

**Table S1.** Relationship between household characteristics and practices and endotoxin levels in dust samples collected from different indoor sites

	n	Mattress endotoxin		Bedroom floor endotoxin		Living room floor endotoxin	
		Level (EU/mg)	Load (EU/m <sup>2</sup> )	Level (EU/mg)	Load (EU/m <sup>2</sup> )	Level (EU/mg)	Load (EU/m <sup>2</sup> )
Household size: < 50 m <sup>2</sup>	50	<b>11.5 (4.7-15.9)*</b>	541 (271-841)	23.9 (13.4-48.5)	<b>604 (324-1622)*</b>	24.6 (16.0-45.8)	270 (171-1123)
≥ 50 m <sup>2</sup>	62	<b>13.3 (7.2-24.1)</b>	459 (303-1015)	23.4 (10.8-39.4)	<b>569 (158-933)</b>	21.1 (13.7-29.2)	234 (167-470)
Lived in the home: ≥ 8 yrs	60	13.4 (6.4-22.8)	545 (226-1013)	22.5 (11.8-41.9)	<b>446 (158-1006)*</b>	20.8 (14.2-29.5)	<b>212 (167-346)†</b>
< 8 yrs	55	11.5 (6.4-16.4)	490 (313-898)	26.5 (13.8-43.1)	<b>700 (340-1582)</b>	25.4 (15.9-48.1)	<b>313 (197-1133)</b>
Number in household: ≥ 5 persons	34	12.6 (6.0-27.1)	431 (266-1230)	20.5 (9.8-34.1)	501 (354-1267)	24.4 (13.5-30.2)	236 (180-561)
< 5 persons	81	12.3 (6.5-17.6)	545 (319-824)	27.4 (12.5-48.8)	689 (227-1501)	21.4 (14.8-43.0)	251 (169-871)
Current cat/dog keeping: Yes	10	12.7 (6.3-18.8)	483 (288-881)	22.4 (12.2-42.6)	597 (269-1317)	21.6 (14.7-373)	248 (171-599)
No	105	10.6 (8.1-22.9)	622 (232-1737)	31.5 (15.5-58.8)	501 (132-1594)	30.2 (14.8-41.6)	236 (136-887)
Smoker in household: Yes	38	13.4 (8.1-20.1)	595 (376-1341)	<b>27.7 (11.6-46.1)*</b>	<b>805 (254-2323)*</b>	<b>27.5 (18.7-46.3)*</b>	<b>249 (188-1280)*</b>
No	77	11.4 (6.4-18.0)	453 (231-829)	<b>22.1 (12.9-41.7)</b>	<b>517 (235-981)</b>	<b>20.1 (13.3-29.6)</b>	<b>248 (167-465)</b>
Current heating fuel: Electricity	55	13.4 (8.0-26.7)	533 (294-1181)	22.5 (13.9-36.6)	597 (204-1260)	20.8 (13.8-29.0)	233 (165-592)
Others	60	12.0 (6.3-15.8)	475 (275-825)	24.9 (11.2-49.9)	514 (275-1614)	25.1 (15.5-43.4)	259 (179-778)
Current damp spots or visible moulds: Yes	58	11.3 (5.2-20.9)	521 (276-1027)	21.6 (11.6-39.4)	555 (203-1286)	22.3 (15.9-45.9)	265 (199-980)
No	57	13.1 (9.0-18.0)	456 (290-838)	27.4 (15.4-45.4)	573 (294-1590)	21.3 (13.7-35.0)	227 (144-483)
Current bedroom floor covering: Carpet	4	12.1 (3.0-27.4)	421 (169-928)	<b>9.2 (8.5-26.4)*</b>	<b>241 (158-621)‡</b>	<b>14.2 (9.2-19.2)§</b>	<b>202 (171-304)§</b>
Others	111	12.4 (6.7-18.0)	497 (294-916)	<b>25.6 (13.4-43.2)</b>	<b>597 (265-1389)</b>	<b>23.0 (15.1-39.5)</b>	<b>251 (171-666)</b>
Current pillow type: Cotton	15	11.0 (5.4-20.6)	690 (374-840)	<b>30.1 (21.6-51.6)*</b>	696 (414-3029)	28.3 (20.1-46.4)	489 (144-1666)
Others	100	12.6 (6.7-19.2)	475 (269-989)	<b>21.8 (10.7-41.7)</b>	515 (221-1285)	21.4 (14.3-34.2)	234 (171-534)
Current bedding type: Feather	20	<b>13.6 (8.9-27.3)*</b>	<b>749 (376-1376)*</b>	<b>31.0 (19.5-67.8)*</b>	<b>793 (527-1377)†</b>	27.3 (22.1-53.3)	408 (249-901)
Others	95	<b>12.4 (5.5-17.3)</b>	<b>456 (267-840)</b>	<b>21.6 (10.3-41.9)</b>	<b>494 (166-1286)</b>	21.4 (14.2-35.0)	227 (171-499)
Duration open windows or doors: ≤ 3 hrs/day	46	13.4 (9.4-20.1)	651 (346-967)	20.2 (10.3-34.2)	596 (156-1577)	18.4 (14.5-29.3)	222 (167-511)
> 3 hrs/day	69	11.0 (5.5-18.0)	456 (270-929)	27.4 (15.3-47.4)	566 (322-1274)	25.1 (14.8-41.6)	262 (179-1013)
Bedroom floor last cleaned: ≤ 2 days	49	12.6 (6.9-17.3)	386 (249-811)	21.6 (9.4-45.5)	<b>431 (156-694)*</b>	20.6 (14.7-33.3)	<b>233 (150-433)*</b>
> 2 days	66	12.4 (6.3-19.8)	662 (345-1141)	29.4 (13.8-42.7)	<b>795 (411-1619)</b>	22.3 (15.3-40.2)	<b>268 (192-1133)</b>
Living room floor last cleaned:	93	12.4 (6.7-20.1)	462 (288-1016)	24.2 (11.9-44.3)	508 (210-1287)	22.2 (14.7-39.5)	<b>248 (169-576)*</b>

	≤ 3 days							
	> 3 days	22	12.5 (5.8-16.8)	670 (213-831)	25.5 (14.2-42.1)	918 (482-1809)	22.6 (16.2-35.5)	<b>248 (204-782)</b>
Bedding last changed:	≤ 7 days	41	<b>14.6 (9.9-26.9)*</b>	456 (350-821)	22.1 (12.2-45.7)	469 (145-1121)	23.0 (14.8-39.6)	233 (161-569)
	> 7 days	74	<b>11.0 (5.3-17.9)</b>	539 (266-1141)	27.8 (12.3-42.6)	689 (388-1488)	21.4 (14.5-36.2)	258 (176-703)
Bedroom floor cleaning:	≤ 5 times/week	60	11.7 (6.3-15.4)	535 (335-826)	22.3 (12.9-40.6)	<b>691 (341-1553)*</b>	21.9 (14.7-39.5)	281 (203-901)
	> 5 times/week	53	13.1 (6.7-25.9)	414 (270-968)	24.2 (10.6-46.7)	<b>463 (158-919)</b>	21.4 (14.7-30.9)	212 (163-435)
Living room cleaning:	≤ 5 times/week	55	11.6 (6.3-15.3)	497 (226-830)	20.3 (12.4-34.7)	689 (325-1389)	21.4 (14.6-35.1)	275 (195-606)
	> 5 times/week	59	13.4 (6.7-25.0)	453 (281-1020)	26.8 (11.8-50.1)	508 (162-1289)	23.8 (15.4-42.3)	217 (167-546)
Bedding change:	≤ 2 times/month	64	12.4 (5.5-17.8)	556 (313-1046)	27.1 (14.1-42.7)	<b>744 (415-1596)‡</b>	21.9 (14.7-36.3)	267 (187-675)
	> 2 times/month	49	12.6 (7.9-23.6)	426 (254-881)	21.6 (9.9-45.7)	<b>414 (152-819)</b>	22.4 (14.5-39.6)	227 (164-517)
Type of bedroom cleaning:	Vacuum cleaning	54	12.5 (6.3-20.0)	393 (212-749)	<b>19.6 (10.0-36.3)*</b>	<b>479 (152-805)*</b>	<b>19.5 (11.2-26.9)*</b>	<b>227 (154-440)*</b>
	Others	61	12.3 (6.9-18.8)	690 (351-1252)	<b>28.8 (16.4-46.8)</b>	<b>707 (409-1636)</b>	<b>26.6 (15.9-43.0)</b>	<b>275 (200-1138)</b>
Type of housing:	Public	52	12.0 (5.3-17.8)	517 (235-844)	27.7 (10.5-47.5)	494 (259-1377)	22.9 (15.2-41.6)	243 (171-631)
	Private	63	12.6 (8.0-21.3)	483 (307-1013)	22.5 (13.6-40.9)	680 (260-1286)	22.2 (13.8-30.4)	248 (171-606)

Statistically significant results were highlighted in bold.

Results on log-transformed endotoxin variables were analyzed by Student *t* test; \*  $p < 0.05$ ; †  $p < 0.01$ ; ‡  $p < 0.005$ ; §  $p < 0.001$ .

**Table S2.** Relationship between household characteristics and practices and Der p 1 levels at the three domestic sites

Factor	n	Der p 1 ( $\mu\text{g/g}$ )		
		Mattress	Bedroom floor	Living room floor
Household size: < 50 m <sup>2</sup>	50	1.33 (0.27-3.20)	0.40 (0.27-0.91)	0.35 (0.19-0.71)
≥ 50 m <sup>2</sup>	62	0.57 (0.19-2.39)	0.38 (0.24-0.98)	0.26 (0.19-0.54)
Lived in the home: ≥ 8 yrs	60	0.61 (0.24-2.12)	0.37 (0.19-0.91)	0.29 (0.19-0.56)
< 8 yrs	55	0.63 (0.22-2.60)	0.40 (0.30-0.93)	0.33 (0.19-0.58)
Number in household: ≥ 5 persons	34	1.57 (0.29-3.46)	0.64 (0.24-1.49)	0.40 (0.22-0.70)
< 5 persons	81	0.49 (0.20-1.91)	0.37 (0.24-0.69)	0.26 (0.16-0.55)
Current cat/dog keeping: Yes	10	1.11 (0.22-5.32)	0.76 (0.44-0.99)	0.27 (0.17-0.44)
No	105	0.61 (0.24-2.46)	0.38 (0.24-0.90)	0.32 (0.19-0.58)
Smoker in household: Yes	38	0.78 (0.22-2.86)	0.40 (0.23-0.92)	0.24 (0.15-0.55)
No	77	0.59 (0.24-2.33)	0.39 (0.26-0.91)	0.33 (0.19-0.61)
Current heating fuel: Electricity	55	0.92 (0.25-2.51)	0.44 (0.29-1.05)	0.32 (0.20-0.55)
Others	60	0.46 (0.23-2.43)	0.36 (0.21-0.78)	0.30 (0.16-0.66)
Current damp spots or visible moulds: Yes	58	0.61 (0.16-2.34)	0.37 (0.20-0.73)	0.23 (0.15-0.54)
No	57	0.63 (0.25-2.48)	0.49 (0.26-1.17)	0.35 (0.22-0.63)
Current bedroom floor covering: Carpet	4	<b>0.19 (0.13-0.58)*</b>	0.39 (0.15-0.40)	0.14 (0.14-2.81)
Others	111	<b>0.76 (0.24-2.51)</b>	0.39 (0.25-0.93)	0.32 (0.19-0.57)
Current pillow type: Cotton	15	1.44 (0.31-2.12)	0.52 (0.29-1.40)	0.27 (0.14-0.81)
Others	100	0.53 (0.24-2.50)	0.39 (0.24-0.91)	0.32 (0.19-0.55)
Current bedding type: Feather	20	1.35 (0.25-2.28)	0.58 (0.28-1.14)	0.38 (0.22-0.61)
Others	95	0.56 (0.22-2.51)	0.37 (0.23-0.91)	0.27 (0.17-0.57)
Duration open windows or doors: ≤ 3 hrs/day	46	0.92 (0.25-3.10)	0.36 (0.20-0.81)	0.23 (0.17-0.38)
> 3 hrs/day	69	0.59 (0.23-2.13)	0.47 (0.28-1.07)	0.37 (0.19-0.66)
Bedroom floor last cleaned: ≤ 2 days	49	0.46 (0.24-1.62)	0.37 (0.20-0.91)	0.32 (0.19-0.52)
> 2 days	66	1.38 (0.20-2.66)	0.40 (0.27-0.97)	0.29 (0.16-0.63)
Living room floor last cleaned: ≤ 3 days	93	0.59 (0.24-2.78)	0.39 (0.24-0.91)	0.30 (0.19-0.63)
> 3 days	22	0.77 (0.25-2.00)	0.44 (0.24-1.23)	0.33 (0.20-0.42)
Bedding last changed: ≤ 7 days	41	<b>0.35 (0.17-0.76)†</b>	<b>0.34 (0.18-0.64)*</b>	<b>0.25 (0.15-0.42)*</b>
> 7 days	74	<b>1.39 (0.26-3.35)</b>	<b>0.42 (0.29-1.23)</b>	<b>0.34 (0.21-0.73)</b>
Bedroom floor cleaning: ≤ 5 times/week	60	<b>1.42 (0.27-3.69)*</b>	0.43 (0.28-1.10)	0.32 (0.21-0.52)
> 5 times/week	53	<b>0.36 (0.16-1.59)</b>	0.36 (0.24-0.91)	0.32 (0.15-0.61)

Living room cleaning: ≤ 5 times/week	55	<b>1.28 (0.27-3.29)*</b>	0.39 (0.25-0.91)	0.31 (0.22-0.48)
> 5 times/week	59	<b>0.36 (0.16-1.71)</b>	0.40 (0.25-0.93)	0.32 (0.15-0.65)
Bedding change: ≤ 2 times/month	64	1.40 (0.25-3.17)	<b>0.44 (0.27-1.25)*</b>	0.33 (0.20-0.63)
> 2 times/month	49	0.39 (0.20-1.40)	<b>0.37 (0.20-0.66)</b>	0.28 (0.17-0.54)
Type of bedroom cleaning: Vacuum cleaning	54	0.49 (0.21-1.63)	0.40 (0.26-0.82)	0.32 (0.18-0.59)
Others	61	1.27 (0.24-3.46)	0.39 (0.20-1.01)	0.28 (0.19-0.57)
Type of housing: Public	52	1.32 (0.26-2.99)	0.42 (0.25-0.96)	0.28 (0.18-0.68)
Private	63	0.50 (0.17-2.41)	0.37 (0.21-0.91)	0.33 (0.20-0.55)

Statistically significant results were highlighted in bold.

Results on log-transformed allergen levels were analyzed by Student *t* test; \*  $p < 0.05$ ; †  $p < 0.01$ ; ‡  $p < 0.005$ ; §  $p < 0.001$ .