Undernutrition through Life Stages

Child and Maternal Health Problems

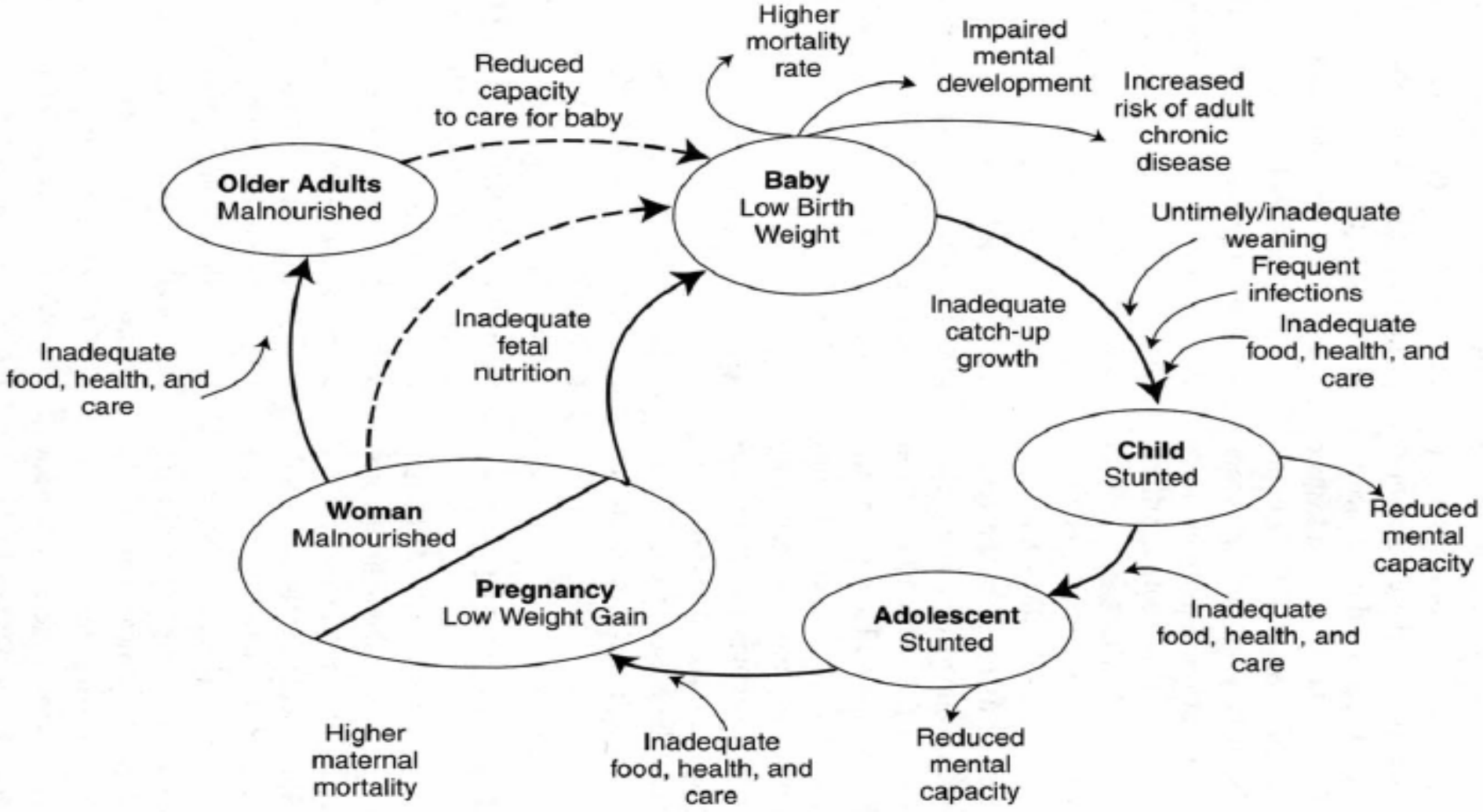
Nutritional Deficiencies

Photo: K West

Infant or Child
Infection (diarrhea, ARI)
Poor growth
Impaired mental, motor and behavioral development
Death

Mother
Obstetric morbidity
Infection/sepsis
Anemia
Death

- PEM
- Micronutrient Defic:
  Vitamin A, zinc, iron, iodine, folate, others
- Behavioral Causes:
  Related to breast feeding, complementary feeding, HH diet low SES, poor educatoin

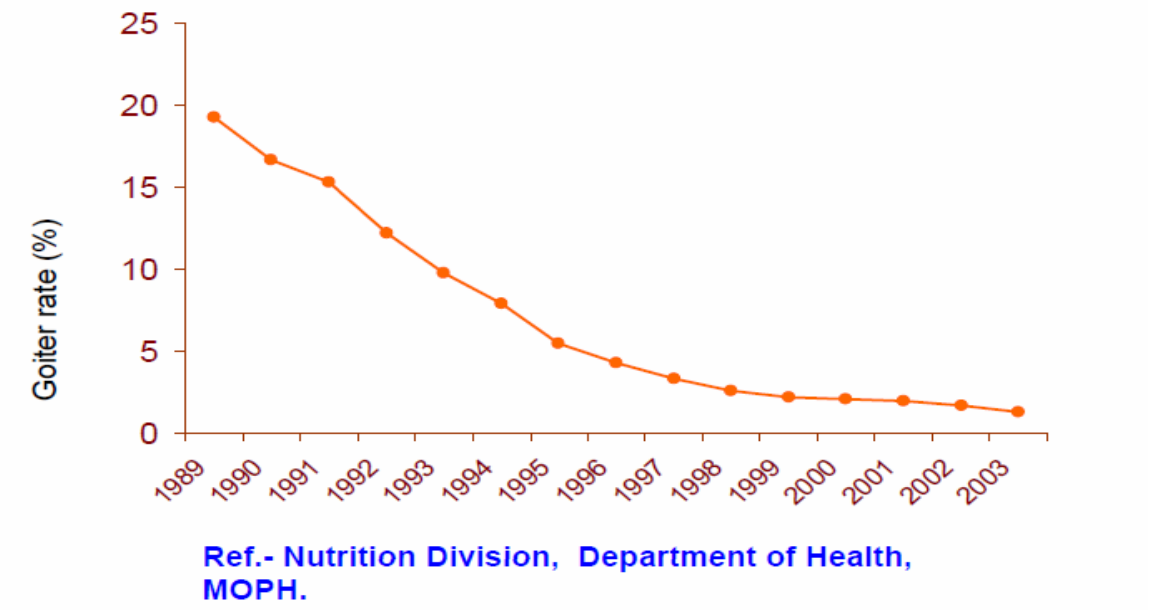


Conceptual Model of the Effects of Undernutrition throughout the Life Cycle

IDD

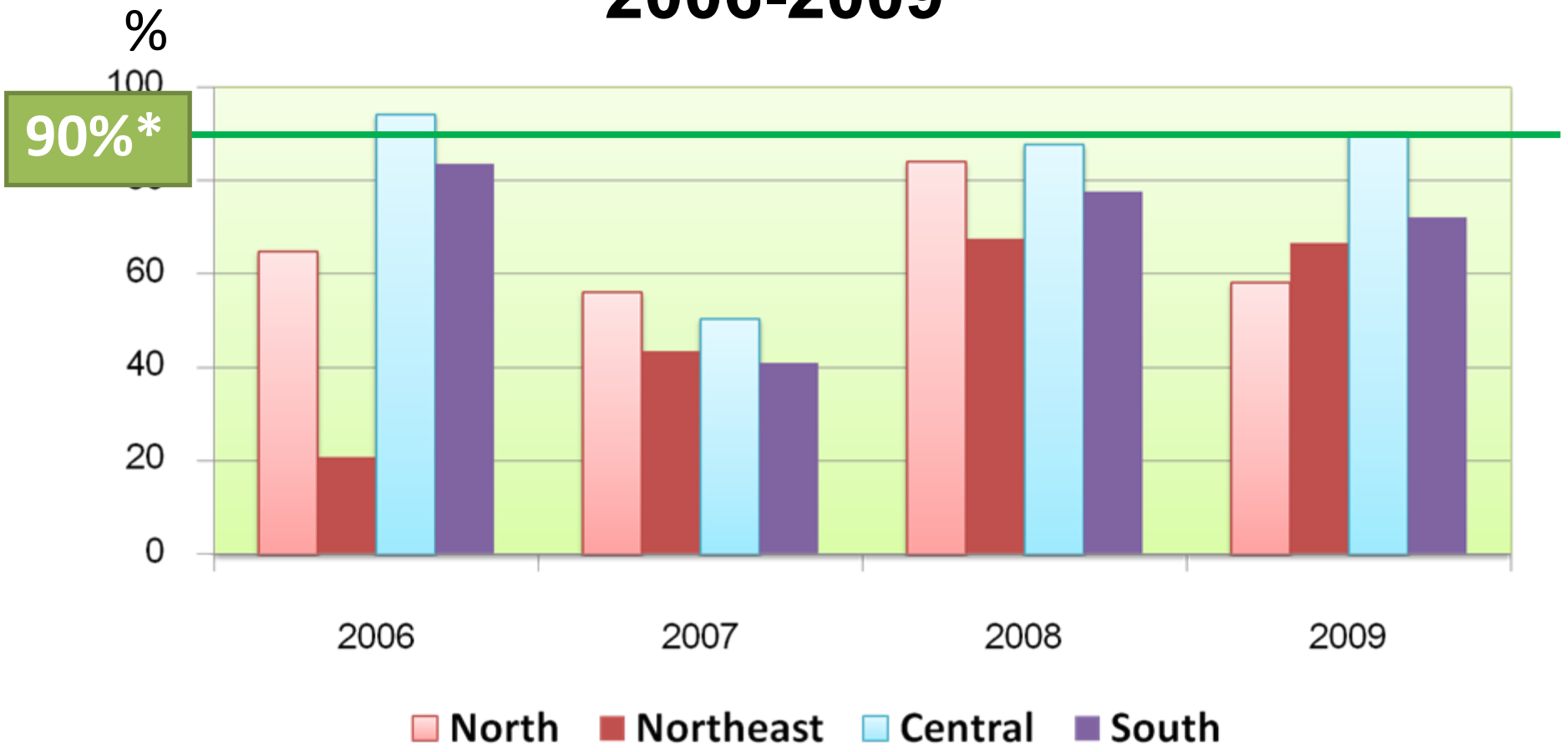
- Since 1960s, Thailand had undertaken a nation-wide IDD control program to eliminate goiter → goiter virtually eliminated

Total goiter rate in school children of Thailand



- At present, IDD still effect intelligence of Thai children who are the most precious resource for the future of Thailand

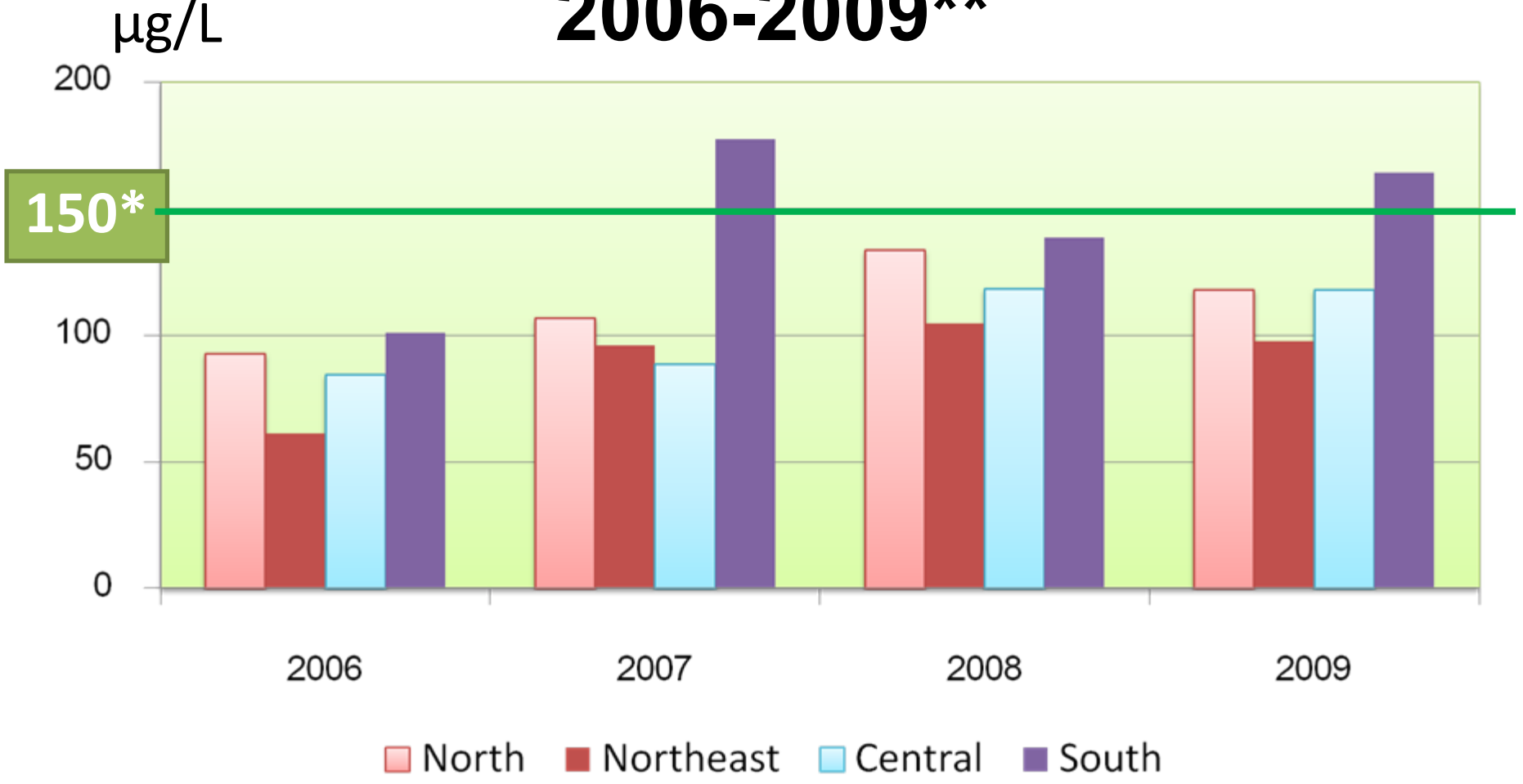
Percentage of households using adequately iodized salt (≥30 ppm), by region, Thailand, 2006-2009**



*Proportion of households using adequately iodized salt should > 90% in each area (WHO recommendation)

**Data from 15 provinces survey by Department of Health ≈ 2,000-4,000 households

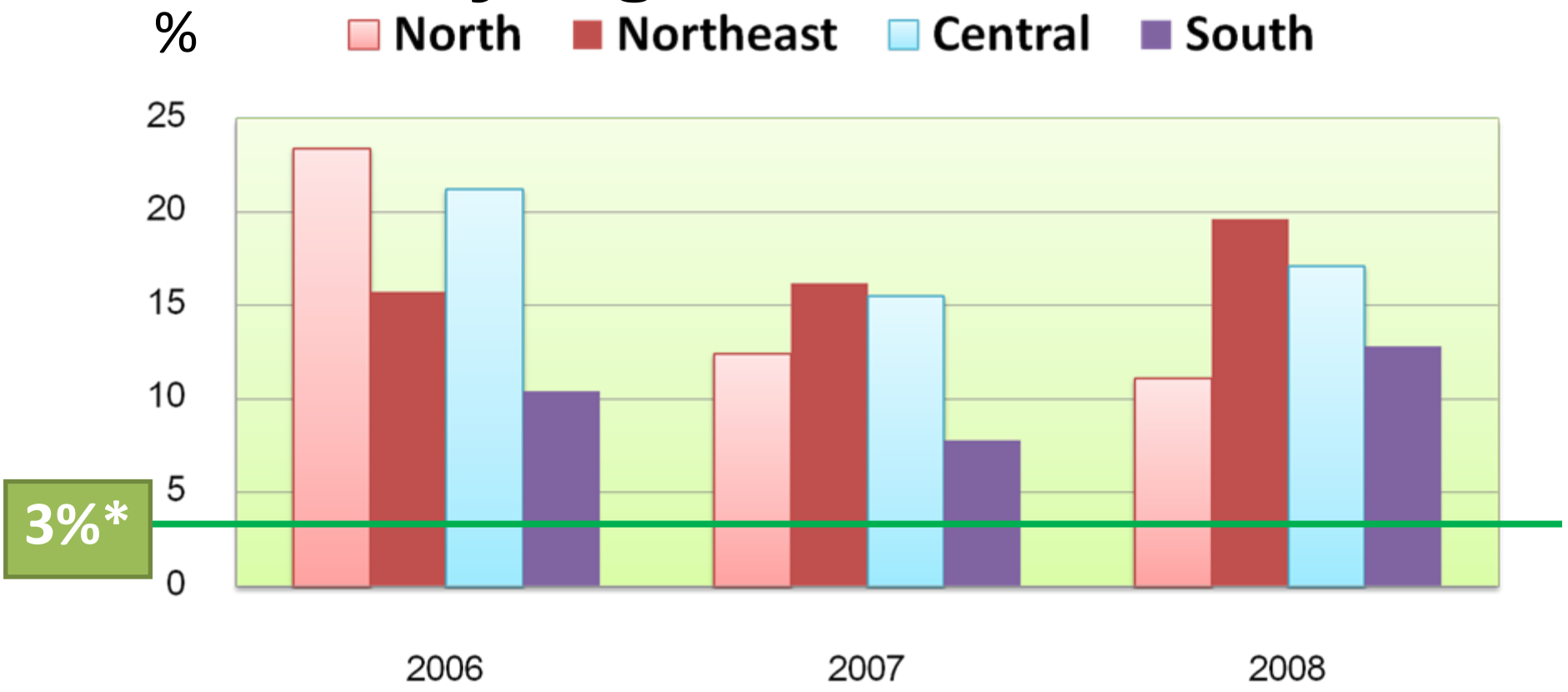
Average of median urinary iodine (µg/L) in pregnant women, by region, 2006-2009**



*Median urinary iodine in pregnant women < 150 µg/L indicates insufficiency

**Data from 15 provinces survey by Department of Health ≈ 4,000-4,500 pregnant women

Percentage of newborns that had TSH values > 11.2 mU/L (in serum), by region, 2006-2008**



*<3% freq. of TSH values >11.2mU/L = iodine sufficiency in a population

**Data from 15 provinces (≈ 100,000 newborns), Department of Medical Sciences

Note: Time of sample collection not specify whether >48 hrs after birth