Appendix 3: Exposure data

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

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SUSTAINABLE
DEVELOPMENT GOALS

Contents

Data inputs – exposure data

1. NO$_2$ exposure by region

The prevalence of NO$_2$ within a region was grouped into the following categories:

- Low NO$_2$ exposure: NO$_2$ < 20.5 μg m^3
- Medium NO$_2$ exposure: NO$_2$ from 20.5 to 28.5 μg m^3
- High NO$_2$ exposure ≥ 28.5 μg m^3

The proportion of individuals within each of these categories is shown below for England, Lambeth and South Lakeland by age and sex groups.

1.1. England

Age group	Sex Group	Proportion of low NO$_2$ exposure	Proportion of medium NO$_2$ exposure	Proportion of high NO$_2$ exposure
0-4	Males	0.293358	0.326599	0.380043
5-9	Males	0.317089	0.331032	0.351879
10-14	Males	0.336099	0.332737	0.331163
15-19	Males	0.336013	0.335512	0.328475
20-24	Males	0.274947	0.325058	0.399995
25-29	Males	0.255433	0.304397	0.440169
30-34	Males	0.252706	0.303180	0.444114
35-39	Males	0.275604	0.313142	0.411254
40-44	Males	0.316485	0.330776	0.352739
45-49	Males	0.342126	0.336732	0.321142
50-54	Males	0.357146	0.338699	0.304155
55-59	Males	0.367891	0.340108	0.292001
60-64	Males	0.388982	0.340653	0.270364
65-69	Males	0.415036	0.342446	0.242518
70-74	Males	0.416817	0.341504	0.241680
75+	Males	0.406033	0.343636	0.250331
0-4	Females	0.292919	0.326171	0.380910
5-9	Females	0.316318	0.330418	0.353264
10-14	Females	0.335615	0.332317	0.332068
15-19	Females	0.331238	0.335130	0.333632

20-24	Females	0.258532	0.322852	0.418616
25-29	Females	0.251138	0.309712	0.439150
30-34	Females	0.264720	0.312854	0.422426
35-39	Females	0.292512	0.321506	0.385982
40-44	Females	0.331154	0.334798	0.334048
45-49	Females	0.350507	0.338075	0.311418
50-54	Females	0.360745	0.339635	0.299620
55-59	Females	0.374832	0.339577	0.285590
60-64	Females	0.394126	0.339482	0.266391
60-64	Females	0.412906	0.343341	0.243752
65-69	Females	0.405568	0.344725	0.249707
75+	Females	0.387532	0.353449	0.259018

1.2 Lambeth

Age group	Sex Group	Proportion of low NO_2 exposure	Proportion of medium NO_2 exposure	Proportion of high NO_2 exposure
0-4	Males	0.00	0.00	1.000000
5-9	Males	0.00	0.00	1.000000
10-14	Males	0.00	0.00	1.000000
15-19	Males	0.00	0.00	1.000000
20-24	Males	0.00	0.00	1.000000
25-29	Males	0.00	0.00	1.000000
30-34	Males	0.00	0.00	1.000000
35-39	Males	0.00	0.00	1.000000
40-44	Males	0.00	0.00	1.000000
45-49	Males	0.00	0.00	1.000000
50-54	Males	0.00	0.00	1.000000
55-59	Males	0.00	0.00	1.000000
60-64	Males	0.00	0.00	1.000000
65-69	Males	0.00	0.00	1.000000
70-74	Males	0.00	0.00	1.000000
75+	Males	0.00	0.00	1.000000
0-4	Females	0.00	0.00	1.000000
5-9	Females	0.00	0.00	1.000000
10-14	Females	0.00	0.00	1.000000
15-19	Females	0.00	0.00	1.000000

20-24	Females	0.00	0.00	1.000000
25-29	Females	0.00	0.00	1.000000
30-34	Females	0.00	0.00	1.000000
35-39	Females	0.00	0.00	1.000000
40-44	Females	0.00	0.00	1.000000
45-49	Females	0.00	0.00	1.000000
50-54	Females	0.00	0.00	1.000000
55-59	Females	0.00	0.00	1.000000
60-64	Females	0.00	0.00	1.000000
60-64	Females	0.00	0.00	1.000000
65-69	Females	0.00	0.00	1.000000
75+	Females	0.00	0.00	1.000000

1.3 South Lakeland

Age group	Sex Group	Proportion of low NO_2 exposure	Proportion of medium NO_2 exposure	Proportion of high NO_2 exposure
0-4	Males	0.816712	0.135574	0.047714
5-9	Males	0.828147	0.133476	0.038377
10-14	Males	0.862080	0.107145	0.030776
15-19	Males	0.866792	0.106354	0.026854
20-24	Males	0.808807	0.136186	0.055007
25-29	Males	0.775884	0.154176	0.069940
30-34	Males	0.770328	0.159085	0.070587
35-39	Males	0.790674	0.151562	0.057764
40-44	Males	0.814286	0.132000	0.053714
45-49	Males	0.821955	0.130722	0.047323
50-54	Males	0.833724	0.122025	0.044251
55-59	Males	0.848059	0.108532	0.043409
60-64	Males	0.858462	0.103091	0.038447
65-69	Males	0.865381	0.104618	0.030001
70-74	Males	0.874380	0.096297	0.029323
75+	Males	0.864357	0.103802	0.031841
0-4	Females	0.808563	0.138853	0.052583
5-9	Females	0.847057	0.116512	0.036431
10-14	Females	0.862952	0.104405	0.032643
15-19	Females	0.858201	0.112261	0.029538

20-24	Females	0.800965	0.140000	0.059035
25-29	Females	0.759464	0.162909	0.077627
30-34	Females	0.779507	0.157416	0.063077
35-39	Females	0.804764	0.144085	0.051151
40-44	Females	0.828080	0.128068	0.043852
45-49	Females	0.835542	0.125290	0.039167
50-54	Females	0.853265	0.109998	0.036737
55-59	Females	0.856584	0.106883	0.036533
60-64	Females	0.865227	0.102572	0.032201
60-64	Females	0.874559	0.097730	0.027711
65-69	Females	0.864276	0.103000	0.032724
75+	Females	0.839767	0.115077	0.045156

2. PM$_{2.5}$ exposure by region

The prevalence of PM$_{2.5}$ within a region was grouped into the following categories:

- Low PM$_{2.5}$ exposure: PM$_{2.5}$ < 12.3 µg m^3
- Medium PM$_{2.5}$ exposure: PM$_{2.5}$ from 12.3 to 13.5 µg m^3
- PM$_{2.5}$ ≥ 13.5 µg m^3

The proportion of individuals within each of these categories is shown below for England, Lambeth and South Lakeland by age and sex groups.

2.1 England

Age group	Sex Group	Proportion of low PM$_{2.5}$ exposure	Proportion of medium PM$_{2.5}$ exposure	Proportion of high PM$_{2.5}$ exposure
0-4	Males	0.331993	0.339153	0.328854
5-9	Males	0.338559	0.338994	0.322447
10-14	Males	0.344088	0.337296	0.318615
15-19	Males	0.337499	0.330320	0.332181
20-24	Males	0.315281	0.311350	0.373369
25-29	Males	0.309764	0.333310	0.356926
30-34	Males	0.310675	0.342040	0.347285
35-39	Males	0.321449	0.346137	0.332413
40-44	Males	0.329929	0.345296	0.324776
45-49	Males	0.332720	0.343595	0.323685

Age group	Sex	Low	Medium	High
50-54	Males	0.333861	0.339804	0.326335
55-59	Males	0.335012	0.336032	0.328956
60-64	Males	0.336374	0.333869	0.329757
65-69	Males	0.337118	0.331543	0.331339
70-74	Males	0.336821	0.329889	0.333290
75+	Males	0.338515	0.323985	0.337500
0-4	Females	0.331751	0.339112	0.329137
5-9	Females	0.339584	0.339705	0.320711
10-14	Females	0.342836	0.338194	0.318970
15-19	Females	0.335977	0.329979	0.334044
20-24	Females	0.312205	0.312743	0.375052
25-29	Females	0.309615	0.341007	0.349378
30-34	Females	0.315516	0.346072	0.338413
35-39	Females	0.326720	0.348813	0.324468
40-44	Females	0.332485	0.346156	0.321359
45-49	Females	0.334895	0.342588	0.322518
50-54	Females	0.334675	0.338972	0.326353
55-59	Females	0.334840	0.336146	0.329014
60-64	Females	0.335767	0.332899	0.331334
60-64	Females	0.336339	0.331977	0.331684
65-69	Females	0.335467	0.329148	0.335384
75+	Females	0.336352	0.321331	0.342317

2.2 Lambeth

Age group	Sex Group	Proportion of low $PM_{2.5}$ exposure	Proportion of medium $PM_{2.5}$ exposure	Proportion of high $PM_{2.5}$ exposure
0-4	Males	0.068784	0.621825	0.309391
5-9	Males	0.062278	0.609449	0.328273
10-14	Males	0.060089	0.605356	0.334555
15-19	Males	0.054719	0.592880	0.352401
20-24	Males	0.036887	0.569703	0.393410
25-29	Males	0.032217	0.575572	0.392211
30-34	Males	0.042995	0.604621	0.352384
35-39	Males	0.054633	0.627637	0.317730
40-44	Males	0.058845	0.605784	0.335371
45-49	Males	0.059609	0.593571	0.346820
50-54	Males	0.058462	0.598465	0.343073

55-59	Males	0.075413	0.579864	0.344723
60-64	Males	0.071054	0.609345	0.319601
65-69	Males	0.076332	0.605226	0.318442
70-74	Males	0.068106	0.598211	0.333683
75+	Males	0.066004	0.581873	0.352123
0-4	Females	0.061791	0.629501	0.308708
5-9	Females	0.064436	0.601082	0.334481
10-14	Females	0.056783	0.602249	0.340969
15-19	Females	0.054730	0.580903	0.364367
20-24	Females	0.035538	0.557168	0.407293
25-29	Females	0.034289	0.595875	0.369836
30-34	Females	0.045648	0.626516	0.327835
35-39	Females	0.061620	0.623578	0.314802
40-44	Females	0.066260	0.612366	0.321374
45-49	Females	0.062411	0.602776	0.334813
50-54	Females	0.064533	0.588685	0.346782
55-59	Females	0.067609	0.583018	0.349373
60-64	Females	0.076283	0.598208	0.325509
60-64	Females	0.062847	0.604642	0.332510
65-69	Females	0.064608	0.578912	0.356479
75+	Females	0.070288	0.606032	0.323679

2.2 South Lakeland

Age group	Sex Group	Proportion of low $PM_{2.5}$ exposure	Proportion of medium $PM_{2.5}$ exposure	Proportion of high $PM_{2.5}$ exposure
0-4	Males	0.717486	0.00	0.282514
5-9	Males	0.701524	0.00	0.298476
10-14	Males	0.723497	0.00	0.276503
15-19	Males	0.730184	0.00	0.269816
20-24	Males	0.706694	0.00	0.293306
25-29	Males	0.698693	0.00	0.301307
30-34	Males	0.706527	0.00	0.293473
35-39	Males	0.691313	0.00	0.308687
40-44	Males	0.701809	0.00	0.298191
45-49	Males	0.703966	0.00	0.296034
50-54	Males	0.694628	0.00	0.305372
55-59	Males	0.686063	0.00	0.313937

60-64	Males	0.699276	0.00	0.300724
65-69	Males	0.672225	0.00	0.327775
70-74	Males	0.676841	0.00	0.323159
75+	Males	0.680201	0.00	0.319799
0-4	Females	0.694239	0.00	0.305761
5-9	Females	0.719781	0.00	0.280219
10-14	Females	0.711177	0.00	0.288823
15-19	Females	0.732980	0.00	0.267020
20-24	Females	0.706649	0.00	0.293351
25-29	Females	0.701816	0.00	0.298184
30-34	Females	0.709039	0.00	0.290961
35-39	Females	0.704577	0.00	0.295423
40-44	Females	0.715585	0.00	0.284415
45-49	Females	0.690421	0.00	0.309579
50-54	Females	0.703929	0.00	0.296071
55-59	Females	0.696813	0.00	0.303187
60-64	Females	0.691842	0.00	0.308158
60-64	Females	0.681448	0.00	0.318552
65-69	Females	0.667710	0.00	0.332290
75+	Females	0.655690	0.00	0.344310