Your important health information

Enhanced recovery after caesarean section

What is enhanced recovery after surgery/caesarean section (ERAS)?

ERAS is a new approach to care that improves your health before, during and after surgery. If you have had a caesarean birth before, you may notice some changes in your plan of care.

Our aim is to help you recover and be independent sooner. This handout explains everything you need to know about our enhanced recovery after surgery (ERAS) programme for your planned caesarean section.

What to bring to hospital

For you

- Regular medications including insulin and glucometer if you have diabetes.
- Clothing, footwear and toiletries for you.
- This handout including the patient diary.
- Signed forms:
  - *Vitamin K and Hepatitis B Vaccination Consent*
  - *Consent, Release and Indemnity for Support Person at Caesarean Section*.

For your baby

- Baby clothes: singlets, growsuits, a beanie hat, baby wraps, blanket and nappies.
- Bottles, bottle sterilizer and baby formula if you plan to formula feed.

What you can expect

Before you come to the hospital

Do not eat solid food from 2:00am on the morning of your operation (no chewing gum or lollies).

You may drink water only until 6:00am.

Do not drink anything after 6:00am.

Your first day in hospital

At admission

Please come to level one, Day Surgery Unit (DSU).

Your support person can stay with you before and during your birth. Your support person can also come to the postnatal ward with you after your baby is born.

You will meet your midwife and care team who will:

- listen to your baby's heartbeat
- check you have had your blood tests
- check you have signed your consent forms
- change you and your support person into special clothes to be worn into the operating room.
- talk to you about the anaesthetic and about your birth

A midwife from the Research Department at the Mercy, may want to speak with you about being part of a hospital research project. This is a chance for you to help improve care for women in the future. You do not have to participate and your care will not be affected if you choose not to.

Your caesarean may happen on the morning or the afternoon of the date you are booked in. Please tell your family and friends that you will let them know when your baby has been born.

In the operating room

Your support person is welcome to take pictures of the birth. You may use a camera or a mobile phone switched to 'Flight Mode'. No videoing is allowed.

Your birth will usually take two to two and a half hours. This includes birthing your baby and time in recovery room.

You will most likely have a spinal anaesthetic. A spinal anaesthetic numbs the nerves that supply the tummy, hips, bottom and legs. You will be awake and will not feel any pain. You may feel some tugging, pulling and pushing on your abdomen.

The numbing effects of the spinal anaesthesia can last several hours.

In the recovery room

You will be given a drink and/or an icy pole in recovery after your birth.

Your baby can be placed on your chest for skin to skin and we will aim to help you to begin to feed your baby.

It may be possible for your baby and support person to stay with you and your midwife in the recovery room. Your support person must not walk around the recovery room, or use their mobile phone and they must leave the recovery room if asked to by nursing staff.

If your baby cannot stay with you after the birth, your baby and support person will be taken to the postnatal ward together. Staff will discuss this with you on the day.

If your baby is unwell and needs tests, your support person can usually go with the baby to the Special Care Nursery with the doctor or midwife.

When you and your baby are ready you will be taken to the post-natal ward. Your support person can go with you.

Post-natal ward

Once you are settled on the post-natal ward you will have a light meal and then a normal dinner in the evening.

Approximately 6 hours after your operation, your midwife will check to see if your legs have feeling back and help you get out of bed.

After you are able to walk around your catheter (tube in your bladder) will be removed. You will be asked to measure the amount of urine (wee) you pass until normal measurement and sensation occurs. the next two times you visit the bathroom.

You will be given regular tablets for pain relief. If you need further pain relief, please talk to your midwife

The midwives will help you feed your baby if needed.

By the end of your first 24 hours in the hospital you should be eating, drinking, had a shower and be walking around in your room.

Day 1 goals

* Have my baby!
* Eat and drink
* Catheter comes out and I can do a wee (pass urine)
* Get up out of bed and have a shower
* Move around my room
* Fill in patient diary

Your second day in hospital

You should be moving around your room independently and spending time with your baby.

You should be eating and drinking normally. If you have any concerns please let your midwife know. Please feel free to bring in food and drinks from home – both a fridge and microwave are available to you.

Your midwife will give you regular pain relief (paracetamol and ibuprofen) if you need it.

The doctors will visit and see how you are feeling. They will check your medications and talk to you about how to manage pain medication at home.

If you are having issues going to the toilet, please let your midwife know.

Your midwife will check your baby from top-to-toe. If needed, they will speak with the paediatricians about your baby.

You will give your baby their first bath.

Physiotherapy have developed a series of videos which contain valuable information about your recovery after childbirth.

These videos should be watched as soon as possible after the birth of your baby.

Access videos via this QR code or follow the link:

https://www.youtube.com/playlist?list=PLsPvysJbVI2M_gsUo4cAqKcB69_8mRvP0

Day 2 goals

* Walk around my room
* Eat and drink as normal
* Bath my baby
* My check-up by the doctor
* My baby's check-up by midwife
* Fill in your patient diary

Information for your visitors

We encourage your family and friends to stay in touch with you via phone or video calls.

Please check Mercy Health website for our current visiting hours and restrictions.

Your third day in hospital - going home

Your midwife will do a full check of you. They will explain how to take care of your wound and dressing at home.

Your midwife will let you know which pain medications to take at home, if you need.

When your baby is 48 hours old, your midwife will check your baby's weight and offer you the Newborn Screening Test (NST). You may know this as the heel prick test.

If you go home before your baby is 48 hours old, both of these can be done by the midwife who comes to visit you at home.

Day 3 goals

- My check-up and review of my wound
- Check my baby's weight
- Newborn Screening Test, if I choose
- Pack my bags
- Complete and return the patient diary
- Go home from the hospital

In the days after you are home

A midwife will call you and visit you at home within one to two days of your discharge from hospital. You and your baby will be checked at this visit.

If you or your baby are very unwell, get help as soon as possible from your general practitioner (GP) or the nearest emergency department.

Further Information

If you have any questions regarding this information, please contact:

Mercy Hospital for Women
Postnatal ward
Phone: 03 8458 4430

Acknowledgements

Produced by: ERAS Committee MHW
Date produced: August 2020
Date of last review: March 2022
Date for review: August 2024

Please fill in this diary and give to your midwife before you go home.

Patient label

Patient diary

Clinician to fill in	Date	Time
Expected time for mobilisation		
Expected time for removal urinary catheter		

Patient to fill in on Day 1	Date	Time
My caesarean was on		
I started drinking after my caesarean on		
I started eating after my caesarean on		
I started walking around on		
The urinary catheter (tube) was taken out on		

Discharge checklist for patient to fill in on Day 3	Yes
My pain is controlled	
I can walk on my own	
I can eat and drink normally	
My cannula (drip) has been removed	
I can pass urine (wee, pass water)	
I can feed my baby	
My baby has been checked by the baby doctor/nurse	
I have had a shower, my caesarean cut in the skin is clean	
My midwife has checked me and discharged me	
I have my medications (tablets) and know how to take them	
I know how I am getting home	
I have help at home	
All my questions have been answered and I know who to contact if I am worried	

Your important health information

Mercy Health
Care first

Managing pain following your caesarean

Good pain control is important. Taking pain medicine properly helps with your pain. When you go home from hospital, you may be given more than one medicine to help with pain.

These medicines help with pain in different ways.

There are three types of medicines for pain.

- **Paracetamol** for example, Panadol® or Panamax®
- **Anti-inflammatories** (Ibuprofen, Nurofen®, Advil® or Herron®, Diclofenac, Voltaren®)

  Anti-inflammatories can upset the stomach and should be taken with food. Do not take for more than one week unless advised by your doctor.

  - Stop taking anti-inflammatories if you become dehydrated, have reflux or heartburn
  - Do not take anti-inflammatories if you have (or have had) a gastric ulcer, gastric bleeding, poor kidney function
  - Use anti-inflammatories carefully if you have asthma
- **Opioids** (oxycodone or tramadol) are strong medicines for pain. Use them for a few days only.

When to take your pain relief medicines

Taking paracetamol and anti-inflammatory medicines regularly can help with pain.

This can also help to take less opioid medicine. The opioids should only be used if you are still in pain while taking your other pain tablets.

- Read the label on your medicines..
- Please buy paracetamol and anti-inflammatories from your local pharmacy before you go home.
- Taking more medicine than you have been told can be harmful or fatal.
- Paracetamol, anti-inflammatories and opioids can be taken together to help reduce bad pain.
- Do not wait for your pain to become bad before taking pain relieving medicines.
- Ask your doctor, pharmacist or midwife/nurse if you have any questions about your medicines.
- If you are breastfeeding, your doctor will make sure the pain medication you take is safe for your baby. Small amounts of medication may pass into your breastmilk. Therefore, you should watch your baby for any side effects such as sleepiness or poor feeding.

If you know an activity will be painful, such as showering, take your pain tablet 30 minutes to one hour before the activity to reduce the pain.

To help with taking your pain medication to maximise the benefit, we have attached a pain medication tracker.

- The times for taking your regular medications (paracetamol and ibuprofen) are noted on the tracker, tick these off as you go along.
- It may be useful to start using this before you leave hospital on your day of discharge.
- Please note any additional pain medication you take (e.g. Endone)
- This medication tracker can be useful to your midwife in the home if you are struggling with pain.
- An example is demonstrated on the first column of the tracker.

Mercy Hospitals Victoria Ltd.
Prompt doc number: MER0144174

Community Reviewed Making information easier to read.

What to do if your pain is not controlled at home

If you require more medicine or if it is hard to manage your pain at home, visit your general practitioner (GP).

If you have increasing or severe pain that is not responding to your pain medicine, you should visit your GP or the closest emergency department.

How to stop taking pain medicines

To stop taking pain tablets, cut down slowly. This makes sure your pain stays well-controlled.

1. Reduce how often you take any opioid medicines and then stop.
2. If your pain is still well-controlled, reduce how often you take any anti-inflammatory medicines. For example, from three times a day, to twice a day, to once a day and then stop.
3. When you are not taking any anti-inflammatory medicines reduce how often you take paracetamol or take it only when needed rather than regularly.

Possible side effects

Most side effects are mild, and easily managed. Common side effects when taking an opioid medicine include drowsiness, constipation, nausea or vomiting, dry mouth and dizziness. Do not drink alcohol while taking opioids.

Drowsiness

Opioid medicines can make you drowsy and slow your reaction time. Wait and see how the medicine affects you before attempting tasks such as driving.

Nausea or vomiting

If you feel sick, try taking your medicine with food and plenty of water. Your doctor can also prescribe medicines to help.

Constipation

Staying active, drinking water and having fibre in your diet can help minimise constipation.
Your doctor may also prescribe laxatives while you are taking an opioid medicine. You can buy laxatives without a prescription from your local pharmacy. Examples of laxatives: Movicol®, Lactulose, Coloxyl and Senna®, Coloxyl®.

If you have any further questions or if there is something you do not understand, please ask your doctor, pharmacist or midwife/nurse.

- You cannot become addicted to paracetamol or anti-inflammatory medications.
- Addiction to opioid medicines is unlikely when used for a few days after a caesarean.
- If you are allergic to any of these medicines, do not take them. Talk to your doctor or pharmacist about other choices.

Further Information

If you have any questions regarding this information, please contact:

Pharmacy

Mercy Hospital for Women
Phone: 03 8458 4675

Werribee Mercy Hospital
Phone: 03 8754 3541

Acknowledgements

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EVERY WEEK COUNTS

#letstalktiming

www.everyweekcounts.com.au

www.womenandbabiesresearch.com

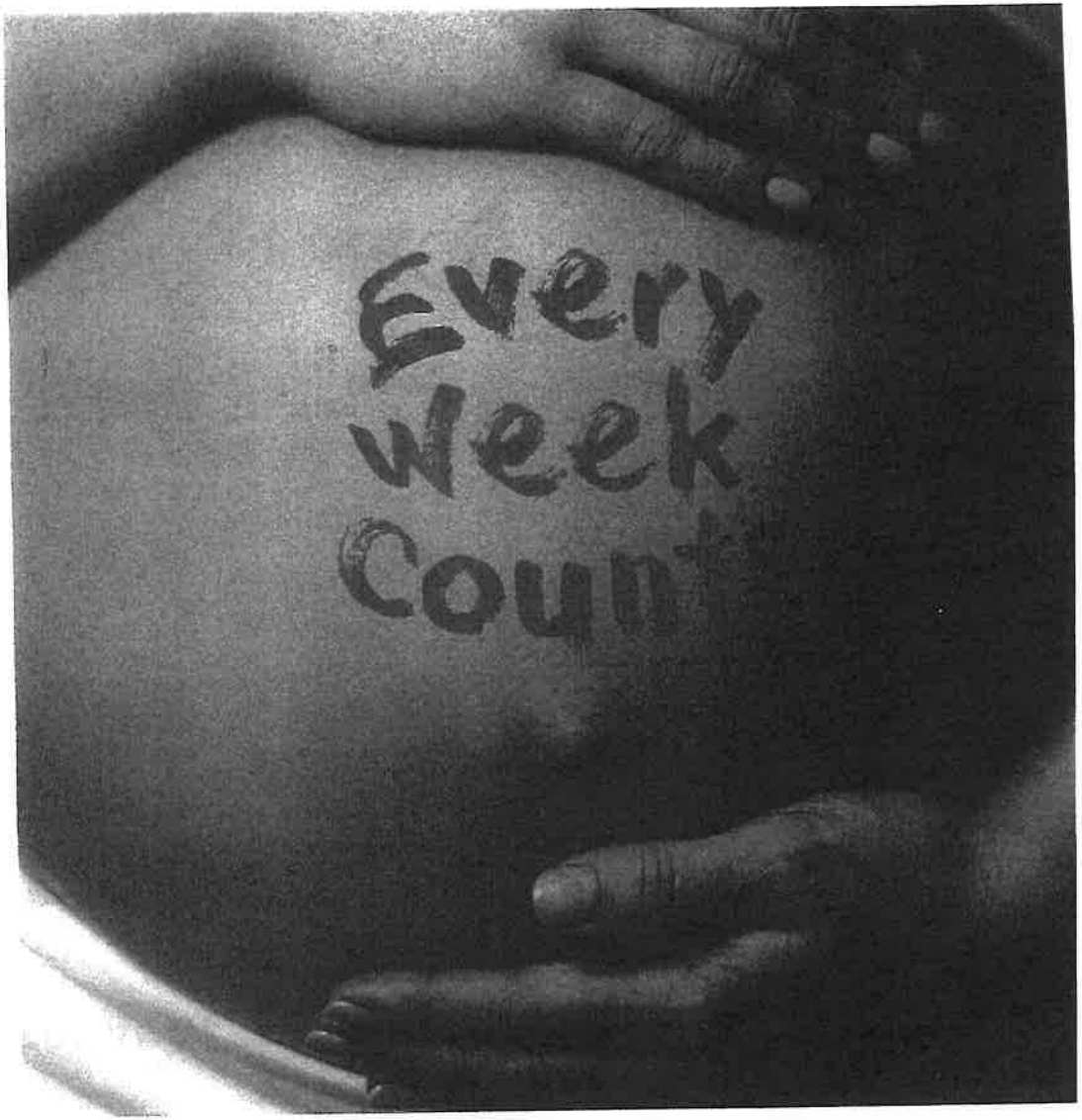
Women and Babies Research | The University of Sydney | In partnership with Sydney HealthPartners

NSW | Stillbirth CRE | Safer Baby | Women's Healthcare Australasia | SCV Safer Care Victoria | Australian Preterm Birth Prevention Alliance | Perinatal Society of Australia & New Zealand PSANZ

The University of Sydney | ABN 15 211 513 464

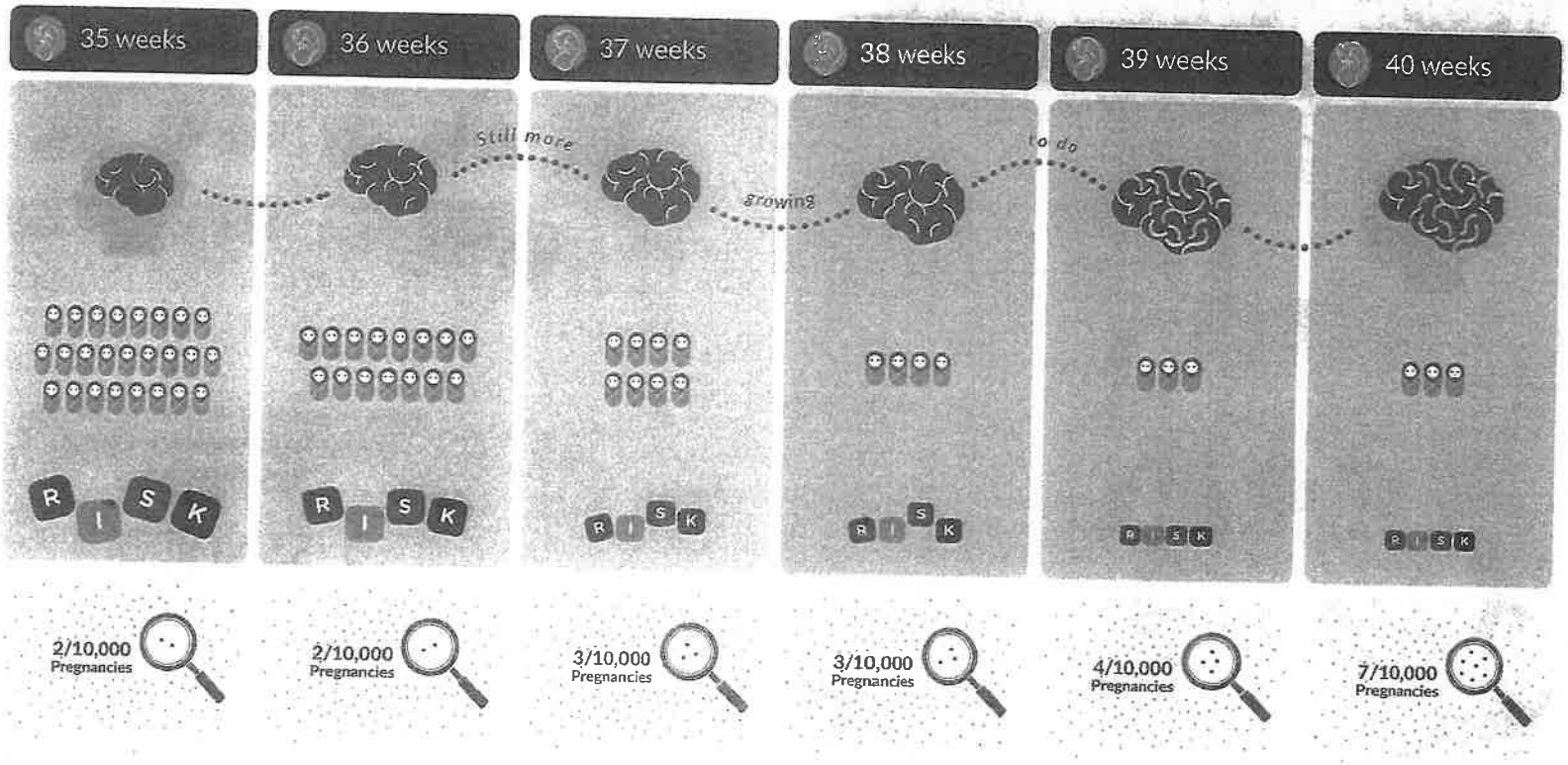
Women and Babies Research, Kolling Institute | Level 5, Douglas Building | Royal North Shore Hospital | St Leonards NSW 2065

Parent Brochure. Version 2. 10/11/2020



EVERY WEEK COUNTS TOWARDS THE END OF PREGNANCY

Through research we're discovering that every week your baby continues to grow inside you makes a difference to their short and long term health outcomes.



*NSW Perinatal Data

Brain development is responsible for learning, movement and coordination

Babies are less likely to need specialised care for breathing and feeding difficulties when born closer to their due date

There is less risk of learning difficulties at school entry for babies born closer to their due date

The rate of stillbirth increases slightly towards 40 weeks, but remains very low

Every pregnancy is unique. The decision about the timing of your birth should be based on balancing health benefits to your baby with any risks specific to your pregnancy.

Involvement in decisions about care and mode of birth

Mercy Health

Care first

- At Mercy Hospital for Women we are committed to improve the experiences for all women giving birth.
- All women have the right to be involved in the decision making regarding their care.
- We would like to understand how you feel about your involvement in the care you have received during your pregnancy so far.
- This survey only has 5 questions and should take 1 minute to complete. This information is recorded anonymously and no identifying information collected.

Click the QR code to access the survey or log in via:

https://www.surveymonkey.com/r/M53J2ZM

Thankyou for helping us to improve our maternity care service.

The Royal Australian and New Zealand College of Obstetricians and Gynaecologists
Excellence in Women's Health

Caesarean Section

A caesarean section is an operation in which a baby is born through an incision (cut) made through the mother's abdomen and the uterus (womb). The cut is usually made low and around the level of the bikini line.

A caesarean section may be planned (elective) if there is a reason that prevents the baby being born by a normal vaginal birth, or unplanned (emergency) if complications develop and delivery needs to be quick. This may be before or during your labour.

There are several reasons why your obstetrician may recommend an elective caesarean section. Your doctor will discuss the reason for making this decision based on your particular situation and, in some cases, your preferences.

These may include:

- you have already had a number of caesarean sections.
- your baby is in a breech position (bottom or feet first) and cannot be turned, or a vaginal breech birth is not recommended.
- your placenta is partly or completely covering the cervix (opening to the womb).
- your baby is lying sideways (transverse) and is not able to be turned by the doctor.
- you have a twin pregnancy, with your first baby in a breech position.

Caesarean section on maternal request

A small number of pregnant women may prefer a caesarean section to vaginal birth for various non-medical reasons. Women considering elective caesarean section, where there does not seem to be a medical reason, should discuss this decision with their doctor or midwife.

There are some risks and benefits to this decision for both mother and baby. It is important to know that some risks may not be apparent until subsequent pregnancies. Your doctor and midwife will respect your right to be involved in the decision making regarding the type of birth, considering your wishes, your perception of the risks and plans for future pregnancies.

Emergency caesarean section

An emergency caesarean might occur for the following reasons:

- concern for your baby's wellbeing prior to or during labour
- your labour is not progressing
- there are maternal complications, such as severe bleeding or severe pre-eclampsia
- there is a life-threatening emergency for you or your baby

Whenever a caesarean section is recommended, your doctor should explain why it is necessary and describe any important complications. Relevant risks will be explained to you when you complete the consent form for the operation, whether for an elective or emergency caesarean section Do not hesitate to ask questions. It is important to make an informed decision.

Risks for your health

A caesarean section is major surgery. Complications rarely occur, but may have serious consequences when they happen. Not all of these risks are unique for caesarean section but are increased compared to having a vaginal birth.

These consequences include:

- blood loss
- wound infection
- blood clots in your legs (known as a deep vein thrombosis, or DVT)
- a blood clot that moves from your leg to your lungs (known as a pulmonary embolus). You may be given once-daily injections while in hospital to minimise the risk of developing clots in your legs and lungs. This is a rare, but serious, complication of caesarean section.
- potential damage to organs near the operation site, including your bladder. This might require further surgery.
- anaesthetic risks such as low blood pressure, nausea and vomiting and post-dural puncture headache. This occurs when the epidural or spinal needle punctures the dura (tissue which surrounds the spinal cord). When a puncture occurs, it causes the spinal fluid to leak out of the hole and it is this which causes a headache. Most headaches will settle within a few days but some may last longer. Information about the risks of anaesthesia during a caesarean section and for pain relief can be found at http://www.anzca.edu.au/Patients
- slower recovery.
- after you have had one caesarean section, future pregnancies are deemed a high risk and the risk of complications increase with each subsequent caesarean.
- all of these risks are increased if you are overweight.

Risks for your baby

The most common problem affecting babies born by caesarean section is temporary breathing difficulty. There is also a small risk of your baby being cut during the operation. This is usually a small cut that isn't deep. This happens in 1 to 2 out of every 100 babies delivered by caesarean section, but usually heals without any further harm.

Thin adhesive strips may be needed to seal the wound while it heals. It is important to note that some babies are still difficult to deliver during a caesarean and forceps or vacuum may be used. They therefore may still have bruising around their head or body.

In the operating theatre

The procedures for a caesarean section are very similar whether the operation is elective or an emergency.

When you arrive in the operating theatre, there will be a number of people present. All of them have an important role to play to ensure the safety of you and your baby.

Anaesthetist – will provide your anaesthetic and pain relief
Obstetrician – will perform the operation and deliver your baby
Surgical assistant – assists the obstetrician
Scrub nurse –coordinates the theatre and passes the instruments to the doctor
Scout nurse – assists the scrub nurse and gathers additional equipment that is required
Anaesthetic nurse – assists the anaesthetist
Paediatrician – receives the baby and cares for it at birth
Midwife –receives the baby and cares for it until you return to the postnatal ward
Theatre technician – helps move you on and off the operating table, positions lights and equipment.
Support people – Due to the large number of people present and the sterile environment of the operating theatre, the number of support people who are able to be with you will be limited.

Attendance of anyone other than your immediate partner or support person may not be possible, and your preference for any additional people will need to be discussed with your doctor or midwife.

There will be a buzz of activity happening at this time, before the operation starts. A plastic cannula (thin tube) will be put into the vein in the back of your hand or arm so that fluids and medication can be given to you. A catheter (a soft, plastic tube) will be inserted into your bladder to keep your bladder empty during the operation.

You will receive a shave of any hair covering the operation site. You will be wearing special stockings known as 'TED' stockings during the surgery until you are moving around after the operation. The purpose of these stockings is to reduce the risk of blood clotting during inactivity.

Anaesthesia

The anaesthetist will provide the most appropriate form of anaesthesia suited to you during the operation. This may be an epidural, spinal block or general anaesthetic.

An epidural and a spinal block are a similar procedure where an anaesthetic, (a drug that gives either partial or total loss of sensation) is injected by the anaesthetist into the small space in your back near your spinal cord.

The medication can then act directly on the nerves to stop the pain signals from being sent to the brain. If you have a spinal block or epidural anaesthetic, you will be awake throughout the operation, but you will feel no pain. If you have a general anaesthesic, you will be asleep during the operation. Information about the use of anaesthesia during a caesarean section and for pain relief can be found at http://www.anzca.edu.au/Patients

If you are awake during the operation, you will still feel tugging and pulling, but you won't feel pain or sharpness. Some women describe the feeling as though "someone is doing the washing up in their stomach". A screen will be put across your chest so that you cannot see what is being done. You will hear the sucking of the waters that surrounded the baby until just before the baby is lifted out.

The operation usually takes about 30 to 40 minutes and the doctors will talk to you during the operation and let you know what is happening. One advantage of an epidural or spinal anaesthetic is that you are awake at the moment of delivery and can see your baby immediately.

Recovery after a caesarean section

Supporting breastfeeding
Assuming your baby doesn't require additional resuscitation or support from the paediatric team, skin to skin contact is important as soon as possible after birth. Your baby should have warmed blankets placed over their back and a bonnet on their head. This is because it is quite cold in theatre and in the recovery room. The rest of your baby's body should be in direct contact with your skin. This will help stabilise their temperature and start to initiate an instinctive feeding response that will enhance bonding and help with establishing breastfeeding. Some hospitals will allow your baby to stay with you in recovery and to have skin to skin contact during this time to increase those responses and the likelihood that baby will attach and feed well at the breast.

Pain relief
Pain is common after surgery. After a caesarean birth you will be uncomfortable for a few days but this can usually be managed well with medications. The anaesthetist will provide you with a number of options to help control your pain. Taking regular pain relief is very important to your recovery. Let your midwife know if you require any pain relief or anti-sickness medication.

Emotional support
Some women feel very positive about having a caesarean, while others feel disappointed or sad, particularly if it was unexpected. It can be very helpful to talk through your feelings with your partner, family, or carers. The doctor or midwife can also discuss the birth experience with you.

Mobility and exercise
Initially after your operation you will be resting in bed. During this time it is important to do deep breathing and leg exercises regularly. Your catheter, drip and wound drain (if you have one) will be removed in the first one to two days depending upon your recovery. Once these have been removed, it is important to take a gentle walk every day.

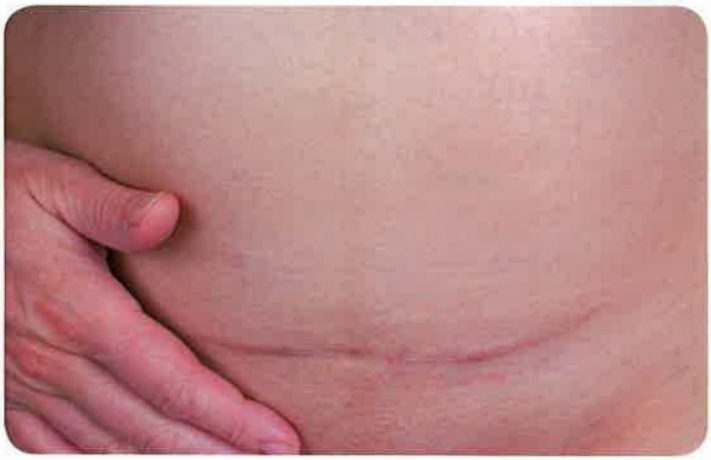
This will reduce the likelihood of chest infections and blood clots in your legs. Postnatal exercises are especially important after a caesarean section to get your muscles working again, but take things at a gentle pace. The midwife or physiotherapist will tell you when you should begin them.

Care of your wound
Your caesarean incision may have been closed with staples which are usually removed within three to seven days of delivery.

It you have stitches, they are usually, reabsorbable sutures, meaning they are absorbed by the body and do not need to be removed. Keep your wound clean and dry. Wear loose clothing and look for signs of infection (such as redness, pain, swelling of the wound or bad-smelling discharge).Report these to the doctor or midwife.

The incision will heal over the next few weeks. During this time, there may be mild cramping, light bleeding or vaginal discharge, as well as pain and numbness in the skin around the incision site.

Most women will feel well by six weeks postpartum, but numbness around the incision and occasional aches and pains can last for several months.



The first few weeks

After a caesarean section, women usually stay in hospital for about three to five days. This can vary between hospitals or if there are problems with your recovery. In some hospitals, you can choose to go home early and have your follow-up care at home. The midwife will explain what your hospital offers and will discuss what best suits your needs.

Looking after a new baby is hard for all women, but it can be harder when you are recovering from a caesarean section. Be kind to yourself. It may take a few weeks or even longer to recover, particularly if you have had complications. Get as much rest as you can. If you feel that you need extra help and support, ask family or friends to help.

Do not lift any weight that is heavier than your baby. Be careful of your back when you lift and don't lift anything that causes you pain.

You should not drive a car until you have fully recovered and your wound has healed. This may take up to 6 weeks. Your obstetrician can provide advice about when it is safe to drive again.

Avoid sex until you feel comfortable. After birth of any kind it is quite normal to take weeks, even months, before you are ready to have sex.

What about the effect on future births?

1. If you plan to have a vaginal birth next time
Information about vaginal birth after a previous caesarean section can be found on the RANZCOG website under patient information.

2. If you plan to have another caesarean section
As the number of previous caesarean sections increases, so does the risk of rare but serious complications. You should consider the size of the family you want. If you have three or more caesarean births, some complications become more common.

These include:

- Problems with your placenta implanting low in the uterus, near your scar, in future pregnancies. This condition is referred to as placenta praevia.
- Problems when your placenta does not come away as it should when your baby is delivered. This condition is known as placenta accreta and increases with each caesarean section. It is a potentially serious complication you should discuss with your doctor.
- Extra procedures that may become necessary during the caesarean section such as a blood transfusion or emergency hysterectomy, particularly if there is heavy bleeding at the time of your caesarean section. A hysterectomy would mean you are unable to have any further children. The risk of needing to undergo a hysterectomy at the end of a subsequent pregnancy increases with each caesarean section, but overall is still very low.

Think about all of your options carefully. If a caesarean section is recommended, your obstetrician or midwife is available to discuss any questions that you may have.

Whether your baby is born vaginally or by caesarean section, the aim is for a safe, rewarding and satisfying experience for you and your family.

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Fax: +61 3 9419 0672
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ranzcog.edu.au

What should I look out for?

You should **always** see your doctor or health care worker:

- if your baby has any unexplained bleeding or bruising – **this is particularly important if your baby has not had vitamin K**.
- if, when your baby is over three weeks old, there are any signs of jaundice (yellow colouring of the skin or whites of the eyes).

Babies with liver problems are particularly at risk, even if they have had vitamin K.

How do I get vitamin K for my baby?

During your pregnancy, your doctor or midwife should ask whether you want your baby to have vitamin K by injection or by mouth, and they will arrange to provide it.

Soon after birth, your baby will have a vitamin K injection **or** the first dose by mouth. This will be given by a doctor or midwife.

If you have chosen vitamin K by mouth:

- The **second oral dose** can be given when your baby has the newborn screening test in the hospital, or by your local doctor or health care worker.
- You need to remember the **important third oral dose** when your baby is between 3 and 4 weeks old. Talk to your doctor or health care worker if you need help or advice.

Make sure that your baby's vitamin K doses are recorded in the baby's personal health record.

This pamphlet is based on the *Joint statement and recommendations on vitamin K administration to newborn infants to prevent vitamin K deficiency bleeding in infancy*, that was re-issued by the National Health and Medical Research Council (NHMRC) in October 2010.

For a copy of the *Joint statement and recommendations on vitamin K administration to newborn infants to prevent vitamin K deficiency bleeding in infancy*, please visit the NHMRC website:
www.nhmrc.gov.au/publications/index.htm

A list of current NHMRC publications is also available from:

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Canberra ACT 2601

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(24-hour answering machine)

Fax (02) 6217 9100

Email nhmrc.publications@nhmrc.gov.au

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Australian Government
National Health and Medical Research Council

VITAMIN K
for newborn babies

Information for parents

If you need more information, please contact your doctor or health care worker

Why is vitamin K important for my baby?

Vitamin K helps blood to clot. It is essential to prevent serious bleeding.

Babies do not get enough vitamin K from their mothers during pregnancy, or when they are breast feeding. Without vitamin K, they are at risk of getting a rare disorder called Vitamin K Deficiency Bleeding, or VKDB. VKDB can cause bleeding into the brain, and may result in brain damage or even death.

VKDB can be prevented by giving new babies extra vitamin K. By the age of about six months, they have built up their own supply.

How is vitamin K given?

The easiest and most reliable way to give babies vitamin K is **by injection**. One injection just after birth will protect a baby for many months. Since about 1980, most newborn babies in Australia have been given a vitamin K injection.

Vitamin K can also be given **by mouth**. Several oral doses are essential to give enough protection, because vitamin K is not absorbed as well when it is given by mouth and the effect does not last as long.

If you choose vitamin K by mouth, your baby must have three doses:

Dose 1	at birth
Dose 2	usually three to five days later, and
Dose 3	in the fourth week, if the baby is fully breast fed. (Babies fed mainly by formula do not need the third dose)

If your baby vomits within one hour of swallowing the vitamin K, the baby will need to have another dose.

Can all babies have vitamin K?

All babies need to have vitamin K. Very small or premature babies may need smaller doses – your doctor can advise you about this.

Vitamin K by mouth is not suitable for some babies:

- Babies who are premature or sick should be given the vitamin by injection. There are two main reasons for this: the very small dose needed is difficult to measure by mouth, and these babies are also more likely to have feeding difficulties.
- If you choose vitamin K by mouth but your baby is unwell when a dose is due, the baby may need to have the injection instead.
- If, while you were pregnant, you took medication for epilepsy, blood clots or tuberculosis, you should tell your doctor or midwife. Your baby may not be able to absorb vitamin K by mouth, and may need the injection instead.

Does vitamin K have any side effects?

Over the 30 years vitamin K has been given to new babies in Australia, it seems to have caused no problems.

Some studies suggest that **injections** of vitamin K might be linked to childhood cancer, but recent studies have not found any link with cancer. The National Health and Medical Research Council has looked carefully at these studies and other evidence, and has concluded that vitamin K is **not** associated with childhood cancer, whether it is given by injection or by mouth.

Does my baby have to have vitamin K?

This is your choice. However, giving vitamin K to your newborn baby is a simple way of preventing a very serious disease.

Medical authorities in Australia strongly recommend that **all** babies be given vitamin K. This includes babies who are premature or sick, and babies having surgery (including circumcision).

Parents who decide against vitamin K need to watch very carefully for any symptoms of VKDB.