UK lineages summary report

This report gives summaries of lineages sampled in England for week 2020-05-22. There are time lags due to batching, curation and analysis, the most recently sampled sequence is 2020-05-17. The analysis (eg time since last sample) is therefore undertaken from this date. 11903 sequences from England have been included in this analysis. 4044 lineages have been recorded, 3225 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 4079 and the maximum is 6455

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

3778 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 266 that remain: 93 are pending extinction, ie last seen three weeks ago. 109 have not been seen for more than one month, and so are viewed as extinct, but will continue to be monitored. 29 lineages have gone quiet, ie haven't been seen this week. 17 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,	819	B.1.1.1	1
	May-16			
UK225	Feb-13,	494	B.2, B.2.2,	2
	May-15		B.2.6	
UK7	Mar-09,	239	B.1.p11	4
	May-13			
UK1	Feb-03,	228	B.1	9
	May-08			
UK9	Mar-09,	189	B.1.13	10
	May-07			
UK4	Feb-28,	160	В	16
	May-01			
UK73	Mar-10,	127	B.1.p11	20
	Apr-27			
UK106	Mar-09,	121	B.1	7
	May-10			

		Number of		Time since last sample
Lineage name	Date range	sequences	Global lineage	(days)
UK5710	Mar-20,	98	B.1.p11	13
	May-04			
UK6	Mar-06,	98	B.1	11
	May-06			
UK18	Mar-07,	98	B.1.1.7	19
	Apr-28			
UK63	Mar-18,	91	B.1.1	2
	May-15			
UK11	Mar-01,	81	B.1	28
	Apr-19			
UK77	Mar-11,	70	B.2, B.2.4	4
	May-13			
UK107	Mar-15,	68	B.2.5, B.2,	26
	Apr-21		B.2.1	
UK339	Feb-23,	60	B.3	31
	Apr-16			
UK89	Mar-11,	58	B.1.1.9	0
	May-17			
UK274	Mar-06,	57	B, B.3	6
	May-11			
UK31	Mar-21,	57	B.1	9
	May-08			
UK37	Mar-17,	57	B.1, B.1.30	14
	May-03			
UK194	Mar-19,	56	B.1.1	27
	Apr-20			
UK36	Mar-19,	56	B.1	14
	May-03			
UK343	Mar-28,	54	B.1	26
	Apr-21			
UK140	Mar-23,	53	B.1.1	22
	Apr-25			
UK26	Mar-18,	53	B.1.1.3	6
	May-11			
UK476	Mar-31,	52	B.1.1	2
	May-15			
UK62	Mar-12,	51	B.3	24
	Apr-23			
UK115	Mar-15,	47	B.2.1	33
	Apr-14			
UK94	Mar-12,	47	B.2, B.2.1	28
	Apr-19			
UK159	Mar-12,	46	B.1.1	2
	May-15			
UK3	Feb-24,	44	B.1	7
	May-10			
UK177	Mar-27,	44	B.1.1	15
	May-02			

		Number of		Time since last sample
Lineage name	Date range	sequences	Global lineage	(days)
UK238	Mar-19,	44	B.1.1	14
	May-03			
UK66	Mar-18,	43	B.1.1.8	19
	Apr-28			
UK5712	Mar-12,	42	B.1.p11	27
	Apr-20			
UK204	Apr-07,	42	B.1.1	12
	May-05			
UK51	Mar-25,	40	B.1.36	5
	May-12			
UK200	Apr-08,	40	B.1.p11	11
	May-06			
UK112	Mar-15,	39	B.1.1.p11, B.1.1	27
	Apr-20			
UK192	Mar-18,	38	B.1.1	16
	May-01			
UK57	Mar-20,	37	B.1.1	19
	Apr-28			
UK199	Apr-08,	36	B.1.5.5	11
	May-06			
UK138	Mar-23,	34	B.2.1	21
	Apr-26			
UK8	Mar-03,	34	В	16
	May-01			
UK12	Mar-12,	34	B.1.p11	10
	May-07			
UK131	Mar-11,	33	B.15	33
	Apr-14			
UK23	Mar-12,	31	B, B.9	16
	May-01			
UK565	Mar-11,	31	B.1.1	30
	Apr-17			
UK283	Mar-25,	30	B.1.1	2
	May-15			
UK10	Mar-11,	29	B.1.1	4
	May-13			
UK241	Mar-22,	29	B.1.5.3	31
	Apr-16			
UK13	Mar-13,	29	B.1.1, B.1.1.p15	4
	May-13			
UK167	Mar-29,	28	B.1, B.1.66	18
	Apr-29			
UK116	Feb-25,	28	B.2.1	46
	Apr-01			
UK95	Mar-10,	27	B.2.1	14
	May-03			
UK183	Mar-29,	27	B.1.1	24
-	Apr-23			

		Number of		Time since last sample
Lineage name	Date range	sequences	Global lineage	(days)
UK346	Mar-16,	27	B.1.72, B.1	42
	Apr-05			
UK173	Mar-16,	26	В	21
	Apr-26			
UK149	Mar-23,	26	B.1.1	19
	Apr-28			
UK33	Mar-21,	26	B.1.1	2
	May-15			
UK144	Mar-05,	26	B.2.1	40
	Apr-07			
UK79	Mar-24,	26	B.1	15
	May-02			
UK300	Mar-28,	25	B.1.1	28
	Apr-19			
UK147	Mar-10,	25	B.1.1	3
	May-14			
UK128	Apr-03,	25	B.1.1	1
	May-16			
UK41	Mar-01,	25	B.1	32
	Apr-15			
UK64	Mar-12,	25	B.1	30
	Apr-17			
UK81	Mar-19,	24	B.1.1	20
	Apr-27			
UK53	Mar-26,	24	B.1.1.4	19
	Apr-28			
UK214	Mar-30,	24	B.1.1	13
	May-04			
UK56	Mar-20,	23	B.1.1	11
	May-06			
UK119	Mar-11,	23	B.2.5	31
	Apr-16			
UK46	Mar-02,	23	B.2.1	9
	May-08			
UK74	Mar-12,	23	B.1	31
	Apr-16			
UK114	Mar-16,	22	B.1.1	26
	Apr-21			
UK101	Mar-21,	22	B.1.5	20
	Apr-27			
UK103	Mar-20,	21	B.1.1	6
	May-11			
UK444	Mar-24,	21	B.1.1	30
	Apr-17			
UK384	Mar-14,	21	B.2.1	45
	Apr-02			
UK235	Mar-21,	21	B.1.1	31
	Apr-16			

		Number of		Time since last sample
Lineage name	Date range	sequences	Global lineage	(days)
UK113	Mar-22,	21	B.1.1	0
	May-17			
UK233	Apr-08,	20	B.1.1	11
	May-06			
UK75	Mar-17,	20	B.1.34, B.1	21
	Apr-26			
UK514	Mar-30,	19	B.1.1	34
	Apr-13			
UK279	Mar-26,	19	B.1.1	24
	Apr-23			
UK307	Mar-28,	19	B.1.1	13
	May-04			
UK291	Mar-13,	19	B.2.1	42
	Apr-05			
UK47	Mar-01,	19	B.1.1	28
	Apr-19			
UK135	Apr-01,	19	B.1.p11	3
	May-14		·	
UK24	Mar-19,	18	B.1.1	24
	Apr-23			
UK143	Mar-14,	18	B.2.1	31
	Apr-16			
UK158	Mar-23,	18	B.1.1, B.1.1.2	39
	Apr-08			
UK193	Apr-07,	18	B.1.1	16
	May-01			
UK30	Mar-15,	17	B.1.1	4
	May-13			
UK403	Mar-23,	17	B.1.1	32
	Apr-15			
UK117	Feb-28,	17	B.2.1	43
	Apr-04			
UK146	Mar-13,	16	B.1.1	22
	Apr-25			
UK28	Mar-13,	16	B.1.1.10	16
	May-01			
UK86	Mar-05,	16	B.1	37
	Apr-10			
UK174	Mar-19,	16	B.1.5	6
	May-11			
UK109	Mar-21,	16	B.1.5	31
	Apr-16			
UK72	Mar-13,	16	B.10	13
	May-04			
UK249	Apr-01,	15	B.1.1	22
	Apr-25			
UK888	Apr-05,	15	B.1.1	38

		Number of		Time since last sample
Lineage name	Date range	sequences	Global lineage	(days)
UK419	Mar-30,	15	B.1.1	31
	Apr-16			
UK276	Mar-30,	15	B.1.1	4
	May-13			
UK134	Mar-04,	15	B.1	40
	Apr-07			
UK35	Mar-20,	14	B.1.5.6, B.1.5	20
	Apr-27			
UK236	Mar-27,	14	B.1.1	25
	Apr-22			
UK269	Apr-03,	14	B.1.1	14
	May-03			
UK61	Mar-12,	14	B.3	26
	Apr-21			
UK234	Apr-11,	14	B.1.1	11
	May-06			
UK153	Mar-13,	14	B.2	33
	Apr-14			
UK254	Mar-20,	14	B.1.1	33
	Apr-14			
UK376	Apr-04,	14	B.1.1	22
	Apr-25			
UK175	Mar-17,	14	B, B.1	18
	Apr-29			
UK45	Mar-02,	13	B.1.1	40
	Apr-07			
UK378	Feb-15,	13	B.1.1	73
	Mar-05			
UK34	Feb-15,	13	B.4	45
	Apr-02			
UK501	Apr-03,	13	B, B.1	25
	Apr-22			
UK397	Mar-28,	13	B.1.1.13	33
	Apr-14			
UK326	Mar-22,	13	B.1.1.10	5
	May-12			
UK266	Apr-06,	12	B.1	17
	Apr-30			
UK347	Mar-13,	12	B.1	45
	Apr-02			
UK604	Mar-09,	12	B.1.1	66
	Mar-12			
UK253	Apr-03,	12	B.1.1	19
	Apr-28			
UK195	Mar-29,	12	B.1.1	20
	Apr-27			
UK694	Mar-06,	12	В	64
	Mar-14			

		Number of		Time since last sample
Lineage name	Date range	sequences	Global lineage	(days)
UK141	Mar-22,	12	B.1.1	23
	Apr-24			
UK308	Apr-09,	12	B.1.1	6
	May-11			
UK126	Mar-29,	12	B.1.1	14
	May-03			
UK374	Apr-01,	12	B.1.1	27
	Apr-20			
UK396	Mar-23,	12	B.1.1	33
	Apr-14			
UK479	Mar-30,	11	B.1.1	33
	Apr-14			
UK268	Mar-23,	11	B.1.1	16
	May-01			
UK278	Apr-10,	11	B.1.1	14
	May-03			
UK168	Mar-16,	11	B.2.1	31
	Apr-16			
UK1018	Apr-20,	11	B.1.1	26
	Apr-21			
UK190	Mar-01,	11	B.1	48
	Mar-30			
UK759	Mar-28,	11	B.1.1	43
	Apr-04			
UK277	Mar-31,	11	B.1.1	13
	May-04			
UK428	Mar-20,	11	B.2, B.2.1	41
	Apr-06			
UK240	Mar-16,	11	B.2	36
	Apr-11			
UK54	Mar-18,	10	B.1.1.10	17
	Apr-30			
UK788	Feb-28,	10	B.4	73
	Mar-05			
UK71	Mar-08,	10	В	30
	Apr-17			
UK242	Mar-26,	10	B.1.5	27
	Apr-20			
UK687	Feb-28,	10	B.2, B.2.1	70
	Mar-08			
UK22	Mar-02,	10	В	26
	Apr-21			
UK171	Mar-13,	10	B.2, B.2.1	34
	Apr-13			
UK220	Mar-27,	10	B.1.1	25
	Apr-22			
UK180	Mar-30,	10	B.1.1	18
	Apr-29			

		Number of		Time since last sample
Lineage name	Date range	sequences	Global lineage	(days)
UK5700	Mar-24,	10	B.1	20
	Apr-27			
	Apr-16,	10	B.1	19
	Apr-28			
	Mar-04,	10	B.2.1	27
	Apr-20			
	Mar-27,	10	B.1.1	13
	May-04			
	Apr-11,	10	B.1.1	4
	May-13			
	Mar-18,	10	B.1.1	36
	Apr-11			
	Mar-27,	10	B.1.1	40
	Apr-07			
	Mar-20,	10	B.1.1	40
	Apr-07			
	Mar-29,	9	B.1.5	3
	May-14			
	Mar-01,	9	B.1.1	55
	Mar-23			
UK186	Apr-08,	9	В	12
	May-05			
UK230	Mar-29,	9	B.1	31
	Apr-16			
UK91	Mar-03,	9	B.1.1	12
	May-05			
UK148	Apr-02,	9	B.1.1	13
	May-04			
UK178	Mar-14,	9	B.1.1	34
	Apr-13			
UK645	Mar-29,	9	B.2.1	39
	Apr-08			
UK311	Mar-20,	9	B.1.1	36
	Apr-11			
UK42	Mar-28,	9	B.1.35, B.1	30
	Apr-17			
UK415	Apr-19,	9	B.1	11
	May-06			
UK909	Apr-13,	9	B.1	27
	Apr-20			
UK3033	Mar-22,	9	B.1.1	31
	Apr-16			
UK541	Mar-30,	9	B.1.1	35
	Apr-12			
UK142	Mar-15,	9	B.2.1	30
	Apr-17			
	Mar-24,	8	B.1	25
	Apr-22			

		Number of		Time since last sample
Lineage name	Date range	sequences	Global lineage	(days)
UK341	Mar-23,	8	B.1	35
	Apr-12			
UK306	Mar-26,	8	B.1.1	37
	Apr-10			
UK335	Mar-25,	8	B.2.1	32
	Apr-15			
UK318	Mar-20,	8	В	37
	Apr-10			
UK182	Mar-29,	8	B.1.1	15
	May-02			
UK251	Mar-17,	8	B.1.1	36
	Apr-11			
UK324	Mar-31,	8	B.1.1	26
	Apr-21			
UK756	Feb-27,	8	B.1.1	73
	Mar-05			
UK104	Apr-01,	8	B.1.1	27
	Apr-20			
UK132	Mar-27,	8	B.1	17
	Apr-30			
UK248	Apr-08,	8	B.1.1	12
	May-05			
UK67	Mar-25,	8	B.1.1	4
	May-13			
UK351	Apr-13,	8	B.1.1	14
	May-03			
UK223	Mar-10,	8	B.2.1	41
	Apr-06			
UK733	Mar-10,	8	B.2.1	48
	Mar-30			
UK90	Mar-29,	8	B.1.1	11
	May-06			
UK252	Apr-04,	8	B.1.1	18
	Apr-29			
UK123	Mar-23,	8	B.1	20
	Apr-27			
UK1013	Apr-15,	8	B.1.1	31
	Apr-16			
UK83	Feb-29,	8	B.1.1	39
	Apr-08			
UK739	Mar-01,	8	B.4	70
	Mar-08			
UK287	Mar-28,	8	B.1	29
	Apr-18			
UK432	Mar-24,	8	B.3	38
	Apr-09			
UK629	Mar-23,	7	B.1	34
	Apr-13			

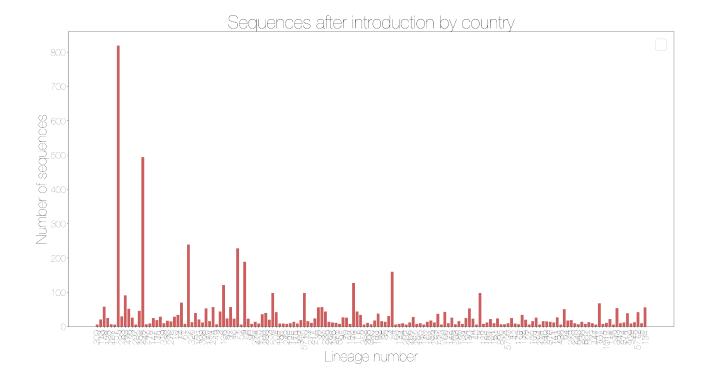
		Number of		Time since last sample
Lineage name	Date range	sequences	Global lineage	(days)
UK244	Mar-12,	7	B.1.1	41
	Apr-06			
UK317	Mar-26,	7	B.3	31
	Apr-16			
UK371	Mar-18,	7	B.1.1	36
	Apr-11			
UK203	Apr-01,	7	B.1.1	19
	Apr-28			
UK237	Mar-31,	7	B.1.1	1
	May-16			
UK390	Mar-27,	7	B.1.5	16
	May-01			
UK716	, Mar-30,	7	B.1.1	39
	Apr-08			
UK14	Mar-04,	7	В	46
	Apr-01			
UK49	Mar-19,	7	B.2.1	6
	May-11			
UK247	Apr-04,	7	B.1.1	2
	May-15			
UK564	Apr-03,	7	B.1.1	32
	Apr-15			
UK574	Mar-30,	7	B.1.1	36
	Apr-11			
UK196	Mar-18,	7	B.2.1	31
	Apr-16			
UK69	Mar-04,	7	B.2.1	33
	Apr-14			
UK232	Mar-04,	7	B.1.1	48
	Mar-30			
UK510	Apr-02,	7	B.1.1	31
	Apr-16			
UK540	Apr-09,	7	B.1.1, B.1.1.p15	25
	Apr-22			
UK65	Mar-07,	7	B.1.1	30
	Apr-17			
UK487	Mar-24,	7	B.1.1	39
	Apr-08			
UK532	Apr-04,	7	B.1.1	30
	Apr-17			
UK206	Mar-22,	7	B.2.1	28
	Apr-19			
UK806	Apr-04,	7	B.1.1.10	20
	Apr-27		_	
UK179	Mar-26,	7	B.1.1.p11	41
	Apr-06			
UK297	Apr-09,	6	B.1.p11	2
	May-15			

		Number of		Time since last sample
Lineage name	Date range	sequences	Global lineage	(days)
UK654	Feb-27,	6	B.2.5	70
	Mar-08			
UK799	Mar-01,	6	B.1	71
	Mar-07			
UK155	Mar-03,	6	B.1	35
	Apr-12			
UK542	Apr-01,	6	B.1	33
	Apr-14			
UK520	Mar-14,	6	B.2, B.2.1	50
	Mar-28			
UK435	Apr-03,	6	B.1.5	24
	Apr-23			
UK544	Mar-24,	6	B.2.1	41
	Apr-06			
UK682	Mar-21,	6	B.2, B.2.1	48
	Mar-30			
UK647	Mar-21,	6	B.2, B.2.1	51
	Mar-27			
UK4037	Mar-31,	6	B.1.1	40
	Apr-07			
UK497	Mar-27,	6	A.2	31
	Apr-16			
UK517	Mar-29,	6	B.1.1	35
	Apr-12			
UK213	Mar-18,	6	B.1.1	33
	Apr-14			
UK27	Mar-08,	6	B.1.1	21
	Apr-26			
UK352	Apr-11,	6	B.1.1	16
	May-01			
UK2767	Apr-15,	6	B.1.1	32
	Apr-15			
UK68	Mar-20,	6	B.1.1	17
	Apr-30			
UK313	Mar-23,	6	B.1.1	33
	Apr-14			
UK309	Apr-05,	6	B.1.1	0
	May-17			
UK70	Mar-06,	6	B.2	31
	Apr-16			
UK202	Mar-10,	6	B.1.1	17
	Apr-30			
UK55	Mar-09,	6	B.1.1	34
	Apr-13			
UK570	Apr-05,	6	B.1.1	30
	Apr-17			
UK573	Apr-04,	6	B.1.1	19
	Apr-28			

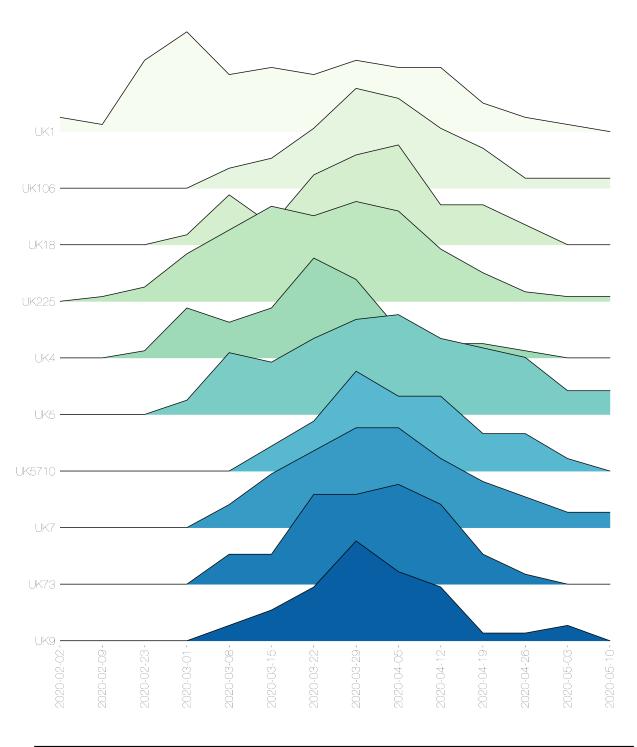
		Number of		Time since last sample
Lineage name	Date range	sequences	Global lineage	(days)
UK330	Mar-23,	6	B.1.1	34
	Apr-13			
UK680	Apr-05,	6	B.1	33
	Apr-14			
UK481	Mar-30,	6	B.1.1	33
	Apr-14			
UK488	Mar-31,	6	B.1	32
	Apr-15			
UK102	Mar-10,	6	B.1	31
	Apr-16			
UK157	Mar-29,	6	B.1	1
	May-16			
UK40	Mar-31,	6	B.16	27
	Apr-20			
UK512	Mar-30,	6	B.1.1	34
	Apr-13			
UK284	Apr-02,	6	B.1.1	22
	Apr-25			
UK447	Apr-05,	6	B.1.1	26
	Apr-21			
UK659	Mar-21,	6	В	48
	Mar-30			
UK489	Mar-23,	6	B.2.1	40
	Apr-07	_		
UK52	Mar-16,	6	B.1, B.1.p73	28
	Apr-19		5 .	40
UK110	Mar-24,	6	B.1	18
1114000	Apr-29		D. 4.4	0.4
UK263	Mar-20,	6	B.1.p11	34
111774	Apr-13		D 4 4 40	0.4
UK440	Mar-28,	6	B.1.1.10	34
111/055	Apr-13		D 4 4	20
UK255	Mar-26,	6	B.1.1	39
111/057	Apr-08	•	D 0 4	40
UK857	Mar-24,	6	B.2.1	49
	Mar-29			

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.

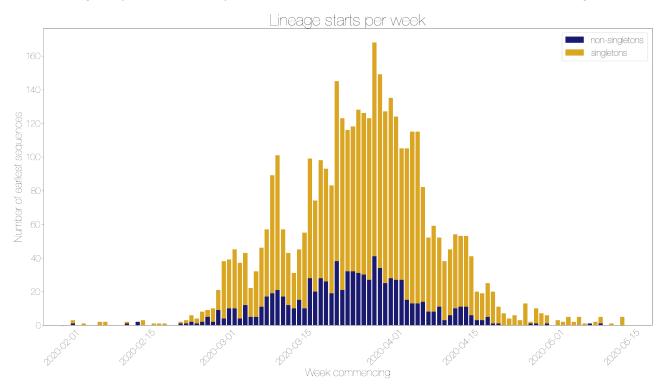


Week commencing	UK5	UK225	UK7	UK1	UK9	UK4	UK73	UK106	UK18	UK5710
2020-02-02	0	0	0	2	0	0	0	0	0	0
2020-02-09	0	1	0	1	0	0	0	0	0	0
2020-02-23	0	3	0	10	0	1	0	0	0	0
2020-03-01	3	10	0	14	0	7	0	0	1	0
2020-03-08	13	15	3	8	2	5	3	2	5	0
2020-03-15	11	20	7	9	4	7	3	3	2	2
2020-03-22	16	18	10	8	7	14	9	6	7	4
2020-03-29	20	21	13	10	13	11	9	10	9	8
2020-04-05	21	19	13	9	9	4	10	9	10	6
2020-04-12	16	11	9	9	7	2	8	6	4	6
2020-04-19	14	6	6	4	1	2	3	4	4	3

Week commencing	UK5	UK225	UK7	UK1	UK9	UK4	UK73	UK106	UK18	UK5710
2020-04-26	12	2	4	2	1	1	1	1	2	3
2020-05-03	5	1	2	1	2	0	0	1	0	1
2020-05-10	5	1	2	0	0	0	0	1	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

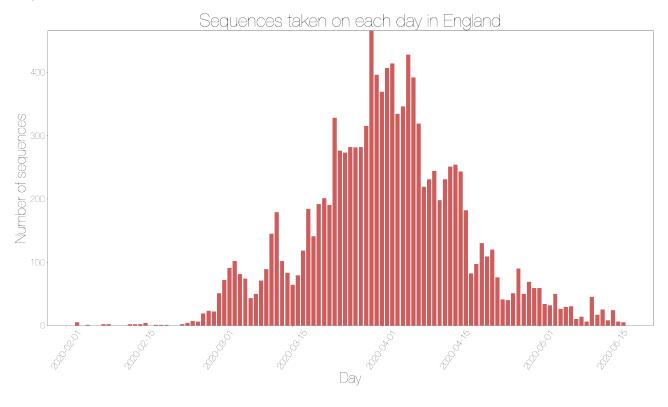


Day	Number of singleton starts	Number of non-singleton starts	Total
2020-02-03	2	1	3
2020-02-05	1	0	1
2020-02-08	2	0	2
2020-02-09	2	0	2
2020-02-13	1	1	2
2020-02-15	0	2	2
2020-02-16	3	0	3
2020-02-18	1	0	1
2020-02-19	1	0	1
2020-02-20	1	0	1
2020-02-23	1	1	2
2020-02-24	2	1	3
2020-02-25	4	2	6
2020-02-26	3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

Day	Number of singleton starts	Number of non-singleton starts	Total
2020-03-02	34	4	38
2020-03-03	29	10	39
2020-03-04	35	10	45
2020-03-05	33	4	37
2020-03-06	31	12	43
2020-03-07	17	5	22
2020-03-08	27	5	32
2020-03-09	35	11	46
2020-03-10	40	17	57
2020-03-11	70	19	89
2020-03-12	80	21	101
2020-03-13	40	17	57
2020-03-14	31	12	43
2020-03-15	21	10	31
2020-03-16	30	15	45
2020-03-17	45	10	55
2020-03-18	71	28	99
2020-03-19	54	20	74
2020-03-20	70	28	98
2020-03-21	67	26	93
2020-03-22	64	19	83
2020-03-23	107	38	145
2020-03-24	102	21	123
2020-03-25	84	32	116
2020-03-26	86	32	118
2020-03-27	97	31	128
2020-03-28	96	30	126
2020-03-29	96	27	123
2020-03-30	127	41	168
2020-03-31	115	34	149
2020-04-01	102	25	127
2020-04-02	107	28	135
2020-04-03	97	27	124
2020-04-04	78	27	105
2020-04-05	90	15	105
2020-04-06	102	13	115
2020-04-07	102	13	115
2020-04-08	68	14	82
2020-04-09	44	8	52
2020-04-10	51	8	59
2020-04-11	41	11	52
2020-04-12	35	3	38
2020-04-13	39	6	45
2020-04-14	44	10	54
2020-04-15	42	11	53
2020-04-16	42	11	53
2020-04-17	35	6	41
2020-04-18	17	3	20
2020-04-19	16	3	19
	10	0	.0

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

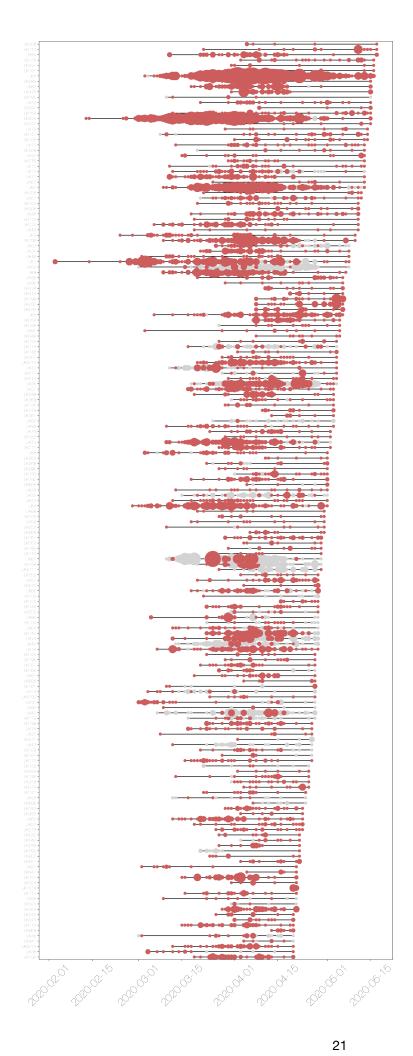
For comparison, here is a plot of the day that every sequence was taken, coloured by country. Note that sequences without dates were not included.



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	23
2020-02-29	22
2020-03-01	51
2020-03-01	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
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	192
2020-03-21	201
	190
2020-03-22	
2020-03-23	328
2020-03-24	276
2020-03-25	273
2020-03-26	282
2020-03-27	281
2020-03-28	282
2020-03-29	315
2020-03-30	466
2020-03-31	396

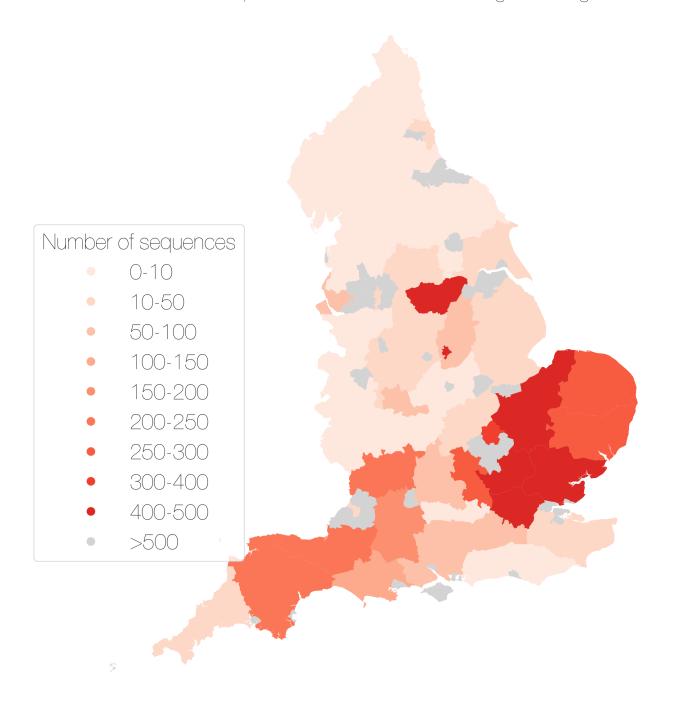
Day	England
2020-04-01	369
2020-04-02	407
2020-04-03	414
2020-04-04	334
2020-04-05	346
2020-04-06	428
2020-04-07	392
2020-04-08	319
2020-04-09	219
2020-04-10	231
2020-04-11	244
2020-04-12	198
2020-04-13	231
2020-04-14	251
2020-04-15	254
2020-04-16	243
2020-04-17	182
2020-04-18	82
2020-04-19	97
2020-04-20	130
2020-04-21	109
2020-04-22	120
2020-04-23	76
2020-04-24	41
2020-04-25	40
2020-04-26	51
2020-04-27	90
2020-04-28	50
2020-04-29	69
2020-04-30	59
2020-05-01	59
2020-05-02	34
2020-05-03	32
2020-05-04	50
2020-05-05	26
2020-05-06	29
2020-05-07	30
2020-05-08	10
2020-05-09	14
2020-05-10	6
2020-05-10	45
2020-05-11	17
2020-05-12	25
	_
2020-05-14	8 24
2020-05-15	_
2020-05-16 2020-05-17	6 5

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.



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.

COVID-19 sequences from each Admn2 region in England



Admin2	Country	Number of sequences	Sequence group
ABERDEEN	Scotland	21	10-50
ABERDEENSHIRE	Scotland	0	0
ANGLESEY	Wales	18	10-50
ANGUS	Scotland	10	10-50
ANTRIM	Northern Ireland	109	100-150

Admin2	Country	Number of sequences	Sequence group
ARGYLL AND BUTE	Scotland	0	0
ARMAGH	Northern Ireland	12	10-50
BATH AND NORTH EAST SOMERSET	England	0	0
BEDFORDSHIRE	England	415	400-500
BERKSHIRE	England	7	1-10
BLACKBURN WITH DARWEN	England	0	0
BLACKPOOL	England	0	0
BLAENAU GWENT	Wales	42	10-50
BOLTON	England	0	0
BOURNEMOUTH	England	0	0
BRIDGEND	Wales	83	50-100
BRIGHTON AND HOVE	England	0	0
BRISTOL	England	18	10-50
BUCKINGHAMSHIRE	England	326	300-400
BURY	England	0	0
CAERPHILLY	Wales	97	50-100
CAMBRIDGESHIRE		601	>500
	England		
CARDIFF	Wales	310	300-400
CARMARTHENSHIRE	Wales	75	50-100
CENTRAL BEDFORDSHIRE	England	0	0
CEREDIGION	Wales	16	10-50
CHESHIRE	England	8	1-10
CLACKMANNANSHIRE	Scotland	2	1-10
CONWY	Wales	37	10-50
CORNWALL	England	13	10-50
CUMBRIA	England	8	1-10
DARLINGTON	England	0	0
DENBIGHSHIRE	Wales	64	50-100
DERBY	England	0	0
DERBYSHIRE	England	25	10-50
DEVON	England	231	200-250
DORSET	England	140	100-150
DOWN	Northern Ireland	52	50-100
DUMFRIES AND GALLOWAY	Scotland	38	10-50
DUNDEE	Scotland	70	50-100
DURHAM	England	1	1-10
EAST AYRSHIRE	Scotland	36	10-50
EAST DUNBARTONSHIRE	Scotland	0	0
EAST LOTHIAN	Scotland	51	50-100
EAST RENFREWSHIRE	Scotland	0	0
EAST RIDING OF YORKSHIRE	England	20	10-50
EDINBURGH	Scotland	397	300-400
EILEAN SIAR	Scotland	2	1-10
ESSEX		1084	>500
	England		
FALKIRK	Scotland	62	50-100
FERMANAGH	Northern Ireland	3	1-10
FIFE	Scotland	41	10-50
FLINTSHIRE	Wales	46	10-50
GATESHEAD	England	0	0

Admin2	Country	Number of sequences	Sequence group
GLASGOW	Scotland	606	>500
GLOUCESTERSHIRE	England	246	200-250
GREATER LONDON	England	2162	>500
GUERNSEY	Channel_islands	41	10-50
GWYNEDD	Wales	39	10-50
HALTON	England	0	0
HAMPSHIRE	England	88	50-100
HARTLEPOOL	England	0	0
HEREFORDSHIRE	England	1	1-10
HERTFORDSHIRE	England	838	>500
HIGHLAND	Scotland	9	1-10
INVERCLYDE	Scotland	0	0
ISLE OF WIGHT	England	0	0
ISLES OF SCILLY	England	0	0
JERSEY	Channel_islands	77	50-100
KENT	England	27	10-50
KINGSTON UPON HULL	-	0	0
LANCASHIRE	England		
	England	6	1-10
LEICESTER	England	0	0
LEICESTERSHIRE	England	5	1-10
LINCOLNSHIRE	England	14	10-50
LONDONDERRY	Northern Ireland	10	10-50
LUTON	England	0	0
MANCHESTER	England	29	10-50
MEDWAY	England	0	0
MERSEYSIDE	England	59	50-100
MERTHYR TYDFIL	Wales	41	10-50
MIDDLESBROUGH	England	0	0
MIDLOTHIAN	Scotland	119	100-150
MILTON KEYNES	England	0	0
MONMOUTHSHIRE	Wales	46	10-50
MORAY	Scotland	0	0
NEATH PORT TALBOT	Wales	85	50-100
NEWPORT	Wales	112	100-150
NORFOLK	England	324	300-400
NORTH AYRSHIRE	Scotland	0	0
NORTH LANARKSHIRE	Scotland	103	100-150
NORTH LINCOLNSHIRE	England	0	0
NORTH SOMERSET	England	0	0
NORTH YORKSHIRE	England	4	1-10
NORTHAMPTONSHIRE	England	22	10-50
NORTHUMBERLAND	England	2	1-10
NOTTINGHAM	England	552	>500
NOTTINGHAMSHIRE	England	58	50-100
OLDHAM	England	0	0
ORKNEY ISLANDS	Scotland	1	1-10
OXFORDSHIRE	England	91	50-100
PEMBROKESHIRE	Wales	56	50-100
PERTHSHIRE AND KINROSS	Scotland	14	10-50

Admin2	Country	Number of sequences	Sequence group
PETERBOROUGH	England	0	0
PLYMOUTH	England	0	0
POOLE	England	0	0
PORTSMOUTH	England	0	0
POWYS	Wales	35	10-50
REDCAR AND CLEVELAND	England	0	0
RENFREWSHIRE	Scotland	157	150-200
RHONDDA, CYNON, TAFF	Wales	0	0
ROCHDALE	England	0	0
RUTLAND	England	0	0
SALFORD	England	0	0
SCOTTISH BORDERS	Scotland	102	100-150
SHETLAND ISLANDS	Scotland	14	10-50
SHROPSHIRE	England	1	1-10
SOMERSET	England	231	200-250
SOUTH AYRSHIRE	Scotland	0	0
SOUTH GLOUCESTERSHIRE	England	0	0
SOUTH LANARKSHIRE	Scotland	3	1-10
SOUTH YORKSHIRE	England	1058	>500
SOUTHAMPTON	England	0	0
SOUTHEND-ON-SEA	England	0	0
STAFFORDSHIRE	England	24	10-50
STIRLING	Scotland	0	0
STOCKPORT	England	0	0
STOCKTON-ON-TEES	England	0	0
STOKE-ON-TRENT	England	0	0
SUFFOLK	England	392	300-400
SURREY	England	56	50-100
SUSSEX	England	1	1-10
SWANSEA	Wales	200	200-250
SWINDON		200	0
	England	_	_
TAMESIDE TELFORD AND WREKIN	England	0	0
	England	0	0
THURROCK	England	0	0
TORBAY	England	0	0
TORFAEN	Wales	71	50-100
TRAFFORD	England	0	0
TYNE AND WEAR	England	37	10-50
TYRONE	Northern Ireland	13	10-50
VALE OF GLAMORGAN	Wales	118	100-150
WARRINGTON	England	0	0
WARWICKSHIRE	England	9	1-10
WEST DUNBARTONSHIRE	Scotland	0	0
WEST LOTHIAN	Scotland	88	50-100
WEST MIDLANDS	England	87	50-100
WEST YORKSHIRE	England	19	10-50
WIGAN	England	0	0
WILTSHIRE	England	150	150-200
WORCESTERSHIRE	England	7	1-10

Admin2	Country	Number of sequences	Sequence group
WREXHAM	Wales	64	50-100
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.