

Early Childhood Nutrition and Health

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WHAT ARE THESE MAPS TELLING US?

High levels of stunting, or lower than average height in children younger than five, are more widespread in Africa south of the Sahara (SSA) than high levels of wasting (lower-than-average weight for height) or underweight (low weight for age) in children under age five (Maps 1, 2, and 3). This reflects a longstanding nutritional problem that has proven difficult to eradicate in this region. Even with improved living conditions in SSA, the prevalence of stunting has not yet been sufficiently reduced. Stunting and underweight are manifestations of undernutrition—food energy deprivation that occurs when food intake is below standard nutritional requirements for a prolonged period and/or levels of food absorption are low. Wasting usually reflects an acute weight loss due to a recent period of hunger or disease and is often associated with shorter term limitations to food supplies. The maps show that high rates of undernutrition do not always correspond to high rates of diarrhea (Map 4), which contribute to undernutrition by interfering with the absorption of food consumed. This suggests that poor infrastructure and lack of access to clean water (the main causes of diarrhea) are just two of many reasons behind the severe undernutrition in SSA. The red areas of the maps reflect undernutrition levels classified as “very high”—40 percent or above for stunting; 15 percent or above for wasting; 30 percent and above for underweight (WHO 2006); and 20 percent or above for diarrhea—and highlight the key areas for concern across the continent.

WHY IS THIS IMPORTANT?

The information on these maps is crucial to policymakers and national and international donors who seek to direct resources to the most food-insecure regions of the world. Child nutrition is often used as an indicator of an area’s nutrition security. According to the World Health Organization (WHO), child undernutrition is directly or indirectly responsible for one-third of the deaths among children under age five, and it is also related to other illnesses common in children, such as diarrhea and measles. Undernutrition carries long-term consequences for children,

impairing their cognitive development and affecting their performance once they are adults. Better nutrition translates into a stronger and healthier population with greater opportunities to break the cycle of poverty and achieve better quality of life. Improving children’s nutritional status is therefore fundamental to realizing a country’s development potential, especially in nations in SSA where nearly half of the population is less than 15 years old.

WHAT ABOUT THE UNDERLYING DATA?

Measurements are usually taken from children from birth up to 60 months, as this captures the impact of possible deficiencies incurred during gestation, and it is when children are most vulnerable as they rapidly grow and develop. After the 1,000-day window of opportunity (from the start of a woman’s pregnancy until her child’s second birthday), any impaired height development or cognitive function is largely irreversible. To obtain anthropometric measures, we used the children’s weight, height, and age information collected in the Demographic and Health Survey (DHS) Phase 5 (2003–2008) and Phase 6 (2008–2013). The DHS surveys are regularly conducted in many developing countries in different years, and these maps show the values for countries with survey years ranging from 2003 to 2011 (Measure DHS 2013).

WHERE CAN I LEARN MORE?

Measure DHS online: www.statcompiler.com/

WHO Child Growth Standards Publications:
www.who.int/childgrowth/publications/en/

Explaining Child Malnutrition in Developing Countries: A Cross-Country Analysis. Smith and Haddad 2000.

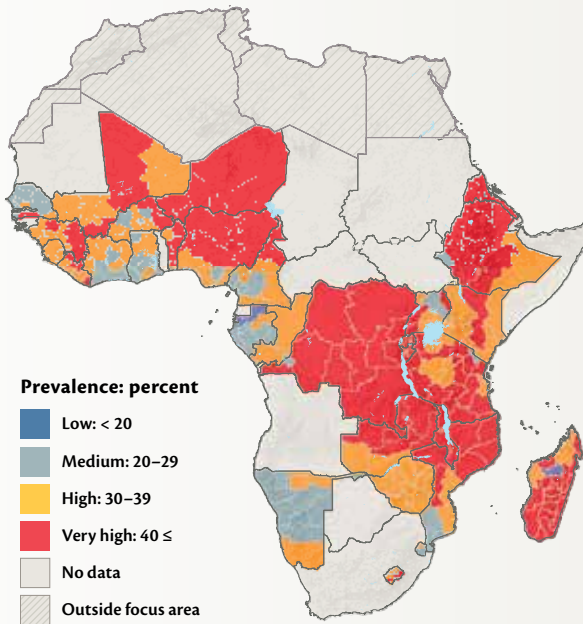
Poverty and Undernutrition: Theory, Measurements, and Policy. Svedberg 2000.

“Worldwide Timing of Growth Faltering: Revisiting Implications for Interventions.” Victora et al. 2010.

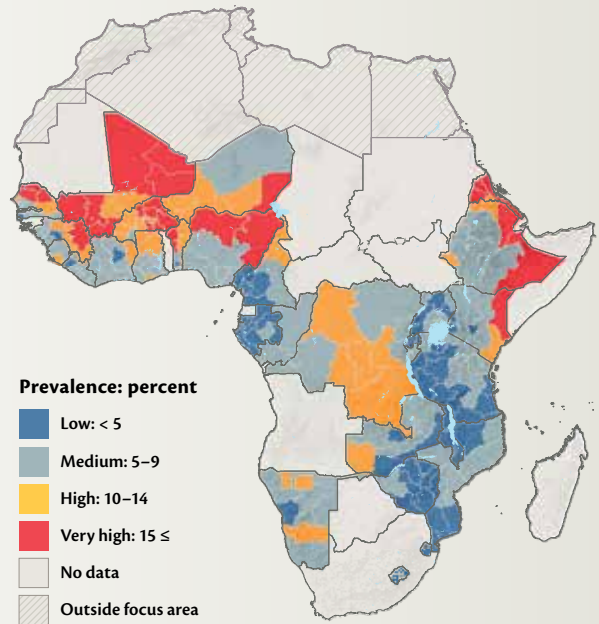


Nutrition and health among children under age five

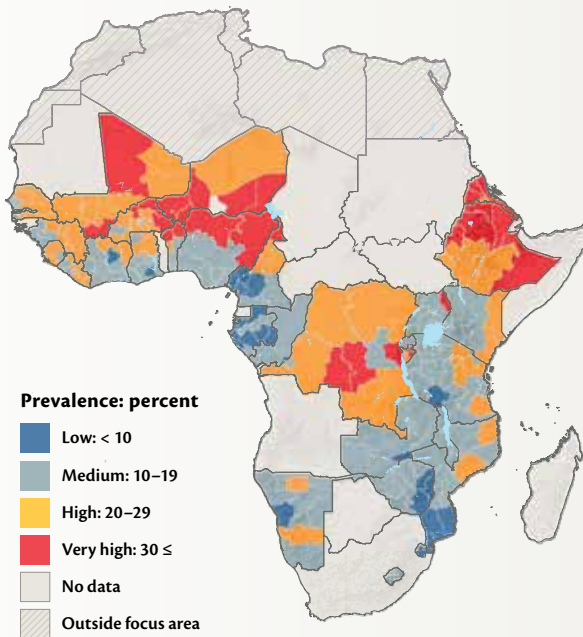
MAP 1 Stunting



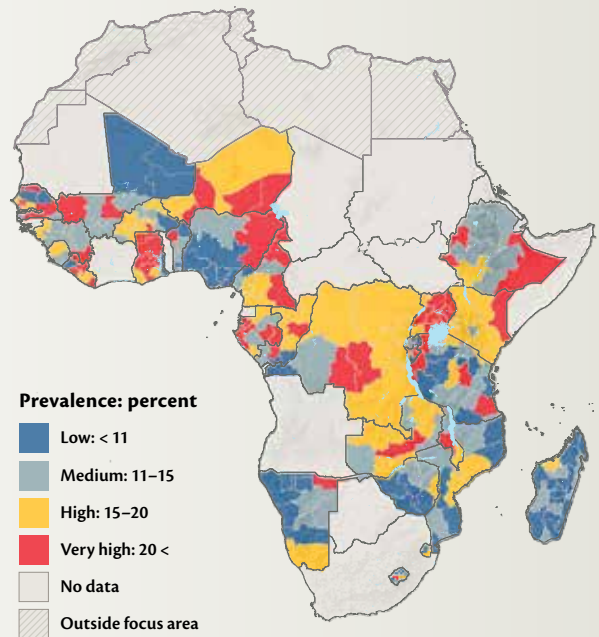
MAP 2 Wasting



MAP 3 Underweight



MAP 4 Diarrhea



Data source (all maps): Measure DHS 2013 and WHO 2006.

Note: The maps are based on DHS surveys conducted over the period 2003 to 2011. The maps show prevalence classes and corresponding undernutrition levels (as a share of total children under age five) as designated by the World Health Organization.