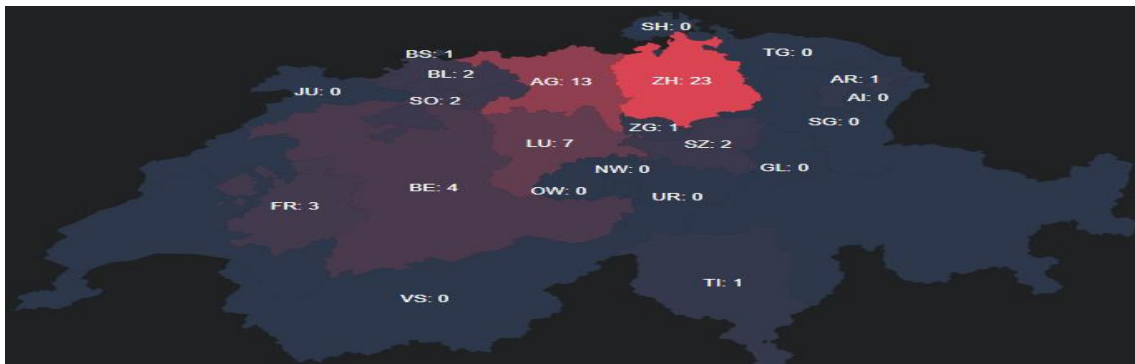# Coronavirus Disease – COVID-19
24.07.2020

- The death toll from the coronavirus outbreak is over 637,810 worldwide, with the highest number of deaths in USA (147,395) and Brazil (84,251). There have been more than 15,722,682 global cases in 210 countries and territories.

- Preliminary results of a Phase 1/2 trial of a coronavirus vaccine developed by the University of Oxford suggest that it is safe and induces an immune response. The vaccine provoked an antibody response within 28 days and a T-cell response within 14 days, according to a release from the medical journal The Lancet. The trial included 1,077 people age 18 to 55 with no history of Covid-19 and took place in five UK hospitals from late April to late May. Participants received the Covid-19 vaccine or the meningococcal conjugate vaccine, as a control group. "*The immune system has two ways of finding and attacking pathogens – antibody and T cell responses. This vaccine is intended to induce both, so it can attack the virus when it's circulating in the body, as well as attacking infected cells,*" University of Oxford Professor Andrew Pollard, the study's lead author, said in a statement. *"We hope this means the immune system will remember the virus, so that our vaccine will protect people for an extended period. However, we need more research before we can confirm the vaccine effectively protects against SARS-CoV-2 infection, and for how long any protection lasts,*" the statement added.

- The United Nations Development Programme and Georgetown University launched the COVID-19 Law Lab, a database of laws that countries have implemented in response to the pandemic. "*It includes state of emergency declarations, quarantine measures, disease surveillance, legal measures relating to mask-wearing, physical distancing, and access to medication and vaccines. Well-designed laws can help to build strong health systems; evaluate and approve safe and effective drugs and vaccines; and enforce actions to create healthier and safer public spaces and workplaces. However, laws that are poorly designed, implemented or enforced can harm marginalized populations, entrench stigma and discrimination, and hinder efforts to end the pandemic"*, WHO Director-General Tedros Adhanom Ghebreyesus said during a briefing. "*We must remember that most people are still susceptible to this virus. As long as it's circulating, everyone is at risk. Just because cases might be at a low level where you live, that doesn't make it safe to let down your guard. Don't expect someone else to keep you safe. We all have a part to play in protecting ourselves and one another"*, he added.

- Worrying trends of coronavirus infection are emerging in southern Europe and in the Balkan region, Mike Ryan, head of the WHO emergencies programme, said on Wednesday. *"Obviously the Americas is clearly still the major hot spot, but we have disease beginning to accelerate in Africa,"* Ryan said. He added: *"Also, even in Europe, while certainly in western Europe the disease has come under control, we still have some worrying trends in southern Europe and the Balkans so we're not out of the woods just yet in the European environment. It requires sustained vigilance."*

- Almost a quarter of people in the Indian capital of Delhi have been infected with the coronavirus, according to scientists, raising fears there could be many more cases in the country. Random testing of more than 20,000 people in Delhi by India's national disease control centre found that 23.48% had antibodies to the virus. Adjusting for false positives and negatives, it was estimated that 22.86% of the population had been infected, Sujeet Kumar Singh, who heads the institute, said on Tuesday.

Countries	Deaths	Cases	Recovered
USA	147,395	4,175,379	1,981,538
Brazil	84,251	2,292,286	1,570,237
UK	45,554	297,146	N/A
Mexico	41,908	370,712	236,209
Italy	35,092	245,338	197,842
India	30,957	1,314,616	833,480
France	30,182	179,398	80,472
Spain	28,429	317,246	N/A
Peru	17,654	371,096	255,945
Iran	15,289	286,523	249,212
Russia	13,046	800,849	588,774
Belgium	9,812	64,847	17,369
Germany	9,190	205,367	189,400
Canada	8,874	112,672	98,519
Chile	8,838	338,759	311,431
Colombia	7,688	226,373	107,951
Netherlands	6,139	52,404	N/A
South Africa	6,093	408,052	236,260
Pakistan	5,763	270,400	219,783
Sweden	5,676	78,763	N/A
Turkey	5,563	223,315	206,365
Ecuador	5,439	78,148	33,455
Indonesia	4,665	95,418	53,945
China	4,634	83,750	78,873
Egypt	4,480	90,413	31,066
Iraq	4,212	104,711	71,268
Bangladesh	2,836	218,658	120,976
Argentina	2,722	148,027	65,447
Saudi Arabia	2,672	262,772	215,731
Bolivia	2,407	65,252	20,030
Romania	2,150	42,394	25,349
Switzerland	1,977	34,154	30,500
Philippines	1,879	76,444	24,502
Ireland	1,763	25,826	23,364
Portugal	1,705	49,379	34,369
Poland	1,655	42,038	31,997
Guatemala	1,632	42,192	28,856
Ukraine	1,571	62,823	34,886
Afghanistan	1,225	35,981	24,602
Kyrgyzstan	1,211	31,247	18,038
Panama	1,209	56,817	31,828
Algeria	1,124	25,484	17,369
Honduras	1,011	36,902	4,448
Dominican Republic	1,006	57,615	26,905
Japan	990	27,029	21,035
Nigeria	833	38,948	16,061
Moldova	726	22,483	15,407
Sudan	715	11,302	5,855
Austria	711	20,214	18,042
Armenia	692	36,613	25,734
Denmark	613	13,438	12,340
Hungary	596	4,398	3,312
Kazakhstan	585	78,486	49,488
Belarus	524	66,846	59,755
Serbia	518	22,852	14,047
Yemen	461	1,654	762
North Macedonia	451	9,797	5,254
Israel	446	58,559	25,887
Kuwait	425	62,625	52,915
Azerbaijan	400	29,312	21,547
Cameroon	385	16,708	14,539
El Salvador	379	13,792	7,415
Czechia	365	14,800	9,328
Oman	359	73,791	53,007
UAE	343	58,249	51,235
Bulgaria	329	9,853	5,031
Finland	329	7,380	6,920
S. Korea	298	13,979	12,817
Morocco	292	18,264	15,872
Bosnia and Herzegovina	280	9,767	4,555
Kenya	263	15,601	7,135
Norway	255	9,088	8,674
DRC	201	8,767	5,109
Greece	201	4,110	1,374
Ethiopia	197	11,933	5,645
Senegal	182	9,422	6,291

Qatar	164	108,638	105,420
Mauritania	156	6,067	4,086
Haiti	154	7,197	4,236
Ghana	153	30,366	26,687
Australia	139	13,595	8,775
Bahrain	136	37,996	34,412
Zambia	134	3,789	1,677
Venezuela	129	13,613	7,752
Croatia	128	4,715	3,555
Malaysia	123	8,861	8,577
Albania	123	4,466	2,523
Mali	123	2,494	1,889
Slovenia	115	2,052	1,678
Luxembourg	112	5,952	4,591
Nicaragua	108	3,439	2,492
Uzbekistan	103	18,986	10,149
Ivory Coast	93	15,001	9,282
Somalia	93	3,171	1,499
Cuba	87	2,466	2,339
Costa Rica	80	13,129	3,448
Lithuania	80	1,986	1,616
Malawi	79	3,386	1,328
Madagascar	76	8,741	5,522
Chad	75	915	805
Liberia	71	1,135	621
Palestine	70	10,093	2,720
Estonia	69	2,028	1,915
Niger	69	1,124	1,022
Sierra Leone	66	1,752	1,292
Tajikistan	58	7,104	5,851
Djibouti	58	5,031	4,927
CAR	58	4,590	1,452
Thailand	58	3,279	3,107
Libya	56	2,314	501
Burkina Faso	53	1,075	920
Andorra	52	889	803
Equatorial Guinea	51	3,071	842
Congo	51	3,038	756
Tunisia	50	1,406	1,118
Gabon	47	6,588	4,235
Channel Islands	47	583	533
South Sudan	45	2,239	1,175
Nepal	44	18,374	12,947
Lebanon	43	3,260	1,619
Guinea	42	6,806	5,999
San Marino	42	699	656
French Guiana	40	7,086	5,376
Montenegro	40	2,569	538
Mayotte	38	2,862	2,650
Paraguay	36	4,113	2,487
Syria	35	608	184
Benin	34	1,694	918
Uruguay	34	1,141	940
Angola	33	851	236
Latvia	31	1,205	1,045
Zimbabwe	28	2,124	510
Slovakia	28	2,118	1,577
Eswatini	28	2,021	882
Singapore	27	49,375	45,015
Guinea-Bissau	26	1,954	803
Isle of Man	24	336	312
Suriname	23	1,234	774
New Zealand	22	1,556	1,513
Cabo Verde	21	2,190	1,150
Tanzania	21	509	183
Cyprus	19	1,047	847
Guyana	19	351	176
Hong Kong	16	2,373	1,407
Georgia	16	1,104	912
Togo	16	828	584
Maldives	15	3,120	2,428
Martinique	15	262	98
Sint Maarten	15	84	63
Sao Tome and Principe	14	749	604
Guadeloupe	14	195	172
Diamond Princess	13	712	651
Sri Lanka	11	2,763	2,094
Mozambique	11	1,582	528
Jordan	11	1,131	1,035
Bahamas	11	274	91
Iceland	10	1,843	1,823
Jamaica	10	821	711
Mauritius	10	343	332
Malta	9	686	665
Bermuda	9	153	139
Trinidad and Tobago	8	141	128
Namibia	7	1,618	72
Taiwan	7	458	440
Comoros	7	340	324
Barbados	7	106	94
Lesotho	6	359	69
Myanmar	6	343	282
Rwanda	5	1,710	889
Gambia	5	170	58
Monaco	4	114	100
Réunion	3	646	558
Brunei	3	141	138
Aruba	3	117	101
Antigua and Barbuda	3	76	58
Saint Martin	3	46	39
Turks and Caicos	2	90	26

- Cloth face coverings should have at least two layers to be most effective, and preferably three, according to new research published Thursday. A team in Australia used tailored LED lighting and a high-speed camera to capture the dispersal of airborne droplets from someone talking, sneezing and coughing while wearing different types of face coverings – bare faced, with a single layer of cloth, a double layer and a medical grade surgical mask. While they said a single-layer face covering is better than nothing "a double-layer cloth face covering was significantly better at reducing the droplet spread caused by coughing and sneezing," they added.
- Mothers infected with Covid-19 are unlikely to pass the infection to their newborns when appropriate health precautions are taken, according to a study published Thursday in The Lancet Child & Adolescent Health. Researchers reported no cases of viral transmission among 120 babies born to 116 Covid-positive mothers, even when both shared a room and the mothers breastfed. Still, precautions were taken: Babies remained in enclosed cribs and six feet apart from their mothers, except while breastfeeding. Mothers were also required to wear surgical masks when handling their child and followed proper hand and breast washing procedures. After, researchers conducted follow up exams and tests. None of the results were positive, and none of the babies showed Covid-19 symptoms. Recommendations for mothers with Covid-19 and their newborns vary. The study affirms current guidance by the World Health Organization and the American Academy of Pediatrics. The pediatricians' group updated its guidance Wednesday.

Newly reported cases in Switzerland today - 24.07.2020.

- **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

Fast Funding for COVID-19 Science - Applications are paused
- https://fastgrants.org/

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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