LEVELS AND TRENDS IN CHILD MALNUTRITION

UNICEF / WHO / World Bank Group Joint Child Malnutrition Estimates
Key findings of the 2018 edition

STUNTED
151 million

WASTED
51 million

OVERWEIGHT
38 million

Stunting affected an estimated 22.2 per cent or 150.8 million children under 5 globally in 2017.

In 2017, wasting continued to threaten the lives of an estimated 7.5 per cent or 50.5 million children under 5 globally.

An estimated 5.6 per cent or 38.3 million children under 5 around the world were overweight in 2017.

Stunting affected an estimated 22.2 per cent or 150.8 million children under 5 globally in 2017.

The ultimate aim is for all children to be free of malnutrition in all its forms.

Good nutrition allows children to survive, grow, develop, learn, play, participate and contribute – while malnutrition robs children of their futures and leaves young lives hanging in the balance.

Stunting is the devastating result of poor nutrition in-utero and early childhood. Children suffering from stunting may never attain their full possible height and their brains may never develop to their full cognitive potential. Globally, approximately 151 million children under 5 suffer from stunting. These children begin their lives at a marked disadvantage: they face learning difficulties in school, earn less as adults, and face barriers to participation in their communities.

Wasting in children is the life-threatening result of poor nutrient intake and/or disease. Children suffering from wasting have weakened immunity, are susceptible to long term developmental delays, and face an increased risk of death, particularly when wasting is severe. These children require urgent feeding, treatment and care to survive. In 2017, nearly 51 million children under 5 were wasted and 16 million were severely wasted.

There is also an emerging face of malnutrition: childhood overweight and obesity. There are now nearly 38 million overweight children globally, an increase of 8 million since 2000. The emergence of overweight and obesity has been shaped, at least in part, by industry marketing and greater access to processed foods, along with lower levels of physical activity.

While malnutrition can manifest in multiple ways, the path to prevention is virtually identical: adequate maternal nutrition before and during pregnancy and lactation; optimal breastfeeding in the first two years of life; nutritious, diverse and safe foods in early childhood; and a healthy environment, including access to basic health, water, hygiene and sanitation services and opportunities for safe physical activity. These key ingredients can deliver a world where children are free from all forms of malnutrition.

Despite this opportunity, the UNICEF, WHO, World Bank global and regional child malnutrition estimates reveal that we are still far from a world without malnutrition. The joint estimates, published in May 2018, cover indicators of stunting, wasting, severe wasting and overweight among children under 5, and reveal insufficient progress to reach the World Health Assembly targets set for 2025 and the Sustainable Development Goals set for 2030.

Improving children’s nutrition requires effective and sustained multi-sectoral nutrition programming over the long term, and many countries are moving in the right direction. Regular data collection is critical to monitor and analyse country, regional and global progress going forward.

Forms of malnutrition* highlighted in this key findings report

- **Stunting** refers to a child who is too short for his or her age. These children can suffer severe irreversible physical and cognitive damage that accompanies stunted growth. The devastating effects of stunting can last a lifetime and even affect the next generation.
- **Overweight** refers to a child who is too heavy for his or her height. This form of malnutrition results from energy intakes from food and beverages that exceed children’s energy requirements. Overweight increases the risk of diet-related noncommunicable diseases later in life.
- **Wasting** refers to a child who is too thin for his or her height. Wasting is the result of recent rapid weight loss or the failure to gain weight. A child who is moderately or severely wasted has an increased risk of death, but treatment is possible.

Forms of malnutrition:

- **Overweight and stunted**: Some children suffer from more than one form of malnutrition – such as stunting and overweight or stunting and wasting. There are currently no joint global or regional estimates for these combined conditions.

Africa and Asia bear the greatest share of all forms of malnutrition

- In 2017, more than half of all stunted children under 5 lived in Asia and more than one third lived in Africa.
- In 2017, almost half of all overweight children under 5 lived in Asia and one quarter lived in Africa.
- In 2017, more than two thirds of all wasted children under 5 lived in Asia and more than one quarter lived in Africa.
Large disparities in stunting reduction exist within regions/between sub-regions

Trends in the percentage of stunted children under 5, by United Nations region/sub-region, 2000 – 2017

In 7 sub-regions, at least one in every four children under 5 is stunted

Percentage of stunted children under 5, by United Nations sub-region, 2017

Two out of five stunted children in the world live in Southern Asia

Number (millions) of stunted children under 5, by United Nations sub-region, 2017

Africa is the only region where the number of stunted children has risen

Trends in the number (millions) of stunted children under 5, by United Nations region/sub-region, 2000 and 2017
In three sub-regions, at least one in every ten children under five is overweight

Percentage of overweight children under 5, by United Nations sub-region, 2017

There has been no progress to stem the rate of overweight in more than 15 years

Percentage of overweight children under 5, by United Nations sub-region, 2000 – 2017

The only more developed UN sub-region with an overweight estimate is Northern America

Number (millions) of overweight children under 5, by United Nations sub-region, 2017

Two sub-regions have seen a significant increase in the number of overweight children

Number (millions) of overweight children under 5, by United Nations region, 2000 and 2017


Wasting in Southern Asia constitutes a critical public health emergency
Percentage of wasted children under 5, by United Nations sub-region, 2017

In Asia and Oceania, wasting is putting nearly one in ten children under 5 at increased risk of death

More than half of all wasted children in the world live in Southern Asia
Number (millions) of wasted children under 5, by United Nations sub-region, 2017

Asia is home to the majority of children under 5 suffering from wasting and severe wasting
Number of wasted and severely wasted children under 5, by United Nations region, 2017

Source: UNICEF, WHO, World Bank Group joint malnutrition estimates, 2018 edition. Note: *Eastern Asia excluding Japan; **Oceania excluding Australia and New Zealand. ***Northern America sub-regional average based on United States data. There is no estimate available for the sub-regions of Europe or Australia and New Zealand. These maps are stylized and not to scale and do not reflect a position by UNICEF, WHO or World Bank Group on the legal status of any country or territory or the delimitation of any frontier.
COUNTRY INCOME GROUPINGS

Upper-middle-income countries have more than halved their stunting rates since 2000
Percentage of stunted, overweight and wasted children under 5, by country income classification, 2000 – 2017


While only about half of all children under-5 live in lower-middle income countries, two-thirds of all stunted children and three-quarters of all wasted children live there

Distribution of children under 5 affected by stunting, overweight and wasting in 2017

Source: UNICEF, WHO, World Bank Group joint malnutrition estimates, 2018 edition. Note: *High-income countries: low (<50 per cent) population coverage in all time periods. Based on FY17 World Bank income classification. The values for “percentage change since 2000” are based on calculations using unrounded estimates and therefore might not match values calculated using the rounded estimates presented in this brochure.

The number of overweight children has increased the most in lower-middle-income countries
Number of overweight children under 5, by country income classification, 2000 and 2017

Distribution of children under-5 in the world, by country income grouping, 2017

### PREVALENCE ESTIMATES TABLES*

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1. Only Less Developed Regions are displayed, while the aggregates of the More Developed Regions are not displayed due to insufficient population coverage.
2. Asia excluding Japan; Eastern Asia excluding Japan.
4. For starting, severe and wasting estimates, the Northern America region average is based on United States data, and the Australia and New Zealand average is based only on Australia’s data hence no figures and severe are available.
5. Consecutive loss population coverage, interpret with caution.

**Notes:**


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Strengths and weaknesses of malnutrition data

Prevalence estimates for stunting and overweight are relatively stable over the course of a calendar year. It is therefore possible to track global and regional changes in these two conditions over time. Wasting and severe wasting are acute conditions that can change frequently and rapidly over the course of a calendar year. This makes it difficult to generate reliable trends over time with the input data available, and as such, this report provides only most recent global and regional estimates.

The joint global and regional estimates that make up the UNICEF/WHO/World Bank Group Joint Child Malnutrition Estimates have been generated using a country-level dataset which is mainly comprised of estimates from nationally representative household surveys. These data are collected infrequently (every 3 to 5 years in most countries) and measure malnutrition at one point in time (i.e., during one or several months of field work), making it difficult to capture the rapid fluctuations in wasting that can occur over the course of a given year. Incidence data (i.e., the number of new cases that occur during the calendar year) would allow for better tracking of changes over time; however, these data currently do not exist.

The analysis methods and presentation have remained unchanged from the 2012 report, except for minor refinements detailed below:

1. Year assigned to each survey

When data collection begins in one calendar year and continues into the next, the survey year assigned is the one in which most of the fieldwork took place. For example, if a survey was conducted between 1 September 2010 and 28 February 2011, the year 2010 would be assigned, since the majority of data collection took place in that year (i.e., four months in 2009 versus two months in 2010). This method has been used since the 2013 edition (prior to that, the latter year was used by default – e.g., 2010 in the example above).

2. Final reports only

As of the 2014 edition, the country-level dataset used to generate the global and regional joint malnutrition estimates is based only on final survey results. Preliminary survey results are no longer included in the dataset since the data are sometimes retracted or change significantly when the final version is released.

3. Updated data sources

i. The updated joint dataset includes:
   - 837 nationally representative surveys;
   - data from 150 countries and territories, representing more than 95 per cent of all children under 5 globally (population coverage varies by region and periods).
   - The majority of data available are from low- and middle-income countries – more efforts are needed to generate data from high-income countries.

ii. The under 5 population estimates were based on The United Nations World Population Prospects, 2017 Revision. These were used as weighting factors for each country survey to derive the regional and global prevalence estimates and calculate the numbers affected.

iii. Regional and country income classifications were based on FY18 World Bank classification.

4. Footnotes on population coverage

As started in the 2014 edition, a separate exercise was conducted to assess population coverage. This was important in order to alert the reader, via footnotes, to instances where the data should be interpreted with caution (low population coverage defined as less than 50 per cent). A conservative method was applied looking at available data within mutually exclusive five-year periods around the projected years. Population coverage was calculated as:

\[ \frac{\text{the sum of country five-year average populations for which surveys are available in the dataset}}{\text{the total of country five-year average population for all countries in the region}} \]

Table 1. Prevalence thresholds and corresponding labels for stunting, overweight and wasting

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Note: * Asia excluding Japan; **Oceania excluding Australia and New Zealand. *** The More Developed Region malnutrition estimates are not displayed in the brochure due to lack of adequate population coverage (60% per annum) in all year ranges since 1990. Also note that figures for wasting are the same as for stunting and therefore not presented.

ONLINE MATERIALS

This key findings report of the 2018 edition of the Joint Malnutrition Estimates summarizes the new regional and global numbers and main messages for official United Nations data on child malnutrition.

- The latest country-level joint malnutrition database, a time series of all country estimates that were used to generate the joint child malnutrition global and regional estimates;
- The joint malnutrition global and regional estimates database by various regional groupings (e.g. United Nations, UNICEF, WHO, etc., regional groupings) and for more years than presented in this brochure;
- A reference document outlining the composition of the various regional groupings for which the joint estimates have been produced.

DASHBOARD OVERVIEW

Tabs where you can select different visualizations for global and regional data

Regional Trends, 1990-2017

The regional and global trends are based on a five-year average data set (i.e., 1990-1994), which evaluates the trajectories in the data and removes the effect of data volatility.

Regional Trends: prevalence

Hover over data points for detailed information

With these links you can view the dashboard on the UNICEF, WHO or World Bank Group websites

Download the graphics and data here

Date: Start Date

Options

Select your regional grouping (UNICEF, WHO, United Nations, World Bank Income)
Select regions to view
Select years to view

Download the graphics and data here
Acknowledgements

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