



Infant Feeding Surveillance System

Infant Feeding at a Glance (2006-2016 Births)

Last Updated, June 2017

Highlights

- ✓ Among mothers who delivered in Durham Region hospitals, about 90% breastfed and 60% exclusively breastfed their babies at hospital discharge.
- ✓ About one-third of mothers who delivered in Durham Region hospitals had uninterrupted skin-to-skin contact with their babies within the first two hours after birth.
- ✓ Over 90% of Durham Region mothers initiated breastfeeding; by six months, just over half still breastfed, and less than 10% exclusively breastfed.
- ✓ Compared to older mothers and those living in other municipalities, adolescent mothers and those living in Oshawa were less likely to initiate and continue to breastfeed.
- ✓ Formula, cereal, fruits and vegetables, and water were the most commonly introduced liquids and solids during the first six months.
- ✓ Half of the mothers who were still breastfeeding at time of the survey intended to continue breastfeeding until baby was 12 to 13 months old.
- ✓ Formula introduction in hospital has gradually decreased over time for hospitals both within (from 60% to 50%) and outside of Durham Region (from 52% to 47%).
- ✓ Babies born in Durham Region hospitals were more likely to be given formula while in hospital, compared to those babies born outside of Durham Region. The gap has been closing since 2010.
- ✓ Almost 80% of the mothers received free formula samples and about 60% of the mothers used the samples. The rates have been steady over time. Most of them received their free sample from mail.
- ✓ Milk supply concerns, medical issues and latching difficulties were the top three reasons for discontinuing breastfeeding and introducing formula.

For more information or if you are require this information in an accessible format, please contact Durham Region Health Connection Line at 906-666-6241 or 1-800-841-2729

Durham Region Infant Feeding Surveillance System

All the indicators in this report, with the exception of infant feeding at hospital discharge and skin-to-skin contact, are from the Infant Feeding Surveillance System (IFSS). The Durham Region Health Department (DRHD) developed and launched IFSS in 2007 to regularly assess infant feeding practices in Durham Region mothers. IFSS contains data for live births and includes preterm low birth weight and multiple birth infants.

At six months postpartum, DRHD contacts mothers who have consented to the Healthy Babies Healthy Children (HBHC) program for an infant feeding survey. In 2009 we changed the sampling frame and proportion of mothers sampled. For 2006 to 2008 birth years, we drew our sample from mothers who completed both an HBHC screen and a DRHD assessment using a DRHD database. Fifty to 100 per cent of mothers were selected for the survey. From 2009 onward, we drew our sample from mothers who completed the HBHC screen with or without further assessment by DRHD using the Integrated Services for Children Information System (ISCIS). All mothers aged 15 to 19 and 15-25% of those 20 years or older have been sampled. As a result, readers should be cautious when comparing response rates from 2009 onward with previous years.

Information about infant feeding at hospital discharge and skin-to-skin contact is from the Ontario's Better Outcomes Registry & Network (BORN) Information System. BORN is Ontario's pregnancy, birth and childhood registry and network, capturing extensive information about births occurring in the province.

For more Durham Region reports on infant feeding, please go to the [Health Statistics in Durham Region](http://durham.ca/healthstats) webpage found at durham.ca/healthstats.

Definitions

- **Breastmilk:** Includes breastfeeding, expressed breastmilk or donor milk and undiluted drops or syrups consisting of vitamins, mineral supplements or medicines.
- **Breastfeeding (BF) Initiation:** Any attempt to provide an infant with breastmilk.
- **Any Breastfeeding:** Provide an infant with breastmilk with or without introducing food or liquid.
- **Exclusive Breastfeeding (EBF):** No food or liquid other than breastmilk, not even water, is given to the infant from birth.

Data notes

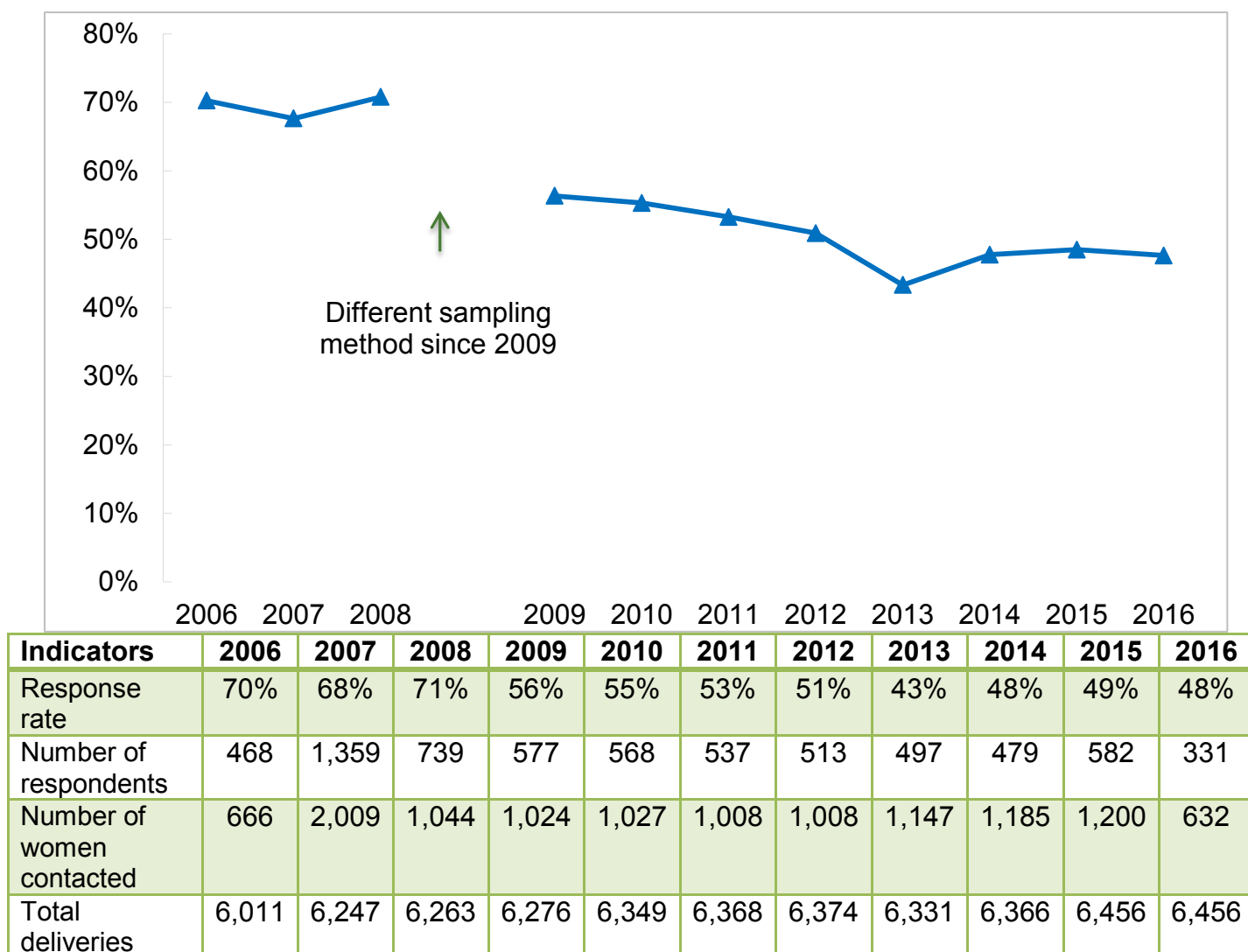
- The report presents **baby's birth year** instead of year when the survey was conducted.
- The report only includes four months of data for 2006 and seven months of data for 2016.
- *: Interpret the estimate with caution as the coefficient of variation (CV) is between 16.6% and 33.3%.
- **NR:** The estimate is unreliable and not releasable as the CV is greater than 33.3%.
- **95% Confidence Interval (CI):** As the survey only includes a proportion of mothers, survey results are estimates and subject to sampling errors. A CI is a range of values that describes the uncertainty surrounding an estimate. The 95% CI means we are 95% confident that the true or actual percentage falls within the interval.
- **Error Bars (I):** Represent the upper and lower 95% CI around the estimate.

Results

Survey response

- ✓ In 2016, 301 mothers completed the survey (between January and July).
- ✓ On average, 520 mothers completed the survey each year between 2009 and 2016.
- ✓ Response rates ranged from 43% to 56%, with a decreasing trend.

Figure 1: Response rate over time



Source: (IFSS, tabulated in June 2017).

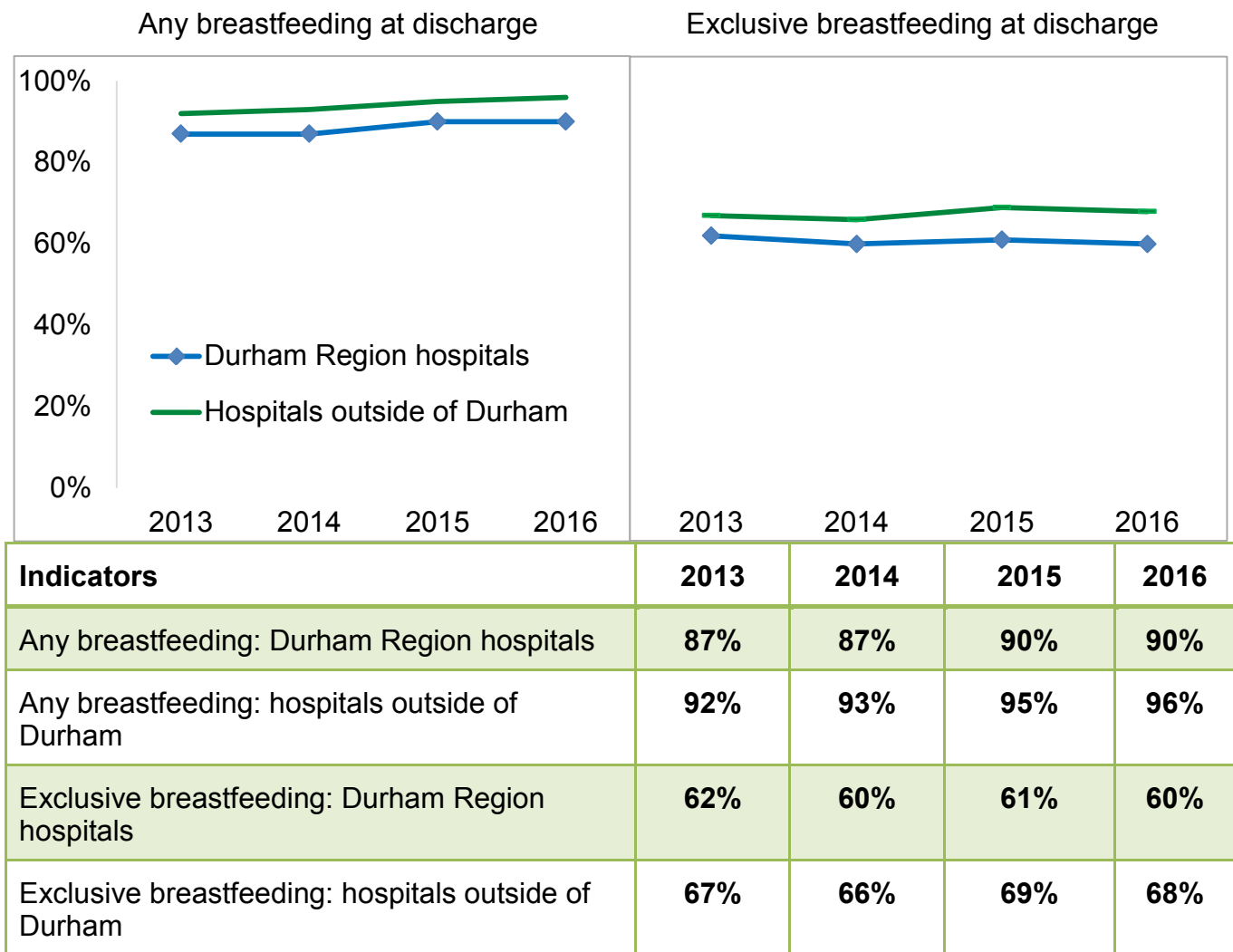
Note:

- Because a different sampling method was used in 2006-2008, readers should be cautious when comparing response rates from 2009 onward with previous years.
- The report includes only four months of data for 2006 and seven months for 2016.
- Total number of deliveries was extracted from hospital in-patient discharge, Ontario Ministry of Health and Long Term Care, IntelliHealth Ontario.

Infant feeding in hospital

- ✓ 87% to 90% of mothers who delivered in Durham Region hospitals breastfed their babies at hospital discharge, compared to 92% to 96% for hospitals outside of Durham.
- ✓ 60% to 62% of mothers who delivered in Durham Region hospitals exclusively breastfed their babies at hospital discharge, compared to 66% to 69% for hospitals outside of Durham.
- ✓ Mothers who delivered in Durham Region hospitals were less likely to breastfeed or exclusively breastfeed their babies at hospital discharge, compared to those who delivered outside of Durham.

Figure 2: Breastfeeding rates at hospital discharge comparing hospitals inside and outside of Durham Region, 2013 to 2016

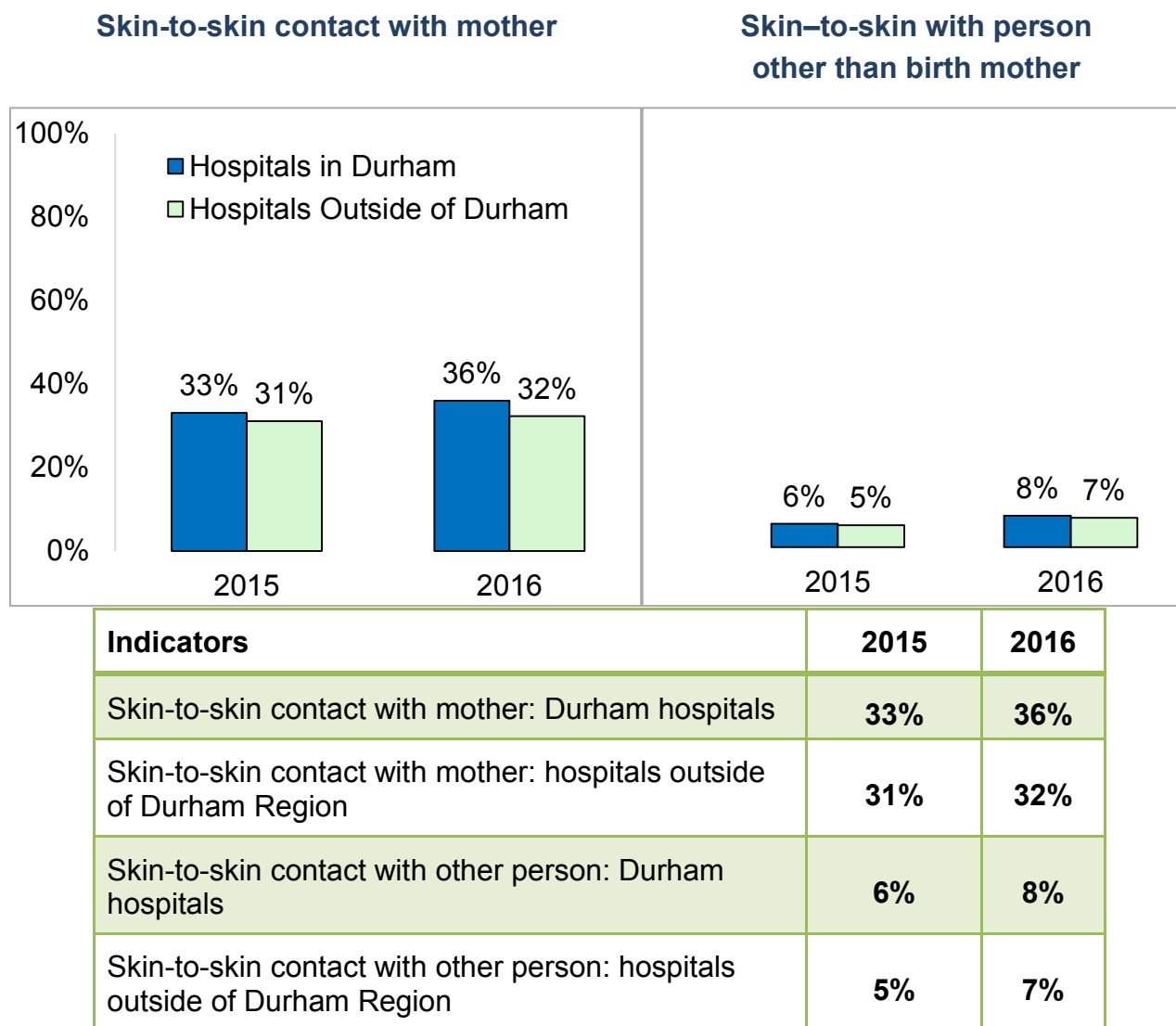


Source: BORN, tabulated in June 2017

Skin-to-skin contact

- ✓ 33% to 36% of mothers who delivered in Durham Region hospitals had uninterrupted skin-to-skin contact with their babies. The contact lasted for at least one hour, within the first two hours after birth. Rates ranged 31% to 32% for hospitals outside of Durham.
- ✓ 6% to 8% of the babies delivered in Durham Region hospitals had skin to skin contact with persons other than birth mothers. Rates ranged 5% to 7% for hospitals outside of Durham.

Figure 3: Skin-to-skin contact in hospitals, 2015 to 2016

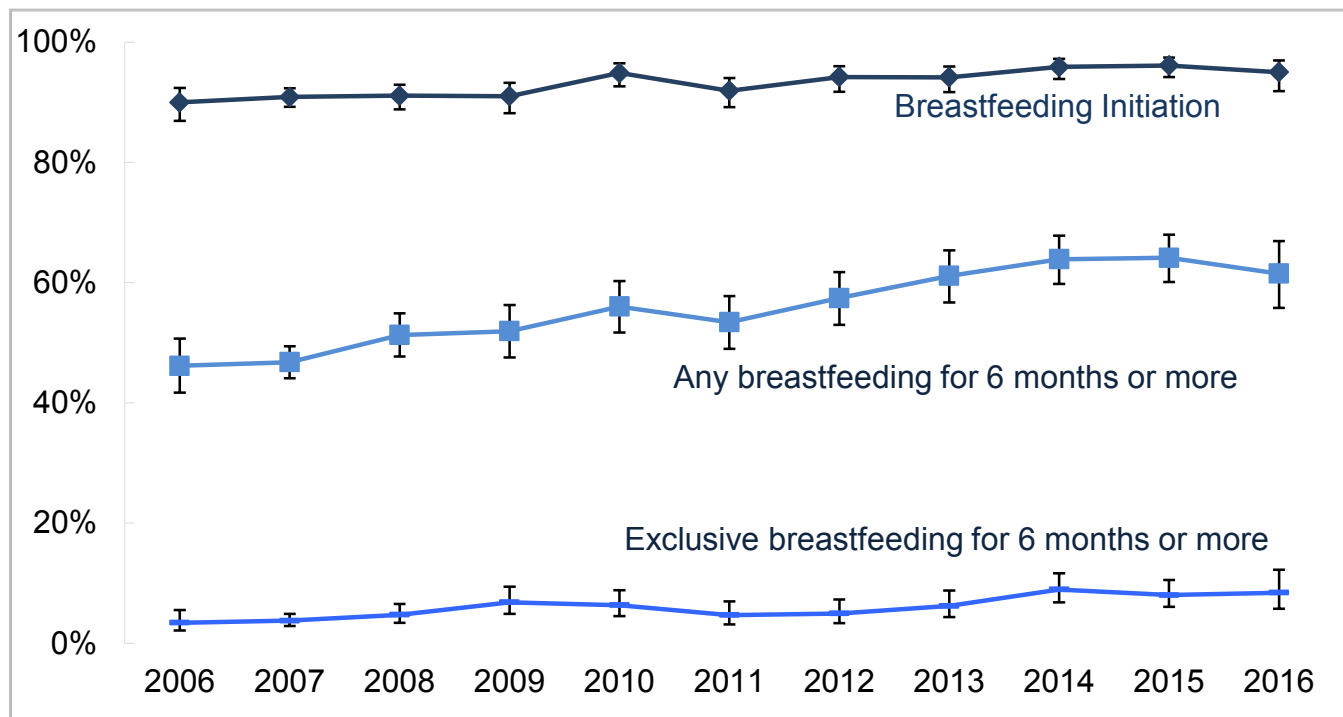


Source: BORN, tabulated in June 2017

Breastfeeding initiation and duration over time

- ✓ 90% to 96% of Durham Region mothers tried to breastfeed or provide breastmilk to their babies. Rates have remained stable over time.
- ✓ 46% to 65% of Durham Region mothers breastfed for at least six months. Rates have been increasing over time.
- ✓ 3% to 9% of Durham Region mothers exclusively breastfed for at least six months. Rates have been increasing over time.

Figure 4: Breastfeeding initiation and duration, 2006 to 2016



Indicators	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Initiation	90%	91%	91%	91%	95%	92%	94%	94%	95%	96%	95%
BF 6 months or more	46%	47%	51%	52%	56%	53%	57%	61%	65%	64%	61%
EBF 6 months or more	3%*	4%	5%	7%*	6%*	5%*	5%*	6%*	9%	8%	8%*

Source: IFSS, tabulated in June, 2016.

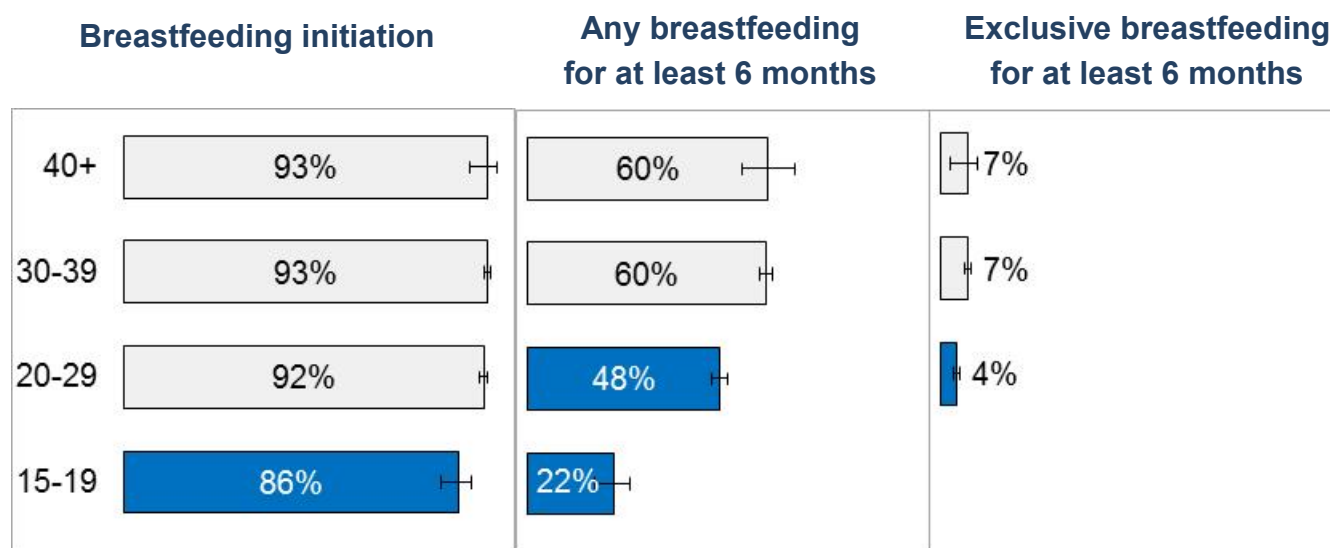
Note:

*: Interpret the estimate with caution as the CV is between 16.6% and 33.3% inclusive.

Breastfeeding initiation and duration by maternal age

- ✓ Adolescent mothers aged 15 to 19 had the lowest breastfeeding initiation rate.
- ✓ Mothers under the age of 29 were also less likely to breastfeed and exclusively breastfeed beyond six months.

Figure 5: Breastfeeding initiation and duration by maternal age, 2006-2016 combined



Maternal age	15-19	20-29	30-39	40+
Breastfeeding initiation	86%	92%	92%	93%
Any breastfeeding for at least 6 months	22%	48%	60%	60%
Exclusive breastfeeding for at least 6 months	NR	4%	7%	7%*

Source: IFSS, tabulated in June 2016.

Note:

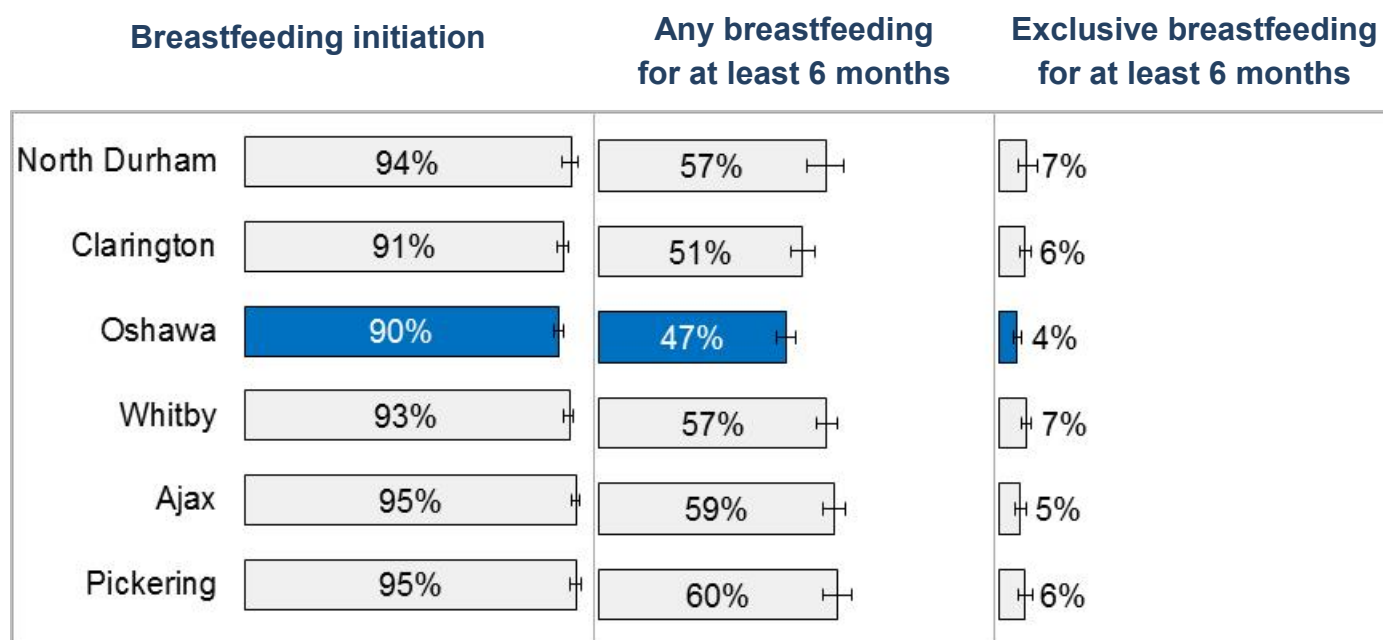
*: Interpret the estimate with caution as the CV is between 16.6% and 33.3%.

NR: The estimate is unreliable and not releasable as the CV is greater than 33.3%.

Breastfeeding initiation and duration by municipality

- ✓ Breastfeeding initiation, duration and exclusivity rates varied between municipalities.
- ✓ Rates for breastfeeding initiation, duration and exclusivity tend to be low in Oshawa.

Figure 6: Breastfeeding initiation and duration by municipality, 2006-2016 combined



Indicators	Pickering	Ajax	Whitby	Oshawa	Clarington	North Durham
Breastfeeding initiation	95%	95%	93%	90%	91%	94%
Any breastfeeding for at least 6 months	60%	59%	57%	47%	51%	57%
Exclusive breastfeeding for at least 6 months	6%	5%	7%	4%	6%	7%*

Source: IFSS, tabulated in June 2016.

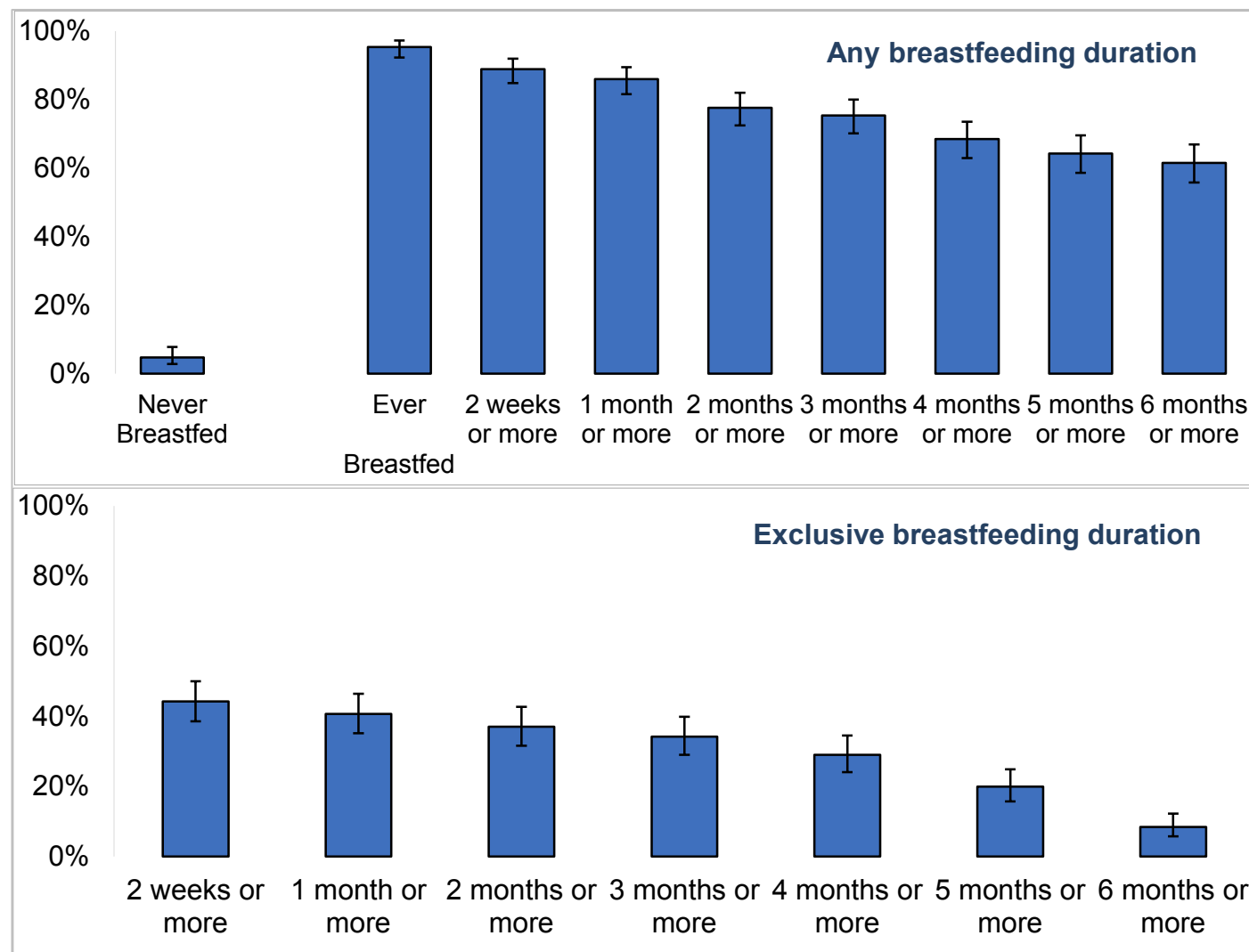
Note:

North Durham includes Brock, Uxbridge and Scugog.

Breastfeeding in the first six months

- ✓ Breastfeeding rates steadily decreased as babies approached six months of age for both any breastfeeding and exclusive breastfeeding.
- ✓ A sharp decrease in the exclusive breastfeeding rate occurred when baby was between five and six months.

Figure 7: Any breastfeeding and exclusive breastfeeding duration, 2006-2016 combined



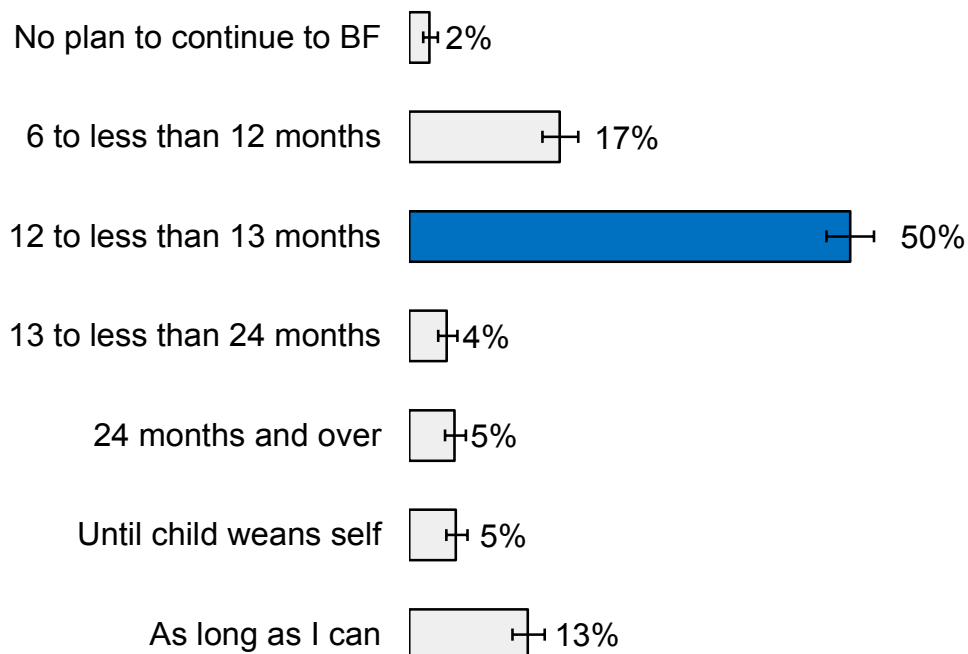
Indicators	Never Breastfed	Ever Breastfed	2 weeks or more	1 month or more	2 months or more	3 months or more	4 months or more	5 months or more	6 months or more
Any breastfeeding	5%	95%	89%	86%	78%	75%	68%	64%	61%
Exclusive breastfeeding	--	--	44%	41%	37%	34%	29%	20%	8%

Source: IFSS, tabulated in June 2016.

Intended breastfeeding duration

- ✓ Half of the mothers who were still breastfeeding at time of the survey reported that they intended to continue breastfeeding until baby was 12 to 13 months old. About 17 per cent of mothers planned to breastfeed for six to 12 months.

Figure 8: Intended breastfeeding duration beyond six or seven months, 2012-2016 combined



Intended breastfeeding duration	Rates
No plan to continue to breastfeed	4%
6 to less than 12 months	16%
12 to less than 13 months	49%
13 to less than 24 months	4%
24 months and over	5%
Until child weans self	5%
As long as I can	13%

Source: IFSS, tabulated in June 2016.

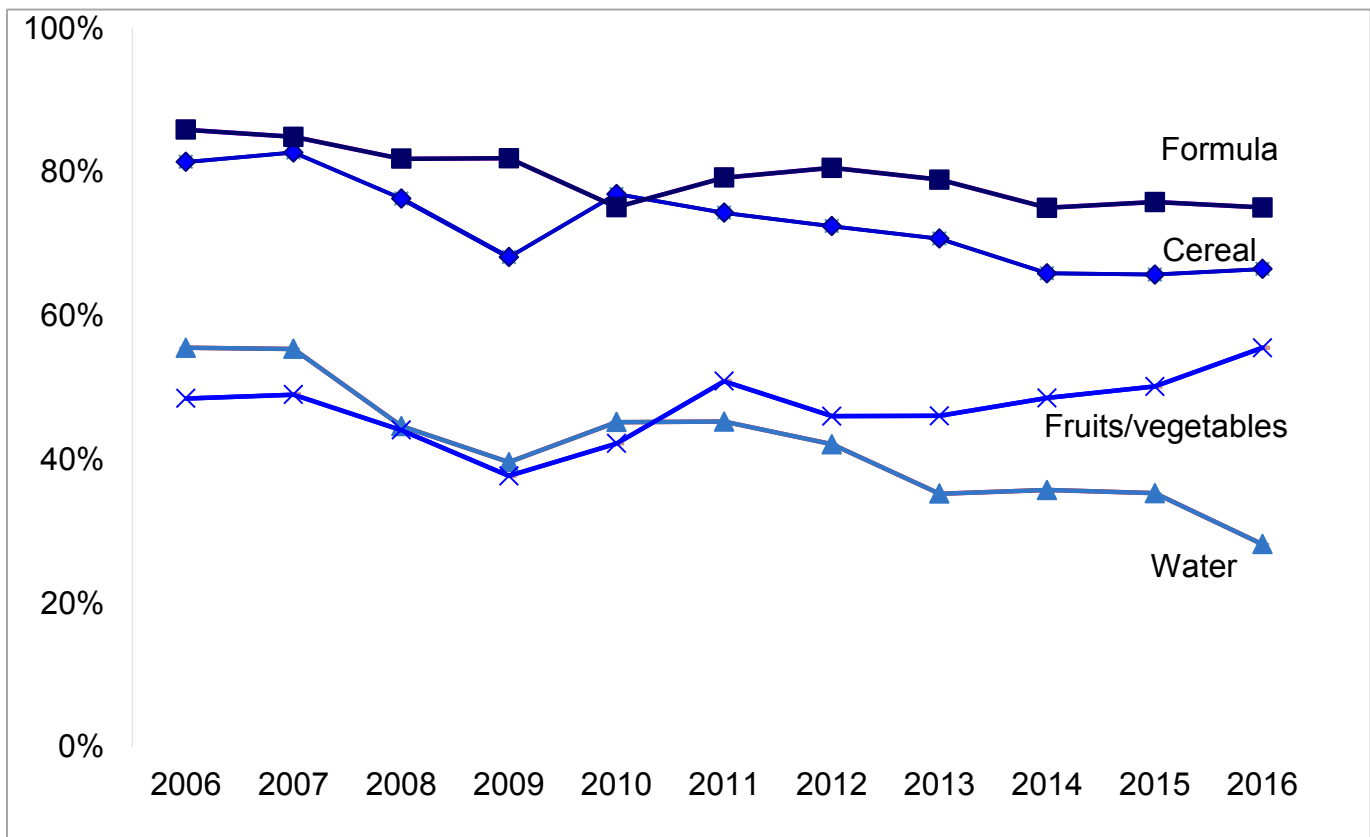
Note:

- We added a question in 2012 about how long mothers planned to continue to breastfeed.

Introduction of liquids and solids

- ✓ Formula, cereal, fruits and vegetables, and water were the most commonly introduced liquids and solids during the first six months.
- ✓ In general, the introduction of specific food and liquids showed the following trends:
 - Decreasing since 2006: cereal and water
 - Stable since 2010: formula
 - Increasing since 2009: fruits and vegetables

Figure 9: Commonly introduced liquids and solids during the first six months, 2006-2016



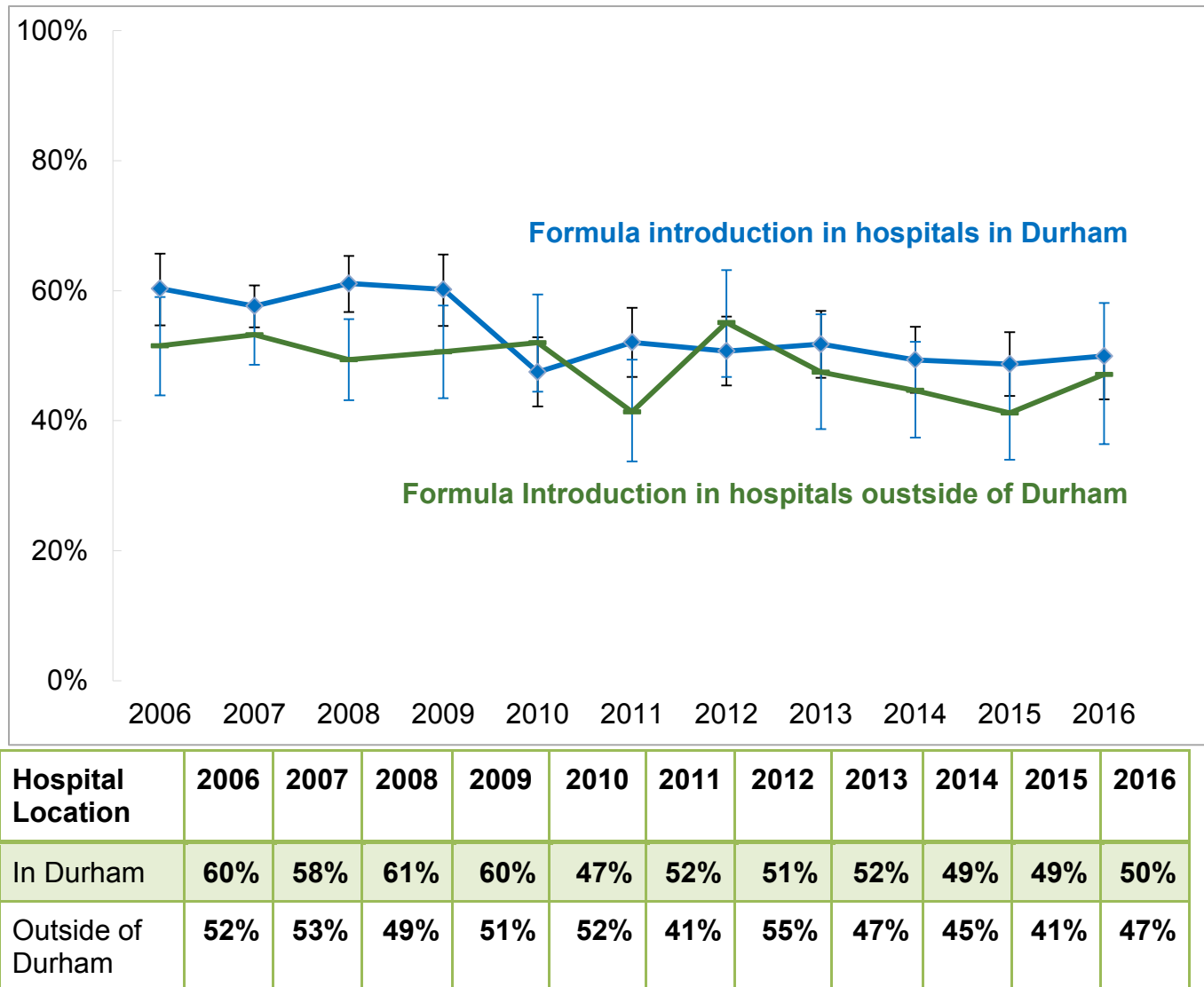
Indicators	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Formula	86%	85%	82%	82%	75%	79%	81%	79%	75%	76%	75%
Cereal	81%	83%	76%	68%	77%	74%	72%	71%	67%	66%	67%
Fruit/vegetables	49%	49%	44%	38%	42%	51%	46%	46%	48%	50%	56%
Water	56%	55%	45%	40%	45%	45%	42%	35%	36%	35%	28%

Source: IFSS, tabulated in June 2016.

Formula introduction in hospital

- ✓ Formula introduction in hospital has gradually decreased over time for both hospitals in and outside of Durham Region.
- ✓ Babies born in hospitals in Durham Region were more likely to be given formula while in hospital.

Figure 10: Formula introduction in hospital over time, 2006 to 2016

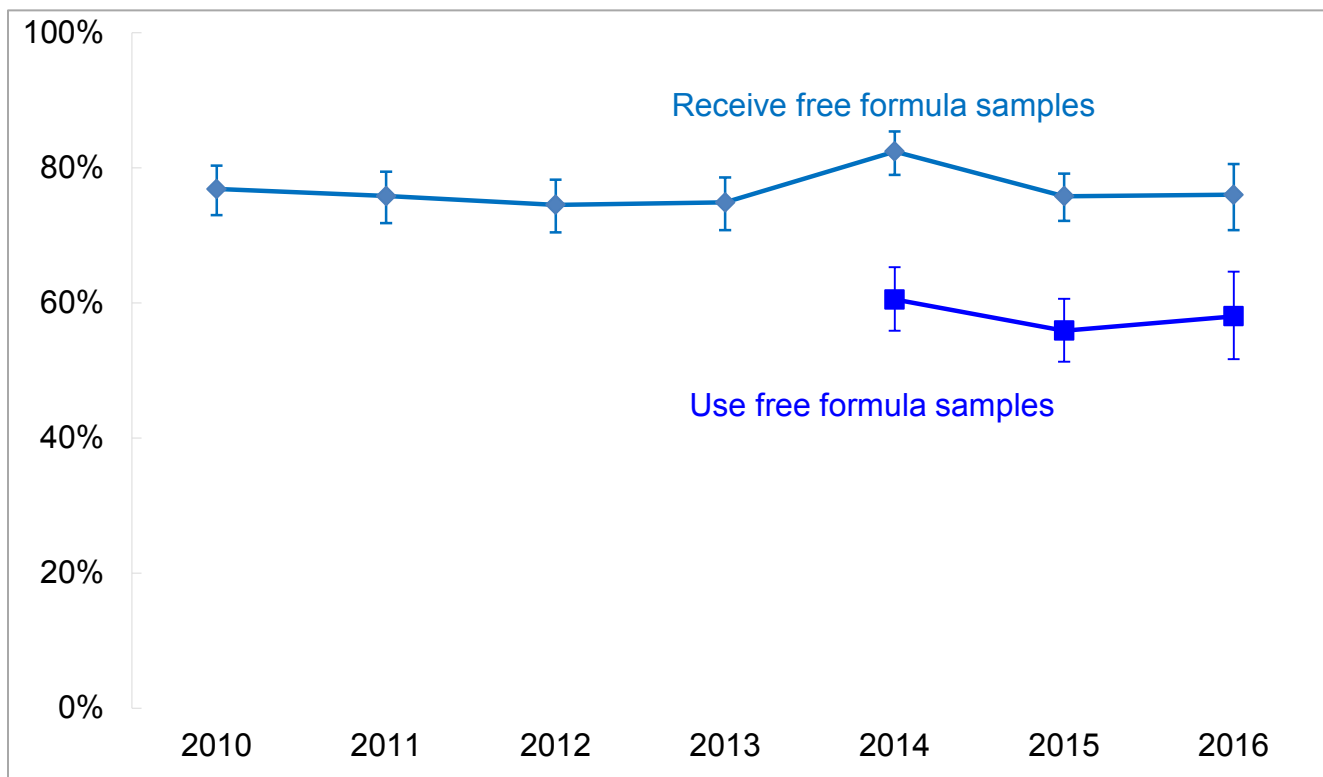


Source: IFSS), tabulated in June 2016.

Free formula samples

- ✓ Almost 80% of the mothers received free formula samples and about 60% of the mothers used the samples.
- ✓ Rates have been stable over time.
- ✓ Most common ways of receiving free samples (2010-2016 combined):
 - Mail: reported by over two thirds (70%) of the mothers
 - Birth hospitals: 15%
 - Others places such as doctors' offices, baby shows, family and friends: 8%

Figure 11: Percentage of mothers receiving and using free formula samples, 2010 to 2016



Indicators	2010	2011	2012	2013	2014	2015	2016
Receive free formula	77%	76%	75%	75%	82%	76%	76%
Use free formula	ND	ND	ND	ND	60%	56%	58%

Source: IFSS, tabulated in June 2016.

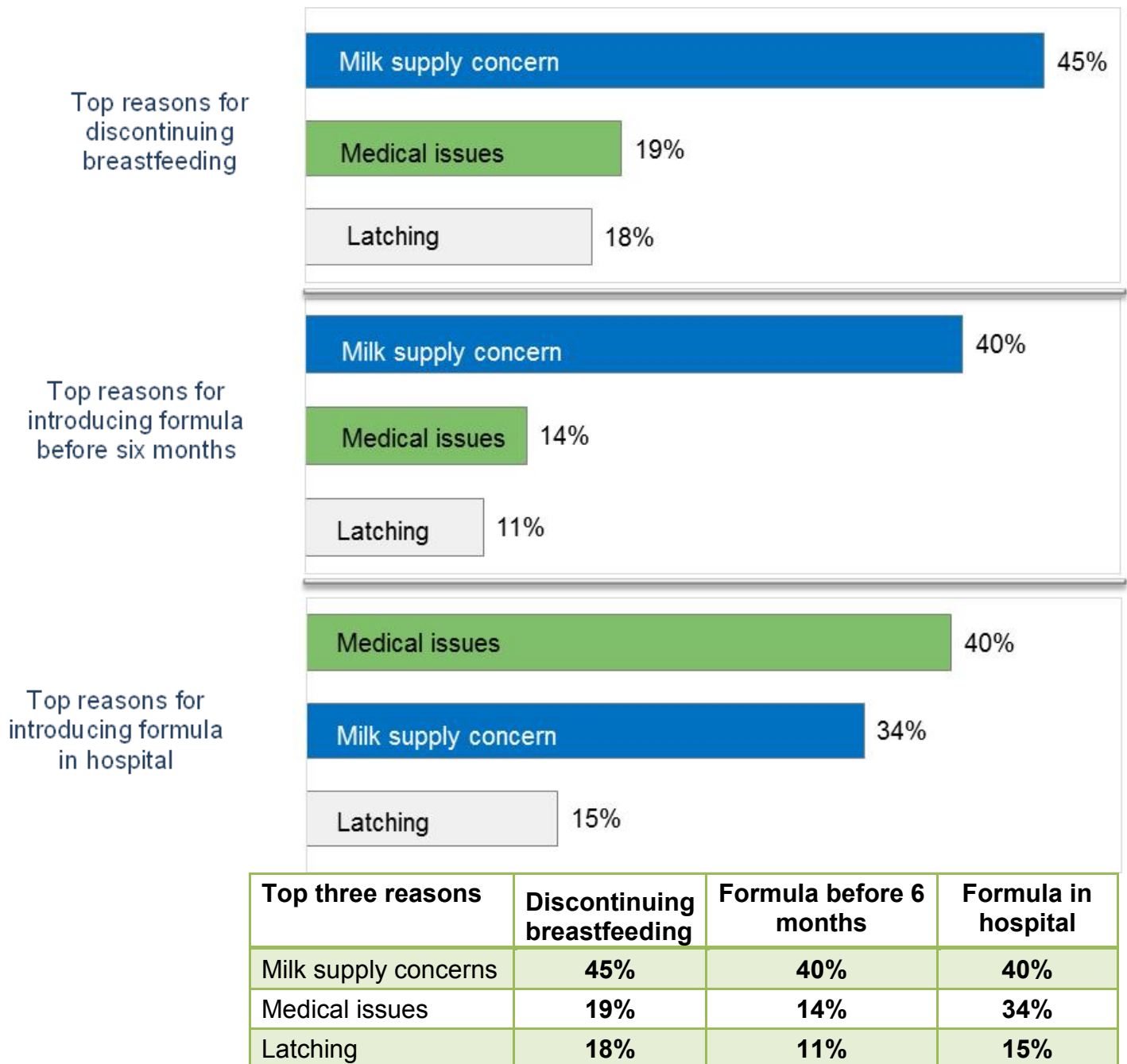
Note:

- ND: no data
- The question on receiving free formula samples was added in 2010.
- The question on use of free formula samples was added in 2014.

Main reasons for discontinuing breastfeeding and introducing formula

- ✓ Milk supply concerns, medical issues and latching difficulties were the top three reasons for discontinuing breastfeeding and introducing formula.

Figure 12: Main reasons for discontinuing breastfeeding and introducing formula, 2009-2016 combined



Source: IFSS, tabulated in June, 2016.

Note:

Medical issues include any medical issues or illness related to the mother or baby.