 2022b). Finally, AFB’s Workplace Technology Study documented experiences with the transition to telework (Silverman et al., 2022a).

Disproportionate Effect of the Pandemic on People With Visual Impairments

Collectively, these studies reveal ways in which the pandemic disproportionately affected Americans who are blind or have low vision, particularly by exacerbating barriers posed by a lack of consistent access to

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transportation and digital information. For example:

- In April 2020, about 80% of respondents reported concerns that they would have trouble getting themselves or their loved ones to a COVID testing site or a healthcare provider if needed because they could not drive (Rosenblum et al., 2020a).

- In April 2020, as schools went virtual, three-fourths of the parents of school-age children who filled out the survey said they had concerns about their child’s educational progress, and about half of the teachers surveyed said they could not reach at least one of their students (Rosenblum et al., 2020b).

- By November 2020, while many children were still attending online school at least part of the time, nearly 60% of teachers surveyed said their students could not access at least one digital tool, and 35% said their students could not access at least two digital tools (Rosenblum et al., 2021).

- In the summer of 2021, 45% of survey respondents said they had trouble getting food or supplies delivered during the pandemic. They cited challenges like inaccessible delivery applications (apps), a lack of available delivery time slots, or prohibitive costs (Rhoads et al., 2022).

- In the same 2021 survey, 70% of respondents tried to use telehealth services; of these, 57% had accessibility issues with the telehealth platform. When they tried to go in-person for healthcare services or COVID tests, some respondents said they were told to wait outside, sometimes in unsafe conditions, because they did not have a car in which they could wait (Rhoads et al., 2022).

- In the Workplace Technology Survey, although 41% of the respondents reported teleworking at least part-time before the pandemic started, 90% were teleworking by April 2020. Some of the respondents reported that they liked teleworking for a variety of reasons such as not needing to worry about transportation, having full control of their office setup, and having more control of how their blindness or low vision was disclosed in the workplace. However, many respondents also cited accessibility challenges with common videoconferencing platforms, and it was sometimes harder to remediate access issues without being physically present in an office (Silverman et al., 2022a).

Like other disasters before it, the COVID-19 pandemic disproportionately affected people with disabilities. People who are blind or have low vision, including those with additional disabilities or medical challenges, and their families, faced especially difficult situations due to disrupted in-person supports, as well as often being at higher risk of complications from the illness.

Although some issues (such as a lack of walkup COVID testing sites) were pandemic-created issues, many other problems manifested from systemic barriers that were present long before the pandemic began. Some of these barriers include the inconsistent accessibility and usability of digital tools and information; facilities and systems set up primarily for people who drive cars; and insufficient broadband coverage in some parts of the country, which caused some children to have difficulty accessing virtual instruction.

**Difference Between Accessibility and Usability**

As a totally blind woman, I was lucky in many ways during the pandemic. I had been a full-time teleworker before the pandemic, and I was self-employed, so I experienced little disruption to my workload or the technology I used. I also have a sighted husband who teleworked, went to the grocery store weekly,
and drove me to my vaccination appointments, a privilege many of my peers who are blind or have low vision did not have.

When I came home from a conference with a telltale sore throat in July 2022, my husband and I isolated from each other for 10 days. I did not want to have him expose himself to the virus by driving me to a testing site, nor did I want to use a rideshare service. My husband and I had rapid tests at home, and I knew some blind people who had tested themselves using a visual interpreting service (like Aira or Be My Eyes) to read their results. I did not trust myself to juggle several unfamiliar tiny tubes and droppers (labeled only in print) while holding them in front of my smartphone’s camera, especially when I was sick, lethargic, and uncoordinated. I considered not testing at all, but as my symptoms worsened, I worried the lack of a positive test could delay my access to treatment. Eventually, my husband assisted me with a home test—on our balcony, with all the windows open. He wore a mask and I handed him the swab I had inserted in my nose, which he placed in the prepared test solution and later emailed me a photo with the caption, “Clearly positive test.”

Fortunately, I recovered without treatment, and my husband never got sick at all. However, this experience is perhaps a clear example of the difference between accessibility and usability. Even when a tool, like an at-home COVID test, is technically accessible, it may not be fully usable during the ideal use case—when someone is ill and wishes to use it without any in-person assistance.

As the end of 2022 approaches, the majority of individuals in the United States have largely returned to their pre-pandemic ways of life. Schools have reopened, many workers have returned to offices, and toilet paper supplies have been restored. However, the underlying systemic issues and inequities highlighted during the pandemic are still in need of remediation. Furthermore, the digital tools that became crucial during the pandemic will still play a continuing role in people’s lives, including the lives of those who are blind or have low vision.

Key Recommendations for Future Disasters

Each of the PPRI research reports includes a series of recommendations for policymakers and other key decision makers to consider in order to mitigate the concerns highlighted by the research data. In considering recovery from the COVID-19 pandemic, as well as preparedness for potential future disasters, some key recommendations might include:

- Educational and workplace decision makers should “buy for inclusion,” by carefully considering the accessibility and usability of new digital tools before making procurement decisions.
- Digital information about disasters and emergencies, such as a global pandemic, should be made fully accessible to viewers who have low vision or are blind or deafblind, including charts, maps, and videos.
- Educational teams should provide intensive or compensatory services or both to students who have experienced learning losses during the pandemic.
- Healthcare facilities, as well as COVID-19 vaccination and testing sites, must be fully accessible to nondrivers.
- State and local transportation agencies should evaluate increasing on-demand transportation options for nondrivers.
- Public health agencies should incorporate the needs of people who are blind or have low vision into planning from the outset as they prepare for future disasters.

Although the COVID-19 pandemic brought losses and struggles to many people, it has also brought some unexpected silver linings. Through the pandemic, individuals have learned to be more innovative and creative in using new tools, such as remote work tools, that have the potential to facilitate universal access to information and services. In the coming years, it will be important to ensure that new technologies and innovations fully
include people with disabilities and that the lessons learned from this pandemic be incorporated in responses to future disasters.

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