

1. Supplementary material

Table S1. Search terms

Airborne	Fine	Poultry
Ambient	Food	Resident
Animal	Fraction	Rural
Background	Green	Season
Bioaerosol	Household	Size
Biosolids	Humidity	Suburban
Broiler	Indoor	Summer
Cattle	Intensive	Swine
Chicken	Landfill	Temperature
Coarse	Layer	Upwind
Compost	Livestock	Urban
Concentration	LPS	Vegetation
Cow	Occupational	Vessel
Dairy	Outdoor	Waste
Downwind	Particle	Wastewater
Dust	Particulates	Windrow
Endotoxin	PM10	Winter
Farm	PM2.5	

Table S2. Sources for particle size graph

Data for particle size graphs were selected based on reported endotoxin concentrations from studies looking at endotoxins in ambient environments. The data include studies where ambient endotoxins were measured as a control.

Study	Concentration (EU·m ⁻³)	Particle Size (µm)	Environment
Bari et al. (2014)	0.16	10	Urban
	0.64	10	Urban
Barraza et al. (2016)	0.094	2.5	Urban
Barth et al. (2009)	7.8	10	Rural
Brooks et al. (2006)	2.6	10	Rural
Carty et al. (2003)	0.026	2.5	Urban
	0.085	2.5	Rural
	0.148	2.5	Urban
Cheng et al. (2012)	0.099	2.5	Urban
	0.345	10	Rural
	0.386	10	Urban
	0.35	10	Urban
Degobbi et al. (2011)	0.1	2.5	Urban
Escobedo et al. (2014)	0.082	2.5	Urban
	0.043	2.5	Urban
Guan et al. (2014)	0.65	2.5	Urban
	0.008	2.5	Urban
Heinrich et al. (2003)	0.011	2.5	Urban
	0.082	10	Urban
	0.083	10	Urban
Madsen (2006)	0.3	10	Urban

	2.9	10	Rural
	0.023	2.5	Rural
Menetrez et al. (2009)	0.051	10	Rural
	0.0057	10	Urban
Morgenstern et al. (2005)	0.026	2.5	Urban
	0.087	10	Urban
	0.36	10	Rural
Mueller-Annelling et al. (2004)	1.07	10	Urban
	0.2	10	Urban
	0.21	10	Urban
Nilsson et al. (2011)	0.056	10	Urban
	0.02	2.5	Urban
Neumann et al. (2002)	1.7	10	Urban
	0.5	10	Urban
Solomon et al. (2006)	5	10	Urban
	1.3	10	Urban
Tager et al. (2010)	1.38	10	Urban
	0.98	10	Urban
	1.24	10	Urban
Traversi et al. (2010)	0.42	10	Urban
	0.331	10	Rural
Traversi et al. (2011)	1.424	10	Rural
	0.512	10	Urban
	0.3285	2.5	Rural
Wheeler et al. (2011)	2.01	10	Urban
	0.17	10	Urban

Table S3. Sources for endotoxin concentration and distance graph

Data for the endotoxin concentration and distance graph were selected based on studies reporting endotoxin concentrations at varying distances, including at source, where a value of 0 m was assigned.

Reference	Distance from source (m)	Endotoxin Concentration (EU·m ⁻³)	Endotoxin Source
Barth et al. (2009)	-10	2.1	Other
	10	36	Other
	2	103	Other
	2	469	Other
Brooks et al. (2006)	2	627	Other
	26	343.7	Other
	105	33.5	Other
	105	133.9	Other
Bünger et al. (2007)	0	160	Compost
Clark et al. (1983)	0	112.6	Compost
Danneberg et al. (1997)	-75	1.61	Compost
	0	207.04	Compost
	150	2.36	Compost
	0.5	0.4	Other
de Man et al. (2014)	0.5	8.5	Other
	0.5	10.6	Other
	0.75	7.1	Other
	1	0.4	Other

Deacon et al. (2009)	1	0.4	Other
	1	0.4	Other
	2	0.4	Other
	2	0.4	Other
	4	16.7	Other
	4	19	Other
	4.25	0.4	Other
	5	5.9	Other
	7	6	Other
	8	0.4	Other
	8	5.8	Other
	10	16.8	Other
	13	12.7	Other
	15	6.3	Other
	15	20	Other
	15	61.8	Other
	17	0.4	Other
	18.5	7.8	Other
	22	2.6	Other
	22	20	Other
	23	0.4	Other
	30	0.4	Other
	32	3.2	Other
	33	0.4	Other
	33	2.9	Other
	45	11	Other
	0	1.4	Compost
	0	1.6	Compost
	0	2.3	Compost
	50	0.3	Compost
	80	0.1	Compost
	100	0.6	Compost
	150	0.7	Compost
	180	0.2	Compost
	280	1.2	Compost
	-590	25	Compost
	-580	19.442	Compost
	-500	6.652	Compost
	-425	1.525	Compost
	-300	0.025	Compost
	-275	8.875	Compost
	-275	17.778	Compost
DEFRA (2013)	-210	0.025	Compost
	-200	2.292	Compost
	-190	2.778	Compost
	-190	21.044	Compost
	-180	0.025	Compost
	-180	1.246	Compost
	-180	1.865	Compost
	-180	61.874	Compost
	-100	0.025	Compost

	50	0.025	Compost
	50	0.025	Compost
	50	0.025	Compost
	50	4.338	Compost
	50	6.547	Compost
	50	21.797	Compost
	50	24.408	Compost
	50	25.833	Compost
	50	35.356	Compost
	50	92.5	Compost
	50	114.65	Compost
	50	263.892	Compost
	50	281.157	Compost
	100	0.025	Compost
	100	2.939	Compost
	100	79.167	Compost
	150	0.025	Compost
	150	0.025	Compost
	150	9.167	Compost
	150	14.671	Compost
	150	67.5	Compost
	150	76.667	Compost
	150	257.7	Compost
	160	3.354	Compost
	200	2.599	Compost
	300	0.842	Compost
	300	33.798	Compost
	320	34.379	Compost
	400	73.735	Compost
	-200	8.5	Farm
	0	173.4	Farm
Dungan and Leytem (2009)	200	88.1	Farm
	600	72.13	Farm
	1390	37.7	Farm
	-200	8.7	Farm
Dungan et al. (2010)	5	74.6	Farm
	200	27.3	Farm
Duquenne et al. (2012)	-40	177.5	Compost
Gangamma et al. (2011)	0	147	Other
	-50	90	Farm
Hartung et al. (1997)	50	600	Farm
	115	150	Farm
	7	56.99	Farm
	8	26.14	Farm
	15	31.93	Farm
	28	7.1	Farm
Jonges et al. (2015)	37	6.97	Farm
	38	31.59	Farm
	44	15.21	Farm
	44	111.42	Farm
	47	48.31	Farm

	54	8.6	Farm
	54	71.89	Farm
	59	13.71	Farm
	100	6.44	Farm
	100	7.47	Farm
	110	2.6	Farm
	110	7.07	Farm
	160	5	Farm
	190	1	Farm
	200	1	Farm
	410	3.82	Farm
	-150	22.8	Farm
Ko et al. (2010)	2	384.9	Farm
	150	39.7	Farm
Liu et al. (2011)	-400	0.15	Compost
	600	3.14	Compost
Oppliger et al. (2005)	0	19.3	Other
Sykes et al. (2011)	-25	2.92	Compost
	0	10.17	Compost
	-30	10	Farm
Thorne et al. (2009)	30	59.5	Farm
	30	194	Farm
	160	30	Farm