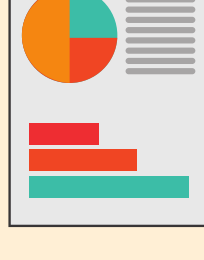




STOP THE GAP

3M N95 VS APIL SSM PROTOTYPE RESULTS



preliminary data to date

APIL SSM prototype results

95%

pass rate overall

93%

pass rate during talking

1024

average fit factor

n95 mask results

68%

pass rate overall

49%

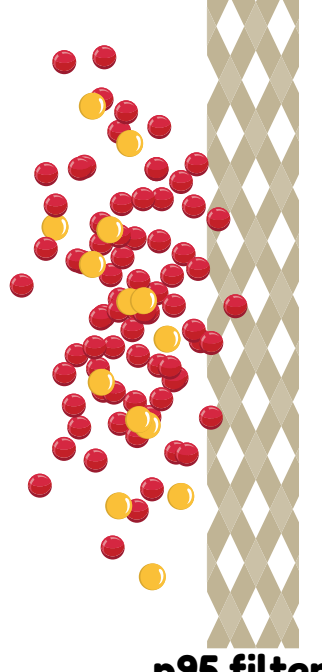
pass rate during talking

270

average fit factor

fit factor* example with 10 000 particles

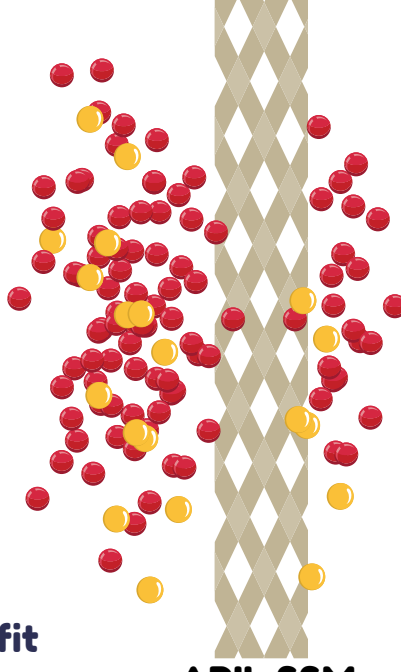
Fit Factor = 10000



n95 filter material

10 000/ 10 000 =
only 1 particle has
potential to leak
through

Fit Factor = 100



APIL SSM
filter material

10 000/100 =
100 particles
have potential
to leak through

average fit
factor among
failed n95 fit
tests was less
than 70!
(n=13/27);

fit factor is a measure of a system's ability to "seal" and is measured as the ratio of
(particles measured in the environment) : (particles measured inside the masks)

how we tested participants



normal breathing



deep breathing



head side to side



talking out loud



bending over



head up and down

Workforce exposure due to fit test failure rates



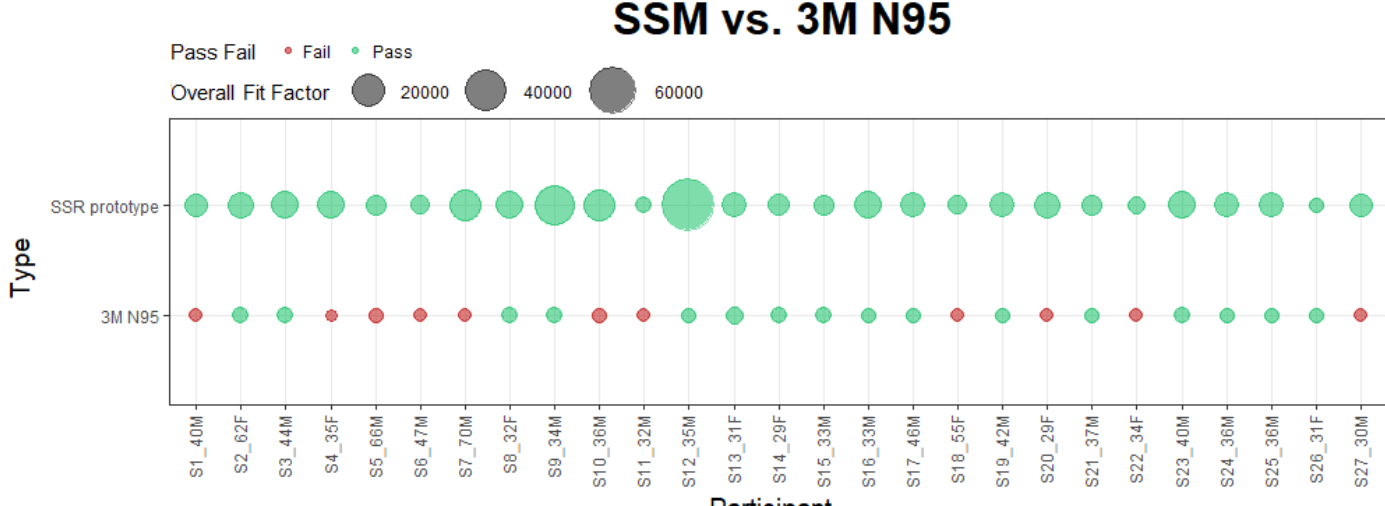
n95 fit test pass
rate: 68%

APIL SSM fit
test pass rate:
95%

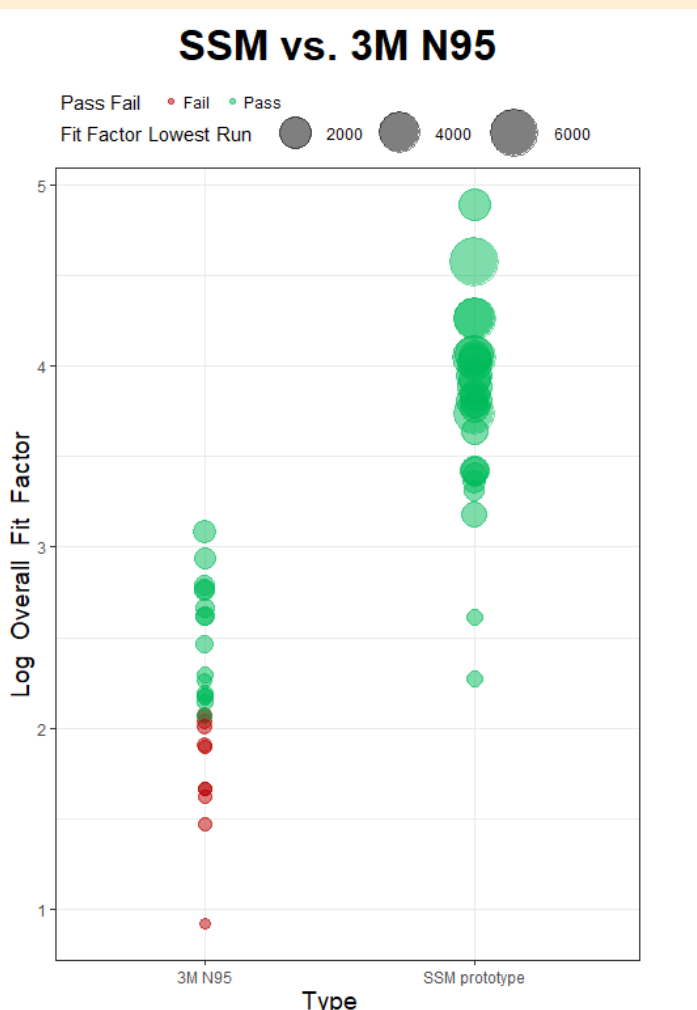


raw data

SSM vs. 3M N95

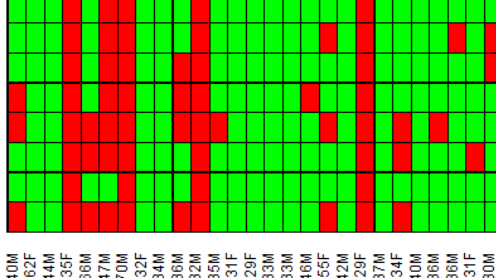


SSM vs. 3M N95



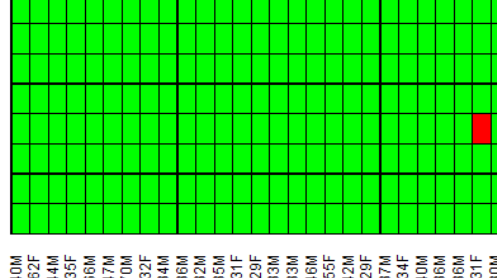
red indicates failed tests

Bitrex tested 3M N95



Normal Breathing
Deep Breathing
Head Side-to-Side
Head Up-and-Dow
Talking out loud
Bending over
Normal Breathing
Pass/Fail

APIL SSM prototype



Normal Breathing
Deep Breathing
Head Side-to-Side
Head Up-and-Dow
Talking out loud
Bending over
Normal Breathing
Pass/Fail

Covid particle size comparison

