



THE UNIVERSITY OF
CHICAGO

TECHNICAL
COVID-19
RESPONSE TEAM

EMERGENCY PPE



Engaging the Maker Community
to help your clinic.

How to help without doing harm.



N95 Mask Alternatives

Designed 3D printable adapters for two N95 mask alternatives:

..... **Anesthesia mask** with 3D printed adapter for HEPA filter or viral/bacterial filter (FDA approved components).
Based on an idea by Boston Children's Hospital.

..... **3M 6200 facemask** with 3D-printable HEPA filter adapter

Download zip file containing 3D printable adapter designs and additional information

physicsciences.uchicago.edu/research/uchicago-technical-covid-response-team



N95 Mask Decontamination



Evaluation of best practices for UV, hydrogen peroxide vapor, and heat/humidity:

N95DECON - A scientific consortium for data-driven recommendations for N95 mask decontamination.

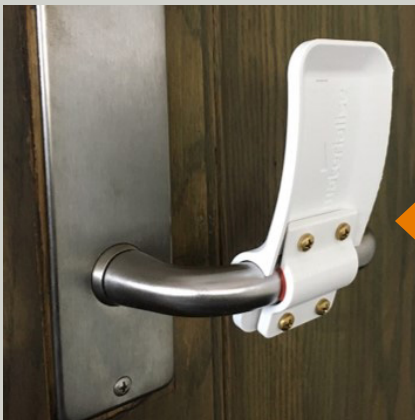
n95decon.org

Cloth Face Coverings

- CDC recommended for all public settings
- DIY masks preferable to reserve medical masks for healthcare workers
- Cloth face coverings should be snug, secure, and not hamper breathing

See the CDC's website for more info

cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html



Face Protection

Evaluation and recommendations for open-source faceshield designs created for UCMC by mHub and others.

Intubation Boxes

Consulted on the design and fabrication of protective boxes for use during patient intubation procedures created for UCMC by Hero Solutions - Shield Project.

Hands-Free Door Openers

..... Adaptation of a 3D printable design for hands-free door openers from Materialise. Prototyped in plastic and installed with silicone rubber grip strips. Now cast in aluminum by Leitelt Bros. Foundry, ~100 installed in UCMC.

materialise.com/en/hands-free-door-opener

For additional PPE information visit getusppe.org

scan me:



The UChicago Technical COVID-19 Response Team is comprised of Faculty, Staff, and Students from all across campus (PSD, PME, MRSEC, BSD, UCMC, Arts, ANL, Polsky, Booth) working together to solve urgent technical engineering problems to improve COVID-19 outcomes.

CONTACT US

We are here to help solve urgent problems. Please send requests for technical help, expertise, and project proposals to: covidtechassist@lists.uchicago.edu and we will let you know how we can help.

DISCLAIMER

Projects described above are works in progress, and are provided for informational purposes only with no endorsements and no explicit or implied warranties. End users assume all risks and responsibilities associated with use.