CAPTURE THE MOMENT

Early initiation of breastfeeding: The best start for every newborn

World Health Organization

unicef

July 2018

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ISBN: 978-92-806-4976-5

For the latest data, please visit:
https://data.unicef.org/topic/nutrition/infant-and-young-child-feeding/

Suggested citation:
UNICEF, WHO. *Capture the Moment – Early initiation of breastfeeding: The best start for every newborn*. New York: UNICEF; 2018

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Acknowledgements

This report was prepared by UNICEF's Nutrition Section (Programme Division), the Data and Analytics Section (Division of Data, Research and Policy) and the Division of Communication, in collaboration with WHO's Department of Nutrition for Health and Development and the Department of Maternal, Newborn, Child and Adolescent Health.

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UNICEF gratefully acknowledges the support of the Bill & Melinda Gates Foundation and the Government of the Netherlands.

UNICEF and WHO would like to extend special thanks to their partners in the Global Breastfeeding Collective for their breastfeeding advocacy efforts.

List of abbreviations

BFHI	Baby-friendly Hospital Initiative
CHW	Community health worker
DHS	Demographic and Health Survey
MICS	Multiple Indicator Cluster Survey
UNICEF	United Nations Children's Fund
WHA	World Health Assembly
WHO	World Health Organization

Contents

Starting out right

No matter where a newborn takes his or her first breath, the desire to give that baby the best start in life is universal. The first hours and days after birth are one of the riskiest periods of a child's life — but getting an early start to breastfeeding offers a powerful line of defense.

Whether delivery takes place in a hut in a rural village or a hospital in a major city, putting newborns to the breast within the first hour after birth gives them the best chance to survive, grow and develop to their full potential. These benefits make the early initiation of breastfeeding a key measure of essential newborn care in the *Every Newborn Action Plan*.[1]

The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) recommend that children initiate breastfeeding within the first hour of birth and be exclusively breastfed for the first six months of life – meaning no other foods or liquids are provided, including water. From the age of 6 months, children should begin eating safe and adequate complementary foods while continuing to breastfeed for up to two years and beyond.[2,3]

The early initiation of breastfeeding – putting newborns to the breast within the first hour of life – is critical to newborn survival and to establishing breastfeeding over the long term. When breastfeeding is delayed after birth, the consequences can be life-threatening – and the longer newborns are left waiting, the greater the risk.

Improving breastfeeding practices could save the lives of more than 800,000 children under 5 every year, the vast majority of whom are under six months of age. Beyond survival, there is growing evidence that breastfeeding boosts children's brain development and provides protection against overweight and obesity. Mothers also reap important health benefits from breastfeeding, including a lower risk of breast cancer, ovarian cancer and type 2 diabetes.[4] The life-saving protection of breastfeeding is particularly important in humanitarian settings, where access to clean water, adequate sanitation and basic services is often limited.

This report presents the global situation of early initiation of breastfeeding and describes trends over the past ten years. Drawing from an analysis of early initiation rates among babies delivered by skilled birth attendants, the report describes key findings and examines the factors that both help and hinder an early start to breastfeeding. The report outlines key learnings from countries where rates of early initiation have improved or deteriorated and concludes with recommendations for policy and programmatic action.

Why an early start to breastfeeding matters

When it comes to breastfeeding, timing is everything. Newborns who are put to their mother's breast within the first hour of life are more likely to survive, while those left waiting face life-threatening consequences. Indeed, the longer newborns wait for the first critical contact with their mother, the greater their risk of death.

According to a recent meta-analysis of five studies from four countries, including more than 130,000 breastfed newborns, those who began breastfeeding between 2 and 23 hours after birth had a 33 per cent greater risk of dying compared with those who began breastfeeding within one hour of birth. Among newborns who started breastfeeding 24 hours or more after birth, the risk was more than twice as high *(see Figure 1)*.[5] The protective effect of early breastfeeding existed independently of whether or not the children were exclusively breastfed.

Children who are not put to the breast within the first hour of life also face a higher risk of common infections. In a study of more than 4,000 children in Tanzania, the delayed initiation of breastfeeding was associated with an increased risk of cough and an almost 50 per cent increased risk of breathing difficulties in the first six months of life, compared with newborns who began breastfeeding within the first hour of birth.[6]

Babies are born ready to breastfeed. The newborn suckling reflex allows infants to suck, swallow and feed immediately after birth. Putting newborns to the breast necessitates skin-to-skin contact, and this closeness between mother and baby in the moments after delivery provides both short- and long-term benefits. Immediate skin-to-skin contact helps regulate newborns' body temperature and allows their bodies to be populated with beneficial bacteria from their mother's skin. These 'good' bacteria provide protection from infectious diseases and help build babies' immune systems.[7]

Suckling at the breast triggers the release of prolactin in the mother, an important hormone that stimulates milk production and helps ensure a continuous food supply for the infant.[8] The breastmilk consumed by newborns during the first few days – called colostrum – is extremely rich in nutrients and antibodies and acts as a child's first 'vaccine', providing a vital shield of protection against disease and death.

Skin-to-skin contact immediately after birth until the end of the first breastfeeding has been shown to extend the duration of breastfeeding, improve the likelihood of babies being breastfed at all in the first months of life, and may also contribute to an increase in exclusive breastfeeding.[9]

Initiating breastfeeding within the first hour of life is no easy feat: mothers cannot be expected to do it alone. They require adequate support and guidance on positioning and feeding their newborns. The appropriate care of both newborn and mother in the moments after birth is critical to ensuring that breastfeeding not only begins but continues successfully. While a small proportion of women cannot breastfeed for medical reasons, most mothers simply need the right support at the right time to ensure that breastfeeding gets an early start.

For newborns, every minute counts

Breastfeeding <1 hour after birth saves lives and provides benefits that last a lifetime.

The longer babies need to wait, the greater the risk.

Waiting 2-23 hours increases their risk of death* by **1.3 times.**

Waiting 1 day or more increases their risk of death* by **more than 2 times.**

*Risk of death is presented for the first 28 days of life and in comparison to those who initiated in <1 hour.

Figure 1. Visualization of the evidence about the importance of initiating breastfeeding within the first hour of life. Source: Smith Emily R, et al. 'Delayed breastfeeding initiation and infant survival: A systematic review and meta-analysis.' PLoS ONE, vol, 12, no. 7, 25 July 2017.

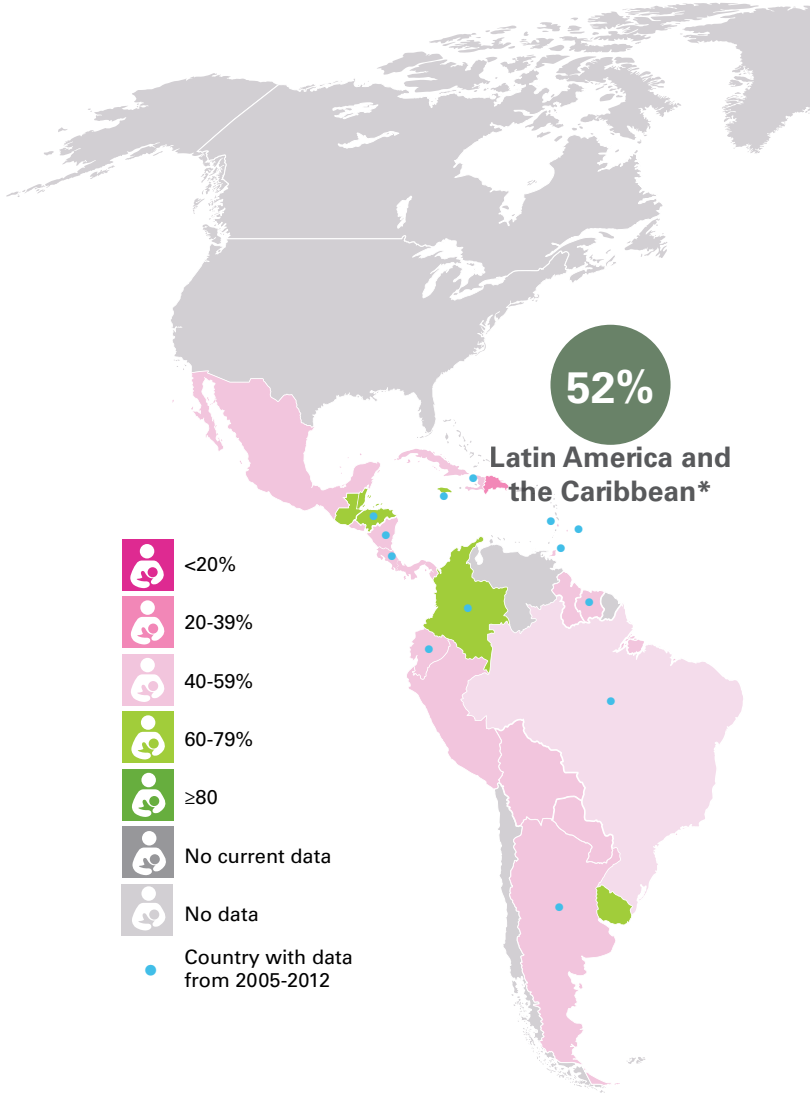
Early initiation in numbers

What the global and regional data tell us

Most of the world's newborns are left waiting too long to begin breastfeeding. In 2017 alone, an estimated 78 million newborns had to wait more than one hour to be put to the breast. This means that only about two in five children (42 per cent), the majority born in low- and middle-income countries, were put to the breast within the first hour of life. While this is a slight improvement from 37 per cent in 2005, progress is slow.

Early initiation rates vary widely across regions – from 35 per cent in the Middle East and North Africa to 65 per cent in Eastern and Southern Africa *(see Figure 2)*. Estimates are not available for any countries in North America or Western Europe *(see box 1)*, highlighting the concerning data gap in many high-income countries.

While early initiation rates vary widely across regions, there are no notable differences globally in rates of initiation by the sex of the child, place of residence (rural or urban) or household wealth.



Globally, only two out of five newborns are put to the breast within the first hour of life

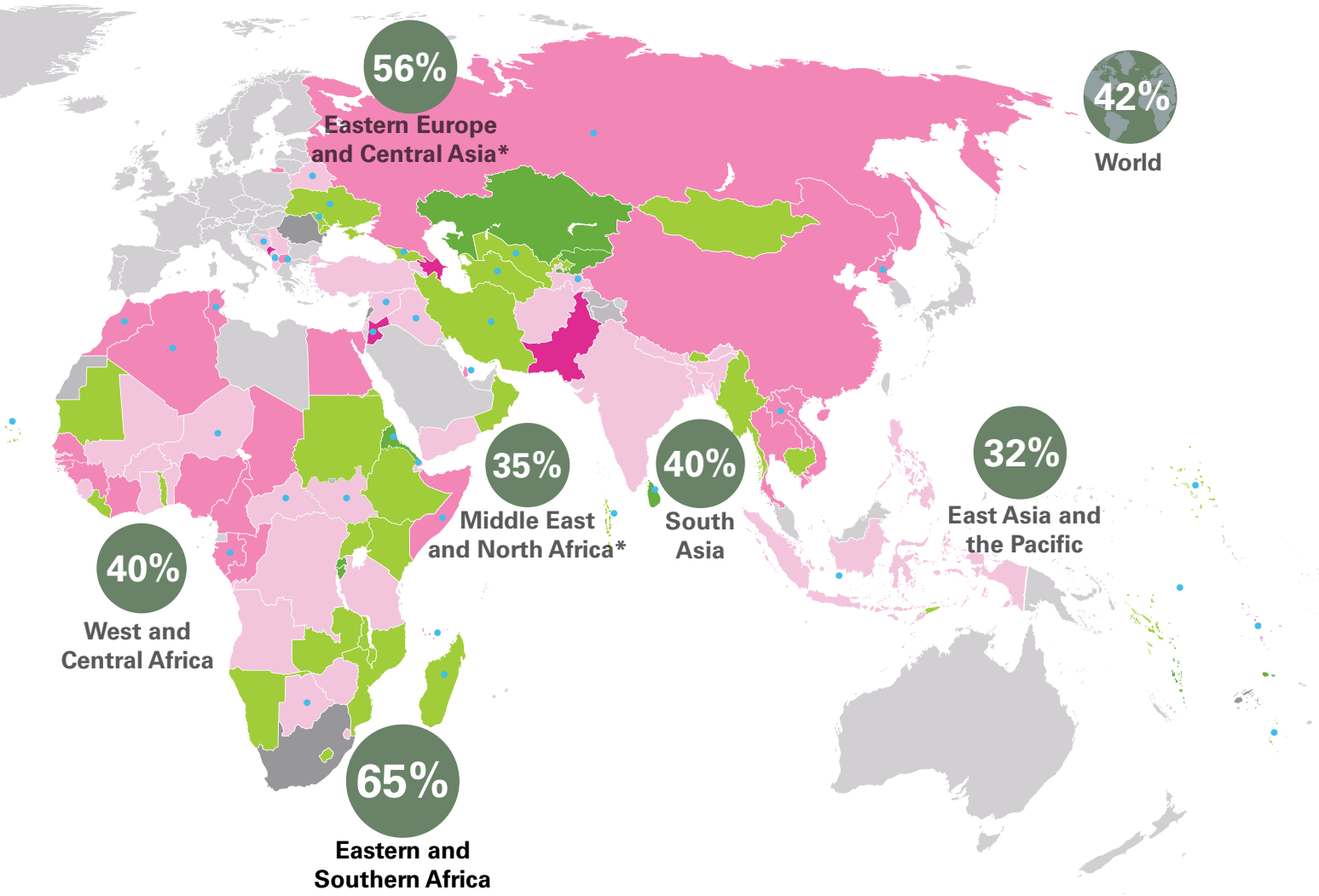


Figure 2. Per cent of newborns put to the breast within one hour of birth, by country and region, 2017.
Source: UNICEF global databases, 2018. For notes on the data, see Annex 3.

BOX 1

Breastfeeding initiation in high-income countries

The early initiation of breastfeeding benefits every newborn – no matter where they live. Yet many high-income countries are failing to track this important indicator of child nutrition.

Globally, rates of early initiation of breastfeeding are tracked using data from household surveys, such as Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS). These large-scale surveys assess initiation rates by asking mothers of children under age 2 whether their youngest child was put to the breast within the first hour of life or later. Many low- and middle-income countries undertake such household surveys every four to five years.

While many high-income countries track breastfeeding through hospital registries or other data systems, these data are not collected using standard global indicators (such as breastfeeding initiation within the first hour of life) and are therefore not internationally comparable.

While it is not possible to report on early initiation rates for the majority of high-income countries, we can report on the number of children who have never been breastfed. In high-income countries, 21 per cent of children are never breastfed, compared with only 4 per cent of children who are never breastfed in low- and middle-income countries.[10] This wide gap means that 2.6 million children in high-income countries are missing out completely on the benefits of breastfeeding.

Barriers and missed opportunities

Why are newborns missing out on breastfeeding in the first hour of life and what obstacles stand in their way? In some cases, outdated practices in health facilities mean that mothers and babies are separated immediately after birth and support and guidance on optimal breastfeeding is limited. In others, the lack of knowledge about breastfeeding after a caesarean section, or cultural practices that involve feeding newborns supplemental foods or drinks, can delay newborns' first critical contact with their mother.[11]

In the context of public health and nutrition programmes, missed opportunities refer to moments where mothers and children fail to receive key life-saving interventions, despite having contact with a health provider. Today, more births take place in health institutions with skilled providers than ever before. Yet, most newborns are still not being put to the breast within the first hour of life. These low global rates of early initiation of breastfeeding are evidence of a massive missed opportunity worldwide.

Skilled birth attendants

Having a skilled attendant present at birth is crucial for the survival and well-being of mother and baby and a measure of the quality of care received. A mother's contact with skilled providers during pregnancy and delivery can provide her with the support needed to carry out the recommended breastfeeding practices, including initiation of breastfeeding within the first hour after birth.

Globally, the proportion of deliveries assisted by a skilled birth attendant has increased from just over 60 per cent in 2000 to nearly 80 per cent in 2016.[12] Despite the potential for skilled birth attendants to support breastfeeding initiation, this is not always the case in practice. UNICEF's 2016 report, *From the First Hour of Life,* showed that the presence of a medical doctor, nurse or midwife did not support the early initiation of breastfeeding in many low- and middle-income countries. In Europe and Central Asia, for example, where almost all births are attended by skilled providers, only 65 per cent of infants delivered by a skilled health provider began breastfeeding within the first hour of life. And in South Asia, the early initiation rate in the presence of a skilled provider was much lower, at 34 per cent.[13]

According to findings from a review of the latest data between 2010 and 2017 on birth assistance and the timing of breastfeeding initiation in 74 countries, early initiation rates were found to be somewhat similar whether the newborn was delivered with the support of a skilled or unskilled provider. Only 48 per cent of newborns delivered by a skilled birth attendant and 44 per cent of newborns delivered by an unskilled attendant began breastfeeding within the first hour of birth.

These findings tell a story of missed opportunities. There is great potential for skilled birth attendants to support mothers in initiating breastfeeding immediately after birth; but better training and support are needed to help them seize these critical moments.

Early initiation rates have only improved significantly among the group of countries with a large increase in institutional deliveries

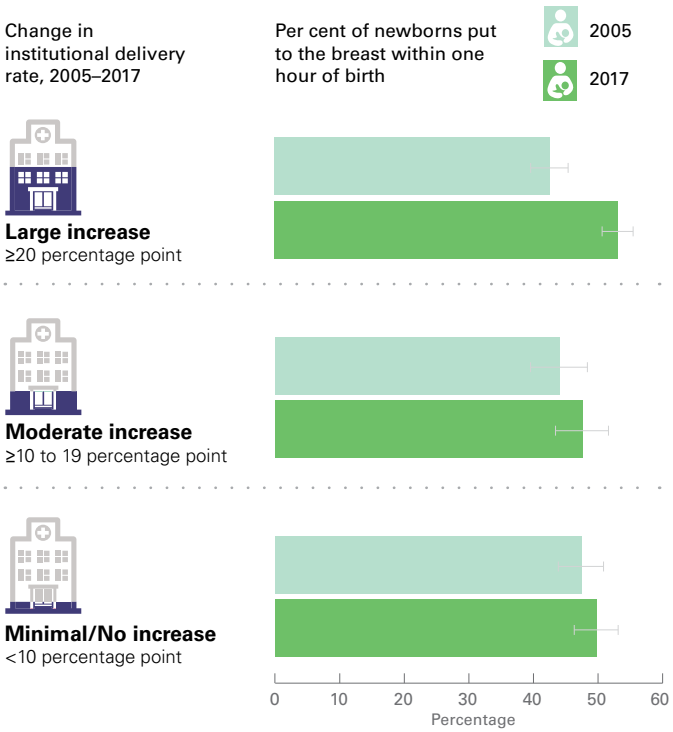


Figure 3. Trends in per cent of infants put to the breast within one hour of birth, by change in institutional delivery rate, 2005 and 2017. The lines on the bars represent confidence intervals.
Source: UNICEF Global databases 2018. For notes on the data, see Annex 3.

Institutional deliveries

Over the past decade, the global rate of institutional deliveries has been rising, with three quarters of all deliveries (75 per cent) now occurring in health facilities. Institutional deliveries take place in a health facility, such as a maternity clinic or a hospital, and are usually performed under the supervision of a skilled birth attendant, suggesting a certain standard of care. However, supporting mothers to bring babies to the breast is not always a routine intervention after birth, and the increase in institutional deliveries has not always translated into improvements in the rate of early initiation of breastfeeding.

In a subset of 58 countries with trend data available for both the place of delivery and the rate of early initiation of breastfeeding, the increase in institutional deliveries (from 53 per cent in 2005 to 71 per cent in 2017) is greater than the rise in early initiation rates over the same period (from 45 per cent to 51 per cent). These figures reflect a missed opportunity to support mothers and newborns in initiating breastfeeding immediately after birth.

The only significant improvement in early initiation rates since 2005 can be seen among the group of countries where institutional deliveries increased by more than 20 percentage points *(see Figure 3)*. The rise in breastfeeding initiation rates among this group of countries is primarily driven by low-income countries, where early initiation rates increased by 15 percentage points, compared with an increase of 8 percentage points in lower- middle-income countries.

While this increase in early initiation rates is important, the rate of early initiation in countries with rising numbers of institutional deliveries is still discouragingly low, with only half of newborns being put to breast in the first hour of life.

The effect of increasing institutional delivery rates on early initiation of breastfeeding depends on national and facility-based policies on the care of mothers and newborns, as well as the skills and commitment of the health professionals working in these facilities. An increase in institutional deliveries can improve early initiation rates when national or facility-based policies emphasize immediate skin-to-skin contact and provide staff trained to support. However, an increase in institutional deliveries can also negatively influence rates of early initiation if staff members are not appropriately trained and facilities maintain outdated policies and practices that create barriers for breastfeeding – such as separating newborns and mothers without medical justification or routinely providing liquids or foods to the newborn.[14]

Caesarean sections

Globally, caesarean sections have increased from an average of 13 per cent in 2005 to more than 20 per cent in 2017. All regions have witnessed a large increase in rates of caesarean sections, apart from Sub-Saharan Africa, where rates have remained somewhat unchanged.[15]

Access to surgical deliveries, where medically needed, is a critical part of ensuring safer deliveries for newborns and their mothers. Yet the rising rates of elective caesarean section worldwide have had consequences on the early initiation of breastfeeding. Several studies show that surgical deliveries can reduce the likelihood of immediate skin-to-skin contact and the early initiation of breastfeeding.[16,17,18] In one study, women who ultimately delivered by caesarean section after an unsuccessful trial of labour were more likely to initiate breastfeeding within the first hour after birth than women with a scheduled repeat caesarean section.*[,19]

An analysis of key factors linked to early initiation rates among babies delivered by a skilled birth attendant showed that the type of delivery can significantly affect when the newborn is put to the breast. Consistently, across all 51 countries studied, early initiation rates among newborns delivered by vaginal birth were more than twice as high as early initiation rates among newborns delivered by caesarean section *(see Figure 4)*. A statistically significant difference was seen in all but 4 of the 51 countries studied.

These findings are concerning because immediate skin-to-skin contact and the initiation of breastfeeding are especially important for babies born by caesarean section. The close contact between mother and baby protects newborns with 'good' bacteria from their mother's body – a critical step in developing the baby's gut health and immune system.[20] With a vaginal delivery, this process likely occurs in the birth canal. There is some evidence that immediate or early skin-to-skin contact after a caesarean section can help increase early breastfeeding initiation and decrease the time to the first breastfeed.[21]

* Repeat caesarean section refers to a caesarean section in a woman whose previous delivery was via caesarean section.

In nearly every country, early initiation rates are significantly lower among newborns delivered by caesarean section

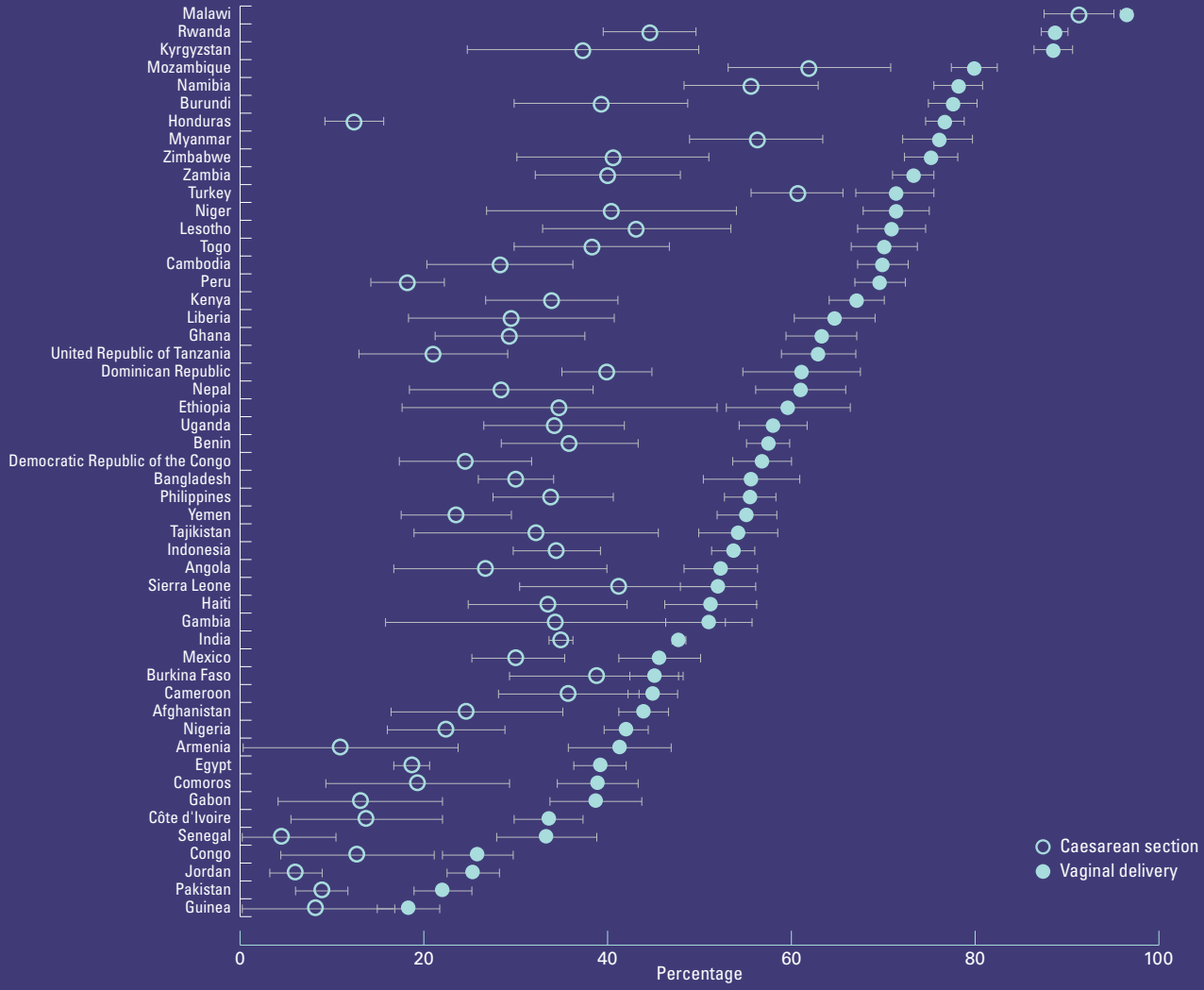


Figure 4. Per cent of newborns put to the breast within one hour of birth, by type of delivery (vaginal delivery or caesarean section), by country, 2017.

Source: UNICEF Global databases 2018. For notes on the data, see Annex 3.

With the right support, most newborns delivered by caesarean section can be put to the breast within the first hour after birth. However, in practice, women who deliver by caesarean section often face important challenges in initiating breastfeeding, such as managing the effects of anesthesia, recovering from surgery and finding help to hold the baby safely.

Key actions to facilitate skin-to-skin contact and initiation of breastfeeding immediately after birth include having an appropriate policy and protocol in the maternity facility, building the skills of staff and involving fathers in breastfeeding support.[22]

Supplemental foods or liquids

Giving newborns foods or drinks in the first days of life is common in many parts of the world and is often linked to cultural norms, family practices and health system policies and procedures that are not based on scientific evidence. These practices and procedures vary by country and may include discarding colostrum or having an elder family member give the newborn a specific food or liquid, such as honey, or having a health professional routinely give the newborn a specific liquid, such as sugar water or infant formula. These practices can delay a newborn's first critical contact with his or her mother.[23, 24, 25]

Early initiation rates are nearly twice as high among newborns who receive only breastmilk, compared with newborns who receive milk-based supplemental feeds in the first three days of life

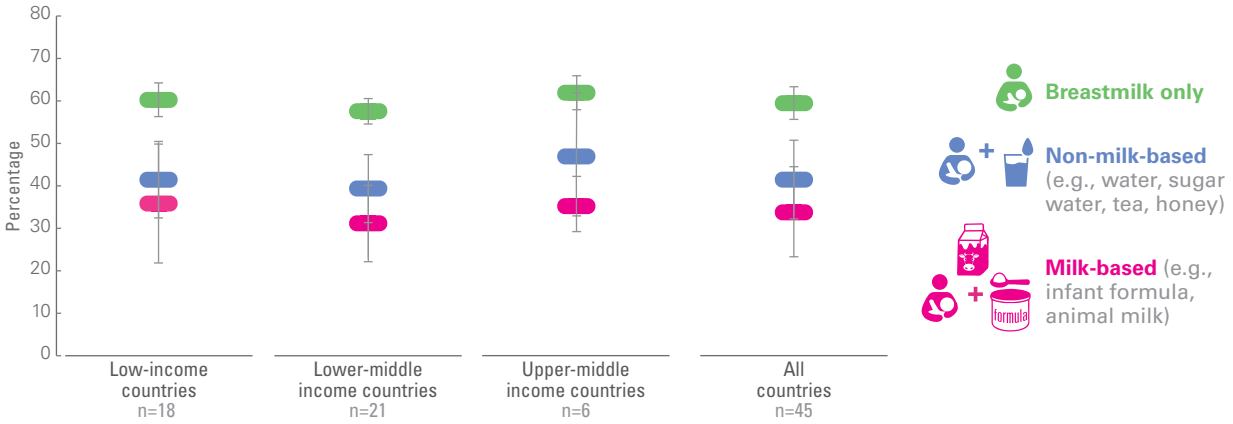


Figure 5. Per cent of newborns put to the breast within one hour of birth, by type of supplemental feeding in the first three days of life, by World Bank country-income grouping, 2017.
Source: UNICEF Global databases 2018. For notes on the data, see Annex 3.

Figure 5 shows that among newborns who received milk-based liquids in the first three days after birth, nearly two in three babies waited one hour or longer to be put to the breast. This finding is based on an analysis of 51 countries with available data on the timing of initiation and the receipt of liquids and foods other than breastmilk.

Conversely, close to 60 per cent of newborns receiving only breastmilk in their first days of life were put to the breast within the first hour. The rates of early initiation were slightly better among newborns receiving water-based supplementary feeds than among newborns receiving other supplementary feeds, but still significantly lower than among newborns receiving only breastmilk.

Clearing the path for breastfeeding

There is a need to better institutionalize the protection, promotion and support of breastfeeding in maternity facilities, particularly in the first days of life.

A systematic review of the Baby-friendly Hospital Initiative (BFHI) in 19 countries showed that facilities' adherence to the BFHI's Ten Steps to Successful Breastfeeding can increase breastfeeding rates, including the early initiation of breastfeeding (see box 2). Efforts to avoid supplementing newborns with liquids or foods other than breast milk (step 6) were crucial to successful breastfeeding outcomes. This may be because of the detrimental impact of supplements on breastfeeding success, or because carrying out this step requires other steps to be in place, including having a policy to support breastfeeding and putting the newborn to the mother's breast in the first hour of life.[26]

Breastfeeding can be challenging to learn, particularly in the first moments after birth. But having the right policies, programmes and people in place provides a strong support network for mothers. A systematic review and meta-analysis conducted in 2015 identified programme and policy-related factors that improve the chances of optimal breastfeeding practices, including starting breastfeeding in the first hour of life.[27] The analysis found that a combination of interventions had the greatest impact on the early initiation of breastfeeding, leading to a significant 85 per cent increase in rates. These interventions comprised the home and family environment (peer support, one-to-one counselling, home visits or telephone and home support by father or grandparent) and health systems and services (including the BFHI). Access to antenatal care, where mothers are counselled about the initiation of breastfeeding, also has a positive effect on its practice.[28, 29, 30, 31] The more antenatal visits and professional antenatal care a mother receives, the greater the probability that she will initiate breastfeeding within the first hour of her child's life.

BOX 2

The Baby-friendly Hospital Initiative

The Baby-friendly Hospital Initiative, launched in 1991 and updated in 2018, ensures adequate protection, promotion and support for breastfeeding in facilities providing maternity and newborn care. The BFHI's Ten Steps to Successful Breastfeeding are key to improving the early initiation of breastfeeding and to supporting optimal breastfeeding practices more generally. The updated BFHI guidance emphasizes the importance of integrating the Ten Steps into other initiatives to improve the quality of care around birth and encourages countries to achieve sustainable, universal coverage of breastfeeding interventions.

Ten Steps to Successful Breastfeeding

(revised 2018)

Critical management procedures

1a. Comply fully with the International Code of Marketing of Breast-milk Substitutes and relevant World Health Assembly (WHA) resolutions (the Code).

1b. Have a written infant feeding policy that is routinely communicated to staff and parents.

1c. Establish ongoing monitoring and data management systems.

2. Ensure staff has sufficient knowledge, competence and skills to support breastfeeding.

Key clinical practices

3. Discuss the importance and management of breastfeeding with pregnant women and their families.

4. Facilitate immediate and uninterrupted skin-to-skin contact and support mothers to initiate breastfeeding as soon as possible after birth.

5. Support mothers to initiate and maintain breastfeeding and manage common difficulties.

6. Do not provide breastfed newborns any food or fluids other than breast milk, unless medically indicated.

7. Enable mothers and their infants to remain together and to practise rooming-in 24 hours a day.

8. Support mothers to recognize and respond to their infants' cues for feeding.

9. Counsel mothers on the use and risks of feeding bottles, teats and pacifiers.

10. Coordinate discharge so that parents and their infants have timely access to ongoing support and care.


BED

Lessons from countries

Tracking the performance of breastfeeding programmes at country level provides evidence of successes and challenges in improving the early initiation of breastfeeding. The examples below, drawn from the experiences of UNICEF country offices, offer important learnings for countries.

In **Cambodia**, an increase in the rates of early initiation of breastfeeding from 6 per cent in 1998 to 63 per cent in 2014 appears to be the result of awareness raising and promotional campaigns in communities, along with investments in improved quality of care around the time of delivery. The percentage of deliveries by a skilled birth attendant increased from 44 per cent in 2005 to 89 per cent in 2014, while institutional deliveries increased from 22 per cent to 83 per cent during the same period. Between 2000 and 2010, the use of supplements in the first three days after birth decreased considerably from 93 per cent to 15 per cent in public facilities, from 91 per cent in 2000 to 34 per cent in 2010 in private facilities and from 94 per cent to 21 per cent for home deliveries.[32]

In the **Dominican Republic,** while caesarean section rates almost doubled, increasing from 31 per cent in 2002 to 58 per cent in 2014, the rate of early initiation of breastfeeding decreased from 62 per cent to 38 per cent during the same period. Since 2014, the Ministry of Health and its partners have increased support for the "Mothers and Newborns in Good Care" initiative, which integrates the promotion, protection and support of breastfeeding as a part of the evidence-based interventions to reduce preventable maternal and newborn deaths. Monitoring the BFHI standards and the Code remains a challenge, particularly in private facilities, where about 40 per cent of deliveries take place, and where 86 per cent of deliveries take place via caesarean section.

In **Egypt,** caesarean section rates more than doubled between 2005 and 2014, increasing from 20 per cent to 52 per cent. During the same period, rates of early initiation of breastfeeding decreased from 40 per cent in 2005 to 27 per cent in 2014. While support for the early initiation of breastfeeding is available in facilities implementing the BFHI where staff are trained and practices are monitored, there are many facilities that are not baby-friendly and lack trained staff and adequate monitoring systems.

In **Montenegro,** standard post–delivery practices include a two-hour observation period during which breastfeeding is not usually initiated. While the rate of caesarean sections increased from 12 per cent in 2007[33] to 20 per cent in 2013,[34] the rates of early initiation of breastfeeding decreased from 25 per cent in 2005 to 14 per cent in 2013.[35]

The government and its partners are currently working to build the capacities of health professionals, with a focus on breastfeeding. The promotion of breastfeeding and baby-friendly hospitals is also done though social media. Plans are underway for a national BFHI programme to be initiated shortly in all maternity wards of the country.

In **Rwanda,** the proportion of deliveries with skilled birth attendants increased from 39 per cent in 2005 to 91 per cent in 2014, with nearly all births in health facilities being assisted by skilled birth attendants. At the same time, the country implemented an intensive and sustained communication campaign on feeding practices, including early initiation of breastfeeding and the BFHI. This resulted in increased awareness about breastfeeding among decision-makers, leaders and communities, and increased investments in building the capacities of community health workers to support breastfeeding. Rwanda now has 45,000 community health workers who counsel mothers about adequate feeding practices and safe deliveries. The rates of early initiation of breastfeeding also increased from 64 per cent in 2005 to 81 per cent in 2014. Between 2010 and 2013, the rate of caesarean sections nearly doubled from 7 per cent to 15 per cent, yet this jump did not impact early initiation. This finding reveals the power of establishing a cadre of well-trained health professionals to support early initiation.

In **Serbia,** there was a steady decline in early initiation rates from 17 per cent in 2005 to just under 8 per cent in 2010. Based on these findings, the government took measures to improve the quality of care around birth and the Ministry of Health and its partners increased support to the BFHI, engaged neonatologists in discussions about improving the BFHI, organized events for pediatricians and other specialists and collaborated with mother support groups. By 2014, the rate of early initiation of breastfeeding had increased to 51 per cent in the country. By 2017, Serbia had integrated the BFHI criteria into its hospital accreditation standards, making the programme more sustainable and easier to scale-up to universal coverage.

In **Viet Nam,** the rate of early initiation of breastfeeding decreased from 44 per cent in 2006 to 27 per cent in 2014, in the context of near universal institutional deliveries (which reached 94 per cent in 2014, while caesarean section rates rose from 10 per cent in 2002 to 28 per cent in 2014). In response, the Ministry of Health approved national *Guidelines for essential care of the mother and newborn during and immediately after a caesarean section* in November 2016.[36] The guidelines emphasize skin-to-skin contact immediately after birth and support for the initiation of breastfeeding within the first hour after birth.

What needs to be done?

Giving all newborns an early start to breastfeeding requires action on the part of multiple actors – particularly governments, health care institutions and health care workers.

Too many newborns are not put to the breast in the first hour of life. While access to maternity facilities and skilled birth attendants at delivery have the potential to improve children's and mothers' chances of survival and wellbeing, the quality of care provided is often inadequate and missed opportunities leave far too many newborns waiting for the first critical contact with their mother.

The early introduction of supplementary foods and liquids and non-indicated caesarean sections are inappropriate practices that may neglect or disrupt support for the early initiation of breastfeeding. National and facility policies to support breastfeeding around the time of birth are inadequate and the capacities of skilled birth attendants are often insufficient.

The following recommendations for action, applicable in development and humanitarian settings, are based on the Global Breastfeeding Collective's framework of key policy actions for improving breastfeeding:[37]

1) **Increase funding** to strengthen the protection, promotion and support of breastfeeding programmes, including for interventions impacting the early initiation of breastfeeding.

2) **Fully implement the *International Code of Marketing of Breast-milk Substitutes*** and relevant World Health Assembly Resolutions through strong legal measures that are enforced and independently monitored by organizations free from conflicts of interest. This includes monitoring the compliance of health professionals and health facilities.

3) **Enhance the quality of care in facilities** by establishing policies on immediate skin-to-skin contact and early initiation of breastfeeding after birth as part of national policies on maternal and newborn care, along with other evidence-based recommendations, including those in the WHO/UNICEF Ten Steps to Successful Breastfeeding.[38,39,40,41] Support for the early initiation of breastfeeding should be reflected in all newborn care policies and cover all situations, including caesarean sections and small and pre-term newborns. National policies should discourage the provision of foods or liquids to breastfed newborns in the first days of life, unless such items are needed for medical reasons. Governments and health professionals need to work together to reduce unnecessary caesarean sections through a combination of improved policies and appropriate incentive schemes.

Support for skin-to-skin contact and early initiation of breastfeeding should be integrated into the pre-service training of health care workers, including those targeting physicians, nurses, midwives and other birth attendants. In-service capacity building to bridge knowledge and skills gaps needs to be supported where needed.

4) **Improve access to skilled breastfeeding counselling** for all mothers, wherever they deliver their babies. Health professionals should prepare and counsel women undergoing a caesarean section on initiating breastfeeding.

5) **Strengthen links between health facilities and communities**, and encourage community networks that protect, promote and support breastfeeding. Through behaviour change strategies, encourage mothers and families to demand support for the early initiation of breastfeeding from birth attendants through behavioural change communication strategies. Establish and support social accountability systems in which mothers and families can provide feedback about the quality of care and hold providers accountable.

6) **Develop monitoring systems that track the progress of policies, programmes and funding** towards improving early initiation of breastfeeding. This includes both ensuring the availability of country level data on early initiation of breastfeeding and data on enabling factors, such as the number of maternity facilities implementing the Ten Steps. Facilities should monitor their own practices in this area as part of quality improvement approach.

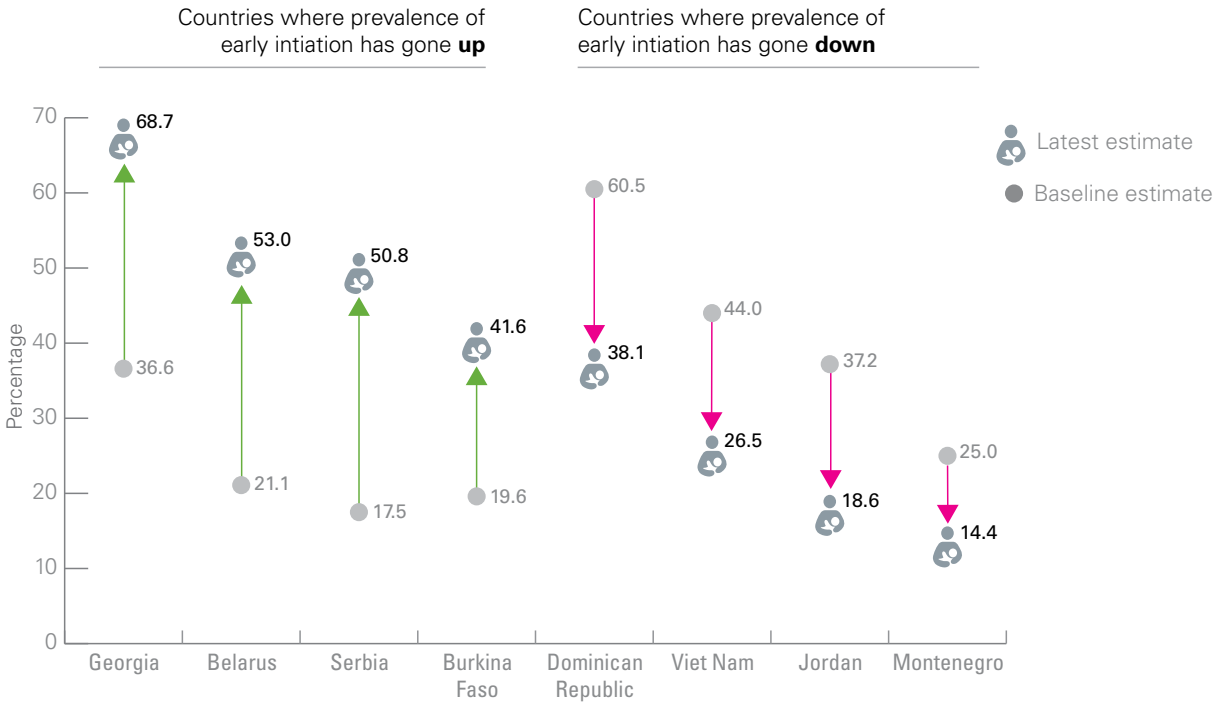
Support for improving the early initiation of breastfeeding is a life-saving intervention, with the power to protect newborns when they are most vulnerable. Mothers and newborns who get an early start to breastfeeding are more likely to continue breastfeeding, paving the way for a successful breastfeeding relationship throughout the critical first years of a child's life.

Governments, policy makers and health providers must together do much more to protect, promote and support the early initiation of breastfeeding. By strengthening the capacities of health workers, adopting protective policies and making mothers and newborns a priority, we can capture the moment and give every newborn the best start to life.

Annexes

ANNEX 1.

Countries with largest changes in prevalence of early initiation of breastfeeding between 2005 and 2017



Trends in per cent of newborns put to the breast within one hour of birth, by country, around 2005 and around 2017.

Source: UNICEF Global databases 2018. For notes on the data, see Annex 3.

ANNEX 2.

Overview of early initiation of breastfeeding rates by country

Countries and territories	Latest estimate[i]			Baseline estimate for trend [ii]		Trend[iii] Category
	Year	Early initiation of breastfeeding (%)	Rank [iv]	Year	Early initiation of breastfeeding (%)	
Afghanistan	2015	40.9	57			
Albania	2008	43.4				
Algeria	2012	35.7		2006	49.5	▼
Andorra	*no data*					
Angola	2015	48.3	50	2007	54.9	▬
Anguilla	*no data*					
Antigua and Barbuda	*no data*					
Argentina	2011	52.7				
Armenia	2015	40.9	58	2005	32.2	▲
Australia	*no data*					
Austria	*no data*					
Azerbaijan	2013	19.7	74	2006	30.7	▼
Bahamas	*no data*					

i **Latest estimate** refers to the most recent estimate from 2000 onwards availale in the UNICEF global database. Regional aggregates and rank were based on countries with recent estimates (2013-2018) only. Trends were presented if a baseline point between 2003 and 2008 was available in addition to a recent (2012-2018) estimate.

ii A **baseline estimate** is presented if the latest estimate was between 2012 and 2018 and if a point between 2003 and 2008 was also available; else blank.

iii **Trends** are presented for a subset of 77 countries with a recent (2012-2018) latest estimate and where a baseline (2003-2008) was also available.

iv **Rank** based on a subset of 76 countries with recent (2013-2018) data.

Legend for categories:

▲ **Increase:** ≥8 percentage point increase

▬ **Minimal/no change:** <8 percentage point change

▼ **Decrease:** ≥8 percentage point decrease

Countries and territories	Latest estimate[i]			Baseline estimate for trend [ii]		Trend[iii] Category
	Year	Early initiation of breastfeeding (%)	Rank [iv]	Year	Early initiation of breastfeeding (%)	
Bahrain	*no data*					
Bangladesh	2014	50.8	43	2006	35.6	▲
Barbados	2012	40.3				
Belarus	2012	53.0		2005	21.1	▲
Belgium	*no data*					
Belize	2015	68.3	20	2006	50.4	▲
Benin	2014	46.6	53	2006	54.1	▬
Bhutan	2015	77.9	9			
Bolivia (Plurinational State of)	2016	55.0	33	2008	62.8	▬
Bosnia and Herzegovina	2011	42.3				
Botswana	2007	40.0				
Brazil	2006	42.9				
British Virgin Islands	*no data*					
Brunei Darussalam	*no data*					
Bulgaria	*no data*					
Burkina Faso	2014	41.6	55	2006	19.6	▲
Burundi	2016	85.0	3			
Cabo Verde	2005	72.7				
Cambodia	2014	62.6	26	2005	35.5	▲
Cameroon	2014	31.2	67	2006	19.6	▲
Canada	*no data*					
Central African Republic	2010	43.5				
Chad	2014	23.0	73	2004	32.4	▼
Chile	*no data*					
China	2013	26.4	71	2008	41.0	▼
Colombia	2009	63.4				

Countries and territories	Latest estimate[i]			Baseline estimate for trend [ii]		Trend[iii] Category
	Year	Early initiation of breastfeeding (%)	Rank [iv]	Year	Early initiation of breastfeeding (%)	
Comoros	2012	33.7				
Congo	2014	25.3	72	2005	34.4	▼
Cook Islands	*no data*					
Costa Rica	2011	59.6				
Côte d'Ivoire	2016	36.6	63	2006	24.9	▲
Croatia	*no data*					
Cuba	2014	47.9	51	2006	70.2	▼
Cyprus	no data					
Czechia	*no data*					
Democratic People's Republic of Korea	2012	28.1				
Democratic Republic of the Congo	2013	51.9	39	2007	48.0	▬
Denmark	*no data*					
Djibouti	2012	52.0				
Dominica	*no data*					
Dominican Republic	2014	38.1	62	2007	60.5	▼
Ecuador	2012	54.6				
Egypt	2014	27.1	69	2005	40.1	▼
El Salvador	2014	42.0	54	2008	32.8	▲
Equatorial Guinea	*no data*					
Eritrea	2010	93.1				
Estonia	*no data*					
Eswatini	2014	48.3	49	2006	59.1	▼
Ethiopia	2016	73.3	14	2005	66.2	▬
Fiji	2004	57.3				
Finland	*no data*					
France	*no data*					
Gabon	2012	32.3				

Countries and territories	Latest estimate[i]			Baseline estimate for trend [ii]		Trend[iii] Category
	Year	Early initiation of breastfeeding (%)	Rank [iv]	Year	Early initiation of breastfeeding (%)	
Gambia	2013	51.5	40	2005	47.7	–
Georgia	2012	68.7		2005	36.6	▲
Germany	*no data*					
Ghana	2014	55.6	32	2006	35.2	▲
Greece	*no data*					
Grenada	*no data*					
Guatemala	2014	63.1	25	2008	55.5	–
Guinea	2016	33.9	64	2005	37.9	–
Guinea-Bissau	2014	33.7	65	2006	22.6	▲
Guyana	2014	49.2	48	2006	43.1	–
Haiti	2012	46.7		2005	42.9	–
Holy See	*no data*					
Honduras	2011	63.8				
Hungary	*no data*					
Iceland	*no data*					
India	2015	41.5	56	2005	23.1	▲
Indonesia	2012	49.3		2007	40.2	▲
Iran (Islamic Republic of)	2010	68.7				
Iraq	2011	42.8				
Ireland	*no data*					
Israel	*no data*					
Italy	*no data*					
Jamaica	2011	64.7				
Japan	*no data*					
Jordan	2012	18.6		2007	37.2	▼
Kazakhstan	2015	83.3	4	2006	64.2	▲
Kenya	2014	62.2	27	2003	49.6	▲

Countries and territories	Latest estimate[i]			Baseline estimate for trend [ii]		Trend[iii] Category
	Year	Early initiation of breastfeeding (%)	Rank [iv]	Year	Early initiation of breastfeeding (%)	
Kiribati	*no data*					
Kuwait	*no data*					
Kyrgyzstan	2014	82.5	5	2005	64.7	▲
Lao People's Democratic Republic	2011	39.1				
Latvia	*no data*					
Lebanon	2004	41.3				
Lesotho	2014	65.3	24	2004	56.8	▲
Liberia	2013	61.2	29	2006	66.2	–
Libya	*no data*					
Liechtenstein	*no data*					
Lithuania	*no data*					
Luxembourg	*no data*					
Madagascar	2012	65.8		2003	60.6	–
Malawi	2015	76.2	11	2006	58.3	▲
Malaysia	*no data*					
Maldives	2009	60.5				
Mali	2015	53.2	37	2006	44.4	▲
Malta	*no data*					
Marshall Islands	2007	72.5				
Mauritania	2015	61.8	28	2007	44.3	▲
Mauritius	*no data*					
Mexico	2015	51.0	42			
Micronesia (Federated States of)	*no data*					
Monaco	*no data*					
Mongolia	2013	71.1	16	2005	77.5	–
Montenegro	2013	14.4	76	2005	25.0	▼
Montserrat	*no data*					

Countries and territories	Latest estimate[i]			Baseline estimate for trend [ii]		Trend[iii] Category
	Year	Early initiation of breastfeeding (%)	Rank [iv]	Year	Early initiation of breastfeeding (%)	
Morocco	2010	26.8				
Mozambique	2013	69.0	18	2003	63.8	–
Myanmar	2015	66.8	21			
Namibia	2013	71.2	15	2006	67.3	–
Nauru	2007	76.4				
Nepal	2016	54.9	34	2006	35.5	▲
Netherlands	*no data*					
New Zealand	*no data*					
Nicaragua	2011	54.4				
Niger	2012	52.9		2006	46.6	–
Nigeria	2016	32.8	66	2007	29.9	–
Niue	*no data*					
Norway	*no data*					
Oman	2014	71.1	17			
Pakistan	2013	18.0	75	2006	25.9	–
Palau	*no data*					
Panama	2013	47.0	52			
Papua New Guinea	*no data*					
Paraguay	2016	49.5	47	2008	47.1	–
Peru	2016	54.8	35	2003	47.4	–
Philippines	2013	49.7	46	2003	46.0	–
Poland	*no data*					
Portugal	*no data*					
Qatar	2012	33.5				
Republic of Korea	*no data*					
Republic of Moldova	2012	60.9		2005	66.6	–
Romania	2004	57.7				

Countries and territories	Latest estimate[i]			Baseline estimate for trend [ii]		Trend[iii] Category
	Year	Early initiation of breastfeeding (%)	Rank [iv]	Year	Early initiation of breastfeeding (%)	
Russian Federation	2011	25.0				
Rwanda	2014	80.5	7	2005	63.9	▲
Saint Kitts and Nevis	*no data*					
Saint Lucia	2012	49.6				
Saint Vincent and the Grenadines	*no data*					
Samoa	2014	81.4	6			
San Marino	*no data*					
Sao Tome and Principe	2014	38.3	61	2006	35.3	–
Saudi Arabia	*no data*					
Senegal	2016	29.4	68	2005	22.6	–
Serbia	2014	50.8	44	2005	17.5	▲
Seychelles	*no data*					
Sierra Leone	2013	53.8	36	2005	33.1	▲
Singapore	*no data*					
Slovakia	*no data*					
Slovenia	*no data*					
Solomon Islands	2015	78.9	8	2006	75.0	–
Somalia	2009	23.4				
South Africa	2003	61.1				
South Sudan	2010	50.5				
Spain	*no data*					
Sri Lanka	2016	90.3	1	2006	79.9	▲
State of Palestine	2014	40.8	59	2006	64.6	▼
Sudan	2014	68.7	19			
Suriname	2010	44.7				
Sweden	*no data*					
Switzerland	*no data*					

Countries and territories	Latest estimate[i]			Baseline estimate for trend [ii]		Trend[iii] Category
	Year	Early initiation of breastfeeding (%)	Rank [iv]	Year	Early initiation of breastfeeding (%)	
Syrian Arab Republic	2009	45.5				
Tajikistan	2012	49.6		2005	60.9	▼
Thailand	2015	39.9	60	2005	49.6	▼
The former Yugoslav Republic of Macedonia	2011	21.0				
Timor-Leste	2016	75.2	12	2003	46.9	▲
Togo	2013	60.6	30	2006	35.8	▲
Tokelau	*no data*					
Tonga	2012	79.1				
Trinidad and Tobago	2006	41.2				
Tunisia	2011	39.9				
Turkey	2013	49.9	45	2003	52.3	–
Turkmenistan	2015	73.4	13	2006	59.8	▲
Turks and Caicos Islands	*no data*					
Tuvalu	2007	15.0				
Uganda	2016	66.1	22	2006	41.8	▲
Ukraine	2012	65.7		2005	35.9	▲
United Arab Emirates	*no data*					
United Kingdom	*no data*					
United Republic of Tanzania	2015	51.3	41	2004	57.6	–
United States	*no data*					
Uruguay	2013	76.5	10			
Uzbekistan	2006	67.1				
Vanuatu	2013	85.4	2	2007	71.9	▲
Venezuela (Bolivarian Republic of)	*no data*					
Viet Nam	2013	26.5	70	2006	44.0	▼
Yemen	2013	52.7	38	2006	29.6	▲
Zambia	2013	65.8	23	2007	55.6	▲
Zimbabwe	2015	57.6	31	2005	68.2	▼

ANNEX 3.

Notes on the data

A. General Notes

A.1 Early Initiation of Breastfeeding: Indicator Definition

Numerator: Children born in the past 24 months put to the breast within one hour of birth
Denominator: Children born in the past 24 months

A.2 UNICEF Global database on early initiation of breastfeeding (used in this report)

UNICEF reports on early initiation of breastfeeding for children born in the last two years for more than 132 countries, the majority of which are low and middle income countries. The viable sources of data for UNICEF's global database include nationally representative household surveys such as Multiple Indicator Cluster Surveys (MICS), Demographic and Health Surveys (DHS), national nutrition surveys and estimates based on surveillance systems. Data presented in this report generally reflect information available as of May 2018. More detailed information on methodology and data sources is available at <data.unicef.org/nutrition/iycf>.

UNICEF New York headquarters collect, review and finalize country level estimates of early initiation of breastfeeding working in close collaboration with UNICEF country offices. The global database includes data that are collected using the standard infant and young child feeding indicators as defined in WHO and UNICEF's 2008 publication, *Indicators for Assessing Infant and Young Child Feeding Practices*. Any deviation from the indicator definition, such as early initiation estimates computed only among children who were ever breastfed rather than all births, is included with a footnote in the global database. Whenever microdata for a survey is available, the data is reanalyzed to conform with the standard indicator definition.

A.3 Population weighted global and regional estimates

All regional and global population weighted estimates were weighted using the annual population by age interpolated datasets from the United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision.

Population weighted averages for any given region were generated by (a) multiplying the early initiation estimates for each country with available data by the number of births in that country; (b) summing all of the country specific products; and (c) dividing the sum of the products by the total population of births in all countries with data.

Population coverage, or the share of the population for which an estimate is available in the UNICEF global database, was calculated by dividing the population of births in countries with data by the total population of births in each respective region. The standard used for minimum population coverage is 50 per cent.

B. Notes on Individual graphics

Figure 2. Per cent of newborns put to the breast within one hour of birth, by country and region, 2017.

Regional and global aggregates are based on a subset of 76 countries in the UNICEF global database with recent data between 2013 and 2018, covering 72 per cent of the global birth population. Regional aggregates are population-weighted and presented only when population coverage of 50 per cent is met or exceeded. *For adequate population coverage, Eastern Europe and Central Asia does not include the Russian Federation, Latin America and Caribbean does not include Brazil, and Middle East and North Africa does not include the Islamic Republic of Iran and Iraq.

● denotes countries with older data between 2005–2012; data from these countries are not included in the regional aggregates. Countries shaded in dark grey have estimates from 2004 or earlier, and are thus represented as having "no current data"; these countries are not included in the regional aggregates.

These maps are stylized and not to scale, and do not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers. The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties. The final boundary between Sudan and South Sudan has not yet been determined. The final status of Abyei area has not yet been determined.

Figure 3. Trends in per cent of infants put to the breast within one hour of birth, by change in institutional delivery rate, 2005 and 2017.
The trend analysis is based on a subset of 58 countries where recent estimates of early initiation of breastfeeding and institutional deliveries between 2012–2018 and baseline estimates between 2003–2008 are available. Trend analyses are unweighted means, covering 71 per cent around 2017 (2012–2018) and 70 per cent of the global birth population around 2005 (2003–2008).

There are 37 countries with institutional delivery rates categorized as 'minimal/no increase'. Since 2005, the rates of institutional delivery among this group of countries have changed less than 10 percentage point (range -0.2 to 9.8 percentage point). Sixteen countries classified as 'moderate increase' have institutional delivery rates that increased by greater than or equal to 10 and less than 20 percentage point (range 10.1 to 19.6 percentage point) between 2005 and 2017. Over the same period, 23 countries where rates of institutional deliveries increased by more than 20 percentage point (range 20.2 to 62.5 percentage point) are categorized as 'large increase'. Countries with institutional delivery rates greater than 95 per cent around the 2005 baseline are not included in the analysis.

Figure 4. Per cent of newborns put to the breast within one hour of birth, by type of delivery (vaginal delivery or caesarean section), by country, 2017.
The analysis is based on Demographic and Health Surveys (DHS) for a subset of 51 countries with available data for type of delivery (vaginal or caesarean section) between 2010–2017 covering 73 per cent of the global birth population excluding Brazil, China and the Russian Federation. Rates of early initiation of breastfeeding by type of delivery are assessed among a subset of newborns who were delivered by skilled health personnel.

Figure 5. Per cent of newborns put to the breast within one hour of birth, by type of supplemental feeding in the first three days of life, by World Bank country-income grouping, 2017.
The analysis is based on Demographic and Health Surveys (DHS) for a subset of 45 countries with available data for feeding type in the first three days between 2010–2017, covering 72 per cent of the global birth population excluding Brazil, China and the Russian Federation. The graphic presents unweighted means due to low population coverage of upper-middle income countries. Income groupings are based on the FY18 World Bank income classification.

Rates of early initiation of breastfeeding by type of supplemental feeding are based on newborns who were ever breastfed and were delivered with the support of skilled health personnel. No data on liquids consumed in the first three days of life were available for infants who were never breastfed.

Annex 1. Countries with largest changes in prevalence of early initiation of breastfeeding between 2005 and 2017.
Country-level trends are assessed for a subset of 77 countries in the UNICEF global database with a recent estimate of early initiation of breastfeeding between 2012–2018 and a baseline estimate between 2003–2008, covering 74 per cent of the global birth population around 2017 and 73 per cent around 2005. The top 4 countries with the largest percentage increase and the bottom 4 countries with the largest percentage decrease between 2005–2017 are presented.

Endnotes

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