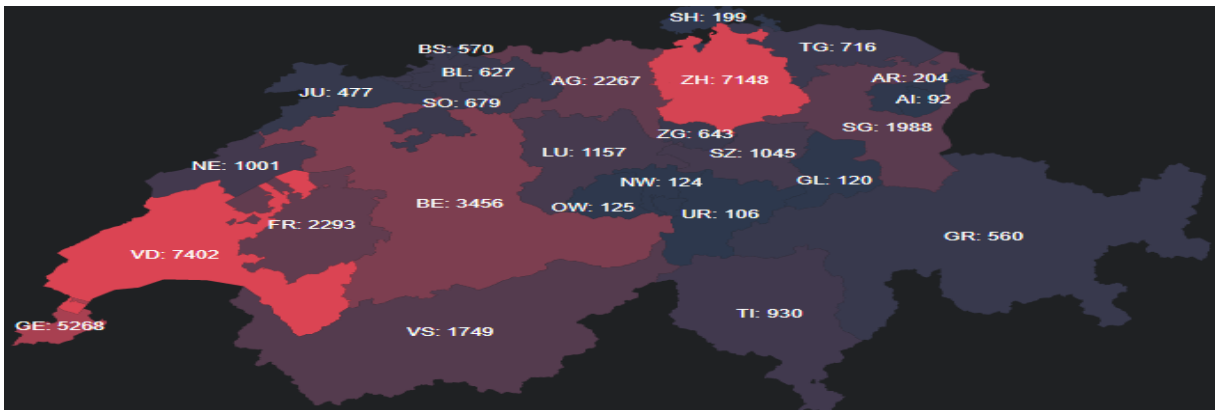# Coronavirus Disease – COVID-19
16.10.2020

- The death toll from the coronavirus outbreak is over 1,104,881 worldwide, with the highest number of deaths in USA (222,953) and Brazil (152,513). There have been more than 39,310,837 global cases in 210 countries and territories. [1]

- The WHO's European office said Thursday the soaring number of Covid-19 cases in Europe was of "great concern", but that the situation was still better than the peaks in April. "Daily numbers of cases are up, hospital admissions are up," the WHO's regional director for Europe Hans Kluge told a press conference. "Covid is now the fifth leading cause of deaths and the bar of a 1,000 deaths per day has now been reached." But he said that "we are not" in the situation experienced in March and April. "Although we record two to three times more cases per day compared to the April peak, we still observe five times less deaths, and the doubling time in hospital admissions is still two to three times longer," Kluge said. He said part of the increase could be traced to a higher level of testing among younger people, and the lower mortality could be explained by the virus spreading in younger, less vulnerable groups. [2]

- Forget the "R" rate, it`s Covid cluster we need to stop. During the coronavirus pandemic, the reproduction number, R, has been used as a key measure of whether the virus is under control. This shows how many people, on average, one person with Covid-19 infects. Trying to keep this number under one has been a major part of the Government's response to the pandemic. But researchers now claim a more useful tool for managing the virus is a measure known simply as K. This reveals the pattern in the way the virus spreads. A K value of one or more means a disease spreads evenly throughout the population, as with flu (each person with flu generally passes it on to another). But if the K number is under one, this means a disease spreads in clusters. This is significant because it provides key information about how we can keep the virus under control. Covid-19 is estimated to have a K value of between 0.1 and 0.5 per cent, based on research by the London School of Hygiene and Tropical Medicine. This suggests that it spreads in clusters. Indeed, scientists believe that between 10 and 20 per cent of people with Covid are responsible for passing on 80 per cent of infections — so-called superspreaders — while most people with the virus won't pass it on to anyone. [3]

- Europe's second wave of coronavirus infections has struck well before flu season even started, with intensive care wards filling up again and bars shutting down. Making matters worse, authorities say, is a widespread case of "COVID-fatigue." Record high daily infections in several eastern European countries and sharp rebounds in the hard-hit west have made clear that Europe never really crushed the COVID-19 curve as hoped, after springtime lockdowns. Spain this week declared a state of emergency for Madrid amid increasing tensions between local and national authorities over virus containment measures. Germany offered up soldiers to help with contact tracing in newly flaring hot spots. Italy mandated masks outdoors and warned that for the first time since the country became the European epicenter of the pandemic, the health system was facing "significant critical issues" as hospitals fill up. The Czech Republic's "Farewell Covid" party in June, when thousands of Prague residents dined outdoors across the Charles Bridge to celebrate their victory over the virus, seems painfully naive now that the country has the highest per-capita infection rate on the continent, at 398 per 100,000 residents. [3]

Countries	Deaths	Cases	Recovered
USA	222,953	8,228,865	5,329,151
Brazil	152,513	5,170,996	4,599,446
India	112,357	7,383,104	6,466,336
Mexico	85,285	834,910	608,188
UK	43,293	673,622	N/A
Italy	36,427	391,611	247,872
Peru	33,577	859,740	764,750
Spain	33,553	972,958	N/A
France	33,125	809,684	104,082
Iran	29,870	522,387	420,910
Colombia	28,457	936,982	826,831
Argentina	25,342	949,063	764,859
Russia	23,723	1,369,313	1,056,582
South Africa	18,309	698,184	628,301
Chile	13,529	488,190	461,097
Indonesia	12,347	353,461	277,544
Ecuador	12,306	150,360	128,134
Belgium	10,327	191,959	20,720
Iraq	10,142	420,303	353,962
Germany	9,829	353,822	284,600
Canada	9,708	192,442	162,203
Turkey	9,080	342,143	299,679
Bolivia	8,407	139,319	103,499
Netherlands	6,708	211,938	N/A
Pakistan	6,621	321,877	305,835
Philippines	6,531	351,750	294,865
Egypt	6,088	105,033	98,011
Sweden	5,918	103,200	N/A
Romania	5,749	172,516	127,076
Bangladesh	5,623	386,086	300,738
Ukraine	5,408	287,231	121,919
Saudi Arabia	5,144	341,495	327,795
China	4,634	85,646	80,759
Guatemala	3,478	100,431	89,494
Poland	3,440	157,608	87,773
Morocco	2,772	163,650	136,036
Honduras	2,552	86,089	34,099
Panama	2,529	122,883	98,671
Dominican Republic	2,189	120,066	96,152
Portugal	2,149	95,902	56,066
Israel	2,141	301,896	262,503
Switzerland	2,120	74,422	50,500
Ireland	1,838	46,429	23,364
Algeria	1,827	53,777	37,603
Kazakhstan	1,768	109,202	104,801
Japan	1,650	91,431	84,451
Moldova	1,549	65,860	46,543
Afghanistan	1,485	40,073	33,516
Ethiopia	1,325	87,169	40,988
Czechia	1,230	149,010	63,350
Costa Rica	1,159	93,152	57,731
Paraguay	1,150	52,596	34,427
Nigeria	1,116	60,982	52,194
Kyrgyzstan	1,103	51,020	45,288
Hungary	1,085	43,025	13,134
Oman	1,071	108,296	94,229
Armenia	1,056	61,460	47,541
Bosnia and Herzegovina	980	32,845	24,603
Bulgaria	944	27,507	16,678
Belarus	921	86,392	78,990
El Salvador	912	31,265	26,542
Australia	904	27,371	25,062
Austria	882	61,387	47,618
Sudan	836	13,691	6,764
North Macedonia	815	22,170	16,758
Kenya	813	43,580	31,648
Myanmar	799	33,488	15,477
Serbia	772	35,719	31,536

Venezuela	720	85,469	77,689
Nepal	715	126,137	88,040
Libya	699	47,845	26,062
Kuwait	684	114,015	105,846
Denmark	677	34,441	28,551
Azerbaijan	621	43,789	39,800
Yemen	596	2,053	1,329
Uzbekistan	520	62,588	59,624
Tunisia	512	34,790	5,032
Lebanon	501	58,745	25,994
Greece	490	24,450	9,989
UAE	455	112,849	104,943
Albania	443	16,501	9,957
S. Korea	441	25,035	23,180
Cameroon	423	21,441	20,117
Palestine	402	46,434	39,921
Finland	351	13,133	9,100
Zambia	346	15,659	14,899
Croatia	345	23,665	19,087
Senegal	317	15,368	13,704
Ghana	310	47,173	46,527
Bahrain	289	76,954	73,013
Jordan	282	33,009	6,565
DRC	281	10,935	10,306
Norway	278	16,201	11,863
Syria	238	4,931	1,425
Madagascar	237	16,754	16,124
Haiti	231	8,925	7,182
Zimbabwe	231	8,075	7,669
Angola	228	7,096	2,928
Qatar	222	128,803	125,802
Montenegro	221	14,672	10,355
Malawi	181	5,836	4,728
Slovenia	180	11,517	5,924
Malaysia	176	18,758	12,259
Mauritania	163	7,585	7,326
Jamaica	162	8,132	3,653
Nicaragua	154	5,353	4,225
Luxembourg	133	10,244	8,384
Mali	132	3,368	2,559
Namibia	130	12,103	10,329
Cuba	124	6,118	5,702
Georgia	124	15,327	7,613
Ivory Coast	120	20,257	19,898
Gambia	118	3,644	2,646
Eswatini	115	5,733	5,375
Bahamas	112	5,385	3,178
Lithuania	112	7,041	3,035
Suriname	109	5,094	4,907
Guyana	107	3,620	2,522
Hong Kong	105	5,221	4,951
Somalia	99	3,864	3,089
Uganda	96	10,334	6,901
Guadeloupe	96	6,908	2,199
Trinidad and Tobago	93	5,194	3,502
Congo	92	5,156	3,887
Chad	92	1,350	1,120
Equatorial Guinea	83	5,068	4,954
Liberia	82	1,374	1,254
Tajikistan	80	10,414	9,393
Cabo Verde	79	7,444	6,348
Mozambique	73	10,537	8,214
Sierra Leone	73	2,323	1,746
Slovakia	71	26,300	7,182
Guinea	70	11,327	10,380
French Guiana	69	10,233	9,894
Niger	69	1,207	1,124
Estonia	68	4,017	3,137
Burkina Faso	65	2,335	1,645
CAR	62	4,855	1,924
Djibouti	61	5,443	5,368
Thailand	59	3,669	3,467

- The head of the WHO has warned against deliberately allowing coronavirus to spread in the hope of achieving so-called herd immunity, saying the idea is unethical. *"Herd immunity is a concept used for vaccination, in which a population can be protected from a certain virus if a threshold of vaccination is reached,"* Tedros Adhanom Ghebreyesus said during a virtual press briefing. For instance, it is estimated that if 95% of the population is vaccinated, the remaining 5% will also be protected from the spread of the virus. For polio the threshold is estimated at 80%. *"Herd immunity is achieved by protecting people from a virus, not by exposing them to it,"* Tedros said. *"Never in the history of public health has herd immunity been used as a strategy for responding to an outbreak, let alone a pandemic."* [4]

- "Given that it is still not clear which vaccines will ultimately prevail, the government is taking a diversified approach," a statement said on Friday. Switzerland has already inked a deal with United States biotech firm Moderna to secure early access to 4.5 million doses of its Covid-19 vaccine. It has also confirmed its participation in the World Health Organization's COVAX initiative aimed at ensuring equitable access to Covid-19 vaccines when they are approved. "The Swiss public will therefore gain access to a further Covid-19 vaccine – provided it successfully passes the clinical trial phase and is approved by Swissmedic," the statement said. [5]

- The number of new coronavirus cases in Switzerland rose to more than 3,000 on Friday. Swiss hospitals could quickly reach their limits as the country experiences a steep rise in Covid-19 cases, warns Geneva virologist Isabella Eckerle. Cantons are now also calling for the government to step in with country-wide rules. [5]

Newly reported cases since 01.06 in Switzerland. [6]

- **Funding opportunity for researchers**

  PRACE (Partnership for Advanced Computing in Europe) Fast Track Call for Proposals
    - https://prace-ri.eu/prace-support-to-mitigate-impact-of-covid-19-pandemic/

  The US Congressionally Directed Medical Research Program - a call for proposals on COVID-19
    - https://ebrap.org/eBRAP/public/ProgramFY.htm?programFYId=256400

  Anyone submitting to US (NIH, DoD) or EU Horizon 2020 calls can contact the Grants Office for support: grantsoffice@research.unibe.ch. The Grants Advisors responsible for the ISPM are Aline Schögler (aline.schoegler@research.unibe.ch) and Leah Witton (leah.witton@research.unibe.ch).

Sources
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[3] https://www.pressreader.com/canada/covid-19-news/
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[6] https://www.corona-data.ch/