

COVID-19 SENTINEL HOSPITAL SURVEILLANCE UPDATE

SOUTH AFRICA WEEK 30 2020

OVERVIEW

This report summarises data of COVID-19 cases admitted to sentinel hospital surveillance sites in all provinces. The report is based on data collected from 5 March to 25 July 2020.

HIGHLIGHTS

- As of 25 July, 33 401 COVID-19 admissions were reported from 321 facilities (98 public-sector and 223 private-sector) in all nine provinces of South Africa. There was an increase of 5 247 new admissions since the last report, and 13 additional hospitals (10 public-sector and 3 private-sector) reporting COVID-19 admissions. There were 12 761 (38%) and 20 640 (62%) admissions reported in public and private sector respectively. The majority of COVID-19 admissions were reported from four provinces, 13 617 (41%) in Western Cape, 9 055 (27%) in Gauteng, 4 755 (14%) in KwaZulu-Natal and 2 153 (6%) in Eastern Cape. Admissions in the Western Cape seem to have plateaued in the past two weeks.
- Of the 33 401 admissions, 6 886 (21%) patients were in hospital at the time of this report, 2 1502 (64%) patients were discharged alive or transferred out and 5 013 (15%) patients had died. There were 1 202 additional deaths since the last report. Of the 26 139 COVID-19 patients who had recorded in-hospital outcome (died and discharged), 5 013 died, equating to a case fatality ratio (CFR) of 19%.
- The CFR in patients who had diabetes only (420/1 872, 22%), increased in diabetics with two (927/3 126, 30%) and three or more (602/1 751, 34%) comorbid conditions. Diabetics with chronic renal disease (241/547, 44%) and obesity (146/292, 50%) had the highest CFRs.
- Of the 12 771 patients admitted in the public sector, most patients were admitted to district hospitals (4 653, 36%), national central hospitals (4 071, 32%) and regional hospitals (2 407, 19%). CFR was highest in regional (27%), provincial tertiary (27%), national central (27%) and district hospitals (23%).
- The median length of stay (time from admission to outcome) for patients who were discharged was 5 days and for those who died was 6 days ($p < 0.001$); was 5 days in public as compared to 6 days in the private sector ($p < 0.001$); and decreased with each month of admission from 7 days in March to 5 days in July ($p < 0.001$).

METHODS

DATCOV, sentinel hospital surveillance for COVID-19 admissions, was initiated on the 1 April 2020. Data are submitted by public and private hospitals that have agreed to report COVID-19 admissions through DATCOV surveillance in all nine provinces of South Africa. A COVID-19 case was defined as a person with a positive reverse transcriptase polymerase chain reaction (RT-PCR) assay for SARS-CoV-2 who was admitted to a DATCOV sentinel hospital. An individual was defined as having severe disease if treated in high care or intensive care unit (ICU), or ventilated or diagnosed with acute respiratory distress syndrome (ARDS). Case fatality ratio (CFR) was calculated for all closed cases, i.e. COVID-19 deaths divided by COVID-19 deaths plus COVID-19 discharges, excluding individuals who are still admitted in hospital.

Data are received from all private hospitals nationally, from all public hospitals in the Western Cape (WC) Province and 37 public hospitals in the other eight provinces. As new hospitals join the surveillance system, they have retrospectively captured all admissions recorded. As of 25 July 2020, a total of 321 facilities, 98 from public sector and 223 from private sector, submitted data on hospitalised COVID-19 cases (Table 1). There were 13 additional hospitals (10 public-sector and 3 private-sector) reporting COVID-19 admissions since the last report.

Table 1: Number of hospitals reporting data on COVID-19 admissions by province and sector, South Africa, 5 March-25 July 2020

Name of province	Public Sector	Private Sector
Eastern Cape (EC)	19	13
Free State (FS)	11	18
Gauteng (GP)	6	82
KwaZulu-Natal (KZN)	7	41
Limpopo (LP)	1	6
North West (NW)	0	8
Northern Cape (NC)	2	12
Western Cape (WC)	1	6
Mpumalanga (MP)	51	37
South Africa	98	223

RESULTS

Epidemiological and geographic trends in admissions

From 5 March to 25 July, a total of 33 401 COVID-19 admissions (5 247 additional from last report) were reported from 321 facilities in all nine provinces of South Africa. Of these admissions, 12 761 (38.2%) and 20 640 (61.8%) were reported in public and private sector, respectively. Initially, most admissions were reported in the private sector; from week 17 a higher proportion of total admissions was reported in the public sector; and since week 25 a higher proportion was reported in the private sector. The shift is most likely due to underreporting in the public sector in other provinces besides Western Cape in recent weeks. The decrease in reported admissions in the last epidemiological week is likely due to a delay in the submission of data (Figure 1).

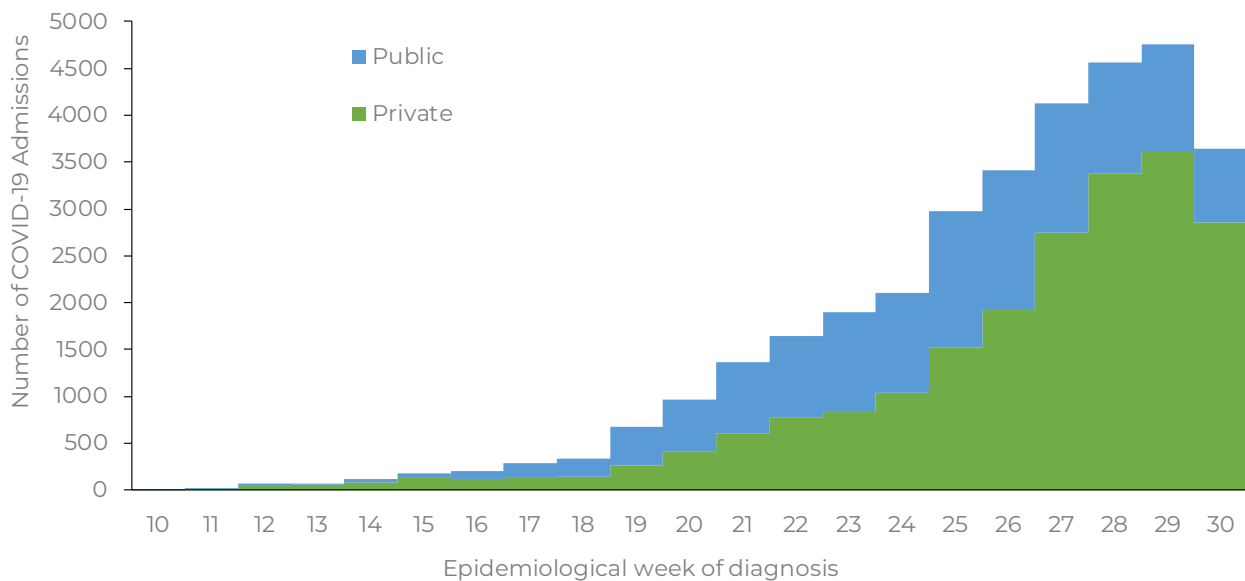


Figure 1: Number of reported COVID-19 admissions by health sector and epidemiologic week of diagnosis, 5 March-25 July 2020, n=33401

The majority of admissions (29 580/33 401, 88.6%) were recorded in four provinces, with the highest number reported in Western Cape (13 617/33 401, 40.8%), followed by Gauteng (9 055/33 401, 27.1%), KwaZulu-Natal (4 755/33 401, 14.2%) and Eastern Cape (2 153/33 401, 6.4%) provinces. Western Cape experienced an increase in admissions from week 19 which has in the past two weeks seemingly plateaued; the increase in Gauteng began in week 23 and in KwaZulu-Natal in week 26 (Figure 2).

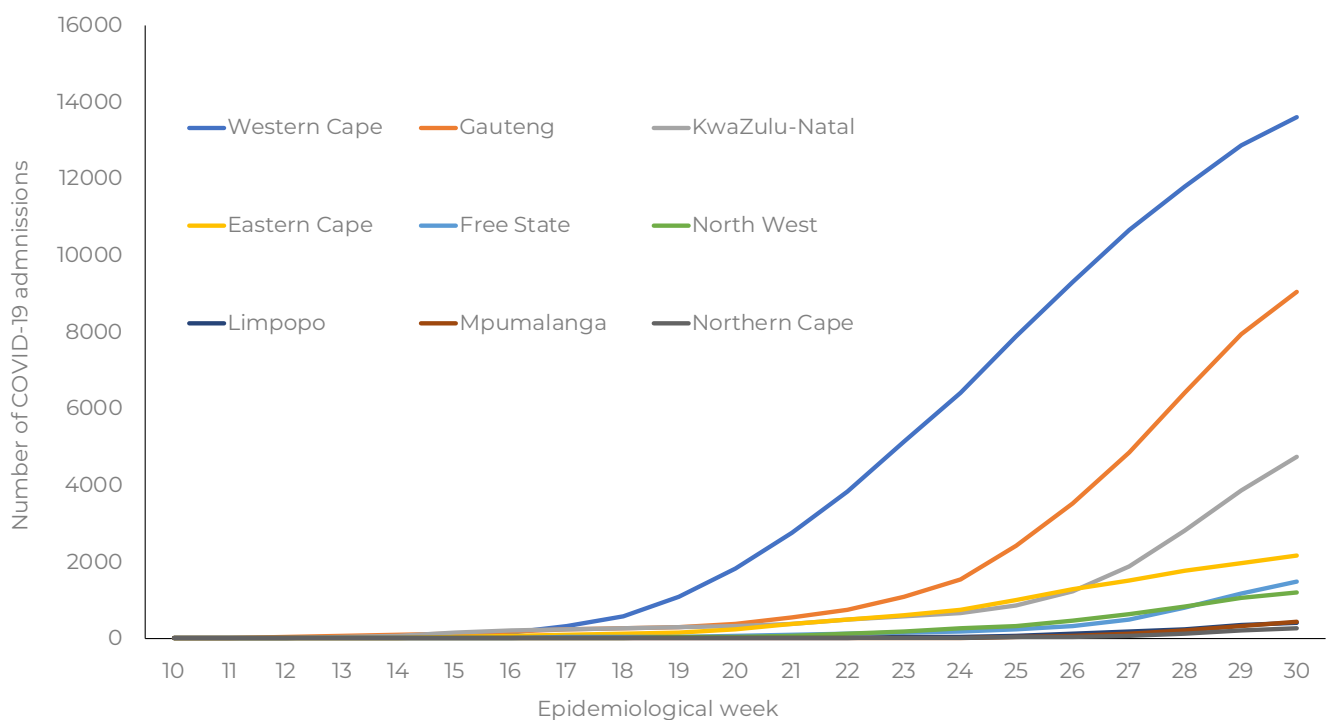


Figure 2: Cumulative numbers of reported COVID-19 admissions, by province and epidemiological week of diagnosis, South Africa, 5 March-25 July 2020, n=33 401

DEMOGRAPHIC AND CLINICAL CHARACTERISTICS OF COVID-19 ADMISSIONS

The median age of COVID-19 admissions was 51 years (interquartile range [IQR] 39 – 62). There were 1076 (3.2%) admissions in patients 18 years and younger and 4783 (14.3%) in patients older than 70 years. Among admitted individuals with COVID-19, 18171 (54.4%) were female. The sex ratio was equal in patients between 40 and 80 years; females were more common than males in patients between 10 and 40 years and males more common in patients younger than 10 years (Figure 3).

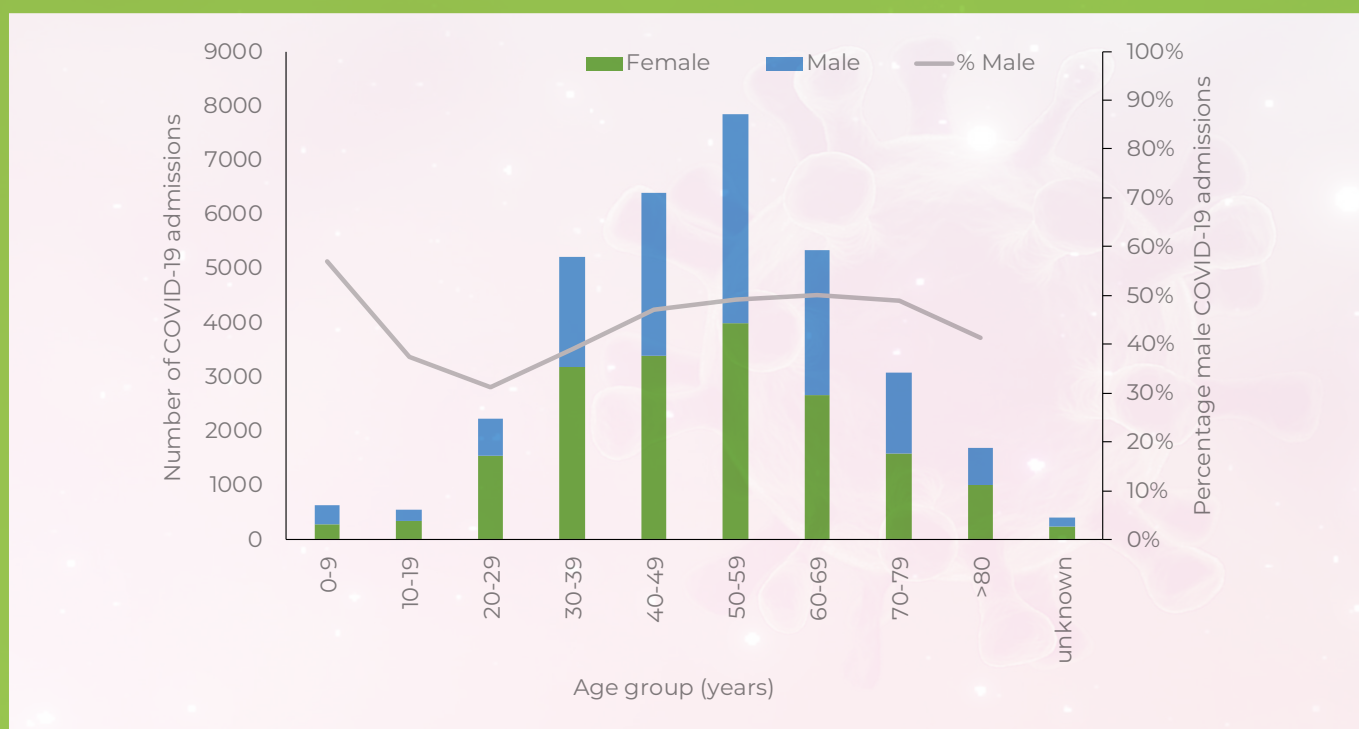
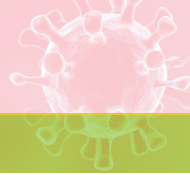


Figure 3: Number of reported COVID-19 admissions by age, gender and percentage of males, South Africa, 5 March-25 July 2020, n=33401



Of the 13666 (40.9%) patients for whom race was known, 9742 (71.3%) were Black African, 1583 (11.6%) were Coloured, 849 (6.2%) were Indian, 1461 (10.7%) were White and 31 (0.2%) were classified as Other race group. There were 806 (2.4%) health care workers (HCW) that were reported to be hospitalised. Among the 8360 admissions in females of child-bearing age 15-50 years, there were 908 (10.9%) females admitted who were pregnant or within 6 weeks post-partum.

Among 27361 (81.9%) patients for whom comorbid conditions were known, 10729 (32.1%) had no comorbid condition reported, 7991 (23.9%) had one comorbid condition reported, 5706 (17.1%) had two comorbid conditions and 2935 (8.8%) had three or more comorbid conditions reported. Among the 16631 (49.8%) patients who had reported a comorbid condition, the most commonly reported were hypertension (10400/16631, 62.5%) and diabetes (8256/16631, 49.6%); there were 2893/16631 (17.4%) patients who were HIV-infected, 572/16631 (3.4%) patients with active tuberculosis (TB) and 1115/16631 (6.7%) patients with previous history of TB (Table 2). Obesity, defined by the subjective opinion of the attending HCW, while not consistently recorded for all reported COVID-19 admissions, was recorded as a risk factor in 997 (3.0%) of all patients hospitalised.

Table 2: Reported comorbid conditions among COVID-19 admissions reporting at least one comorbid condition, South Africa, 5 March-25 July 2020, n=16631*

Comorbid disease**	n	%
Hypertension	10 400	62.5%
Diabetes mellitus	8 256	49.6%
Chronic cardiac disease	1 186	7.1%
Chronic pulmonary disease/ Asthma	2 325	14.0%
Chronic renal disease	1 119	6.7%
Malignancy	331	2.0%
HIV	2 893	17.4%
Active TB	572	3.4%
Previous history of TB	1 115	6.7%

* Multiple comorbid conditions are counted more than once so the total number may be more than the total number of individuals reporting comorbid conditions.

** Presence of a comorbid condition includes only the conditions reported in the table; obesity is not included.

MANAGEMENT OF PATIENTS WITH SEVERE DISEASE

Amongst all admissions to date, 5134 (15.4%) patients were treated in ICU and 3 246 (9.7%) were treated in High Care; 2 250 (6.7%) were ventilated and 6 321 (18.9%) received supplemental oxygen. The proportion of reported in-patients who were treated in ICU and ventilated in each epidemiological week decreased from week 15 to week 22, but since then there has been an increase in the proportion of patients who were treated in ICU (Figure 4).

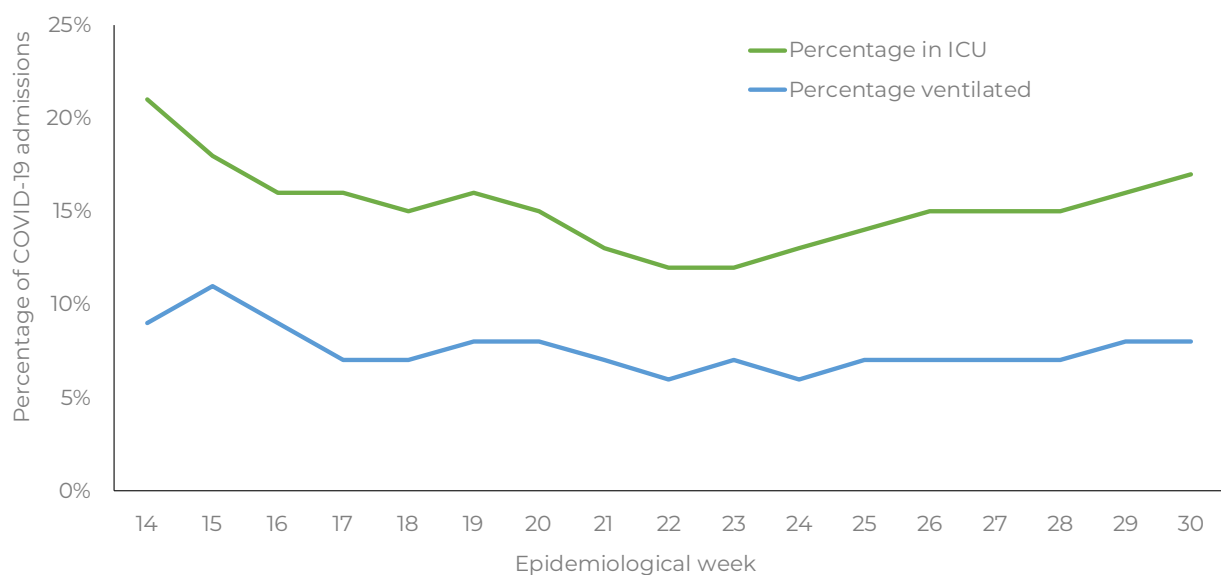


Figure 4: Proportion of COVID-19 in-patients treated in intensive care unit (ICU) and ventilated by epidemiological week, South Africa, 28 March-25 July 2020

**Data on ventilation and ICU care was not reliable prior to epidemiological week 14

OUTCOMES

Of the 3 3401 admitted individuals, 6886 (20.6%) were currently in hospital, 21 126 (63.2%) were discharged alive, 376 (1.1%) were transferred out to either higher level care or step-down facilities and 5 013 (15.0%) had died. There were 1 202 additional deaths since the last report. Of the 26 139 COVID-19 patients who had recorded in-hospital outcome (died and discharged), 5 013 died, equating to a case fatality ratio (CFR) of 19.2%.

EPIDEMIOLOGICAL AND GEOGRAPHIC TRENDS IN MORTALITY

There has been an increasing trend in reported number of deaths and the CFR among hospitalised individuals increased with each month of admission – March 11.1%, April 17.3%, May 19.1%, June 20.0% and July 18.7% the difference in July being significant ($p=0.028$). In the first few weeks of the outbreak most deaths were reported in the private sector, since week 17 a higher proportion of reported deaths was in the public sector, and since week 27 again most deaths were reported in the private sector (Figure 5). The CFR was higher in the public health sector (24.1%) than in the private health sector (15.8%) ($p<0.001$).

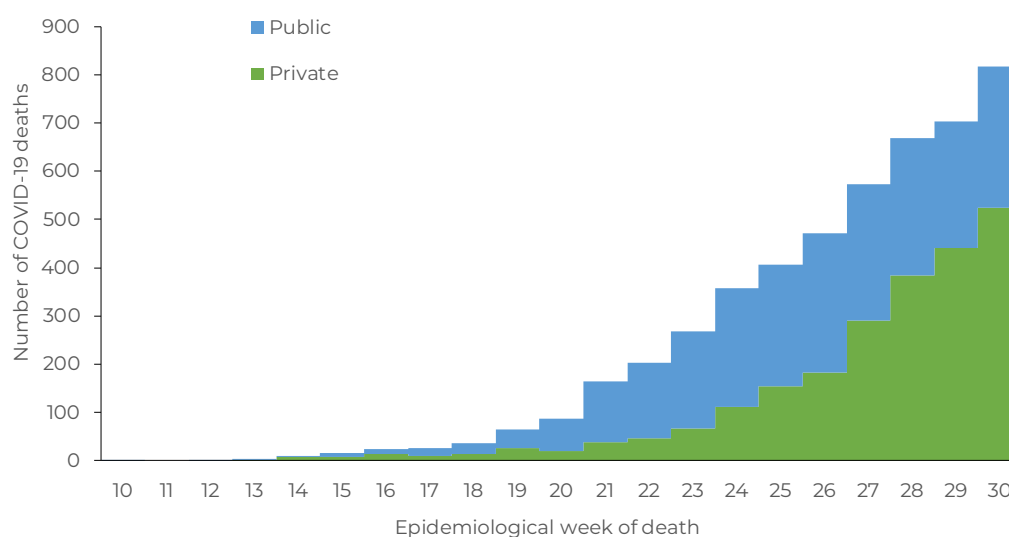


Figure 5: Number of COVID-19 deaths reported per week by health sector and epidemiologic week, South Africa, 5 March-25 July 2020, $n=5013$ *Data on ventilation and ICU care was not reliable prior to epidemiological week 14

Most deaths were reported in Western Cape (2 522, 50.3%), followed by Gauteng (1 093, 21.8%), KwaZulu-Natal (508, 10.1%) and Eastern Cape (505, 10.1%). The increases in deaths seem to be plateauing in Western Cape and Eastern Cape, with sharper increases in deaths in Gauteng in the past four weeks and KwaZulu-Natal in the past two weeks (Figure 6). However, compared to Western Cape province (CFR 20.8%), the CFR was significantly elevated in Eastern Cape province (30.8%) ($p<0.001$), Free State (17.3%) ($p=0.033$) and Gauteng province (17.4%) ($p<0.001$), and significantly lower in Mpumalanga (6.4%) province ($p=0.001$).

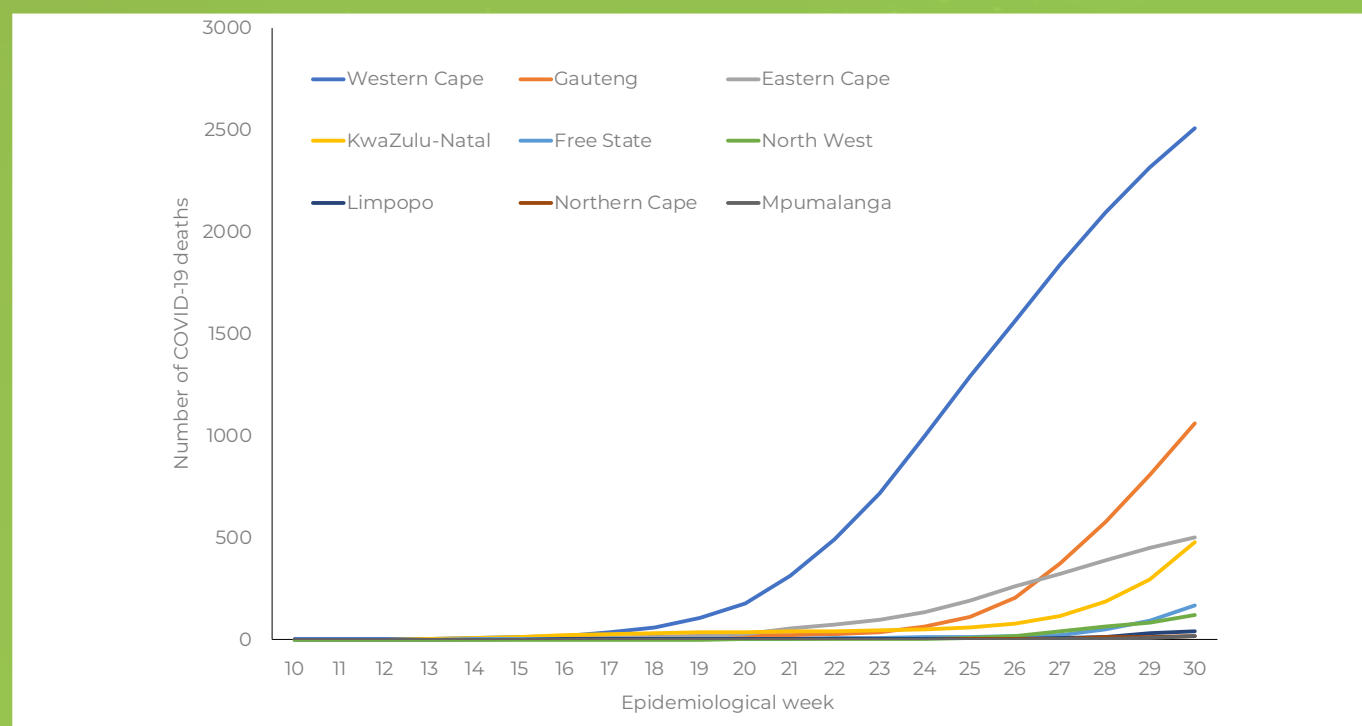


Figure 6: Cumulative numbers of reported COVID-19 deaths, by province and epidemiological week of death, South Africa, 5 March-25 July 2020, $n=5\ 013$

DEMOGRAPHIC CHARACTERISTICS OF DEATHS

The median age of patients who died was 62 (IQR 53 – 72) years, and for those who were discharged alive was 48 (IQR 36 – 59) years. There were 27 (0.5%) deaths in children ≤ 18 years, most of these deaths in children with serious underlying comorbid conditions. There were 351 (7.0%) deaths in patients younger than 40 years (Figure 7). The CFR was higher in males (22.3%) than females (16.6%) ($p<0.001$).

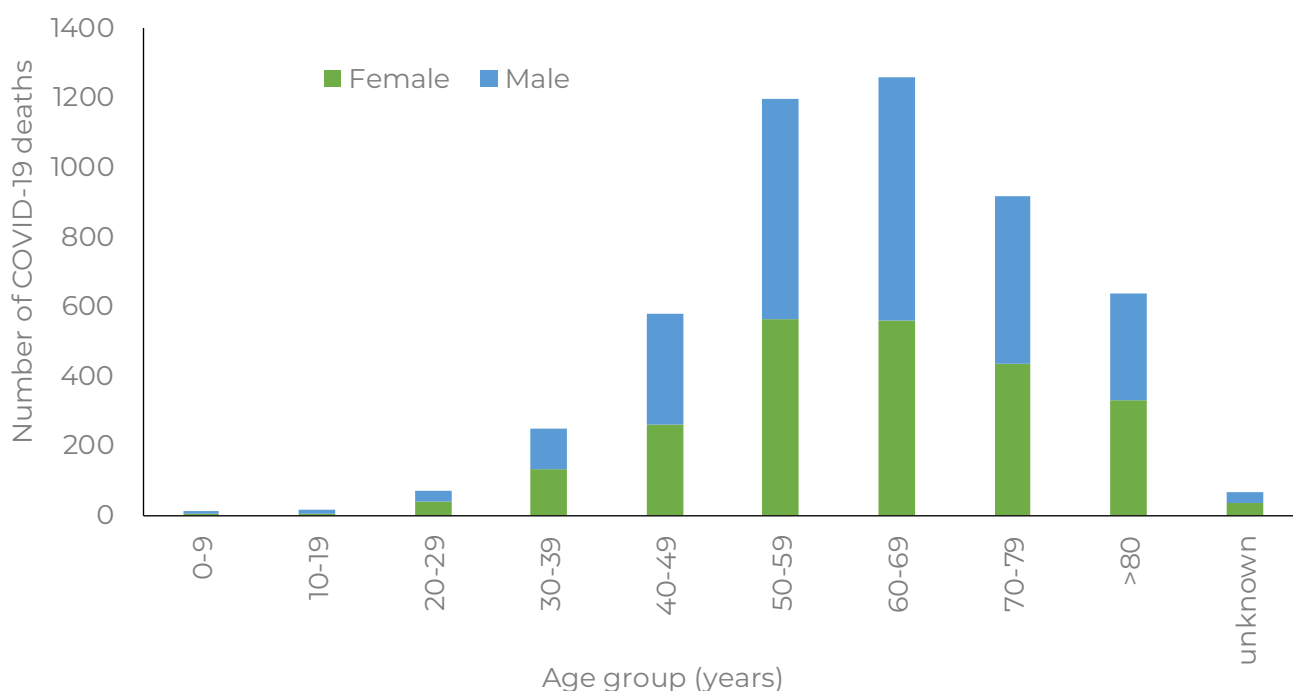


Figure 7: Number of reported COVID-19 deaths by age and gender, South Africa, 5 March-25 July 2020, n=5 013

For each age group, the CFR increased with increasing age; it also increased with the presence of a comorbid condition, except in individuals aged 80 years and over (Figure 8).

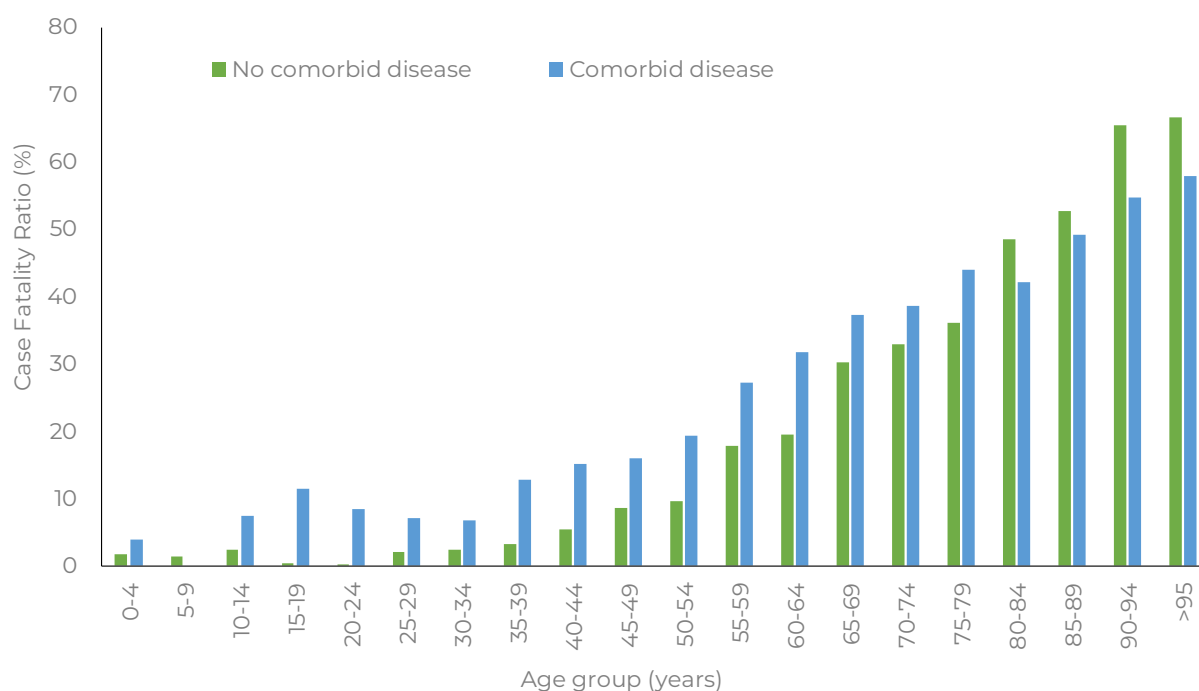


Figure 8: Case fatality ratio among 5013 individuals with in-hospital outcome (discharges and deaths) by age group and presence of comorbid condition, South Africa, 5 March-25 July 2020

ASSOCIATION OF COMORBIDITY WITH MORTALITY

Previous reports have highlighted the increased risk of in-hospital mortality on multivariable analysis, for patients with diabetes mellitus. Among patients with diabetes, 1949/6749 died (CFR 28.9%). Diabetics with other comorbid conditions had a higher CFR, notably those with past tuberculosis (113/305, 37.1%), malignancy (28/69, 40.6%), chronic renal disease (241/547, 44.1%) and obesity (146/292, 50.0%). The CFR in patients who had diabetes only (420/1872, 22.4%), increased in diabetics with two (927/3 126, 29.7%) and three or more (602/1 751, 34.4%) comorbid conditions (Figure 9).

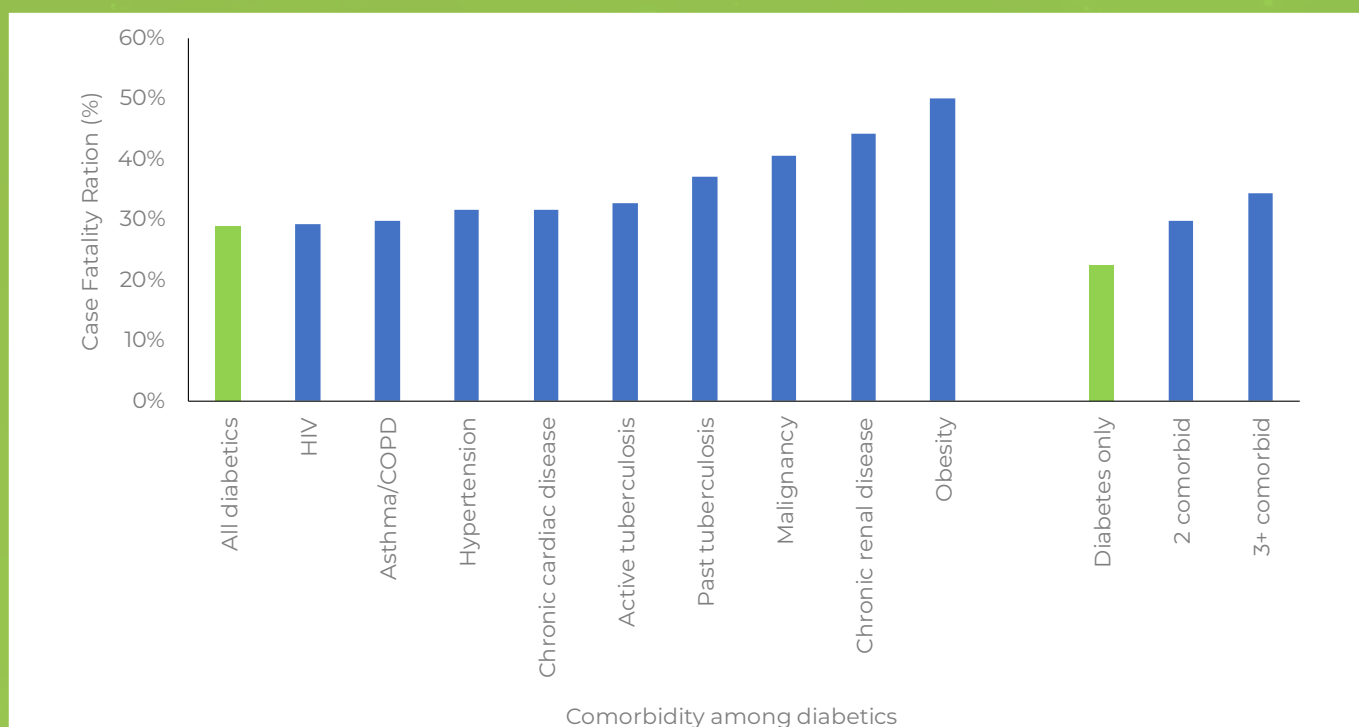


Figure 9: Case fatality ratio among 6749 individuals with diabetes and other comorbid conditions, with in-hospital outcome (discharges and deaths), South Africa, 5 March-25 July 2020

* CFRs are presented for diabetics as only comorbid condition and for diabetics with other comorbidities

HEALTH SERVICES TRENDS

In the private sector, all patients were admitted to general private hospitals. Of the 12 771 patients admitted in the public sector, most patients were admitted to district hospitals (4 653, 36.4%), national central hospitals (4 071, 31.9%) and regional hospitals (2 407, 18.8%) (Figure 10).

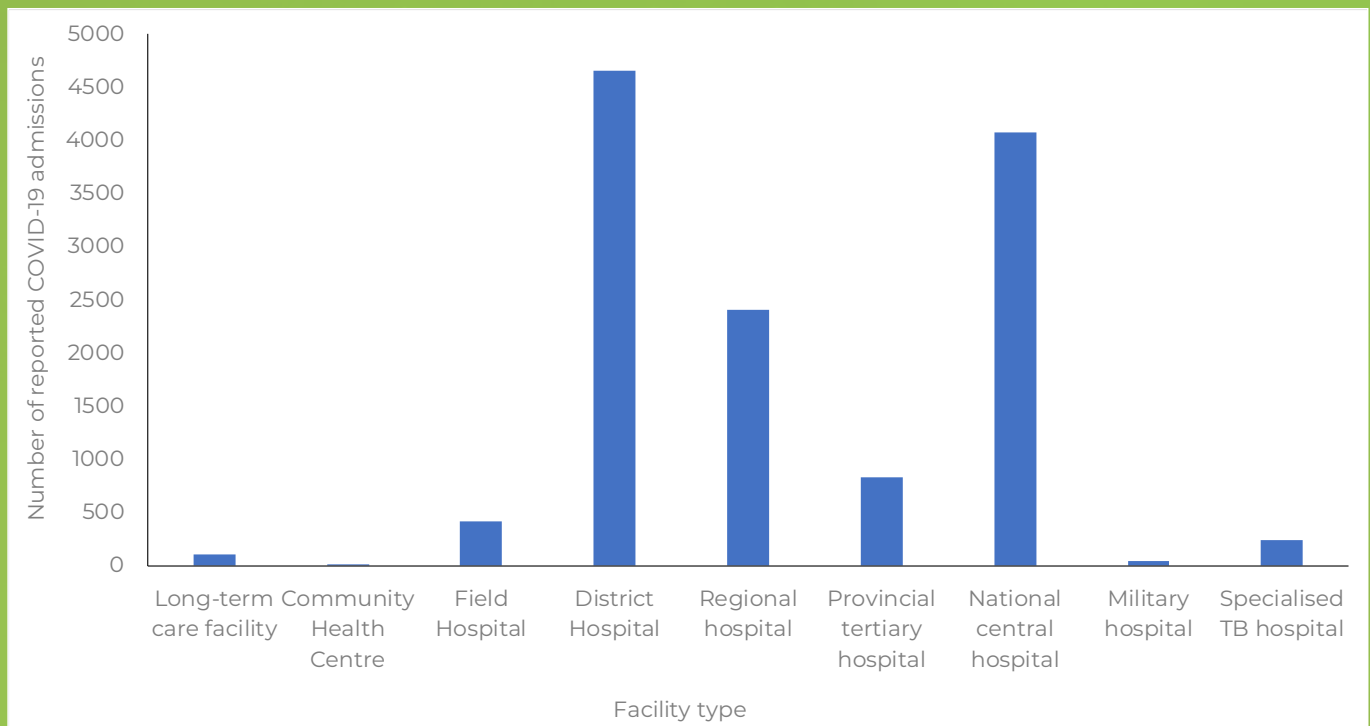


Figure 10: Number of reported COVID-19 admissions by facility type in the public sector, South Africa, 5 March-25 July 2020, n=12 771

Excluding those with small numbers of admissions, the CFR was low in field hospitals providing intermediate care (9.4%) and specialised TB hospitals (7.7%); and higher in regional (26.5%), provincial tertiary (26.8%), national central (26.8%) hospitals and district hospitals (22.7%) (Table 3).

TABLE 3: CASE FATALITY RATIO AMONG 26 139 INDIVIDUALS WITH IN-HOSPITAL OUTCOME (DISCHARGES AND DEATHS), BY TYPE OF FACILITY, SOUTH AFRICA, 5 MARCH-25 JULY 2020

Type of facility	Case-fatality ratio n/N (%)
Long-term care facility	0/7 (0)
Community Health Centre	3/6 (50.0)
Field Hospital	33/351 (9.4)
District Hospital	943/4 163 (22.7)
Regional hospital	521/1 970 (26.5)
Provincial tertiary hospital	167/624 (26.8)
National central hospital	880/3 282 (26.8)
Military hospital	9/26 (34.6)
Specialised TB hospital	13/169 (7.7)
Private general hospital	24 44/15 477 (15.8)
Total	5 013/26 139 (19.2)

AVERAGE LENGTH OF STAY

The length of stay (LOS) in hospital was calculated from the date of admission to the date of discharge, transfer or death. Among 25 646 patients with closed admissions and with reliable data available on LOS, the median LOS for patients who were discharged was 5 days and for those who died was 6 days ($p < 0.001$). The median length of stay was 5 days in public as compared to 6 days in the private sector ($p < 0.001$); and differed by province, with the longest being Eastern Cape and North West provinces (7 days each) and the shortest being Mpumalanga and Limpopo (4 days each) ($p < 0.001$). The length of stay decreased with month of admission from 7 days in March to 5 days in July ($p < 0.001$). The length of stay was shortest in community health centres (2 days) and district hospitals (4 days) ($p < 0.001$) (Table 4).

TABLE 4: LENGTH OF HOSPITAL STAY AMONGST REPORTED COVID-19 ADMISSIONS, BY OUTCOME, PROVINCE, SECTOR, MONTH AND FACILITY TYPE, SOUTH AFRICA, 5 MARCH-28 JULY, N=25 646

	N	Median LOS	IQR	p-value
Outcome				<0.001
Discharged alive	20 714	5	3-9	
Died	4 932	6	2-11	
Sector				<0.001
Private	15 059	6	3-10	
Public	10 587	5	2-9	
Province				<0.001
Eastern Cape	1 611	7	3-12	
Free State	1 014	6	3-10	
Gauteng	6 114	6	3-10	
KwaZulu-Natal	3 164	6	3-10	
Limpopo	353	4	2-8	
Mpumalanga	327	4	2-6	
North West	821	7	4-10	
Northern Cape	190	4	2-9	
Western Cape	12 052	5	2-9	
Month				<0.001
March	190	7	3-13	
April	909	7	3-14	
May	4 445	6	3-11	
June	10 447	6	3-11	
July	9 655	5	3-8	
Facility type				<0.001
Long-term care facility	70	40.5	15-61	
Community Health Centre	6	2	0-16	
Field Hospital	350	5	3-8	
District Hospital	4 157	4	2-8	
Regional hospital	1 960	5	2-8	
Provincial tertiary hospital	604	7	3-12	
National central hospital	3 256	6	3-11	
Military hospital	25	9	7-12	
Specialised TB hospital	164	6	6-10	
Private general hospital	15 054	6	3-10	

DISCUSSION

DATCOV currently includes 33 401 admissions from 321 public and private hospitals in all nine provinces in South Africa. It also includes 5 013 deaths that have occurred to date.

Previous DATCOV reports revealed factors associated with in-hospital mortality were older age groups; male sex; and having comorbid hypertension, diabetes, chronic cardiac disease, chronic renal disease, malignancy, HIV and active tuberculosis. CFR increased with increasing age; and with the presence of a comorbid condition, except in individuals aged 80 years and over.

The increased risk for severe disease and mortality in patients with diabetes mellitus has been reported in several reviews.¹⁻³ In our dataset, among patients with diabetes, 1 949/6 749 died (CFR 29%). The CFR was higher in diabetics with multimorbidity and particularly in those with chronic renal disease (44%) and obesity (50%).

As expected, the CFR was low in field hospitals providing intermediate care (9%) that are likely to refer patients to acute hospital care if required. It would be expected that CFR would be higher in referral hospitals that are likely to admit more severe cases, such as regional (27%), provincial tertiary (27%) and national central (27%) hospitals. The finding of high CFR in district hospitals (23%) is concerning. This requires investigation into (a) access to care to determine if there are any delays for patients in getting to care, (b) the quality of clinical management and availability of intensive care facilities, and (c) referral systems from district hospitals to higher levels of care.

The median LOS for patients who were discharged was 5 days and for those who died was 6 days ($p < 0.001$). The median LOS was shorter in public as compared to private sector; was shorter in the most recent month of admission; and differed by province. The median duration of hospital stay was 7 days in a cohort of over 16 000 patients in the United Kingdom.⁴

Trends in CFR over time and provincial differences may be affected by many factors such as hospital admission criteria, timeousness of closing cases, testing criteria in different provinces, and the severity of illness in admitted cases.

The availability of reliable surveillance data is of critical importance to gain a better understanding of the epidemiology of COVID-19 in South Africa, to monitor the COVID-19 epidemic and to respond with adequate control measures. It has been suggested that when local transmission is widespread and testing strategies change, hospital admission or mortality surveillance systems provide a more reliable picture of the epidemic progression than overall confirmed case numbers.

DATCOV provides real-time data and summary analyses, which inform modelling and reporting at a national level. It also addresses a knowledge gap, in the lack of data from low and middle income countries (LMIC), allowing for analysis of COVID-19 epidemiology in a country with a younger population, unique disease profile with epidemics of both infectious (HIV and tuberculosis) and non-communicable diseases, and an overburdened public health system.

LIMITATIONS

DATCOV is a sentinel surveillance system and does not include all hospitals with COVID-19 admissions and therefore may not be truly representative of hospital admissions for COVID-19 throughout South Africa. DATCOV only reports hospital-based admissions and deaths and therefore does not include deaths occurring outside hospitals. Data quality in a surveillance system is dependent on the information submitted by healthcare institutions. It is not possible for the NICD to verify or check the quality of all these data, however, the NICD has built-in data quality checks.

In patients with non-communicable diseases, the current data collection platform is not able to distinguish between those that had pre-existing disease and those that were newly-diagnosed; and between those with well or poorly controlled disease. New variables are being introduced to allow for this analysis. For obesity, the platform currently only allows for capture of the subjective opinion of the attending HCW that the patient is obese. The platform will soon include fields to collect height and weight where available, to allow calculation of Body Mass Index (BMI).

Data on socioeconomic status are not collected. Data on treatment and medical interventions have not been analysed because the data were incomplete.

Efforts are ongoing to improve the quality and completeness of data on symptom of these data will be included in future reports.

REFERENCES

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ACKNOWLEDGEMENTS

Western Cape province: all public sector hospitals submitting data to DATCOV
Public hospitals using DATCOV surveillance online platform:

Netcare

Bedford Hospital, Eastern Cape
Butterworth Hospital, Eastern Cape
Cecilia Makiwana Hospital, Eastern Cape
Cradock Hospital, Eastern Cape
Dora Nginza Hospital, Eastern Cape
Frere Hospital, Eastern Cape
Khotsong TB Hospital, Eastern Cape
Komga Hospital, Eastern Cape
Livingstone Hospital, Eastern Cape
Madwaleni Hospital, Eastern Cape
Nompumelelo Hospital, Eastern Cape
SS Gida Hospital, Eastern Cape
St Patricks Hospital, Eastern Cape
Stutterheim Hospital, Eastern Cape
Tafalofefe Hospital, Eastern Cape
Tower Psychiatric Hospital, Eastern Cape
Uitenhage Hospital, Eastern Cape
Winterberg TB Hospital, Eastern Cape
Zithulele hospital, Eastern Cape
3 Military Hospital, Free State
Albert Nzula District Hospital, Free State
Bongani Regional Hospital, Free State
Botshabelo Hospital, Free State
Dr Js Moroka Hospital, Free State
Elizabeth Ross Hospital, Free State
Manapo Hospital, Free State
National District Hospital, Free State
Nketoana District Hospital, Free State
Pelonomie Hospital, Free State
Phekolong Hospital, Free State
Universitas Hospital, Free State

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ACKNOWLEDGEMENTS

Charlotte Maxeke Hospital, Gauteng
Chris Hani Baragwanath Hospital, Gauteng
Helen Joseph Hospital, Gauteng
Leratong Hospital, Gauteng
Steve Biko Academic Hospital, Gauteng
Tambo Memorial Hospital, Gauteng
Addington Hospital, KwaZulu-Natal
General Justice Gizenga Mpanza Hospital, KwaZulu-Natal
Grey's Hospital, KwaZulu-Natal
King Edward VIII Hospital, KwaZulu-Natal
Ladysmith Hospital, KwaZulu-Natal
Manguzi Hospital, KwaZulu-Natal
Polokwane Hospital, Limpopo
Job Shimankana Tabane Hospital, North West
Tshepong Hospital, North West
Robert Mangaliso Sobukwe Hospital, Northern Cape
Tygerberg Hospital, Western Cape

Private hospital groups submitting data to DATCOV:

Netcare
Life Healthcare
Mediclinic Southern Africa
National Hospital Network (NHN)
Clinix Health Group
Lenmed
Joint Medical Holdings (JMH)

Private hospitals using DATCOV surveillance online platform:

Aurora Rehabilitation Hospital, Eastern Cape
Care Cure Queenstown, Eastern Cape
Matatiele Private Hospital, Eastern Cape
Nurture Queenstown, Eastern Cape
Busamed Bram Fischer International Airport Hospital, Free State
Busamed Harrismith Private Hospital, Free State

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ACKNOWLEDGEMENTS

Busamed Harrismith Private Hospital, Free State
Corona Sub-Acute Hospital, Free State
Emoyamed Private Hospital, Free State
Nurture Woodlands, Free State
Riemland Clinic, Free State
St Helena GM Hospital, Free State
Arwyp Medical Centre, Gauteng
Botshilu Private Hospital, Gauteng
Busamed Modderfontein Private Hospital Orthopaedic and Oncology Centre, Gauteng
Louis Pasteur Private Hospital, Gauteng
Lynnmed Clinic, Gauteng
Midvaal Private Hospital, Gauteng
Nurture Rynmed, Gauteng
Nurture Vereeniging, Gauteng
Pretoria Urology Hospital, Gauteng
RH Rand Hospital, Gauteng
Sunshine Hospital, Gauteng
Zuid Afrikaans Hospital, Gauteng
Ahmed Al-Kadi Private Hospital, KwaZulu-Natal
Busamed Gateway Private Hospital, KwaZulu-Natal
Busamed Hillcrest Private Hospital, KwaZulu-Natal
Capital hospital, KwaZulu-Natal
KwaDukuza Private Hospital, KwaZulu-Natal
Midlands Medical Centre Private Hospital, KwaZulu-Natal
Nurture Ilembe, KwaZulu-Natal
Shelly Beach Private Hospital, KwaZulu-Natal
Zoutpansberg Private Hospital, Limpopo
Kiaat Private Hospital, Mpumalanga
RH Piet Retief Hospital, Mpumalanga
Medicare Private Hospital, North West
Mooimed Private Hospital, North West
Sunningdale Hospital, North West
Vryburg private hospital, North West
Wilmed Park Private Hospital, North West
Lenmed Royal Hospital and Heart Centre, Northern Cape
Busamed - Paardevelei private hospital, Western Cape
Nurture Cape View, Western Cape
Nurture Newlands, Western Cape

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APPENDIX

TABLE 5: NUMBER OF REPORTED COVID-19 ADMISSIONS AND DEATHS BY AGE AND GENDER, SOUTH AFRICA, 5 MARCH-25 JULY 2020

Age (years)	ADMISSIONS				DEATHS			
	Female	Male	Unknown	Total	Female	Male	Unknown	Total
0-4	212	280	0	492	5	7	0	12
5-9	57	77	0	134	0	1	0	1
10-14	84	74	0	158	1	3	0	4
15-19	265	135	0	400	3	8	0	11
20-24	487	252	0	739	8	13	0	21
25-29	1 047	442	0	1 489	33	19	0	52
30-34	1 481	851	0	2 332	43	37	0	80
35-39	1 702	1 176	0	2 878	89	81	0	170
40-44	1 607	1 372	1	2 980	107	133	0	240
45-49	1 771	1 639	0	3 410	153	187	0	340
50-54	2 010	1 942	0	3 952	230	260	0	490
55-59	1 974	1 925	0	3 899	334	373	0	707
60-64	1 528	1 545	0	3 073	280	372	0	652
65-69	1 141	1 128	1	2 270	282	326	1	609
70-74	877	882	1	1 760	226	272	0	498
75-79	701	625	0	1 326	209	210	0	419
80-84	518	377	0	895	152	150	0	302
85-89	296	207	0	503	104	93	0	197
90-94	153	107	0	260	61	59	0	120
>95	30	9	0	39	16	4	0	20
Unknown	230	181	1	412	36	32	0	68
	18 171	15 226	4	33 401	2 372	2 640	1	5 013