

Covid19 situation report for WHO Africa

07/04/2020

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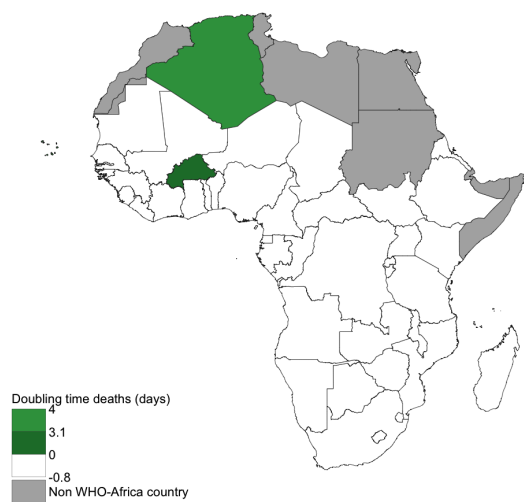
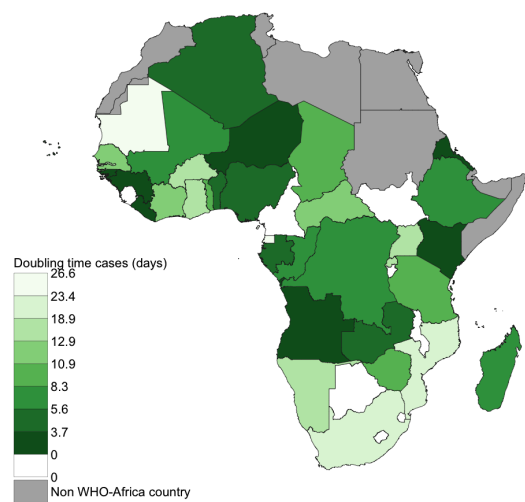
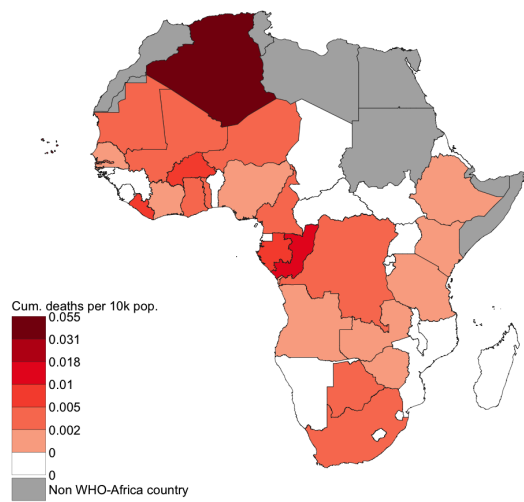
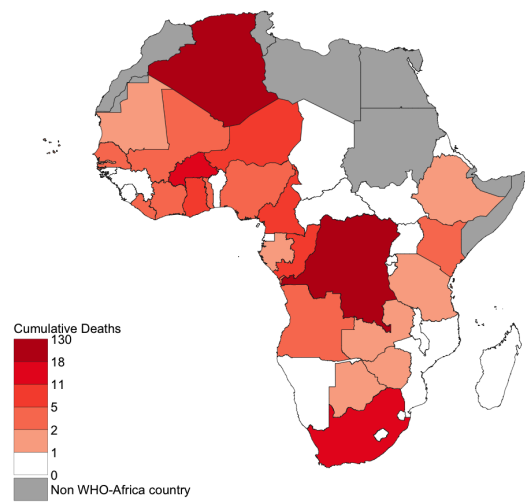
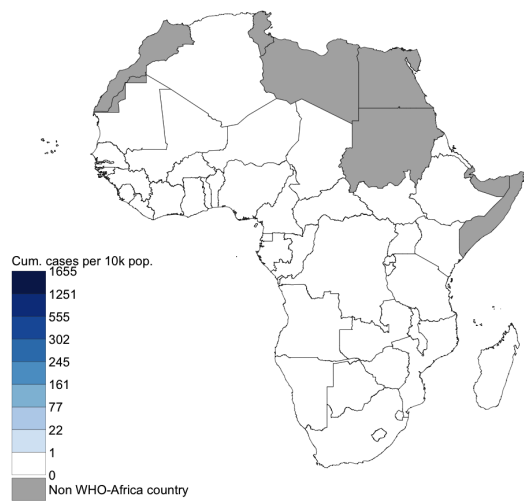
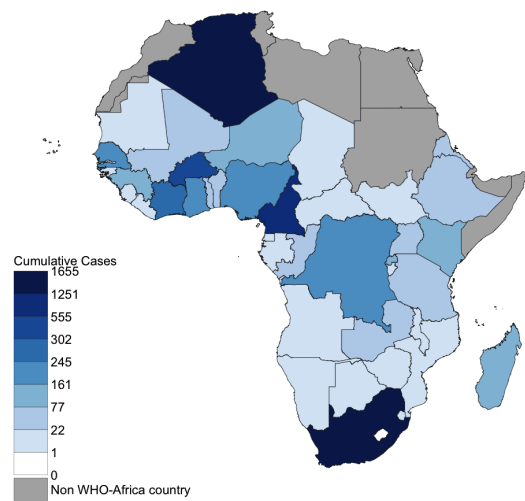
We compare the size and rate of increase of the COVID-19 epidemic across the countries included in WHO Africa Region.



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WHO Africa situation overview



The maps above summarise the in-country situations:

- Top-left: cumulated reported cases.
- Top-right: cumulated reported cases per 10,000 population on a log10 scale.
- Middle-left: cumulated reported deaths.
- Middle-right: cumulated reported deaths per 10,000 population on a log10 scale.
- Bottom-left: Overview of doubling time of cumulative incidence. Doubling times are calculated over a 7 day period up to 06/04/2020.
- Bottom-right: Overview of doubling time of cumulative deaths per 10,000 population. Doubling times are calculated over a 7 day period up to 06/04/2020.

APPENDIX

Data

Sources and access

- Case counts for countries in WHO African region from WHO Coronavirus disease (COVID-2019) situation reports <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports> (accessed 2400 06/04/2020).
- Death counts for countries in WHO African region from WHO Coronavirus disease (COVID-2019) situation reports <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports> (accessed 2400 06/04/2020).
- Population counts from the World Bank (2018) <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=ZG> (accessed 0900 30/03/2020).

Doubling time calculations

Calculated over prior 7 days using method described by *E. Vynnycky & R. White (2010) An Introduction to Infectious Disease Modelling*, page 74.

Confidence intervals calculated using bootstrapping of a simulated dataset with Poisson error structure, using method published here: <https://doi.org/10.1101/2020.02.05.20020750>.

Caveats

- Case count data are affected by any changes in testing strategy or testing effort over time and/or any variation in testing strategy or testing effort between regions.
- Case count data are likely a substantial under-representation of the true number of COVID-19 infections.
- Death data are considered more reliable but may lag behind case data by as much as 3 weeks.

Extended data tables

Cumulative incidence

Country	Cum. Incidence	ci.low	ci.upp
South Africa	1655	1597	1678
Algeria	1251	1211	1276
Cameroon	555	NA	NA
Burkina Faso	302	275	321
Cote d'Ivoire	245	224	259
Mauritius	227	208	252
Senegal	222	201	241
Nigeria	208	NA	NA
Ghana	205	186	212
Democratic Republic of the Congo	161	153	174
Niger	144	130	158
Kenya	142	129	154
Guinea	111	104	131
Rwanda	102	89	112
Madagascar	77	68	90
Uganda	48	40	61
Congo	45	38	50
Togo	44	35	47
Ethiopia	43	35	55
Mali	39	35	51
Zambia	39	33	46
Eritrea	29	20	42
Benin	22	12	34
United Republic of Tanzania	22	18	33
Gabon	21	15	27
Guinea Bissau	18	9	20
Equatorial Guinea	16	10	19
Namibia	16	10	22
Angola	14	11	20
Liberia	13	9	18
Mozambique	10	3	14
Seychelles	10	5	13
Central African Republic	9	5	13
Chad	9	7	17
Eswatini	9	4	15
Zimbabwe	9	4	14
Mauritania	6	2	11
Sierra Leone	6	2	10
Cape Verde	5	3	10
Botswana	4	2	6
Gambia	4	1	7
Malawi	4	1	9
Burundi	3	1	6
South Sudan	1	0	3
Comoros	0	NA	NA
Lesotho	0	NA	NA
Sao Tome and Principe	0	NA	NA

Cumulative incidence per 10,000 population

Country	Cum. Incidence per 10k pop.	ci.low	ci.upp
Cameroon	10.2066	NA	NA
Mauritius	1.7940	1.6399	1.9881
Seychelles	1.0335	0.5632	1.3435
Algeria	0.2962	0.2867	0.3022
South Africa	0.2864	0.2763	0.2905
Burkina Faso	0.1529	0.1394	0.1624
Senegal	0.1400	0.1265	0.1523
Equatorial Guinea	0.1222	0.0783	0.1459
Gabon	0.0991	0.0708	0.1279
Cote d'Ivoire	0.0977	0.0895	0.1034
Guinea Bissau	0.0960	0.0475	0.1078
Guinea	0.0894	0.0841	0.1053
Congo	0.0858	0.0733	0.0947
Rwanda	0.0829	0.0727	0.0908
Ghana	0.0689	0.0624	0.0711
Eswatini	0.0658	0.0326	0.1064
Namibia	0.0654	0.0419	0.0903
Niger	0.0642	0.0578	0.0704
Togo	0.0558	0.0449	0.0600
Eritrea	0.0479	0.0331	0.0696
Madagascar	0.0293	0.0261	0.0343
Kenya	0.0276	0.0251	0.0299
Liberia	0.0270	0.0187	0.0366
Zambia	0.0225	0.0190	0.0266
Mali	0.0204	0.0185	0.0266
Central African Republic	0.0193	0.0105	0.0271
Benin	0.0192	0.0104	0.0300
Democratic Republic of the Congo	0.0192	0.0182	0.0207
Botswana	0.0177	0.0089	0.0271
Gambia	0.0175	0.0064	0.0287
Mauritania	0.0136	0.0045	0.0244
Uganda	0.0112	0.0094	0.0143
Nigeria	0.0106	NA	NA
Sierra Leone	0.0078	0.0032	0.0132
Zimbabwe	0.0062	0.0027	0.0094
Chad	0.0058	0.0045	0.0110
Angola	0.0045	0.0035	0.0065
Ethiopia	0.0039	0.0032	0.0051
United Republic of Tanzania	0.0039	0.0033	0.0058
Mozambique	0.0034	0.0012	0.0047
Burundi	0.0027	0.0013	0.0055
Malawi	0.0022	0.0008	0.0049
Cape Verde	0.0020	0.0012	0.0038
South Sudan	0.0009	0.0000	0.0023
Comoros	0	NA	NA
Lesotho	0	NA	NA
Sao Tome and Principe	0	NA	NA

Cumulative deaths

Country	Cumulative deaths
Algeria	130
Democratic Republic of the Congo	18
Burkina Faso	15
South Africa	11
Cameroon	9
Niger	8
Mauritius	7
Congo	5
Ghana	5
Kenya	4
Mali	4
Nigeria	4
Liberia	3
Togo	3
Angola	2
Côte d'Ivoire	2
Senegal	2
Botswana	1
Cabo Verde	1
Ethiopia	1
Gabon	1
Gambia	1
Mauritania	1
United Republic of Tanzania	1
Zambia	1
Zimbabwe	1
Benin	0
Burundi	0
Central African Republic	0
Chad	0
Comoros	0
Equatorial Guinea	0
Eritrea	0
Eswatini	0
Guinea	0
Guinea-Bissau	0
Lesotho	0
Madagascar	0
Malawi	0
Mozambique	0
Namibia	0
Rwanda	0
Sao Tome and Principe	0
Seychelles	0
Sierra Leone	0
South Sudan	0
Uganda	0

Cumulative deaths per 10,000 populations

Country	Cumulative deaths per 10k pop.
Mauritius	0.0553227
Algeria	0.0307849
Cabo Verde	0.0183902
Congo	0.0095340
Burkina Faso	0.0075943
Liberia	0.0062254
Gabon	0.0047186
Botswana	0.0044363
Gambia	0.0043858
Togo	0.0038027
Cameroon	0.0035691
Niger	0.0035646
Mauritania	0.0022710
Democratic Republic of the Congo	0.0021411
Mali	0.0020967
South Africa	0.0019038
Ghana	0.0016797
Senegal	0.0012615
Cote d'Ivoire	0.0007978
Kenya	0.0007783
Zimbabwe	0.0006926
Angola	0.0006491
Zambia	0.0005763
Nigeria	0.0002042
United Republic of Tanzania	0.0001776
Ethiopia	0.0000916
Benin	NA
Burundi	NA
Central African Republic	NA
Chad	NA
Comoros	NA
Equatorial Guinea	NA
Eritrea	NA
Eswatini	NA
Guinea	NA
Guinea-Bissau	NA
Lesotho	NA
Madagascar	NA
Malawi	NA
Mozambique	NA
Namibia	NA
Rwanda	NA
Sao Tome and Principe	NA
Seychelles	NA
Sierra Leone	NA
South Sudan	NA
Uganda	NA

Doubling time (incidence)

Country	Incidence doubling time (days)	ci.low	ci.upp
Guinea Bissau	2.2	1.8	6.1
Angola	2.5	1.8	3.6
Guinea	2.5	2.3	2.8
Niger	2.5	2.1	3.1
Kenya	2.8	2.4	3.3
Eritrea	3.1	2.2	3.3
Liberia	3.3	2.2	3.7
Benin	3.7	2.3	5.2
Gabon	4.4	3.7	5.6
Algeria	4.8	4.5	5.1
Zambia	5.4	4.5	7.4
Congo	5.6	4.9	8.1
Mauritius	6.1	5.4	6.6
Mali	6.3	4.1	7
Madagascar	6.6	5.5	7
Ethiopia	6.8	4.9	10.2
Democratic Republic of the Congo	7.1	6.1	8.1
Chad	8.3	4.2	14.3
Togo	10.7	8.6	16.8
United Republic of Tanzania	10.7	8.1	16.8
Senegal	10.9	9.7	12
Central African Republic	12	7	24.2
Cote d'Ivoire	12.3	10.4	12.9
Namibia	12.9	8.7	20.6
Rwanda	12.9	9.5	15.6
Uganda	12.9	9.4	24.2
Burkina Faso	15.8	15.2	17.3
Ghana	16.2	12.5	20.3
South Africa	18.9	17.9	20.6
Equatorial Guinea	23.4	14	68.6
Botswana	NA	NA	NA
Burundi	NA	NA	NA
Cape Verde	NA	NA	NA
Cameroon	NA	NA	NA
Comoros	NA	NA	NA
Eswatini	NA	NA	NA
Gambia	NA	NA	NA
Lesotho	NA	NA	NA
Malawi	NA	NA	NA
Mauritania	NA	NA	NA
Mozambique	NA	NA	NA
Nigeria	NA	NA	NA
Sao Tome and Principe	NA	NA	NA
Seychelles	NA	NA	NA
Sierra Leone	NA	NA	NA
South Sudan	NA	NA	NA
Zimbabwe	NA	NA	NA

Doubling time (deaths)

Country	Deaths doubling time (days)	ci.low	ci.upp
Burkina Faso	3	1.7	4.9
Algeria	3.2	3.1	3.8
Cameroon	3.2	2.1	12.6
Angola	NA	NA	NA
Benin	NA	NA	NA
Botswana	NA	NA	NA
Burundi	NA	NA	NA
Cape Verde	NA	NA	NA
Central African Republic	NA	NA	NA
Chad	NA	NA	NA
Comoros	NA	NA	NA
Congo	NA	NA	NA