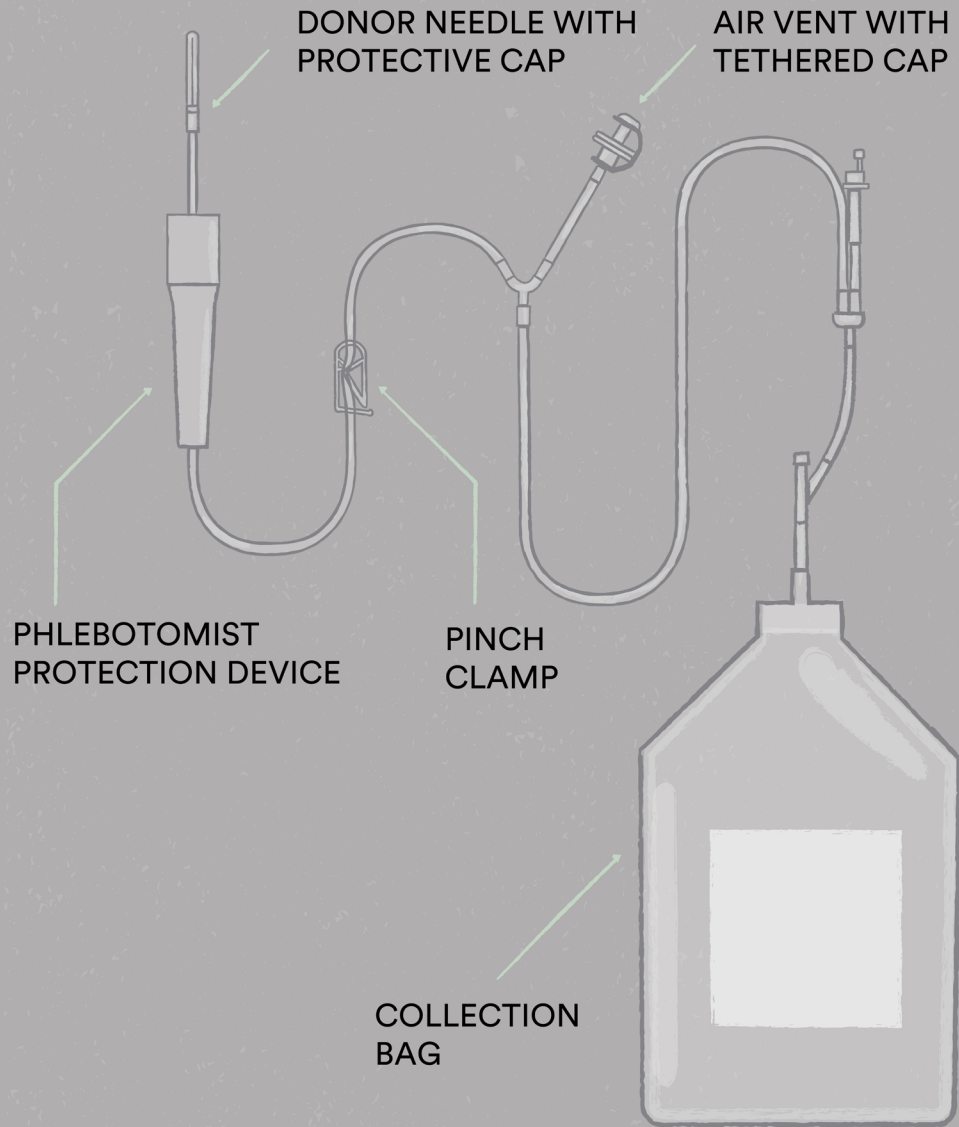


STERILE COLLECTION BAG



LMC Collection Instructions

Background

In New Zealand, cord blood is regarded as a medicine under the Medicines Act 1981 and its collection must meet the standards of the New Zealand Code of Good Manufacturing Practice (GMP).

As the Registered Health Care Practitioner conducting the collection process, you must understand and undertake the collection procedure using the GMP compliant technique covered in these instructions.

Who is Authorised to Collect Cord Blood?

Only registered health care practitioners, who have been specifically trained by CordBank, are authorised to collect cord blood on behalf of parents for processing and storage at CordBank. This includes registered Doctors, Nurses, Midwives, and Phlebotomists.

Requirements for Cord Blood Collection

Safety

The Lead Maternity Carer has the authority to make the final decision to collect the cord blood. The safety of mother and baby always come first.

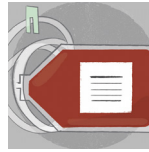


Sterile Technique

You must wear gloves, keep the collection bag sterile during the collection process, and clean the umbilical cord venepuncture site with the swab sticks provided in the kit, prior to the collection of blood to maintain sterility.

Accurate Labelling

It is extremely important that the cord blood unit and maternal blood samples are labelled clearly and accurately. A second health care practitioner is required to counter-sign the data collection sheet to confirm all the details are completed and correct. The use of hospital labels is favoured.



Actively Managed Versus Physiological Delivery

Collection can start regardless of ecobolic or physiological 3rd stage as soon as possible. If the parents want to delay cord clamping beyond 60 seconds, they must be made aware that they risk having a reduced sample collected.

Maximizing the Volume of Cord Blood Collected

Every attempt should be made to collect as much blood as possible — it should be possible to collect between 25-200mL of cord blood into the bag with either 1 or 2 venepunctures into the umbilical vein.

Equipment

All CordBank components have been tested and validated. A record of lot numbers is recorded against each collection kit. Prior to undertaking the collection, confirm that the components in the kit are intact. **Substitution of components is not permitted.**

If the components are not intact, a replacement Collection Kit must be obtained from CordBank.

Contact
0800 CORDBANK
(0800 267 322)
for advice.

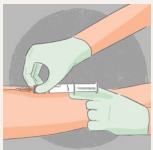
Collection Procedure

Positively identify the mother prior to beginning the collection procedure. Confirm the mother's full name and date of birth. If the mother is unable to state her full name and date of birth, refer to the mother's ID bracelet.

PART 1: PRE-DELIVERY: MATERNAL SAMPLING

This sample is tested for HIV, Hepatitis B, Hepatitis C, and Syphilis.

1. Identify a venepuncture site on the mother and clean using the alcohol wipes.
2. Using the 21G needle and vacutainer holder, collect a sample of her blood into the 10mL, red top tube.
3. Label the sample with mother's full name, date of birth, the date and time of collection and the collector's signature. Use hospital labels where possible.
4. Place this sample into the biohazard bag and return to the collection kit box.



PART 2: CORD BLOOD COLLECTION

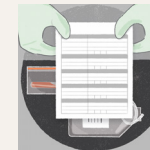
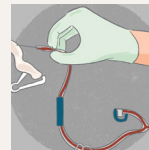
Prepare the cord blood collection bag by removing the outer foil wrapper. The collection bag is contained in an inner, sterile wrapper which should not be opened until you are ready to perform the collection. Do not open using sharp objects.

Cord blood can be collected while the placenta is in-utero or ex-utero. The in-utero procedure helps maximise the volume of blood collected and decreases the risk of microbial and maternal cell contamination. In-utero collections can be performed during vaginal or Caesarean deliveries. Ex-utero cord blood collection can also be carried out by placing the placenta on a sterile tray before the collection process begins. Whichever procedure is used, begin the collection as soon as possible — within five minutes of birth.



1. Clamp and cut cord close to the baby.
2. Select an area at the foetal end of the cord to perform the collection. Cleanse the area using the first swab stick. Wipe in one direction only with a single motion then repeat using the other side of the swab stick.
3. Open the inner wrapper of the cord blood collection bag.

4. Close the pinch clamp on the collection line and remove the needle cover by twisting off.
5. Insert the needle into the umbilical vein at the cleansed site.
6. Open the pinch clamp and extend the tubing to its full length, placing the collection bag lower than the cord to maximise flow. It may also help to massage the cord from the top downwards to improve recovery.
7. When blood flow has stopped, close the pinch clamp and remove the needle from the umbilical cord.
8. To maximise collection volume you may reinsert the needle higher up the umbilical cord, after thoroughly cleaning the second site with the second swab stick.
9. When blood flow has stopped, close the clamp and pull the needle into the barrel of the needle guard until a click is heard.
10. Open the blue cap on the sterile vent and allow any cord blood in the tubing to drain into the bag. This is important to prevent clots forming in the tubing.
11. Gently mix the bag and place the additional slide clamp onto the collection line.
12. Label the cord blood unit using the label provided, completing the details. Stick this directly over the existing label on the bag. Place into the thick biohazard bag and seal.



PART 3: POST-COLLECTION PROCEDURES

1. Complete the data collection sheet with mother and baby's details. Use a hospital label if you can.
1. Have a second health care practitioner check the labelling of the cord blood unit and mother's sample and sign the data collection sheet to confirm this.
3. Place this sheet inside the CordBank collection box with the cord blood and mother's sample.
4. Return the CordBank collection kit and courier bag to the parents who are responsible for shipping of the kit. Instructions for this are printed on the back of the box sleeve. If collection of the cord blood kit by the courier is delayed for any reason, **do not refrigerate.**