

Risk factors impacting breastfeeding initiation



Mothers with one or more of the risk factors below are at risk of experiencing **delayed secretory activation** (milk 'coming in' ≥ 72 hours after birth).¹ These factors should be identified early to allow for additional support since women with delayed secretory activation have a 60% higher odds of stopping breastfeeding at 4 weeks post birth.²

Maternal Risk factors

→ Disease/Disorders

- Diabetes³⁻⁵
- Obesity⁶⁻⁹
- Polycystic ovarian syndrome^{10,11}
- Thyroid disorders¹²

→ Medication/Treatment

- After chemotherapy¹³
- After radiotherapy¹⁴
- Drugs that suppress lactation¹⁵⁻¹⁷

→ Breast concerns

- Glandular hypoplasia¹⁸⁻²⁰
- Breast surgery^{21, 22}
- Nipple piercing²³
- Nipple anomalies^{24, 25}

→ Other factors

- Assisted conception²⁶
- Induction of labour^{27, 28}
- Primiparity^{1, 8, 24}

What can be done to support those at risk?

- ✓ Develop and implement evidence-based protocols to proactively identify and manage individuals with risk factors⁵⁰
- ✓ Provide education for HCP's on the importance of identifying risk and the need for timely interventions⁵¹
- ✓ Identify and assess risk factors during the antenatal period^{50, 52}
- ✓ Implement the practice of routine, immediate, uninterrupted skin to skin contact⁴³
- ✓ Promote evidence-based best practice; early, frequent and optimal breast stimulation^{45, 53}
- ✓ Early use of a breast pump if breast-feeding is not effective⁵⁴

Birth & infant Risk factors

→ Birth

- Prolonged/stressful labour^{29, 30}
- Caesarean section^{31, 32}
- Postpartum haemorrhage^{33, 34}

→ Infant

- Gestational age^{35, 36}
- Low birth weight³⁷⁻³⁹
- Facial abnormalities e.g. cleft lip/palate⁴⁰

→ Postpartum

- Separation of mother and infant^{41, 42}
- Delayed or interrupted skin to skin contact^{43, 44}
- Delayed first breastfeed^{45, 46}

→ Feeding & pumping practices

- Infrequent breastfeeding < 8 times in 24 hours⁴⁷
- Infrequent breast pumping < 5 times in 24 hours⁴⁸
- Supplementation with anything other than OMM⁴⁹



Do not opt for a 'wait and see' approach!

This may result in a delay in appropriate interventions for early breastfeeding problems.⁵⁰

Recognize when and how to intervene.^{1, 55}

References

- 1 Hurst NM. J Midwifery Womens Health. 2007; 52(6):588–594.
- 2 Brownell E et al. J Pediatr. 2012; 161(4):608–614.
- 3 Wu Jing-Ling et al. Breastfeed Med. 2021; 16(5):385–392.
- 4 Suwaydi MA et al. BMC. Pregnancy. Childbirth. 2022; 22(1):350.
- 5 Longmore DK et al. Diabetologia. 2020; 63(12):2571–2581.
- 6 Preusting I et al. J Hum Lact. 2017; 33(4):684–691.
- 7 Bui LM et al. Breastfeed Med. 2025.
- 8 Nommsen-Rivers LA et al. Am J Clin Nutr. 2010; 92(3):574–584.
- 9 Poston L et al. Lancet Diabetes Endocrinol. 2016; 4(12):1025–1036.
- 10 Vanky E et al. Acta Obstet Gynecol Scand. 2008; 87(5):531–535.
- 11 Joham AE et al. Acta Obstet Gynecol Scand. 2016; 95(4):458–466.
- 12 Amino N, Arata N. Best Pract Res Clin Endocrinol Metab. 2020; 34(4):101438.
- 13 Stopenski S et al. Breastfeed Med. 2017; 12(2):91–97.
- 14 Leal SC et al. Expert Rev Anticancer Ther. 2013; 13(2):159–164.
- 15 Anderson PO. Breastfeed Med. 2017; 12(3):128–130.
- 16 Hale TW. 19th edition. New York, NY: Springer publishing company; copyright 2021. 715 p.
- 17 Aljazaf K et al. Br J Clin Pharmacol. 2003; 56(1):18–24.
- 18 Kam RL et al. Breastfeed Med. 2021; 16(8):594–602.
- 19 Spatz DL, Miller J. J Perinat Educ. 2021; 30(1):13–18.
- 20 Duran MS, Spatz DL. J Hum Lact. 2011; 27(4):394–397.
- 21 Kraut RY et al. PLoS One. 2017; 12(10):e0186591.
- 22 Schiff M et al. Int Breastfeed J. 2014; 9:17.
- 23 Garbin CP et al. JAMA. 2009; 301(24):2550–2551.
- 24 Dewey KG et al. Pediatrics. 2003; 112(3 Pt 1):607–619.
- 25 Shilpa Umesh Bagal. et al. International Journal of Health Sciences & Research. 2017; 7(4):280–288.
- 26 Barrera CM et al. Am J Obstet Gynecol. 2019; 220(3):261.e1–261.e7.
- 27 Reed R. London: Pinter & Martin; 2018. (Why it matters; vol 14).
- 28 Dahlen HG et al. BMJ Open. 2021; 11(6):e047040.
- 29 Grajeda R, Pérez-Escamilla R. J Nutr. 2002; 132(10):3055–3060.
- 30 Dewey KG. J Nutr. 2001; 131(11):3012S–5S.
- 31 Hobbs AJ et al. BMC. Pregnancy. Childbirth. 2016; 16:90.
- 32 Brown A, Jordan S. J Adv Nurs. 2013; 69(4):828–839.
- 33 Thompson JF et al. Int Breastfeed J. 2010; 5:5.
- 34 Farah E et al. J Midwifery Womens Health. 2021; 66(5):631–640.
- 35 Boies EG, Vaucher YE. Breastfeed Med. 2016; 11(10):494–500.
- 36 Dong D et al. Int Breastfeed J. 2022; 17(1):6.
- 37 Chapman DJ, Pérez-Escamilla R. J Am Diet Assoc. 1999; 99(4):450–454; quiz 455–456.
- 38 Parker MG et al. Pediatrics. 2021; 148(5).
- 39 Parker LA et al. J Hum Lact. 2021; 37(3):581–592.
- 40 Madhoun LL et al. Cleft Palate Craniofac J. 2020; 57(4):477–486.
- 41 Pérez-Escamilla R et al. Am J Public Health. 1994; 84(1):89–97.
- 42 Eden C. J Hum Lact. 2024; 40(4):535–538.
- 43 Widström AM et al. Acta Paediatr. 2019; 108(7):1192–1204.
- 44 UNICEF, WHO. Geneva: World Health Organization; 2018. 56 p.
- 45 Salariya EM et al. Lancet. 1978; 2(8100):1141–1143.
- 46 NEOVITA Study Group. Lancet Glob Health. 2016; 4(4):e266–275.
- 47 Huang S-K, Chih M-H. Breastfeed Med. 2020; 15(10):639–645.
- 48 Hoban R et al. J Perinatol. 2024; 44(11):1597–1606.
- 49 Feldman-Winter L et al. Pediatrics. 2020; 145(4):e20183696.
- 50 Spatz DL et al. Nurs Womens Health. 2024; 28(4):256–263.
- 51 Gavine A et al. Int Breastfeed J. 2016; 12:6.
- 52 Spatz DL. MCN Am J Matern Child Nurs. 2020; 45(3):186.
- 53 Meier PP et al. J Perinatol. 2016; 36(7):493–499.
- 54 Spatz DL et al. J Perinat Educ. 2015; 24(3):160–170.
- 55 Spatz DL et al. J Midwifery Womens Health. 2025; 70(2):343–349.