CONTENTS

Part 1: Introduction to the database

Part 2: Using the database

Part 3: Variable descriptions and values

Part 1: Introduction to the database

The IHME DAH Database enables comprehensive analysis of trends in international disbursements for health from sources of funding, channels of funding, for recipient countries/geographic regions, health focus areas and program areas. In order to understand the framework used to track DAH, we recommend that users of the IHME DAH Database 2019 review the *Financing Global Health 2018* report and its online methods appendix. Both resources can be found at http://www.healthdata.org/policy-report/financing-global-health-2018-countries-and-programs-transition.

Overview of variables: The main variable in this dataset is development assistance for health (DAH). The data are disaggregated at the year, source, channel, double counted transfers and recipient country level, so that these variables together are the unique identifiers.

Development Assistance for Health (DAH) is the financial and in-kind resources transferred from major health development agencies to low-income and middle-income countries with the primary intent of improving or maintaining health. In this dataset, it is tracked from source to channel to recipient country, region, health focus area and program area. DAH is funded by the channel's corresponding income, or funds transferred from a source to the channel. Disbursements to specific health focus areas can include transfers between two channels, which can be captured in data from both channels. Duplicate transfers are removed before calculating DAH for each health focus areas, recipient region, etc. The dataset contains two elimination variables which identify double counting observations. These duplicate transfers are described on Page 3.

Source distinguishes where funds originate from, such as private versus public funds from a particular donor country.

Channels are the agencies through which funds are disbursed. (See Part 3 of this guide for detailed information on the definitions and admissible values of these variables).

Health Focus Areas (HFAs) include Maternal and Child health (MNCH), HIV/AIDs, Malaria, Tuberculosis, Other Infectious Diseases (OID), Non-communicable Diseases (NCD), Sectorwide Approaches/Health System Strengthening (SWAP/HSS).

Program Areas (PAs) are subcategories of HFAs detailed in Part 3.

All dollar values are reported in thousands of constant 2019 US dollars. Dashes indicate nonzero values under \$500 that, when rounded to the thousands place, would be rounded to zero. Negative values in the dataset result from eliminations of double counted transfers between certain channels, and redistribution of DAH between countries for countries and years that were backcasted. Data was backcasted for countries that divided into independent nations, such as Sudan and South Sudan in

2011, and Indonesia and Timor-Leste in 1999. Due to data limitations, regional- and country-level recipient data are not available after 2017.

Transfers between two channels, both of which are tracked in our database, must be removed before DAH can be summed. The code for removing these transfers can be found in Part 2 of this user's guide. These transfers include the following:

- Funds flowing from the Bill & Melinda Gates Foundation (BMGF), US foundations, GAVI, and the Global Fund to fight AIDS, Tuberculosis, and Malaria to other channels that we track, including NGOs. These funds are in essence reported in the initial (first receipt) channel's data and the final (last receipt) channel's data. We track the funds at the final channel of disbursement, so the funds reported by the initial channel of receipt are dropped.
 - Funds flowing between UN agencies. These include transfers between the Joint United Nations Programme on HIV/AIDS (UNAIDS), the United Nations Population Fund (UNFPA), the United Nations Children's Fund (UNICEF), the Pan American Health Organization (PAHO), and the World Health Organization (WHO). Funds reported by a UN agency channel as being sourced from another UN agency are dropped from the source agency. These funds are then captured in the outflow of the UN agency that received the funds. As Unitaid provides grantee information for the outflow of their funds, transfers to other agencies we track independently are dropped directly from the Unitaid analysis.
 - Funds transferred from bilateral agencies to NGOs tracked through the USAID VolAg report. These transfers are reported by both bilateral agencies and NGOs. For DAH by channel estimates, the transfers reported by NGOs in the VolAg report are subtracted from each bilateral channel's DAH, and NGOs are kept as the channel. Since funds are reported by NGOs as being from US or non-US public sources, US public funds are subtracted from the US bilateral channel's DAH, and non-US public funds are subtracted from each non-US bilateral channel's DAH based on each channel's share of total DAH. For DAH by source estimates, the transfers reported by NGOs already tracked through the VolAg report are dropped and the transfers reported by bilateral agencies are kept.
 - Funds transferred from bilateral agencies to other channels that we track. The OECD CRS dataset, through which we track funding contributed by bilateral agencies, also includes bilateral funding channeled through numerous other agencies including development banks, UN agencies, and public-private-partnerships. Since we track funding using data from those channels, we eliminate transfers from bilateral sources through these channels in order to avoid double counting. We identify double counted channel data using channel information in the CRS dataset, and drop funding disbursed through these channels.

Part 2: Using the database

The code below uses the IHME DAH Database 2019 to calculate DAH by channel, source, and recipient country. The code (1) removes transfers between channels that are captured more than once in the database, including transfers from BMGF to other channels, from one UN agency to another, and from GAVI and GFATM to other channels; (2) aggregates DAH by channel, source, or recipient country; (3) creates and exports two stacked bar graphs, DAH by channel from 1990-2019 and DAH by source from 1990-2019. The code is written in and for Stata 15.

Users can copy and paste this code into a Stata 15 editor.

```
// Using the IHME DAH Database (2019) to generate DAH by channel, source, and recipient
country estimates.
// Copy and paste code into a .do file and run in Stata 15.
clear all
set more off
local DATA
                "FILL IN DATA PATH WHERE USER STORED DOWNLOADED IHME DATABASE"
local OUT
                "FILL IN FOLDER PATH WHERE USER WANTS GRAPHS STORED"
local deflate_yr "19"
use "`DATA'\IHME DAH Database (2019).dta", clear
// Prepare data by dropping transfers between channels that are double counted
        drop if elim_ch == 1
        drop elim_ch
// Convert DAH variables to numeric values
        destring *dah*, replace force
tempfile data
```

```
save 'data', replace
** **********
// 1.) DAH by channel
** ************
use 'data', clear
// Step 1: Calculate total DAH by channel of assistance
collapse (sum) dah `deflate yr', by(year channel)
rename dah_`deflate_yr' dah_`deflate_yr'_
replace dah `deflate_yr'_ = dah_`deflate_yr'_/ 10^6
reshape wide dah `deflate yr', i(year) j(channel) string
egen dah 'deflate yr' BIL OTHER = rowtotal(dah 'deflate yr' BIL * dah 'deflate yr' EC dah 'deflate yr' EEA)
egen dah 'deflate yr' BIL GRAPH = rowtotal(dah 'deflate yr' BIL AUS dah 'deflate yr' BIL CAN dah 'deflate yr' BIL CHN
dah 'deflate yr' BIL FRA dah 'deflate yr' BIL DEU dah 'deflate yr' BIL GBR dah 'deflate yr' BIL USA)
replace dah_'deflate_yr'_BIL_OTHER = dah_'deflate_yr'_BIL_OTHER - dah_'deflate_yr'_BIL_GRAPH
egen dah 'deflate yr' REG DB = rowtotal(dah 'deflate yr' IDB dah 'deflate yr' AfDB dah 'deflate yr' AsDB)
egen dah_`deflate_yr'_other_UN = rowtotal(dah_`deflate_yr'_UNICEF dah_`deflate_yr'_UNFPA dah `deflate yr' UNAIDS
dah 'deflate yr' PAHO dah 'deflate yr' UNITAID)
egen dah 'deflate yr' WB = rowtotal(dah 'deflate yr' WB*)
// Step 2: Graph total DAH by channel of assistance
gr bar (sum) dah `deflate yr' BIL USA dah `deflate yr' BIL GBR dah `deflate yr' BIL DEU dah `deflate yr' BIL FRA
dah 'deflate yr' BIL CAN dah 'deflate yr' BIL AUS dah 'deflate yr' BIL CHN dah 'deflate yr' BIL OTHER dah 'deflate yr' other UN
dah 'deflate yr' WHO dah 'deflate yr' GAVI dah 'deflate yr' GFATM dah 'deflate yr' CEPI dah 'deflate yr' BMGF dah 'deflate yr' NGO
dah `deflate yr' INTLNGO dah `deflate yr' US FOUND dah `deflate yr' WB dah `deflate yr' REG DB, over(year, gap(0) label(labsize(*0.6)
angle(45))) ///
stack ylabel(0(2)42, labsize(*0.7) nogrid angle(0)) ytitle("Billions of" "20'deflate yr' USD", size(*0.8) orientation(horizontal))
```

```
graphregion(fcolor(white)) legend(lab(1 "US bilateral") lab(2 "UK bilateral") lab(3 "Germany bilateral") lab(4 "France bilateral") lab(5 "Canada
bilateral") lab(6 "Australia bilateral") lab(7 "China bilateral") lab(8 "Other bilateral development agencies") lab(9 "UNICEF, UNFPA, UNAIDS,
Unitaid, PAHO") lab(10 "WHO") lab(11 "Gavi") lab(12 "Global Fund") lab(13 "CEPI") lab(14 "Gates Foundation") lab(15 "US NGOs") lab(16
"International NGOs") lab(17 "US foundations") lab(18 "World Bank") lab(19 "Regional development banks") order(19 18 17 16 15 14 13 12 11
10 9 8 7 6 5 4 3 2 1) size(*0.525) symxsize(2) ///
position(11) colfirst ring(0) region(lcolor(none) fcolor(none))) title("Development assistance for health by channel of assistance, 1990-
20'deflate yr'", size(*0.6)) bar(1, c(red*1.2)) bar(2, c(red)) bar(3, c(red*.7)) bar(4, c(red*.5)) bar(5, c(red*0.2)) bar(6, c(erose)) bar(7,
c(erose*.6)) bar(8, c(erose*0.3)) bar(9, c(ebblue)) bar(10, c(ebblue*0.6)) bar(11, c(purple*0.9)) bar(12, c(purple*0.7)) bar(13, c(purple*0.3))
bar(14, c(midgreen)) bar(15, c(midgreen*0.65)) bar(16, c(midgreen*0.4)) bar(17, c(midgreen*0.2)) bar(18, c(dkorange*0.5)) bar(19,
c(dkorange*0.3))
gr export "'OUT'\DAH by channel 1990-2019.pdf"
** *************
// 2.) DAH by source
use 'data', clear
// Step 1: Calculate total DAH by source
collapse (sum) dah `deflate yr', by(year source)
replace dah _`deflate_yr' = dah_`deflate_yr'/ 10^6
reshape wide dah `deflate yr', i(year) j(source) string
egen other public dah 'deflate yr' = rowtotal(dah 'deflate yr'Austria dah 'deflate yr'Belgium dah 'deflate yr'Denmark
dah `deflate yr'Finland dah `deflate yr'Greece dah `deflate yr'Ireland dah `deflate yr'Italy dah `deflate yr'Korea
dah `deflate yr'Luxembourg dah `deflate yr'New Zealand dah `deflate yr'Portugal dah `deflate yr'Sweden dah `deflate yr'Switzerland
dah_`deflate_yr'Non_OECD_DAC_countries dah_`deflate_yr'Non_OECD_DAC_countries)
// Step 2: Graph total DAH by source
gr bar (sum) dah `deflate yr'United States dah `deflate yr'United Kingdom dah `deflate yr'Germany dah `deflate yr'France
```

```
dah `deflate yr'Spain dah `deflate yr'Norway dah `deflate yr'Netherlands dah `deflate yr'Japan dah `deflate yr'Canada
dah `deflate yr'Australia dah `deflate yr'China other public dah `deflate yr' dah `deflate yr'BMGF dah `deflate yr'Corporate donations
dah `deflate yr'Private other dah `deflate yr'Debt repayments dah `deflate yr'Other dah `deflate yr'Unallocable, over(year, gap(0)
label(labsize(*0.6) angle(45))) ///
stack ylabel(0(2)42, labsize(*0.7) nogrid angle(0)) ytitle("Billions of" "20`deflate yr' USD", size(*0.8) orientation(horizontal))
graphregion(fcolor(white)) legend(lab(1 "United States") lab(2 "United Kingdom") lab(3 "Germany") lab(4 "France") lab(5 "Spain") lab(6
"Norway") lab(7 "Netherlands") lab(8 "Japan") lab(9 "Canada") lab(10 "Australia") lab(11 "China") lab(12 "Other governments") lab(13 "BMGF")
lab(14 "Corporate doantions") lab(15 "Other private philanthropy") lab(16 "Debt repayments (IBRD)") lab(17 "Other") lab(18 "Unallocable")
order(18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1) size(*0.525) symxsize(2) ///
position(11) colfirst ring(0) region(lcolor(none) fcolor(none))) title("Development assistance for health by source of funding, 1990-
20'deflate yr'", size(*0.6)) bar(1, c(red)) bar(1, c(red*1.2)) bar(2, c(red*0.8)) bar(3, c(red*0.6)) bar(4, c(red*0.2)) bar(5, c(gold*1.2)) bar(6,
c(gold)) bar(7, c(gold*0.6)) bar(8, c(gold*0.2)) bar(9, c(erose*0.8)) bar(10, c(erose*0.6)) bar(11, c(erose*0.4)) bar(12, c(erose*0.2)) bar(13,
c(midgreen*0.8)) bar(14, c(midgreen*0.6)) bar(15, c(midgreen*0.4)) bar(16, c(orange*0.8)) bar(17, c(gs8)) bar(18, c(gs12))
gr export "'OUT'\DAH by source 1990-2019.pdf"
** *************
// 3.) Recipient country totals
** ************
use 'data', clear
// Calculate total DAH by recipient country
   collapse (sum) dah `deflate yr', by(recipient country recipient isocode year)
   sort recipient country year
```

Part 3: Variable descriptions and values

Variable Name	Description	Admissible Value
year	Disbursement year	1990 – 2019
source	Denotes source	See Appendix A
channel	Channel of funding	See Appendix B
recipient_isocode recipient_country	Recipient country's ISO 3-digit code and country name (form used by IHME)	See Appendix A
gbd_location_id	Recipient country's Global Burden of Disease location ID	
wb_regioncode	Recipient country's World Bank Region Code	See Appendix C
wb_location_id	Recipient country's World Bank Region ID	See Appendix C
gbd_region	Recipient country's Global Burden of Disease region	See Appendix D
gbd_region_id	Recipient country's Global Burden of Disease region ID	
gbd_superregion	Recipient country's Global Burden of Disease super-region	See Appendix E
gbd_superregion_id	Recipient country's Global Burden of Disease super-region ID	
elim_ch	Binary indicator to tag transfers between channels that are captured elsewhere in the database	1= drop to avoid double counting, 0 = Do not drop
prelim_est	Binary indicator to tag estimates based on preliminary data that may change in future editions (used predominantly for 2018 and 2019 estimates)	1= Preliminary Estimate, 0= Final estimate
dah_19	Total funds for health disbursed from source to channel to recipient country	

Variable Name	Description	Admissible Value
hiv_dah_19	Funds for health disbursed from	
hiv_care_dah_19 hiv_ct_dah_19	source to channel to recipient country	
hiv_hss_other_dah_19	for HIV/AIDS, disaggregated by care	
hiv_hss_hrh_dah_19	and support, counseling & testing,	
hiv_treat_dah_19hiv_ovc_dah_19	other health system strengthening,	
hiv_pmtct_dah_19	human resources, treatment, orphans	
hiv_prev_dah_19	& vulnerable children, prevention of	
hiv_amr_dah_19	mother to child transmission,	
hiv_other_dah_19	prevention, drug resistance, and	
	other.	
	Funds for health disbursed from	
mal_dah_19	source to channel to recipient country	
mal_comm_con_dah_19	for malaria, disaggregated by	
mal_con_nets_dah_19	community outreach, bednets, indoor	
mal_con_irs_dah_19	spraying, other control, diagnosis,	
mal_con_oth_dah_19	other health system strengthening,	
mal_diag_dah_19	human resources, treatment, drug	
mal_hss_other_dah_19	resistance, and other	
mal_hss_hrh_dah_19		
mal_treat_dah_19		
mal_amr_dah_19		
mal_other_dah_19		
rmh_dah_19	Funds for health disbursed from	
rmh_fp_dah_19	source to channel to recipient country	
rmh_hss_other_dah_19	for reproductive and maternal health,	
rmh_hss_hrh_dah_19	disaggregated by family planning,	
rmh_mh_dah_19	other health system strengthening,	
rmh_other_dah_19	human resources, other maternal	
	health, and other	
nch dob 10	Funds for health disbursed from	
nch_dah_19		
nch_cnn_dah_19 nch_cnv_dah_19	source to channel to recipient country for newborn and child health,	
nch_hss_hrh_dah_19	disaggregated by nutrition, vaccines,	
nch_hss_hrh_dah_19	other health system strengthening,	
nch_other_dah_19	human resources, and other	
	indinan resources, and other	
ncd_dah_19	Funds for health disbursed from	
ncd_mental_dah_19	source to channel to recipient country	
ncd_hss_other_dah_19	for non-communicable diseases,	
ncd_hss_hrh_dah_19	disaggregated by mental health,	
ncd_tobac_dah_19	other health system strengthening,	
ncd_other_dah_19	human resources, tobacco initiatives,	
	and other	

Variable Name	Description	Admissible Value
oid_dah_19	Funds for health disbursed from	
oid_hss_other_dah_19 oid_hss_hrh_dah_19	source to channel to recipient country	
oid_ebz_dah_19	for other infectious diseases, disaggregated by other health system	
oid_ebz_dan_19	strengthening, human resources,	
oid_zika_dan_19 oid_amr_dah_19		
oid_amr_dan_19	Ebola, Zika, antimicrobial resistance, and other	
old_other_dan_19	and other	
tb_dah_19	Funds for health disbursed from	
tb_diag_dah_19	source to channel to recipient country	
tb_hss_other_dah_19	for tuberculosis, disaggregated by	
tb_hss_hrh_dah_19	diagnosis, other health system	
tb_treat_dah_19	strengthening, human resources,	
tb_amr_dah_19	treatment, drug resistance, and other	
tb_other_dah_19		
swap_hss_total_dah_19		
swap_hss_hrh_dah_19	Funds for health disbursed from	
swap_hss_pp_dah_19	source to channel to recipient country	
swap_hss_other_dah_19	for health systems strengthening and	
	sector-wide approaches,	
	disaggregated by human resources,	
	pandemic preparedness, and other	
other_dah_19		
	Funds for health distributed from	
	source to channel to recipient country	
	for which we have health focus area	
	information but which is not	
	identified as being allocated to any of	
	the other health focus areas listed	
unalloc_dah_19		
	Funds for health disbursed from	
	source to channel to recipient country	
	for which we have no health focus	
	area information	

Appendix A: Source

BMGF Contribution from the Bill & Melinda Gates

Foundation

Corporate Donations Private sector in-kind contributions to NGOs

Debt Repayments Debt repayments (World Bank)

Other OECD DAC Countries Public sector funds from other OECD DAC

countries including Czech Republic, Hungary,

Iceland, Poland, Slovakia, Slovenia

Non-OECD DAC Countries Public sector funds from countries not in the

OECD Development Assistance Committee (DAC)

(national treasuries)

Other Interest, transfer of funds, refunds, miscellaneous

income earned by channel

Private_other Private sector financial contributions (includes

corporations, foundations, individuals, etc.)

Unallocable Unspecified donor sector

Australia Public sector funds (national treasuries)

Austria

Belgium

Canada

China

Denmark Finland

France

Germany

-

Greece

Ireland

Italy

Japan

Korea

Luxembourg

Netherlands

New Zealand

Norway

Portugal

Spain Sweden Switzerland United Kingdom United States

Appendix B: Channels of funding Bilateral agencies:

BIL_ARE United Arab Emirates

BIL_AUS Australia

BIL_AUT Austria

BIL_BEL Belgium

BIL_CAN Canada

BIL_CHE Switzerland

BIL_CHN China

BIL_DEU Germany

BIL_DNK Denmark

BIL_ESP Spain

BIL_FIN Finland

BIL_FRA France

BIL_GBR United Kingdom

BIL_GRC Greece

BIL_IRL Ireland

BIL_ITA Italy

BIL_JPN Japan

BIL_KOR Korea

BIL_LUX Luxembourg

BIL_NLD Netherlands

BIL_NOR Norway

BIL_NZL New Zealand

BIL_PRT Portugal

BIL_SWE Sweden

BIL_USA United States

Multilateral agencies:

EC European Commission
EEA European Economic Area

Public-private partnerships:

GAVI Gavi, the Vaccine Alliance

GFATM Global Fund to Fight AIDS, Tuberculosis, and Malaria
CEPI Coalition for Epidemic Preparedness Innovations

Development banks:

AfDB African Development Bank
AsDB Asian Development Bank

IDB Inter-American Development Bank

WB_IBRD World Bank, International Bank for Reconstruction and Development

WB_IDA World Bank, International Development Association

NGOs and foundations:

BMGF Bill & Melinda Gates Foundation

INTLNGO International NGOs

NGO US NGOs

US_FOUND US Foundations

UN agencies:

PAHO Pan American Health Organization

UNAIDS Joint United Nations Programme on HIV/AIDS

UNIFPA United Nations Population Fund
UNICEF United Nations Children's Fund

UNITAID Unitaid

WHO World Health Organization

Appendix C: World Bank Region Codes

Region code	Region name
EAP	East Asia and Pacific
ECA	Europe and Central Asia
LAC	Latin America and Caribbean
MNA	North Africa and Middle East
NA	Unallocable/Unspecified
SAS	South Asia
SSA	Sub-Saharan Africa
WLD	Global

Appendix D: Global Burden of Disease Regions

Asia Pacific, high-income

Asia, Central

Asia, East

Asia, South

Asia, Southeast

Caribbean

Europe, Central

Europe, Eastern

Europe, Western

Global

Latin America, Andean

Latin America, Central

Latin America, Southern

Latin America, Tropical

North Africa/Middle East

Oceania

Sub-Saharan Africa, Central

Sub-Saharan Africa, Eastern

Sub-Saharan Africa, Southern

Sub-Saharan Africa, Western

Unallocated/Unspecified

Appendix E: Global Burden of Disease Super-regions

Seven regions which group sub-regions based on cause of death patterns.

Central Europe, Eastern Europe, and Central Asia Highincome
GBD High-income
Latin America and Caribbean
North Africa and Middle East
South Asia
Southeast Asia, East Asia, and Oceania
Sub-Saharan Africa
Unallocated/Unspecified
Global