

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Guideline scope

Intrapartum care for healthy women and babies (update)

This guideline will update the NICE guideline on intrapartum care for healthy women and babies (CG190).

The guideline will be developed using the methods and processes outlined in [developing NICE guidelines: the manual](#).

This guideline will also be used to update the NICE [quality standard](#) for intrapartum care.

1 Why the update is needed

New evidence that could affect recommendations was identified through the surveillance process, and some areas needing editorial revision were also identified. Topic experts, including those who helped to develop the existing guideline, also advised NICE on whether areas should be updated or new areas added, and further input was obtained from stakeholders. Full details are set out in the [surveillance review decision](#).

Why the guideline is needed

Key facts and figures

This guideline covers the care of healthy women who go into labour at term (37 to 42 weeks of pregnancy), who are pregnant with a single baby, and who do not have any pre-existing medical conditions or antenatal conditions that predispose to a higher risk birth.

There are approximately 650,000 births in the UK each year, of which 275,000 (42%) are to first-time mothers, and almost all (98.80%) are in NHS

establishments, with 2.1% at home (ONS, 2020).

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths>. Accessed 12 May 2020)

Giving birth is a life-changing event, and the care that a woman receives during labour can affect her short-term and long-term physical and emotional health, and that of her baby. High quality, safe and responsive care, based on the latest evidence, with timely interventions when required, should minimise the risk of adverse events during birth. In addition to this, adequate support for the woman and good communication during labour can optimise outcomes and contribute to making birth a positive experience for the woman, and for her birth companions. Conversely, a birth in which serious and potentially avoidable complications arise, can lead to a devastating outcome for the baby, mother, and the wider family, with potentially life-long consequences.

There is also a financial consideration, as while a successful birth that leads to a healthy mother and baby has a beneficial long-term financial outcome for the NHS and social services, the downstream costs of care after an adverse birth event can be substantial.

Current practice

The existing intrapartum care guideline was published in 2007 and updated in 2014, with additional amendments in 2017 relating to the measurement of fetal heart rate. In addition to the surveillance review described above, stakeholders and topic experts have identified that some areas of the current guideline may not reflect current terminology or current practice.

Policy, legislation, regulation and commissioning

Since 2014 several initiatives have impacted on national policy for maternity services. These include the report of the National Maternity Review '[Better Births](#)' which was published in 2016 and the subsequent [Maternity Transformation Programme](#) (MTP). The MTP aims to reduce the number of stillbirths, neonatal and maternal deaths and brain injuries, as well as creating

a more personalised, kinder, professional and family friendly maternity service.

In 2016, NHS England also launched the [Saving Babies' Lives](#) care bundle, which aimed specifically to reduce stillbirth rates by encouraging targeted evidence-based practice. The report focused on 4 themes: reducing smoking in pregnancy, monitoring fetal growth, raising awareness of reduced fetal movement and fetal monitoring during labour. This has subsequently been updated in 2019 with an additional theme on reducing preterm birth. A number of the themes included in these individual reports have been further consolidated by inclusion in the section on maternity services in the [NHS Long Term Plan](#).

The Royal College of Obstetricians and Gynaecologists also launched its own national quality improvement programme called [Each Baby Counts](#) in 2015, with the aim of reducing the rates of babies born at term who die or are left with severe brain injury.

In addition, there are the ongoing lesson learnt reports from the [Mothers and babies: reducing risk through audits and confidential enquiries](#) (MBRRACE-UK) group that aim to inform maternity and perinatal care, and reports such as the recent Ockendon Report (2020) that recommend some ways of improving the safety and quality of maternity services. It will be important that the areas included in the update of the intrapartum care guideline take these lessons into consideration where appropriate.

2 Who the guideline is for

This guideline is for:

- pregnant women, their birth companions, families and the public
- obstetricians, midwives, anaesthetists and other healthcare professionals involved in the care of women in labour
- providers and commissioners of maternity services.

It may also be relevant for:

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- charities and other non-statutory groups that provide support to pregnant women and their families

NICE guidelines cover health and care in England. Decisions on how they apply in other UK countries are made by ministers in the [Welsh Government](#), [Scottish Government](#) and [Northern Ireland Executive](#).

Equality considerations

NICE has carried out [an equality impact assessment](#) during scoping. The assessment:

- lists equality issues identified, and how they have been addressed
- explains why any groups are excluded from the scope.

The guideline will look at inequalities relating to women who may not have full access to a range of healthcare and so may not derive full benefit from the care available (for example, recent migrants, travellers, women who have difficulty understanding and speaking English, and women with disabilities).

For simplicity of language, this guideline will use the term 'woman' or 'mother' throughout, and this should be taken to include people who do not identify as women but who are pregnant.

3 What the updated guideline will cover

3.1 *Who is the focus?*

Groups that will be covered

- Women in labour who are pregnant with a single baby, who go into labour at term (37 to 42 weeks of pregnancy) and who do not have any pre-existing medical conditions or antenatal conditions that predispose to a higher risk birth.
- Women in labour whose baby has not been identified before labour to be at high risk of adverse outcomes.

- Singleton babies born at term (37 to 42 weeks of pregnancy) with no previously identified problems (for example congenital malformations, genetic anomalies, intrauterine growth restriction, placental problems).

Subgroups of older or younger women, those from a Black and Minority Ethnic background, from a vulnerable group or from a deprived socioeconomic group may need specific consideration, if data is available.

Groups that will not be covered

- Women in labour who are identified before labour to be at high risk, or whose baby is at high risk, of complications or adverse outcomes.
- Women with breech presentation.
- Women in preterm labour.
- Women with an intrauterine fetal death.
- Women pregnant with multiple babies.
- Women who are having their labour induced (until active labour is established).
- Women who have had a previous caesarean birth or who are having a planned caesarean birth.

3.2 Settings

Settings that will be covered

All settings where women may give birth, including home, freestanding midwifery units, midwifery units located alongside obstetric units and consultant-led obstetric units.

3.3 Activities, services or aspects of care

Key areas that will be covered in this update

We will look at evidence in the areas below when developing this update. We will consider making new recommendations or updating existing recommendations in these areas only.

Note that guideline recommendations for medicines will normally fall within licensed indications but if clearly supported by evidence, use outside a licensed indication may be recommended. The guideline will assume that prescribers will use a medicine's summary of product characteristics to inform decisions made with individual patients.

- 1 Choosing planned place of birth
- 2 Initial assessment of women
- 3 Pain relief in labour: non-regional analgesia.
- 4 Pain relief in labour: regional analgesia
- 5 Care in established labour
- 6 First stage of labour.
- 7 Second stage of labour.
- 8 Third stage of labour.

Proposed outline for the guideline

The table below outlines all the areas that will be included in the guideline. It sets out what NICE plans to do for each area in this update.

Recommendations in areas that are being retained from the existing guideline may be edited to ensure that they meet current editorial standards, and reflect the current policy and practice context. More details of planned editorial revisions are given in [section 3.6](#).

Area in the guideline	What NICE plans to do
Choosing planned place of birth (2014)	Review evidence: update existing recommendations as needed – impact of BMI on place of birth
Medical conditions and other factors that may affect planned place of birth (2007, updated 2014)	No evidence review: retain recommendations from existing guideline
Women's experience in all birth settings (2014)	No evidence review: retain recommendations from existing guideline
One-to-one care in all birth settings (2014)	No evidence review: retain recommendations from existing guideline

Service organisation and clinical governance (2014)	No evidence review: retain recommendations from existing guideline
Communication (2007)	No evidence review: retain recommendations from existing guideline
Mobilisation (2007)	No evidence review: retain recommendations from existing guideline
Support (2007)	No evidence review: retain recommendations from existing guideline
Hygiene measures (2007)	No evidence review: retain recommendations from existing guideline
Definitions of the latent and established first stages of labour (2007)	No evidence review: retain recommendations from existing guideline
Education and early assessment (2014)	Review evidence: update existing recommendations as needed - timeframe between a mother reporting possible PRoM and face-to-face clinical review
Pain relief (2014)	No evidence review: retain recommendations from existing guideline
Initial assessment of woman (2014)	No evidence review: retain recommendations from existing guideline
Measuring fetal heart rate as part of initial assessment (2017)	No evidence review: retain recommendations from existing guideline
Ongoing assessment (and criteria for transfer to obstetric-led care) (2014)	No evidence review: retain recommendations from existing guideline
Presence of meconium (2014)	No evidence review: retain recommendations from existing guideline
General principles for transfer of care (2014)	No evidence review: retain recommendations from existing guideline
Support in labour (2007)	No evidence review: retain recommendations from existing guideline
Controlling gastric acidity (2007)	No evidence review: retain recommendations from existing guideline

Attitudes to pain and pain relief in childbirth (2007)	No evidence review: retain recommendations from existing guideline
Pain-relieving strategies (2007)	Review evidence: update existing recommendations as needed - use of water papules
Non-pharmacological analgesia (TENS) (2007)	No evidence review: retain recommendations from existing guideline
Inhalational analgesia (2007)	No evidence review: retain recommendations from existing guideline
Intravenous and intramuscular opioids (2007)	Review evidence: update existing recommendations as needed – intravenous PCA in labour versus intermittent intramuscular injection
Information about regional analgesia (2007, amended 2014)	No evidence review: retain recommendations from existing guideline
Timing of regional analgesia (2007)	No evidence review: retain recommendations from existing guideline
Care and observations for women with regional analgesia (2007, 1 updated 2014)	No evidence review: retain recommendations from existing guideline
Establishing and maintaining regional analgesia (2007)	Evidence review: update existing recommendations as needed– programmed intermittent epidural bolus
Measuring fetal heart rate (2017)	No evidence review: retain recommendations
Overall care (2017)	No evidence review: retain recommendations from existing guideline
Baseline fetal heart rate (2017)	No evidence review: retain recommendations from existing guideline
Baseline variability (2017)	No evidence review: retain recommendations from existing guideline
Decelerations (2017)	No evidence review: retain recommendations from existing guideline
Accelerations (2017)	No evidence review: retain recommendations from existing guideline
Categorisation of traces (2017)	No evidence review: retain recommendations from existing guideline

Management (2017)	No evidence review: retain recommendations from existing guideline
Conservative measures (2017)	No evidence review: retain recommendations from existing guideline
Intrauterine resuscitation (2017)	No evidence review: retain recommendations from existing guideline
Fetal scalp stimulation (2017)	No evidence review: retain recommendations from existing guideline
Fetal blood sampling (2017)	Evidence review: update existing recommendations as needed on effectiveness of fetal blood sampling
When a fetal blood sample cannot be obtained (2017)	No evidence review: retain recommendations from existing guideline
Record keeping (2014, some 2007 amended 2014)	No evidence review: retain recommendations from existing guideline
PRoM (2007)	No evidence review: retain recommendations from existing guideline
Duration of first stage(2007)	No evidence review: retain recommendations from existing guideline
Observations during the established first stage (2007)	No evidence review: retain recommendations from existing guideline
Possible routine interventions in the first stage (2007)	No evidence review: retain recommendations from existing guideline
Delay in first stage (2007)	Review evidence: update recommendations on dosage and titration of oxytocin
Definition (2007)	No evidence review: retain recommendations from existing guideline
Observations during the second stage (2007)	No evidence review: retain recommendations from existing guideline
Duration of the second stage and definition of delay (2007 or 2007, amended 2014)	No evidence review: retain recommendations from existing guideline
Non-clinical interventions to reduce C-birth	No evidence review: retain recommendations from existing guideline

Oxytocin in the second stage (2007)	No evidence review: retain recommendations from existing guideline
The woman's position and pushing in the second stage (2007)	Review evidence: update existing recommendations as needed - position with/without epidural, delayed pushing with/without regional analgesia
Intrapartum interventions to reduce perineal trauma (2007)	Review evidence: update existing recommendations as needed - interventions such as perineal massage
Water birth (2007)	No evidence review: retain recommendations from existing guideline
Delay in the second stage (2007)	No evidence review: retain recommendations from existing guideline
Instrumental birth and delayed second stage (2007)	Review evidence: update existing recommendations - prophylactic antibiotics in assisted vaginal birth
Expediting birth (2104)	No evidence review: retain recommendations from existing guideline
Third stage (2014)	No evidence review: retain recommendations from existing guideline
Definition of the third stage (2014)	No evidence review: retain recommendations from existing guideline
Prolonged third stage (2014)	No evidence review: retain recommendations from existing guideline
Observations in the third stage (2014)	No evidence review: retain recommendations from existing guideline
Active and physiological management of the third stage (2014)	Review evidence: update existing recommendations as needed - risks of active management, route of administration of oxytocin; use of carbetocin or other uterotonics, optimal time for cord clamping and placement of the baby during delayed cord clamping
Retained placenta (2014)	No evidence review: retain recommendations from existing guideline
Postpartum haemorrhage - risk factors (2007)	No evidence review: retain recommendations from existing guideline
Postpartum haemorrhage - management (2014)	Review evidence: update existing recommendations as needed - use of tranexamic acid

Initial assessment of the newborn baby and mother–baby bonding (2007)	No evidence review: retain recommendations from existing guideline
Neonatal resuscitation (2014)	No evidence review: retain recommendations from existing guideline
Care of babies in the presence of meconium (2014)	No evidence review: retain recommendations from existing guideline
Babies born to women with pre-labour rupture of the membranes at term (2007 and 2014)	No evidence review: retain recommendations from existing guideline
Initial assessment (2014)	No evidence review: retain recommendations from existing guideline
Perineal care (2007, some amended 2014)	No evidence review: retain recommendations from existing guideline. Editorial change of heading to 'Perineal damage assessment and repair'

Areas that will not be subject to new evidence reviews as part of this update

- 1 Place of birth for suspected fetal macrosomia.
- 2 Non-clinical interventions to reduce unplanned caesarean birth.
- 3 Ultrasound scanning in early labour to confirm presentation (cephalic versus breech).
- 4 The availability of cardiotocography at birthing centres.
- 5 Automated interpretation of cardiotocography.
- 6 Monitoring during labour.
- 7 The benefits and risks of epidurals.
- 8 The impact of opioids administered during labour on breastfeeding.
- 9 Labouring in water for pain relief during labour.
- 10 The use of fetal scalp stimulation to assess fetal wellbeing during labour.

Related NICE guidance

Published

- [Twin and triplet pregnancy](#) (2019) NICE guideline (NG137)

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- [Hypertension in pregnancy](#) (2019) NICE guideline (NG133)
- [Intrapartum care for women with existing medical conditions or obstetric complications and their babies](#) (2019) NICE guideline (NG121)
- [Preterm labour and birth](#) (2015) NICE guideline (NG25)
- [Safe midwifery staffing for maternity settings](#) (2015) NICE guideline (NG4)
- [Diabetes in pregnancy](#) (2015) NICE guideline (NG3)
- [Antenatal and postnatal mental health](#) (2014) NICE guideline (CG192)
- [Neonatal infection \(early onset\): antibiotics for prevention and treatment](#) (2012) NICE guideline (CG149)
- [Caesarean section](#) (2011) NICE guideline (CG132) (currently being updated, publication expected March 2021)
- [Pregnancy and complex social factors](#) (2010) NICE guideline (CG110)
- [Weight management before, during and after pregnancy](#) (2010) NICE public health guideline (PH27)
- [Inducing labour](#) (2008) NICE guideline (CG70) (currently being updated, publication expected October 2021)
- [Antenatal care for uncomplicated pregnancies](#) (2008) NICE guideline (CG62) (currently being updated, publication expected August 2021)
- [Postnatal care up to 8 weeks after birth](#) (2006) NICE guideline (CG37) (currently being updated, publication expected April 2021)

NICE guidance about the experience of people using NHS services

NICE has produced the following guidance on the experience of people using the NHS. This guideline will not include additional recommendations on these topics unless there are specific issues related to intrapartum care:

- [Medicines optimisation](#) (2015) NICE guideline NG5
- [Patient experience in adult NHS services](#) (2012) NICE guideline CG138
- [Service user experience in adult mental health](#) (2011) NICE guideline CG136
- [Medicines adherence](#) (2009) NICE guideline CG76

3.4 Economic aspects

We will take economic aspects into account when making recommendations. We will develop an economic plan that states for each review question (or key area in the scope) whether economic considerations are relevant, and if so whether this is an area that should be prioritised for economic modelling and analysis. We will review the economic evidence and carry out economic analyses, using an NHS perspective, as appropriate.

3.5 Key issues and draft questions

While writing the scope for this updated guideline, we have identified the following key issues and draft review questions related to them:

- 1 Choosing planned place of birth
 - 1.1 What are the benefits and risks of different places of birth for women at different BMI thresholds?
- 2 Initial assessment of women reporting pre-labour rupture of membranes (PRoM):
 - 2.1 What is the optimum timeframe between a mother reporting possible PRoM and face-to-face clinical review?
- 3 Pain relief in labour: non-regional analgesia:
 - 3.1 What is the effectiveness of water papules for pain relief during labour?
 - 3.2 What is the effectiveness of opioids administered by intravenous patient-controlled analgesia (PCA) compared to intramuscular administration?
- 4 Pain relief in labour: regional analgesia
 - 4.1 What is the effectiveness of Programmed Intermittent Epidural Bolus compared to other methods of maintaining epidural analgesia?
- 5 Care in established labour
 - 5.1 What is the effectiveness of fetal blood sampling in improving outcomes for babies?
- 6 First stage of labour:

- 6.1 What is the effectiveness of altering the dose of intravenous oxytocin to prevent excessive frequency of uterine contractions?
- 6.2 What is the optimum dose at which oxytocin should be restarted if stopped due to an abnormality in the CTG?
- 7 Second stage of labour:
- 7.1 What is the most effective position for birth in women with an epidural in situ?
- 7.2 What is the most effective position for birth in women without an epidural?
- 7.3 What are the benefits and risks of the different pushing techniques (immediate, spontaneous, delayed, directed) in the second stage of labour in women with and without regional analgesia?
- 7.4 What is the effectiveness of perineal care (for example, massage, hands-on support and warm compresses) for reducing perineal trauma and tears in the second stage of labour?
- 7.5 What is the effectiveness of prophylactic antibiotics for preventing post-natal infections in assisted vaginal birth?
- 8 Third stage of labour:
- 8.1 What are the benefits and risks associated with active management compared to physiological management in the third stage of labour?
- 8.2 Is intravenous administration of oxytocin more effective than intramuscular administration in the active management of the third stage of labour?
- 8.3 What is the effectiveness of uterotonics (for example, oxytocin and carbetocin) for the prevention of postpartum haemorrhage?
- 8.4 What is the optimum method (including timing and position) to perform cord clamping to maximise outcomes for the baby (including after instrumental and caesarean birth)?
- 8.5 What is the effectiveness of pharmacological treatments for the management of postpartum haemorrhage?

The key issues and draft questions will be used to develop more detailed review questions, which guide the systematic review of the literature

3.6 Editorial updates

In addition to the key issues and draft questions a number of editorial changes to the guideline will be made without undertaking a systematic review of the evidence:

- 1 Editorial changes to the sections on communication and women's experience to bring them more in-line with current NICE style and terminology and to increase the emphasis on shared decision-making
- 2 Removal of the terminology 'supervisor of midwives'
- 3 Editorial changes to the recommendations on planning place of birth, to ensure they are consistent with current practice (for example, administration of intravenous antibiotics by midwives, outpatient induction with dinoprostone)
- 4 Editorial changes to clarify the existing wording on the criteria that necessitate an urgent or emergency transfer to obstetric care
- 5 Editorial changes to the information that should be given to women about the availability of different pain relief options at their planned place of birth
- 6 Editorial changes to clarify the existing wording on the monitoring (for example, auscultation) that should occur during transfer
- 7 Editorial changes to the current definitions for the latent and active first stages of labour, and the risk assessment that should be undertaken to determine the best place of care (including the incremental effect of several minor risk factors)
- 8 Editorial changes to include cross-referral to existing guidance on management of women who are group B streptococcus positive in the current or previous pregnancy
- 9 Editorial changes to the recommendation on controlling gastric acidity to remove antacids and include proton-pump inhibitors.

- 10 Editorial changes to the recommendations on use of inhalational analgesia (Entonox) to include awareness of the environmental impact.
- 11 Editorial changes to the recommendations on TENS to clarify that women can obtain and use a TENS machine, but that this is not a pain relief modality provided by the NHS
- 12 Editorial changes to the recommendations on monitoring of women with regional analgesia, in light of updated guidelines from the Association of Anaesthetists and the Obstetric Anaesthetists' Association
- 13 Editorial changes to the recommendations on drinking water, use of intravenous fluids and monitoring of urine output and fluid balance during labour to reduce the risk of hyponatremia.
- 14 Editorial changes to the wording of the recommendations on CTG interpretation and subsequent actions, to aid implementation, encourage standardised practice and to clarify which team members should be involved
- 15 Clarification of the difference between antenatal and intrapartum CTG interpretation
- 16 Editorial changes to the current definitions for the duration of the second stage of labour and the definition of delay
- 17 Editorial changes to the recommendation on assisted birth to clarify when analgesia is required, and when anaesthesia is required.
- 18 Editorial changes to the recommendations on the dose of oxytocin to be used if started for the first time in the second stage of labour
- 19 Editorial changes to the recommendations on the risk factors for postpartum haemorrhage to include ongoing nature of assessment and medications which may increase the risk.
- 20 Editorial changes to the recommendations on the management of postpartum haemorrhage to clarify the amount of oxygen and dose of medications to be given.
- 21 Editorial changes to the recommendation to assess babies using the APGAR score so it is also applicable to non-white babies

- 22 Editorial changes to the recommendations on skin-to-skin contact to include information on positioning and monitoring.

3.7 Main outcomes

The main outcomes that may be considered when searching for and assessing the evidence are:

For the woman:

- maternal death
- measures of blood loss (including measures of postpartum iron deficiency)
- genital tract trauma
- women's experience of labour and birth
- mode of birth
- unassisted vaginal birth (that is, without induction, without the use of instruments, not by caesarean birth and without general, spinal or epidural anaesthetic before or during delivery)
- birth without interventions (that is, unassisted vaginal birth which does not need augmentation of labour, use of opioid drugs, artificial rupture of the membranes, or managed third stage).

For the baby:

- neonatal death (death before the age of 28 completed days after live birth)
- breastfeeding
- respiratory complications
- neurological complications
- feeding difficulties
- Apgar scores
- Infection.

4 NICE quality standards and NICE Pathways

4.1 NICE quality standards

NICE quality standards that may need to be revised or updated when this guideline is published

- [Intrapartum care: existing medical conditions and obstetric complications \(2020\)](#) NICE quality standard [QS192]
- [Intrapartum care](#) (2015, updated 2017) NICE quality standard [QS105]
- [Inducing labour](#) (2014) NICE quality standard [QS60]

4.2 NICE Pathways

When this guideline is published, we will update the existing NICE Pathway on [Intrapartum care](#). NICE Pathways bring together everything NICE has said on a topic in an interactive flowchart.

5 Further information

The guideline is expected to be published in March 2023.

You can follow progress of the [guideline](#).

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