

**Caring for
pregnant women
with pre-existing
and gestational**

diabetes

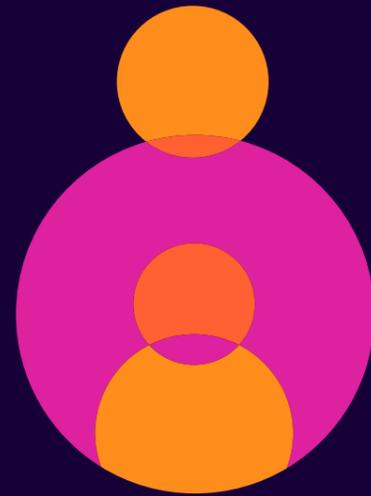


**Royal College
of Midwives**

Key messages



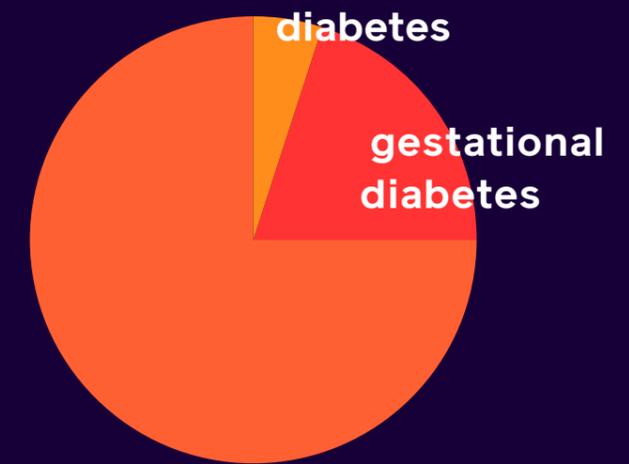
- The incidence of diabetes in pregnancy has increased and this has negatively affected the health of women and their babies. Midwives are caring for increasing numbers of pregnant women with diabetes.



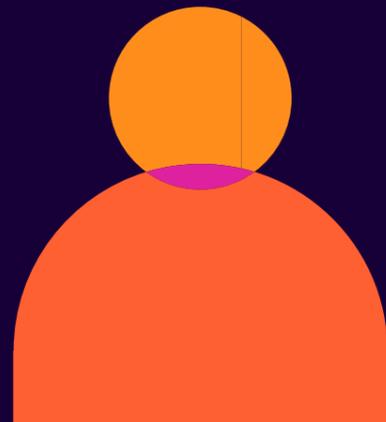
- The complexity of care pregnant women with diabetes need requires specialist knowledge and a personalised approach.



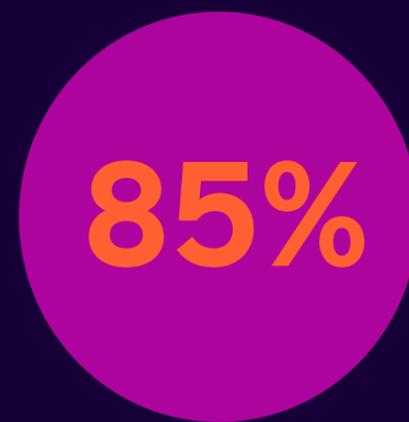
- Diabetes is a disorder of glucose metabolism. It is life-changing and has incremental sequela for public health (Neiger, 2017).



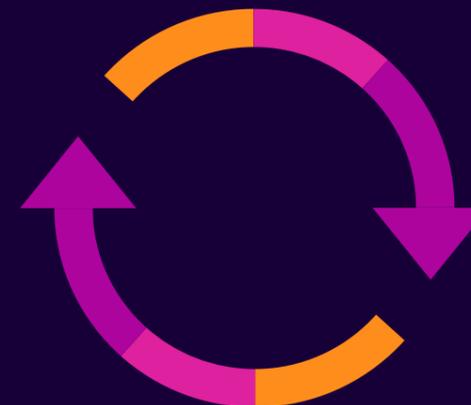
- Worldwide, 1% to 2% of pregnant women have type 1 or type 2 diabetes and between 6% and 9% develop gestational diabetes (Ogurtsova et al, 2017).



- Midwives are crucial in improving outcomes for women and childbearing people as they are often the first point of contact in pregnancy.



- Evidence shows that 85% of midwives would like more information and training on the topic, including how to support women and their families throughout pregnancy and beyond (Wallace & Stulz, 2020).



- The benefits of midwifery continuity of carer (MCoC) are well known for improving maternal and fetal outcomes and promoting a positive experience of maternity care.



- Individual health, personal needs and preferences should be considered when providing healthy lifestyle guidance to promote sustainable and manageable change. Referral to services that offer additional support for lifestyle change must be considered.

Evidence

Diabetes affects over 5% of women giving birth in the UK and 16.2% of women giving birth internationally, with 85.1% of those experiencing gestational diabetes mellitus. Compared to the population of healthy pregnant women, diabetes in pregnancy increases the risk of complications during pregnancy and birth for the mother, fetus and baby and in the long-term (Neiger, 2017).

Pregnant women with types 1 or 2 diabetes have a higher chance of having a baby with a birth defect, preterm birth and stillbirth. High blood sugar levels during pregnancy can increase the risk of having a caesarean birth, a large for gestational age baby and going on to develop obesity or type 2 diabetes in the future.

There is a four-fold difference in maternal mortality rates amongst women from Black ethnic minority groups and an almost two-fold difference amongst women from Asian ethnic minority groups compared to white counterparts. A continued focus on action to address these disparities throughout pregnancy, birth and in the postnatal period is essential.

The latest MBBRACE-UK report (Knight et al, 2021) recommends timely referrals to specialist services when risk factors are identified during pregnancy.

Professionals can use a range of guidance to help shape the care of women with diabetes and provide a clear pathway through their antenatal journey. The National Health Service (NHS) trust/board is responsible for ensuring that pathways, processes and guidance are in place and are followed by the multidisciplinary team and that these are reviewed and updated.

Antenatally, when having discussions with women about their lifestyle, diet, and physical exercise, it is important to personalise it. Research has shown that if the advice given is tailored to cultural or individual needs and habits it is more likely to be adhered to (Morton et al,

Research has shown that if the advice given is tailored to cultural or individual needs and habits it is more likely to be adhered to (Morton et al, 2014; Malek et al, 2016).

2014; Malek et al, 2016). Leaders and NHS trusts/boards have a duty to ensure that, if needed, there is access to enhanced information and services to support diet and lifestyle changes.

Evidence shows that improvement of preconception health promotes improved reproductive health outcomes (Wahabi et al, 2010). It is important that women understand why they need to eat well and stay active in pregnancy (DHSC et al, 2019). Furthermore, to enhance positive pregnancy outcomes for future pregnancies, a preconception counselling session should be undertaken before discharge from midwifery care (Yehuda, 2016). This discussion should focus on health promotion for example: family spacing, contraception, nutrition, infections, immunisations, medications and family history.

Pregnant women and childbearing people with diabetes should be provided with information on the significance of hand-expressing colostrum from 36 weeks of gestation, early feeding and continued breastfeeding in helping to stabilise and maintain the baby's blood sugar levels (Dalsgaard et al, 2019). NHS leaders and trusts must ensure that Infant feeding specialists and safe staffing levels are in place in postnatal wards as well as in community settings to support families in initiating and maintaining breastfeeding. The same standards of support and resources must be provided for families who use milk substitutes to feed their babies.



Conclusions

The care provided to women with diabetes should nurture their independence, self-management and control over their health. Maternity services must offer prompt access to the right services at the right time. This includes implementing prevention services, weight management clinics and supporting women and their families through radical lifestyle changes. This, in conjunction with recognition of the role health technologies, can help women to achieve more independence and improved outcomes in glycaemic control.

Additional resources

**The midwives' role and key responsibilities:
acute and community settings**



Resources for professionals

NICE (2020) Diabetes in pregnancy guideline (www.nice.org.uk/guidance/ng3)

RCM (2022) i-Learn module: Diabetes in pregnancy (www.ilearn.rcm.org.uk/)

MBRRACE-UK (2021) Annual report 2021 (www.npeu.ox.ac.uk/assets/downloads/mbrance-uk/reports/maternal-report-2021/MBRRACE-UK_Maternal_Report_2021_-_FINAL_-_WEB_VERSION.pdf)

Diabetes care trust (2018). Diabetes care in pregnancy A midwife education needs analysis (www.diabetologists-abcd.org.uk/Research/DCT_report_final_05012018.pdf)

JBDS-IP (2022). Managing diabetes and hyperglycaemia during labour and birth (www.diabetestimes.co.uk/wp-content/uploads/2022/01/JBDS-12-Managing-diabetes-and-hyperglycaemia-during-labour-and-birth-27.1.22.pdf)

NHS Digital (2021). Diabetes in pregnancy National Audit (www.digital.nhs.uk/data-and-information/publications/statistical/national-pregnancy-in-diabetes-audit/2019-and-2020)

Scottish Government (2018). Healthier future: Framework for the prevention, early detection and early intervention of type 2 diabetes (www.gov.scot/publications/healthier-future-framework-prevention-early-detection-early-intervention-type-2/documents/)

Scottish Government (2021). Diabetes care in pregnancy (www.gov.scot/publications/diabetes-care-scotland-progress-against-national-priorities-commitments-2021-2026/pages/6/)

Scottish intercollegiate guidelines network SIGN (2017) Management of Diabetes (www.sign.ac.uk/assets/sign116.pdf)

NHS Diabetes (2010) Lead Midwife in Diabetes: Standards, Roles and Competencies (www.diabetes-resources-production.s3-eu-west-1.amazonaws.com/diabetes-storage/migration/pdf/lead-midwife-diabetes-standards-role-competencies.pdf)

UNICEF maternal health research on diabetes and infant feeding (www.unicef.org.uk/babyfriendly/news-and-research/baby-friendly-research/maternal-health-research/maternal-health-research-diabetes/)

Resources for pregnant women and people with diabetes

Diet

1. SOUTH EAST LONDON CCG - Culturally Sensitive Cookbook for women and birthing people with Gestational Diabetes-FREE (www.selondonccg.nhs.uk/news/culturally-sensitive-cookbook-for-women-and-birthing-people-with-gestational-diabetes-free/)
2. DIABETES UK - what can i eat with gestational diabetes? (www.diabetes.org.uk/guide-to-diabetes/enjoy-food/eating-with-diabetes/i-have-gestational-diabetes)
3. DIABETES UK - what is a healthy, balanced diet for diabetes? (www.diabetes.org.uk/guide-to-diabetes/enjoy-food/eating-with-diabetes/what-is-a-healthy-balanced-diet)
4. INTERNATIONAL DIABETES FEDERATION - Diabetes and Ramadan practical guidelines 2021 (www.daralliance.org/daralliance/idf-dar-practical-guidelines-2021/)
5. First Steps Nutrition - Eating well in pregnancy (www.static1.squarespace.com/static/59f75004f09ca48694070f3b/t/62441bab8007e9123ce11255/1648630791896/Healthy+Pregnancy+for+web+25+March+2022.pdf)
6. Public Health England - Eatwell guide (www.assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/528193/Eatwell_guide_colour.pdf)
7. NHS INFORM.SCOT Ready Steady Baby - Looking after yourself and your baby (www.nhsinform.scot/ready-steady-baby/pregnancy/looking-after-yourself-and-your-baby/)
8. Leicester Diabetes Centre - MyDESMOND self-management education tool (www.mydesmond.com/home/)
9. Food facts portion sizes - Association of UK dieticians (www.bda.uk.com/resource/food-facts-portion-sizes.html)
10. Diabetes UK - portion size (www.diabetes.org.uk/guide-to-diabetes/enjoy-food/eating-with-diabetes/portion-sizes)

Exercise

11. DIABETES UK - Exercise in pregnancy for pregnant women with diabetes (www.diabetes.org.uk/diabetes-the-basics/gestational-diabetes/testing-and-treatment#activity)
12. BMC (2021). Postpartum dietary and physical activity-related beliefs and behaviours among women with recent gestational diabetes mellitus: a qualitative study from Singapore (www.bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-021-04089-6)
13. UK CHIEF MEDICAL OFFICERS - Physical activity guidelines and infographics (www.assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/832868/uk-chief-medical-officers-physical-activity-guidelines.pdf)



References and links to online and virtual support and guidance

1. Department of Health and Social Care (DHSC), Llywodraeth Cymru Welsh Government, Department of Health Northern Ireland and the Scottish Government (2019). UK Chief Medical Officers' Physical Activity Guidelines. London: DHSC. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/832868/uk-chief-medical-officers-physical-activity-guidelines.pdf [Accessed 14 July 2022]
2. Dalsgaard BT, Rodrigo-Domingo M, Kronborg H, Haslund H (2019). Breastfeeding and skin-to-skin contact as non-pharmacological prevention of neonatal hypoglycemia in infants born to women with gestational diabetes; a Danish quasi-experimental study. *Sexual & Reproductive Healthcare* 19: 1-8
3. Knight M, Bunch K, Tuffnell D, Patel R, Shakespeare J, Kotnis R, Kenyon S, Kurinczuk JJ (Eds.) on behalf of MBRRACE-UK (2021). Saving Lives, Improving Mothers' Care - Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2017-19. Oxford: National Perinatal Epidemiology Unit, University of Oxford. https://www.npeu.ox.ac.uk/assets/downloads/mbrrace-uk/reports/maternal-report-2021/MBRRACE-UK_Maternal_Report_2021_-_FINAL_-_WEB_VERSION.pdf [Accessed 14 July 2022]
4. Malek L, Umberger W, Makrides M, Zhou SJ (2016). Adherence to the Australian dietary guidelines during pregnancy: evidence from a national study. *Public Health Nutrition* 19(7):1155-63.
5. Morton SM, Grant CC, Wall CR, Atatoan Carr PE, Bandara DK, Schmidt JM, Ivory V, Inskip HM, Camargo CA JR (2014). Adherence to nutritional guidelines in pregnancy: evidence from the Growing Up in New Zealand birth cohort study. *Public Health Nutrition* 17(9):1919-29.
6. Neiger R (2017). Long-Term Effects of Pregnancy Complications on Maternal Health: A Review. *Journal of Clinical Medicine* 6(8):76. <https://doi.org/10.3390/jcm6080076> [Accessed 14 July 2022].
7. Ogurtsova K, da Rocha Fernandes JD, Huang Y, Linnenkamp U, Guariguata L, Cho NH, Cavan D, Shaw JE, Makarof LE (2017). IDF Diabetes Atlas: Global estimates for the prevalence of diabetes for 2015 and 2040. *Diabetes Research and Clinical Practice* 128:40-50.
8. Persson M, Hörnsten Å, Winkvist A, Mogren I (2011). "Mission Impossible"? Midwives' experiences counseling pregnant women with gestational diabetes mellitus. *Patient Education and Counseling* 84(1):78-83.
9. Wahabi HA, Alzeidan RA, Bawazeer GA, Alansari LA, Esmail SA. (2010). Preconception care for diabetic women for improving maternal and fetal outcomes: a systematic review and meta-analysis. *BMC Pregnancy Childbirth* 10(63). <https://doi.org/10.1186/1471-2393-10-63> [Accessed 14 July 2022].
10. Wallace M, Stulz V (2020). The lived experiences of midwifery care for women with diabetes: An integrative review. *Midwifery* 89(102795). <https://doi.org/10.1016/j.midw.2020.102795> [Accessed 14 July 2022].
11. Yehuda I. (2016). Implementation of Preconception Care for Women with Diabetes. *Diabetes Spectrum* 29(2):105-14.

Expert Clinical Advisory Group

Contact ExpertClinicalAdvisoryGroup@rcm.org.uk

Date of Briefing September 2022

Review date July 2025

Acknowledgements

ECAG acknowledges the following for their support in developing this briefing: Debora Burns, Diabetes Midwife Coordinator, Lisa Grant, Specialist Midwife, Diabetes, Noreen Dunnachie, Lead Midwife for Diabetes and Ruth Olukoga, Diabetes Specialist Midwife Lead.



Caring for pregnant women with
pre-existing and gestational diabetes
Published: September 2022

Follow us on:



[@MidwivesRCM](https://twitter.com/MidwivesRCM)



www.facebook.com/MidwivesRCM



[@midwives_rcm](https://www.instagram.com/midwives_rcm)

The Royal College of Midwives
10–18 Union Street
London, SE1 1SZ

0300 303 0444
info@rcm.org.uk
www.rcm.org.uk