The OASI Care Bundle Manual

For midwives and obstetricians

External version 2 – March 2022

This material was developed for use in the 29 sites participating in the OASI2 study from September 2021-December 2022. It is now being made more widely available in response to wide ranging requests.

A note on sharing this resource:

Please do not share this manual or any other resources from the toolkit outside of your Trust/Health Board. Instead, please direct any interested individuals to complete our request form.

This manual is part of the OASI Care Bundle Toolkit, which was developed by the OASI2 Project Team specifically to support care bundle implementation in the 29 units taking part in the OASI2 study. You can confirm if your maternity unit is taking part in the OASI2 study here. Access to this toolkit is now being granted in response to wide-ranging requests. Please be advised that the care bundle components are to be applied as described in the toolkit materials. Any changes, including partial application of the components, does not constitute the OASI Care Bundle as designed and evaluated in the peer-reviewed literature.

Disclaimer

Care has been taken to provide accurate and up-to-date information. However, this is not guaranteed. No responsibility will be accepted for any loss, damage or expense resulting from the use of this information.

These materials, unlike protocols or guidelines issued by employers, are not intended to be prescriptive directions. Departure from the local prescriptive protocols or guidelines should be fully documented in the patient's case notes at the time the relevant decision is taken.

How to use this manual

This manual was developed to enable all midwives and obstetricians (referred to as 'clinicians') to incorporate the OASI Care Bundle into routine maternity practice. The OASI Care Bundle includes four components that, when implemented together, improve the reliability and quality of care that are needed to reduce the occurrence and long term impact of obstetric anal sphincter injury (OASI). **This manual is compatible with clinician discretion and does not replace reasonable clinical judgement.**

It is essential that the OASI Care Bundle is used in conjunction with local and national maternity guidelines, protocols, and best practice. For instance, those relating to obtaining women's informed consent, supporting women's birth choices, assisted vaginal births, episiotomy, conducting a perineal assessment, and management of OASI[1–3]. The relevant guidelines are referenced and linked throughout this manual.

This guide contains:

- Detailed descriptions of the four care bundle components including suggested wording to support documentation of each element
- Recommendations for how to communicate effectively with women about all aspects of the care bundle
- Additional resources for training in perineal support techniques
- Guidance on how to monitor use of the OASI Care Bundle in your unit

The OASI Care Bundle is not to be used to the exclusion of other recommended interventions and practices. For example, warm compresses have been shown to significantly reduce OASI[3] and may be used if feasible at the local unit, and/or is part of a clinician's routine practice. As with all aspects of maternal care, appropriate consent should be obtained prior to the use of any interventions.

If viewing this manual electronically as an interactive pdf file, you may click on the videos throughout to view a demonstration of a specific skill related to the care bundle.

Please also refer to the full OASI Care Bundle e-Learning Programme, which includes commentary on the video demonstrations referenced throughout this manual.

The e-Learning programme is comprised of four modules:

1. **eLearning Introduction:** background on severe perineal trauma, the collaboration between the RCOG and the RCM to address it, and women's experiences
2. **The OASI Care Bundle Projects:** a series of videos describing the preceding OASI1 study and its results as well as an overview of the OASI2 study
3. **Prevention & diagnosis of OASI with the OASI Care Bundle:** a series of videos focusing on each of the four components of the OASI Care Bundle
4. **Facilitating implementation:** intended primarily for OASI QI Leads to support local implementation of the OASI Care Bundle

Please note that the videos in the elearning programme were developed for the maternity units participating in the OASI2 study.

Contents

Background

Burden of OASI

In England, the reported rate of detected obstetric anal sphincter injury (OASI) among primiparous women tripled over a ten-year period from 1.8% in 2000 to 5.9% in 2011[4]. According to the 2019 clinical report from the National Maternity Perinatal Audit (NMPA), the overall incidence of detected OASI in Great Britain between 2016 and 2017 was 3.5% (range 1.6-7.5%)[5]. Although this increase is primarily associated with improved detection at the time of delivery[4], some tears continue to be undiagnosed, leading to a greater likelihood of developing anal and urinary incontinence symptoms[6], which can have a devastating impact on quality of life.

Risk factors for OASI*

- Nulliparity
- South Asian ethnicity
- Baby's birthweight greater than 4 kg
- Shoulder dystocia
- Occipito-posterior position
- Prolonged second stage of labour
- Previous OASI
- Assisted vaginal birth (particularly forceps)

* Even without these known risk factors, a woman may sustain an OASI.

Hear three women's personal stories with OASI:

Long-term complications of OASI include anal incontinence (faeces and flatus), chronic pain, dyspareunia and urinary incontinence[7]. One of the main risk factors for anal incontinence amongst childbearing women is OASI[8]. The social, psychological, emotional consequences of associated anal incontinence is a hidden taboo which carries considerable morbidity[10]. In some circumstances, the trauma of sustaining an OASI and its complications affects subsequent births and may make women more likely to request an elective caesarean birth[11].

Medico-legally, the total value of OASI-related negligence claims against the NHS was estimated to be £31.2 million between 2000 and 2010[12]. The specific negligent acts related to failure to offer a caesarean birth, failure to perform or extend an episiotomy, failure to identify and therefore diagnose the true extent and grade of the injury, inadequacy of repair and failure to perform a repair due to a failure to detect the injury[12].

Furthermore, the direct and indirect healthcare costs associated with OASI treatment and management of anal incontinence can be significant, with further treatment including ongoing imaging, outpatient, community and surgical follow-up. There are often additional OASI-related consultation and treatment costs at the menopause. Some women experience loss of earnings, as well as a need for medications and continence supplies, physiotherapy and counselling for psychosexual and emotional consequences[8].

In 2014, the Royal College of Obstetricians and Gynaecologists (RCOG) and the Royal College of Midwives (RCM) joined forces to address the increasingly high burden of OASI. This resulted in the development of the OASI Care Bundle, which places safety, informed choice and a positive birth experience at the forefront.

About care bundles

The US Institute for Healthcare Improvement (IHI) defines a 'care bundle' as a small set of evidence-based interventions for a defined patient segment or population and care setting that, when implemented together, will result in significantly better outcomes than when implemented individually[13].

> Care bundles combine elements of good, standard practice so that when implemented, they improve the reliability and quality of care as well as patient outcomes[11].

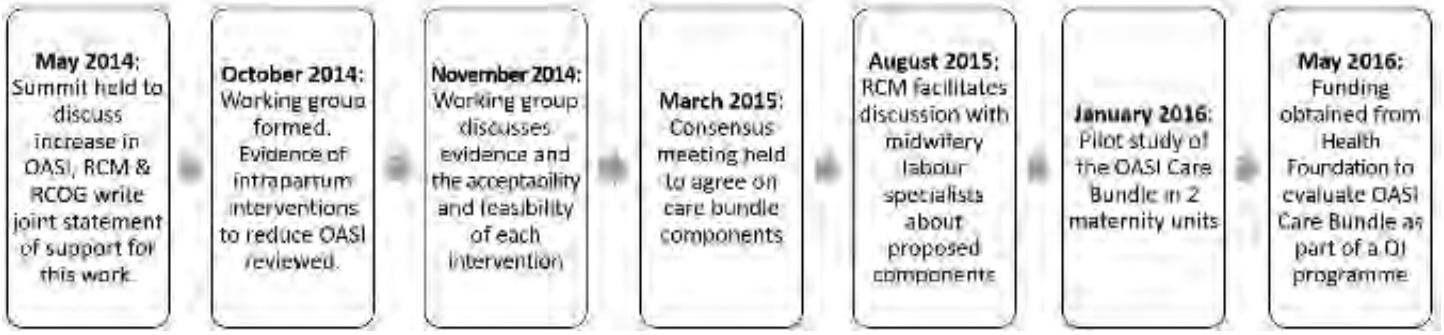
Care bundles should be concise and straightforward, comprising a set of three to five practices or precautionary steps[13]. Each of these components is an intervention or practice in its own right, ideally with a sound evidence base. The focus should be on how to deliver the best care. A care bundle should not introduce any practice or technique that are not standard practice in at least some settings.

It is crucial that all care bundle components can be applied to an individual in one clinical episode, and therefore each application of the bundle is self-contained. In this way, compliance with the care bundle is easily monitored. **For a clinical episode to be care bundle compliant, all elements must be applied.**

OASI Care Bundle development

In 2014, the RCOG and the RCM convened a working group of expert obstetricians, midwives and methodologists to discuss how to address the impact of OASI. The group decided that a care bundle of interventions is the most appropriate. The working group then reviewed the evidence from national guidelines, randomised controlled trials (RCTs) and key observational studies of intrapartum care interventions to reduce OASI rates. An overview of this evidence was presented to the OASI Care Bundle Group of clinical experts to be considered when selecting interventions to be included in the care bundle. The RCM then facilitated a discussion about the proposed components of the care bundle with midwifery labour specialists. In addition to the quality of evidence, other factors such as feasibility and patient acceptability were taken into account in the final selection process.

Timeline of OASI Care Bundle development:



The final interventions selected for inclusion within the OASI Care Bundle were based on the expert consensus of obstetricians and midwives in the OASI Care Bundle Group.

The four components of the OASI Care Bundle are:

1. In the antenatal period, the midwife or doctor will **discuss OASI with the woman** and what can be done to reduce the risk of it occurring.
2. At the time of birth and with the woman's consent, the midwife or doctor will use their hands to support both the perineum and baby's head (known as **manual perineal protection**, or MPP) while communicating with the woman to encourage a slow and guided birth.
   - For spontaneous vaginal births, MPP should be used unless the woman's chosen birth position (i.e. water births) doesn't enable MPP to be used or she declines this technique.
   - For assisted vaginal births (i.e. forceps, ventouse), MPP should always be used unless the woman declines this technique.
3. *If clinically indicated* and with the woman's consent, an **episiotomy** (a cut made through the vaginal wall and perineum) should be performed at an angle of 60 degrees from the midline at crowning.
4. Following all vaginal births, **a systematic examination of the vagina and ano-rectum** should be offered to all women even if the perineum appears intact. This is to ensure that any tears are identified immediately and that treatment options are discussed and implemented as necessary.

In accordance with guidance from the US IHI, compliance with the OASI Care Bundle is achieved when all four of the components are used. Full compliance for each birth should be recorded and monitored to help assess its impact in the maternity unit (how this will be done is explained in the final section of this manual).

Implementation and evaluation of the OASI Care Bundle (2016-2018)

Following promising results from pilot implementation of the care bundle in two maternity units, the OASI Care Bundle Project Team launched a quality improvement (QI) project involving 16 additional maternity units across England, Scotland and Wales. In this project, referred to as 'OASI1', the Project Team worked closely with local clinical champions (comprised of midwives and obstetricians) to implement the care bundle in participating units. Support included multidisciplinary training and an awareness campaign to encourage uptake of the care bundle.

Watch the OASI1 team and clinicians from participating maternity units discuss lessons learned:

The OASI Care Bundle was evaluated for clinical effectiveness as well as barriers and enablers to uptake. The clinical results, published in BJOG, compared almost 28,000 singleton vaginal births that took place before implementation of the care bundle with 27,000 singleton vaginal births that took place after. It was found that the care bundle reduced OASI rates from 3.3% to 3.0%, without affecting rates of caesarean birth or episiotomy. Despite this small percentage reduction of detected OASI, the care bundle was associated with a 20% *reduction in OASI risk* when individual characteristics, such as age, ethnicity, body mass index, parity, birthweight and mode of birth, were taken into account[14].

Following OASI1's demonstration of the care bundle's clinical effectiveness in reducing rates of OASI, the Project Team began plans to understand how to feasibly and sustainably implement the OASI Care Bundle at scale. This forms the basis of the OASI2 Project.

The OASI2 Project

Because the OASI Care Bundle was successful in reducing OASI rates, the Project Team was awarded additional funding from the Health Foundation in 2019 to scale up the initiative to more maternity units. This new project is referred to as "OASI2". OASI2 will be implemented in 10 of the original sites that participated in the first phase of the project (OASI1), in addition to 20 maternity units that did not take part in OASI1.

The overarching aim of OASI2 is to sustainably reduce rates of severe perineal trauma following childbirth in Great Britain through (a) supporting long-term sustainability of the OASI Care Bundle in units that participated in the original OASI1 study, and (b) supporting the bundle's scale-up in new units as part of the peer support and lean implementation methods. This will be done across three study arms: the sustainability group, the peer support arm, and the lean implementation arm, summarised below.

	20 maternity units randomised into two scale-up methods:	
Sustainability group	**Peer support**	**Lean implementation**
10 OASI1 maternity units	10 maternity units	10 maternity units

Implementation of the OASI Care Bundle in OASI1 units relied on continuous support from the Project Team which, although effective, it is not a sustainable model for wide scale implementation. OASI2 will assess how differing levels of *scalable* external support (peer support vs. lean implementation) affect both implementation success and the care bundle's clinical effectiveness in reducing OASI rates. Both clinical and implementation outcomes will be evaluated:

- The primary clinical outcome is **rate of OASI** after the implementation of the OASI Care Bundle
- The primary implementation outcome is **clinicians' level of adoption** of the OASI Care Bundle into routine practice (measured using survey data from the validated Normalization Measurement Development Tool[15])

Maternity units, led by OASI Quality Improvement (QI) Leads, are encouraged to use the **Implementation Toolkit** provided by the OASI2 Project Team (which includes this manual and the e-Learning programme, among other materials) to develop local programmes and plans to support implementation. The OASI QI Leads are responsible for ensuring that clinicians attending births within their units are sufficiently prepared to use the care bundle safely and effectively. To ensure standardisation of the care bundle components, a brief period of in-person instruction will be necessary to ensure widespread knowledge of each element.

The OASI2 Project Team will conduct the evaluation of outcomes at participating units.

For more information on the OASI1 and OASI2 studies, please visit the OASI Care Bundle webpage

Eligibility to receive the OASI Care Bundle

To achieve the intended results of the care bundle, all of its components should be applied in a single clinical episode. **All vaginal births (excluding water births)** are eligible for *all four components* of the care bundle, if women provide their informed consent. Components 2-4 of the care bundle can only be applied to vaginal births, including trial of vaginal birth. Women who have a caesarean birth are not eligible.

Component-specific eligibility should be understood to ensure that 'partially eligible' women are receiving appropriate are:

1. **Antenatal discussion** about OASI applies to *all women* from 32 weeks (see page 10).
2. **MPP** is recommended for term vaginal births. It requires complete visualisation of the perineum; the clinician may need to adjust their own position to be able to support the perineum —see pages 11 and 12 for instruction on how this may be done. If visualisation of the perineum is not possible, the birth is not eligible for MPP.
   The role of MPP is not certain with breech, preterm or stillbirths due to a lack of evidence. Local guidelines and protocols should be followed when supporting these types of births (see page 12).
3. An **episiotomy** should only be done *if clinically indicated*—see list of common indications on page 16. An episiotomy requires complete visualisation of the perineum; it is not possible to cut an episiotomy if the woman is giving birth in position that obstructs complete visualisation.
4. A **systematic examination of the vagina and ano-rectum** should be offered *following all vaginal births.*

Applying the four elements of the OASI Care Bundle

The efficacy of the OASI Care Bundle is dependent upon the conscientious application of all components. This section provides information on how to perform all components of the care bundle, including how to obtain and document women's informed consent[16] and respecting women's choices about how they wish to give birth.

Good communication with the woman underpins the successful application of all four elements of the care bundle. This is addressed specific to each element in the following subsections.

1. Antenatal discussion about perineal tears and the OASI Care Bundle

Women should be given the **'Tears during Childbirth: Discussion guide for antenatal counselling'** leaflet at their antenatal appointment between **32-36 weeks** (see Appendix 1). This discussion should be documented in the woman's notes so that when intrapartum care begins, the attending clinician can confirm whether the woman has been made aware of the care bundle (see next page on intrapartum communication).

Every case will be different, but you may refer to the mock antenatal discussion linked here for one example.

Specific discussion points should include:

- ✓ What is an OASI?
- ✓ The potential long term effects of an OASI, particularly anal incontinence, difficulty controlling wind and urinary leakage so that women are made aware that these symptoms should be reported
- ✓ The woman's individual risk for OASI
- ✓ If appropriate, instruction on how to safely massage the perineum prior to birth (refer to leaflet in Appendix 2)

Components 2-4 of the care bundle should be discussed in detail, as well as any other perineal protection practices that the maternity unit offers, such as the use of warm compresses.

Women have the right to decline *any* element of the care bundle at *any* time.

The discussion guide should be readily available in appropriate places within the maternity unit where women will attend for antenatal care, for instance:

- assessment units
- ultrasound departments
- consultant clinics
- community midwifery clinics

Key principles of valid consent[16]

- Woman must have the **capacity** to make an informed decision
  - → must be considered *competent* to give consent
  - → must be able to *understand* the information provided
  - → must be able to *communicate* her decision
- Consent must be provided **voluntarily**
  - → The decision to provide or withhold consent should be *made by the woman*
  - → The woman should *not be coerced or influenced* by carers, family or friends
- Woman should be **fully informed** of the following and be given enough time to reflect and ask questions:
  - → *Benefits and risks* of the intervention
  - → Alternative management strategies
  - → Implications of not undergoing the proposed intervention

It may also be helpful to provide the RCOG patient information leaflets: Perineal tears during childbirth: what you need to know during pregnancy (Appendix 2) and Understanding how risk is discussed in healthcare. Women can also be directed to the RCOG Tears Hub for more information.

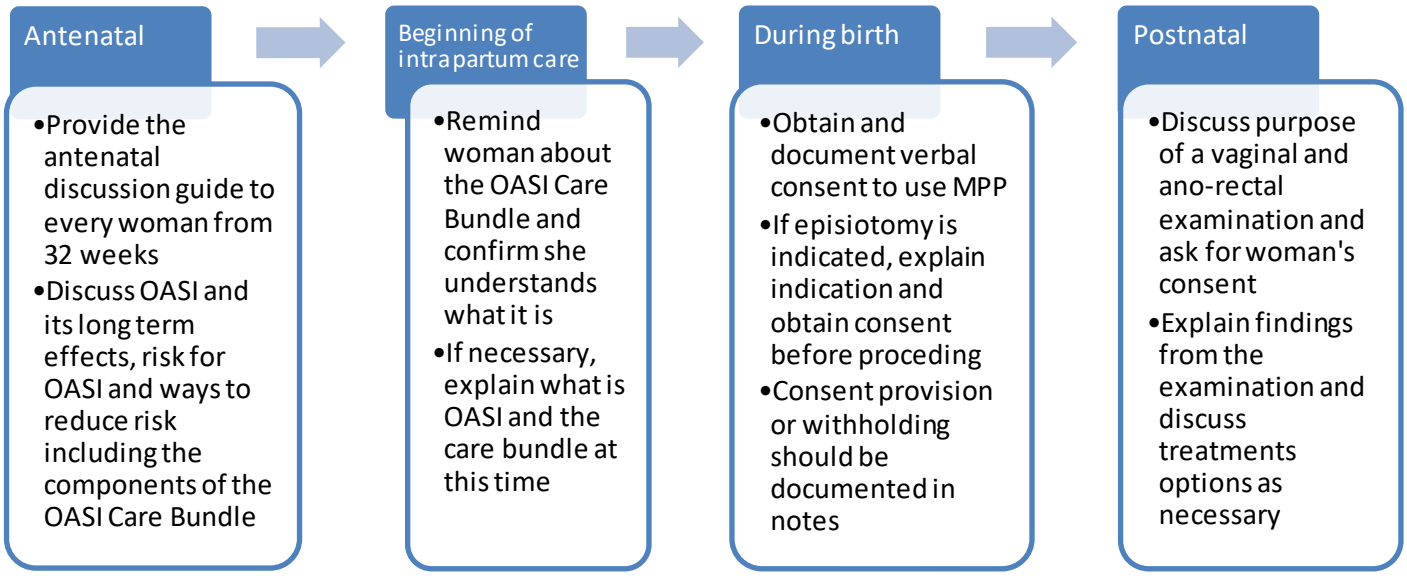
Intrapartum communication about the care bundle

Once intrapartum care begins, clinicians should ask the woman if:

- ✓ she has received information about the OASI Care Bundle in the antenatal period
- ✓ she has had the opportunity to discuss perineal tears and the care bundle with her midwife or doctor
- ✓ she has used any antenatal perineal massage techniques in pregnancy (document if so).

If the woman does not recall discussing or receiving any information about tears or the OASI Care Bundle in the antenatal period, the clinician should explain the care bundle to her at this time and address any questions or concerns she may have. **This can be done even if the woman presents in the advanced stages of labour (see below)**. However, waiting so late to discuss OASI and the care bundle for the first time should be avoided where possible.

Pathway for communication with women about OASI



Documenting the outcomes of antenatal discussion

We suggest that the following wording should be included in the woman's maternity notes with regard to the discussion of the care bundle:

> *"**[Woman's name]** is aware of the OASI Care Bundle and currently has no concerns about its application."*
>
> **-OR-**
>
> *"**[Woman's name]** is aware of the OASI Care Bundle and has concerns **regarding [care bundle component(s)]** because **[reason for concern, if provided]**."*

2. Manual Perineal Protection (MPP) to slow the birth

The primary aim of MPP is to slow the birth of the baby's head. MPP is a bimanual technique that supports both the woman's perineum and the baby's head to gauge the speed at which the head is progressing in order to encourage a controlled crowning. It also provides control during birth of the shoulders.

→ **MPP is recommended for spontaneous and assisted vaginal births.**

→ The role of MPP is not certain with breech, preterm and stillbirths due to a lack of evidence. Clinicians' judgment is recommended in these instances.

- Breech births should be supported in line with Green-top Guideline No. 20b [17].
- Stillbirth should be supported in line with Green-top Guideline No. 55[18].
- Preterm births should be supported in line with NICE guideline for Preterm labour and birth[19] and Green-top Guideline No. 73[20]

→ MPP cannot be applied during water births. Water births should be supported in line with RCM Midwifery Blue Top Guidance No. 1[21])

With the woman's consent, use MPP accordingly (unless contraindicated, see above):

- ✓ For spontaneous vaginal births, MPP should be used unless the woman's chosen position for birth does not allow for MPP to be used, or she objects to MPP.
- ✓ For assisted vaginal births (i.e., forceps, ventouse), MPP should always be used unless the woman declines. This may require the assistance of a second clinician (i.e., midwife or obstetrician).

Intrapartum communication with MPP

It is recommended that women are encouraged to slow their breathing and control their pushes on crowning in anticipation of the birth of the fetal head. This allows the perineum to stretch gradually, thereby reducing the risk of tearing through uncontrolled expulsion. The aim is to prevent the fetal head from uncontrollably 'popping out'; instead it should be guided in a controlled manner at crowning, with a combination of controlled , slowed or shallow maternal breathing, reduced maternal pushing and MPP.

Where MPP is not possible due to lack of visualisation, or the woman does not provide consent, clear and calm communication with the woman should continue in order to support the woman in reducing the expulsive nature of her pushing, using panting or slow breathing. If MPP is not employed, clinicians can determine if other methods to slow the birth of the head may be employed.

MPP and birth position

Women should be enabled to give birth in a position of their choice. MPP can be performed in most birthing positions in which the woman feels comfortable. If a woman is at high risk for OASI, birth position should be discussed with her during the antenatal period and/or in the early stages of labour.

There is limited evidence that any particular position has a significantly protective effect on the perineum. However, one study found that, irrespective of parity, births in the lithotomy position had higher rates of OASI, while the lowest rates were found among women giving birth in the standing position[22]. Evidence also indicates that women who give birth in upright positions experience a shorter second stage of labour and less pain than women who give birth in the lithotomy position[23]. **The lithotomy position should therefore generally be avoided unless it is required for an assisted birth.**

Clinicians may be concerned that there are positions that will not allow them to use MPP. Although clear visualisation of the perineum at crowning is necessary for MPP to be performed, it should never be a reason to restrict a woman's movement throughout the second stage. The clinician may have to adjust *their own position* in order to optimise their visualisation of the perineum, as shown below.

The guiding principle for birth position in the second stage of labour is maternal comfort and supporting mobility as well as the widening of the pelvic outlet to assist birth[24]. If MPP is not possible, it is beneficial to aid the slowing down of the birth of the baby's head through verbal coaching. This coaching should also be documented.

Recumbent/ semi-recumbent

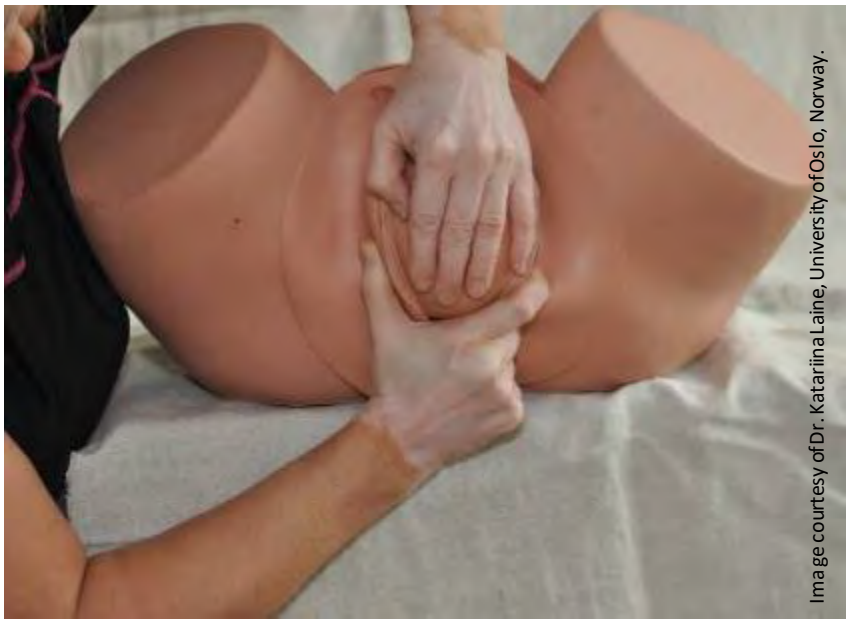
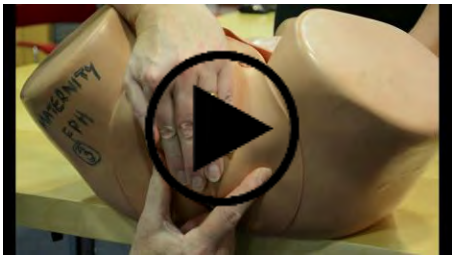
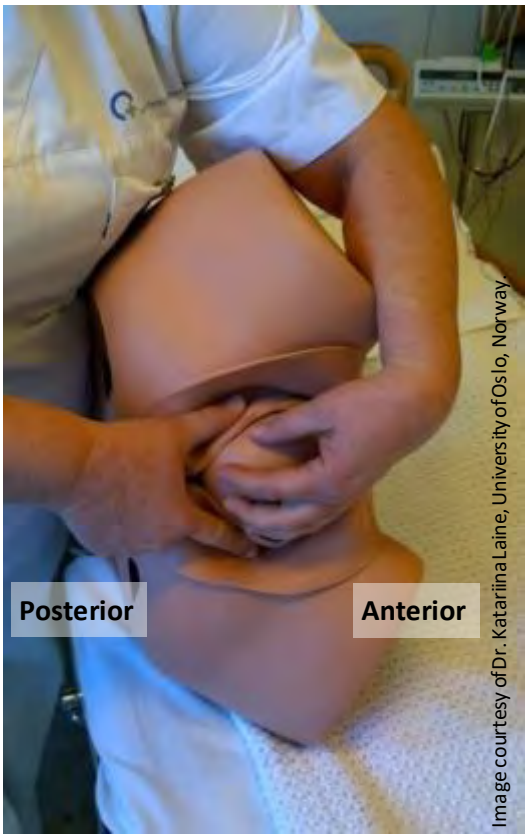
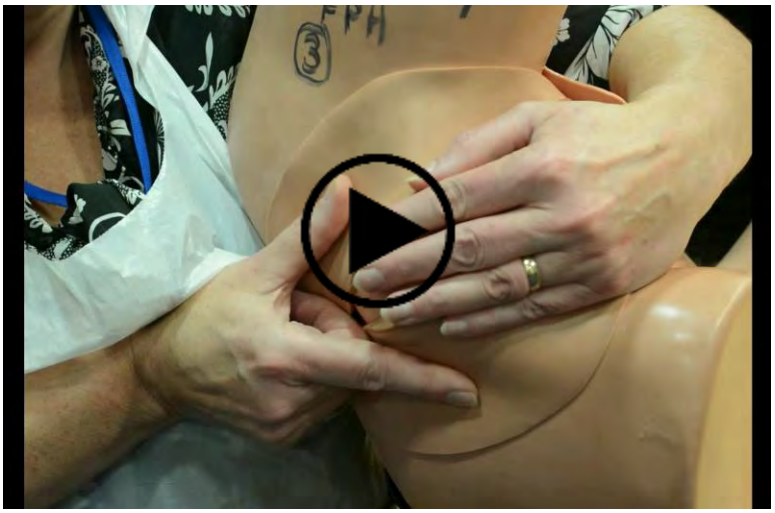


Image courtesy of Dr. Katariina Laine, University of Oslo, Norway.

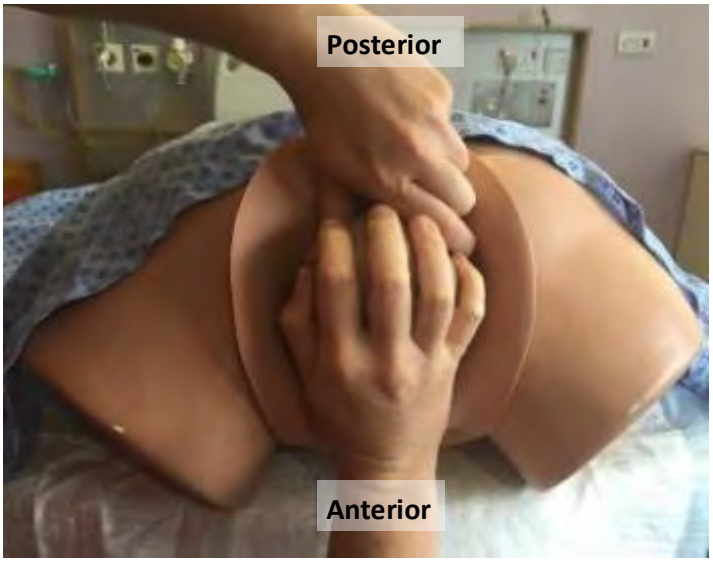


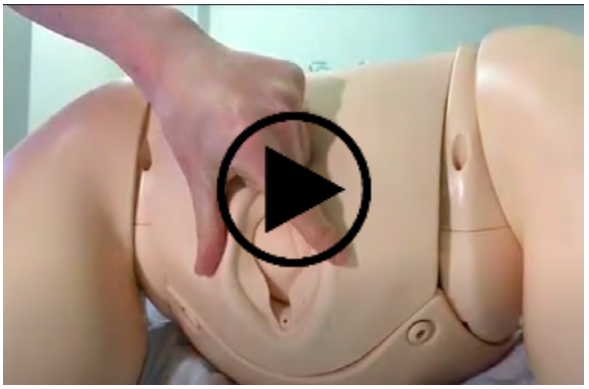
Left Lateral





'All fours' (hands and knees)



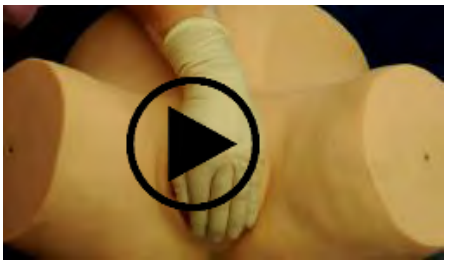


Spontaneous births

The following steps are general guidance for how to use MPP for a spontaneous birth. The opposite hand may be used per clinician's' preference.

1. The dominant hand **supports the perineum** using the thumb and forefinger on the lower part of the labia, firm pressure is used while flexing (curling in) the remaining 3 fingers and pushing them against the perineum. As crowning approaches, the woman should be guided to cease pushing and "breathe the baby out." Small pushes may alternate with periods of pushing.

2. The non-dominant hand is used to "cup" the fetal head and **assess the speed and progress** of the presenting part.



3. As the face becomes visible use the middle finger of the perineal support hand (the dominant hand) to **assist with the birth of the chin** over the introitus.

4. When the head is born, encourage the woman to refrain from pushing and **wait for restitution** to occur. Still supporting the perineum encourage the woman to **push gently to birth the shoulders.** Depending on the woman's chosen position, the posterior shoulder may be born first.

5. Continue MPP throughout the birth of the shoulders by **moving your non-dominant hand** to support the baby's body. The baby's shoulders may be born spontaneously, or gentle axial traction may be used to assist the birth of both shoulders.

6. If help is available, consider the second person supporting the perineum whilst you support the birth of the shoulders.

Assisted vaginal births

MPP should always be used during assisted births with both forceps or vacuum-extraction. In these instances, MPP should be implemented by the accoucheur (using the non-dominant hand) when the head starts to distend the perineum. This is at the point when the handles of the forceps or vacuum are raised in a gentle curve to deliver the head by extension:

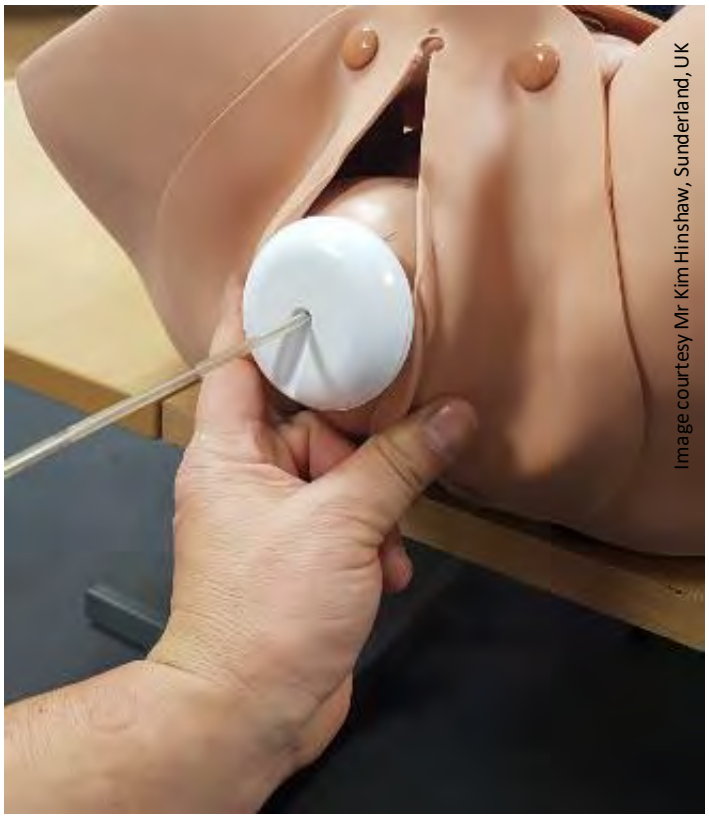
1. As the head distends the perineum – keep the dominant hand on the vacuum suction cup or on the handles of the forceps (Pajot's manoeuvre)
2. Move the non-dominant hand to support the perineum and use the MPP technique during delivery of the head
3. Start to raise the instrument through a gentle curve upwards, away from the perineum towards the symphysis pubis – deliver as slowly as possible
4. If indicated, pause to make an episiotomy (remember: at 60 degrees away from the midline when the perineum is stretched)
5. Complete delivery of the head by gentle traction, in a curved movement upwards – protect the perineum throughout, using the MPP technique

If two clinicians are available during an assisted birth, the assistant may support the perineum during birth of the head (and potentially during birth of the shoulders as well).

MPP while using forceps

Image courtesy Mr Kim Hinshaw, Sunderland,

MPP while using ventouse:

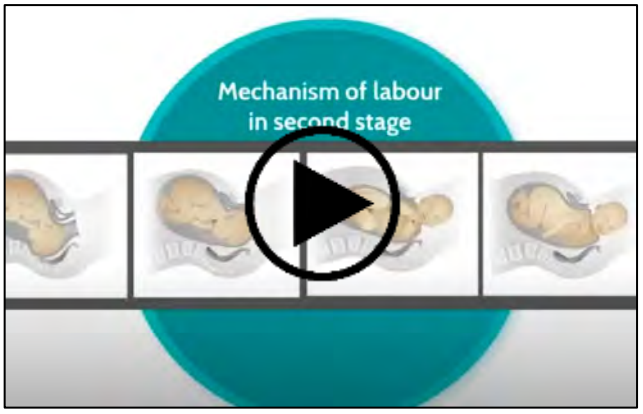


1. Traction with ventouse when MPP is applied

2. Elevation with ventouse when MPP is applied

MPP and birth of baby's shoulders

Unless the baby's condition is critical, once the head is born, the clinician should wait for restitution of the head (external rotation) and internal rotation of the shoulders. This should occur with the next contraction.



Great care should be taken during the birth of the shoulders and MPP should be continued as the shoulders are born. The posterior shoulder should ideally be delivered first.

The baby's body should be born following the direction of the curve of Carus using maternal effort and gentle axial traction, if needed, avoiding undue downward traction. View the video for a more detailed description of the mechanism of labour in the second stage.

Key principles for effective MPP:

- **Coach** the woman to avoid sudden expulsive pushing
- Maintain **gradual progress** during the birth of the head
- **Avoid downward traction** during birth of the baby's shoulders
- **Support the perineum** throughout the whole birth

Documenting MPP

We suggest that the following wording should be included in the woman's notes with regard to the use of MPP:

> *"I **[clinician name]** used MPP during the birth of the baby. **[Woman's name]** consented to this and was in the **[list that woman's position for birth]** position."*

Any difficulties with applying MPP should also be documented.

3. Mediolateral episiotomy, if clinically indicated

Episiotomy should never be a 'routine' intervention to reduce the risk of OASI and should only be carried out after clinical assessment of fetal and maternal risks.

Indications for episiotomy

The indication for an episiotomy should be recorded in the woman's notes. In the context of this care bundle, episiotomy is indicated in cases of:

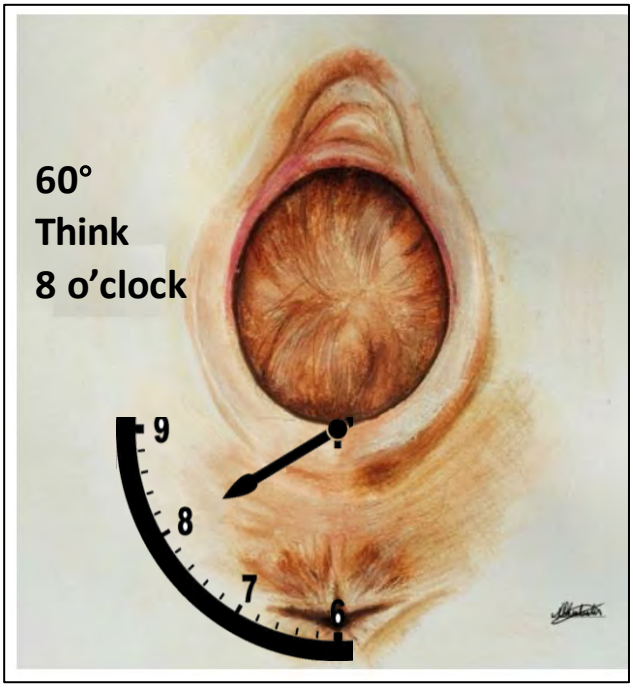
- Suspected fetal compromise
- Delayed second stage of labour
- If a severe perineal tear is judged to be imminent, feel digitally for remaining space/stretch and observe whether blood flow to the perineum appears significantly reduced (i.e., pallor of the stretched skin).
- Assisted vaginal birth with forceps.

There is little evidence to support the routine use of episiotomy for an unassisted spontaneous vaginal birth; however, there is some evidence that episiotomy reduces the risk of OASI during assisted vaginal birth. The 2020 Green-top guideline No. 26 on Assisted Vaginal Birth states, "*The evidence to support use of mediolateral episiotomy at assisted vaginal birth in terms of preventing OASI is* ***stronger for nulliparous women and for birth via forceps***"[2]. Episiotomy should be considered for ventouse-assisted births in primiparous women.

Mediolateral technique

If an episiotomy is indicated, it should be performed at **a 60-degree angle, beginning at the mid-point of the fourchette and extending on the maternal right, as the baby's head is crowning.**

- ✓ All midwives and obstetricians should be competent in performing this intervention. **See appendix 3 for training resources.**
- ✓ Studies have demonstrated that a significant proportion of mediolateral episiotomies are performed at an inappropriately acute angle, perhaps due to the distorted anatomy at the time of crowning[25].
- ✓ NICE guidance states more evidence is needed before epi-scissors can be recommended in routine practice[26].



Intrapartum communication about episiotomy

It is important that the clinician communicates the indication(s) for why an episiotomy is being considered with the woman. As with any intervention, the woman must give her consent before an episiotomy is performed.

Documenting episiotomy

When an episiotomy is used, clinicians should ensure that they document the indications for episiotomy, the angle at which the episiotomy was performed, and the woman's consent.

We suggest that the following wording should be used:

> *"Due to **[indication],** I **[clinician's name]** recommended an episiotomy for **[Woman's name],** who consented to the procedure. I made the cut at a **[angle]**-degree angle."*

4. Systematic examination of the vagina and ano-rectum

A **thorough examination of the vagina and ano-rectum should be offered to all women who have had a vaginal birth, even if the perineum appears intact**. With the woman's consent, it is recommended that a clinician who is competent to perform the assessment, assess the perineum, labia and vagina. Competency to perform the assessment can be gained by viewing video 3D of the OASI2 eLearning programme and participating in skills training sessions facilitated by local OASI Care Bundle leads in unit.

This assessment should include an examination of the ano-rectum and vagina using the pill-rolling technique. The pill-rolling technique is to feel for the 'tone and bulk' of the sphincters. Note that the woman's ability to squeeze is affected by whether she has an epidural, but the bulk can just *feel* thinner anteriorly in an OASI ('thinner at 12 o clock' than at '9' and '3'). This should prompt a second look by a senior midwife or obstetrician.

Any tears should be classified according to Green-Top Guideline No. 29: The Management of Third- and Fourth-Degree Perineal Tears[3] and documented in the case notes.

Failure to detect an injury will deny the woman the opportunity of immediate repair by experienced staff with a 60-80% chance of avoiding all bowel symptoms in the short to medium term[3,27–29] and in the case of fourth degree tear, a recto-vaginal fistula usually requiring a stoma and in many cases, repeated surgical treatments.

Classification of perineal tears

The following classification described by Sultan has been adopted by the International Consultation on Incontinence and the RCOG[3]:

1. **First-degree tear:** Injury to perineal skin and/or vaginal mucosa.
2. **Second-degree tear**: Injury to perineum involving perineal muscles but not involving the anal sphincter.
3. **Third-degree tear:** Injury to perineum involving the anal sphincter complex:
   a. Grade 3a tear: Less than 50% of external anal sphincter (EAS) thickness torn.
   b. Grade 3b tear: More than 50% of EAS thickness torn.

c. Grade 3c tear: Both EAS and internal anal sphincter (IAS) torn.

4. **Fourth-degree tear:** Injury to perineum involving the anal sphincter complex (EAS and IAS) and anorectal mucosa.

Discussing the vaginal and ano-rectal examination with women

The clinician should seek verbal consent from the woman prior to undertaking the examination. The clinician should explain that the examination will enable them to identify any damage to the perineal area that has resulted from childbirth and then provide the most appropriate treatment for any damage. The clinician should ensure that the woman is comfortable (with adequate analgesia) and in a position that allows optimal visualisation of the perineum for assessment. Skin to skin contact between mother and baby should be supported after the birth, so women should be allowed to hold their babies during the examination. Good lighting is also necessary. The woman's dignity must be maintained throughout and the clinician must stop the examination if asked to do so by the woman.

Documenting the vaginal and ano-rectal examination

The woman's consent, the examination, and the post-partum discussions must all be clearly documented in the notes, together with examination findings and any follow-up plans.

We suggest that the following wording should be included in the woman's notes with regard to the postnatal vaginal and ano-rectal examination:

> *"**[Woman's name]** has consented to a postnatal vaginal and ano-rectal examination. I **[clinician name]** have performed this and found **[list tears and degree]**. I communicated this with **[woman's name]."***

It is also important to document if a woman declines the examination. In this case, we suggest the following wording:

> *I **[clinician name]** offered to perform a postnatal vaginal and ano-rectal examination on **[woman's name]** in order to detect any tearing. **[Woman's name]** declined the examination, and it was not performed.*

In the event of an OASI being detected, repair procedures should follow national guidelines[3]. Appropriate and specific discussion with the woman is required in addition to routine postnatal debriefing. The RCOG has developed a postnatal information sheet for women with 3rd and 4th degree tears that may be useful in the postnatal debriefing.

Monitoring adoption of the OASI Care Bundle

It is recommended that you use your unit's Maternity Information System (MIS) to monitor your unit's OASI rate. Refer to section V of the implementation guidebook for how to do this.

It is also recommended that you monitor whether or not the OASI Care Bundle was used for every vaginal birth. Your maternity information system may already have the capacity to do this—contact your system provider as you may need to enable the fields in the system settings. Otherwise, you may consider adding a field to your electronic MIS, or, in paper-based units, using stickers to record use of the bundle. The below is suggested wording to support recording this information.

After every vaginal birth, record the following, at a minimum:

For **all vaginal births**: Were all four components of the OASI Care Bundle* applied to this birth?

- ❑ Yes
- ❑ No
- ❑ Birth not eligible**

* If an episiotomy was **not** indicated and **not** done, tick yes if the other three components were applied
**Birth is not eligible if consent not given, if it is a water birth, if the birth position did not allow for MPP

The next page provides guidance for clinicians on how to answer this question.

Guidance on answering: **Were all four components of the care bundle applied to this birth?**

 OASI discussion	 MPP	 Mediolateral episiotomy if indicated	 Examination of vagina & ano-rectum

When to tick 'yes'?

- Tick 'yes' if *all four components* of the care bundle were successfully applied
- Note that component 3, mediolateral episiotomy 60° from the midline, ***should only be done if clinically indicated*** (see page 18 for list of common indications for episiotomy)**.** Therefore, if an episiotomy was **not** indicated and **not** done, you may still tick 'yes' if the other three components were applied.
- Component 1, antenatal discussion about OASI, should ideally occur at 32 weeks. The attending clinician must confirm that the woman is aware of what OASI and the OASI Care Bundle are when intrapartum care begins (see page 10).
    - If the woman confirms awareness and understanding of the care bundle components, then component 1 has been successfully applied.
    - If the woman does not recall what OASI or the OASI Care Bundle are, then the attending clinician should explain this while the woman is in early labour, if possible. Component 1 can still be considered successful if it can be reasonably assumed that the woman has understood the information just presented to her and if she has had the opportunity to ask questions.

When to tick 'no'?

- If a **single component of the care bundle was not applied** for any reason, then tick 'no'.
- If the woman does not provide her consent to a specific component, then do not apply the component, and tick 'no'.
- If MPP could not be applied because the clinician was unable visualise the perineum in the woman's chosen birth position, tick 'no'.
- If components 1-3 of the care bundle were successfully applied but component 4 (examination of the vagina and ano-rectum) was not done (even if the perineum appears intact), tick 'no'.
- If components 1-3 of the care bundle were successfully applied and component 4 (examination of the vagina and ano-rectum) was offered to the woman and she declined, tick 'no'.
- If there was a clinical indication for episiotomy and the episiotomy was not done (i.e., due to a fast birth), tick 'no'.

Additional resources for clinical skills training

Clinical training on the elements of the care bundle is vital to its success. OASI QI Leads will facilitate practical training in-unit for clinicians. Please also refer to the videos referred to throughout this care bundle guide, which are also included with commentary in the e-Learning package that is complementary to this manual.

Many other virtual resources can supplement your training. We recommend the following:

- MaternityPEARLS Perineal assessment and repair tutorial from the Royal College of Obstetricians and Gynaecologists (RCOG)
- MaternityPEARLS (perineal repair and suturing) i-learn course from the Royal College of Midwives (RCM)
- Third and fourth degree perineal rears and episiotomy: hands-on workshop from the Croydon Urogynaecology & Pelvic Reconstruction Unit
- The Management of Third and Fourth-Degree Perineal Tears (Green-top guideline No.29, June 2015)

The RCM and RCOG continues to value and welcome any feedback about the OASI Care Bundle.

Please share your thoughts on this manual and/or the other components of the Implementation Toolkit here: https://r1.dotdigital-pages.com/p/15N0-NFV/confirmation

For more information, please refer to the OASI Care Bundle website and the FAQ page.
If you would like to speak to someone from the Project Team directly, please write to us at: OASICareBundle@RCOG.ORG.UK

Thank you for your efforts to improve childbirth outcomes for women.
We wish you all the best in your quality improvement journey!

References

1. Royal College of Obstetricians and Gynaecologists. *Obtaining Valid Consent. Clinical Governance Advice No. 6.* London; 2015. https://www.rcog.org.uk/globalassets/documents/guidelines/clinical-governance-advice/cga6.pdf.
2. Murphy DJ, Strachan BK, Bahl R, on behalf of the Royal College of Obstetricians and Gynaecologists. Assisted Vaginal Birth. *BJOG An Int J Obstet Gynaecol*. 2020. doi:https://doi.org/10.1111/1471-0528.16092
3. Royal College of Obstetricians and Gynaecologists. *Green-Top Guideline No. 29: The Management of Third- and Fourth-Degree Perineal Tears*. London; 2015. https://www.rcog.org.uk/globalassets/documents/guidelines/gtg-29.pdf#:~:text=The Management of Third- and Fourth-Degree Perineal Tears,under the same title. Executive summary of recommendations.
4. Gurol-Urganci I, Cromwell DA, Edozien LC, et al. Third- and fourth-degree perineal tears among primiparous women in England between 2000 and 2012: Time trends and risk factors. *BJOG An Int J Obstet Gynaecol*. 2013;120(12):1516-1525. doi:10.1111/1471-0528.12363
5. NMPA Project Team. *National Maternity and Perinatal Audit: Clinical Report 2019. Based on Births in NHS Maternity Services between 1 April 2016 and 31 March 2017.* London; 2019.
6. Taithongchai A, Veiga SI, Sultan AH, Thakar R. The consequences of undiagnosed obstetric anal sphincter injuries (OASIS) following vaginal delivery. *Int Urogynecol J*. 2020. doi:10.1007/s00192-019-04033-5
7. Fornell EU, Matthiesen L, Sjödahl R, Berg G. Obstetric anal sphincter injury ten years after: Subjective and objective long term effects. *BJOG An Int J Obstet Gynaecol*. 2005. doi:10.1111/j.1471-0528.2004.00400.x
8. Meyer I, Richter HE. Impact of fecal incontinence and its treatment on quality of life in women. *Women's Heal*. 2015. doi:10.2217/whe.14.66
9. Lacross A, Groff M, Smaldone A. Obstetric anal sphincter injury and anal incontinence following vaginal birth: A systematic review and meta-analysis. *J Midwifery Women's Heal*. 2015. doi:10.1111/jmwh.12283
10. Keighley MRB, Perston Y, Bradshaw E, Hayes J, Keighley DM, Webb S. The social, psychological, emotional morbidity and adjustment techniques for women with anal incontinence following Obstetric Anal Sphincter Injury: Use of a word picture to identify a hidden syndrome. *BMC Pregnancy Childbirth*. 2016. doi:10.1186/s12884-016-1065-y
11. Evans C, Archer R, Forrest A, Barrington J. Management of obstetric anal sphincter injuries (OASIS) in subsequent pregnancy. *J Obstet Gynaecol (Lahore)*. 2014. doi:10.3109/01443615.2014.911835
12. NHS Litigation Authority. *Ten Years of Maternity Claims. An Analysis of NHS Litigation Authority Data.* London; 2012. https://resolution.nhs.uk/wp-content/uploads/2018/11/Ten-years-of-Maternity-Claims-Final-Report-final-2.pdf.
13. Institute for Healthcare Improvement. Bundle up for safety. http://www.ihi.org/resources/Pages/ImprovementStories/BundleUpforSafety.aspx. Published 2015.
14. Gurol-Urganci I, Bidwell P, Sevdalis N, et al. Impact of a quality improvement project to reduce the rate of obstetric anal sphincter injury: a multicentre study with a stepped-wedge design. *BJOG An Int J Obstet Gynaecol*. 2020. doi:10.1111/1471-0528.16396
15. Rapley T, Girling M, Mair FS, et al. Improving the normalization of complex interventions: Part 1 - Development of the NoMAD instrument for assessing implementation work based on normalization process theory (NPT) 17 Psychology and Cognitive Sciences 1701 Psychology. *BMC Med Res Methodol*. 2018. doi:10.1186/s12874-018-0590-y
16. Medical Protection Society. Consent - The basics - England. *MPS*. 2015. https://www.medicalprotection.org/uk/articles/eng-consent-the-basics.
17. Impey, LWM, Murphy, DJ, Griffiths, M, Penna, LK, on behalf of the Royal College of Obstetricians and Gynaecologists. Management of Breech Presentation. *BJOG*. 2017. https://obgyn.onlinelibrary.wiley.com/doi/full/10.1111/1471-0528.14465.
18. Royal College of Obstetricians and Gynaecologist. Late Intrauterine Fetal Death and Stillbirth Late Intrauterine Fetal Death and Stillbirth. *Green-top Guidel No 55*. 2010.
19. NICE. Preterm labour and birth | Guidance and guidelines. *NICE Guid Guidel*. 2015.
20. Thomson AJ. Care of Women Presenting with Suspected Preterm Prelabour Rupture of Membranes from

24+0 Weeks of Gestation: Green-top Guideline No. 73. *BJOG An Int J Obstet Gynaecol*. 2019. doi:10.1111/1471-0528.15803

21. The Royal College of Midwives. *Midwifery Care in Labour Guidance for All Women in All Settings: RCM Midwifery Blue Top Guidance No. 1*. London; 2018. https://www.rcm.org.uk/media/2539/professionals-blue-top-guidance.pdf.
22. Elvander C, Ahlberg M, Thies-Lagergren L, Cnattingius S, Stephansson O. Birth position and obstetric anal sphincter injury: A population-based study of 113 000 spontaneous births. *BMC Pregnancy Childbirth*. 2015. doi:10.1186/s12884-015-0689-7
23. Gupta JK, Sood A, Hofmeyr GJ, Vogel JP. Position in the second stage of labour for women without epidural anaesthesia. *Cochrane Database Syst Rev*. 2017. doi:10.1002/14651858.CD002006.pub4
24. National Institute for Health and Clinical Excellence. *Intrapartum Care for Healthy Women and Babies*.; 2014.
25. Kalis V, Landsmanova J, Bednarova B, Karbanova J, Laine K, Rokyta Z. Evaluation of the incision angle of mediolateral episiotomy at 60 degrees. *Int J Gynecol Obstet*. 2011. doi:10.1016/j.ijgo.2010.09.015
26. National Institute for Health and Clinical Excellence. *Episcissors-60 for Mediolateral Episitomy*.; 2020. https://www.nice.org.uk/guidance/mtg47/resources/episcissors60-for-mediolateral-episiotomy-pdf-64372060816837.
27. Fernando RJ, Sultan AH, Kettle C, Radley S, Jones P, O'Brien PMS. Repair techniques for obstetric anal sphincter injuries: A randomized controlled trial. *Obstet Gynecol*. 2006. doi:10.1097/01.AOG.0000218693.24144.bd
28. Garcia V, Rogers RG, Kim SS, Hall RJ, Kammerer-Doak DN. Primary repair of obstetric anal sphincter laceration: A randomized trial of two surgical techniques. *Am J Obstet Gynecol*. 2005. doi:10.1016/j.ajog.2004.11.045
29. Williams A, Adams EJ, Tincello DG, Alfirevic Z, Walkinshaw SA, Richmond DH. How to repair an anal sphincter injury after vaginal delivery: Results of a randomised controlled trial. *BJOG An Int J Obstet Gynaecol*. 2006. doi:10.1111/j.1471-0528.2006.00806.x

Appendix 1

Perineal Health in Pregnancy, Birth & Beyond

Antenatal discussion guide

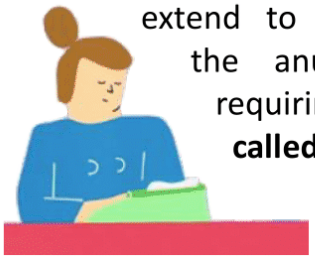
OASI TWO CARE BUNDLE

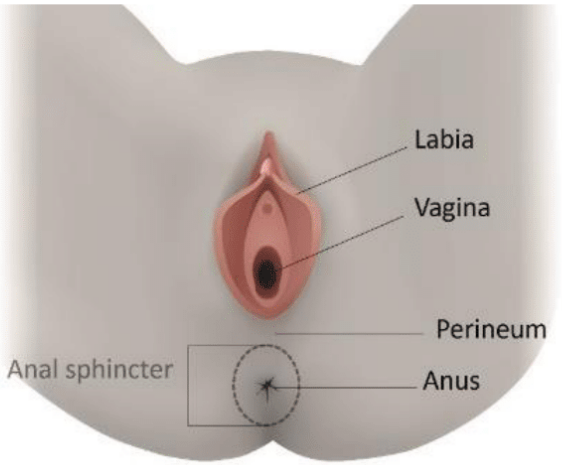
V3 MARCH 2022

What types of perineal tears can occur during childbirth?

During vaginal birth, it is very common to experience a graze or tear of the labia or, more frequently, the **perineum**, which is the **area between your vagina and anus**. For most, these tears are minor and heal quickly.

- **1st and 2nd degree:** tears that involve muscle/skin that may require stitches
- **3rd and 4th degree:** severe tears which extend to the muscles that control the anus (the anal sphincter), requiring stitches. **These are also called 'Obstetric Anal Sphincter Injuries' (OASI).**





Am I at risk of a severe tear?

Severe tears (OASI) occur in **3-4 in 100 births.**

You are at significantly higher risk if:

- Forceps are used to help you give birth
- This is your first vaginal birth

The following may also increase your risk:

- Your baby is born in the back-to-back position
- Your baby is over 4kg (9 lbs)
- You are of South Asian ethnicity
- Your baby is born quickly
- You are over 35
- Your baby's shoulder gets stuck behind the pubic bone (shoulder dystocia)
- Ventouse is used to help you give birth
- The pushing phase of labour takes a long time

What about recovery?

Most women and birthing people who have a severe tear (OASI) repaired recover well, although it can take some time. Occasionally, long-term pain and a difficulty or inability to fully control the bladder, bowels or the passing of wind can occur. This could lead to:

- Feelings of depression, low mood, isolation
- Anxiety about leaving the house and not being able to quickly access a toilet
- Difficulty bonding with baby
- Concerns about leakage while exercising
- Concerns about having sex or giving birth again

If you experience any of the above after birth, contact your doctor or midwife as soon as possible to access specialist care.

Turn to the other side for information on how to reduce your risk

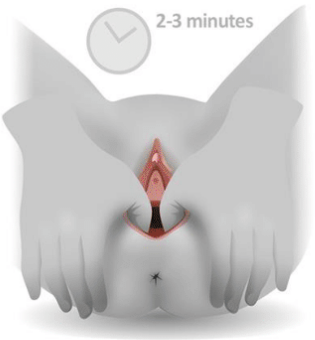
Please speak to your midwife or doctor if you have any questions.
For more information and support, visit: rcog.org.uk/tears or masic.org.uk

Royal College of Midwives
Royal College of Obstetricians & Gynaecologists
The Health Foundation

Appendix 1

How can I reduce my risk of a severe tear?

Perineal massage with a natural oil (such as coconut or almond) from 35 weeks pregnant until birth, as illustrated here. Visit rcog.org.uk/tears for more information on how to do this.



A warm compress is a flannel heated with warm tap water and held against your perineum during the pushing phase of labour. Ask your midwife or doctor if they can provide this.

Spontaneous vaginal birth *(birth without forceps or ventouse)* can be encouraged by choosing the ideal place of birth (consider a homebirth or midwifery-led unit if you are low-risk), avoiding induction and epidural where possible, creating a relaxing environment (consider soothing lighting, sounds, smells) and remaining active throughout labour and birth. *For first-time mothers with an epidural,* lying on your side during the pushing phase of labour is recommended.

Choose a birth position that is most comfortable for you. Listen to your midwife and they will advise a slow and guided birth of the head. Positions at the moment of birth that may reduce risk of severe tears include:

OASI Care Bundle is the following set of practices, most effective when applied together:

1. In the antenatal period, your midwife or doctor will **discuss severe tears (OASI) with you** and what can be done to reduce the risk of this occurring.
2. With your consent, your midwife or doctor will **use their hands to support** your perineum and the baby's head and shoulders during birth and encourage a slow and guided birth.
3. You may need an **episiotomy**—a cut through the vaginal wall and perineum to make more space for your baby to come out—your midwife or doctor will ask for your consent to do this.
4. After your baby has been born, your midwife or doctor will ask for your consent to **examine your vagina, perineum and anus** (just inside the back passage) to ensure any tears are identified and appropriately treated to avoid further consequences.

✓ **Developed by experts**

✓ **Supported by women**

✓ **Found effective in a 2017-18 study (OASI1)**

This discussion guide was developed for the OASI2 Project, which studies the implementation of the OASI Care Bundle in maternity units across Great Britain. For more information about the OASI2 project, please visit: www.rcog.org.uk/OASI2

Royal College of Midwives
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The Health Foundation

Appendix 2 **Perineal tears during childbirth: what you need to know during pregnancy**

Perineal tears during childbirth

What you need to know during pregnancy

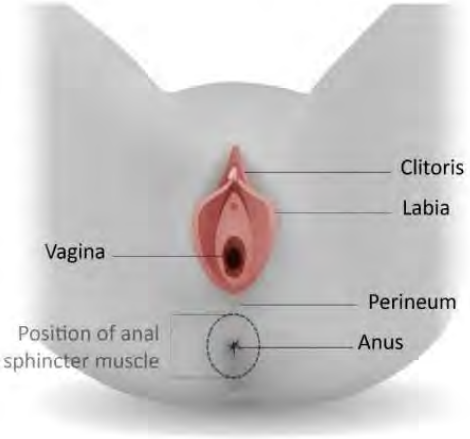
Royal College of Obstetricians & Gynaecologists

Your perineum is the area between your vagina and your back passage (anus). It can tear when you are giving birth, or sometimes your healthcare professional might recommend a cut to your perineum (episiotomy) to make more room for your baby to be born.

9/10 First-time mothers have a tear, graze or episiotomy

After the birth of your baby a healthcare professional will offer you an examination to see if you have a tear. They will advise you if you need stitches. Most tears heal within 6 weeks with no long-term problems. For women who do have problems after a tear (such as pain, difficulty going to the toilet, incontinence or mental health problems) specialist help is available.

Approximately 6 out of 100 women giving birth for the first time and 2 out of 100 women who have given birth vaginally before will have a deeper tear involving the back passage/anal sphincter muscle (a 'third- or fourth-degree tear'). These deeper tears will need repair in an operating theatre. You will be supported by healthcare professionals including physiotherapists after your recovery from a third- or fourth-degree tear.



Perineal massage and 'hands-on' birth

A kneeling or all-fours birthing position may be beneficial and reduce the severity of tearing.

You can ask your healthcare professional to support your perineum as your baby is being born, which reduces the risk of a third- or fourth-degree tear. This is called 'hands-on' birth.

From 35 weeks onwards, you may choose to try perineal massage until your baby is born, which has been shown to reduce the risk of tears. This is particularly beneficial for first-time mothers. You may wish to ask your partner to help with this.

Top tips

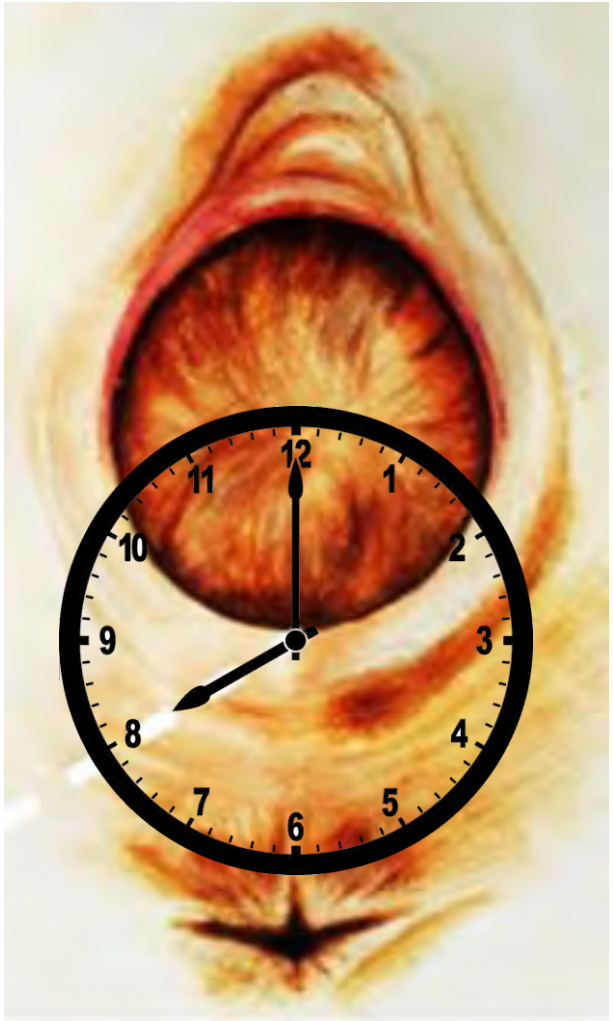
1. Use lubricant like vitamin E oil, almond oil or olive oil.
2. Hold one or both of your thumbs in the position shown for about one minute. You will begin to feel a stretching sensation. Keep breathing.
3. Gently massage the lower half of your vagina using a U-shaped movement for 2-3 minutes. Do this 2-3 times.
4. Repeat the massage daily, or when possible.

For more information about the types of tears that can happen in childbirth, and what can be done to help your recovery if you do tear, visit **www.rcog.org.uk/tears**

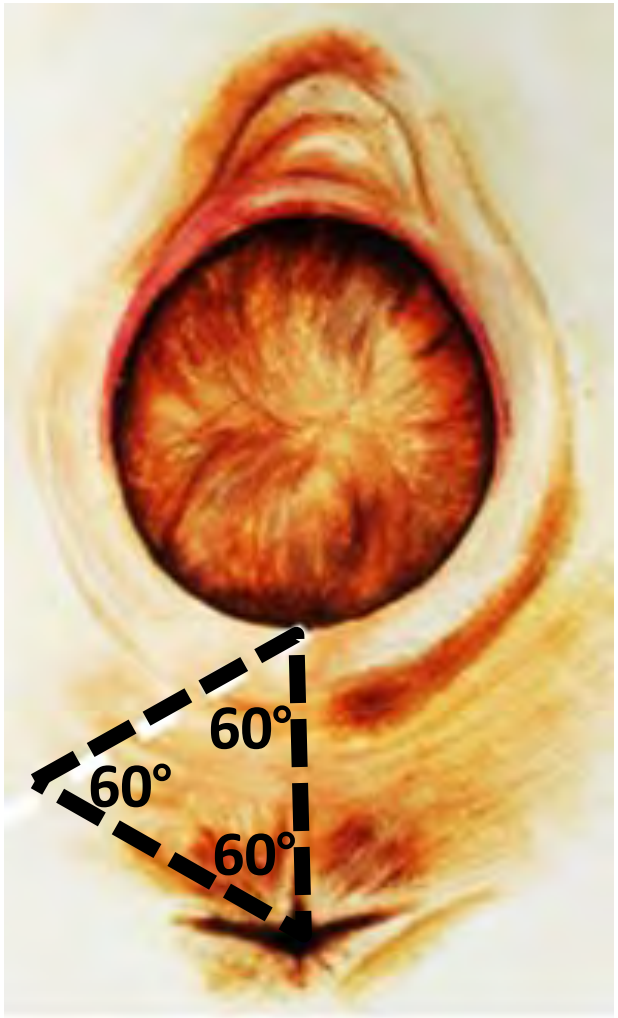
Published in October 2019

Appendix 3. 60-degree episiotomy simulation tools

Think: 8 o'clock:

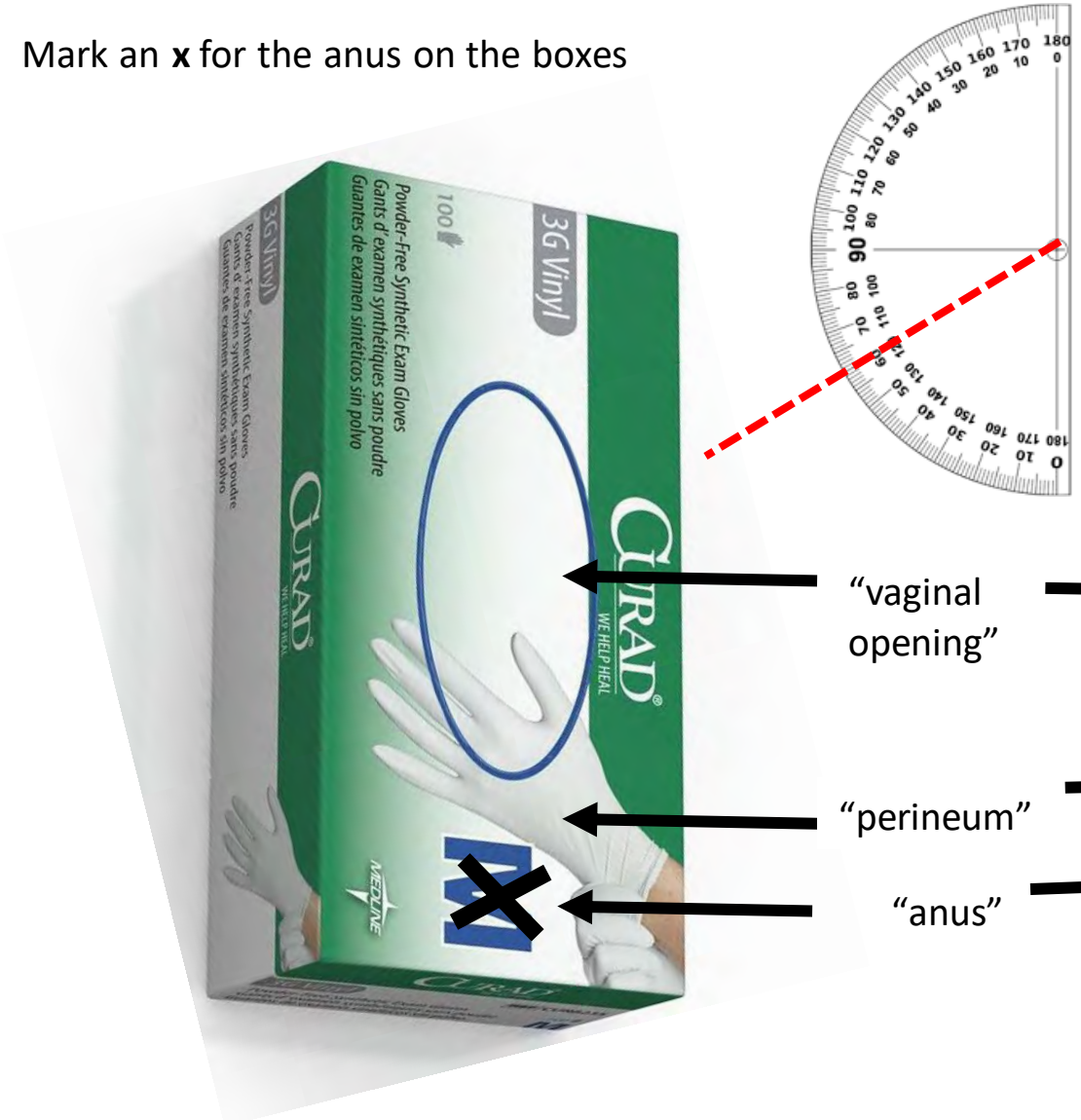


Think: "equilateral triangle"

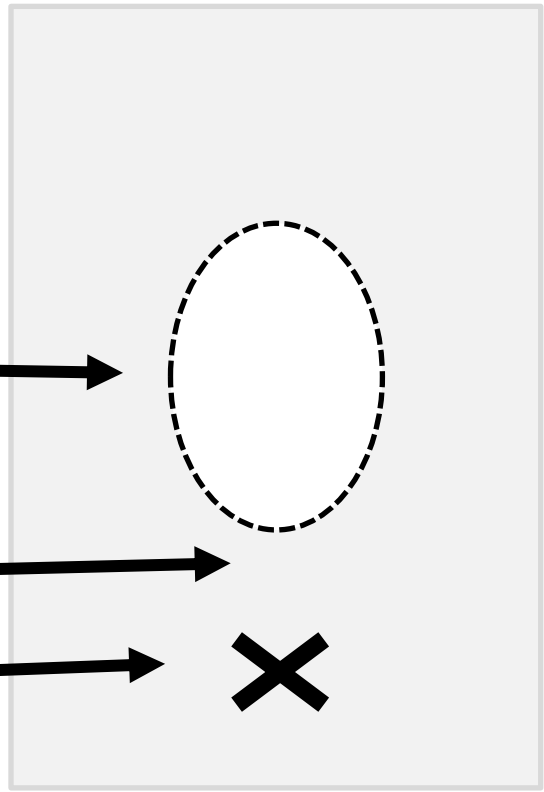


Use disposable glove boxes (full or empty) or paper cut-outs during skills training sessions to simulate having to quickly measure and cut at 60 degrees; then verify the angle using a protractor. Use scissors typically used in the unit for episiotomy.

Mark an **x** for the anus on the boxes



Cut out a circle and mark an **x** for the anus



"vaginal opening"

"perineum"

"anus"