



Short Update 19b COVID-19 Coronavirus Disease 15th of May 2020



GLOBALLY

4 444 670
Confirmed cases

1 588 858
recovered
302 493 deaths

USA

(x2 in 40.5 d ↘)

1 417 889
confirmed cases
246 414 recovered
85 906 deaths

Brazil

(x2 in 12.0 d ↗)

203 165
confirmed cases
79 479 recovered
13 999 deaths

Russia

(x2 in 13.5 d ↘)

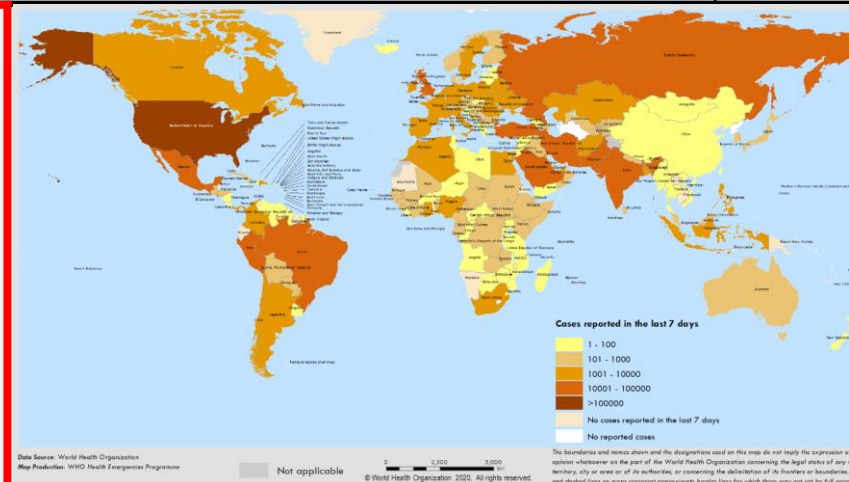
252 245
confirmed cases
53 530 recovered
2 305 deaths

News:

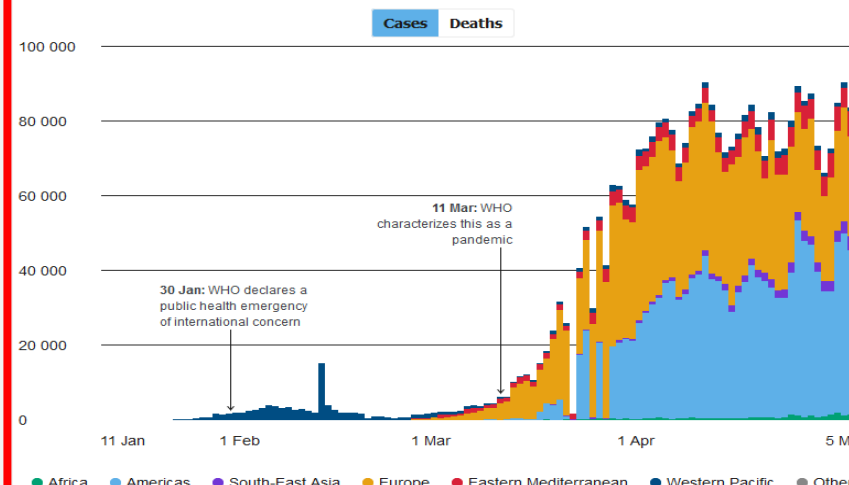
- **WHO** has published an annex to the [guidance](#) on considerations on adjusting public health and social measures (PHSM). The [new annex](#) provides a pragmatic decision process to help countries through adapting PHSM based on epidemiological and public health criteria.
- **WHO** has published a new guidance on [Considerations for school-related public health measures in the context of COVID-19](#) as an annex to earlier guidance on [adjusting public health and social measures](#) published on 15 April 2020.
- WHO Europe
- **ECDC** published the third update [for Infection prevention and control and preparedness for COVID-19 in healthcare settings](#).
- According to the [2020 World Health Statistics](#) published by WHO today, [the COVID-19 pandemic is causing significant loss of life, disrupting livelihoods](#), and threatening the recent advances in health and progress towards global sustainable development goals.
- According to a study by the DEU University Medical Center Hamburg-Eppendorf (UKE), the novel corona virus affects not only the lungs but also numerous other organs. The second most frequently affected organ are the kidneys. In addition, the pathogen was found in the heart, liver, brain and blood. The highest concentrations were found in the cells of the respiratory tract.
- Worldwide, the corona virus pandemic could postpone or cancel up to 30 million planned operations a study of the University of Birmingham. Orthopaedic interventions in particular, but also around two million cancer operations are affected.
- Find Articles and other materials about COVID-19 on our website [here](#)
- Please use our online observation form to report your lessons learned observations as soon as possible [here](#)

Topics:

- Germany: What measures got Corona under control?
- The airborne lifetime of small speech droplets and their potential importance in SARS-CoV-2 transmission
- Country in Focus - Brazil
- Conflict & Health – Democratic Republic of the Congo –
- Mental Health – sport reduce stress and depression



Daily reported cases and deaths of COVID-19



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EUROPE

1 623 586
confirmed cases

742 566 recovered
151 749 deaths

SPAIN

(x2 in 124.5 d ↘)

229 540
confirmed cases

143 374 recovered
27 321 deaths

ITALY

(x2 in 128.5 d →)

223 096
confirmed cases

115 288 recovered
31 368 deaths

UK

(x2 in 40.5 d ↘)

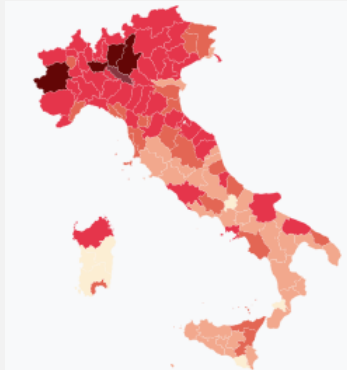
234 441
confirmed cases

1 045 recovered
33 693 deaths

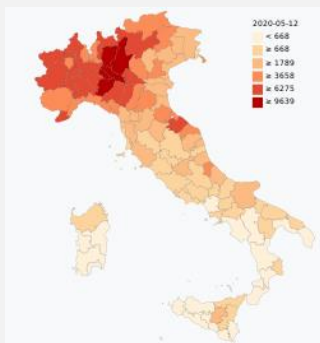
Situation in Europe

Italy: In Bergamo and its province, 568% more people died in the first weeks of the epidemic than there die in normal years. The national statistics office Istat and the Istituto Superiore di Sanità, Italy's highest health authority, have this in a large-scale study on the so-called Found out mortality in the country. No area in Europe has been hit harder than "la Bergamasca". After Bergamo, the following provinces were particularly hard hit: Cremona (plus 391% deaths), Lodi (plus 371%), Brescia (plus 291%), Piacenza (plus 264%) and Parma (plus 208%). Another finding is also astonishingly confirmed: in the center and south of Italy, the mortality rate in 2020 will be roughly the same as ever. The uniform and nationwide lockdown not only prevented a potentially devastating spread of the pathogen in the economically weaker part of Italy. Mortality was even lower in these areas than in other years because there were of course fewer traffic and work accidents. In Rome, for example, 9.4 percent fewer people died than usual. There were 3 categories of people who died: people, especially in old people's homes and at home, who died and were buried at Covid-19 without being tested; People whose previous illnesses have not been diagnosed by the infection and have accelerated fatally; and people who could not be treated due to the congestion in the hospitals and those who, despite suffering, were unable to go to the emergency room. The apparently sudden escalation of the crisis was preceded by mistakes. Giorgio Gori, the mayor of Bergamo, speaks of a "broad, cross-party underestimation" at the beginning of the epidemic and does not exempt himself from it. In several cases, prosecutors in the north are now investigating whether it was really just that, or whether officials and politicians may also have been accused of negligent homicide. At the center of the most explosive case is the Pesenti Fenaroli hospital in the small town of Alzano Lombardo in Val Seriana, a valley in the hinterland of Bergamo. The management of the clinic - apparently at the behest of the Lombard health authority - simply continued the operation even after the first cases of infection. Moreover, refraining from isolating patients' relatives, nurses and doctors working in the hospital, and quarantining them, became one of the largest sources of infection.

Source: <https://www.sueddeutsche.de/politik/corona-italien-berga-mo-1.4897629?reduced=true>



Number of confirmed cases by province
(as of 20 April 2020).



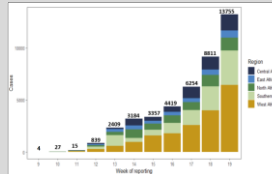
Confirmed cases per million residents by province
(as of 2 May 2020).

Source:
https://en.wikipedia.org/wiki/COVID-19_pandemic_in_Italy

Global Situation

AFRICA: New WHO-AFRO (BMJ) modelling

- New estimates based on country-specific variables (slower transmission rate, lower age of the population and lower mortality compared to countries outside Africa)
- 29 to 44 million people infected in the first year of the pandemic (without containment)
- 83,000 - 190,000 deaths (CF 0.4%)
- 3.6 - 5.5 million hospitalizations, including 52,000 - 107,000 serious cases
- Capacity: 9 ICU beds / 1 million (47 countries in the region)
- Laboratory: PCR diagnostics in 44 of 47 countries
- According to a study by the NYU, HIV co-infections do not appear to be a significant risk factor for a more severe course compared to other COVID-19 patients without HIV co-infection. HIV patients were hospitalized comparatively more often and had high CRP values. Other markers did not differ significantly in the group comparison.
- Weekly bulletin WHO Africa: <https://apps.who.int/iris/bitstream/handle/10665/332067/OEW19-0410052020.pdf>



WHO: Coronavirus never disappears?

The emergency aid coordinator of the World Health Organization (WHO) is sceptical that the new coronavirus can still be eliminated after the rapid spread around the world. "This virus can become native to the population, and it may never go away," said Michael Ryan at the media briefing in Geneva on Wednesday night. HIV, the virus that triggers the immune deficiency disease, has never disappeared again. In the case of HIV, however, the world has managed to create drugs and preventive measures. The virus had lost part of its terror through them. "I don't want to compare the diseases, but we have to be realistic," said Ryan. Nevertheless, there is still a small chance to exterminate Sars-CoV-2. To do this, a highly effective vaccine must be found, manufactured in sufficient quantities and distributed all over the world. And people should agree to be vaccinated. "Each of these steps is challenging," said Ryan. He criticized the widespread scepticism about vaccinations and the lack of funds for good health systems in many regions of the world. "We have very effective vaccines on this planet that we have not used effectively," he said, referring to measles. The number of measles cases has been increasing again for several years. Many countries failed in eradicating the disease as for example DEU that had actually committed to WHO to eradicate measles by 2015. However, this would require more than 95 percent of the population to be immune to the disease. A value that is not achieved. With the right measures, however, the coronavirus can be brought under control, emphasized WHO expert Maria van Kerkhove. Accordingly, this includes the detection of infected people, the isolation of contact persons and effective treatment. Vaccines and medicines are being worked at high pressure, says van Kerkhove.

Germany: What measures got Corona under control?

In Germany comprehensive containment measures were taken in the second half of March. For example, companies and establishments in sectors such as hospitality, retail or culture and leisure were closed in the area of public life. The same applies to day-care centers and schools, professional and recreational sports have been discontinued. The borders to most of the neighbouring countries were closed.

It is already very important to determine which measures have had which share in containing the virus. That is the aim of the mentioned article.

The fact that were implemented by the German state governments and not according to a nationwide schedule. The implementation of the various containment measure at different times allows an assessment of the effects on the slowing down of the virus spread.

The main effects: schools and day-care centers, exit restrictions, sport

Maßnahme	Koeffizient	p-Wert
Schulen/Ki Tas	-0,0803	0,0000
Ausgangsbeschränkungen	-0,0430	0,0004
Profi- und Breitensport	-0,0345	0,0000
Einzelhandel	0,0224	0,2398
Beherbergung	-0,0162	0,2307
Gaststätten	-0,0016	0,8729
Bars/Clubs	-0,0294	0,2025
Kinos	0,0206	0,2247
Messen/Veranstaltungen	-0,0032	0,8126
Sonstiger Unterricht	-0,0036	0,8712
Kunst/Unterhaltung/Erholung	0,0229	0,1608
Friseure/Kosmetik	-0,0095	0,4618
Außengrenzen	-0,0129	0,1675

The regression results are shown in the Table. The greatest effect is for school and daycare closings with -0.080. These measures have reduced the growth rate of confirmed infections by 8.0 percentage points. The exit restrictions account for 4.3 percentage points, the discontinuation of professional and recreational sports 3.4 percentage points. These effects have a high statistical significance (p-value <0.01).

There are moderately negative coefficients for accommodation and bars / clubs, but these, like all other coefficients for branch closures, are statistically insignificant.

An only slightly negative and insignificant effect can also be seen in the border closings. If we remove all these variables from the regression, the effect of school and daycare closures will be absolutely slightly smaller (7.9 percentage points) and that of the exit restrictions will be slightly larger (5.0 percentage points).

Conclusion

The results indicate that the flattening of the infections is primarily associated with school and daycare closures, exit restrictions and the cessation of professional and recreational sports. On the other hand, there are hardly any additional effects for the closings of the service sectors of public life.

Opening schools and day care centers is of immense importance from a social, educational and labor market perspective. For example, Wanger / Weber (2020) calculate a loss of 55.8 million working days for the parents affected by closures by the end of April.

Major events such as sports continue to be viewed critically. According to the results of the study, however, there could be a good chance that a controlled opening of the service sectors of public life would be possible without significantly increasing the infection rate.

The results of the present study can provide clues not only for a further opening strategy, but also for the procedure if - if necessary locally - renewed containment measures are necessary. It should be noted that all measured effects apply under the conditions that prevailed during the observation period. The effects of the opening steps should be examined empirically based on the different regional design in order to collect further evidence.

The airborne lifetime of small speech droplets and their potential importance in SARS-CoV-2 transmission

Abstract

Speech droplets generated by asymptomatic carriers of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) are increasingly considered to be a likely mode of disease transmission. Highly sensitive laser light scattering observations have revealed that loud speech can emit thousands of oral fluid droplets per second. In a closed, stagnant air environment, they disappear from the window of view with time constants in the range of 8 to 14 min. These observations confirm that there is a substantial probability that normal speaking causes airborne virus transmission in confined environments.

In a recent report the scientists used an intense sheet of laser light to visualize bursts of speech droplets produced during repeated spoken phrases. That methods showed a total integrated volume far higher than in previous reports. The high sensitivity of the light scattering method in observing medium-sized (10 μm to 100 μm) droplets, a fraction of which remain airborne for at least 30 s, likely accounts for the large increase in the number of observed droplets.

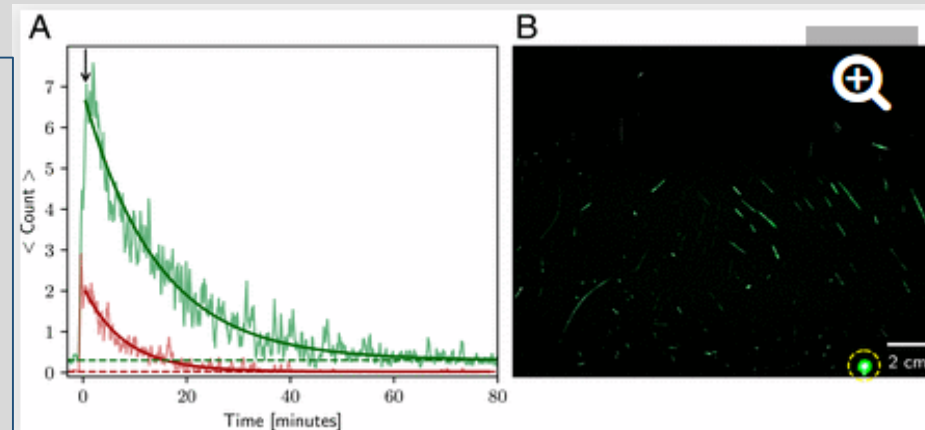
The distance over which droplets travel laterally from the speaker's mouth during their downward trajectory is dominated by the total volume and flow velocity of exhaled air. The flow velocity varies with phonation, while the total volume and droplet count increase with loudness. Therefore, in an environment of stagnant air, droplet nuclei generated by speaking will persist as a slowly descending cloud emanating from the speaker's mouth, with the rate of descent determined by the diameter of the dehydrated speech droplet nuclei.

Results and Discussion

Movie clips of speech droplet nuclei were recorded at a frame rate of 24 Hz with high-definition resolution (1,920 $\times$ 1,080 pixels). The total number of particles in the enclosure can be approximated by multiplying the average number of particles detected in a single movie frame by the volume ratio of the enclosure to the visualized sheet, which is $\sim 7,300$. With the internal circulation fan turned on, the enclosure was purged with HEPA-filtered air for several minutes.

Then, the purge shutter was closed, the movie clip was started, the speaker port was opened, and the enclosure was "filled" with speech droplets by someone repeating the phrase "stay healthy" for 25 s. The internal fan was turned off 10 s after speech was terminated, and the camera continued recording for 80 min. The movie clip was analyzed frame by frame to determine the number of spots/streaks whose maximum single-pixel intensity exceeded a threshold value of 30.

Light scattering observation of airborne speech droplet nuclei, generated by a 25-s burst of repeatedly speaking the phrase "stay healthy" in a loud voice (maximum 85 dBB at a distance of 30 cm; average 59 dBB). Valentyin Stadnytskyi et al. PNAS doi:10.1073/pnas.2006874117



The figure charts the time-dependent decrease in the number of scattering particles detected. The study was not yet able to quantitatively link the observed scattered light intensity to the size of the scattering particle because the light intensity varies across the sheet. However, the brightest 25% were found to decay more quickly than the dimmer fraction, with the two curves reasonably well described by exponential decay times of 8 and 14 min, respectively (Fig. 1A). These fits indicate that, near time 0, there were, on average, approximately nine droplet nuclei in the 30-cm³ observation window, with the larger and brighter nuclei (on average) falling to the bottom of the enclosure at faster speeds than the smaller and dimmer ones.

At an average viral load of 7×10^6 per milliliter, the scientists estimate that 1 min of loud speaking generates at least 1,000 virion-containing droplet nuclei that remain airborne for more than 8 min. These therefore could be inhaled by others and, according to IAH, trigger a new SARS-CoV-2 infection.

Source: <https://www.pnas.org/content/early/2020/05/12/2006874117>



Brazil



Brazil is being pushed to save its indigenous people

The rate of confirmed SARS-CoV-2 infections in Brazil has now reached almost 170,000. The virus, which Brazil President Jair Bolsonaro still cites as the cause of an insignificant cold ("gripezinha"), has now claimed 11,654 deaths nationwide. It is precisely the president's attitude towards the Brazilian population that lacks empathy that causes his critics' anger to swell. While the densely populated economic metropolises in southeastern Brazil, such as Rio de Janeiro and São Paulo, were particularly hard hit at first, the infection spread to northern Brazil with a time lag. Among the 9 northern states of Brazil, Amazonas, the largest of these states, is particularly hard hit by the pandemic. There are currently 12,919 COVID-19 cases with 1,035 deaths confirmed. With 19.4 deaths / 100,000 inhabitants, the Amazon has a dramatically higher COVID-19 mortality rate than the national average of 4.4 / 100,000.

About half of the state's Amazon infections are concentrated in the state's capital, Manaus. However, the officially reported number of COVID-19-related deaths is subject to considerable underreporting, especially since testing to SARS-CoV-2 is far from being necessary. The data from the Brazilian Federal Association of Public Notaries for April 2020 shows, in addition to the 385 officially died from COVID-19, a further 999 deaths from respiratory diseases due to an unknown cause. In contrast, the number of unexplained respiratory deaths in April of the previous year was only 249, which is why the actual number of COVID-19-related deaths is unofficially estimated to be at least 4 times higher. At the moment more people are dying in Manaus than can be buried in the city's cemeteries. The dead are therefore temporarily stored in refrigerated trucks before being buried in mass graves in the "Nossa Senhora Aparecida" cemetery.

At the beginning of April the virus found its way into the territories of numerous tribes of the indigenous population of Brazil, which currently comprises 103 different ethnic groups. As the first member of this ethnic group, a 15-year-old from the Yanomami tribe died on April 10 after being unsuccessfully treated for 1 week in Boa Vista, north of Manaus. Since then, diseases and deaths from SARS-CoV-2 have increased in different communities and evoke memories of the near-extinction of indigenous tribes by infectious diseases that foreign road construction workers brought to them in the 1970s and 1980s than during the development In the Amazon region, numerous workers from other parts of Brazil entered the Amazon region.

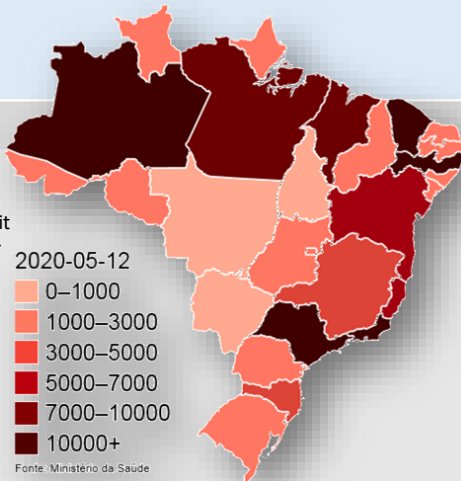
The two maps on the right must also be taken into account: the least populated area, Amazonia in the north-west of the country, is worst affected in terms of its absolute number of infections and ultimately in relative terms, since significantly more population lives in the coastal cities.

Organizations that cooperate with indigenous peoples such as FUNAI (Fundação Nacional do Índio), the National Authority for Indian Affairs, support the tribal leaders' calls for help and also address the international public. Thereupon THE GUARDIAN reported on May 3rd, 2020 with the headline "We are on the eve of a genocide - Brazil urged to save Amazon tribes from COVID-19" about the current situation of the indigenous ethnic groups in the Amazon region. In an open letter, an international group of well-known representatives from the worlds of art, science, celebrities and intellectuals urged the Brazilian government to do much more to fight the spread of COVID-19 among the country's indigenous people in order to potentially eradicate these communities prevent. In the remote settlements there is a lack of everything that enables protection against infection, such as public information campaigns, masks, gloves, isolation options, basic medical and intensive care treatment facilities, opportunities for telecommunications, the Internet and social support in the event of illness or death of family members.

The protective measures implemented by the government in Brazil, which are reluctant to do so anyway, completely save the indigenous population. Under Bolsonaro's government, this portion of the population is virtually non-existent, which is why they treat it consistently with indifference and refusal to take any protective measures. Since the government under Bolsonaro, after its seizure of power in January 2019, with its propagated stance, also significantly fueled the economic exploitation of the Amazon rainforest areas, the overexploitation of nature within the reserves assigned to the indigenous tribes has led to a considerably accelerated destruction of their natural resources. Illegally operating mines exploit the region of the north, which is rich in gold and other raw materials, leaving considerable environmental damage. Illegal land grabbing by farmers and ranchers has been followed by unlicensed clearing of rainforest. The unchecked influx of strangers is followed by the introduction of COVID-19 into the tribal areas of the indigenous people as a natural consequence.

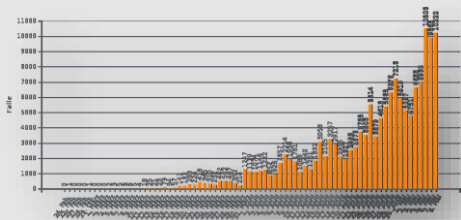
In the wake of the extensive forest fires in northern Brazil in 2019, from which the local population has by no means recovered, it occurred in the same year on the indigenous territory of the Ituna Itatá tribe on the Rio Xingú (state of Pará) on an area of approximately 7,500 hectares to further massive tree losses due to illegal clearing. Dedicated representatives of the Brazilian environmental agency IBAMA (Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis) then managed to completely stop further clearing in 2020. In addition, IBAMA closed an illegally operating mine in the Ituna Itatá area and confiscated an extensive arms store. The successful operations of IBAMA in the fight against the progressive destruction in Amazonia were published on Brazilian television at the end of April. Despite vehement protests following the broadcast, the two key coordinators of the two IBAMA operations were stripped of their post by the Environment Minister on 30 April at the behest of the President. Ultimately, IBAMA and FUNAI should be seen as a thorn in the side of Brazil's president, pursuing activities in the region that run counter to the country's president. In the meantime, however, the anger of the population has escalated and senior government officials appointed by Bolsonaro are no longer on their side. The Justice Minister recently announced his resignation from all offices. The attitude of the Brazilian armed forces currently seems to be waiting. It appears that the military is still trying to give Bolsonaro the opportunity to withdraw on its own initiative.

Source: <https://www.theguardian.com/world/2020/may/03/eve-of-genocide-brazil-urged-save-amazon-tribes-covid-19-sebastiao-salgado>

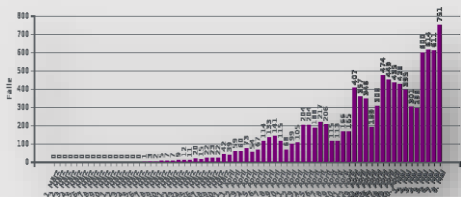


Source:
https://upload.wikimedia.org/wikipedia/commons/5/58/COVID-19_Outbreak_Cases_in_Brazil.svg

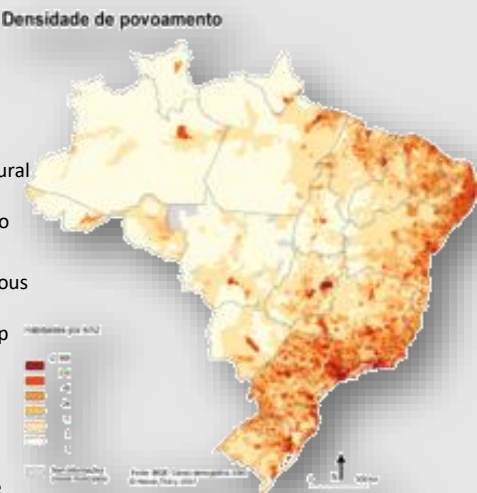
Confirmed cases in Brazil (daily)



Confirmed deaths in Brazil (daily)



Distribution of the population in Brazil



Source: <https://de.wikipedia.org/wiki/Brasilien>



Congo (Democratic Republic)

26.5 Index Score

161/195



	COUNTRY SCORE	AVERAGE SCORE*
PREVENTION	24.0	34.8
Antimicrobial resistance (AMR)	8.3	42.4
Zoonotic disease	20.4	27.1
Biosecurity	4	16.0
Biosafety	0	22.8
Dual-use research and culture of responsible science	0	1.7
Immunization	93.9	85.0
DETECTION AND REPORTING	25.1	41.9
Laboratory systems	16.7	54.4
Real-time surveillance and reporting	30	39.1
Epidemiology workforce	50	42.3
Data integration between human/animal/environmental health sectors	0	29.7
RAPID RESPONSE	31.3	38.4
Emergency preparedness and response planning	25	16.9
Exercising response plans	50	16.2
Emergency response operation	0	23.6
Linking public health and security authorities	0	22.6
Risk communication	25	39.4
Access to communications infrastructure	40.1	72.7
Trade and travel restrictions	100	97.4
HEALTH SYSTEM	11.8	26.4
Health capacity in clinics, hospitals and community care centers	18.8	24.4
Medical countermeasures and personnel deployment	0	21.2
Healthcare access	29.6	38.4
Communications with healthcare workers during a public health emergency	0	15.1
Infection control practices and availability of equipment	0	20.8
Capacity to test and approve new medical countermeasures	25	42.2
COMPLIANCE WITH INTERNATIONAL NORMS	45.9	48.5
IHR reporting compliance and disaster risk reduction	50	62.3
Cross-border agreements on public and animal health emergency response	50	54.4
International commitments	28.1	53.4
JEE and PVS	25	17.7
Financing	50	36.4
Commitment to sharing of genetic & biological data & specimens	66.7	68.1
RISK ENVIRONMENT	20.1	55.0
Political and security risks	71	60.4
Socio-economic resilience	28.7	66.1
Infrastructure adequacy	0	49.0
Environmental risks	62.9	52.9
Public health vulnerabilities	9.4	46.9

*Average: all 195 countries
Scores are normalized (0-100, where 100 = most favorable)

www.ghsindex.org

Conflict & Health

DEMOCRATIC REPUBLIC OF THE CONGO

Land of resources, conflicts and humanitarian catastrophes

After the Democratic Republic of the Congo (abbreviated “Congo” or “DRC”, formerly known as Zaire) was released from the partially cruel Belgian colonial rule in 1960, dictator Mobutu ruled the country for 32 years. After this the country tumbled into a series of conflicts with severe economic and social consequences from which it still suffers. The following phase is called the “African World War” or “Great War of Africa” because of the involvement of numerous neighbouring countries in the internal conflicts, ended with a peace treaty in 2002 which brought peace to most parts of the DRC. In 2006 the first free elections took place, followed by two additional elections in 2011 and 2018. Irrespective of this, DRC is ranked very low on many indices due to massive corruption, conflicts and violation of human rights, for example DRC is placed on 5th rank of the Fragile State Index 2019 (FSI) and ranked 166th out of 167 on the Democracy Index. The United Nations try to support the peace process since 1999 with the MONUSCO mission, currently approximately 17,000 soldiers are involved. Nevertheless, conflicts are still on-going in the eastern part of DRC (approx. 100 rebel groups) and in some other parts of the country. This leads to a very bad security situation and permanent almost unmanageable violence and conflicts, this mostly affects the civil population.

DRC is the 11th largest country (by territory) in the world and has approximately half the size of Europe. The approximately 80 million inhabitants belong to approx. 200 ethnic groups and the urbanization rate is at almost 45%. Especially significant is the notable annual increase of the population size of 2.7% during the past 20 years and the annual increase of the urbanization rate by 4% driven by rural exodus and displacement. The steady growth and the increasing mobility of the population has adverse effects on the social infrastructure and the natural resources in DRC. This development has direct impact on the allocation of available agricultural land and on the biosphere of the rain forest that covers large parts of DRC. The increase of population also increases the demand for food, energy, water and social resources and infrastructure.

Another challenge for the development of the country is the almost non-existing infrastructure. In the whole country only 3,000km of asphalted roads are existing. Conflicts and mismanagement brought the streets and railways of the colonial era to a standstill over the decades. The main transportation routes are the rivers that flow through the entire country and ensure supply. DRC is one of the richest countries in raw materials worldwide and – despite of its complicated political and social situation – plays an important and elementary role in global supply with raw materials and on the commodity market. Especially diamonds, gold, zinc, copper, oil, and coltan are extracted. Coltan plays an important role in all kinds of electronic devices that are used globally and the (often) inhumane extraction process is subject to public criticism. The richness in raw materials and the extraction thereof leads to severe conflicts in the respective regions of DRC. Many rebel groups are financing themselves via resource extraction, e.g. in the eastern part of DRC (gold), in the conflict area of Kasai (diamonds) and in the region of Katanga (manganese, copper).

The very poor medical condition in DRC is a result of one of the poorest health systems in the world (compare GHSI). Governmental spending is at 3 USD per year and inhabitant, there is approximately 1 physician per 10,000 people. At the same time only 35% of the population have access to clean water and only one third has access to sanitation. This lack of hygiene measures promotes the spread of infectious diseases and epidemics. In addition, the situation deteriorated because of severe floods and an uncountable number epidemics such as Cholera, Measles (currently over 8,000 fatalities in 2020), Ebola (currently over 2,500 fatalities) and a high risk for Malaria. Especially the third and most recent outbreak of Ebola in the last three years, which is still on-going in the eastern part of DRC is seen as one of the most complex health risks in history. The reason for this is the necessity of fighting an outbreak of Ebola in a warzone with more than 100 conflict parties in geographically challenging terrain and numerous additional influencing factors. The only new hope in fighting the virus was the Ebola vaccine that was first used there and lead to a notable mitigation of the outbreak, despite the catastrophic circumstances and security situation. Whether the outbreak will be ended in the long run is still open.

Currently DRC reports less than 1,000 COVID-19 cases and less than 50 deaths which are comparably low numbers but a high number of undetected cases due to limited testing capacities is likely.

Highlights

- Launched of “**1 million mask made in DRC initiative**” working with local private sector and vulnerable women and youth groups. **Already 945,598 masks are ordered.**
- Launched the distance learning radio programme to cover **13.9 million children**
- 17,000,000 people reached with COVID-messaging** on prevention and access to services
- 32 oxygen concentrators** handed over to 6 hospitals in Kinshasa
- 159,742 calls** through the COVID-19 Hotline in the last 2 weeks reaching a total of 263,738 calls

COVID-19 overview

30 April 2020

- > 500 confirmed cases
- > 31 deaths
- > 65 people recovered
- > 279 cases under investigation
- > 6.3% Fatality Rate
- > 74 sample tested

Kinshasa remains the epicenter of the epidemic, with more than 95% (476/500) of all confirmed cases.
Other affected provinces including # of cases are: North Kivu (5) South Kivu (4) Ituri (2) Haut Katanga (1) and Kwilu (1)

The hotspot of the outbreak currently leis in the capital Kinshasa, whereas the conflict- and Ebola-outbreak-regions in the eastern part of DRC also reported confirmed cases of COVID-19 in the meantime. Conclusion: The overall situation in DRC with a politically challenging situation, a very severe security situation, an almost non-existing infrastructure, a global and local fight for resources, a constantly growing population and a subsequently deficient supply, as well as the destruction of the environment leads to one humanitarian catastrophe following the other.

One of the main drivers are on-going violent conflicts, destabilizing parts of the country and limiting or ruling out medical help for the population. These circumstances also set the scene for the fight against the spread of COVID-19



<https://reliefweb.int/report/democratic-republic-congo/democratic-republic-congo-coronavirus-covid-19-situation-report-4>
<https://data.worldbank.org/country/congo-dem-rep>
<https://kivusecurity.org/>
<https://www.arcgis.com/apps/Cascade/index.html?appid=33c9cb99feaf49abb771b13d9965b7c>
<https://www.unocha.org/drc>
<https://reliefweb.int/report/democratic-republic-congo/analysis-interactive-map-artisanal-mining-areas-eastern-dr-congo-3>
<https://monusco.unmissions.org/en>



Ramadan and COVID-19

Ramadan:

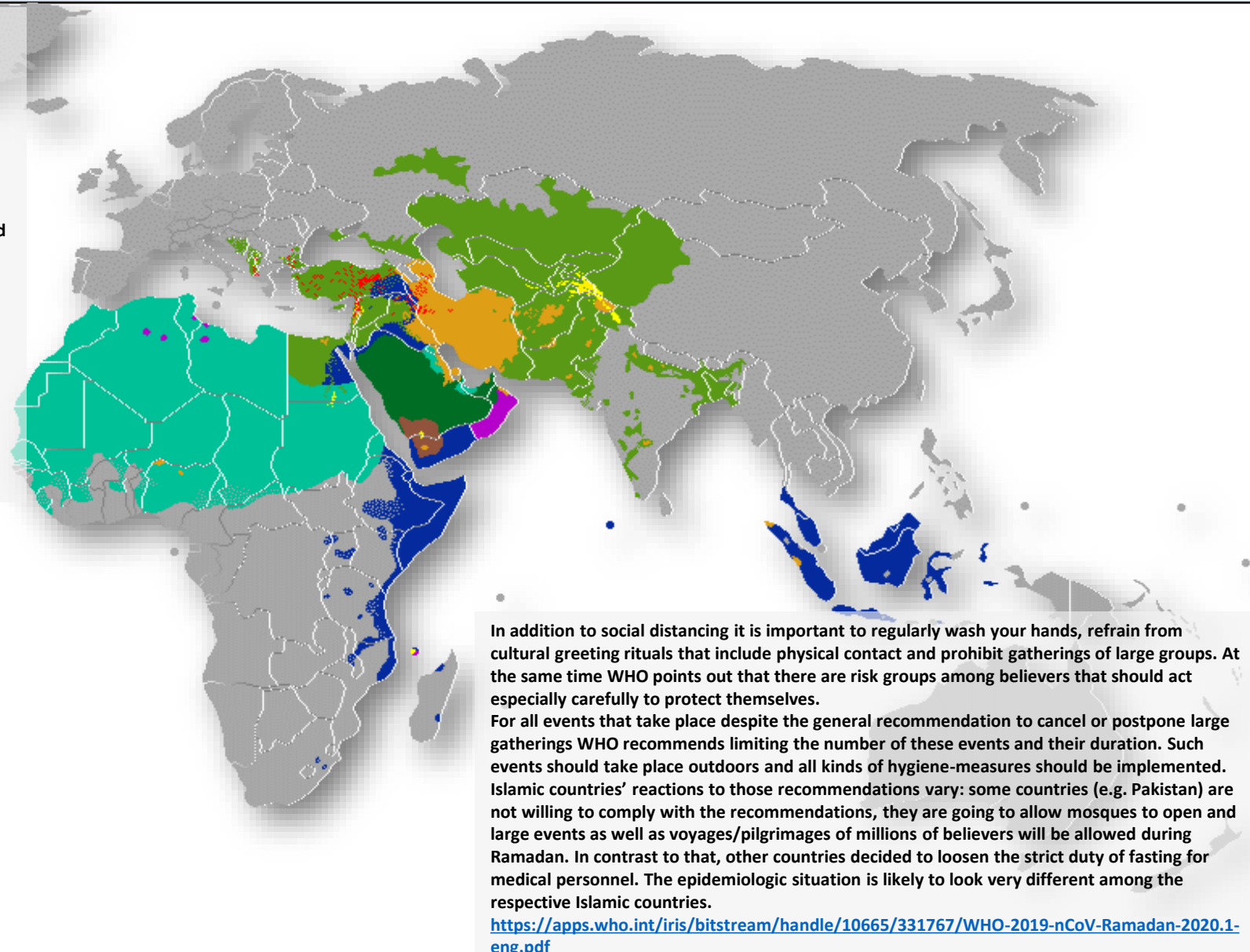
The Ramadan, the month of fasting for the Muslims and the subsequent Fast-Breaking ("Iftar") are two important events in the Islamic calendar. As one of the five pillars of Islam fasting during Ramadan is conducted by 1.8 billion people (approx. ¼ of global population). Like many other cultural and religious festivities and events worldwide, the Ramadan, starting at the end of April and lasting until the end of May is affected by the pandemic.

During Ramadan/fasting numerous social and physical contacts take place for religious reasons (e.g. increased and intensive visits to the mosques, pilgrimages and celebrations with the family). The usual way of conducting these activities are often not compliant with the rules of social distancing and other prevention measures. Therefore, WHO has published recommendations for celebrating a safe Ramadan. These recommendations should enable believers to fulfil their religious duties while at the same time complying with medical and epidemiological prevention measures to contain the deadly virus.

The most effective measures are the postponement or cancellation of social and religious gatherings, as recommended by the WHO whenever possible. It is recommended to use all available virtual/digital ways of communication to replace physical gatherings for religious interaction to the maximum possible extent.

A strong communication strategy has to be implemented by the authorities (especially national health authorities) to make believers understand, accept and comply with the necessary measures. In order to protect yourself and other from infection WHO still recommends the following:

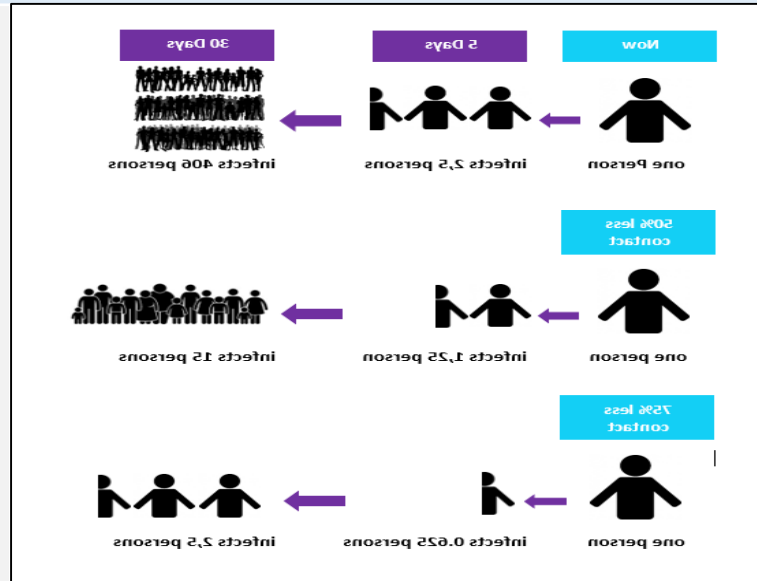
SUNNI	
	HANAFI
	HANBALI
	MALIKI
	SHAFI'I
SHIA	
	ISMAILI
	JAFARI
	ZAIDI
	OTHER
OTHER	
	IBADI



Friendly Reminder

You can reduce your chances of being infected or spreading COVID-19 by taking some simple precautions:

- Regularly and thoroughly clean your hands with an alcohol-based hand rub or wash them with soap and water.
Why? Washing your hands with soap and water or using alcohol-based hand rub kills viruses that may be on your hands.
- Maintain at least 1 metre (3 feet) distance between yourself and others.
Why? When someone coughs, sneezes, or speaks they spray small liquid droplets from their nose or mouth which may contain virus. If you are too close, you can breathe in the droplets, including the COVID-19 virus if the person has the disease.
- Avoid going to crowded places.
Why? Where people come together in crowds, you are more likely to come into close contact with someone that has COVID-19 and it is more difficult to maintain physical distance of 1 metre (3 feet).
- Avoid touching eyes, nose and mouth.
Why? Hands touch many surfaces and can pick up viruses. Once contaminated, hands can transfer the virus to your eyes, nose or mouth. From there, the virus can enter your body and infect you.
- Make sure you, and the people around you, follow good respiratory hygiene. This means covering your mouth and nose with your bent elbow or tissue when you cough or sneeze. Then dispose of the used tissue immediately and wash your hands.
Why? Droplets spread virus. By following good respiratory hygiene, you protect the people around you from viruses such as cold, flu and COVID-19.
- Stay home and self-isolate even with minor symptoms such as cough, headache, mild fever, until you recover. Have someone bring you supplies. If you need to leave your house, wear a mask to avoid infecting others.
Why? Avoiding contact with others will protect them from possible COVID-19 and other viruses.
- If you have a fever, cough and difficulty breathing, seek medical attention, but call by telephone in advance if possible and follow the directions of your local health authority.
Why? National and local authorities will have the most up to date information on the situation in your area. Calling in advance will allow your health care provider to quickly direct you to the right health facility. This will also protect you and help prevent spread of viruses and



Protect yourself and others from getting sick

Wash your hands



- after coughing or sneezing
- when caring for the sick
- before, during and after you prepare food
- before eating
- after toilet use
- when hands are visibly dirty
- after handling animals or animal waste

HOW TO WEAR A MEDICAL MASK SAFELY

[who.int/epi-win](https://www.who.int/epi-win)

Do's →



Find the top side, where the metal piece or stiff edge is



Ensure the colored-side faces outwards



Place the metal piece or stiff edge over your nose



Cover your mouth, nose, and chin



Adjust the mask to your face without leaving gaps on the sides



Avoid touching the mask



Remove the mask from behind the ears or head



Keep the mask away from you and surfaces while removing it



Discard the mask immediately after use preferably into a closed bin



Wash your hands after discarding the mask

Don'ts →



Do not use a ripped or damp mask



Do not wear the mask only over mouth or nose



Do not wear a loose mask



Do not touch the front of the mask



Do not remove the mask to talk to someone or do other things that would require touching the mask



Do not leave your used mask within the reach of others



Do not re-use the mask

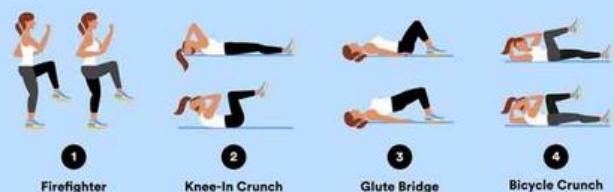
Remember that masks alone cannot protect you from COVID-19. Maintain at least 1 metre distance from others and wash your hands frequently and thoroughly, even while wearing a mask.

12 Best Abs Workout

The 7-Minute Core Workout That Requires Zero Equipment

Perform as many reps as possible of the following exercises in order for 30 seconds each. Rest for 5 seconds between exercises. The circuit can be repeated 2-3 times if desired.

www.healthinsider.org



Health Insider www.healthinsider.org

Mental Health

Sports reduce stress and depression

Mental health is the level of psychological well-being or an absence of mental illness. It is the state of someone who is "functioning at a satisfactory level of emotional and behavioral adjustment".^[1] From the perspectives of positive psychology or of holism, mental health may include an individual's ability to enjoy life and to create a balance between life activities and efforts to achieve psychological resilience. According to the World Health Organization (WHO), mental health includes "subjective well-being, perceived self-efficacy, autonomy, competence, inter-generational dependence, and self-actualization of one's intellectual and emotional potential, among others". The WHO further states that the well-being of an individual is encompassed in the realization of their abilities, coping with normal stresses of life, productive work, and contribution to their community. Cultural differences, subjective assessments, and competing professional theories all affect how one defines "mental health".

Sports reduce stress and depression

Exercise reduces the levels of stress hormones in your body. At the same time, it stimulates production of endorphins. These are natural mood lifters that can keep stress and depression at bay. Endorphins may even leave you feeling more relaxed and optimistic after a hard workout.

Improves mood and mental health.

Exercise promotes chemicals in the brain that improve your mood and make you more relaxed. Specifically, the brain releases feel-good chemicals called endorphins throughout the body. **Physical activity** reduces anxiety and depressed mood, and enhances self-esteem.

How do sports help your brain?

Research shows that playing **sports** boosts blood flow to **your brain**. This enables **your** body to build more connections between nerves within the **brain**. This improves memory, stimulates creativity, and **helps your brain** develop better problem-solving skills. One study found that playing **sports** can improve **brain** function.

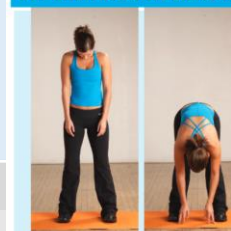
Mental Health Benefits Of Exercise

Reduce Stress. Rough day at the office? ...
Improve Self-Confidence. ...
Enjoy The Great Outdoors. ...
Prevent Cognitive Decline. ...
Alleviate Anxiety. ...
Boost Brainpower. ...
Sharpen Memory.

A good walk can do wonders for your mental wellbeing.

Being active has a whole range of **benefits** when it comes to **mental** wellbeing. It **improves** self-perception and self-esteem, mood and sleep quality, and it reduces stress, anxiety and fatigue.

OFF-THE-FLOOR TRAINING FOR THE CORE



Plates Roll Down and Warm-up: Stand with your feet shoulder-width apart. Imagine you are standing with your back against a wall. Starting at the top of the head, begin to roll down and away from the wall, one vertebra at a time, until you are in a forward-fold position. Take a deep breath in and, as you slowly exhale, contract the abdominals to roll up and begin stacking your vertebrae back to a standing position.



Downward Dog Mountain Climber: Start in a downward-facing dog position. Move forward into a plank position and pull your right knee toward your chest, engaging your core. Press back to downward-facing dog position and place the right foot back on the floor. Repeat with the left side. Perform 8-12 repetitions on each side.



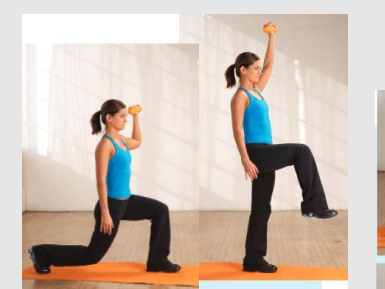
Pass the Belt: Begin in boat pose (V position), with knees bent, feet off the floor and the core engaged. Hold a light dumbbell in one hand and open the arms out to the sides. Lift the weight overhead and transfer to the other hand, opening the arms back out to the sides. Continue to pass the dumbbell back and forth while maintaining core stability. Repeat 8-12 times on each side.



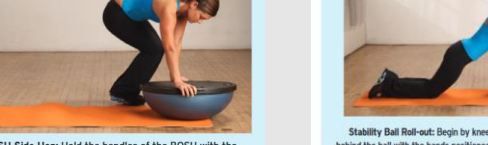
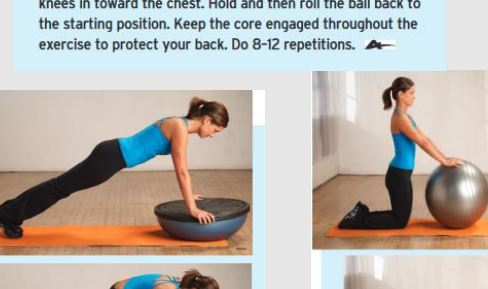
Elevated Side Plank: Start in a side-plank position with your forearm on the floor and your feet elevated onto a BOSU or a step. Keep the elbow aligned beneath your shoulder and your shoulder away from your ears. Stack your hips north to south and engage your core. Lower and lift your hips carefully while keeping your body aligned to the side of the room. Do 8-12 repetitions and switch sides.



Stability Ball Roll-In: Start in plank position with the hands on the floor, shoulders over the wrists, and the shins on top of the stability ball. Contract your abdominals and draw the knees in toward the chest. Hold and then roll the ball back to the starting position. Keep the core engaged throughout the exercise to protect your back. Do 8-12 repetitions.



Dumbbell Lunge and Lift: Start in a split lunge position holding a dumbbell in the left hand (right leg is back). Lower down into a lunge and then come all the way up to a balancing position by standing on the left leg and lifting the right knee up to waist level. Simultaneously lift the weight up overhead. Return to the starting position and do 8-12 repetitions. Hold the dumbbell in the right hand and repeat with the left leg.



BOSU Side Hop: Hold the handles of the BOSU with the dome side down. Begin in a plank position with legs together. Jump both feet toward the left side of the BOSU and then jump back to plank. Repeat on the right side; continue to alternate for 8-12 repetitions.



Stability Ball Roll-out: Begin by kneeling about 12-16 inches behind the ball with the hands positioned in prayer position on the ball and the torso long with a neutral pelvis. Using the strength of the legs, shoulders and core, roll the ball out to a knee plank. Slowly return to the starting position. Try to keep your hip flexors from bending and providing assistance. Do 8-12 repetitions.

Source: <https://www.acefitness.org/certifiednewsarticle/2698/off-the-floor-training-for-the-core>