

AIR QUALITY **IN HONG KONG 2021**

Statistical Summary

Air Science Group

Environmental Protection Department

**The Government of the Hong Kong
Special Administrative Region**

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Table C1: 2021 Exceedance of Short-Term Limit Values of Air Quality Objectives

Pollutant: Sulphur Dioxide

(10-minute limit value = 500 µg/m³ ; allowable no. of exceedance of limit value = 3)

Station	No. of exceedance of limit value	1st High	2nd High	3rd High	4th High
Central/Western	0	56	54	52	51
Southern	0	46	38	38	36
Eastern	0	51	36	34	22
Kwun Tong	0	33	32	26	24
Sham Shui Po	0	40	39	39	38
Kwai Chung	0	48	45	45	45
Tsuen Wan	0	27	26	25	23
Tseung Kwan O	0	30	23	18	18
Yuen Long	0	26	26	25	24
Tuen Mun	0	33	25	23	22
Tung Chung	0	20	19	19	19
Tai Po	0	20	17	15	15
Sha Tin	0	40	38	34	33
North	0	20	19	18	18
Tap Mun	0	18	17	17	17
Causeway Bay	0	38	34	32	32
Central	0	46	44	29	26
Mong Kok	0	37	31	30	30

Pollutant: Carbon Monoxide

(1-hour limit value = 30,000 µg/m³ ; allowable no. of exceedance of limit value = 0)

Station	No. of exceedance of limit value	1st High
Southern	0	1230
Tsuen Wan	0	1240
Tseung Kwan O	0	1750
Yuen Long	0	2090
Tuen Mun	0	1720
Tung Chung	0	1240
North	0	2150
Tap Mun	0	1210
Causeway Bay	0	1920
Central	0	1990
Mong Kok	0	2130

Pollutant: Sulphur Dioxide

(24-hour limit value = 125 µg/m³ ; allowable no. of exceedance of limit value = 3)

Station	No. of exceedance of limit value	1st High	2nd High	3rd High	4th High
Central/Western	0	11	11	10	10
Southern*	0	9	9	9	8
Eastern	0	5	5	5	5
Kwun Tong	0	9	8	8	7
Sham Shui Po	0	13	13	13	12
Kwai Chung	0	16	16	14	14
Tsuen Wan	0	8	8	8	8
Tseung Kwan O	0	10	9	9	9
Yuen Long	0	15	15	14	14
Tuen Mun	0	11	11	10	9
Tung Chung	0	9	9	9	9
Tai Po	0	9	8	8	8
Sha Tin	0	13	12	11	11
North*	0	8	7	7	7
Tap Mun	0	12	11	11	11
Causeway Bay	0	12	11	11	11
Central	0	11	11	11	10
Mong Kok	0	15	12	11	10

Pollutant: Carbon Monoxide

(8-hour limit value = 10,000 µg/m³ ; allowable no. of exceedance of limit value = 0)

Station	No. of exceedance of limit value	1st High
Southern	0	1014
Tsuen Wan	0	1164
Tseung Kwan O	0	1375
Yuen Long	0	1591
Tuen Mun	0	1450
Tung Chung	0	1073
North	0	1550
Tap Mun	0	1188
Causeway Bay	0	1551
Central	0	1774
Mong Kok	0	1719

Pollutant: Nitrogen Dioxide (1-hour limit value = 200 µg/m³ ; allowable no. of exceedance of limit value = 18)

Station	No. of exceedance of limit value	1st High	2nd High	3rd High	4th High	5th High	6th High	7th High	8th High	9th High	10th High	11th High	12th High	13th High	14th High	15th High	16th High	17th High	18th High	19th High
Central/Western	0	180	176	175	170	170	168	167	166	164	163	158	157	156	156	155	154	151	149	149
Southern	0	167	162	160	159	157	148	141	140	139	133	132	130	129	125	125	124	123	123	123
Eastern	0	162	160	151	151	149	146	145	145	139	137	135	132	131	131	130	130	129	129	129
Kwun Tong	0	197	191	189	187	184	181	179	176	175	174	172	169	167	166	165	165	165	164	164
Sham Shui Po	3	259	229	207	187	186	186	184	183	182	181	180	180	179	176	175	175	173	171	171
Kwai Chung	2	202	202	197	189	189	187	187	186	186	185	184	182	182	182	181	181	181	181	180
Tsuen Wan	2	224	201	182	177	175	174	171	165	164	161	159	158	156	155	155	153	153	152	151
Tseung Kwan O	0	182	177	158	156	152	151	149	148	148	147	142	140	137	137	137	134	133	133	132
Yuen Long	1	206	194	176	176	175	169	168	164	164	161	161	159	158	156	154	152	151	149	148
Tuen Mun	6	217	214	212	211	210	201	197	195	187	182	182	179	177	177	177	175	173	172	172
Tung Chung	0	163	157	139	136	136	134	131	130	130	130	127	126	123	122	120	119	118	118	115
Tai Po	0	134	129	129	129	125	123	122	122	121	120	120	119	119	119	117	116	116	115	115
Sha Tin	0	198	195	193	175	175	172	170	169	168	168	165	164	164	164	164	162	162	162	159
North	0	186	166	165	162	156	154	150	150	148	148	144	143	143	142	141	140	139	136	135
Tap Mun	0	83	82	78	78	77	70	69	69	63	62	61	60	60	59	58	57	57	56	56
Causeway Bay	29	301	287	257	244	239	238	238	234	232	226	225	223	221	220	219	215	214	211	211
Central	35	274	268	265	251	246	240	236	228	228	226	224	221	221	220	220	219	219	218	216
Mong Kok	19	259	240	235	232	232	227	224	224	220	217	209	205	204	203	203	202	201	201	201

Table C1 (Cont.): 2021 Exceedance of Short-Term Limit Values of Air Quality Objectives

Pollutant: Ozone (Daily maximum 8-hour limit value = 160 µg/m³ ; allowable no. of exceedance of limit value = 9)

Station	No. of exceedance of limit value	1st High	2nd High	3rd High	4th High	5th High	6th High	7th High	8th High	9th High	10th High
Central/Western	8	241	221	205	176	170	165	164	163	155	155
Southern	6	218	205	181	176	175	167	160	156	155	155
Eastern	6	217	208	197	166	165	161	160	157	149	148
Kwun Tong	2	190	169	153	153	151	150	148	139	138	136
Sham Shui Po	4	199	193	182	163	151	145	145	137	137	136
Kwai Chung	2	170	169	156	156	142	135	131	130	126	124
Tsuen Wan	4	204	191	167	167	149	145	142	141	139	130
Tseung Kwan O	9	227	208	191	190	181	170	164	164	163	158
Yuen Long	14	286	228	206	206	190	184	181	180	179	178
Tuen Mun	11	256	233	198	187	185	182	180	180	164	161
Tung Chung	7	208	205	187	180	176	173	161	160	160	158
Tai Po	12	246	236	230	222	200	184	183	183	179	168
Sha Tin	8	236	222	193	190	169	167	162	162	160	157
North	20	289	249	231	217	212	211	193	188	187	187
Tap Mun	22	301	274	250	214	199	196	188	188	178	177
Causeway Bay	0	120	113	104	102	101	101	98	98	95	94
Central	0	135	132	129	121	116	115	110	109	109	107
Mong Kok	0	126	115	114	111	109	101	100	99	99	97

Pollutant: Respirable Suspended Particulates (PM₁₀) (24-hour limit value = 100 µg/m³ ; allowable no. of exceedance of limit value = 9)

Station	No. of exceedance of limit value	1st High	2nd High	3rd High	4th High	5th High	6th High	7th High	8th High	9th High	10th High
Central/Western	1	110	94	82	80	79	77	70	68	65	65
Southern	0	99	96	75	74	69	67	67	63	59	53
Eastern	2	117	116	88	86	80	78	76	76	74	62
Kwun Tong	2	128	102	99	95	88	77	77	75	74	72
Sham Shui Po	2	104	103	89	88	85	79	77	72	68	67
Kwai Chung	0	92	92	88	73	72	69	68	67	64	56
Tsuen Wan	0	96	89	82	71	71	71	67	66	64	60
Tseung Kwan O	0	89	88	67	65	62	61	60	52	50	50
Yuen Long	1	109	98	92	90	88	87	86	78	73	73
Tuen Mun	4	130	111	111	107	98	91	90	89	89	87
Tung Chung	0	98	92	80	77	76	70	70	65	64	63
Tai Po	1	113	94	79	77	70	69	69	69	63	60
Sha Tin	2	109	102	88	81	76	75	73	61	59	58
North	0	100	86	76	75	74	71	67	67	63	62
Tap Mun	1	118	96	74	72	68	68	68	64	60	54
Causeway Bay	4	117	109	104	103	92	86	85	83	83	79
Central	2	117	101	90	90	86	85	73	73	70	70
Mong Kok	1	115	100	91	88	86	80	74	73	70	69

Pollutant: Fine Suspended Particulates (PM_{2.5}) (24-hour limit value = 75 µg/m³ ; allowable no. of exceedance of limit value = 9)

Station	No. of exceedance of limit value	1st High	2nd High	3rd High	4th High	5th High	6th High	7th High	8th High	9th High	10th High
Central/Western	0	61	57	57	50	48	45	45	44	41	39
Southern	0	48	42	39	33	32	32	31	31	30	29
Eastern	0	53	51	50	39	39	38	38	36	36	34
Kwun Tong	0	56	56	45	43	41	41	41	38	37	36
Sham Shui Po	0	49	46	40	38	35	35	34	33	33	33
Kwai Chung	0	57	52	51	42	42	41	40	38	38	37
Tsuen Wan	0	56	51	51	50	49	46	44	42	40	39
Tseung Kwan O	0	51	44	34	32	32	32	31	31	31	30
Yuen Long	0	75	66	55	49	47	46	45	45	44	43
Tuen Mun	0	65	64	60	54	53	52	52	47	47	46
Tung Chung	0	60	60	59	51	48	47	45	45	45	44
Tai Po	0	58	54	54	51	48	42	39	39	39	38
Sha Tin	0	58	45	40	38	38	37	36	36	34	34
North	0	50	44	44	43	41	40	40	39	34	34
Tap Mun	0	59	54	47	39	39	36	34	33	33	32
Causeway Bay	0	70	63	62	61	60	56	53	50	49	47
Central	0	65	64	64	52	50	49	49	47	46	43
Mong Kok	0	63	62	61	53	50	48	47	47	46	44

Notes:

1. All concentration units are in microgram per cubic metre (µg/m³).
2. Shaded no. of exceedance of limit value represents exceedance of the respective air quality objective.
3. Shaded concentration is higher than the limit value of the respective air quality objective.

Table C2: 2021 Monthly and Annual Averages of Air Pollutants

Pollutant: Sulphur Dioxide

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Central/Western	4	4	4	4	5	5	6	6	6	2	4	4	4
Southern	3	2	2	2	4	4	5	5	5	3	2	2	3
Eastern	3	1	1	1	1	1	1	1	2	1	2	2	2
Kwun Tong	5	3	3	3	4	5	4	3	4	3	5	6	4
Sham Shui Po	7	5	5	7	8	8	9	4	4	2	5	5	6
Kwai Chung	7	6	7	7	10	8	6	5	5	3	4	6	6
Tsuen Wan	4	3	3	3	4	5	5	6	6	5	5	6	5
Tseung Kwan O	4	2	3	3	2	2	2	2	3	2	3	6	3
Yuen Long	9	7	7	8	8	8	9	9	10	10	12	5	9
Tuen Mun	6	4	4	4	4	4	5	5	6	5	7	6	5
Tung Chung	5	3	4	4	4	5	6	6	7	7	3	4	5
Tai Po	5	3	3	5	3	2	2	3	3	3	4	5	4
Sha Tin	5	8	6	7	7	4	6	6	7	4	6	6	6
North	4	1	3	4	3	4	3	4	3	3	4	4	3
Tap Mun	6	5	5	6	5	5	5	6	7	7	8	9	6
Causeway Bay	7	6	6	6	7	5	5	6	7	4	5	6	6
Central	7	4	4	3	4	4	3	4	4	4	5	6	4
Mong Kok	5	4	5	5	5	4	3	4	5	1	4	3	4

Pollutant: Nitrogen Oxides

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Central/Western	62	55	51	37	26	31	29	36	41	31	48	52	41
Southern	49	42	42	34	35	40	36	43	38	29	41	48	40
Kwun Tong	95	83	69	62	71	72	69	81	83	57	80	84	76
Sham Shui Po	94	87	73	63	49	62	58	66	72	51	70	75	68
Kwai Chung	99	89	87	75	98	104	89	99	85	51	75	82	86
Tsuen Wan	79	67	62	54	62	63	58	68	58	42	59	68	62
Tseung Kwan O	47	38	31	28	34	38	38	46	38	19	35	33	35
Yuen Long	88	62	53	44	36	41	47	54	58	44	70	80	56
Tuen Mun	105	72	63	51	38	42	39	50	49	43	73	87	59
Tung Chung	56	39	36	27	21	23	22	26	34	29	46	56	35
Tai Po	63	48	40	36	34	38	39	45	41	34	52	58	44
Sha Tin	68	48	38	35	33	33	34	47	43	26	51	54	42
North	72	56	45	39	32	38	42	48	50	41	69	74	51
Tap Mun	18	11	12	10	9	9	8	13	11	9	13	16	12
Causeway Bay	209	202	179	151	190	195	208	223	213	165	209	248	199
Central	189	150	137	111	133	144	141	159	154	121	175	184	150
Mong Kok	156	147	132	132	143	148	144	158	151	98	134	127	139

Pollutant: Nitrogen Dioxide (Annual limit value = 40 µg/m³)

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Central/Western	51	43	38	32	21	25	22	25	30	27	42	43	33
Southern	39	30	31	27	26	29	25	29	25	23	33	36	30
Eastern	45	39	38	34	24	30	29	30	34	31	42	43	35
Kwun Tong	63	55	47	43	40	42	41	44	51	41	59	58	49
Sham Shui Po	66	57	49	46	33	42	38	42	45	39	55	56	47
Kwai Chung	65	55	52	50	52	54	48	50	49	34	54	55	52
Tsuen Wan	59	49	44	41	40	41	39	42	40	33	48	51	44
Tseung Kwan O	34	29	23	21	23	25	25	30	27	16	30	28	26
Yuen Long	57	41	40	34	24	27	31	34	39	35	55	57	40
Tuen Mun	74	54	48	41	29	32	30	34	36	34	58	62	44
Tung Chung	44	29	27	21	14	15	15	17	25	25	39	43	26
Tai Po	49	36	31	28	24	27	27	30	30	25	39	42	32
Sha Tin	49	36	30	27	25	24	25	31	29	22	41	42	32
North	53	38	35	30	22	26	28	31	33	33	49	51	36
Tap Mun	16	9	9	8	6	6	7	10	9	8	12	15	10
Causeway Bay	88	79	72	70	60	63	62	57	68	65	85	86	71
Central	90	73	67	64	57	59	59	57	66	60	84	81	68
Mong Kok	84	78	71	76	61	65	63	62	69	57	81	72	70

Pollutant: Carbon Monoxide

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Southern	501	461	428	329	255	265	263	428	450	496	422	581	407
Tsuen Wan	745	642	521	572	471	604	576	521	536	601	562	633	582
Tseung Kwan O	790	798	670	433	363	424	438	469	474	468	439	550	525
Yuen Long	814	638	679	516	435	566	473	600	680	530	672	700	608
Tuen Mun	877	869	707	738	716	608	652	726	664	625	689	718	715
Tung Chung	563	430	400	331	204	223	281	371	345	330	307	496	357
North	580	597	412	364	445	337	413	545	676	620	735	697	534
Tap Mun	640	491	489	534	476	370	304	356	479	653	443	684	494
Causeway Bay	892	806	885	811	611	647	658	754	790	661	587	776	740
Central	781	680	695	558	449	519	519	671	983	1093	1109	1021	758
Mong Kok	933	831	1035	1036	673	890	837	767	660	764	672	789	824

Table C2 (Cont.): 2021 Monthly and Annual Averages of Air Pollutants

Pollutant: Ozone

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Central/Western	65	64	58	79	48	52	49	39	57	70	83	72	61
Southern	79	78	66	84	44	48	44	35	56	75	79	73	63
Eastern	71	73	67	87	56	57	51	42	61	71	78	72	65
Kwun Tong	58	53	50	68	29	31	27	20	39	56	63	57	46
Sham Shui Po	59	57	52	69	41	39	38	28	47	59	62	51	50
Kwai Chung	51	51	46	62	20	23	22	15	37	55	58	50	41
Tsuen Wan	50	50	45	63	29	34	31	22	42	56	59	49	44
Tseung Kwan O	80	75	73	90	42	46	44	34	61	78	86	79	65
Yuen Long	49	54	50	71	43	44	42	29	47	55	56	46	49
Tuen Mun	48	54	48	68	43	43	45	32	53	57	57	43	49
Tung Chung	51	53	49	67	43	47	43	33	52	60	60	48	51
Tai Po	69	69	67	84	47	50	47	34	59	63	67	57	59
Sha Tin	60	58	59	77	41	48	42	28	51	67	67	56	54
North	64	65	61	82	50	50	48	35	57	61	61	51	57
Tap Mun	89	85	77	98	56	61	56	42	73	80	96	82	75
Causeway Bay	38	37	36	50	24	25	16	13	19	31	30	27	29
Central	37	41	40	54	23	23	18	14	25	38	37	34	32
Mong Kok	42	40	36	48	21	21	18	13	25	42	45	37	32

Pollutant: Respirable Suspended Particulates (PM₁₀) (Annual limit value = 50 µg/m³)

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Central/Western	48	31	34	32	14	16	13	12	17	23	32	37	26
Southern	42	27	29	30	17	20	16	16	19	24	33	35	26
Eastern	50	33	34	36	16	20	19	15	20	27	34	39	29
Kwun Tong	58	37	40	38	20	21	18	18	24	27	37	41	31
Sham Shui Po	50	35	36	35	17	22	17	16	20	23	33	37	28
Kwai Chung	40	28	33	31	17	20	16	15	19	23	31	36	26
Tsuen Wan	43	24	28	29	14	18	15	14	19	22	29	37	24
Tseung Kwan O	37	25	27	29	16	18	16	15	20	24	30	32	24
Yuen Long	56	32	33	31	16	19	16	15	23	27	41	49	30
Tuen Mun	69	39	42	40	19	22	20	16	26	33	50	55	36
Tung Chung	48	27	24	30	14	16	13	14	17	24	39	44	26
Tai Po	46	28	30	29	15	17	15	14	20	24	30	36	26
Sha Tin	46	26	29	31	16	17	14	14	18	21	29	36	25
North	47	27	28	27	14	15	14	14	23	24	33	38	25
Tap Mun	44	26	27	29	12	14	11	11	16	25	29	35	23
Causeway Bay	62	44	47	43	29	29	28	25	33	35	46	50	39
Central	53	35	36	36	20	20	18	17	22	25	36	43	30
Mong Kok	52	36	40	37	17	20	17	16	22	27	36	41	30

Pollutant: Fine Suspended Particulates (PM_{2.5}) (Annual limit value = 35 µg/m³)

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Central/Western	29	19	20	17	8	9	8	8	11	14	19	24	16
Southern	20	15	15	14	8	9	8	7	9	11	16	18	13
Eastern	25	18	17	16	9	10	9	8	11	13	17	21	15
Kwun Tong	28	20	20	19	12	12	10	10	13	15	19	23	17
Sham Shui Po	23	18	17	14	8	9	8	9	11	13	16	20	14
Kwai Chung	22	19	20	17	10	12	11	10	13	15	19	25	16
Tsuen Wan	26	17	18	17	10	11	10	10	13	15	18	25	16
Tseung Kwan O	20	14	15	15	8	9	8	8	11	13	16	19	13
Yuen Long	27	18	16	15	10	11	10	10	15	17	24	31	17
Tuen Mun	37	24	23	20	10	10	9	9	14	18	26	32	19
Tung Chung	28	17	15	16	9	9	9	11	12	16	26	31	17
Tai Po	28	18	18	16	9	9	9	9	13	14	18	23	16
Sha Tin	24	14	15	14	9	9	8	8	11	12	17	23	14
North	26	17	16	15	10	9	10	9	13	13	17	21	15
Tap Mun	25	17	15	14	7	8	7	6	11	13	16	21	14
Causeway Bay	35	27	28	23	17	17	17	17	21	21	27	31	23
Central	31	21	21	20	12	13	12	12	15	15	21	27	18
Mong Kok	31	23	25	22	12	12	11	11	14	15	20	25	18

Notes:

1. All concentration units are in microgram per cubic metre (µg/m³).
2. Shaded annual average represents exceedance of the respective air quality objective.

Table C3: 2021 Hourly Statistics of Air Pollutants

Pollutant: Sulphur Dioxide

Station	No. of hourly data	Data capture rate (%)	Percentiles									Arithmetic mean	Highest 1-hour
			10	25	50	75	90	95	97.5	99	99.8		
Central/Western	8509	97.1	2	3	4	6	7	9	10	13	18	4	45
Southern*	8641	98.6	1	1	3	4	6	7	9	11	16	3	30
Eastern	8568	97.8	0	1	1	2	3	4	5	6	9	2	28
Kwun Tong	8442	96.4	2	3	3	5	6	7	8	9	13	4	19
Sham Shui Po	8451	96.5	2	3	5	8	10	12	14	16	21	6	32
Kwai Chung	8464	96.6	2	4	5	8	12	14	16	19	25	6	42
Tsuen Wan	8467	96.7	2	3	4	6	7	8	9	11	14	5	19
Tseung Kwan O	8550	97.6	1	2	2	3	5	8	9	9	11	3	15
Yuen Long	8440	96.3	6	8	8	10	12	13	14	15	17	9	21
Tuen Mun	8615	98.3	3	3	4	6	8	9	10	12	15	5	18
Tung Chung	8452	96.5	3	3	5	6	7	8	9	11	14	5	16
Tai Po	8462	96.6	2	2	3	5	6	6	7	9	11	4	14
Sha Tin	8442	96.4	2	4	6	8	10	11	12	14	17	6	32
North*	8562	97.7	1	2	3	4	5	6	7	8	11	3	14
Tap Mun	8448	96.4	4	5	6	7	8	10	11	12	13	6	15
Causeway Bay	8519	97.2	3	4	5	7	9	11	12	14	17	6	22
Central	8510	97.1	2	3	4	5	7	9	10	12	16	4	27
Mong Kok	8469	96.7	2	3	4	5	7	9	11	14	18	4	27

Pollutant: Nitrogen Oxides

Station	No. of hourly data	Data capture rate (%)	Percentiles									Arithmetic mean	Highest 1-hour
			10	25	50	75	90	95	97.5	99	99.8		
Central/Western	8497	97.0	12	18	32	51	79	106	142	193	293	41	487
Southern	8612	98.3	14	21	32	47	72	96	123	163	243	40	414
Kwun Tong	8433	96.3	25	41	66	97	133	166	202	254	357	76	462
Sham Shui Po	8395	95.8	24	38	59	85	115	144	183	248	396	68	500
Kwai Chung	8427	96.2	25	44	75	115	158	193	225	274	357	86	543
Tsuen Wan	8477	96.8	22	39	56	76	103	129	157	198	264	62	371
Tseung Kwan O	8583	98.0	12	16	23	42	76	101	126	159	253	35	417
Yuen Long	8405	95.9	22	33	48	68	100	128	161	207	285	56	540
Tuen Mun	8621	98.4	20	31	49	74	109	143	181	228	341	59	490
Tung Chung	8426	96.2	9	14	25	48	73	90	106	132	181	35	318
Tai Po	8506	97.1	18	26	38	54	76	95	118	144	223	44	365
Sha Tin	8428	96.2	13	18	31	53	89	118	143	183	249	42	326
North	8611	98.3	16	25	40	62	96	129	162	211	309	51	710
Tap Mun	8416	96.1	4	6	9	15	21	26	32	42	71	12	142
Causeway Bay	8475	96.7	59	107	178	268	369	435	486	563	665	199	972
Central	8508	97.1	47	78	126	199	285	341	392	471	638	150	950
Mong Kok	8460	96.6	42	79	131	184	240	278	321	381	495	139	602

**Pollutant: Nitrogen Dioxide (1-hour limit value = 200 µg/m³; allowable no. of exceedance of limit value = 18
Annual limit value = 40 µg/m³)**

Station	No. of hourly data	Data capture rate (%)	Percentiles									Arithmetic mean	Highest 1-hour	No. of exceedance of limit value
			10	25	50	75	90	95	97.5	99	99.8			
Central/Western	8497	97.0	11	16	28	42	62	80	98	119	149	33	180	0
Southern	8612	98.3	11	17	26	36	52	66	81	99	123	30	167	0
Eastern	8567	97.8	16	22	32	44	57	67	79	100	129	35	162	0
Kwun Tong	8433	96.3	20	30	44	61	80	100	118	136	164	49	197	0
Sham Shui Po	8395	95.8	19	28	42	60	80	96	111	133	171	47	259	3
Kwai Chung	8427	96.2	19	31	47	64	89	110	129	151	181	52	202	2
Tsuen Wan	8477	96.8	17	29	41	54	73	89	102	120	152	44	224	2
Tseung Kwan O	8583	98.0	9	13	18	31	54	72	89	106	133	26	182	0
Yuen Long	8405	95.9	16	24	35	49	68	84	101	120	149	40	206	1
Tuen Mun	8621	98.4	17	25	38	56	80	99	117	137	172	44	217	6
Tung Chung	8426	96.2	6	11	21	37	55	66	75	91	118	26	163	0
Tai Po	8506	97.1	13	19	29	41	56	68	82	98	115	32	134	0
Sha Tin	8428	96.2	9	15	24	40	64	86	103	119	162	32	198	0
North	8611	98.3	13	20	31	46	64	79	96	113	136	36	186	0
Tap Mun	8416	96.1	3	5	8	13	18	23	27	36	56	10	83	0
Causeway Bay	8475	96.7	32	47	67	91	115	132	148	171	211	71	301	29
Central	8508	97.1	30	43	62	86	112	132	152	175	218	68	274	35
Mong Kok	8460	96.6	29	46	66	88	115	132	149	169	201	70	259	19

Pollutant: Carbon Monoxide (1-hour limit value = 30,000 µg/m³; allowable no. of exceedance of limit value = 0)

Station	No. of hourly data	Data capture rate (%)	Percentiles									Arithmetic mean	Highest 1-hour	No. of exceedance of limit value
			10	25	50	75	90	95	97.5	99	99.8			
Southern	8630	98.5	200	290	390	500	630	690	790	860	1020	407	1230	0
Tsuen Wan	8481	96.8	380	450	560	690	810	870	940	1022	1150	582	1240	0
Tseung Kwan O	8559	97.7	330	380	460	640	810	900	1010	1120	1308	525	1750	0
Yuen Long	8434	96.3	400	470	580	710	870	970	1080	1200	1401	608	2090	0
Tuen Mun	8647	98.7	540	600	680	800	940	1030	1100	1210	1457	715	1720	0
Tung Chung	8444	96.4	160	240	330	450	580	680	760	850	980	357	1240	0
North	8637	98.6	260	380	520	660	810	930	1030	1180	1427	534	2150	0
Tap Mun	8403	95.9	300	370	460	600	740	810	880	970	1092	494	1210	0
Causeway Bay	8494	97.0	480	572.5	710	870	1050	1170	1270	1420	1620	740	1920	0
Central	8495	97.0	380	510	730	990	1170	1250	1340	1450	1650	758	1990	0
Mong Kok	8510	97.1	550	650	790	980	1150	1230	1320	1430	1640	824	2130	0

Table C3 (Cont.): 2021 Hourly Statistics of Air Pollutants

Pollutant: Ozone

Station	No. of hourly data	Data capture rate (%)	Percentiles									Arithmetic mean	Highest 1-hour
			10	25	50	75	90	95	97.5	99	99.8		
Central/Western	8663	98.9	20	34	54	87	109	122	134	156	213	61	304
Southern	8639	98.6	20	35	57	91	112	125	137	153	203	63	265
Eastern	8565	97.8	28	41	60	88	108	119	130	149	199	65	253
Kwun Tong	8391	95.8	10	19	37	69	93	106	119	132	167	46	222
Sham Shui Po	8378	95.6	14	26	45	70	91	104	119	139	193	50	295
Kwai Chung	8364	95.5	3	12	33	66	90	101	111	126	170	41	252
Tsuen Wan	8472	96.7	8	19	37	65	88	99	113	133	189	44	318
Tseung Kwan O	8573	97.9	17	32	57	98	122	135	147	161	214	65	259
Yuen Long	8445	96.4	7	21	40	69	99	117	138	172	240	49	341
Tuen Mun	8595	98.1	10	22	40	68	98	116	140	173	234	49	326
Tung Chung	8413	96.0	11	25	43	70	99	117	135	171	220	51	275
Tai Po	8669	99.0	13	28	50	87	116	130	147	170	243	59	311
Sha Tin	8377	95.6	6	23	46	82	110	126	139	159	218	54	278
North	8654	98.8	9	25	48	84	112	128	151	193	260	57	353
Tap Mun	8438	96.3	27	44	66	103	132	146	159	186	244	75	350
Causeway Bay	8624	98.4	7	11	21	40	62	76	86	97	115	29	142
Central	8677	99.1	5	11	23	48	72	86	97	108	130	32	161
Mong Kok	8526	97.3	7	12	26	47	67	80	91	101	122	32	159

Pollutant: Respirable Suspended Particulates (PM₁₀) (Annual limit value = 50 µg/m³)

Station	No. of hourly data	Data capture rate (%)	Percentiles									Arithmetic mean	Highest 1-hour
			10	25	50	75	90	95	97.5	99	99.8		
Central/Western	8691	99.2	7	12	23	35	46	55	72	86	128	26	179
Southern	8471	96.7	10	15	23	33	43	51	61	76	116	26	155
Eastern	8273	94.4	10	16	26	37	49	58	73	91	140	29	191
Kwun Tong	8045	91.8	10	18	28	42	55	64	79	96	138	31	174
Sham Shui Po	8550	97.6	10	16	25	37	49	58	72	89	127	28	181
Kwai Chung	8602	98.2	9	14	23	33	44	54	66	82	117	26	153
Tsuen Wan	8635	98.6	8	12	21	31	44	56	68	82	124	24	157
Tseung Kwan O	8614	98.3	9	14	22	31	40	48	55	66	107	24	149
Yuen Long	8586	98.0	9	14	25	40	56	68	82	101	135	30	205
Tuen Mun	8539	97.5	11	18	31	48	67	80	97	116	156	36	200
Tung Chung	8586	98.0	7	12	22	34	50	62	74	88	124	26	150
Tai Po	8523	97.3	8	13	22	34	45	54	68	87	130	26	169
Sha Tin	8464	96.6	8	14	22	32	44	53	67	86	130	25	172
North	8314	94.9	9	13	21	33	45	56	69	87	120	25	154
Tap Mun	8586	98.0	6	11	20	32	44	51	61	79	126	23	167
Causeway Bay	8455	96.5	17	25	36	50	64	74	88	104	145	39	194
Central	8483	96.8	11	17	27	39	51	61	78	93	134	30	158
Mong Kok	8622	98.4	10	16	27	40	52	61	76	90	136	30	162

Pollutant: Fine Suspended Particulates (PM_{2.5}) (Annual limit value = 35 µg/m³)

Station	No. of hourly data	Data capture rate (%)	Percentiles									Arithmetic mean	Highest 1-hour
			10	25	50	75	90	95	97.5	99	99.8		
Central/Western	8694	99.2	4	8	13	21	29	35	43	56	75	16	125
Southern	8455	96.5	3	7	11	17	23	28	33	41	54	13	66
Eastern	8192	93.5	5	8	13	19	27	32	38	49	70	15	85
Kwun Tong	8569	97.8	6	10	15	22	29	35	41	50	68	17	89
Sham Shui Po	8550	97.6	4	7	12	18	25	30	36	44	59	14	117
Kwai Chung	8603	98.2	6	9	14	20	28	34	41	51	68	16	98
Tsuen Wan	8635	98.6	5	8	13	20	29	36	45	54	75	16	125
Tseung Kwan O	8612	98.3	4	7	12	17	24	28	34	41	58	13	79
Yuen Long	8616	98.4	5	8	14	23	33	40	48	58	83	17	143
Tuen Mun	8539	97.5	5	9	17	27	37	44	53	62	92	19	124
Tung Chung	8583	98.0	4	8	14	22	32	41	48	57	74	17	103
Tai Po	8521	97.3	5	8	13	21	29	35	42	52	72	16	89
Sha Tin	8461	96.6	4	7	11	18	27	32	39	47	66	14	79
North	8310	94.9	5	8	12	19	27	33	39	52	64	15	94
Tap Mun	8587	98.0	3	6	12	18	26	31	36	44	72	14	90
Causeway Bay	8455	96.5	10	15	21	30	39	46	54	66	87	23	138
Central	8483	96.8	7	11	16	23	32	39	48	61	80	18	111
Mong Kok	8622	98.4	7	10	16	24	33	41	48	61	79	18	118

Notes:

1. All concentration units are in microgram per cubic metre (µg/m³).
2. Shaded arithmetic mean represents exceedance of the respective air quality objective.

Table C4 (Cont.): 2021 Diurnal Variations of Air Pollutants

Pollutant: Ozone

Station	Hr01	Hr02	Hr03	Hr04	Hr05	Hr06	Hr07	Hr08	Hr09	Hr10	Hr11	Hr12	Hr13	Hr14	Hr15	Hr16	Hr17	Hr18	Hr19	Hr20	Hr21	Hr22	Hr23	Hr24
Central/Western	59	61	61	62	61	59	53	44	42	46	54	63	72	77	78	77	74	69	63	59	59	59	58	57
Southern	58	60	60	60	58	54	49	46	47	51	59	67	77	83	85	84	80	73	68	63	60	60	59	59
Eastern	63	66	66	66	65	62	54	46	46	53	61	68	76	79	79	78	75	72	69	67	66	65	63	63
Kwun Tong	42	47	49	48	49	44	33	28	30	34	40	48	55	58	58	59	56	52	48	46	46	45	42	42
Sham Shui Po	49	54	55	56	52	48	40	35	36	40	47	55	62	65	65	64	58	51	45	44	45	47	47	47
Kwai Chung	39	44	45	44	45	40	33	26	26	31	40	45	51	55	55	53	47	42	36	35	36	37	37	37
Tsuen Wan	40	45	47	47	45	42	32	28	30	35	43	49	56	60	62	62	58	50	41	37	37	37	37	37
Tseung Kwan O	52	54	56	58	52	49	44	47	54	63	71	80	87	91	93	93	89	81	72	64	61	59	55	53
Yuen Long	38	37	39	39	37	33	27	25	32	43	54	65	73	78	82	80	73	63	52	44	40	38	37	36
Tuen Mun	41	42	44	44	42	38	32	27	31	39	47	58	69	75	78	79	72	59	46	43	44	43	40	40
Tung Chung	43	43	45	45	44	41	36	33	35	41	48	56	65	72	76	79	75	66	53	47	43	43	42	42
Tai Po	47	47	48	47	45	42	35	33	40	53	65	76	85	90	93	91	86	75	64	58	55	52	49	47
Sha Tin	41	44	45	43	43	40	34	33	40	49	61	70	79	85	86	84	79	68	56	49	45	44	43	42
North	45	46	46	45	43	37	30	29	37	49	62	73	84	91	93	90	85	75	62	55	52	48	47	46
Tap Mun	59	58	57	55	53	52	51	54	60	67	76	87	97	103	107	107	105	99	90	81	74	69	65	62
Causeway Bay	31	37	40	41	42	40	28	20	17	19	20	22	25	26	28	29	29	29	27	27	27	28	27	30
Central	36	40	43	42	42	39	31	23	18	21	24	29	34	37	36	33	33	29	25	26	29	32	32	32
Mong Kok	35	43	45	45	44	42	31	24	21	24	27	30	35	35	35	33	30	28	25	26	29	30	29	30

Pollutant: Respirable Suspended Particulates (PM₁₀)

Station	Hr01	Hr02	Hr03	Hr04	Hr05	Hr06	Hr07	Hr08	Hr09	Hr10	Hr11	Hr12	Hr13	Hr14	Hr15	Hr16	Hr17	Hr18	Hr19	Hr20	Hr21	Hr22	Hr23	Hr24
Central/Western	24	24	23	23	23	23	23	23	24	26	27	28	27	27	28	28	28	28	27	28	28	27	26	25
Southern	24	24	24	23	23	23	23	23	24	25	27	28	27	26	27	27	28	29	29	28	27	26	26	25
Eastern	28	28	27	27	27	27	27	27	27	27	28	29	29	29	30	31	32	32	31	31	31	31	30	29
Kwun Tong	29	28	27	27	27	27	26	28	30	32	34	35	36	34	35	35	35	35	35	35	34	32	31	30
Sham Shui Po	28	26	25	25	25	25	24	25	25	26	27	28	28	29	30	32	33	32	32	32	33	32	31	29
Kwai Chung	24	24	23	22	22	23	23	24	25	26	27	27	27	28	28	29	29	28	29	29	28	28	26	25
Tsuen Wan	22	22	21	20	20	20	21	21	22	23	24	25	26	27	28	28	29	28	28	28	28	26	24	23
Tseung Kwan O	24	23	23	22	22	22	22	22	22	23	23	24	24	24	25	26	26	27	27	26	26	26	25	24
Yuen Long	29	28	27	26	26	26	26	27	28	29	30	30	30	31	31	32	33	33	33	33	33	32	31	30
Tuen Mun	34	33	31	31	31	30	30	31	33	35	37	38	38	38	40	41	42	41	40	40	40	38	36	35
Tung Chung	23	23	22	22	22	22	22	23	25	27	28	28	30	31	31	32	30	28	26	26	26	25	25	24
Tai Po	25	24	23	23	23	23	24	24	25	26	26	27	27	27	26	26	26	27	27	27	28	27	26	25
Sha Tin	25	24	23	22	22	23	23	24	25	25	26	25	25	25	26	26	27	27	27	27	27	27	26	25
North	25	25	24	23	23	22	22	23	24	24	26	26	27	27	26	26	26	27	28	28	28	27	27	25
Tap Mun	21	21	22	22	22	22	22	21	22	24	25	25	25	25	25	26	26	26	25	24	23	22	22	22
Causeway Bay	34	30	27	27	26	26	29	35	37	42	45	45	44	45	49	48	48	46	47	47	47	43	39	37
Central	28	27	26	25	25	24	25	28	30	31	31	32	32	33	33	33	32	33	33	34	34	33	30	29
Mong Kok	28	26	25	25	24	24	25	26	28	30	31	32	32	32	34	34	33	34	34	36	36	33	30	29

Pollutant: Fine Suspended Particulates (PM_{2.5})

Station	Hr01	Hr02	Hr03	Hr04	Hr05	Hr06	Hr07	Hr08	Hr09	Hr10	Hr11	Hr12	Hr13	Hr14	Hr15	Hr16	Hr17	Hr18	Hr19	Hr20	Hr21	Hr22	Hr23	Hr24
Central/Western	15	14	14	14	14	14	14	14	15	16	16	16	16	17	17	17	16	16	16	17	17	17	16	15
Southern	12	12	12	11	11	11	11	12	12	13	14	14	13	13	13	13	13	13	13	13	13	13	13	12
Eastern	14	14	14	14	14	14	14	14	15	15	15	14	15	14	14	15	15	16	16	16	16	16	16	15
Kwun Tong	16	15	15	15	15	15	15	16	17	17	18	18	18	18	18	18	18	18	18	19	19	18	17	16
Sham Shui Po	13	13	13	13	13	13	12	12	13	13	13	13	13	14	14	14	15	15	15	15	16	16	15	14
Kwai Chung	15	15	14	14	14	14	14	14	15	15	16	16	17	17	17	17	17	17	18	18	18	18	17	16
Tsuen Wan	15	14	14	13	13	13	14	14	15	15	15	16	16	17	17	17	17	18	18	19	19	18	16	15
Tseung Kwan O	13	13	13	12	12	12	13	13	13	12	12	12	13	13	13	13	13	14	14	14	14	14	14	13
Yuen Long	17	16	16	15	16	16	16	16	16	16	16	16	16	17	17	17	18	19	19	19	19	18	18	17
Tuen Mun	19	18	18	17	17	17	18	18	19	19	19	19	19	20	20	20	21	21	21	22	22	22	21	20
Tung Chung	16	15	15	14	15	15	15	16	16	17	17	17	18	19	19	19	19	19	18	17	17	17	16	16
Tai Po	15	15	15	14	15	14	15	15	16	16	16	16	16	16	16	16	16	16	16	17	17	17	16	16
Sha Tin	14	14	13	12	13	13	13	14	14	15	15	14	14	14	14	13	13	13	13	14	14	15	14	14
North	15	15	14	14	14	14	14	14	14	15	15	15	15	14	14	15	15	16	16	16	16	16	16	15
Tap Mun	12	12	13	13	13	13	13	13	14	15	15	15	15	15	14	14	14	14	14	14	13	13	13	13
Causeway Bay	20	18	16	16	16	15	17	21	22	24	25	26	27	28	28	28	28	27	28	30	30	27	25	22
Central	17	16	16	15	15	15	15	17	18	19	19	19	20	20	21	20	19	20	20	20	21	21	18	18
Mong Kok	17	16	15	15	15	15	15	16	17	18	19	19	20	20	21	21	20	20	21	23	24	21	19	18

Note:

1. All concentration units are in microgram per cubic metre ($\mu\text{g}/\text{m}^3$).