

PREVALENCE OF UNDERWEIGHT

Impact indicator, Outcome indicator, Cluster indicator

Indicator Phrasing

English: % of children aged 6 - 59 months with a weight for age < -2 Z-scores

French: % d'enfants âgés de 6 à 59 mois avec un poids pour l'âge < -2 Z-scores

Portuguese: % de crianças com idade entre 6-59 meses com um rácio de peso para idade < -2 Z-pontos

Czech: % dětí ve věku 6-59 měsíců s hmotnostně-věkovým poměrem < -2 Z-skóre

What is its purpose?

The indicator measures the prevalence of underweight. It assesses to what degree (so called "Z-score") a child's weight for age deviates from the weight of a child of the same age and sex in the 2006 WHO Growth Standards. It is a composite indicator which combines chronic and acute growth faltering.

How to Collect and Analyse the Required Data

Children's weight and age are (alongside with other data) assessed by anthropometric surveys using the **SMART methodology** (local events calendars are used to correctly determine child's age). SMART's website provides all the required guidance, forms, training modules as well as Emergency Nutrition Assessment software used for data analysis and reporting.

According to WHO, **the prevalence of underweight (lower than -2 SD) shall be interpreted as:**

lower than 10%: low prevalence

10-19%: medium prevalence

20-29%: high prevalence

$\geq 30\%$: very high prevalence

Disaggregate by

[Disaggregate](#) the data by gender and age groups (such disaggregation is automatically produced by ENA software).

Important Comments

1) This indicator relies on an accurate age assessment. Since people often do not remember the exact dates of their children's birth, the data collectors should **always verify the child's age**. This can be done by reviewing the child's birth certificate, vaccination card or another document; however, since many caregivers do not have such documents (and since they can include mistakes), it is essential that your data collectors are able to **verify the child's age by using local events calendars**. Read FAO's Guidelines (see below) to learn how to prepare local events calendars and how to train data collectors in their correct use.

2) Compared to measuring weight for height (showing wasting) and height for age (showing stunting), this indicator provides **less useful data** (as it is less clear what problem it represents). It is a composite indicator which combines chronic and acute growth faltering.

3) Since the differences in the prevalence of underweight are often relatively small (e.g. from 23.5% to 21%), SMART surveys need to be implemented to a maximum quality and precision. Always **use a small margin of error** (2-2.5%). If your team does not have sufficient experience with conducting SMART surveys, contract an in-country or headquarters-based advisor to design methodology, train your team and supervise the survey quality.

Access Additional Guidance

- ACF (2014) [Rapid SMART Surveys Guidelines](#)
- PIN (2015) [Practical Checklist for Conducting Nutrition Surveys](#)
- [SMART methodology](#)
- WHO (2010) [Interpretation Guide](#)
- FAO (2008) [Guidelines for Estimating the Month and Year of Birth of Young Children](#)