

FreeFACTS

No 3/2020 / March 2020 / Issue 23

Find us online at www.irr.org.za

Is SA ready for COVID-19?

The world is grappling with a crisis of almost unprecedented proportions. The Covid-19 epidemic has left almost no country untouched.

Although estimates vary about how deadly the virus is to humans the issue that many countries are facing that even with a low mortality rate healthcare systems could crumble under the weight of large numbers of people seeking treatment due to falling ill from Covid-19. This is behind the concept of 'flattening the curve' so that the spread of the disease is curbed so that healthcare systems are not overwhelmed. Reports coming out of Italy show how hospitals in that country, particularly in the country's north are not coping with the influx of ill people.

Will South Africa be able to handle this challenge?

This edition of *FreeFACTS* looks at the state of South Africa's healthcare system.

As we have reported before in this publication one of the few successes of the Zuma administration was the progress made in improving health outcomes, notably the spread of HIV/AIDS. Although one-in-five South Africa has HIV the increase in infections was slowed significantly, primarily thanks to the provision of ARVs. However, there are concerns that people with living with HIV will be disproportionately impacted by the crisis. In addition, initial data shows that people living with another condition, such as diabetes (which South Africa has a relatively high number of people suffering from) are more likely to die from Covid-19. And despite increases in the numbers of doctors and nurses working in South Africa the country faces a shortage of hospital beds, particularly those needed for critical care.

If the Covid-19 epidemic reaches levels seen in Italy and Iran (and now, it seems, the United States), our healthcare system will be under immense strain. Hopefully the lockdown that has been implemented will help us 'flatten the curve' and not see a spike in infections, although it is not yet clear whether such heavy-handed measures will do this. — **Marius Roodt**

JOIN US

The IRR is an advocacy group that fights for your right to make decisions about your life, family and business, free from unnecessary government, political, and bureaucratic interference. FreeFACTS publishes evidence that communities are better off when individuals are free to make decisions about how they want to live, be educated, work, access healthcare, think, speak, own property, and protect their communities. If you agree with the issues we stand for, welcome to the team. There are millions of people just like you who are tired of South African politicians, activists, and commentators attempting to rein in your freedom to decide. Take control and make sure your voice is heard by becoming a friend of the IRR.

**SMS YOUR NAME
TO 32823
SMS costs R1.
Ts and Cs apply.**

Health

Doctors

All registered general practitioners and specialists^a by province, 2007-19

Province	2007	2009	2010	2012	2014	2016	2018 ^b	2019 ^c	Change ^d 2007-19
Eastern Cape	2 183	2 381	2 149	1 883	2 801	2 952	3 547	3 696	69.3%
Free State	1 722	1 750	1 559	1 321	1 894	1 915	1 939	1 977	14.8%
Gauteng	12 246	12 332	11 524	10 245	14 192	14 961	17 965	18 721	52.9%
KwaZulu-Natal	5 707	6 113	5 670	4 916	7 165	7 625	4 838	4 607	-19.3%
Limpopo	1 196	975	937	836	1 404	1 548	1 628	1 704	42.5%
Mpumalanga	1 149	1 966	1 819	1 612	1 475	1 555	1 964	1 979	72.2%
North West	962	680	631	574	1 316	1 423	1 183	1 263	31.3%
Northern Cape	432	458	403	342	580	622	559	570	31.9%
Western Cape	7 288	7 648	7 086	6 183	8 894	9 485	11 889	12 216	67.6%
South Africa^e	34 324	35 707	36 912	38 444	41 132	43 503	45 512	46 733	36.2%

Source: HPCSA, www.hpcsa.co.za, accessed 1 June 2016; Health Systems Trust (HST), www.hst.org.za; accessed 1 December 2014; *South African Health Review (SAHR) 2016*, May 2016, Table 34, p302; HPCSA, www.hpcsa.co.za, *Welcome to iregister*, accessed 18 July 2018; HPCSA, www.hpcsa.co.za, *Welcome to iregister*, accessed 8 July 2019

a Registered with the Health Professions Council of South Africa. This includes those practising in either the public or the private sector, those working abroad, and those registered but no longer practising.

b As at 3 July 2018.

c As at 8 July 2019.

d IRR calculations.

e Totals should add up vertically but may not, owing to the fact that the location of some registered doctors was unspecified.

All registered general practitioners and specialists, 2007-19



Health

Public sector general practitioners and specialists, 2000-18			
Year ^a	General practitioners	Specialists	Total
2000	7 591	3 881	11 472
2001	7 352	3 812	11 164
2002	7 287	3 685	10 972
2003	7 645	3 446	11 091
2005	8 747	3 499	12 246
2006	9 527	3 695	13 222
2007	9 959	4 000	13 959
2008	10 653	4 026	14 679
2009	10 878	4 311	15 189
2010	11 309	4 442	15 751
2011	12 014	4 620	16 634
2012	12 444	4 775	17 219
2013	13 531	4 947	18 478
2014	13 593	4 893	18 486
2015	13 656	4 986	18 642
2016	14 036	4 737	18 773
2017	14 856	4 891	19 747
2018	15 001	4 827	19 828

Source: HST, www.hst.org.za, SAHR 2018, December 2018, Table 45, p221
 a Data for 2004 was not available.

Health

People-to-doctor ratio by province, 2019

Province	People per doctor ^a	Number of doctors ^b	Proportion of total ^a
Eastern Cape	1 816 to 1	3 696	7.9%
Free State	1 461 to 1	1 977	4.2%
Gauteng	811 to 1	18 721	40.1%
KwaZulu-Natal	2 450 to 1	4 607	9.9%
Limpopo	3 511 to 1	1 704	3.6%
Mpumalanga	2 320 to 1	1 979	4.2%
North West	3 189 to 1	1 263	2.7%
Northern Cape	2 217 to 1	570	1.2%
Western Cape	560 to 1	12 216	26.1%
South Africa^c	1 258 to 1	46 733	100.0%

Source: HPCSA, www.hpcsa.co.za. *Welcome to iregister*, accessed 3 July 2018; Stats SA, *Mid-year population estimates 2019*, Statistical release P0302, 29 July 2019, Appendix 1, p21

- a IRR calculations.
- b General practitioners and specialists registered, with the Health Professions Council of South Africa.
- c Totals should add up vertically but may not owing to the fact that for some registered doctors, their province was unspecified.

People-to-public sector doctor^a ratio, 2000-18

Year	People per doctor ^{bc}	Year	People per doctor ^{bc}
2000	3 808 to 1	2010	3 174 to 1
2001	4 015 to 1	2011	3 112 to 1
2002	4 143 to 1	2012	3 036 to 1
2003	4 186 to 1	2013	2 867 to 1
2005	3 829 to 1	2014	2 921 to 1
2006	3 584 to 1	2015	2 948 to 1
2007	3 428 to 1	2016	2 978 to 1
2008	3 317 to 1	2017	2 862 to 1
2009	3 247 to 1	2018	2 911 to 1

Source: Stats SA, email communication; *Mid-year population estimates, 2007-16* data; HST, www.hst.org.za, *SAHR 2016*, May 2016, Table 34, p302; *SAHR 2018*, December 2018, Table 45, p221

- a Data for 2004 was not available.
- b Registered general practitioners and specialists.
- c IRR calculations.

Nurses

All registered nurses ^a , 1998-2018				
Year	Professional nurses ^b	Enrolled nurses ^c	Nursing assistants ^d	Total
1998	91 011	32 744	N/A	123 755
1999	92 390	32 925	N/A	125 315
2000	93 303	32 399	N/A	125 702
2001	94 552	32 120	N/A	126 672
2002	94 948	32 495	N/A	127 443
2003	96 715	33 575	N/A	130 290
2004	98 490	35 266	N/A	133 756
2005	99 534	37 085	54 650	191 269
2006	101 295	39 305	56 314	196 914
2007	103 792	40 582	59 574	203 948
2008	107 978	43 686	61 142	212 806
2009	111 299	48 078	62 440	221 817
2010	115 244	52 370	63 472	231 086
2011	118 262	55 408	64 526	238 196
2012	124 045	58 722	65 969	248 736
2013	129 015	63 788	67 895	260 698
2014	133 127	66 891	70 419	270 437
2015	136 854	70 300	71 463	278 617
2016	140 598	73 558	73 302	287 458
2017	142 092	74 556	70 431	287 079
2018	146 791	70 552	68 361	285 704
1998-2018	61.3%	115.5%	N/A	130.9%

Source: South African Nursing Council (SANC), www.sanc.co.za, *Provincial distribution of nursing manpower versus the population of South Africa*, January 2016, p2; SANAC, www.sanc.co.za, *Provincial distribution of nursing manpower versus the population of South Africa*, January 2018, p2; *Provincial distribution of nursing manpower versus the population of South Africa*, December 2018, p1

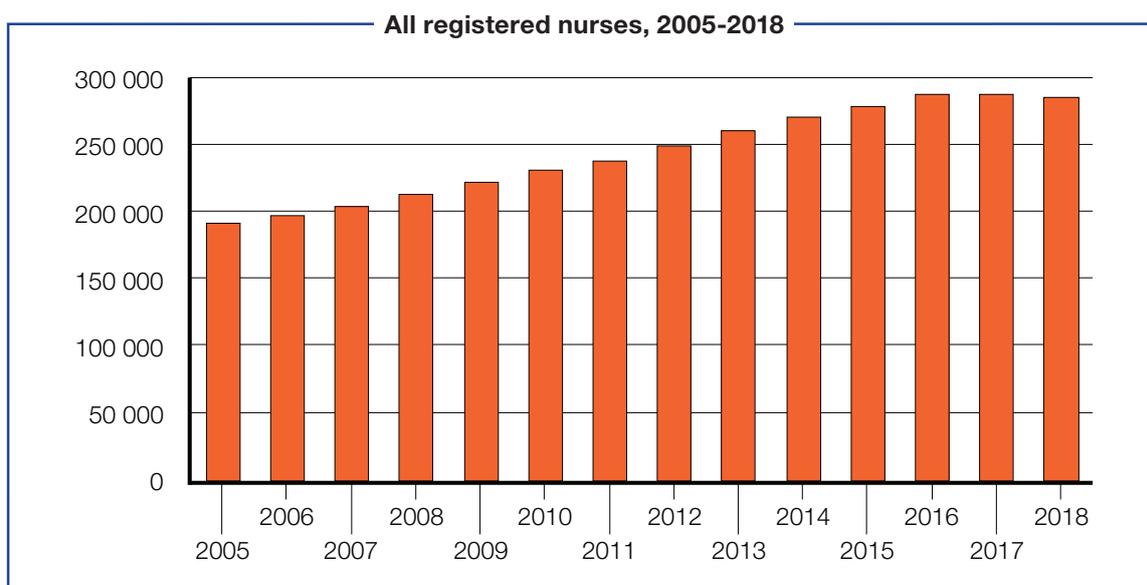
a Registered with the South African Nursing Council.

b Includes nurses practising in either the public or the private sector, those working abroad, and those registered but no longer practising. Professional nurses have completed a four-year programme at university or a nursing college and practise comprehensive nursing and midwifery.

c Includes nurses practising in either the public or the private sector, those working abroad, and those registered but no longer practising. Enrolled nurses have completed a two-year programme at a public or private institution, usually a nursing college. Alternatively, an enrolled nurse has left university after completing only two years of the four-year university programme. Enrolled nurses practise basic nursing.

d Includes nurses practising in either the public or the private sector, those working abroad, and those registered but no longer practising. Nursing assistants, also referred to as auxiliary nurses, have completed a year-long programme or course at a college or have exited after completing the first year of the university four-year programme. Nursing assistants practise elementary nursing.

N/A — Not available/applicable.



Health

Public and private sector nurses ^a , 2000-17						
Year ^b	Public sector			Private sector		
	Professional nurses	Enrolled nurses	Nursing assistants	Professional nurses	Enrolled nurses	Nursing assistants
2000	41 734	20 726	28 194	51 569	11 673	N/A
2001	41 460	20 691	28 646	53 092	11 429	N/A
2002	40 318	20 590	28 661	54 630	11 905	N/A
2003	41 563	20 683	29 052	55 152	12 892	N/A
2005	43 660	20 582	31 006	55 874	16 503	23 644
2006	44 071	20 806	31 850	57 224	18 499	24 464
2007	45 102	21 379	33 219	58 690	19 203	26 355
2008	47 834	22 707	34 030	60 144	20 979	27 112
2009	49 341	23 039	33 914	61 958	25 039	28 526
2010	51 966	24 316	34 858	63 278	28 054	28 614
2011	56 075	27 256	36 315	62 187	28 152	28 211
2012	59 890	29 735	36 770	64 155	28 987	29 199
2013	63 833	30 215	36 275	65 182	33 573	31 620
2014	66 711	30 571	35 147	66 416	36 320	35 272
2015	68 105	30 870	34 877	68 749	39 430	36 586
2016	67 766	31 325	34 583	72 832	42 233	38 719
2017	69 881	31 388	33 176	72 211	43 168	37 255
2000-17	67.4%	51.4%	17.7%	40.0%	269.8%	N/A

Source: SANC, www.sanc.co.za, *Provincial distribution of nursing manpower versus the population of South Africa*, accessed 31 January 2019

a Registered nurses in both the public and the private sectors.

b Data for 2004 was not available.

N/A — Not available/applicable.

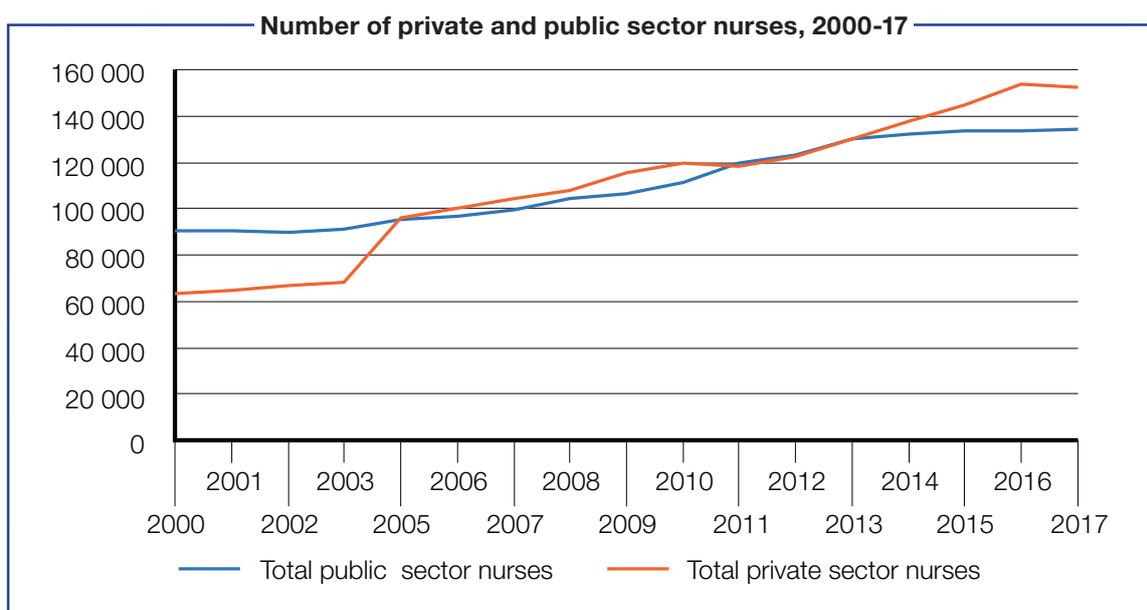
Health

People-to-public and private sector nurse ^a ratio, 2000-17				
Year	Total public sector nurses	People per public sector nurse ^b	Total private sector nurses	People per private sector nurse ^b
2000	90 654	482 to 1	63 242	691 to 1
2001	90 797	491 to 1	64 521	691 to 1
2002	89 569	496 to 1	66 535	668 to 1
2003	91 298	509 to 1	68 044	682 to 1
2005	95 248	492 to 1	96 021	488 to 1
2006	96 727	490 to 1	100 187	473 to 1
2007	99 700	480 to 1	104 248	459 to 1
2008	104 571	466 to 1	108 235	450 to 1
2009	106 294	464 to 1	115 523	427 to 1
2010	111 140	450 to 1	119 946	417 to 1
2011	119 646	423 to 1	118 550	437 to 1
2012	123 395	424 to 1	122 341	427 to 1
2013	130 323	407 to 1	130 375	406 to 1
2014	132 429	408 to 1	138 008	391 to 1
2015	133 852	411 to 1	144 765	380 to 1
2016	133 674	418 to 1	153 784	364 to 1
2017	134 445	420 to 1	152 634	370 to 1

Source: SANC, www.sanc.co.za, *Provincial distribution of nursing manpower versus the population of South Africa*, January 2016, p2; Stats SA, email communication; *Mid-year population estimates*, 2007-17 data

a Registered nurses with the South African Nursing Council.

b IRR calculations.



Health

Public and private hospitals by province, 2017/18

<i>Province</i>	<i>Public^a</i>	<i>Private^b</i>	<i>Total</i>	<i>Public as a proportion of total^c</i>	<i>Private as a proportion of total^c</i>
Eastern Cape	74	36	110	67.3%	32.7%
Free State	31	24	55	56.4%	43.6%
Gauteng	30	93	123	24.4%	75.6%
KwaZulu-Natal	55	58	113	48.7%	51.3%
Limpopo	39	14	53	73.6%	26.4%
Mpumalanga	28	24	52	53.8%	46.2%
North West	19	17	36	52.8%	47.2%
Northern Cape	13	8	21	61.9%	38.1%
Western Cape	42	93	135	31.1%	68.9%
South Africa	331	367	698	47.4%	52.6%

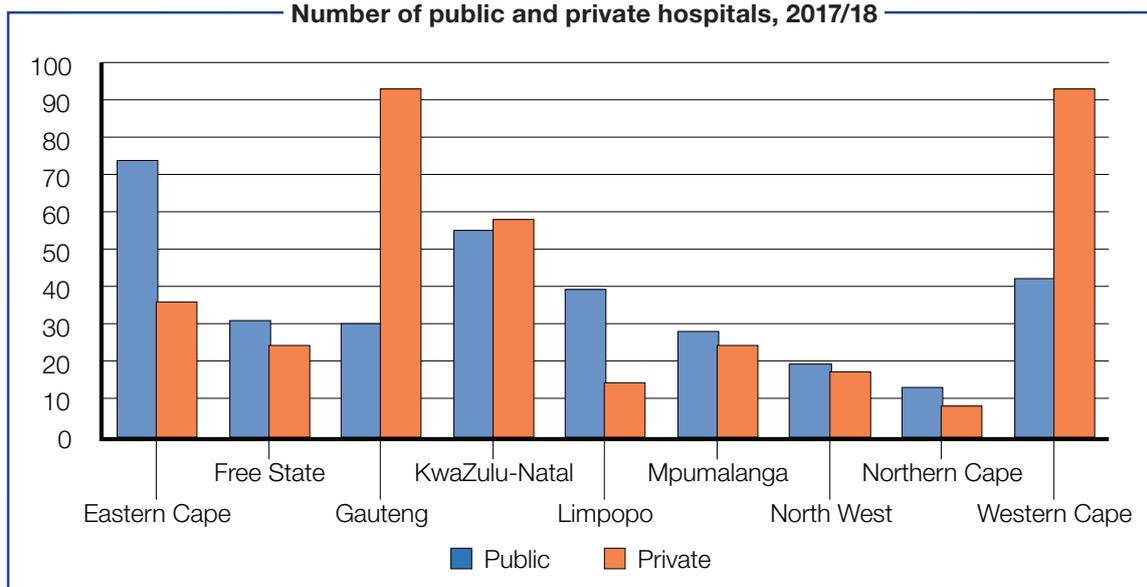
Source: HST, www.hst.org.za, *DHB 2016/17*, November 2017, pp229-747; Stats SA, *Mid-year population estimates 2018*, Statistical release P0302, 23 July 2017, Appendix 1, p21

a Excludes Community Health Centres.

b Includes psychiatric and specialised TB hospitals (excluding specialised hospitals).

c IRR calculations.

Number of public and private hospitals, 2017/18



Health

Beds in public hospitals by province, 2018

Province	Total inpatient beds ^a	As a proportion of total ^b	People per hospital bed
Eastern Cape	13 738	15.7%	475 to 1
Free State	4 753	5.4%	622 to 1
Gauteng	18 014	20.6%	817 to 1
KwaZulu-Natal	21 039	24.1%	541 to 1
Limpopo	7 764	8.9%	747 to 1
Mpumalanga	4 895	5.6%	924 to 1
North West	4 259	4.9%	934 to 1
Northern Cape	1 930	2.2%	635 to 1
Western Cape	11 037	12.6%	600 to 1
South Africa	87 429	100.0%	660 to 1

Source: HST, www.hst.org.za, SAHR 2018, December 2018, Table 42, p216; Stats SA, *Mid-year population estimates 2018*, Statistical release P0302, 23 July 2018, Appendix 1, p21

a As at March 2018.

b IRR calculations.

Intensive Care Unit^a (ICU) departments in public hospitals by province, 2019

Province	Number	Proportion of total ^b
Eastern Cape	18	7.4%
Free State	13	5.3%
Gauteng	87	35.7%
KwaZulu-Natal	48	19.7%
Limpopo	6	2.5%
Mpumalanga	12	4.9%
North West	16	6.6%
Northern Cape	6	2.5%
Western Cape	38	15.6%
South Africa	244	100.0%

Source: Medpages, www.medpages.co.za, *Hospital Departments-ICU*, accessed 10 July 2019

a A hospital unit with special equipment and specially trained personnel for the care of seriously ill patients requiring immediate and continuous attention.

b IRR calculations.

Health

Causes of death

Leading causes of death, 2004-16						
Cause of death	2004	2013	2014	2015	2016	Change 2004-16
Tuberculosis	77 406	41 904	39 695	34 042	29 513	-61.9%
Influenza and pneumonia	71 800	24 345	22 878	21 001	19 638	-72.6%
Human immuno-deficiency virus [HIV] disease	13 590	23 825	22 866	22 557	21 830	60.6%
Cerebrovascular diseases	33 224	23 158	24 258	23 505	23 137	-30.4%
Diabetes mellitus	18 654	23 133	24 092	25 774	25 255	35.4%
Other forms of heart disease	46 795	22 189	23 009	23 299	23 515	-49.7%
Hypertensive diseases	30 679	17 104	18 416	19 845	19 960	-34.9%
Intestinal infectious diseases ^a	29 841	16 163	14 834	N/A	N/A	N/A
Other viral diseases	16 384	14 101	14 574	16 475	16 577	1.2%
Chronic lower respiratory diseases	19 828	12 384	12 793	13 006	12 659	-36.2%
Ischaemic heart diseases	N/A	N/A	N/A	12 714	12 883	N/A
Certain disorders involving the immune mechanism	28 778	N/A	N/A	N/A	N/A	N/A
Respiratory and cardiovascular disorders-perinatal	19 801	N/A	N/A	N/A	N/A	N/A
Other natural causes	108 217	207 523	208 537	207 820	200 403	85.2%
Non-natural causes	52 491	49 681	50 939	53 228	51 242	-2.4%
ALL CAUSES^b	576 700	475 510	476 891	473 266	456 612	-20.8%

Source: Stats SA, *Mortality and causes of death in South Africa 2004: Findings from death notification*, Statistical Release P0309.3, May 2006, Table 4.2, p21; *Mortality and causes of death in South Africa 2015: Findings from death notification*, Statistical Release P0309.3, 28 February 2017, Table 4.5, p31; Stats SA, *Mortality and causes of death in South Africa 2016: Findings from death notification*, Statistical Release P0309.3, 27 March 2018; Table 4.5, p33

a Cholera would fall under this category.

b Stats SA totals.

N/A — Not available/applicable.

Health

Tuberculosis (TB)

TB prevalence and death rates, 1990-2017			
Year	Prevalence rate ^a	Death rate ^b (including HIV co-infection ^c)	Death rate ^b (excluding HIV co-infection)
1990	475	78	42
1991	475	78	43
1992	473	82	43
1993	461	112	41
1994	444	114	38
1995	427	116	35
1996	415	126	33
1997	417	133	32
1998	443	144	34
1999	496	129	38
2000	568	183	44
2001	644	213	50
2002	694	194	53
2003	722	227	54
2004	736	233	52
2005	748	249	51
2006	748	232	49
2007	753	230	48
2008	761	N/A	47
2009	795	N/A	50
2010	803	N/A	51
2011	831	N/A	55
2012	857	168	59
2013	715	121	48
2014	696	134	44
2015	454	133	46
2016	438	181	41
2017	322	99	39
1990-2017	-32.2%	26.9%	-7.1%

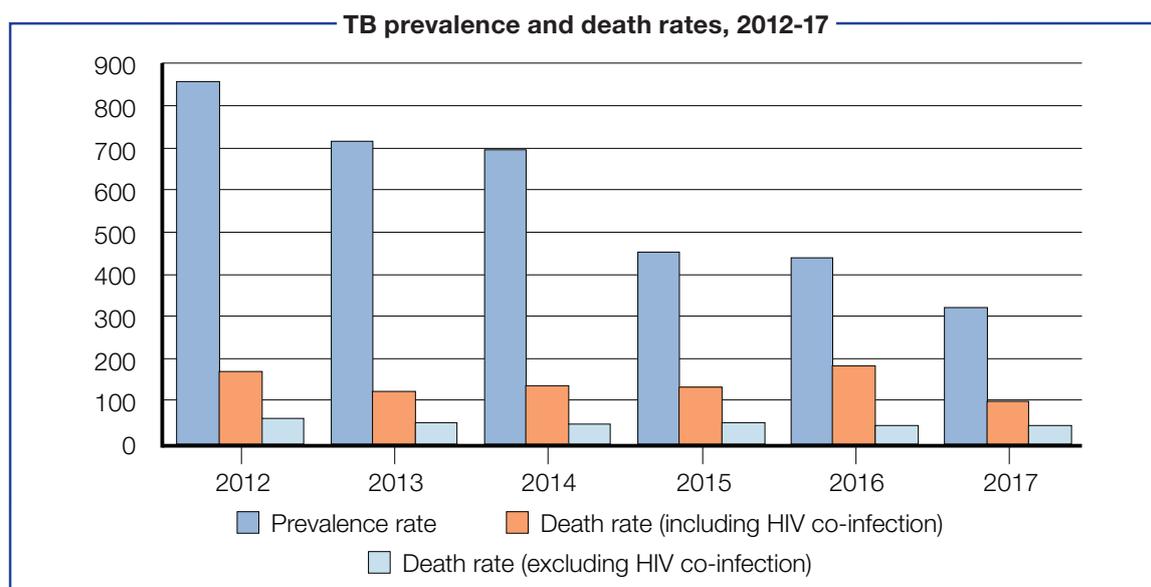
Source: WHO, www.who.int, *Global Tuberculosis Report 2016*, October 2016, p155; HST, www.hst.org.za, accessed 11 June 2016; WHO, www.who.int, *Global Tuberculosis Report 2017*, December 2017, p188; *Global Tuberculosis Report 2018*, September 2018, p204

a The number of people with TB per 100000 people.

b The number of deaths owing to TB reported in that year per 100000 people.

c Includes deaths occurring in HIV-positive TB cases.

N/A – Not available.



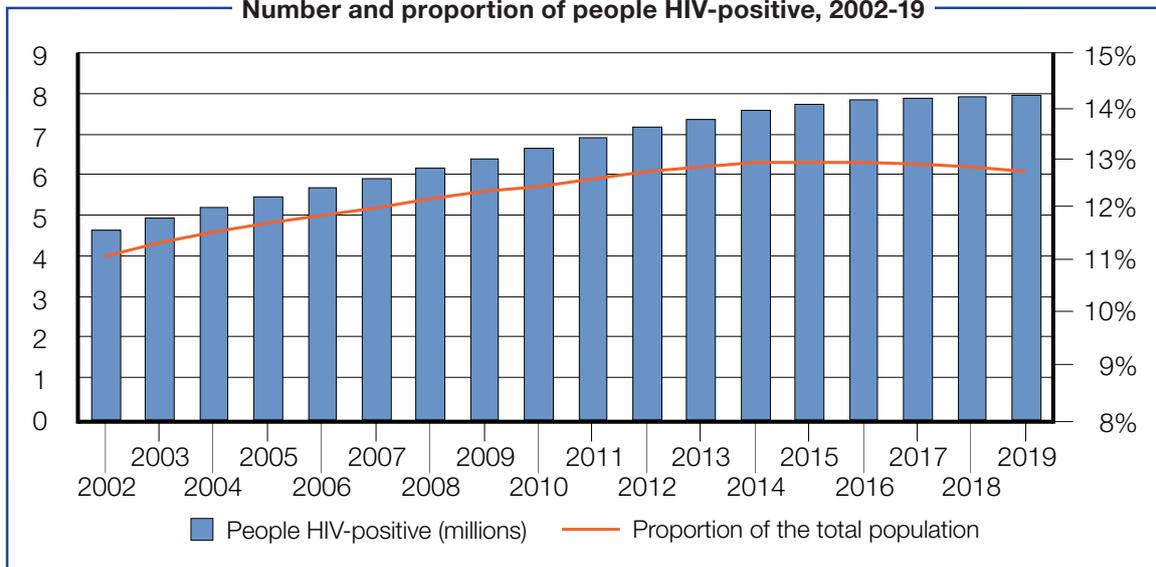
HIV and AIDS

Number and proportion of people HIV-positive, 2002-19				
Year	Total population		Population aged 15-49	
	People HIV-positive (millions)	Proportion of the total population	Proportion of the population HIV-positive	Proportion of women HIV-positive
2002	4.64	10.0%	16.3%	18.8%
2003	4.95	10.6%	17.0%	19.6%
2004	5.21	11.0%	17.4%	20.2%
2005	5.45	11.4%	17.8%	20.7%
2006	5.68	11.7%	18.1%	21.1%
2007	5.91	12.0%	18.5%	21.5%
2008	6.17	12.4%	18.8%	22.0%
2009	6.41	12.7%	19.2%	22.4%
2010	6.66	12.9%	19.5%	22.8%
2011	6.92	13.2%	19.8%	23.2%
2012	7.16	13.5%	20.1%	23.6%
2013	7.38	13.7%	20.3%	23.9%
2014	7.58	13.9%	20.4%	24.1%
2015	7.72	13.9%	20.3%	24.0%
2016	7.84	13.9%	20.2%	23.9%
2017	7.90	13.8%	19.8%	23.5%
2018	7.94	13.7%	19.5%	23.2%
2019	7.97	13.5%	19.1%	22.7%
2002-19	71.8%	35.4%	17.2%	21.1%

Source: Stats SA, *Mid-year population estimates 2019*, Statistical release P0302, July 2019, Appendix 3, p22

Health

Number and proportion of people HIV-positive, 2002-19



Diabetes incidence^a by province, 2014/15-2016/17

Province	2014/15	2015/16	2016/17	Change 2014/15-2016/17
Eastern Cape	1.6	1.8	2.4	50.0%
Free State	1.1	1.1	2.4	118.2%
Gauteng	0.9	1.5	3.3	266.7%
KwaZulu-Natal	1.6	2.2	2.7	68.8%
Limpopo	2.6	2.5	2.0	-23.1%
Mpumalanga	1.4	1.7	3.1	121.4%
Northern Cape	3.9	1.4	0.0	-100.0%
North West	1.0	1.6	1.4	40.0%
Western Cape	1.1	1.0	1.2	9.1%
South Africa	1.4	1.7	2.4	71.4%

Source: HST, www.hst.org.za, SAHR 2018, November 2018, Table 31, p204

a The number of newly diagnosed cases of diabetes initiated on treatment per 1 000 people, per year.