NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Guideline

Intrapartum care for healthy women and babies

Draft for consultation, April 2023

This guideline covers the care of healthy women and their babies, during labour and immediately after the birth. It focuses on women who give birth between 37 and 42 weeks of pregnancy (‘term’). The guideline helps women to make an informed choice about where to have their baby and about their care in labour. It also aims to reduce variation in aspects of care.

In this guideline we use the terms 'woman' or 'mother' throughout. These should be taken to include people who do not identify as women but are pregnant or have given birth.

This guideline will update NICE guideline CG190 (published December 2014).

Who is it for?

- Healthcare professionals
- Commissioners and providers of maternity services
- Healthy women who have had a straightforward pregnancy and give birth between 37 and 42 weeks of pregnancy, and their families and carers

What does it include?

- the recommendations
- recommendations for research
- rationale and impact sections that explain why the committee made the **[2023]** recommendations and how they might affect practice
- the guideline context.

Information about how the guideline was developed is on the guideline's webpage. This includes the evidence reviews, the scope, details of the committee and any declarations of interest.

New and updated recommendations

We have reviewed the evidence on some aspects of pain relief, regional analgesia, prelabour rupture of membranes, care in all stages of labour and postpartum care. You are invited to comment on the new and updated recommendations. These are marked as **[2023]**.

You are also invited to comment on recommendations that we propose to delete from the **[2014]** guideline and the **[2017]** update.

We have not reviewed the evidence for the recommendations shaded in grey, and cannot accept comments on them. In some cases, we have made minor wording changes for clarification.

See update information for a full explanation of what is being updated.

Full details of the evidence and the committee's discussion on the **[2023]** recommendations are in the evidence reviews. Evidence for the **[2014]** recommendations is in the full version of the **[2014]** guideline. Evidence for the **[2017]** recommendations is in the evidence reviews for the **[2017]** update.

Contents

Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in NICE's information on making decisions about your care.

Making decisions using NICE guidelines explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

Recommendations

1.1 Antenatal education about labour

1.1.1 Give all nulliparous women information antenatally about:

- what to expect in the latent first stage of labour
- how to work with any pain they experience
- how to contact their midwifery care team and what to do in an emergency. **[2014]**

1.1.2 Offer all nulliparous women antenatal education about the signs of labour, consisting of:

- how to differentiate between Braxton Hicks contractions and active labour contractions
- the expected frequency of contractions and how long they last
- recognition of amniotic fluid ('waters breaking')
- description of normal vaginal loss. **[2014]**

1.1.3 For all women, discuss their preferences and choices for care during labour and birth as early as possible in their pregnancy, and record these choices. Emphasise that:

- making and recording care choices in advance will mean they will have more time to consider all their options
- they are free to change their mind at any time, including during labour or while giving birth
- choices and decisions may need to be discussed again if problems or changes occur during pregnancy or labour. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

1.2 Service organisation

1.2.1 Commissioners and providers, including networks of providers, should ensure that all 4 birth settings (home, freestanding midwifery unit, alongside midwifery unit, obstetric unit) are available to all women (in the local area or in a neighbouring area). **[2014, amended 2023]**

1.2.2 Ensure that all women giving birth have timely access to an obstetric unit if they need transfer of care for medical reasons or because they request regional analgesia. Audit transfer times and reasons for delay in transfers so women can be informed of local service availability. **[2014, amended 2023]**

1.2.3 Commissioners and providers, including networks of providers, should ensure that there are:

- robust protocols in place for transfer of care between settings (see also section 1.5)
- clear local pathways for the continued care of women who are transferred from one setting to another, including:
  - when crossing provider boundaries
  - if the nearest obstetric or neonatal unit is closed to admissions or the local midwifery-led unit is full. **[2014]**

1.2.4 Commissioners and providers, including networks of providers, should ensure that there are multidisciplinary clinical governance structures in place to enable the oversight of all birth settings. These structures should include, as a minimum, midwifery, obstetric, anaesthetic and neonatal expertise, and adequately supported user representation. **[2014, amended 2023]**

1.3 Planning place of birth

All women at low risk of complications

1.3.1 Explain to both multiparous and nulliparous women who are at low risk of complications that giving birth is generally very safe for both the woman and her baby. **[2014]**

1.3.2 Advise women that additional resources to help them plan their place of birth are available on the NICE website and the NHS website. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

1.3.3 Explain to both multiparous and nulliparous women that they may choose any birth setting (home, freestanding midwifery unit, alongside midwifery unit or obstetric unit), and support them in their choice of setting wherever they choose to give birth:

- advise low-risk multiparous women that planning to give birth at home or in a midwifery-led unit (freestanding or alongside) is particularly suitable for them because the rate of interventions is lower and the outcome for the baby is no different compared with an obstetric unit
- advise low-risk nulliparous women that planning to give birth in a midwifery-led unit (freestanding or alongside) is particularly suitable for them because the rate of interventions is lower and the outcome for the

baby is no different compared with an obstetric unit. Explain that if they plan birth at home there is a small increase in the risk of an adverse outcome for the baby. **[2014]**

1.3.4 Ensure that all healthcare professionals involved in the care of pregnant women are familiar with the types and frequencies of serious medical problems that can affect babies (see appendix A), in order to be able to provide this information to women if they request it. **[2014]**

1.3.5 Give women the following information, including local statistics, about all local birth settings, and update them if this changes during their pregnancy:

- access to midwives, including:
  - the likelihood of being cared for in labour by a familiar midwife
  - the likelihood of receiving one-to-one care throughout labour (not necessarily being cared for by the same midwife for the whole of labour)
- access to medical staff (obstetric, anaesthetic and neonatal)
- availability of birthing pools
- access to pain relief, including Entonox (a 50:50 mixture of oxygen and nitrous oxide) and medicines (for example, pethidine, diamorphine, patient-controlled analgesia and regional analgesia)
- the likelihood of being transferred to an obstetric unit (if this is not the woman's chosen place of birth), the reasons why this might happen, the time it may take, the delay in care this may cause, and how her birth companion will travel. Refer to table 1 if no local data are available.

More information on transfer to an obstetric unit for different groups of women is included in tables 4, 6 and 8. **[2014, amended 2023]**

Table 1. Primary reasons for transfer to an obstetric unit by number of women transferred (% of total transferred from each setting)

Primary reason for transfer to an obstetric unit	From home (n = 3,529)	From a freestanding midwifery unit (n = 2,457)	From an alongside midwifery unit (n = 4,401)
Delay during first or second stage of labour	1,144 (32.4%)	912 (37.1%)	1,548 (35.2%)
Abnormal fetal heart rate	246 (7.0%)	259 (10.5%)	477 (10.8%)
Request for regional anaglesia	180 (5.1%)	163 (6.6%)	585 (13.3%)
Meconium staining	432 (12.2%)	301 (12.2%)	538 (12.2%)
Retained placenta	250 (7.0%)	179 (7.3%)	203 (4.6%)
Repair of perineal trauma	386 (10.9%)	184 (7.5%)	369 (8.4)
Postpartum neonatal concerns	180 (5.1%)	63 (2.6%)	5 (0.11%)
Other	711 (20.1%)	396 (16.2%)	676 (16.3%)

'Primary reason' was the main reason given for transfer to an obstetric unit for each woman (there may be more than 1 reason).

Source: Birthplace in England Research Study, 2011.

Impact of BMI on choice of place of birth

1.3.6 Advise women that having a BMI at booking of 25 kg/m^2 or more may be associated with increased risks for them and their baby, and that they should take this into account when planning their place of birth. Use tables 2, 3, 4 and 5 below to discuss these risks with women. **[2023]**

Table 2. Nulliparous women: how BMI may affect the rate of stillbirth, neonatal death or the baby needing neonatal care

BMI at booking (kg/m^2)	Average rate of stillbirth, neonatal death or baby needing neonatal care
18.5 to 24.9	36 per 1,000 (so this does not happen in about 964 pregnancies per 1,000).
25 to 29.9	No data
30 to 35	No data
More than 35	67 per 1,000 (so this does not happen in about 933 pregnancies per 1,000). This is an average increase of 31 per 1,000 compared to women with a BMI 18.5 to 24.9 kg/m^2 (so for about 969 pregnancies per 1,000 the outcome was the same).

Table 3. Nulliparous women: how BMI above or below 35 kg/m^2 may affect the rate of caesarean birth and postpartum haemorrhage

BMI at booking (kg/m^2)	Average rate of intrapartum caesarean birth (category 1, 2 or 3)	Average rate of emergency caesarean birth (category 1 or 2)	Average rate of postpartum haemorrhage
35 or less	82 per 1,000 (so this does not happen in about 918 pregnancies per 1,000).	65 per 1,000 (so this does not happen in about 935 pregnancies per 1,000).	17 per 1,000 (so this does not happen in about 983 pregnancies per 1,000).
More than 35	138 per 1,000 (so this does not happen in about 862 pregnancies per 1,000). This is an average increase of 56 per 1,000 compared to women with a BMI less than 35 (so for about 944 pregnancies per 1,000 the outcome was the same).	122 per 1,000 (so this does not happen in about 878 pregnancies per 1,000). This is an average increase of 57 per 1,000 compared to women with a BMI less than 35 (so for about 943 pregnancies per 1,000 the outcome was the same).	51 per 1,000 (so this does not happen in about 949 pregnancies per 1,000). This is an average increase of 34 per 1,000 compared to women with a BMI less than 35 (so for about 966 pregnancies per 1,000 the outcome was the same).

Table 4. Multiparous women: how BMI may affect the rate of transfer from home and the rate of stillbirth, neonatal death or the baby needing neonatal care

BMI at booking (kg/m^2)	Average rate of transfer from home to an obstetric unit	Average rate of stillbirth, neonatal death or baby needing neonatal care
18.5 to 24.9	102 per 1,000 (so this does not happen in about 898 pregnancies per 1,000).	17 per 1,000 (so this does not happen in about 983 pregnancies per 1,000).
25 to 29.9	No data	No data
30 to 35	145 per 1,000 (so this does not happen in about 855 pregnancies per 1,000). This is an average increase of 43 per 1,000 compared to women with a BMI 18.5 to 24.9 kg/m^2 (so for about 957 pregnancies per 1,000 the outcome was the same).	No data
More than 35	No data	27 per 1,000 (so this does not happen in about 973 pregnancies per 1,000). This is an average increase of about 10 per 1,000 compared to women with a BMI 18.5 to 24.9 kg/m^2 (so for about 990 pregnancies per 1,000 the outcome was the same).

Table 5. All women: how BMI may affect the rate of caesarean birth or the rate of stillbirth, neonatal death or the baby needing neonatal care

BMI at booking (kg/m^2)	Average rate of intrapartum caesarean birth (category 1, 2 or 3)	Average rate of stillbirth, neonatal death or the baby needing neonatal care
Less than 18.5	No data	6 per 1,000 (so this does not happen in about 994 pregnancies per 1,000). This is an average decrease of about 12 per 1,000 compared to women with a BMI 18.5 to 24.9 kg/m^2 (so for about 988 pregnancies per 1,000 the outcome was the same).
18.5 to 24.9	95 per 1,000 (so this does not happen in about 905 pregnancies per 1,000).	18 per 1,000 (so this does not happen in about 982 pregnancies per 1,000).
25 to 29.9	123 per 1,000 (so this does not happen in about 877 pregnancies per 1,000). This is an average increase of 28 per 1,000 compared to women with a BMI 18.5 to 24.9 kg/m^2 (so for about 972 pregnancies per 1,000 the outcome was the same).	No data
30 to 35	133 per 1,000 (so this does not happen in about 867 pregnancies per 1,000). This is an average increase of 38 per 1,000 compared to women with a BMI 18.5 to 24.9 kg/m^2 (so for about 962 pregnancies per 1,000 the outcome was the same).	No data
More than 35	137 per 1,000 (so this does not happen in about 863 pregnancies per 1,000). This is an average increase of 42 per 1,000 compared to women with a BMI 18.5 to 24.9 kg/m^2 (so for about 958 pregnancies per 1,000 the outcome was the same).	No data

Source: evidence review A. For more details on risks identified in different settings see evidence review A.
For more information of the categories of caesarean birth see the NICE guideline on caesarean birth.

Note: these data are based on a population of women of mixed ethnicity which reflects the ethnic composition of the UK population. New reference ranges defining overweight and obesity for non-pregnant women from different ethnic groups are available in the NICE guideline on obesity, but the correlation of these revised ranges with intrapartum risks for women and their babies is not known.

For a short explanation of why the committee made these 2023 recommendations see the rationale section on impact of BMI on choice of place of birth.

Full details of the evidence and the committee's discussion are in evidence review A: impact of BMI on choice of place of birth.

Low-risk multiparous women

1.3.7 Using tables 6 and 7 below, explain to low-risk multiparous women that:

- planning birth at home or in a freestanding midwifery unit is associated with a higher rate of spontaneous vaginal birth than planning birth in an alongside midwifery unit, and these 3 settings are associated with higher rates of spontaneous vaginal birth than planning birth in an obstetric unit
- planning birth in an obstetric unit is associated with a higher rate of interventions, such as vaginal birth with forceps or ventouse, caesarean birth and episiotomy, compared with planning birth in other settings
- there are no differences in outcomes for the baby associated with planning birth in any setting. **[2014]**

Table 6. Low-risk multiparous women: Rates of different modes of birth, transfer to an obstetric unit and obstetric interventions for each planned place of birth (number of incidences per 1,000 women giving birth by location)

Type of birth	Home	Freestanding midwifery unit	Alongside midwifery unit	Obstetric unit
Spontaneous vaginal birth	984	980	967	927
Birth with forceps or ventouse	9	12	23	38

Caesarean birth	7	8	10	35
Transfer to an obstetric unit	115	94	125	10
Regional analgesia (epidural and/or spinal)	28	40	60	121
Episiotomy	15	23	35	56
Blood transfusion	4	4	5	8

For obstetric unit transfer to an obstetric unit, the 10 cases noted are the estimated transfer rate from one obstetric unit to a different obstetric unit owing to lack of capacity or expertise. For regional anaesthesia, Blix et al. reported epidural analgesia and Birthplace reported spinal or epidural analgesia.

Sources: Birthplace in England Research Study, 2011, Outcomes of planned home births and planned hospital births in low-risk women in Norway between 1990 and 2007. Blix et al. 2012.

Table 7. Low-risk multiparous women: Outcomes for the baby for each planned place of birth (by number of babies per 1,000 births)

Population	Home	Freestanding midwifery unit	Alongside midwifery unit	Obstetric unit
Babies without serious medical problems	997	997	998	997
Babies with serious medical problems	3	3	2	3

Serious medical problems were combined: neonatal encephalopathy and meconium aspiration syndrome were the most common adverse events, together accounting for 75% of the total. Stillbirths after the start of care in labour and death of the baby in the first week of life accounted for 13% of the events. Fractured humerus and clavicle were uncommon outcomes (less than 4% of adverse events). For the frequency of these events (how often any of them actually occurred), see appendix A.

Source: Birthplace in England Research Study, 2011.

Low-risk nulliparous women

1.3.8 Using tables 8 and 9 below, explain to low-risk nulliparous women that:

- planning birth at home or in a freestanding midwifery unit is associated with a higher rate of spontaneous vaginal birth than planning birth in an alongside midwifery unit, and these 3 settings are associated with

higher rates of spontaneous vaginal birth than planning birth in an obstetric unit

- planning birth in an obstetric unit is associated with a higher rate of interventions, such as vaginal birth with forceps or ventouse, caesarean birth and episiotomy, compared with planning birth in other settings
- there are no differences in outcomes for the baby associated with planning birth in an alongside midwifery unit, a freestanding midwifery unit or an obstetric unit
- planning birth at home is associated with an overall small increase (about 4 more per 1,000 births) in the risk of a baby having a serious medical problem compared with planning birth in other settings. **[2014]**

Table 8. Low risk nulliparous women: Rates of different modes of birth, transfer to an obstetric unit and obstetric interventions for each planned place of birth (number of incidences per 1,000 women giving birth by location)

Type of birth	Home	Freestanding midwifery unit	Alongside midwifery unit	Obstetric unit
Spontaneous vaginal birth	794	813	765	688
Birth with (forceps or ventouse)	126	118	159	191
Caesarean birth	80	69	76	121
Transfer to an obstetric unit	450	363	402	10
Regional analgesia (epidural and/or spinal)	218	200	240	349
Episiotomy	165	165	216	242
Blood transfusion	12	8	11	16

For obstetric unit transfer to an obstetric unit, the 10 cases noted are the estimated transfer rate from one obstetric unit to a different obstetric unit owing to lack of capacity or expertise. For regional anaesthesia, Blix et al. reported epidural analgesia and Birthplace reported spinal or epidural analgesia.

Sources: Birthplace in England Research Study, 2011, Outcomes of planned home births and planned hospital births in low-risk women in Norway between 1990 and 2007. Blix et al., 2012.

Table 9. Low-risk nulliparous women: Outcomes for the baby for each planned place of birth (by number of babies per 1,000 births)

Population	Home	Freestanding midwifery unit	Alongside midwifery unit	Obstetric unit
Babies without serious medical problems	991	995	995	995
Babies with serious medical problems	9	5	5	5

Serious medical problems were combined: neonatal encephalopathy and meconium aspiration syndrome were the most common adverse events, together accounting for 75% of the total. Stillbirths after the start of care in labour and death of the baby in the first week of life accounted for 13% of the events. Fractured humerus and clavicle were uncommon outcomes (less than 4% of adverse events). For the frequency of these events (how often any of them actually occurred), see appendix A.

Source: Birthplace in England Research Study, 2011.

Medical conditions and other factors that may affect planned place of birth

1.3.9 Use tables 10 to 13 below as part of an assessment for a woman choosing her planned place of birth:

- tables 10 and 11 show medical conditions or other situations in which there is increased risk for the woman or baby during or shortly after labour, where care in an obstetric unit would be expected to reduce this risk
- the factors listed in tables 12 and 13 are not reasons in themselves for advising birth within an obstetric unit, but indicate that further consideration of birth setting may be needed
- discuss these risks and the additional care that can be provided in the obstetric unit with the woman so that she can make an informed choice about planned place of birth. **[2007, amended 2014]**

Table 10. Medical conditions indicating increased risk and suggesting planned birth at an obstetric unit

Disease area	Medical condition
Cardiovascular	Confirmed cardiac disease

	Hypertensive disorders
Respiratory	Asthma requiring an increase in treatment or hospital treatment Cystic fibrosis
Haematological	Haemoglobinopathies – sickle-cell disease, beta-thalassaemia major History of thromboembolic disorders Immune thrombocytopenia purpura or other platelet disorder or platelet count below 100 × 10^9/litre Von Willebrand's disease Bleeding disorder in the woman or unborn baby Atypical antibodies which carry a risk of haemolytic disease of the newborn
Endocrine	Hyperthyroidism Diabetes requiring medication
Infective	Hepatitis B/C with abnormal liver function tests Toxoplasmosis – women receiving treatment Current active infection of chicken pox/rubella/genital herpes in the woman or baby Tuberculosis under treatment
Immune	Systemic lupus erythematosus Scleroderma
Renal	Abnormal renal function Renal disease requiring supervision by a renal specialist
Neurological	Epilepsy Myasthenia gravis Previous cerebrovascular accident
Gastrointestinal	Liver disease associated with current abnormal liver function tests
Psychiatric	Psychiatric disorder requiring current inpatient care

Table 11. Other factors indicating increased risk and suggesting planned birth at an obstetric unit

Factor	Additional information
Previous complications	Unexplained stillbirth/neonatal death or previous death related to intrapartum difficulty Previous baby with neonatal encephalopathy Pre-eclampsia requiring preterm birth Placental abruption with adverse outcome Eclampsia Uterine rupture Primary postpartum haemorrhage requiring additional treatment or blood transfusion Caesarean birth

	Shoulder dystocia
Current pregnancy	Multiple birth Placenta praevia Pre-eclampsia or pregnancy-induced hypertension Preterm labour or preterm prelabour rupture of membranes Placental abruption Anaemia – haemoglobin less than 85 g/litre at onset of labour Confirmed intrauterine death Substance misuse Alcohol dependency requiring assessment or treatment Gestational diabetes requiring medication Malpresentation – breech or transverse lie Recurrent antepartum haemorrhage Small for gestational age in this pregnancy (less than fifth centile or reduced growth velocity on ultrasound as defined in Saving Babies Lives version 2) Abnormal fetal heart rate, umbilical or fetal doppler studies Ultrasound diagnosis of oligo/polyhydramnios
Previous gynaecological history	Myomectomy Hysterotomy

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2 **Table 12. Medical conditions indicating individual assessment is needed when**
3 **planning place of birth**

Disease area	Medical condition
Cardiovascular	Cardiac disease without intrapartum implications
Haematological	Atypical antibodies not putting the baby at risk of haemolytic disease Sickle-cell trait Thalassaemia trait Anaemia – haemoglobin 85 to 105 g/litre at onset of labour
Endocrine	Unstable hypothyroidism such that a change in treatment is needed
Infective	Risk factors associated with group B streptococcus where it is likely that antibiotics in labour will be needed Hepatitis B/C with normal liver function tests (as baby will need paediatric review after birth) Carrier of/infected with HIV
Immune	Non-specific connective tissue disorders
Skeletal/Neurological	Spinal abnormalities Previous fractured pelvis Neurological deficits
Gastrointestinal	Liver disease without current abnormal liver function

	Crohn's disease Ulcerative colitis

Table 13. Other factors to consider when planning place of birth

Factor	Additional information
Previous complications	Stillbirth/neonatal death with a known non-recurrent cause Pre-eclampsia developing at term Placental abruption with good outcome History of previous baby more than 4.5 kg Extensive vaginal, cervical, or third- or fourth-degree perineal trauma Retained placenta requiring manual removal in theatre Previous term baby with jaundice requiring exchange transfusion Major gynaecological surgery
Current pregnancy	Antepartum bleeding of unknown origin (single episode after 24 weeks of pregnancy) BMI at booking (see the recommendations on Impact of BMI on place of birth) Blood pressure of 140 mmHg systolic or 90 mmHg diastolic or more on 2 occasions Clinical or ultrasound suspicion of macrosomia Induction of labour Grand multiparity (parity 4 or more) Recreational drug use Under current outpatient psychiatric care Age 40 or over at booking Fibroids Fetal abnormality

1.3.10 If further discussion is wanted by either the midwife or the woman about the choice of planned place of birth, arrange this with a senior or consultant midwife and/or a consultant obstetrician if there are obstetric issues. **[2014, amended 2023]**

1.3.11 When discussing the woman's choice of place of birth with her, do not disclose personal views or judgements about her choices. **[2014]**

1.4 Care throughout labour in all birth settings

1.4.1 For all women giving birth in all birth settings, follow the principles in the NICE guideline on patient experience in adult NHS services and the NICE guideline on shared decision making, and support the woman's choices. **[2014, amended 2023]**

1.4.2 All staff and organisations should ensure that all birth settings have a culture of respect for each woman as an individual undergoing a significant and emotionally intense life experience, so that the woman is in control, is listened to, her choices are supported, and she is cared for with compassion. **[2014, amended 2023]**

1.4.3 All staff should demonstrate, through their own words and behaviour, appropriate ways of relating to and talking about women and their birth companion(s), and of talking about birth and the choices to be made when giving birth. **[2014, amended 2023]**

One-to-one care in all birth settings

1.4.4 Maternity services should:

- provide a model of care that supports one-to one care in labour for all women **and**
- benchmark services and identify overstaffing or understaffing by using workforce planning models and/or woman-to-midwife ratios. **[2014]**

1.4.5 Do not leave a woman in established labour on her own except for short periods or at the woman's request. **[2007]**

1.4.6 For guidance on ensuring continuity of care, see recommendation 1.4.1 in the NICE guideline on patient experience in adult NHS services. **[2016]**

Communication

1.4.7 When giving women (and their birth companions) information about care during labour:

- use clear language

- tailor the timing, content and delivery of information to the needs and preferences of the woman
- ensure that the information given supports shared decision making between the woman and her healthcare team, which may include:
  - using reliable interpreting services when needed (for example, for languages other than English, British Sign Language, Makaton)
  - using interpreters who are independent of the woman (rather than, for example, a family member or friend)
  - using culturally sensitive language
  - adapting communication when necessary, for example for people with learning disabilities. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

1.4.8 Treat all women in labour with kindness, dignity and respect. **[2007, amended 2023]**

1.4.9 Ensure that the woman is empowered, informed and central to making decisions about her care, and recognise that the way in which care is given is key to this. Support the woman so she:

- maintains control of what is happening to her
- feels confident that her care team is there to assist her
- understands that she can accept or decline any care that is offered, can change her mind, and that any decisions she makes will not affect the care offered.

To ensure this happens, establish a rapport with the woman, ask her about her wants and expectations for labour, and be aware of the importance of both tone and demeanour and the actual words used. Use this information to support her and guide her care through her labour. **[2007, amended 2023]**

1.4.10 To establish communication with the woman:

- greet her and her birth companion with a smile and a personal welcome, introduce yourself and explain your role in her care
- maintain a calm, confident and professional approach
- respect the woman's personal space, privacy and dignity, and ask others to do the same (for example, knock and wait before entering the woman's room)
- ask how the woman is feeling and whether there is anything in particular she would like to discuss or if she has any concerns
- discuss the woman's labour and birth preferences and review and discuss any written birth plan
- ensure the woman is aware of pain relief options, and provide both the opportunity to discuss these options and give information if she requests it to establish what her choices are
- encourage the woman to adapt the environment to meet her individual needs
- explain all procedures and observations before they take place and ask for consent for them, focusing on the woman rather than the technology or the documentation
- show the woman and her birth companion(s) how to summon help, and reassure her that she can do so whenever and as often as she needs to
- when leaving the room, let her know when you will return
- involve the woman in any handover of care to another professional, either when additional expertise has been brought in or at the end of a shift – this should occur in the room, when appropriate, with the woman at the centre of the handover discussion. **[2007, amended 2023]**

Position and mobilisation

1.4.11 Encourage and help the woman to move and adopt whatever positions she finds most comfortable throughout labour, except lying flat on her back. **[2007, amended 2023]**

Support

1.4.12 Encourage the woman to have support from birth companion(s) of her choice. **[2007]**

Hygiene measures

1.4.13 Tap water may be used if cleansing is needed before vaginal examination. **[2007]**

1.4.14 Routine hygiene measures taken by staff caring for women in labour, including standard hand hygiene and single-use non-sterile gloves, are appropriate to reduce cross-contamination between women, babies and healthcare professionals. **[2007]**

1.4.15 Selection of personal protective equipment for healthcare professionals must be based on an assessment of the risk of exposure to blood and/or bodily fluids, non-intact skin or mucous membranes. Standard infection control procedures to prevent transmission of recognised and unrecognised infections must be followed. See the National infection prevention and control manual for England. **[2007, amended 2023]**

1.5 Transfer of care and changing place of birth

Transfer of care refers to the transfer between midwifery-led care and obstetric-led care. This may or may not involve transport from 1 location to another. Women who are receiving midwifery-led care in an obstetric unit can have responsibility for their care transferred to being obstetric-led without being moved.

1.5.1 Base any decisions about transfer of care on clinical findings and discuss the options with the woman and her birth companion(s). **[2014]**

1.5.2 If contemplating transfer of care:

- talk with the woman and her birth companion(s) about the reasons for this and what they can expect, including the time needed for transfer
- address any concerns she has and try to allay any anxiety about the transfer

- ensure that her wishes are respected and her informed consent is obtained. **[2014]**

1.5.3 When arranging transfer of care, the midwife attending the labour should contact the ambulance service (if appropriate) and the coordinating midwife in the obstetric unit. The coordinating midwife should then alert the relevant healthcare professionals (obstetric, anaesthetic and neonatal). **[2014]**

1.5.4 Carry out transfer of care of women in labour as soon as possible after the decision to transfer has been made. Categorise transfers as:

- life-threatening emergency (ambulance service category 1)
- urgent (for example, for pain relief) (ambulance service category 2). **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

1.5.5 When arranging transfer from 1 location to another, ensure the following:

- before transfer, the woman is dressed, wrapped in a blanket or otherwise covered in a way that she feels is comfortable and appropriate
- the woman is made to feel as comfortable as possible before and during transfer
- any ambulance staff or other personnel involved are aware that some positions may make the woman uncomfortable or afraid and could affect her labour, so she should be encouraged to choose how to move and what position to adopt if possible, in accordance with ambulance service protocols
- communication and companionship are maintained:

  - explain the arrangements for transfer to the woman and her birth companion(s)
  - ensure a midwife who has been involved in the woman's care up to that point travels with her
  - carry out a handover of care that involves the woman
- the woman is monitored throughout the transfer, as appropriate for her stage of labour, including intermittent auscultation of the fetal heart where possible and safe to do
- enable the woman's birth companion(s) to travel with her in the ambulance if that is what she wants and this is agreed by her care team and the ambulance crew. **[2014, amended 2023]**

1.5.6 If a woman is transferred to an obstetric unit after the birth (see section 1.12), ensure that her baby goes with her. **[2014]**

1.6 Pain relief during labour

Attitudes to pain and pain relief in childbirth

1.6.1 Healthcare professionals should think about how their own values and beliefs inform their attitude to coping with pain in labour and ensure their care supports the woman's choice. **[2007]**

Non-pharmacological pain-relieving strategies

1.6.2 Advise women that breathing exercises, having a shower or bath, and massage may reduce pain during the latent first stage of labour. **[2014, amended 2023]**

1.6.3 Do not offer or advise aromatherapy, yoga or acupressure for pain relief during the latent first stage of labour. If a woman wants to use any of these techniques, support her choice. **[2014, amended 2023]**

1.6.4 If a woman chooses to use breathing and relaxation techniques in labour, support her choice. **[2007]**

1.6.5 If a woman chooses to use massage techniques in labour that have been taught to birth companions, support her choice. **[2007]**

1.6.6 Advise women who wish to use transcutaneous electrical nerve stimulation (TENS) that:

- TENS devices are not provided by the NHS, but they can provide and use their own device if they wish
- there is very little evidence of its effectiveness in established labour, but no evidence of harm
- other forms of analgesia may still be needed. **[2007, amended 2023]**

1.6.7 Do not offer acupuncture, acupressure or hypnosis during labour. If a woman wants to use any of these techniques, support her choice. **[2007, amended 2023]**

1.6.8 Support the playing of music of the woman's choice in labour. **[2007]**

1.6.9 Offer the woman the opportunity to labour in water for pain relief. **[2007]**

1.6.10 For women labouring in water, monitor the temperature of the woman and the water hourly to ensure that the woman is comfortable and not becoming pyrexial. The temperature of the water should not be above 37.5°C. **[2007]**

1.6.11 Keep baths and birthing pools clean using a protocol agreed with the local microbiology department or infection control guidance and, in the case of birthing pools, in accordance with the manufacturer's guidelines. **[2007, amended 2023]**

Sterile water injections

1.6.12 Consider intracutaneous or subcutaneous sterile water injections as a pain relief option for women in labour with back pain. **[2023]**

1.6.13 Explain to women that sterile water injections can provide relief of back pain from 10 minutes after the injection for up to 3 hours, but can lead to an initial stinging sensation. **[2023]**

1.6.14 If the woman chooses to have sterile water injections, give this at 4 different injection points around the Michaelis' Rhomboid, using doses of

0.1 ml intracutaneously or 0.5 ml subcutaneously at each injection point. **[2023]**

For a short explanation of why the committee made these 2023 recommendations see the rationale section on sterile water injections.

Full details of the evidence and the committee's discussion are in evidence review C: sterile water injections.

Inhalational analgesia

1.6.15 Ensure that Entonox (a 50:50 mixture of oxygen and nitrous oxide) is available in all birth settings as it may reduce pain in labour, but inform the woman that it may make her feel nauseous and light-headed. **[2007]**

Pharmacological analgesia

1.6.16 Ensure that pethidine, diamorphine or other opioids are available in all birth settings. Inform the woman that these will provide limited pain relief during labour and may have significant side effects for both her (for example, drowsiness, nausea and vomiting) and her baby (for example, short-term respiratory depression and drowsiness which may last several days and may make it more difficult to breastfeed). **[2007, amended 2023]**

1.6.17 If an intravenous or intramuscular opioid is used, also administer an antiemetic. **[2007]**

1.6.18 Women should not enter water (a birthing pool or bath) within 2 hours of opioid administration or if they feel drowsy. **[2007]**

1.6.19 Consider intravenous remifentanil patient-controlled analgesia (PCA) 40 micrograms per bolus with a 2 minute lockout period instead of intramuscular opioids, as an option for women who want ongoing pain relief during labour and birth but who do not want an epidural.

In April 2023, this was an off-label use of remifentanil. See NICE's information on prescribing medicines. **[2023]**

1.6.20 Only use remifentanil PCA in obstetric units because of the risk of respiratory depression in women. In midwifery-led units and for home births, use intramuscular opioids if needed. **[2023]**

1.6.21 Discuss the risks and benefits of remifentanil PCA with women (using tables 14 and 15) and make a shared decision about its use. Explain that, with 40 micrograms of remifentanil compared to intramuscular pethidine:

- they are less likely to need an epidural if using remifentanil PCA
- they are more likely to have a spontaneous vaginal birth when using remifentanil PCA
- they are less likely to have a birth with forceps or ventouse when using remifentanil PCA
- they are more likely to have a reduced oxygen saturation and to need supplemental oxygen when using remifentanil PCA
- there is evidence showing there is no difference in maternal respiratory rate below 8 breaths per minute, caesarean birth, pain (based on a visual analogue scale), maternal satisfaction, or breastfeeding within the first hour after birth. **[2023]**

Table 14. Outcomes that were more or less likely for women using intravenous remifentanil PCA compared to intramuscular pethidine

Outcome	Intravenous remifentanil PCA	Intramuscular pethidine	Risk difference
Request for epidural analgesia	About 194 per 1,000 women would be expected to request epidural analgesia (so 806 would not)	About 407 per 1,000 women would be expected to request epidural analgesia (so 593 would not)	About 213 per 1,000 fewer women would be expected to request epidural analgesia with intravenous remifentanil PCA, so for 787 there would be no difference

Spontaneous vaginal birth	About 647 per 1,000 women would be expected to have a spontaneous vaginal birth (so 353 would not)	About 536 per 1,000 women would be expected to have a birth with forceps or ventouse (so 464 would not)	About 111 per 1,000 more women would be expected to have a spontaneous vaginal birth with intravenous remifentanil PCA, so for 889 there would be no difference
Birth with forceps or ventouse	About 145 per 1,000 women would be expected to have a birth with forceps or ventouse (so 856 would not)	About 245 per 1,000 women would be expected to have a birth with forceps or ventouse (so 756 would not)	About 100 per 1,000 fewer women would be expected to have a birth with forceps or ventouse with intravenous remifentanil PCA, so for 900 there would be no difference
Requirement for supplemental oxygen	About 461 per 1,000 women would be expected to need supplemental oxygen (so 539 would not)	About 13 women per 1,000 women would be expected to need supplemental oxygen (so 987 would not)	About 448 per 1,000 more women would be expected to need supplemental oxygen with intravenous remifentanil PCA, so for 552 there would be no difference
Maternal reduced oxygen saturation (less than 94 % SpO_2)	About 138 per 1,000 women would be expected to have reduced oxygen saturation (so 862 would not)	About 52 per 1,000 women would be expected to have reduced oxygen saturation (so 948 would not)	About 86 per 1,000 more women would be expected to have reduced oxygen saturation with intravenous remifentanil PCA, so for 914, there would be no difference

1 See evidence review D for more details. See table 15 for outcomes that were similar
2 regardless of intervention.

Table 15. Outcomes that were similar regardless of the intervention for women using intravenous remifentanil PCA compared to women using intramuscular pethidine

Outcome
Maternal respiratory rate < 8 breaths per minute
Caesarean birth
Pain in labour (based on a visual analogue scale)
Maternal satisfaction
Breastfeeding within first hour of birth

1.6.22 When using remifentanil PCA, ensure that:

- there is the continuous presence of a midwife (one-to-one care)
- there is continuous cardiotocography monitoring
- there is continuous monitoring of respiratory function (observation of breathing and pulse oximetry)
- units have clear guidelines on responding to respiratory depression
- supplemental oxygen is available
- immediate anaesthetic support is available in case of respiratory depression. **[2023]**

For a short explanation of why the committee made these 2023 recommendations see the rationale section on remifentanil patient-controlled analgesia.

Full details of the evidence and the committee's discussion are in evidence review D: remifentanil patient-controlled analgesia.

Regional analgesia

Information about regional analgesia

1.6.23 If a woman requests regional analgesia, talk with her about the benefits and risks and the effect it may have on her pain and her labour. **[2007, amended 2023]**

1.6.24 Provide information to women about epidural analgesia, including the following:

- it is available only in obstetric units so transfer will be necessary if she is in another setting
- it provides more effective pain relief than opioids
- it may not always be fully effective and may need to be adjusted or replaced
- complications during insertion of the epidural may cause a severe postnatal headache
- it is not associated with long-term backache
- it is not associated with a longer first stage of labour or an increased chance of a caesarean birth
- it is associated with a longer second stage of labour and an increased chance of birth with forceps or ventouse
- it will be accompanied by a more intensive level of monitoring and intravenous access, and so mobility may be reduced. **[2007, amended 2023]**

1.6.25 If, after a discussion of the benefits and risks, a woman in labour chooses regional analgesia, support her decision. This includes women in severe pain in the latent first stage of labour. **[2007, amended 2023]**

Care and observations for women with regional analgesia

1.6.26 Always secure intravenous access before starting regional analgesia. **[2007]**

1.6.27 Preloading and maintenance fluid infusion do not need to be administered routinely before establishing low-dose epidural analgesia and combined spinal–epidural analgesia. **[2007]**

1.6.28 Undertake the following additional observations for women with regional analgesia:

- during establishment of regional analgesia or after further boluses (10 ml or more of low-dose solutions), measure blood pressure every 5 minutes for 15 minutes

- if the woman is not pain free 30 minutes after each administration of local anaesthetic/opioid solution, ask the anaesthetist to review
- assess the level of the sensory block hourly
- if the woman is not mobilising, assess the level of motor block hourly by asking the woman to do a straight leg raise. If she is unable to do this, inform the anaesthetist immediately. **[2007, amended 2023]**

1.6.29 Encourage women with regional analgesia to adopt whatever positions, including upright, they find comfortable throughout labour, except lying flat on their back. **[2007, amended 2023]**

1.6.30 Advise women with an epidural in situ that if they have sufficient leg strength and sensation, as checked and confirmed by their midwife, they can mobilise with assistance, but their legs may feel heavier than usual. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

1.6.31 Once established, continue regional analgesia until after completion of the third stage of labour and any necessary perineal repair. **[2007]**

1.6.32 Upon confirmation of full cervical dilatation in a woman with regional analgesia, unless the woman has an urge to push or the baby's head is visible, pushing may be delayed by 1 hour for multiparous women and up to 2 hours for nulliparous women, after which actively encourage her to push during contractions. **[2007, amended 2023]**

1.6.33 Do not routinely use oxytocin in the second stage of labour for women with regional analgesia. **[2007]**

1.6.34 Perform continuous cardiotocography before and during epidural insertion. Maintain continuous cardiotocography while the woman has an epidural in situ. **[2007, amended 2023]**

Establishing and maintaining regional analgesia

1.6.35 Use either epidural or combined spinal–epidural analgesia for establishing regional analgesia in labour. **[2007]**

1.6.36 If rapid analgesia is needed, use combined spinal–epidural analgesia. **[2007]**

1.6.37 Establish combined spinal–epidural analgesia with bupivacaine (or an equivalent local anaesthetic) and fentanyl. **[2007, amended 2023]**

1.6.38 Establish epidural analgesia with a low-concentration local anaesthetic and fentanyl solution. The initial dose is essentially a test dose, so administer it cautiously to ensure that inadvertent intrathecal or intravascular placement of the epidural catheter has not occurred. **[2007, amended 2023]**

1.6.39 Use low-concentration local anaesthetic and opioid solutions (0.0625 to 0.1% bupivacaine or equivalent combined with 2.0 micrograms per ml fentanyl) for maintaining epidural analgesia in labour. **[2007]**

1.6.40 Use patient-controlled epidural analgesia, programmed intermittent epidural bolus or intermittent bolus given by healthcare professionals for maintaining epidural analgesia. **[2023]**

1.6.41 Do not use high concentrations of local anaesthetic solutions (0.25% or above of bupivacaine or equivalent) routinely for either establishing or maintaining epidural analgesia. **[2007]**

For a short explanation of why the committee made this 2023 recommendation see the rationale section on programmed intermittent epidural bolus.

Full details of the evidence and the committee's discussion are in evidence review E: programmed intermittent epidural bolus.

1.7 Prelabour rupture of membranes at term

1.7.1 Advise women with suspected rupture of membranes after 37+0 weeks to contact their maternity unit in order to have an initial triage assessment over the phone with a midwife. This should include an assessment of any risk factors, such as:

- meconium-stained liquor
- vaginal bleeding
- blood-stained liquor
- reduced fetal movements
- continuous abdominal pain
- unpleasant smelling liquor, or any change in the colour or smell of her vaginal loss
- the woman feeling unwell
- history of group B streptococcus infection where a plan has been made for prophylactic antibiotics in this pregnancy
- the baby has abnormal lie or presentation (for example, transverse lie, breech)
- fetal growth restriction
- low lying placenta.

If any of these factors are present or if there is any uncertainty, the woman should be advised to immediately attend the maternity unit for an urgent in-person review. **[2023]**

1.7.2 For women after 37+0 weeks with suspected rupture of the membranes but no risk factors on initial phone triage assessment (see recommendation 1.7.1):

- see the woman in person as soon as possible if she has any concerns or wishes to be induced immediately, **or**
- no longer than 6 hours later, **and**
- if anything changes or the woman has any concerns, advise her to call her maternity unit or midwife back sooner than the planned review.

Carry out the review at the woman's home, in a midwifery-led unit, or an assessment centre at an obstetric unit. **[2023]**

1.7.3 Do not carry out a speculum examination if it is certain that the membranes have ruptured. **[2007]**

1.7.4 If it is uncertain whether prelabour rupture of the membranes has occurred, offer the woman a speculum examination to determine whether the membranes have ruptured. Avoid digital vaginal examination in the absence of contractions. **[2007]**

1.7.5 Advise women presenting with prelabour rupture of the membranes at term that:

- the risk of serious neonatal infection is 1%, rather than 0.5% for women with intact membranes, and may increase over time
- intrapartum antibiotics are recommended in some situations (see the NICE guideline on neonatal infection)
- 60% of women with prelabour rupture of the membranes will go into labour within 24 hours. **[2007, amended 2023]**

1.7.6 Offer women with prelabour rupture of membranes at term (at or after 37+0 weeks) a choice of:

- expectant management for up to 24 hours, or
- induction of labour as soon as possible (See the NICE guideline on inducing labour).

Discuss the benefits and risks of these options with the woman, and take into account her individual circumstances and preferences. **[2023]**

1.7.7 For women who choose expectant management after prelabour rupture of the membranes at term (at or after 37+0 weeks), offer induction of labour if labour has not started naturally after approximately 24 hours. (See the NICE guideline on inducing labour). **[2023]**

1.7.8 Until the induction is started or if expectant management beyond 24 hours is chosen by the woman:

- do not offer lower vaginal swabs and measurement of maternal C-reactive protein
- to detect any infection that may be developing, advise the woman to record her temperature every 4 hours during waking hours and to report immediately any change in the colour or smell of her vaginal loss
- inform the woman that bathing or showering is not associated with an increase in infection, but that having sexual intercourse may be. **[2007]**

1.7.9 Assess fetal movement and heart rate at initial contact and then every 24 hours after rupture of the membranes while the woman is not in labour, and advise the woman to report immediately any decrease in fetal movements. **[2007]**

1.7.10 If labour has not started 24 hours after rupture of the membranes, advise the woman to give birth where there is access to neonatal services (this may be in an obstetric unit or an alongside midwifery unit) and to stay in hospital for at least 12 hours after the birth. **[2007, amended 2023]**

1.7.11 If a woman has prelabour rupture of membranes at term (at or after 37+0 weeks) and has had a positive group B streptococcus test at any time in their current pregnancy, offer immediate induction of labour, or caesarean birth if it had been planned. See the NICE guideline on neonatal infection for advice on intrapartum antibiotics. **[2023]**

For a short explanation of why the committee made these 2023 recommendations see the rationale section on initial assessment of women reporting prelabour rupture of membranes.

Full details of the evidence and the committee's discussion are in evidence review B: initial assessment of women reporting prelabour rupture of membranes.

1.8 First stage of labour

Definitions of the latent and established first stages of labour and early triage

1.8.1 For the purposes of this guideline, use the following definitions of labour:

- latent first stage of labour is a period of time, not necessarily continuous, when:
  - there are contractions **and**
  - there is some cervical change, including cervical position, consistency, effacement and dilatation up to 4 cm
- established first stage of labour is when:
  - there are regular contractions **and**
  - there is progressive cervical dilatation from 4 cm. **[2007, amended 2023]**

1.8.2 If a woman in labour contacts her maternity unit or midwife for advice, carry out an assessment of labour by telephone triage and determine whether a face-to-face assessment is needed. **[2014, amended 2023]**

1.8.3 Carry out a face-to-face early assessment of labour either:

- at home (regardless of planned place of birth) **or**
- in her planned place of birth (midwifery-led unit or obstetric unit), comprising one-to-one midwifery care for at least 1 hour. **[2014, amended 2023]**

1.8.4 Include the following in any early or triage assessment of labour:

- ask the woman how she is, and about her wishes, expectations and any concerns she has
- ask the woman about the baby's movements, including any changes
- give information about what the woman can expect in the latent first stage of labour and how to work with any pain she experiences
- give information about what to expect when she accesses care

- agree a plan of care with the woman, including guidance about who she should contact next and when
- provide guidance and support to the woman's birth companion(s). **[2014]**

1.8.5 The triage midwife should document the guidance that she gives to the woman. **[2014]**

1.8.6 If a woman seeks advice or attends a midwifery-led unit or obstetric unit with painful contractions, but is not in established labour:

- recognise that a woman may experience painful contractions without cervical change, and although she is described as not being in labour, she may well think of herself as being 'in labour' by her own definition
- offer her individualised support, and analgesia if needed
- encourage her to remain at or return home, unless doing so leads to a significant risk that she could give birth without a midwife present or become distressed. **[2014]**

Assessment of women in the first stage of labour

1.8.7 When performing an initial assessment of a woman in labour, listen to her story and support her preferences and her emotional and psychological needs. **[2014, amended 2023]**

1.8.8 Carry out an initial assessment to determine if midwifery-led care in any setting is suitable for the woman, irrespective of any previous plan. This assessment should comprise the following:

- maternal factors:
  - review and discussion of the antenatal notes (including all antenatal screening results)
  - review the personalised care plan
  - review if there are any antenatal or intrapartum risk factors for fetal hypoxia (see the NICE guideline on fetal monitoring)
  - ask her about the length, strength and frequency of her contractions

  - ask her about any pain she is experiencing and discuss her options for pain relief
  - record her pulse, blood pressure and temperature, and carry out urinalysis
  - record if she has had any vaginal loss
  - check if she requires intrapartum antibiotics for group B streptococcus prophylaxis and that these are available in her chosen place of birth if needed (see the NICE guideline on neonatal infection)
- observations of the unborn baby:
  - ask the woman about the baby's movements in the last 24 hours
  - palpate the woman's abdomen to determine the fundal height, the baby's lie, presentation, position, engagement of the presenting part, and frequency and duration of contractions.
- auscultate the fetal heart rate for a minimum of 1 minute immediately after a contraction. Palpate the woman's pulse to differentiate between the heartbeats of the woman and the baby
- if there is uncertainty about whether the woman is in established labour, a vaginal examination may be helpful after a period of assessment, but is not always necessary
- if the woman appears to be in established labour, offer a vaginal examination. **[2014, amended 2023]**

1.8.9 When conducting a vaginal examination:

- be sure that the examination is necessary and will add important information to the decision-making process
- recognise that a vaginal examination can be very distressing for a woman, especially if she is already in pain, highly anxious and in an unfamiliar environment
- explain the reason for the examination and what will be involved
- ensure the woman's informed consent, privacy, dignity and comfort
- explain sensitively the findings of the examination and any impact on the birth plan to the woman and her birth companion(s). **[2014]**

1.8.10 When performing a vaginal examination, determine:

- the station of the presenting part
- the position of the presenting part
- the presence or absence of caput or moulding
- cervical effacement
- cervical dilatation
- presence or absence of membranes. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

1.8.11 Transfer the woman to obstetric-led care, following the general principles for transfer of care described in section 1.5, if any of the following are observed on initial assessment, taking into account that multiple risk factors may increase the urgency of the transfer, particularly if they have a cumulative effect:

- observations of the woman:
  - pulse over 120 beats/minute on 2 occasions 15 to 30 minutes apart
  - a single reading of either raised diastolic blood pressure of 110 mmHg or more or raised systolic blood pressure of 160 mmHg or more
  - either raised diastolic blood pressure of 90 mmHg or more or raised systolic blood pressure of 140 mmHg or more on 2 consecutive readings taken 15 to 30 minutes apart
  - a reading of 2+ of protein on urinalysis and a single reading of either raised diastolic blood pressure (90 mmHg or more) or raised systolic blood pressure (140 mmHg or more)
  - temperature of 38°C or above on a single reading, or 37.5°C or above on 2 consecutive readings 1 hour apart
  - any vaginal blood loss other than a show

  - rupture of membranes more than 24 hours before the onset of established labour
  - the presence of meconium (see recommendations on the presence of meconium)
  - pain reported by the woman that differs from the pain normally associated with contractions
  - any risk factors recorded in the woman's notes that indicate the need for obstetric-led care.
- observations of the unborn baby:
  - non-cephalic fetal presentation
  - high (4/5 to 5/5 palpable) or free-floating head in a nulliparous woman
  - suspected or diagnosed small for gestational age
  - diagnosed fetal growth restriction
  - suspected or diagnosed large for gestational age
  - diagnosis of oligohydramnios or anhydramnios on ultrasound
  - concerns about fetal monitoring as described in the NICE guideline on fetal monitoring
  - reduced fetal movements in the last 24 hours reported by the woman
  - cord presentation.

If none of these are observed, continue with midwifery-led care unless the woman requests transfer. **[2014, amended 2023]**

1.8.12 If any of the factors in recommendation 1.8.11 are observed but birth is imminent, assess whether birth in the current location is preferable to transferring the woman to an obstetric unit and discuss this with the coordinating midwife. **[2014]**

Measuring fetal heart rate as part of initial assessment

1.8.13 Offer auscultation of the fetal heart rate at first contact with a woman in suspected or established labour, and at each further assessment. **[2017, amended 2023]**

1.8.14 For advice on the choice and method of fetal monitoring during labour, including risk assessment and indications for continuous cardiotocography, see the NICE guideline on fetal monitoring in labour. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

Controlling gastric acidity

1.8.15 Do not routinely offer proton pump inhibitors to low-risk women. **[2007, amended 2023]**

1.8.16 Consider proton pump inhibitors (for example omeprazole) for women who receive opioids, or who have or develop risk factors that make a caesarean birth more likely. **[2007, amended 2023]**

Eating and drinking

1.8.17 Inform the woman that she can drink during labour if thirsty, but there is no benefit to drinking more than normal. Isotonic drinks may be more beneficial than water. **[2007, amended 2023]**

1.8.18 Inform the woman that she can eat a light diet in established labour unless she has received opioids or she develops risk factors that make a caesarean birth more likely. **[2007, amended 2023]**

Ongoing assessment during the first stage of labour

1.8.19 Record the following observations during the first stage of labour:

- half-hourly documentation of frequency of contractions
- hourly pulse
- 4-hourly temperature and blood pressure
- offer a 4-hourly vaginal examination (see recommendation 1.8.9 and 1.8.10), or in response to the woman's wishes if there is concern about

progress (after abdominal palpation and assessment of vaginal loss). **[2007]**

1.8.20 Carry out an hourly risk assessment of the woman and her baby, and if any of the following risks have developed, transfer the woman to obstetric-led care (following the general principles for transfer of care described in section 1.5), unless the risks of transfer outweigh the benefits. Take into account that multiple risk factors may increase the urgency of the transfer, particularly if they have a cumulative effect:

- observations of the woman:
  - pulse over 120 beats/minute on 2 occasions 15 to 30 minutes apart
  - a single reading of either raised diastolic blood pressure of 110 mmHg or more or raised systolic blood pressure of 160 mmHg or more
  - either raised diastolic blood pressure of 90 mmHg or more or raised systolic blood pressure of 140 mmHg or more on 2 consecutive readings taken 15 to 30 minutes apart
  - a reading of 2+ of protein on urinalysis and a single reading of either raised diastolic blood pressure (90 mmHg or more) or raised systolic blood pressure (140 mmHg or more)
  - temperature of 38°C or above on a single reading, or 37.5°C or above on 2 consecutive occasions 1 hour apart
  - any vaginal blood loss other than a show
  - the new appearance of meconium (see recommendations on the presence of meconium)
  - pain reported by the woman that differs from the pain normally associated with contractions
  - confirmed delay in the first stage of labour
  - request by the woman for additional pain relief using regional analgesia
  - obstetric emergency – including antepartum haemorrhage, cord prolapse, maternal seizure or collapse, or a need for advanced neonatal resuscitation

- observations of the unborn baby:
  - any non-cephalic presentation, including cord presentation
  - high (4/5 to 5/5 palpable) or free-floating head in a nulliparous woman
  - suspected fetal growth restriction or macrosomia
  - suspected anhydramnios or polyhydramnios
  - any changes in the fetal heart rate pattern (see the NICE guideline on fetal monitoring)

If none of these are observed, continue with midwifery-led care unless the woman requests transfer. **[2014, amended 2023]**

1.8.21 Do not routinely use verbal assessment using a numerical pain score. **[2007]**

1.8.22 Use a pictorial record of labour (partogram) once labour is established. **[2007, amended 2023]**

1.8.23 Review bladder care for the woman at least every 4 hours. This should include:

- frequency of passing urine and bladder sensation
- fluid balance monitoring if sensation is abnormal or absent, there is an inability to pass urine, or the woman is receiving intravenous fluids (including oxytocin)
- inserting a catheter if there are any concerns over the woman's ability to pass urine. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

1.8.24 Give ongoing consideration to the woman's emotional and psychological needs, including her desire for pain relief. **[2007]**

1.8.25 Encourage the woman to say if she needs more analgesia at any point during labour. **[2007]**

Presence of meconium

1.8.26 As part of ongoing assessment, document the presence or absence of meconium. **[2014, amended 2023]**

1.8.27 If meconium is present consider the character of the meconium and discuss the option of transfer to obstetric-led care with the woman. Explain that meconium:

- may increase the risk to the baby
- means that continuous CTG monitoring may be advised (see the NICE guideline on fetal monitoring)
- may mean that healthcare professionals trained in advanced neonatal life support are needed as soon as the baby is born. **[2014, amended 2023]**

1.8.28 If the woman wishes to be transferred, provided that it is safe to do so and the birth is unlikely to occur before transfer is completed, follow the general principles for transfer of care described in section 1.5. Take into account that the presence of other risk factors (in addition to meconium) may increase the urgency of the transfer. **[2014, amended 2023]**

1.8.29 Be aware that meconium is more common after full term, but should still trigger a full risk assessment and discussion with the woman about the option of transfer to obstetric-led care. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

Duration of the first stage

1.8.30 Inform women that, while the length of established first stage of labour varies between women:

- first labours last on average 8 hours and are unlikely to last over 18 hours
- second and subsequent labours last on average 5 hours and are unlikely to last over 12 hours. **[2007]**

1.8.31 Do not offer or advise clinical intervention if labour is progressing normally and the woman and baby are well. **[2007]**

1.8.32 In all stages of labour, women who have left the normal care pathway because of the development of complications can return to it if/when the complication is resolved. **[2007]**

Interventions in the first stage

1.8.33 Do not routinely perform amniotomy in normally progressing labour. **[2007]**

1.8.34 Do not routinely use combined early amniotomy with use of oxytocin. **[2007]**

Delay in the first stage

1.8.35 If delay in the established first stage is suspected, take the following into account:

- parity
- cervical dilatation and rate of change
- uterine contractions
- station and position of presenting part

Offer the woman support, hydration, and appropriate and effective pain relief. **[2007, amended 2023]**

1.8.36 If delay in the established first stage is suspected, assess all aspects of progress in labour when diagnosing delay, including:

- cervical dilatation of less than 2 cm in 4 hours for first labours
- cervical dilatation of less than 2 cm in 4 hours or a slowing in the progress of labour for second or subsequent labours
- descent and rotation of the baby's head
- changes in the strength, duration and frequency of uterine contractions. **[2007]**

1.8.37 If delay in the established first stage of labour is suspected, discuss the findings (see recommendation 1.8.36) and the options available with the woman, and support her decision. **[2007, amended 2023]**

1.8.38 Offer all women with delay in the established first stage of labour support and effective pain relief. **[2007]**

1.8.39 Advise all women with suspected delay in the established first stage of labour to have a vaginal examination 2 hours later, and diagnose delay if progress is less than 1 cm. **[2007]**

1.8.40 If delay in the established first stage of labour is diagnosed, consider amniotomy for all women with intact membranes, after explanation of the procedure and advice that it will shorten labour by about an hour and may increase the strength and pain of contractions. **[2007, amended 2023]**

1.8.41 Do not advise transfer to obstetric-led care for amniotomy alone. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

1.8.42 After amniotomy advise the woman to have a repeat vaginal examination 2 hours later whether her membranes are ruptured or intact. **[2007, amended 2023]**

1.8.43 If there is no progress 2 hours after the amniotomy, diagnose delay and transfer the woman to obstetric-led care. Follow the general principles for

transfer of care described in section 1.5. Take into account that the presence of other risk factors (in addition to delay) may increase the urgency of the transfer. **[2014, amended 2023]**

1.8.44 For all women with confirmed delay in the established first stage of labour, an obstetrician should offer a full assessment. The obstetric review should include abdominal palpation and vaginal examination and consideration of oxytocin. **[2007, amended 2023]**

1.8.45 Discuss the use of oxytocin with the woman and make a shared decision with her about its use. Explain that:

- she can be involved in decisions to start, stop or restart the oxytocin
- using oxytocin after spontaneous or artificial rupture of the membranes will bring forward the time of birth but will not influence the mode of birth or other outcomes
- oxytocin will increase the frequency and strength of contractions and that its use will mean that her contractions and her baby will be monitored continuously using cardiotocography. See the NICE guideline on fetal monitoring in labour
- oxytocin can cause hyperstimulation which may increase the chance of fetal hypoxia. **[2007, amended 2023]**

1.8.46 Offer the woman an epidural before oxytocin is started. **[2007]**

1.8.47 When starting intravenous oxytocin:

- do not start separate intravenous fluids without a clinical indication (for example, the woman is not drinking, is dehydrated, or is hypotensive)
- monitor fluid balance. **[2023]**

1.8.48 If oxytocin is used, ensure that the time between increments of the dose is no more frequent than every 30 minutes. Increase oxytocin until there are 3 to 4 contractions in 10 minutes. **[2023]**

1.8.49 Use oxytocin in labour with caution. If the woman has contractions more frequently than 4 in 10 minutes, reduce or stop the oxytocin until the woman is having 4 or fewer contractions in 10 minutes. **[2023]**

1.8.50 Oxytocin must be discontinued immediately if the cardiotocography (CTG) is pathological, and urgent obstetrician or senior midwife review sought. See the NICE guideline on fetal monitoring in labour. **[2023]**

1.8.51 Consider restarting oxytocin if:

- obstetric review has been carried out and the CTG is no longer pathological
- the woman agrees that it can be restarted.

Base the dose when restarting on a full clinical assessment, taking into consideration the previous dose. **[2023]**

1.8.52 Advise the woman to have a vaginal examination 4 hours after the oxytocin infusion has led to regular contractions in established labour:

- if cervical dilatation has increased by less than 2 cm after 4 hours of oxytocin, further obstetric review is needed to assess the need for caesarean birth
- if cervical dilatation has increased by 2 cm or more, advise 4-hourly vaginal examinations. **[2007, amended 2023]**

1.8.53 If oxytocin is restarted, base the timing of the next vaginal examination on a clinical assessment of the woman and her individual circumstances. **[2023]**

For a short explanation of why the committee made these 2023 recommendations see the rationale section on the use of oxytocin in the first or second stage of labour.

Full details of the evidence and the committee's discussion are in evidence review F: oxytocin in the first or second stage of labour.

1.9 Second stage of labour

Definition of the second stage

1.9.1 For the purposes of this guideline, use the following definitions of labour:

- passive second stage of labour - when there is full dilatation of the cervix (determined either by vaginal examination or noting other external signs of full dilatation) before or in the absence of involuntary or active pushing
- the passive second stage of labour may be up to 2 hours when a woman with an epidural in place has been advised to delay pushing (see recommendations 1.9.7 to 1.9.10)
- onset of the active second stage of labour is when:
  - the baby is visible, **or**
  - there is involuntary or active pushing with full dilatation of the cervix.

[2007, amended 2023]

Assessment of women during the second stage of labour

1.9.2 Continue with observations of the woman and baby and assessment of risk as described for the first stage of labour (see recommendations 1.8.19 and 1.8.20) but be aware that the frequency of fetal monitoring will increase. See the NICE guideline on fetal monitoring. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

1.9.3 Offer a vaginal examination (see recommendation 1.8.9 and 1.8.10) hourly in the active second stage, or in response to the woman's wishes (after abdominal palpation and assessment of vaginal loss). To assess progess, the vaginal examination should include:

- position of the head
- descent

- caput and moulding. **[2007, amended 2023]**

1.9.4 During the second stage of labour:

- continue to take the woman's emotional and psychological needs into account
- assess progress, which should include the woman's behaviour, the effectiveness of pushing and the baby's wellbeing, taking into account the baby's position and station at the onset of the second stage. These factors will assist in deciding the timing of further vaginal examinations and any need for transfer to obstetric-led care
- assess the frequency, strength and duration of contractions
- perform intermittent auscultation of the fetal heart rate immediately after a contraction for at least 1 minute, at least every 5 minutes. Palpate the woman's pulse every 5 minutes to differentiate between the 2 heartbeats. See the NICE guideline on fetal monitoring.
- ongoing consideration should be given to the woman's position, hydration, coping strategies and pain relief throughout the second stage. **[2007, amended 2023]**

The woman's position and pushing in the second stage

1.9.5 Advise a woman with an epidural in place that:

- lying flat on her back can lead to a decrease in blood pressure and may reduce placental blood flow
- she can use any other position she finds comfortable to give birth, including upright positions. **[2023]**

1.9.6 Advise a woman without an epidural in place:

- lying flat on her back can lead to a decrease in blood pressure and may reduce placental blood flow
- she can use any other position she finds comfortable to give birth

- upright positions and keeping mobile may be beneficial (as they may reduce fetal heart rate abnormalities, episiotomy rates and improve her birthing experience). **[2023]**

For a short explanation of why the committee made these 2023 recommendations see the rationale section on position for birth.

Full details of the evidence and the committee's discussion are in evidence review G: position for birth.

1.9.7 Advise women without an epidural in place that:

- spontaneous pushing may shorten the second stage of labour compared with directed pushing
- pushing while exhaling may shorten the active second stage of labour for multiparous women. **[2023]**

1.9.8 If full dilatation of the cervix has been confirmed in a woman without an epidural in place, but she does not get an urge to push, carry out further assessment after 1 hour. **[2007]**

1.9.9 Advise nulliparous women with an epidural that:

- directed pushing rather than spontaneous pushing may reduce the likelihood of needing caesarean birth
- delayed pushing (up to 2 hours after full dilatation) may shorten the active second stage of labour. **[2023]**

1.9.10 Advise multiparous women with an epidural that:

- delayed pushing (by 1 hour after full dilatation) may reduce the likelihood of needing birth with forceps or ventouse
- delayed pushing (by 1 hour after full dilatation) may shorten the active second stage of labour. **[2023]**

1.9.11 If pushing is ineffective or if requested by the woman, offer strategies to assist birth, such as support, change of position, emptying of the bladder and encouragement. **[2007]**

For a short explanation of why the committee made these 2023 recommendations see the rationale section on pushing techniques.

Full details of the evidence and the committee's discussion are in evidence review H: pushing techniques.

Intrapartum interventions to reduce perineal trauma

1.9.12 Discuss with women their preferences for techniques to reduce perineal trauma during birth, and support their choices. **[2023]**

1.9.13 Once the presenting part distends the perineum in the second stage of labour, offer to apply a warm compress to the perineum and continue this until birth. Check the temperature of the compress is comfortable for the woman. **[2023]**

1.9.14 Consider massage and gentle stretching of the perineum with a water-soluble lubricant in the second stage of labour, if the woman prefers this to a warm compress. **[2023]**

1.9.15 Advise women that the 'hands poised' technique (with hands off the perineum and baby's head, but in readiness to slow crowning) may lead to a decreased risk of episiotomy compared to the 'hands on' technique (guarding the perineum and flexing the baby's head). **[2023]**

1.9.16 Do not offer lidocaine spray to reduce pain in the second stage of labour. **[2007]**

1.9.17 Do not carry out a routine episiotomy during spontaneous vaginal birth. **[2007]**

1.9.18 Inform any woman with a history of severe perineal trauma that her risk of repeat severe perineal trauma is not increased in a subsequent birth, compared with women having their first baby. **[2007]**

1.9.19 Do not offer episiotomy routinely at vaginal birth after previous third- or fourth-degree trauma. **[2007]**

1.9.20 In order for a woman who has had previous third- or fourth-degree trauma to make an informed choice, talk with her about the future mode of birth, encompassing:

- current urgency or incontinence symptoms
- the degree of previous trauma
- risk of recurrence
- the success of the repair undertaken
- the psychological effect of the previous trauma
- management of her labour. **[2007]**

1.9.21 Inform any woman with infibulated genital mutilation of the risks of difficulty with vaginal examination, catheterisation and application of fetal scalp electrodes. Inform her of the risks of delay in the second stage and spontaneous laceration together with the need for an anterior episiotomy and the possible need for defibulation in labour. **[2007]**

1.9.22 If an episiotomy is performed, the recommended technique is a mediolateral episiotomy originating at the vaginal fourchette and usually directed to the right side. The angle to the vertical axis should be between 45 and 60 degrees at the time of the episiotomy. **[2007]**

1.9.23 Perform an episiotomy if there is a clinical need, such as birth with forceps or ventouse or suspected fetal compromise. **[2007]**

1.9.24 Provide tested, effective analgesia before carrying out an episiotomy, except in an emergency because of acute fetal compromise. **[2007]**

For a short explanation of why the committee made the 2023 recommendations see the rationale section on interventions to reduce perineal trauma.

Full details of the evidence and the committee's discussion are in evidence review I: interventions to reduce perineal trauma.

Water birth

1.9.25 Inform women that there is insufficient high-quality evidence to either support or discourage giving birth in water. **[2007]**

Duration of the active second stage and definition of delay

1.9.26 For a nulliparous woman without an epidural:

- birth would be expected to take place within 3 hours of the start of the active second stage in most women
- after 1 hour of active pushing, reassess the clinical picture including progress, contractions, maternal and fetal wellbeing:
  - if there are signs of progress (in terms of rotation or descent of the presenting part) encourage the woman to continue pushing
  - if there are no signs of progress, offer vaginal examination and consider amniotomy if the membranes are intact. If there is still no progress diagnose delay and escalate for senior review.
- if birth is not imminent after 2 hours of pushing refer the woman for a senior review and a decision on place and mode of birth. **[2007, amended 2023]**

1.9.27 For a multiparous woman without an epidural:

- birth would be expected to take place within 2 hours of the start of the active second stage in most women
- after 30 minutes of active pushing, reassess clinical picture including progress, contractions, maternal and fetal wellbeing:
  - if there are signs of progress (in terms of rotation or descent of the presenting part) encourage the woman to continue pushing

  - if there are no signs of progress, offer vaginal examination and consider amniotomy if the membranes are intact. If there is still no progress diagnose delay and escalate for senior review.
- if birth is not imminent after 1 hour of pushing refer the woman for senior review and decision on place and mode of birth. **[2007, amended 2023]**

1.9.28 For a nulliparous woman with an epidural:

- birth would be expected to take place within 3 hours of the start of the active second stage in most women, but be aware that these women may have had a passive stage of up to 2 hours after full dilatation before commencing active pushing (see recommendation 1.9.9)
- after 1 hour of active pushing, reassess the clinical picture including progress, contractions, maternal and fetal wellbeing:
  - if there are signs of progress (in terms of rotation or descent of the presenting part) encourage the woman to continue pushing
  - if there are no signs of progress, offer vaginal examination and consider amniotomy if the membranes are intact. If there is still no progress diagnose delay and escalate for senior review
- if birth is not imminent after 2 hours of pushing refer the woman for a senior review and decision on place and mode of birth. **[2007, amended 2023]**

1.9.29 For a multiparous woman with an epidural:

- birth would be expected to take place within 2 hours of the start of the active second stage in most women, but be aware that these women may have had a passive stage of up to 1 hour after full dilatation before commencing active pushing (see recommendation 1.9.10)
- after 30 minutes of active pushing, reassess clinical picture including progress, contractions, maternal and fetal wellbeing:
  - if there are signs of progress (in terms of rotation or descent of the presenting part) encourage the woman to continue pushing

  - if there are no signs of progress, offer vaginal examination and consider amniotomy if the membranes are intact. If there is still no progress diagnose delay and escalate for senior review
- if birth is not imminent after 1 hour of pushing refer the woman for a senior review and decision on place and mode of birth. **[2007, amended 2023]**

Delay in the second stage

1.9.30 If there is delay in the second stage of labour (see the expected duration of the second stage at 1.9.26 to 1.9.29), or if the woman is excessively distressed, provide support and sensitive encouragement, and assess the woman's need for analgesia/anaesthesia. **[2007, amended 2023]**

1.9.31 If there is delay in the second stage of labour and the decision is made to transfer the woman to obstetric-led care, follow the general principles for transfer of care described in section 1.5. Take into account that the presence of other risk factors (in addition to delay) may increase the urgency of the transfer. **[2014, amended 2023]**

1.9.32 An obstetrician should carry out an in-person assessment of a woman with confirmed delay in the second stage, after transfer to obstetric-led care before contemplating the use of oxytocin. This should include:

- assessment and confirmation of fetal wellbeing (including presentation, position and heart-rate)
- differentiation between the fetal and maternal heart rates
- confirmation that there are no signs of obstructed labour
- confirmation that contractions are infrequent or ineffective. **[2014, amended 2023]**

1.9.33 If the decision is made to start oxytocin, ensure that the time between increments of the dose is no more frequent than every 30 minutes. Increase oxytocin until there are 3 to 4 contractions in 10 minutes (see recommendation 1.8.48). **[2023]**

1.9.34 After initial obstetric assessment of a woman with delay in the second stage, maintain ongoing obstetric review every 15 to 30 minutes. **[2007]**

Expediting birth

1.9.35 If the birth needs to be expedited for maternal or fetal reasons, assess both the risk to the baby and the safety of the woman. The assessment should include:

- the degree of urgency
- clinical findings on abdominal and vaginal examination
- the mode of birth (and whether to use forceps or ventouse if indicated)
- anticipated degree of difficulty, including the likelihood of success if birth with forceps or ventouse is attempted
- location
- any time that may be needed for transfer to obstetric-led care
- the need for additional analgesia or anaesthesia
- the woman's preferences. **[2014]**

1.9.36 Talk with the woman and her birth companion(s) about why the birth needs to be expedited and what the options are. **[2014]**

1.9.37 Inform the team about the degree of urgency. **[2014]**

1.9.38 Record the time at which the decision to expedite the birth is made. **[2014]**

Birth with forceps or ventouse in delayed second stage

1.9.39 Consider birth with forceps or ventouse if there is concern about the baby's wellbeing, there is a prolonged second stage or the woman requests assistance. **[2007, amended 2023]**

1.9.40 Base the choice of instrument on a balance of clinical circumstance and practitioner experience. **[2007, amended 2023]**

1.9.41 Discuss pain relief options for birth with forceps or ventouse. The option used should be based on the woman's preference and the clinical situation. **[2007, amended 2023]**

1.9.42 Ensure the level of pain relief is acceptable to the woman before using forceps or ventouse during birth. **[2007, amended 2023]**

1.9.43 Offer women who have had a birth with forceps or ventouse a single dose of intravenous co-amoxiclav (or a locally agreed alternative for women who are allergic to penicillin) within 6 hours after cord clamping. **[2023]**

1.9.44 Advise the woman to have a caesarean birth if vaginal birth is not possible. See the NICE guideline on caesarean birth. **[2007]**

For a short explanation of why the committee made the 2023 recommendation see the rationale section on prophylactic antibiotics for birth with forceps or ventouse.

Full details of the evidence and the committee's discussion are in evidence review J: prophylactic antibiotics for birth with forceps or ventouse.

1.10 Third stage of labour

1.10.1 Recognise that the time immediately after the birth is when the woman and her birth companion(s) are meeting and getting to know the baby. Ensure that any care or interventions are sensitive to this and minimise separation or disruption of the mother and baby. **[2014]**

Definition of the third stage

1.10.2 For the purposes of this guideline, use the following definitions:

- the third stage of labour is the time from the birth of the baby to the expulsion of the placenta and membranes.
- active management of the third stage involves a package of care comprising the following components:
  - routine use of uterotonic drugs
  - cord clamping and cutting of the cord (see recommendation 1.10.16)
  - controlled cord traction after signs of separation of the placenta.

- physiological management of the third stage involves a package of care that includes the following components:
  - no routine use of uterotonic drugs
  - no clamping of the cord until pulsation has stopped, or after delivery of the placenta
  - delivery of the placenta spontaneously or by maternal effort. **[2014, amended 2023]**

Observations in the third stage

1.10.3 Record the following observations for a woman in the third stage of labour:

- her general physical condition, as shown by her colour, respiration and her own report of how she feels
- vaginal blood loss. **[2014]**

1.10.4 If there is postpartum haemorrhage, a retained placenta or maternal collapse, or any other concerns about the woman's wellbeing:

- carry out frequent observations to assess whether resuscitation is needed
- transfer her to obstetric-led care. Follow the general principles for transfer of care described in section 1.5, taking into account that multiple risk factors may increase the urgency of the transfer, particularly if they have a cumulative effect. **[2014, amended 2023]**

Management of the third stage

1.10.5 Discuss with the woman antenatally, during her initial assessment and in labour:

- the different options for managing the third stage of labour, and what to expect with each option
- the benefits and risks associated with active and physiological management of the third stage. **[2014, amended 2023]**

1.10.6 Explain to the woman that active management:

- shortens the third stage compared with physiological management
- is associated with an approximate risk of 13 in 1,000 of a haemorrhage of more than 1 litre
- is associated with an approximate risk of 13 in 1,000 of needing a blood transfusion
- is associated with nausea and vomiting in about 100 in 1,000 women. **[2023]**

1.10.7 Explain to the woman that physiological management:

- is associated with an approximate risk of 29 in 1,000 of a haemorrhage of more than 1 litre
- is associated with an approximate risk of 35 in 1,000 of needing a blood transfusion
- is associated with nausea and vomiting in about 50 in 1,000 women **[2023]**

1.10.8 Advise women that active management of the third stage of labour is associated with a lower risk of a postpartum haemorrhage or blood transfusion. **[2014]**

1.10.9 If a woman requests physiological management of the third stage:

- discuss her level of risk so she can make an informed decision, and
- support her in her choice. **[2014, amended 2023]**

1.10.10 Document in her records the decision that is agreed with the woman about management of the third stage. **[2014]**

1.10.11 For a woman who is having a vaginal birth and has chosen to have an active third stage, discuss the choice of uterotonic for active management. Include that:

- oxytocin plus ergometrine may be more effective than oxytocin alone at reducing the risk of postpartum haemorrhage

- oxytocin plus ergometrine is advised if there are risk factors which could increase the risk of postpartum haemorrhage
- oxytocin plus ergometrine is more likely to lead to nausea and vomiting compared to oxytocin alone
- oxytocin plus ergometrine is contraindicated in women with severe hypertension, pre-eclampsia, eclampsia, or severe cardiac, hepatic or renal disease. **[2023]**

1.10.12 Offer antiemetics (for example, cyclizine) to women having oxytocin plus ergometrine. **[2023]**

1.10.13 For active management after vaginal birth, administer 10 units of oxytocin (by intramuscular or intravenous injection, see recommendation 1.10.14) or 5 units of oxytocin plus 500 micrograms of ergometrine (by intramuscular injection) when the birth of the anterior shoulder occurs or immediately after the birth of the baby and before the cord is clamped and cut. **[2023]**

1.10.14 If oxytocin is used, administer it by:

- intramuscular injection, **or**
- slow intravenous injection over 3 to 5 minutes for women who have received oxytocin during labour. **[2023]**

1.10.15 For women who have had a caesarean birth, offer carbetocin 100 micrograms by slow intravenous injection over 1 minute for the prevention of postpartum haemorrhage. **[2023]**

For a short explanation of why the committee made these 2023 recommendations see the rationale section on management of the third stage.

Full details of the evidence and the committee's discussion are in evidence review K: active and physiological management of the third stage, evidence review L: route of administration of oxytocin in the third stage of labour, and evidence review M: uterotonics for prevention of postpartum haemorrhage.

1.10.16 After administering the uterotonic, clamp and cut the cord:

- do not clamp the cord earlier than 1 minute from the birth of the baby unless there is concern about the integrity of the cord or the baby has a heart rate below 60 beats/minute that is not getting faster.
- clamp the cord before 5 minutes in order to perform controlled cord traction as part of active management.
- if the woman requests that the cord is clamped and cut later than 5 minutes, support her choice. **[2014, amended 2023]**

For a short explanation of why the committee did not make any recommendations about the position of the baby during cord-clamping,. see the rationale section on position of the baby during cord-clamping.

Full details of the evidence and the committee's discussion are in evidence review N: position of the baby during cord-clamping.

1.10.17 After cutting the cord, perform controlled cord traction as part of active management only after administration of oxytocin and signs of separation of the placenta. **[2014, amended 2023]**

1.10.18 Record the timing of cord clamping in both active and physiological management. **[2014]**

1.10.19 Advise a change from physiological management to active management if either of the following occur:

- haemorrhage
- the placenta is not delivered within 1 hour of the birth of the baby. **[2014]**

1.10.20 Offer a change from physiological management to active management if the woman wants to shorten the third stage. **[2014]**

1.10.21 Do not use either umbilical oxytocin infusion or prostaglandin routinely in the third stage of labour. **[2014]**

Prolonged third stage

1.10.22 Diagnose a prolonged third stage of labour if it is not completed within 30 minutes of the birth with active management or within 60 minutes of the birth with physiological management. Follow recommendations 1.10.23 to 1.10 30 on managing a retained placenta. **[2014]**

Retained placenta

1.10.23 Secure intravenous access if the placenta is retained, and explain to the woman why this is needed. **[2014]**

1.10.24 Do not use umbilical vein agents if the placenta is retained. **[2014]**

1.10.25 Do not use intravenous oxytocic agents routinely to deliver a retained placenta. **[2014]**

1.10.26 Give intravenous oxytocic agents if the placenta is retained and the woman is bleeding excessively. **[2014]**

1.10.27 If the placenta is retained and there is concern about the woman's condition:

- offer a vaginal examination to assess the need to undertake manual removal of the placenta
- explain that this assessment can be painful and advise her to have analgesia. **[2014]**

1.10.28 If the woman reports inadequate analgesia during the assessment, stop the examination and address this immediately. **[2014]**

1.10.29 If the placenta is retained and the woman is not already in an obstetric unit, arrange transfer. Follow the general principles for transfer of care described in section 1.5, taking into account that multiple risk factors may increase the urgency of the transfer, particularly if they have a cumulative effect. **[2014, amended 2023]**

1.10.30 Do not carry out uterine exploration or manual removal of the placenta without an anaesthetic. **[2014]**

Postpartum haemorrhage

Risk factors for postpartum haemorrhage

1.10.31 Advise women with antenatal risk factors for postpartum haemorrhage to give birth in an obstetric unit, where more emergency treatment options are available. Risk factors include:

- previous postpartum haemorrhage over 1,000 mL or requiring blood transfusion
- placenta accreta spectrum
- pre-eclampsia
- maternal haemoglobin level below 85 g/litre at onset of labour
- BMI greater than 35 kg/m^2
- grand multiparity (parity 4 or more)
- antepartum haemorrhage or placental abruption
- overdistention of the uterus (for example, multiple pregnancy, polyhydramnios)
- existing uterine abnormalities (for example fibroids)
- low-lying placenta. **[2007, amended 2023]**

1.10.32 Continue to assess risk factors for postpartum haemorrhage during labour, taking into account antenatal risk factors and any risk factors that have arisen during labour. These can include:

- induction or augmentation of labour with oxytocin or prostaglandins
- prolonged first or second stage of labour
- sepsis
- oxytocin use during labour
- precipitate labour
- birth with forceps or ventouse
- caesarean birth
- shoulder dystocia
- delay in delivery of the placenta. **[2007, amended 2023]**

1.10.33 Be aware that taking selective serotonin reuptake inhibitor (SSRI) or serotonin-noradrenaline reuptake inhibitor (SNRI) antidepressants in the month before birth may result in a small increased risk of postpartum haemorrhage, and that this should be taken into account as part of the bleeding and thrombotic risk assessment. See the MHRA advice on the use of SSRI and SNRI antidepressants in the month before birth. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

1.10.34 If a woman has risk factors for postpartum haemorrhage, highlight these in her notes, and agree with her a care plan covering the third stage of labour. **[2007]**

Management of postpartum haemorrhage

1.10.35 If a woman has a postpartum haemorrhage:

- call for help
- give immediate clinical treatment:
  - emptying of the bladder **and**
  - uterine massage **and**
  - uterotonic drugs **and**
  - intravenous fluids **and**
  - controlled cord traction if the placenta has not yet been delivered

- continuously assess blood loss and the woman's condition, and identify the source of the bleeding
- give supplementary oxygen if needed (starting at 15 L/minute, to obtain a target oxygen saturation of 94 to 98%, using a non-rebreathing mask with a reservoir bag)

- arrange for transfer of the woman to obstetric-led care (following the general principles for transfer of care described in section 1.5). **[2014, amended 2023]**

1.10.36 Administer one of the following (see table 16 below) as first-line treatment for postpartum haemorrhage, taking into account which uterotonics have already been administered as part of active management of the third stage of labour. Offer further treatment for postpartum haemorrhage if needed. **[2023]**

Table 16. Choice of uterotonics for the treatment of postpartum haemorrhage

Uterotonic used in the third stage of labour as prophylaxis	Suggested first-line treatment for treatment of postpartum haemorrhage	Suggested second-line treatment of postpartum haemorrhage	Additional treatments that can be offered, depending on clinical need
No uterotonic used – physiological management	• Oxytocin 5 units plus ergometrine 500 micrograms by intramuscular injection (if contraindicated give carboprost). • Oxytocin infusion (usually 40 units in 500 mL over 4 hours) as soon as intravenous access is available	Carboprost 250 micrograms intramuscular injection	• Carboprost 250 micrograms intramuscular injection (can be repeated at intervals not less than 15 minutes up to a maximum of 8 doses) • Misoprostol 800 micrograms sublingually or rectally (may be used earlier if intravenous route not available) • Carbetocin 100 micrograms slow intravenous injection
Oxytocin alone	• Ergometrine 500 micrograms intramuscular injection (if contraindicated give carboprost) • Oxytocin infusion (usually 40 units in 500 mL over 4	Carboprost 250 micrograms intramuscular injection	• Carboprost 250 micrograms intramuscular injection (can be repeated at intervals not less than 15 minutes up to a

	hours) as soon as intravenous access is available		maximum of 8 doses) • Misoprostol 800 micrograms sublingually or rectally (may be used earlier if intravenous route not available) • Carbetocin 100 micrograms slow intravenous injection
Oxytocin plus ergometrine	• Carboprost 250 micrograms intramuscular injection • Oxytocin infusion (usually 40 units in 500 mL over 4 hours) as soon as intravenous access is available	Repeat carboprost after 15 minutes	• Carboprost 250 micrograms intramuscular injection (can be repeated at intervals not less than 15 minutes up to a maximum of 8 doses) • Misoprostol 800 micrograms sublingually or rectally (may be used earlier if intravenous route not available) • Carbetocin 100 micrograms slow intravenous injection
Carbetocin	Ergometrine 500 micrograms intramuscular injection	Carboprost 250 micrograms intramuscular injection	• Carboprost 250 micrograms intramuscular injection (can be repeated at intervals not less than 15 minutes up to a maximum of 8 doses) • Misoprostol 800 micrograms sublingually or rectally

In April 2023, this was an off-label use of misoprostol. See NICE's information on prescribing medicines.

1.10.37 In addition to uterotonic drugs, give tranexamic acid (1 g by intravenous injection over 10 minutes, repeated if necessary after at least 30 minutes) for managing continuing postpartum haemorrhage. **[2023]**

For a short explanation of why the committee made these 2023 recommendations see the rationale section on the pharmacological management of postpartum haemorrhage.

Full details of the evidence and the committee's discussion are in evidence review O: pharmacological management of postpartum haemorrhage.

1.10.38 Allocate a member of the healthcare team to stay with the woman and her birth companion(s), explain what is happening, answer any questions and offer support throughout the emergency situation. **[2014]**

1.10.39 If the haemorrhage continues:

- consider near-patient coagulation testing, if available
- consider administration of blood products (for example, packed red cells and clotting products)
- perform examination under anaesthetic
- ensure that the uterus is empty and repair any trauma
- consider balloon tamponade before surgical options. **[2014, amended 2023]**

1.10.40 Be aware that no particular surgical procedure can be recommended over any other for treating postpartum haemorrhage. **[2014]**

1.10.41 Ensure the maternity service and ambulance service have strategies in place in order to respond quickly and appropriately if a woman has a postpartum haemorrhage in any setting. **[2014]**

1.11 Care of the newborn baby

Initial assessment of the newborn baby and mother–baby bonding

1.11.1 Record the Apgar score routinely at 1 and 5 minutes for all births. **[2007]**

1.11.2 When assessing the colour element of the Apgar score:

- assess central oxygenation by looking inside the mouth at the mucous membranes and tongue
- assess peripheral oxygenation by looking at the colour of the nail beds. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

1.11.3 Record the time from birth to the onset of regular respirations. **[2014]**

1.11.4 If the baby is born in poor condition (for example, with abnormal breathing, heart rate or tone):

- follow recommendations 1.11.16 to 1.11.21 on neonatal resuscitation **and**
- take paired cord-blood samples for blood gas analysis, after double-clamping the cord using 2 clamps.

Continue to evaluate and record the baby's condition until it is improved and stable. **[2014]**

1.11.5 Do not take paired cord-blood samples (for blood gas analysis) routinely. **[2014]**

1.11.6 Ensure that a second clamp to allow double-clamping of the cord is available in all birth settings. **[2014]**

1.11.7 Encourage women to have skin-to-skin contact with their babies as soon as possible after the birth. If the woman is not well enough, encourage her

birth companion to have skin-to-skin contact instead. **[2007, amended 2023]**

1.11.8 In order to keep the baby warm, dry and cover them with a warm, dry blanket or towel while maintaining skin-to-skin contact with the woman. **[2007]**

1.11.9 Prioritise optimal baby airway positioning ensuring the head is supported so the airway does not become obstructed during skin-to-skin contact and explain to the woman and her birth companion(s) how to maintain the baby's airway. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

1.11.10 Avoid separating the woman and her baby within the first hour of the birth for routine postnatal procedures, for example, weighing, measuring and bathing, unless these measures are requested by the woman, or are necessary for the immediate care of the baby. **[2007]**

1.11.11 Encourage initiation of breastfeeding as soon as possible after the birth, ideally within 1 hour. **[2007]**

1.11.12 Record head circumference, body temperature and birth weight soon after the first hour following birth. **[2007]**

1.11.13 Undertake an initial examination to detect any major physical abnormality and to identify any problems that need referral. **[2007]**

1.11.14 Undertake additional monitoring of the baby for women who have taken SSRI or SNRI antidepressants during pregnancy as these may result in a small increased risk of persistent pulmonary hypertension of the newborn or neonatal withdrawal symptoms. See the NICE guideline on antenatal

and postnatal mental health and the MHRA advice on the use of SSRI and SNRI antidepressants in pregnancy. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

1.11.15 Ensure that any examination or treatment of the baby is undertaken with the consent of the parents and either in their presence or, if this is not possible, with their knowledge. **[2007]**

Neonatal resuscitation

1.11.16 In the first minutes after birth, evaluate the condition of the baby – specifically respiration, heart rate and tone – in order to determine whether resuscitation is needed according to nationally accredited guidelines on neonatal resuscitation. **[2014]**

1.11.17 All relevant healthcare professionals caring for women during birth should attend annually a course in neonatal resuscitation that is consistent with nationally accredited guidelines on neonatal resuscitation. **[2014]**

1.11.18 In all birth settings:

- bear in mind that it will be necessary to call for help if the baby needs resuscitation, and plan accordingly
- ensure that there are facilities for resuscitation, and for transferring the baby to another location if necessary
- develop emergency referral pathways for both the woman and the baby, and implement these if necessary. **[2014]**

1.11.19 If a newborn baby needs basic resuscitation, start with air. **[2014]**

1.11.20 Minimise separation of the baby and mother, taking into account the clinical circumstances. **[2014]**

1.11.21 Throughout an emergency situation in which the baby needs resuscitation, allocate a member of the healthcare team to talk with, and offer support to, the woman and any birth companion(s). **[2014]**

Care of babies in the presence of meconium

1.11.22 In the presence of any degree of meconium:

- do not suction the baby's upper airways (nasopharynx and oropharynx) before birth of the shoulders and trunk
- do not suction the baby's upper airways (nasopharynx and oropharynx) if the baby has normal respiration, heart rate and tone
- do not intubate if the baby has normal respiration, heart rate and tone. **[2014]**

1.11.23 If there has been any degree of meconium and the baby does not have normal respiration, heart rate and tone, follow nationally accredited guidelines on neonatal resuscitation. **[2014, amended 2023]**

1.11.24 If there has been significant meconium and the baby is healthy, closely observe the baby within a unit with immediate access to a neonatologist. Perform these observations at 1 and 2 hours old and then 2-hourly until 12 hours old. **[2014]**

1.11.25 If there has been non-significant meconium, observe the baby at 1 and 2 hours old in all birth settings. **[2014]**

1.11.26 If any of the following are observed after any degree of meconium, ask a neonatologist to assess the baby. Transfer both the woman and baby if they are at home or in a freestanding midwifery unit. Follow the general principles for transfer of care described in section 1.5, taking into account that multiple risk factors may increase the urgency of the transfer, particularly if they have a cumulative effect:

- respiratory rate above 60 breaths/ minute
- the presence of grunting
- heart rate below 100 or above 160 beats/minute

- capillary refill time above 3 seconds
- body temperature of 38°C or above, or 37.5°C on 2 occasions 15 to 30 minutes apart
- oxygen saturation below 95% (measuring oxygen saturation is optional after non-significant meconium)
- presence of central cyanosis, confirmed by pulse oximetry if available.

[2014, amended 2023]

1.11.27 Explain the findings to the woman, and inform her about what to look out for and who to talk to if she has any concerns. **[2014]**

Babies born to women with prelabour rupture of the membranes at term

1.11.28 Closely observe any baby born to a woman with prelabour rupture of the membranes (more than 24 hours before the onset of established labour) at term for the first 12 hours of life (at 1, 2, 6 and 12 hours) in all settings. Include assessment of:

- temperature
- heart rate
- respiratory rate
- presence of respiratory grunting
- significant subcostal recession
- presence of nasal flare
- presence of central cyanosis, confirmed by pulse oximetry if available
- skin perfusion assessed by capillary refill
- floppiness
- concerns about general wellbeing and feeding.

If any of these are observed, ask a neonatologist to assess the baby. Transfer both the woman and baby if they are at home or in a freestanding midwifery unit. Follow the general principles for transfer of care described in section 1.5 and take into account that multiple risk factors may increase the urgency of the transfer, particularly if they have a cumulative effect. **[2014, amended 2023]**

1.11.29 If there are no signs of infection in the woman, do not give antibiotics to either the woman or the baby, even if the membranes have been ruptured for over 24 hours. **[2007]**

1.11.30 If there is evidence of infection in the woman, see the NICE guideline on neonatal infection for advice on when to consider antibiotics. **[2007, amended 2023]**

1.11.31 Advise women with prelabour rupture of the membranes to inform their healthcare professionals immediately of any concerns they have about their baby's wellbeing in the first 5 days after birth, particularly in the first 12 hours when the risk of infection is greatest. **[2007]**

1.11.32 Do not perform blood, cerebrospinal fluid and/or surface culture tests in an asymptomatic baby. **[2007]**

1.11.33 Refer a baby with any symptom of possible sepsis, or born to a woman who has evidence of chorioamnionitis, to a neonatal care specialist immediately. **[2007]**

1.12 Care of the woman after birth

Initial assessment

1.12.1 Carry out the following observations of the woman after birth:

- record her temperature, pulse and blood pressure. Transfer the woman (with her baby) to obstetric-led care if any of the relevant indications listed in recommendation 1.8.20 are met
- check uterine contraction and lochia
- examine the placenta and membranes: assess their condition, structure, cord vessels and completeness. Transfer the woman (with her baby) to obstetric-led care if the placenta is incomplete.
- make an early assessment of the woman's emotional and psychological condition in response to labour and birth
- check for successful voiding of the bladder. If, after 6 hours, her bladder is palpable and she is unable to pass urine, advise

catheterisation and consider transferring the woman (with her baby) to obstetric-led care.

If transferring the woman to obstetric-led care, follow the general principles for transfer of care described in section 1.5 and take into account that multiple risk factors may increase the urgency of the transfer, particularly if they have a cumulative effect. **[2014, amended 2023]**

1.12.2 Check that women who have had regional analgesia or anaesthesia can perform a straight leg raise by 4 hours after the last anaesthetic dose. If not, contact the obstetric anaesthetist for urgent review. **[2023]**

For a short explanation of why the committee made this 2023 recommendation see table B New recommendations that have been added without an evidence review.

Perineal care

1.12.3 Define perineal or genital trauma caused by either tearing or episiotomy as follows:

- first degree – injury to skin only
- second degree – injury to the perineal muscles but not the anal sphincter
- third degree – injury to the perineum involving the anal sphincter complex:
  - 3 a – less than 50% of external anal sphincter thickness torn
  - 3b – more than 50% of external anal sphincter thickness torn
  - 3c – internal anal sphincter torn.
- fourth degree – injury to the perineum involving the anal sphincter complex (external and internal anal sphincter) and anal epithelium. **[2007]**

1.12.4 Before assessing for genital trauma:

- explain to the woman what is planned and why
- offer inhalational analgesia
- ensure good lighting
- position the woman so that she is comfortable and so that the genital structures can be seen clearly. **[2007]**

1.12.5 Perform the initial examination gently and with sensitivity. It may be done in the immediate period after birth. **[2007]**

1.12.6 If genital trauma is identified after birth, offer further systematic assessment, including a rectal examination. **[2007]**

1.12.7 Include the following in a systematic assessment of genital trauma:

- further explanation of what is planned and why
- confirmation by the woman that tested effective local or regional analgesia is in place
- visual assessment of the extent of perineal trauma to include the structures involved, the apex of the injury and assessment of bleeding
- a rectal examination to assess whether there has been any damage to the external or internal anal sphincter if there is any suspicion that the perineal muscles are damaged. **[2007]**

1.12.8 Ensure that the timing of this systematic assessment does not interfere with mother–baby bonding unless the woman has bleeding that requires urgent attention. **[2007]**

1.12.9 Assist the woman to adopt a position that allows adequate visual assessment of the degree of trauma and for repair. Only maintain this position for as long as necessary for systematic assessment and repair. If it is not possible to adequately assess the trauma, transfer the woman (with her baby) to obstetric-led care, following the general principles for transfer of care described in section 1.5. **[2007, amended 2014]**

1.12.10 Seek advice from a more experienced midwife or obstetrician if there is uncertainty about the nature or extent of the trauma. Transfer the woman

(with her baby) to obstetric-led care (following the general principles for transfer of care described in section 1.5) if the repair needs further surgical or anaesthetic expertise. **[2007, amended 2014]**

1.12.11 Document the systematic assessment and its results fully, possibly pictorially. **[2007]**

1.12.12 All relevant healthcare professionals should attend training in perineal/genital assessment and repair and ensure that they maintain these skills. **[2007]**

1.12.13 Undertake repair of the perineum as soon as possible to minimise the risk of infection and blood loss. **[2007]**

1.12.14 When carrying out perineal repair:

- ensure that tested effective analgesia is in place, using infiltration with up to 20 ml of 1% lidocaine or equivalent
- top up the epidural or insert a spinal anaesthetic if necessary. **[2007]**

1.12.15 If the woman reports inadequate pain relief at any point, address this immediately. **[2007]**

1.12.16 Advise the woman that in the case of first-degree trauma, the wound should be sutured in order to improve healing, unless the skin edges are well opposed. **[2007]**

1.12.17 Advise the woman that in the case of second-degree trauma, the muscle should be sutured in order to improve healing. **[2007]**

1.12.18 If the skin is opposed after suturing of the muscle in second-degree trauma, there is no need to suture it. **[2007]**

1.12.19 If the skin does need suturing, use a continuous subcuticular technique. **[2007]**

1.12.20 Undertake perineal repair using a continuous non-locked suturing technique for the vaginal wall and muscle layer. **[2007]**

1.12.21 Use an absorbable synthetic suture material to suture the perineum. **[2007]**

1.12.22 Offer rectal non-steroidal anti-inflammatory drugs routinely after perineal repair of first- and second-degree trauma provided these drugs are not contraindicated. **[2007]**

1.12.23 Observe the following basic principles when performing perineal repairs:

- repair perineal trauma using aseptic techniques
- check equipment and count swabs and needles before and after the procedure
- ensure good lighting is available to see and identify the structures involved
- ensure that difficult trauma is repaired by an experienced practitioner in theatre under regional or general anaesthesia
- ensure that good anatomical alignment of the wound is achieved and that consideration is given to the cosmetic results
- ensure that suture material has not been accidentally inserted through the rectal mucosa by carrying out a rectal examination after completing the repair
- after completion of the repair, document an accurate detailed account covering the extent of the trauma, the method of repair and the materials used
- give the woman information about the extent of the trauma, pain relief, diet, hygiene and the importance of pelvic floor exercises. **[2007, amended 2023]**

Terms used in this guideline

This section defines terms that have been used in a particular way for this guideline. For other definitions see the NICE glossary and the Think Local, Act Personal Care and Support Jargon Buster.

Cephalic

The baby is positioned head-down, facing the woman's back, ready to enter the pelvis.

Significant meconium

This is defined as dark green or black amniotic fluid that is thick or tenacious, or any meconium-stained amniotic fluid containing lumps of meconium.

Recommendations for research

The guideline committee has made the following recommendations for research.

Key recommendations for research

1 Perineal care

What is the effectiveness of hands on, hands poised or Finnish grip in the 2nd stage of labour for reducing perineal trauma? **[2023]**

> For a short explanation of why the committee made this research recommendation see the rationale section on interventions to reduce perineal trauma.
>
> Full details of the evidence and the committee's discussion are in evidence review I: interventions to reduce perineal trauma.

2 Restarting oxytocin

What is the most effective dosage at which oxytocin should be recommenced once stopped in labour because of an abnormal cardiotocography? **[2023]**

> For a short explanation of why the committee made these research recommendations see the rationale section on the use of oxytocin in the first or second stage of labour.
>
> Full details of the evidence and the committee's discussion are in evidence review F: oxytocin in the first or second stage of labour.

3 Position of the baby during cord-clamping

What is the optimum position for the baby during delayed cord clamping in relation to the mother's uterus? **[2023]**

For a short explanation of why the committee made this research recommendation see the rationale section on position of the baby during cord-clamping.

Full details of the evidence and the committee's discussion are in evidence review N: position of the baby during cord-clamping.

4 Management of postpartum haemorrhage

What is the impact of pharmacological interventions for the management of postpartum haemorrhage on breastfeeding and women's and their birth companions' experience and satisfaction in the postnatal period? **[2023]**

For a short explanation of why the committee made this research recommendation see the rationale section on the pharmacological management of postpartum haemorrhage.

Full details of the evidence and the committee's discussion are in evidence review O: pharmacological management of postpartum haemorrhage.

5 Prophylactic antibiotics for birth with forceps or ventouse

What is the effectiveness and cost-effectiveness of intravenous compared to oral antibiotics for preventing postnatal infections after birth with forceps or ventouse? **[2023]**

For a short explanation of why the committee made this research recommendation see the rationale section on prophylactic antibiotics for birth with forceps or ventouse.

Full details of the evidence and the committee's discussion are in evidence review J: prophylactic antibiotics for birth with forceps or ventouse.

Other recommendations for research

Effect of information giving on place of birth

How does the provision of accurate, evidence-based information affect women's decision-making processes and choice of place of birth? **[2014]**

Why this is important

A longitudinal narrative report of pregnant women in 3 maternity services in the UK identifies in detail why women make choices about where to give birth and how these choices can be influenced. Influences may include written and verbal information (both online and from midwives and doctors), previous experience, and word-of-mouth advice from friends and family. The Birthplace study concluded that giving birth outside an obstetric unit is the optimal choice for low-risk women. This finding should be used to restructure the way in which information is provided, so that it is presented in a more accurate, less risk-based way in order to support women's choices. This change should be evaluated in a quantitative observational study and/or qualitative study that records any changes in women's choice-making about place of birth. Outcomes include understanding why and how women make choices about where to give birth and how this can influence the provision of appropriate and accessible information, a measure of informed decision-making, and fearfulness and absence of fearfulness when choosing place of birth.

Long-term consequences of planning birth in different settings

What are the long-term consequences for women and babies of planning birth in different settings? **[2014]**

Why this is important

The long-term consequences of birth experiences and birth outcomes are poorly understood, particularly in relation to place of birth. A large population-based observational study would compare women's experiences and outcomes in different birth settings (with subgroup analysis by mode of birth) in relation to the wellbeing of the women and their children over different periods of time (for example, 2, 5, 10, 15, 20 and 30 years). A secondary analysis could compare different providers where birth philosophies are different. Outcomes would be compared by accessing medical

records and through qualitative interviews. Primary outcomes are long-term physical morbidity, pain after birth, readmission to hospital, infection, psychological morbidity (for example, postnatal depression, bonding, relationship breakdown with partner, fear of giving birth in future) and breastfeeding rates. Secondary outcomes are impact on attachment between mother and child, obesity in children, autoimmune disease, chronic illness, educational achievement and family functioning.

Oxytocin in the first stage of labour

What is the effectiveness of altering the dose of intravenous oxytocin to reduce excessive frequency of uterine contractions? **[2023]**

> For a short explanation of why the committee made this research recommendation see the rationale section on the use of oxytocin in the first or second stage of labour.
>
> Full details of the evidence and the committee's discussion are in evidence review F: oxytocin in the first or second stage of labour.

Management of the third stage of labour

What is the effectiveness of intramuscular carbetocin for the prevention of postpartum haemorrhage after vaginal birth? **[2023]**

> For a short explanation of why the committee made this research recommendation see the rationale section on the management of the third stage of labour.
>
> Full details of the evidence and the committee's discussion are in evidence review M: uterotonics for the prevention of postpartum haemorrhage.

Postpartum haemorrhage

What is the most effective treatment for primary postpartum haemorrhage? **[2014]**

Why this is important

There is uncertainty about the most effective drug treatments and dosage regimes, and about which other treatments should be used, for women who develop a

postpartum haemorrhage. The most effective sequencing of interventions is also uncertain. The psychological impact of postpartum haemorrhage for women can be significant, and identifying the approach that minimises this impact is important. Randomised controlled trials comparing different dosage regimes for oxytocin and misoprostol, as well as comparisons with ergometrine and carboprost, are needed. Trials of mechanical measures such as intrauterine balloons or interventional radiology as early second-line treatment (rather than an alternative drug treatment) are also needed. Alternatively, a trial comparing the effectiveness of a complex intervention (for example, an educational component, sequence of interventions, immediate feedback and quality improvements) compared with standard care could be undertaken. Important outcomes include blood and blood product transfusion, need for further intervention, need for hysterectomy and psychological outcomes for the woman.

Rationale and impact

These sections briefly explain why the committee made the recommendations and how they might affect practice.

Impact of BMI on choice of place of birth

Recommendation 1.3.6

Why the committee made the recommendation

There was some evidence that women with a BMI less than 18.5 kg/m^2 may have a reduced risk of their baby needing neonatal care, stillbirth or neonatal death, compared to women with a healthy BMI of 18.5 to 24.9 kg/m^2. There was evidence for some increased risks for women with a BMI of 25 to 29.9 kg/m^2, 30 to 35 kg/m^2 and greater than 35 kg/m^2, compared to women with a lower BMI. Some of the increased risks were dependent on whether the woman was nulliparous or multiparous. The increased risks included increased rates of transfer to an obstetric unit, increased rates of intrapartum or emergency caesarean birth, and increased rates of neonatal admission, stillbirth or neonatal death. As the increased risks were seen in women across a variety of different planned places of birth (home, freestanding and alongside midwifery-led units, and obstetric units) the committee were unable to determine if the risks were related solely to increased BMI or were

affected by the planned place of birth, but agreed that the information should be made available to women to assist with their decision-making about place of birth.

How the recommendation might affect practice

The information on risks will allow women to make an informed, personal choice about their place of birth, and may result in more women choosing to give birth at home or in a midwifery-led unit.

Return to recommendations

Initial assessment of women reporting prelabour rupture of membranes

Recommendations 1.7.1, 1.7.2, 1.7.6, 1.7.7, 1.7.11

Why the committee made the recommendations

No evidence was identified for this review so the committee used their knowledge and experience to define the factors which may indicate that a woman with prelabour rupture of the membranes requires an immediate in-person clinical review. For other women without these factors the committee agreed, based on their knowledge and experience, that an in-person review within 6 hours would ensure review within a safe time period, but would not put undue pressure on the woman to attend urgently.

Based on their knowledge and experience, the committee also amended the recommendations on actions to be taken when a woman presents with prelabour rupture of the membranes at term to align with the recommendations in the NICE guidelines on inducing labour and neonatal infection.

How the recommendations might affect practice

The recommendations will reduce variation in practice and for some units may mean women are reviewed a few hours earlier than is currently the case.

Return to recommendations

Sterile water injections

Recommendations 1.6.12 to 1.6.14

Why the committee made the recommendations

There was evidence for the benefits of sterile water injections for back pain in labour, and some evidence that women found it a satisfactory treatment that they would use again. However, the committee were concerned about the quality of the evidence, and chose only to recommend sterile water injections as an option for back pain.

There was evidence that both intracutaneous and subcutaneous sterile water injection were effective, and that while there was a greater quantity of evidence for intracutaneous administration, there was no difference between the effectiveness of the 2 types of injection. Based on their own knowledge and experience, the committee were aware that sterile water injections could lead to a stinging sensation when administered, but there was evidence that pain relief was apparent 10 minutes after the injection and could last up to 3 hours. A variety of doses were found to be effective. However, several studies used doses of 0.1 ml for intracutaneous administration or 0.5 ml for subcutaneous administration, usually injected into 4 sites in the Michaelis' Rhomboid, so the committee recommended these doses.

The evidence showed that use of sterile injected water did not increase the risk of caesarean birth, birth with forceps or ventouse, use of rescue analgesia or neonatal unit admission.

How the recommendations might affect practice

The recommendations may lead to increased use of sterile water injections for back pain in labour and will increase the number of treatment options available to women. As this is an inexpensive intervention, there is not expected to be a resource impact for the NHS.

Return to recommendations

Remifentanil patient-controlled analgesia

Recommendations 1.6.19 to 1.6.22

Why the committee made the recommendations

There was some evidence that using remifentanil patient-controlled analgesia (PCA), when compared to intramuscular opioids, reduced the use of epidural analgesia,

reduced birth with forceps or ventouse and increased vaginal birth, without causing any neonatal harms (such as neonatal respiratory depression or neonatal unit admission). Because of concerns over the quality and heterogeneity of this evidence, the committee agreed that they could not make a stronger recommendation about the use of remifentanil PCA.

As the evidence included studies which had used different doses of remifentanil the committee based their recommendations on the dose used in the most recent and larger studies, which was the same dose as that already used in clinical practice.

There was evidence that intravenous remifentanil PCA led to an increase in maternal respiratory depression, and together with their knowledge and experience, the committee defined the appropriate settings, monitoring and safety procedures that should be in place for its use.

How the recommendations might affect practice

The recommendations will increase the use of intravenous remifentanil PCA, and this will have resource implications but this will be offset by reduced use of rescue analgesia (including epidurals) and is a cost-effective use of NHS resources.

Return to recommendations

Programmed intermittent epidural bolus

Recommendation 1.6.40

Why the committee made the recommendation

There was some evidence from different combinations of local anaesthetic and opioids that programmed intermittent epidural bolus (PIEB) used to maintain epidural analgesia led to reduced anaesthetist reattendance, reduced motor block, reduced labour pain, reduced duration of the second stage of labour, reduced caesarean birth and improved women's experience of labour, compared to other methods of maintaining epidural analgesia such as continuous epidural infusion, or patient-controlled epidural. There was conflicting evidence for the effects of PIEB on the rate of birth with forceps or ventouse, with evidence for both an increased and decreased rate. As the evidence was limited, the committee agreed to offer PIEB as an

alternative option to epidural bolus administered by a healthcare professional or patient-controlled.

How the recommendation might affect practice

As PIEB is suggested as an alternative option to other methods of maintaining epidural analgesia the resource impact is likely to be minimal. Most epidural pumps can already provide either patient-controlled or programmed intermittent boluses so units would not need to purchase new pumps to implement these recommendations. There may be a reduction in staff time to administer the boluses, and because of reduced anaesthetist reattendance.

Return to recommendations

Use of oxytocin in the first or second stage of labour

Recommendation 1.8.47 to 1.8.51, 1.8.53 and 1.9.33

Why the committee made the recommendations

There was no evidence about altering the dose of intravenous oxytocin so the committee amended the recommendations from the previous version of the guideline. They based the changes on the summary of product characteristics for oxytocin and their knowledge and experience of the potential harms that may arise from hyperstimulation if oxytocin is administered at too high a dose or the dose is increased too rapidly.

There was no evidence for the optimum dose at which oxytocin should be restarted if stopped because of an abnormality in the cardiotocography, so the committee were unable to make recommendations about the dose to be used, but advised the decision should be based on the woman's previous dose and the full clinical picture.

Based on their knowledge and experience, the committee made recommendations to advise that the use of oxytocin, including whether stop or restart it, should always be discussed with the woman and a shared decision should be made about its use. They also added a recommendation based on their knowledge and experience to advise cautious use of intravenous fluids and monitoring of fluid balance to limit the likelihood of fluid overload and hyponatremia.

As there was no evidence available, the committee made 2 research recommendations.

How the recommendations might affect practice

The recommendations may reduce variation in current practice.

Return to recommendations

Position for birth

Recommendation 1.9.5 and 1.9.6

Why the committee made the recommendations

For women with an epidural in situ, there was evidence of no difference in outcomes for women who adopted an upright or a recumbent (left or right lateral) position for birth. Based on their knowledge and experience the committee were aware that women with an epidural in situ may need more assistance to mobilise and find a comfortable position.

For women with no epidural in situ there was some evidence for the benefits of an upright position on fetal heart rate abnormalities, episiotomy rates and women's experience of birth.

For all women, the committee were aware of the risks of women lying flat on their backs from aortocaval compression and for women with an epidural in situ, exacerbation of epidural-induced hypotension.

How the recommendations might affect practice

The recommendations will reduce variation in practice.

Return to recommendations

Pushing techniques

Recommendations 1.9.7, 1.9.9, 1.9.10

Why the committee made the recommendations

There was evidence for pushing techniques for women both with and without an epidural in place, and as the action of an epidural can affect a woman's urge and ability to push the committee made recommendations for these 2 groups separately.

For women without an epidural, there was evidence that spontaneous pushing and pushing while exhaling may reduce the length of the second stage of labour, but that there was otherwise no difference for any outcomes so the committee could not recommend one technique over another.

For nulliparous women with an epidural in place there was some evidence that directed pushing may reduce the likelihood of a caesarean birth and for multiparous women some evidence that delayed pushing may reduce the likelihood of a birth with forceps or ventouse. For both nulliparous and multiparous women with epidurals there was evidence that delayed pushing may reduce the duration of the active second stage. For all other outcomes there was no difference between spontaneous and directed or immediate or delayed so the committee could not recommend one technique over another.

The committee used the evidence to determine by how many hours pushing should be delayed by for nulliparous and multiparous women with epidurals in place.

How the recommendations might affect practice

The recommendations will reduce variation in practice.

Return to recommendations

Interventions to reduce perineal trauma

Recommendation 1.9.12 to 1.9.15

Why the committee made the recommendations

There was evidence that warm compresses applied to the perineum during labour reduced the incidence of third and fourth-degree tears, urinary incontinence and postpartum perineal pain. There was some evidence that massage with lubricant also reduced the incidence of third and fourth degree tears, and a comparison of warm compresses and massage with lubricant showed a reduction in episiotomy

with warm compresses. Therefore the committee recommended that massage with lubricant could be considered as an alternative, but that warm compresses should be used in preference where possible.

The evidence for 'hands on' and 'hands poised' was mixed and had limitations, with no difference between the techniques for many outcomes, and benefits and harms seen for both techniques for other outcomes. The committee could therefore not recommend one technique over another but instead advised women of the possible increased risk of episiotomy with the 'hands on' technique.

As there was a lack of evidence which allowed the committee to decide between 'hands on' and 'hands poised' care, and as there no evidence for a technique called 'the Finnish grip' the committee made a research recommendation.

How the recommendations might affect practice

The recommendations will increase the use of warm compresses during labour and may increase the use of massage with lubricant. These are low cost interventions and the long-term benefits of reducing third and fourth degree tears, urinary incontinence and pain are likely to make them cost-effective.

The use of hands on or hands poised is unlikely to have an impact on current practice.

Return to recommendations

Prophylactic antibiotics for birth with forceps or ventouse

Recommendation 1.9.43

Why the committee made the recommendation

There was good evidence that antibiotics administered within 6 hours reduced the risk of infection after birth with forceps or ventouse and did not cause any harms to the mother or baby. There was evidence for intravenous co-amoxiclav but the committee agreed, based on their experience, that in women who were allergic to penicillin an alternative may be necessary.

As there was no evidence for oral antibiotics, the committee made a research recommendation.

How the recommendation might affect practice

The recommendations will increase the use of intravenous antibiotics after birth with forceps or ventouse. However, the benefits of preventing infections and on quality of life are likely to make this intervention cost-effective, and the resource impact is likely to be mitigated by a reduction in the costs of treating women with postpartum infection.

Return to recommendations

Management of the third stage of labour

Recommendation 1.10.6, 1.10.7, 1.10.11 to 1.10.15

Why the committee made the recommendations

There was evidence that active management had benefits compared to physiological management in terms of postpartum haemorrhage (PPH) of 500 mL or more and 1,000 mL or more, anaemia, need for blood transfusion and need for additional uterotonics, but also harms in terms of increased side effects because of the use of uterotonics in active management. The committee were aware that some of the evidence was old and that methods for measuring blood and criteria for blood transfusion may have changed, which may impact on the absolute rates of PPH and blood transfusion quoted in the recommendations. However, they agreed that the increase in these risks with physiological management compared to active management still provided an indication to women of the difference in outcomes between the 2 management methods.

There was evidence of clinical effectiveness for some doses of oxytocin, oxytocin plus ergometrine, carbetocin and some doses of misoprostol at reducing postpartum haemorrhage more than 1,000 mL, the need for additional uterotonics, blood transfusions and mean blood loss, compared to placebo. The committee agreed that reduction in postpartum haemorrhage was the most important outcome for decision making. The committee considered the evidence stratified by women who had had a vaginal birth and women who had had a caesarean birth. For vaginal birth the most

effective uterotonics that the committee agreed were suitable for use in a wide variety of settings without causing unacceptable side-effects were oxytocin plus ergometrine or oxytocin alone. The cost-effectiveness evidence showed that for women who had had a vaginal birth the most cost-effective options were oxytocin alone or oxytocin plus ergometrine to reduce postpartum haemorrhage more than 1,000 mL. Based on their knowledge and experience the committee were aware that oxytocin plus ergometrine may lead to more nausea and vomiting (and so should be prescribed with an anti-emetic) and the treatment is also contraindicated in women with some comorbidities. They therefore recommended a choice of oxytocin or oxytocin plus ergometrine, but highlighted the fact that women with risk factors for postpartum haemorrhage should be advised to have oxytocin plus ergometrine as the clinical evidence had shown it may be more effective. The committee considered the use of carbetocin but the evidence was for intravenous carbetocin and the committee agreed that the routine use of an intravenous uterotonic in healthy women following vaginal birth was not appropriate and so they made a research recommendation for the use of intramuscular carbetocin.

For women who had had a caesarean birth there was evidence showing that the most effective uterotonics at reducing postpartum haemorrhage were misoprostol 600 to 800 micrograms and intravenous carbetocin. The committee considered that misoprostol was not a suitable agent for routine use due to the high incidence of nausea and vomiting, diarrhoea and abdominal pain it caused. The most cost-effective option appeared to be carbetocin, and the committee noted that carbetocin would be considered cost effective compared with oxytocin if a person would be willing to trade 17 days in full health to avoid having a PPH ≥ 1000 mL. The committee agreed this was a reasonable trade off and so agreed to recommend carbetocin.

There was evidence that oxytocin given intravenously as part of active management of the third stage of labour had benefits when compared to intramuscular injection of oxytocin, as it helped reduce:

- maternal admission to intensive care
- the risk of primary and severe postpartum haemorrhage
- the need for manual removal of placenta

- the use of additional uterotonic drugs.

The committee investigated the outcomes stratified by intravenous infusion or intravenous bolus injection, and by whether the woman had received oxytocin during labour. They agreed that there was sufficient clinical evidence of the benefits and no evidence of harms compared to intramuscular oxytocin, in terms of side effects, to offer oxytocin administered by intravenous bolus injection to women in the third stage of labour. However, because of insufficient evidence of the benefits for women who have not had oxytocin during labour, the committee chose to make a recommendation offering intravenous bolus oxytocin only to women who have already had oxytocin during labour. The committee agreed that this would also improve the feasibility and acceptability of the recommendation, as these women would already have intravenous access in place.

How the recommendations might affect practice

The recommendations will reinforce current practice which is to advise active management of the third stage of labour.

The recommendations will lead to increased use of oxytocin and ergometrine instead of oxytocin alone for women having a vaginal birth, and will increase the use of carbetocin instead of oxytocin for women having a caesarean birth, but both of these changes will be cost-effective.

The recommendation will increase the administration of oxytocin by intravenous bolus injection for women in the third stage of labour who have already had oxytocin during labour, and this may have resource implications if an additional midwife is needed to assist with the intravenous administration.

Return to recommendations

Position of the baby during cord-clamping

Why the committee did not make any recommendations

There was only a very small amount of evidence, mostly of low or very low quality which showed no difference or an unclear difference between holding the baby at the vaginal level or abdominal/chest level. The committee did not therefore make any

recommendations about the optimum position for the baby during cord-clamping, but agreed that more data was needed, so made a research recommendation.

How the recommendations might affect practice

There may currently be some variation in practice, with some babies held at vaginal level and some placed on the mother's abdomen or passed to her. This variation may continue in the short term as at present there is no evidence to suggest one technique is better or worse that the other.

Return to recommendations

Management of postpartum haemorrhage

Recommendation 1.10.36 and 1.10.37

Why the committee made the recommendation

There was good evidence that tranexamic acid reduced maternal death from bleeding compared to placebo, and some evidence that, when used in combination with oxytocin and ergometrine, it reduced blood loss volume and the need for additional surgical intervention, compared to oxytocin and ergometrine alone. There was no evidence for the benefits of oxytocin and ergometrine for the management of postpartum haemorrhage but based on their knowledge and experience the committee knew these were effective and so retained them in the guideline as treatment options. There was some evidence for the benefits of misoprostol, and carbetocin at reducing the need for additional surgical and pharmacological management, and evidence that carboprost reduced blood loss compared to oxytocin so these were included as treatment options.

There was no evidence regarding the ideal sequencing of pharmacological treatments for PPH but the committee were aware that the choice of medication for the management of PPH depended on uterotonics that had been received by the woman as part of active management, as a number of agents could not be repeated (for example ergometrine and carbetocin).

As there was no evidence for the outcomes of breastfeeding or women's experience the committee made a research recommendation.

How the recommendation might affect practice

Tranexamic acid was already recommended in the previous version of the guideline as an option for the treatment of postpartum haemorrhage but these recommendations may increase its use and standardise practice across the NHS. Carbetocin was not previously recommended for use to treat postpartum haemorrhage so this may increase its use, but all other medicines were recommended in the previous version of guideline so this is unlikely to change practice.

Return to recommendations

Context

Giving birth is a life-changing event. The care that a woman receives during labour has the potential to affect her – both physically and emotionally, in the short and longer term – and the health of her baby. Good communication, support and compassion from staff, and having her wishes respected, can help her feel in control of what is happening and contribute to making birth a positive experience for the woman and her birth companion(s).

This guideline covers the care of healthy women who go into labour at term (37+0 to 41+6 weeks). About 700,000 women give birth in England and Wales each year, of whom about 40% are having their first baby. Most of these women are healthy and have a straightforward pregnancy. Almost 90% of women will give birth to a single baby after 37 weeks of pregnancy, with the baby presenting head first. About two-thirds of women go into labour spontaneously. Therefore, most women giving birth in England and Wales are covered by this guideline.

Since the original guideline was published in 2014, the number of women giving birth in England and Wales each year has risen, the rate of intervention (births with forceps or ventouse and caesarean birth) has increased slightly, and there has been some reconfiguration of services.

It is important that the woman is given information and advice about all available settings when she is deciding where to have her baby, so that she is able to make a fully informed decision. This includes information about outcomes for the different

settings. It is also vital to recognise when transfer of care from midwifery-led care to obstetric-led care is indicated because of increased risk to the woman and/or her baby resulting from complications that have developed during labour.

Uncertainty and inconsistency of care has been identified in a number of areas, such as choosing place of birth, care during the latent first stage of labour, fetal assessment and monitoring during labour (particularly cardiotocography compared with intermittent auscultation) and management of the third stage of labour. These and other related topics are addressed in the guideline. The recommendations on fetal monitoring have been removed from this guideline and can now be found in the separate NICE guideline on Fetal monitoring in labour.

The guideline is intended to cover the care of healthy women with uncomplicated pregnancies entering labour at low risk of developing intrapartum complications. In addition, recommendations are included that address the care of women who start labour as low risk but who go on to develop complications. These include the care of women with prelabour rupture of membranes at term, care of the woman and baby when meconium is present and the management of retained placenta and postpartum haemorrhage.

Finding more information and committee details

To find NICE guidance on related topics, including guidance in development, see the NICE webpage on fertility, pregnancy and childbirth.

For details of the guideline committee see the committee member list.

Update information

September 2023

This guideline is an update of NICE guideline CG190 (published December 2014) and will replace it.

Recommendations are marked **[2023]** if the evidence has been reviewed or new recommendations have been made based on committee consensus.

Recommendations that have been deleted, added or changed without an evidence review

We propose to delete some sections from the 2014 guideline. Table A sets out these sections and includes details of where the replacement recommendations can be found.

A number of editorial updates without an evidence review were planned for inclusion in this guideline. Where these have led to the development of new recommendations a rationale for the new recommendations is provided in table B.

For recommendations shaded in grey and ending **[2007, 2014 or 2017, amended 2023]** we have made changes that could affect the intent without reviewing the evidence. Yellow shading is used to highlight these changes, and reasons for the changes are given in table C.

For recommendations shaded in grey and ending **[2007, 2014 or 2017]**, we have not reviewed the evidence. In some cases minor changes have been made – for example, to update links, or bring the language and style up to date – without changing the intent of the recommendation. Minor changes are listed in table D.

See also the previous NICE guideline and supporting documents.

Table A Sections of the guideline that have been deleted

Section in 2014 guideline	Comment
1.10 Monitoring in labour	This whole section has been deleted and replaced with the NICE guideline on fetal monitoring in labour (NG229)

Table B New recommendations that have been added without an evidence review

New recommendation	Rationale for new recommendation
1.1.3 For all women, discuss their preferences and choices for care during labour and birth as early as possible in their pregnancy, and record these choices. Emphasise that:	The committee were aware that the increased focus of the guideline on shared decision-making during labour meant that there were a number of points during labour where women were asked to make decisions on their care (for

• making and recording care choices in advance will mean they will have more time to consider all their options • they are free to change their mind at any time, including during labour or while giving birth • choices and decisions may need to be discussed again if problems or changes occur during pregnancy or labour. [2023]	example, what type of analgesia, use of oxytocin, perineal care, active or physiological management of the 3rd stage). The committee agreed that it would therefore be helpful if discussions of some of these options could begin during pregnancy when women would have more time to consider their options.
1.3.2 Advise women that additional resources to help them plan their place of birth are available on the NICE website and the NHS website.	The committee were aware that resources were available via the NICE and NHS website that could help women and healthcare professionals when discussing place of birth and so added a cross-reference to these resources.

1.4.7 When giving women (and their birth companions) information about care during labour:
• use clear language
• tailor the timing, content and delivery of information to the needs and preferences of the woman
• ensure that the information given supports shared decision making between the woman and her healthcare team, which may include:
  ○ using reliable interpreting services when needed (for example, for languages other than English, British Sign Language, Makaton)
  ○ using interpreters who are independent of the woman (rather than, for example, a family member or friend)
  ○ using culturally sensitive language
  ○ adapting communication when necessary, for example for people with learning disabilities. [2023]
	As part of the editorial updates planned for this guideline (see supplement 3) the committee were asked to update the sections on communication and to bring them more in-line with current NICE style and terminology and to increase the emphasis on shared decision-making. The committee therefore added this new recommendation as these aspects of communication were not previously covered in the guideline.

1.5.4 Carry out transfer of care of women in labour as soon as possible after the decision to transfer has been made. Categorise transfers as: • life-threatening emergency (ambulance service category 1)	As part of the editorial updates planned for this guideline (see supplement 3) the committee were asked to clarify the existing wording on the criteria that necessitate an emergency or urgent transfer to obstetric care. The committee therefore added this new recommendation as this aspect of

• urgent (for example, for pain relief) (ambulance service category 2). [2023]	transfer was not previously covered in the guideline.
1.6.30 Advise women with an epidural in situ that if they have sufficient leg strength and sensation, as checked and confirmed by their midwife, they can mobilise with assistance, but their legs may feel heavier than usual. [2023]	Based on their knowledge and experience the committee were aware that women with an epidural in situ may not be aware that they can still mobilise, or may be discouraged from mobilising, but that they can do this safely with assistance. They therefore added a recommendation to state this.
1.18.10 When performing a vaginal examination, determine: • the station of the presenting part • the position of the presenting part • the presence or absence of caput or moulding • cervical effacement • cervical dilatation • presence or absence of membranes. [2023]	The committee were aware that the guideline recommended a vaginal examination be carried out at a number of different timepoints but did not specify what should be assessed as part of this vaginal examination. Based on their knowledge and experience the committee therefore added a recommendation with these details.
1.8.14 For advice on the choice and method of fetal monitoring during labour, including risk assessment and indications for continuous cardiotocography, see the NICE guideline on fetal monitoring in labour. [2023]	The detail about fetal monitoring has been removed from this guideline as it is now contained in a separate NICE guideline so a cross-reference was added to explain this.
1.8.23 Review bladder care for the woman at least every 4 hours. This should include: • frequency of passing urine and bladder sensation • fluid balance monitoring if sensation is abnormal or absent, there is an inability to pass urine, or the woman is receiving intravenous fluids (including oxytocin) • inserting a catheter if there are any concerns over the woman's ability to pass urine. [2023]	As part of the editorial updates planned for this guideline (see supplement 3) the committee were asked update recommendations on monitoring of urine output and fluid balance during labour. The committee therefore added this new recommendation as this aspect of care was not previously covered in the guideline.
1.8.29 Be aware that meconium is more common after full term, but should still trigger a full risk assessment and discussion with the woman about the option of transfer to obstetric-led care. [2023]	The committee added this recommendation on meconium to the existing recommendations on the presence of meconium to ensure consistency with the advice given in the NICE guideline of fetal monitoring in labour.
1.8.41 Do not advise transfer to obstetric-led care for amniotomy alone. [2023]	The committee were aware that there may be uncertainty about the need to transfer for amniotomy. Based on their

	knowledge and experience the committee were aware that amniotomy could be safely carried out in midwife-led settings and so made a recommendation to state this.
1.9.2 Continue with observations of the woman and baby and assessment of risk as described for the first stage of labour (see recommendations 1.8.19 and 1.8.20) but be aware that the frequency of fetal monitoring will increase. See the NICE guideline on fetal monitoring. [2023]	Instead of repeating the list of observations for the second stage of labour the committee chose to cross-refer to the first stage list and the NICE guideline on fetal monitoring.
1.10.33 Be aware that taking selective serotonin reuptake inhibitor (SSRI) or serotonin-noradrenaline reuptake inhibitor (SNRI) antidepressants in the month before birth may result in a small increased risk of postpartum haemorrhage, and that this should be taken into account as part of the bleeding and thrombotic risk assessment. See the MHRA advice on the use of SSRI and SNRI antidepressants in the month before birth. [2023]	As part of the editorial updates planned for this guideline (see supplement 3) the committee were asked update recommendations on medications which may increase the risk of postpartum haemorrhage. The committee therefore added this new recommendation to alert healthcare professionals to the MHRA warning about SSRI and SNRI antidepressants increasing the risk.
1.11.2 When assessing the colour element of the Apgar score: • assess central oxygenation by looking inside the mouth at the mucous membranes and tongue • assess peripheral oxygenation by looking at the colour of the nail beds. [2023]	As part of the editorial updates planned for this guideline (see supplement 3) the committee were asked update recommendations on the use of the APGAR score for non-white babies. The committee therefore added this new recommendation to explain how the skin colour assessment of the APGAR score should be carried out.
1.11.9 Prioritise optimal baby airway positioning ensuring the head is supported so the airway does not become obstructed during skin-to-skin contact and explain to the woman and her birth companion(s) how to maintain the baby's airway. [2023]	As part of the editorial updates planned for this guideline (see supplement 3) the committee were asked update recommendations on skin-to-skin contact to include information on safe positioning and monitoring. The committee therefore added this new recommendation to ensure safety for the airway during skin-to-skin.
1.11.14 Undertake additional monitoring of the baby for women who have taken SSRI or SNRI antidepressants during pregnancy as these may result in a small increased risk of persistent pulmonary hypertension of the newborn or neonatal withdrawal symptoms. See the NICE guideline on antenatal and postnatal mental health and the MHRA advice on	The committee were aware of an MHRA warning relating to the risk of persistent pulmonary hypertension or withdrawal symptoms in babies whose mothers had taken SSRI or SNRI antidepressants during pregnancy, and so added a recommendation to alert people to this.

the use of SSRI and SNRI antidepressants in pregnancy. [2023]	
1.12.2 Check that women who have had regional analgesia or anaesthesia can perform a straight leg raise by 4 hours after the last anaesthetic dose. If not, contact the obstetric anaesthetist for urgent review. [2023]	As part of the editorial updates planned for this guideline (see supplement 3) the committee were asked update recommendations on monitoring of women with regional analgesia in light of updated guidelines from the Association of Anaesthetists and the Obstetric Anaesthetists' Association. The committee therefore added this new recommendation to ensure motor function was checked appropriately.

1

2 **Table C Summary of changes to the 2014 guideline: recommendations that**
3 **have been amended without an evidence review, deleted or replaced with**
4 **recommendations from a new evidence review**

Recommendation in 2014 guideline (arranged by order of these recommendations)	Recommendation in current guideline	Reason for change
Terminology throughout guideline: Instrumental or assisted birth	Changed throughout to: Birth with forceps or ventouse	The terminology of instrumental or assisted birth may be confusing for women and has been changed throughout the guideline, in accordance with the recommendations produced by the Royal College of Midwives Re:Birth report on communication.
1.1.1 Explain to both multiparous and nulliparous women who are at low risk of complications that giving birth is generally very safe for both the woman and her baby. [2014]	1.3.1 No change	
1.1.2 Explain to both multiparous and nulliparous women that they may choose any birth setting (home, freestanding midwifery unit, alongside midwifery unit or obstetric unit), and support	1.3.3 No change	

them in their choice of setting wherever they choose to give birth: • Advise low-risk multiparous women that planning to give birth at home or in a midwifery-led unit (freestanding or alongside) is particularly suitable for them because the rate of interventions is lower and the outcome for the baby is no different compared with an obstetric unit. • Advise low-risk nulliparous women that planning to give birth in a midwifery-led unit (freestanding or alongside) is particularly suitable for them because the rate of interventions is lower and the outcome for the baby is no different compared with an obstetric unit. Explain that if they plan birth at home there is a small increase in the risk of an adverse outcome for the baby. [2014]		
1.1.3 Using tables 1 and 2, explain to low-risk multiparous women that: • planning birth at home or in a freestanding midwifery unit is associated with a higher rate of spontaneous vaginal birth than planning birth in an alongside midwifery unit, and these 3 settings are associated with higher rates of spontaneous vaginal birth than planning birth in an obstetric unit • planning birth in an obstetric unit is associated with a higher rate of interventions,	1.3.7 No change	

such as instrumental vaginal birth, caesarean section and episiotomy, compared with planning birth in other settings • there are no differences in outcomes for the baby associated with planning birth in any setting. [2014]		
Table 1	Table 6 - reordered	The contents of this table have been reordered to group modes of birth together but otherwise no changes have been made.
Table 2	Table 7 – No change	
1.1.4 Using tables 3 and 4, explain to low-risk nulliparous women that: • planning birth at home or in a freestanding midwifery unit is associated with a higher rate of spontaneous vaginal birth than planning birth in an alongside midwifery unit, and these 3 settings are associated with higher rates of spontaneous vaginal birth than planning birth in an obstetric unit • planning birth in an obstetric unit is associated with a higher rate of interventions, such as instrumental vaginal birth, caesarean section and episiotomy, compared with planning birth in other settings • there are no differences in outcomes for the baby associated with planning birth in an alongside midwifery unit, a freestanding midwifery unit or an obstetric unit	1.3.8 No change	

• planning birth at home is associated with an overall small increase (about 4 more per 1,000 births) in the risk of a baby having a serious medical problem compared with planning birth in other settings. [2014]		
Table 3	Table 8 - reordered	The contents of this table have been reordered to group modes of birth together but otherwise no changes have been made.
Table 4	Table 9 - No change	
1.1.5 Ensure that all healthcare professionals involved in the care of pregnant women are familiar with the types and frequencies of serious medical problems that can affect babies (see appendix A), in order to be able to provide this information to women if they request it. [2014]	1.3.4 No change	
1.1.6 Commissioners and providers[1] should ensure that all 4 birth settings are available to all women (in the local area or in a neighbouring area). [2014]	1.2.1 Commissioners and providers, including networks of providers, should ensure that all 4 birth settings (home, freestanding midwifery unit, alongside midwifery unit, obstetric unit) are available to all women (in the local area or in a neighbouring area). [2014, amended 2023]	The detail of the 4 birth settings have been included in the recommendation.
1.1.7 Give the woman the following information, including local statistics, about all local birth settings: • Access to midwives, including: o the likelihood of being cared for in labour by a familiar midwife	1.3.5 Give women the following information, including local statistics, about all local birth settings, and update them if this changes during their pregnancy: • access to midwives, including: o the likelihood of being cared for in	The advice to update women if this information changes during their pregnancy has been included, to ensure they have the most up to date data. Availability of birthing pools has been separated from other

○ the likelihood of receiving one-to-one care throughout labour (not necessarily being cared for by the same midwife for the whole of labour). • Access to medical staff (obstetric, anaesthetic and neonatal). • Access to pain relief, including birthing pools, Entonox, other drugs and regional analgesia. • The likelihood of being transferred to an obstetric unit (if this is not the woman's chosen place of birth), the reasons why this might happen and the time it may take. Refer to table 5 if no local data are available. [2014]	labour by a familiar midwife ○ the likelihood of receiving one-to-one care throughout labour (not necessarily being cared for by the same midwife for the whole of labour) • access to medical staff (obstetric, anaesthetic and neonatal) • availability of birthing pools • access to pain relief, including Entonox (a 50:50 mixture of oxygen and nitrous oxide) and other medicines (for example, pethidine, diamorphine, patient-controlled analgesia and regional analgesia) • the likelihood of being transferred to an obstetric unit (if this is not the woman's chosen place of birth), the reasons why this might happen, the time it may take, the delay in care this may cause, and how her birth companion will travel. Refer to table 1 if no local data are available. More information on transfer to an obstetric unit for different groups of women is included in tables 4, 6 and 8. [2014, amended 2023]	pain relief options, which have been expanded, and more detail on the implications of transfer have been included. All these changes have been made based on the committee's knowledge and experience to help women have all the information needed to make an informed choice about place of birth.
Table 5	Table 1 – percentage corrected 5/4,401 = 0.11% (not 0% as previously)	The percentage of women transferring from an alongside midwifery unit due to postpartum neonatal concerns has been amended as it had been calculated incorrectly.

1.1.8 If further discussion is wanted by either the midwife or the woman about the choice of planned place of birth, arrange this with a consultant midwife or supervisor of midwives, and/or a consultant obstetrician if there are obstetric issues. [2014]	1.3.10 If further discussion is wanted by either the midwife or the woman about the choice of planned place of birth, arrange this with a senior or consultant midwife, and/or a consultant obstetrician if there are obstetric issues. [2014, amended 2023]	The terminology supervisor of midwives has been removed as this term is no longer in common usage.
1.1.9 When discussing the woman's choice of place of birth with her, do not disclose personal views or judgements about her choices. [2014]	1.3.11 No change	
1.1.10 Use tables 6, 7, 8 and 9 as part of an assessment for a woman choosing her planned place of birth: • Table 6 and 7 show medical conditions or situations in which there is increased risk for the woman or baby during or shortly after labour, where care in an obstetric unit would be expected to reduce this risk. • The factors listed in table 8 and 9 are not reasons in themselves for advising birth within an obstetric unit, but indicate that further consideration of birth setting may be required. • Discuss these risks and the additional care that can be provided in the obstetric unit with the woman so that she can make an informed choice about planned place of birth. [2007, amended 2014]	1.3.9 No change except table numbers have now changed to 10,11,12 and 13	
Table 6 • Diabetes • Risk factors associated with group B streptococcus whereby	Table 10 • Diabetes requiring medication • This bullet was moved to Table 12 (indicating that	• The committee agreed that diabetes that did not require medication to control did not

antibiotics in labour would be recommended • Carrier of/infected with HIV	individual assessment was needed to decide on place of birth) • This bullet was moved to Table 12 (indicating that individual assessment was needed to decide on place of birth)	necessitate birth in an obstetric unit. • The committee agreed that antibiotics for Group B streptococcus could be delivered in an alongside midwifery unit and did not necessitate birth in an obstetric unit. • The committee agreed that if the women was on HIV medication and had a low or no viral load then it was not necessary to specify birth in an obstetric unit.
Table 7 • Retained placenta requiring manual removal in theatre • Induction of labour • Onset of gestational diabetes • BMI at booking of greater than 35 kg/m^2 • Small for gestational age in this pregnancy (less than fifth centile or reduced growth velocity on ultrasound) • Abnormal fetal heart rate/doppler studies	Table 11 • This bullet was moved to Table 13 (indicating that it was a factor to consider when deciding on place of birth) • This bullet was moved to Table 13 (indicating that it was a factor to consider when deciding on place of birth) • Gestational diabetes requiring medication • This bullet was moved to Table 13 (indicating that it was a factor to consider when deciding on place of birth) • Small for gestational age in this pregnancy (less than fifth centile or reduced growth velocity on ultrasound as defined in Saving Babies Lives version 2)	• The committee agreed that a previous retained placenta did not necessitate birth in an obstetric unit. • The committee agreed that outpatient and midwife-led induction was possible and so did not necessitate birth in an obstetric unit. • The committee agreed that very mild gestational diabetes did not necessitate birth in an obstetric unit but that gestational diabetes that

	• Abnormal fetal heart rate, umbilical or fetal doppler studies	needed medication may impact on fetal size and so should remain in this category. • The committee agreed that now additional recommendations had been made about choosing place of birth based on BMI it was not appropriate to include set cut-offs for BMI in this table. • The definition of small for gestational age has now been better defined in Saving Babies Lives so the committee included this in the bullet point • The committee clarified that the doppler studies related to umbilical or fetal studies
Table 8 • <> • Hepatitis B/C with normal liver function tests • <>	Table 12 • Risk factors associated with group B streptococcus where it is likely that antibiotics in labour will be needed • Hepatitis B/C with normal liver function tests (as baby will need paediatric review after birth) • Carrier of/infected with HIV	• See justification above under table 6/table 10 • The committee added the rationale for this bullet point as it relates to care after birth and is not due to intrapartum risk • See justification above under table 6/table 10

Table 9 • <> • BMI at booking of 30–35 kg/m^2 • <> • Age over 35 at booking • Cone biopsy or large loop excision of the transformation zone	Table 13 • Retained placenta requiring manual removal in theatre • BMI at booking (see recommendations on Impact of BMI on place of birth) • Induction of labour • Age over 40 at booking • <Deleted>	• See justification above under table 7/table 11 • The committee agreed that now additional recommendations had been made about choosing place of birth based on BMI it was not appropriate to include set cut-offs for BMI in this table. • See justification above under table 7/table 11 • The committee agreed that with an increasing number of older mothers it was no longer necessary to include those over 35 years as at particular risk and increased the age cut-off 40 years • The committee agreed that previous cone biopsy did not require special consideration for women who laboured at term
1.1.11 For all women giving birth in all birth settings, follow the principles in the NICE guideline on patient experience in adult NHS services. [2014]	1.4.1 For all women giving birth in all birth settings, follow the principles in the NICE guideline on patient experience in adult NHS services and the NICE guideline on shared decision making, and support the woman's choices. [2014, amended 2023]	Updated to include the shared decision-making guideline and to emphasis the need to support women's choices.
1.1.12 Providers, senior staff and all healthcare professionals should ensure that in all birth settings there	1.4.2 All staff and organisations should ensure that all birth settings have a culture of respect for each	Updated to include all staff (not just senior staff and healthcare

is a culture of respect for each woman as an individual undergoing a significant and emotionally intense life experience, so that the woman is in control, is listened to and is cared for with compassion, and that appropriate informed consent is sought. [2014]	woman as an individual undergoing a significant and emotionally intense life experience, so that the woman is in control, is listened to, her choices are supported, and she is cared for with compassion. [2014, amended 2023]	professionals) and to include the concept of choice.
1.1.13 Senior staff should demonstrate, through their own words and behaviour, appropriate ways of relating to and talking about women and their birth companion(s), and of talking about birth and the choices to be made when giving birth. [2014]	1.4.3 All staff should demonstrate, through their own words and behaviour, appropriate ways of relating to and talking about women and their birth companion(s), and of talking about birth and the choices to be made when giving birth. [2014, amended 2023]	Amended to include all staff, not just senior staff.
1.1.14 Maternity services should: • provide a model of care that supports one-to-one care in labour for all women and • benchmark services and identify overstaffing or understaffing by using workforce planning models and/or woman-to-midwife ratios. [2014]	1.4.4 No change	
1.1.15 Ensure that all women giving birth have timely access to an obstetric unit if they need transfer of care for medical reasons or because they request regional analgesia. [2014]	1.2.2 Ensure that all women giving birth have timely access to an obstetric unit if they need transfer of care for medical reasons or because they request regional analgesia. Audit transfer times and reasons for delay in transfers so women can be informed of local service availability. [2014, amended 2023]	The committee added the need to be aware of local transfer times as the potential for delay in transfers can greatly influence women's decisions on place of birth.
1.1.16 Commissioners and providers[1] should ensure that there are: • robust protocols in place for transfer of care between settings (see also section 1.6)	1.2.3 No change	

• clear local pathways for the continued care of women who are transferred from one setting to another, including: o when crossing provider boundaries o if the nearest obstetric or neonatal unit is closed to admissions or the local midwifery-led unit is full. [2014]		
1.1.17 Commissioners and providers[1] should ensure that there are multidisciplinary clinical governance structures in place to enable the oversight of all birth settings. These structures should include, as a minimum, midwifery (including a supervisor of midwives), obstetric, anaesthetic and neonatal expertise, and adequately supported user representation. [2014]	1.2.4 Commissioners and providers, including networks of providers, should ensure that there are multidisciplinary clinical governance structures in place to enable the oversight of all birth settings. These structures should include, as a minimum, midwifery, obstetric, anaesthetic and neonatal expertise, and adequately supported user representation. [2014, amended 2023]	The term supervisor of midwives has been removed as this is no longer in use. The footnote 'including networks of providers' has been included in the recommendation.
1.2.1 Treat all women in labour with respect. Ensure that the woman is in control of and involved in what is happening to her, and recognise that the way in which care is given is key to this. To facilitate this, establish a rapport with the woman, ask her about her wants and expectations for labour, and be aware of the importance of tone and demeanour, and of the actual words used. Use this information to support and guide her through her labour. [2007]	1.4.8 Treat all women in labour with kindness, dignity and respect. [2007, amended 2023] 1.4.9 Ensure that the woman is empowered, informed and central to making decisions about her care, and recognise that the way in which care is given is key to this. Support the woman so she: • maintains control of what is happening to her • feels confident that her care team is there to assist her • understands that she can accept or decline any care that is offered, can	This recommendation has been split into 2 to make it easier to read. It has been amended by the committee to reinforce the principles of kindness, informed decision-making and support for the woman's choices.

	change her mind, and that any decisions she makes will not affect the care offered. To ensure this happens, establish a rapport with the woman, ask her about her wants and expectations for labour, and be aware of the importance of both tone and demeanour and the actual words used. Use this information to support her and guide her care through her labour. [2007, amended 2023]	
1.2.2.To establish communication with the woman: • Greet the woman with a smile and a personal welcome, establish her language needs, introduce yourself and explain your role in her care. • Maintain a calm and confident approach so that your demeanour reassures the woman that all is going well. • Knock and wait before entering the woman's room, respecting it as her personal space, and ask others to do the same. • Ask how the woman is feeling and whether there is anything in particular she is worried about. • If the woman has a written birth plan, read and discuss it with her. • Assess the woman's knowledge of strategies for coping with pain and provide balanced information to find out which available approaches are acceptable to her.	1.4.10 To establish communication with the woman: • greet her and her birth companion with a smile and a personal welcome, introduce yourself and explain your role in her care • maintain a calm, confident and professional approach • respect the woman's personal space, privacy and dignity, and ask others to do the same (for example, knock and wait before entering the woman's room) • ask how the woman is feeling and whether there is anything in particular she would like to discuss or if she has any concerns • discuss the woman's labour and birth preferences and review and discuss any written birth plan • ensure the woman is aware of pain relief options, and provide both the opportunity to discuss these options and give information if	The wording has been amended to reflect more up to date communication methods and approach to care.

• Encourage the woman to adapt the environment to meet her individual needs. • Ask her permission before all procedures and observations, focusing on the woman rather than the technology or the documentation. • Show the woman and her birth companion(s) how to summon help and reassure her that she may do so whenever and as often as she needs to. When leaving the room, let her know when you will return. • Involve the woman in any handover of care to another professional, either when additional expertise has been brought in or at the end of a shift. [2007]	she requests it to establish what her choices are • encourage the woman to adapt the environment to meet her individual needs • explain all procedures and observations before they take place and ask for consent for them, focusing on the woman rather than the technology or the documentation • show the woman and her birth companion(s) how to summon help, and reassure her that she can do so whenever and as often as she needs to • when leaving the room, let her know when you will return • involve the woman in any handover of care to another professional, either when additional expertise has been brought in or at the end of a shift – this should occur in the room, when appropriate, with the woman at the centre of the handover discussion. [2007, amended 2023]	
1.2.3 Encourage and help the woman to move and adopt whatever positions she finds most comfortable throughout labour. [2007]	1.4.11 Encourage and help the woman to move and adopt whatever positions she finds most comfortable throughout labour, except lying flat on her back. [2007, amended 2023]	Evidence for the review on Position for birth (Evidence review G) showed that lying flat can have detrimental effects on the baby. Separate recommendations were made on this topic but it has also been added to this recommendation.
1.2.4 Encourage the woman to have support from birth	1.4.12 No change	

companion(s) of her choice. [2007]		
1.2.5 Tap water may be used if cleansing is required before vaginal examination. [2007]	1.4.13 No change	
1.2.6 Routine hygiene measures taken by staff caring for women in labour, including standard hand hygiene and single-use non-sterile gloves, are appropriate to reduce cross-contamination between women, babies and healthcare professionals. [2007]	1.4.14 No change	
1.2.7 Selection of protective equipment must[2] be based on an assessment of the risk of transmission of microorganisms to the woman, and the risk of contamination of the healthcare worker's clothing and skin by women's blood, body fluids, secretions or excretions[3]. [2007, amended 2014]	1.4.15 Selection of personal protective equipment for healthcare professionals must be based on an assessment of the risk of exposure to blood and/or bodily fluids, non-intact skin or mucous membranes. Standard infection control procedures to prevent transmission of recognised and unrecognised infections must be followed. See the National infection prevention and control manual for England.[2007, amended 2023]	The wording of footnote 2 (which relates to health and safety legislation) has been included in the wording of the recommendation and the recommendation has been updated to refer to the National infection prevention and control manual which the committee agreed was the most up to date source of information for the NHS.
1.3.1 For the purposes of this guideline, use the following definitions of labour: • Latent first stage of labour – a period of time, not necessarily continuous, when: o there are painful contractions and o there is some cervical change, including cervical effacement and dilatation up to 4 cm. • Established first stage of labour – when:	1.8.1 For the purposes of this guideline, use the following definitions of labour: • latent first stage of labour is a period of time, not necessarily continuous, when: o there are contractions and o there is some cervical change, including cervical position, consistency, effacement and dilatation up to 4 cm	Painful has been removed as the committee agreed that not all women would report these early contractions as painful. Additional detail has been added about the cervical changes to make the definition easy to interpret in clinical practice.

○ there are regular painful contractions and ○ there is progressive cervical dilatation from 4 cm. [2007]	• established first stage of labour is when: ○ there are regular contractions and ○ there is progressive cervical dilatation from 4 cm. [2007, amended 2023]	
1.3.2 Give all nulliparous women information antenatally about: • what to expect in the latent first stage of labour • how to work with any pain they experience • how to contact their midwifery care team and what to do in an emergency. [2014]	1.1.1 No change	
1.3.3 Offer all nulliparous women antenatal education about the signs of labour, consisting of: • how to differentiate between Braxton Hicks contractions and active labour contractions • the expected frequency of contractions and how long they last • recognition of amniotic fluid ('waters breaking') • description of normal vaginal loss. [2014]	1.1.2 No change	
1.3.4 Consider an early assessment of labour by telephone triage provided by a dedicated triage midwife for all women. [2014]	1.8.2 If a woman in labour contacts her maternity unit or midwife for advice, carry out an assessment of labour by telephone triage and determine whether a face-to-face assessment is needed. [2014, amended 2023]	The action to be taken following the early assessment by phone has been clarified, which is to determine if the woman needs to be seen in person.
1.3.5 Consider a face-to-face early assessment of labour for all low-risk nulliparous women, either: • at home (regardless of planned place of birth) or	1.8.3 Carry out a face-to-face early assessment of labour either: • at home (regardless of planned place of birth) or • in her planned place of birth (midwifery-led unit	The face-to-face assessment should be carried out for all women, not just nulliparous women, and the risk assessment may change at this point

• in an assessment facility in her planned place of birth (midwifery-led unit or obstetric unit), comprising one-to-one midwifery care for at least 1 hour. [2014]	or obstetric unit), comprising one-to-one midwifery care for at least 1 hour. [2014, amended 2023]	so it is not accurate to state that this is just for low-risk women. The terminology assessment facility is not necessary, as the detail of the location will vary between maternity units.
1.3.6 Include the following in any early or triage assessment of labour: • ask the woman how she is, and about her wishes, expectations and any concerns she has • ask the woman about the baby's movements, including any changes • give information about what the woman can expect in the latent first stage of labour and how to work with any pain she experiences • give information about what to expect when she accesses care • agree a plan of care with the woman, including guidance about who she should contact next and when • provide guidance and support to the woman's birth companion(s). [2014]	1.8.4 No change	
1.3.7 The triage midwife should document the guidance that she gives to the woman. [2014]	1.8.5 No change	
1.3.8 If a woman seeks advice or attends a midwifery-led unit or obstetric unit with painful contractions, but is not in established labour: • recognise that a woman may experience painful contractions without cervical change, and	1.8.6 No change	

although she is described as not being in labour, she may well think of herself as being 'in labour' by her own definition • offer her individualised support, and analgesia if needed • encourage her to remain at or return home, unless doing so leads to a significant risk that she could give birth without a midwife present or become distressed. [2014]		
1.3.9 Advise the woman and her birth companion(s) that breathing exercises, immersion in water and massage may reduce pain during the latent first stage of labour. (See also recommendation 1.9.3) [2014]	1.6.2 Advise women that breathing exercises, having a shower or bath, and massage may reduce pain during the latent first stage of labour. [2014, amended 2023]	Immersion in water has been clarified to mean a bath or shower, to reduce possible confusion with a birthing pool.
1.3.10 Do not offer or advise aromatherapy, yoga or acupressure for pain relief during the latent first stage of labour. If a woman wants to use any of these techniques, respect her wishes. [2014]	1.6.3 Do not offer or advise aromatherapy, yoga or acupressure for pain relief during the latent first stage of labour. If a woman wants to use any of these techniques, support her choice. [2014, amended 2023]	'Support her choice' is more women-centred language than 'respect her wishes' and so this change to the terminology has been made.
1.4.1 When performing an initial assessment of a woman in labour, listen to her story and take into account her preferences and her emotional and psychological needs. [2014]	1.8.7 When performing an initial assessment of a woman in labour, listen to her story and support her preferences and her emotional and psychological needs. [2014, amended 2023]	'Support her preferences' is more women-centred language than 'take into account her preferences' and so this change to the terminology has been made.
1.4.2 Carry out an initial assessment to determine if midwifery-led care in any setting is suitable for the woman, irrespective of any previous plan. The assessment should comprise the following:	1.8.8. Carry out an initial assessment to determine if midwifery-led care in any setting is suitable for the woman, irrespective of any previous plan. This assessment should comprise the following: • maternal factors:	Updated NICE guidance on fetal monitoring and management of neonatal infection are now available so links to these have been added.

• Observations of the woman:
  ○ Review the antenatal notes (including all antenatal screening results) and discuss these with the woman.
  ○ Ask her about the length, strength and frequency of her contractions.
  ○ Ask her about any pain she is experiencing and discuss her options for pain relief.
  ○ Record her pulse, blood pressure and temperature, and carry out urinalysis.
  ○ Record if she has had any vaginal loss.
• Observations of the unborn baby:
  ○ Ask the woman about the baby's movements in the last 24 hours.
  ○ Palpate the woman's abdomen to determine the fundal height, the baby's lie, presentation, position, engagement of the presenting part, and frequency and duration of contractions.
• Auscultate the fetal heart rate for a minimum of 1 minute immediately after a contraction. Palpate the
	○ review and discussion of the antenatal notes (including all antenatal screening results)
	○ review the personalised care plan
	○ review if there are any antenatal or intrapartum risk factors for fetal hypoxia (see the NICE guideline on fetal monitoring)
	○ ask her about the length, strength and frequency of her contractions
	○ ask her about any pain she is experiencing and discuss her options for pain relief
	○ record her pulse, blood pressure and temperature, and carry out urinalysis
	○ record if she has had any vaginal loss
	○ check if she requires intrapartum antibiotics for group B streptococcus prophylaxis and that these are available in her chosen place of birth if needed (see the NICE guideline on neonatal infection)
	• observations of the unborn baby:	

woman's pulse to differentiate between the heartbeats of the woman and the baby. • In addition (see also recommendation 1.4.5): • If there is uncertainty about whether the woman is in established labour, a vaginal examination may be helpful after a period of assessment, but is not always necessary. • If the woman appears to be in established labour, offer a vaginal examination. [2014]	○ ask the woman about the baby's movements in the last 24 hours ○ palpate the woman's abdomen to determine the fundal height, the baby's lie, presentation, position, engagement of the presenting part, and frequency and duration of contractions. ○ auscultate the fetal heart rate for a minimum of 1 minute immediately after a contraction. Palpate the woman's pulse to differentiate between the heartbeats of the woman and the baby • if there is uncertainty about whether the woman is in established labour, a vaginal examination may be helpful after a period of assessment, but is not always necessary (see recommendation 1 • if the woman appears to be in established labour, offer a vaginal examination. [2014, amended 2023]	
1.4.3 Transfer the woman to obstetric-led care, following the general principles for transfer of care described in section 1.6, if any of the following are observed on initial assessment:	1.8.11 Transfer the woman to obstetric-led care, following the general principles for transfer of care described in section 1.5, if any of the following are observed on initial assessment, taking into	The urgency of transfer will depend on whether there are multiple risk factors, which may be cumulative so this has been added.

• Observations of the woman: ○ pulse over 120 beats/minute on 2 occasions 30 minutes apart ○ a single reading of either raised diastolic blood pressure of 110 mmHg or more or raised systolic blood pressure of 160 mmHg or more ○ either raised diastolic blood pressure of 90 mmHg or more or raised systolic blood pressure of 140 mmHg or more on 2 consecutive readings taken 30 minutes apart ○ a reading of 2+ of protein on urinalysis and a single reading of either raised diastolic blood pressure (90 mmHg or more) or raised systolic blood pressure (140 mmHg or more) ○ temperature of 38°C or above on a single reading, or 37.5°C or above on 2 consecutive readings 1 hour apart ○ any vaginal blood loss other than a show ○ rupture of membranes more than 24 hours before the onset	account that multiple risk factors may increase the urgency of the transfer, particularly if they have a cumulative effect: • observations of the woman: ○ pulse over 120 beats/minute on 2 occasions 15 to 30 minutes apart ○ a single reading of either raised diastolic blood pressure of 110 mmHg or more or raised systolic blood pressure of 160 mmHg or more ○ either raised diastolic blood pressure of 90 mmHg or more or raised systolic blood pressure of 140 mmHg or more on 2 consecutive readings taken 15 to 30 minutes apart ○ a reading of 2+ of protein on urinalysis and a single reading of either raised diastolic blood pressure (90 mmHg or more) or raised systolic blood pressure (140 mmHg or more) ○ temperature of 38°C or above on a single reading, or 37.5°C or above on 2 consecutive readings 1 hour apart ○ any vaginal blood loss other than a show ○ rupture of membranes more than 24 hours before the onset of established labour	The interval between checking pulse and blood pressure readings has been shortened to bring this in line with the fetal monitoring guidance. The term ‘significant’ has been removed as this is subjective before birth and any meconium should be considered a risk factor. The term abnormal is vague terminology to describe the fetal position and has been clarified to non-cephalic, with cord presentation moved to a separate bullet point. The risk factors relating to the baby’s size have been clarified. A cross-link has been added to the NICE guidelines on fetal monitoring instead of including some details about the fetal heart-rate in the recommendation.

of established labour (see recommendation 1.15.25) ○ the presence of significant meconium (see recommendation 1.5.2) ○ pain reported by the woman that differs from the pain normally associated with contractions ○ any risk factors recorded in the woman's notes that indicate the need for obstetric led care. • Observations of the unborn baby: ○ any abnormal presentation, including cord presentation ○ transverse or oblique lie ○ high (4/5–5/5 palpable) or free-floating head in a nulliparous woman ○ suspected fetal growth restriction or macrosomia ○ suspected anhydramnios or polyhydramnios ○ fetal heart rate below 110 or above 160 beats/minute ○ a deceleration in fetal heart rate heard on intermittent auscultation ○ reduced fetal movements in the last 24 hours	○ the presence of meconium (see recommendations on the presence of meconium) ○ pain reported by the woman that differs from the pain normally associated with contractions ○ any risk factors recorded in the woman's notes that indicate the need for obstetric-led care. • observations of the unborn baby: ○ any non-cephalic fetal presentation ○ high (4/5 to 5/5 palpable) or free-floating head in a nulliparous woman ○ suspected or diagnosed small for gestational age ○ diagnosed fetal growth restriction ○ suspected or diagnosed large for gestational age ○ diagnosis of oligohydramnios or anhydramnios on ultrasound ○ concerns about fetal monitoring as described in the NICE guideline on fetal monitoring ○ reduced fetal movements in the last 24 hours reported by the woman ○ cord presentation. If none of these are observed, continue with midwifery-led care unless the woman requests transfer. [2014, amended 2023]	

reported by the woman. If none of these are observed, continue with midwifery-led care unless the woman requests transfer (see also recommendation 1.4.6). [2014]		
1.4.4 If any of the factors in recommendation 1.4.3 are observed but birth is imminent, assess whether birth in the current location is preferable to transferring the woman to an obstetric unit and discuss this with the coordinating midwife. [2014]	1.8.12 No change	
1.4.5 When conducting a vaginal examination: • be sure that the examination is necessary and will add important information to the decision-making process • recognise that a vaginal examination can be very distressing for a woman, especially if she is already in pain, highly anxious and in an unfamiliar environment • explain the reason for the examination and what will be involved • ensure the woman's informed consent, privacy, dignity and comfort • explain sensitively the findings of the examination and any impact on the birth plan to the woman and her birth companion(s). [2014]	1.8.9 No change	
1.4.6 Offer auscultation of the fetal heart rate at first contact with a woman in suspected or established labour, and at each further assessment:	1.8.13 Offer auscultation of the fetal heart rate at first contact with a woman in suspected or established labour, and at each further assessment. [2017, amended 2023]	The detail about monitoring fetal heart rate has been removed from this recommendation and instead a link has been created to the

• Use either a Pinard stethoscope or doppler ultrasound. • Carry out auscultation immediately after a contraction for at least 1 minute and record it as a single rate. • Record accelerations and decelerations if heard. • Palpate the maternal pulse to differentiate between the maternal and fetal heartbeats. [2017]	1.8.14 For advice on the choice and method of fetal monitoring during labour, including risk assessment and indications for continuous cardiotocography, see the NICE guideline on fetal monitoring in labour. [2023]	NICE guideline on fetal monitoring.
1.4.7 Be aware that for women at low risk of complications there is insufficient evidence about whether cardiotocography as part of the initial assessment either improves outcomes or results in harm for women and their babies, compared with intermittent auscultation alone. [2017]	Deleted	All detailed information about use of cardiotocography is now included in the NICE guideline on fetal monitoring.
1.4.8 If a woman at low risk of complications requests cardiotocography as part of the initial assessment: • discuss the risks, benefits and limitations of cardiotocography with her, and support her in her choice • explain that, if she is in a setting where cardiotocography is not available, she will need to be transferred to obstetric-led care. [2017]	Deleted	All detailed information about use of cardiotocography is now included in the NICE guideline on fetal monitoring.
1.4.9 Offer continuous cardiotocography if any of the risk factors listed in recommendation 1.4.3 are identified on initial assessment, and explain to the woman why this is being offered. (See also section 1.10 on fetal monitoring.) [2017]	Deleted	All detailed information about use of cardiotocography is now included in the NICE guideline on fetal monitoring.

1.4.10 Offer cardiotocography if intermittent auscultation indicates possible fetal heart rate abnormalities, and explain to the woman why this is being offered. If the trace is normal (see table 11 in section 1.10 on fetal monitoring) after 20 minutes, return to intermittent auscultation unless the woman asks to stay on continuous cardiotocography. [2017]	Deleted	All detailed information about use of cardiotocography is now included in the NICE guideline on fetal monitoring.
1.4.11 If fetal death is suspected despite the presence of an apparently recorded fetal heart rate, offer real-time ultrasound assessment to check fetal viability. [2017]	Deleted	All detailed information about fetal monitoring is now included in the NICE guideline on fetal monitoring.
1.5.1 Transfer the woman to obstetric-led care (following the general principles for transfer of care described in section 1.6) if any of the following are observed at any point, unless the risks of transfer outweigh the benefits: • Observations of the woman: ○ pulse over 120 beats/minute on 2 occasions 30 minutes apart ○ a single reading of either raised diastolic blood pressure of 110 mmHg or more or raised systolic blood pressure of 160 mmHg or more ○ either raised diastolic blood pressure of 90 mmHg or more or raised systolic blood pressure of 140 mmHg or	1.8.20 Carry out an hourly risk assessment of the woman and her baby, and if any of the following risks have developed, transfer the woman to obstetric-led care (following the general principles for transfer of care described in section 1.5) unless the risks of transfer outweigh the benefits. Take into account that multiple risk factors may increase the urgency of the transfer, particularly if they have a cumulative effect: • observations of the woman: ○ pulse over 120 beats/minute on 2 occasions 15 to 30 minutes apart ○ a single reading of either raised diastolic blood pressure of 110 mmHg or more or raised systolic blood pressure of 160 mmHg or more	The frequency of the ongoing assessment has been stated as hourly, in accordance with the NICE guideline on fetal monitoring. The urgency of transfer will depend on whether there are multiple risk factors, which may be cumulative. The interval between checking pulse and blood pressure readings has been shortened to bring this in line with the fetal monitoring guidance. The term significant has been removed as this is subjective, and any meconium should be considered a risk factor. The term abnormal is vague terminology to describe the fetal position and has

more on 2 consecutive readings taken 30 minutes apart ○ a reading of 2+ of protein on urinalysis and a single reading of either raised diastolic blood pressure (90 mmHg or more) or raised systolic blood pressure (140 mmHg or more) ○ temperature of 38°C or above on a single reading, or 37.5°C or above on 2 consecutive occasions 1 hour apart ○ any vaginal blood loss other than a show ○ the presence of significant meconium (see recommendation 1.5.2) ○ pain reported by the woman that differs from the pain normally associated with contractions ○ confirmed delay in the first or second stage of labour ○ request by the woman for additional pain relief using regional analgesia ○ obstetric emergency – including antepartum haemorrhage,	○ either raised diastolic blood pressure of 90 mmHg or more or raised systolic blood pressure of 140 mmHg or more on 2 consecutive readings taken 15 to 30 minutes apart ○ a reading of 2+ of protein on urinalysis and a single reading of either raised diastolic blood pressure (90 mmHg or more) or raised systolic blood pressure (140 mmHg or more) ○ temperature of 38°C or above on a single reading, or 37.5°C or above on 2 consecutive occasions 1 hour apart ○ any vaginal blood loss other than a show ○ the new appearance of meconium (see recommendations on the presence of meconium) ○ pain reported by the woman that differs from the pain normally associated with contractions ○ confirmed delay in the first stage of labour ○ request by the woman for additional pain	been clarified to non-cephalic. A cross-link has been added to the NICE guidelines on fetal monitoring instead of including some details about the fetal heart-rate in the recommendation.

cord prolapse, postpartum haemorrhage, maternal seizure or collapse, or a need for advanced neonatal resuscitation ○ retained placenta ○ third-degree or fourth-degree tear or other complicated perineal trauma that needs suturing. • Observations of the unborn baby: ○ any abnormal presentation, including cord presentation ○ transverse or oblique lie ○ high (4/5–5/5 palpable) or free-floating head in a nulliparous woman ○ suspected fetal growth restriction or macrosomia ○ suspected anhydramnios or polyhydramnios ○ fetal heart rate below 110 or above 160 beats/minute ○ a deceleration in fetal heart rate heard on intermittent auscultation. If none of these are observed, continue with midwifery-led care unless the woman requests transfer (see also recommendation 1.4.6). [2014]	relief using regional analgesia ○ obstetric emergency – including antepartum haemorrhage, cord prolapse, maternal seizure or collapse, or a need for advanced neonatal resuscitation • observations of the unborn baby: ○ any non-cephalic presentation, including cord presentation ○ high (4/5 to 5/5 palpable) or free-floating head in a nulliparous woman ○ suspected fetal growth restriction or macrosomia ○ suspected anhydramnios or polyhydramnios ○ any changes in the fetal heart rate pattern (see the NICE guideline on as detailed in fetal monitoring) guidance. If none of these are observed, continue with midwifery-led care unless the woman requests transfer. [2014, amended 2023]	

1.5.2 As part of ongoing assessment, document the presence or absence of significant meconium. This is defined as dark green or black amniotic fluid that is thick or tenacious, or any meconium-stained amniotic fluid containing lumps of meconium. [2014]	1.8.26 As part of ongoing assessment, document the presence or absence of meconium. [2014, amended 2023]	The term significant and its definition has been removed as the committee agreed that any meconium should be documented.
1.5.3 If significant meconium is present, ensure that: • healthcare professionals trained in fetal blood sampling are available during labour and • healthcare professionals trained in advanced neonatal life support are readily available for the birth. [2014]	1.8.27 If meconium is present consider the character of the meconium and discuss the option of transfer to obstetric-led care with the woman. Explain that meconium: • may increase the risk to the baby • means that continuous CTG monitoring may be advised (see the NICE guideline on Fetal monitoring) • may mean that healthcare professionals trained in advanced neonatal life support are needed as soon as the baby is born. [2014, amended 2023]	The committee agreed that the presence of any meconium should lead to discussion about the risks, the monitoring required and the best place of care. Fetal blood sampling is no longer recommended so this has been removed.
1.5.4 If significant meconium is present, transfer the woman to obstetric-led care provided that it is safe to do so and the birth is unlikely to occur before transfer is completed. Follow the general principles for transfer of care described in section 1.6. [2014]	1.8.28. If the woman wishes to be transferred, provided that it is safe to do so and the birth is unlikely to occur before transfer is completed, follow the general principles for transfer of care described in section 1.5. Take into account that the presence of other risk factors (in addition to meconium) may increase the urgency of the transfer. [2014, amended 2023]	The emphasis on the women's choice to be transferred has been included. The urgency of the transfer will depend on the presence of additional risk factors.
Text at the start of section 1.6 Transfer of care refers to the transfer between midwifery-led care and obstetric-led care. This may or may not involve transport from one location to another. Women who are receiving midwifery-	Text at the start of section 1.5 No change	

led care in an obstetric unit can have their care transferred to obstetric-led care without being moved.		
1.6.1 Base any decisions about transfer of care on clinical findings, and discuss the options with the woman and her birth companion(s). [2014]	1.5.1 No change	
1.6.2 If contemplating transfer of care: • talk with the woman and her birth companion(s) about the reasons for this and what they can expect, including the time needed for transfer • address any concerns she has and try to allay her anxiety • ensure that her wishes are respected and her informed consent is obtained. [2014]	1.5.2 No change	
1.6.3 When arranging transfer of care, the midwife attending the labour should contact the ambulance service (if appropriate) and the coordinating midwife in the obstetric unit. The coordinating midwife should then alert the relevant healthcare professionals (obstetric, anaesthetic and neonatal). [2014]	1.5.3 No change	
1.6.4 When arranging transfer from one location to another, ensure the following: • Before transfer, the woman is dressed, wrapped in a blanket or otherwise covered in a way that she feels is comfortable and appropriate. • The woman is made to feel as comfortable as possible before and during transfer.	1.5.5 When arranging transfer from 1 location to another, ensure the following: • before transfer, the woman is dressed, wrapped in a blanket or otherwise covered in a way that she feels is comfortable and appropriate • the woman is made to feel as comfortable as possible before and during transfer	The committee agreed, based on their knowledge and experience, that the woman should be monitored throughout the transfer. Reasons for not enabling the birth companion to travel with her have been clarified – she may not wish this to happen, or the ambulance crew are

• Any ambulance staff or other personnel involved are aware that some positions may make the woman uncomfortable or afraid and could affect her labour, so she should be encouraged to choose how to move and what position to adopt if possible, in accordance with ambulance service protocols.
• Communication and companionship are maintained. Explain the arrangements for transfer to the woman and her birth companion(s). A midwife who has been involved in her care up to that point should travel with her and carry out a handover of care that involves the woman.
• Arrangements are in place to enable the woman's birth companion(s) to travel with her in the ambulance if that is what she wants. If this is not possible or not wanted, check that the birth companion(s) have or can arrange their own transport. [2014]
	• any ambulance staff or other personnel involved are aware that some positions may make the woman uncomfortable or afraid and could affect her labour, so she should be encouraged to choose how to move and what position to adopt if possible, in accordance with ambulance service protocols
	• communication and companionship are maintained:
	  ○ explain the arrangements for transfer to the woman and her birth companion(s)
	  ○ ensure a midwife who has been involved in the woman's care up to that point travels with her
	  ○ carry out a handover of care that involves the woman
	• the woman is monitored throughout the transfer, as appropriate for her stage of labour, including intermittent auscultation of the fetal heart where possible and safe to do
	• enable the woman's birth companion(s) to travel with her in the ambulance if that is what she wants and this is agreed by her care team and the ambulance crew. [2014, amended 2023]
		unable to accommodate the companion. The committee agreed that the discussion about how the companion would travel should be discussed antenatally (see recommendation 1.3.5).

1.6.5 If a woman is transferred to an obstetric unit after the birth (see section 1.16), ensure that her baby goes with her. [2014]	1.5.6 No change	

1.7.1 Provide a woman in established labour with supportive one-to-one care. [2007]	Deleted as repeats recommendation 1.4.4	
1.7.2 Do not leave a woman in established labour on her own except for short periods or at the woman's request. [2007]	1.4.5 No change	
1.7.3 For guidance on ensuring continuity of care, see recommendation 1.4.1 in the NICE guideline on patient experience in adult NHS services. [2016]	1.4.6 No change	
1.7.4 Do not offer either H2-receptor antagonists or antacids routinely to low-risk women. [2007]	1.8.15 Do not routinely offer proton pump inhibitors to low risk women [2007, amended 2023]	H2 receptor antagonists (for example ranitidine) are no longer prescribed or available due to an impurity linked to an increased risk of cancer, and antacids are not routinely used any more in labour so it is not necessary to have a 'do not…' recommendation relating to them, but proton pump inhibitors may be used as an alternative, so the recommendation has been amended to include these instead.
1.7.5 Either H2-receptor antagonists or antacids should be considered for women who receive opioids or who have or develop risk factors that make a general anaesthetic more likely. [2007]	1.8.16 Consider proton pump inhibitors (for example omeprazole) for women who receive opioids, or who have or develop risk factors that make a caesarean birth more likely. [2007, amended 2023]	Proton pump inhibitors are used instead of H2 receptor antagonists or antacids (see above). It is the risk of a caesarean birth, not just a general anaesthetic, that makes their use advisable.
1.7.6 Inform the woman that she may drink during established labour and that	1.8.17 Inform the woman that she can drink during labour if thirsty, but there is	Water intoxication has been reported in women who have

isotonic drinks may be more beneficial than water. [2007]	no benefit to drinking more than normal. Isotonic drinks may be more beneficial than water. [2007, amended 2023]	drunk excessive amounts of water during labour.
1.7.7 Inform the woman that she may eat a light diet in established labour unless she has received opioids or she develops risk factors that make a general anaesthetic more likely. [2007]	1.8.18 Inform the woman that she may eat a light diet in established labour unless she has received opioids or she develops risk factors that make a caesarean birth more likely. [2007,amended 2023]	It is the risk of a caesarean birth, not just a general anaesthetic, that makes eating inadvisable.
1.8.1 Healthcare professionals should think about how their own values and beliefs inform their attitude to coping with pain in labour and ensure their care supports the woman's choice. [2007]	1.6.1 No change	
1.8.2 If a woman chooses to use breathing and relaxation techniques in labour, support her in this choice. [2007]	1.6.4 No change	
1.8.3 If a woman chooses to use massage techniques in labour that have been taught to birth companions, support her in this choice. [2007]	1.6.5 No change	
1.8.4 Offer the woman the opportunity to labour in water for pain relief. [2007]	1.6.9 No change	
1.8.5 For women labouring in water, monitor the temperature of the woman and the water hourly to ensure that the woman is comfortable and not becoming pyrexial. The temperature of the water should not be above 37.5°C. [2007]	1.6.10 No change	
1.8.6 Keep baths and birthing pools clean using a protocol agreed with the microbiology department and, in the case of birthing pools, in accordance with the manufacturer's guidelines. [2007]	1.6.11 Keep baths and birthing pools clean using a protocol agreed with the local microbiology department or infection control guidance and, in the case of birthing pools, in accordance with the	Clarification has been added about local departments and infection control guidance.

	manufacturer's guidelines. [2007, amended 2023]	
1.8.7 Do not use injected water papules. [2007]	Deleted.	Replaced by recommendations 1.6.12 to 1.6.14, based on evidence for injected water papules (evidence review C).
1.8.8 Do not offer acupuncture, acupressure or hypnosis, but do not prevent women who wish to use these techniques from doing so. [2007]	1.6.7 Do not offer acupuncture, acupressure or hypnosis during labour. If a woman wants to use any of these techniques, support her choice. [2007, amended 2023]	The language 'support her choice' is more woman-centred than 'do not prevent…'
1.8.9 Support the playing of music of the woman's choice in labour. [2007]	1.6.8 No change	
1.8.10 Do not offer transcutaneous electrical nerve stimulation (TENS) to women in established labour. [2007]	1.6.6 Advise women who wish to use transcutaneous electrical nerve stimulation (TENS) that: • TENS devices are not provided by the NHS, but they can provide and use their own device if they wish • there is very little evidence of its effectiveness in established labour, but no evidence of harm • other forms of analgesia may still be needed. [2007, amended 2023]	Based on the committee's knowledge and experience the NHS position on TENS has been updated and clarified.
1.8.11 Ensure that Entonox (a 50:50 mixture of oxygen and nitrous oxide) is available in all birth settings as it may reduce pain in labour, but inform the woman that it may make her feel nauseous and light-headed. [2007]	1.6.15 No change	
1.8.12 Ensure that pethidine, diamorphine or other opioids are available in all birth settings. Inform the woman that these will provide limited pain relief during labour and may have significant side	1.6.16 Ensure that pethidine, diamorphine or other opioids are available in all birth settings. Inform the woman that these will provide limited pain relief during labour and may have	The caution that opioids may make breast-feeding more difficult has been added to this recommendation instead of being in a

effects for both her (drowsiness, nausea and vomiting) and her baby (short-term respiratory depression and drowsiness which may last several days). [2007]	significant side effects for both her (for example, drowsiness, nausea and vomiting) and her baby (for example, short-term respiratory depression and drowsiness which may last several days and may make it more difficult to breastfeed). [2007, amended 2023]	separate recommendation.
1.8.13 Inform the woman that pethidine, diamorphine or other opioids may interfere with breastfeeding. [2007]	Deleted	Incorporated into above recommendation.
1.8.14 If an intravenous or intramuscular opioid is used, also administer an antiemetic. [2007]	1.6.17 No change	
1.8.15 Women should not enter water (a birthing pool or bath) within 2 hours of opioid administration or if they feel drowsy. [2007]	1.6.18 No change	
1.9.1 If a woman is contemplating regional analgesia, talk with her about the risks and benefits and the implications for her labour, including the arrangements and time involved for transfer of care to an obstetric unit if she is at home or in a midwifery unit (follow the general principles for transfer of care described in section 1.6). [2007, amended 2014]	1.6.23 If a woman is requests regional analgesia, talk with her about the benefits and risks and the effect it may have on her pain and her labour. [2007, amended 2023]	This recommendation has been simplified to focus on a benefits and risks discussion and all the detail of these benefits and risks are now in a separate, subsequent recommendation.
1.9.2 Provide information about epidural analgesia, including the following: • It is available only in obstetric units • It provides more effective pain relief than opioids • It is not associated with long-term backache. • It is not associated with a longer first stage of labour or an increased chance of a caesarean birth	1.6.24 Provide information to women about epidural analgesia, including the following: • it is available only in obstetric units so transfer will be necessary if she is in another setting • it provides more effective pain relief than opioids • it may not always be fully effective and may need to be adjusted or replaced	Based on the committee's knowledge and experience the potential for an epidural to only be partially effective, and to cause postnatal headache have been added.

• It is associated with a longer second stage of labour and an increased chance of vaginal instrumental birth • It will be accompanied by a more intensive level of monitoring and intravenous access, and so mobility may be reduced. [2007, amended 2014]	• complications during insertion of the epidural may cause a severe postnatal headache • it is not associated with long-term backache • it is not associated with a longer first stage of labour or an increased chance of a caesarean birth • it is associated with a longer second stage of labour and an increased chance of birth with forceps or ventouse • it will be accompanied by a more intensive level of monitoring and intravenous access, and so mobility may be reduced. [2007, amended 2023]	
1.9.3 If a woman in labour asks for regional analgesia, comply with her request. This includes women in severe pain in the latent first stage of labour. [2007]	1.6.25 If, after a discussion of the benefits and risks, a woman in labour chooses for regional analgesia, support her decision. This includes women in severe pain in the latent first stage of labour. [2007, amended 2023]	The wording 'comply with her request' has been changed to the more woman-centred 'support her decision'.
1.9.4 Always secure intravenous access before starting regional analgesia. [2007]	1.6.26 No change	
1.9.5 Preloading and maintenance fluid infusion need not be administered routinely before establishing low-dose epidural analgesia and combined spinal–epidural analgesia. [2007]	1.6.27 No change	
1.9.6 Undertake the following additional observations for women with regional analgesia: • During establishment of regional analgesia or after further boluses (10 ml or more of low-dose solutions), measure	1.6.28 Undertake the following additional observations for women with regional analgesia: • during establishment of regional analgesia or after further boluses (10 ml or more of low-dose solutions), measure	Based on the committee's knowledge and experience an additional bullet point relating to checking motor function has been added to the list.

blood pressure every 5 minutes for 15 minutes. • If the woman is not pain-free 30 minutes after each administration of local anaesthetic/opioid solution, recall the anaesthetist. • Assess the level of the sensory block hourly. [2007]	blood pressure every 5 minutes for 15 minutes • if the woman is not pain free 30 minutes after each administration of local anaesthetic/opioid solution, ask the anaesthetist to review • assess the level of the sensory block hourly • if the woman is not mobilising, assess the level of motor block hourly by asking the woman to do a straight leg raise. If she is unable to do this, inform the anaesthetist immediately. [2007, amended 20223]	
1.9.7 Encourage women with regional analgesia to move and adopt whatever upright positions they find comfortable throughout labour. [2007]	1.6.29 Encourage women with regional analgesia to adopt whatever upright positions, including upright, they find comfortable throughout labour, except lying flat on their back. [2007, amended 2023]	The caveat that women should not lie flat on their back has been added in accordance with the evidence identified on position for birth (evidence review G)
1.9.8 Once established, continue regional analgesia until after completion of the third stage of labour and any necessary perineal repair. [2007]	1.6.31 No change	
1.9.9 Upon confirmation of full cervical dilatation in a woman with regional analgesia, unless the woman has an urge to push or the baby's head is visible, pushing should be delayed for at least 1 hour and longer if the woman wishes, after which actively encourage her to push during contractions. [2007]	1.6.32 Upon confirmation of full cervical dilatation in a woman with regional analgesia, unless the woman has an urge to push or the baby's head is visible, pushing may be delayed by 1 hour for multiparous women and up to 2 hours for nulliparous women, after which actively encourage her to push during contractions. [2007, amended 2023]	The delay before pushing has been changed to 1 hour for multiparous women and 2 hours for nulliparous women, in accordance with the evidence identified on pushing techniques (evidence review H)
1.9.10 After diagnosis of full dilatation in a woman with regional analgesia, agree a plan with the woman in order to ensure that birth will have	Deleted	This recommendation is now superseded by recommendations 1.9.7, 1.9.9 and 1.9.10 based on evidence identified

occurred within 4 hours regardless of parity. [2007]		on pushing techniques (evidence review H).
1.9.11 Do not routinely use oxytocin in the second stage of labour for women with regional analgesia. [2007]	1.6.33 No change	
1.9.12 Perform continuous cardiotocography for at least 30 minutes during establishment of regional analgesia and after administration of each further bolus of 10 ml or more. [2007, amended 2014]	1.6.34 Perform continuous cardiotocography before and during epidural insertion. Maintain continuous cardiotocography while the woman has an epidural in situ. [2007, amended 20142023]	Based on the committee's knowledge and experience, CTG is advised continuously while an epidural is in situ.
1.9.13 Use either epidural or combined spinal–epidural analgesia for establishing regional analgesia in labour. [2007]	1.6.35 No change	
1.9.14 If rapid analgesia is required, use combined spinal–epidural analgesia. [2007]	1.6.36 No change	
1.9.15 Establish combined spinal–epidural analgesia with bupivacaine and fentanyl. [2007]	1.6.37 Establish combined spinal–epidural analgesia with bupivacaine (or an equivalent local anaesthetic) and fentanyl. [2007, amended 2023]	The option of using an equivalent local anaesthetic has been included to allow greater flexibility, as some units may use other drugs such as ropivicaine.
1.9.16 Establish epidural analgesia with a low-concentration local anaesthetic and opioid solution with, for example, 10–15 ml of 0.0625–0.1% bupivacaine with 1–2 micrograms per ml fentanyl. The initial dose of local anaesthetic plus opioid is essentially a test dose, so administer cautiously to ensure that inadvertent intrathecal injection has not occurred. [2007]	1.6.38 Establish epidural analgesia with a low-concentration local anaesthetic and fentanyl solution. The initial dose is essentially a test dose, so administer it cautiously to ensure that inadvertent intrathecal or intravascular placement of the epidural catheter has not occurred. [2007, amended 2023]	The details of the dose and concentrations has been removed as this would be subject to local anaesthetic expertise. The reason for a test dose has been clarified, based on the committee's knowledge and experience.
1.9.17 Use low-concentration local anaesthetic and opioid solutions (0.0625–0.1% bupivacaine or equivalent combined with 2.0 micrograms per ml fentanyl)	1.6.39 No change	

for maintaining epidural analgesia in labour. [2007]		
1.9.18 Do not use high concentrations of local anaesthetic solutions (0.25% or above of bupivacaine or equivalent) routinely for either establishing or maintaining epidural analgesia. [2007]	1.6.41 No change	
1.9.19 Either patient-controlled epidural analgesia or intermittent bolus given by healthcare professionals are the preferred modes of administration for maintenance of epidural analgesia. [2007]	Deleted	Replaced by recommendation 1.6.40, based on evidence review for programmed intermittent epidural bolus (evidence review E)
1.11.1 Do not carry out a speculum examination if it is certain that the membranes have ruptured. [2007]	1.7.3 No change	
1.11.2 If it is uncertain whether prelabour rupture of the membranes has occurred, offer the woman a speculum examination to determine whether the membranes have ruptured. Avoid digital vaginal examination in the absence of contractions. [2007]	1.7.4 No change	
1.11.3 Advise women presenting with prelabour rupture of the membranes at term that: • the risk of serious neonatal infection is 1%, rather than 0.5% for women with intact membranes • 60% of women with prelabour rupture of the membranes will go into labour within 24 hours • induction of labour[4] is appropriate approximately 24 hours after rupture of the membranes. [2007]	1.7.5 Advise women presenting with prelabour rupture of the membranes at term that: • the risk of serious neonatal infection is 1%, rather than 0.5% for women with intact membranes, and may increase over time • intrapartum antibiotics are recommended in some situations (see the NICE guideline on neonatal infection) • 60% of women with prelabour rupture of the membranes will go into labour within 24 hours. [2007, amended 2023]	Risk of infection increases with time since membrane rupture and new NICE guideline are now available on the use of antibiotics after rupture of the membranes.

1.11.4 Until the induction is started or if expectant management beyond 24 hours is chosen by the woman: • do not offer lower vaginal swabs and measurement of maternal C-reactive protein • to detect any infection that may be developing, advise the woman to record her temperature every 4 hours during waking hours and to report immediately any change in the colour or smell of her vaginal loss • inform the woman that bathing or showering is not associated with an increase in infection, but that having sexual intercourse may be. [2007]	1.7.8 No change	
1.11.5 Assess fetal movement and heart rate at initial contact and then every 24 hours after rupture of the membranes while the woman is not in labour, and advise the woman to report immediately any decrease in fetal movements. [2007]	1.7.9 No change	
1.11.6 If labour has not started 24 hours after rupture of the membranes, advise the woman to give birth where there is access to neonatal services and to stay in hospital for at least 12 hours after the birth. [2007]	1.7.10 If labour has not started 24 hours after rupture of the membranes, advise the woman to give birth where there is access to neonatal services (this may be in an obstetric unit or an alongside midwifery unit) and to stay in hospital for at least 12 hours after the birth. [2007, amended 2023]	Clarification has been added about which places of birth provide access to neonatal services.
1.12.1 Do not offer or advise clinical intervention if labour is progressing normally and the woman and baby are well. [2007]	1.8.31 No change	
1.12.2 In all stages of labour, women who have left the normal care pathway	1.8.32 No change	

because of the development of complications can return to it if/when the complication is resolved. [2007]		
1.12.3 Inform women that, while the length of established first stage of labour varies between women: • first labours last on average 8 hours and are unlikely to last over 18 hours • second and subsequent labours last on average 5 hours and are unlikely to last over 12 hours. [2007]	1.8.30 No change	
1.12.4.Do not routinely use verbal assessment using a numerical pain score. [2007]	1.8.21 No change	
1.12.5 Use a pictorial record of labour (partogram) once labour is established. [2007]	1.8.22 No change	
1.12.6 Where the partogram includes an action line, use the World Health Organization recommendation of a 4-hour action line[5]. [2007]	Deleted	The WHO partogram will be replaced by the Avoiding Brain Injury in Childbirth collaboration partogram, and the committee did not therefore think it was necessary to refer to the WHO partogram.
1.12.7 Record the following observations during the first stage of labour: • half-hourly documentation of frequency of contractions • hourly pulse • 4-hourly temperature and blood pressure • frequency of passing urine • offer a vaginal examination (see recommendation 1.4.5) 4-hourly or if there is concern about progress or in response to the woman's wishes (after	1.8.19 Record the following observations during the first stage of labour: • half-hourly documentation of frequency of contractions • hourly pulse • 4-hourly temperature and blood pressure • offer a 4-hourly vaginal examination (see recommendation 1.8.9 and 1.8.10), or in response to the woman's wishes if there is concern about progress (after abdominal palpation and	The recommendations about transfer are already included in the subsequent recommendation (1.8.20) now that the guideline has been reordered so do not need repeating here.

abdominal palpation and assessment of vaginal loss). [2007] If any of the indications for transfer are met (see recommendation 1.5.1), transfer the woman to obstetric-led care. Follow the general principles for transfer of care described in section 1.6. [2014]	assessment of vaginal loss). [2007]	
1.12.8 Give ongoing consideration to the woman's emotional and psychological needs, including her desire for pain relief. [2007]	1.8.24 No change	
1.12.9 Encourage the woman to communicate her need for analgesia at any point during labour. [2007]	1.8.25 No change	
1.12.10 Do not routinely offer the package known as active management of labour (one-to-one continuous support; strict definition of established labour; early routine amniotomy; routine 2-hourly vaginal examination; oxytocin if labour becomes slow). [2007]	Deleted	Active management of labour does not fit with current women-centred care, is not used any more and so this recommendation has been deleted.
1.12.11 In normally progressing labour, do not perform amniotomy routinely. [2007]	1.8.33 No change	
1.12.12 Do not use combined early amniotomy with use of oxytocin routinely. [2007]	1.8.34 No change	
1.12.13 If delay in the established first stage is suspected, take the following into account: • parity • cervical dilatation and rate of change • uterine contractions • station and position of presenting part • the woman's emotional state	1.8.35 If delay in the established first stage is suspected, take the following into account: • parity • cervical dilatation and rate of change • uterine contractions • station and position of presenting part Offer the woman support, hydration, and appropriate	Referral to an appropriate healthcare professional is not a factor to take into account when there is delay; including a specific mention of the woman's emotional state implies that this is only taken into account here, but it would be taken into account throughout

• referral to the appropriate healthcare professional. Offer the woman support, hydration, and appropriate and effective pain relief. [2007]	and effective pain relief. [2007, amended 2023]	labour, so it has been deleted here.
1.12.14 If delay in the established first stage is suspected, assess all aspects of progress in labour when diagnosing delay, including: • cervical dilatation of less than 2 cm in 4 hours for first labours • cervical dilatation of less than 2 cm in 4 hours or a slowing in the progress of labour for second or subsequent labours • descent and rotation of the baby's head • changes in the strength, duration and frequency of uterine contractions. [2007] If delay is diagnosed, transfer the woman to obstetric-led care. Follow the general principles for transfer of care described in section 1.6. [2014]	1.8.36 If delay in the established first stage is suspected, assess all aspects of progress in labour when diagnosing delay, including: • cervical dilatation of less than 2 cm in 4 hours for first labours • cervical dilatation of less than 2 cm in 4 hours or a slowing in the progress of labour for second or subsequent labours • descent and rotation of the baby's head • changes in the strength, duration and frequency of uterine contractions. [2007] 1.8.37 If delay in the established first stage of labour is suspected discuss the findings (see recommendation 1.8.36) and the options available with the woman, and support her decision. [2007, amended 2023]	This recommendation has been split into 2 for easier comprehension, and the decision to transfer will be discussed with and made with the woman.
1.12.15 If delay in the established first stage of labour is suspected, amniotomy should be considered for all women with intact membranes, after explanation of the procedure and advice that it will shorten her labour by about an hour and may increase the strength and pain of her contractions. [2007]	1.8.40 If delay in the established first stage of labour is diagnosed, consider amniotomy for all women with intact membranes, after explanation of the procedure and advice that it will shorten labour by about an hour and may increase the strength and pain of contractions. [2007, amended 2023]	Amniotomy would only be considered when delay has been diagnosed, not just when it is suspected.
1.12.16 Whether or not a woman has agreed to an amniotomy, advise all	1.8.39 No change	

women with suspected delay in the established first stage of labour to have a vaginal examination 2 hours later, and diagnose delay if progress is less than 1 cm. [2007]		
1.12.17 For women with intact membranes in whom delay in the established first stage of labour is confirmed, advise the woman to have an amniotomy, and to have a repeat vaginal examination 2 hours later whether her membranes are ruptured or intact. [2007]	1.8.42 After amniotomy advise the woman to have a repeat vaginal examination 2 hours later whether her membranes are ruptured or intact. [2007,amended 2023]	As the recommendations have been reordered, it is no longer necessary to have the first phrase about having an amniotomy.
1.12.18 For all women with confirmed delay in the established first stage of labour: • transfer the woman to obstetric-led care for an obstetric review and a decision about management options, including the use of oxytocin (follow the general principles for transfer of care described in section 1.6) [2014] • explain to her that using oxytocin after spontaneous or artificial rupture of the membranes will bring forward the time of birth but will not influence the mode of birth or other outcomes. [2007]	1.8.43 If there is no progress 2 hours after the amniotomy, diagnose delay and transfer the woman to obstetric-led care. Follow the general principles for transfer of care described in section 1.5. Take into account that the presence of other risk factors (in addition to delay) may increase the urgency of the transfer. [2014, amended 2023] 1.8.44 For all women with confirmed delay in the established first stage of labour, an obstetrician should offer a full assessment. The obstetric review should include abdominal palpation and vaginal examination and consideration of the offer of oxytocin. [2007, amended 2023] 1.8.45 Discuss the use of oxytocin with the woman and make a shared decision with her about its use. Explain that: • she can be involved in decisions to start, stop or restart the oxytocin • using oxytocin after spontaneous or artificial rupture of the	Recommendations 1.12.18, 1.12.19 and 1.12 21 have been reworded and reordered to form recommendations 1.8.43 to 1.8.46 but the overall content and meaning has not changed.

	membranes will bring forward the time of birth but will not influence the mode of birth or other outcomes • oxytocin will increase the frequency and strength of contractions and that its use will mean that her contractions and her baby will be monitored continuously using cardiotocography. See the NICE guideline on fetal monitoring in labour • oxytocin can cause hyperstimulation which may increase the chance of fetal hypoxia. [2007, amended 2023] 1.8.46 Offer the woman an epidural before oxytocin is started. [2007]	
1.12.19 For a multiparous woman with confirmed delay in the established first stage of labour, an obstetrician should perform a full assessment, including abdominal palpation and vaginal examination, before a decision is made about using oxytocin. [2007]	See above	
1.12.20 Offer all women with delay in the established first stage of labour support and effective pain relief. [2007]	1.8.38 No change	
1.12.21 Inform the woman that oxytocin will increase the frequency and strength of her contractions and that its use will mean that her baby should be monitored continuously. Offer the woman an epidural before oxytocin is started. [2007]	See above	
1.12.22 If oxytocin is used, ensure that the time between increments of the dose is no more frequent than every 30 minutes. Increase oxytocin until there are 4–5 contractions in 10 minutes.	Deleted	Replaced by recommendations 1.8.49 and 1.8.50 based on evidence on use of oxytocin (evidence review F)

(See also recommendation 1.10.4.) [2007]		
1.12.23 Advise the woman to have a vaginal examination 4 hours after starting oxytocin in established labour: • If cervical dilatation has increased by less than 2 cm after 4 hours of oxytocin, further obstetric review is required to assess the need for caesarean section. • If cervical dilatation has increased by 2 cm or more, advise 4-hourly vaginal examinations. [2007]	1.8.52 Advise the woman to have a vaginal examination 4 hours after the oxytocin infusion has led to regular contractions in established labour: • if cervical dilatation has increased by less than 2 cm after 4 hours of oxytocin, further obstetric review is needed to assess the need for caesarean birth • if cervical dilatation has increased by 2 cm or more, advise 4-hourly vaginal examinations. [2007, amended 2023]	Based on the committee's knowledge and experience, the timing of review should be based on when the oxytocin has led to regular contractions, not when it was started.
1.13.1 For the purposes of this guideline, use the following definitions of labour: • Passive second stage of labour: o the finding of full dilatation of the cervix before or in the absence of involuntary expulsive contractions. • Onset of the active second stage of labour: o the baby is visible o expulsive contractions with a finding of full dilatation of the cervix or other signs of full dilatation of the cervix o active maternal effort following confirmation of full dilatation of the cervix in the absence of expulsive	1.9.1 For the purposes of this guideline, use the following definitions of labour: • passive second stage of labour - when there is full dilatation of the cervix (determined either by vaginal examination or noting other external signs of full dilatation) before or in the absence of involuntary or active pushing • the passive second stage of labour may be up to 2 hours when a woman with an epidural in place has been advised to delay pushing (see recommendation 1.9.7 to 1.9.10) • onset of the active second stage of labour is when: o the baby is visible, or o there is involuntary or active pushing with full dilatation of the cervix	Based on the evidence review for pushing techniques (evidence review H) the duration of the passive second stage has been included in the recommendation.

contractions. [2007]	[2007, amended 2023]	
1.13.2 Carry out the following observations in the second stage of labour, record all observations on the partogram and assess whether transfer of care may be needed (see recommendation 1.5.1) [2007, amended 2014]: • half-hourly documentation of the frequency of contractions [2007] • hourly blood pressure [2007] • continued 4-hourly temperature [2007] • frequency of passing urine [2007] • offer a vaginal examination (see recommendation 1.4.5) hourly in the active second stage, or in response to the woman's wishes (after abdominal palpation and assessment of vaginal loss). [2007] In addition: • Continue to take the woman's emotional and psychological needs into account. [2007] • Assess progress, which should include the woman's behaviour, the effectiveness of pushing and the baby's wellbeing, taking into account the baby's position and station at the onset of the second stage. These factors will assist in deciding the timing of further vaginal examination and any need for transfer to obstetric led care. [2007, amended	1.9.2 Continue with observations of the woman and baby and assessment of risk as described for the first stage of labour (see recommendations 1.8.19 and 1.8.20) but be aware that the frequency of fetal monitoring will increase. See the NICE guideline on fetal monitoring. [2023] 1.9.3 Offer a vaginal examination (see recommendation 1.8.9 and 1.8.10) hourly in the active second stage, or in response to the woman's wishes (after abdominal palpation and assessment of vaginal loss). To assess progess, the vaginal examination should include: • position of the head • descent • caput and moulding, [2007, amended 2023] 1.9.4 During the second stage of labour: • continue to take the woman's emotional and psychological needs into account • assess progress, which should include the woman's behaviour, the effectiveness of pushing and the baby's wellbeing, taking into account the baby's position and station at the onset of the second stage. These factors will assist in deciding the timing of further vaginal examinations and any need for transfer to obstetric-led care	Recommendation 1.13.2 has been split into recommendations 1.9.2 to 1.9.4 to make it easier to follow, to simplify it as the monitoring is the same as for the first stage, to remove the detail about fetal monitoring and instead cross-refer to the NICE guideline on fetal monitoring.

2014] • Perform intermittent auscultation of the fetal heart rate immediately after a contraction for at least 1 minute, at least every 5 minutes. Palpate the woman's pulse every 15 minutes to differentiate between the two heartbeats. [2007, amended 2014] • Ongoing consideration should be given to the woman's position, hydration, coping strategies and pain relief throughout the second stage. [2007]	• assess the frequency, strength and duration of contractions • perform intermittent auscultation of the fetal heart rate immediately after a contraction for at least 1 minute, at least every 5 minutes. Palpate the woman's pulse every 15 minutes to differentiate between the 2 heartbeats. See the NICE guideline on fetal monitoring. • ongoing consideration should be given to the woman's position, hydration, coping strategies and pain relief throughout the second stage. [2007, amended 2023]	
1.13.3 For a nulliparous woman: • birth would be expected to take place within 3 hours of the start of the active second stage in most women • diagnose delay in the active second stage when it has lasted 2 hours and refer the woman to a healthcare professional trained to undertake an operative vaginal birth if birth is not imminent. [2007]	1.9.26 For a nulliparous woman without an epidural: • birth would be expected to take place within 3 hours of the start of the active second stage in most women • after 1 hour of active pushing, reassess the clinical picture including progress, contractions, maternal and fetal wellbeing: o if there are signs of progress (in terms of rotation or descent of the presenting part) encourage the woman to continue pushing o if there are no signs of progress, offer vaginal examination and consider amniotomy if the membranes are	Based on their knowledge and experience and also using the evidence on pushing techniques (evidence review H) the committee revised these recommendations and created separate recommendations for women with and without epidurals.

	intact. If there is still no progress diagnose delay and escalate for senior review. • if birth is not imminent after 2 hours of pushing refer the woman for a senior review and a decision on place and mode of birth. [2007, amended 2023] 1.9.28 For a nulliparous woman with an epidural: • birth would be expected to take place within 3 hours of the start of the active second stage in most women, but be aware that these women may have had a passive stage of up to 2 hours after full dilatation before commencing active pushing (see recommendation 1.9.9) • after 1 hour of active pushing, reassess the clinical picture including progress, contractions, maternal and fetal wellbeing: o if there are signs of progress (in terms of rotation or descent of the presenting part) encourage the woman to continue pushing o if there are no signs of progress, offer vaginal examination and consider amniotomy if the membranes are intact. If there is still no progress diagnose delay and escalate for senior review • if birth is not imminent after 2 hours of pushing refer the woman for a senior review and	

	decision on place and mode of birth. [2007, amended 2023]	
1.13.4 For a multiparous woman: • birth would be expected to take place within 2 hours of the start of the active second stage in most women • diagnose delay in the active second stage when it has lasted 1 hour and refer the woman to a healthcare professional trained to undertake an operative vaginal birth if birth is not imminent. [2007]	1.9.27 For a multiparous woman without an epidural: • birth would be expected to take place within 2 hours of the start of the active second stage in most women • after 30 minutes of active pushing, reassess clinical picture including progress, contractions, maternal and fetal wellbeing: o if there are signs of progress (in terms of rotation or descent of the presenting part) encourage the woman to continue pushing o if there are no signs of progress, offer vaginal examination and consider amniotomy if the membranes are intact. If there is still no progress diagnose delay and escalate for senior review • if birth is not imminent after 1 hour of pushing refer the woman for senior review and decision on place and mode of birth. [2007, amended 2023] 1.9.29 For a multiparous woman with an epidural: • birth would be expected to take place within 2 hours of the start of the active second stage in most women, but be aware that these women may have had a passive	Based on their knowledge and experience and also using the evidence on pushing techniques (evidence review H) the committee revised these recommendations and created separate recommendations for women with and without epidurals, and combining the contents of recommendations 1.13.5 to 1.13.7 into recommendations 1.9.26 to 1.9.29.

	stage of up to 1 hour after full dilatation before commencing active pushing (see recommendation 1.9.10)
	• after 30 minutes of active pushing, reassess clinical picture including progress, contractions, maternal and fetal wellbeing:
	  ○ if there are signs of progress (in terms of rotation or descent of the presenting part) encourage the woman to continue pushing
	  ○ if there are no signs of progress, offer vaginal examination and consider amniotomy if the membranes are intact. If there is still no progress diagnose delay and escalate for senior review
	• if birth is not imminent after 1 hour of pushing refer the woman for a senior review and decision on place and mode of birth. [2007, amended 2023]	

1.13.5 For a nulliparous woman, suspect delay if progress (in terms of rotation and/or descent of the presenting part) is inadequate after 1 hour of active second stage. Offer vaginal examination and then offer amniotomy if the membranes are intact. [2007, amended 2014]	See above	
1.13.6 For a multiparous woman, suspect delay if progress (in terms of rotation and/or descent of the	See above	

presenting part) is inadequate after 30 minutes of active second stage. Offer vaginal examination and then offer amniotomy if the membranes are intact. [2014]		
1.13.7 If full dilatation of the cervix has been confirmed in a woman without regional analgesia, but she does not get an urge to push, carry out further assessment after 1 hour. [2007]	See above	
1.13.8 Consideration should be given to the use of oxytocin, with the offer of regional analgesia, for nulliparous women if contractions are inadequate at the onset of the second stage. [2007]	Deleted	Replaced with recommendations about starting oxytocin in the second stage – see 1.13.25/1.9.32 below.
1.13.9 Discourage the woman from lying supine or semi-supine in the second stage of labour and encourage her to adopt any other position that she finds most comfortable. [2007]	Deleted	Replaced by recommendations 1.9.5 and 1.9.6 based on the evidence on position for birth (evidence review H).
1.13.10 Inform the woman that in the second stage she should be guided by her own urge to push. [2007]	Deleted	Replaced by recommendations 1.9.7, 1.9.9 and 1.9.10 based on the evidence on pushing techniques (evidence review G).
1.13.11 If pushing is ineffective or if requested by the woman, offer strategies to assist birth, such as support, change of position, emptying of the bladder and encouragement. [2007]	1.9.11 No change	
1.13.12 Do not perform perineal massage in the second stage of labour. [2007]	Deleted	Replaced by recommendations 1.9.12 to 1.9.15 on interventions to reduce perineal trauma (evidence review I)
1.13.13 Either the 'hands on' (guarding the perineum and flexing the baby's head) or the 'hands poised' (with	Deleted	Replaced by recommendations 1.9.12 to 1.9.15 on interventions to

hands off the perineum and baby's head but in readiness) technique can be used to facilitate spontaneous birth. [2007]		reduce perineal trauma (evidence review I)
1.13.14 Do not offer lidocaine spray to reduce pain in the second stage of labour. [2007]	1.9.16 No change	
1.13.15 Do not carry out a routine episiotomy during spontaneous vaginal birth. [2007]	1.9.17 No change	
1.13.16 Inform any woman with a history of severe perineal trauma that her risk of repeat severe perineal trauma is not increased in a subsequent birth, compared with women having their first baby. [2007]	1.9.18 No change	
1.13.17 Do not offer episiotomy routinely at vaginal birth after previous third- or fourth-degree trauma. [2007]	1.9.19 No change	
1.13.18 In order for a woman who has had previous third- or fourth-degree trauma to make an informed choice, talk with her about the future mode of birth, encompassing: • current urgency or incontinence symptoms • the degree of previous trauma • risk of recurrence • the success of the repair undertaken • the psychological effect of the previous trauma • management of her labour. [2007]	1.9.20 No change	
1.13.19 Inform any woman with infibulated genital mutilation of the risks of difficulty with vaginal examination, catheterisation and application of fetal scalp electrodes. Inform her of the	1.9.21 No change	

risks of delay in the second stage and spontaneous laceration together with the need for an anterior episiotomy and the possible need for defibulation in labour. [2007]		
1.13.20 If an episiotomy is performed, the recommended technique is a mediolateral episiotomy originating at the vaginal fourchette and usually directed to the right side. The angle to the vertical axis should be between 45 and 60 degrees at the time of the episiotomy. [2007]	1.9.22 No change	
1.13.21 Perform an episiotomy if there is a clinical need, such as instrumental birth or suspected fetal compromise. [2007]	1.9.23 No change	
1.13.22 Provide tested effective analgesia before carrying out an episiotomy, except in an emergency because of acute fetal compromise. [2007]	1.9.24 No change	
1.13.23 Inform women that there is insufficient high-quality evidence to either support or discourage giving birth in water. [2007]	1.9.25 No change	
1.13.24 If there is delay in the second stage of labour, or if the woman is excessively distressed, support and sensitive encouragement and the woman's need for analgesia/anaesthesia are particularly important. [2007]	1.9.30 If there is delay in the second stage of labour (see the expected duration of the second stage at 1.9.26 to 1.9.29), or if the woman is excessively distressed, provide support and sensitive encouragement, and assess the woman's need for analgesia/anaesthesia. [2007, amended 2023]	The wording has been amended to make it more woman-focused.
1.13.25 An obstetrician should assess a woman with confirmed delay in the second stage (after transfer to obstetric-led care, following the general	1.9.31 If there is delay in the second stage of labour and the decision is made to transfer the woman to obstetric-led care, follow the general principles for transfer	This recommendation has been split and reordered so that the transfer precedes the assessment. Based

principles for transfer of care described in section 1.6) before contemplating the use of oxytocin. [2014]	of care described in section 1.5. Take into account that the presence of other risk factors (in addition to delay) may increase the urgency of the transfer. [2014, amended 2023] 1.9.32 An obstetrician should carry out an in-person assessment of a woman with confirmed delay in the second stage, after transfer to obstetric-led care before contemplating the use of oxytocin. This should include: • assessment and confirmation of fetal wellbeing (including presentation, position and heart-rate) • differentiation between the fetal and maternal heart rates • confirmation that there is noare no signs of obstructed labour • confirmation that contractions are infrequent or ineffective. [2014, amended 2023]	on the committee's knowledge and experience, more details about the assessment that should be carried out before oxytocin is used have been included.
1.13.26 After initial obstetric assessment of a woman with delay in the second stage, maintain ongoing obstetric review every 15–30 minutes. [2007]	1.9.34 No change	
1.13.27 Think about offering instrumental birth if there is concern about the baby's wellbeing or there is a prolonged second stage. [2007]	1.9.39 Consider birth with forceps or ventouse if there is concern about the baby's wellbeing, there is a prolonged second stage or the woman requests assistance. [2007, amended 2023]	Recommendations 1.13.27 and 1.13 28 have been combined into 1.9.39
1.13.28 Recognise that, on rare occasions, the woman's need for help in the second stage may be an indication to assist by offering instrumental birth when	See above	

supportive care has not helped. [2007]		
1.13.29 The choice of instrument depends on a balance of clinical circumstance and practitioner experience. [2007]	1.9.40 No change	
1.13.30 Because instrumental birth is an operative procedure, advise the woman to have tested effective anaesthesia. [2007]	1.9.41 Discuss pain relief options for birth with forceps or ventouse. The option used should be based on the woman's preference and the clinical situation. [2007, amended 2023] 1.9.42 Ensure the level of pain relief is acceptable to the woman before using forceps or ventouse during birth. [2007, amended 2023]	The wording has been updated to make it more woman-centric and separated into 2 recommendations.
1.13.31 If a woman declines anaesthesia, offer a pudendal block combined with local anaesthetic to the perineum during instrumental birth. [2007]	Deleted	Different analgesia options would be discussed with the woman before birth with forceps or ventouse depending on her wishes and the clinical situation (see above, 1.13.30/1.9.41) so this recommendation has been deleted.
1.13.32 If there is concern about fetal compromise, offer either tested effective anaesthesia or, if time does not allow this, a pudendal block combined with local anaesthetic to the perineum during instrumental birth. [2007]	Deleted	Different analgesia options would be discussed with the woman before birth with forceps or ventouse depending on her wishes and the clinical situation (see above 1.13.30/1.9.41) so this recommendation has been deleted.
1.13.33 Advise the woman to have a caesarean section if vaginal birth is not possible[6]. [2007]	1.9.44 No change	
1.13.34 If the birth needs to be expedited for maternal or fetal reasons, assess both the risk to the baby and the	1.9.35 No change	

safety of the woman. Assessments should include: • the degree of urgency • clinical findings on abdominal and vaginal examination • choice of mode of birth (and whether to use forceps or ventouse if an instrumental birth is indicated) • anticipated degree of difficulty, including the likelihood of success if instrumental birth is attempted • location • any time that may be needed for transfer to obstetric-led care • the need for additional analgesia or anaesthesia • the woman's preferences. [2014]		
1.13.35 Talk with the woman and her birth companion(s) about why the birth needs to be expedited and what the options are. [2014]	1.9.36 No change	
1.13.36 Inform the team about the degree of urgency [2014]	1.9.37 No change	
1.13.37 Record the time at which the decision to expedite the birth is made. [2014]	1.9.38 No change	
1.14.1 Recognise that the time immediately after the birth is when the woman and her birth companion(s) are meeting and getting to know the baby. Ensure that any care or interventions are sensitive to this and minimise separation or disruption of the mother and baby. [2014]	1.10.1 No change	
1.14.2 For the purposes of this guideline, use the following definitions: • The third stage of labour is the time from the birth	1.10.2 For the purposes of this guideline, use the following definitions: • The third stage of labour is the time from the birth	Timing of cord-clamping in active management is defined in a later recommendation so

of the baby to the expulsion of the placenta and membranes.
• Active management of the third stage involves a package of care comprising the following components:
  ○ routine use of uterotonic drugs
  ○ deferred clamping and cutting of the cord
  ○ controlled cord traction after signs of separation of the placenta.
• Physiological management of the third stage involves a package of care that includes the following components:
  ○ no routine use of uterotonic drugs
  ○ no clamping of the cord until pulsation has stopped
  ○ delivery of the placenta by maternal effort. [2014]
	of the baby to the expulsion of the placenta and membranes.
	• Active management of the third stage involves a package of care comprising the following components:
	  ○ routine use of uterotonic drugs
	  ○ cord clamping and cutting of the cord (see recommendation 1.10.16)
	  ○ controlled cord traction after signs of separation of the placenta.
	• Physiological management of the third stage involves a package of care that includes the following components:
	  ○ no routine use of uterotonic drugs
	  ○ no clamping of the cord until pulsation has stopped, or after delivery of the placenta
	  ○ delivery of the placenta spontaneously or by maternal effort. [2014, amended 2023]
		the term ‘deferred’ is not needed here. For physiological management the cord clamping timing has been clarified.

1.14.3 Diagnose a prolonged third stage of labour if it is not completed within 30 minutes of the birth with active management or within 60 minutes of the birth with physiological management. Follow recommendations 1.14.21 to 1.14.28 on managing a retained placenta. [2014]	1.10.22 No change.	

1.14.4 Record the following observations for a woman in the third stage of labour: • her general physical condition, as shown by her colour, respiration and her own report of how she feels • vaginal blood loss. [2014]	1.10.3 No change	
1.14.5 If there is postpartum haemorrhage, a retained placenta or maternal collapse, or any other concerns about the woman's wellbeing: • transfer her to obstetric-led care (following the general principles for transfer of care described in section 1.6) • carry out frequent observations to assess whether resuscitation is needed. [2014]	1.10.4 If there is postpartum haemorrhage, a retained placenta or maternal collapse, or any other concerns about the woman's wellbeing: • carry out frequent observations to assess whether resuscitation is needed • transfer her to obstetric-led care. (Follow the general principles for transfer of care described in section 1.5, taking into account that multiple risk factors may increase the urgency of the transfer, particularly if they have a cumulative effect. [2014, amended 2023]	The observations have been moved before the transfer instructions and the need to consider multiple risk factors when deciding the urgency of transfer has been added.
1.14.6 Explain to the woman antenatally about what to expect with each package of care for managing the third stage of labour and the benefits and risks associated with each. [2014]	1.10.5 Discuss with the woman antenatally, during her initial assessment and in labour about: • the different options for managing the third stage of labour, and what to expect with each option • and the benefits and risks associated with active and physiological management of the third stage. [2014, amended 2023]	The ongoing nature of the discussion about the third stage has been included and this incorporates the wording from recommendation 1.14.9
1.14.7 Explain to the woman that active management: • shortens the third stage compared with physiological management	Deleted	Replaced with recommendation 1.10.6 based on the evidence from the review on active and physiological management of the

• is associated with nausea and vomiting in about 100 in 1,000 women • is associated with an approximate risk of 13 in 1,000 of a haemorrhage of more than 1 litre • is associated with an approximate risk of 14 in 1,000 of a blood transfusion. [2014]		third stage (evidence review K)
1.14.8 Explain to the woman that physiological management: • is associated with nausea and vomiting in about 50 in 1,000 women • is associated with an approximate risk of 29 in 1,000 of a haemorrhage of more than 1 litre • is associated with an approximate risk of 40 in 1,000 of a blood transfusion. [2014]	Deleted	Replaced with recommendation 1.10.7 based on the evidence from the review on active and physiological management of the third stage (evidence review K)
1.14.9 Discuss again with the woman at the initial assessment in labour (see section 1.4) about the different options for managing the third stage and ways of supporting her during delivery of the placenta, and ask if she has any preferences. [2014]	Deleted	Incorporated into 1.14.6/1.10.5
1.14.10 Advise the woman to have active management of the third stage, because it is associated with a lower risk of a postpartum haemorrhage and/or blood transfusion. [2014]	1.10.8 No change	
1.14.11 If a woman at low risk of postpartum haemorrhage requests physiological management of the third stage, support her in her choice. [2014]	1.10.9 If a woman requests physiological management of the third stage:, • discuss her level of risk so she can make an informed decision, and • support her in her choice. [2014, amended 2023]	All women should be supported in their decision to have physiological management, even if not at low risk, although they should be made aware of the risks.

1.14.12 Document in the records the decision that is agreed with the woman about management of the third stage. [2014]	1.10.10 No change	
1.14.13 For active management, administer 10 IU of oxytocin by intramuscular injection with the birth of the anterior shoulder or immediately after the birth of the baby and before the cord is clamped and cut. Use oxytocin as it is associated with fewer side effects than oxytocin plus ergometrine. [2014]	Deleted	Replaced by recommendations 1.10.11 to 1.10.13 and 1.10.15, based on evidence for prevention of postpartum haemorrhage (evidence review M).
1.14.14 After administering oxytocin, clamp and cut the cord. • Do not clamp the cord earlier than 1 minute from the birth of the baby unless there is concern about the integrity of the cord or the baby has a heart rate below 60 beats/minute that is not getting faster. • Clamp the cord before 5 minutes in order to perform controlled cord traction as part of active management. • If the woman requests that the cord is clamped and cut later than 5 minutes, support her in her choice. [2014]	1.10.16 After administering the uterotonic, clamp and cut the cord: • do not clamp the cord earlier than 1 minute from the birth of the baby unless there is concern about the integrity of the cord or the baby has a heart rate below 60 beats/minute that is not getting faster • clamp the cord before 5 minutes in order to perform controlled cord traction as part of active management. • if the woman requests that the cord is clamped and cut later than 5 minutes, support her choice. [2014, amended 2023]	Oxytocin has been changed to 'uterotonic' as several uterotonics are now recommended, depending on the clinical situation.
1.14.15 After cutting the cord, use controlled cord traction. [2014]	Deleted	This recommendation has been combined into the subsequent recommendation.
1.14.16 Perform controlled cord traction as part of active management only after administration of oxytocin and signs of separation of the placenta. [2014]	1.10.17 After cutting the cord, perform controlled cord traction as part of active management only after administration of oxytocin and signs of separation of	See above

	the placenta. [2014, amended 2023]	
1.14.17 Record the timing of cord clamping in both active and physiological management. [2014]	1.10.18 No change	
1.14.18 Advise a change from physiological management to active management if either of the following occur: • haemorrhage • the placenta is not delivered within 1 hour of the birth of the baby. [2014]	1.10.19 No change	
1.14.19 Offer a change from physiological management to active management if the woman wants to shorten the third stage. [2014]	1.10.20 No change	
1.14.20 Do not use either umbilical oxytocin infusion or prostaglandin routinely in the third stage of labour. [2014]	1.10.21 No change	
1.14.21 Secure intravenous access if the placenta is retained, and explain to the woman why this is needed. [2014]	1.10.23 No change	
1.14.22 Do not use umbilical vein agents if the placenta is retained. [2014]	1.10.24 No change	
1.14.23 Do not use intravenous oxytocic agents routinely to deliver a retained placenta. [2014]	1.10.25 No change	
1.14.24 Give intravenous oxytocic agents if the placenta is retained and the woman is bleeding excessively. [2014]	1.10.26 No change	
1.14.25 If the placenta is retained and there is concern about the woman's condition: • offer a vaginal examination to assess the need to undertake manual removal of the placenta	1.10.27 No change	

• explain that this assessment can be painful and advise her to have analgesia. [2014]		
1.14.26 If the woman reports inadequate analgesia during the assessment, stop the examination and address this immediately. [2014]	1.10.28 No change	
1.14.27 If uterine exploration is necessary and the woman is not already in an obstetric unit, arrange urgent transfer (following the general principles for transfer of care described in section 1.6). [2014]	1.10.29 If the placenta is retained and the woman is not already in an obstetric unit, arrange transfer. Follow the general principles for transfer of care described in section 1.5, taking into account that multiple risk factors may increase the urgency of the transfer, particularly if they have a cumulative effect. [2014, amended 2023]	Based on the committee's knowledge and experience, all women with a retained placenta should be transferred, not just because they need uterine exploration. The urgency of the transfer based on cumulative risk factors has been included.
1.14.28 Do not carry out uterine exploration or manual removal of the placenta without an anaesthetic. [2014]	1.10.30 No change	
1.14.29 Advise women with risk factors for postpartum haemorrhage to give birth in an obstetric unit, where more emergency treatment options are available. • Antenatal risk factors: o previous retained placenta or postpartum haemorrhage o maternal haemoglobin level below 85 g/litre at onset of labour o BMI greater than 35 kg/m2 o grand multiparity (parity 4 or more) o antepartum haemorrhage o overdistention of the uterus (for	1.10.31 Advise women with antenatal risk factors for postpartum haemorrhage to give birth in an obstetric unit, where more emergency treatment options are available. Risk factors include: • previous retained placenta or previous postpartum haemorrhage over 1,000 mL or requiring blood transfusion • placenta accreta spectrum • pre-eclampsia • maternal haemoglobin level below 85 g/litre at onset of labour • BMI greater than 35 kg/m^2	Based on their knowledge and experience the committee revised the lists of antenatal and intrapartum risk factors. The recommendation was split into 2 to make it easier to read.

example, multiple pregnancy, polyhydramnios or macrosomia) ○ existing uterine abnormalities ○ low-lying placenta ○ maternal age of 35 years or older. • Risk factors in labour: ○ induction ○ prolonged first, second or third stage of labour ○ oxytocin use ○ precipitate labour ○ operative birth or caesarean section. [2007]	• grand multiparity (parity 4 or more) • antepartum haemorrhage or placental abruption • overdistention of the uterus (for example, multiple pregnancy, polyhydramnios) existing • uterine abnormalities (for example fibroids) • low-lying placenta. [2007, amended 2023] 1.10.32 Continue to assess risk factors for postpartum haemorrhage during labour, taking into account antenatal risk factors and any risk factors that have arisen during labour. These can include: • induction or augmentation of labour with oxytocin or prostaglandins • prolonged first or, second or third stage of labour • sepsis • oxytocin use during labour • precipitate labour • birth with forceps or ventouse • caesarean birth • shoulder dystocia • delay in delivery of the placenta. [2007, amended 20223]	
1.14.30 If a woman has risk factors for postpartum haemorrhage, highlight these in her notes, and make and discuss with her a care plan covering the third stage of labour. [2007]	1.10.34 No change	
1.14.31 If a woman has a postpartum haemorrhage: • call for help	1.10.35 If a woman has a postpartum haemorrhage: • call for help	Based on the committee's knowledge and experience the dose and method of

• give immediate clinical treatment:
  ○ emptying of the bladder and
  ○ uterine massage and
  ○ uterotonic drugs and
  ○ intravenous fluids and
  ○ controlled cord traction if the placenta has not yet been delivered
• continuously assess blood loss and the woman's condition, and identify the source of the bleeding
• give supplementary oxygen
• arrange for transfer of the woman to obstetric-led care (following the general principles for transfer of care described in section 1.6). [2014]
	• give immediate clinical treatment:
	  ○ emptying of the bladder and
	  ○ uterine massage and
	  ○ uterotonic drugs and
	  ○ intravenous fluids and
	  ○ controlled cord traction if the placenta has not yet been delivered
	• continuously assess blood loss and the woman's condition, and identify the source of the bleeding
	• give supplementary oxygen if needed (starting at 15 L/minute, to obtain a target oxygen saturation of 94 to -98%, using a non-rebreathing mask with a reservoir bag):
	• arrange for transfer of the woman to obstetric-led care (following the general principles for transfer of care described in section 1.5). [2014, amended 2023]
		oxygen administration has been clarified.

1.14.32 Administer a bolus of one of the following as first-line treatment for postpartum haemorrhage: • oxytocin (10 IU intravenous) or • ergometrine (0.5 mg intramuscular) or • combined oxytocin and ergometrine (5 IU/0.5 mg intramuscular). [2014]	Deleted	Replaced by recommendation 1.10.36 and table 16, based on the evidence from the management of postpartum haemorrhage (evidence review O)
1.14.33 Offer second-line treatment for postpartum haemorrhage if needed. No particular uterotonic drug can	Deleted	Replaced by recommendation 1.10.36 and table 16, based on the evidence from the

be recommended over any other; options include:
• repeat bolus of:
  ○ oxytocin (intravenous)
  ○ ergometrine (intramuscular, or cautiously intravenously)
  ○ combined oxytocin and ergometrine (intramuscular)
• misoprostol
• oxytocin infusion
• carboprost (intramuscular). [2014]
		management of postpartum haemorrhage (evidence review O)

1.14.34 Assess the need for adjuvant options for managing significant continuing postpartum haemorrhage, including: • tranexamic acid (intravenous) • rarely, in the presence of otherwise normal clotting factors, rFactor VIIa, in consultation with a haematologist. [2014]	Deleted	Replaced by recommendation 1.10 37 based on the evidence on the management of postpartum haemorrhage (evidence review O). The use of blood products was moved to a subsequent recommendation (see 1.14.36/1.10.39)
1.14.35 Allocate a member of the healthcare team to stay with the woman and her birth companion(s), explain what is happening, answer any questions and offer support throughout the emergency situation. [2014]	1.10.38 No change	
1.14.36 If the haemorrhage continues: • perform examination under anaesthetic • ensure that the uterus is empty and repair any trauma • consider balloon tamponade before surgical options. [2014]	1.10.39 If the haemorrhage continues: • consider near-patient coagulation testing, if available • consider administration of blood products (for example, packed red cells and clotting products) • perform examination under anaesthetic	Based on the committee's knowledge and experience the use of near patient testing and blood products was included in this recommendation.

	• ensure that the uterus is empty and repair any trauma • consider balloon tamponade before surgical options. [2014, amended 2023]	
1.14.37 Be aware that no particular surgical procedure can be recommended over any other for treating postpartum haemorrhage. [2014]	1.10.40 No change	
1.14.38 The maternity service and ambulance service should have strategies in place in order to respond quickly and appropriately if a woman has a postpartum haemorrhage in any setting. [2014]	1.10.41 No change	
1.15.1 Record the Apgar score routinely at 1 and 5 minutes for all births. [2007]	1.11.1 No change	
1.15.2 Record the time from birth to the onset of regular respirations. [2014]	1.11.3 No change	
1.15.3 If the baby is born in poor condition (on the basis of abnormal breathing, heart rate or tone): • follow recommendations 1.15.13 to 1.15.18 on neonatal resuscitation and • take paired cord-blood samples for blood gas analysis, after clamping the cord using 2 clamps. Continue to evaluate and record the baby's condition until it is improved and stable. [2014]	1.11.4 No change	
1.15.4 Do not take paired cord blood samples (for blood gas analysis) routinely. [2014]	1.11.5 No change	
1.15.5 Ensure that a second clamp to allow double-clamping of the cord is	1.11.6 No change	

available in all birth settings. [2014]		
1.15.6 Encourage women to have skin-to-skin contact with their babies as soon as possible after the birth[7]. [2007]	1.11.7 Encourage women to have skin-to-skin contact with their babies as soon as possible after the birth. If the woman is not well enough, encourage her birth companion to have skin-to-skin contact instead. [2007, amended 2023]	Based on their knowledge and experience, the committee were aware that skin-to skin contact with another person is preferable to no skin to skin.
1.15.7 In order to keep the baby warm, dry and cover him or her with a warm, dry blanket or towel while maintaining skin-to-skin contact with the woman. [2007]	1.11.8 No change	
1.15.8 Avoid separation of a woman and her baby within the first hour of the birth for routine postnatal procedures, for example, weighing, measuring and bathing, unless these measures are requested by the woman, or are necessary for the immediate care of the baby[7]. [2007]	1.11.10 No change	
1.15.9 Encourage initiation of breastfeeding as soon as possible after the birth, ideally within 1 hour[7]. [2007]	1.11.11 No change	
1.15.10 Record head circumference, body temperature and birth weight soon after the first hour following birth. [2007]	1.11.12 No change	
1.15.11 Undertake an initial examination to detect any major physical abnormality and to identify any problems that require referral. [2007]	1.11. 13 No change	
1.15.12 Ensure that any examination or treatment of the baby is undertaken with the consent of the parents and either in their presence or, if this is not possible, with their knowledge. [2007]	1.11.15 No change	

1.15.13 In the first minutes after birth, evaluate the condition of the baby – specifically respiration, heart rate and tone – in order to determine whether resuscitation is needed according to nationally accredited guidelines on neonatal resuscitation. [2014]	1.11. 16 No change	
1.15.4 All relevant healthcare professionals caring for women during birth should attend annually a course in neonatal resuscitation that is consistent with nationally accredited guidelines on neonatal resuscitation. [2014]	1.11.17 No change	
1.15.15 In all birth settings: • bear in mind that it will be necessary to call for help if the baby needs resuscitation, and plan accordingly • ensure that there are facilities for resuscitation, and for transferring the baby to another location if necessary • develop emergency referral pathways for both the woman and the baby, and implement these if necessary. [2014]	1.11.18 No change	
1.15.16 If a newborn baby needs basic resuscitation, start with air. [2014]	1.11.19 No change	
1.15.17 Minimise separation of the baby and mother, taking into account the clinical circumstances. [2014]	1.11.20 No change	
1.15.18 Throughout an emergency situation in which the baby needs resuscitation, allocate a member of the healthcare team to talk with, and offer support to, the woman and any birth companion(s). [2014]	1.11 21 No change	

1.15.19 In the presence of any degree of meconium: • do not suction the baby's upper airways (nasopharynx and oropharynx) before birth of the shoulders and trunk • do not suction the baby's upper airways (nasopharynx and oropharynx) if the baby has normal respiration, heart rate and tone • do not intubate if the baby has normal respiration, heart rate and tone. [2014]	1.11.22 No change	
1.15.20 If there has been significant meconium (see recommendation 1.5.2) and the baby does not have normal respiration, heart rate and tone, follow nationally accredited guidelines on neonatal resuscitation, including early laryngoscopy and suction under direct vision. [2014]	1.11.23 If there has been any degree of meconium and the baby does not have normal respiration, heart rate and tone, follow nationally accredited guidelines on neonatal resuscitation. [2014, amended 2023]	The committee considered that any degree of meconium should be followed by resuscitation if the baby's clinical condition warranted it.
1.15.21 If there has been significant meconium and the baby is healthy, closely observe the baby within a unit with immediate access to a neonatologist. Perform these observations at 1 and 2 hours of age and then 2-hourly until 12 hours of age. [2014]	1.11.24 No change	
1.15.22 If there has been non-significant meconium, observe the baby at 1 and 2 hours of age in all birth settings. [2014]	1.11.25 No change	
1.15.23 If any of the following are observed after any degree of meconium, ask a neonatologist to assess the baby (transfer both the woman and baby if they are at home or in a freestanding midwifery unit, following the general principles for transfer	1.11.26 If any of the following are observed after any degree of meconium, ask a neonatologist to assess the baby. Transfer both the woman and baby if they are at home or in a freestanding midwifery unit. Follow the general principles	The need to take to effect of multiple risk factors into consideration when deciding the urgency of the transfer was added and the timing of raised

of care described in section 1.6): • respiratory rate above 60 per minute • the presence of grunting • heart rate below 100 or above 160 beats/minute • capillary refill time above 3 seconds • body temperature of 38°C or above, or 37.5°C on 2 occasions 30 minutes apart • oxygen saturation below 95% (measuring oxygen saturation is optional after non-significant meconium) • presence of central cyanosis, confirmed by pulse oximetry if available. [2014]	for transfer of care described in section 1.5, taking into account that multiple risk factors may increase the urgency of the transfer, particularly if they have a cumulative effect. • respiratory rate above 60 breaths/ minute • the presence of grunting • heart rate below 100 or above 160 beats/minute • capillary refill time above 3 seconds • body temperature of 38°C or above, or 37.5°C on 2 occasions 15 to 30 minutes apart • oxygen saturation below 95% (measuring oxygen saturation is optional after non-significant meconium) • presence of central cyanosis, confirmed by pulse oximetry if available. [2014, amended 2023]	temperatures was clarifed.
1.15.24 Explain the findings to the woman, and inform her about what to look out for and who to talk to if she has any concerns. [2014]	1.11.27 No change	
1.15.25 Closely observe any baby born to a woman with prelabour rupture of the membranes (more than 24 hours before the onset of established labour) at term for the first 12 hours of life (at 1 hour, 2 hours, 6 hours and 12 hours) in all settings. Include assessment of: • temperature • heart rate • respiratory rate • presence of respiratory grunting • significant subcostal recession	1.11.28 Closely observe any baby born to a woman with prelabour rupture of the membranes (more than 24 hours before the onset of established labour) at term for the first 12 hours of life (at 1, 2, 6 and 12 hours) in all settings. Include assessment of: • temperature • heart rate • respiratory rate • presence of respiratory grunting • significant subcostal recession	The need to take to effect of multiple risk factors into consideration when deciding the urgency of the transfer was added.

• presence of nasal flare • presence of central cyanosis, confirmed by pulse oximetry if available • skin perfusion assessed by capillary refill • floppiness, general wellbeing and feeding. If any of these are observed, ask a neonatologist to assess the baby (transfer both the woman and baby if they are at home or in a freestanding midwifery unit, following the general principles for transfer of care described in section 1.6). [2014]	• presence of nasal flare • presence of central cyanosis, confirmed by pulse oximetry if available • skin perfusion assessed by capillary refill • floppiness • concerns about general wellbeing and feeding. If any of these are observed, ask a neonatologist to assess the baby. Transfer both the woman and baby if they are at home or in a freestanding midwifery unit. Follow the general principles for transfer of care described in section 1.5 and take into account that multiple risk factors may increase the urgency of the transfer, particularly if they have a cumulative effect. [2014, amended 2023]	
1.15.26 If there are no signs of infection in the woman, do not give antibiotics to either the woman or the baby, even if the membranes have been ruptured for over 24 hours. [2007]	1.11.29 No change	
1.15.27 If there is evidence of infection in the woman, prescribe a full course of broad-spectrum intravenous antibiotics. [2007]	1.11.30 If there is evidence of infection in the woman, see the NICE guideline on neonatal infection for advice on when to consider antibiotics. [2007, amended 2023]	This recommendation has been superseded by the NICE neonatal infection guidance and so a cross-link has been included to this.
1.15.28 Advise women with prelabour rupture of the membranes to inform their healthcare professionals immediately of any concerns they have about their baby's wellbeing in the first 5 days after birth, particularly in the first 12 hours when the risk of infection is greatest. [2007]	1.11.31 No change	

1.15.29 Do not perform blood, cerebrospinal fluid and/or surface culture tests in an asymptomatic baby. [2007]	1.11.32 No change	
1.15.30 Refer a baby with any symptom of possible sepsis, or born to a woman who has evidence of chorioamnionitis, to a neonatal care specialist immediately. [2007]	1.11.33 No change	
1.16.1 Carry out the following observations of the woman after birth: • Record her temperature, pulse and blood pressure. Transfer the woman (with her baby) to obstetric-led care if any of the relevant indications listed in recommendation 1.5.1 are met. • Uterine contraction and lochia. • Examine the placenta and membranes: assess their condition, structure, cord vessels and completeness. Transfer the woman (with her baby) to obstetric-led care if the placenta is incomplete. • Early assessment of the woman's emotional and psychological condition in response to labour and birth. • Successful voiding of the bladder. Assess whether to transfer the woman (with her baby) to obstetric-led care after 6 hours if her bladder is palpable and she is unable to pass urine. If transferring the woman to obstetric-led care, follow the general principles for transfer of care described in section 1.6. [2014]	1.12.1 Carry out the following observations of the woman after birth: • record her temperature, pulse and blood pressure. Transfer the woman (with her baby) to obstetric-led care if any of the relevant indications listed in recommendation 1.8.20 are met • check uterine contraction and lochia • examine the placenta and membranes: assess their condition, structure, cord vessels and completeness. Transfer the woman (with her baby) to obstetric-led care if the placenta is incomplete • make an early assessment of the woman's emotional and psychological condition in response to labour and birth • check for successful voiding of the bladder. If, after 6 hours, her bladder is palpable and she is unable to pass urine, advise catheterisation and consider transferring the woman (with her baby) to obstetric-led care	Based on the committee knowledge and experience, the action to take if a woman is unable to pass urine after 6 hours has been included. The need to consider multiple risk factors when deciding on the urgency of transfer has been included.

	If transferring the woman to obstetric-led care, follow the general principles for transfer of care described in section 1.5 and take into account that multiple risk factors may increase the urgency of the transfer, particularly if they have a cumulative effect. [2014, amended 2023]	

1.16.2 Define perineal or genital trauma caused by either tearing or episiotomy as follows:
• first degree – injury to skin only
• second degree – injury to the perineal muscles but not the anal sphincter
• third degree – injury to the perineum involving the anal sphincter complex:
  ○ 3a – less than 50% of external anal sphincter thickness torn
  ○ 3b – more than 50% of external anal sphincter thickness torn
  ○ 3c – internal anal sphincter torn.
• fourth degree – injury to the perineum involving the anal sphincter complex (external and internal anal sphincter) and anal epithelium. [2007]
	1.12.3 No change	

1.16.3 Before assessing for genital trauma: • explain to the woman what is planned and why • offer inhalational analgesia • ensure good lighting • position the woman so that she is comfortable and so that the genital	1.12.4 No change	

structures can be seen clearly. [2007]		
1.16.4 Perform the initial examination gently and with sensitivity. It may be done in the immediate period after birth. [2007]	1.12.5 No change	
1.16.5 If genital trauma is identified after birth, offer further systematic assessment, including a rectal examination. [2007]	1.12.6 No change	
1.16.6 Include the following in a systematic assessment of genital trauma: • further explanation of what is planned and why • confirmation by the woman that tested effective local or regional analgesia is in place • visual assessment of the extent of perineal trauma to include the structures involved, the apex of the injury and assessment of bleeding • a rectal examination to assess whether there has been any damage to the external or internal anal sphincter if there is any suspicion that the perineal muscles are damaged. [2007]	1.12 7 No change	
1.16.7 Ensure that the timing of this systematic assessment does not interfere with mother–baby bonding unless the woman has bleeding that requires urgent attention. [2007]	1.12.8 No change	
1.16.8 Assist the woman to adopt a position that allows adequate visual assessment of the degree of trauma and for repair. Only maintain this position for as long as necessary for systematic assessment and repair. If it is not possible to adequately assess the trauma, transfer	1.12 9 No change	

the woman (with her baby) to obstetric-led care, following the general principles for transfer of care described in section 1.6. [2007, amended 2014]		
1.1.6.9 Seek advice from a more experienced midwife or obstetrician if there is uncertainty about the nature or extent of the trauma. Transfer the woman (with her baby) to obstetric-led care (following the general principles for transfer of care described in section 1.6) if the repair needs further surgical or anaesthetic expertise. [2007, amended 2014]	1.12.10 No change	
1.16.10 Document the systematic assessment and its results fully, possibly pictorially. [2007]	1.12.11 No change	
1.16.11 All relevant healthcare professionals should attend training in perineal/genital assessment and repair, and ensure that they maintain these skills. [2007]	1.12.12 No change	
1.16.12 Undertake repair of the perineum as soon as possible to minimise the risk of infection and blood loss. [2007]	1.12.13 No change	
1.16.13 When carrying out perineal repair: • ensure that tested effective analgesia is in place, using infiltration with up to 20 ml of 1% lidocaine or equivalent • top up the epidural or insert a spinal anaesthetic if necessary. [2007]	1.12.14 No change	
1.16.14 If the woman reports inadequate pain relief at any point, address this immediately. [2007]	1.12.15 No change	

1.16.15 Advise the woman that in the case of first-degree trauma, the wound should be sutured in order to improve healing, unless the skin edges are well opposed. [2007]	1.12.16 No change	
1.16.16 Advise the woman that in the case of second-degree trauma, the muscle should be sutured in order to improve healing. [2007]	1.12.17 No change	
1.16.17 If the skin is opposed after suturing of the muscle in second-degree trauma, there is no need to suture it. [2007]	1.12.18 No change	
1.16.18 If the skin does require suturing, use a continuous subcuticular technique. [2007]	1.12.19 No change	
1.16.19 Undertake perineal repair using a continuous non-locked suturing technique for the vaginal wall and muscle layer. [2007]	1.12.20 No change	
1.16.20 Use an absorbable synthetic suture material to suture the perineum. [2007]	1.12.21 No change	
1.16.21 Offer rectal non-steroidal anti-inflammatory drugs routinely after perineal repair of first- and second-degree trauma provided these drugs are not contraindicated. [2007]	1.12.22 No change	
1.16.22 Observe the following basic principles when performing perineal repairs: • Repair perineal trauma using aseptic techniques. • Check equipment and count swabs and needles before and after the procedure. • Good lighting is essential to see and identify the structures involved. • Ensure that difficult trauma is repaired by an	1.12.23 Observe the following basic principles when performing perineal repairs: • repair perineal trauma using aseptic techniques • check equipment and count swabs and needles before and after the procedure • ensure good lighting is available to see and identify the structures involved	Based on the committee's knowledge and experience the routine insertion of a catheter is not required after perineal repair.

experienced practitioner in theatre under regional or general anaesthesia. • Insert an indwelling catheter for 24 hours to prevent urinary retention. • Ensure that good anatomical alignment of the wound is achieved and that consideration is given to the cosmetic results. • Carry out rectal examination after completing the repair to ensure that suture material has not been accidentally inserted through the rectal mucosa. • After completion of the repair, document an accurate detailed account covering the extent of the trauma, the method of repair and the materials used. • Give the woman information about the extent of the trauma, pain relief, diet, hygiene and the importance of pelvic-floor exercises. [2007]	• ensure that difficult trauma is repaired by an experienced practitioner in theatre under regional or general anaesthesia • ensure that good anatomical alignment of the wound is achieved and that consideration is given to the cosmetic results • ensure that suture material has not been accidentally inserted through the rectal mucosa by carrying out a rectal examination after completing the repair • after completion of the repair, document an accurate detailed account covering the extent of the trauma, the method of repair and the materials used • give the woman information about the extent of the trauma, pain relief, diet, hygiene and the importance of pelvic floor exercises. [2007, amended 2023]	

Table D Minor changes to recommendation wording (no change to intent)

Recommendation numbers in current guideline	Comment
All recommendations except those labelled **[2023]** or **[2007, 2014 or 2017, amended 2023]**	Recommendations have been edited into the direct style (in line with current NICE style for recommendations in guidelines) where possible. Yellow highlighting has not been applied to these changes.

Appendix A: Adverse outcomes for different places of birth

Adverse outcome: in order to be able to count enough adverse events to be able to say that the results recorded are not just a result of chance, the Birthplace UK (2011) study used a composite definition of 'adverse outcome'. The definition includes the following outcomes: stillbirth during labour, death of the baby in the first week after birth, neonatal encephalopathy (disordered brain function caused by oxygen deprivation before or during birth), meconium aspiration syndrome, and physical birth injuries (brachial plexus injury and bone fractures). The term 'serious medical problems' has been used to describe this composite outcome in the guideline recommendations.

Table A1. Numbers and proportions of the individual components of the composite adverse outcomes measure recorded in the Birthplace UK (2011) study

Outcome	Actual number of babies affected out of [63,955 to 64,535] (number per 1,000)	Percentage of all adverse outcomes measured
Stillbirth after start of care in labour	14 out of 64,535 (0.22 per 1,000)	5%
Death of the baby in the first week after birth	18 out of 64,292 (0.28 per 1,000)	7%
Neonatal encephalopathy (disordered brain function caused by oxygen deprivation before or during birth) (clinical diagnosis)	102 out of 63,955 (1.6 per 1,000)	40%
Meconium aspiration syndrome (the baby breathes meconium into their lungs)	86 out of 63,955 (1.3 per 1,000)	34%
Brachial plexus injury	24 out of 63,955 (0.38 per 1,000)	9%
Bone fractures	11 out of 63,955 (0.17 per 1,000)	4%
TOTAL (of all outcomes included in the 'adverse outcome' composite measure)	255 out of 63,955 to 64,535) (approx. 4 per 1,000)	99% (does not equal 100% because of rounding)

Note: Each of the categories above are mutually exclusive and outcomes listed higher in the table take precedence over outcomes listed lower down. For example, if a baby with neonatal encephalopathy died within 7 days the outcome is classified as

an early neonatal death. For actual number of babies affected, the denominator varies because of missing values.