Melatonin

Selected References:

- Albzea W, et al. 2023. Efficacy and safety of preoperative melatonin for women undergoing cesarean section: a systematic review and meta-analysis of randomized placebo-controlled trials. Medicina (Kaunas), 59(6):1065.
- Alkhfaji H, et al. 2023. Impact of melatonin as a premedication agent in caesarean section on blood loss and postoperative pain level. Anesthesiol Res Pract, 2023:8102111.
- Amaral FGD and José C. 2018. A brief review about melatonin, a pineal hormone. Archives of Endocrinology and Metabolism, 62(4):472-479
- American Academy of Neurology. 2019. Practice guideline: Treatment for insomnia and disrupted sleep behavior in children and adolescents with autism spectrum disorder. Accessed May 11. 2026 from https://pmc.ncbi.nlm.nih.gov/articles/PMC7238942/
- Andersen LP, et al. 2016. The safety of melatonin in humans. Clin Drug Investig; 36:169–175.
- Davis, F. C. (1997). Melatonin: role in development. Journal of Biological Rhythms; 12(6):498–508.
- Díaz E, et al. 2000. Effect of prenatal melatonin on the gonadotropin and prolactin response to the feedback effect of testosterone in male offspring. The Journal of Steroid Biochemistry and Molecular Biology; 72(1):61-69.
- Díaz, E, et al. 1999. Prenatal melatonin exposure influences the maturation of gonadotropin and prolactin estradiol-benzoate feedback system. The Journal of Steroid Biochemistry and Molecular Biology; 70(1): 81-88.
- Ejaz F, et al. 2020. Maternal serum melatonin increases during pregnancy and falls immediately after delivery implicating the placenta as a major source of melatonin. Frontiers in Endocrinology (Lausanne); 11:623038–623038.
- Garofoli F, et al. 2023. Fate of melatonin orally administered in preterm newborns: antioxidant performance and basis for neuroprotection. J Pineal Res; 76(1):e12932.
- Garofoli F, et al. 2021. Oral melatonin as a new tool for neuroprotection in preterm newborns: study protocol for a randomized controlled trial. Trials; 22(1):82.
- Gitto E, et al. 2011. Update on the use of melatonin in pediatrics. J Pineal Res; 50:21–8.
- Gowda SK. 2022. A comparative study to evaluate the effect of melatonin on blood loss after elective Caesarean section: a randomized double blind study. Indian J Anaesth; 66(Suppl 1):S17-S18.
- Grivas T, et al. 2007. Melatonin the “light of the night” in human biology and adolescent idiopathic scoliosis. Scoliosis; 2,6.
- Hardeland R. 2009. New approaches in the management of insomnia: weighing the advantages of prolonged-release melatonin and synthetic melatoninergic agonists. Neuropsychiatric Disease and Treatment, 5:341–354.
- Harpsøe NG, et al. 2015. Clinical pharmacokinetics of melatonin: a systematic review. Eur J Clin Pharmacol, 71:901–909.
- Iavarone S, et al. 2023. Antiplatelet effect of melatonin through breastfeeding: a pediatric case report. Children (Basel), 10(12):1839.
- Jayashree, et al. 2021. Effect of melatonin in reducing blood loss during and after caesarean section. Int J Clin Obstet Gynecol, 5(6):227-231.
- Katzer D, et al. 2016. Melatonin concentrations and antioxidative capacity of human breast milk according to gestational age and the time of day. J Hum Lact; 32:NP105–NP110.
- Khezri MB, et al. 2019. Effect of melatonin on blood loss after cesarean section: a prospective randomized double-blind trial. J Obstet Gynaecol India; 69(5):436-443.
- Luboshitzky R, et al. 2002. Melatonin administration alters semen quality in healthy men. J Androl; 4:572-578. Mannino G, et al. 2021. Melatonin

- and phytomelatonin: chemistry, biosynthesis, metabolism, distribution and bioactivity in plants and animals-an overview. International Journal of Molecular Sciences; 22(18):9996.
- Mejlhede MAB, et al. 2021. Oral melatonin supplementation during *in vitro* fertilization treatment: a systematic PRISMA review and meta-analysis of randomized controlled trials. Gynecological Endocrinology; 37(12):1079-1085.
- Moradi M, et al. 2021. Melatonin protects rats testes against bleomycin, etoposide, and cisplatin-induced toxicity via mitigating nitro-oxidative stress and apoptosis. Biomed Pharmacother; 138:111481.
- National Center for Complementary and Integrative Health. 2023. Attention deficit hyperactivity disorder (ADHD) and complementary health approaches: What the science says. Accessed on May 11, 2026 from https://www.nccih.nih.gov/health/providers/digest/adhd-and-complementary-health-approaches-science
- Okatani Y, et al.2001. Effect of prenatal melatonin exposure on gonadotropins and prolactin secretion in male and female rat pups. European Journal of Pharmacology; 424(3):229-235.
- Ramiro-Cortijo D, et al. 2020. Maternal antioxidant status in early pregnancy and development of fetal complications in twin pregnancies: a pilot study. Antioxidants; 9(4):269
- Reiter RJ, et al. 2024. Melatonin-mediated actions and circadian functions that improve implantation, fetal health and pregnancy outcome. Reproductive toxicology (Elmsford, N.Y.), 124, 108534.
- Showell MG, et al. 2020. Antioxidants for female subfertility. Cochrane Database Syst Rev, 8(8):CD007807.
- Sun TC, et al. 2020. Protective effects of melatonin on male fertility preservation and reproductive system. Cryobiology, 95:1-8
- Vine T, et al. 2022. Melatonin use during pregnancy and lactation: a scoping review of human studies. Braz J Psychiatry, 44(3):342-348.
- Voordouw BCG, et al. 1992. Melatonin and melatonin-progestin combinations alter pituitary-ovarian function in women and can inhibit ovulation. J Clin Endocrinol Metab; 74:108-17.
- Yang HL, et al. 2018. Pleiotropic roles of melatonin in endometriosis, recurrent spontaneous abortion, and polycystic ovary syndrome. Am J Reprod Immunol, 80(1):e12839.

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, May 1, 2026.

Melatonin

Selected References:

- Anghelescu I, et al. 2004. Successful switch to aripiprazole after induction of hyperprolactinemia by ziprasidone: a case report. J Clin Psychiatry; 65:1286-1287.
- Biesdorf C, et al. 2019. Physiologically-based pharmacokinetics of ziprasidone in pregnant women. Br J Clin Pharmacol; 85(5):914-923.
- Bode'n R, et al. 2012. Antipsychotics During Pregnancy Relation to Fetal and Maternal Metabolic Effects. Arch Gen Psychiatry; 69(7):715-721.
- Cho H, et al. 2025. Antipsychotic use during pregnancy and outcomes in pregnant individuals and newborns. J Affect Disord; 373:495-504.
- Creeley CE, et al. 2019. Use of Prescribed Psychotropics during Pregnancy: A Systematic Review of Pregnancy, Neonatal, and Childhood Outcomes. Brain Sci; 9(9),235.
- Damkier P, Videbech P. 2018. The safety of second-generation antipsychotics during pregnancy: A clinically focused review. CNS Drugs. 32(4):351-366.
- Einarson A, Boskovic R. 2009. Use and safety of antipsychotic drugs during pregnancy. J Psychiatr Pract; 15(3):183-192.
- FDA. 2011. Drug Safety Communication: Antipsychotic drug labels updated on use during pregnancy and risk of abnormal muscle movements and withdrawal symptoms in newborns (issued 2/2011). https://www.fda.gov/Drugs/DrugSafety/ucm243903.htm
- FDA 2014. Drug Safety Communication: FDA reporting mental health drug ziprasidone (Geodon) associated with rare but potentially fatal skin reactions. (Issued 12/2014). https://www.fda.gov/drugs/drug-safety-and-availability/fda-drug-safety-communication-fda-reporting-mental-health-drug-ziprasidone-geodon-associated-rare.
- Ginsberg DL. 2003. Ziprasidone-induced galactorrhea. Prim Psychiatry; 10:22-23.
- Ginsbery DL. 2004. Ziprasidone-induced hyperprolactinemia. Prim Psychiatry; 11:26–27.
- Goodnick PJ, et al. 2002. Antipsychotics: Impact on prolactin levels. Expert Opin Pharmacother; 3:1381–1391.
- Haddad PM, Wieck A. 2004. Antipsychotic-induced hyperprolactinaemia: mechanisms, clinical features and management. Drugs; 64:2291-2314.
- Heinonen E, et al. 2022. Antipsychotic Use During Pregnancy and Risk for Gestational Diabetes: A National Register-Based Cohort Study in Sweden. CNS drugs; 36(5):529–539.
- Humby T, Davies W. 2019. Brain gene expression in a novel mouse model of postpartum mood disorder. Trans Neurosci; 10:168-174.
- Huybrechts KF, et al. 2016. Antipsychotic use in pregnancy and the risk for congenital malformations. JAMA Psychiatr; 73(9):938-46.
- Huybrechts KF, et al. 2023. Association of In Utero Antipsychotic Medication Exposure With Risk of Congenital Malformations in Nordic Countries and the US. JAMA psychiatry; 80(2):156–166.
- Jordan MP. 2003. Ziprasidone-associated galactorrhea in a female teenager. J Am Acad Child Adolesc Psychiatry; 42:4-5.
- Khan SJ, et al. 2016. Bipolar disorder in pregnancy and postpartum: Principles of management. Curr Psychiatry Rep; 18(2):13.
- Kopecek M, et al. 2005. Ziprasidone-induced galactorrhea: A case report. Neuro Endocrinol Lett; 26:69–70.
- Kulkarni J, et al. 2015. Antipsychotic use in pregnancy. Expert Opin Pharmacother; 16(9):1335-1345.
- Lusskin SI, et al. 2004. Prolactin Elevation with Ziprasidone. American Journal of Psychiatry; 161(10): 1925.
- Maguire GA. 2002. Prolactin elevation with antipsychotic Medications: Mechanisms of action and clinical consequences. J Clin Psychiatry; 63 Suppl 4:56–62.

- McCauley-Elsom K, et al. 2010. Antipsychotics in pregnancy. Psychiat Ment Health Nurs 17(2):97-104.
- Myers WT. 2014. A lactating adolescent on atypical antipsychotics: A case report of an emerging challenge. J Investig Med; 62:485.
- Park Y, et al. 2018. Continuation of atypical antipsychotic medication during early pregnancy and the risk of gestational diabetes. Am J Psychiatry; 175(6):564-574
- Peitl MV, et al. 2010. Ziprasidone as a possible cause of cleft palate in a newborn. Psychiatr Danub; 22(1):117-119.
- Ramadan M, et al. 2005. D2-blockade and possible ziprasidone-induced galactorrhea. Int Clin Psychopharmacol; 20:113–114.
- Raza S, Haq F. 2010. Ziprasidone-induced galactorrhea in an adolescent female: A case report. Prim Care Companion J Clin Psych; 12(3):PCC.09l00855
- Ruzic K, et al. 2009. Pregnancy and atypical antipsychotics. Psychiatr Danub; 21(3):368-370.
- Saldaña SN, Delgado SV. 2007. Ziprasidone-associated galactorrhea in an adolescent female. J Child Adolesc Psychopharmacol; 17:259–260.
- Schlotterbeck P, et al. 2009. Low concentration of ziprasidone in human milk: a case report. Int J Neuropsychopharmacology; 12(3) 437–438.
- Sørensen MJ, et al. 2015. Risk of fetal death after treatment with antipsychotic medications during pregnancy. PLoS One; 10(7): e0132280.
- Straub L, et al. 2026. Congenital malformation risk following prenatal antipsychotic exposure: a systematic safety surveillance approach. BMJ Ment Health; 29(1):e302270.
- Wang E, et al. 2025. Comparative Safety of Antipsychotic Medications and Mood Stabilizers During Pregnancy: A Systematic Review and Network Meta-analysis of Congenital Malformations and Prenatal Outcomes. CNS Drugs; 391–22.
- Werremeyer A. 2009. Ziprasidone and citalopram use in pregnancy and lactation in a woman with psychotic depression. Am J Psychiatry; 166(11):1298.
- Uguz F. 2016. Second-generation antipsychotics during the lactation period: A comparative systematic review on infant safety. J Clin Psychopharmacol; 36:244-252.
- Uguz FJ. 2019. Antipsychotic use during pregnancy and the risk of gestational diabetes mellitus: A systematic review. Clin Psychopharmacol; 39(2):162-167.

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, May 1, 2026.

Melatonin

Selected References:

- American Dental Association (ADA). https://www.ada.org/resources/practice/legal-and-regulatory/amalgam [accessed May 2026].
- Bjorklund G, et. al. 2019. Mercury exposure and its effects on fertility and pregnancy outcome. Basic Clin Pharmacol Toxicol 125(4):317-327
- Brodsky JB, et al. 1985. Occupational exposure to mercury in dentistry and pregnancy outcome. J Am Dent Assoc; 111:779-780.
- Centers for Disease Control and Prevention (CDC). 2003. Guidelines for Infection Control in Dental Health-Care Settings. Morbidity and Mortality Weekly Report (MMWR). 52(RR17):1-61.
- CDC. 2021. Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care. Available at: https://www.cdc.gov/oralhealth/infectioncontrol/summary-infection-prevention-practices/index.html https://www.cdc.gov/dental-infection-control/hcp/summary/index.html
- CDC. 2011. Immunization of Health-Care Personnel: Recommendations of the Advisory Committee on Immunization Practices (ACIP). Morbidity and Mortality Weekly Report (MMWR); 60 (RR07):1-45.
- Ericson A, Kallen B. 1989. Pregnancy outcome in women working as dentists, dental assistants or dental technicians. Int Arch Occup Environ Health 61:329-33.
- Glick M, Goldman HS. 1993. Viral infections in the dental setting: potential effects on pregnant HCWs. J Am Dent Assoc. 124(6):79-86.
- Heggland I, et al. 2011. Pregnancy outcomes among female dental personnel-a registry-based retrospective cohort study. Scand J Work Environ Health; 37(6): 539-546.
- Knill-Jones RP, et al. 1975. Anaesthetic practice and pregnancy. Lancet; 2:807-9.
- LeBeau J. 2015. Laser Safety in the Dental Office. https://www.aldadmin.org/index.cfm/patients/ALD_Blog/show/blogPost/LaserSafetyInTheDentalOffice [last accessed May 2026].
- Lindbohm ML, et al. 2007.Occupational exposure in dentistry and miscarriage. Occup Environ Med; 64:127-133.
- Mann A, et. al. 2020. Considerations for pregnant dental and health care workers amid COVID-19. JDR Clin Trans Res 5(4):300-306.
- Marklund S, et al. 2019. Work ability and productivity among dentists: associations with musculoskeletal pain, stress, and sleep. Int Arch Occup Environ Health. PMID: 31654126
- Nagpal N, et al. 2017. A Review of Mercury Exposure and Health of Dental Personnel. Saf Health Work. 8(1): 1-10.
- Naimi-Akbar A, et al. 2012. Cognitive function among sons of women who worked in dentistry. Scand J Work Environ Health. 38(6):546-552.
- Occupational Safety and Health Administration (OSHA). Dentistry Hazard Recognition, Control and Prevention: Available at: https://www.osha.gov/dentistry/hazard-control-prevention [Accessed 6/2025].
- OSHA. Laser/Electrosurgery Plume. https://www.https://www.osha.gov/laser-electrosurgery-plume [Accessed May 2026].
- OSHA. Mercury OSHA Standards. https://www. https://www.osha.gov/mercury/standards [Accessed May 2026].
- Olfert SM. 2006. Reproductive outcomes among dental personnel: a review of selected exposures. J Can Dent Assoc. 72(9):821-5.

- Romano F, et al. 2017. Electrosurgical Smoke: Ultrafine Particle Measurements and Work Environment Quality in Different Operating Theatres. Int J Environ Res Public Health; 14(2): 137.
- Rowland A et al. 1995. Nitrous oxide and spontaneous abortion in female dental assistants. Am J Epidemiol. 141(6):531-8. doi: 10.1093/oxfordjournals.aje.a117468. PMID: 7900720.
- Smalley P. 2011. Laser safety: Risks, hazards, and control measures. Laser Ther; 20(2): 95-106.
- Warwick D, et al. 2019. Mercury vapor volatilization from particulate generated from dental amalgam removal with a high-speed dental drill – a significant source of exposure. Jrnl of Occ Med & Tox. 14,22.
- United States Food and Drug Administration (FDA). 2017. About Dental Amalgam Fillings. https://www.fda.gov/medical-devices/dental-devices/dental-amalgam-fillings [Accessed May 2026].

Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at MotherToBaby.org.

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, May 1, 2026.

Melatonin

Selected References:

- Anderson OW. 1977. Mumps mastitis. J Pediatr; 91(4):687.
- Beard CM, et al. 1977. The incidence and outcome of mumps orchitis in Rochester, Minnesota, 1935 to 1974. Mayo Clin Proc; 52(1):3-7.
- Casella R, et al. 1997. Mumps orchitis: report of a mini-epidemic. J Urol; 158(6):2158-61.
- Centers for Disease Control and Prevention (CDC). 2025. Mumps. Available at https://www.cdc.gov/mumps/about/index.html. [Last accessed May 2026].
- CDC. 2008. Updated recommendations for isolation of persons with mumps. MMWR Morb Mortal Wkly Rep; 57(40):1103-5.
- Dejucq N, Jégou B. 2001. Viruses in the mammalian male genital tract and their effects on the reproductive system. Microbiol Mol Biol Rev; 65(2):208-31.
- Donahue M, et al. 2017. Notes from the Field: Complications of Mumps During a University Outbreak Among Students Who Had Received 2 Doses of Measles-Mumps-Rubella Vaccine – Iowa, July 2015-May 2016.

MMWR Morb Mortal Wkly Rep; 66(14):390-391.

- Enders M, et al. 2005. [Frequency of spontaneous abortion and premature birth after acute mumps infection in pregnancy]. Gynakol Geburtshilfliche Rundsch; 45(1):39-43.
- Garcia AG, et al. 1980. Intrauterine infection with mumps virus. Obstet Gynecol; 56(6):756–9.
- Groenendaal F, et al. 1990. Congenital Mumps pneumonia: a rare cause of neonatal respiratory distress. Acta Paediatr Scand; 79(12):1252–4.
- Gupta RK, et al. 2005. Mumps and the UK epidemic 2005. BMJ; 330(7500):1132-5.
- Hall R, Richards H. 1987. Hearing loss due to mumps. Arch Dis Child; 62(2):189-91.
- Hill AB, et al. 1985. Virus diseases in pregnancy and congenital defects. Br J Prev Coc Med; 12:1–7.
- Hyatt HW. 1961. Relationship of maternal mumps to congenital defects and fetal deaths and to maternal morbidity and mortality. Am Pract; 12:359–63.
- Hviid A, et al. Mumps. Lancet; 371(9616):932-44.
- Johnstone JA, et al. 1972. Meningitis and encephalitis associated with mumps infection. A 10-year survey. Arch Dis Child; 47(254):647-51.
- Kilham L. 1951. Mumps virus in human milk and in milk of infected monkey. J Am Med Assoc; 146(13):1231-2.
- Kutty PK, et al. 2010. Guidance for isolation precautions for mumps in the United States: a review of the scientific basis for policy change. Clin Infect Dis; 50(12):1619-28
- Manson AL. 1990. Mumps orchitis. Urology; 36(4):355-8.
- Manson MM, et al. 1988. Rubella and other virus infections during pregnancy. Report on public health and medical subjects No 101. Ministry of Health, her Majesty's Stationary Office, 1960. Cited by Korones SB: Uncommon virus infections of the mother, fetus and newborn: Influenza, Mumps and measles. Clinics in Perinatology; 15(2)259–72.
- McPherson TD, et al. 2020. Mumps Cases Disproportionately Affecting Persons Living with HIV Infection and Men Who Have Sex with Men – Chicago, Illinois, 2018. MMWR Morb Mortal Wkly Rep; 69(28):909-912.
- Ornoy A, Tenenbaum A. 2006. Pregnancy outcome following infections by coxsackie, echo, measles, mumps, hepatitis, polio and encephalitis viruses. Reprod Toxicol; 21:446–457.
- Russell RR, Donald JC. 1958. The neurological complications of mumps. Br Med J; 2(5087):27-30.
- Siegel M. 1973. Congenital malformations following chickenpox, measles, mumps, and hepatitis. Results of a cohort study. JAMA; 226(13):1521-4.
- Siegel M, et al. 1966. Comparative fetal mortality in maternal virus diseases. A prospective study on rubella, measles, mumps, chicken pox and hepatitis. N Engl J Med; 274(14):768-71.
- Takahashi Y, et al. 1998. A case of congenital mumps infection complicated with persistent pulmonary hypertension. Am J Perinatol; 15(7):409–12.
- Taparelli F, et al. 1988. Isolation of mumps virus from vaginal secretions in association with oophoritis. J Infect; 17:255-8.
- Ternavasio-de la Vega HG, et al. 2010. Mumps orchitis in the post-vaccine era (1967-2009): a single-center series of 67 patients and review of clinical outcome and trends. Medicine (Baltimore); 89(2):96-116.
- Utz JP, et al. 1964. Clinical and Laboratory Studies of Mumps. N Engl J Med; 270:1283-6.
- Vuori M, et al. 1962. Perceptive deafness in connection with mumps. A study of 298 servicemen suffering from mumps. Acta Otolaryngol; 55:231-6.
- Westmore GA, et al, 1979. Isolation of mumps virus from the inner ear after sudden deafness. Br Med J;1(6155):14-5.
- White SJ, et al. 2012. Measles, mumps, and rubella. Clin Obstet Gynecol; 55(2):550-9.
- Wu H, et al. 2021. Mumps Orchitis: Clinical Aspects and Mechanisms. Front Immunol; 12:582946.

Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at MotherToBaby.org.

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, May 1, 2026.

Melatonin

Selected References:

- Carvajal A, et al. 2015. Emergency contraceptive pill safety profile. Comparison of the results of a follow-up study to those coming from spontaneous reporting. Pharmacoepidemiology and Drug Safety; 24(1): 93–97.
- De Santis M, et al. 2005. Failure of the emergency contraceptive levonorgestrel and the risk of adverse effects in pregnancy and on fetal development: an observational cohort study. Fertility and Sterility; 84(2):296–299.
- Endler M, et al. 2022. Effect of levonorgestrel emergency contraception on implantation and fertility: A review. Contraception; 109:8-18.
- Gainer E, et al. 2007. Levonorgestrel pharmacokinetics in plasma and milk of lactating women who take 1.5 mg for emergency contraception. Hum Reprod; 22(6):1578-84.
- Leelakanok N. & Methaneethorn J. 2020. A systematic review and meta-analysis of the adverse effects of levonorgestrel emergency oral contraceptive. Clinical Drug Investigation; 40(5):395–420.
- Mierzejewska A, et al. 2024. Emergency contraception – a narrative review of literature. Eur J Obstet Gynecol Reprod Biol; 299:188-192.
- Polakow-Farkash S et al. 2013. Levonorgestrel used for emergency contraception during lactation-A prospective observational cohort study on maternal and infant safety. J Matern Fetal Neonatal Med; 26:219-221.
- Shohel M, et al. 2014. A systematic review of effectiveness and safety of different regimens of levonorgestrel oral tablets for emergency contraception. BMC Women's Health; 14(54).
- Shurie S, et al. 2018. Levonorgestrel only emergency contraceptive use and risk of ectopic pregnancy in Eldoret Kenya: a case-control study. The Pan African Medical Journal; 31(214).
- Shaaban OM et al. 2019. Levonorgestrel emergency contraceptive pills use during breastfeeding; effect on infants' health and development. J Matern Fetal Neonatal Med; 32:2524–2528.
- Trussell J, et al. 2003. Ectopic pregnancy following use of progestin-only ECPs. J Fam Plann Reprod Health Care; 29(4):249.
- von Hertzen H, et al. 2002. Low dose mifepristone and two regimens of levonorgestrel for emergency contraception: a WHO multicentre randomised trial. Lancet; 360(9348):1803-1810.
- Zhang J, et al. 2015. Association between levonorgestrel emergency contraception and the risk of ectopic pregnancy: a multicenter case-control study. Sci Rep; 5(8487).

Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at MotherToBaby.org.

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, May 1, 2026.