

COVID-19 Community Innovation Stories, Week of July 13, 2020

In the face of the coronavirus disease (COVID-19) pandemic, the country is seeing innovations in communities that highlight the best of human ingenuity. We highlight these stories to show how many are helping those around them, and prompt everyone to think about how they can help others.¹

Protocols and Resources to Support School Adaptations

Precautions at Primary Schools

At a Nashville, Tennessee day school, teachers disinfect childrens' lunchboxes at drop-off in the morning, and children must switch into a designated pair of shoes that remain at the school. Schools are also removing soft toys and dress-up clothes and dividing supplies, such as markers and scissors, so that each child can have their own. To prepare for students who may test positive for COVID-19 as operations resume, some schools designated isolation rooms where sick children can wait for pickup from school.² The National Association of School Nurses (NASN) recommends that the isolation room is adjacent to a nurse's office and features an outside access door.

Precautions at Child Care Centers

In Charlottesville, Virginia, a preschool divided its playground into sections so that different classes could play at the same time. To accommodate limited indoor space for social distancing, a childcare center in Atlanta, Georgia placed privacy dividers between cots and cribs, which were arranged in an alternated head-to-toe pattern. In infant classrooms, teachers are using clear masks so that infants can take cues from facial expressions.²

Staffing to Support Reduced Class Sizes

Although school reopening guidance recommends emptier classrooms to encourage social distancing, overcrowded schools in New York have about 30 students in one class and an insufficient number of teachers to accommodate reduced class sizes. To address the staffing shortage, the president of New York City's teacher's union suggested supplementing staffing for in-person or remote teaching with employees from the city's Department of Education

¹ This document contains references and links to non-federal resources and organizations. This information is meant solely for informational purposes and is not intended to be an endorsement of any non-federal entity by FEMA, U.S. Department of Homeland Security, or the U.S. government.

² 2020 The New York Times, With Caution and Creativity, Day Cares Prepare to Reopen, <https://www.nytimes.com/2020/06/02/parenting/coronavirus-day-cares-reopening.html>



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who have teaching certificates. Classes may also be held in cafeterias or gyms to allow for adequate social distancing.³

Resources to Support Remote Learning

Nordic countries, such as Estonia, Finland, and Denmark, made their remote learning tools and resources available for global use at no cost, although the duration of free access varies by resource. This [online source](#) is regularly updated and allows users to sort by "General Education", "Early Years", and "Higher Education". Examples of resources include management tools for lessons and homework assignments, exam and quiz generators, and messaging applications for communication between teachers and students or families.⁴

Repurposing Recyclables into Protective Equipment

The Professional Association of Diving Instructors (PADI) and an Irish watersports clothing company are collaborating to recycle ocean plastic waste into personal protective equipment (PPE). Their efforts have converted over 1100 lbs of plastic into masks that are sold for approximately the same cost of making them. Other industries have launched similar endeavors to create PPE from recycled materials. For example, an online marketing agency in England has transformed recycled water bottles into 3D printed face shields for healthcare workers.⁵

Disinfecting Spaces for Essential Services

A team from the Massachusetts Institute of Technology (MIT) Computer Science and Artificial Intelligence Laboratory (CSAIL) collaborated with a robotics company and the Greater Boston Food Bank (GBFB) to create a robot that can quickly disinfect surfaces and neutralize aerosolized forms of COVID-19 with UV-C light. During a test run, the robot disinfects a 4,000 square-foot GBFB warehouse in half an hour. A team teleoperated the robot to teach it the path to take around the warehouse before allowing the robot to function autonomously. There are also plans to enable the robot to detect new environments or changes in aisle occupation so it can adjust its speed, path, and UV dosage as it moves through the warehouse.⁶

Facilitating Patient and Family Connection

While many hospitals have set up videoconferences for COVID-19 patients to connect with their families, this practice may not be feasible for patients whose families may not have access to smartphones or tablets. To address this discrepancy in access, a chaplain at a New Mexico hospital that serves a majority Navajo Nation population has

³ 2020 The New York Times, New York City's Biggest Decision: How to Safely Reopen Schools, <https://www.nytimes.com/2020/07/06/nyregion/nyc-school-reopening-plan.html?action=click&module=RelatedLinks&pgtype=Article>

⁴ 2020 Education Nation, Top Remote Learning Solutions That You Can Now Use For Free, <https://education-nation.99math.com/>

⁵ 2020 World Economic Forum, How scuba divers are turning ocean waste into COVID face masks, <https://www.weforum.org/agenda/2020/06/scuba-ocean-waste-face-masks-ppe-covid/>

⁶ 2020 World Economic Forum, COVID-19: This robot can disinfect a warehouse floor in just half an hour, <https://www.weforum.org/agenda/2020/07/csail-robot-disinfects-covid19-food-bank/>

been calling families via landline to describe the room and atmosphere, how the patient is feeling, and what the nurse is doing.⁷

Shifting Public Transportation Schedules

To prepare for reopening businesses in New York City, the Metropolitan Transportation Authority (MTA) asked employers to consider offering flexible start times to employees and extending telework options in order to decrease congestion during rush hour on buses and subways. In Paris, France, public transportation during peak hours is restricted only for those who are required to work during standard hours. These individuals must present a certificate from their employer to confirm the necessity.⁸

Skills Training to Mitigate Unemployment

To mitigate the negative impact of COVID-19 on the global economy, a technology company announced plans to launch an [online portal](#) to provide unemployed individuals around the world with free skills training. Using data from an employment-oriented social networking service, the company identified the top ten technology sector jobs that are in high demand, offer a livable wage, and require skills that can be learned online. The company is also setting aside \$20 million in grants for nonprofit organizations that are helping those who have lost their jobs as a result of COVID-19, with a special focus on nonprofits that work with underrepresented groups in technology.⁹

Resource Exchange Platform

The American Heart Association launched an [online platform](#) to coordinate available resources and services from private organizations to help communities in need. For example, a shipping company may post the availability of its idle trucks for food banks to use to refrigerate meals for families, or a company may offer the volunteer services of its employees to help communities impacted by COVID-19. The platform arranges all needs and resources geographically for easy matching.¹⁰

Managing Restaurant Capacity

To help business owners transition to dine-in services, a crowd-sourcing review company announced updates to its [waitlist feature](#), which was introduced earlier in the COVID-19 pandemic for helping restaurants avoid crowded wait areas or lines outside. With new manual control options for wait times, restaurant staff can now track seating capacity and receive alerts when the restaurant is reaching the predesignated limit. Staff can then manually adjust wait times displayed online to manage restaurant capacity. .¹¹

⁷ 2020 WTOP News, Hospital Chaplain Offers Comfort to Hard-Hit Navajo Nation, <https://wtop.com/news/2020/06/covid-19-hospital-chaplain-offers-comfort-to-hard-hit-navajo-nation/>

⁸ 2020 World Economic Forum, Here's how to make public transport safer during COVID-19, <https://www.weforum.org/agenda/2020/07/masks-subway-disinfectant-how-to-make-commuters-feel-safe-after-covid-19/>

⁹ 2020 World Economic Forum, Microsoft to distribute \$20M in grants to nonprofits, offers free skills training via LinkedIn, <https://www.weforum.org/agenda/2020/07/microsoft-to-distribute-20m-in-grants-to-nonprofits-offers-free-skills-training-via-linkedin-techcrunch/>

¹⁰ 2020 American Heart Association, The Beneficial Business Exchange, <https://theexchange.heart.org/>

¹¹ 2020 Yelp, Helping Local Businesses Reopen During COVID-19 with New Products and Features, <https://blog.yelp.com/2020/06/helping-local-businesses-reopen-during-covid-19-with-new-products-and-features>

Expanding Services for Safe Entertainment

In partnership with a global media company, a major U.S. retail corporation [announced](#) the addition of drive-in movie theaters in store parking lots at 160 locations across the country, from August through October. Customers will be able to order concessions for delivery to their vehicles. The global media company is also hosting a [drive-in film series](#) at five beach parks and stadiums across the country every weekend in July.¹²

FEMA's Best Practice Initiative

There are extraordinary efforts nationwide, and from partner nations, to support personnel and resource needs to battle the COVID-19 pandemic. FEMA is working to highlight these efforts and encourage everyone to think about what they can do to be a part of providing solutions to help. Visit <https://www.fema.gov/coronavirus/best-practices> for more information.

Topics for the “Best Practices” series are generated from crowd-sourced suggestions. Have an idea? Let us research it! Organizations and individuals can e-mail best practices or lessons learned to fema-cipsupport@fema.dhs.gov.

For more information on how to help during COVID-19, visit [FEMA's website for information on donations and volunteering](#).

FEMA does not endorse any non-government entities, organizations, or services. Claims made by third parties have not been independently verified by FEMA.

¹² 2020 Engadget, Walmart is turning some of its parking lots into drive-in theaters, <https://www.engadget.com/walmart-turning-parking-lots-drive-in-theaters-201551641.html>