Institute for Health Metrics and Evaluation

Data Release Information Sheet

Data Summary

Dataset name: Global Anemia Prevalence Geospatial Estimates 2000-2019

Date of release: October 12, 2021

Summary: Annual estimates were produced for anemia prevalence in women of reproductive age (15-49 years) at the 5x5 km-level for 82 low- and middle-income countries (LMICs) between 2000 and 2019. These estimates were produced using a geo-positioned dataset created from 218 household surveys. Survey sources used include the Demographic and Health Survey (DHS) and UNICEF Multiple Indicator Cluster Survey (MICS) series, and other country-specific surveys. Countries and subnational units outside of these 82 LMICs were supplemented with GBD results.

This dataset includes the following:

- GeoTIFF raster files for pixel-level estimates of anemia prevalence in women of reproductive age (15-49 years) for 82 LMICs
- CSV files of aggregated for 195 countries at the national level, 82 LMICs plus GBD subnational locations at the first-level administrative divisions, and 82 LMICs at the second-level administrative divisions
- Code files used to generate the estimates

Get Data Files

Relevant publications and visualizations:

- Kinyoki DK, Osgood-Zimmerman A, Hay SI, Local Burden of Disease Anaemia Collaborators. Mapping anaemia prevalence in women of reproductive age in low- and middle-income countries between 2000 and 2018. *Nature Medicine*. 12 October 2021.

Acknowledgements

Contributing organizations:

- Institute for Health Metrics and Evaluation (IHME)

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- Bill and Melinda Gates Foundation (BMGF)

Suggested Citation:

Institute for Health Metrics and Evaluation (IHME). Global Anemia Prevalence Geospatial Estimates 2000-2019. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2021.

Data Files Information

CSV files of Aggregated Estimates of Anemia

Stored in files named <MEASURE>_<LEVEL_OF_AGGREGATION>.CSV

(Example: IHME_GLOBAL_ANEMIA_2000_2019**_MILD_ANEMIA_PREV_ADMIN_0**_Y2020M08D31.CSV)

- **Measure**: All anemia, Mild anemia, Moderate anemia, Severe anemia
- **Level of aggregation:** admin0, admin1, or admin2, corresponding to first and second administrative level areas as defined in the Database of Global Administrative Areas (GADM) 2019 shapefiles, with adjustments made in some countries. Each row in each table is unique by administrative unit and year.

Variable	Variable Label	Variable Definition
ADM0_CODE	GADM Admin 0 Code	GADM code identifying the administrative unit
ADM0_NAME	Admin 0 Name	Zero level administrative unit (Country) name as found in the GADM shapefile
ADM1_CODE	GADM Admin 1 Code	GADM code identifying the administrative unit (Only in the admin1 files)
ADM1_NAME	Admin 1 Name	First level administrative unit name as found in the GADM shapefile
ADM2_CODE	GADM Admin 2 Code	GADM code identifying the administrative unit (Only in the admin2 files)
ADM2_NAME	Admin 2 Name	Second level administrative unit name as found in the GADM shapefile (Only in the admin2 files)
year	Year	Time period of estimate. Possible values: years in the range 2000-2019
age_group_id	Age Group ID	Unique numeric identifier for the age group generated and stored in an IHME database of data dimensions. Possible values: 24
age_group_name	Age Group Name	Age group estimated. Possible values: 15-49 years
sex_id	Sex ID	Unique numeric identifier for the sex generated and stored in an IHME database of data dimensions. Possible values: 2
sex	Sex	Sex estimated: Possible values: Females
measure	Measure	The measure (indicator) estimated. Possible values: • All anemia • Mild anemia • Moderate anemia • Severe anemia
metric	Metric	Metric/unit of measure for the estimate. Values: Percent
mean	Mean	Mean posterior population-weighted estimate for the administrative unit

Variable	Variable Label	Variable Definition
lower	Lower Confidence Interval	2.5% population-weighted posterior quantile estimate for the administrative unit
upper	Upper Confidence Interval	97.5% population-weighted posterior quantile estimate for the administrative unit

GeoTIFF Raster Files for Pixel-level Estimates of Anemia

Stored in files named <MEASURE>_<STAT>_<YEAR>.TIF

(Example: IHME_GLOBAL_ANEMIA_2000_2019_**MILD_ANEMIA_PREV_MEAN_2010**_Y2020M08D31.TIF)

- **Measure**: All anemia, Mild anemia, Moderate anemia, Severe anemia
- **Metric**: Percent
- **Stat:** mean, upper, or lower summary statistics from the predictive posterior distribution at each pixel. Lower and upper correspond to 2.5% and 97.5% quantiles
- **Year**: From 2000 to 2019, corresponding to the time period of the estimate

Note that rasters mask (i.e., have NA values) for lakes and areas with low population (10 people per 1km and classified as barren/sparsely vegetated).

Additional Information

Terms and Conditions

http://www.healthdata.org/about/terms-and-conditions

Contact information

To request further information about this dataset, please contact IHME:

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These files may be updated periodically, so we appreciate hearing feedback or additional information about how these data are being used.