

## **COV/EDI/20/13 - Rapid 3D printing of personalised protective facemasks and visors to WHO standard for healthcare workers treating SARS-CoV-2 patients.**

COVID-19 is a highly contagious viral infection that spreads through small droplets when an infected person coughs or exhales. Healthcare workers are at particular risk of infection due to frequent and high dose exposure. The ongoing global pandemic has highlighted the shortage and difficult procurement of personal protective equipment, particularly FFP3 masks, as a major weakness in preparedness to wide scale infectious crises. Clinically available 3D scanners and printers can be repurposed to rapidly scan and generate customised WHO standard facemasks within hospitals. These masks can be easily cleaned and reused, protecting workers between patients and reducing time off with the disease.