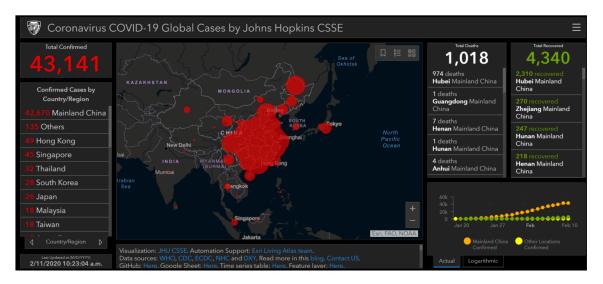
Instructions to Access to Johns Hopkins University cases data

Step 1: Please visit this link: https://systems.jhu.edu/research/public-health/ncov/. The dashboard reports cases at the province level in China, county level in the US, state level in Australia and Canada, and at the country level otherwise.

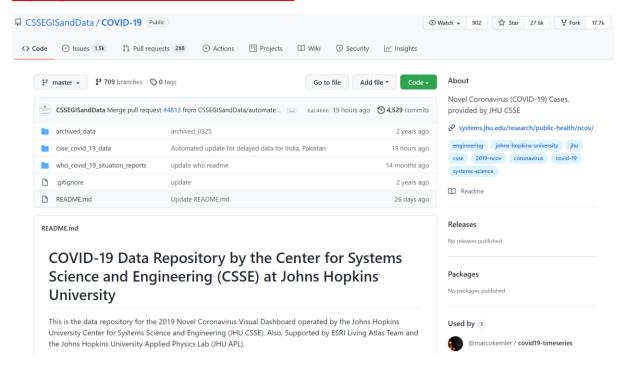


Mapping COVID-19

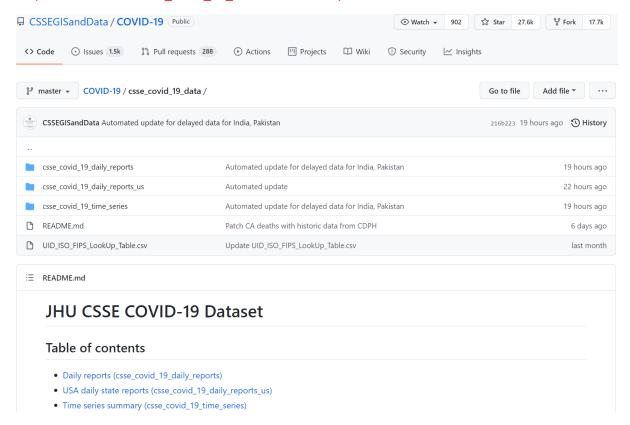
By Lauren Gardner, January 23, 2020



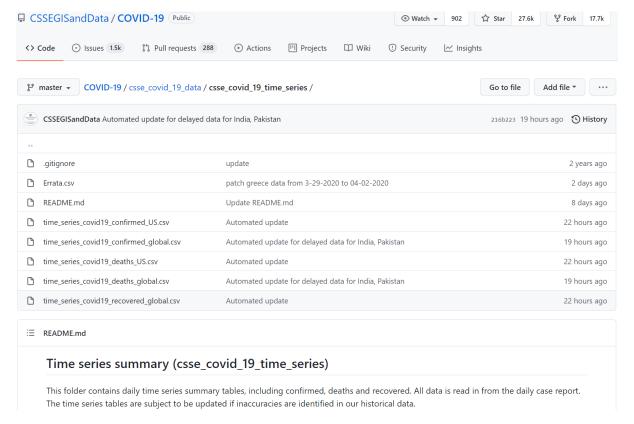
Step 2: To download the data for processing by AI methods, you need to visit the GitHub link: https://github.com/CSSEGISandData/COVID-19



Step 3: Click on the "csse_covid_19_data" folder to explore more details:



Step 4: Click on the "csse_covid_19_time_series" folder, you will now have the option to download confirmed cases or death cases in US or global, or recovered cases globally.



Step 5: For example, if you select the "time_series_covid19_confirmed_US.csv" file, you will see the file is too large to display, but you can click on the "View raw" button to view the data:

UD. iso2, iso3, cod3, FFPS, Admin2, Province_State, Country_Region, Lst, Long_Combined_Key, 1/22/28, 1/23/28, 1/24/28, 1/25/28, 1/26/28, 1/27/28, 2/13/28, 2/14/28, 2/15/28, 2/16/28, 2/17/28, 2/13/28, 2/14/28, 2/15/28, 2/16/28, 2/17/28, 2/18/28, 2/16/28, 2/17/28, 2/18/28, 2

/21,9/4/21,9/5/21,9/6/21,9/7/21,9/28/1,9/29/21,9/29/21,9/21,9/12/1,9/27/21,9/28/21,9/2

Step 6: Now, you can right click on the page and selection "Save as..." to save the file "time_series_covid19_confirmed_US.csv" to your local folder. Open the file in Excel, you will see the data look like below:

4	Α	В	С	D	E	F	G	Н	1	J	K	L	М	N	0	Р	Q	R
U	ID	iso2	iso3	code3	FIPS	Admin2	Province_State	Country_F	Lat	Long_	Combined_Key	1/22/20	1/23/20	1/24/20	1/25/20	1/26/20	1/27/20	1/28/20
2 8	4001001	US	USA	840	1001	Autauga	Alabama	US	32.53953	-86.6441	Autauga, Alabar	0	0	(0	0	C)
8	4001003	US	USA	840	1003	Baldwin	Alabama	US	30.72775	-87.7221	Baldwin, Alaban	0	0	(0	0	C)
8	4001005	US	USA	840	1005	Barbour	Alabama	US	31.86826	-85.3871	Barbour, Alaban	0	0	(0	0	C)
8	4001007	US	USA	840	1007	Bibb	Alabama	US	32.99642	-87.1251	Bibb, Alabama,	0	0	(0	0	C)
8	4001009	US	USA	840	1009	Blount	Alabama	US	33.98211	-86.5679	Blount, Alabama	0	0	(0	0	C)
8	4001011	US	USA	840	1011	Bullock	Alabama	US	32.10031	-85.7127	Bullock, Alabam	0	0	(0	0	C)
8	4001013	US	USA	840	1013	Butler	Alabama	US	31.753	-86.6806	Butler, Alabama	0	0	(0	0	C)
8	4001015	US	USA	840	1015	Calhoun	Alabama	US	33.77484	-85.8263	Calhoun, Alabar	0	0	(0	0	C)
0 8	4001017	US	USA	840	1017	Chambers	Alabama	US	32.9136	-85.3907	Chambers, Alab	0	0	(0	0	C)
1 8	4001019	US	USA	840	1019	Cherokee	Alabama	US	34.17806	-85.6064	Cherokee, Alaba	0	0	(0	0	C)
2 8	4001021	US	USA	840	1021	Chilton	Alabama	US	32.85044	-86.7173	Chilton, Alabam	0	0	(0	0	C)
3 8	4001023	US	USA	840	1023	Choctaw	Alabama	US	32.02227	-88.2656	Choctaw, Alabar	0	0	(0	0	C)
4 8	4001025	US	USA	840	1025	Clarke	Alabama	US	31.681	-87.8355	Clarke, Alabama	0	0	(0	0	C)
5 8	4001027	US	USA	840	1027	Clay	Alabama	US	33.26984	-85.8584	Clay, Alabama, U	. 0	0	(0	0	C)
6 8	4001029	US	USA	840	1029	Cleburne	Alabama	US	33.67679	-85.5201	Cleburne, Alaba	0	0	(0	0	C)
7 8	4001031	US	USA	840	1031	Coffee	Alabama	US	31.39933	-85.989	Coffee, Alabama	0	0	(0	0	C)
8 8	4001033	US	USA	840	1033	Colbert	Alabama	US	34.69847	-87.8017	Colbert, Alabam	0	0	(0	0	C)
9 8	4001035	US	USA	840	1035	Conecuh	Alabama	US	31.43402	-86.9932	Conecuh, Alabai	0	0	(0	0	C)
0 8	4001037	US	USA	840	1037	Coosa	Alabama	US	32.9369	-86.2485	Coosa, Alabama	0	0	(0	0	C)
1 8	4001039	US	USA	840	1039	Covington	Alabama	US	31.24779	-86.4505	Covington, Alab	0	0	(0	0	C)
2 8	4001041	US	USA	840	1041	Crenshaw	Alabama	US	31.72942	-86.3159	Crenshaw, Alaba	0	0	(0	0	C)
3 8	4001043	US	USA	840	1043	Cullman	Alabama	US	34.1302	-86.8689	Cullman, Alaban	0	0	(0	0	C)
4 8	4001045	US	USA	840	1045	Dale	Alabama	US	31.43037	-85.611	Dale, Alabama, I	0	0	(0	0	C)
5 8	4001047	US	USA	840	1047	Dallas	Alabama	US	32.32688	-87.1087	Dallas, Alabama	0	0	(0	0	C)
6 8	4001049	US	USA	840	1049	DeKalb	Alabama	US	34.45947	-85.8078	DeKalb, Alabam	0	0	(0	0	C)
7 8	4001051	US	USA	840	1051	Elmore	Alabama	US	32.59785	-86.1442	Elmore, Alabam	0	0	(0	0	C)
8 8	4001053	US	USA	840	1053	Escambia	Alabama	US	31.12568	-87.1592	Escambia, Alaba	0	0	(0	0	C)
9 8	4001055	US	USA	840	1055	Etowah	Alabama	US	34.04567	-86.0405	Etowah, Alabam	0	0	(0	0	C)
0 8	4001057	US	USA	840	1057	Fayette	Alabama	US	33.72077	-87.7389	Fayette, Alabam	0	0	(0	0	C)
1 8	4001059	US	USA	840	1059	Franklin	Alabama	US	34.44235	-87.8429	Franklin, Alaban	0	0	(0	0	C)
2 8	4001061	US	USA	840	1061	Geneva	Alabama	US	31.09389		Geneva, Alabam		0	() 0	0	C)

Step 7: If you scroll to the right, you can see the updated data of recent days.

4	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB
1	10/07/2021	10/08/2021	10/09/2021	10/10/2021	10/11/2021	10/12/2021	10/13/21	10/14/21	10/15/21	10/16/21	10/17/21	10/18/21	10/19/21	10/20/21	10/21/21	10/22/21	10/23/21
2	9826	9839	9843	9850	9851	9858	9865	9874	9883	9893	9901	9904	9909	9910	9954	9967	10043
3	36780	36814	36870	36889	36905	36933	36965	37018	37044	37069	37087	37098	37127	37167	37192	37224	37245
4	3536	3541	3545	3546	3546	3548	3550	3552	3553	3554	3556	3560	3563	3565	3566	3575	3577
5	4176	4184	4192	4193	4194	4202	4208	4211	4216	4216	4217	4217	4232	4236	4240	4246	4251
6	9957	9970	9998	10013	10020	10037	10047	10071	10081	10094	10102	10104	10113	10132	10162	10179	10192
7	1511	1511	1511	1512	1514	1517	1517	1517	1517	1517	1517	1517	1517	1516	1516	1516	1516
8	3221	3227	3228	3228	3228	3230	3233	3236	3239	3247	3248	3248	3250	3253	3256	3258	3263
9	21886	21924	21950	22004	22011	22034	22065	22095	22125	22142	22159	22168	22180	22190	22205	22221	22225
10	5520	5523	5524	5531	5532	5537	5541	5553	5558	5559	5560	5562	5562	5563	5567	5607	5607
11	2965	2968	2971	2973	2977	2980	2990	2992	2994	2999	3000	3005	3009	3016	3017	3023	3028
12	6522	6529	6535	6541	6545	6550	6559	6571	6580	6587	6592	6595	6602	6608	6627	6633	6641
13	853	853	855	859	860	861	862	865	866	869	870	870	870	878	881	882	885
14	4706	4710	4720	4720	4720	4722	4723	4726	4726	4727	4734	4734	4749	4740	4745	4754	4755
15	2364	2367	2374	2375	2376	2380	2385	2388	2397	2403	2407	2408	2411	2412	2417	2430	2433
16	2444	2445	2446	2447	2447	2450	2454	2457	2459	2469	2470	2470	2469	2471	2473	2474	2477
17	9114	9129	9139	9140	9146	9151	9161	9171	9176	9182	9182	9182	9185	9190	9195	9205	9210
18	8692	8707	8715	8723	8725	8728	8741	8768	8781	8789	8791	8794	8803	8803	8826	8840	8860
19	1839	1840	1841	1841	1841	1844	1845	1850	1853	1856	1856	1857	1857	1857	1858	1859	1861
20	1752	1752	1753	1757	1758	1765	1768	1773	1777	1785	1788	1790	1792	1794	1797	1800	1802
21	6602	6614	6624	6626	6627	6631	6640	6661	6672	6682	6685	6688	6692	6695	6699	6706	6712
22	2415	2418	2420	2421	2421	2425	2428	2430	2433	2435	2437	2437	2439	2440	2443	2448	2452
23	15081	15124	15162	15173	15189	15209	15237	15257	15297	15306	15325	15333	15354	15365	15383	15406	15443
24	8796	8808	8821	8828	8830	8830	8840	8850	8856	8859	8864	8866	8873	8874	8880	8884	8897
25	4783	4799	4807	4810	4817	4822	4839	4848	4854	4882	4889	4897	4899	4902	4936	4949	4973
26	12429	12451	12464	12479	12481	12495	12503	12530	12554	12569	12574	12575	12584	12598	12622	12637	12649
27	14797	14810	14844	14870	14878	14901	14910	14944	15038	15075	15086	15095	15110	15126	15161	15186	15241
28	6672	6676	6682	6688	6688	6692	6696	6714	6725	6732	6743	6747	6750	6755	6764	6766	6772
29	19641	19652	19670	19688	19691	19709	19714	19727	19739	19758	19764	19770	19764	19774	19811	19816	19825
30	2851	2853	2862	2873	2877	2877	2881	2897	2905	2906	2909	2910	2912	2913	2918	2923	2928
31	5896	5904	5906	5907	5914	5920	5924	5926	5927	5930	5935	5936	5943	5947	5955	5959	5959
32	4535	4542	4547	4550	4551	4555	4557	4557	4558	4564	4564	4564	4567	4567	4566	4568	4571

Similarly, repeating from the Step 5, you will be able to download the death and recovered numbers in US or globally.

Step 8: On the first page of this data source (https://systems.jhu.edu/research/public-health/ncov/) as below, there is also a link to an analysis about the effectiveness of COVID-19 vaccines in reducing virus transmission at a population level, and more critically, reducing deaths resulting from COVID-19. If you click on the link "(New) COVID-19 vaccination rates and COVID-19 cases and deaths", you will be directed to this link: https://systems.jhu.edu/research/public-health/covid-19-vaccine/



Step 9: On the new page, you will find a link to the Vaccination Coverage Data Source: US COVID-19 Vaccination Tracking at http://www.vaccinetracking.us/



PUBLIC HEALTH

The relationship between vaccination rates and COVID-19 cases and deaths in the USA

Step 10: Click on that link, you will be directed to the US COVID-19 Vaccination Tracking page. You can explore the map to understand the distribution of COVID-19 vaccination coverage across US counties, and learn more about our data & analysis at the tabs "Data" and "Analysis":

