UK lineages summary report

This report gives summaries of lineages sampled in England for week 2020-05-29. There are time lags due to batching, curation and analysis, the most recently sampled sequence is 2020-05-23. The analysis (eg time since last sample) is therefore undertaken from this date. 13522 sequences from England have been included in this analysis. 4680 lineages have been recorded, 3565 of which only contain one sequence.

A few notes: the size of a lineage may be due to a low amount of transmission of this lineage, but it is likely also that it just hasn't been sampled as frequently, especially for newer lineages. It's also important to realise that these lineages are *estimates* of how we think the virus is spreading in the UK after being introduced from abroad, as the low evolutionary rate of the virus makes it difficult to separate lineages with certainty.

The minimum number of introductions is 4822 and the maximum is 7104

Sequences which were replicates or too error-prone were removed from this analysis.

4356 are lineages which were sampled less than five times in England, and so have been left out of visualisation in the interests of clarity

Furthermore, those sequences which haven't been sampled in the last month are not shown.

Of the 324 that remain: 125 are pending extinction, ie last seen three weeks ago. 136 have not been seen for more than one month, and so are viewed as extinct, but will continue to be monitored. 36 lineages have gone quiet, ie haven't been seen this week. 9 lineages have reactivated. 18 lineages have been continuously circulating.

The following table contains information about lineages and the number of sequences the dataset, in reverse size order.

Each entry is the count of sequences from each lineage in each country, with the percentage of the total sequences from that lineage that this count represents.

The global lineages are correct as of the data release on 2020-05-19

It is written to "summary_files" as "lineage_summary.tsv" for further use, and the full list of lineages is available in the same directory as "all_lineages.csv"

Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK5	Mar-03, May-22	1000	B.1, B.1.1.1, B.1.1	1
UK701	Feb-03, May-10	244	B.1.p11, B.1	13
UK2464	Mar-09, May-11	240	B.1.p11	12
UK9	Mar-09, May-05	199	B.1.13	18
UK4	Feb-28, May-01	138	B	22
UK19	Mar-09, May-10	137	B.1	13
UK6	Mar-06, May-13	112	B.1	10
UK494	Mar-20, May-05	105	B.1.p11	18

Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK63	Mar-18, May-05	103	B.1.1	18
UK36	Mar-19, May-12	81	B.1	11
UK371	Mar-12, May-19	79	B.1.1	4
UK77	Mar-11, May-20	74	B.2, B.2.4	3
UK177	Mar-27, May-02	73	B.1.1	21
UK26	Mar-18, May-18	73	B.1.1.3	5
UK31	Mar-21, May-08	71	B.1	15
UK107	Mar-15, Apr-21	68	B.2, B.2.5, B.2.1	32
UK66	Mar-18, May-01	68	B.1.1.8	22
UK89	Mar-11, May-17	64	B.1.1.9	6
UK200	Apr-08, May-14	62	B.1.p11	9
UK194	Mar-19, Apr-24	61	B.1.1	29
UK343	Mar-28, Apr-24	60	B.1	29
UK37	Mar-17, May-04	60	B.1, B.1.30	19
UK233	Apr-08, May-13	59	B.1.1	10
UK274	Mar-06, May-11	59	B, B.3	12
UK115	Mar-15, Apr-20	58	B.2.1	33
UK476	Mar-31, May-06	56	B.1.1	17
UK112	Mar-15, May-04	55	B.1.1.p11, B.1.1	19
UK632	Mar-23, May-17	54	B.1.1	6
UK204	Apr-07, May-12	54	B.1.1	11
UK5322	Mar-24, May-13	53	B.1.1	10
UK199	Apr-08, May-17	52	B.1.5.5	6
UK62	Mar-12, Apr-23	52	B.3	30

Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK51	Mar-25, May-19	50	B.1.36	4
UK33	Mar-21, May-15	50	B.1.1	8
UK3	Feb-24, May-10	48	B.1	13
UK94	Mar-12, Apr-19	47	B.2, B.2.1	34
UK11	Mar-06, Apr-11	46	B.1	42
UK13	Mar-13, May-13	46	B.1.1	10
UK28	Mar-13, May-01	45	B.1.1.10	22
UK238	Mar-19, May-03	44	B.1.1	20
UK513	Mar-12, Apr-29	43	B.1.p11	24
UK8	Mar-03, May-01	38	B	22
UK23	Mar-12, May-02	37	B, B.9	21
UK214	Mar-14, May-13	37	B.1.1	10
UK2240	Mar-01, Apr-19	37	B.1	34
UK128	Apr-03, May-23	37	B.1.1	0
UK283	Mar-25, May-04	36	B.1.1	19
UK12	Mar-12, May-07	36	B.1.p11	16
UK346	Mar-16, Apr-19	36	B.1.72, B.1	34
UK57	Mar-20, May-04	35	B.1.1	19
UK18	Mar-11, May-03	34	B.1.1.7	20
UK147	Apr-04, May-22	34	B.1.1	1
UK131	Mar-11, Apr-14	34	B.15	39
UK138	Mar-23, Apr-26	33	B.2.1	27
UK167	Mar-29, May-21	31	B.1.66, B.1	2
UK173	Mar-16, May-06	31	B	17

Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK5672	Mar-20, May-13	30	B.2	10
UK300	Mar-28, May-04	30	B.1.1	19
UK79	Mar-24, May-05	30	B.1	18
UK1845	Mar-01, Apr-07	30	B	46
UK241	Mar-22, Apr-16	29	B.1.5.3	37
UK183	Mar-29, Apr-28	28	B.1.1	25
UK116	Feb-25, Apr-01	28	B.2.1	52
UK95	Mar-10, May-03	28	B.2.1	20
UK565	Mar-31, May-13	26	B.1.1	10
UK351	Apr-13, May-17	26	B.1.1.10, B.1.1	6
UK53	Mar-26, May-22	26	B.1.1.4	1
UK144	Mar-05, Apr-07	26	B.2.1	46
UK158	Mar-23, Apr-19	25	B.1.1.2, B.1.1	34
UK92	Mar-23, Apr-28	25	B.1.1	25
UK41	Mar-01, Apr-15	25	B.1	38
UK46	Mar-02, May-08	25	B.2.1	15
UK5675	Mar-03, Apr-10	25	B.2	43
UK64	Mar-12, Apr-17	24	B.1	36
UK81	Mar-19, Apr-27	24	B.1.1	26
UK56	Mar-20, May-06	24	B.1.1	17
UK119	Mar-11, Apr-16	23	B.2.5	37
UK109	Mar-21, May-01	23	B.1.5	22
UK235	Mar-21, May-04	23	B.1.1	19
UK103	Mar-20, May-20	23	B.1.1	3

Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK326	Mar-22, May-22	23	B.1.1.10	1
UK101	Mar-21, Apr-27	22	B.1.5	26
UK61	Mar-12, Apr-21	22	B.3	32
UK2200	Feb-28, May-04	22	B.1.5.6, B.1.5	19
UK5649	Mar-15, May-01	22	B.2.6	22
UK30	Mar-15, May-15	22	B.1.1	8
UK114	Mar-16, Apr-21	22	B.1.1	32
UK279	Mar-26, Apr-25	22	B.1.1	28
UK74	Mar-12, Apr-16	21	B.1	37
UK5549	Mar-04, May-10	21	B.2.2	13
UK384	Mar-14, Apr-02	21	B.2.1	51
UK174	Mar-19, May-22	21	B.1.5	1
UK135	Apr-01, May-14	21	B.1.p11	9
UK113	Mar-22, May-19	21	B.1.1	4
UK293	Mar-24, Apr-28	20	B.1	25
UK75	Mar-17, Apr-26	20	B.1, B.1.34	27
UK24	Mar-18, Apr-30	20	B.1.1.10, B.1.1	23
UK291	Mar-13, Apr-05	20	B.2.1	48
UK514	Mar-30, Apr-13	19	B.1.1	40
UK419	Mar-30, May-02	19	B.1.1	21
UK403	Mar-23, May-04	19	B.1.1	19
UK307	Mar-28, May-04	19	B.1.1	19
UK5309	Mar-20, Apr-29	18	B.1.1.10, B.1.1	24
UK117	Feb-28, Apr-04	18	B.2.1	49

Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK248	Apr-08, May-11	18	B.1.1	12
UK193	Apr-07, May-01	18	B.1.1	22
UK143	Mar-14, Apr-16	18	B.2.1	37
UK72	Mar-13, May-04	18	B.10	19
UK444	Mar-24, Apr-17	16	B.1.1	36
UK86	Mar-05, Apr-10	16	B.1	43
UK888	Apr-05, May-01	16	B.1.1	22
UK195	Mar-29, May-03	16	B.1.1	20
UK67	Mar-25, May-21	16	B.1.1	2
UK134	Mar-04, Apr-07	15	B.1	46
UK374	Apr-01, Apr-20	15	B.1.1	33
UK2045	Mar-17, Apr-29	15	B, B.1	24
UK5084	Mar-23, Apr-16	15	B.1.p11, B.1, B.2.1	37
UK146	Mar-24, May-07	14	B.1.1	16
UK5409	Mar-22, Apr-19	14	B.1.1	34
UK236	Mar-27, Apr-22	14	B.1.1	31
UK254	Mar-20, Apr-14	14	B.1.1	39
UK249	Apr-01, Apr-25	14	B.1.1	28
UK5180	Apr-04, Apr-24	14	B.1.1.7	29
UK722	Mar-31, May-05	14	B.1.1	18
UK179	Mar-26, Apr-18	14	B.1.1.p11	35
UK276	Mar-18, May-04	14	B.1.1	19
UK376	Apr-08, May-08	14	B.1.1	15
UK726	Mar-30, May-04	14	B.1	19

Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK153	Mar-13, Apr-14	14	B.2	39
UK45	Mar-02, Apr-15	14	B.1.1	38
UK253	Apr-03, May-03	14	B.1.1	20
UK378	Feb-15, Mar-05	13	B.1.1	79
UK34	Feb-15, Apr-02	13	B.4	51
UK278	Apr-10, May-07	13	B.1.1	16
UK5260	Mar-29, May-02	13	B.1.1	21
UK637	Mar-28, May-01	13	B.1.1	22
UK71	Mar-08, Apr-30	13	B	23
UK5498	Apr-01, Apr-20	13	B.2	33
UK354	Mar-18, Apr-07	13	B.1.1	46
UK308	Apr-09, May-18	13	B.1.1	5
UK397	Mar-28, Apr-14	13	B.1.1.13	39
UK501	Apr-03, Apr-22	13	B, B.1	31
UK604	Mar-09, Mar-12	12	B.1.1	72
UK126	Mar-29, May-03	12	B.1.1	20
UK5715	Feb-13, Apr-05	12	B.2	48
UK168	Mar-16, Apr-16	12	B.2.1	37
UK347	Mar-13, Apr-02	12	B.1	51
UK694	Mar-06, Mar-14	12	B	70
UK203	Apr-01, May-17	12	B.1.1	6
UK329	Apr-11, May-09	12	B.1.1	14
UK511	Apr-05, May-06	12	B.1.1	17
UK186	Apr-08, May-15	12	B	8

Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK269	Apr-03, May-06	12	B.1.1	17
UK479	Mar-30, May-12	12	B.1.1	11
UK148	Apr-02, May-13	12	B.1.1	10
UK240	Mar-16, Apr-11	11	B.2	42
UK141	Mar-22, Apr-24	11	B.1.1	29
UK1018	Apr-20, Apr-21	11	B.1.1	32
UK415	Apr-19, May-06	11	B.1	17
UK180	Mar-30, May-01	11	B.1.1	22
UK428	Mar-20, Apr-06	11	B.2, B.2.1	47
UK163	Mar-27, Apr-16	11	B.1.1	37
UK47	Mar-17, Apr-13	11	B.1.1	40
UK368	Mar-18, May-01	11	B.1	22
UK532	Apr-04, May-09	11	B.1.1	14
UK441	Apr-04, May-01	11	B.1.1	22
UK251	Mar-17, May-02	11	B.1.1	21
UK266	Apr-06, Apr-30	11	B.1	23
UK54	Mar-18, Apr-30	11	B.1.1.10	23
UK5339	Apr-15, Apr-29	11	B.1.1	24
UK111	Mar-25, May-01	11	B.1.1	22
UK759	Mar-28, Apr-04	11	B.1.1	49
UK255	Mar-26, Apr-20	10	B.1.1	33
UK22	Mar-02, Apr-21	10	B	32
UK132	Mar-27, Apr-30	10	B.1	23
UK42	Mar-28, Apr-28	10	B.1, B.1.35	25

Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK687	Feb-28, Mar-08	10	B.2, B.2.1	76
UK125	Mar-27, May-10	10	B.1.1	13
UK219	Mar-26, May-02	10	B.1.1	21
UK123	Mar-23, May-01	10	B.1	22
UK178	Mar-14, Apr-13	10	B.1.1	40
UK155	Feb-27, Mar-24	10	B.1	60
UK38	Mar-04, Apr-20	10	B.2.1	33
UK171	Mar-13, Apr-13	10	B.2, B.2.1	40
UK220	Mar-27, Apr-22	10	B.1.1	31
UK201	Mar-29, May-03	10	B.1	20
UK909	Apr-13, Apr-20	10	B.1	33
UK78	Mar-29, May-14	10	B.1.5	9
UK242	Mar-26, Apr-20	10	B.1.5	33
UK564	Apr-03, May-02	9	B.1.1	21
UK802	Mar-21, Apr-22	9	B.1	31
UK541	Apr-01, May-02	9	B.1.1	21
UK569	Mar-23, Apr-10	9	B.1.1	43
UK5423	Apr-23, May-04	9	B.1.1	19
UK5338	Apr-29, May-02	9	B.1.1	21
UK2258	Mar-25, May-07	9	B.1, B.1.5	16
UK142	Mar-15, Apr-17	9	B.2.1	36
UK432	Mar-24, Apr-09	9	B.3	44
UK237	Mar-31, May-16	9	B.1.1	7
UK312	Mar-01, Mar-23	9	B.1.1	61

Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK190	Mar-01, Mar-30	9	B.1	54
UK5685	Mar-17, Apr-13	9	B.2	40
UK5663	Apr-11, Apr-30	9	B.2	23
UK90	Mar-29, May-06	9	B.1.1	17
UK91	Mar-28, May-06	9	B.1.1	17
UK1737	Mar-11, Apr-14	9	B.1	39
UK5673	Mar-19, May-01	9	B.2	22
UK297	Apr-09, May-15	9	B.1.p11	8
UK645	Mar-29, Apr-08	9	B.2.1	45
UK1013	Apr-15, Apr-16	8	B.1.1	37
UK311	Mar-20, Apr-11	8	B.1.1	42
UK70	Mar-06, Apr-16	8	B.2	37
UK5707	Mar-18, Apr-14	8	B.2	39
UK252	Apr-04, Apr-29	8	B.1.1	24
UK318	Mar-20, Apr-10	8	B	43
UK129	Mar-23, Apr-29	8	B.1.1	24
UK480	Mar-27, May-19	8	B.1.1.10, B.1.1	4
UK287	Mar-28, Apr-18	8	B.1	35
UK223	Mar-10, Apr-06	8	B.2.1	47
UK306	Mar-26, Apr-10	8	B.1.1	43
UK341	Mar-23, Apr-12	8	B.1	41
UK324	Mar-31, Apr-21	8	B.1.1	32
UK335	Mar-25, Apr-15	8	B.2.1	38
UK1849	Apr-11, Apr-29	8	B.1.1	24

Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK733	Mar-10, Apr-22	8	B.2.1	31
UK739	Mar-01, Mar-08	8	B.4	76
UK5563	Apr-11, Apr-22	8	B.2.2	31
UK83	Feb-29, Apr-08	8	B.1.1	45
UK5505	Mar-23, Apr-21	8	B.2, B.1	32
UK352	Apr-11, May-03	8	B.1.1	20
UK5557	Mar-11, May-07	8	B.2.2	16
UK788	Feb-28, Mar-05	8	B.4	79
UK756	Feb-27, Mar-05	8	B.1.1	79
UK5308	Apr-29, May-01	8	B.1.1	22
UK574	Mar-30, Apr-29	8	B.1.1	24
UK3875	Apr-08, May-12	8	B.1.1	11
UK182	Mar-29, May-02	8	B.1.1	21
UK5178	Mar-21, Apr-17	8	B.1.1.7	36
UK244	Mar-12, Apr-30	8	B.1.1	23
UK634	Mar-30, Apr-18	7	B.1.1	35
UK487	Mar-24, Apr-08	7	B.1.1	45
UK213	Mar-18, Apr-17	7	B.1.1	36
UK510	Apr-02, Apr-16	7	B.1.1	37
UK5307	Mar-10, May-12	7	B.1.1	11
UK913	Apr-03, Apr-29	7	B.1	24
UK188	Mar-07, Apr-15	7	B.1	38
UK232	Mar-04, Mar-30	7	B.1.1	54
UK29	Mar-09, Apr-30	7	B.1.1	23

Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK49	Mar-19, May-11	7	B.2.1	12
UK309	Apr-01, May-17	7	B.1.1	6
UK692	Mar-04, Apr-03	7	B.2, B, B.2.1	50
UK540	Apr-09, Apr-22	7	B.1.1.p15, B.1.1	31
UK5174	Mar-26, Apr-07	7	B.1.1.7	46
UK1006	Apr-04, Apr-29	7	B.1.1	24
UK206	Mar-22, Apr-19	7	B.2.1	34
UK65	Mar-07, Apr-17	7	B.1.1	36
UK69	Mar-04, Apr-14	7	B.2.1	39
UK5261	Mar-29, May-01	7	B.1.1	22
UK317	Mar-26, Apr-16	7	B.3	37
UK390	Mar-27, May-01	7	B.1.5	22
UK14	Mar-04, Apr-01	7	B	52
UK629	Mar-23, Apr-13	7	B.1	40
UK5112	Mar-20, May-08	7	B.1, B.2.1	15
UK5177	Mar-27, Apr-11	7	B.1.1.7	42
UK268	Mar-23, Apr-16	7	B.1.1	37
UK217	Apr-04, May-18	7	B.1.1	5
UK331	Mar-31, May-01	7	B.1.1	22
UK32	Mar-11, May-01	7	B.1.1	22
UK2557	Apr-01, May-13	7	B.1.p11	10
UK806	Apr-04, Apr-27	7	B.1.1.10	26
UK682	Mar-21, Mar-30	6	B.2, B.2.1	54
UK647	Mar-21, Mar-27	6	B.2, B.2.1	57

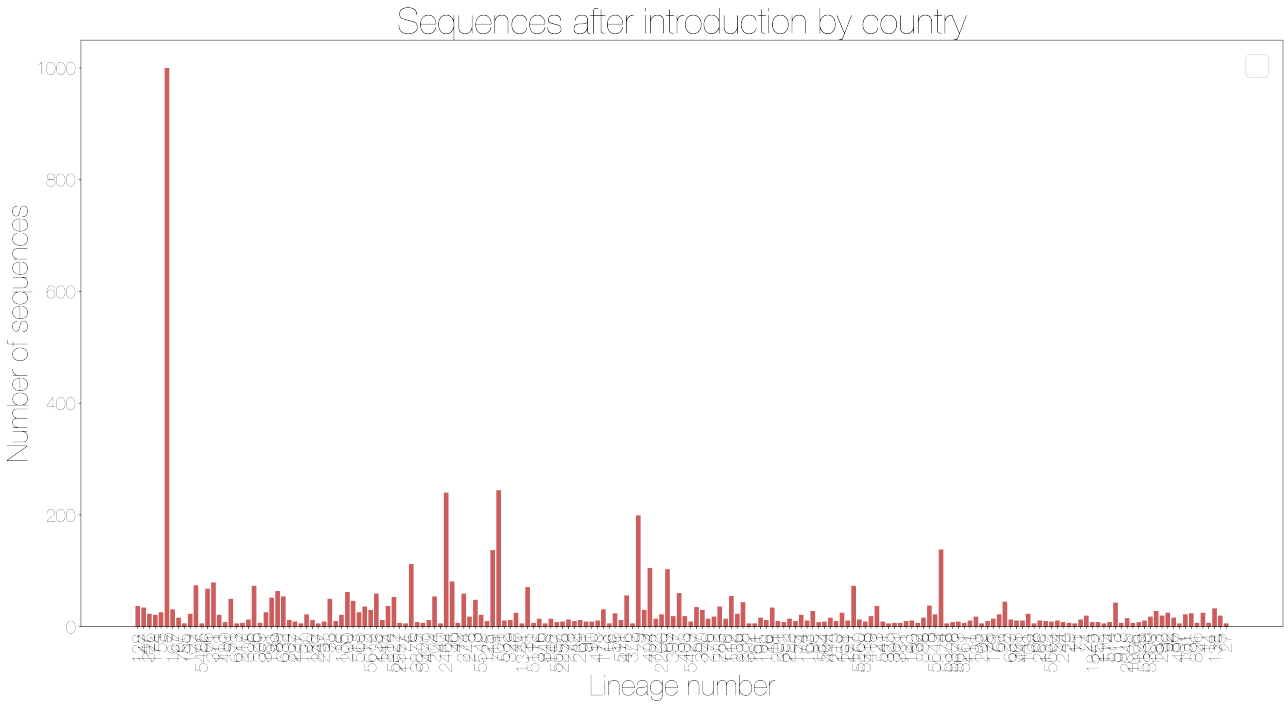
Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK270	Mar-13, Apr-09	6	B.3	44
UK5666	Mar-13, Apr-05	6	B.2	48
UK755	Mar-06, May-21	6	B.1.1	2
UK544	Mar-24, Apr-06	6	B.2.1	47
UK654	Feb-27, Mar-08	6	B.2.5	76
UK716	Mar-31, Apr-08	6	B.1.1	45
UK440	Mar-28, Apr-13	6	B.1.1.10	40
UK517	Mar-29, Apr-12	6	B.1.1	41
UK799	Mar-01, Mar-07	6	B.1	77
UK5581	Mar-11, Apr-08	6	B.2.2	45
UK1023	Apr-07, Apr-16	6	B.1.1	37
UK673	Mar-28, May-18	6	B.1.1	5
UK68	Mar-20, Apr-30	6	B.1.1	23
UK263	Mar-20, Apr-13	6	B.1.p11	40
UK849	Apr-16, May-07	6	B.1.1	16
UK325	Apr-10, May-01	6	B.1.1	22
UK110	Mar-24, Apr-29	6	B.1	24
UK542	Apr-01, Apr-14	6	B.1	39
UK16	Apr-16, May-06	6	B.1.1	17
UK435	Apr-03, Apr-23	6	B.1.5	30
UK302	Mar-25, May-03	6	B.1.1	20
UK161	Mar-10, May-03	6	B.1.1	20
UK372	Apr-16, May-05	6	B.1.1	18
UK497	Mar-27, Apr-27	6	A.2	26

Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK1344	Apr-20, May-08	6	B	15
UK58	Mar-17, Apr-09	6	B.1	44
UK15	Mar-06, Apr-30	6	B.1.1	23
UK5378	Mar-23, May-01	6	B.1.1	22
UK157	Mar-29, May-16	6	B.1	7
UK746	Mar-31, Apr-14	6	B.1.5	39
UK247	Apr-04, May-15	6	B.1.1	8
UK202	Mar-10, Apr-30	6	B.1.1	23
UK5703	Mar-06, Apr-07	6	B.2	46
UK489	Mar-23, Apr-07	6	B.2.1	46
UK481	Mar-30, Apr-14	6	B.1.1	39
UK659	Mar-21, Mar-30	6	B	54
UK447	Apr-05, Apr-21	6	B.1.1	32
UK284	Apr-02, Apr-25	6	B.1.1	28
UK512	Mar-30, Apr-13	6	B.1.1	40
UK570	Apr-05, Apr-17	6	B.1.1	36
UK102	Mar-10, Apr-16	6	B.1	37
UK735	Mar-13, Apr-16	6	B.3	37
UK5486	Mar-11, May-20	6	B.2, B.1.1	3
UK280	Mar-30, Apr-15	6	B.1.1	38
UK680	Apr-05, Apr-14	6	B.1	39
UK330	Mar-23, Apr-13	6	B.1.1	40
UK40	Mar-31, Apr-20	6	B.16	33
UK1174	Apr-02, May-12	6	B.1.1	11

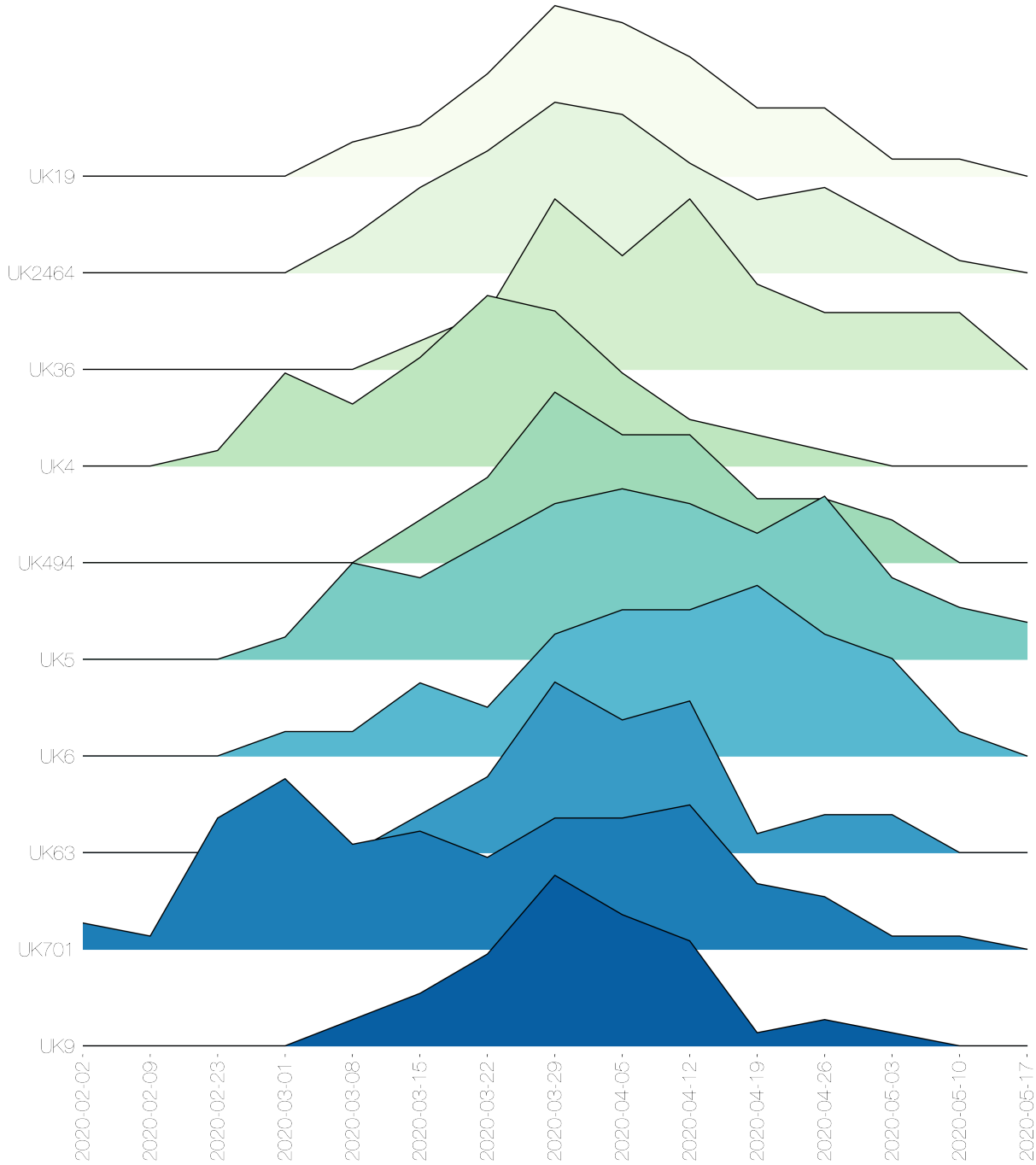
Lineage name	Date range	Number of sequences	Global lineage	Time since last sample (days)
UK313	Mar-23, Apr-14	6	B.1.1	39
UK989	Mar-21, Apr-19	6	B.1	34
UK27	Mar-08, Apr-26	6	B.1.1	27
UK857	Mar-24, Mar-29	6	B.2.1	55

These data is represented in the stacked bar chart below. Note that the number of sequences is likely to be due more to differing sampling efforts in different regions, rather than genuine differences in numbers of cases.

The raw data for this bar chart are in the table above.



The relative growth and decline of the ten most sampled lineages in terms of number of counties they are present in is shown below. The raw data for the plot is shown below it, with each column representing a lineage, and the number of admin2 regions it is present in in each week.

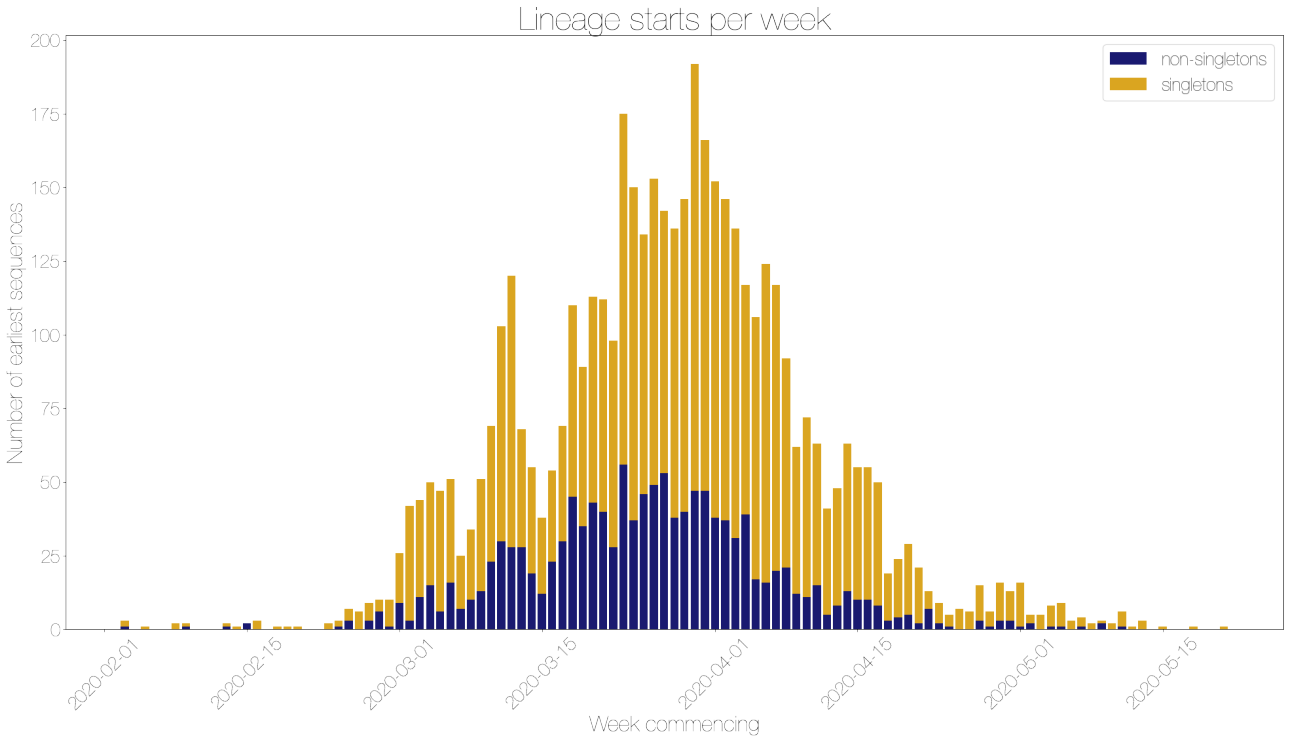


Week commencing	UK5	UK701	UK2464	UK9	UK4	UK19	UK6	UK494	UK63	UK36
2020-02-02	0	2	0	0	0	0	0	0	0	0
2020-02-09	0	1	0	0	0	0	0	0	0	0
2020-02-23	0	10	0	0	1	0	0	0	0	0
2020-03-01	3	13	0	0	6	0	1	0	0	0
2020-03-08	13	8	3	2	4	2	1	0	0	0
2020-03-15	11	9	7	4	7	3	3	2	2	1
2020-03-22	16	7	10	7	11	6	2	4	4	2
2020-03-29	21	10	14	13	10	10	5	8	9	6
2020-04-05	23	10	13	10	6	9	6	6	7	4
2020-04-12	21	11	9	8	3	7	6	6	8	6
2020-04-19	17	5	6	1	2	4	7	3	1	3

Week commencing	UK5	UK701	UK2464	UK9	UK4	UK19	UK6	UK494	UK63	UK36
2020-04-26	22	4	7	2	1	4	5	3	2	2
2020-05-03	11	1	4	1	0	1	4	2	2	2
2020-05-10	7	1	1	0	0	1	1	0	0	2
2020-05-17	5	0	0	0	0	0	0	0	0	0

The date of first sequence in the cluster is shown below for every cluster with date information.

NB the lineage may have started anywhere in the UK, but has been recorded at least once in England

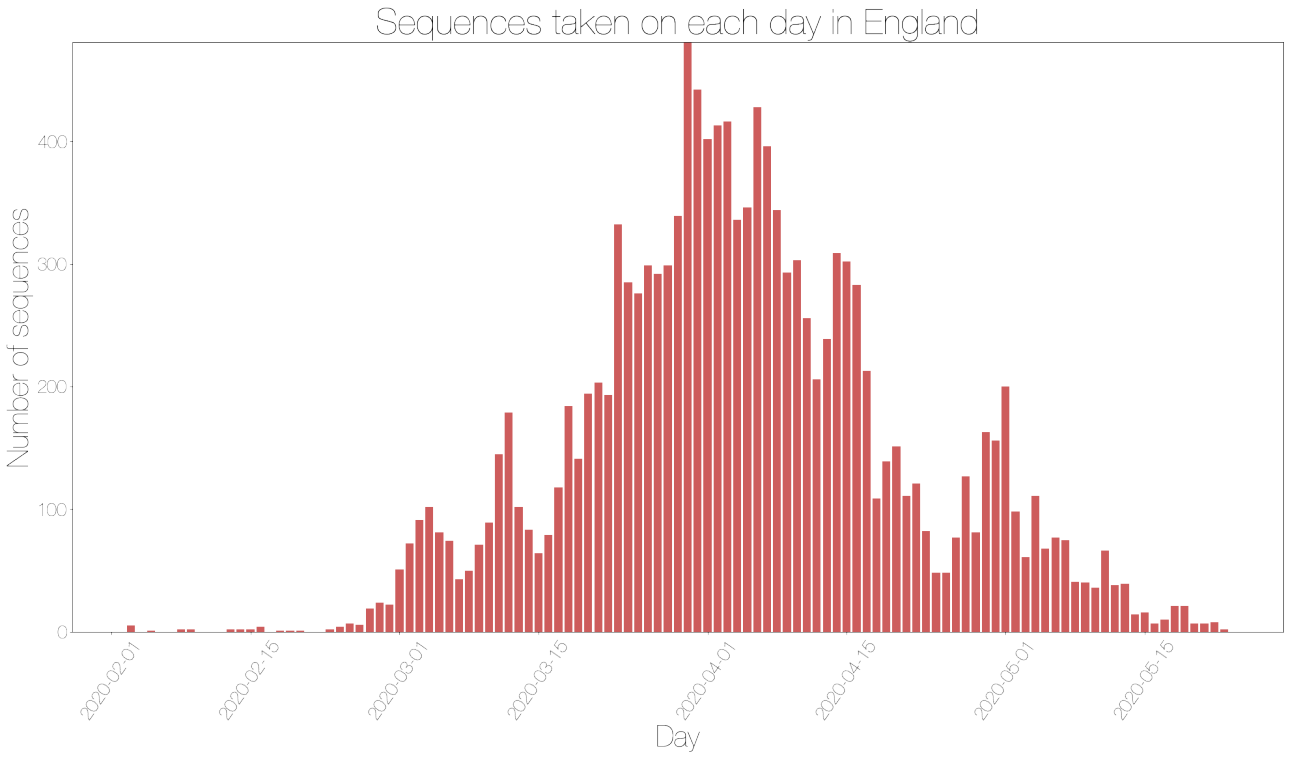


Day	Number of singleton starts	Number of non-singleton starts	Total
2020-02-03	2	1	3
2020-02-05	1	0	1
2020-02-08	2	0	2
2020-02-09	1	1	2
2020-02-13	1	1	2
2020-02-14	1	0	1
2020-02-15	0	2	2
2020-02-16	3	0	3
2020-02-18	1	0	1
2020-02-19	1	0	1
2020-02-20	1	0	1
2020-02-23	2	0	2
2020-02-24	2	1	3
2020-02-25	4	3	7
2020-02-26	6	0	6
2020-02-27	6	3	9
2020-02-28	4	6	10

Day	Number of singleton starts	Number of non-singleton starts	Total
2020-02-29	9	1	10
2020-03-01	17	9	26
2020-03-02	39	3	42
2020-03-03	33	11	44
2020-03-04	35	15	50
2020-03-05	41	6	47
2020-03-06	35	16	51
2020-03-07	18	7	25
2020-03-08	24	10	34
2020-03-09	38	13	51
2020-03-10	46	23	69
2020-03-11	73	30	103
2020-03-12	92	28	120
2020-03-13	40	28	68
2020-03-14	36	19	55
2020-03-15	26	12	38
2020-03-16	31	23	54
2020-03-17	39	30	69
2020-03-18	65	45	110
2020-03-19	54	35	89
2020-03-20	70	43	113
2020-03-21	72	40	112
2020-03-22	70	28	98
2020-03-23	119	56	175
2020-03-24	113	37	150
2020-03-25	88	46	134
2020-03-26	104	49	153
2020-03-27	89	53	142
2020-03-28	98	38	136
2020-03-29	106	40	146
2020-03-30	145	47	192
2020-03-31	119	47	166
2020-04-01	114	38	152
2020-04-02	109	37	146
2020-04-03	105	31	136
2020-04-04	78	39	117
2020-04-05	89	17	106
2020-04-06	108	16	124
2020-04-07	97	20	117
2020-04-08	71	21	92
2020-04-09	50	12	62
2020-04-10	61	11	72
2020-04-11	48	15	63
2020-04-12	36	5	41
2020-04-13	40	8	48
2020-04-14	50	13	63
2020-04-15	45	10	55
2020-04-16	45	10	55
2020-04-17	42	8	50

Day	Number of singleton starts	Number of non-singleton starts	Total
2020-04-18	16	3	19
2020-04-19	20	4	24
2020-04-20	24	5	29
2020-04-21	19	2	21
2020-04-22	6	7	13
2020-04-23	7	2	9
2020-04-24	4	1	5
2020-04-25	7	0	7
2020-04-26	6	0	6
2020-04-27	12	3	15
2020-04-28	5	1	6
2020-04-29	13	3	16
2020-04-30	10	3	13
2020-05-01	15	1	16
2020-05-02	3	2	5
2020-05-03	5	0	5
2020-05-04	7	1	8
2020-05-05	8	1	9
2020-05-06	3	0	3
2020-05-07	3	1	4
2020-05-08	2	0	2
2020-05-09	1	2	3
2020-05-10	2	0	2
2020-05-11	5	1	6
2020-05-12	1	0	1
2020-05-13	3	0	3
2020-05-15	1	0	1
2020-05-18	1	0	1
2020-05-21	1	0	1

For comparison, here is a plot of the day that every sequence was taken, coloured by country. Note that sequences without dates were not included.

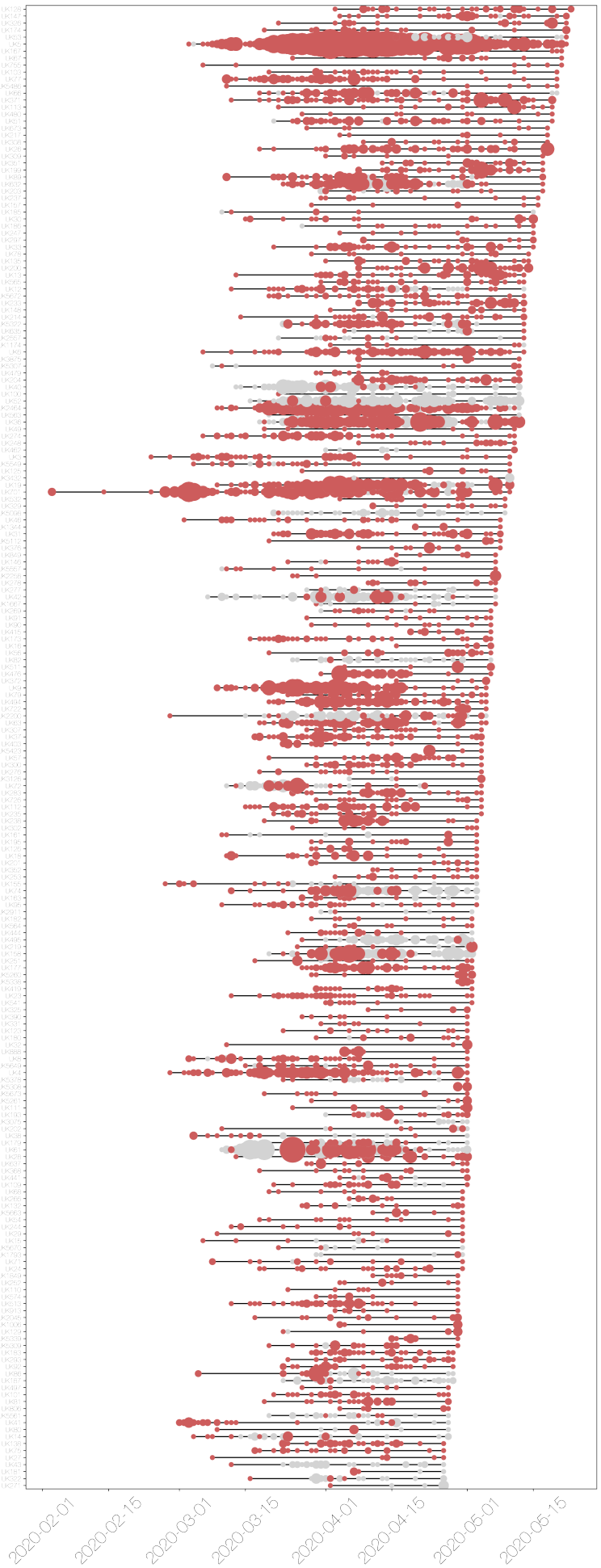


Day	England
2020-02-03	5
2020-02-05	1
2020-02-08	2
2020-02-09	2
2020-02-13	2
2020-02-14	2
2020-02-15	2
2020-02-16	4
2020-02-18	1
2020-02-19	1
2020-02-20	1
2020-02-23	2
2020-02-24	4
2020-02-25	7
2020-02-26	6
2020-02-27	19
2020-02-28	24
2020-02-29	22
2020-03-01	51
2020-03-02	72
2020-03-03	91
2020-03-04	102
2020-03-05	81
2020-03-06	74
2020-03-07	43
2020-03-08	50
2020-03-09	71

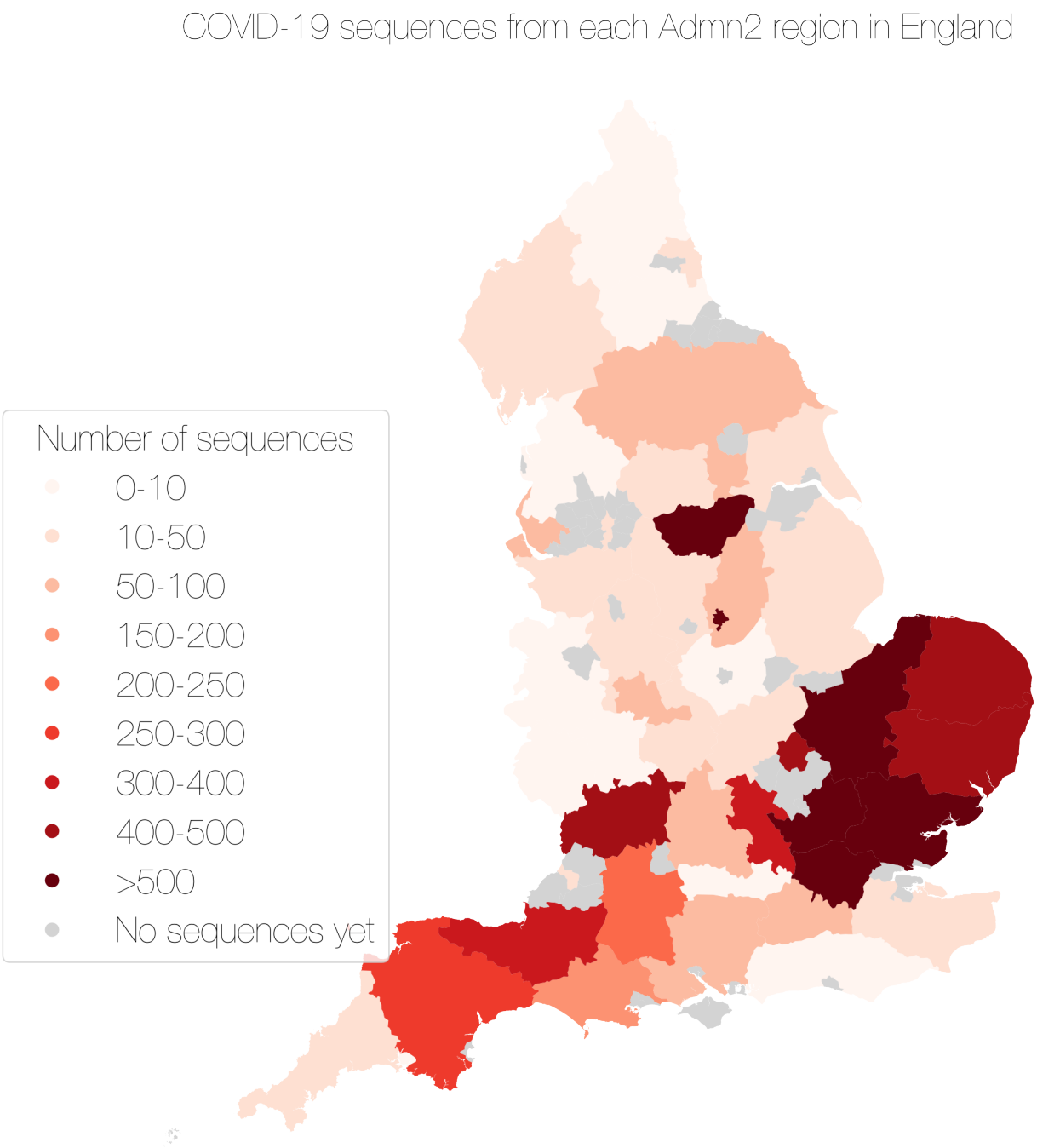
Day	England
2020-03-10	89
2020-03-11	145
2020-03-12	179
2020-03-13	102
2020-03-14	83
2020-03-15	64
2020-03-16	79
2020-03-17	118
2020-03-18	184
2020-03-19	141
2020-03-20	194
2020-03-21	203
2020-03-22	193
2020-03-23	332
2020-03-24	285
2020-03-25	276
2020-03-26	299
2020-03-27	292
2020-03-28	299
2020-03-29	339
2020-03-30	481
2020-03-31	442
2020-04-01	402
2020-04-02	413
2020-04-03	416
2020-04-04	336
2020-04-05	346
2020-04-06	428
2020-04-07	396
2020-04-08	344
2020-04-09	293
2020-04-10	303
2020-04-11	256
2020-04-12	206
2020-04-13	239
2020-04-14	309
2020-04-15	302
2020-04-16	283
2020-04-17	213
2020-04-18	109
2020-04-19	139
2020-04-20	151
2020-04-21	111
2020-04-22	121
2020-04-23	82
2020-04-24	48
2020-04-25	48
2020-04-26	77
2020-04-27	127

Day	England
2020-04-28	81
2020-04-29	163
2020-04-30	156
2020-05-01	200
2020-05-02	98
2020-05-03	61
2020-05-04	111
2020-05-05	68
2020-05-06	77
2020-05-07	75
2020-05-08	41
2020-05-09	40
2020-05-10	36
2020-05-11	66
2020-05-12	38
2020-05-13	39
2020-05-14	14
2020-05-15	16
2020-05-16	7
2020-05-17	10
2020-05-18	21
2020-05-19	21
2020-05-20	7
2020-05-21	7
2020-05-22	8
2020-05-23	2

These lineages are shown on the timeline below. Each line represents the length of the cluster, from oldest to most recent sampling date. The dots are sized by the number of sequences taken on that date, and again are colour coded by country. The raw data has been written to a summary file.


2020-02-01
2020-02-15
2020-03-01
2020-03-15
2020-04-01
2020-04-15
2020-05-01
2020-05-15

The map below shows the number of sequences sampled in each admin2 region in the UK. The colour scale is the same for all four countries, but with different underlying base colours.



Admin2	Country	Number of sequences	Sequence group
BATH AND NORTH EAST SOMERSET	England	0	0
BEDFORDSHIRE	England	417	400-500
BERKSHIRE	England	7	1-10
BLACKBURN WITH DARWEN	England	0	0
BLACKPOOL	England	0	0
BOLTON	England	0	0

Admin2	Country	Number of sequences	Sequence group
BOURNEMOUTH	England	0	0
BRIGHTON AND HOVE	England	0	0
BRISTOL	England	18	10-50
BUCKINGHAMSHIRE	England	348	300-400
BURY	England	0	0
CAMBRIDGESHIRE	England	656	>500
CENTRAL BEDFORDSHIRE	England	0	0
CHESHIRE	England	10	10-50
CORNWALL	England	20	10-50
CUMBRIA	England	31	10-50
DARLINGTON	England	0	0
DERBY	England	0	0
DERBYSHIRE	England	25	10-50
DEVON	England	283	250-300
DORSET	England	159	150-200
DURHAM	England	3	1-10
EAST RIDING OF YORKSHIRE	England	31	10-50
ESSEX	England	1189	>500
GATESHEAD	England	0	0
GLOUCESTERSHIRE	England	452	400-500
GREATER LONDON	England	2273	>500
HALTON	England	0	0
HAMPSHIRE	England	95	50-100
HARTLEPOOL	England	0	0
HEREFORDSHIRE	England	4	1-10
HERTFORDSHIRE	England	928	>500
ISLE OF WIGHT	England	0	0
ISLES OF SCILLY	England	0	0
KENT	England	28	10-50
KINGSTON UPON HULL	England	0	0
LANCASHIRE	England	6	1-10
LEICESTER	England	0	0
LEICESTERSHIRE	England	5	1-10
LINCOLNSHIRE	England	16	10-50
LUTON	England	0	0
MANCHESTER	England	30	10-50
MEDWAY	England	0	0
MERSEYSIDE	England	59	50-100
MIDDLESBROUGH	England	0	0
MILTON KEYNES	England	0	0
NORFOLK	England	498	400-500
NORTH LINCOLNSHIRE	England	0	0
NORTH SOMERSET	England	0	0
NORTH YORKSHIRE	England	53	50-100
NORTHAMPTONSHIRE	England	22	10-50
NORTHUMBERLAND	England	2	1-10
NOTTINGHAM	England	559	>500
NOTTINGHAMSHIRE	England	58	50-100
OLDHAM	England	0	0

Admin2	Country	Number of sequences	Sequence group
OXFORDSHIRE	England	97	50-100
PETERBOROUGH	England	0	0
PLYMOUTH	England	1	1-10
POOLE	England	0	0
PORTSMOUTH	England	0	0
REDCAR AND CLEVELAND	England	0	0
ROCHDALE	England	0	0
RUTLAND	England	0	0
SALFORD	England	0	0
SHROPSHIRE	England	1	1-10
SOMERSET	England	338	300-400
SOUTH GLOUCESTERSHIRE	England	0	0
SOUTH YORKSHIRE	England	1165	>500
SOUTHAMPTON	England	0	0
SOUTHEND-ON-SEA	England	0	0
STAFFORDSHIRE	England	28	10-50
STOCKPORT	England	0	0
STOCKTON-ON-TEES	England	0	0
STOKE-ON-TRENT	England	0	0
SUFFOLK	England	484	400-500
SURREY	England	60	50-100
SUSSEX	England	1	1-10
SWINDON	England	0	0
TAMESIDE	England	0	0
TELFORD AND WREKIN	England	0	0
THURROCK	England	0	0
TORBAY	England	0	0
TRAFFORD	England	0	0
TYNE AND WEAR	England	38	10-50
WARRINGTON	England	0	0
WARWICKSHIRE	England	10	10-50
WEST MIDLANDS	England	89	50-100
WEST YORKSHIRE	England	20	10-50
WIGAN	England	0	0
WILTSHIRE	England	243	200-250
WORCESTERSHIRE	England	7	1-10
YORK	England	0	0

There are some sequences with locations that are not matched to real Admin2 regions, some manual curation required.

Other results modules for UK lineage analysis can be added in here if required.