

Please note, IF DOCUMENT IS PRINTED, IT MAY BECOME OUT OF DATE

## TRUST CLINICAL GUIDELINE

### Multiple Pregnancy & Birth

#### Overview

The aim of this guideline is to provide evidence-based guidance on the management of women and birthing people with twin or triplet pregnancies through the antenatal and intrapartum period.

<b>Owner</b>	S. Adamson
<b>Author/further information</b>	R. Mason, Obstetric Consultant
<b>Guideline version</b>	v1.0
<b>Related policies</b>	None
<b>Related protocols/procedures</b>	<p><b>SRH&amp;WH:</b></p> <p>Antenatal Care and Patient Information, Induction of Labour, Antenatal Screening Tests, Preterm Risk Pathway, Antepartum &amp; Intrapartum Haemorrhage, Hypertensive Disorders of Pregnancy, Care in Labour.</p> <p><b>PRH&amp;RSCH:</b></p> <p>Antenatal Schedule of Care, Obstetric Haemorrhage, Antenatal Screening protocols, Hypertensive Diseases, Care in Labour.</p> <p><b>UHSx:</b></p> <p>Consultant Midwife Additional Care and Support Clinic Meeting SOP</p>
<b>Standards</b>	<a href="#">NICE NG137 Twin &amp; Triplet Pregnancy (updated 2024)</a>
<b>Superseded documents</b>	<p><b>SRH&amp;WH:</b></p> <p>CG1126 Multiple Pregnancy &amp; Birth</p> <p><b>PRH&amp;RSCH:</b></p>

	MP020 Multiple Birth
<b>Review due</b>	September 2028
<b>Date uploaded</b>	29th September 2025

<b>Approval</b>		
JOGG	Date approved	27 <sup>th</sup> May 2025
Women & Children's Clinical Effectiveness Meeting	Date approved	19 <sup>th</sup> June 2025
Medicines Governance Committee	Date approved	19 <sup>th</sup> August 2025
<b>Consultation</b>		
Sonography	Date reviewed	21 <sup>st</sup> October 2024
<b>Ratification</b>		
Clinical Document Approval Group	Date approved	23 <sup>rd</sup> September 2025

## Contents

1.0	Introduction .....	4
2.0	Scope .....	4
3.0	Responsibilities .....	5
4.0	Definitions and abbreviations used within this guideline .....	5
5.0	Diagnosis and determination of chorionicity & amnionicity .....	6
5.1	Ascertaining chorionicity and amnionicity .....	6
6.0	Antenatal care .....	7
6.1	General antenatal care .....	7
6.2	Planning for birth .....	8
6.2.1	Timing of birth .....	9
6.3	Screening, scans and antenatal appointments .....	10
6.3.1	Antenatal appointment schedules .....	11
7.0	Indications for referral to tertiary centre or fetal medicine specialist .....	12
8.0	Monitoring for fetal growth restriction .....	12
9.0	Twin to Twin Transfusion Syndrome (TTTS) also known as Feto-Fetal Transfusion Syndrome .....	13
9.1	Quintero Classification of TTTS .....	15
9.2	Management of confirmed TTTS .....	15
10.0	Single fetal demise in multiple pregnancy .....	16
11.0	Further complications of multiple pregnancy .....	16
11.1	Hypertension and pre-eclampsia .....	16
11.2	Screening for and preventing preterm labour .....	17
11.2.1	Screening for preterm labour .....	17
11.2.2	Preventing preterm labour .....	18
11.2.3	Postpartum haemorrhage .....	18
12.0	Mode of birth .....	19
13.0	Unscheduled attendances to the maternity unit including threatened preterm labour .....	20
14.0	Labour and birth .....	20
14.1	Fetal monitoring in labour .....	21
14.1.1	Review of CTGs .....	22
14.1.2	Management based on CTGs in twin pregnancies .....	22
14.2	Analgesia .....	23
14.3	Second stage .....	24
14.4	Birth of second twin .....	24
14.5	Third stage .....	25
15.0	Postnatal care: special considerations where one, both or all babies have died .....	25
16.0	Monitoring .....	26
	Appendix 1: Schedule of appointments for monochorionic diamniotic twins .....	27
	Appendix 2: Schedule of appointments for dichorionic diamniotic twins .....	28
	Appendix 3: Schedule of appointments for triplet pregnancies .....	29
	Guideline Version Control Log .....	30
	Due Regard Assessment Tool .....	31
	Dissemination, Implementation and Access Plan .....	32
	Additional guidance and information .....	33

# Multiple Pregnancy & Birth

## 1.0 Introduction

Multiple pregnancies in the UK are reported to be 14.6 per 1000 maternities (as per Office for National Statistics 2022). Assisted reproductive technology increases the prevalence of twin pregnancies.

Twin and higher order pregnancies are associated with increased maternal and fetal complications:

### Maternal complications:

- Hyperemesis
- Anaemia
- Miscarriage at all gestations
- Stillbirth risk
- Hypertensive disorders (Gestational hypertension, Pre-eclampsia, eclampsia)
- Operative birth including caesarean birth
- Post-partum haemorrhage
- Postnatal complications including adverse puerperal mood changes

### Fetal complications:

- Increased risk of structural and chromosomal abnormalities
- Preterm birth
- Fetal growth restriction (FGR)
- Twin Anaemia-Polycythaemia Sequence (TAPS)
- Twin Reversed Arterial Perfusion (TRAP) sequence
- Single intrauterine death (more commonly in monochorionic twin pregnancy)

Monochorionic diamniotic twins (MCDA), constituting a third of all twin pregnancies, are associated with an increased risk of complications including a 10-15% of twin-to-twin transfusion syndrome.

Monochorionic monoamniotic (MCMA) twins are associated with the risk of cord entanglement which is further associated with increased perinatal mortality.

## 2.0 Scope

This guideline applies to the following:

- Midwives
- Obstetricians

- Sonographers
- Anaesthetists

### 3.0 Responsibilities

Midwives & obstetricians:

- To access, read, understand and follow this guidance.
- To use their professional judgement in application of this guideline.

Management:

- To ensure the guideline is reviewed as required in line with Trust and National recommendations.
- To ensure the guideline is accessible to all relevant staff.

### 4.0 Definitions and abbreviations used within this guideline

<b>APH</b> Antepartum Haemorrhage	<b>CTG</b> Cardiotocograph
<b>DCDA</b> Dichorionic diamniotic	<b>DVP</b> Deepest vertical pocket
<b>EFW</b> Estimated fetal weight	<b>EPAC</b> Early Pregnancy Assessment Clinic
<b>FFTS</b> Feto-fetal transfusion syndrome	<b>FGR</b> Fetal Growth Restriction
<b>IUI</b> Intrauterine insemination	<b>IVF</b> In vitro fertilisation
<b>MCA</b> Middle cerebral artery	<b>MCDA</b> Monochorionic diamniotic
<b>MVP</b> Maximum vertical pocket	<b>MC</b> Monochorionic
<b>NT</b> Nuchal translucency	<b>PAPP-A</b> Pregnancy Associated Plasma Protein A
<b>PIH</b> Pregnancy Induced Hypertension	<b>PSV</b> Peak systolic velocity
<b>TAPS</b> Twin Anaemia-Polycythaemia Sequence	<b>TRAP</b> Twin Reversed Arterial Perfusion sequence
<b>TTTS</b> Twin to twin transfusion syndrome	

#### Definitions:

Type of pregnancy	Chorionicity and amnionicity
Dichorionic Diamniotic Twins	Both babies have a separate placenta and amniotic sac.
Monochorionic diamniotic twins	Both babies share a placenta but have separate amniotic sacs.
Monochorionic monoamniotic twins	Both babies share a placenta and amniotic sac.
Trichorionic triamniotic triplets	Each baby has a separate placenta and amniotic sac.

Dichorionic triamniotic triplets	One baby has a separate placenta and 2 of the babies share a placenta. All 3 babies have separate amniotic sacs.
Dichorionic diamniotic triplets	One baby has a separate placenta and amniotic sac. Two of the babies share a placenta and amniotic sac.
Monochorionic triamniotic triplets	All 3 babies share 1 placenta. All 3 babies have separate amniotic sacs.
Monochorionic diamniotic triplets	All 3 babies share 1 placenta. One baby has a separate amniotic sac and 2 babies share 1 sac.
Monochorionic monoamniotic triplets	All 3 babies share a placenta and amniotic sac.

## 5.0 Diagnosis and determination of chorionicity & amnionicity

- The diagnosis of a multiple pregnancy is usually made at the time of the dating scan in the first trimester of pregnancy. Some pregnant women and birthing people may have this identified at viability scans in Early Pregnancy Assessment Clinic (EPAC) or on routine scans after assisted conception.
- Estimate gestational age should be from the largest baby in a twin or triplet pregnancy to avoid the risk of estimating it from a baby with early growth pathology.
- Assign nomenclature to babies (for example, upper and lower, or left and right) in a twin or triplet pregnancy, and document this clearly to ensure consistency throughout pregnancy.

### 5.1 Ascertaining chorionicity and amnionicity

- Presence of a thick intertwin septum with detection of a “lambda sign” is indicative of dichorionic pregnancy, whereas a thin septum with a T-sign and a single continuous placental mass is observed in monochorionic pregnancies.
- If there is doubt in the diagnosis of chorionicity, the pregnant woman or birthing person should be referred to a specialist without delay, as chorionicity is best determined before 14 weeks.
- If it is difficult to determine chorionicity, even after referral (for example, because the pregnant woman or birthing person has booked late in pregnancy), manage the pregnancy as a monochorionic pregnancy until proved otherwise.
- If a pregnant woman or birthing person with a twin or triplet pregnancy presents after 14+0 weeks, determine chorionicity and amnionicity at the earliest opportunity by ultrasound using all of the following:
  - The number of placental masses.
  - The presence of amniotic membrane(s) and membrane thickness.
  - The lambda or T-sign.
  - Discordant fetal sex.

- A photographic record should be retained, in the case notes, of the ultrasound appearances of the membrane attachment to the placenta.
- Separate placentae and discordant genitalia are also signs of dichorionicity, particularly in the mid-trimester.

## 6.0 Antenatal care

### 6.1 General antenatal care

Pregnant women and birthing people with a multiple pregnancy must be offered consultant led care and given information specific to twin and triplet pregnancies at their first contact after diagnosis. Ensure access to interpreting services and translated patient information for women and birthing people for whom English is not their first language.

Antenatal clinical care for pregnant women and birthing people with a twin or triplet pregnancy should be provided by a nominated multidisciplinary team consisting of:

- A **core team** of named specialist obstetricians, specialist midwives and sonographers, all of whom have experience and knowledge of managing twin and triplet pregnancies.
- An **enhanced team** for referrals, which should include:
  - A perinatal mental health professional
  - A women's health physiotherapist
  - An infant feeding specialist
  - A dietitian.

However do not routinely refer all pregnant women and birthing people with a twin or triplet pregnancy to the enhanced team but base the decision to refer on each pregnant woman or birthing person's needs.

Information should be given on antenatal nutrition, anaemia, support groups, parent education, breastfeeding, antenatal and postnatal mental health, and signs and symptoms of preterm labour.

Signpost all pregnant women and birthing people with multiple pregnancy to support groups:

- [Multiple Birth Foundation MBF](#)
- [Twins Trust: twinstrust.org](https://www.twins-trust.org/)
- Provide relevant information leaflets on BadgerNet Maternity.

Although the majority their appointments will be at the Twins Clinic, the community midwife should also offer separate appointments to ensure continuity of community support throughout the pregnancy and into the postnatal period. How frequently they attend the community midwife appointments can be discussed with the midwife and scheduled to suit their individual circumstances.

## 6.2 Planning for birth

All discussions should involve the pregnant woman or birthing person with the multiple pregnancy and their family or carers if appropriate.

Pregnant women and birthing people should be given information on the risks and benefits of different modes of birth to support them in planning their birth.

Following discussion, the agreed planned place, timing and mode of birth should be documented on BadgerNet Maternity.

- From 24 weeks in a twin or triplet pregnancy, discuss with the pregnant woman or birthing person (and their family members or carers, as appropriate) their plans and wishes for the birth of their babies.
- Provide information that is tailored to each pregnant woman or birthing person's pregnancy, taking into account their needs and preferences. Revisit these conversations whenever clinically indicated and whenever they want to.
- Ensure the following has been discussed and documented by 28 weeks at the latest:
  - Place of birth and the possible need to transfer in case of preterm birth.
  - Timing and possible modes of birth.
  - Analgesia during labour: offer an epidural to pregnant women and birthing people with a twin or triplet pregnancy who choose to have a vaginal birth. Explain that this is likely to improve the chance of success and optimal timing of assisted vaginal birth of all the babies and may enable a quicker birth by emergency caesarean birth if needed.
  - Anaesthesia during caesarean birth: Offer regional anaesthesia to pregnant women and birthing people with a twin or triplet pregnancy that are having a caesarean birth.
  - Management of the third stage of labour and postpartum haemorrhage. ([see section 14.5](#))
- At 28 weeks intrapartum fetal heart monitoring should be discussed and documented. It should be explained that:
  - Recommendations on cardiotocography(CTG) are based on evidence from pregnant women and birthing people with a singleton pregnancy because there is a lack of evidence specific to twin pregnancy or preterm babies.
  - It allows simultaneous monitoring of both babies.
  - It might restrict their mobility.
  - Normal traces show the babies are coping well with labour; if traces are not normal, there will be less certainty about the babies' condition.
  - It is normal to see changes to the fetal heart rate pattern during labour and this does not necessarily mean there is a problem.

- Findings from the CTG are used to help make decisions during labour and birth, but these will also be based on her wishes, their condition and that of their babies.

Pregnant women and birthing people with multiple pregnancies should have the following discussed:

- Spontaneous preterm birth and planned preterm birth are associated with an increased risk of admission to a neonatal unit.
- About 60 in 100 twin pregnancies result in spontaneous birth before 37 weeks.
- 75 in 100 triplet pregnancies result in spontaneous birth before 35 weeks.

For an uncomplicated multiple pregnancy, discuss and offer planned birth as follows, after a course of antenatal corticosteroids has been considered. The risks and benefits of corticosteroids should be discussed and this discussion documented in line with the [RCOG infographic \(2022\)](#).

### 6.2.1 Timing of birth

The timing of birth should be individualised in each pregnancy and include considerations of safety such as avoiding induction at weekends, aiming for birth of:

#### **Dichorionic diamniotic twin pregnancies:**

- Planned birth from 37+0 weeks does not appear to be associated with an increased risk of serious neonatal adverse outcomes.
- Continuing the pregnancy beyond 37+6 weeks increases the risk of fetal death.
- **Aim for birth of dichorionic diamniotic twins at 37 weeks.**

#### **Monochorionic diamniotic twin pregnancies:**

- Planned birth from 36 weeks does not appear to be associated with an increased risk of serious neonatal adverse outcomes.
- Continuing the pregnancy beyond 36+6 weeks increases the risk of fetal death.
- **Aim for birth of monochorionic diamniotic twins at 36 weeks.**

#### **Monochorionic monoamniotic twin pregnancy:**

- Planned birth between 32+0 and 33+6 weeks does not appear to be associated with an increased risk of serious neonatal adverse outcomes.
- Their babies will usually need to be admitted to the neonatal unit and have an increased risk of respiratory problems.
- Continuing the pregnancy beyond 33+6 weeks increases the risk of fetal death.

<ul style="list-style-type: none"> <li>• <b>Aim for birth of monochorionic monoamniotic twins between 32+0 and 33+6 weeks.</b></li> </ul>
<p><b>Trichorionic triamniotic or dichorionic triamniotic triplet pregnancies:</b></p> <ul style="list-style-type: none"> <li>• Continuing the pregnancy beyond 35+6 weeks increases the risk of fetal death.</li> <li>• <b>Aim for birth of trichorionic triamniotic or dichorionic triamniotic triplet at 35 weeks.</b></li> </ul>
<p><b>Monochorionic triamniotic triplet pregnancy or a triplet pregnancy that involves a shared amnion:</b></p> <p>Timing of birth will be decided and discussed with each pregnant woman or birthing person individually.</p>

In twin pregnancy induction of labour would be advised with the process the same as for singleton pregnancy (refer to maternity induction of labour guidance) provided that the first twin is cephalic and no other risk factors are present.

Inform paediatric consultant of planned birth date for triplet pregnancies in order that resources and equipment can be organised.

For pregnant women and birthing people who decline planned birth at the recommended timing, offer weekly appointments with the specialist obstetrician. At each appointment, offer an ultrasound scan and perform assessments of amniotic fluid level and Doppler of the umbilical artery flow for each baby in addition to fortnightly fetal growth scans. They should be made aware that this enhanced surveillance cannot guarantee against a poor outcome.

Consider referral to a consultant midwife for further discussion and support for the woman or birthing person. (Please see [SP23005 Consultant Midwife SOP](#))

### 6.3 Screening, scans and antenatal appointments

- **Booking bloods:** blood group and antibody, screening for infections e.g. Hepatitis B, rubella immunity, HIV, screening for asymptomatic bacteriuria etc. should be performed as for all other pregnant women and birthing people.
- Be aware of higher incidence of anaemia; consider the need for iron supplementation.
- Pregnant women and birthing people should be counselled before screening by appropriately trained personnel regarding the implications of high-risk results and antenatal diagnosis in multiple pregnancies.
- **Scan at 10-13 weeks gestation** for viability, accurate dating, chorionicity, major congenital malformation and nuchal translucency.

- **Screening for Down's, Edwards' and Patau syndromes:** First trimester combined test (nuchal translucency (NT) scan with serum screening) can be offered to women and birthing people with twin pregnancies that opt for screening. For triplets and higher order multiple pregnancies the screening is offered with NT and maternal age only (FASP 2019).
- Refer pregnant women and birthing people with a dichorionic and monochorionic triplet pregnancy who want to have screening for Down's syndrome, Edwards' syndrome and Patau's syndrome, to a tertiary level fetal medicine centre.
- All triplet pregnancies should be referred to internal fetal medicine at point of diagnosis. If not available then they should be referred to tertiary service directly at the earliest opportunity.
- Pregnant women and birthing people with a triplet pregnancy should be given information about:
  - The greater likelihood of Down's syndrome, Edwards' syndrome and Patau's syndrome in triplet pregnancy.
  - The different options for screening.
  - The increased false positive rate of screening tests in triplet pregnancy.
  - Their greater likelihood of being offered invasive test and higher chance of complications of invasive testing.
  - The physical risks and psychological implications in the short and long-term relating to selective fetal reduction.
- **Anomaly ultrasound** at 20/40 should be offered with standard 5 FASP recommended views of the heart for monochorionic twins and triplets. Extended views are no longer recommended.
- Full blood count should be performed at 20 weeks and at 28 weeks.
- At 26 -28 weeks oral glucose tolerance test at 26-28 weeks for gestational diabetes should be offered.
- Anaesthetic and paediatric antenatal appointments should be organised as necessary on an individual basis.

### 6.3.1 Antenatal appointment schedules

#### **Monochorionic diamniotic twins:**

(see [Appendix 1](#))

Monochorionic diamniotic twin pregnancies should have **11 antenatal appointments** scheduled with a healthcare professional from the core team. **At least 2** of these appointments should be with the specialist obstetrician.

**Dichorionic diamniotic twins**

(see [Appendix 2](#))

Dichorionic diamniotic twin pregnancies **8 antenatal appointments** scheduled with a healthcare professional from the core team. **At least 2** of these appointments should be with the specialist obstetrician.

**Triplet pregnancies**

(see [Appendix 3](#))

These pregnancies should have **11 antenatal appointments** scheduled with a healthcare professional from the core team. **At least 5** of these appointments should be with the specialist obstetrician.

**Monoamniotic twin or triplet pregnancies**

These pregnancies should have individualised care from a tertiary centre.

## 7.0 Indications for referral to tertiary centre or fetal medicine specialist

- Monochorionic monoamniotic twins.
- All triplet pregnancies.
- If there is doubt in the diagnosis of chorionicity.
- Pregnancies complicated by any of the following:
  - Fetal weight discordance (of 25% or more) and an EFW of any of the babies below the 10th centile for gestational age.
  - Fetal anomaly (structural or chromosomal).
  - Twin to twin transfusion syndrome (TTTS) or suspected Twin Anaemia-Polycythaemia Sequence (TAPS).
  - Twin reversed arterial perfusion sequence (TRAP).
  - Conjoined twins or triplets.
- Referral to a tertiary centre is also advised in the event of intra uterine fetal demise of one of the monochorionic twins.

## 8.0 Monitoring for fetal growth restriction

- Do not use abdominal palpation or symphysis–fundal height measurements to monitor for fetal growth.

- Monitoring for fetal weight discordance using 2 or more biometric parameters and amniotic fluid levels at each ultrasound scan.
- Measure the deepest vertical pocket (DVP) on either side of the amniotic membrane.

	Commence monitoring fetal weight	Interval of scanning	Formula for calculating estimated fetal weight (EFW) discordance
<b>Dichorionic twins</b>	From 24 weeks	At least every 28 days	$(\text{EFW larger fetus} - \text{EFW smaller fetus}) \div \text{EFW larger fetus} \times 100$ for percentage
<b>Trichorionic triplets</b>	From 24 weeks	At least every 14 days	$(\text{EFW largest fetus} - \text{EFW smallest fetus}) \div \text{EFW largest fetus}$ and $(\text{EFW largest fetus} - \text{EFW middle fetus}) \div \text{EFW largest fetus} \times 100$ for percentage
<b>Monochorionic twins</b>	From 16 weeks	At least every 14 days	$(\text{EFW larger fetus} - \text{EFW smaller fetus}) \div \text{EFW larger fetus} \times 100$ for percentage
<b>Monochorionic triplets</b>	From 16 weeks	At least every 14 days	The named specialist obstetrician should review the EFW of dichorionic and monochorionic triplets and calculate EFW discordance based on their understanding of the implications of chorionicity.

- Increase diagnostic monitoring in the second and third trimesters to at least weekly, and include Doppler assessment of the umbilical artery flow for each baby, if:
  - There is an EFW discordance of 20% or more and/or
  - The EFW of any of the babies is below the 10th centile for gestational age.
- Refer the pregnant woman or birthing person to a tertiary level fetal medicine centre if there is an EFW discordance of 25% or more and the EFW of any of the babies is below the 10th centile for gestational age because this is a clinically important indicator of selective fetal growth restriction.

## 9.0 Twin to Twin Transfusion Syndrome (TTTS) also known as Feto-Fetal Transfusion Syndrome

- All pregnant women and birthing people with monochorionic pregnancies should be made aware of the following 'red flag' warning signs of TTTS and asked to call Triage if they become aware of any of them:
  - Sudden abdominal distension.
  - Abdominal pain.

- Sudden breathlessness.
  - Inability to lie on their back.
  - Reduced fetal movements ([MBRRACE-UK, 2021](#))
- Staff should also be aware of the following clinical signs of TTTS:
  - Rapidly increased abdominal girth.
  - Inability to feel fetal parts on abdominal palpation.
  - Ultrasound changes based on Quintero criteria ([MBRRACE-UK, 2021](#))
- TTTS occurs in about 10-15% of monochorionic twin and triplet pregnancies and is characterised by oligohydramnios in one sac and polyhydramnios in the other with discordant appearance of bladders and abnormal umbilical artery Doppler in severe cases. Monitoring with ultrasound must be targeted to assess all these parameters. Umbilical artery Dopplers from 24 weeks.
- Screening for fetal growth restriction or TTTS should not be offered in the first trimester.
- Offer diagnostic monitoring for TTTS to women with a monochorionic twin or triplet pregnancy. Monitor with ultrasound every 14 days from 16 weeks until birth.
- Explain that the relative likelihood of each complication changes with advancing gestation but that they can all occur at any gestational age.
- Offer pregnant women and birthing people simultaneous monitoring for TTTS, fetal growth restriction and advanced-stage twin anaemia polycythaemia sequence (TAPS) at every ultrasound.
- Offer weekly ultrasound monitoring for TAPS from 16 weeks of pregnancy using middle cerebral artery peak systolic velocity (MCA PSV) to pregnant women and birthing people whose pregnancies are complicated by:
  - TTTS that has been treated by fetoscopic laser therapy OR
  - Selective fetal growth restriction (defined by an EFW discordance of 25% or more and an EFW of any of the babies below the 10th centile for gestational age).
- Measure the DVP depths of amniotic fluid on either side of the amniotic membrane.
- Increase the frequency of diagnostic monitoring in the second and third trimester to at least weekly if there are concerns about differences between the babies' amniotic fluid level (a difference in DVP depth of 4 cm or more). Include Doppler assessment of the umbilical artery flow for each baby.
- For pregnant women and birthing people with a monochorionic pregnancy showing any of the following:
  - Cardiovascular compromise (such as fetal hydrops or cardiomegaly) or
  - Unexplained isolated polyhydramnios or
  - Abnormal umbilical artery.

- Perform ultrasound MCA PSV measurements to help detect advanced stage TAPS, and seek management advice immediately from a tertiary level fetal medicine specialist.

**Where TTTS is diagnosed early referral to the regional tertiary centre or the fetal medicine specialist is indicated.**

- Refer the pregnant women and birthing people to a tertiary level fetal medicine centre if TTTS is diagnosed, based on the following:
  - The amniotic sac of 1 baby has a DVP depth of less than 2 cm and
  - The amniotic sac of another baby has a DVP depth of:
    - Over 8 cm before 20+0 weeks of pregnancy or
    - Over 10 cm from 20+0 weeks.
- Further assessment and monitoring by the woman or birthing person's named consultant is indicated if:
  - The amniotic sac of 1 baby has a DVP depth in the normal range and
  - The amniotic sac of another baby has a DVP depth of:
    - Less than 2 cm or
    - 8 cm or more.

## 9.1 Quintero Classification of TTTS

**Stage I** There is a discrepancy in amniotic fluid volume with oligohydramnios of a maximum vertical pocket (MVP)  $\leq 2$  cm in one sac and polyhydramnios in other sac (MVP  $\geq 8$  cm). The bladder of the donor twin is visible and Doppler studies are normal.

**Stage II** The bladder of the donor twin is not visible (during length of examination, usually around 1 hour) but Doppler studies are not critically abnormal.

**Stage III** Doppler studies are critically abnormal in either twin and are characterised as abnormal or reversed end-diastolic velocities in the umbilical artery, reverse flow in the Ductus venosus or pulsatile umbilical venous flow.

**Stage IV** Ascites, pericardial or pleural effusion, scalp oedema or overt hydrops present.

**Stage V** One or both babies are dead.

## 9.2 Management of confirmed TTTS

- Where TTTS is diagnosed at gestations below 26 weeks, fetoscopic laser ablation is the intervention of choice.
- Anastomoses may be missed at laser ablation and TTTS can recur later in up to 14% of pregnancies treated by laser ablation. Thus surveillance should continue.
- Laser ablation can be performed in mono- and dichorionic triplet pregnancies.

- Some pregnant women and birthing people request termination of pregnancy when severe TTTS is diagnosed and this should be discussed as an option.
- Another option is to offer selective termination of pregnancy using bipolar diathermy of one of the umbilical cords, with inevitable sacrifice of that baby. This may be appropriate if there is severe hydrops fetalis in the recipient or evidence of cerebral damage in either twin.

## 10.0 Single fetal demise in multiple pregnancy

When counselling those pregnant women and birthing people who have suffered from a twin demise, it is important to use the same statistics on each site. The timing of fetal demise does not affect the incidence of neurodevelopmental delay, co-twin death or preterm birth in the surviving twin but is different between MCDA and DCDA sets. Fetal brain imaging using MRI is offered to the surviving twin in MCDA sets.

### Outcome for survivor twin following co-twin demise in 2<sup>nd</sup> & 3<sup>rd</sup> trimesters:

	MCDA	DCDA
Death of survivor twin	15%	3%
Preterm birth	68%	54%
Neurodevelopmental delay	26%	2%

*Hillman et al Obstet Gynecol 2011;118:928-40*

- When a twin is lost during the first trimester there is no influence on the outcome of the pregnancy.
- Where the fetal demise occurs after 12 weeks, the continuing pregnancy should continue to be treated as a multiple pregnancy (i.e. scan and appointment schedules).
- Even though there is risk to the surviving twin, rapid birth is usually unwise unless:
  - The pregnancy is over 37+0 weeks
  - There is a CTG abnormality
  - Abnormal MCA Doppler is present.

## 11.0 Further complications of multiple pregnancy

### 11.1 Hypertension and pre-eclampsia

Advise pregnant women and birthing people that they should take aspirin 150 mg with food at night from 12 weeks until 36 weeks, or birth if before 36 weeks, if they have any of the following additional **moderate risk** factors for hypertension as multiple pregnancy compounds the risk of hypertension. ([NICE 2023](#))

- Nulliparity

- Age 40 years or older
- Pregnancy interval of more than 10 years
- Body mass index (BMI) of 35 kg/m<sup>2</sup> or more at first visit
- Family history of pre-eclampsia

Or have a **high risk** factor:

- Hypertensive disease during a previous pregnancy (pre-eclampsia or pregnancy induced hypertension).
- Chronic kidney disease
- Auto-immune disease such as systemic lupus erythematosus or antiphospholipid syndrome
- Type 1 or 2 diabetes
- Chronic hypertension outside of pregnancy requiring antihypertensive treatment (as defined by [NICE](#))
- Low Pregnancy Associated Plasma Protein (PAPP-A) >5th centile (current pregnancy)

Measure blood pressure and test urine for proteinuria to screen for hypertensive disorders at each antenatal appointment in a twin and triplet pregnancy.

## 11.2 Screening for and preventing preterm labour

### 11.2.1 Screening for preterm labour

Explain to pregnant women and birthing people and their family members or carers (as appropriate) that:

- They have a higher risk of spontaneous preterm birth than women with a singleton pregnancy.
- This risk is further increased if they have other risk factors, such as a spontaneous preterm birth in a previous pregnancy or they are found to have a short cervix (25 mm or less) on cervical length screening. [NICE 2024](#)
- They should be made aware of the signs and symptoms of preterm labour and to call Triage if they experience any of these symptoms.
- They should be informed of the benefit of targeted corticosteroids. However do not use single or multiple untargeted (routine) courses of corticosteroids in twin or triplet pregnancy as there is no benefit.
- Do not use home uterine activity monitoring to predict the risk of spontaneous preterm birth in twin and triplet pregnancy.
- Do not offer the following interventions (alone or in combination) routinely to prevent spontaneous preterm birth in women with a twin or triplet pregnancy:
  - Arabin pessary.

- Bed rest.
- Cervical cerclage.
- Oral tocolytics.

### 11.2.2 Preventing preterm labour

- Discuss with women and birthing people with a twin or triplet pregnancy that if a cervical length scan shows that they have a short cervix (25 mm or less), treatment with progesterone may reduce the risk of preterm birth.
- Offer a single cervical length scan between 16 and 20 weeks to women and birthing people with a twin or triplet pregnancy.
- Offer progesterone 200 mg vaginal capsules once a day at bedtime to women and birthing people with a twin or triplet pregnancy and a cervical length of 25 mm or less. Continue treatment until 34 weeks (or birth if sooner). *In April 2024, this was an off-label use of progesterone 200 mg vaginal capsules. See [NICE's information on prescribing medicines](#).*
- If a cervical length of 25 mm or less is found incidentally on a scan conducted between 20 and 24 weeks, offer progesterone 200 mg vaginal capsules once a day at bedtime. Continue treatment until 34 weeks (or birth if sooner).

[NICE 2024](#)

### 11.2.3 Postpartum haemorrhage

- Start assessing the risk of postpartum haemorrhage in pregnant women and birthing people with a twin or triplet pregnancy in the antenatal period and continue throughout labour and the third stage.
- Offer each pregnant woman or birthing person an individualised assessment of their risk of postpartum haemorrhage and explain that multiple pregnancy is a risk factor for increased blood loss at birth.
- By 28 weeks of pregnancy, discuss options for managing the third stage of labour with pregnant women and birthing people with a twin or triplet pregnancy.
- Do not offer physiological management of the third stage to pregnant women and birthing people with a twin or triplet pregnancy.
- Recommend that pregnant women and birthing people with a twin or triplet pregnancy accept active management of the third stage. Explain that it is associated with a lower risk of postpartum haemorrhage and/or blood transfusion.
- Recommend active management of the third stage with additional uterotonics for pregnant women and birthing people who have 1 or more risk factors (in addition to a twin or triplet pregnancy) for postpartum haemorrhage.
- By 28 weeks of pregnancy, discuss with women and birthing people who have a twin or triplet pregnancy the potential need for blood transfusion, including the need for intravenous access. Document this discussion on BadgerNet Maternity.

- Consider use of intraoperative cell salvage for elective caesarean birth. Cell salvage should be used for emergency caesarean birth.

## 12.0 Mode of birth

Explain to pregnant women and birthing people with an **uncomplicated twin pregnancy** planning their mode of birth, that giving birth after 32 weeks:

- Planned vaginal birth and planned caesarean birth are both safe choices for them and their babies if all of the following apply:
  - The pregnancy remains uncomplicated and has progressed beyond 32 weeks.
  - There are no obstetric contraindications to labour.
  - The first baby is in a cephalic (head-first) presentation.
  - There is no significant size discordance between the twins.
- Nationally nearly two thirds of women and birthing people who opt for vaginal birth are successful and over a third have a caesarean birth. Locally however, approximately half of women and birthing people who opt for a vaginal birth are successful in having one, with the other half having a caesarean birth.
- Almost all pregnant women and birthing people who plan a caesarean birth do have one, but a few will have a vaginal birth before caesarean birth can be carried out.
- A small number of pregnant women and birthing people who plan a vaginal birth will need an emergency caesarean birth to deliver the second twin after vaginal birth of the first twin (1:20).

Offer a caesarean birth to pregnant women and birthing people with a **monochorionic monoamniotic twin pregnancy**:

- At the time of planned birth (between 32+0 and 33+6 weeks) or
- After any complication is diagnosed in her pregnancy requiring earlier birth or
- If they are in established preterm labour, and gestational age suggests there is a reasonable chance of survival of the babies (unless the first twin is close to vaginal birth and a senior obstetrician advises continuing to vaginal birth).

Offer a caesarean birth to pregnant women and birthing people with a **triplet pregnancy**:

- At the time of planned birth (35 weeks) or
- After any complication is diagnosed in their pregnancy requiring earlier birth or
- If they are in established preterm labour, and gestational age suggests there is a reasonable chance of survival of the babies.

### 13.0 Unscheduled attendances to the maternity unit including threatened preterm labour

- All pregnant women and birthing people with multiple pregnancies who attended the unit outside of scheduled appointments should be assessed promptly by a senior obstetrician.
- A clear plan should be documented for monitoring in labour, mode of birth and when referral is required, particularly in extremely preterm labour.
- There should be senior review at least daily.
- Where necessary ensure prompt review by senior neonatologist.
- All clinical staff working within a maternity triage or emergency assessment area should be aware of the pathophysiology and warning signs of extreme preterm birth and of twin-to-twin transfusion syndrome (see section [9.0 Twin to Twin Transfusion](#)).
- Consider reduced fetal movements in a twin pregnancy as a 'red-flag warning sign' of TTTS, in addition to rapid maternal abdominal distension, abdominal pain, and acute dyspnoea ([MBRRACE-UK 2021](#)).
- Consideration should be given to the use of corticosteroids and magnesium sulphate in line with maternity preterm birth guidance.

### 14.0 Labour and birth

- All pregnant women and birthing people with a multiple pregnancy should be advised to give birth on the labour ward.
- They should be assessed promptly by a senior obstetrician on admission.
- Ensure accurate estimation of gestational age when a pregnant woman or birthing person presents with threatened or established extreme preterm labour. This enables the correct risk assessment for potential neonatal survival, and therefore directs the optimal multidisciplinary care bundle.
- Intrapartum care should be provided by a multidisciplinary team of obstetricians and midwives who have experience and knowledge of multiple pregnancies.
- A partogram should be started and completed for all pregnant women and birthing people with multiple births who are in labour.
- The on-call obstetric consultant and on-call anaesthetic and paediatric teams should be informed of admission in labour.
- IV access and bloods taken for FBC, U&Es and Group & Save should be obtained early in labour so that prompt blood transfusion and intravenous fluids can be given if needed.
- Offer caesarean birth to pregnant women and birthing people if the first twin is not cephalic at the time of planned birth.
- Offer caesarean birth to pregnant women and birthing people in established preterm labour between 26 and 32 weeks if the first twin is not cephalic.

- Offer an individualised assessment of mode of birth to pregnant women and birthing people in suspected, diagnosed or established preterm labour before 26 weeks. Take into account the risks of caesarean birth and the chance of survival of the babies.
- Where preterm birth is anticipated before 23+0 weeks ensure prompt discussions between the parents, obstetric and neonatal teams to guide whether active resuscitation or palliative care should be undertaken. Care of the pregnant woman or person and their baby/babies should reflect their wishes and values and those of their partner, informed and supported by joint discussion with obstetric and neonatal professionals. Please see Maternity Preterm guidance.
- Conversations with parents must be clearly documented and agreed management plans carefully and clearly communicated between professionals and staff shifts.
- The decisions on management should be regularly reviewed before and after birth in conjunction with the parents and the plans reconsidered if the risk for the baby/babies changes or if parental wishes change. Redirection of care, in the best interests of the baby, should be discussed with the parents if deterioration occurs despite maximum intensive care.
- Following spontaneous birth of Twin 1 at less than 24 weeks consider delaying the birth of the surviving second twin, if there are no contraindications such as infection, fetal compromise, bleeding or coagulopathy.
- Counsel parents prior to the birth of Twin 1, regarding the possible option of delayed birth of Twin 2 including the maternal risks as well as the risk of Twin 2 being born at the extremes of prematurity.
- In cases where delayed birth of Twin 2 is an option, manage the pregnancy as high risk in a tertiary centre, with close monitoring for signs of infection, clotting abnormalities and fetal growth ([MBRRACE-UK, 2021](#))

#### 14.1 Fetal monitoring in labour

- Perform a portable ultrasound scan when established labour starts, to confirm which twin is which, the presentation of each twin, and to locate the fetal hearts.
- For pregnant women and birthing people between 23+0 and 25+6 weeks of pregnancy who are in established labour, involve a senior obstetrician in discussions with the pregnant woman or birthing person and their family members or carers about how to monitor the fetal heart rates.
- Offer continuous CTG to pregnant women and birthing people with a twin pregnancy who are in established labour and are more than 26 weeks pregnant. Intermittent auscultation is not recommended. Ensure:
  - A dual channel CTG monitor is used to allow simultaneous monitoring of both fetal hearts.
  - Document on the CTG and in the clinical records which CTG trace belongs to which baby.

- Consider electronically monitoring the maternal pulse and displaying it simultaneously on the same CTG trace, ensuring clear differentiation between the fetal heart rates and maternal pulse recordings.
- Consider separating the fetal heart rates by 20 beats/minute if there is difficulty differentiating between them.
- Consider fetal scalp electrode on first twin once membranes have been ruptured if the gestation is 34+0w or more.

#### 14.1.1 Review of CTGs

Classify and interpret cardiotocography in line with maternity fetal monitoring guidance taking into account that:

- Twin pregnancy should be considered a clinical risk factor when performing a holistic review prior to CTG classification.
- Fetal scalp stimulation should not be performed in twin pregnancy to gain reassurance after a CTG trace is categorised as 'pathological'.
- Carry out systematic assessments of both CTGs at least hourly, and more frequently if there are concerns.
- Document which CTG trace belongs to which baby.
- Be aware of the possibility of monitoring the same baby twice. At each CTG review, ensure that twin synchronicity (superimposition of both fetal heart rate traces causing difficulty with interpretation) is not occurring.

#### 14.1.2 Management based on CTGs in twin pregnancies

If abdominal monitoring is unsuccessful or there are concerns about synchronicity of the fetal hearts:

- Involve a senior obstetrician and senior midwife.
- Apply a fetal scalp electrode to the first baby (only after 34+0 weeks and if there are no contraindications) while continuing abdominal monitoring of the second baby.
- Perform a bedside ultrasound scan to confirm both fetal heart rates.
- If monitoring remains unsatisfactory, consider a caesarean birth.

If the cardiotocograph trace is categorised as '**suspicious**' in the first baby during established labour:

- Involve the senior obstetrician and senior midwife.
- Correct any reversible causes.
- Consider applying a fetal scalp electrode to the first baby (only after 34+0 weeks and if there are no contraindications) while continuing abdominal monitoring of the second baby if there is a concern about the monitoring falsely displaying a suspicious trace.

If the cardiotocograph trace is categorised as '**pathological**' in the first baby during **established labour**:

- Involve the senior obstetrician and senior midwife.
- Correct any reversible causes.
- Consideration of the use of fetal blood sampling should be discussed with the consultant as no longer recommended by NICE. Discussion should then be held with the pregnant woman or birthing person, and their family members or carers, regarding the possible use of fetal blood sampling of the first baby from 34+0 weeks if the benefits are likely to outweigh the potential risks. They should be made aware that if a blood sample cannot be obtained then they are likely to need a caesarean birth.
- If the results of fetal blood sampling are not available within 20 minutes, or fetal blood sampling is contraindicated, offer an immediate caesarean.

If the CTG trace is categorised as '**pathological**' in the first baby during the **second stage of labour**:

- Involve the senior obstetrician and senior midwife.
- Assess whether an assisted vaginal birth is an option.
- If vaginal birth is not an option or cannot be achieved within 20 minutes, offer an immediate caesarean birth.

If the CTG trace of the second baby is categorised as '**suspicious**' or '**pathological**' during established labour before the first baby is born:

- Involve the senior obstetrician and senior midwife.
- All CTGs reviewed as suspicious or pathological need a senior obstetric review who should assess the full holistic picture and plan as appropriate +/- expediting birth.
- If vaginal birth of the second baby cannot be achieved within 20 minutes, discuss performing a caesarean birth with the pregnant woman or birthing person and their family members or carers.

**Acute TTTS can occur in labour in MCDA twins - therefore a low threshold for CS is advisable if any CTG abnormalities occur.**

## 14.2 Analgesia

Choice of analgesia should be discussed with the pregnant woman or birthing person and taking note of their preference and should have been discussed antenatally at 28weeks.

Offer an epidural to women and birthing people with a twin or triplet pregnancy who choose to have a vaginal birth. Explain that this is likely to:

- Improve the chance of success and optimal timing of assisted vaginal birth of all the babies'
- Enable a quicker birth by emergency caesarean birth if needed.

Offer regional anaesthesia to women and birthing people with a twin or triplet pregnancy who are having a caesarean birth.

### 14.3 Second stage

- The anaesthetist, theatre team and labour ward coordinator should be informed when the pregnant woman or birthing person reaches second stage.
- Second stage events must be clearly documented by the clinician leading the birth.
- The first twin may be delivered by a midwife, as for singleton birth, with the obstetric registrar / consultant present in the room.
- 10 units oxytocin in 50 mL sodium chloride (refer to maternity induction of labour guidance) should be ready for possible uterine inertia following birth of the first twin.

### 14.4 Birth of second twin

- Active management of the birth of twin 2 has been reported as the major factor in reducing morbidity and the need for caesarean birth. There is no definite evidence about safe interval between the birth of first and second twins when there is no suspected fetal compromise; but there are reports of an increase in poor outcome for the second twin if delayed beyond 45 minutes.
- Continuous electronic fetal monitoring should be continued in second stage and if there is 'suspicious' or 'pathological' CTG trace, and vaginal birth cannot be achieved within 20 minutes, discuss performing a caesarean birth with the pregnant woman or birthing person and their family members or carers.
- After birth of the first twin, a longitudinal lie should be maintained in the second twin by holding the abdomen until the presenting part is fixed in the pelvis.
- The lie of the second twin should be assessed, by a senior experienced practitioner, using abdominal palpation, vaginal examination if necessary and/or a portable scan.
- If not longitudinal, the lie should be corrected either by **external cephalic version** or by **internal podalic version**. Both of these manoeuvres are more successful with epidural analgesia.
- Should birth not be imminent after 30 minutes, consider transferring the pregnant woman or birthing person to theatre to avoid unnecessary delay of twin 2.
- **A 10 units oxytocin in 50 mL sodium chloride infusion** can be used to augment uterine activity as per maternity induction of labour guidance once the lie is longitudinal if contractions are inadequate. This infusion should be made up and ready to administer required in the room.
- Oxytocin should only be used if clinically indicated and not as a routine procedure ([MBRRACE-UK, 2021](#)).
- When longitudinal lie and regular contractions have been established, pushing should be recommenced when the presenting part is visible or there is an urge to push.

- Artificial rupture of membranes should be performed only when the presenting part is fixed in the pelvis.
- If breech presentation – birth should be by a practitioner competent in breech births/obstetric registrar. The obstetric consultant should be informed or present.

#### 14.5 Third stage

- Active management of third stage should be strongly advised.
- An individual risk assessment for PPH should be made by the obstetrician. Oxytocin 40 units infusions should not be preprepared and brought into the room prior to the birth of both babies. [NHS England/National Patient Safety Alert – risk of oxytocin overdose during labour and childbirth \(2024\)](#)
- Delayed/ deferred cord clamping is recommended by 1-3 minutes after birth to allow placental transfusion, unless the need for neonatal resuscitation is recognised. The timing of cord clamping does not appear to have a major impact on blood loss at the time of birth. Ensure that the cords are clearly differentiated, for example one clamp at the cut end of the cord for twin 1 and two clamps for twin 2.
- Consider double clamping the cord to allow umbilical cord blood gases to be sampled. Ensure that blood gas samples are correctly labelled for each baby.

#### 15.0 Postnatal care: special considerations where one, both or all babies have died

- If there has been a fetal loss of either or both twins or all triplets the Bereavement Care Pathway should be followed as well as routine postnatal care (as appropriate) and referral made to Birth Afterthoughts or Birth Stories service.
- For placental histology, ensure the pathologist is provided with a complete clinical history when requesting post-mortem or placental examination. In cases of twin pregnancy, this should be clearly indicated on the request, including chorionicity and details of the other twin should the examination be requested separately or if there is a surviving sibling.
- Discussion regarding placental examination should be fully documented.
- If one twin survives, ensure community midwives visiting in the community are aware of the stillbirth or NND of the other twin.
- If indicated a six-week follow-up an obstetric consultant appointment should be made to discuss events and future pregnancies. This should be made a joint obstetric and neonatal appointment if needed. ([MBRRACE-UK, 2021](#)).

**16.0 Monitoring**

Issue being monitored	Monitoring method	Responsibility	Frequency	Reviewed by and actions arising followed up by
Incidents of PPH, neonatal resuscitation or preterm birth.	Case review	Patient Safety Midwives	On-going	Maternity Safety & Quality Meeting

## Appendix 1: Schedule of appointments for monochorionic diamniotic twins

- **11 antenatal appointments** scheduled with a healthcare professional from the **core team**.
- At least **2** of these appointments should be with **the specialist obstetrician**.

<b>11<sup>+2</sup> – 14<sup>+1</sup> weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Determine chorionicity.</li> <li>• Appointment with professional from Core Team.</li> <li>• Screening information given.</li> <li>• Consider iron supplementation.</li> <li>• Commence on aspirin if high risk of hypertension.</li> </ul>
<b>16 weeks</b>	<ul style="list-style-type: none"> <li>• Scan including umbilical Dopplers.</li> <li>• Appointment with fetal medicine consultant or consultant with special interest in high-risk obstetrics capable of carrying out Doppler studies to assess fetal wellbeing.</li> <li>• General and specific risks for this pregnancy discussed including 'red flag' TTTS signs. <a href="#">MBRRACE-UK 2021</a></li> <li>• Offer cervical length measurement between 16-29 weeks.</li> </ul>
<b>18 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Appointment with member of Core Team.</li> </ul>
<b>20 weeks</b>	<ul style="list-style-type: none"> <li>• Anomaly scan including MCA+UmbArt Dopplers and optimal time to offer cervical length.</li> <li>• Appointment with a member of Core Team.</li> <li>• FBC</li> </ul>
<b>22 weeks</b>	<ul style="list-style-type: none"> <li>• Scan including MCA+UmbArt Dopplers</li> <li>• Appointment with a member of Core Team</li> </ul>
<b>24 weeks</b>	<ul style="list-style-type: none"> <li>• Scan including MCA+UmbArt Dopplers</li> <li>• Discuss plan for birth, risks &amp; signs of preterm labour.</li> <li>• Appointment with fetal medicine consultant or consultant with special interest in high-risk obstetrics capable of carrying out Doppler studies to assess fetal wellbeing.</li> </ul>
<b>26 weeks</b>	<ul style="list-style-type: none"> <li>• Scan including MCA+UmbArt Dopplers</li> <li>• Appointment with a member of Core Team.</li> <li>• Offer GTT between 26-28 weeks.</li> </ul>
<b>28 weeks</b>	<ul style="list-style-type: none"> <li>• 28 week scan including MCA+UmbArt Dopplers</li> <li>• FBC</li> <li>• Appointment with a member of Core Team.</li> <li>• Discuss:               <ul style="list-style-type: none"> <li>- Risks &amp; signs of preterm labour</li> <li>- Place and timing of birth</li> <li>- Possible risk of transfer if very preterm</li> <li>- Risk of admission to neonatal unit</li> <li>- Analgesia</li> <li>- Monitoring of fetal hearts</li> </ul> </li> </ul>
<b>30 weeks</b>	<ul style="list-style-type: none"> <li>• Scan including MCA+UmbArt Dopplers</li> <li>• Appointment with a member of Core Team.</li> </ul>
<b>32 weeks</b>	<ul style="list-style-type: none"> <li>• Scan including MCA+UmbArt Dopplers</li> <li>• Appointment with a member of Core Team.</li> </ul>
<b>34 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Appointment with a member of Core Team.</li> </ul>
<b>Offer birth at 36 weeks</b>	

## Appendix 2: Schedule of appointments for dichorionic diamniotic twins

- **8 antenatal appointments** scheduled with a healthcare professional from the **core team**.
- At least **2** of these appointments should be with the **specialist obstetrician**.

<b>11<sup>+2</sup> – 14<sup>+1</sup> weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Determine chorionicity.</li> <li>• Appointment with a member of the Core Team.</li> <li>• Screening information given.</li> <li>• Consider iron supplementation.</li> <li>• Commence on aspirin if high risk of hypertension.</li> </ul>
<b>16 weeks</b>	<ul style="list-style-type: none"> <li>• Appointment with DC twin service lead consultant.</li> <li>• General and specific risks for this pregnancy discussed. <a href="#">MBRRACE-UK 2021</a></li> <li>• Offer cervical length measurement between 16-29 weeks.</li> </ul>
<b>20 weeks</b>	<ul style="list-style-type: none"> <li>• Anomaly scan</li> <li>• Appointment with a member of Core Team.</li> <li>• FBC</li> </ul>
<b>24 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Appointment with a member of Core Team.</li> <li>• Discuss plan for birth, risks &amp; signs of preterm labour.</li> <li>• Offer GTT between 26-28 weeks.</li> </ul>
<b>28 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• FBC</li> <li>• Appointment with a member of Core Team.</li> <li>• Discuss:               <ul style="list-style-type: none"> <li>- Risks &amp; signs of preterm labour</li> <li>- Place and timing of birth</li> <li>- Possible risk of transfer if very preterm</li> <li>- Risk of admission to neonatal unit</li> <li>- Analgesia in labour and with caesarean birth</li> <li>- Intrapartum monitoring of fetal hearts.</li> </ul> </li> </ul>
<b>32 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Appointment with a member of Core Team.</li> </ul>
<b>34 weeks</b>	<ul style="list-style-type: none"> <li>• Appointment with a member of Core Team.</li> </ul>
<b>36 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Appointment with a member of Core Team.</li> </ul>
<b>Offer birth at 37 weeks</b>	

### Appendix 3: Schedule of appointments for triplet pregnancies

- **11 antenatal appointments** scheduled with a healthcare professional from the **core team**.
- At least **5** of these appointments should be with the **specialist obstetrician**.

<b>11<sup>+2</sup> – 14<sup>+1</sup> weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Determine chorionicity.</li> <li>• Appointment with a member of the core team.</li> <li>• Screening information given.</li> <li>• Consider iron supplementation.</li> <li>• Commence on aspirin if high risk of hypertension.</li> </ul>
<b>16 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Fetal medicine consultant appointment.</li> <li>• General and specific risks for this pregnancy discussed. <a href="#">MBRRACE-UK 2021</a></li> <li>• Offer cervical length measurement between 16-29 weeks.</li> </ul>
<b>18 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Appointment with a member of Core Team.</li> </ul>
<b>20 weeks</b>	<ul style="list-style-type: none"> <li>• Anomaly scan</li> <li>• Appointment with a member of Core Team.</li> <li>• FBC</li> </ul>
<b>22 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Appointment with a member of Core Team.</li> </ul>
<b>24 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Appointment with a member of Core Team.</li> <li>• Discuss plan for birth, risks &amp; signs of preterm labour.</li> </ul>
<b>26 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Appointment with a member of Core Team.</li> <li>• Offer GTT between 26-28 weeks.</li> </ul>
<b>28 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Appointment with a member of Core Team.</li> <li>• FBC</li> <li>• Discuss:               <ul style="list-style-type: none"> <li>- Risks &amp; signs of preterm labour</li> <li>- Place and timing of birth</li> <li>- Possible risk of transfer if very preterm</li> <li>- Risk of admission to neonatal unit</li> <li>- Analgesia with caesarean birth</li> <li>- Monitoring of fetal hearts.</li> </ul> </li> </ul>
<b>30 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Appointment with a member of Core Team.</li> </ul>
<b>32 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Appointment with a member of Core Team.</li> </ul>
<b>34 weeks</b>	<ul style="list-style-type: none"> <li>• Scan</li> <li>• Appointment with a member of Core Team.</li> </ul>
<b>Triamniotic triplet pregnancies: Offer birth at 35 weeks.</b> <b>Pregnancies with a shared amnion will have an individualised plan from a tertiary fetal medicine centre.</b>	

**Guideline Version Control Log**

Version	Date	Author	Comment
1.0	October 2024	R. Mason, Consultant Obstetrician	New Trust wide guideline replacing: <ul style="list-style-type: none"><li>• CG1126 Multiple Pregnancy &amp; Birth (SRH&amp;WH)</li><li>• MP020 Multiple Birth (PRH&amp;RSCH)</li></ul>

## Due Regard Assessment Tool

To be completed and attached to any guideline when submitted to the appropriate committee for consideration and approval.

		Yes/No	Comments
<b>1.</b>	<b>Does the document/guidance affect one group less or more favourably than another on the basis of:</b>		
	Age	No	
	· Disability	No	
	· Gender (Sex)	No	
	· Gender Identity	No	
	· Marriage and civil partnership	No	
	· Pregnancy and maternity	No	
	· Race (ethnicity, nationality, colour)	No	
	· Religion or Belief	No	
	· Sexual orientation, including lesbian, gay and bisexual people	No	
<b>2.</b>	<b>Is there any evidence that some groups are affected differently and what is/are the evidence source(s)?</b>	No	
<b>3.</b>	<b>If you have identified potential discrimination, are there any exceptions valid, legal and/or justifiable?</b>	NA	
<b>4.</b>	<b>Is the impact of the document likely to be negative?</b>	No	
<b>5.</b>	<b>If so, can the impact be avoided?</b>	NA	
<b>6.</b>	<b>What alternative is there to achieving the intent of the document without the impact?</b>	NA	
<b>7.</b>	<b>Can we reduce the impact by taking different action and, if not, what, if any, are the reasons why the guideline should continue in its current form?</b>	NA	
<b>8.</b>	<b>Has the document been assessed to ensure service users, staff and other stakeholders are treated in line with Human Rights FREDAs principles (fairness, respect, equality, dignity and autonomy)?</b>	Yes	

If you have identified a potential discriminatory impact of this guideline, please refer it to [Insert Name], together with any suggestions as to the action required to avoid/reduce this impact. For advice in respect of answering the above questions, please contact uhsussex.equality@nhs.net (01273 664685).

## Dissemination, Implementation and Access Plan

To be completed and attached to any guideline when submitted to Corporate Governance for consideration and TMB approval.

	Dissemination Plan	Comments
1.	Identify:	
	Which members of staff or staff groups will be affected by this guideline?	Midwives and obstetricians
	How will you confirm that they have received the guideline and understood its implications?	Dissemination through the usual communication channels and highlighted at Safety Huddles.
	How have you linked the dissemination of the guideline with induction training, continuous professional development, and clinical supervision as appropriate?	All new members of staff are shown where to access Clinical documents that are relevant to their area of practice.
2.	How and where will staff access the document (at operational level)?	Accessed by staff via Sharepoint.

		Yes/No	Comments
3.	Have you made any plans to remove old versions of the guideline or related documents from circulation?	Yes	Previous versions will be archived as part of the uploading onto sharepoint process.
4.	Have you ensured staff are aware the document is logged on the organisation's register?	Yes	Dissemination plan includes notifying staff via email, departmental noticeboards, and safety huddles.

## **Additional guidance and information**

Hillman et al (2011) 118:928-40. Single intrauterine fetal death in twin pregnancies is associated with increased risk of preterm birth and abnormal antenatal brain imaging in the survival co-twin. BJOG Obstet Gynecol

[NHS England/National Patient Safety Alert – risk of oxytocin overdose during labour and childbirth \(2024\)](#)

NICE (updated 2024) NG137 [Twin and Triplet Pregnancy](#)

MBRRACE-UK 2021 Perinatal Confidential Enquiry: Stillbirths and Neonatal Deaths in Twin Pregnancies.

RCOG (2022) [Antenatal Corticosteroids to Reduce Neonatal Morbidity](#) (Green-top Guideline No. 74)

RCOG (2024) [Management of Monochorionic Twin Pregnancy Green-Top Guideline No. 51 \(2024 Partial Update\) - Kilby - 2025](#)

## **Patient information**

[Twin Anaemia Polycythaemia Sequence - Welcome To TAPS Support](#)

[Twins Trust | Twins Trust - We support twins, triplets and more...](#)

[Multiple pregnancy: having more than one baby | RCOG](#)