Global Experience with USI – Success and Achievements Towards the Elimination of IDD

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Salt of the Earth: 2018 World Salt Symposium

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Overview

- Background on salt iodization
- Global salt iodization coverage
- Trends in global iodine status
- Programmatic issues
- Conclusion

Major milestones for elimination of iodine deficiency

Year	Milestone	Programme progress
1990	Declaration of the World Summit for Children includes goal of virtual elimination of iodine deficiency disorders 43rd World Health Assembly accepts IDD elimination by 2000 as a major public health goal for all countries	Accelerated programme initiation and a shift from supplementation to salt iodization
1994	UNICEF-WHO Joint Committee on Health Policy endorses universal salt iodization as a safe, cost-effective and sustainable strategy to ensure sufficient intake of iodine by all individuals	IDD prevention and control through expansion of salt iodization programmes
2002	UN General Assembly Special Session on Children adopts *A World Fit for Children*, the declaration that set the goal of sustainable elimination of IDD by 2005	Programme maturation with improvements in enforcement, public education and advocacy, monitoring and partnership with salt industry
2007	*A World Fit for Children* commemorative session reviews progress in achieving and sustaining IDD elimination through universal salt iodization programmes	Enhancements in programme sustainability

UNICEF, 2008

World Health Organization

GUIDELINE: Fortification of food-grade salt with iodine for the prevention and control of iodine deficiency disorders

Recommendation:

All food-grade salt used in household and food processing should be fortified with iodine as a safe and effective strategy for the prevention and control of iodine deficiency disorders in populations living in stable and emergency settings (*strong recommendation*)

World Health Organization, 2014

World Health Organization

GUIDELINE: Fortification of food-grade salt with iodine for the prevention and control of iodine deficiency disorders

Remarks (selected):

- Policies for salt iodization and reduction of salt to <5 g/day are compatible, cost effective and of great public health benefit. Although salt is an appropriate vehicle for iodine fortification, iodization of salt should not justify promotion of salt intake to the public.
- Clear legislation should also be established for food producers and distributors, especially where the main source of dietary salt is processed foods and meals consumed outside households. Legislation should cover not only proper iodization of salt, but also the salt content of industrialized food products.

World Health Organization, 2014

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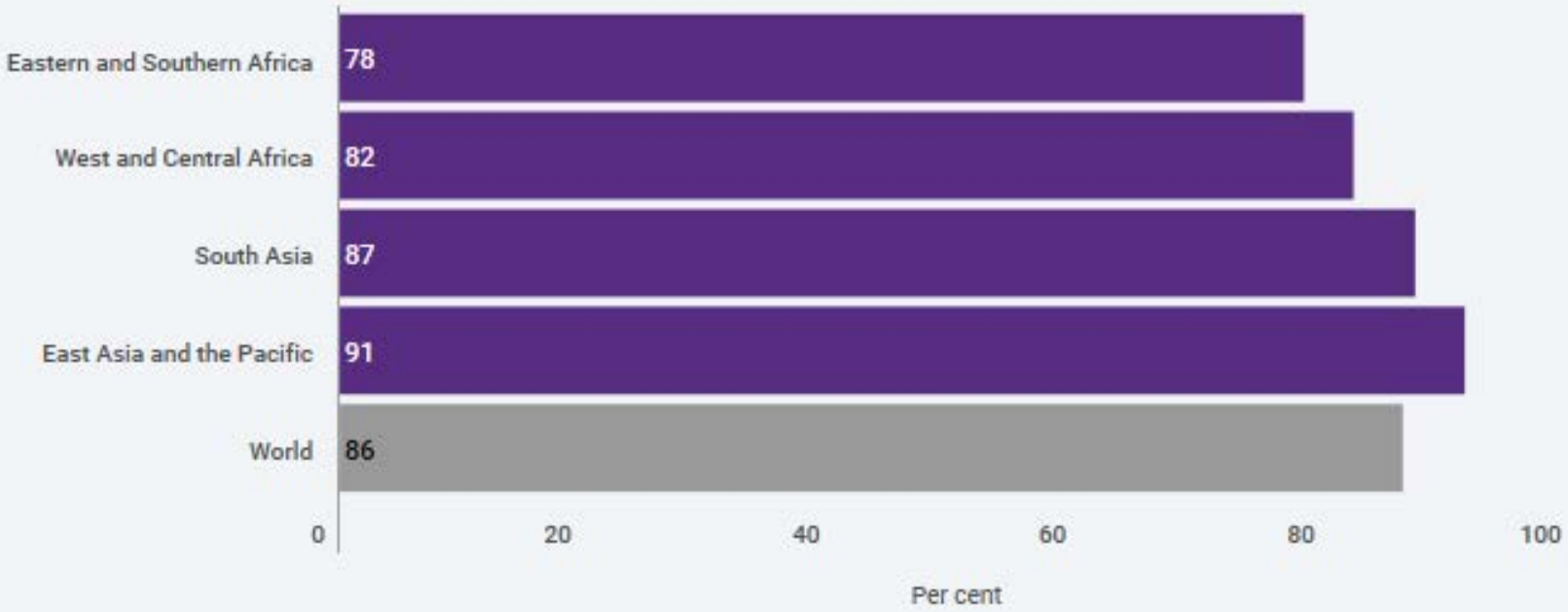
Globally, 86 per cent of the population has access to iodized salt

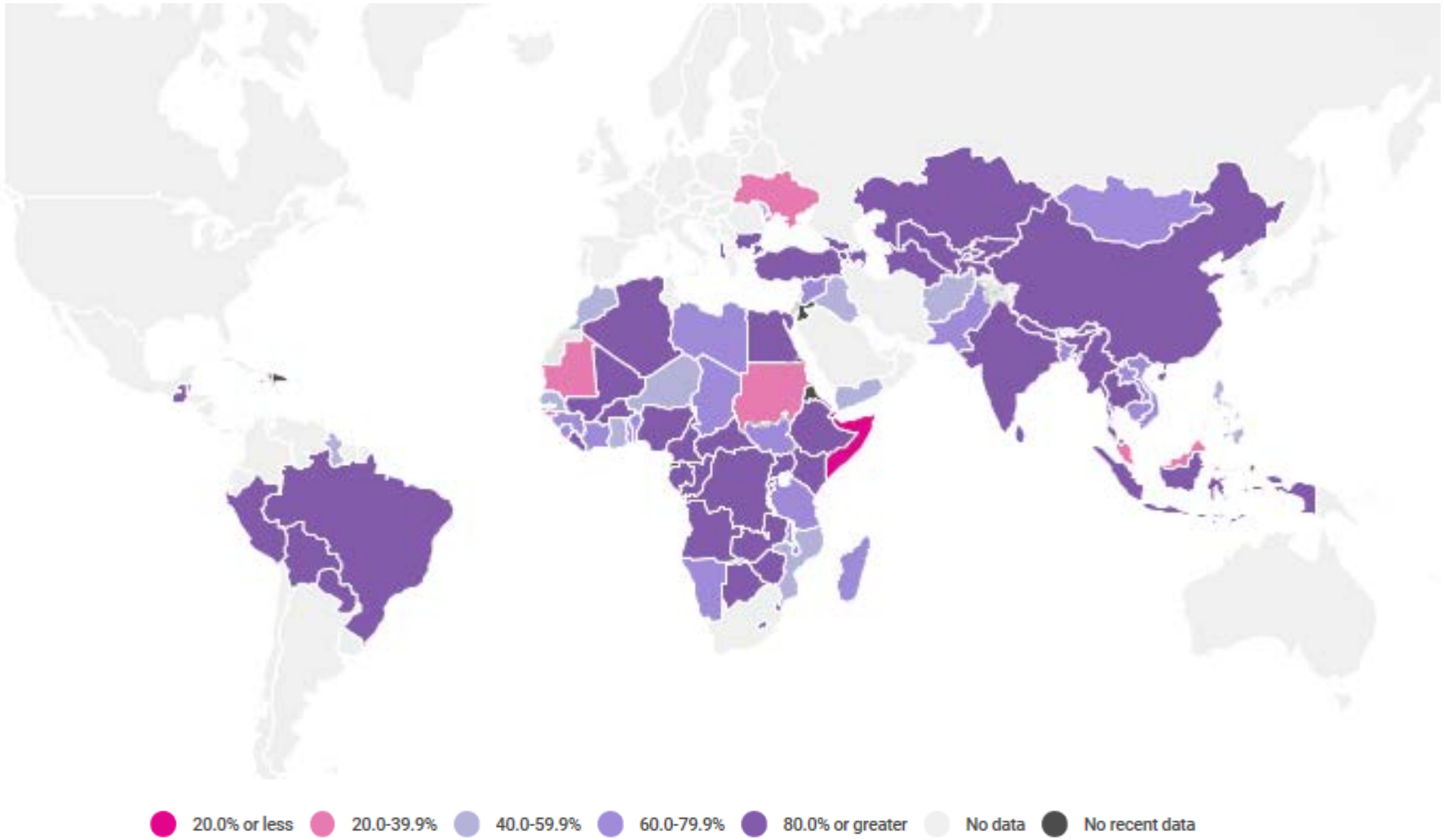


Percentage of households consuming salt with any iodine, by UNICEF region, 2018

Source: Global database, 2018, based on Multiple Indicator Cluster Surveys (MICS), Demographic and Health Surveys (DHS) and other nationally representative household surveys, 2011-2018.

https://data.unicef.org/topic/nutrition/iodine-deficiency/

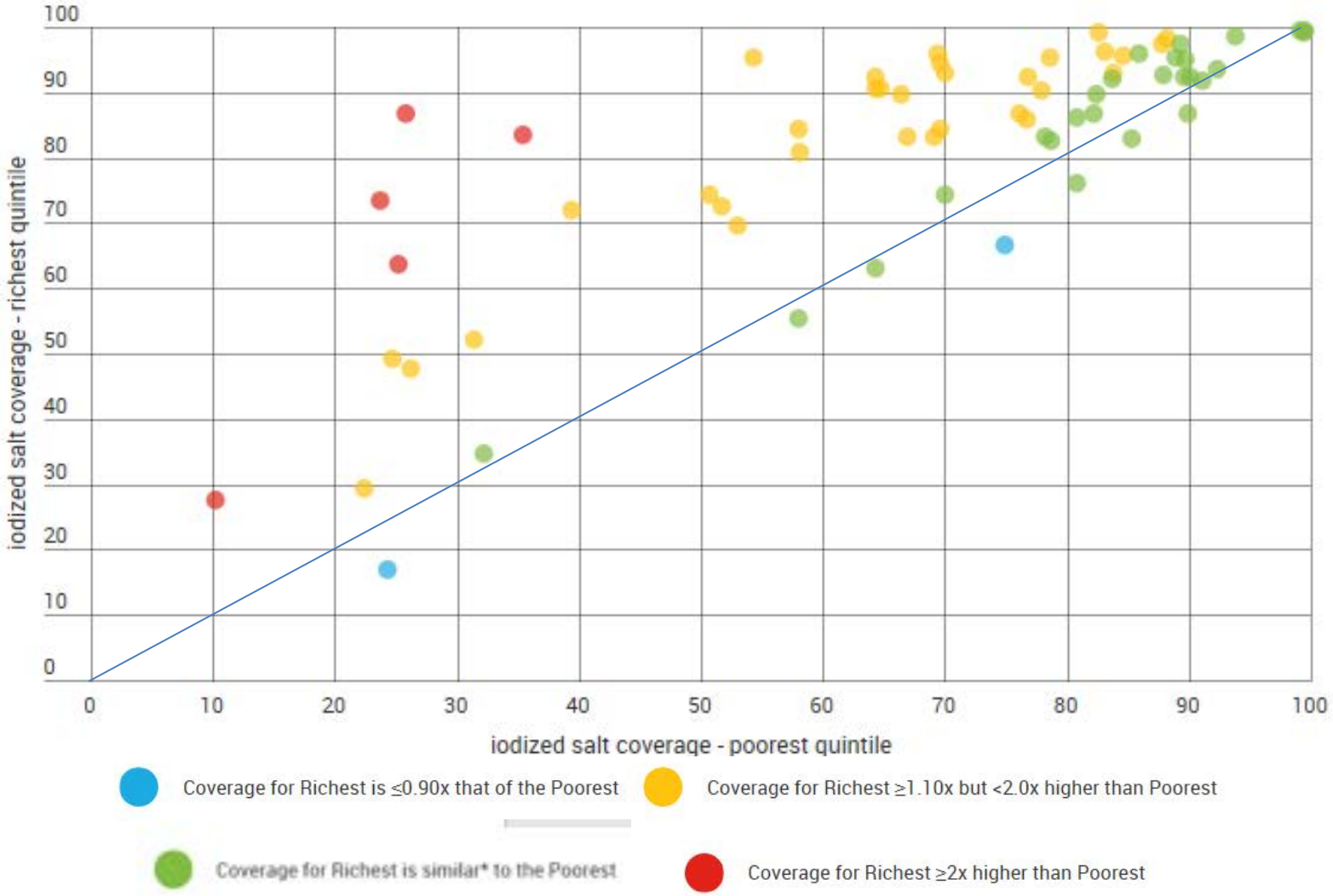
Percentage of households consuming salt with any iodine by country, 2011-2018



https://data.unicef.org/topic/nutrition/iodine-deficiency/

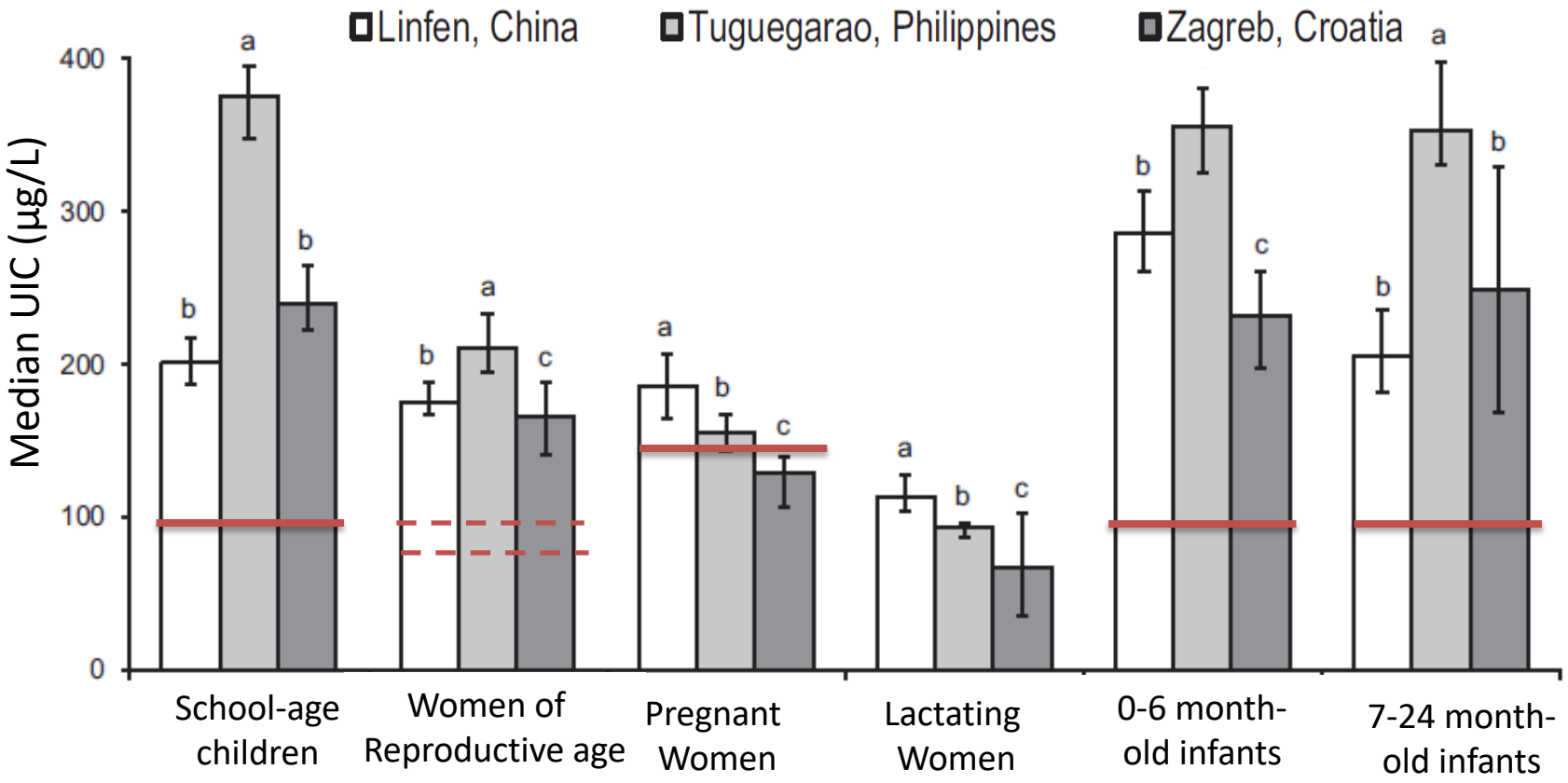
Percentage of households consuming iodized salt among the richest and poorest quintiles, in 65 countries with available data, 2010-2017

Iodized salt consumption is higher among the richest households when compared to the poorest households in the majority of countries with available data



https://data.unicef.org/topic/nutrition/iodine-deficiency/

Universal Salt Iodization Provides Sufficient Dietary Iodine to Achieve Adequate Iodine Nutrition during the First 1000 Days: A Cross-Sectional Multicenter Study



Dold et al. *J Nutr* 2018;148:587–598

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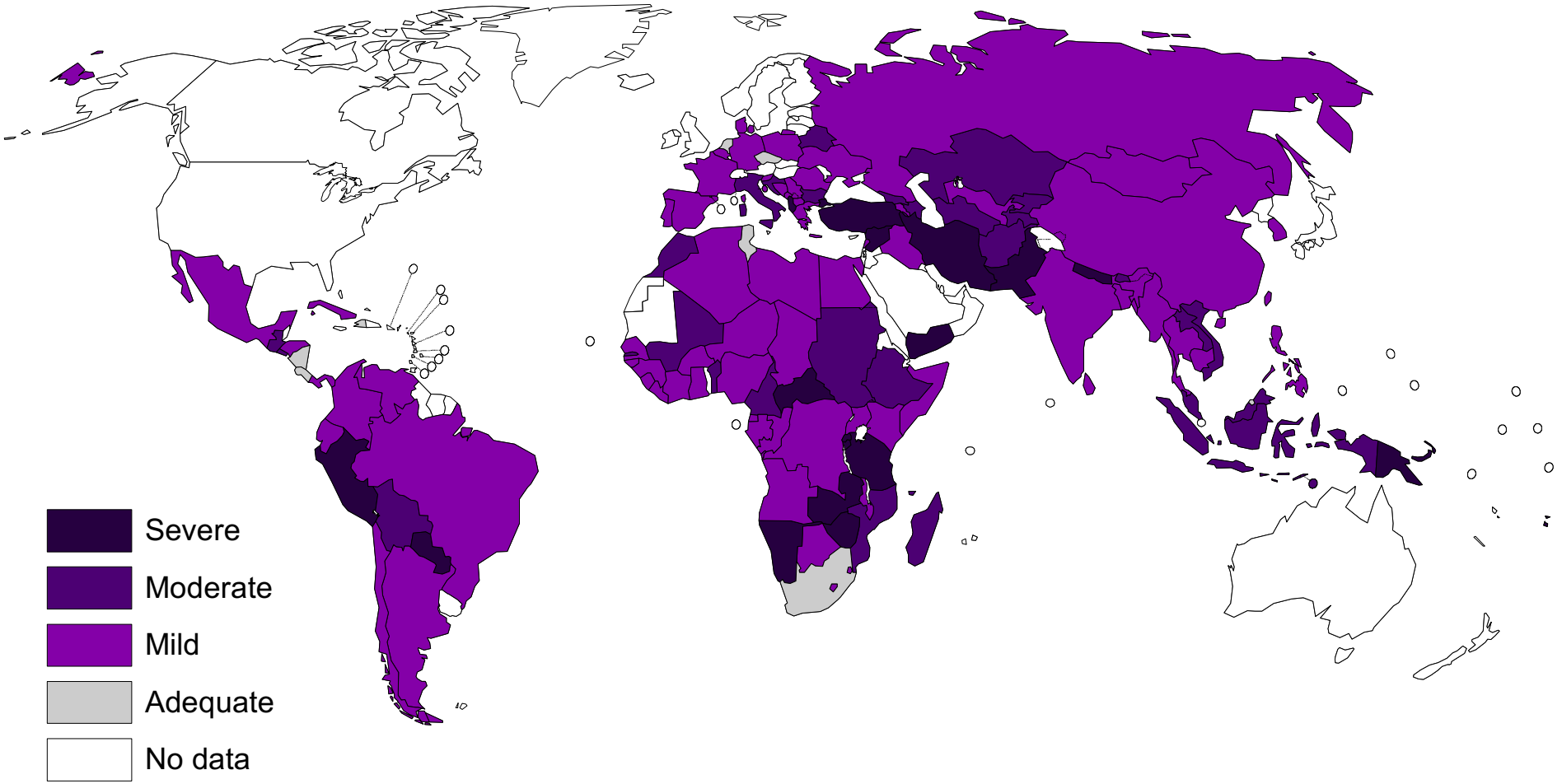
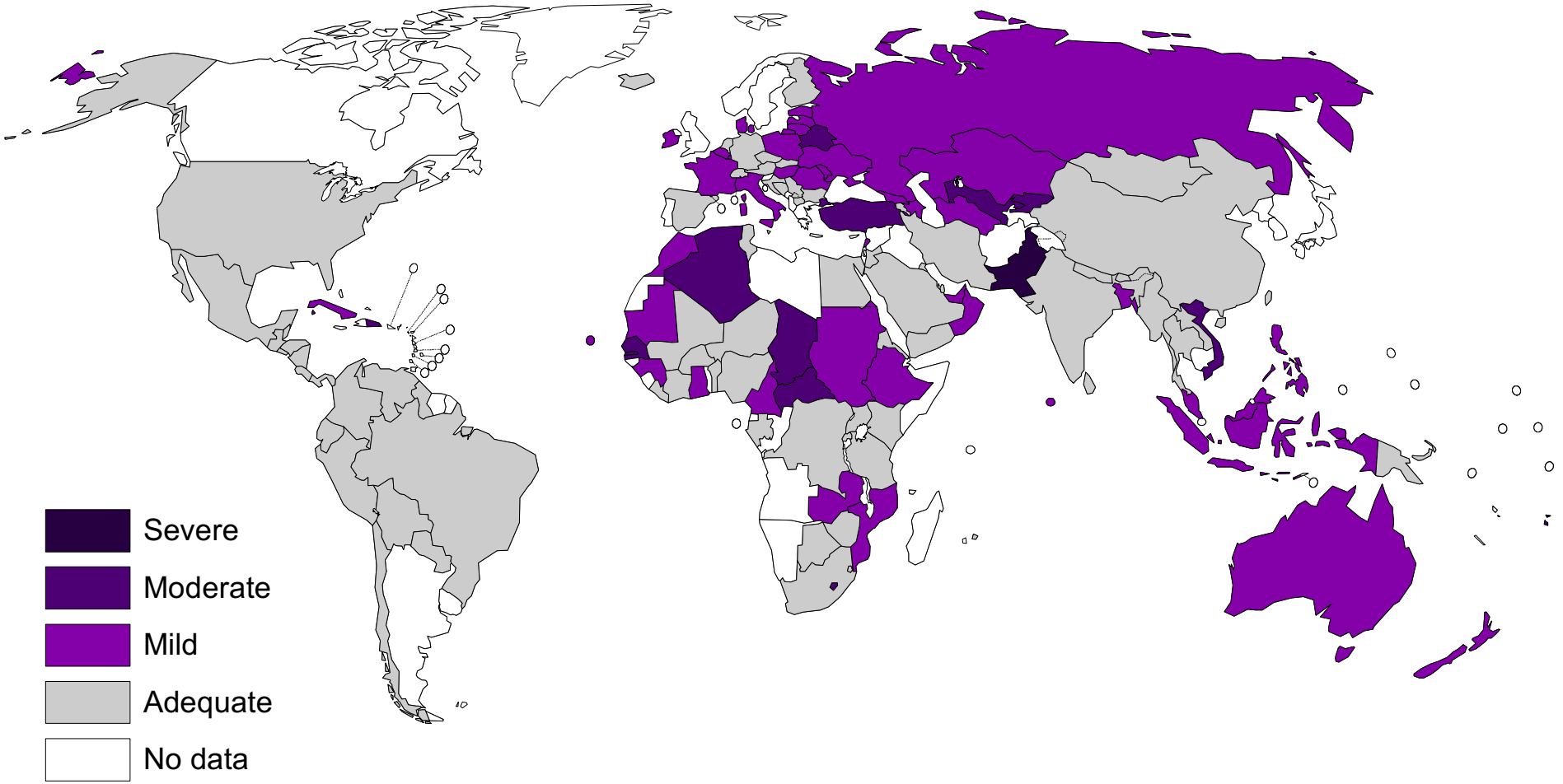
Iodine Status 1993



110 countries iodine deficient

Source: Iodine Global Network

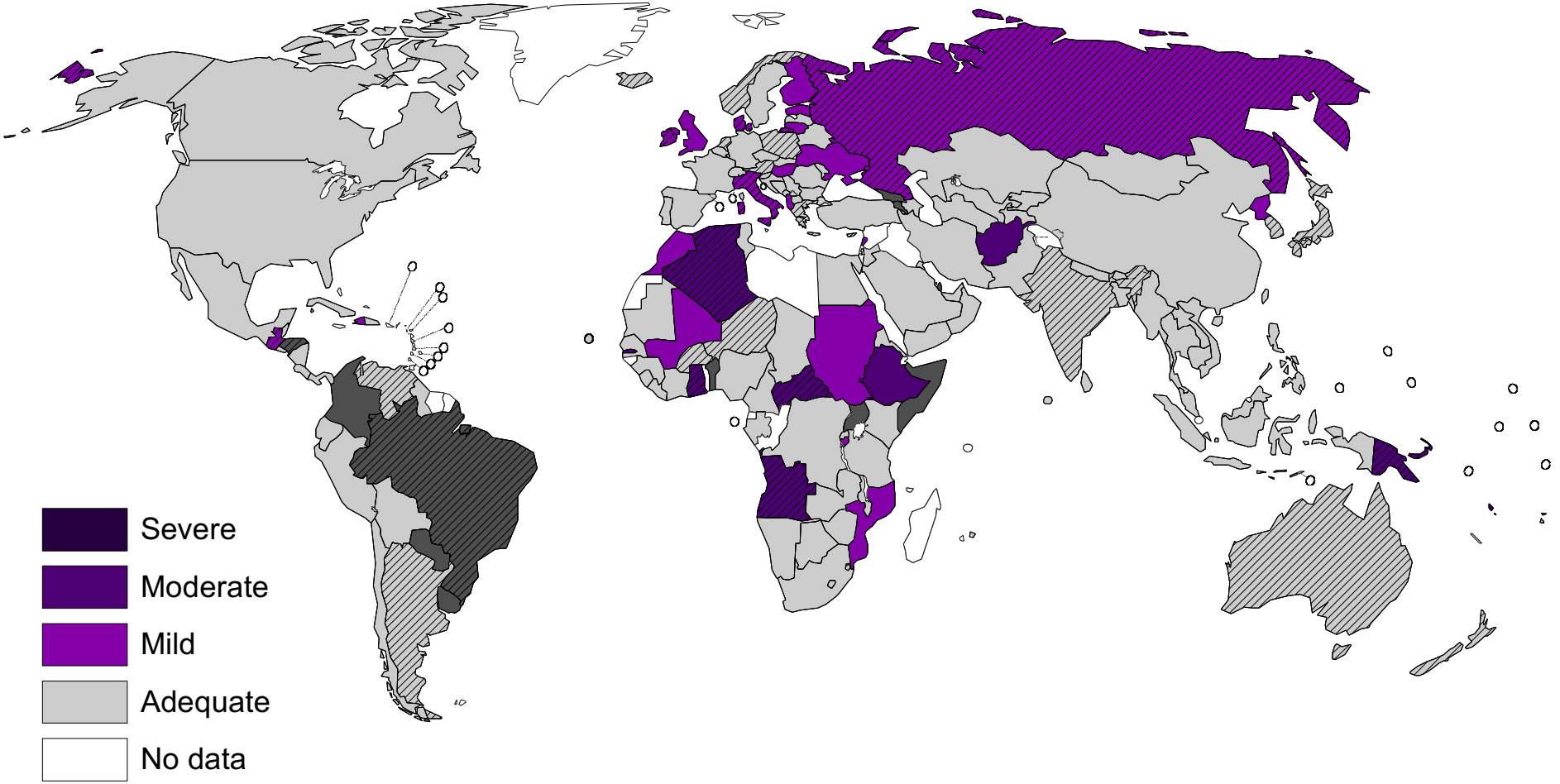
Iodine Status 2003



54 countries iodine deficient

Source: Iodine Global Network

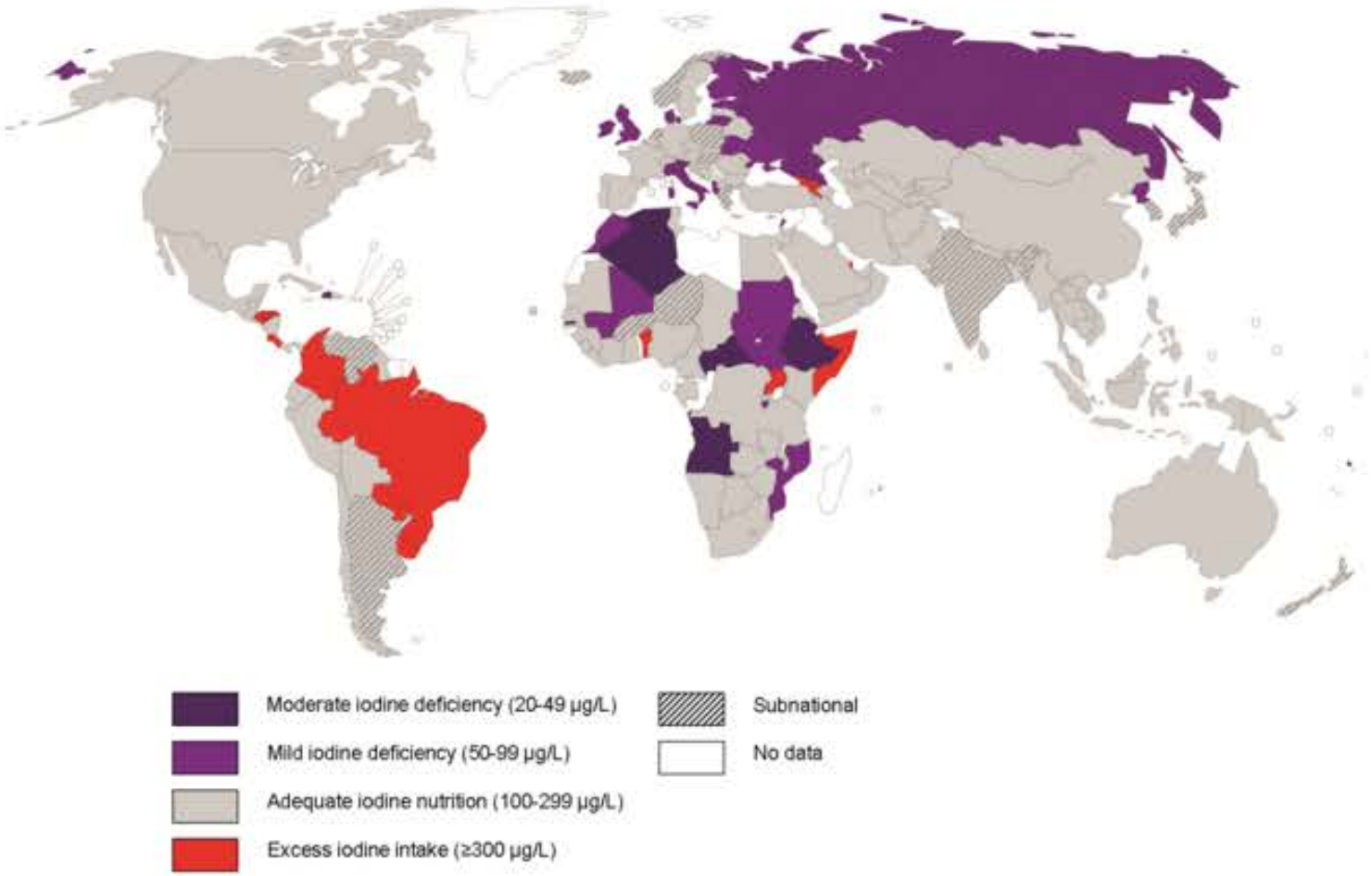
Iodine Status 2014



30 countries iodine deficient

Source: Iodine Global Network

Iodine Status (Median UIC) 2015

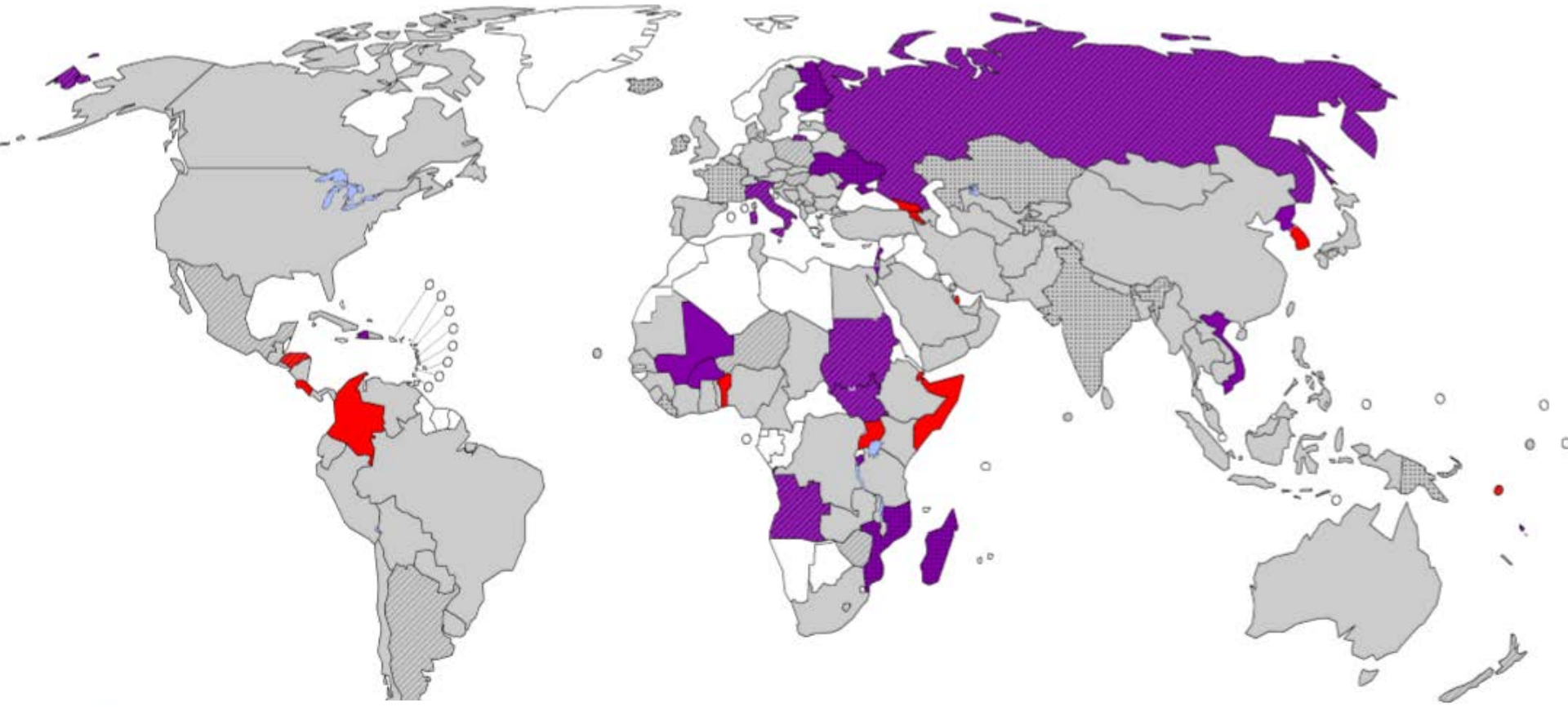


25 countries iodine deficient

…but also 12 countries with excessive levels

Source: Iodine Global Network

Iodine Status (Median UIC) 2017



20 countries iodine deficient

…but also 11 countries with excessive levels

Source: Iodine Global Network

Elimination of iodine deficiency disorders from the Americas: a public health triumph

Lancet Diabetes Endocrinol 2017

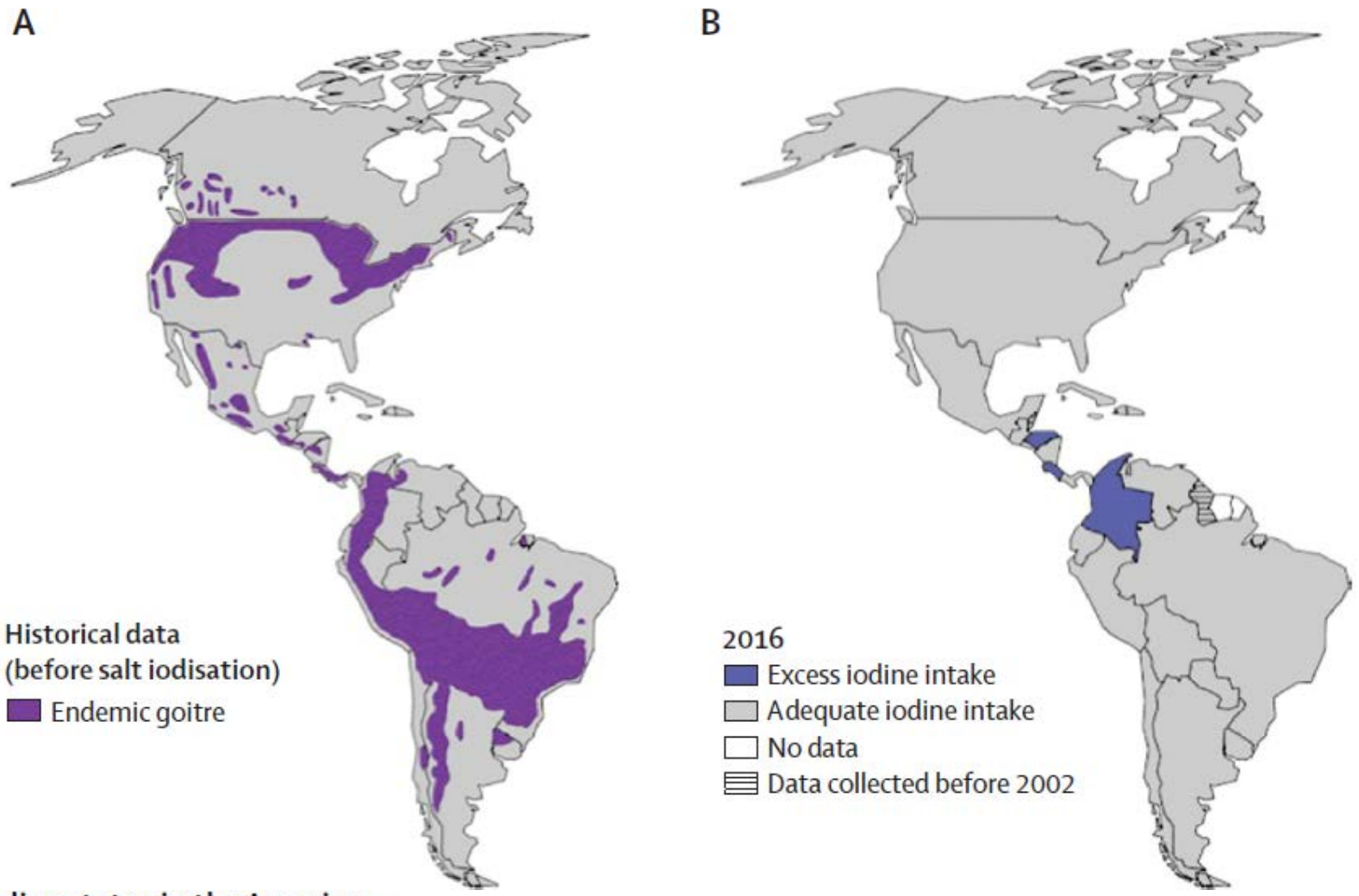
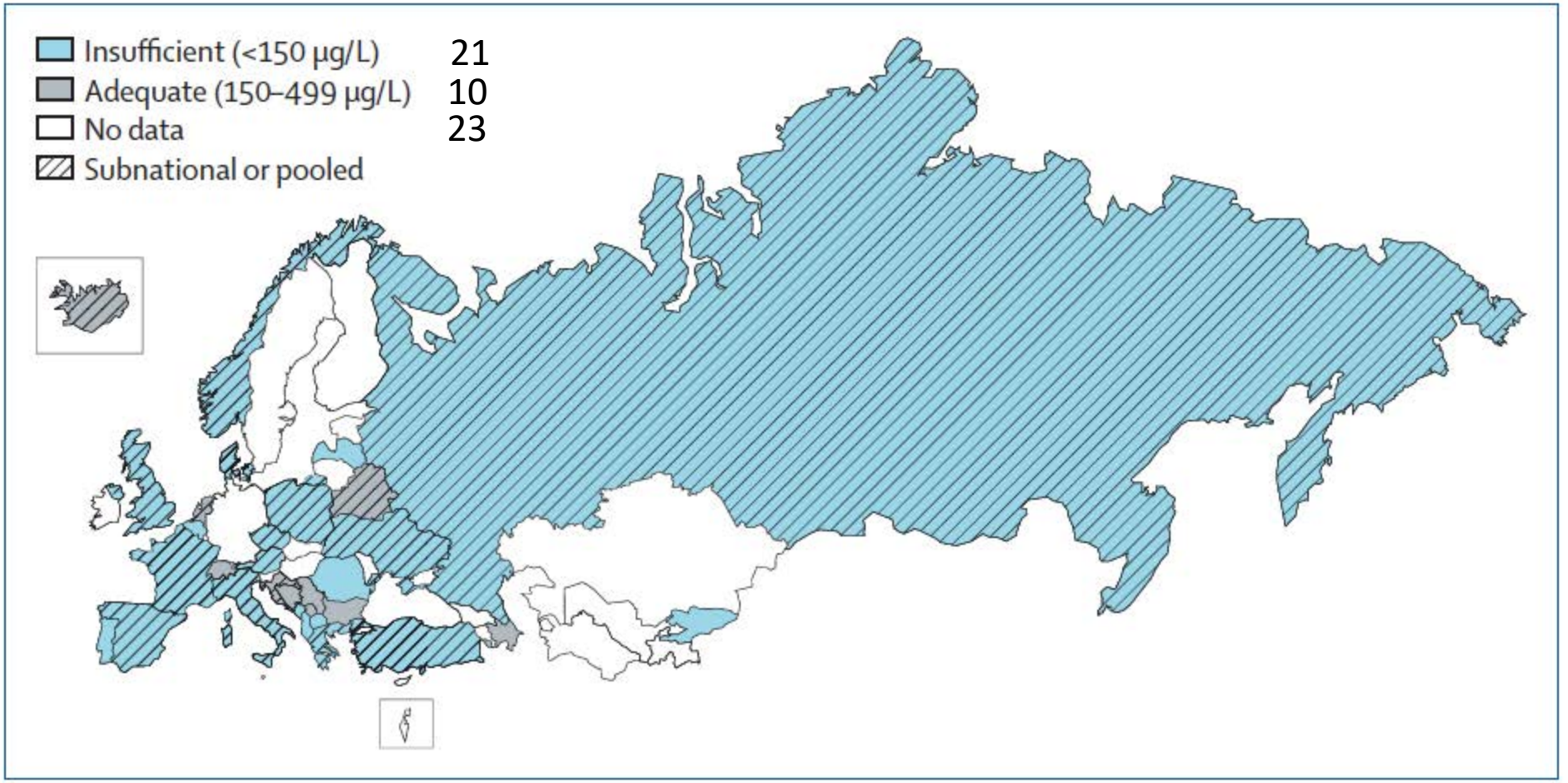


Figure: **Map of iodine status in the Americas**

(A) Presence of endemic goitre before salt iodisation (adapted from maps in Kelly and Snedden[2]).(B) In 2016, median urinary iodine concentrations based on national or pooled subnational data in school-aged or preschool-age children.[4,7]

Iodine nutrition during pregnancy in the countries of the WHO European Region and Kosovo



Zimmermann et al, Lancet Diab Endocrin 2015

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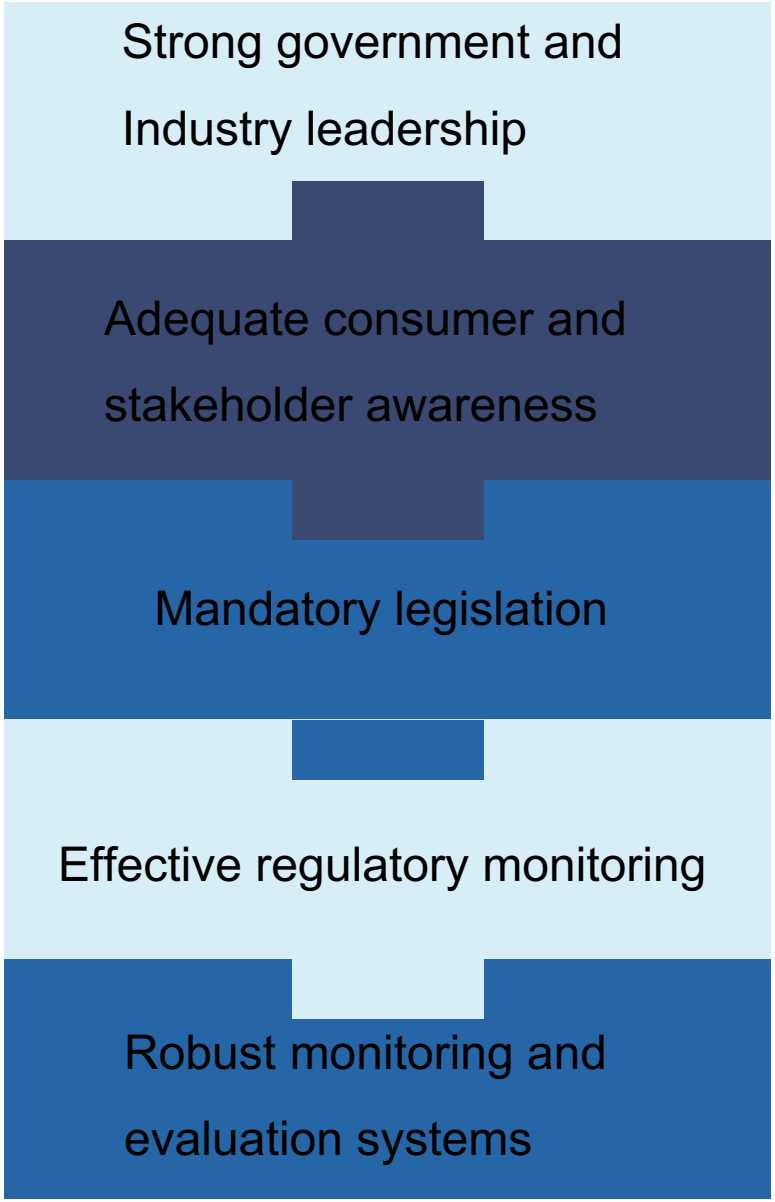
Program Success Factors



Outstanding programmatic issues

To sustain existing gains and accelerate progress towards successfully controlling iodine deficiency among all at-risk groups, the follow steps are necessary:

- Improve methods to quantify the prevalence of population iodine deficiency
- Optimizing iodine status among vulnerable groups and sub-populations while avoiding iodine excess in other groups
- Expand the use of iodized salt in processed foods
- Harmonize salt reduction strategies with salt iodization strategies
- Maintain advocacy and engagement with government to prevent backsliding
- Integrate salt iodization into wider multisectoral nutrition plans' to create healthy and sustainable food systems

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- Salt iodization is one of the biggest public health success stories in the last two decades and one of few successful public-private partnerships to improve the human capital and sustainable development
- However, populations in 20 countries remain at risk for low iodine intakes and the job is thus not yet done
- IDD prevention efforts need to remain a cornerstone of global nutrition agenda

The control of iodine deficiency in all countries worldwide by 2020 is within our reach!


Thank You!
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