

Indicators for assessing infant and young child feeding practices: Definitions and measurement methods



World Health
Organization

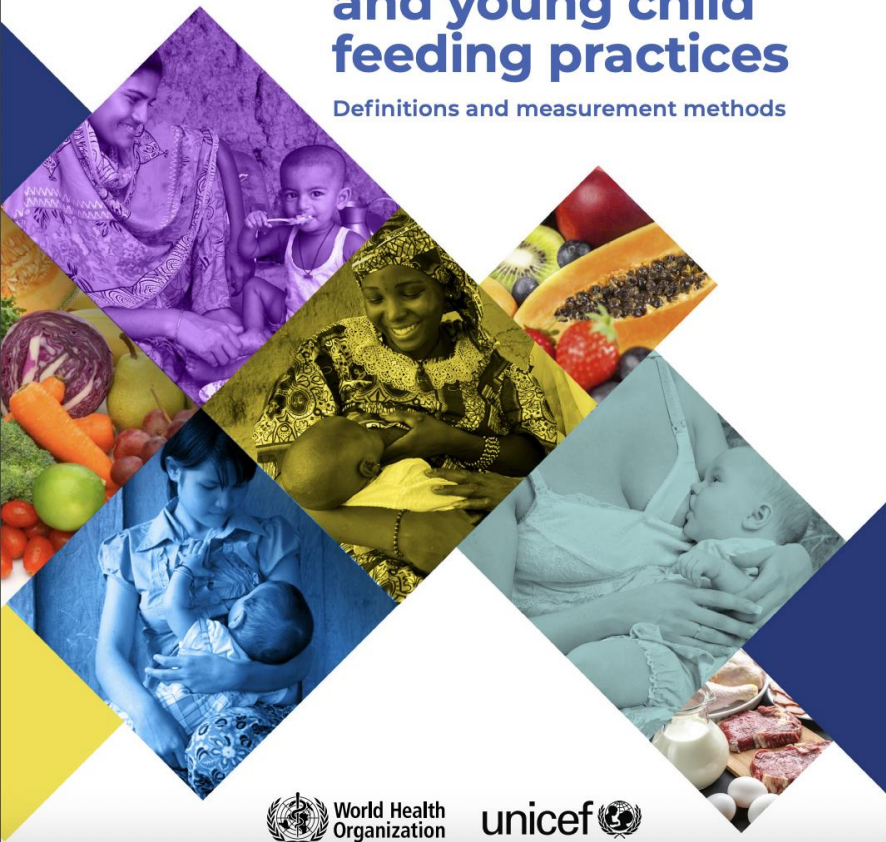
REGIONAL OFFICE FOR Europe

Julianne Williams, PhD, MPH

WHO European Office for Prevention and Control of NCDs

Indicators for assessing infant and young child feeding practices

Definitions and measurement methods



GLOBAL BREASTFEEDING SCORECARD 2022

PROTECTING BREASTFEEDING THROUGH FURTHER INVESTMENTS AND POLICY ACTIONS

Breastfeeding is essential for child survival and health. Breast milk is a safe, natural, nutritious, and sustainable food for babies. Breast milk contains antibodies that help protect against many common childhood illnesses such as diarrhoea and respiratory diseases.¹ It is estimated that inadequate breastfeeding is responsible for 16% of child deaths each year.^{1,2} Breastfed children perform better on intelligence tests and are less likely to be overweight or obese later in life.³ Women who breastfeed also have a reduced risk of cancer and type II diabetes.⁴

The Global Breastfeeding Collective has identified seven policy priorities for countries to protect, promote and support breastfeeding. The Nutrition for Growth Summit of 2021 announced a number of bold commitments from governments, development partners, UN agencies and civil society partners amongst others to improve nutrition, particularly through increased investments in exclusive breastfeeding.⁵ Further investments and actions are required to support mothers to breastfeed their babies.

The Global Breastfeeding Scorecard examines national performance on key indicators of the seven policy priorities identified by the Global Breastfeeding Collective.⁶ The 2022 Scorecard documents progress and challenges in improving infant and young child feeding (IYCF) against these priorities. Details on the indicators used in this Scorecard are available in a separate methodology document.⁷

GLOBAL BREASTFEEDING
COLLECTIVE



IMPLEMENTATION GUIDANCE

Protecting, promoting and supporting
breastfeeding in facilities providing
maternity and newborn services: the revised
**BABY-FRIENDLY
HOSPITAL INITIATIVE**



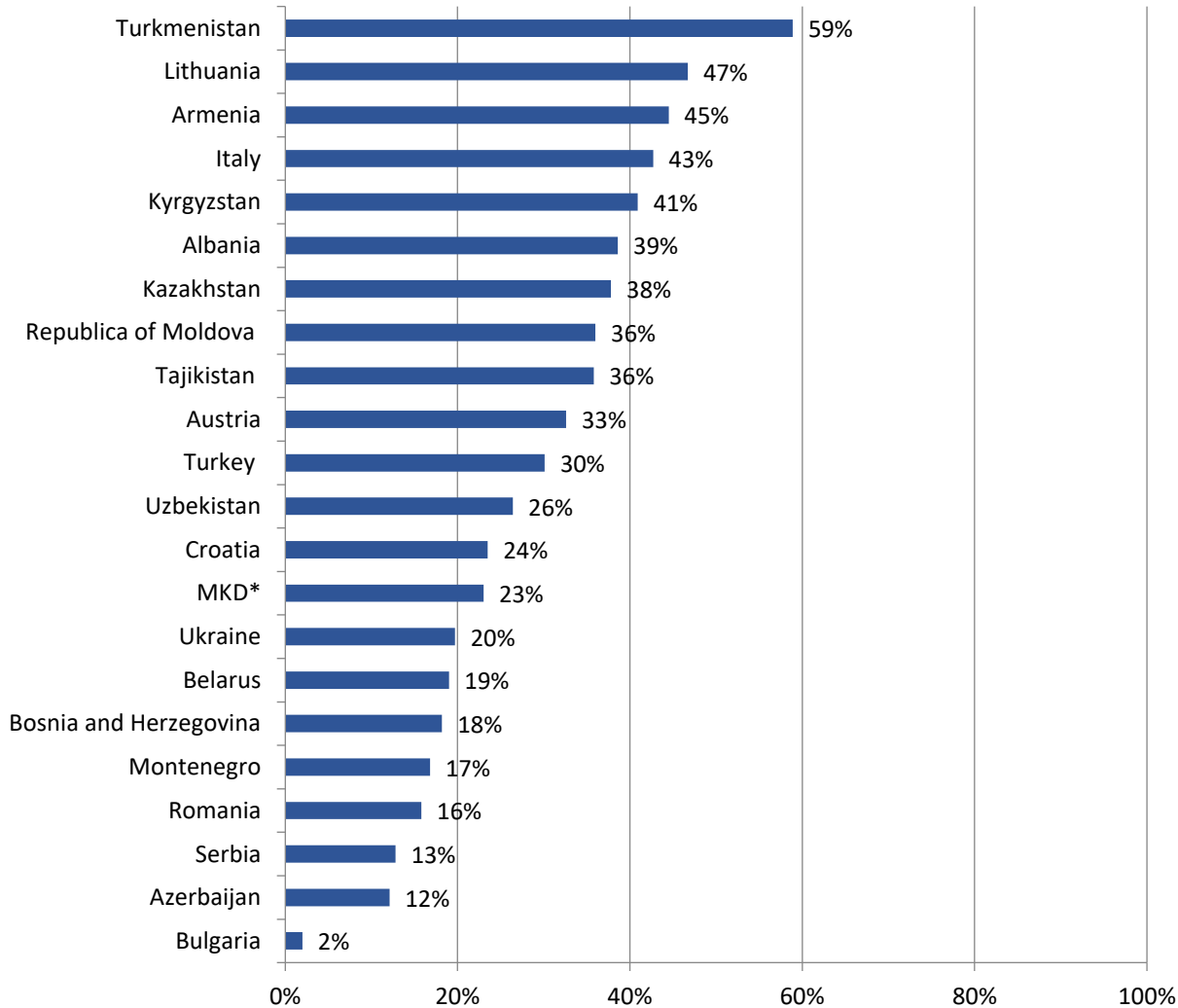
2018



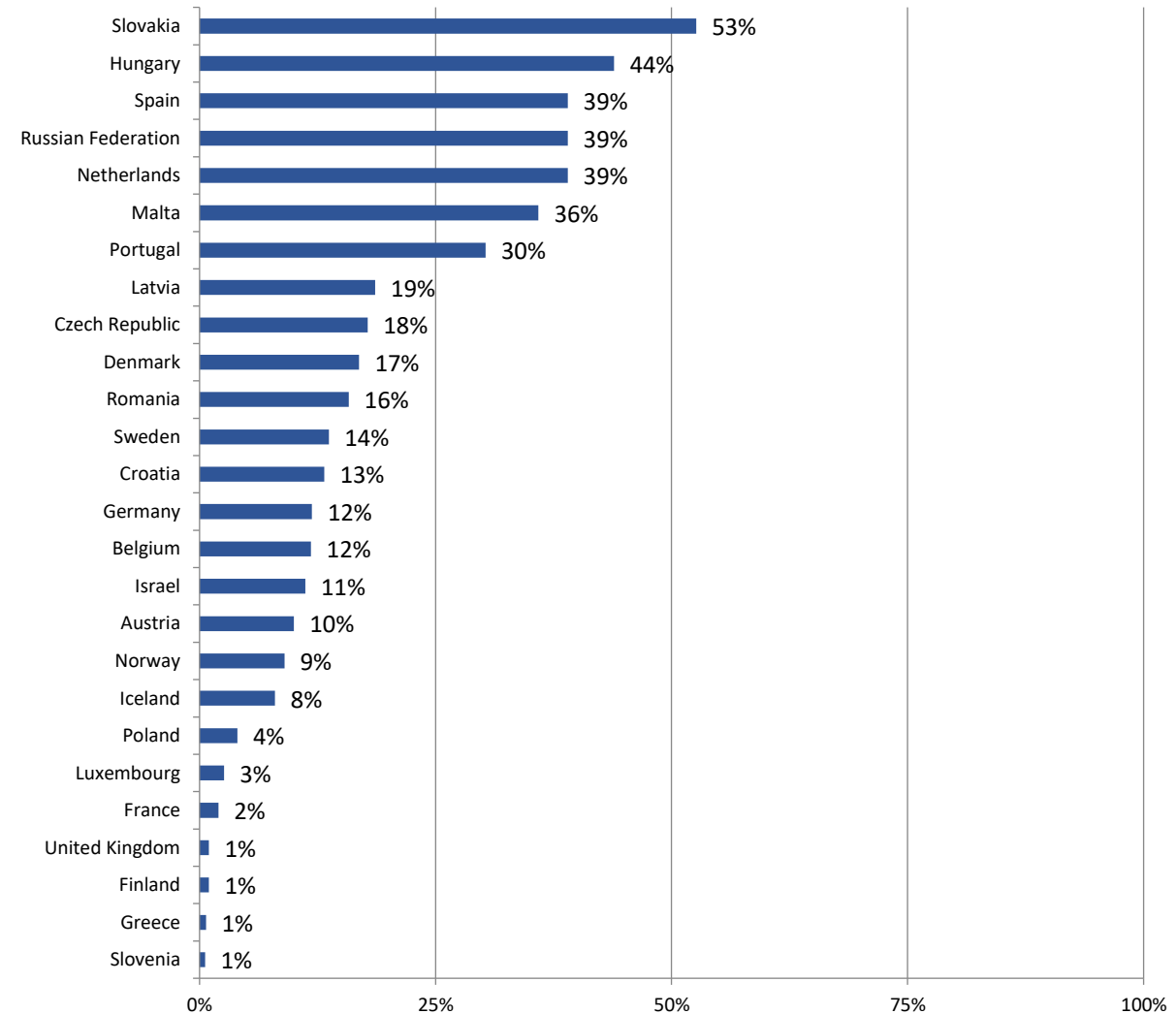
Exclusive Breastfeeding UNDER and AT SIX MONTHS

Latest
Available
Data

EBF under 6 months



EBF at 6 months



Breastfeeding: The data available

- Data availability for breastfeeding patterns shows an unusual distribution.
- Health authorities and researchers in high-income countries seem to neglect breastfeeding to such an extent that most of these countries are unable to report on reliable, standardized indicators.

(Lancet 2016: Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect)

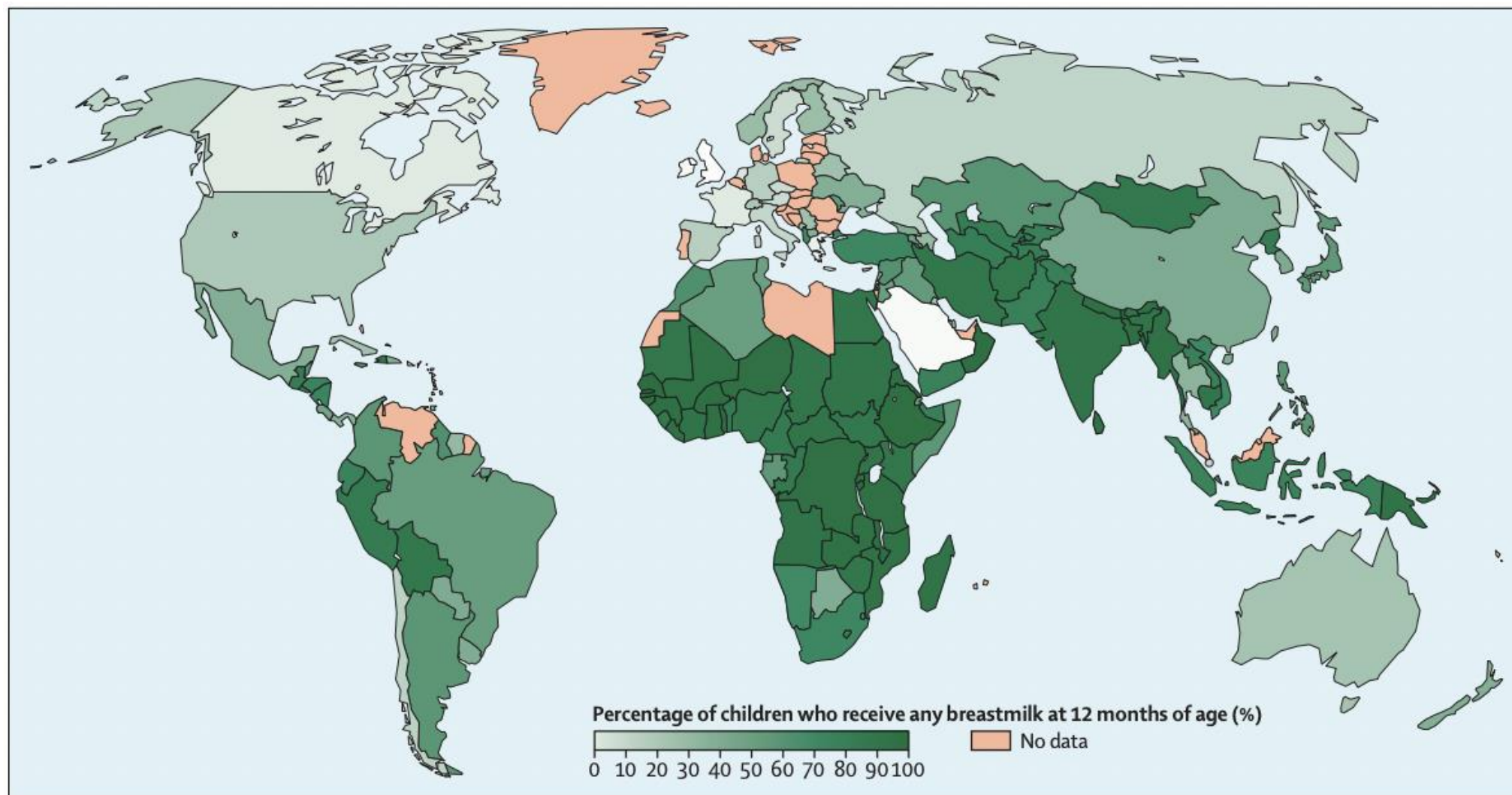
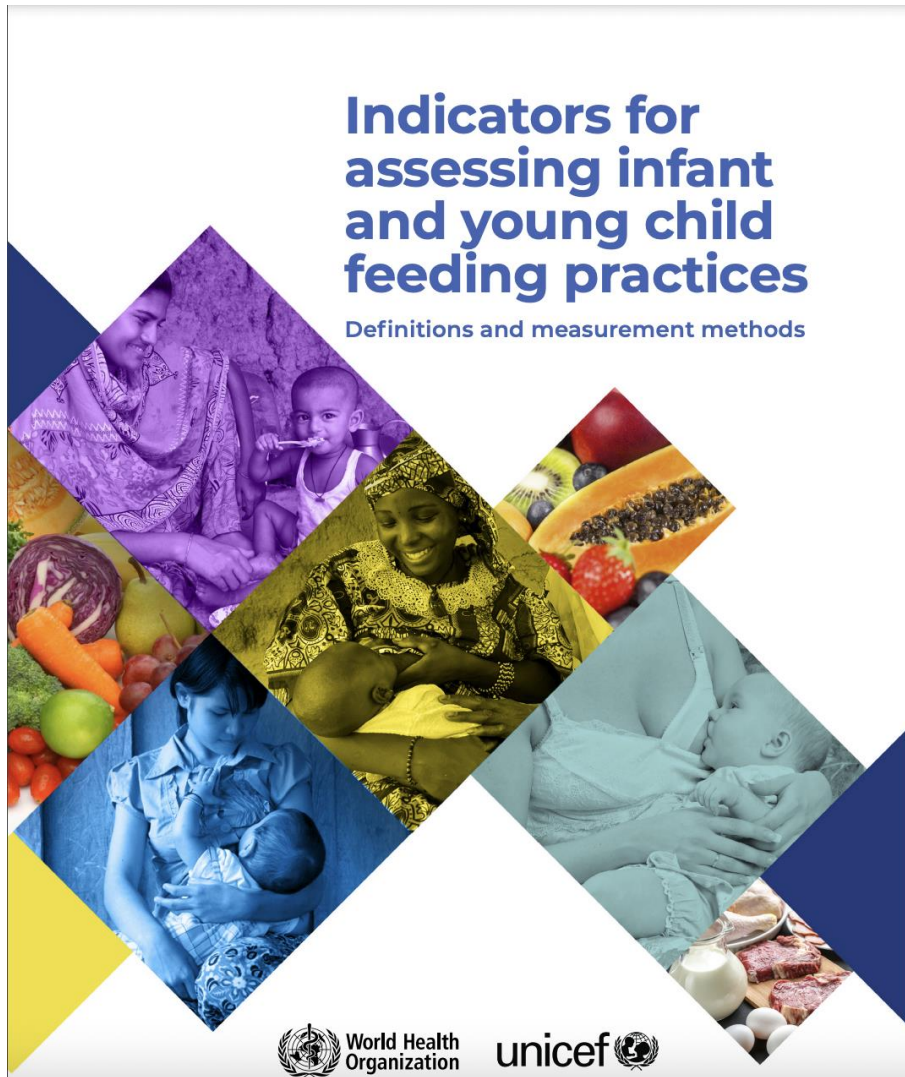


Figure 1: Global distribution of breastfeeding at 12 months
Data are from 153 countries between 1995 and 2013.

(Lancet 2016: Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect)



- New and updated indicators to assess infant and young child feeding (IYCF) practices at household level.
- 17 recommended IYCF indicators in the 2021 edition.
- Provides tools for the collection and calculation of the indicators.
- It is intended for use by managers of large-scale population-based surveys

Scope of the Document

Part 1

- Overview of the 17 IYCF indicators
- Summary of key changes between the 2008 and 2021 recommended indicators

Part 2

- Information and tools for measuring the IYCF indicators and constructing the area graphs

Infant and Young Child Feeding Indicators

Indicator		Short name	Age group	Definition
<i>Breastfeeding indicators</i>				
1	Ever breastfed	EvBF	Children born in the last 24 months	Percentage of children born in the last 24 months who were ever breastfed
2	Early initiation of breastfeeding	EIBF	Children born in the last 24 months	Percentage of children born in the last 24 months who were put to the breast within one hour of birth
3	Exclusively breastfed for the first two days after birth	EBF2D	Children born in the last 24 months	Percentage of children born in the last 24 months who were fed exclusively with breast milk for the first two days after birth
4	Exclusive breastfeeding under six months	EBF	Infants 0–5 months of age	Percentage of infants 0–5 months of age who were fed exclusively with breast milk during the previous day
5	Mixed milk feeding under six months	MixMF	Infants 0–5 months of age	Percentage of infants 0–5 months of age who were fed formula and/or animal milk in addition to breast milk during the previous day
6	Continued breastfeeding 12–23 months	CBF	Children 12–23 months of age	Percentage of children 12–23 months of age who were fed breast milk during the previous day

Indicator	Short name	Age group	Definition	
Complementary feeding indicators				
7	Introduction of solid, semi-solid or soft foods 6–8 months	ISSSF	Infants 6–8 months of age	Percentage of infants 6–8 months of age who consumed solid, semi-solid or soft foods during the previous day
8	Minimum dietary diversity 6–23 months	MDD	Children 6–23 months of age	Percentage of children 6–23 months of age who consumed foods and beverages from at least five out of eight defined food groups during the previous day
9	Minimum meal frequency 6–23 months	MMF	Children 6–23 months of age	Percentage of children 6–23 months of age who consumed solid, semi-solid or soft foods (but also including milk feeds for non-breastfed children) the minimum number of times or more during the previous day
10	Minimum milk feeding frequency for non-breastfed children 6–23 months	MMFF	Children 6–23 months of age	Percentage of non-breastfed children 6–23 months of age who consumed at least two milk feeds during the previous day
11	Minimum acceptable diet 6–23 months	MAD	Children 6–23 months of age	Percentage of children 6–23 months of age who consumed a minimum acceptable diet during the previous day
12	Egg and/or flesh food consumption 6–23 months	EFF	Children 6–23 months of age	Percentage of children 6–23 months of age who consumed egg and/or flesh food during the previous day
13	Sweet beverage consumption 6–23 months	SwB	Children 6–23 months of age	Percentage of children 6–23 months of age who consumed a sweet beverage during the previous day
14	Unhealthy food consumption 6–23 months	UFC	Children 6–23 months of age	Percentage of children 6–23 months of age who consumed selected sentinel unhealthy foods during the previous day
15	Zero vegetable or fruit consumption 6–23 months	ZVF	Children 6–23 months of age	Percentage of children 6–23 months of age who did not consume any vegetables or fruits during the previous day

2008 indicator	2021 indicator	Key change	Main rationale
Children ever breastfed	Ever breastfed	This was an "optional" indicator in the 2008 set of indicators	There is no longer a set of optional indicators; all are recommended.
Early initiation of breastfeeding	Early initiation of breastfeeding	No change	
	Exclusively breastfed for the first two days after birth	New indicator	Feeding newborns anything other than breast milk can make it more difficult to establish breastfeeding.
Exclusive breastfeeding under six months	Exclusive breastfeeding under six months	No change	
	Mixed milk feeding under six months	New indicator	This indicator may be useful for advocacy purposes to document the extent to which non-human milks are used to supplement breastfeeding.
Continued breastfeeding at one year (12–15 months)	Continued breastfeeding 12–23 months	Age window widened to reflect any breastfeeding in the second year of life	Sample size tended to be small for children aged 12–15 months and age window did not accurately reflect "at 1 year".
Introduction of solid, semi-solid or soft foods	Introduction of solid, semi-solid or soft foods 6–8 months	Calculation is now based on the food list question rather than the frequency of feeding question	Brought into line with data analysis practices of two major household survey programmes, the Multiple Indicator Cluster Survey (MICS) and the Demographic and Health Surveys (DHS).
Minimum dietary diversity	Minimum dietary diversity 6–23 months	Breast milk added as an eighth food group and cut-off for minimum increased to five food groups	Previous definition disadvantaged breastfed children in not counting breast milk as a food group.
Minimum meal frequency	Minimum meal frequency 6–23 months	At least one non-milk feeding is required to meet minimum for non-breastfed children while the previous definition allowed children to achieve the minimum with milk feeds only	Dietary intake for this age group needs to include solid, semi-solid or soft foods; allowing consumption of only milk-based meals was not in line with guiding principles on IYC feeding.
Milk feeding frequency for non-breastfed children	Minimum milk feeding frequency for non-breastfed children 6–23 months	This was an "optional" indicator in the 2008 set of indicators	There is no longer a set of optional indicators; all are recommended.

CHANGES BETWEEN THE 2008 AND 2021 IYCF INDICATORS





2008 indicator	2021 indicator	Key change	Main rationale
Minimum acceptable diet	Minimum acceptable diet 6–23 months	Altered to reflect changes in MDD and MMF above	See above.
	Egg and/or flesh food consumption 6–23 months	New indicator	Diets lacking egg and/or flesh foods are less likely to meet nutrient needs for IYC.
	Sweet beverage consumption 6–23 months	New indicator	Intake of sweet beverages is associated with increased weight-for-length and BMI z-scores, and intake of sugar-sweetened beverages with an obesity risk in children.
	Unhealthy food consumption 6–23 months	New indicator	Unhealthy foods displace nutritious foods and establish dietary preferences that persist throughout childhood and into adulthood.
	Zero vegetable or fruit consumption 6–23 months	New indicator	Low vegetable and fruit consumption is associated with an increased risk of noncommunicable diseases.
Bottle feeding	Bottle feeding 0–23 months	This was an “optional” indicator in the 2008 set of indicators	There is no longer a set of optional indicators; all are recommended.
Infant feeding area graphs	Area graphs under 6 months	New indicator	These graphs were recommended in the previous guidance for 0–23 months, but not listed among the indicators. Given their value in situation analysis and monitoring, they have now been included as “other indicators”.
Consumption of iron-rich or iron-fortified foods		Deleted	Hard to operationalize in household surveys.
Continued breastfeeding at two years (20–23 months) (optional)		Combined with continued breastfeeding 12–23 months as described above	
Age-appropriate breastfeeding (optional)		Deleted	Composite indicator that was hard to interpret programmatically.
Predominant breastfeeding under six months (optional)		Deleted	Predominant breastfeeding is not recommended. The indicator was rarely used; not considered useful.
Duration of breastfeeding (optional)		Deleted	Difficult to calculate and hard to communicate.

Priority Policy Actions



1 Increase funding to raise breastfeeding rates from birth through two years.



5 Improve access to skilled breastfeeding counselling as part of comprehensive breastfeeding policies and programmes in health facilities.



2 Fully implement the International Code of Marketing of Breastmilk Substitutes and relevant World Health Assembly resolutions through strong legal measures that are enforced and independently monitored by organizations free from conflicts of interest.



6 Strengthen links between health facilities and communities, and encourage community networks that protect, promote, and support breastfeeding.



3 Enact paid family leave and workplace breastfeeding policies, building on the International Labour Organization's maternity protection guidelines as a minimum requirement, including provisions for the informal sector.



7 Strengthen monitoring systems that track the progress of policies, programmes, and funding towards achieving both national and global breastfeeding targets.



4 Implement the Ten Steps to Successful Breastfeeding in maternity facilities, including providing breastmilk for sick and vulnerable newborns.

Global Breastfeeding Scorecard



GLOBAL BREASTFEEDING SCORECARD 2022

PROTECTING BREASTFEEDING THROUGH FURTHER INVESTMENTS AND POLICY ACTIONS

Breastfeeding is essential for child survival and health. Breast milk is a safe, natural, nutritious, and sustainable food for babies. Breast milk contains antibodies that help protect against many common childhood illnesses such as diarrhoea and respiratory diseases.¹ It is estimated that inadequate breastfeeding is responsible for 16% of child deaths each year. Breastfed children perform better on intelligence tests and are less likely to be overweight or obese later in life.² Women who breastfeed also have a reduced risk of cancer and type II diabetes.³

The Global Breastfeeding Collective has identified seven policy priorities for countries to protect, promote and support breastfeeding. The Nutrition for Growth Summit of 2021 announced a number of bold commitments from governments, development partners, UN agencies and civil society partners amongst others to improve nutrition, particularly through increased investments in exclusive breastfeeding.⁴ Further investments and actions are required to support mothers to breastfeed their babies.

The Global Breastfeeding Scorecard examines national performance on key indicators of the seven policy priorities identified by the Global Breastfeeding Collective.⁵ The 2022 Scorecard documents progress and challenges in improving infant and young child feeding (IYCF) against these priorities. Details on the indicators used in this Scorecard are available in a separate methodology document.⁷

- Indicators on:
 - GBC policy priorities (1-2 each)
 - IYCF in emergencies
 - Breastfeeding rates (EIBF, ExBF, 1yr, 2yr)
- Colour-coding on level of performance
- Sets 2030 targets
- Aims to advocate for progress, increase accountability, and document change on top priorities
- Published annually since 2017
- Online dashboard: (<https://www.globalbreastfeedingcollective.org/global-breastfeeding-scorecard>)
 - Maps
 - Country-specific data for 194 countries

What's new: New indicators

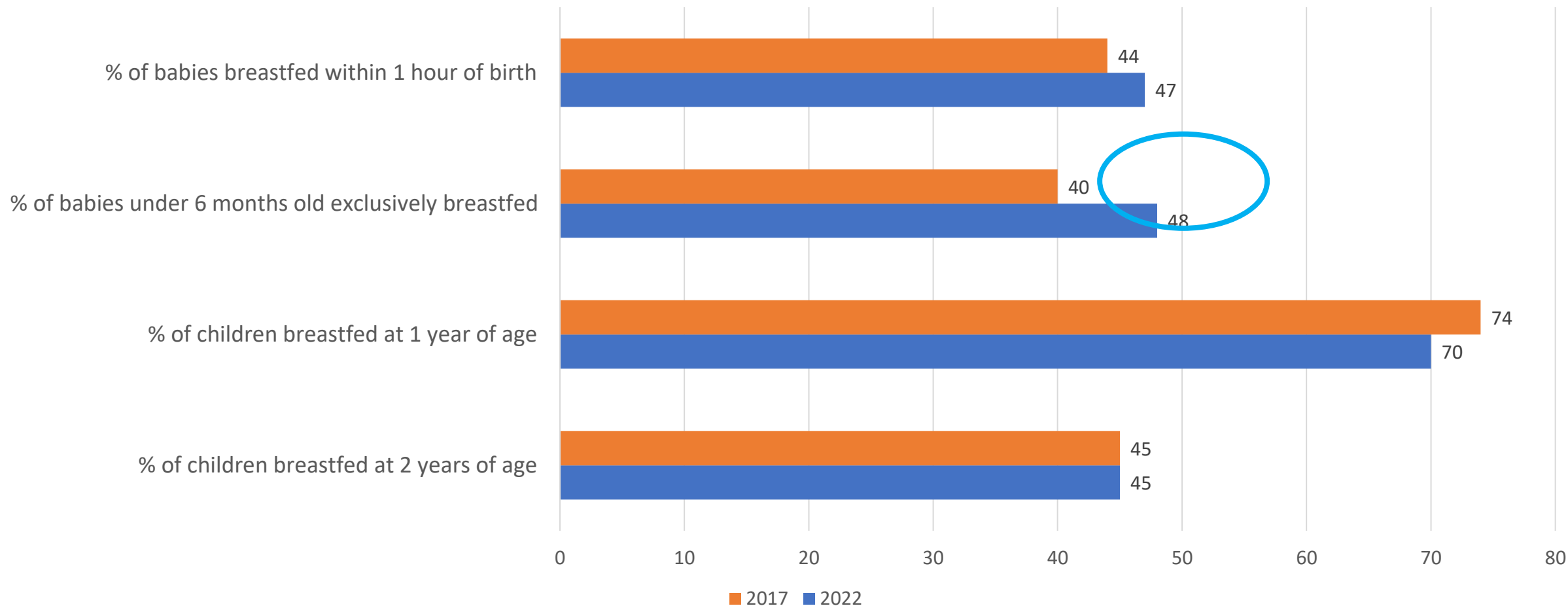
Theme/ Policy ask	Indicator	2030 Target	Data source
Code	Monitoring of the Code	50% of countries with monitoring mechanism for the Code and continuous monitoring (25% baseline)	UNICEF Nutridash
Maternity protection	Standards on workplace accommodations	40% of countries meeting ILO standards on provision of nursing breaks and facilities (20% baseline)	2022 ILO Care at Work report
BFHI	% of Births Observed on Breastfeeding at Birth	40% of countries with at least 75% of births observed on breastfeeding at birth (15% baseline)	Demographic and Health Survey
Counseling	% of Caregivers Counselling on IYCF	60% of countries with at least 75% of caregivers of children below 2 years of age counselled on IYCF (28% baseline)	UNICEF Nutridash
	Inclusion of IYCF Support in PreService Curricula	40% of countries with IYCF support included in pre-service curricula for medical doctors and nurses (17% baseline)	UNICEF Nutridash
IYCF in emergencies	IYCF Support in Emergencies	50% of countries with programme, policy, and funding for IYCF in emergencies (23% baseline)	UNICEF Nutridash

What's new: Data updates

Theme	Indicator	Data source
Funding	Donor Funding (USD) Per Live Birth	2022 R4D report: Tracking aid for the WHA nutrition targets
Code	Legal Status of the Code	2022 Code Status Report
Maternity protection	Standards on Maternity Leave	2022 ILO report: Care at Work
Community support	% of districts implementing community BF programs	Nutridash 2021
Monitoring	Most recent exclusive BF report	UNICEF IYCF database
	Most recent WBTi BF program assessment	IBFAN/BPNI reporting
Breastfeeding practices	Initiation in first hour	UNICEF IYCF database
	Exclusive breastfeeding 0-6 months	UNICEF IYCF database
	Continued breastfeeding 12-15 months	UNICEF IYCF database
	Continued breastfeeding 20-23 months	UNICEF IYCF database

What's new: Results

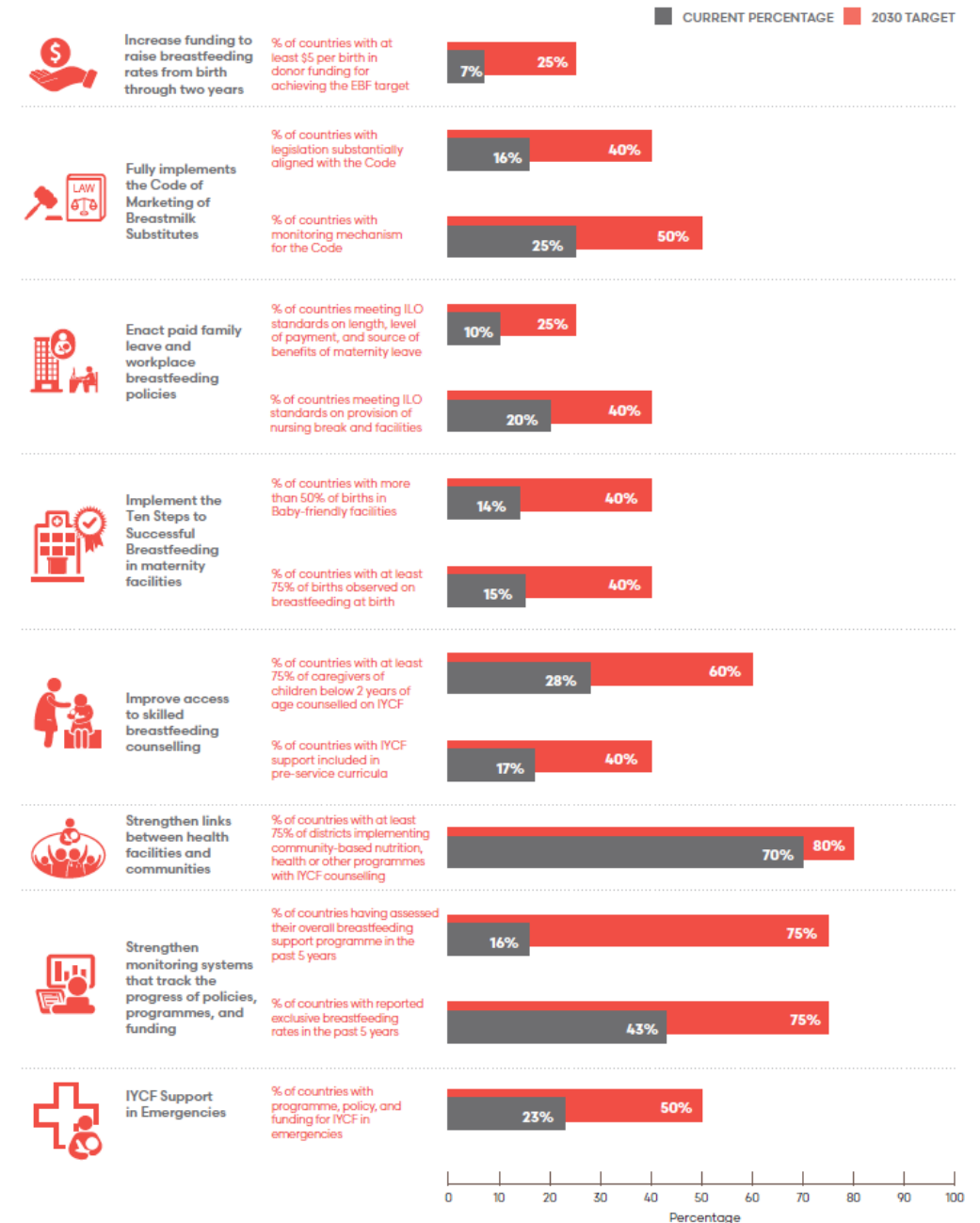
Global prevalence of breastfeeding



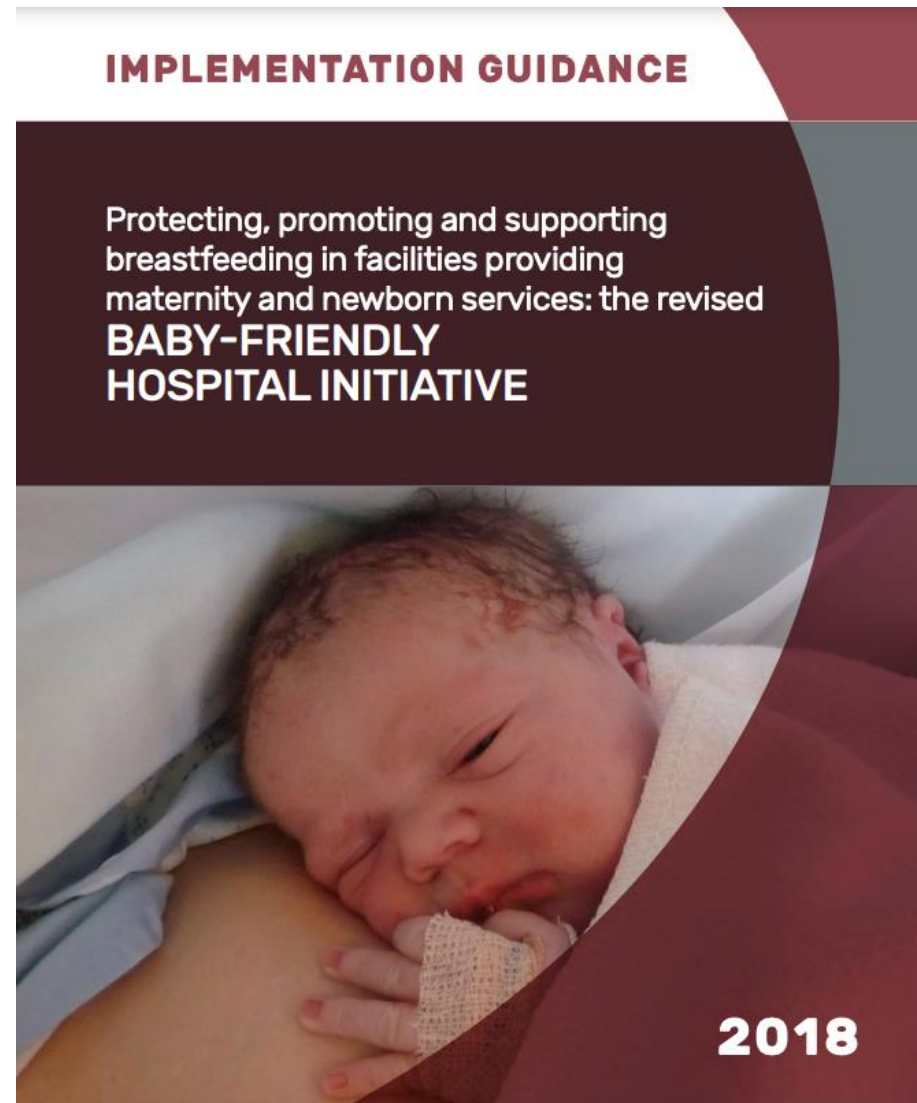
What's new: Results

- Updated data on donor funding shows little improvement.
- Progress has been made on the implementation of the Code, with seven new countries having legislation substantially aligned with the Code.
- Only one in four countries have functioning mechanisms to monitor compliance with the Code.
- New analysis of legislation on maternity leave shows little progress.
- Most countries do not guarantee working mothers the right to facilities and paid break times for breastfeeding.

Figure 1. Percent of countries with recommended policies to protect, promote, and support breastfeeding



- Intended for : governments; national managers of maternal and child health programmes in general, and of breastfeeding- and Baby-friendly Hospital Initiative (BFHI)-related programmes
- The steps are divided into: institutional procedures and standards for individual care of mothers and infants (key clinical practices)



Appendix: Indicators for monitoring

Protecting, promoting and supporting
BREASTFEEDING IN FACILITIES
providing maternity and newborn services:
the revised Baby-friendly Hospital Initiative

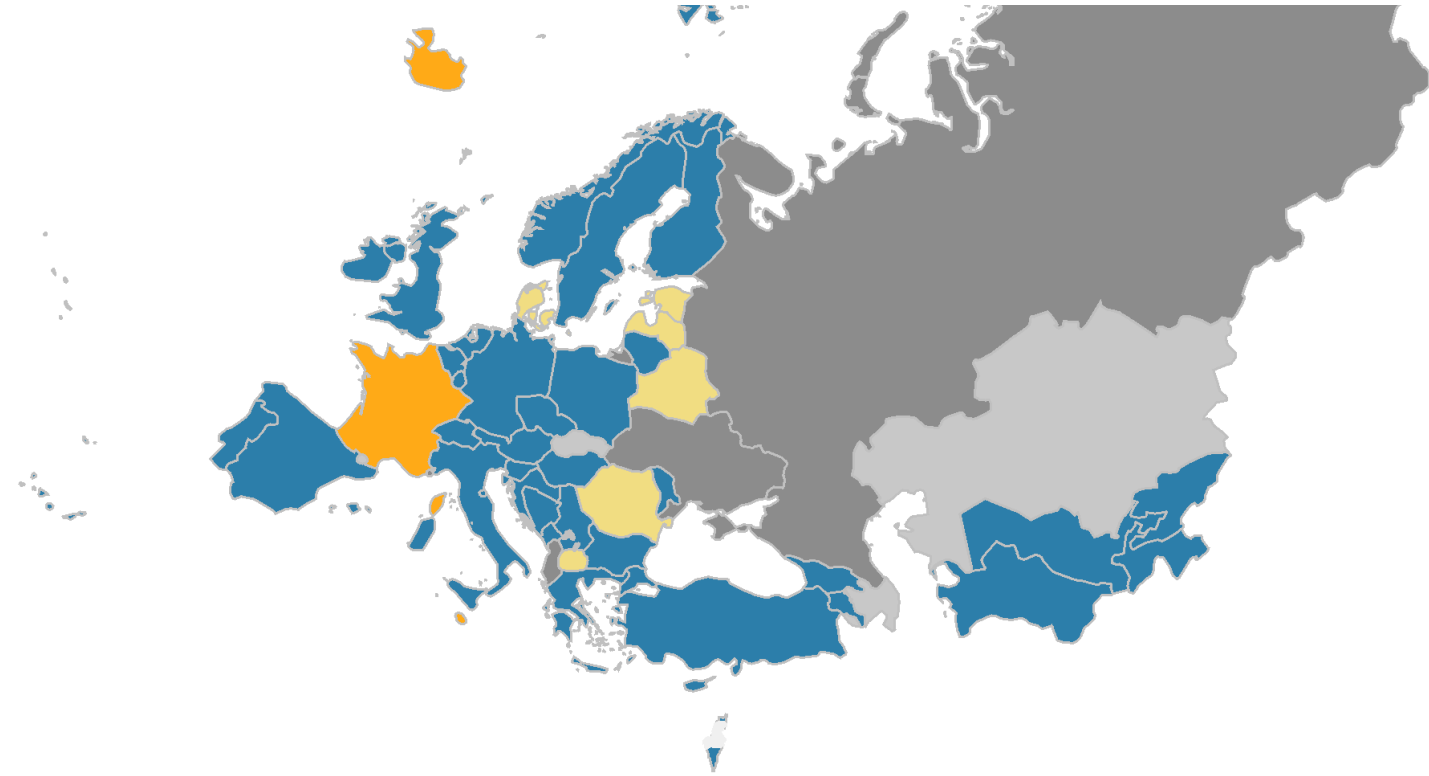
Tables with:

- Key clinical practices,
- Proposed indicator definition
- Target
- Primary source
- Additional sources

https://cdn.who.int/media/docs/default-source/breastfeeding/publication/bfhi-implementation-2018-appendix.pdf?sfvrsn=d38e8885_11



Implementation status of baby friendly hospital initiative (BFHI), 2017



Why are standardized methods for assessing IYCF important?

Standardized methods allow more accurate tracking/comparison over time in country and with other countries

Informs policy, programs and civil society

Allows inclusion in global datasets

Targets provide a benchmark for progress

Holds everyone to account

Thank you
Julianne Williams
williamsj@who.int

Special Thanks
Nigel Rollins
and Muzna Mughal

WHO Regional Office for Europe



WHO_Europe



facebook.com/WHOEurope



instagram.com/whoeurope



youtube.com/user/whoeuro



REGIONAL OFFICE FOR

World Health
Organization

Europe



BUREAU RÉGIONAL DE L'

Organisation
mondiale de la Santé

Europe



REGIONALBÜRO FÜR

Weltgesundheitsorganisation

Europa



Всемирная организация
здравоохранения

Европейское региональное бюро