

Joint UNICEF – WHO – The World Bank Child Malnutrition Database: Estimates for 2012 and Launch of Interactive Data Dashboards¹

On September 20, 2013 UNICEF, WHO and the World Bank updated their joint database on child malnutrition and released new global and regional estimates for 2012.² For the first time, the database contains global and regional estimates of wasting and severe wasting. This note summarizes the main findings, introduces accompanying interactive data dashboards, and highlights pertinent methodological notes.

Main Findings

Stunting

- Globally, 162 million under-five year olds were stunted in 2012.
- The global trend in stunting prevalence and burden continues to decrease. Between 2000 and 2012 stunting prevalence declined from 33 percent to 25 percent and burden declined from 197 million to 162 million.
- In 2012, 56 percent of all stunted children lived in Asia and 36% in Africa.

Underweight

- Globally, 99 million under-five year olds were underweight in 2012.
- The global trend in underweight prevalence continues to decrease, but at a slow pace. Between 1990 and 2012 underweight prevalence decreased from 25 percent to 15 percent, which remains insufficient to meet the Millennium Development Goal of halving the 1990 prevalence by 2015.
- In 2012, 67 percent of all underweight children lived in Asia and 29% in Africa.

Wasting and severe Wasting

- Globally, 51 million under-five year olds were wasted and 17 million were severely wasted in 2012.
- Globally, wasting and severe wasting prevalence in 2012 were estimated at almost 8 percent and just less than 3 percent respectively.
- In 2012, approximately 71 percent of all severely wasted children lived in Asia and 28 percent in Africa, with similar figures for wasted children at 69 percent and 28 percent respectively.

Overweight

- Globally, 44 million under-five year olds were overweight in 2012.
- The global trend in overweight prevalence and burden is rising. Between 2000 and 2012 overweight prevalence increased from 5 percent to 7 percent and the global burden increased from 32 million to 44 million. The rise in overweight prevalence is reflected in all regions, while the burden is increasing in Africa, Asia and the developed countries, but stagnating in Latin America and Oceania.
- In 2012, overweight prevalence was highest in Southern Africa (18%), Central Asia (12%) and Southern America (7%).

¹ The new joint child malnutrition estimates were prepared by Andrew Thompson (UNICEF); Monika Blössner and Elaine Borghi (WHO); and Juan Feng and Johan Mistiaen (The World Bank).

² This database update replaces the [previous version of joint estimates](http://www.who.int/entity/nutgrowthdb/jme_unicef_who_wb.pdf) release in the report: “Levels and Trends in Child Malnutrition: UNICEF-WHO-The World Bank Joint Child Malnutrition Estimates” available on-line at: http://www.who.int/entity/nutgrowthdb/jme_unicef_who_wb.pdf

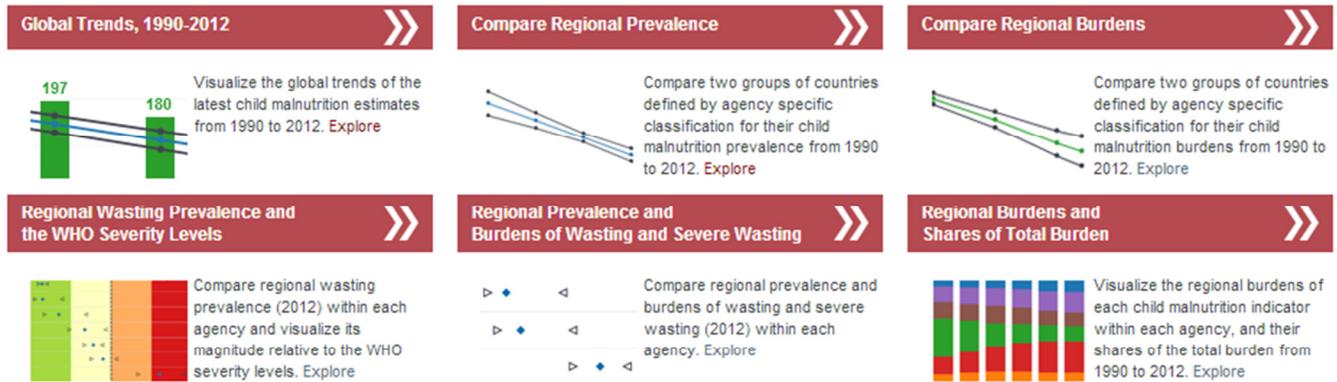
Data Dashboards

A suite of six on-line interactive dashboards were developed to enable users to explore the entire time-series (1990 – 2012) of global and regional estimates of prevalence and burden for stunting, underweight, overweight, wasting and severe wasting indicators by various country regional and income group classifications.³ The dashboards are available on-line on each Agency’s website:

UNICEF http://www.childinfo.org/malnutrition_dashboard.html

WHO <http://apps.who.int/gho/data/view.wrapper.nutrition-1-1>

World Bank <http://data.worldbank.org/child-malnutrition>



³ These data dashboards were developed by Vanessa Moreira da Silva and Juan Feng of The World Bank.

Methodological Notes

For this update new releases of the following data sources are used: (a) the new under-5 population estimates (UN population division, 2013) were applied as weighting factors to each country survey used in order to derive the regional and global prevalence estimates and to calculate the burden—i.e., number of affected children; (b) the number of underlying national surveys used increased from 639 to 694, currently representing over 90 percent of all children under-five globally; and (c) the new World Bank income classification released in July 2013. The approach and methodology used remains unchanged with the exception of a minor refinement to better reflect the year in which various country survey data were collected.⁴ Previously the survey year was exclusively based on the median of year ranges, while in this round we also considered the median of month ranges for survey enumeration whenever available. In total, the year for 42 country surveys was changed as annotated under the “Notes” column in the joint data set.

Severe wasting is included in this round, given that it is commonly used in emergency settings to reflect severe acute malnutrition. The joint UNICEF/WHO/WB data set provides this information for the national aggregate, while disaggregated subnational estimates are available from the WHO global database (www.who.int/nutgrowthdb). The reason for presenting only the latest estimates (2012) for wasting and severe wasting is that these indicators are very responsive to infection and changes in food availability. A child’s weight relative to its height can drop quickly but also bounce back up with appropriate interventions or a stabilization of a crisis. Malnutrition prevalence estimates are generated from household surveys that only allow for a snapshot view at one short point in time (usually a few months long). In addition, surveys do not capture the duration of wasting and averages during the year are unavailable. Wasting and severe wasting thus, show fluctuations across surveys that do not necessarily reflect the whole spectrum of possible variability. A more appropriate way to have accurate estimates for these conditions would be to use annual incidence (i.e., number of cases that occur in a population during a given year). However, estimates of incidence at national or even regional level do not exist. Therefore, the estimates of prevalence are a proxy and should be interpreted with caution as even the presented confidence intervals may or may not span over the fluctuations that have occurred. Contrary to wasting and severe wasting, the prevalence estimates of stunting, underweight, and overweight are more stable and less reactive to rapid changes in the conditions children live in.

⁴ Methodological details and background papers are available from <http://www.who.int/nutgrowthdb/estimates2012/en/>.