





**A F R I C A**

## Africa: Summary of TB control policies

COUNTRY	STATUS <sup>a</sup>	MANUAL <sup>b</sup>	MICROSCOPY <sup>c</sup>	MONITORING OF TB SUSPECTS <sup>d</sup>	SCC <sup>e</sup>	DOT <sup>f</sup>	OUTCOME MONITORING <sup>g</sup>
ALGERIA	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
ANGOLA	DOTS		Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
BENIN	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
BOTSWANA	DOTS		Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
BURKINA FASO	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
BURUNDI	DOTS		Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
CAMEROON	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in some units/areas
CAPE VERDE	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in some units/areas	Implemented in some units/areas
CENTRAL AFRICAN REPUBLIC	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
CHAD	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
COMOROS			Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
CONGO	DOTS		Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
CÔTE D'IVOIRE	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
DR CONGO	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
EQUATORIAL GUINEA			Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
ERITREA	DOTS		Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
ETHIOPIA	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
GABON	<b>DOTS</b>	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
GAMBIA	DOTS		Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
GHANA	DOTS	YES	Implemented in all units/areas	Implemented in some units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in some units/areas
GUINEA	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
GUINEA-BISSAU	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
KENYA	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
LESOTHO	DOTS	NO	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
LIBERIA			Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
MADAGASCAR	DOTS		Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
MALAWI	DOTS		Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
MALI	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in some units/areas	Implemented in all units/areas
MAURITANIA			Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
MAURITIUS	DOTS	NO	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
MOZAMBIQUE	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
NAMIBIA	DOTS	YES	Implemented in some units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in some units/areas	Implemented in all units/areas
NIGER			Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
NIGERIA	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
RWANDA	DOTS	YES	Implemented in all units/areas	Implemented in some units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in some units/areas
SAO TOME AND PRINCIPE		YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
SENEGAL	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in some units/areas	Implemented in some units/areas
SEYCHELLES	DOTS	YES	Implemented in all units/areas	Not implemented	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
SIERRA LEONE	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
SOUTH AFRICA	DOTS	YES	Implemented in all units/areas	Implemented in some units/areas	Implemented in all units/areas	Implemented in some units/areas	Implemented in some units/areas
SWAZILAND	<b>DOTS</b>	YES	Not implemented	Implemented in all units/areas	Implemented in all units/areas	Implemented in some units/areas	Implemented in some units/areas
TOGO	DOTS		Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
UGANDA	DOTS	YES	Implemented in some units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in some units/areas	Implemented in some units/areas
UR TANZANIA	DOTS	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
ZAMBIA	<b>DOTS</b>	YES	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas
ZIMBABWE	DOTS	YES	Implemented in some units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas	Implemented in all units/areas

AFRICA

	Implemented in all units/areas
	Implemented in some units/areas
	Not implemented
	Unknown

- a Status: DOTS status (**bold** indicates DOTS introduced in 2002)  
b Manual: National TB control manual (recommended)  
c Microscopy: Use of smear microscopy for diagnosis (core component of DOTS)  
d Monitoring of TB Suspects: Register of TB suspects (e.g. patients with cough  $\geq$  3 weeks) kept at DOTS facilities (recommended)  
e SCC: Short course chemotherapy (core component of DOTS)  
f DOT: Directly observed treatment (core component of DOTS)  
g Outcome monitoring: Monitoring of treatment outcomes by cohort analysis (core component of DOTS)

# Explanatory notes

Country-specific data are grouped by WHO region. For each country we present:

- 2002 notification, detection, and coverage data – for the whole country, and separately for DOTS and non-DOTS programmes.
- Treatment outcomes for 2001 cohorts – both the new smear-positive and the retreatment cohorts from DOTS programmes, and the new smear-positive treatment outcomes (where available) from non-DOTS programmes.
- New smear-positive notifications (numbers) by age and sex – from DOTS and from non-DOTS programmes.
- New smear-positive notification rates by age and sex for the whole country.
- Notification numbers and rates since 1980, all forms of TB.
- Notification numbers and rates since 1993, new smear-positive cases.
- Country notes: remarks that may help to explain data reported by selected countries.

## Notation for 1st table

(Country data...notification, detection and DOTS coverage)

- a The population expressed in thousands (source: United Nations Population Division, World Population Prospects, 2002 revision).
- b' The total number of tuberculosis cases notified (European definition, includes all new, retreatment, and recurrent cases).
- b The total number of tuberculosis cases notified to WHO (WHO definition, includes new and relapse cases and, for Europe only, cases with previous history unknown).
- c The case notification rate (per 100 000 population),  $b/a * 100$ .
- d The number of new smear-positive cases notified to WHO.
- e The new smear-positive case notification rate (per 100 000 population),  $d/a * 100$ .
- f The number of new pulmonary laboratory-confirmed cases notified to WHO (includes smear-positive and/or culture-positive cases).
- g The new pulmonary laboratory-confirmed case notification rate (per 100 000 population),  $f/a * 100$ . These data are not required by WHO, but are provided by some countries, particularly those in the European region.
- h WHO estimate of the number of new cases (all forms of TB) in 2002.
- i The estimated incidence rate, all forms of TB, per 100 000 population),  $h/a * 100$ .
- j WHO estimate of the number of new sputum smear-positive cases in 2002.
- k The estimated incidence rate, smear-positive cases (per 100 000 population),  $j/a * 100$ .
- l The proportion of estimated cases (all forms) that were notified,  $b/h * 100$ .
- m The case detection rate: the proportion of estimated new smear-positive cases that were notified,  $d/j * 100$ .

**Country data for Africa: notification, detection and DOTS coverage, 2002**

	Country information														DOTS				non-DOTS					
	Notified TB							Estimated TB							DOTS				non-DOTS					
	Pop thousands	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w
Algeria	31 266	18 934	61	8 246	26	8 506	27	16 137	52	7 256	23	117	114	100	18 934	61	8 246	26	114	86	1 452	742	55	
Angola	13 184	29 996	228	18 087	137	44 226	335	19 162	145	68	94	50	98	100	28 544	217	17 345	132	91	70	3 807	2 562	86	
Benin	6 558	2 830	43	2 415	37	2 499	38	5 644	86	2 473	38	50	98	100	2 521	38	2 415	37	98	100				
Botswana	1 770	10 204	577	3 334	188	11 622	657	4 577	259	88	73	39		100	10 204	577	3 334	188	73	39				
Burkina Faso	12 624	2 376	19	1 544	12	1 544	12	18 833	157	8 511	67	12	18	100	2 376	19	1 544	12	18	88				
Burundi	6 602	6 371	97	2 791	42	23 721	359	10 082	153	27	28			91	6 371	97	2 791	42	28	69				
Cameroon	15 729	11 057	70	7 921	50	29 520	188	12 350	79	37	64			90	10 341	66	7 365	47	60	81				
Cape Verde	454	195	43	111	24	111	24	810	178	363	80	24	31	75	40	195	43	111	24	31	69			
Central African Republic	3 819	4 837	127	2 758	72	12 903	338	5 376	141	37	51			98	4 837	127	2 758	72	49	90				
Chad	8 348	5 077	61	3 519	42	18 565	222	8 134	97	27	43			100	4 828	58	3 417	41	42	77				
Comoros	747					453	61	204	27					20	9 076	250	4 207	116	69	67				
Congo	3 633	9 076	250	4 207	116	14 339	395	6 131	169	63	69			74	10 560	65	7 105	43	25	86				
Côte d'Ivoire	16 365	14 367	88	9 667	59	67 376	412	28 453	174	21	34			60	70 625	138	44 518	87	52	84				
DR Congo	51 201	70 625	138	44 518	87	196 352	383	85 363	167	36	52			70	70 625	138	44 518	87	52	84				
Equatorial Guinea	481					917		402	84															
Eritrea	3 991	2 805	70	646	16	10 678	268	4 703	118	26	14			60	2 805	70	646	16	14	33				
Ethiopia	68 961	110 289	160	36 541	53	255 345	370	109 630	159	43	33			95	110 289	160	36 541	53	33	52				
Gabon	1 306	2 034	156	1 033	79	3 244	248	1 417	108	63	73			22	2 034	156	1 033	79	73	57				
Gambia	1 388	1 859	134	1 035	75	3 194	230	1 419	102	58	73			100	1 859	134	1 035	75	73	59				
Ghana	20 471	11 723	57	7 732	38	43 104	211	18 961	93	27	41			100	11 723	57	7 732	38	41	74				
Guinea	8 359	6 199	74	4 300	51	17 932	215	7 970	95	35	54			100	6 199	74	4 300	51	54	88				
Guinea-Bissau	1 449	1 566	108	899	62	983	68	2 836	196	1 249	86			20	1 113	77	532	37	43	53			85	
Kenya	31 540	80 183	254	34 337	109	170 213	540	70 384	223	47	49			100	80 183	254	34 337	109	49	52				
Lesotho	1 800	10 111	562	3 167	176	13 059	726	5 201	289	77	61			100	10 111	562	3 167	176	61	42				
Liberia	3 239					7 993	247	3 521	109															
Madagascar	16 916	16 082	95	10 940	65	39 553	234	17 755	105	41	62			100	16 082	95	10 940	65	62	87				
Malawi	11 871	24 595	207	7 686	65	51 202	431	21 173	178	48	36			100	24 595	207	7 686	65	36	42				
Mali	12 623	4 457	35	2 757	22	42 118	334	18 704	148	11	15			68	4 457	35	2 757	22	15	76				
Mauritania	2 807					5 271	188	2 362	84															
Mauritius	1 210	139	11	86	7	780	64	351	29	18	25			100	139	11	86	7	25	75				
Mozambique	18 537	25 544	138	15 236	82	80 893	436	33 690	182	32	45			100	25 544	138	15 236	82	45	71				
Namibia	1 961	12 698	647	4 535	231	4 535	231	9 940	86	86	76			60	12 698	647	4 535	231	76	43				
Niger	11 544					22 332	193	9 940	86															
Nigeria	120 911	38 628	32	21 936	18	21 936	18	367 836	304	159 116	132			55	29 645	25	19 596	16	12	71				
Rwanda	8 272	6 011	73	3 956	48	32 155	389	13 628	165	19	29			100	6 011	73	3 956	48	29	81				
Sao Tome & Principe	157	94	60	42	27	42	27	92	58	46	46			100	94	60	42	27	81					
Senegal	9 855	8 366	85	5 796	59	23 824	242	10 676	108	35	54			100	8 366	85	5 796	59	54	82				
Seychelles	80	29	36	9	11	20	25	33	42	15	19			100	29	36	9	11	60	31				
Sierra Leone	4 764	4 793	101	2 938	62	19 275	405	8 248	173	25	36			93	4 793	101	2 938	62	36	69				
South Africa	44 759	215 120	481	98 799	221	249 660	558	101 696	227	86	97			98	212 616	475	97 656	218	96	62				
Swaziland	1 069	6 748	631	1 410	132	1 410	132	4 525	423	59	31			100	6 748	631	1 410	132	31	24				
Togo	4 801	1 645	34	1 203	25	17 336	361	7 491	156	9	16			35	574	12	421	9	6	93				
Uganda	25 004	40 695	163	19 088	76	94 362	377	41 000	164	43	47			100	40 695	163	19 088	76	47	53				
Uganda	36 276	60 306	166	24 136	67	131 566	363	56 054	155	46	43			100	60 306	166	24 136	67	43	52				
UR Tanzania	10 688	54 220	507	16 351	153	71 509	668	29 024	271	76	56			55	41 487	388	11 694	109	40	31				
Zambia	12 835	59 170	461	15 941	124	16 506	129	87 649	683	34 759	271			100	59 170	461	15 941	124	46	33				
Zimbabwe	12 835	59 170	461	15 941	124	16 506	129	87 649	683	34 759	271			100	59 170	461	15 941	124	46	33				
<b>Region</b>	<b>672 237 984</b>	<b>992 054 148</b>	<b>451 653 67</b>	<b>226 588 34</b>	<b>2 353 702 350</b>	<b>999 551 149</b>	<b>42 45</b>	<b>42 45</b>	<b>42 45</b>	<b>42 45</b>	<b>42 45</b>	<b>42 45</b>	<b>42 45</b>	<b>81</b>	<b>958 365 143</b>	<b>438 259 65</b>	<b>44 59</b>	<b>44 59</b>	<b>44 59</b>	<b>44 59</b>	<b>33 689</b>	<b>13 394</b>	<b>44</b>	<b>44</b>

See explanatory notes, page 129.







Country data for Africa, cont'd: smear-positive notification rates (per 100 000 population) by age and sex, 2002

	MALE					FEMALE					ALL											
	0-14	15-24	25-34	35-44	45-54	55-64	65+	0-14	15-24	25-34	35-44	45-54	55-64	65+	0-14	15-24	25-34	35-44	45-54	55-64	65+	
Algeria	1	39	60	33	33	44	48	1	55	29	18	19	33	35	1	47	45	25	26	38	41	
Angola	14	177	279	354	327	268	282	20	205	261	282	246	201	153	17	191	270	317	284	232	210	
Benin	1	36	122	110	128	121	111	2	37	72	48	42	42	26	2	37	96	76	83	80	67	
Botswana	5	112	457	625	464	501	435	13	197	427	328	232	137	89	9	154	442	470	338	286	226	
Burkina Faso	0	9	33	61	70	80	66	0	7	19	21	26	13	12	0	8	26	40	45	41	32	
Burundi	1	43	124	212	162	111	72	3	33	60	124	76	19	19	2	38	91	167	115	56	39	
Cameroon	2	50	125	162	131	80	48	2	58	97	75	47	39	14	2	54	111	118	87	58	29	
Cape Verde	3	18	94	89	158	20	27	2	21	34	46	20	43	31	3	20	63	66	71	35	29	
Central African Republic	9	70	188	261	136	108	34	8	80	157	151	104	87	20	9	75	172	204	119	96	26	
Chad	1	11	192	231	116	24	15	1	3	91	140	74	11	8	1	7	141	184	94	17	11	
Comoros																						
Congo																						
Côte d'Ivoire	3	62	172	174	125	89	101	4	56	130	108	65	59	51	3	59	152	143	97	75	77	
DR Congo	5	96	219	243	234	164	139	7	104	182	190	159	104	61	6	100	201	216	195	132	94	
Equatorial Guinea																						
Eritrea	2	21	32	29	36	36	70	2	19	31	28	32	39	40	2	20	32	29	34	38	52	
Ethiopia	8	100	126	106	77	63	41	10	83	125	88	44	23	13	9	92	125	97	60	42	26	
Gabon	4	104	192	236	144	103	156	7	94	149	114	73	80	87	5	99	170	175	109	91	118	
Gambia	1	104	250	224	203	181	162	2	55	113	56	77	58	37	1	79	181	138	138	117	95	
Ghana	2	24	84	132	136	123	138	2	22	54	59	47	50	64	2	23	69	95	91	85	98	
Guinea	1	48	169	161	127	90	136	2	48	79	67	41	46	39	2	48	124	114	84	67	83	
Guinea-Bissau	2	75	157	217	173	195	167	3	59	113	106	112	125	48	2	67	134	160	141	158	101	
Kenya	4	120	349	332	240	178	102	6	122	241	161	105	87	39	5	121	294	243	169	130	68	
Lesotho	3	105	577	1014	746	591	210	4	140	341	231	178	81	37	3	123	440	521	404	292	115	
Liberia																						
Madagascar	2	63	140	195	223	199	171	4	61	119	124	111	70	49	3	62	130	159	166	131	105	
Malawi																						
Mali	1	16	70	98	159	87	55	1	11	31	33	59	32	14	1	14	50	64	104	56	32	
Mauritania																						
Mauritius	1	11	6	21	17	19	13	1	3	8	7	1	5	2	1	7	7	14	9	11	7	
Mozambique																						
Namibia	4	158	759	819	563	402	276	10	187	549	476	265	183	161	7	172	652	638	408	278	211	
Niger																						
Nigeria	1	18	46	43	37	31	31	1	22	36	25	21	17	12	1	20	41	34	29	24	21	
Rwanda	1	12	34	57	38	28	15	1	10	18	16	9	10	7	1	11	25	35	22	18	10	
Sao Tome & Principe	3	38	54	30	56	79	59	0	33	46	28	68	69	53	2	36	50	29	62	74	56	
Senegal	3	80	187	177	162	160	217	3	54	76	67	66	59	62	3	67	131	121	113	106	127	
Seychelles																						
Sierra Leone	2	70	175	197	167	110	97	3	65	115	124	82	45	34	3	67	144	160	123	75	61	
South Africa	41	110	384	498	384	224	143	44	151	307	218	135	84	55	43	131	345	354	256	147	89	
Swaziland	0	79	399	542	435	167	64	4	193	362	256	138	58	45	2	137	379	371	265	109	54	
Togo	1	29	74	79	73	62	59	1	26	45	36	28	29	16	1	27	59	57	50	44	35	
Uganda	4	60	236	354	256	196	161	6	67	188	205	125	88	53	5	63	212	279	187	138	102	
UR Tanzania	2	61	196	239	219	194	249	3	51	137	110	87	68	64	3	56	166	173	150	127	146	
Zambia	45	89	425	549	302	87	286	44	121	386	384	224	138	111	45	105	405	465	261	115	188	
Zimbabwe	7	39	298	356	235	142	79	8	60	260	224	117	57	27	7	49	279	289	172	97	51	
<b>Region</b>	<b>6</b>	<b>58</b>	<b>158</b>	<b>180</b>	<b>148</b>	<b>106</b>	<b>90</b>	<b>7</b>	<b>63</b>	<b>122</b>	<b>101</b>	<b>71</b>	<b>51</b>	<b>35</b>	<b>6</b>	<b>60</b>	<b>140</b>	<b>140</b>	<b>108</b>	<b>77</b>	<b>60</b>	

Rates are missing where data for smear-positive cases are missing, or where age- and sex-specific population data are not available.



Country data for Africa, cont'd: case notification rates (per 100 000 population), 1980-2002

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Algeria	14	70	66	62	63	57	48	48	48	45	46	44	44	50	49	48	54	57	52	56	61	59	61
Angola	144	103	105	85	126	104	110	98	92	105	110	116	114	81	68	47	138	132	122	103	130	170	228
Benin	53	52	49	48	49	51	52	45	46	43	45	45	49	46	40	43	41	39	39	42	43	43	43
Botswana	270	255	256	264	275	232	218	256	214	192	217	235	292	316	315	365	418	448	479	510	539	550	577
Burkina Faso	38	34	32	42	12	59	13	17	11	17	17	16	16	15	9	25	17	15	18	20	19	20	19
Burundi	19	15	22	23	40	48	51	53	70	84	82	85	77	79	64	55	63	88	107	103	101	101	97
Cameroun	28	25	41	36	34	34	21	36	45	49	51	57	55	56	56	25	22	28	35	52	35	73	70
Cape Verde	178	117	132	76	92	82	87	82	61	63	62	62	68	68	77	77	45	48	49	65	65	43	43
Central African Republic	28	32	61	67	18	20	29	18	29	2	72	68	68	68	100	105	127	136	137	137	68	127	127
Chad	5	6	3	41	29	30	25	20	54	46	45	49	44	45	51	47	28	30	38	62	22	17	61
Comoros	41	65	193	209	136	125	143	154	166	181	24	24	44	72	105	123	147	109	119	150	268	275	250
Côte d'Ivoire	50	50	54	62	60	55	56	57	56	58	63	62	68	70	100	83	89	92	97	97	82	103	88
DR Congo	18	11	34	43	65	81	84	80	86	87	57	87	94	88	89	96	101	97	126	125	125	134	138
Equatorial Guinea					61	5	0	3	6	45	71	92	92	71	81	91	76	78	87	96			
Eritrea	112	116	139	146	162	173	189	194	209	171	181	119	115	139	370	489	669	160	248	225	168	179	71
Ethiopia	124	111	103	99	83	105	92	100	81	99	96	92	91	93	96	101	83	122	115	130	156	160	160
Gabon																							
Gambia	37	9															92	108	114	126	119	134	134
Ghana	47	35	37	22	15	24	29	42	37	40	42	45	44	52	100	49	58	59	61	54	56	60	57
Guinea	39	30	16	23	25	21	22	30	32	32	36	45	46	46	46	48	58	58	61	65	67	71	74
Guinea-Bissau	81	57	25	44	42	59	144	80	81	138	114	119	98	139	143	136	137	115	65	88	93	108	108
Kenya	68	59	65	65	53	49	49	50	55	50	51	58	58	79	86	103	125	138	166	191	210	235	254
Lesotho	320	293	367	250	207	203	1	15	154	159	161	188	206	207	261	308	328	373	446	483	546	562	562
Liberia	41	52	42	43	20	11	18	41			94	86	85	65	65	38	68						
Madagascar	100	80	37	36	86	31	35	36	39	47	52	49	64	76	80	157	90	97	210	220	208	100	95
Malawi	77	79	68	70	63	74	82	93	97	104	131	152	145	174	197	191	201	197	210	220	208	224	207
Mali	12	13	3	7	24	20	23	30	30	18	32	28	33	33	31	30	34	46	37	39	35	35	35
Mauritania	471	572	138	135	225	243	122	196	203	204	260	147	203	183	167	167	162	156	145	142	116	116	116
Mauritius	14	16	12	15	12	11	12	11	11	12	11	13	12	15	13	12	10	11	10	13	13	10	11
Mozambique	62	56	46	46	40	43	62	83	105	120	118	120	106	112	111	112	112	112	115	122	118	121	138
Namibia																							
Nigeria	13	50	13	11	11	11	8	8	9	8	68	68	71	117	354	94	567	569	618	542	563	670	647
Niger																							
Nigeria	15	16	16	15	16	20	18	25	32	16	23	22	16	12	9	13	15	16	19	22	23	39	32
Rwanda	29	26	24	25	22	40	51	62	69	94	49	49	49	49	78	32	59	66	80	93	90	79	68
Sao Tome & Principe	139	38	41	59	48	39	8	51	12	15	101	101	101	78	32	59	66	80	93	90	79	68	
Senegal	36	45	28	40	17	14	14	91	81	83	68	90	96	86	85	91	100	94	92	79	95	89	85
Seychelles	25	0	25	24	15	15	35	20	14	9	58	16	36	41	66	63	48	79	76	78	85	102	101
Sierra Leone	23	26	26	9	23	24	10	3	3														
South Africa	190	201	209	199	195	180	163	166	174	189	218	206	214	228	225	181	262	297	331	341	344	334	481
Swaziland	23	483	299																				
Togo	8	5	8	6	12	25	19	37	33	28	38	35	34	27	30	39	41	39	29	28	31	34	34
Uganda	8	9	4	15																			
UR Tanzania	61	62	58	57	56	62	68	72	75	76	85	93	102	109	116	129	130	132	132	139	129	152	163
Zambia	89	100	102	104	107	117	120	134	167	179	206	277	293	342	385	384	421	442	442	442	478	438	507
Zimbabwe	56	54	59	48	67	54	57	62	61	67	87	109	147	179	208	263	299	360	381	401	402	441	461
Region	59	59	61	64	64	69	68	73	80	76	84	81	83	78	99	89	100	100	112	119	122	130	148

Country data for Africa, cont'd: new smear-positive cases, 1993-2002

	Number of cases																	Rate (per 100 000 population)																
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002														
Algeria	6 793	5 735	6 556	7 740	7 462	7 845	8 328	7 953	8 246	8 246	25	21	23	27	23	25	26	28	26	26														
Angola	4 874	4 337	3 804	8 016	8 246	7 333	7 379	9 053	11 923	18 087	48	41	35	72	72	62	61	73	93	137														
Benin	1 653	1 618	1 839	1 868	1 939	1 988	2 192	2 286	2 415	2 415	32	30	34	33	34	34	36	37	37	37														
Botswana	1 508	1 868	1 903	2 824	3 112	2 746	3 091	3 057	3 334	3 334	102	110	123	159	174	187	162	179	175	188														
Burkina Faso	561	1 028	1 381	1 426	1 331	1 411	1 560	1 522	1 544	1 544	6	6	10	13	10	12	12	13	12	12														
Burundi	1 861	1 527	1 121	1 533	2 022	2 762	2 924	3 040	2 791	2 791	32	26	19	25	33	46	47	47	47	42														
Cameroun	2 316	1 883	2 896	2 312	3 548	4 374	5 832	3 960	4 695	7 921	18	14	22	22	17	25	30	39	26	50														
Cape Verde	111	117	103	104	104	104	104	140	111	111	28	28	28	29	25	25	25	31	31	24														
Central African Republic	1 794	1 992	2 267	2 637	2 725	2 725	2 725	1 382	2 758	2 758	53	58	65	74	75	74	75	37	37	72														
Chad	2 002	870	103	107	100	99	112	87	3 519	3 519	30	13	17	15	15	15	16	12	12	42														
Comoros	1 691	2 013	2 505	1 984	2 044	2 222	4 218	4 319	4 207	4 207	60	69	83	63	63	63	66	122	122	116														
Congo	7 012	8 254	8 927	9 093	9 850	10 047	8 497	10 920	9 667	9 667	51	57	61	61	61	64	65	54	68	59														
Côte d'Ivoire	14 924	20 914	24 125	24 609	33 442	34 923	36 123	42 054	44 518	44 518	36	47	53	53	71	73	74	74	84	87														
DR Congo	219	209	226	284	284	284	284	284	284	284	55	55	55	51	54	66	66	66	66	66														
Equatorial Guinea	5 752	9 040	13 160	15 957	18 864	21 597	30 510	33 028	36 541	36 541	10	16	22	22	26	30	34	47	49	53														
Eritrea	395	486	263	577	889	916	916	1 033	1 033	1 033	37	44	23	49	74	74	74	74	74	79														
Gabon	778	743	820	900	861	861	861	861	861	861	70	64	69	73	68	73	68	68	75	75														
Gambia	5 778	2 638	6 474	7 254	7 757	6 877	7 316	7 712	7 732	7 732	34	15	15	36	40	41	36	37	39	38														
Ghana	2 082	2 158	2 263	2 844	2 981	3 362	3 563	3 920	4 300	4 300	30	30	31	38	39	43	45	48	50	51														
Guinea	10 149	11 324	13 934	16 978	19 040	24 029	27 197	28 773	31 307	34 337	39	42	51	60	66	82	91	94	101	109														
Guinea-Bissau	1 405	1 330	1 361	1 788	2 398	2 476	2 729	3 041	3 167	3 167	86	80	81	105	139	141	154	170	170	176														
Kenya	1 547	1 154	668	1 190	1 190	1 190	1 190	1 190	1 190	1 190	75	54	30	30	46	46	46	46	46	46														
Lesotho	6 881	7 366	8 026	8 456	9 639	8 132	8 260	8 309	7 686	7 686	53	55	58	60	60	64	64	73	71	65														
Liberia	5 692	5 988	6 285	6 703	7 587	8 765	8 132	8 260	8 309	7 686	58	60	63	65	72	81	73	73	71	65														
Madagascar	1 740	1 866	2 173	3 178	2 558	2 690	2 527	2 757	2 757	2 757	17	18	20	20	29	23	23	21	22	22														
Malawi	113	99	112	109	122	115	115	85	86	86	10	9	10	9	10	9	10	10	7	7														
Mali	9 526	9 677	10 566	10 478	11 116	12 116	12 825	13 257	13 964	15 236	64	63	66	64	66	71	73	74	77	82														
Mauritania	463	1 865	1 492	1 970	2 189	2 631	2 693	2 693	4 535	4 535	5	21	17	18	20	22	25	25	25	231														
Mauritius	1 723	9 476	10 662	11 235	13 161	15 903	17 423	23 410	21 936	21 936	2	10	10	10	11	12	14	15	20	18														
Mozambique	1 840	2 034	2 034	2 820	4 417	4 298	3 681	3 252	3 956	3 956	36	36	36	38	48	67	60	48	40	48														
Namibia	4 599	5 421	5 940	5 340	5 454	5 011	5 823	6 094	5 796	5 796	57	65	70	70	61	61	55	62	63	59														
Niger	2	6	11	13	9	10	11	12	9	9	3	8	15	17	17	12	13	14	15	11														
Nigeria	1 408	1 454	2 234	2 296	2 262	2 472	2 692	2 938	2 938	2 938	35	36	54	54	55	54	56	56	59	62														
Rwanda	23 112	42 163	54 073	66 047	72 088	75 967	83 808	98 799	98 799	98 799	56	101	128	154	166	154	166	173	189	221														
Sao Tome & Principe	660	2 226	1 823	1 279	1 410	1 410	1 410	1 410	1 410	1 410	70	232	70	232	23	23	23	20	22	25														
Senegal	545	887	913	935	904	904	984	1 203	1 203	1 203	15	15	15	15	23	23	23	20	22	25														
Seychelles	11 949	14 763	13 631	15 312	17 254	18 222	18 463	17 246	17 291	19 088	63	75	67	73	80	82	81	73	71	76														
Sierra Leone	15 569	17 164	19 955	21 472	22 010	23 726	24 125	24 049	24 685	24 136	54	57	65	68	68	71	71	69	69	67														
South Africa	9 620	10 038	12 072	11 645	12 927	13 024	16 351	16 351	16 351	16 351	105	107	126	126	107	114	114	124	123	153														
Swaziland	5 331	8 965	11 965	14 512	14 492	14 414	14 392	15 370	15 941	15 941	47	76	100	119	117	115	115	114	120	124														
Togo	107 012	121 005	212 910	264 650	276 022	324 648	349 133	361 053	396 632	451 653	20	22	37	45	46	53	56	56	60	67														
Uganda	11 949	14 763	13 631	15 312	17 254	18 222	18 463	17 246	17 291	19 088	63	75	67	73	80	82	81	73	71	76														
UR Tanzania	15 569	17 164	19 955	21 472	22 010	23 726	24 125	24 049	24 685	24 136	54	57	65	68	68	71	71	69	69	67														
Zambia	9 620	10 038	12 072	11 645	12 927	13 024	16 351	16 351	16 351	16 351	105	107	126	126	107	114	114	124	123	153														
Zimbabwe	5 331	8 965	11 965	14 512	14 492	14 414	14 392	15 370	15 941	15 941	47	76	100	119	117	115	115	114	120	124														
<b>Region</b>	<b>107 012</b>	<b>121 005</b>	<b>212 910</b>	<b>264 650</b>	<b>276 022</b>	<b>324 648</b>	<b>349 133</b>	<b>361 053</b>	<b>396 632</b>	<b>451 653</b>	<b>20</b>	<b>22</b>	<b>37</b>	<b>45</b>	<b>46</b>	<b>53</b>	<b>56</b>	<b>56</b>	<b>60</b>	<b>67</b>														

# Notes

**ETHIOPIA** Annual data are from a July–June calendar.

**GABON** Treatment outcomes for new cases are reportedly for laboratory-confirmed (not necessarily smear-positive) cases.

**MAURITANIA** Data were received too late for inclusion in this report. Total notifications for 2002 were 3411 (of which, 1941 smear-positive cases). Among 1608 cases registered in 2001, the success rate was reported to be 53%.

**MOZAMBIQUE** Country offers additional information on “access” to DOTS services, which it estimates to be about 45% (versus 100% DOTS coverage).

**SOUTHAFRICA** Discrepancy between cases notified in 2001 and the number “registered” for treatment outcomes is due to late receipt of quarterly reports and also to double registration of cases referred from hospitals. Age and sex data are incomplete because some provinces did not use the age groupings requested by WHO in 2002.

**SWAZILAND** Four of 15 operational units are not reporting to the NTP on a regular basis.

**UR TANZANIA** Country offers additional information on “access” to DOTS services, which it measures in terms of distance from a health facility: 70% population live within 5 km and 90% within 10 km from a health unit.

**ZIMBABWE** Not all reporting units use the same age and sex breakdown of smear-positive cases.