

## Open Source for Personal Protective Equipment

According to the CDC, COVID-19 is believed to be [spread mainly from person-to-person](#), “through respiratory droplets produced when an infected person coughs or sneezes.” In order to safely treat patients, healthcare personnel must don appropriate Personal Protective Equipment (PPE), including facemasks and respirators. PPE shortages due to the projected high influx of patients in various U.S. cities are inspiring several crowdsourced and open-sourced designs of facemasks, respirators, and other medical equipment to be manufactured using conventional and additive manufacturing. Engineers at MITRE are currently working to review various open-sourced solutions to these PPE shortages. Efforts include reviewing designs, prototyping, and developing testing procedures to understand effectiveness of these designs in preventing transmission of COVID-19 in comparison to approved PPE, such as N95 respirators. With this work, MITRE hopes to provide the community with a better understanding of the PPE available during the pandemic to improve safety and reduce transmissions. If you would like more information regarding this effort, contact Francisco Ramos [franciscorc@mitre.org](mailto:franciscorc@mitre.org).

