

Supplementary Table 1. Comparison between ‘baseline’ and ‘functioning’ particle concentrations (particle count/cubic foot (pc/ft³)). ‘Functioning’ concentrations were measured at 1, 3 and 5L/min air flow (+/- an anti-viral filter). Values are reported as medians (standard error (SE)) and comparisons are by Wilcoxon signed rank tests, with p-values adjusted for multiple comparisons (significant values in bold). NA: Not available as both datasets consist of entirely zero readings.

1L/min						
	No filter			Filter		
Channel size	Baseline concentration (pc/ft ³) (SE)	Functioning concentration (pc/ft ³) (SE)	P value	Baseline concentration (pc/ft ³) (SE)	Functioning concentration (pc/ft ³) (SE)	P value
0.3-0.5 µm	185 (6.11)	833 (8.22)	<0.00086	22 (1.42)	13 (0.60)	<0.00086
0.5-1 µm	27 (1.52)	230 (3.70)	<0.00086	3 (0.25)	2 (0.26)	0.1598
1-3 µm	5 (0.54)	46 (1.91)	<0.00086	0 (0.09)	0 (0.11)	0.08314
3-5 µm	27 (1.53)	230 (3.92)	<0.00086	3 (0.25)	2 (0.26)	0.07186
5-10 µm	0 (0)	0 (0.07)	0.02627	0 (0.03)	0 (0)	1
>10 µm	0 (0)	0 (0)	NA	0 (0.03)	0 (0)	1
3L/min						
	No filter			Filter		
Channel size	Baseline concentration (pc/ft ³) (SE)	Functioning concentration (pc/ft ³) (SE)	P value	Baseline concentration (pc/ft ³) (SE)	Functioning concentration (pc/ft ³) (SE)	P value
0.3-0.5 µm	170 (11.45)	1417 (15.73)	<0.00086	119 (7.84)	15 (0.91)	<0.00086
0.5-1 µm	38 (1.76)	546 (5.11)	<0.00086	13 (0.81)	3 (0.36)	<0.00086
1-3 µm	6 (0.53)	209 (3.77)	<0.00086	1 (0.25)	0 (0.11)	<0.00086
3-5 µm	38 (1.85)	546 (5.15)	<0.00086	13 (0.81)	3 (0.38)	1
5-10 µm	0 (0.03)	1 (0.20)	<0.00086	0 (0)	0 (0)	NA
>10 µm	0 (0)	0 (0)	NA	0 (0)	0 (0)	NA
5L/min						
	No filter			Filter		
Channel size	Baseline concentration (pc/ft ³) (SE)	Functioning concentration (pc/ft ³) (SE)	P value	Baseline concentration (pc/ft ³) (SE)	Functioning concentration (pc/ft ³) (SE)	P value
0.3-0.5 µm	216 (8.25)	2692 (37.57)	<0.00086	144 (6.41)	12 (0.75)	<0.00086
0.5-1 µm	20 (0.82)	1070 (10.00)	<0.00086	14 (0.80)	3 (0.26)	<0.00086
1-3 µm	3 (0.25)	436 (6.20)	<0.00086	2 (0.22)	0 (0.08)	<0.00086
3-5 µm	20 (1.00)	1070 (10.34)	<0.00086	14 (0.90)	3 (0.26)	1
5-10 µm	0 (0.05)	5 (0.38)	<0.00086	0 (0)	0 (0.03)	1
>10 µm	0 (0)	1 (0.14)	<0.00086	0 (0)	0 (0)	NA