

Annex 2

Country profiles

FOR 30 HIGH TB BURDEN COUNTRIES

**20 high TB burden countries based on
absolute number of incident cases**

**10 high TB burden countries based on
severity of disease burden
(incidence per capita)**

Angola

POPULATION 2018 **31 MILLION**

ESTIMATES OF TB BURDEN, ^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	109 (71–156)	355 (230–507)
HIV-positive TB incidence	11 (6.8–15)	34 (22–49)
MDR/RR-TB incidence ^b	3.9 (1.7–7.1)	13 (5.4–23)
HIV-negative TB mortality	19 (11–28)	60 (36–91)
HIV-positive TB mortality	3.7 (2.4–5.3)	12 (7.9–17)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	2.4% (1.1–4.2)
Previously treated cases	15% (11–19)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	66 189
– % tested with rapid diagnostics at time of diagnosis	
– % with known HIV status	68%
– % pulmonary	94%
– % bacteriologically confirmed ^c	54%
– % children aged 0–14 years	
– % women	
– % men	
Total cases notified	70 362

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	61% (42–94)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	21% (11–33)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	4 327	10%
– on antiretroviral therapy	2 101	49%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	<1%
– Previously treated cases	9%
Laboratory-confirmed cases ^d	MDR/RR-TB: 649, XDR-TB: 0
Patients started on treatment ^{d,e}	MDR/RR-TB: 649, XDR-TB: 0
MDR/RR-TB cases tested for resistance to second-line drugs	0

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	25%	57 877
Previously treated cases, excluding relapse, registered in 2017		
HIV-positive TB cases registered in 2017		
MDR/RR-TB cases started on second-line treatment in 2016	4%	175
XDR-TB cases started on second-line treatment in 2016		0

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	42%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	

TB FINANCING, 2019

National TB budget (US\$ millions)	67
Funding source:	21% domestic, 10% international, 70% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

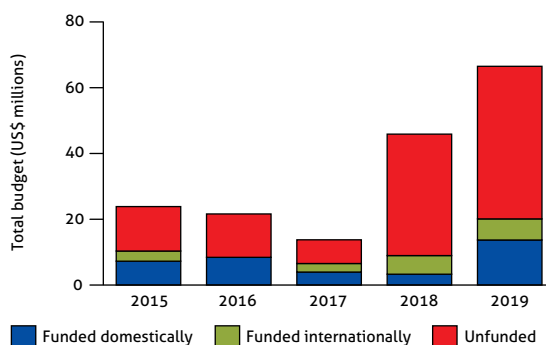
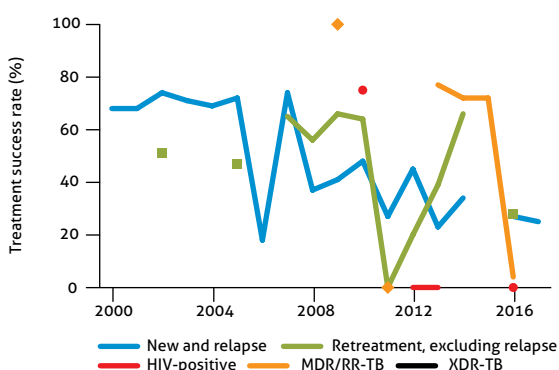
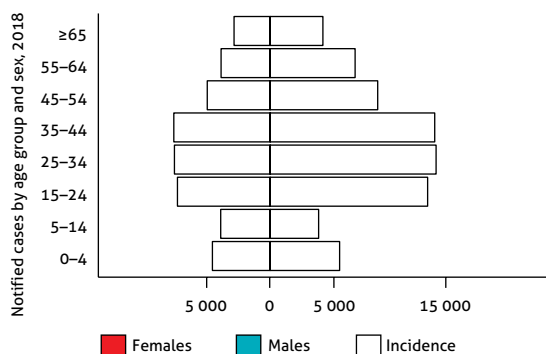
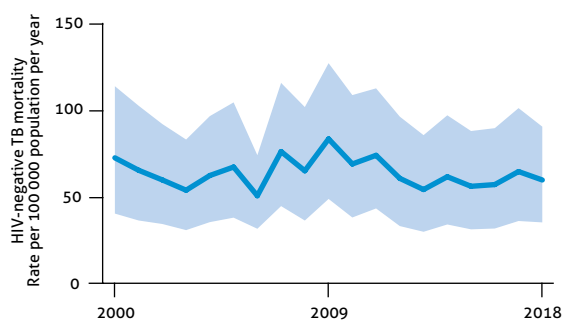
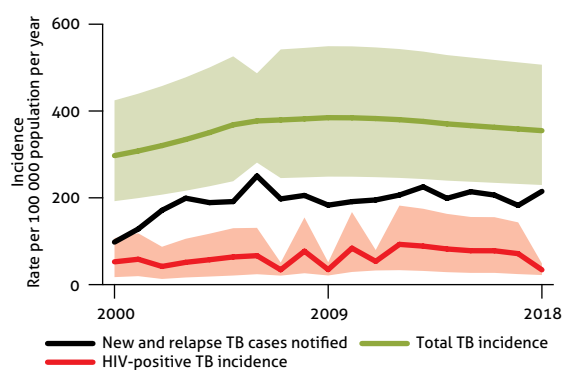
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

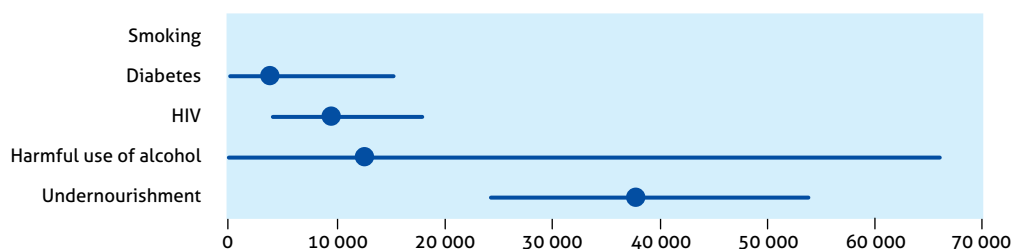
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

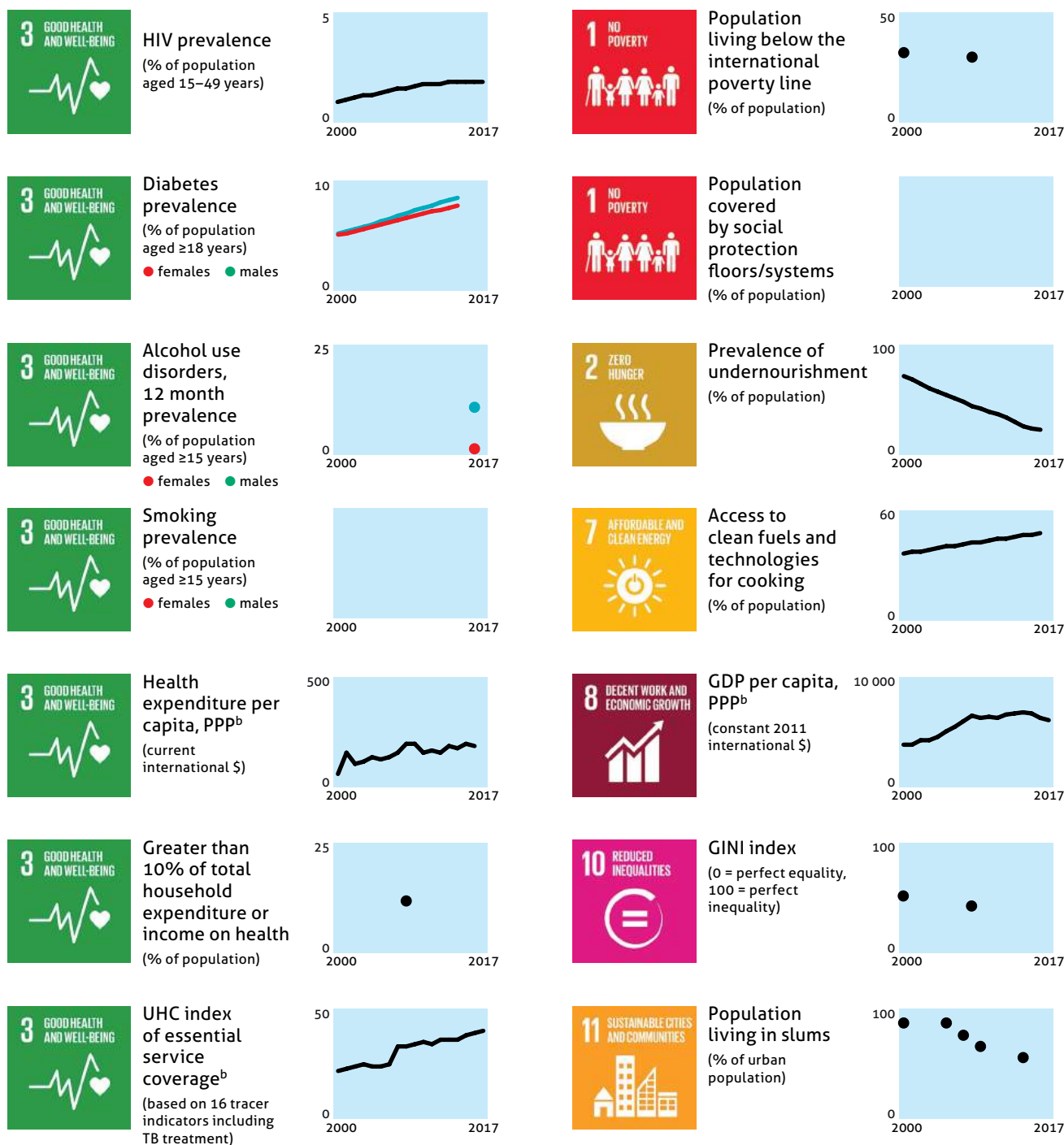
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Bangladesh

POPULATION 2018 **161 MILLION**

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	357 (260–469)	221 (161–291)
HIV-positive TB incidence	0.73 (0.36–1.2)	0.45 (0.23–0.76)
MDR/RR-TB incidence ^b	5.9 (3.2–9.6)	3.7 (2–5.9)
HIV-negative TB mortality	47 (30–67)	29 (18–42)
HIV-positive TB mortality	0.19 (0.094–0.32)	0.12 (0.06–0.2)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	1.5% (0.9–2.3)
Previously treated cases	4.9% (3–7.9)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	267 143
– % tested with rapid diagnostics at time of diagnosis	18%
– % with known HIV status	1%
– % pulmonary	81%
– % bacteriologically confirmed ^c	72%
– % children aged 0–14 years	4%
– % women	41%
– % men	55%
Total cases notified	268 596

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	75% (57–100)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	13% (8–21)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	67	2%
– on antiretroviral therapy	63	94%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	24%
– Previously treated cases	98%
Laboratory-confirmed cases ^d	MDR/RR-TB: 1 228, XDR-TB: 6
Patients started on treatment ^{d,e}	MDR/RR-TB: 1 147, XDR-TB: 6
MDR/RR-TB cases tested for resistance to second-line drugs	853

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	94%	242 640
Previously treated cases, excluding relapse, registered in 2017	86%	1 561
HIV-positive TB cases registered in 2017	67%	89
MDR/RR-TB cases started on second-line treatment in 2016	78%	918
XDR-TB cases started on second-line treatment in 2016	63%	8

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	43% (40–47)

TB FINANCING, 2019

National TB budget (US\$ millions)	80
Funding source:	23% domestic, 63% international, 15% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

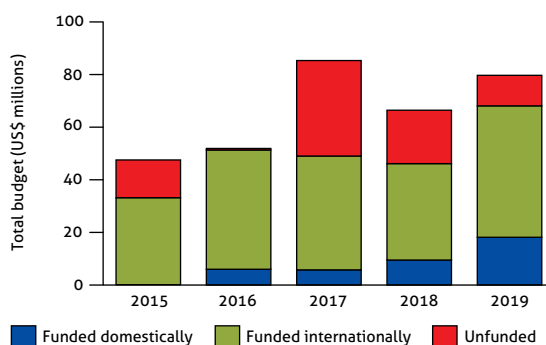
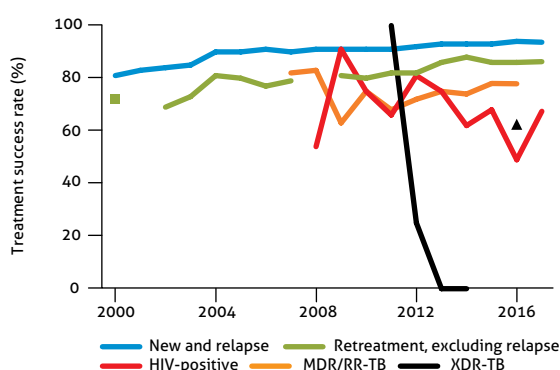
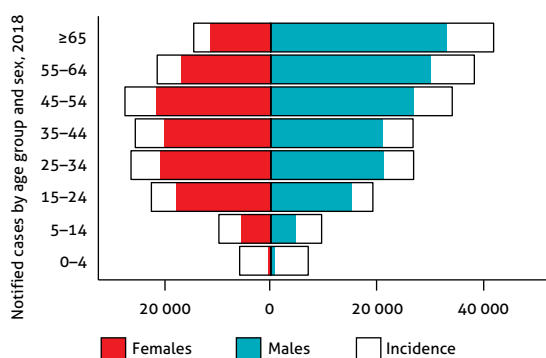
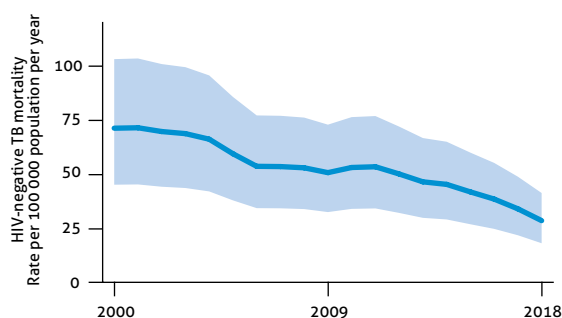
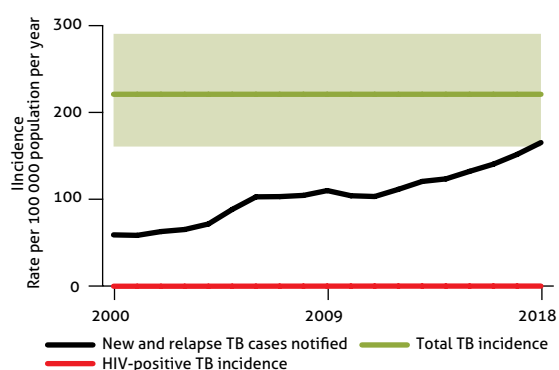
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

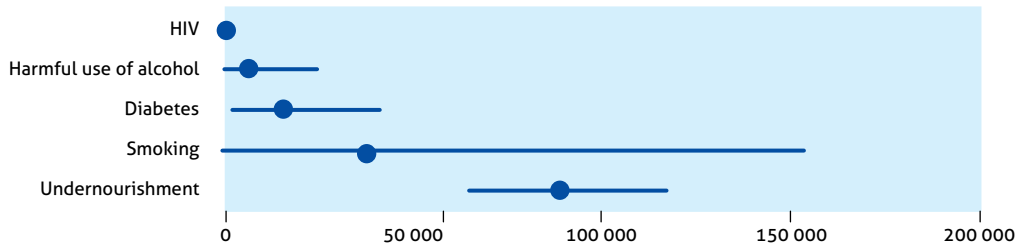
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

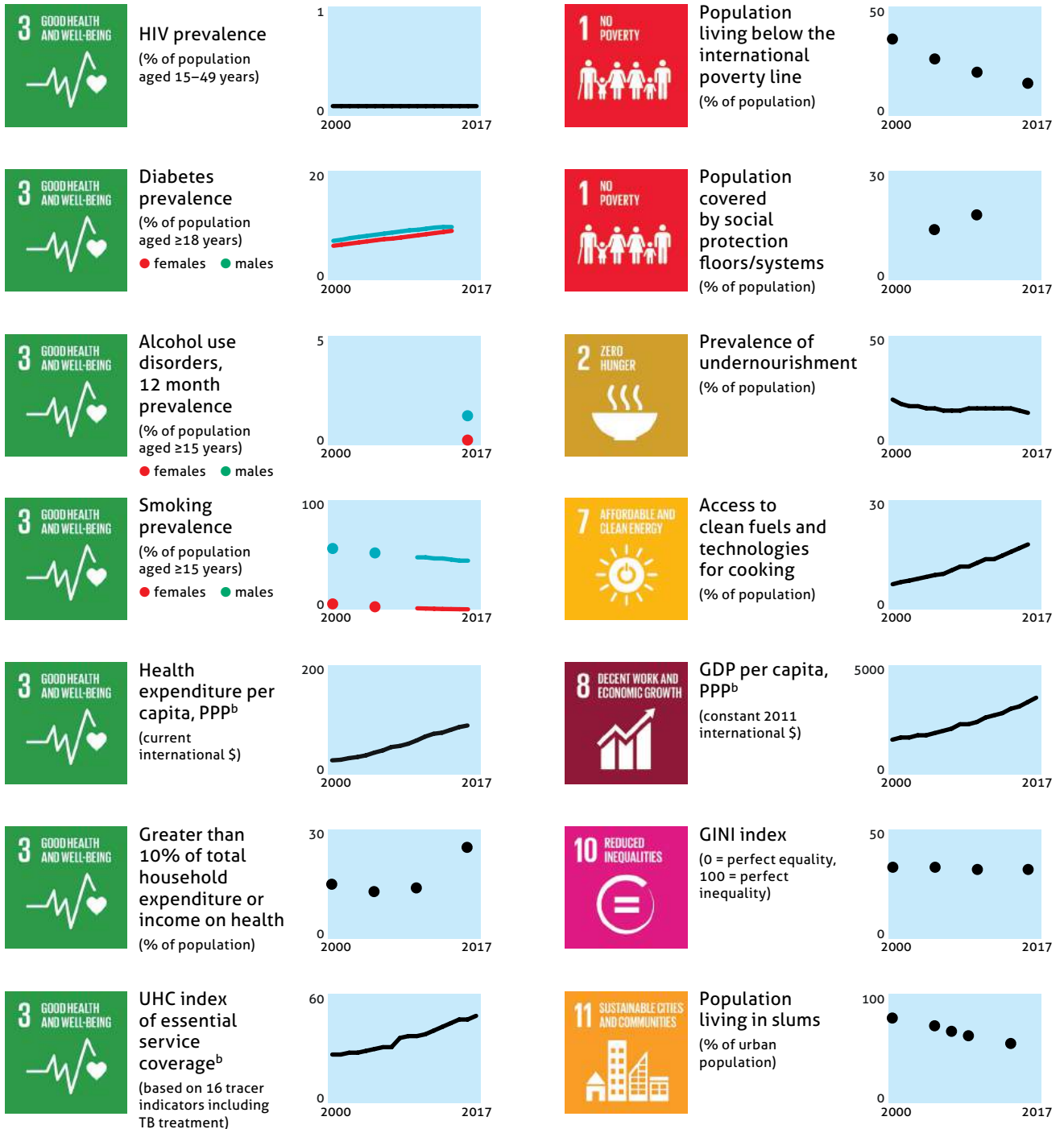
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Brazil

ESTIMATES OF TB BURDEN, ^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	95 (81–110)	45 (39–52)
HIV-positive TB incidence	11 (9.3–13)	5.2 (4.4–6)
MDR/RR-TB incidence ^b	2.5 (1.9–3.2)	1.2 (0.89–1.5)
HIV-negative TB mortality	4.8 (4.6–5)	2.3 (2.2–2.4)
HIV-positive TB mortality	1.9 (1.4–2.4)	0.88 (0.66–1.1)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	1.5% (1.1–2)
Previously treated cases	8% (6–10)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	82 409
– % tested with rapid diagnostics at time of diagnosis	34%
– % with known HIV status	79%
– % pulmonary	87%
– % bacteriologically confirmed ^c	74%
– % children aged 0–14 years	3%
– % women	29%
– % men	68%
Total cases notified	90 527

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	87% (75–100)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	7% (6–8)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	7 445	11%
– on antiretroviral therapy	3 776	51%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	43%
– Previously treated cases	48%
Laboratory-confirmed cases ^d	MDR/RR-TB: 1 119, XDR-TB: 26
Patients started on treatment ^{d,e}	MDR/RR-TB: 746, XDR-TB: 26
MDR/RR-TB cases tested for resistance to second-line drugs	141

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	71%	78 652
Previously treated cases, excluding relapse, registered in 2017	39%	7 350
HIV-positive TB cases registered in 2017	51%	7 617
MDR/RR-TB cases started on second-line treatment in 2016	61%	546
XDR-TB cases started on second-line treatment in 2016	41%	17

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	

TB FINANCING, 2019

National TB budget (US\$ millions)	38
Funding source:	100% domestic, <1% international, 0% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

^a Ranges represent uncertainty intervals.

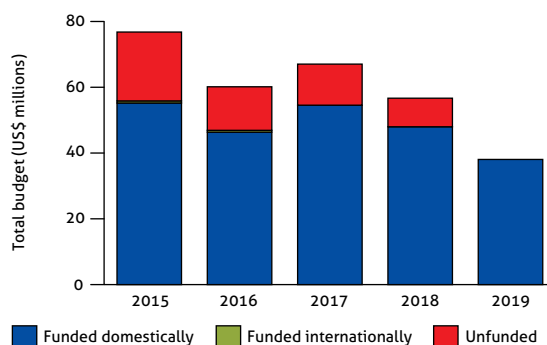
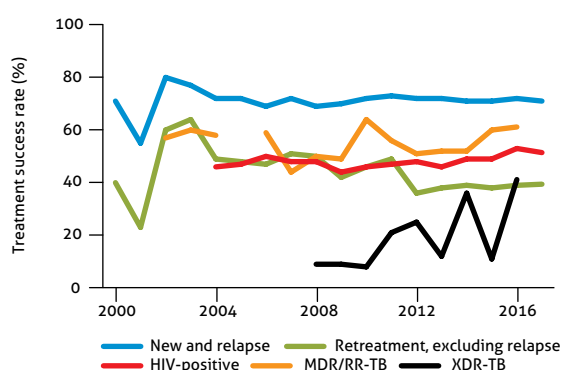
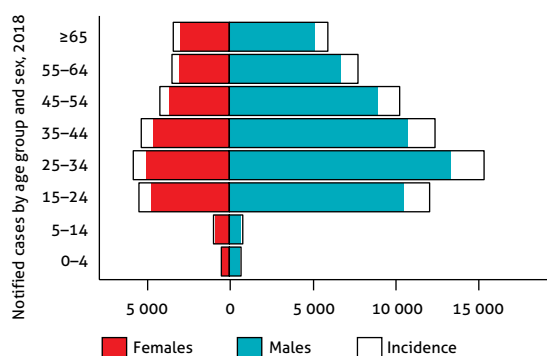
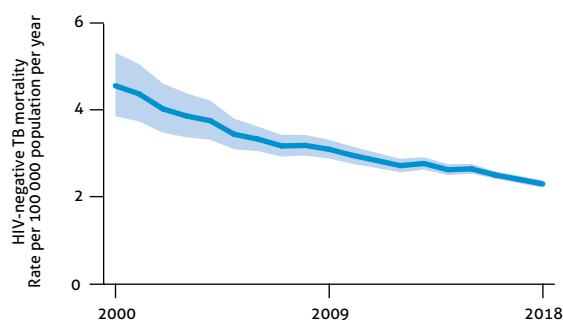
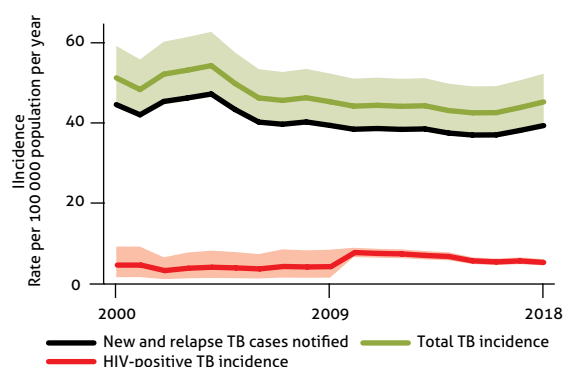
^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

^c Calculated for pulmonary cases only.

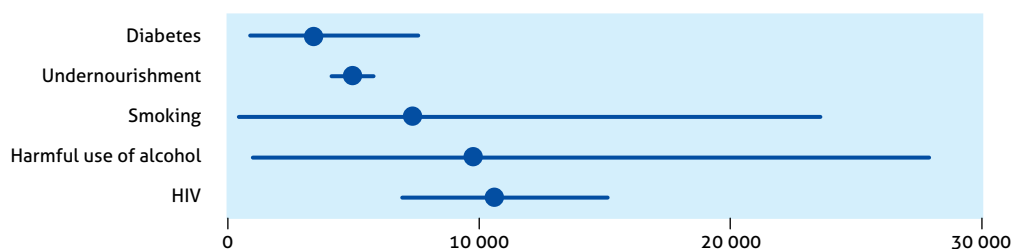
^d Includes cases with unknown previous TB treatment history.

^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

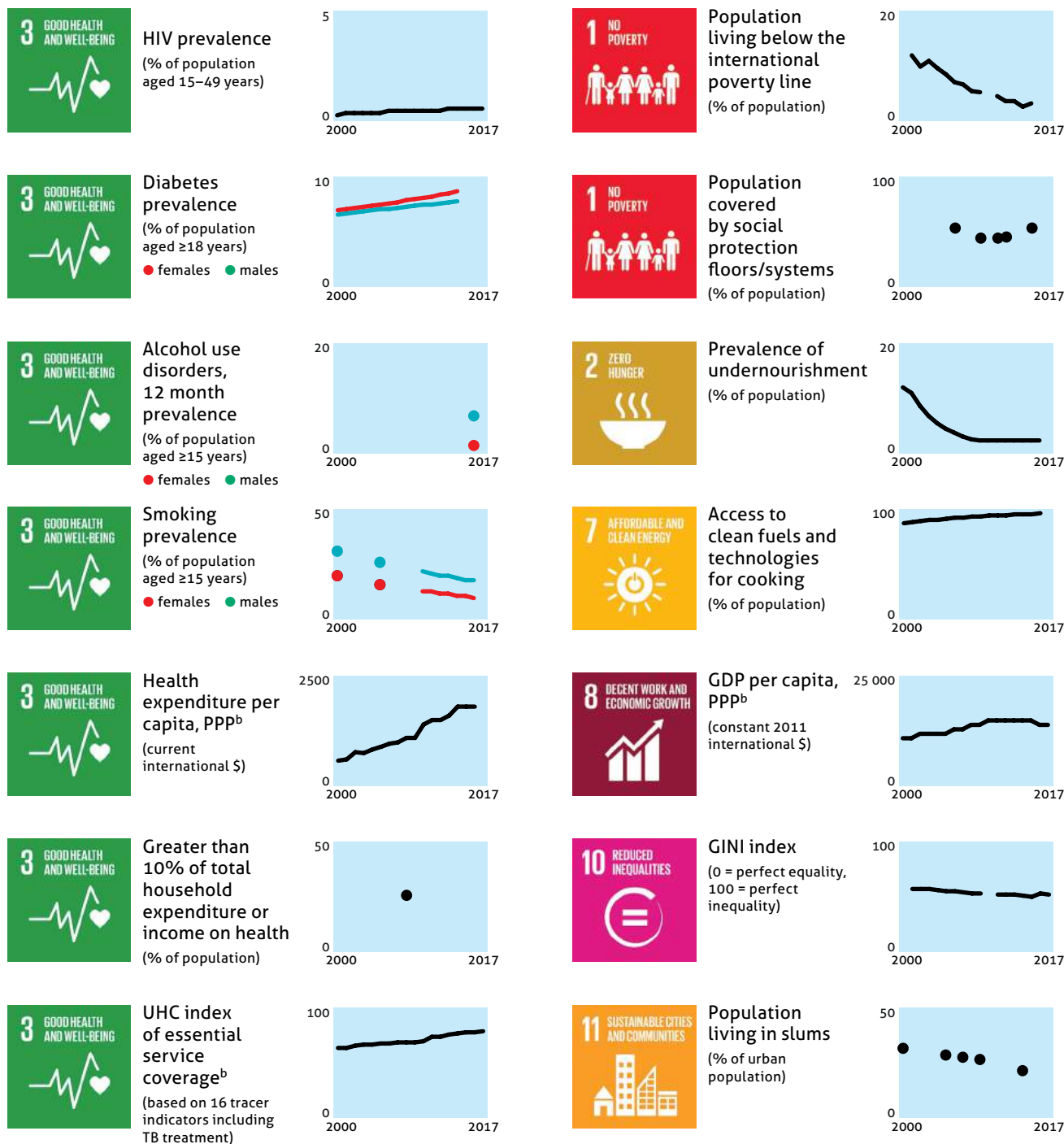
POPULATION 2018 209 MILLION



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

China

POPULATION 2018 **1 428 MILLION**

ESTIMATES OF TB BURDEN, ^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	866 (740–1 000)	61 (52–70)
HIV-positive TB incidence	18 (9.8–28)	1.2 (0.69–2)
MDR/RR-TB incidence ^b	66 (50–85)	4.6 (3.5–6)
HIV-negative TB mortality	37 (34–41)	2.6 (2.4–2.9)
HIV-positive TB mortality	2.4 (1.2–4)	0.17 (0.08–0.28)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	7.1% (5.6–8.7)
Previously treated cases	21% (21–21)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	795 245
– % tested with rapid diagnostics at time of diagnosis	15%
– % with known HIV status	60%
– % pulmonary	95%
– % bacteriologically confirmed ^c	37%
– % children aged 0–14 years	1%
– % women	31%
– % men	68%
Total cases notified	801 532

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	92% (79–110)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	5% (4–6)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	7 935	2%
– on antiretroviral therapy	6 915	87%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	58%
– Previously treated cases	100%
Laboratory-confirmed cases ^d	MDR/RR-TB: 14 636, XDR-TB: 430
Patients started on treatment ^{d,e}	MDR/RR-TB: 8 965, XDR-TB:
MDR/RR-TB cases tested for resistance to second-line drugs	

TREATMENT SUCCESS RATE AND COHORT SIZE

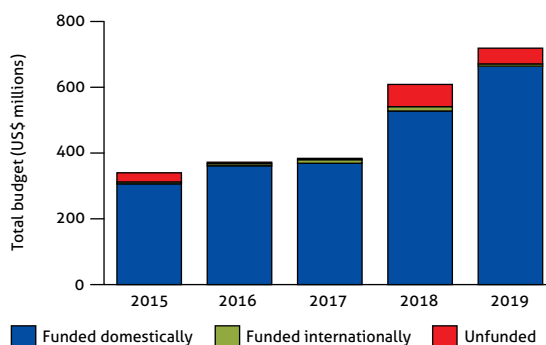
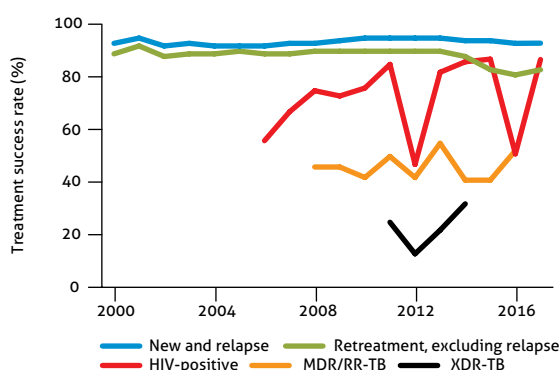
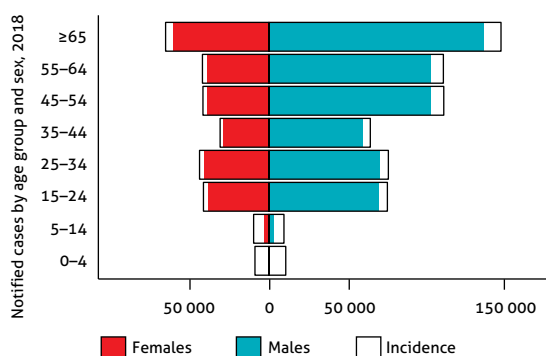
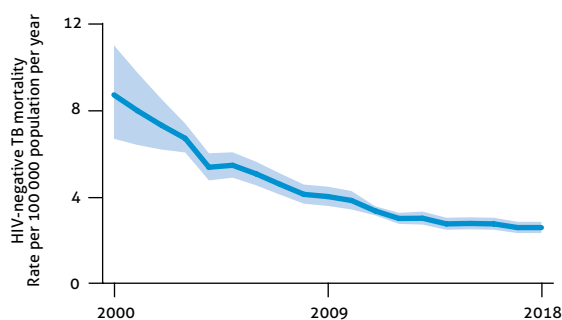
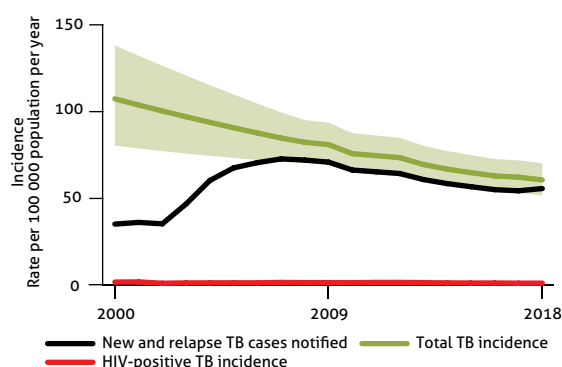
	SUCCESS	COHORT
New and relapse cases registered in 2017	93%	764 701
Previously treated cases, excluding relapse, registered in 2017	83%	5 077
HIV-positive TB cases registered in 2017	87%	5 308
MDR/RR-TB cases started on second-line treatment in 2016	52%	5 405
XDR-TB cases started on second-line treatment in 2016		

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	

TB FINANCING, 2019

National TB budget (US\$ millions)	719
Funding source:	92% domestic, <1% international, 7% unfunded



Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

^a Ranges represent uncertainty intervals.

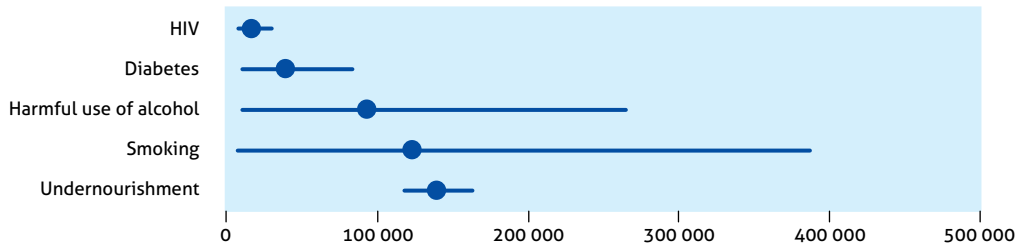
^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

^c Calculated for pulmonary cases only.

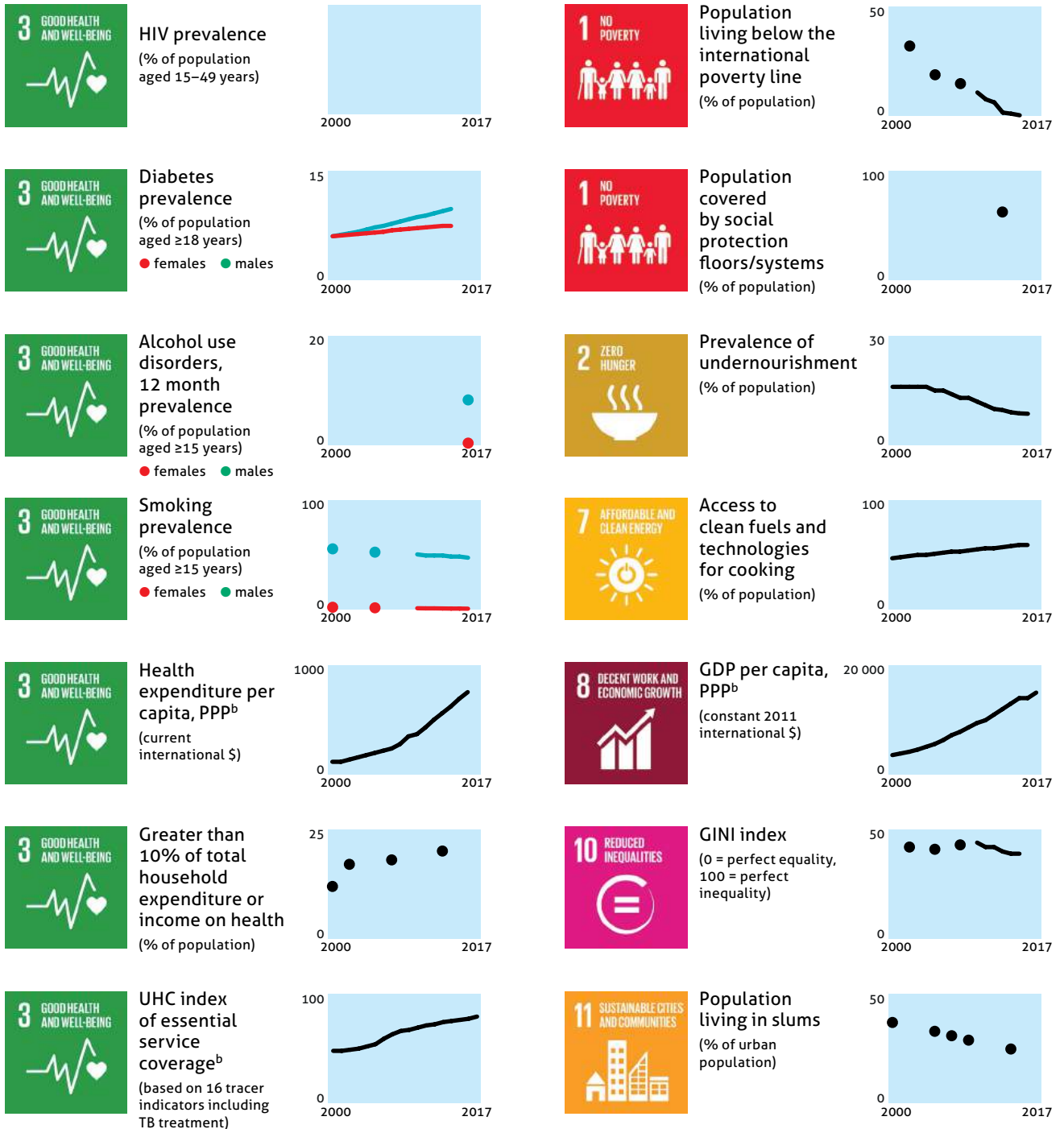
^d Includes cases with unknown previous TB treatment history.

^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Democratic People's Republic of Korea POPULATION 2018 26 MILLION

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	131 (114–149)	513 (446–584)
HIV-positive TB incidence	0.22 (0.12–0.36)	0.87 (0.47–1.4)
MDR/RR-TB incidence ^b	5.2 (2.5–8.8)	20 (10–34)
HIV-negative TB mortality	20 (14–27)	80 (56–107)
HIV-positive TB mortality	0.068 (0.035–0.11)	0.27 (0.14–0.44)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	2.2%
Previously treated cases	16% (9.1–25)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	89 939
– % tested with rapid diagnostics at time of diagnosis	
– % with known HIV status	0%
– % pulmonary	80%
– % bacteriologically confirmed ^c	50%
– % children aged 0–14 years	5%
– % women	34%
– % men	61%
Total cases notified	95 245

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	69% (60–79)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	16% (11–21)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	0	
– on antiretroviral therapy	0	

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	
– Previously treated cases	20%
Laboratory-confirmed cases ^d	MDR/RR-TB: 1 782, XDR-TB: 0
Patients started on treatment ^{d,e}	MDR/RR-TB: 1 487, XDR-TB: 0
MDR/RR-TB cases tested for resistance to second-line drugs	0

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	83%	100 553
Previously treated cases, excluding relapse, registered in 2017		
HIV-positive TB cases registered in 2017		
MDR/RR-TB cases started on second-line treatment in 2016	80%	814
XDR-TB cases started on second-line treatment in 2016		

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	100%

TB FINANCING, 2019

National TB budget (US\$ millions)	50
Funding source:	12% domestic, 14% international, 75% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

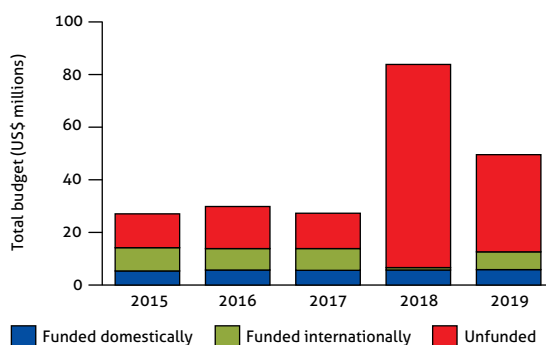
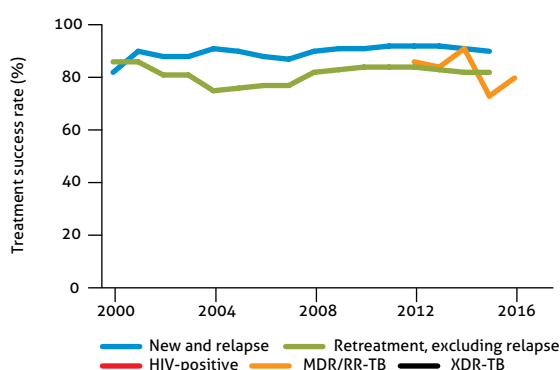
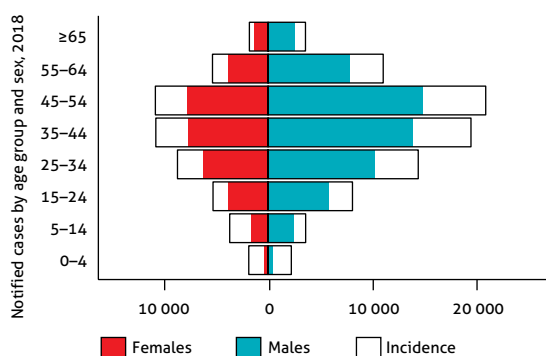
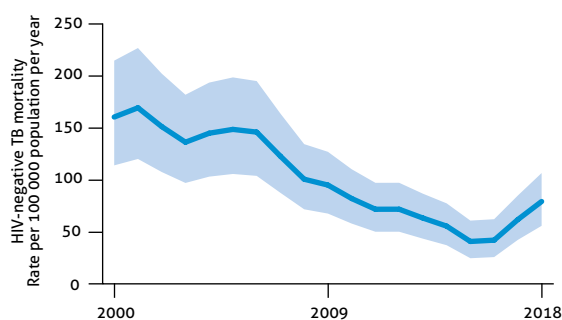
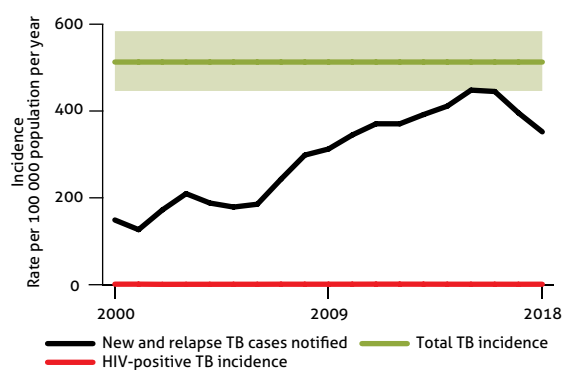
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

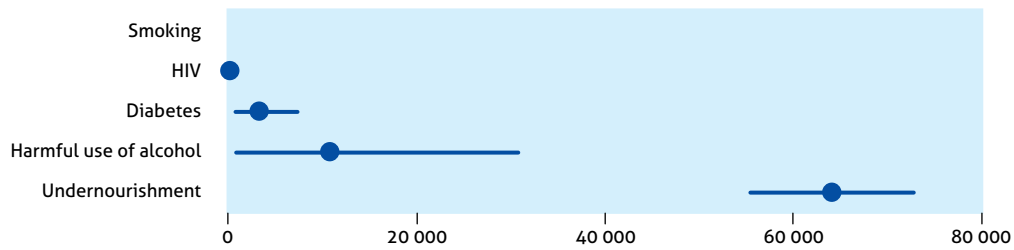
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

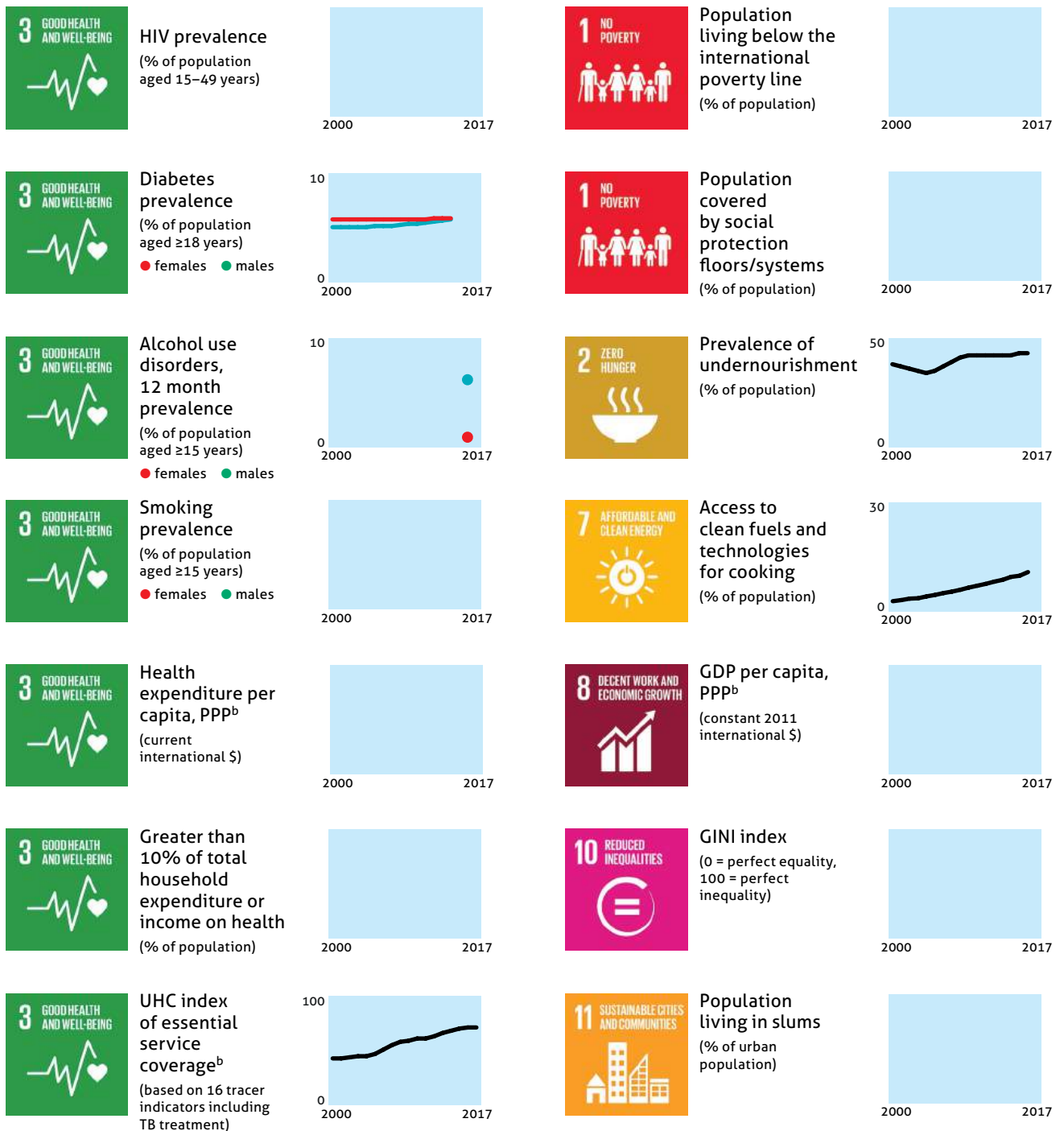
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Democratic Republic of the Congo

POPULATION 2018 **84 MILLION**

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	270 (175–385)	321 (208–458)
HIV-positive TB incidence	31 (9.4–65)	37 (11–77)
MDR/RR-TB incidence ^b	6 (3–10)	7.2 (3.6–12)
HIV-negative TB mortality	43 (25–65)	51 (30–77)
HIV-positive TB mortality	10 (3.2–22)	12 (3.8–26)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	1.7% (1.1–2.6)
Previously treated cases	9.5% (8.8–10)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	169 748
– % tested with rapid diagnostics at time of diagnosis	7%
– % with known HIV status	60%
– % pulmonary	83%
– % bacteriologically confirmed ^{ooo}	77%
– % children aged 0–14 years	11%
– % women	39%
– % men	50%
Total cases notified	171 682

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	63% (44–97)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	20% (10–33)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	9 758	9%
– on antiretroviral therapy	8 481	87%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	2%
– Previously treated cases	66%
Laboratory-confirmed cases ^d	MDR/RR-TB: 765, XDR-TB: 22
Patients started on treatment ^{d,e}	MDR/RR-TB: 690, XDR-TB: 15
MDR/RR-TB cases tested for resistance to second-line drugs	328

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	90%	149 657
Previously treated cases, excluding relapse, registered in 2017	70%	1 593
HIV-positive TB cases registered in 2017	78%	9 688
MDR/RR-TB cases started on second-line treatment in 2016	86%	634
XDR-TB cases started on second-line treatment in 2016	39%	18

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	39%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	24% (22–26)

TB FINANCING, 2019

National TB budget (US\$ millions)	44
Funding source:	4% domestic, 55% international, 41% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

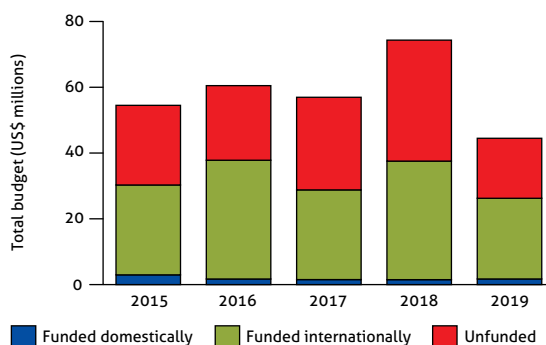
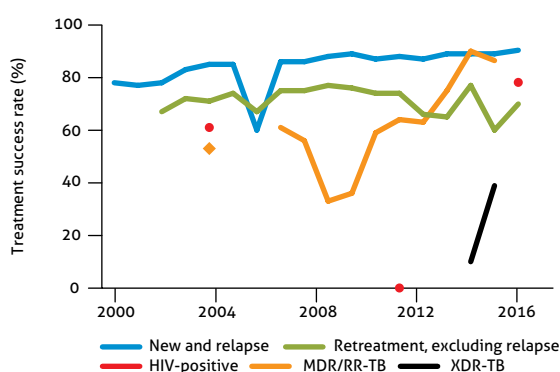
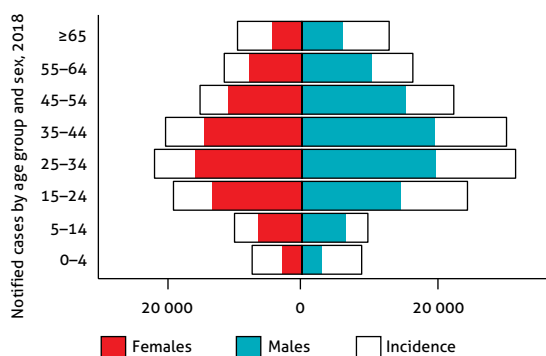
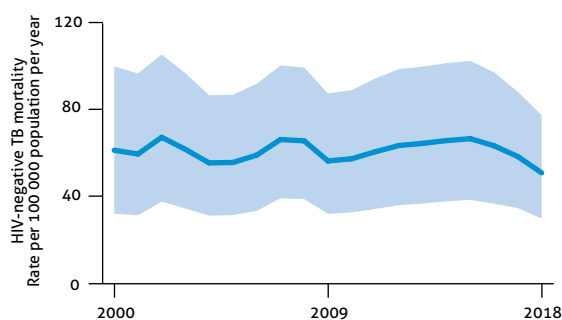
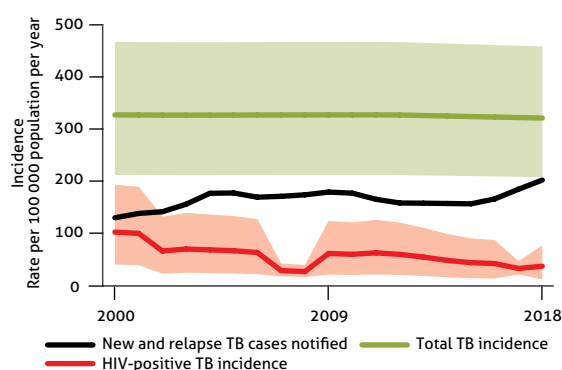
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

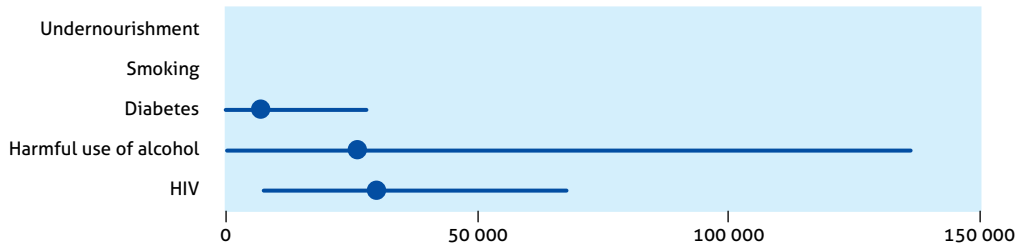
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

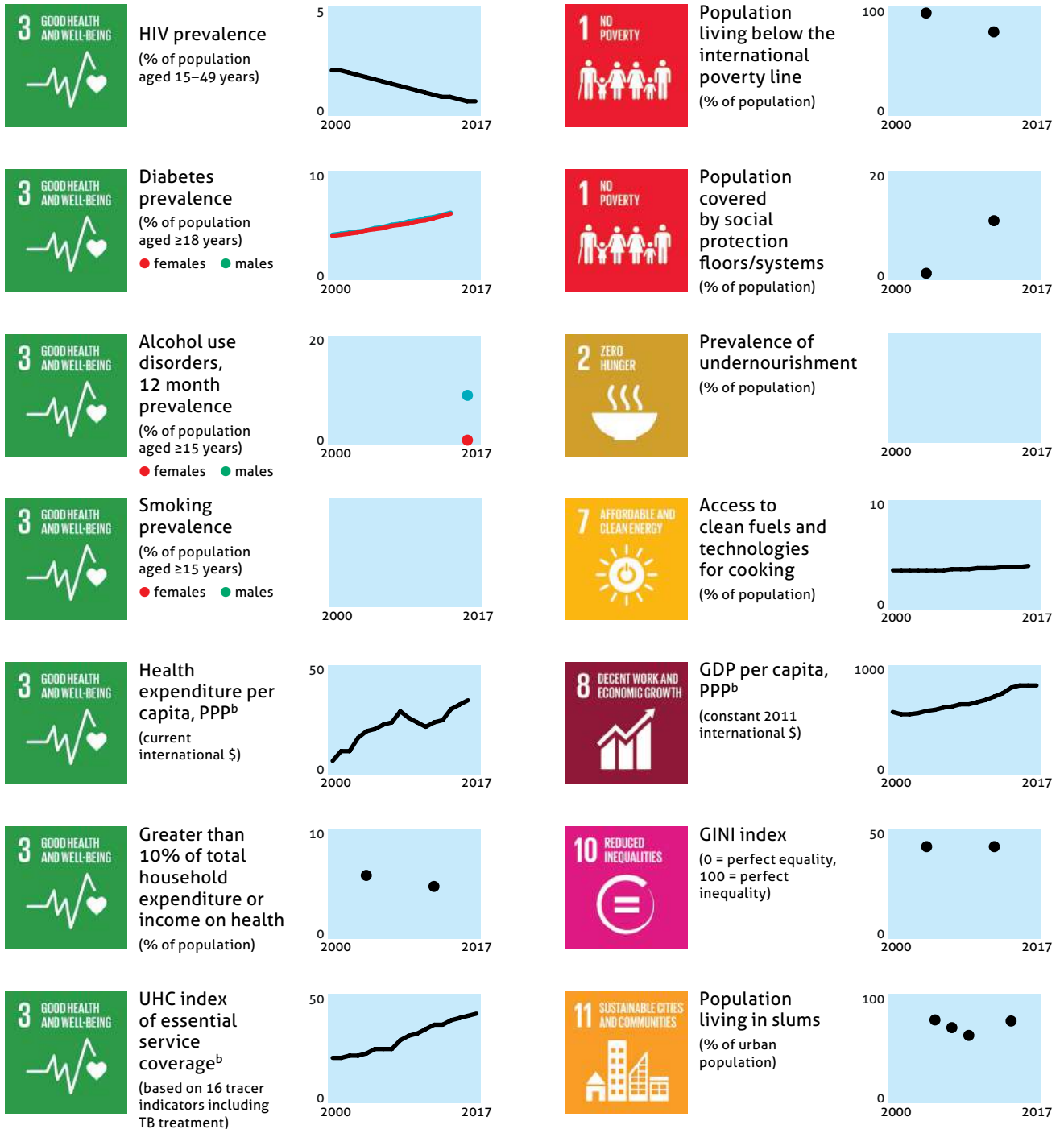
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Ethiopia

POPULATION 2018 **109 MILLION**

ESTIMATES OF TB BURDEN, ^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	165 (116–223)	151 (107–204)
HIV-positive TB incidence	7.6 (5.3–10)	7 (4.9–9.4)
MDR/RR-TB incidence ^b	1.6 (1–2.2)	1.4 (0.96–2)
HIV-negative TB mortality	24 (15–36)	22 (14–33)
HIV-positive TB mortality	2.2 (1.5–3)	2 (1.4–2.8)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	0.71%
Previously treated cases	16% (14–17)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	113 613
– % tested with rapid diagnostics at time of diagnosis	
– % with known HIV status	92%
– % pulmonary	69%
– % bacteriologically confirmed ^c	62%
– % children aged 0–14 years	10%
– % women	40%
– % men	50%
Total cases notified	114 233

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	69% (51–98)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	17% (9–25)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	4 816	5%
– on antiretroviral therapy	4 393	91%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	80%
– Previously treated cases	100%
Laboratory-confirmed cases ^d	MDR/RR-TB: 741, XDR-TB: 3
Patients started on treatment ^{d,e}	MDR/RR-TB: 747, XDR-TB: 3
MDR/RR-TB cases tested for resistance to second-line drugs	360

TREATMENT SUCCESS RATE AND COHORT SIZE

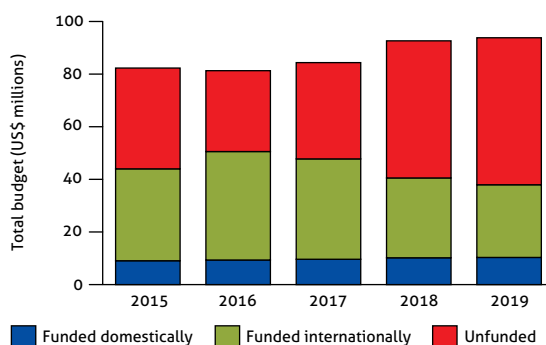
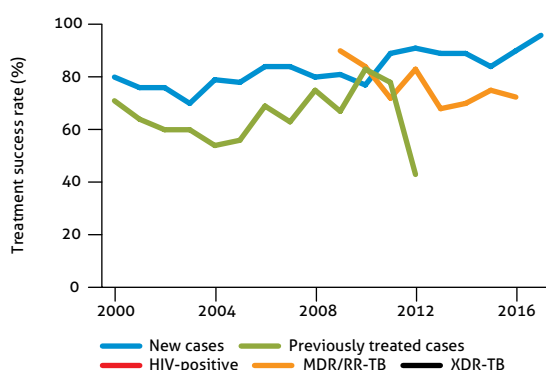
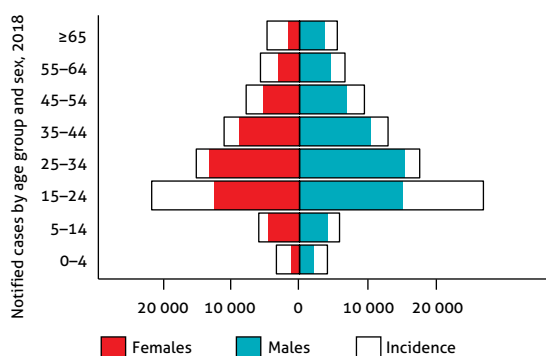
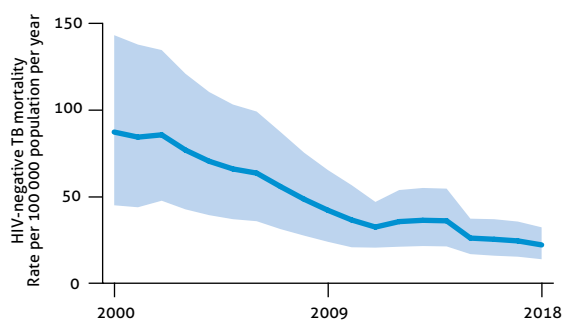
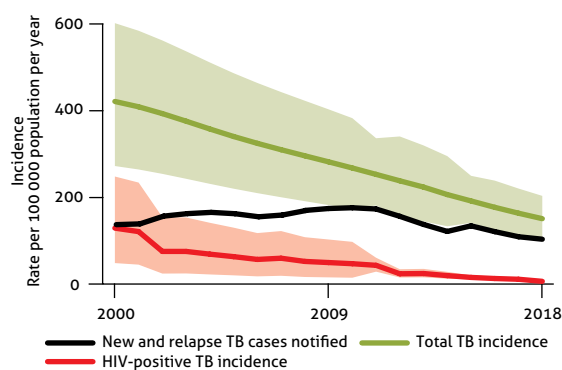
	SUCCESS	COHORT
New cases registered in 2017	96%	113 690
Previously treated cases registered in 2017		
HIV-positive TB cases registered in 2017		
MDR/RR-TB cases started on second-line treatment in 2016	72%	703
XDR-TB cases started on second-line treatment in 2016		

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	49%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	22% (20–24)

TB FINANCING, 2019

National TB budget (US\$ millions)	94
Funding source:	11% domestic, 29% international, 60% unfunded



Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

^a Ranges represent uncertainty intervals.

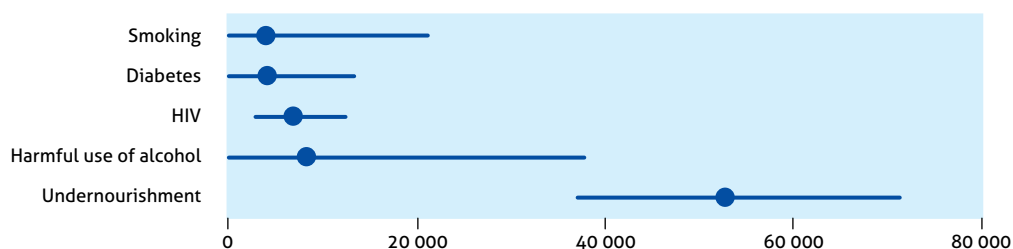
^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

^c Calculated for pulmonary cases only.

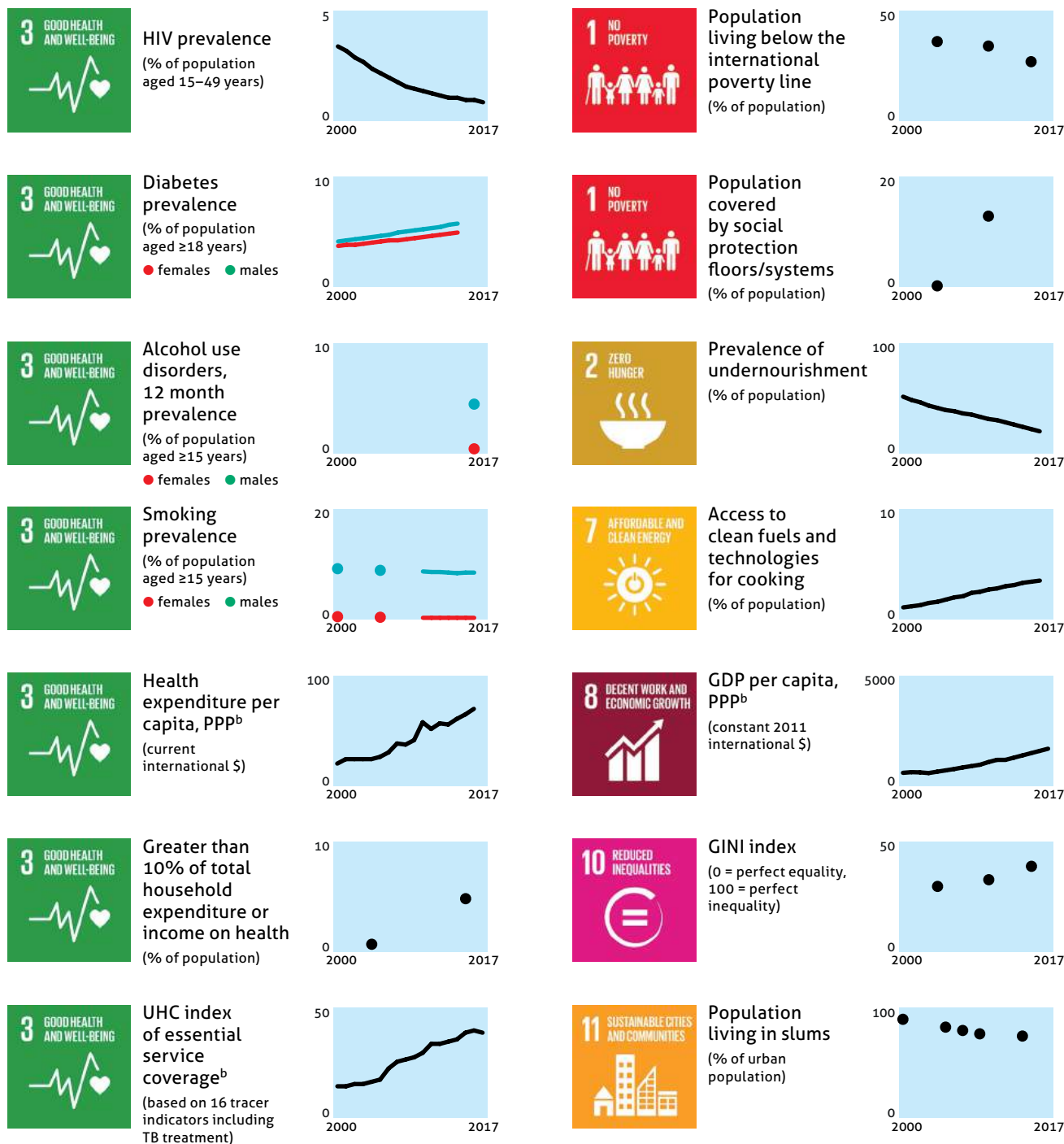
^d Includes cases with unknown previous TB treatment history.

^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

India

POPULATION 2018 **1 353 MILLION**

ESTIMATES OF TB BURDEN, ^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	2 690 (1 840–3 700)	199 (136–273)
HIV-positive TB incidence	92 (63–126)	6.8 (4.6–9.3)
MDR/RR-TB incidence ^b	130 (77–198)	9.6 (5.7–15)
HIV-negative TB mortality	440 (408–472)	32 (30–35)
HIV-positive TB mortality	9.7 (5.7–15)	0.72 (0.42–1.1)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	2.8% (2.3–3.5)
Previously treated cases	14% (14–14)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	1 994 000
– % tested with rapid diagnostics at time of diagnosis	50%
– % with known HIV status	72%
– % pulmonary	82%
– % bacteriologically confirmed ^c	57%
– % children aged 0–14 years	6%
– % women	34%
– % men	60%
Total cases notified	2 155 894

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	74% (54–110)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	17% (12–24)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	49 047	3%
– on antiretroviral therapy	44 080	90%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	46%
– Previously treated cases	91%
Laboratory-confirmed cases ^d	MDR/RR-TB: 58 347, XDR-TB: 3 400
Patients started on treatment ^{d,e}	MDR/RR-TB: 46 569, XDR-TB: 2 724
MDR/RR-TB cases tested for resistance to second-line drugs	38 236

TREATMENT SUCCESS RATE AND COHORT SIZE

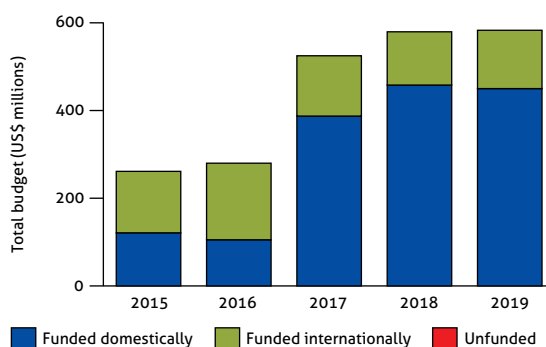
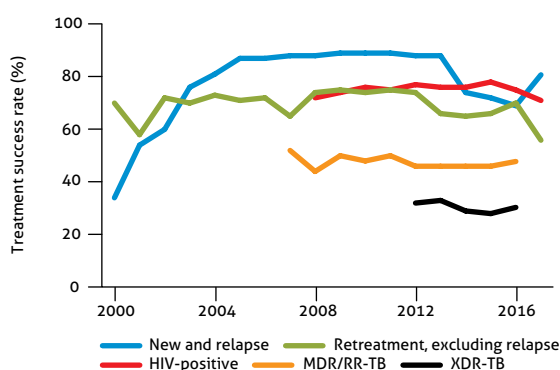
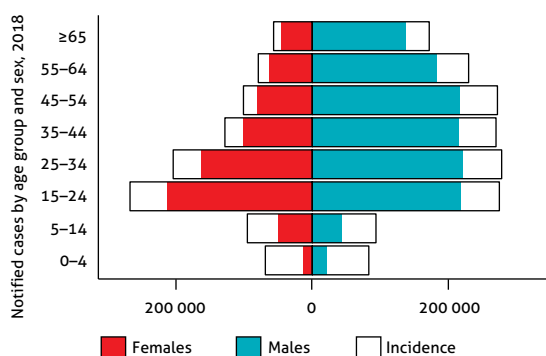
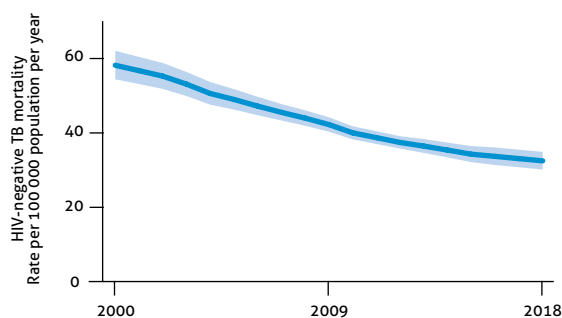
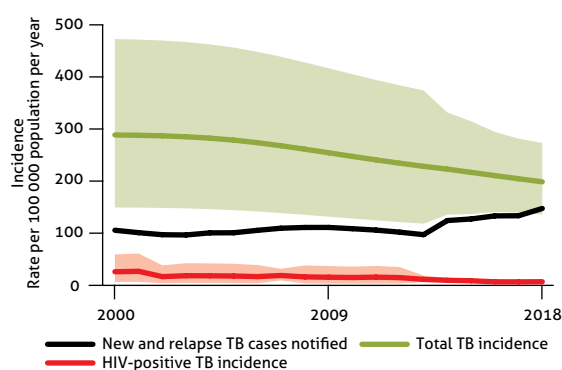
	SUCCESS	COHORT
New and relapse cases registered in 2017	81%	1 568 392
Previously treated cases, excluding relapse, registered in 2017	56%	146 982
HIV-positive TB cases registered in 2017	71%	31 213
MDR/RR-TB cases started on second-line treatment in 2016	48%	33 197
XDR-TB cases started on second-line treatment in 2016	30%	2 464

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	17%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	26% (24–28)

TB FINANCING, 2019

National TB budget (US\$ millions)	583
Funding source:	77% domestic, 23% international, 0% unfunded



Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries. Estimates of TB incidence and mortality for India are interim in nature, pending results from the national TB prevalence survey planned for 2019/2020.

^a Ranges represent uncertainty intervals.

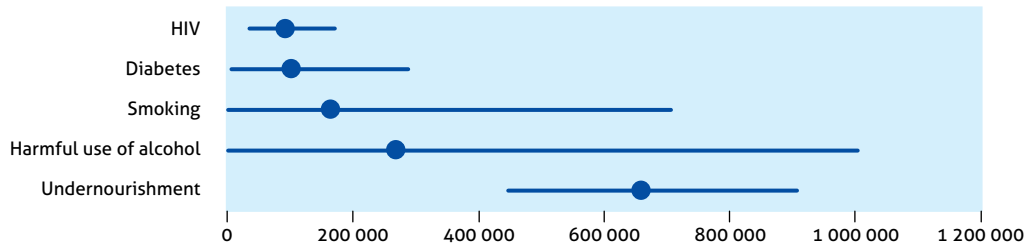
^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

^c Calculated for pulmonary cases only.

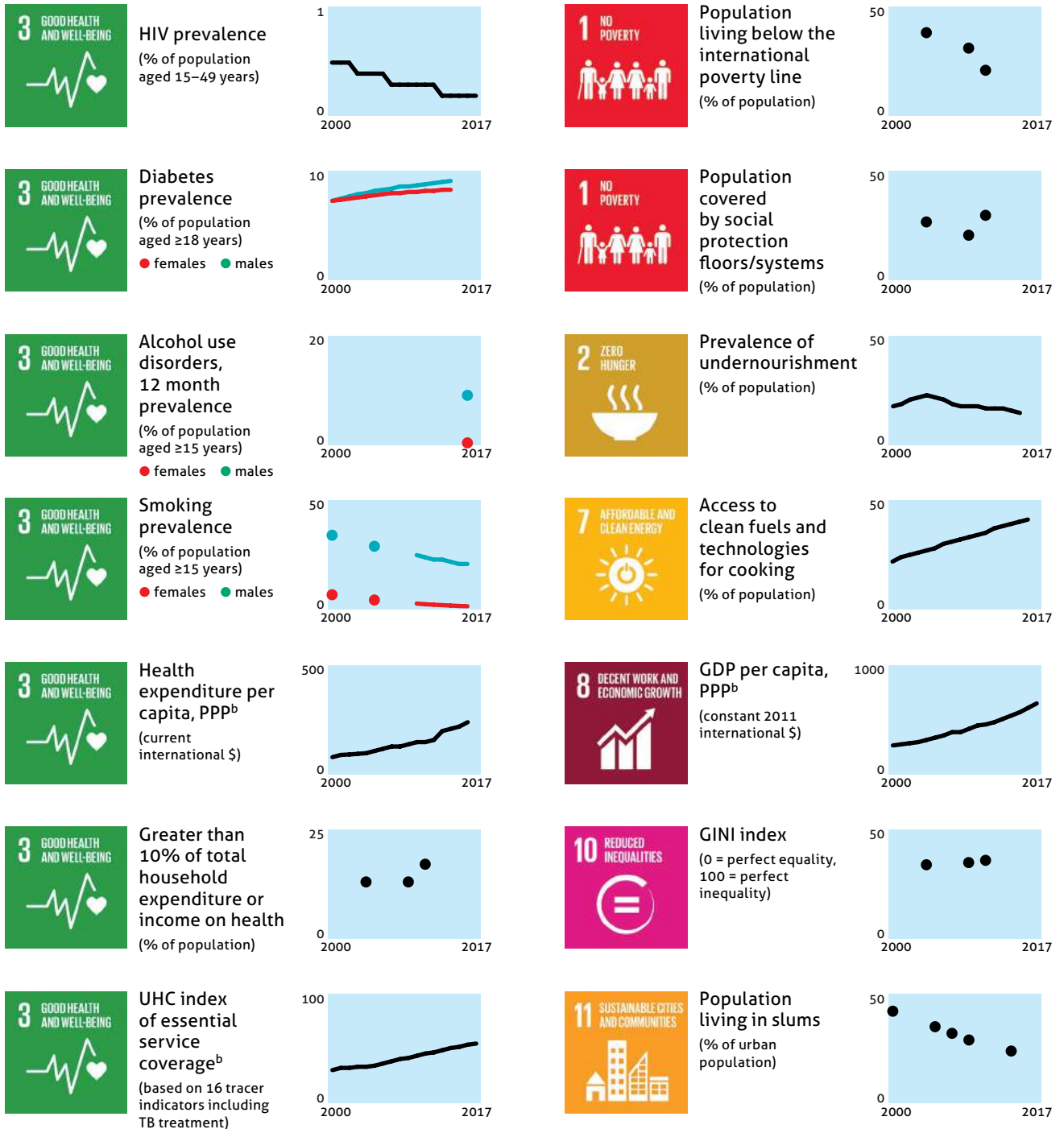
^d Includes cases with unknown previous TB treatment history.

^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Indonesia

POPULATION 2018 **268 MILLION**

ESTIMATES OF TB BURDEN, ^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	845 (770–923)	316 (288–345)
HIV-positive TB incidence	21 (8.9–38)	7.9 (3.3–14)
MDR/RR-TB incidence ^b	24 (17–32)	8.8 (6.2–12)
HIV-negative TB mortality	93 (87–99)	35 (33–37)
HIV-positive TB mortality	5.3 (2.1–9.8)	2 (0.79–3.7)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	2.4% (1.8–3.3)
Previously treated cases	13% (9–18)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	563 879
– % tested with rapid diagnostics at time of diagnosis	12%
– % with known HIV status	37%
– % pulmonary	88%
– % bacteriologically confirmed ^c	50%
– % children aged 0–14 years	11%
– % women	37%
– % men	52%
Total cases notified	570 289

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	67% (61–73)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	12% (10–13)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	10 174	5%
– on antiretroviral therapy	4 082	40%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	33%
– Previously treated cases	127%
Laboratory-confirmed cases ^d	MDR/RR-TB: 9 038, XDR-TB: 80
Patients started on treatment ^{d,e}	MDR/RR-TB: 4 194, XDR-TB: 59
MDR/RR-TB cases tested for resistance to second-line drugs	2 526

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	85%	425 819
Previously treated cases, excluding relapse, registered in 2017	73%	4 934
HIV-positive TB cases registered in 2017	69%	7 966
MDR/RR-TB cases started on second-line treatment in 2016	48%	1 905
XDR-TB cases started on second-line treatment in 2016	21%	61

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	10%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	10% (9.3–11)

TB FINANCING, 2019

National TB budget (US\$ millions)	366
Funding source:	30% domestic, ^f 13% international, 57% unknown

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

^a Ranges represent uncertainty intervals.

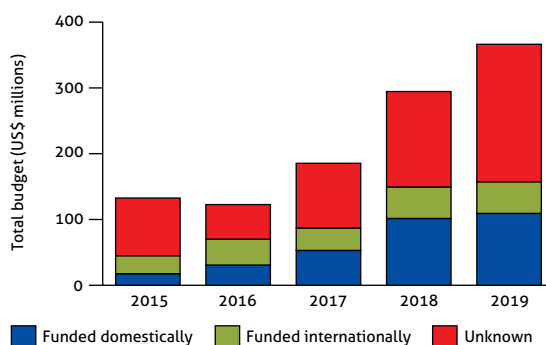
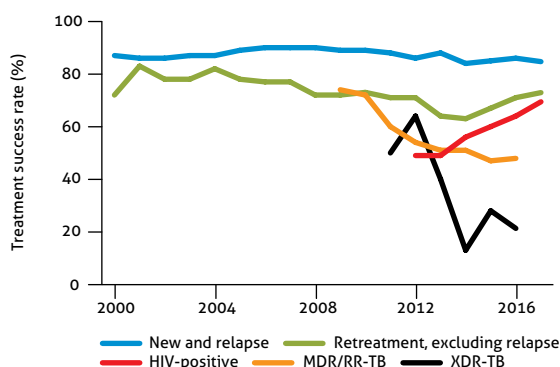
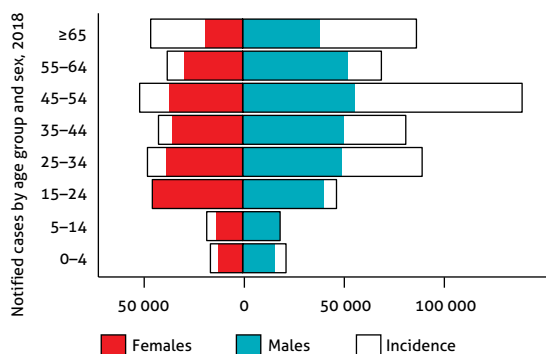
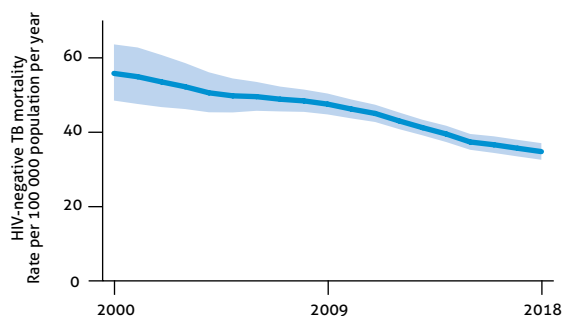
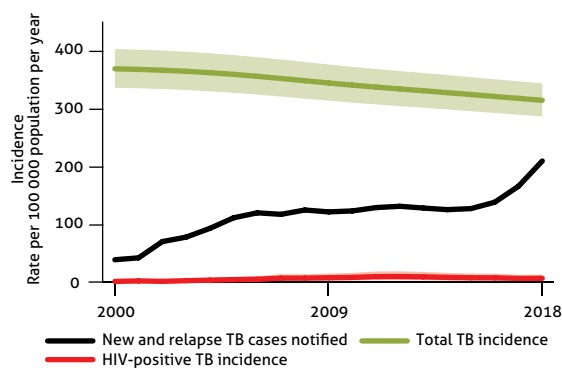
^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

^c Calculated for pulmonary cases only.

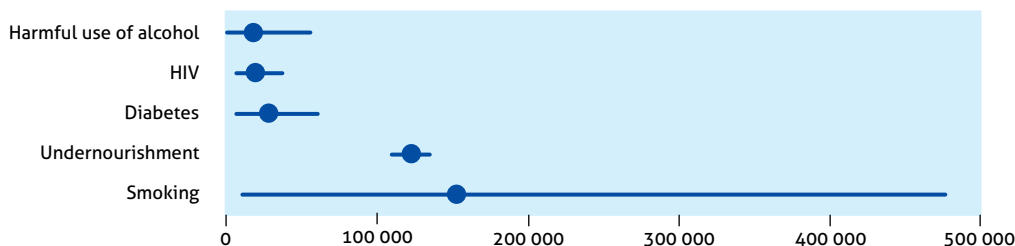
^d Includes cases with unknown previous TB treatment history.

^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

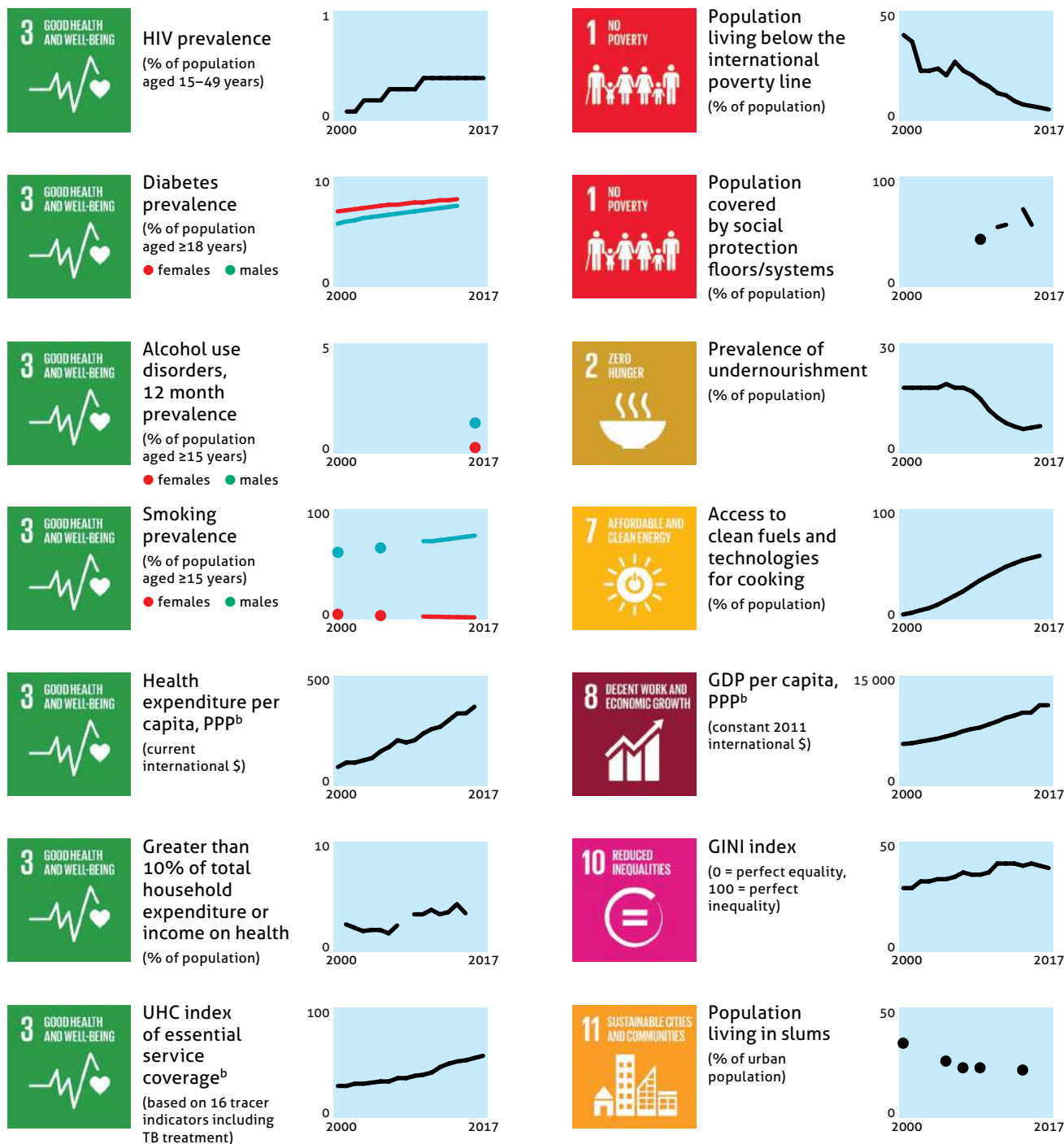
^f Funding from provincial and district budgets are not known at national level.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Kenya

POPULATION 2018 **51 MILLION**

ESTIMATES OF TB BURDEN, ^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	150 (92–222)	292 (179–432)
HIV-positive TB incidence	40 (25–60)	79 (48–117)
MDR/RR-TB incidence ^b	2.3 (1.1–4.1)	4.5 (2.1–7.9)
HIV-negative TB mortality	19 (11–30)	38 (22–59)
HIV-positive TB mortality	13 (8.1–20)	26 (16–38)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	1.3% (0.74–2)
Previously treated cases	4.4% (3.7–5.2)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	94 534
– % tested with rapid diagnostics at time of diagnosis	47%
– % with known HIV status	98%
– % pulmonary	85%
– % bacteriologically confirmed ^c	58%
– % children aged 0–14 years	10%
– % women	32%
– % men	58%
Total cases notified	96 478

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	63% (43–100)
TB patients facing catastrophic total costs, 2017	27% (21–32)
TB case fatality ratio (estimated mortality/estimated incidence), 2018	23% (12–36)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	24 950	27%
– on antiretroviral therapy	24 186	97%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	64%
– Previously treated cases	79%
Laboratory-confirmed cases ^d	MDR/RR-TB: 465, XDR-TB: 1
Patients started on treatment ^{d,e}	MDR/RR-TB: 470, XDR-TB: 1
MDR/RR-TB cases tested for resistance to second-line drugs	125

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	83%	83 088
Previously treated cases, excluding relapse, registered in 2017	72%	1 583
HIV-positive TB cases registered in 2017	78%	23 060
MDR/RR-TB cases started on second-line treatment in 2016	68%	308
XDR-TB cases started on second-line treatment in 2016	0	0

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	34% (31–37)

TB FINANCING, 2019

National TB budget (US\$ millions)	81
Funding source:	22% domestic, 15% international, 63% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

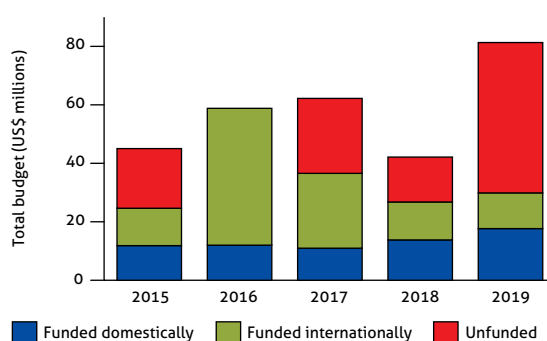
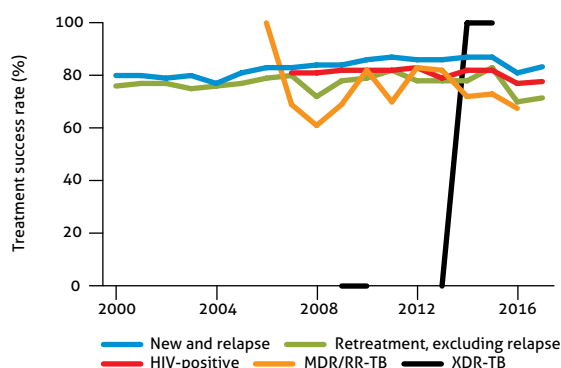
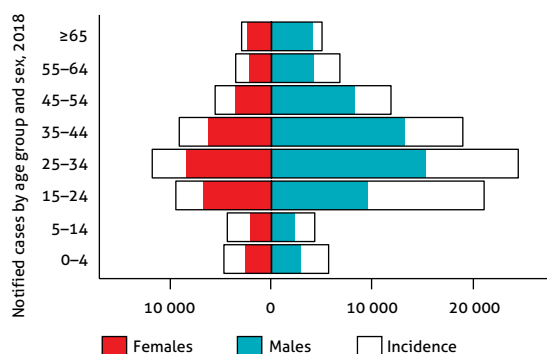
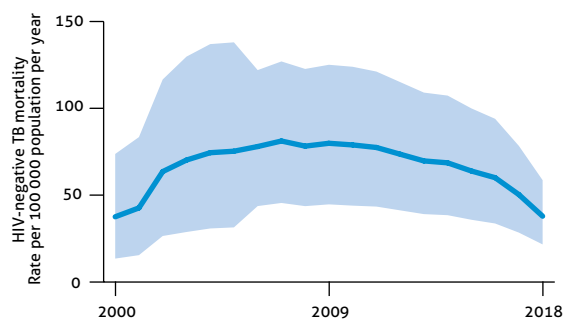
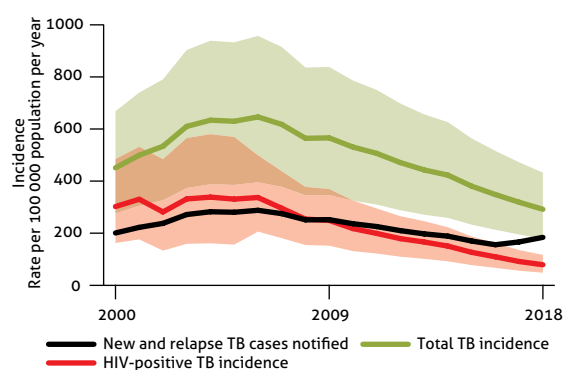
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

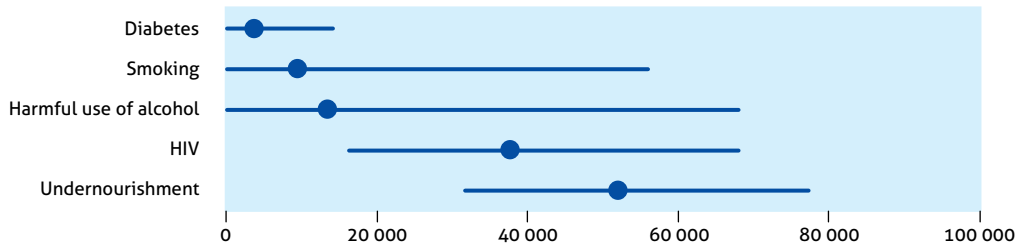
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

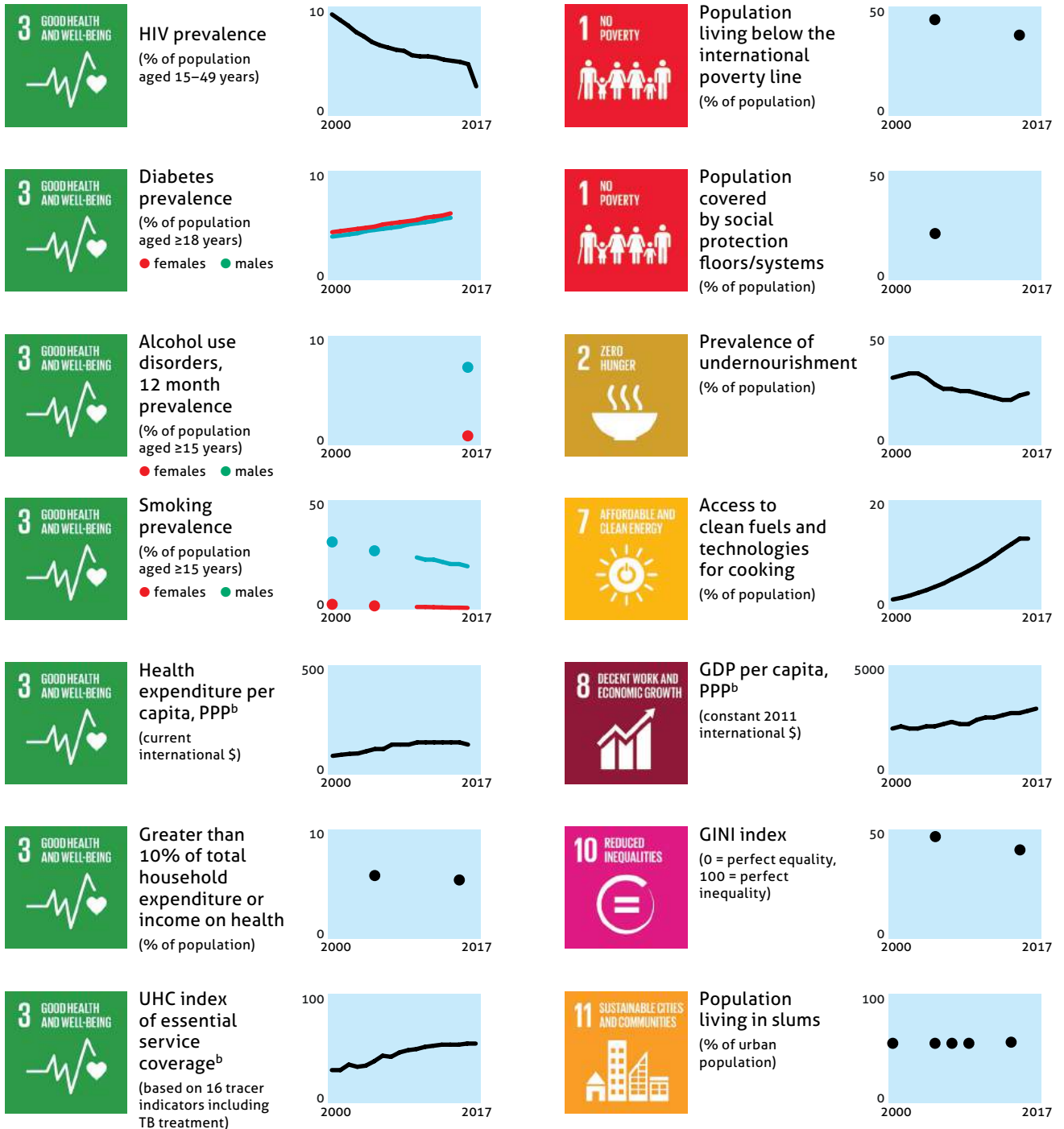
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Mozambique

POPULATION 2018 **29 MILLION**

ESTIMATES OF TB BURDEN, ^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	162 (105–232)	551 (356–787)
HIV-positive TB incidence	58 (38–83)	197 (127–281)
MDR/RR-TB incidence ^b	8.3 (4.4–14)	28 (15–46)
HIV-negative TB mortality	21 (13–32)	72 (43–109)
HIV-positive TB mortality	22 (14–31)	73 (46–106)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	3.7% (2.5–5.2)
Previously treated cases	20% (5.2–40)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	92 381
– % tested with rapid diagnostics at time of diagnosis	41%
– % with known HIV status	98%
– % pulmonary	93%
– % bacteriologically confirmed ^c	39%
– % children aged 0–14 years	13%
– % women	42%
– % men	45%
Total cases notified	93 546

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	57% (40–88)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	27% (15–41)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	32 641	36%
– on antiretroviral therapy	31 440	96%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	44%
– Previously treated cases	66%
Laboratory-confirmed cases ^d	MDR/RR-TB: 1 158, XDR-TB: 45
Patients started on treatment ^{d,e}	MDR/RR-TB: 1 134, XDR-TB: 45
MDR/RR-TB cases tested for resistance to second-line drugs	472

TREATMENT SUCCESS RATE AND COHORT SIZE

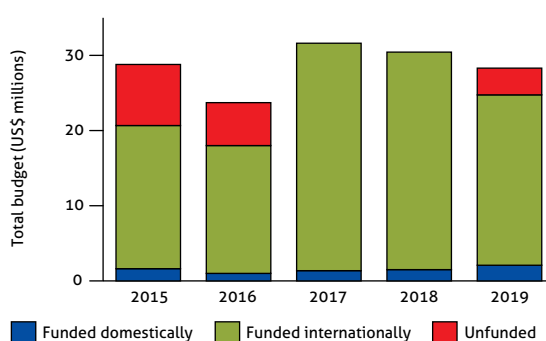
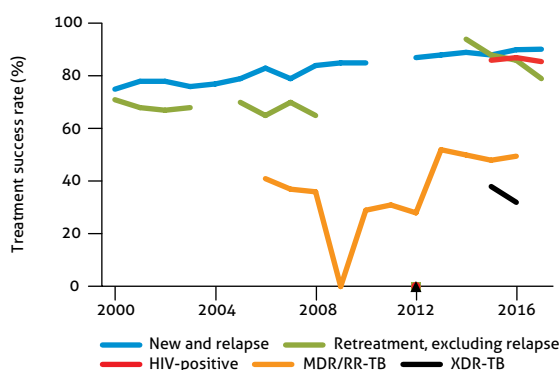
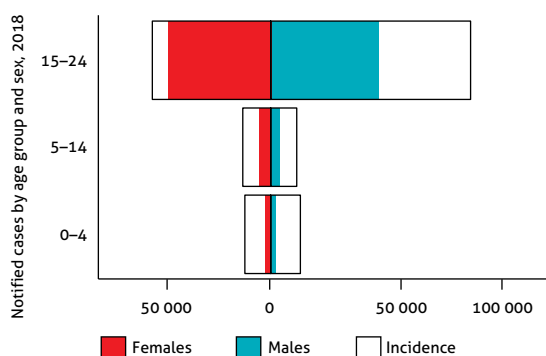
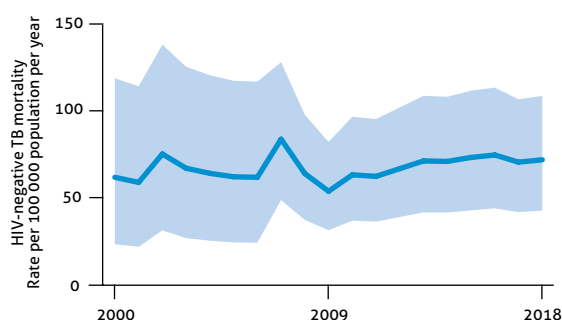
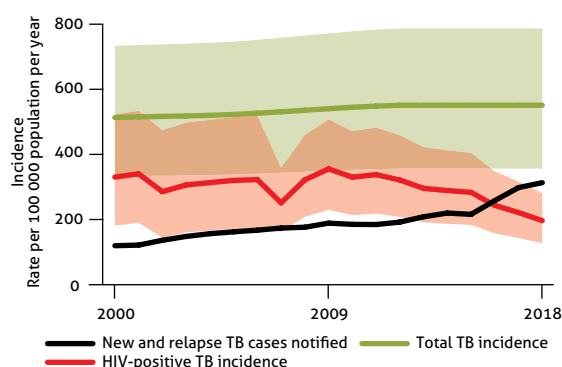
	SUCCESS	COHORT
New and relapse cases registered in 2017	90%	82 674
Previously treated cases, excluding relapse, registered in 2017	79%	1 139
HIV-positive TB cases registered in 2017	85%	34 056
MDR/RR-TB cases started on second-line treatment in 2016	50%	854
XDR-TB cases started on second-line treatment in 2016	32%	25

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	100%

TB FINANCING, 2019

National TB budget (US\$ millions)	28
Funding source:	7% domestic, 80% international, 13% unfunded



Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries. Estimates of TB incidence and mortality for Mozambique will be reviewed after final results from the national TB prevalence survey are available in 2020.

^a Ranges represent uncertainty intervals.

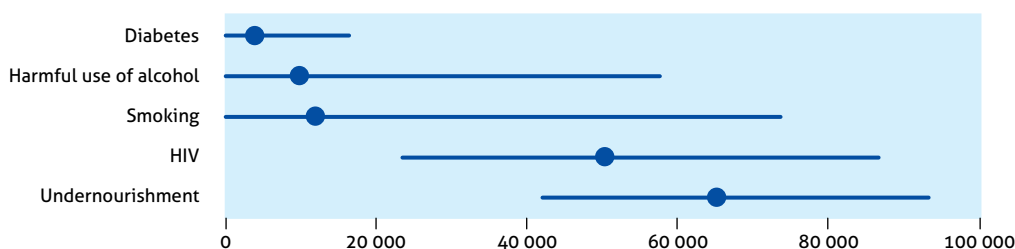
^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

^c Calculated for pulmonary cases only.

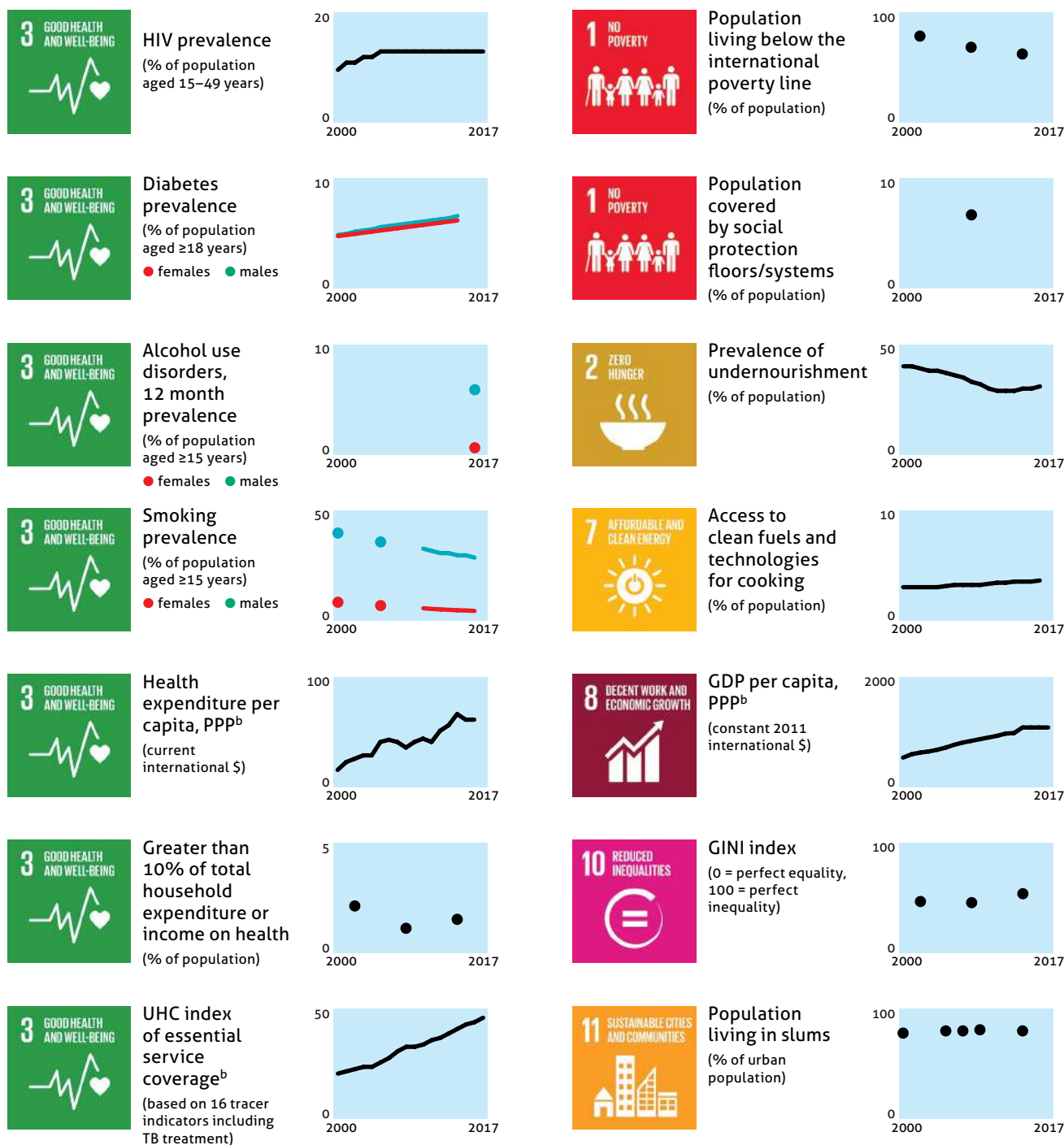
^d Includes cases with unknown previous TB treatment history.

^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Myanmar

POPULATION 2018 **54 MILLION**

ESTIMATES OF TB BURDEN, ^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	181 (119–256)	338 (222–477)
HIV-positive TB incidence	15 (10–22)	29 (19–41)
MDR/RR-TB incidence ^b	11 (7.4–16)	21 (14–30)
HIV-negative TB mortality	21 (12–31)	39 (23–58)
HIV-positive TB mortality	3.7 (2.5–5.2)	6.9 (4.6–9.7)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	4.9% (4.7–5.1)
Previously treated cases	20% (19–21)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	137 972
– % tested with rapid diagnostics at time of diagnosis	42%
– % with known HIV status	89%
– % pulmonary	91%
– % bacteriologically confirmed ^c	44%
– % children aged 0–14 years	19%
– % women	29%
– % men	52%
Total cases notified	139 518

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	76% (54–120)
TB patients facing catastrophic total costs, 2015	60% (56–63)
TB case fatality ratio (estimated mortality/estimated incidence), 2018	14% (8–22)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	10 516	9%
– on antiretroviral therapy	7 464	71%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c		
– New cases		92%
– Previously treated cases		84%
Laboratory-confirmed cases ^d	MDR/RR-TB: 3 479, XDR-TB: 35	
Patients started on treatment ^{d,e}	MDR/RR-TB: 2 650, XDR-TB: 29	
MDR/RR-TB cases tested for resistance to second-line drugs		927

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	87%	126 746
Previously treated cases, excluding relapse, registered in 2017	78%	1 638
HIV-positive TB cases registered in 2017	73%	10 294
MDR/RR-TB cases started on second-line treatment in 2016	79%	2 512
XDR-TB cases started on second-line treatment in 2016	63%	8

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	15%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	3.1% (2.8–3.4)

TB FINANCING, 2019

National TB budget (US\$ millions)	62
Funding source:	3% domestic, 60% international, 37% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

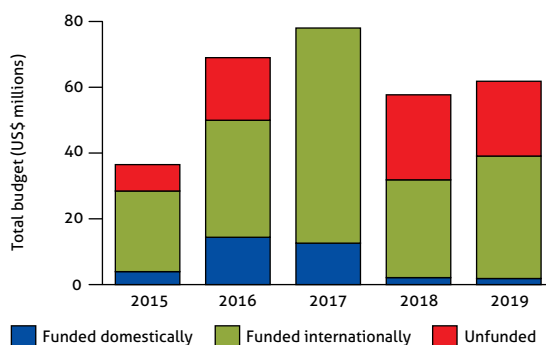
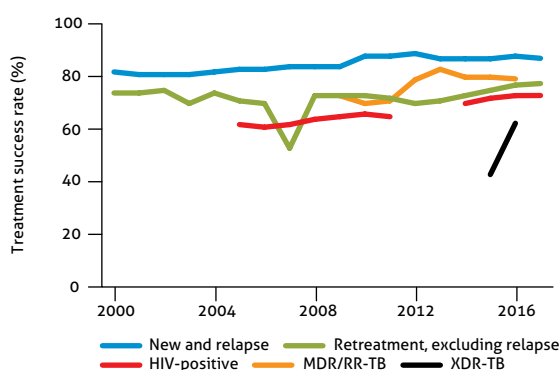
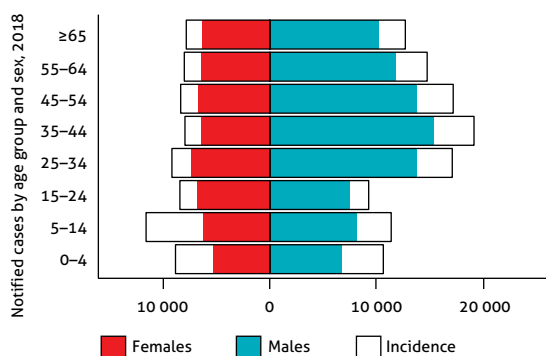
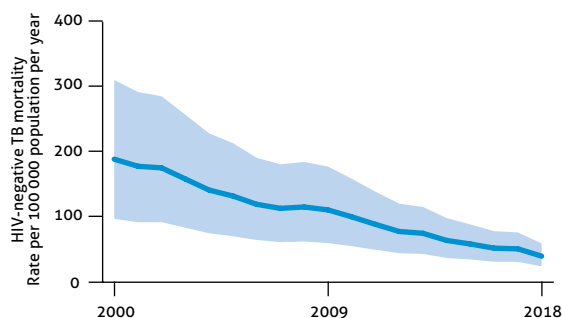
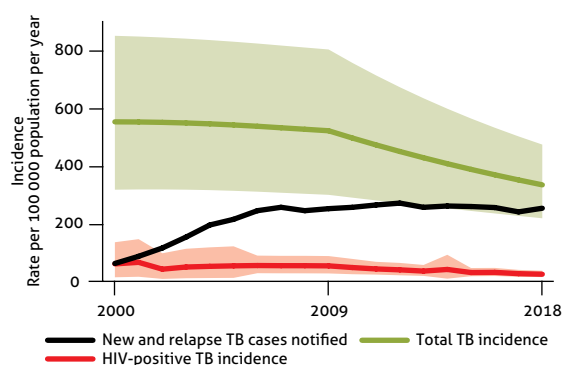
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

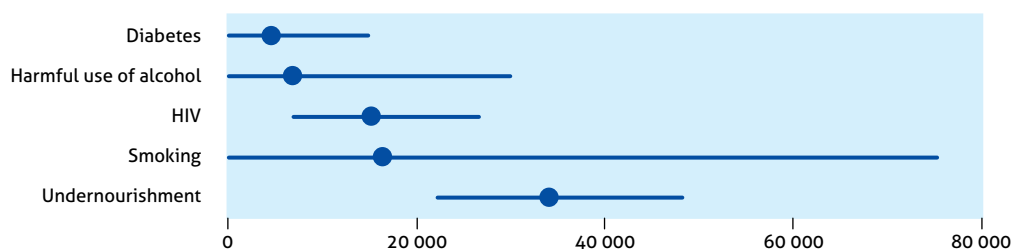
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

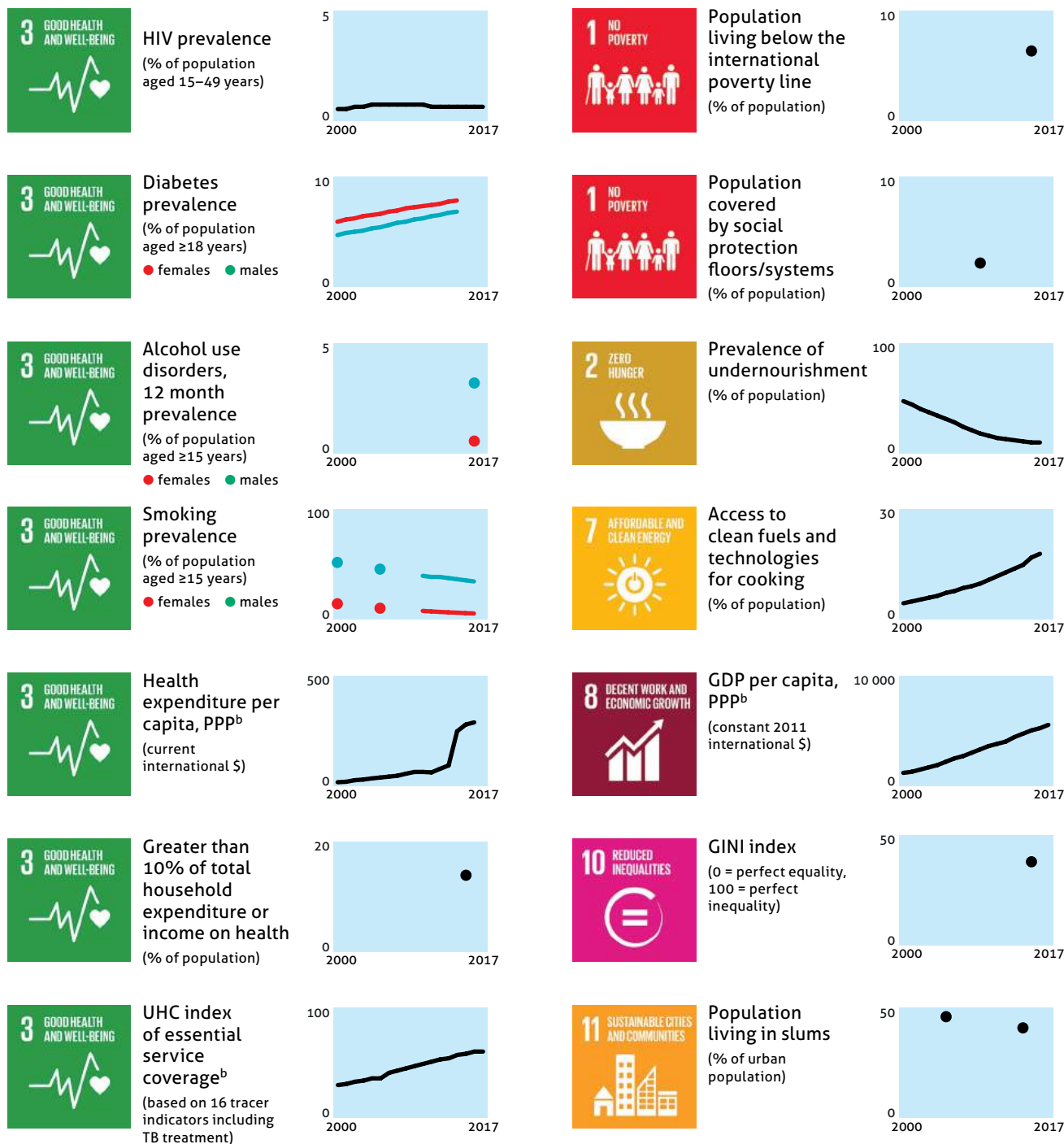
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Nigeria

POPULATION 2018 **196 MILLION**

ESTIMATES OF TB BURDEN, ^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	429 (280–609)	219 (143–311)
HIV-positive TB incidence	53 (34–75)	27 (17–38)
MDR/RR-TB incidence ^b	21 (13–32)	11 (6.4–16)
HIV-negative TB mortality	125 (73–192)	64 (37–98)
HIV-positive TB mortality	32 (20–47)	16 (10–24)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	4.3% (3.2–5.5)
Previously treated cases	15% (11–19)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	103 921
– % tested with rapid diagnostics at time of diagnosis	54%
– % with known HIV status	100%
– % pulmonary	96%
– % bacteriologically confirmed ^c	77%
– % children aged 0–14 years	8%
– % women	34%
– % men	58%
Total cases notified	106 533

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	24% (17–37)
TB patients facing catastrophic total costs, 2017	71% (68–73)
TB case fatality ratio (estimated mortality/estimated incidence), 2018	38% (19–59)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	12 700	12%
– on antiretroviral therapy	11 032	87%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	65%
– Previously treated cases	88%
Laboratory-confirmed cases ^d	MDR/RR-TB: 2 275, XDR-TB: 31
Patients started on treatment ^{d,e}	MDR/RR-TB: 1 895, XDR-TB: 14
MDR/RR-TB cases tested for resistance to second-line drugs	1 895

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	86%	101 734
Previously treated cases, excluding relapse, registered in 2017	82%	2 781
HIV-positive TB cases registered in 2017	76%	13 851
MDR/RR-TB cases started on second-line treatment in 2016	77%	1 251
XDR-TB cases started on second-line treatment in 2016		

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	62%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	19% (17–21)

TB FINANCING, 2019

National TB budget (US\$ millions)	278
Funding source:	8% domestic, 32% international, 60% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

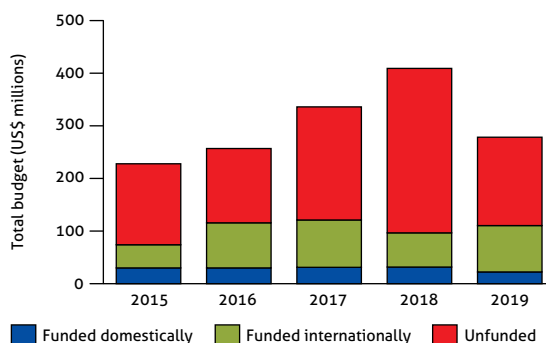
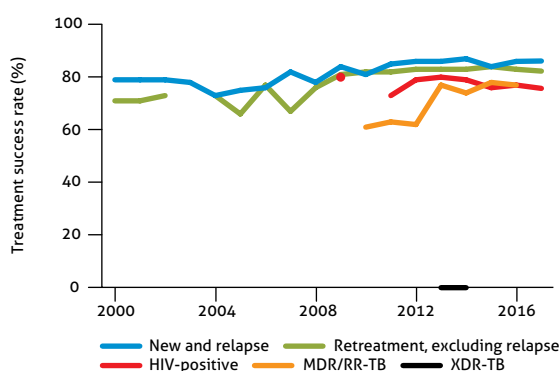
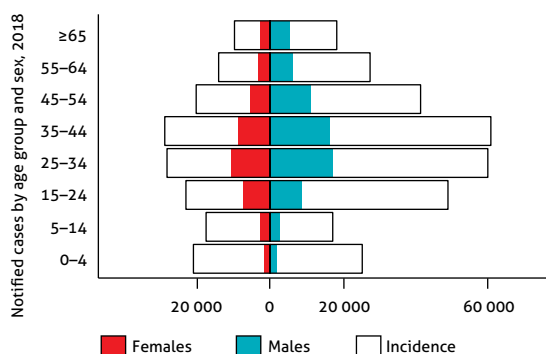
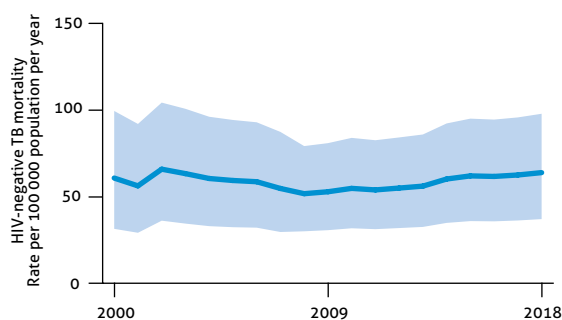
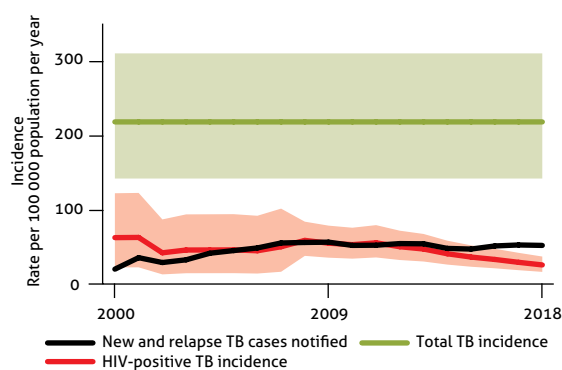
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

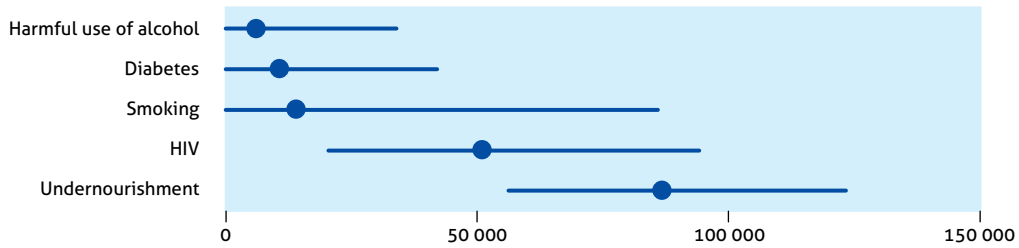
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

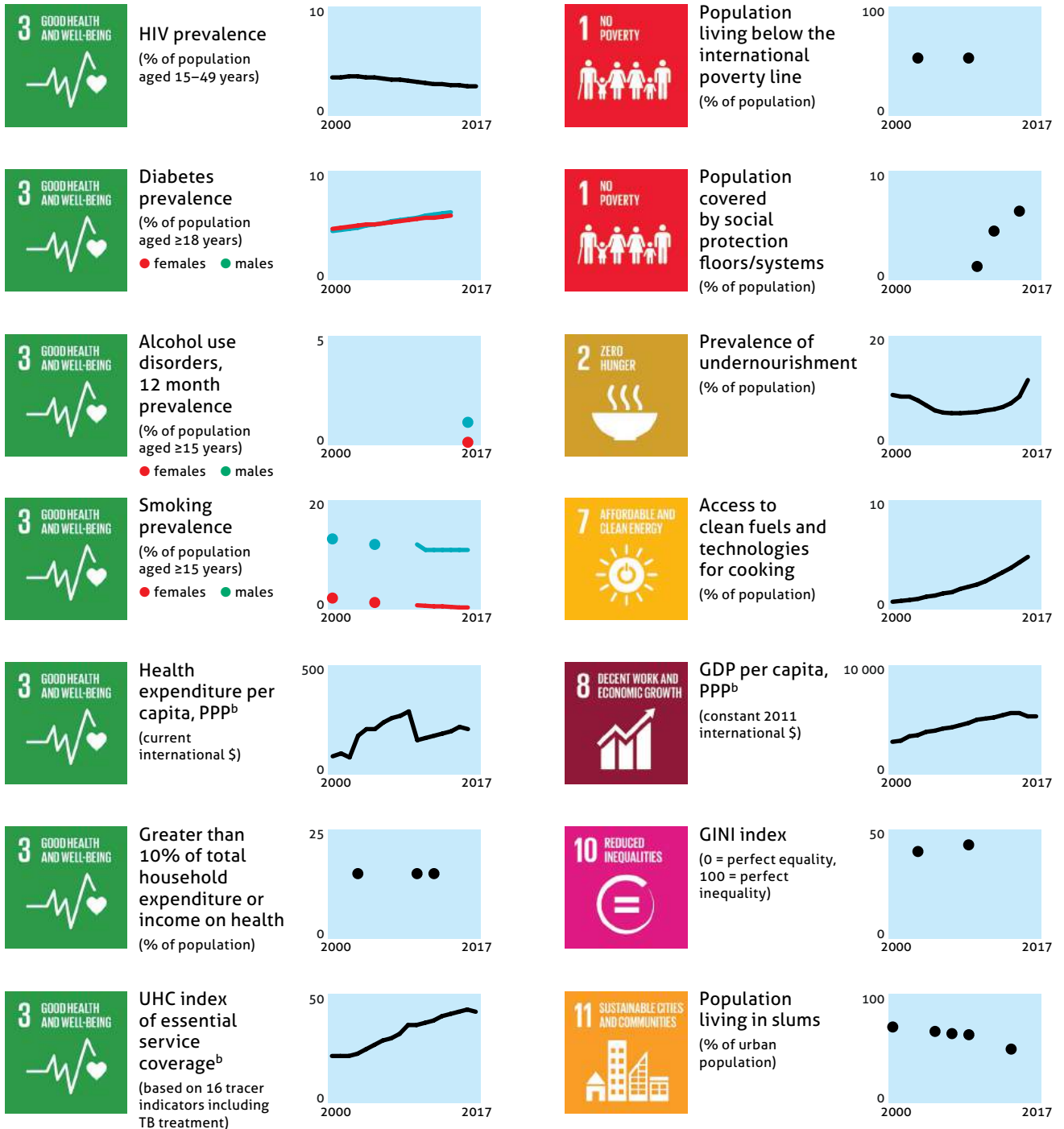
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Pakistan

ESTIMATES OF TB BURDEN, ^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	562 (399–754)	265 (188–355)
HIV-positive TB incidence	3.8 (2.5–5.4)	1.8 (1.2–2.5)
MDR/RR-TB incidence ^b	28 (18–40)	13 (8.4–19)
HIV-negative TB mortality	43 (35–52)	20 (16–25)
HIV-positive TB mortality	1.3 (0.83–1.8)	0.6 (0.39–0.86)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	4.2% (3.2–5.3)
Previously treated cases	16% (15–17)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	360 472
– % tested with rapid diagnostics at time of diagnosis	22%
– % with known HIV status	20%
– % pulmonary	80%
– % bacteriologically confirmed ^c	48%
– % children aged 0–14 years	13%
– % women	42%
– % men	45%
Total cases notified	369 548

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	64% (48–90)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	8% (5–11)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	636	<1%
– on antiretroviral therapy	417	66%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	45%
– Previously treated cases	79%
Laboratory-confirmed cases ^d	MDR/RR-TB: 3 824, XDR-TB: 95
Patients started on treatment ^{d,e}	MDR/RR-TB: 3 106, XDR-TB: 71
MDR/RR-TB cases tested for resistance to second-line drugs	2 893

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	93%	358 730
Previously treated cases, excluding relapse, registered in 2017	79%	9 673
HIV-positive TB cases registered in 2017		
MDR/RR-TB cases started on second-line treatment in 2016	64%	2 804
XDR-TB cases started on second-line treatment in 2016	35%	77

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	5.7% (5.2–6.3)

TB FINANCING, 2019

National TB budget (US\$ millions)	135
Funding source:	3% domestic, 31% international, 66% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

^a Ranges represent uncertainty intervals.

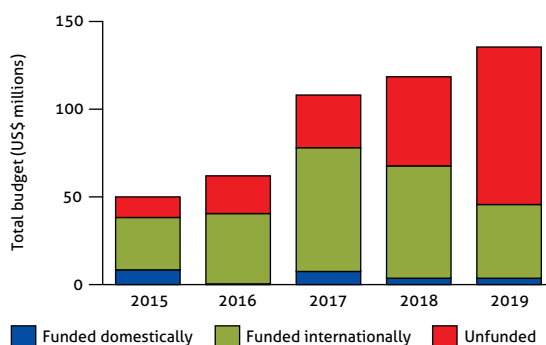
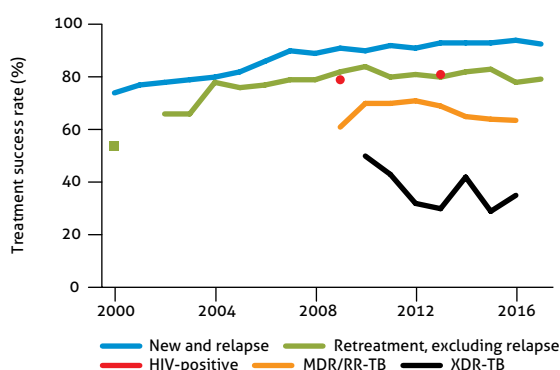
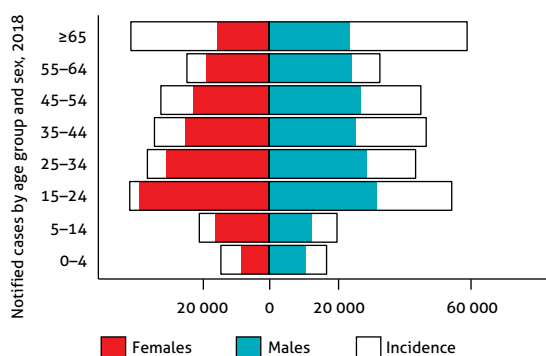
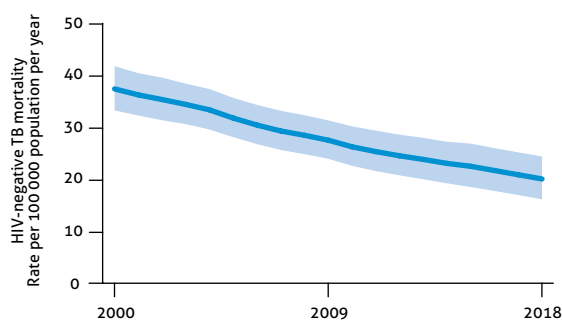
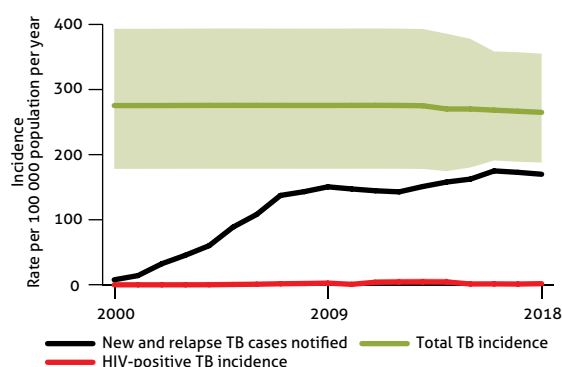
^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

^c Calculated for pulmonary cases only.

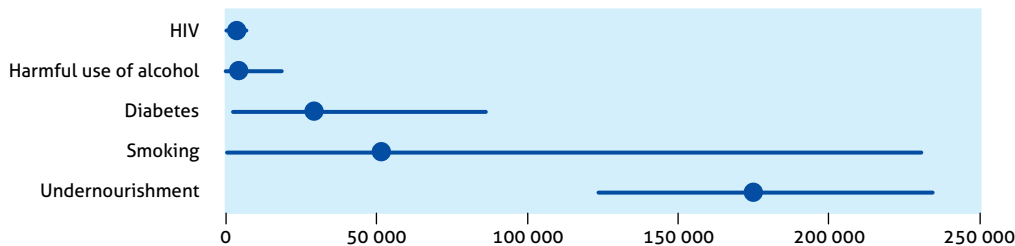
^d Includes cases with unknown previous TB treatment history.

^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

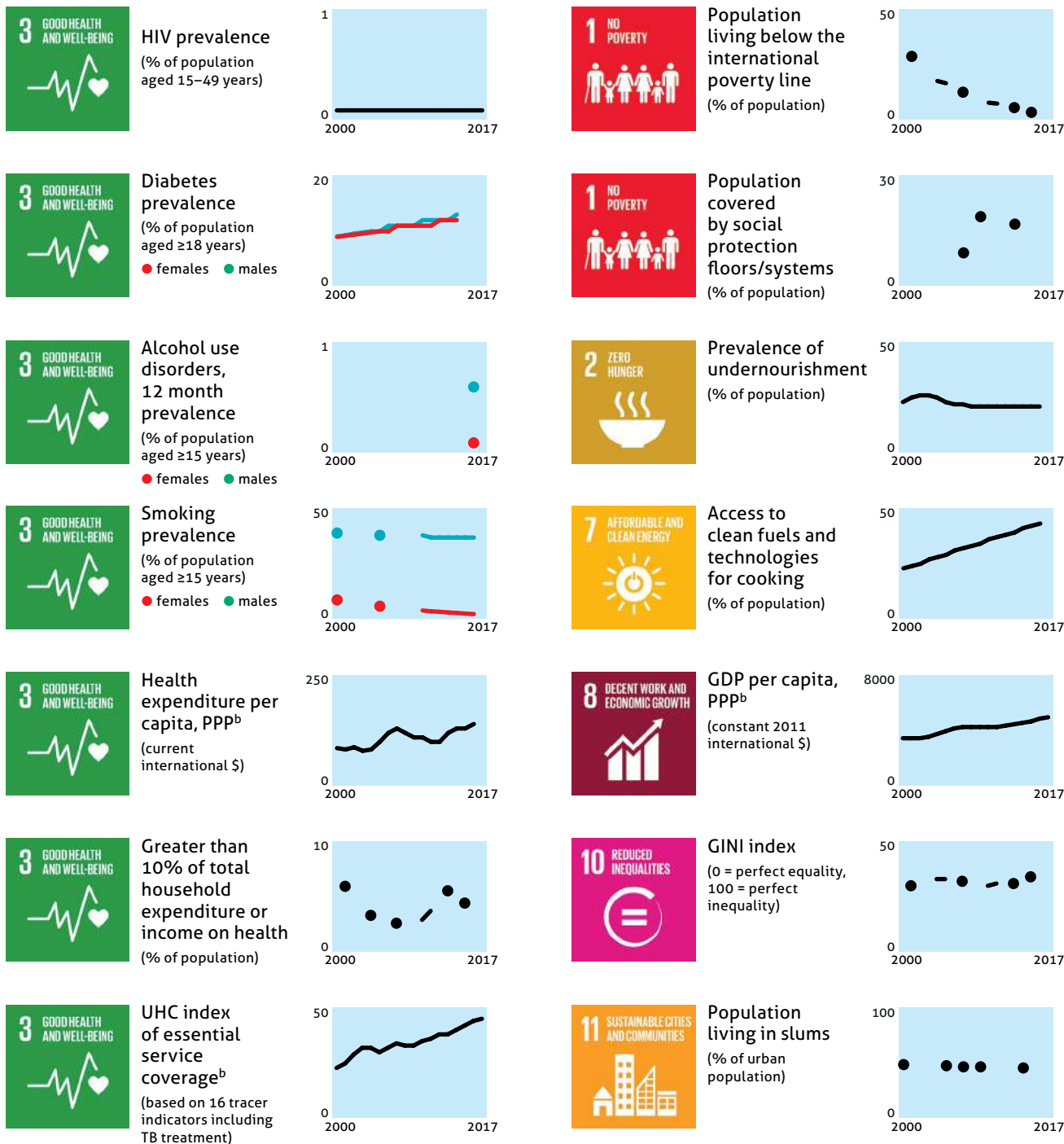
POPULATION 2018 212 MILLION



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Philippines

POPULATION 2018 **107 MILLION**

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	591 (332–924)	554 (311–866)
HIV-positive TB incidence	10 (4.1–19)	9.4 (3.8–17)
MDR/RR-TB incidence ^b	18 (7.7–32)	17 (7.3–30)
HIV-negative TB mortality	26 (22–30)	24 (20–28)
HIV-positive TB mortality	0.6 (0–4.2)	0.57 (0–4)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	1.7% (1.1–2.5)
Previously treated cases	16% (13–20)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	371 668
– % tested with rapid diagnostics at time of diagnosis	36%
– % with known HIV status	27%
– % pulmonary	98%
– % bacteriologically confirmed ^c	36%
– % children aged 0–14 years	12%
– % women	30%
– % men	58%
Total cases notified	382 543

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	63% (40–110)
TB patients facing catastrophic total costs, 2017	35% (33–37)
TB case fatality ratio (estimated mortality/estimated incidence), 2018	5% (3–7)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	1 477	1%
– on antiretroviral therapy	1 350	91%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	<1%
– Previously treated cases	24%
Laboratory-confirmed cases ^d	MDR/RR-TB: 7 276, XDR-TB: 52
Patients started on treatment ^{d,e}	MDR/RR-TB: 6 125, XDR-TB: 52
MDR/RR-TB cases tested for resistance to second-line drugs	2 095

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	91%	315 923
Previously treated cases, excluding relapse, registered in 2017	82%	9 486
HIV-positive TB cases registered in 2017	83%	1 258
MDR/RR-TB cases started on second-line treatment in 2016	58%	5 071
XDR-TB cases started on second-line treatment in 2016	20%	10

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	52%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	9.4% (8.7–10)

TB FINANCING, 2019

National TB budget (US\$ millions)	205
Funding source:	12% domestic, 25% international, 63% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

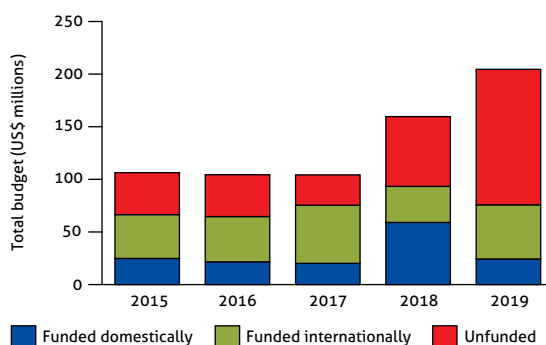
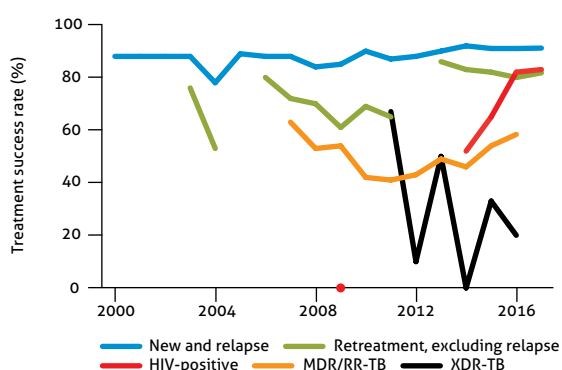
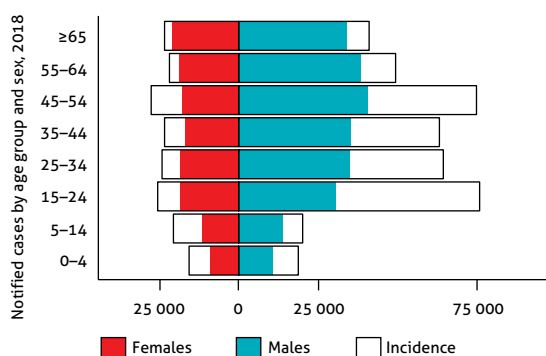
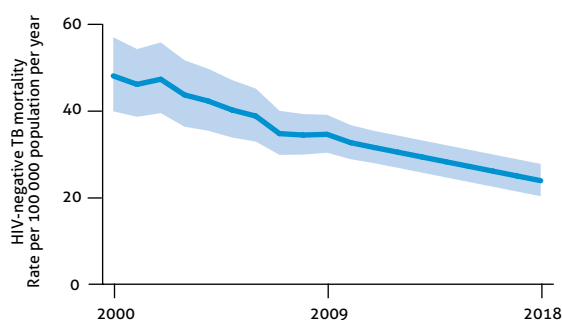
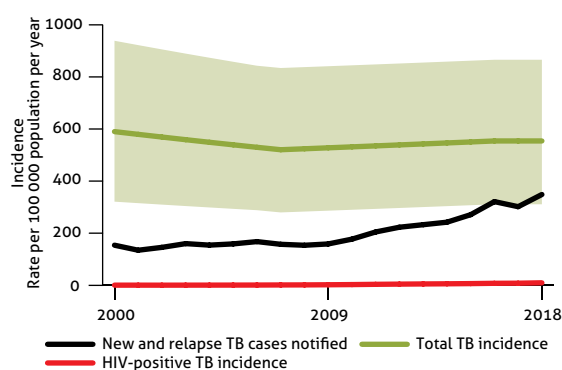
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

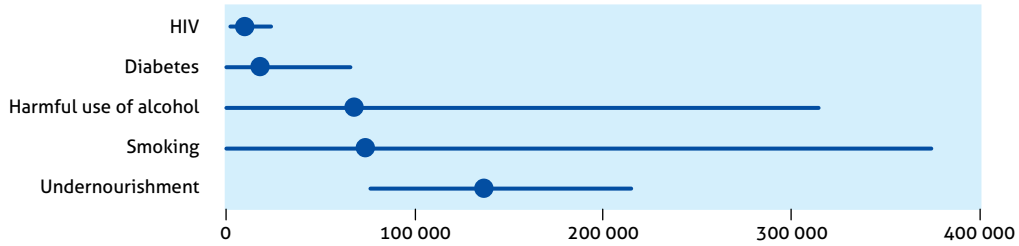
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

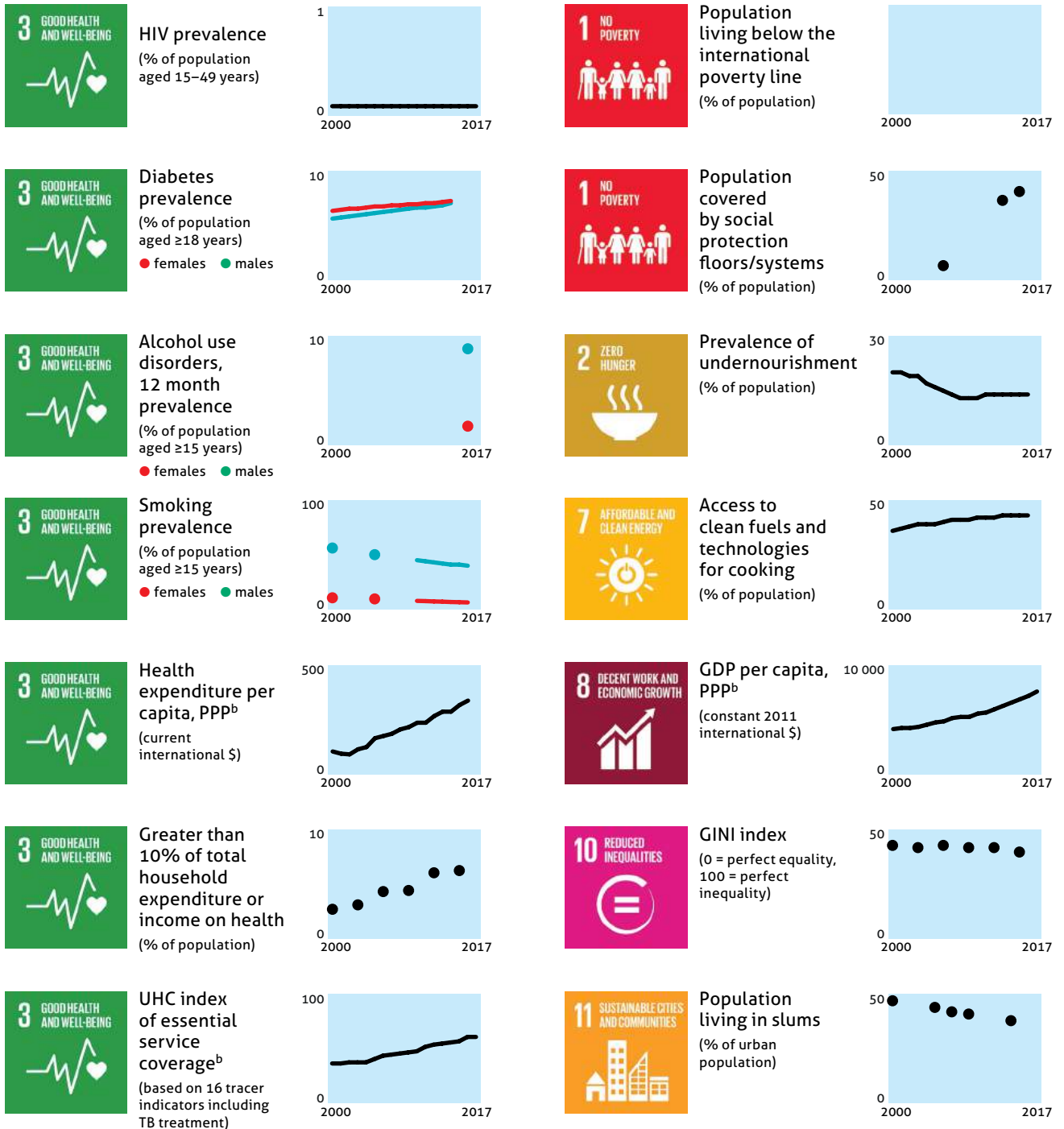
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Russian Federation

POPULATION 2018^a 146 MILLION

ESTIMATES OF TB BURDEN, ^b 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	79 (51–112)	54 (35–77)
HIV-positive TB incidence	16 (10–22)	11 (7–15)
MDR/RR-TB incidence ^c	41 (26–59)	28 (18–40)
HIV-negative TB mortality	9.2 (8.3–10)	6.3 (5.7–7)
HIV-positive TB mortality	1.3 (0.57–2.2)	0.86 (0.39–1.5)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	35% (34–35)
Previously treated cases	71% (70–71)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	78 258
– % tested with rapid diagnostics at time of diagnosis ^d	73%
– % with known HIV status	95%
– % pulmonary	92%
– % bacteriologically confirmed ^e	54%
– % children aged 0–14 years	3%
– % women	29%
– % men	68%
Total cases notified	106 913

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	99% (70–150)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	14% (9–20)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	14 797	20%
– on antiretroviral therapy	10 077	68%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^e	
– New cases	88%
– Previously treated cases	95%
Laboratory-confirmed cases ^f	MDR/RR-TB: 27 438, XDR-TB: 5 112
Patients started on treatment ^g	MDR/RR-TB: 27 014, XDR-TB: 4 140
MDR/RR-TB cases tested for resistance to second-line drugs	24 601

TREATMENT SUCCESS RATE AND COHORT SIZE

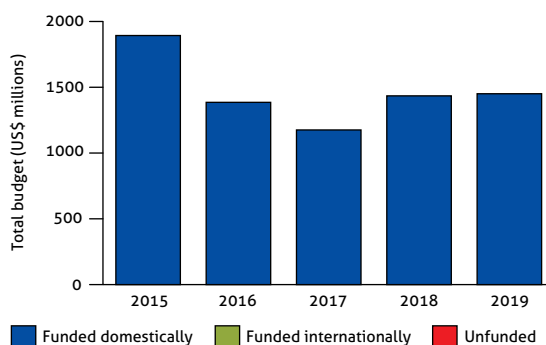
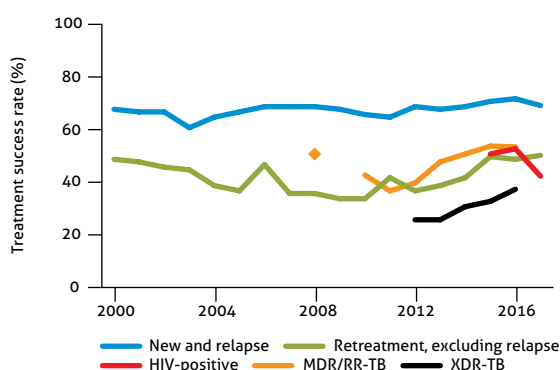
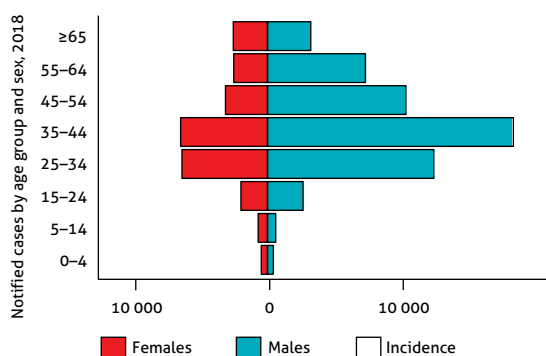
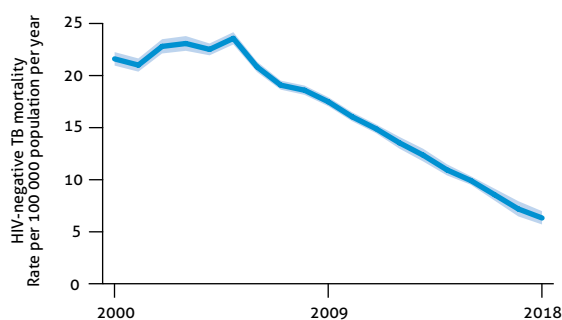
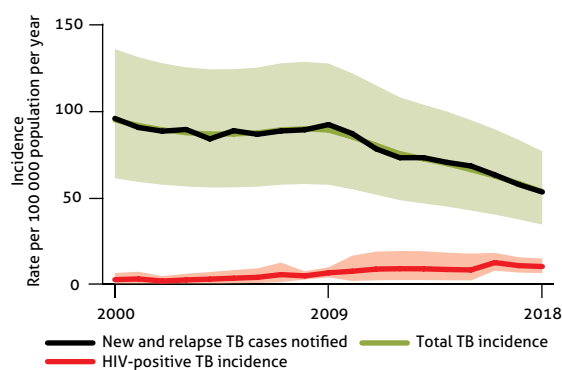
	SUCCESS	COHORT
New and relapse cases registered in 2017	69%	67 593
Previously treated cases, excluding relapse, registered in 2017	50%	9 339
HIV-positive TB cases registered in 2017	43%	9 655
MDR/RR-TB cases started on second-line treatment in 2016	54%	22 593
XDR-TB cases started on second-line treatment in 2016	38%	2 909

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	97%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	100%

TB FINANCING, 2019

National TB budget (US\$ millions)	1 451
Funding source:	100% domestic, 0% international, 0% unfunded



Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

^a UN Population Division estimates are lower than the population registered by the Federal State Statistics Service of the Russian Federation.

^b Ranges represent uncertainty intervals.

^c MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

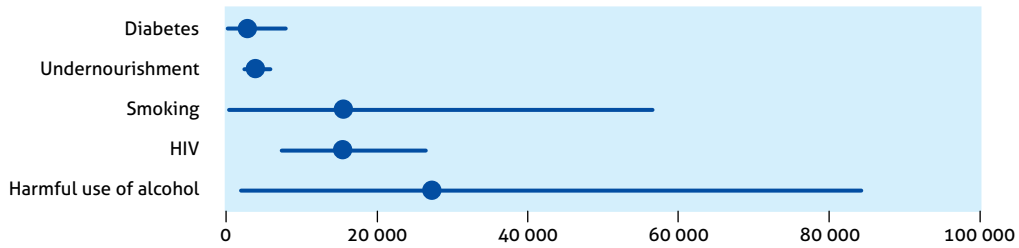
^d Includes coverage by all molecular genetic methods, including those developed in the Russian Federation

^e Calculated for pulmonary cases only.

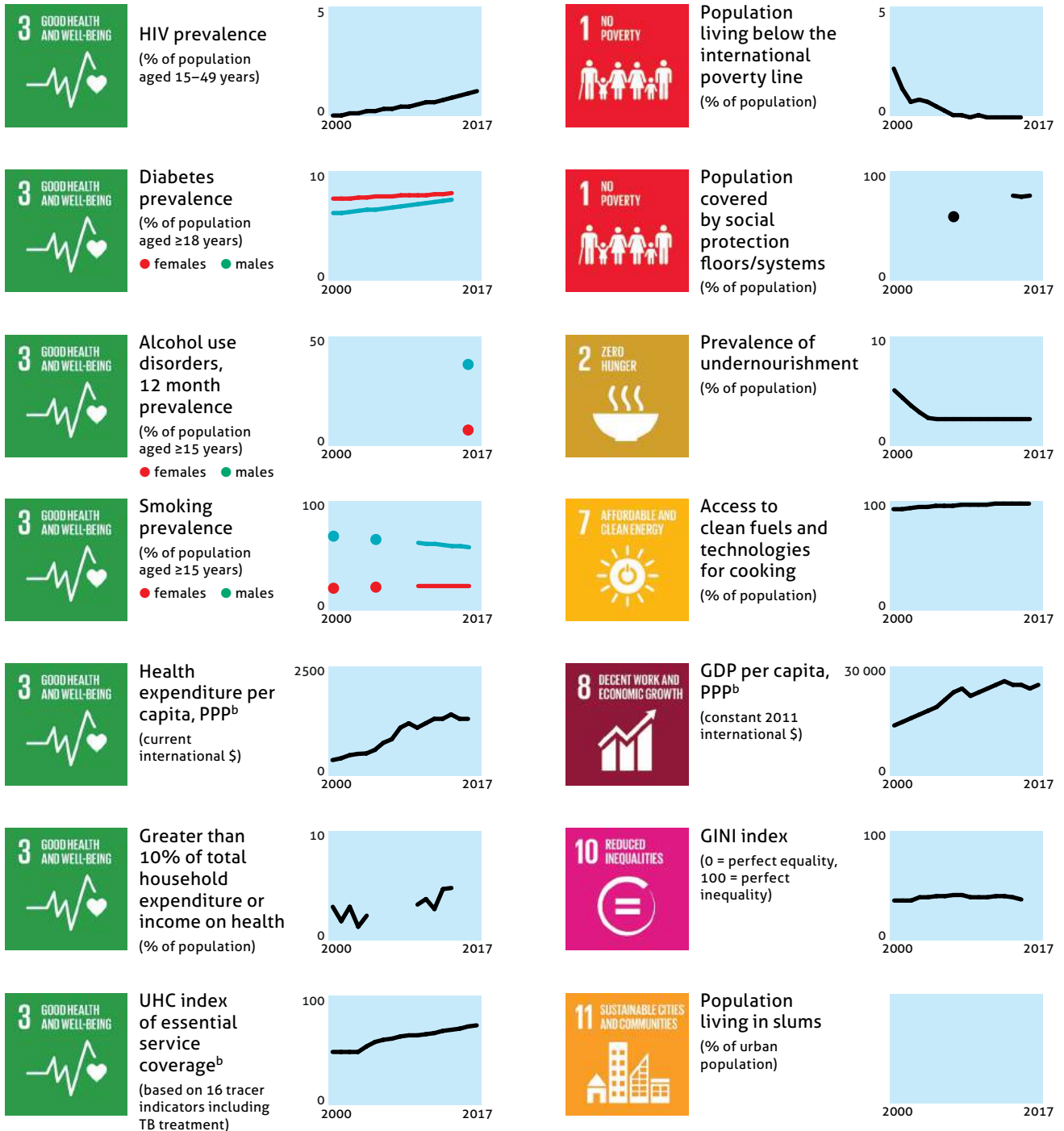
^f Includes cases with unknown previous TB treatment history.

^g Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

South Africa

POPULATION 2018 **58 MILLION**

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	301 (215–400)	520 (373–691)
HIV-positive TB incidence	177 (127–235)	306 (219–406)
MDR/RR-TB incidence ^b	11 (7.2–16)	19 (12–28)
HIV-negative TB mortality	21 (20–23)	37 (35–39)
HIV-positive TB mortality	42 (30–57)	73 (51–99)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	3.4% (2.5–4.3)
Previously treated cases	7.1% (4.8–9.5)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	227 999
– % tested with rapid diagnostics at time of diagnosis	71%
– % with known HIV status	90%
– % pulmonary	89%
– % bacteriologically confirmed ^c	70%
– % children aged 0–14 years	7%
– % women	37%
– % men	56%
Total cases notified	235 652

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	76% (57–110)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	22% (14–30)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	120 862	59%
– on antiretroviral therapy	104 625	87%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	92%
– Previously treated cases	94%
Laboratory-confirmed cases ^d	MDR/RR-TB: 13 199, XDR-TB: 553
Patients started on treatment ^{d,e}	MDR/RR-TB: 9 558, XDR-TB: 539
MDR/RR-TB cases tested for resistance to second-line drugs	7 469

TREATMENT SUCCESS RATE AND COHORT SIZE

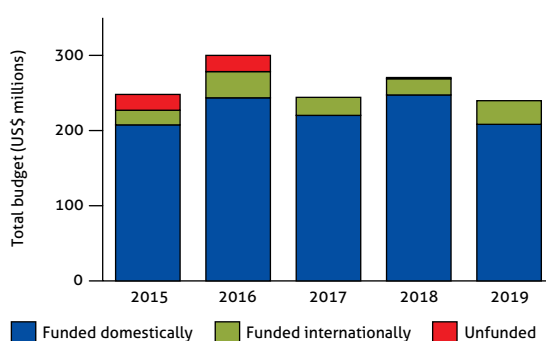
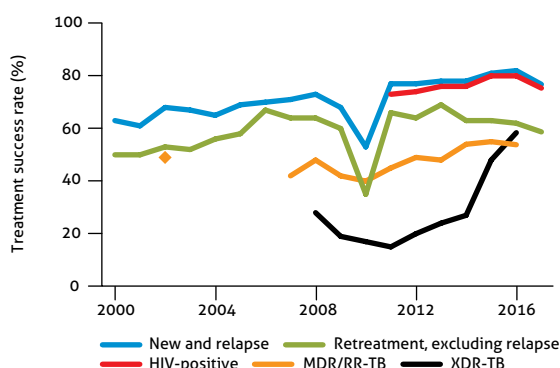
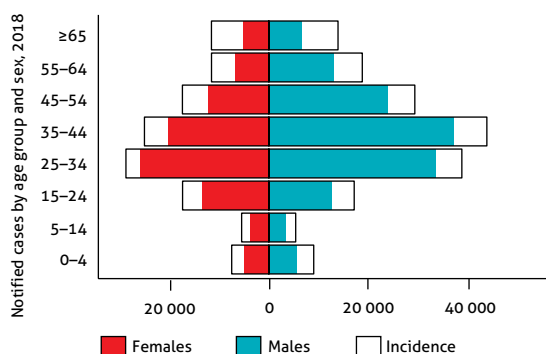
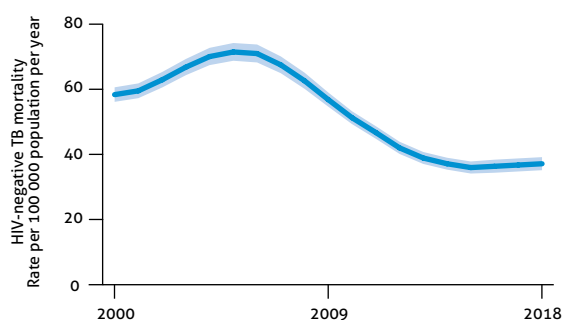
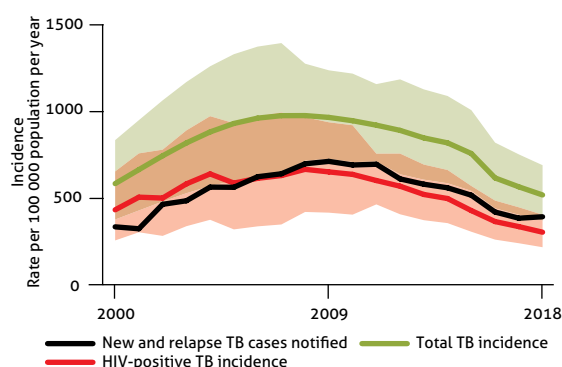
	SUCCESS	COHORT
New and relapse cases registered in 2017	77%	240 332
Previously treated cases, excluding relapse, registered in 2017	59%	6 508
HIV-positive TB cases registered in 2017	75%	134 672
MDR/RR-TB cases started on second-line treatment in 2016	54%	11 159
XDR-TB cases started on second-line treatment in 2016	58%	601

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	65%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	59% (54–65)

TB FINANCING, 2019

National TB budget (US\$ millions)	240
Funding source:	87% domestic, 13% international, 0% unfunded



Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries. Estimates of TB incidence and mortality for South Africa will be reviewed after final results from the national TB prevalence survey are available in 2020.

^a Ranges represent uncertainty intervals.

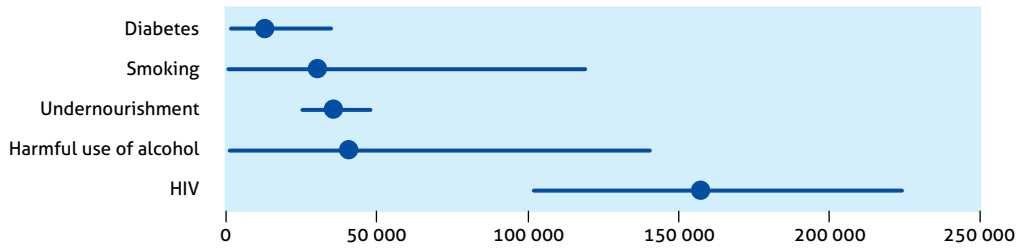
^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

^c Calculated for pulmonary cases only.

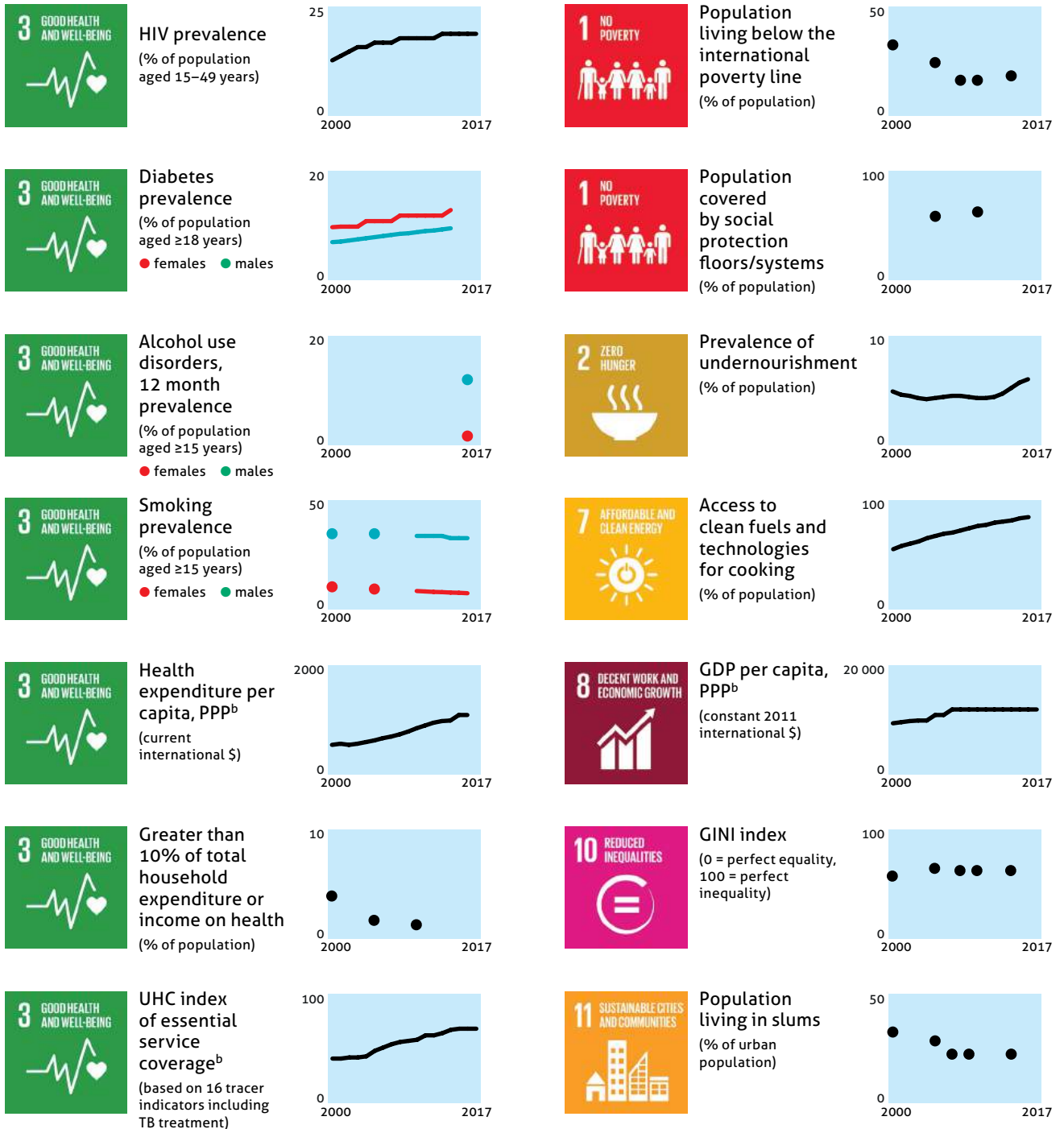
^d Includes cases with unknown previous TB treatment history.

^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Thailand

POPULATION 2018 **69 MILLION**

ESTIMATES OF TB BURDEN, ^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	106 (81–136)	153 (116–195)
HIV-positive TB incidence	11 (8.2–14)	15 (12–20)
MDR/RR-TB incidence ^b	4 (2.3–6.1)	5.7 (3.3–8.8)
HIV-negative TB mortality	9.2 (6.9–12)	13 (9.9–17)
HIV-positive TB mortality	2.3 (1.7–3)	3.3 (2.4–4.4)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	2.3% (1.3–3.4)
Previously treated cases	24% (18–31)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	85 029
– % tested with rapid diagnostics at time of diagnosis	19%
– % with known HIV status	79%
– % pulmonary	85%
– % bacteriologically confirmed ^c	59%
– % children aged 0–14 years	1%
– % women	31%
– % men	68%
Total cases notified	86 949

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	80% (63–110)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	11% (8–15)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	6 780	10%
– on antiretroviral therapy	5 391	80%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	30%
– Previously treated cases	62%
Laboratory-confirmed cases ^d	MDR/RR-TB: 1 312, XDR-TB: 29
Patients started on treatment ^{d,e}	MDR/RR-TB: 910, XDR-TB: 21
MDR/RR-TB cases tested for resistance to second-line drugs	665

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	84%	80 160
Previously treated cases, excluding relapse, registered in 2017	55%	1 848
HIV-positive TB cases registered in 2017	73%	7 130
MDR/RR-TB cases started on second-line treatment in 2016	61%	952
XDR-TB cases started on second-line treatment in 2016	75%	8

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	6.4% (5.9–7.1)

TB FINANCING, 2019

National TB budget (US\$ millions)	27
Funding source:	88% domestic, 12% international, 0% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

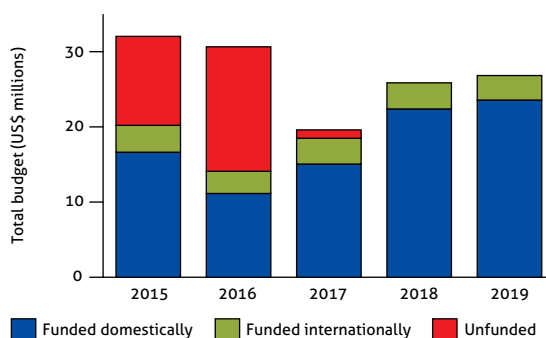
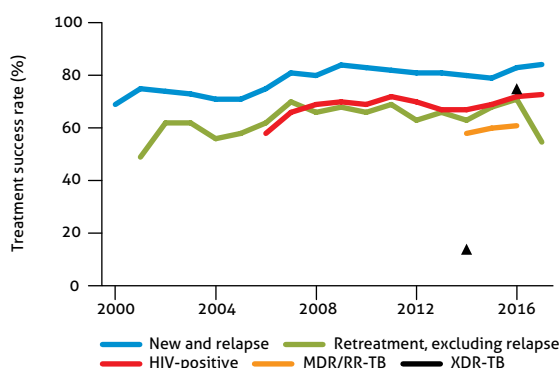
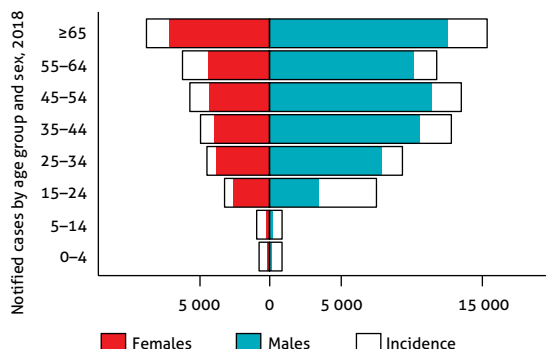
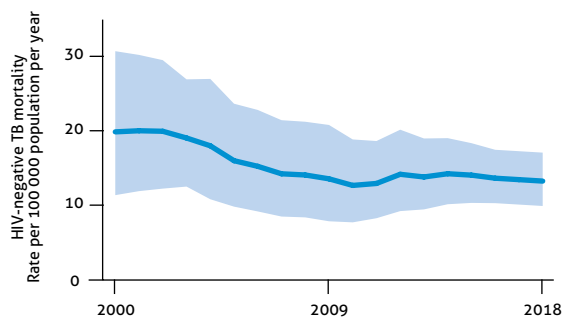
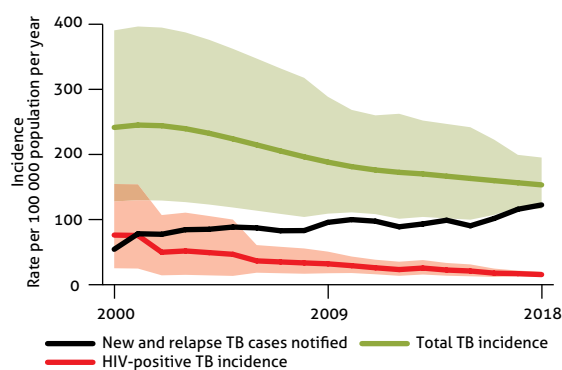
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

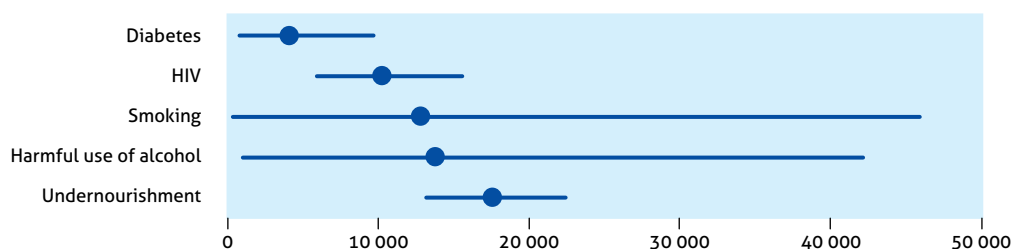
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

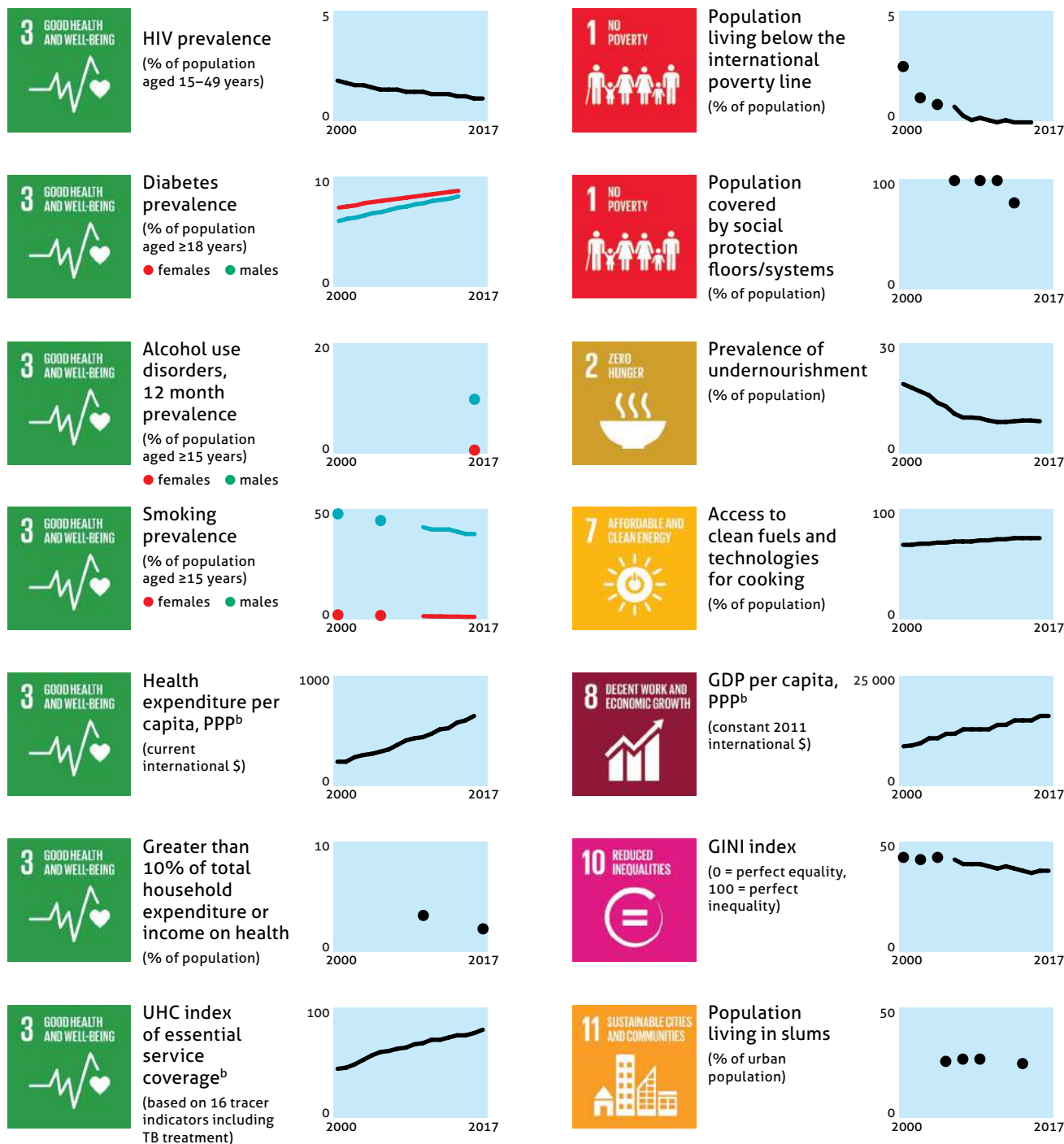
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

United Republic of Tanzania

POPULATION 2018 **56 MILLION**

ESTIMATES OF TB BURDEN, ^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	142 (67–245)	253 (119–435)
HIV-positive TB incidence	40 (19–69)	71 (34–122)
MDR/RR-TB incidence ^b	1.9 (0.67–3.7)	3.3 (1.2–6.6)
HIV-negative TB mortality	22 (10–40)	40 (18–70)
HIV-positive TB mortality	16 (7.8–27)	29 (14–49)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	0.97%
Previously treated cases	13% (11–15)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	74 692
– % tested with rapid diagnostics at time of diagnosis	18%
– % with known HIV status	99%
– % pulmonary	79%
– % bacteriologically confirmed ^o ^{oo}	48%
– % children aged 0–14 years	14%
– % women	33%
– % men	53%
Total cases notified	75 828

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	53% (30–110)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	30% (11–53)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	20 695	28%
– on antiretroviral therapy	20 337	98%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	70%
– Previously treated cases	81%
Laboratory-confirmed cases ^d	MDR/RR-TB: 449, XDR-TB: 0
Patients started on treatment ^{d,e}	MDR/RR-TB: 409, XDR-TB: 0
MDR/RR-TB cases tested for resistance to second-line drugs	62

TREATMENT SUCCESS RATE AND COHORT SIZE

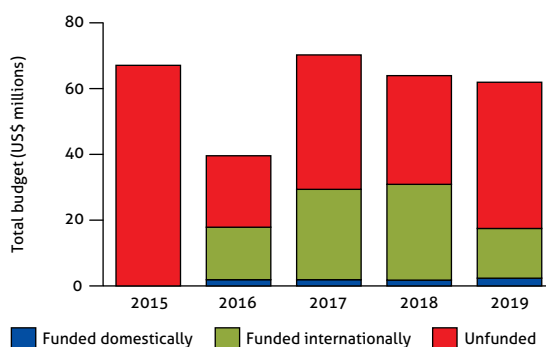
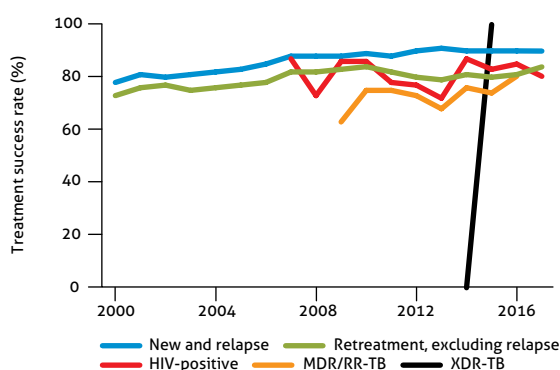
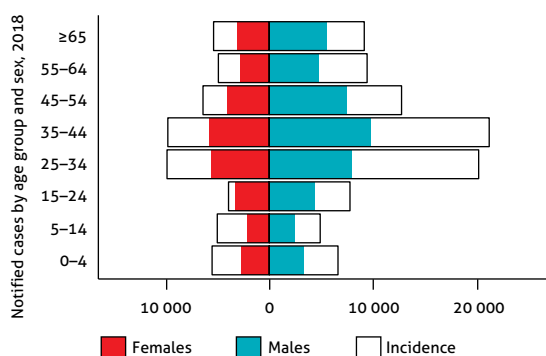
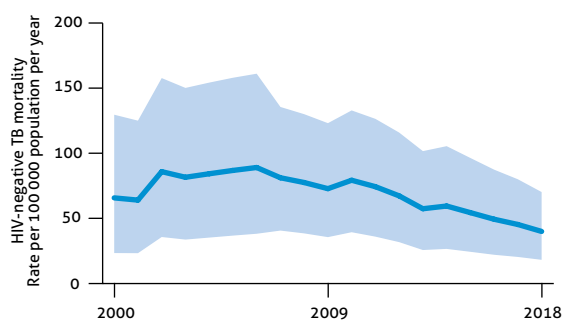
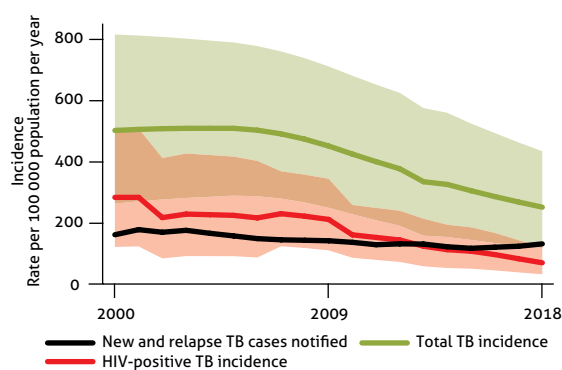
	SUCCESS	COHORT
New and relapse cases registered in 2017	90%	68 278
Previously treated cases, excluding relapse, registered in 2017	84%	1 250
HIV-positive TB cases registered in 2017	80%	21 349
MDR/RR-TB cases started on second-line treatment in 2016	80%	158
XDR-TB cases started on second-line treatment in 2016		0

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	22% (20–24)

TB FINANCING, 2019

National TB budget (US\$ millions)	62
Funding source:	4% domestic, 24% international, 72% unfunded



Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

^a Ranges represent uncertainty intervals.

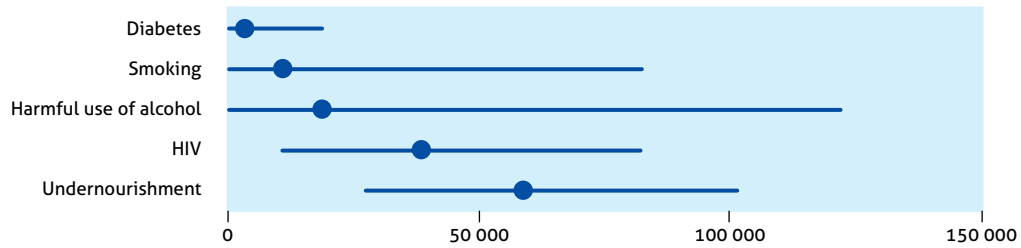
^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

^c Calculated for pulmonary cases only.

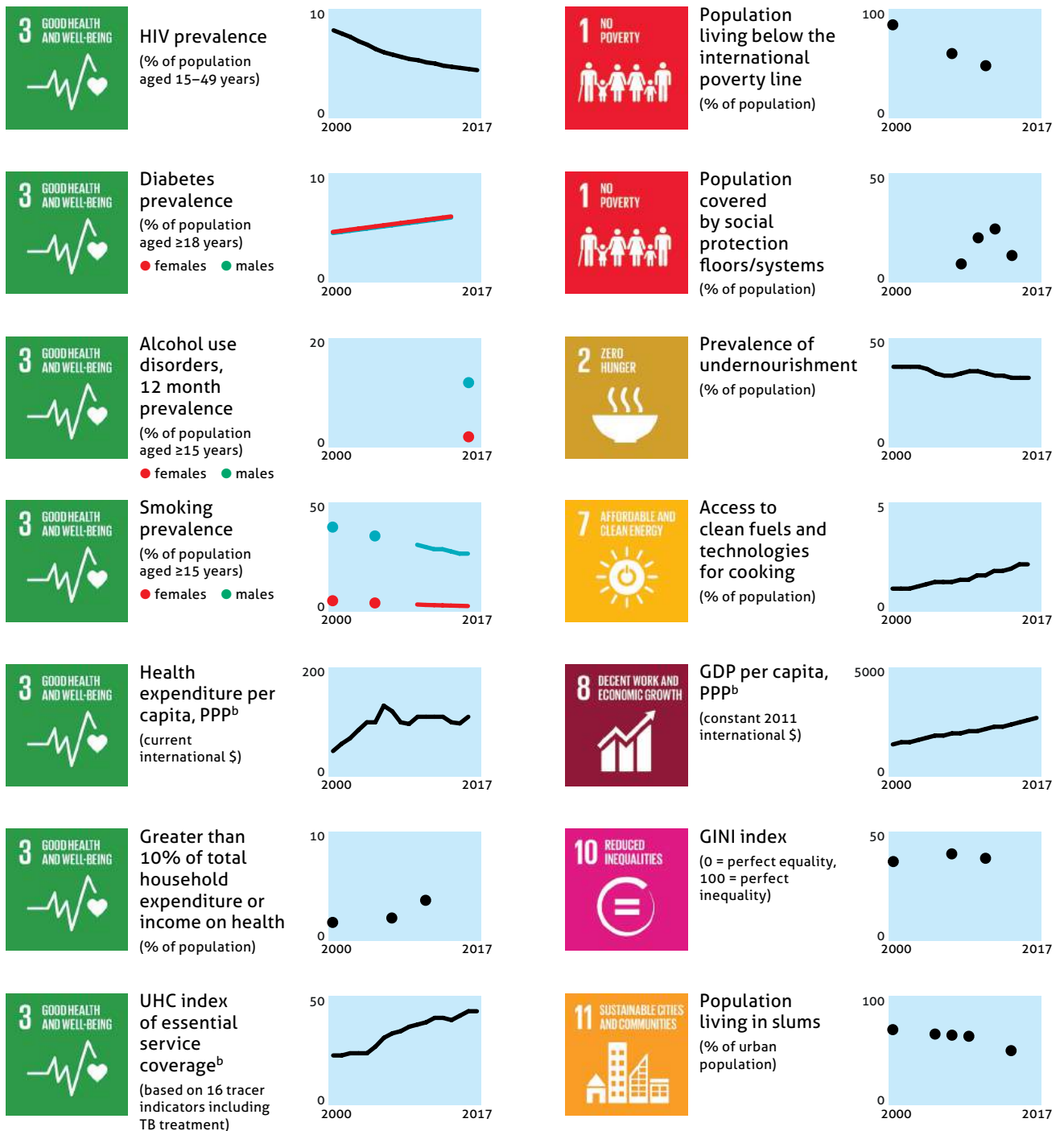
^d Includes cases with unknown previous TB treatment history.

^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Viet Nam

POPULATION 2018 **96 MILLION**

ESTIMATES OF TB BURDEN, ^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	174 (111–251)	182 (116–263)
HIV-positive TB incidence	6 (3.8–8.6)	6.2 (4–9)
MDR/RR-TB incidence ^b	8.6 (5.4–13)	9.1 (5.7–13)
HIV-negative TB mortality	11 (6.7–15)	11 (7–16)
HIV-positive TB mortality	2.2 (1.4–3.2)	2.3 (1.5–3.4)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	3.6% (3.4–3.8)
Previously treated cases	17% (17–18)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	99 658
– % tested with rapid diagnostics at time of diagnosis	20%
– % with known HIV status	85%
– % pulmonary	80%
– % bacteriologically confirmed ^c	70%
– % children aged 0–14 years	2%
– % women	27%
– % men	71%
Total cases notified	102 171

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	57% (40–90)
TB patients facing catastrophic total costs, 2016	63% (58–67)
TB case fatality ratio (estimated mortality/estimated incidence), 2018	8% (4–12)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	2 902	3%
– on antiretroviral therapy	2 705	93%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	82%
– Previously treated cases	100%
Laboratory-confirmed cases ^d	MDR/RR-TB: 3 126, XDR-TB: 61
Patients started on treatment ^{d,e}	MDR/RR-TB: 3 110, XDR-TB: 198
MDR/RR-TB cases tested for resistance to second-line drugs	1 922

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	92%	102 193
Previously treated cases, excluding relapse, registered in 2017	87%	2 983
HIV-positive TB cases registered in 2017	79%	3 002
MDR/RR-TB cases started on second-line treatment in 2016	68%	2 450
XDR-TB cases started on second-line treatment in 2016	68%	28

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	39%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	22% (21–25)

TB FINANCING, 2019

National TB budget (US\$ millions)	72
Funding source:	14% domestic, 24% international, 62% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

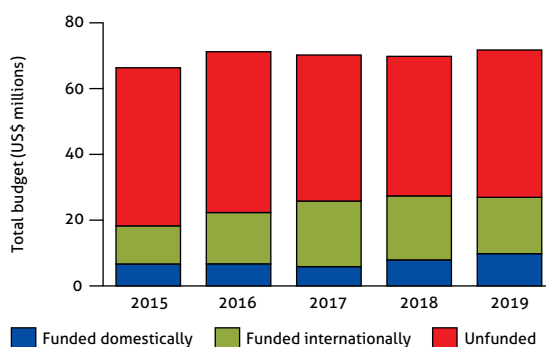
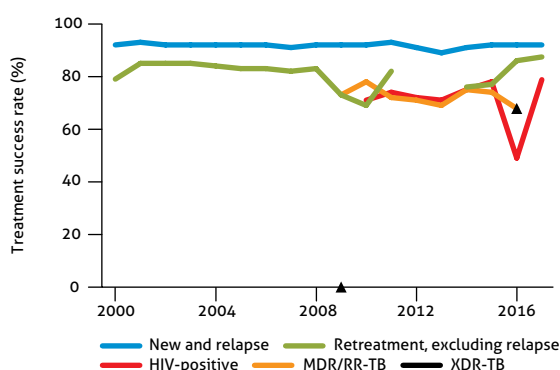
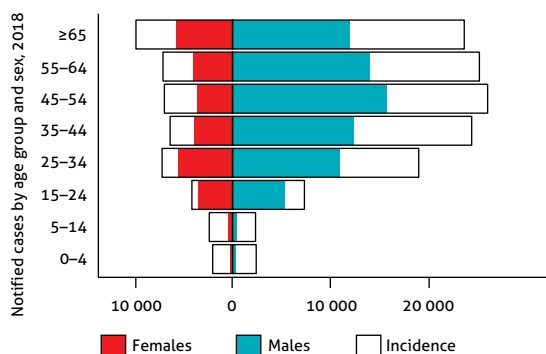
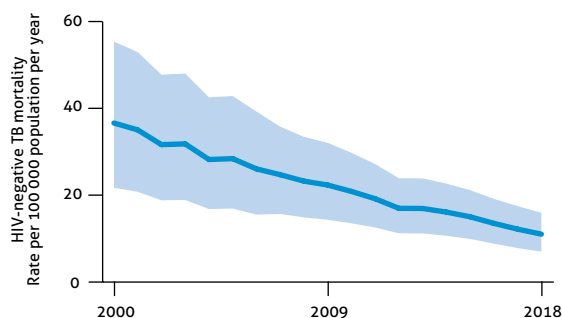
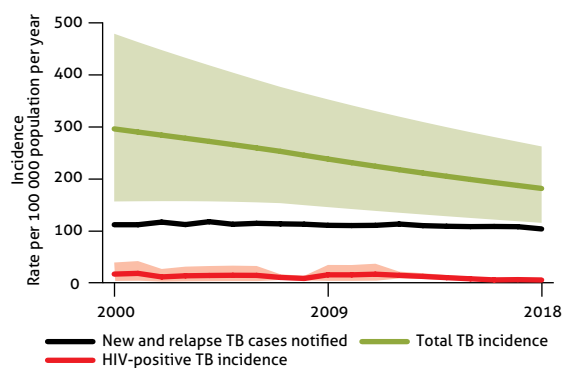
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

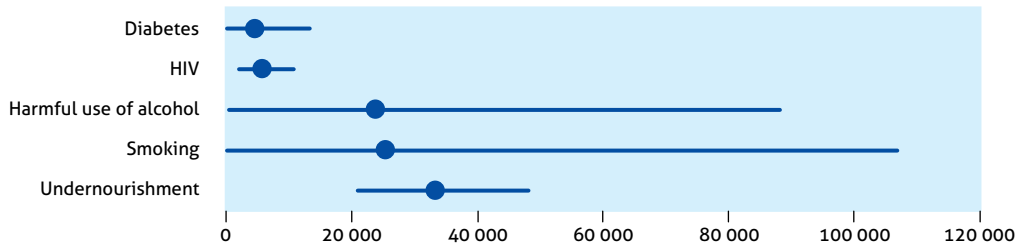
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

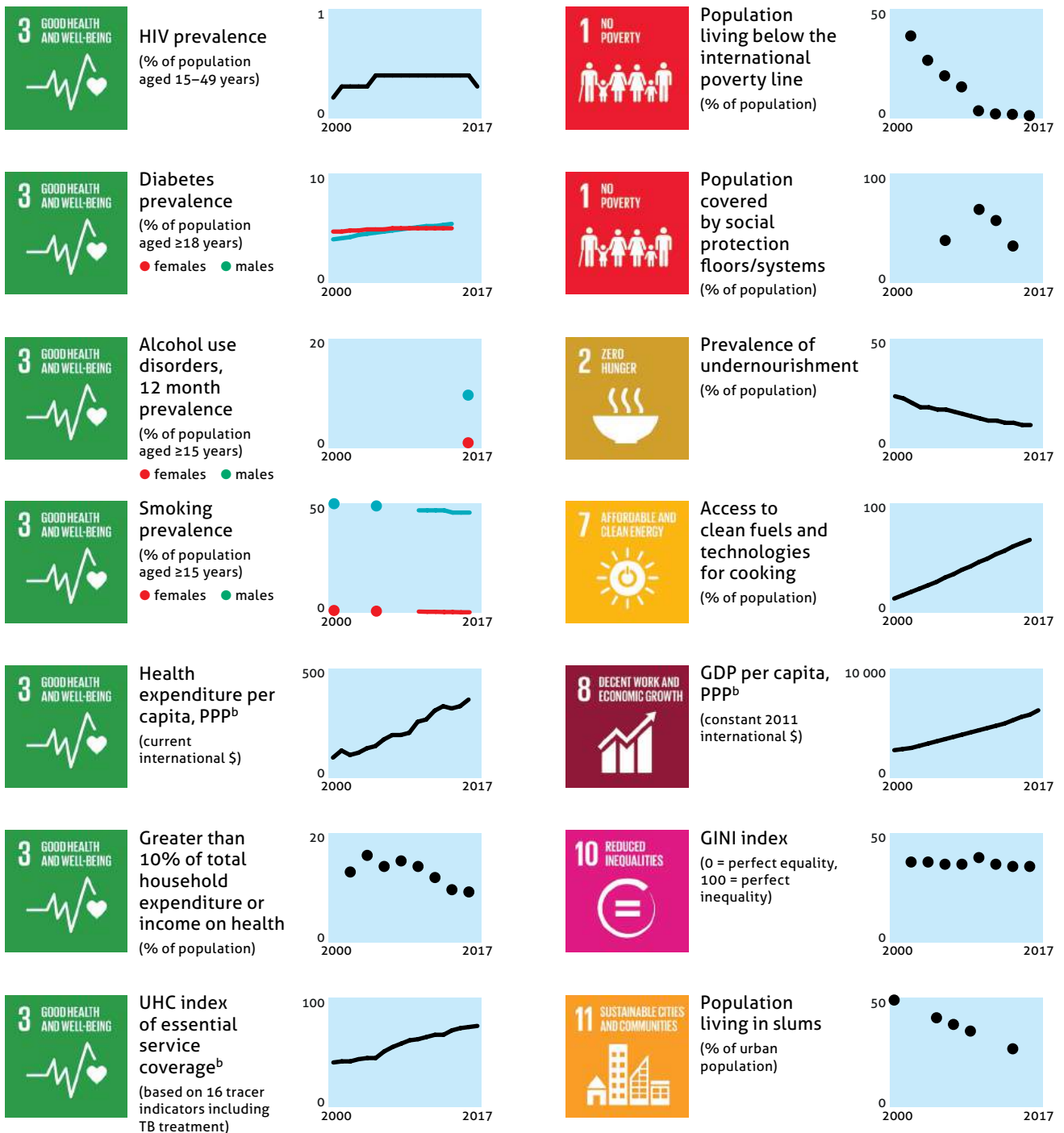
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Cambodia

POPULATION 2018 **16 MILLION**

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	49 (27–77)	302 (169–473)
HIV-positive TB incidence	1.1 (0.59–1.7)	6.5 (3.6–10)
MDR/RR-TB incidence ^b	1 (0.46–1.9)	6.4 (2.8–11)
HIV-negative TB mortality	3 (1.9–4.3)	18 (12–26)
HIV-positive TB mortality	0.38 (0.21–0.6)	2.3 (1.3–3.7)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	1.8% (1.2–2.8)
Previously treated cases	8.2% (4–16)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	28 620
– % tested with rapid diagnostics at time of diagnosis	
– % with known HIV status	94%
– % pulmonary	65%
– % bacteriologically confirmed ^c	53%
– % children aged 0–14 years	19%
– % women	36%
– % men	45%
Total cases notified	28 757

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	58% (37–100)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	7% (4–12)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	580	2%
– on antiretroviral therapy	580	100%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	
– Previously treated cases	
Laboratory-confirmed cases ^d	MDR/RR-TB: 128, XDR-TB: 0
Patients started on treatment ^{d,e}	MDR/RR-TB: 128, XDR-TB: 0
MDR/RR-TB cases tested for resistance to second-line drugs	125

TREATMENT SUCCESS RATE AND COHORT SIZE

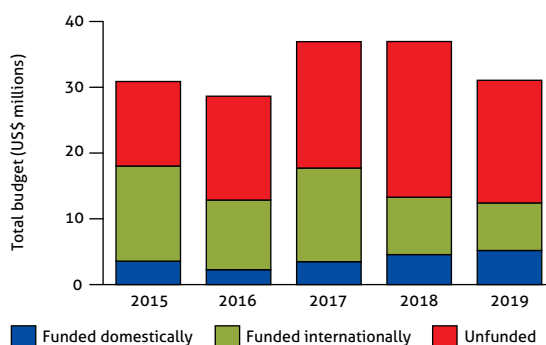
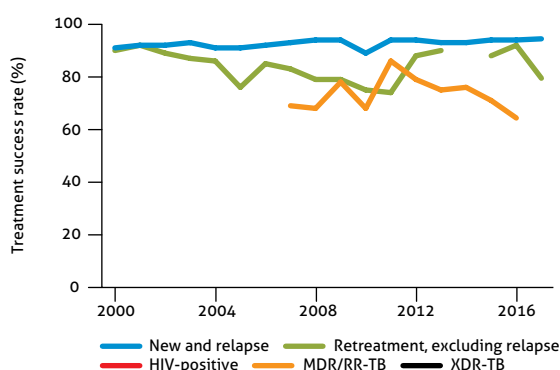
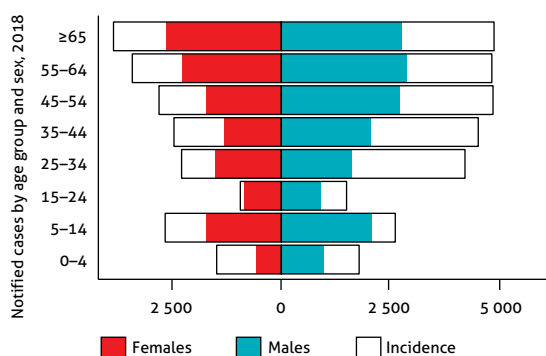
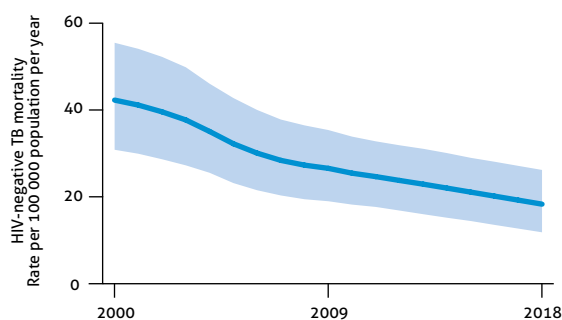
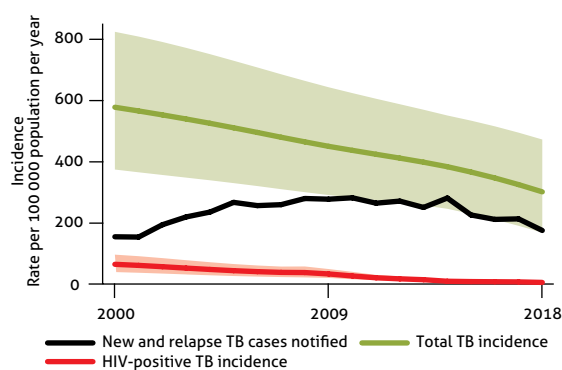
	SUCCESS	COHORT
New and relapse cases registered in 2017	94%	34 238
Previously treated cases, excluding relapse, registered in 2017	79%	229
HIV-positive TB cases registered in 2017		
MDR/RR-TB cases started on second-line treatment in 2016	64%	101
XDR-TB cases started on second-line treatment in 2016		

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	

TB FINANCING, 2019

National TB budget (US\$ millions)	31
Funding source:	17% domestic, 23% international, 60% unfunded



Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

^a Ranges represent uncertainty intervals.

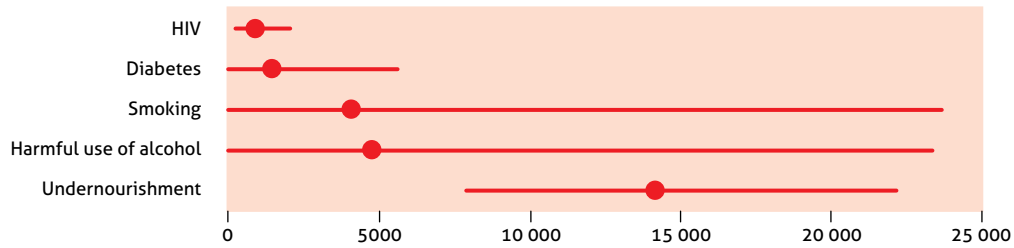
^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

^c Calculated for pulmonary cases only.

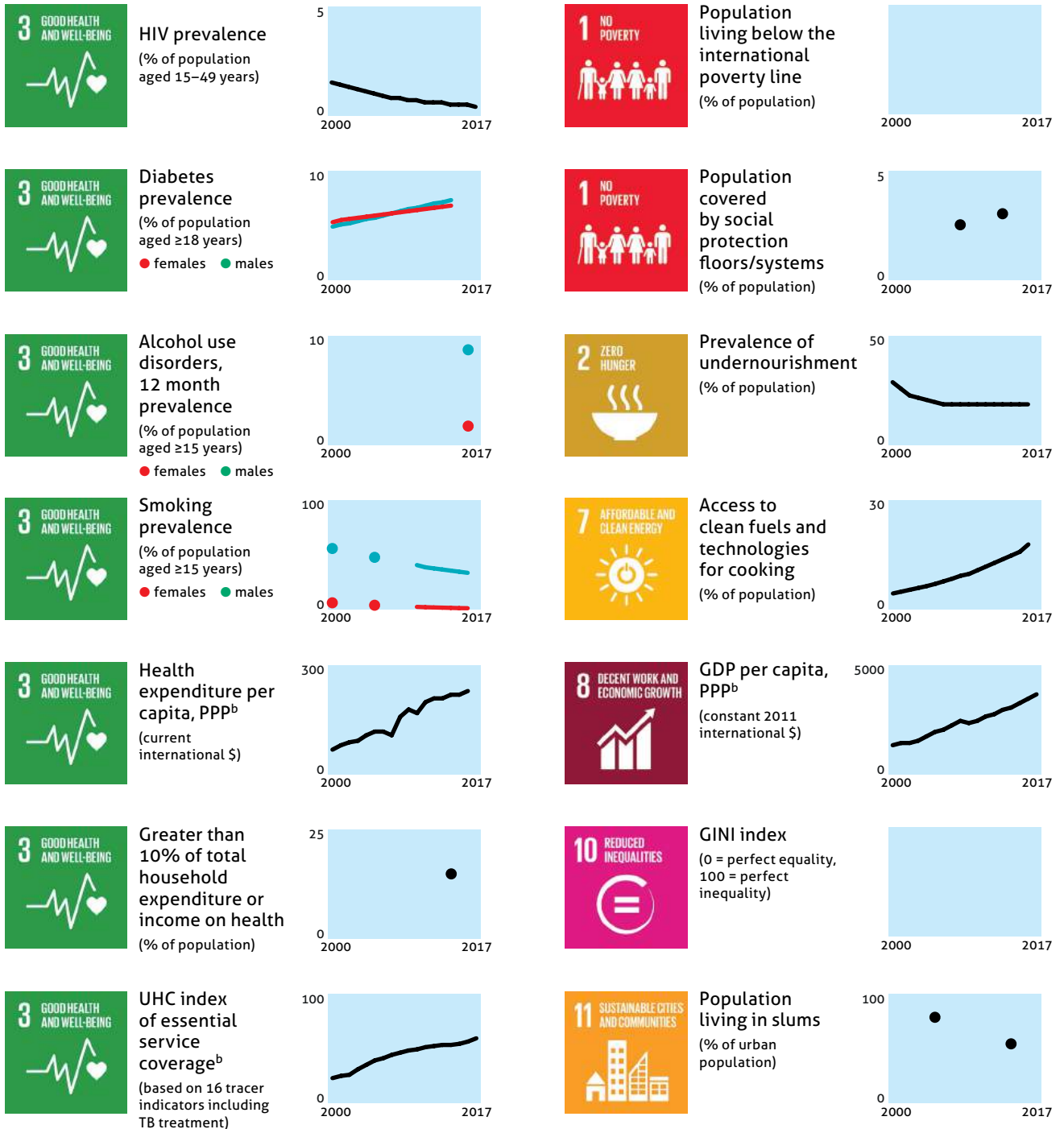
^d Includes cases with unknown previous TB treatment history.

^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Central African Republic

POPULATION 2018 **4.7 MILLION**

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	25 (16–36)	540 (349–771)
HIV-positive TB incidence	6.6 (4.2–9.4)	141 (91–201)
MDR/RR-TB incidence ^b	0.18 (0.1–0.27)	3.8 (2.2–5.9)
HIV-negative TB mortality	4.8 (2.8–7.3)	103 (60–157)
HIV-positive TB mortality	3.1 (2–4.5)	67 (42–97)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	0.4% (0–2.2)
Previously treated cases	15% (11–19)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	10 881
– % tested with rapid diagnostics at time of diagnosis	<1%
– % with known HIV status	79%
– % pulmonary	79%
– % bacteriologically confirmed ^c	64%
– % children aged 0–14 years	17%
– % women	35%
– % men	48%
Total cases notified	11 032

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	43% (30–67)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	33% (18–50)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	2 274	26%
– on antiretroviral therapy	1 923	85%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	<1%
– Previously treated cases	55%
Laboratory-confirmed cases ^d	MDR/RR-TB: 58, XDR-TB: 0
Patients started on treatment ^{d,e}	MDR/RR-TB: 60, XDR-TB: 0
MDR/RR-TB cases tested for resistance to second-line drugs	0

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	78%	9 302
Previously treated cases, excluding relapse, registered in 2017	73%	147
HIV-positive TB cases registered in 2017	74%	2 137
MDR/RR-TB cases started on second-line treatment in 2016	59%	41
XDR-TB cases started on second-line treatment in 2016	0	0

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	100%

TB FINANCING, 2019

National TB budget (US\$ millions)	2.9
Funding source:	27% domestic, 41% international, 32% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

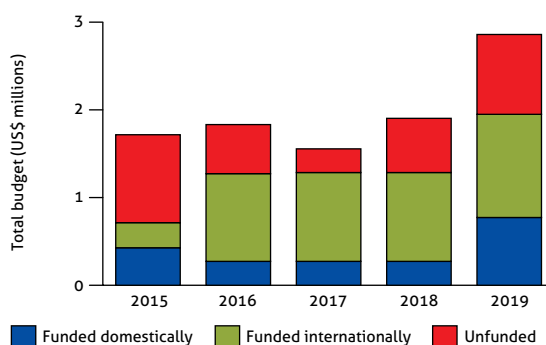
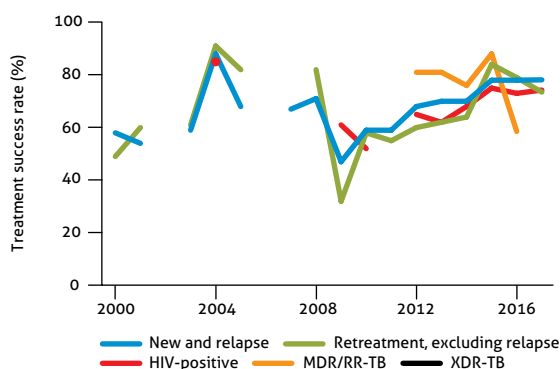
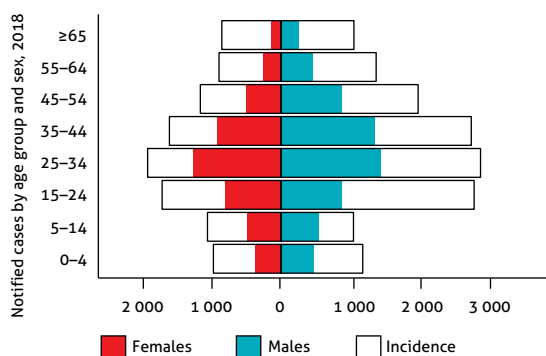
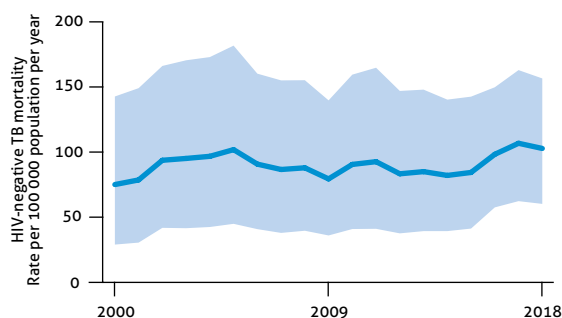
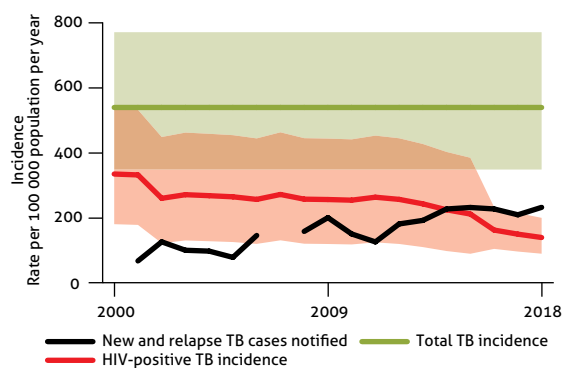
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

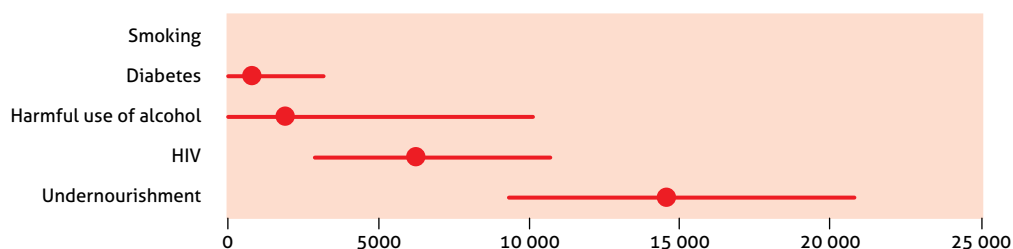
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

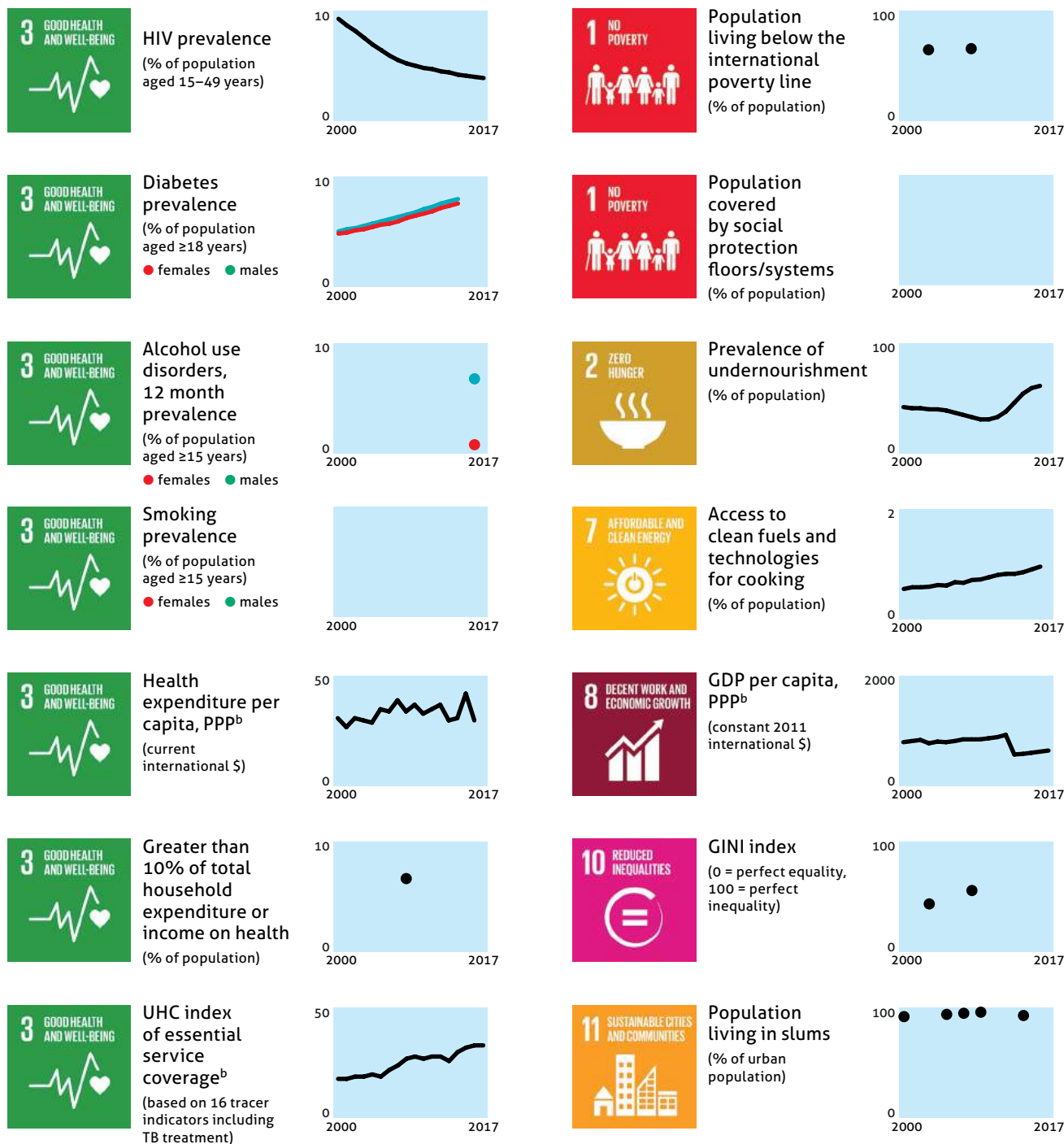
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Congo

POPULATION 2018 **5.2 MILLION**

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	20 (12–28)	375 (238–543)
HIV-positive TB incidence	5.7 (2.9–9.4)	108 (55–179)
MDR/RR-TB incidence ^b	0.56 (0.23–1)	11 (4.5–20)
HIV-negative TB mortality	3 (1.7–4.6)	57 (32–89)
HIV-positive TB mortality	2.3 (1.2–3.8)	43 (22–72)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	2.4% (1.1–4.2)
Previously treated cases	12% (8.7–16)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	10 706
– % tested with rapid diagnostics at time of diagnosis	9%
– % with known HIV status	19%
– % pulmonary	77%
– % bacteriologically confirmed ^c	49%
– % children aged 0–14 years	8%
– % women	40%
– % men	52%
Total cases notified	10 981

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	54% (38–86)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	28% (14–44)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	553	28%
– on antiretroviral therapy	273	49%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	15%
– Previously treated cases	100%
Laboratory-confirmed cases ^d	MDR/RR-TB: 61, XDR-TB: 0
Patients started on treatment ^{d,e}	MDR/RR-TB: 47, XDR-TB: 0
MDR/RR-TB cases tested for resistance to second-line drugs	0

TREATMENT SUCCESS RATE AND COHORT SIZE

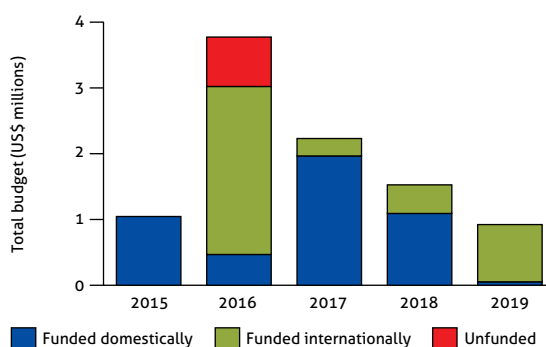
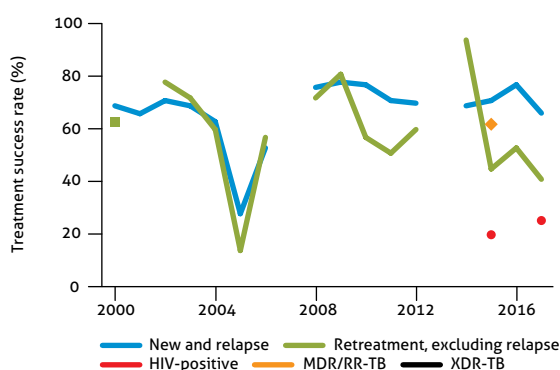
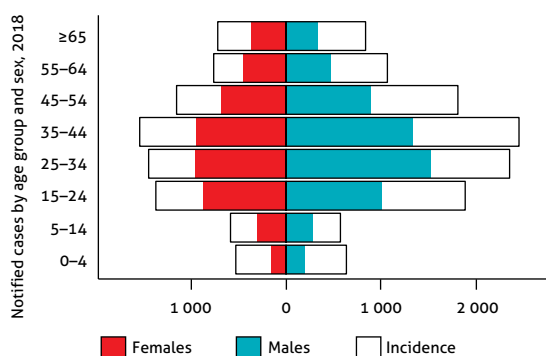
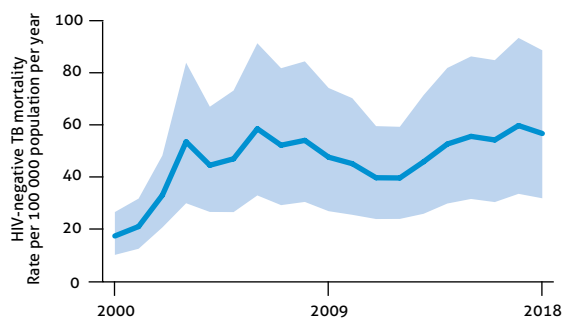
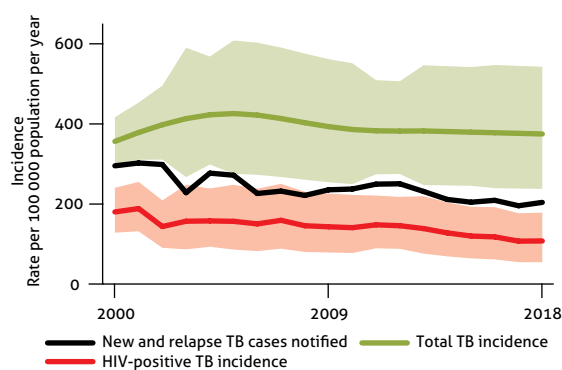
	SUCCESS	COHORT
New and relapse cases registered in 2017	66%	10 005
Previously treated cases, excluding relapse, registered in 2017	41%	258
HIV-positive TB cases registered in 2017	25%	374
MDR/RR-TB cases started on second-line treatment in 2016	0	
XDR-TB cases started on second-line treatment in 2016	0	

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	

TB FINANCING, 2019

National TB budget (US\$ millions)	<1
Funding source:	6% domestic, 94% international, 0% unfunded



Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

^a Ranges represent uncertainty intervals.

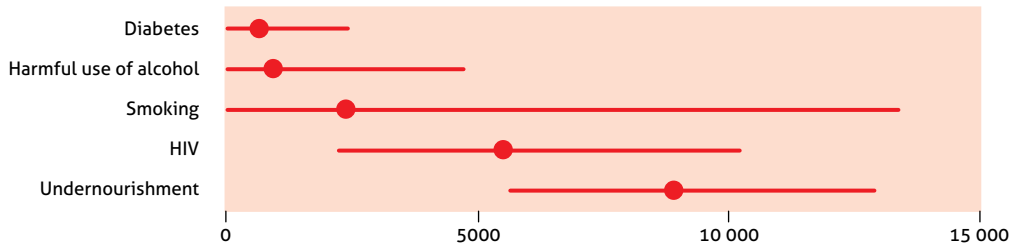
^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

^c Calculated for pulmonary cases only.

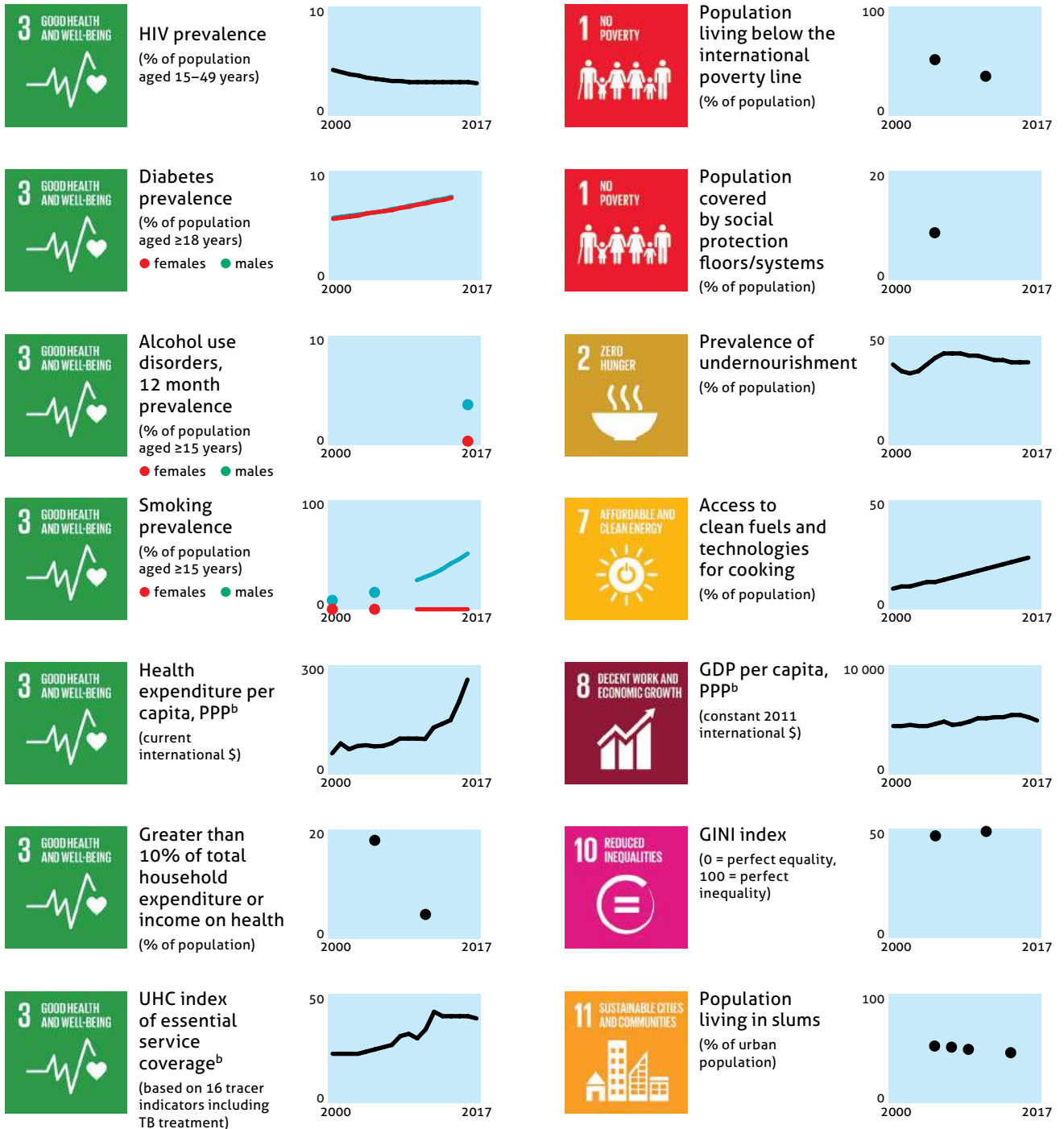
^d Includes cases with unknown previous TB treatment history.

^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Lesotho

POPULATION 2018 **2.1 MILLION**

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	13 (8.3–18)	611 (395–872)
HIV-positive TB incidence	8.4 (5.4–12)	398 (257–568)
MDR/RR-TB incidence ^b	0.8 (0.47–1.2)	38 (22–58)
HIV-negative TB mortality	0.95 (0.56–1.4)	45 (27–68)
HIV-positive TB mortality	3.3 (2.1–4.7)	155 (98–223)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	4.8% (3.7–6)
Previously treated cases	14% (9.5–18)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	7 027
– % tested with rapid diagnostics at time of diagnosis	
– % with known HIV status	97%
– % pulmonary	90%
– % bacteriologically confirmed ^c	67%
– % children aged 0–14 years	4%
– % women	34%
– % men	62%
Total cases notified	7 128

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	55% (38–84)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	34% (18–52)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	4 435	65%
– on antiretroviral therapy	4 077	92%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	70%
– Previously treated cases	65%
Laboratory-confirmed cases ^d	MDR/RR-TB: 243, XDR-TB: 5
Patients started on treatment ^{d,e}	MDR/RR-TB: 186, XDR-TB: 5
MDR/RR-TB cases tested for resistance to second-line drugs	191

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	76%	7 305
Previously treated cases, excluding relapse, registered in 2017	73%	121
HIV-positive TB cases registered in 2017	75%	4 949
MDR/RR-TB cases started on second-line treatment in 2016	77%	222
XDR-TB cases started on second-line treatment in 2016		0

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	33%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	51% (47–56)

TB FINANCING, 2019

National TB budget (US\$ millions)	12
Funding source:	5% domestic, 39% international, 57% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries. Estimates are rounded and totals are computed prior to rounding. Estimates of TB incidence and mortality for Lesotho will be reviewed after final results from the national TB prevalence survey are available in 2020.

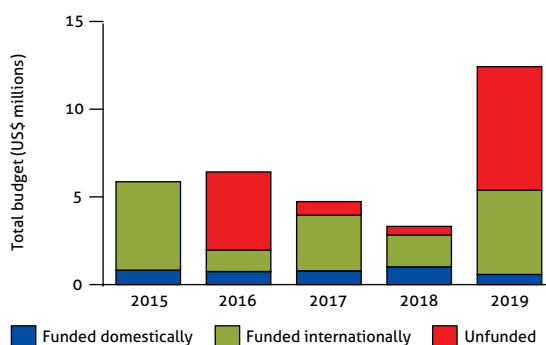
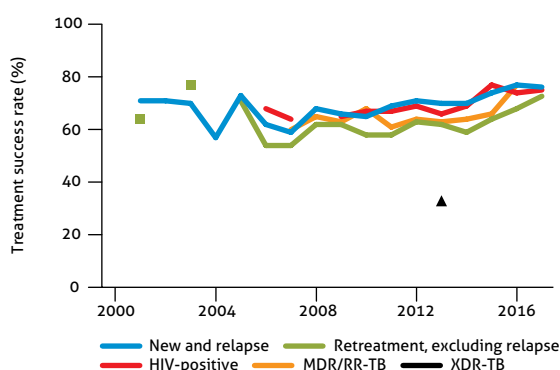
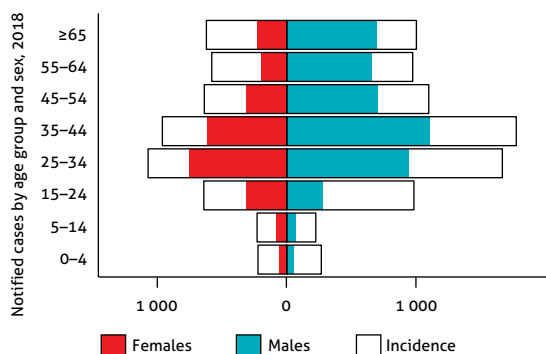
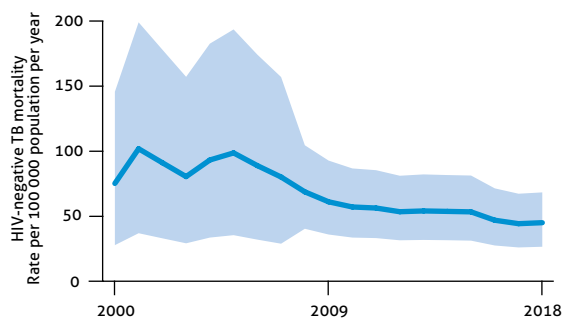
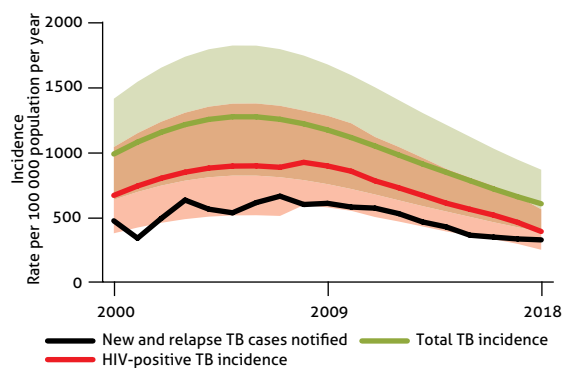
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

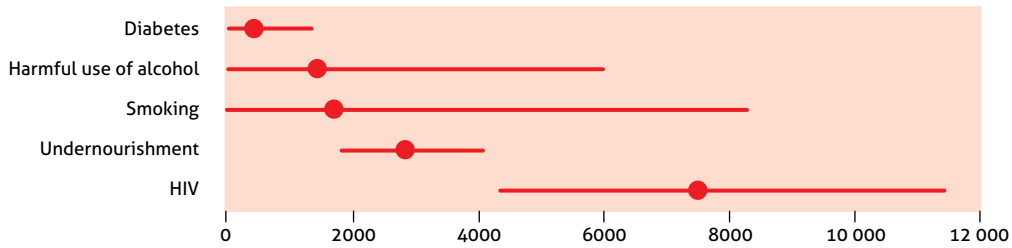
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

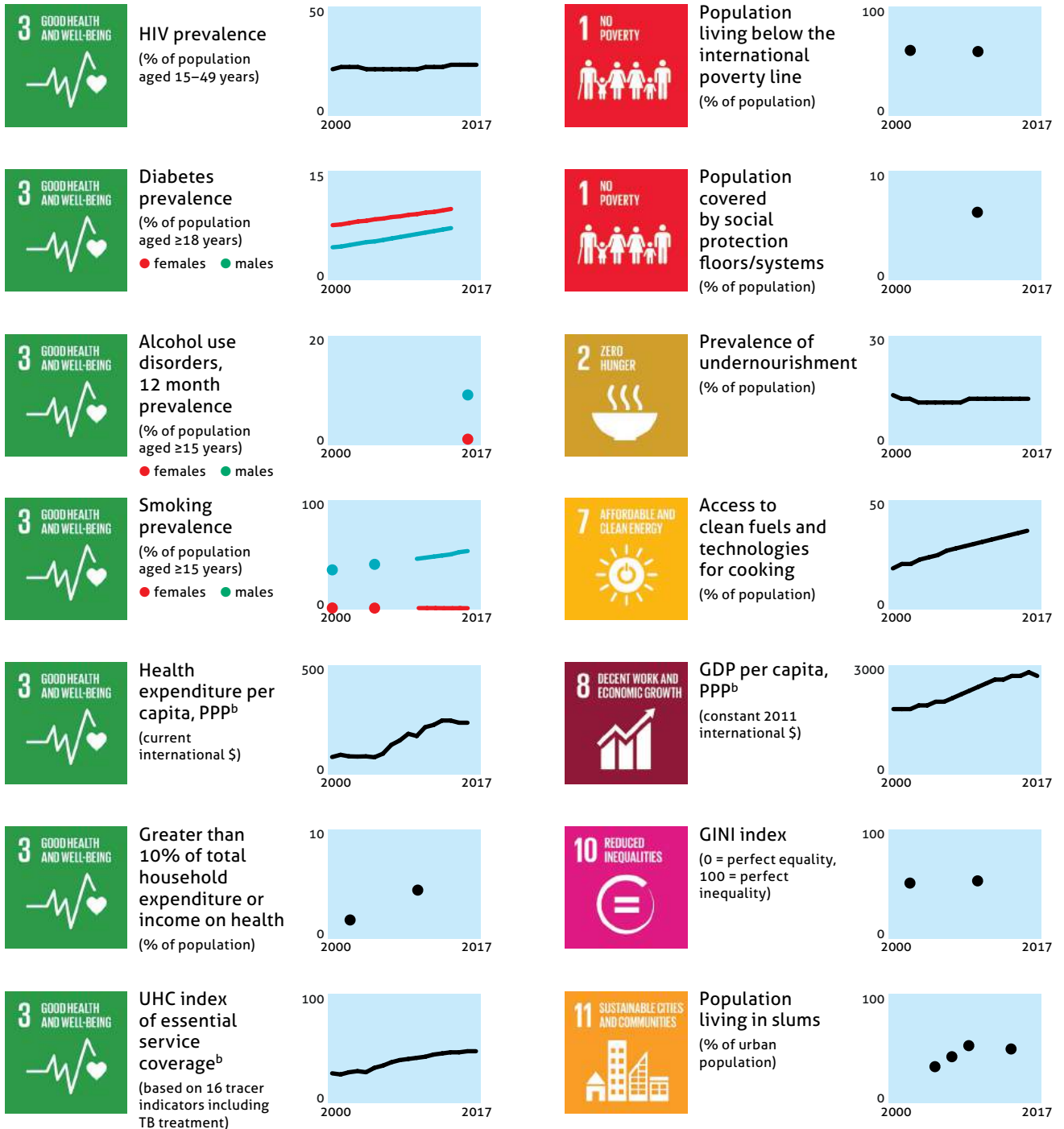
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Liberia

POPULATION 2018 **4.8 MILLION**

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	15 (9.6–21)	308 (199–440)
HIV-positive TB incidence	2.6 (1.7–3.7)	53 (34–76)
MDR/RR-TB incidence ^b	0.39 (0.15–0.72)	8 (3.2–15)
HIV-negative TB mortality	2.7 (1.6–4.1)	56 (33–85)
HIV-positive TB mortality	1 (0.67–1.5)	22 (14–31)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	2.4% (1.1–4.2)
Previously treated cases	15% (11–19)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	7 808
– % tested with rapid diagnostics at time of diagnosis	9%
– % with known HIV status	77%
– % pulmonary	66%
– % bacteriologically confirmed ^c	60%
– % children aged 0–14 years	15%
– % women	37%
– % men	48%
Total cases notified	7 824

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	53% (37–81)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	26% (14–41)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	1 035	17%
– on antiretroviral therapy	686	66%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	23%
– Previously treated cases	52%
Laboratory-confirmed cases ^d	MDR/RR-TB: 73, XDR-TB: 0
Patients started on treatment ^{d,e}	MDR/RR-TB: 53, XDR-TB: 0
MDR/RR-TB cases tested for resistance to second-line drugs	

TREATMENT SUCCESS RATE AND COHORT SIZE

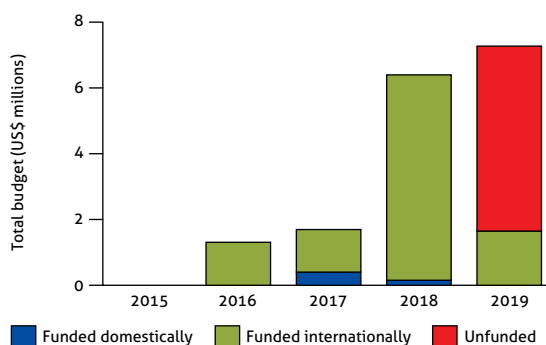
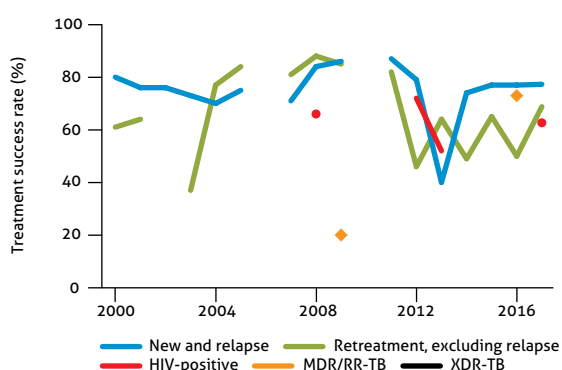
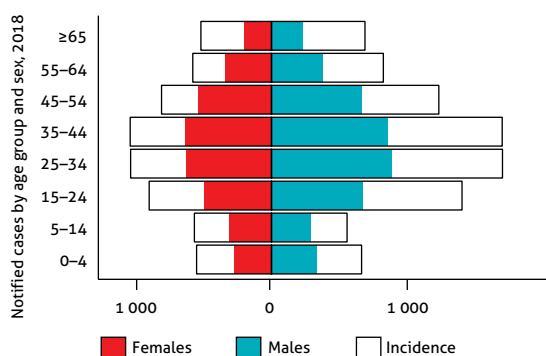
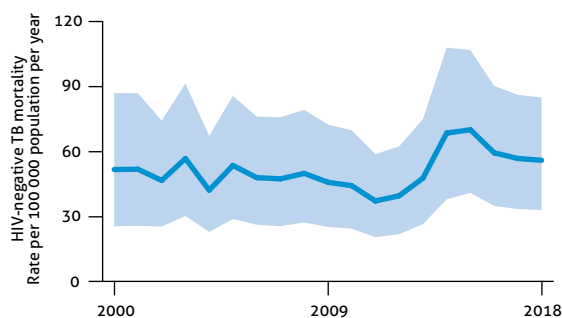
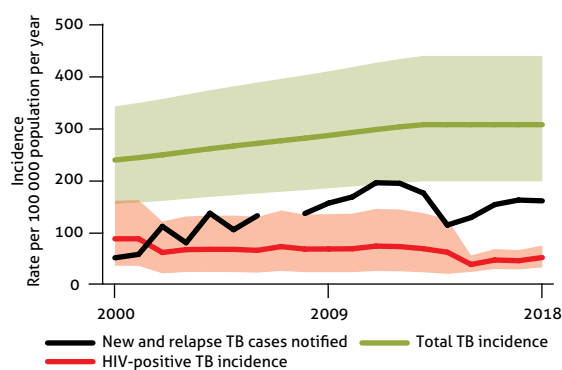
	SUCCESS	COHORT
New and relapse cases registered in 2017	77%	6 907
Previously treated cases, excluding relapse, registered in 2017	69%	16
HIV-positive TB cases registered in 2017	63%	833
MDR/RR-TB cases started on second-line treatment in 2016	73%	74
XDR-TB cases started on second-line treatment in 2016		

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	21%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	2% (1.9–2.3)

TB FINANCING, 2019

National TB budget (US\$ millions)	7.3
Funding source:	0% domestic, 23% international, 77% unfunded



Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

^a Ranges represent uncertainty intervals.

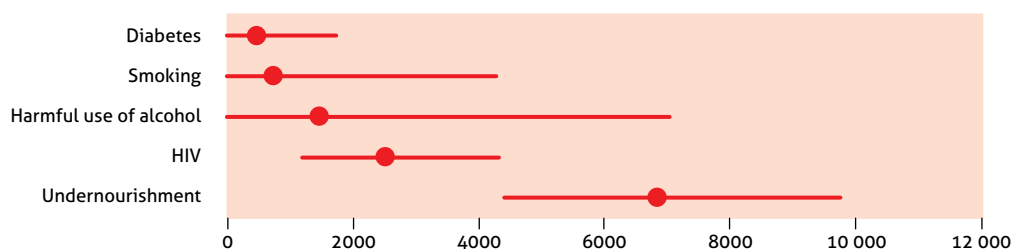
^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

^c Calculated for pulmonary cases only.

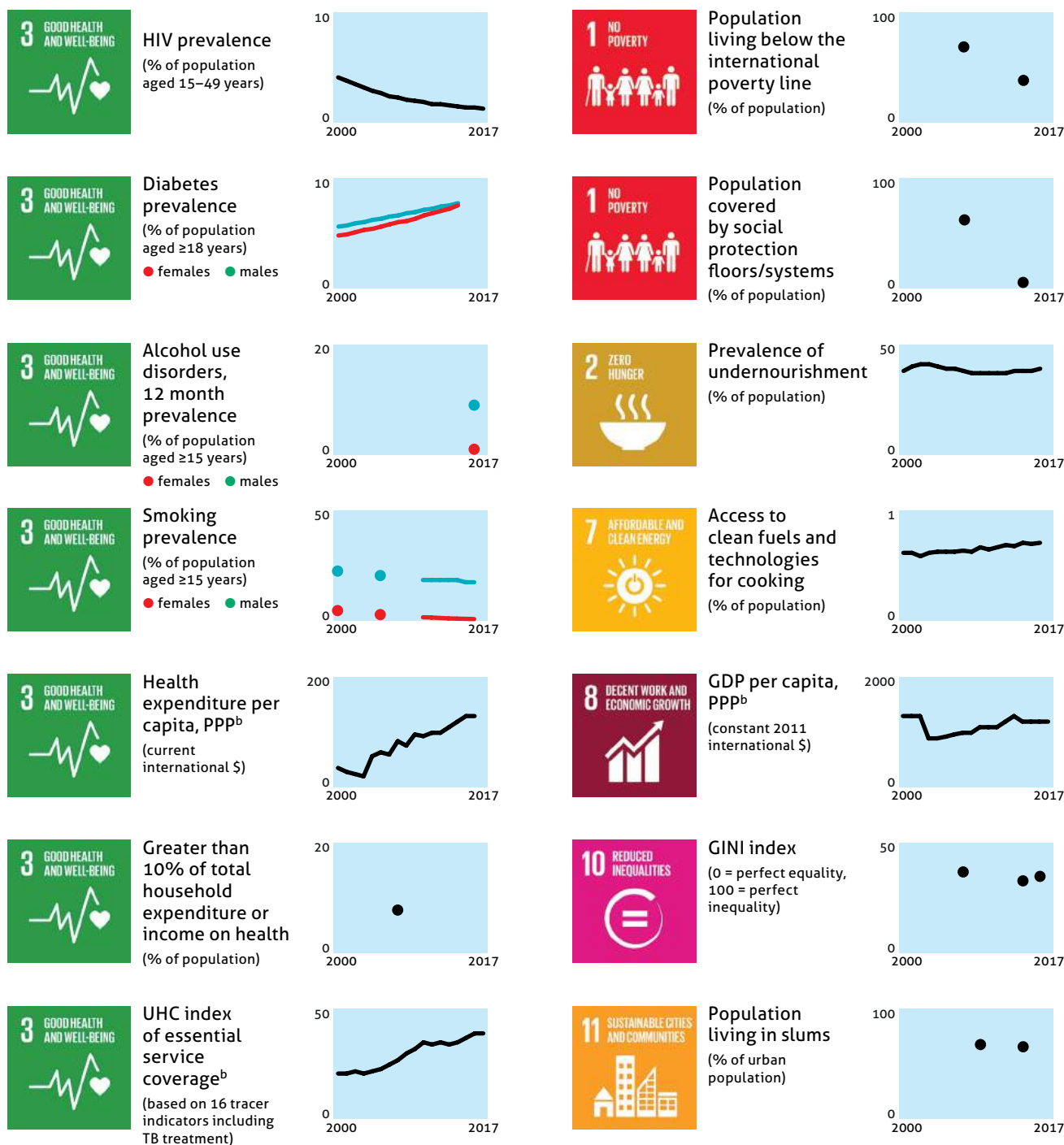
^d Includes cases with unknown previous TB treatment history.

^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Namibia

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	13 (9.2–17)	524 (375–697)
HIV-positive TB incidence	4.5 (3.2–5.9)	182 (130–242)
MDR/RR-TB incidence ^b	0.9 (0.62–1.2)	37 (25–50)
HIV-negative TB mortality	1.6 (1–2.3)	64 (41–92)
HIV-positive TB mortality	1.5 (1.1–2.1)	62 (43–85)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	5.8% (5–6.5)
Previously treated cases	12% (9.4–14)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	7 808
– % tested with rapid diagnostics at time of diagnosis	60%
– % with known HIV status	99%
– % pulmonary	81%
– % bacteriologically confirmed ^c	84%
– % children aged 0–14 years	9%
– % women	34%
– % men	57%
Total cases notified	8 100

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	61% (46–85)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	25% (16–35)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	2 768	35%
– on antiretroviral therapy	2 675	97%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	88%
– Previously treated cases	73%
Laboratory-confirmed cases ^d	MDR/RR-TB: 323, XDR-TB: 19
Patients started on treatment ^{d,e}	MDR/RR-TB: 311, XDR-TB: 19
MDR/RR-TB cases tested for resistance to second-line drugs	200

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	86%	8 559
Previously treated cases, excluding relapse, registered in 2017	64%	292
HIV-positive TB cases registered in 2017	82%	2 983
MDR/RR-TB cases started on second-line treatment in 2016	71%	348
XDR-TB cases started on second-line treatment in 2016	50%	10

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	44% (40–48)

TB FINANCING, 2019

National TB budget (US\$ millions)	50
Funding source:	61% domestic, 9% international, 30% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

^a Ranges represent uncertainty intervals.

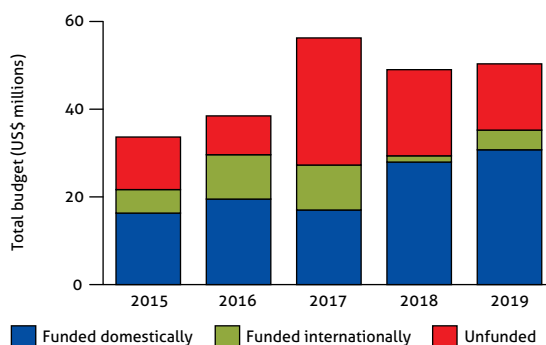
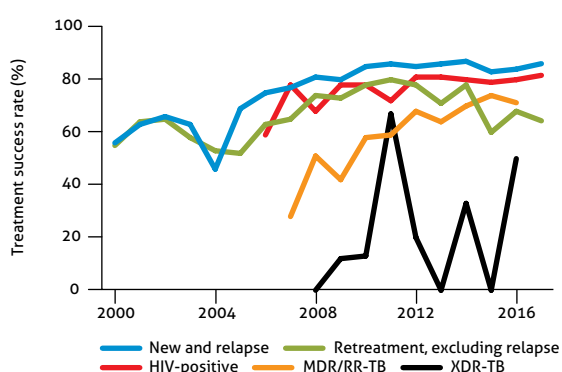
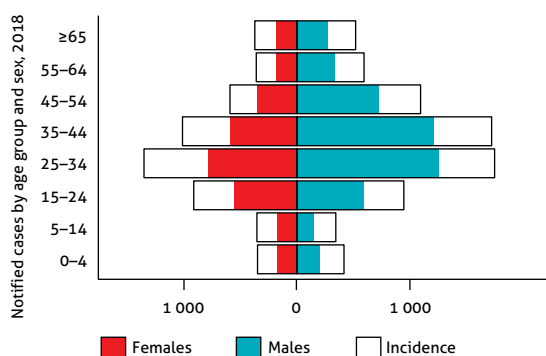
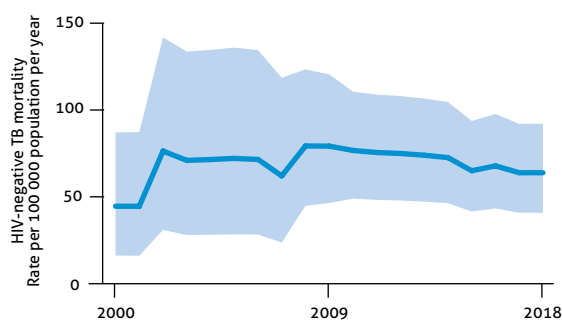
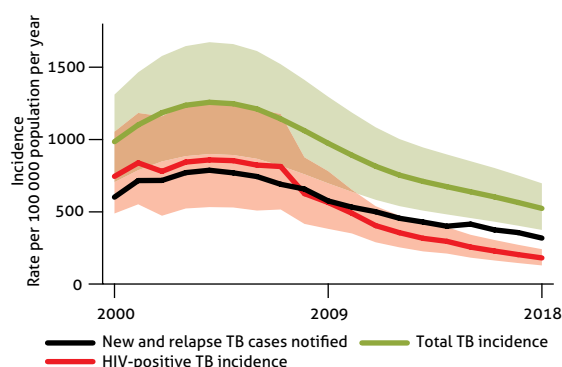
^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

^c Calculated for pulmonary cases only.

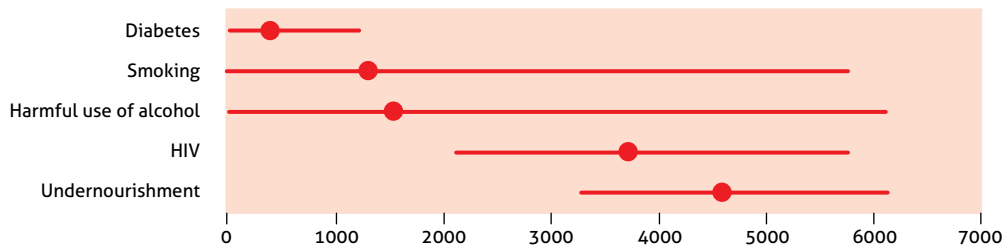
^d Includes cases with unknown previous TB treatment history.

^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

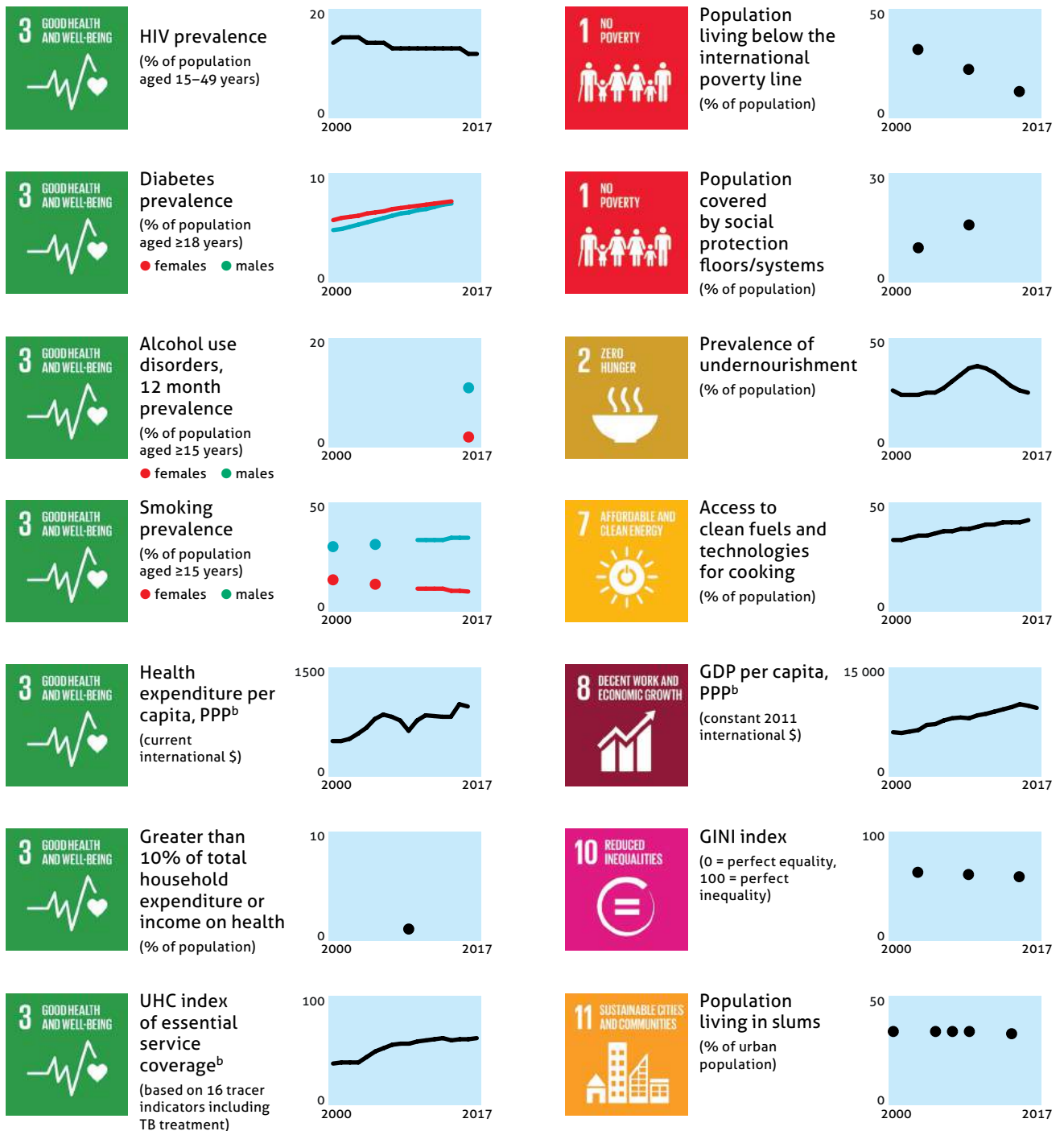
POPULATION 2018 2.4 MILLION



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Papua New Guinea

POPULATION 2018 **8.6 MILLION**

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	37 (30–45)	432 (352–521)
HIV-positive TB incidence	2.7 (2.2–3.3)	32 (26–38)
MDR/RR-TB incidence ^b	2 (1.2–2.9)	23 (14–33)
HIV-negative TB mortality	4.5 (3–6.2)	52 (35–72)
HIV-positive TB mortality	0.25 (0.1–0.45)	2.8 (1.2–5.2)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	3.4% (1.7–5)
Previously treated cases	26% (15–36)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	27 887
– % tested with rapid diagnostics at time of diagnosis	
– % with known HIV status	52%
– % pulmonary	56%
– % bacteriologically confirmed ^c	30%
– % children aged 0–14 years	24%
– % women	36%
– % men	40%
Total cases notified	29 364

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	75% (62–92)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	13% (8–18)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	1 124	7%
– on antiretroviral therapy	909	81%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	
– Previously treated cases	
Laboratory-confirmed cases ^d	MDR/RR-TB: 433, XDR-TB: 8
Patients started on treatment ^{d,e}	MDR/RR-TB: 401, XDR-TB: 8
MDR/RR-TB cases tested for resistance to second-line drugs	252

TREATMENT SUCCESS RATE AND COHORT SIZE

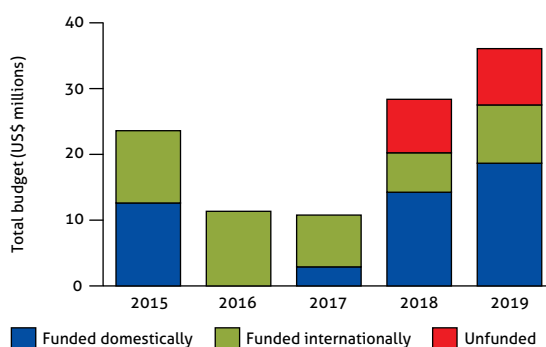
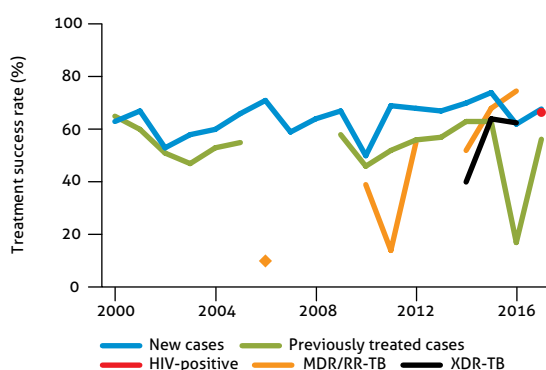
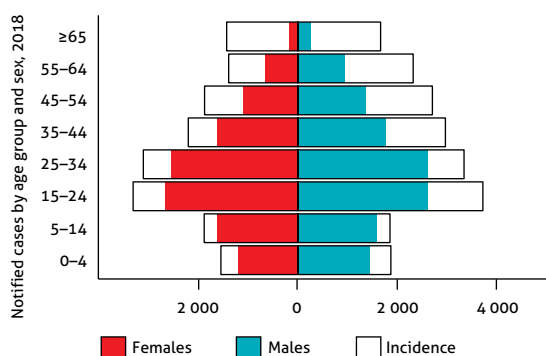
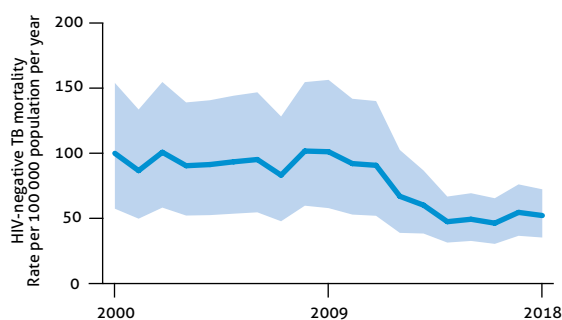
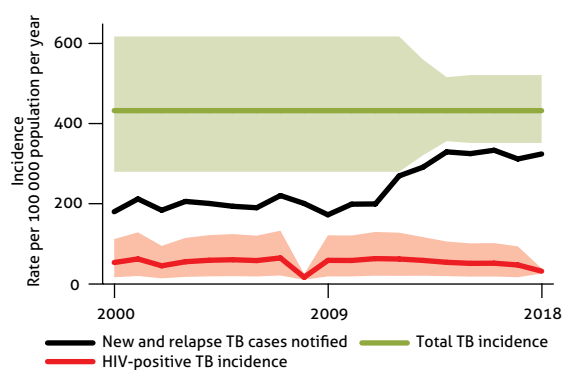
	SUCCESS	COHORT
New cases registered in 2017	68%	26 954
Previously treated cases registered in 2017	56%	983
HIV-positive TB cases registered in 2017	66%	835
MDR/RR-TB cases started on second-line treatment in 2016	75%	236
XDR-TB cases started on second-line treatment in 2016	63%	8

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	21%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	27% (25–30)

TB FINANCING, 2019

National TB budget (US\$ millions)	36
Funding source:	52% domestic, 25% international, 24% unfunded



Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

^a Ranges represent uncertainty intervals.

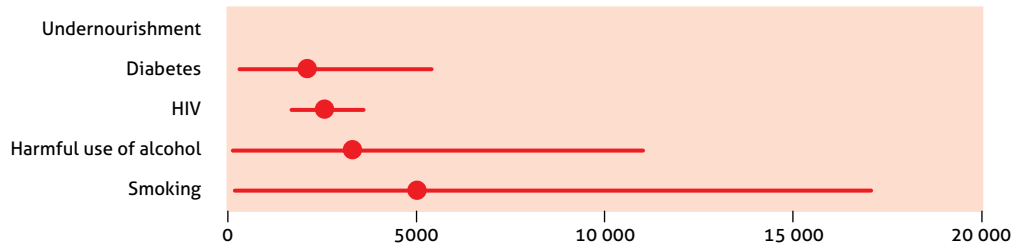
^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

^c Calculated for pulmonary cases only.

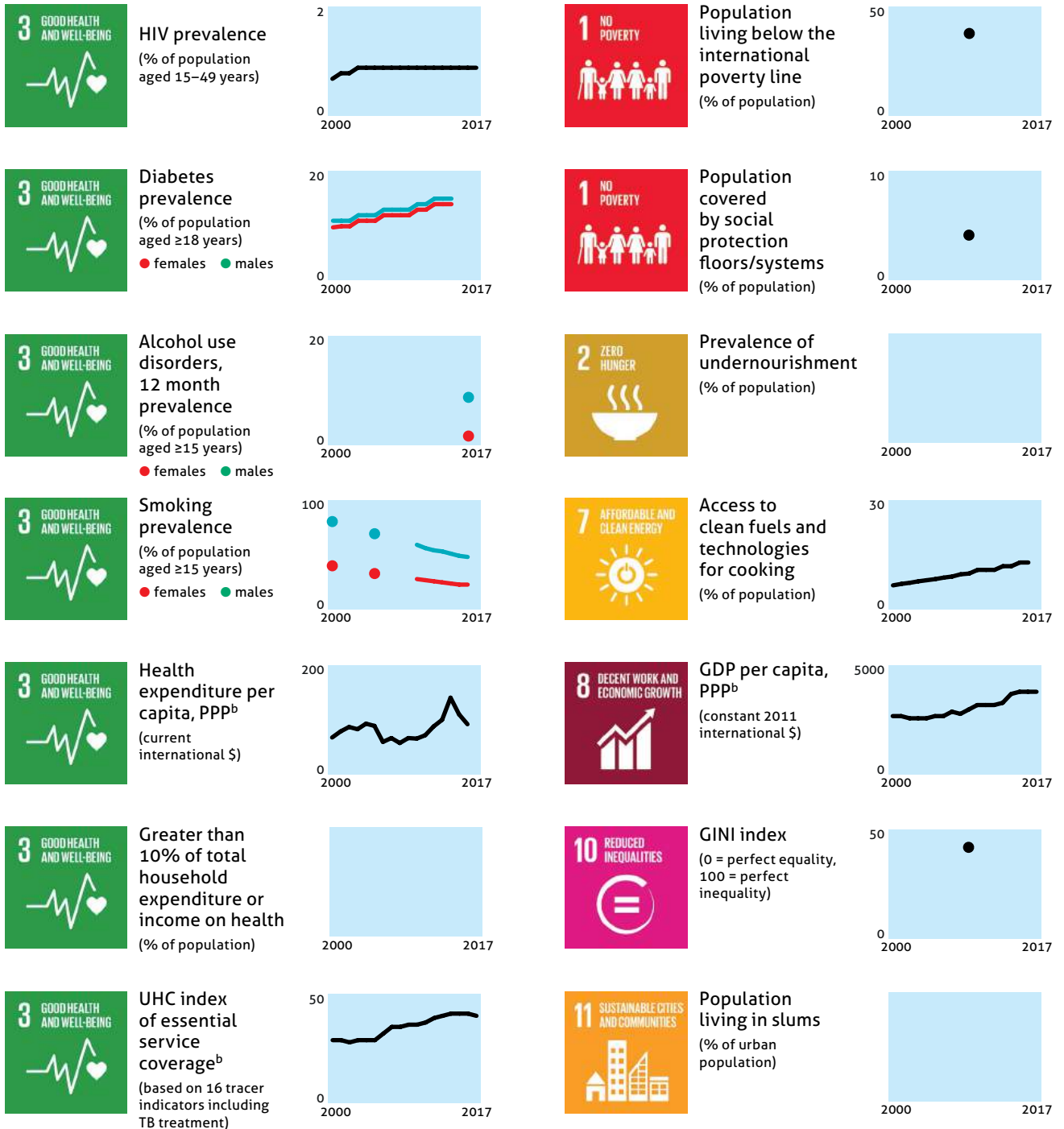
^d Includes cases with unknown previous TB treatment history.

^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.

NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Sierra Leone

POPULATION 2018 **7.7 MILLION**

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	23 (15–33)	298 (191–427)
HIV-positive TB incidence	2.9 (1.9–4.2)	38 (25–55)
MDR/RR-TB incidence ^b	0.64 (0.26–1.2)	8.3 (3.4–15)
HIV-negative TB mortality	2.6 (1.5–3.9)	33 (20–51)
HIV-positive TB mortality	0.7 (0.44–1)	9.2 (5.8–13)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	2.4% (1.1–4.2)
Previously treated cases	15% (11–19)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	17 144
– % tested with rapid diagnostics at time of diagnosis	5%
– % with known HIV status	98%
– % pulmonary	92%
– % bacteriologically confirmed ^c	65%
– % children aged 0–14 years	14%
– % women	33%
– % men	53%
Total cases notified	17 169

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	75% (53–120)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	15% (8–23)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	2 168	13%
– on antiretroviral therapy	2 167	100%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	
– Previously treated cases	
Laboratory-confirmed cases ^d	MDR/RR-TB: 166, XDR-TB: 0
Patients started on treatment ^{d,e}	MDR/RR-TB: 120, XDR-TB: 0
MDR/RR-TB cases tested for resistance to second-line drugs	120

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	90%	15 935
Previously treated cases, excluding relapse, registered in 2017	63%	207
HIV-positive TB cases registered in 2017	82%	1 936
MDR/RR-TB cases started on second-line treatment in 2016		
XDR-TB cases started on second-line treatment in 2016		

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	57%
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	

TB FINANCING, 2019

National TB budget (US\$ millions)	9.5
Funding source:	3% domestic, 71% international, 25% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

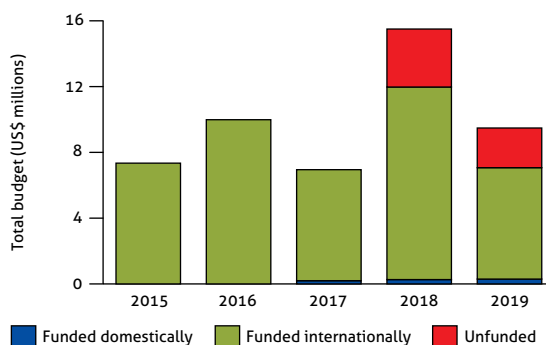
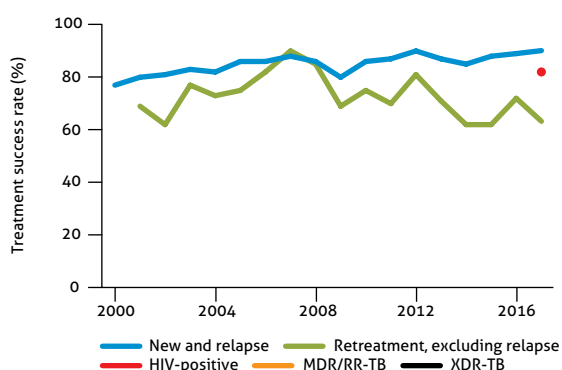
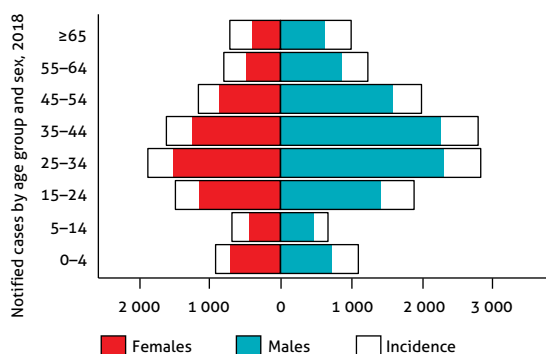
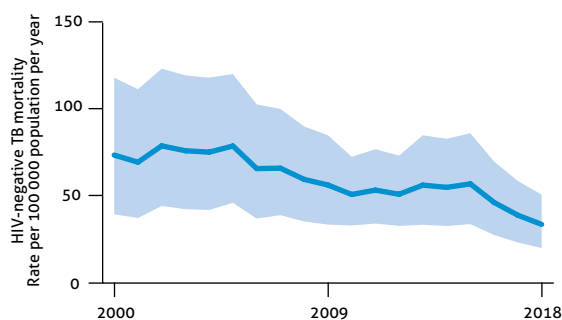
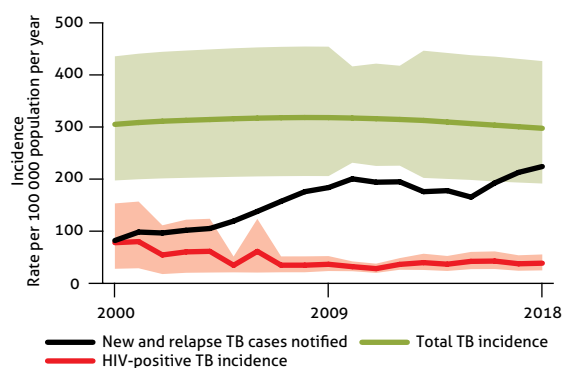
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

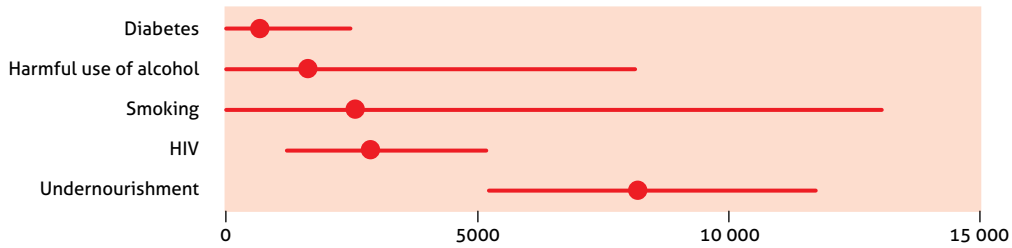
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

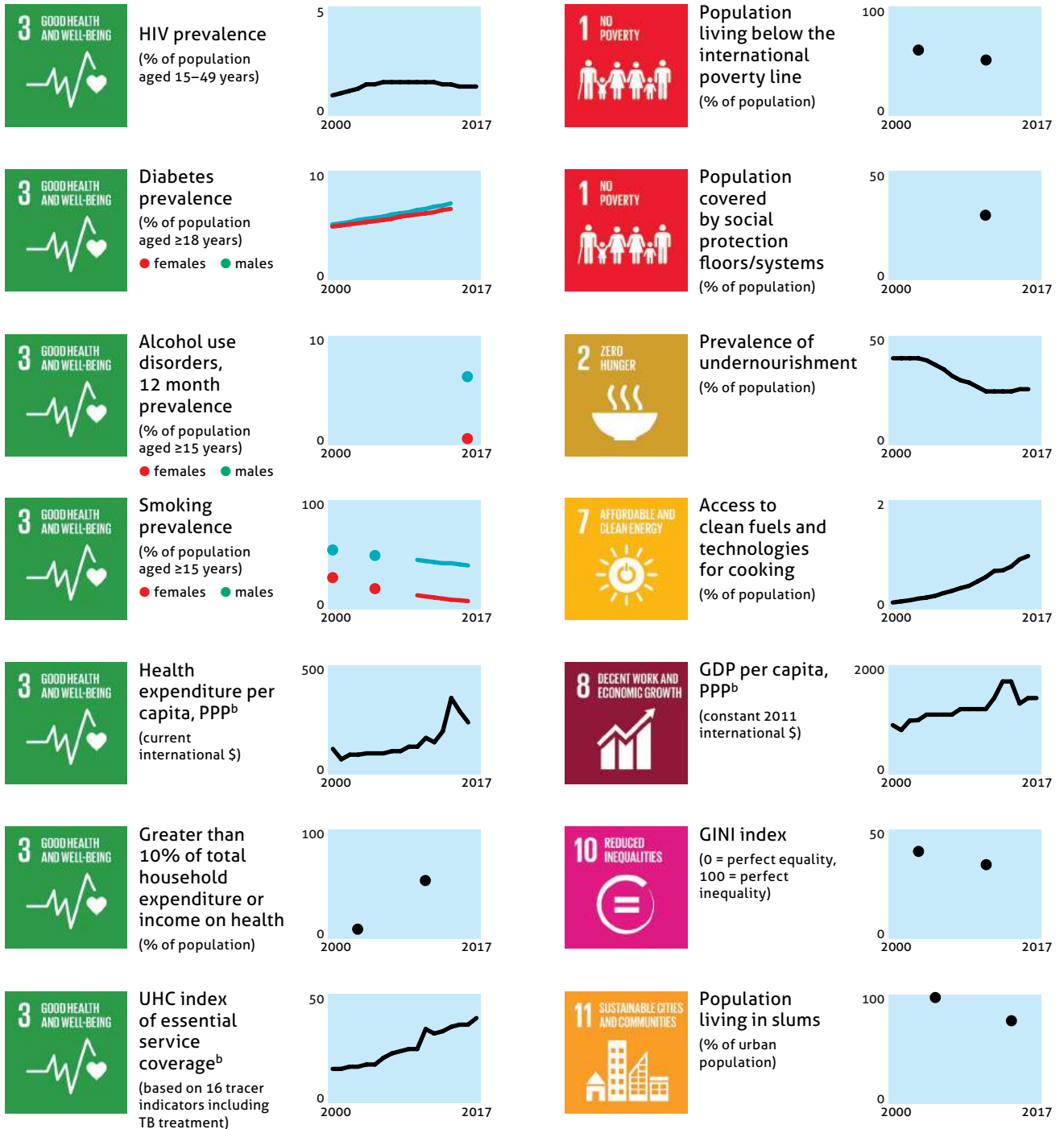
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Zambia

POPULATION 2018 **17 MILLION**

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	60 (39–86)	346 (225–493)
HIV-positive TB incidence	36 (23–51)	205 (133–293)
MDR/RR-TB incidence ^b	3.1 (1.6–5)	18 (9.4–29)
HIV-negative TB mortality	4.8 (2.9–7.3)	28 (16–42)
HIV-positive TB mortality	13 (8.3–19)	74 (48–107)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	2.8% (2.5–3.1)
Previously treated cases	18% (12–26)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	35 071
– % tested with rapid diagnostics at time of diagnosis	46%
– % with known HIV status	95%
– % pulmonary	87%
– % bacteriologically confirmed ^c	56%
– % children aged 0–14 years	6%
– % women	32%
– % men	62%
Total cases notified	35 922

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	58% (41–90)
TB patients facing catastrophic total costs	
TB case fatality ratio (estimated mortality/estimated incidence), 2018	31% (17–46)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	20 202	59%
– on antiretroviral therapy	18 421	91%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	98%
– Previously treated cases	54%
Laboratory-confirmed cases ^d	MDR/RR-TB: 627, XDR-TB: 1
Patients started on treatment ^{d,e}	MDR/RR-TB: 506, XDR-TB: 1
MDR/RR-TB cases tested for resistance to second-line drugs	150

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	90%	36 010
Previously treated cases, excluding relapse, registered in 2017	83%	1 193
HIV-positive TB cases registered in 2017	86%	20 362
MDR/RR-TB cases started on second-line treatment in 2016	71%	136
XDR-TB cases started on second-line treatment in 2016		0

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	

TB FINANCING, 2019

National TB budget (US\$ millions)	31
Funding source:	29% domestic, 43% international, 28% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

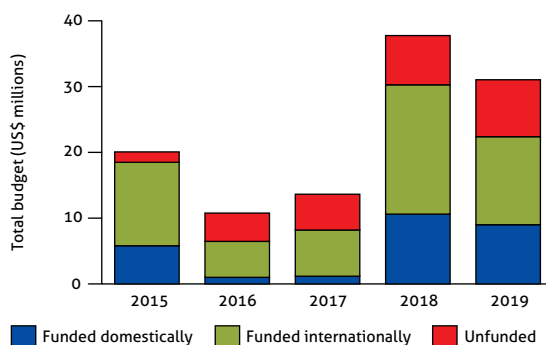
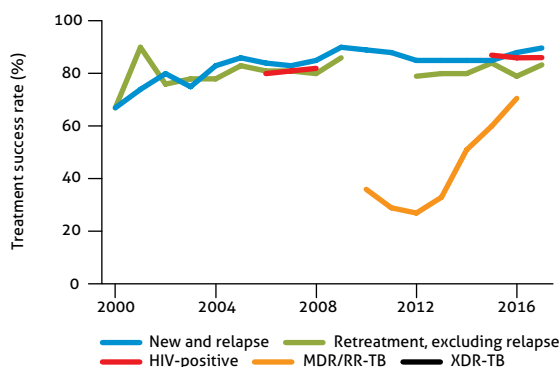
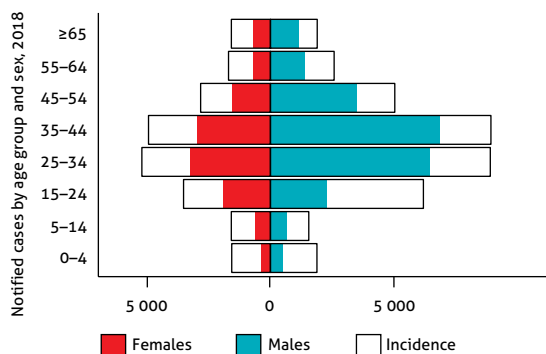
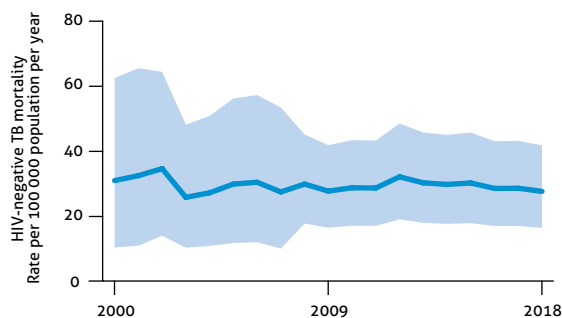
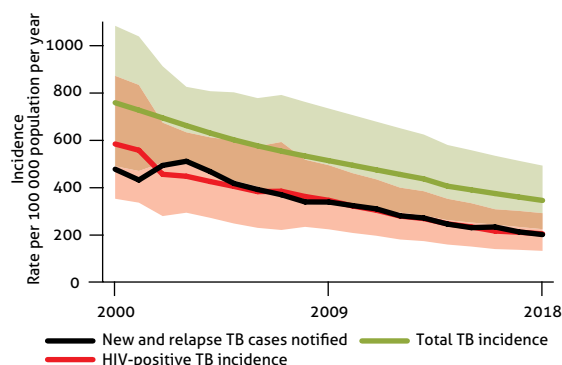
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

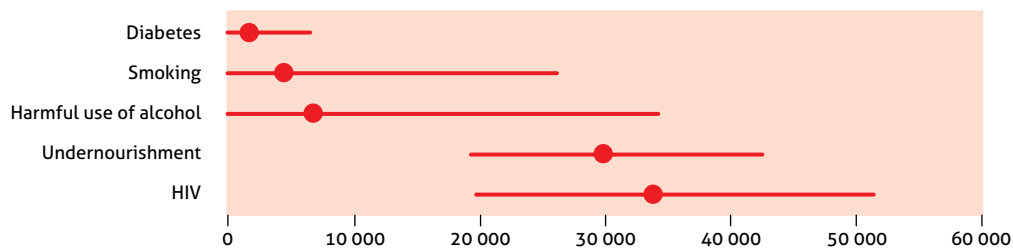
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

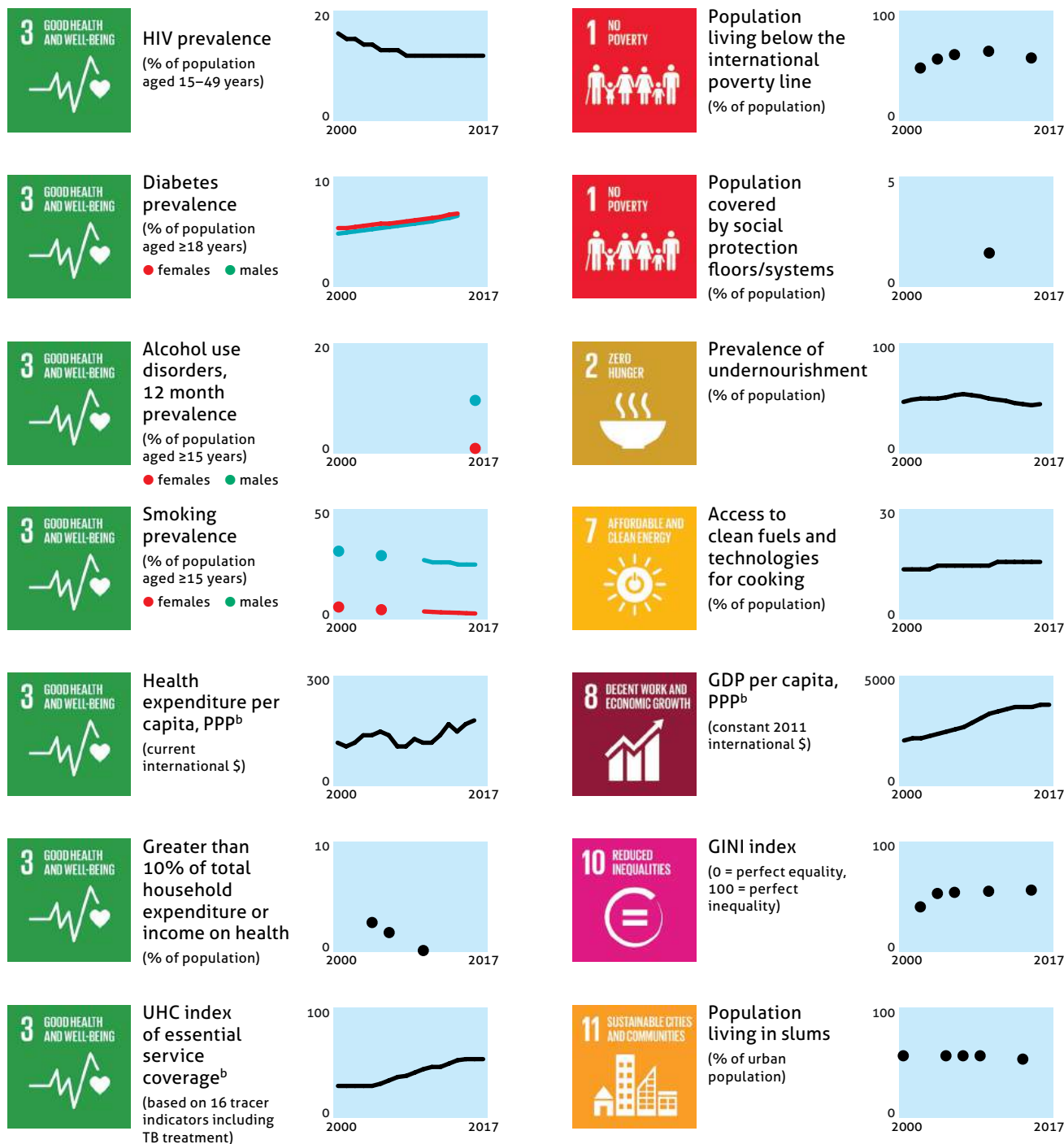
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage

Zimbabwe

POPULATION 2018 **14 MILLION**

ESTIMATES OF TB BURDEN,^a 2018

	NUMBER (thousands)	RATE (per 100 000 population)
Total TB incidence	30 (22–39)	210 (155–272)
HIV-positive TB incidence	19 (14–24)	130 (96–169)
MDR/RR-TB incidence ^b	1.5 (1.1–2)	10 (7.4–14)
HIV-negative TB mortality	1.1 (0.69–1.7)	7.7 (4.8–11)
HIV-positive TB mortality	3.5 (2.4–4.8)	24 (16–33)

ESTIMATED PROPORTION OF TB CASES WITH MDR/RR-TB, 2018

New cases	3.9% (3.5–4.3)
Previously treated cases	14% (8.9–20)

TB CASE NOTIFICATIONS, 2018

Total new and relapse	25 204
– % tested with rapid diagnostics at time of diagnosis	87%
– % with known HIV status	94%
– % pulmonary	89%
– % bacteriologically confirmed ^c	54%
– % children aged 0–14 years	6%
– % women	36%
– % men	58%
Total cases notified	25 775

UNIVERSAL HEALTH COVERAGE AND SOCIAL PROTECTION

TB treatment coverage (notified/estimated incidence), 2018	83% (64–110)
TB patients facing catastrophic total costs, 2018	80% (74–85)
TB case fatality ratio (estimated mortality/estimated incidence), 2018	15% (10–22)

TB/HIV CARE IN NEW AND RELAPSE TB PATIENTS, 2018

	NUMBER	(%)
Patients with known HIV-status who are HIV-positive	15 062	62%
– on antiretroviral therapy	13 636	91%

DRUG-RESISTANT TB CARE, 2018

% of bacteriologically confirmed TB cases tested for rifampicin resistance ^c	
– New cases	91%
– Previously treated cases	97%
Laboratory-confirmed cases ^d	MDR/RR-TB: 406, XDR-TB: 7
Patients started on treatment ^{d,e}	MDR/RR-TB: 381, XDR-TB: 3
MDR/RR-TB cases tested for resistance to second-line drugs	

TREATMENT SUCCESS RATE AND COHORT SIZE

	SUCCESS	COHORT
New and relapse cases registered in 2017	83%	25 848
Previously treated cases, excluding relapse, registered in 2017	83%	553
HIV-positive TB cases registered in 2017	82%	16 602
MDR/RR-TB cases started on second-line treatment in 2016	57%	488
XDR-TB cases started on second-line treatment in 2016	0%	5

TB PREVENTIVE TREATMENT, 2018

% of HIV-positive people (newly enrolled in care) on preventive treatment	
% of children (aged <5) household contacts of bacteriologically confirmed TB cases on preventive treatment	30% (27–33)

TB FINANCING, 2019

National TB budget (US\$ millions)	41
Funding source:	<1% domestic, 31% international, 69% unfunded

Data are as reported to WHO. Estimates of TB and MDR/RR-TB burden are produced by WHO in consultation with countries.

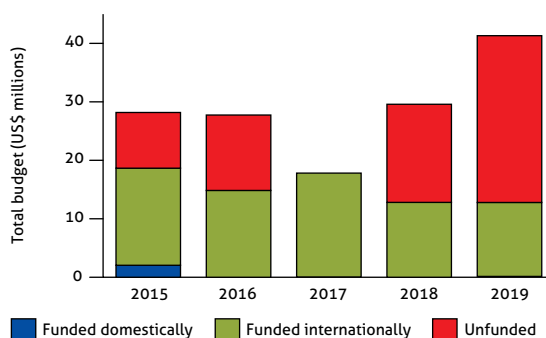
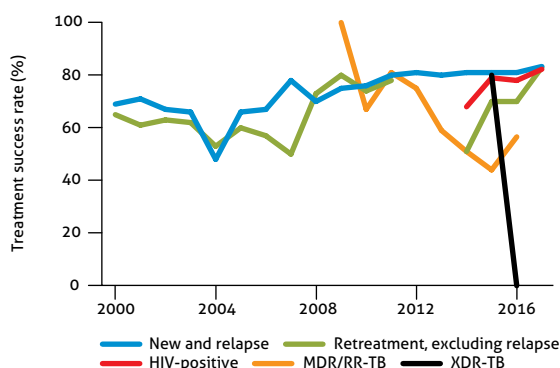
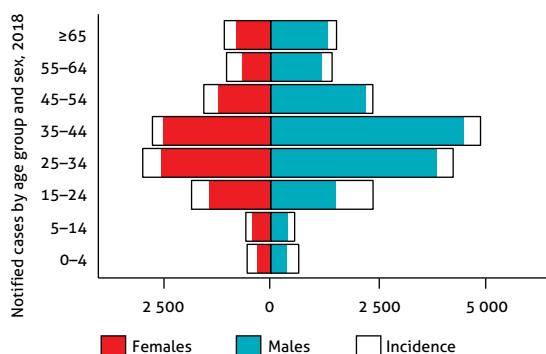
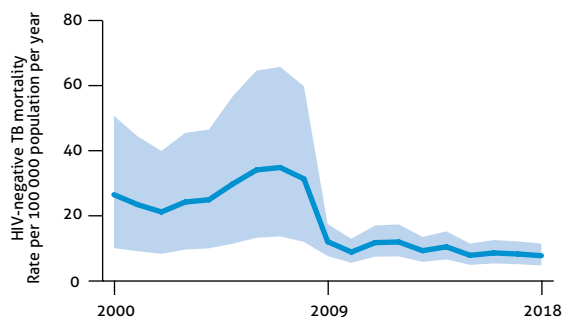
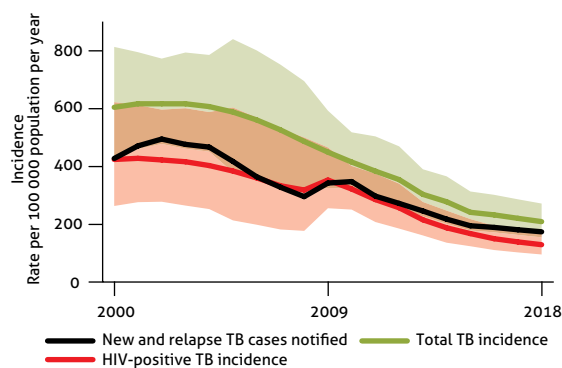
^a Ranges represent uncertainty intervals.

^b MDR is TB resistant to rifampicin and isoniazid; RR is TB resistant to rifampicin.

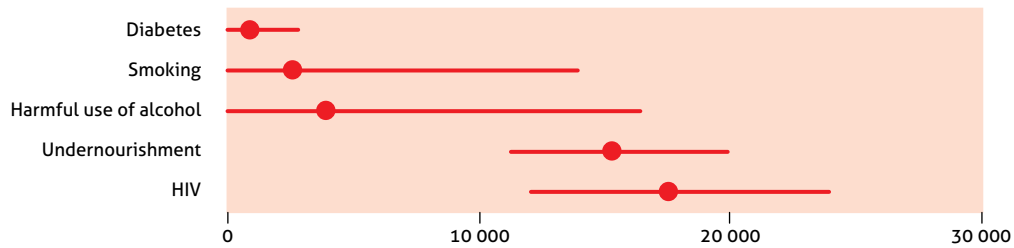
^c Calculated for pulmonary cases only.

^d Includes cases with unknown previous TB treatment history.

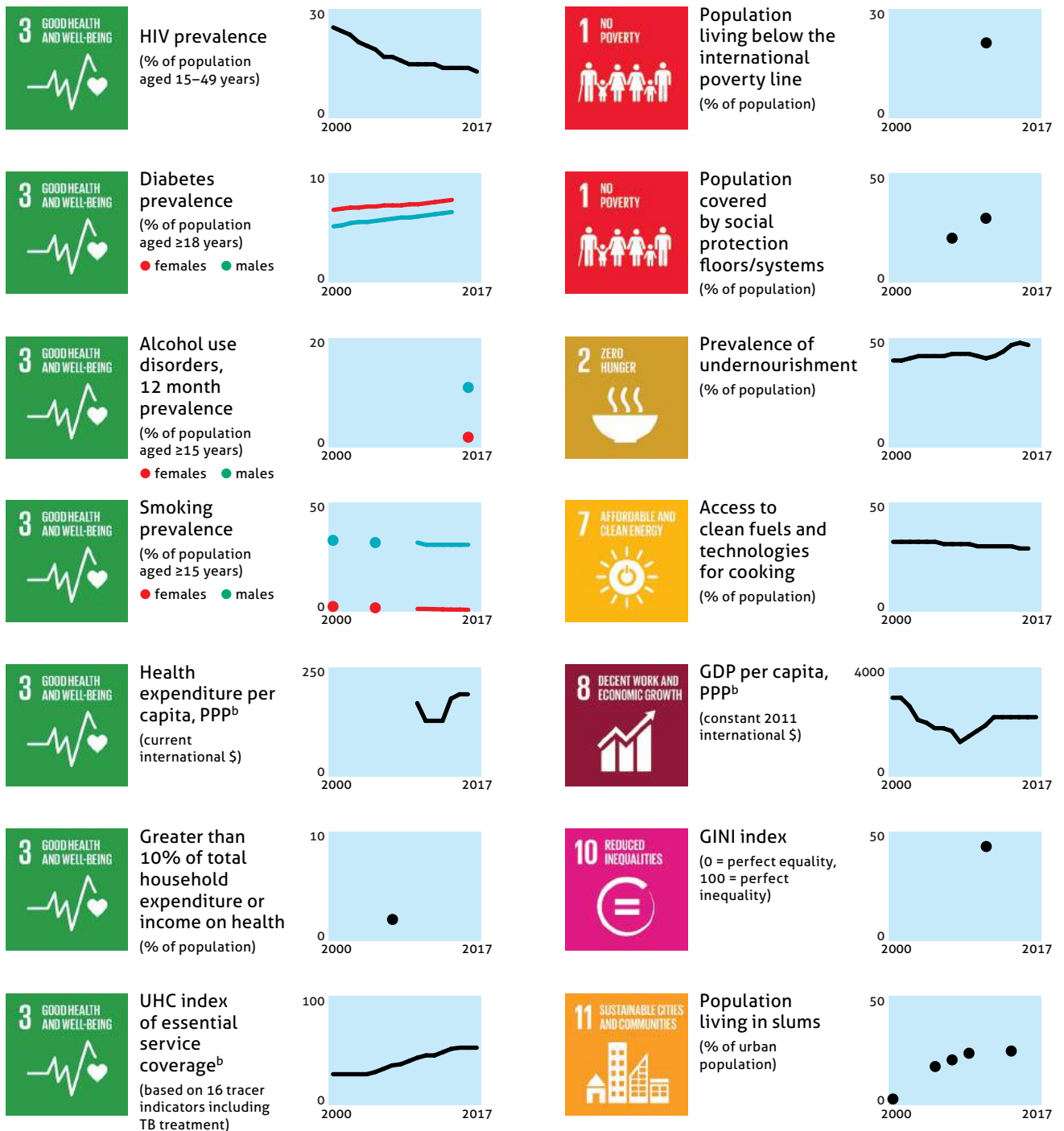
^e Includes patients diagnosed before 2018 and patients who were not laboratory-confirmed.



NUMBER OF TB CASES ATTRIBUTABLE TO FIVE RISK FACTORS, 2018



INDICATORS IN THE SUSTAINABLE DEVELOPMENT GOALS ASSOCIATED WITH TB INCIDENCE^a



^a Data sources: SDG indicators database, The World Bank, World Health Organization. Missing values and empty boxes indicate data not available in these data sources.

^b GDP = gross domestic product; PPP = purchasing power parity; UHC = universal health coverage