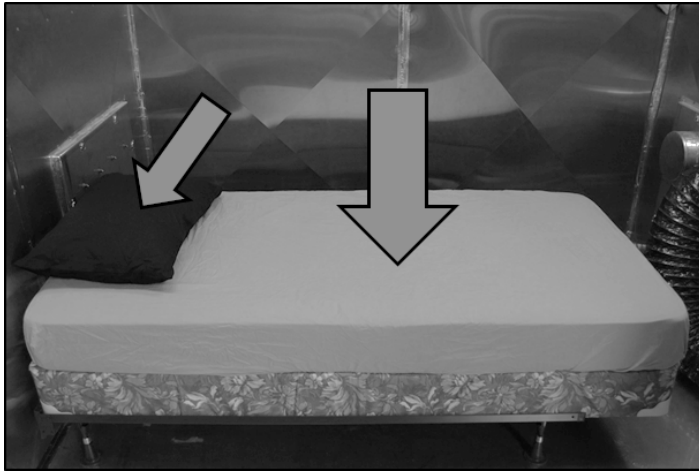
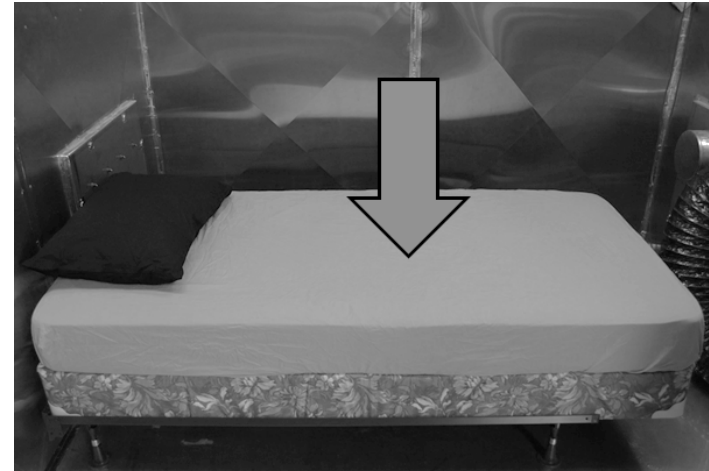


SUPPLEMENTAL INFORMATION

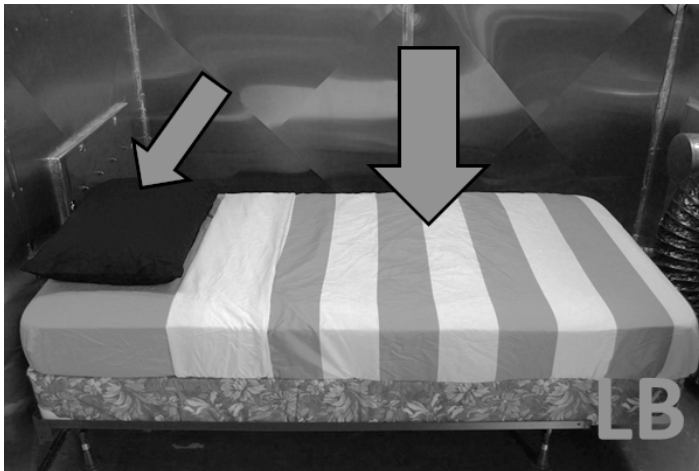
Figures A1-A10. Ten bedding arrangements used for the experimental study. The arrows indicate elements that have been seeded (pillow, blanket or mattress). LB-light blanket; HB-heavy blanket, FB-fleece blanket; CP-covered pillow.



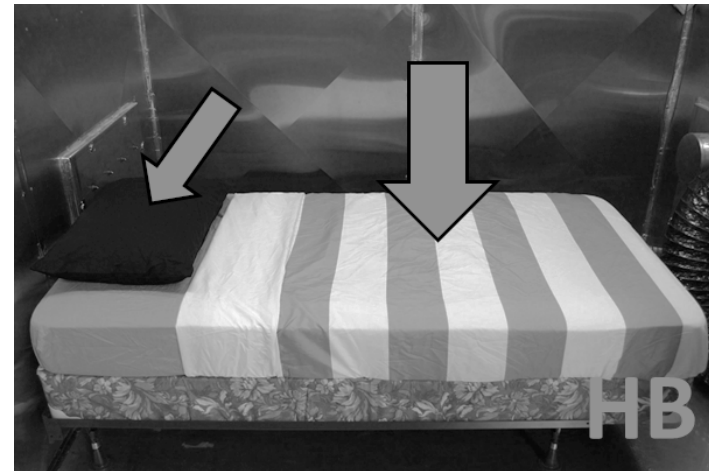
A1



A2

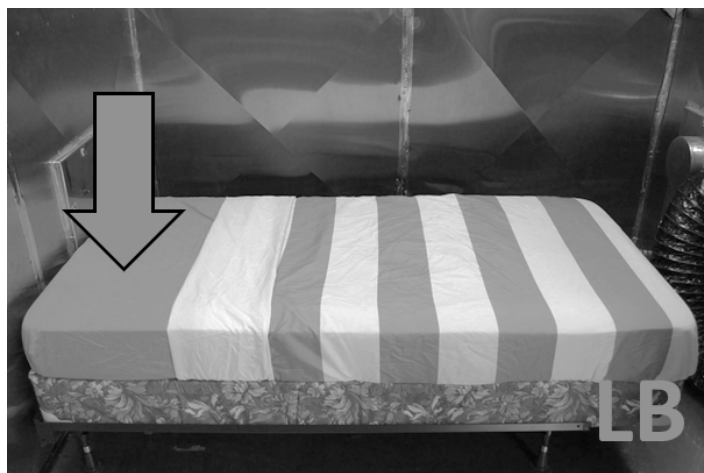


A3

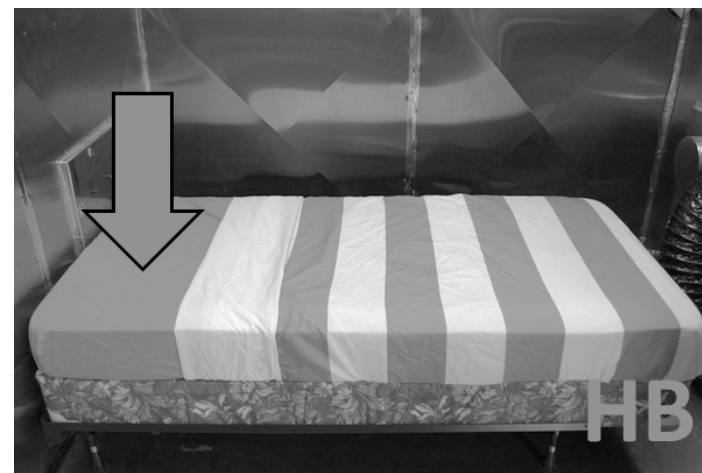


A4

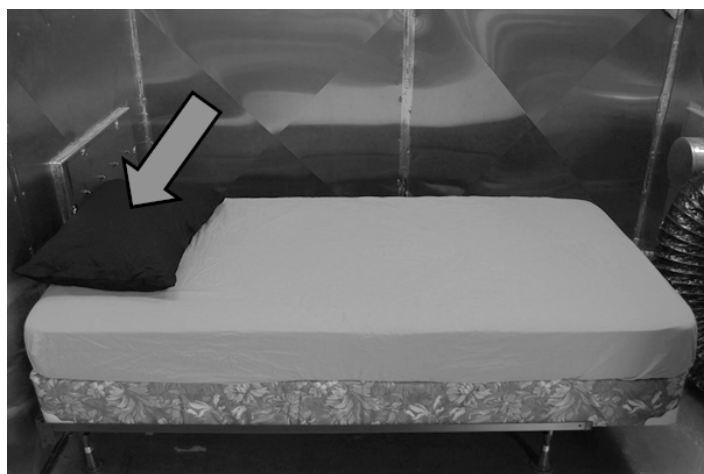
Particle Resuspension from Bedding Materials



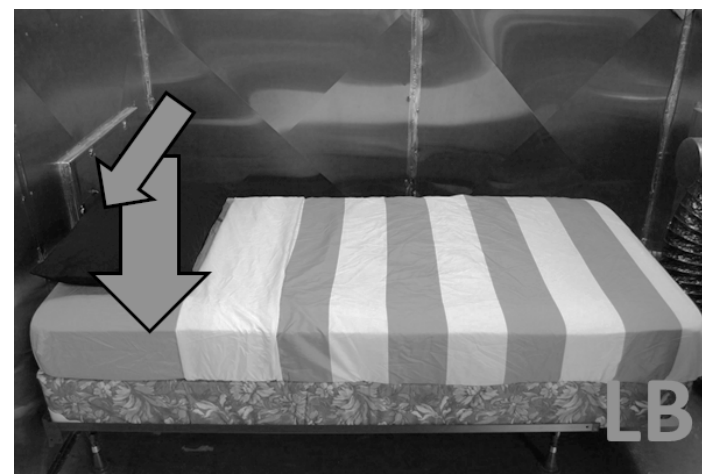
A5



A6

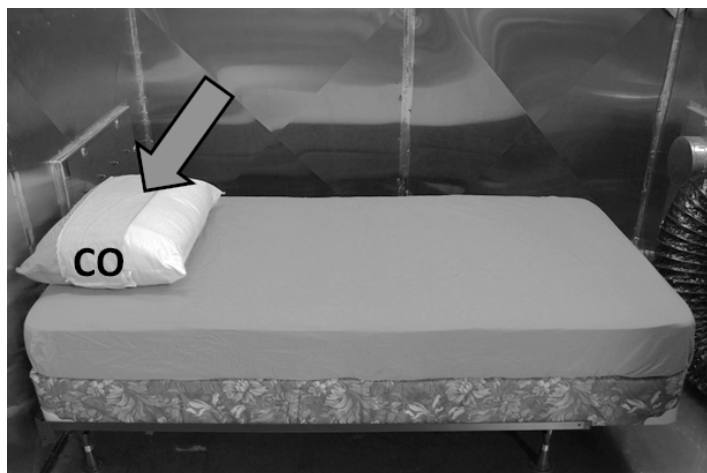


A7

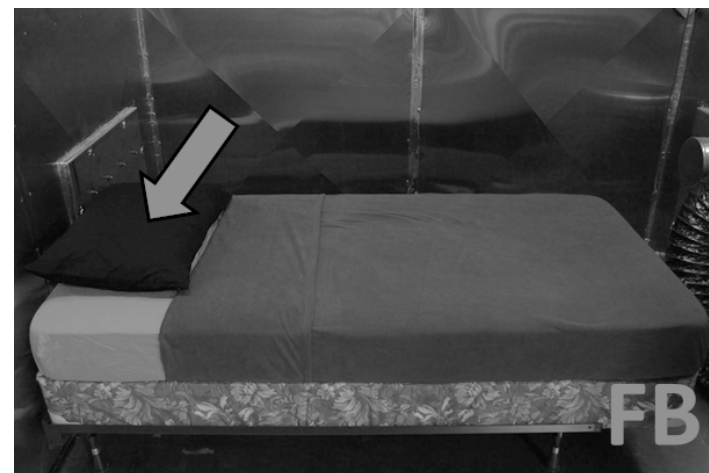


A8

Particle Resuspension from Bedding Materials



A9



A10

SUPPLEMENTAL INFORMATION

Table SI1. Weights, Heights and BMI of participants together with initial dust loads.

	Participant 1	Participant 2	Participant 3
Weight (kg)	68	79	48
Height (cm)	188	175	155
BMI	19.3	25.9	19.8
Arrangement 1	0.085±0.015	0.089±0.012	0.117±0.016
Arrangement 2	0.112±0.028	0.093±0.013	0.094±0.030
Arrangement 3	0.128±0.017	0.093±0.052	0.086±0.055
Arrangement 4	0.102±0.009	0.091±0.018	0.075±0.018
Arrangement 5	0.100±0.011	0.104±0.020	0.094±0.031
Arrangement 6	0.090±0.027	0.101±0.013	0.086±0.011
Arrangement 7	0.085±0.017	0.092±0.008	0.111±0.027
Arrangement 8	0.112±0.036	0.101±0.023	0.090±0.021
Arrangement 9	0.096±0.036	0.097±0.017	0.129±0.028
Arrangement 10	0.084±0.014	0.097±0.009	0.089±0.013

Particle Resuspension from Bedding Materials

Table SI2. p-values of comparison of average resuspension rates between investigated arrangements. The non-parametric differences were considered significant for p-values below 0.05. Estimated p-value represents difference between arrangements.

*The p-values represent negative trend between the tested arrangements

^aExample of interpretation: for particle size range 2-3µm, resuspension rates of arrangement one is higher than arrangement two with level of significance 0.28.

	First movement set					Second movement set				
	1-2µm	2-3µm	3-5µm	5-10µm	10-20µm	1-2µm	2-3µm	3-5µm	5-10µm	10-20µm
1→2	0.28	0.28	0.28	0.59	1.0	1.0	1.0	1.0	1.0	0.59
1→9	1.0*	1.0*	1.0*	1.0*	1.0*	0.28	0.59	0.28	0.28	0.11
2→9	1.0*	1.0*	1.0*	0.59*	1.0*	0.11	0.28	0.28	0.28	0.11
1→7	0.59	0.59	0.59	0.11	0.28	0.28	0.28	0.28	0.11	0.2
1→8	0.11	0.11	0.11	0.11	1.0	0.28	0.11	0.59	0.28	0.28
7→8	1.0*	1.0*	1.0*	0.28*	0.59*	0.28*	0.59*	0.59*	0.11*	1.0*
3→4	0.28*	0.11*	0.11*	0.11*	0.11*	0.11*	0.11*	0.11*	0.11*	0.11*
3→8	0.28*	0.11*	0.11*	0.11*	0.28*	0.11*	0.11	0.11*	0.11*	1.0*
4→8	0.59	0.59	0.59	0.59	1.0*	0.59	0.59*	1.0*	1.0	0.28
3→10	0.11*	0.11*	0.11*	0.28*	0.11*	0.11*	0.11	0.11	0.11*	0.11*
4→10	0.28*	0.28*	0.59*	0.59*	0.28*	1.0	1.0*	0.59*	0.59*	0.11
2→5	0.28*	0.59*	0.59*	1.0*	0.11*	0.59	1.0*	1.0*	1.0	1.0*
2→6	0.59	1.0*	1.01*	0.28	1.0*	0.28	1.0	0.59	0.59	0.11
2→8	1.0*	0.59	0.28	0.28	1.0*	0.28	0.28	0.28	0.28	0.28
5→6	0.59	0.59	0.59	1.0	0.59	0.59	0.59	0.28	0.59	1.0
5→8	0.59	0.59	0.28	0.28	0.28	0.59	0.59	0.28	0.28	0.59
6→8	0.59*	0.59*	0.59*	0.59*	1.0*	0.59*	1.0	0.28*	0.59*	0.28

Table SI3. P-values of comparison of intake fractions (iF) between investigated arrangements. The non-parametric differences were considered significant for p-values below 0.05. Estimated p-value represents difference between arrangements.

*The p-values represent negative trend between the tested arrangements

^aExample of interpretation: for particle size range 3-5µm, intake fraction of arrangement one is higher than arrangement nine with level of significance 0.59.

	First movement set					Second movement set				
	1-2µm	2-3µm	3-5µm	5-10µm	10-20µm	1-2µm	2-3µm	3-5µm	5-10µm	10-20µm
1→2	0.59*	0.59*	1.0	1.0	0.28*	0.28	0.59	0.28	0.59	1.0
1→9	0.28	1.0	1.0	1.0	0.11*	0.11	0.11	0.28	0.59*	0.28*
2→9	0.11	0.11	0.11	1.0	0.28	0.59*	1.0	1.0	1.0	0.11*
1→7	0.59	1.0	0.59	0.59*	0.59*	0.59	0.59	0.59	1.0	0.59
1→8	0.59	1.0	1.0	1.0	1.0*	0.28	0.59	0.11	1.0	0.28
7→8	1.0	1.0	0.59*	1.0*	0.59	1.0	1.0	1.0	0.11	0.59
3→4	1.0*	1.0	0.59	0.28	0.59	1.0	0.11	0.11	0.11	0.28*
3→8	0.59	1.0*	0.59	0.59	0.11	0.11	0.11	0.11	0.11	0.28*
4→8	1.0*	1.0*	1.0*	0.59*	0.28	0.11	0.28	0.11	1.0	0.28*
3→10	0.28	0.11	0.28	0.28	0.28	0.11	0.28	0.11	0.11	0.28*
4→10	0.28	0.11	0.28	0.59	0.28	0.11	0.28	0.28	0.28	0.59
2→5	0.11	0.28	0.28	1.0	0.11	1.0	1.0	1.0	1.0	0.59
2→6	0.11	0.28	1.0	0.59*	0.11	1.0	1.0	1.0	1.0	0.11
2→8	0.11	0.11	0.59	1.0	0.11	1.0	1.0	1.0	1.0	0.59
5→6	0.11	0.28*	0.11*	0.11*	0.28	1.0	1.0*	0.11*	0.11	0.11
5→8	1.0	1.0	0.59	0.59	0.59	0.59*	0.28*	1.0	0.59	1.0*
6→8	0.28	0.59	0.11	0.11	0.59	0.59*	1.0	0.28	0.59	1.0*