State COVID-19 websites fail to meet accessibility standards

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Over the course of the COVID-19 pandemic, U.S. states and territories all created websites designed to share information with the public about the disease, vaccinations and related public health recommendations. However, a new study finds these sites do not meet accessibility standards—meaning that some members of the public, such as

individuals who are blind or visually impaired, are not able to access all of the relevant information on the sites.

"Everyone should be able to access this important health information," says Yingchen He, co-author of a paper on the work and an assistant professor of psychology at North Carolina State University. "People need to know how to protect themselves, how to access vaccines and what the current public health recommendations are. Right now, many state and territorial governments are not meeting these needs."

Researchers first assessed the accessibility of state and territorial COVID-19 websites in 2021, and have now replicated that work in 2023. The 2021 study used software tools to assess the accessibility of these sites in all 50 states and the U.S. territories Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands. In the 2023 study, they were able to include American Samoa—which did not have a COVID-19 site in 2021. However, in 2023, the Northern Mariana Islands had taken down their COVID-19 site.

Specifically, the researchers tested the sites to see if they complied with the level AA standard for the Web Content Accessibility Guidelines (WCAG) established by the World Wide Web Consortium, which is the most widely used international standard for accessibility. The researchers checked the accessibility of three pages on each site: the home page, the vaccine information page and the page about COVID-19 testing.

"In 2021, none of these public-facing COVID-19 sites met all the checked WCAG guidelines, and things did not get any better in 2023," says Dylan Hewitt, co-lead author of the paper and a Ph.D. student at NC State.

"We identified a wide range of accessibility problems," Hewitt says. "For example, some pages were not compatible with screen readers,

some pages had limited contrast, some pages did not include alt text for their images, and so on."

"It's important to note that we were not assessing these sites using the most stringent accessibility criteria," says He. "We were really looking at the minimum level of accessibility that would allow people to navigate the website and access information."

"These findings underscore the extent to which these sites are failing to meet the needs of people who are blind or visually impaired," says Hewitt. "Hopefully, highlighting this problem will encourage developers to do a better job of making this information accessible."

"There are simple fixes to many of these problems," says He. "This is a challenge that could be addressed fairly easily, if there is the will to do so."

The paper, "Web Accessibility: A Revisit of U.S. State and Territory COVID-19 Websites After Two Years," will be presented at the International Annual Meeting of the Human Factors and Ergonomics Society, being held in Washington, D.C.

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