



# Institute for Health Metrics and Evaluation

## Data Release Information Sheet

### ***Data Summary***

Dataset name: Low- and Middle-Income Country MCV1 Coverage Geospatial Estimates 2000-2019

Date of release: December 16, 2020

Summary:

Estimates were produced for first-dose coverage of measles-containing vaccine (MCV1) at the 5x5 km-level in 101 low- and middle-income countries (LMICs) between 2000–2019. These estimates were produced using data on vaccination coverage and geographical locations from 354 household-based surveys.

This dataset includes the following:

- GeoTIFF raster files for pixel-level estimates of MCV1 coverage
- CSV files of aggregated MCV1 coverage estimates for each country at the first and second administrative unit divisions
- Code files used to generate the estimates

Relevant publications and visualizations:

- Sbarra AN, Rolfe S, Nguyen JQ, Earl L, Galles NC, Marks A, et al. Mapping routine measles vaccination in low- and middle-income countries. *Nature*. 16 Dec 2020.
- [Local Burden of Disease – Measles Vaccination Coverage](#)

### ***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). Low- and Middle-Income Country MCV1 Coverage Geospatial Estimates 2000-2019. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2020.

## Data Files Information

### CSV files of Aggregated Estimates of MCV1 Coverage

Stored in files named

IHME\_LMIC\_MCV1\_2000\_2019\_<LEVEL\_OF\_AGGREGATION>\_<VERSION\_DATE>.CSV

(Example: IHME\_LMIC\_MCV1\_2000\_2019\_ [ADMIN\\_1\\_Y2020M12D16](#).CSV)

**Level of aggregation:** admin1 or admin2, corresponding to first and second administrative level areas as defined in a modified version of the Database of Global Administrative Areas (GADM) shapefile. 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: 238
age_group	Age Group Name	Age group estimated. Possible values: 12-23 months
sex_id	Sex ID	Unique numeric identifier for the sex generated and stored in an IHME database of data dimensions. Possible values: 3
sex	Sex	Sex estimated: Possible values: Both
measure	Measure	The measure (indicator) estimated. Possible values: MCV1 coverage
metric	Metric	Metric/unit of measure for the estimate. Values: Percent
mean	Mean	Mean posterior population-weighted estimate for the administrative unit
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

Variable	Variable Label	Variable Definition
cfb	Coffey-Feingold-Bromberg	Coffey-Feingold-Bromberg estimate for the administrative unit

## Codebooks

Variable names, labels, and value encoding for the admin 1 and 2 files can be found in the machine-actionable codebook file [IHME\\_LMIC\\_MCV1\\_2000\\_2019\\_CODEBOOK\\_Y2020M12D16.CSV](#)

## GeoTIFF Raster Files for Pixel-level Estimates of MCV1 Coverage

Stored in files named <STAT>\_<VERSION\_DATE>.TIF

(Example: IHME\_LMIC\_MCV1\_2000\_2019\_MEAN\_Y2020M12D16.TIF)

**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

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.