

The COVID-19 pandemic has changed nearly every aspect of people's lives, both at home and at work. While there have been many unfortunate outcomes from the pandemic, it also helped reveal some areas where organizations and communities could make improvements. As 2020 comes to an end, here are a few highlights of improvements coming out of the pandemic.

Wastewater surveillance as an early warning of infectious disease spread

Prior to COVID-19, sewage testing was used for early disease detection, but on a highly limited basis. Seeing the advantages of how testing can help indicate where outbreaks may occur spurred the Centers for Disease Control (CDC), in collaboration with other federal agencies, to establish the National Wastewater Surveillance System (NWSS). On a local level, wastewater treatment plants will be partnering with local health departments to sample, test and submit data to the NWSS. As data is submitted and trends are monitored, the system can be updated to increase its effectiveness and become a valuable resource for future public health concerns. Read more

HVAC systems used to lower the spread of viruses

Since the pandemic, there have been numerous studies on the how COVID-19 spreads. In July the World Health Organization (WHO) officially stated that airborne transmission of the virus may be possible indoors, especially in crowded, poorly ventilated rooms. While lots of new research has been done, the spread of viruses across rooms through heating, ventilation and air conditioning (HVAC) systems is not a new discovery; however, this statement led to new HVAC system recommendations and guidelines from the CDC, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and others. Moving forward, a better understanding of how HVAC systems can work with or against air-borne disease prevention will help improve indoor air quality even after the pandemic.

Connecting rural communities

Reliable and affordable high-speed internet is essential for social and economic activities, and in 2020 it became even more important as many education and healthcare services became accessible only virtually. For the 17 million rural Americans who do not have access to reliable broadband internet, adjusting to these changes was especially challenging.

To help address some of these additional impacts of the pandemic, the CARES Act (Coronavirus Aid, Relief and Economic Security Act) allocated \$500 million specifically for rural communities.

- \$100 million for the USDA Rural Utility Service (RUS) ReConnect Pilot Program. Established in 2018, the ReConnect Pilot Program provides funding for the construction, improvement or acquisition of facilities and equipment needed to provide broadband service in eligible rural areas. The allocation was in addition to \$512 million previously announced for the second round of funding for the program.
- \$25 million for the USDA RUS Distance Learning, Telemedicine and Broadband (DLT) Program Funding for additional grants to support rural communities' access to telecommunications-enabled information, audio and video equipment.
- \$200 million for the Federal Communications Commission (FCC) COVID-19
 Telehealth Program Funding to support health care providers with telecommunications services, information services and the devices necessary to enable connected care services.
- \$180 million for Health Resources and Services Administration (HRSA) Rural Health Funding to expand services and capacity for rural hospitals, including telehealth.

The USDA created a COVID-19 federal program resource guide for rural residents, businesses and communities that includes links and information on financial assistance and state and local programs.

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These outcomes represent just a few ways the pandemic has helped make a positive impact. Throughout 2020 we have all learned to become more flexible, change our priorities as needed and adapt as we encounter new situations. As we head into 2021, organizations of all types will continue to evolve as changing citizen expectations accelerates digital transformations, sustainability imperatives and safety initiatives.