

CHAPTER 3:

DEVELOPMENT ASSISTANCE FOR HEALTH TO SPECIFIC HEALTH FOCUS AREAS

In Chapter 2, total DAH and all-cause DALYs were considered side-by-side, facilitating an assessment of the relationship between spending and burden of disease. However, these metrics encapsulate an amalgam of disease and health issues. To unpack this mix, we explore the DAH dedicated to specific health focus areas and the corresponding DALYs in this chapter. IHME classifies spending into six major categories: HIV/AIDS; maternal, newborn, and child health (MNCH); malaria; TB; NCDs; and health sector support. Examining each of these six areas in depth allows us to

further assess any association between DAH disbursements and burden of disease.

Assessing trends in DALYs and DAH for specific health focus areas exposes disconnects between burden and international development spending. NCD programs notably receive very little DAH relative to the associated burden. The lack of association between DAH and DALYs is not surprising given the poor information on burden previously available. Few decision-makers have access to full information on the composition of burden

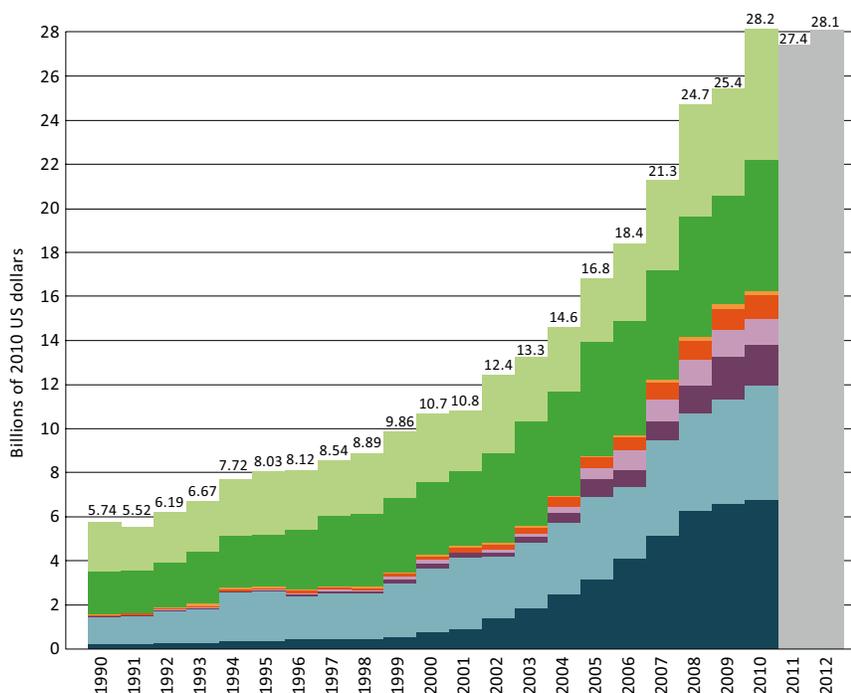
FIGURE 11:
DAH for HIV/AIDS; maternal, newborn, and child health; malaria; tuberculosis; noncommunicable diseases; and health sector support, 1990-2010

DAH for which we did not have information on disease focus is coded as "unallocable." DAH for other health focus areas not yet tracked by IHME is coded as "other."

- Unallocable
- Other
- Noncommunicable diseases
- Tuberculosis
- Health sector support
- Malaria
- Maternal, newborn, and child health
- HIV/AIDS
- Preliminary estimates

Sources: IHME DAH Database 2012 and IHME DAH Database (Country and Regional Recipient Level) 2012

Notes: 2011 and 2012 are preliminary estimates based on information from channels of assistance, including budgets, appropriations, and correspondence. Data were unavailable to show total DAH by health focus area for 2011 and 2012.



in their own national context, let alone across regions. For this reason, GBD 2010 makes strides toward better decision-making about the diseases and injuries that afflict national populations. Similar to Chapter 2, this chapter features the DALYs produced through GBD 2010. As these and other GBD estimates are taken up and utilized, improved decision-making regarding the allocation of DAH will be possible.

This chapter also reveals that the rapid-growth phase involved accelerated increases in the DAH devoted to certain health focus areas. While all health focus areas examined grew from 2001 to 2010, the strong rate of growth was driven predominantly by increases in DAH for HIV/AIDS as well as malaria, TB, and health sector support. DAH for MNCH and NCDs grew at a stable, albeit less rapid, pace during the 2001 to 2010 period. MNCH is a health focus area that has received strong support since 1990. Other areas, rather, simply grew faster.

More recently, decreases in certain health focus areas have interrupted the consistent growth trend. Although IHME is only able to report estimates from 2010 due to a lag in reporting, we observed an indication of a downward tendency in certain areas from 2009 to 2010. The DAH provided to address NCDs, malaria, and health system support declined slightly from 2009 to 2010. The remaining health focus areas highlighted by IHME continued to grow.

In future years, IHME anticipates expanding this section by breaking out health focus areas further. Increasingly, disease- and intervention-specific groups are interested in knowing the amount of DAH allocated to their work as they help decision-makers address funding gaps, investment decisions, and trade-offs between different programs. Furthermore, IHME expects to expand its health financing work to estimate broader expenditure on all major diseases, including the public and private domestic sources of funds allocated to treatment and prevention. Using the updated estimates of burden produced through GBD 2010 will allow IHME to generate accurate approximations of this spending.

DAH by health focus area

As Figure 11 illustrates, the composition of DAH in terms of health focus areas did not change substantially over the 2009 to 2010 period. Among the DAH classified as devoted to a specific health issue, HIV/AIDS constituted the most substantial portion (30.5%) in 2010. Since 2000, DAH for HIV/AIDS has expanded rapidly with the creation of HIV/AIDS-specific organizations, such as PEPFAR and GFATM, as well as the increase in support for the Joint United Nations Programme on HIV/AIDS (UNAIDS). At 23.3% of allocable health focus area spending, MNCH was the next most substantial. MNCH has been a major portion of DAH spending since 1990; however, because HIV/AIDS and other spending expanded quickly over the period, MNCH's share of the total diminished over time. The DAH allocated to the other major health focus areas considered has also risen substantially over the past 10 years. These areas all composed a relatively small share of expenditure: the DAH allocated to malaria (8.4%), health sector support (5.3%), and TB (4.9%) each amount to less than 10% of spending. NCDs constituted by far the smallest health focus area tracked, as total expenditure amounted to just \$185 million or 0.8% of the total allocable DAH in 2010.

Due to data quality, a significant proportion of expenditure cannot be categorized easily into one of the six health focus areas. The largest categories among health focus areas are "unallocable" (21.2%) and "other" (21.1%). If the DAH target is known but does not fit into one of the health focus areas highlighted, the expenditure is allocated to "other." DAH that cannot be linked to a specific purpose is assigned to the "unallocable" category. While the fraction of DAH that IHME has been able to allocate to specific health focus areas has increased over time, this continued ambiguity highlights the need for better reporting of DAH.

DAH for most of the health focus areas expanded in absolute terms from 2009 to 2010, although support for several key issue areas fell. Growth in DAH for MNCH and TB was the most impressive among health focus areas, at 8.8% and 13.8%, respectively, from 2009 to 2010. HIV/AIDS spending increased at a slower, although still substantial, 2.8%. In contrast, we observed drops in the DAH provided for malaria (4.2%), NCDs (5.1%), and health sector support (2.5%) in 2010, balking the growth trend overall.

FIGURE 12:
DAH for HIV/AIDS by channel of assistance, 1990-2010

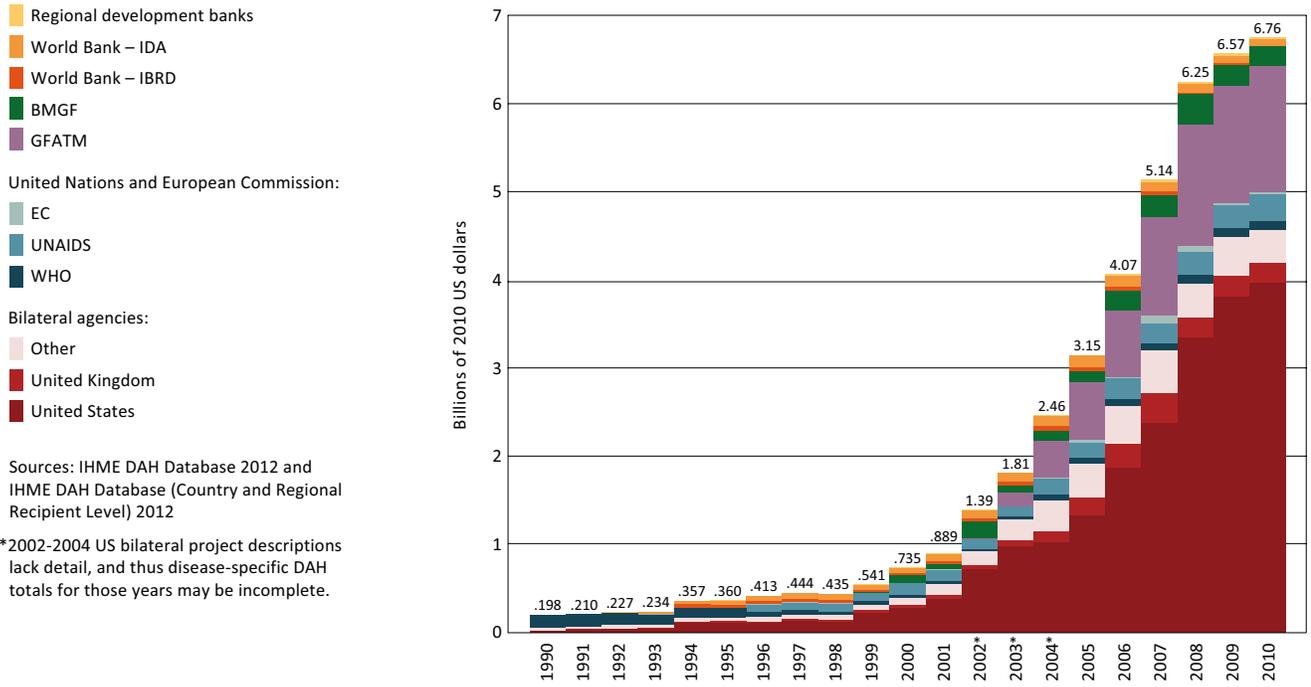


FIGURE 13:
HIV/AIDS DAH, 2008-2010, per related DALY, 2010

DALY estimates for 2010 are from the Global Burden of Disease Study 2010. Countries that were ineligible for DAH based on their World Bank income classification are shown in white. DAH received is shown in real 2010 US dollars.

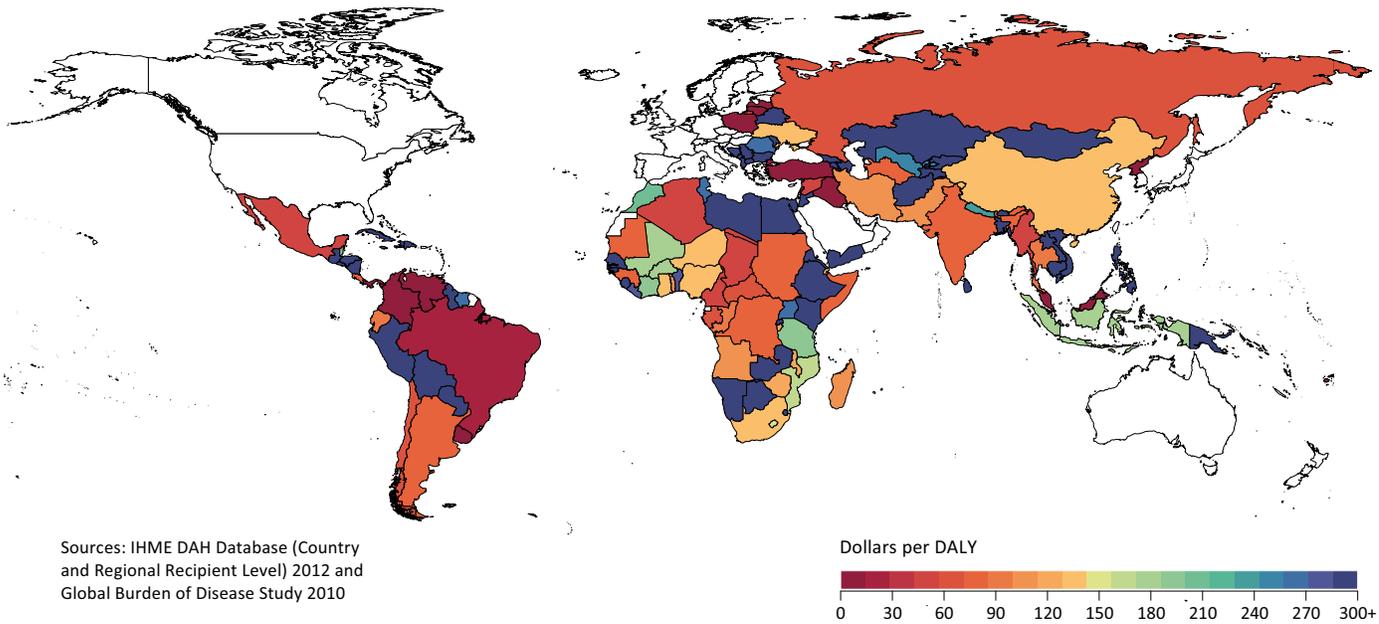
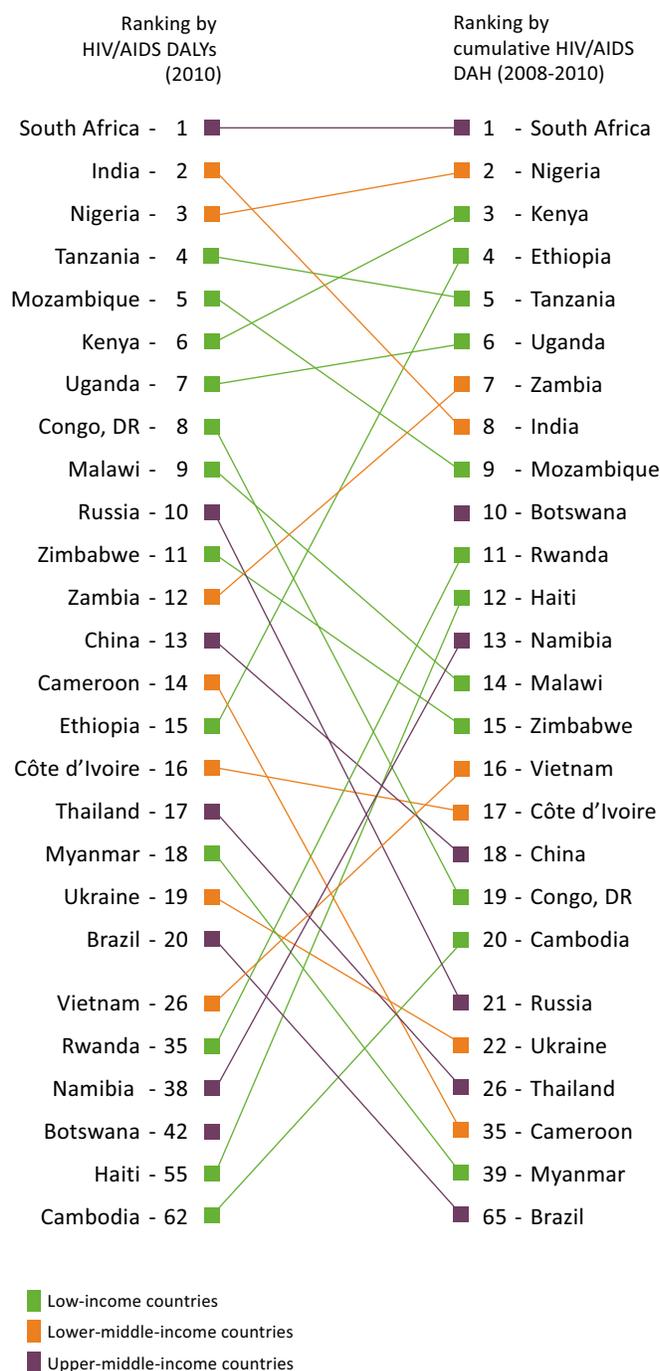


FIGURE 14:
Top 20 countries by 2010 HIV/AIDS burden of disease versus cumulative 2008-2010 HIV/AIDS DAH



Sources: IHME DAH Database (Country and Regional Recipient Level) 2012 and Global Burden of Disease Study 2010

DAH for HIV/AIDS

As shown in Figure 12, DAH for HIV/AIDS expanded at a tremendous rate from 1998 onward. The expansive increase is due largely to the commitment of US bilaterals, mainly through PEPFAR and USAID. US bilaterals funded more than half (58.8%) of DAH for HIV/AIDS, with \$4 billion in DAH spent in 2010, a 4.2% increase from 2009. GFATM was also vital to the rapid surge in DAH spending and contributed the second largest proportion of DAH to HIV/AIDS. After a dip in funding flows from 2008 to 2009, GFATM's disbursements for HIV/AIDS rose 8.1% in 2010 (\$1.4 billion).

This rapid uptick in spending was a response to the rise of the HIV/AIDS epidemic since 1990. According to GBD 2010, HIV/AIDS was only the 33rd cause of global DALYs in 1990. By 2010, it was the fifth, a 351% increase.¹² These burden numbers persist despite major declines in HIV/AIDS mortality since 2005 and the expansive roll-out of antiretroviral (ARV) treatment and preventing mother-to-child transmission of HIV (PMTCT) programming. Even so, in 2012, the global advocacy group ONE released a report stating that the world is not on track to reach the MDG HIV/AIDS targets. According to ONE, 8.4 million people are still in need of treatment and 2.5 million people continue to be infected annually.³⁰ UNAIDS, in a report in July 2012, estimates that an additional \$2 to \$3 billion is required annually to meet treatment and prevention needs.³¹

The shortfall is particularly important for sub-Saharan Africa, where about half of those estimated resources are needed, according to ONE. In South and East sub-Saharan Africa, HIV/AIDS is the most significant source of DALYs. It also ranks in the top 10 absolute DALYs for Central and West sub-Saharan Africa as well as Eastern Europe. This is evident in the "Ranking by HIV/AIDS DALYs" column of Figure 14, in which the countries with the highest HIV/AIDS DALYs are displayed. Of the top 20, 13 are located in sub-Saharan Africa. Figure 13 illustrates that most countries in the region received between \$40 and \$160 per HIV DALY. Certain countries in sub-Saharan Africa received upwards of \$300 per HIV/AIDS DALY. Figure 14 also displays the relationship between DALYs and DAH for HIV/AIDS. Notably, South Africa ranked first in both HIV/AIDS DAH and HIV/AIDS DALYs. However, disconnects between burden and DAH existed for Cameroon, Myanmar, and Brazil, which had particularly low levels of HIV/AIDS DAH given their burden.

FIGURE 15:
DAH for maternal, newborn, and child health by channel of assistance, 1990-2010

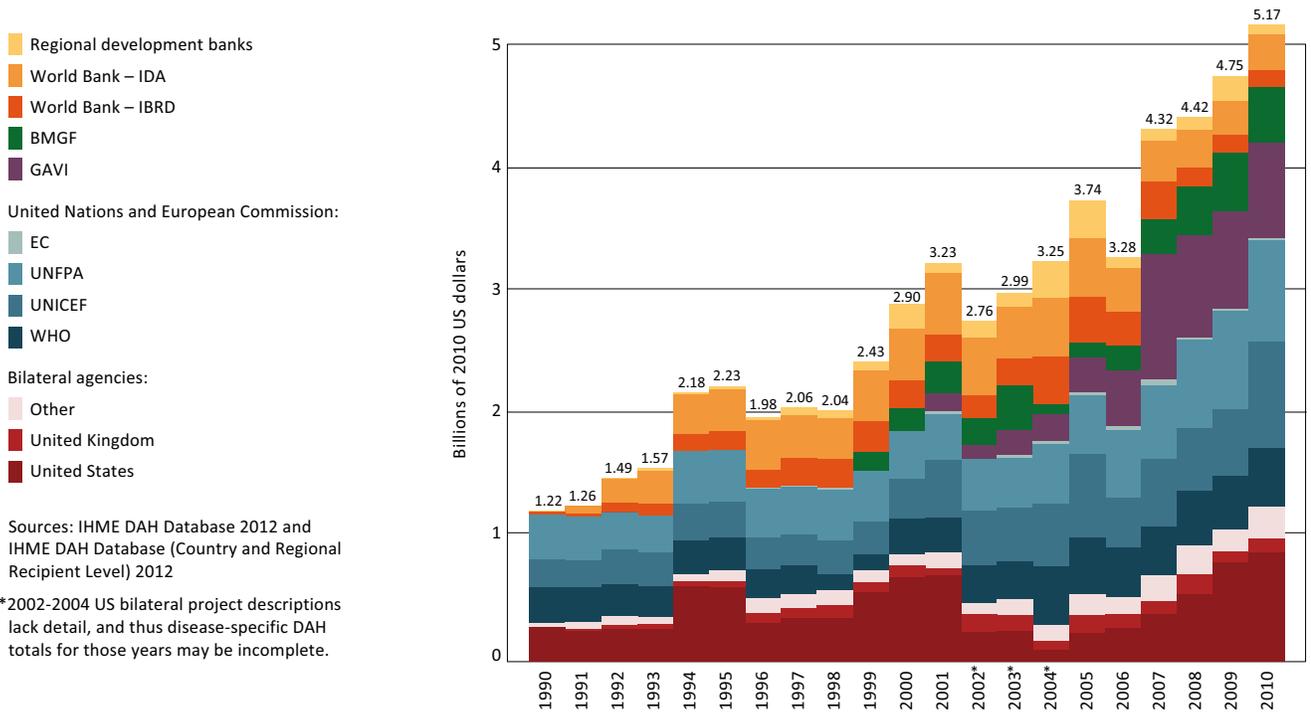


FIGURE 16:
Maternal, newborn, and child health DAH, 2008-2010, per related DALY, 2010

DALY estimates for 2010 are from the Global Burden of Disease Study 2010. Countries that were ineligible for DAH based on their World Bank income classification are shown in white. DAH received is shown in real 2010 US dollars.

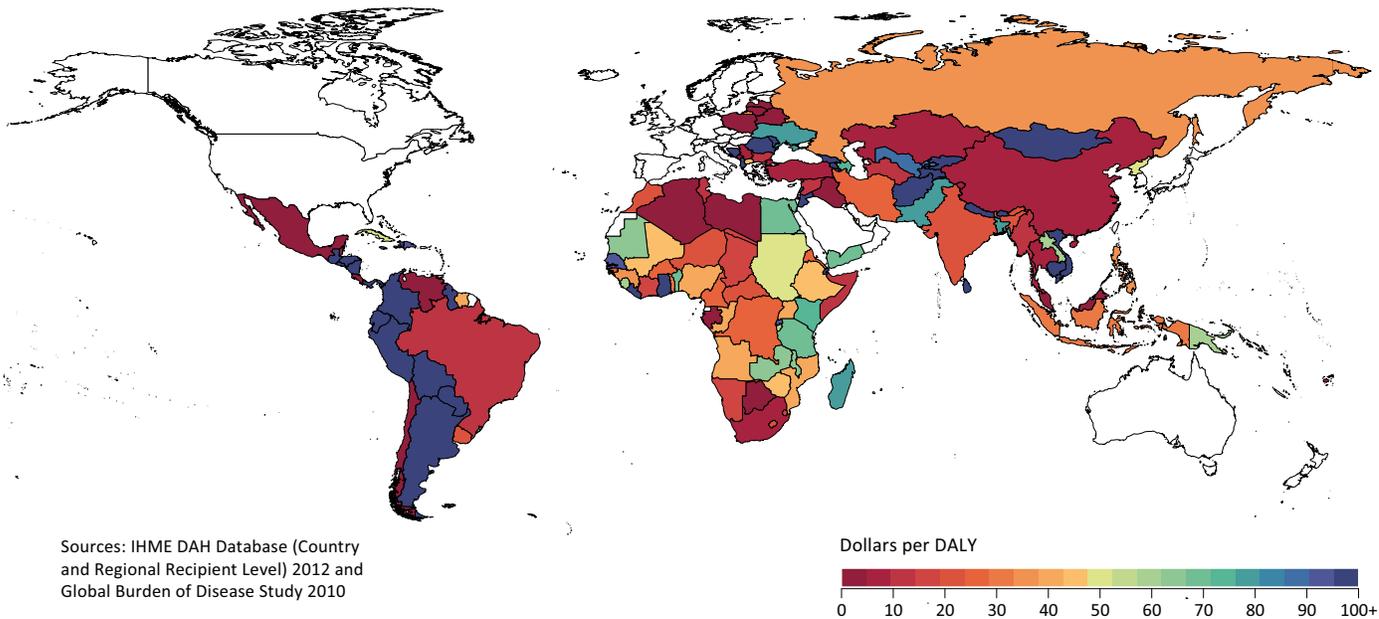
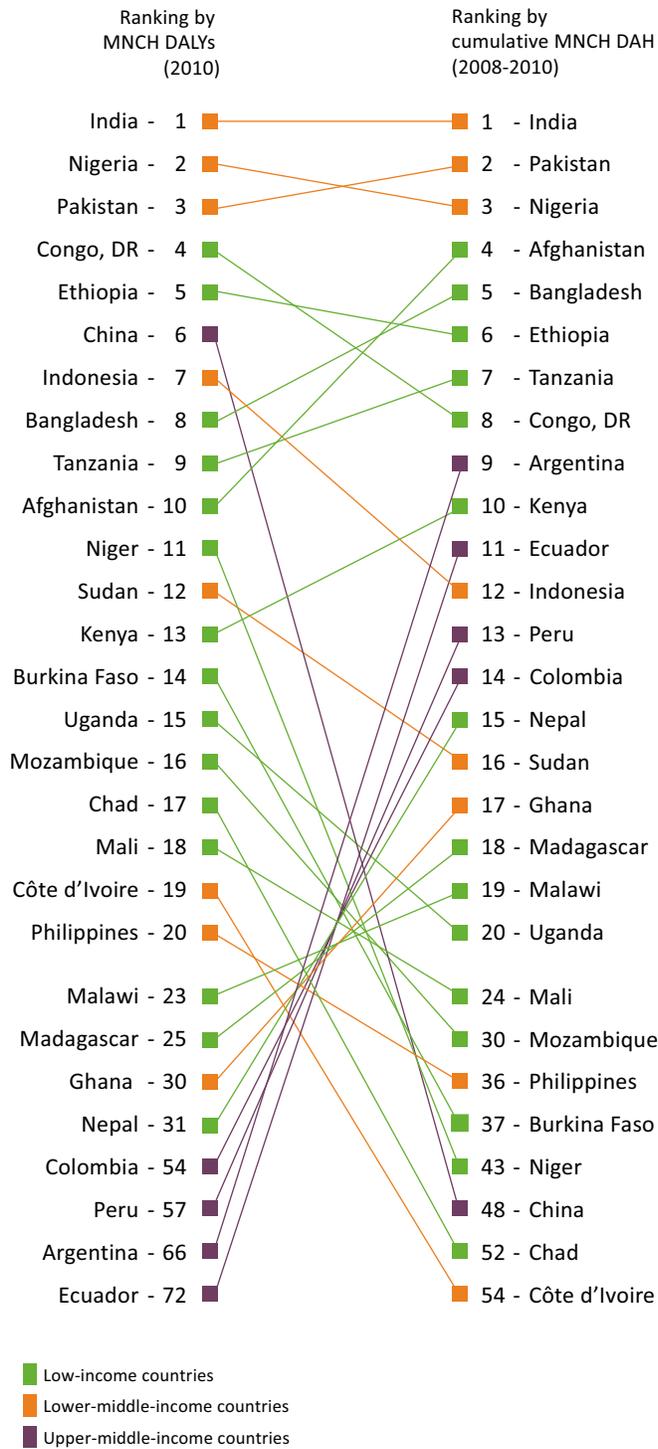


FIGURE 17:
Top 20 countries by 2010 maternal, newborn, and child health (MNCH) burden of disease versus cumulative 2008-2010 MNCH DAH



Sources: IHME DAH Database (Country and Regional Recipient Level) 2012 and Global Burden of Disease Study 2010

DAH for maternal, newborn, and child health

Compared to the rapid growth rates of HIV/AIDS DAH, expenditure on MNCH has not grown as quickly, although increases were still steady from 1990 onward. MNCH DAH, at \$1.22 billion in 1990, made up a much more substantial share of total DAH two decades ago. By 2010, MNCH spending reached almost \$5.2 billion, an 8.8% increase from 2009. According to our 2010 estimates, as shown in Figure 15, the US was the single largest contributor to MNCH, spending approximately 17.1% of the total in 2010. UNICEF (16.6%) and UNFPA (15.9%) followed closely behind the US in terms of their share of expenditure on MNCH. GAVI also made up a major proportion of spending on MNCH, at 14.9% of MNCH DAH in 2010; spending in this health focus area increasingly concentrates on vaccinations.

MNCH growth trends from 2009 to 2010 coincide with the creation of new MNCH initiatives. The Every Woman Every Child initiative has received over \$20 billion in commitments since its inception in 2010.³² In 2012, the London Summit on Family Planning also succeeded in mobilizing billions of dollars for MNCH.³³ The debut of the spending associated with Every Woman Every Child and other maternal and child health initiatives is manifested in MNCH growth rates. In 2010, UNICEF spending on MNCH jumped 60.9% (the response to the earthquake in Haiti and the floods in Pakistan also contributed to this rise).³⁴ MNCH DAH disbursements also grew significantly for the UK (38.8%). Other actors engaged in supporting MNCH also increased the DAH provided for the sector. A surge in funding for the WHO's programs on MNCH (8.5%) as well as US bilateral (9.4%) and UNFPA support (2.3%) bolstered sector-wide growth.

These investments in the MNCH focus area have risen with the decrease of global MNCH DALYs. Among children younger than 5 years of age, global DALYs declined from 41% in 1990 to 25% in 2010.¹² In 1990, maternal disorders were 0.9% of global DALYs, by 2010 these disorders made up 0.6%. However, globally, a quarter of the global burden remains a result of disease and injury in children younger than 5.

Among the 10 countries with the highest MNCH DALYs, as displayed in Figure 17, eight received among the highest amounts of MNCH DAH, all of which are low- or lower-middle-income countries. China is the only upper-middle-income country ranked in the top 20 and it received vastly less MNCH DAH in relative terms, at 48th among recipients of cumulative MNCH

FIGURE 18:
DAH for malaria by channel of assistance, 1990-2010

- Regional development banks
- World Bank – IDA
- BMGF
- GFATM
- United Nations and European Commission:
 - EC
 - WHO
- Bilateral agencies:
 - Other
 - United Kingdom
 - United States

Sources: IHME DAH Database 2012 and IHME DAH Database (Country and Regional Recipient Level) 2012

*2002-2004 US bilateral project descriptions lack detail, and thus disease-specific DAH totals for those years may be incomplete.

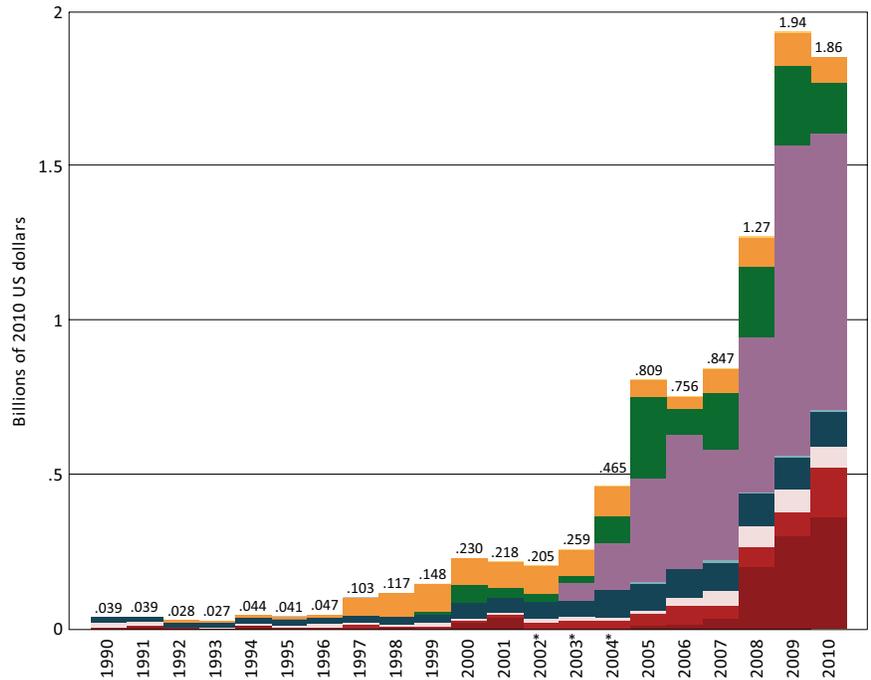
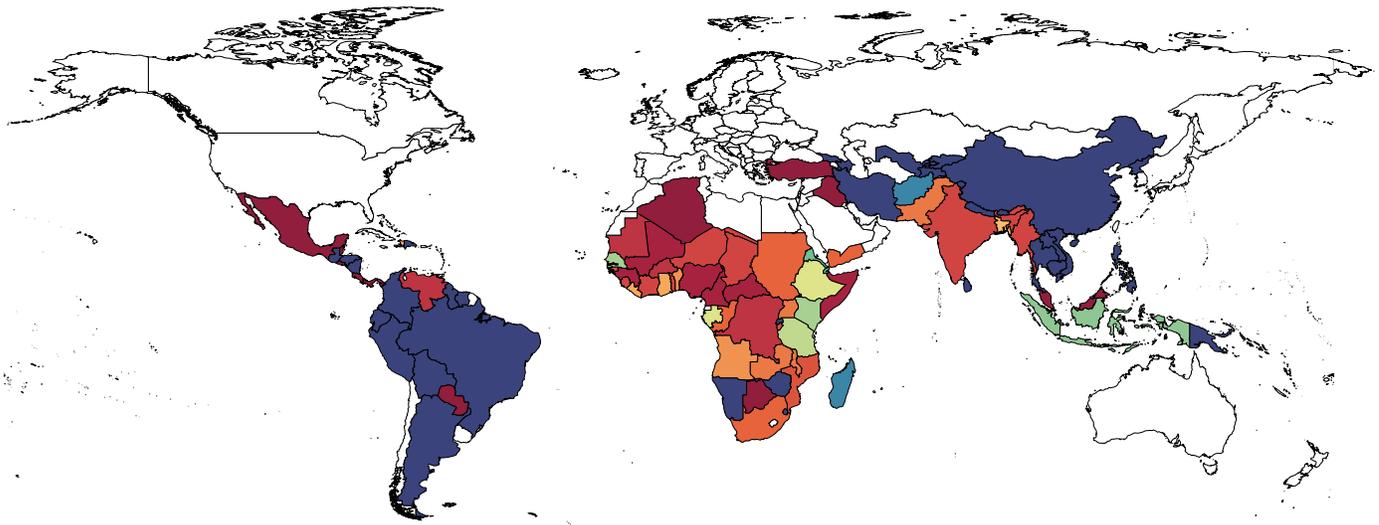


FIGURE 19:
Malaria DAH, 2008-2010, per related DALY, 2010

DALY estimates for 2010 are from the Global Burden of Disease Study 2010. Countries that were ineligible for DAH based on their World Bank income classification and countries not considered malaria-endemic by the *World Malaria Report 2011* are shown in white. DAH received is shown in real 2010 US dollars.



Sources: IHME DAH Database (Country and Regional Recipient Level) 2012, Global Burden of Disease Study 2010, and *World Malaria Report 2011*

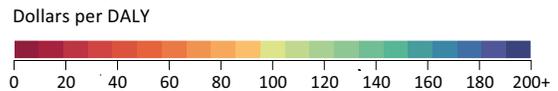
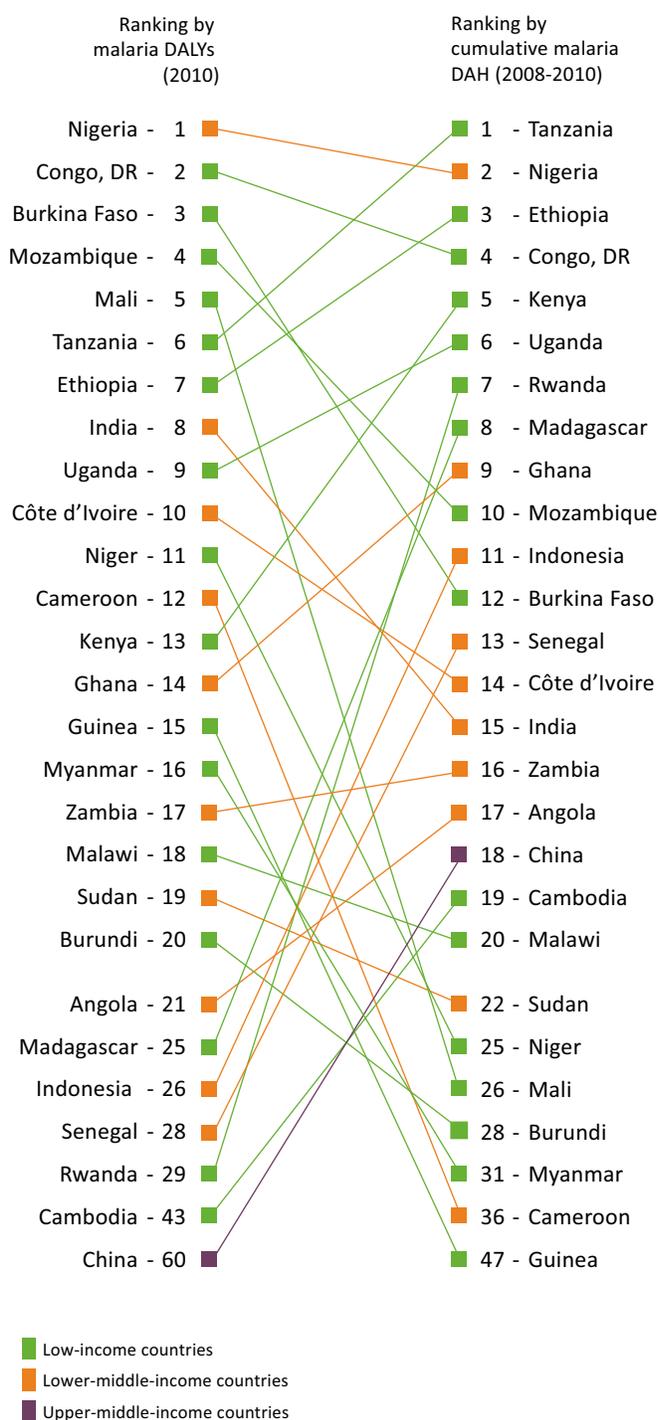


FIGURE 20:
Top 20 countries by 2010 malaria burden of disease versus cumulative 2008-2010 malaria DAH



Sources: IHME DAH Database (Country and Regional Recipient Level) 2012 and Global Burden of Disease Study 2010

DAH. However, a number of upper-middle-income countries with lower DALYs (Argentina, Peru, and Colombia) received some of the highest absolute levels of DAH for MNCH. This is highlighted in Figure 16 (on page 28), which shows that MNCH DAH per MNCH DALY was relatively high in parts of Central and South America. Worldwide, MNCH DAH per DALY ranged from less than \$5 in select countries, including a few upper-middle-income countries, to over \$100 in parts of the Central and South America region.

DAH for malaria

Unlike DAH for HIV/AIDS and MNCH, spending on malaria dipped from 2009 to 2010. Total DAH for malaria amounted to almost \$1.9 billion, a decrease of 4.2% from 2009. The cutback in spending was driven by a number of actors, including the EC, other bilaterals, GFATM, and other organizations, all of which reduced spending on malaria DAH in 2010. According to our estimates, US and UK expenditures on malaria were up 20.4% and 103.5%, respectively, in 2010. The large increase in UK spending was the result of a significant investment in GFATM's Affordable Medicines Facility – malaria (AMFm). Reflecting the 2010 decline, the Roll Back Malaria Partnership, the global entity focused on reducing malaria, identified a \$3.6 billion gap in spending if global malaria targets are to be met by 2015.³⁵

However, as shown in Figure 18, the drop follows strong growth since 2005, including a \$664 million jump in malaria DAH from 2008 to 2009 (a 52.1% increase). This rise was principally due to increased investments by GFATM, which more than doubled from 2008 to 2009. The creation in 2005 of the President's Malaria Initiative, launched with US funding, has also driven this increase in recent years. Furthermore, BMGF, through increased investment in programs such as PATH's Malaria Vaccine Initiative, has contributed significantly to malaria DAH.

The expansion of malaria program support was built on the recognition that malaria accounts for 3.3% of total global DALYs.¹² Furthermore, according to new research by IHME in 2012, 22.6% of the global malaria burden occurs in adults over the age of 15 years – a previously unknown cause of adult disease burden.¹³ Malaria also predominantly affects developing countries. The countries afflicted with the highest malaria DALYs, as shown in Figure 20, are all classified as low-income or lower-middle-income

FIGURE 21:
DAH for tuberculosis by channel of assistance, 1990-2010

- Regional development banks
- World Bank – IDA
- World Bank – IBRD
- BMGF
- GFATM
- United Nations and European Commission:
 - EC
 - WHO
- Bilateral agencies:
 - Other
 - United Kingdom
 - United States

Sources: IHME DAH Database 2012 and IHME DAH Database (Country and Regional Recipient Level) 2012

*2002-2004 US bilateral project descriptions lack detail, and thus disease-specific DAH totals for those years may be incomplete.

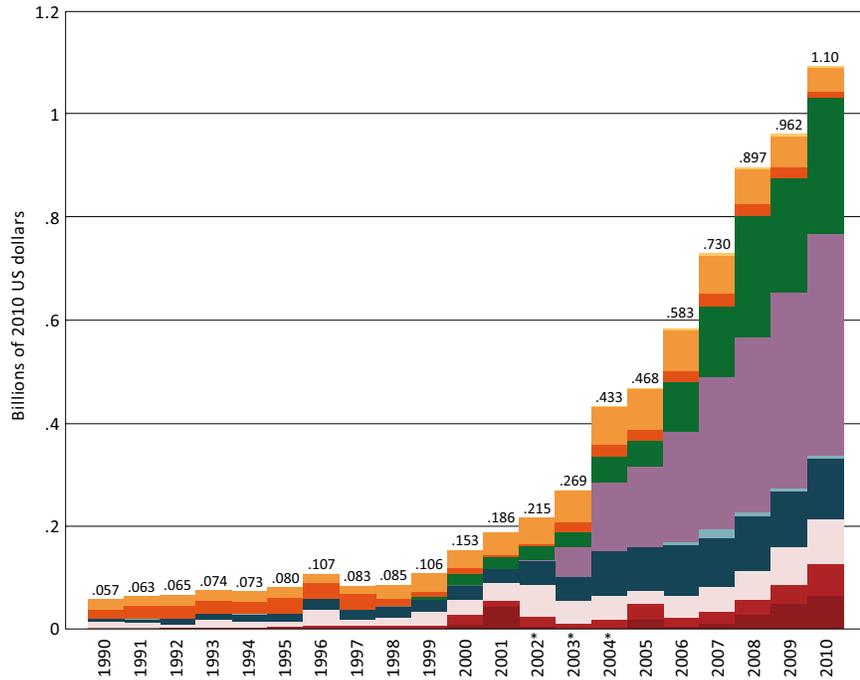
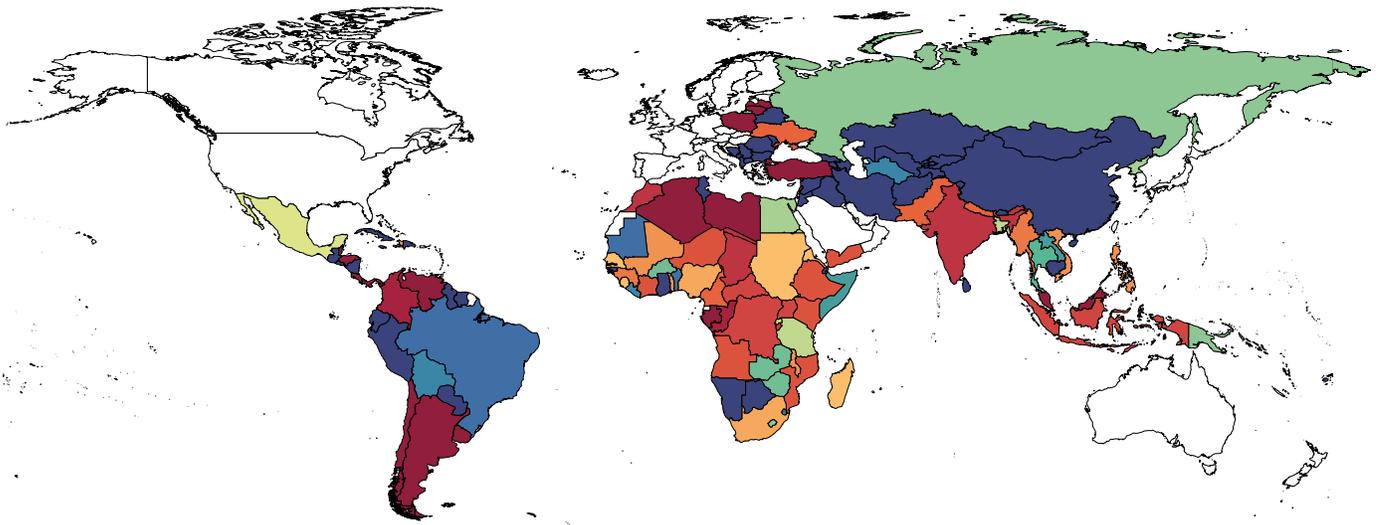


FIGURE 22:
Tuberculosis DAH, 2008-2010, per related DALY, 2010

DALY estimates for 2010 are from the Global Burden of Disease Study 2010. Countries that were ineligible for DAH based on their World Bank income classification are shown in white. DAH received is shown in real 2010 US dollars.



Sources: IHME DAH Database (Country and Regional Recipient Level) 2012 and Global Burden of Disease Study 2010

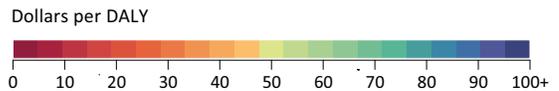
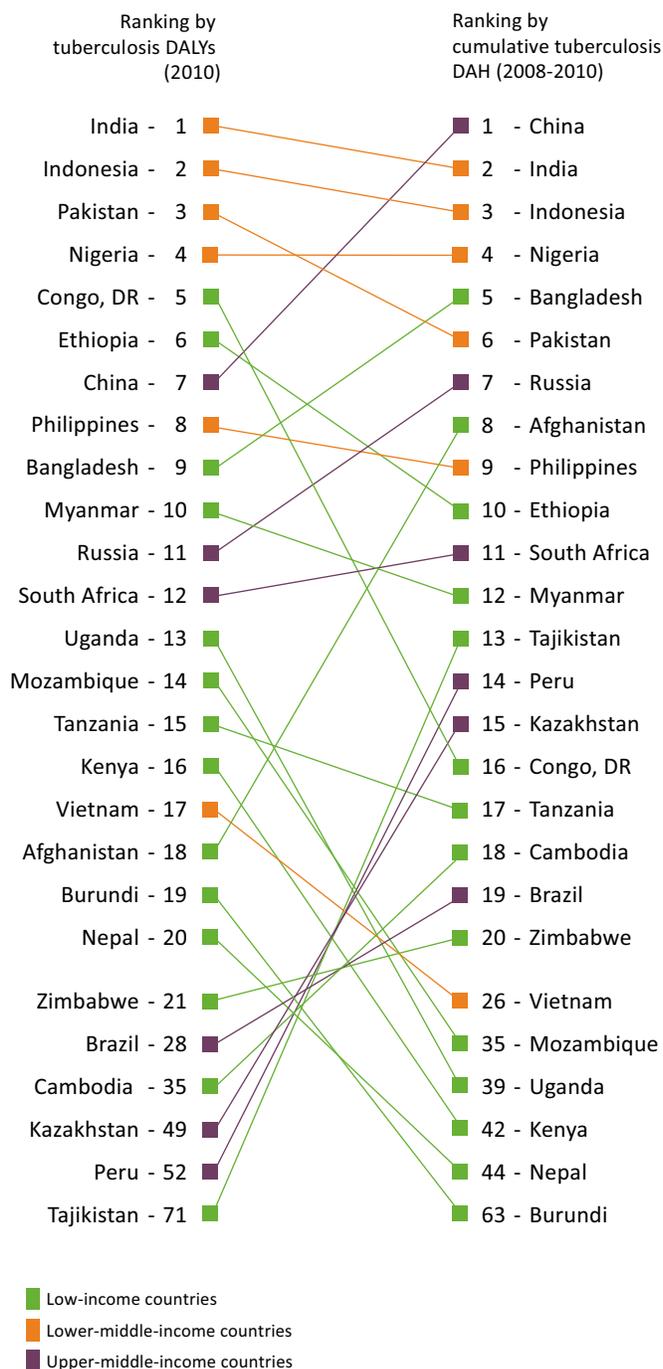


FIGURE 23:
Top 20 countries by 2010 tuberculosis burden of disease versus cumulative 2008-2010 tuberculosis DAH



Sources: IHME DAH Database (Country and Regional Recipient Level) 2012 and Global Burden of Disease Study 2010

countries. China is the only upper-middle-income country to appear among the top 20 recipients of DAH for malaria. Malaria is also most concentrated in sub-Saharan Africa; only one non-African country, India, ranks among the countries with the highest malaria burden. Spending on malaria in terms of DAH per DALY, as exhibited in Figure 19 (on page 30), is high in most of South America as well as East Asia and the Pacific because the relative burden was low. Sub-Saharan Africa as a whole, and particularly West and Central sub-Saharan Africa, received relatively low levels of malaria DAH per malaria DALY.

DAH for tuberculosis

Worldwide, TB accounts for 2% of all DALYs and ranks 13th overall in terms of causes of disease.¹² In October 2012, the WHO’s Stop TB Department announced that the world had achieved the MDG target of halting and reversing the TB epidemic and was also on track to reduce TB prevalence by 50% by 2015. According to the *Global Tuberculosis Report 2012*, however, Africa and Europe lag behind the rest of the world in making progress toward these goals.³⁶

Figure 21 illustrates that TB programs have benefited from a significant increase in funding since 2004. This trend continued on to 2010, with year-over-year growth of 13.8%. A total of \$1.1 billion in DAH was spent on TB in 2010. As with malaria, this funding can be largely attributed to GFATM, which contributed 39.4% of funds and spent \$432 million on TB in 2010. BMGF also provided substantial support to TB programs, disbursing 24.2% of total TB DAH in 2010. Although a good portion of these contributions are expected to continue in coming years, the *Global Tuberculosis Report* also emphasized a funding gap of \$1.4 billion for research and \$3 billion for control and care annually between 2013 and 2015.³⁶

Figure 23 indicates that TB is present in countries across income levels, including the upper-middle-income countries of China, Russia, and South Africa. These and other upper-middle-income countries (Peru, Kazakhstan, and Brazil) were ranked among the top 20 recipients of cumulative TB DAH from 2008 to 2010. Kazakhstan and Peru in particular received large amounts of DAH for TB despite relatively small burdens. This mix of spending and burden is also evident in Figure 22. Globally, DAH per TB DALY ranged from under \$5 to over \$100 across regions. A few countries in South America and East and Central Asia received especially high levels of DAH per DALY.

FIGURE 24:
DAH for noncommunicable diseases by channel of assistance, 1990-2010

- Regional development banks
- World Bank – IDA
- World Bank – IBRD
- Bloomberg Family Foundation
- BMGF

- United Nations and European Commission:
- EC
- WHO

- Bilateral agencies:
- Other
- United Kingdom
- United States

Sources: IHME DAH Database 2012 and IHME DAH Database (Country and Regional Recipient Level) 2012

*2002-2004 US bilateral project descriptions lack detail, and thus disease-specific DAH totals for those years may be incomplete.

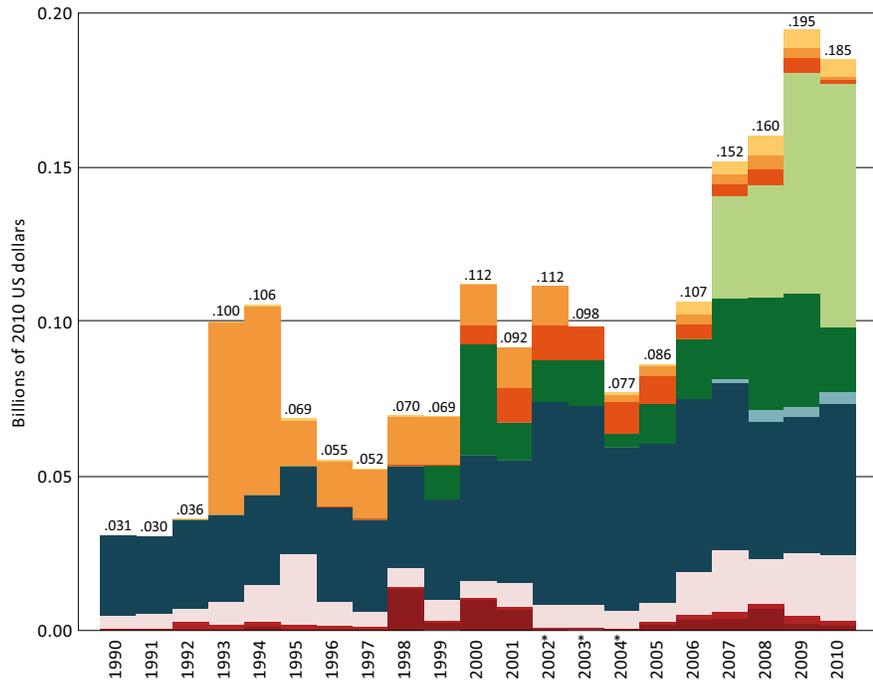
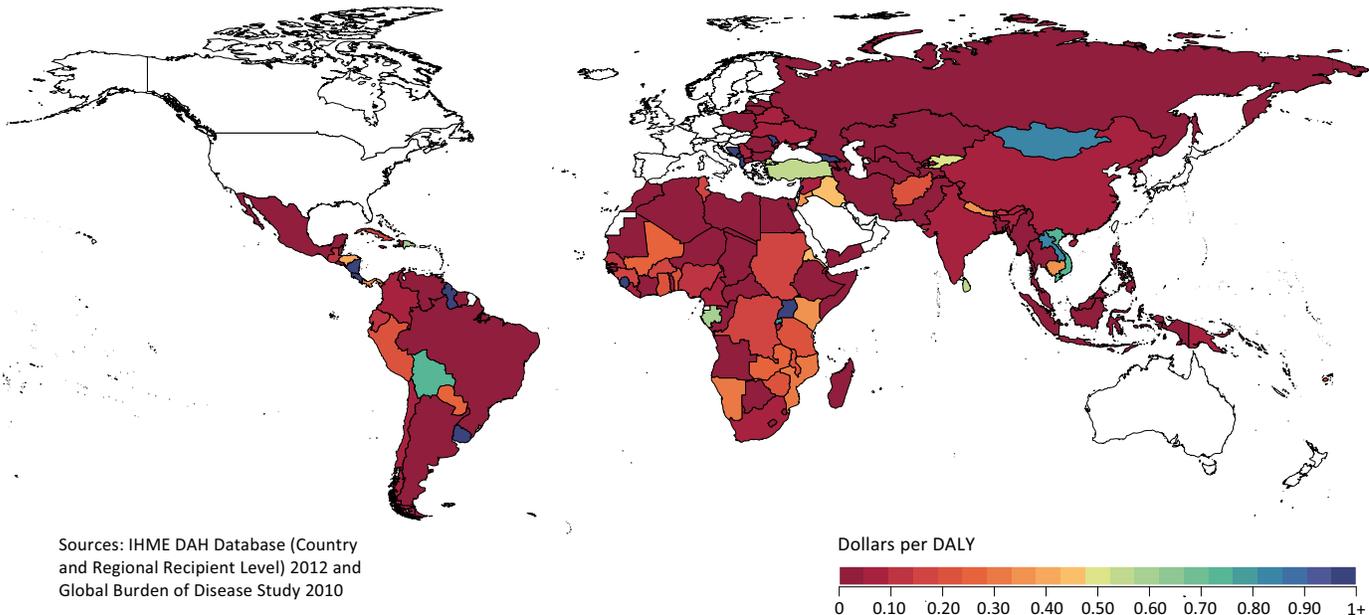


FIGURE 25:
Noncommunicable diseases DAH, 2008-2010, per related DALY, 2010

DALY estimates for 2010 are from the Global Burden of Disease Study 2010. Countries that were ineligible for DAH based on their World Bank income classification are shown in white. DAH received is shown in real 2010 US dollars.



Sources: IHME DAH Database (Country and Regional Recipient Level) 2012 and Global Burden of Disease Study 2010

DAH for noncommunicable diseases

NCDs include cancer, diabetes, heart disease, and other illnesses that are noninfectious and nontransmissible. In 2011, a high-level UN meeting on NCDs was convened to emphasize the need to address NCDs' growing share of burden, among other issues.³⁷ However, NCDs have not traditionally been a chief focus of development assistance for health, and NCD DAH remains a very small portion of total spending. Out of \$28.2 billion of DAH in 2010, DAH for NCDs amounted to \$185 million. Similar to DAH for malaria, expenditure on NCDs fell 5.1% in 2010. This is displayed in Figure 24.

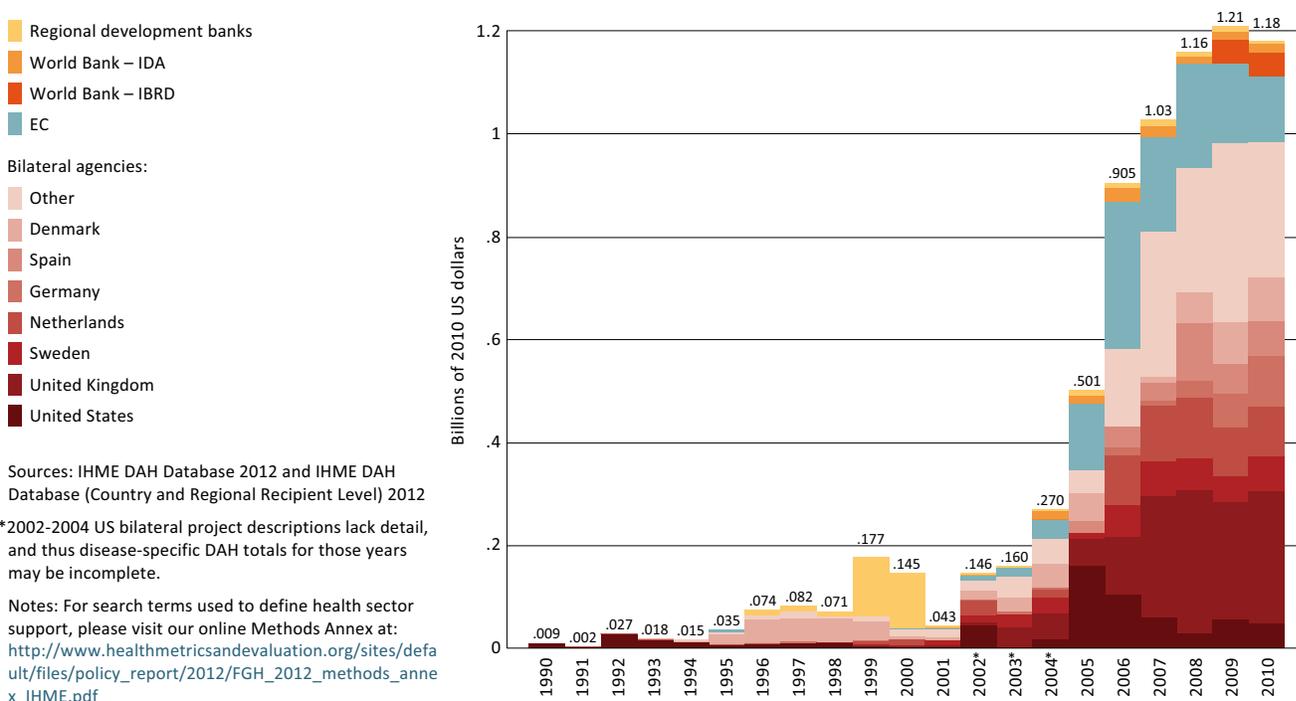
The results of GBD 2010 underscore the growing importance of this health focus area. Since 1990, the global burden of disease has shifted substantially away from communicable diseases to NCDs. As a portion of global DALYs in 1990, 43% were NCDs; by 2010, NCDs had risen to 54% of global DALYs.¹² As people live longer and communicable diseases are tackled more systematically, NCDs will be an increasingly important issue for health systems in low- and middle-income countries. Investing in preventive measures now can prevent the need for expensive curative care in the future.³⁸

Since 1990, the WHO has been one of the most consistent supporters of DAH for NCDs, providing \$49 million or 26.5% of this funding in 2010. In recent years, the Bloomberg Family Foundation, which focuses on smoking prevention and other issues, has committed an increasing share of its resources to NCDs and now accounts for 42.7% of NCD DAH (\$79 million). Spending on NCD DAH per DALY is low across regions. Figure 25 shows that countries that received the highest NCD DAH per DALY were allocated, at most, \$1 per NCD DALY. We refrained from ranking countries by NCD DAH or DALYs associated with NCDs because spending on NCDs is low enough to be subject to a large amount of variability and thus be unrepresentative of trends overall (i.e., a single project could make a recipient highly ranked).

DAH for health sector support

DAH for health sector support includes disbursements made directly to developing-country governments to spend on health system strengthening or other health priorities. DAH for health sector support is particularly hard to separate from DAH for diseases or MNCH because definitions of health sector support are not

FIGURE 26:
DAH for health sector support by channel of assistance, 1990-2010



applied uniformly. DAH for health sector support took off after development assistance partners committed to this particular approach in the 2005 Paris Declaration on Aid Effectiveness.³⁹ The declaration emphasizes the alignment of development assistance with country-government priorities and stresses the use of development assistance to strengthen national systems, in line with creating sustained domestic capacity. The effect of the Paris Declaration is evident in the growth of DAH for health sector support from 2005 onward; from 2005 to 2010, health sector support increased almost \$700 million.

As shown in Figure 26 (on page 35), European bilateral development organizations provided the bulk of funding for health sector support. Despite strong support from most European agencies, total DAH for health sector support contracted 2.5% from 2009. Among the European bilaterals highlighted in Figure 26, only the EC's DAH dropped significantly (17.2%). The UK, which provides the most significant amount of DAH for health sector support, contributed \$258 million in 2010, a 13.5% increase from 2009. We also observed growth in the DAH provided by Germany (50.9%), Sweden (31.5%), Spain (14.4%), and the Netherlands (2.9%). DAH from the US for health sector support, meanwhile, decreased 14.5% from 2009 to 2010.