

# **UMBILICAL CORD BLOOD COLLECTION PROCEDURE.**

## ***A GUIDE FOR HEALTHCARE PROFESSIONALS COLLECTING UMBILICAL CORD BLOOD.***

### **PLEASE READ AND FOLLOW THESE INSTRUCTIONS CAREFULLY.**

Collection must only take place AFTER the cord has been clamped + cut and the Mother and Baby are confirmed safe by the Doctor/Midwife.

Thank you for agreeing to collect the umbilical cord blood. This procedure can be performed IN-UTERO or EX-UTERO and normally only takes between 3-5 minutes. The same method is used for either. If possible this procedure should be performed IN-UTERO as there is the added advantage of the placenta still pulsating which can help pump blood through the cord into the collection bag.

The healthcare professional collecting the sample must be guided by the Doctor/Midwife attending the delivery. Consideration must also be given to the mother's wishes.

### ***THE COLLECTION KIT.***

1. Cord collection bag. \*(with needle and safety cover)
2. Sterile Gauze.
3. Alcohol swabs.
4. Pathoseal bag.
5. Gelpack for transportation.
6. White absorbent cloth (for transportation)
7. DHL courier bag.
8. Client Identification form. (to be sent with sample)
9. Procurement for the collection of umbilical cord blood stem cells form.  
(to be signed and given back to the mother or birthing partner)

**\* PLEASE READ THE ENCLOSED INFORMATION FOR THE CORD BLOOD  
COLLECTION NEEDLE / SAFETY COVER.**

## **UMBILICAL CORD BLOOD COLLECTION PROCEDURE.**

This simple procedure must be done in a sterile environment as soon as possible after the safe delivery of the baby and after the cord has been clamped and cut as close to the baby's abdomen as possible. If the cord blood is to be collected EX-UTERO it should be performed as soon as it is safely possible once the placenta has been delivered. The procedure for a caesarean section is exactly the same as a natural birth.

PLEASE ENSURE THAT THE CORD REMAINS CLAMPED AT ALL TIMES.

### **COLLECTING THE UMBILICAL CORD BLOOD.**

#### **IN-UTERO.**

##### **STEP ONE.**

- Clean the umbilical cord with the sterile gauze.
- Disinfect the areas where the needle will be inserted. (a sterile environment is a must)
- Take the sterile blood bag out of its packaging and place it nearby.

### **COLLECTING THE UMBILICAL CORD BLOOD**

#### **EX-UTERO.**

The collection needs to be performed as soon as it is safely possible before the natural clotting process begins. (This needs to be taken into consideration when a physiological delivery of the placenta takes place as the natural clotting process may reduce the amount of cord blood available for collection.)

##### **STEP ONE.**

- Prepare the work surface where the cord blood collection will be performed.
- Place the placenta on a sterile cloth and allow the umbilical cord to hang down over the side. (Gravity can play an important part in this procedure)
- Clean the umbilical cord with the sterile gauze.
- Disinfect the areas where the needle will be inserted. (a sterile environment is a must)

## ***STEP TWO. ( IN-UTERO AND EX-UTERO)***

- Take the sterile blood bag out of its packaging.
- The needle is covered with a blue cap, remove it.
- Starting at the end of the clamped cord insert the needle attached to the blood bag into the disinfected blood vessel.
- Allow the cord blood to flow into the collection bag to collect as much blood as possible; this may take a few minutes.
- If the cord blood does not flow, very gently turn the needle (the bevel of the needle may be resting on the vessel wall) this should allow the blood to flow.
- If the cord blood still fails to flow, remove the needle from the vessel and insert into the next disinfected vessel further up the cord.
- Gently agitate the collection bag during the procedure in order to mix the cord blood with the CPD anticoagulant.
- It may be necessary to draw blood from several places in the umbilical cord. Please ensure that these areas have been properly sterilised beforehand

## ***STEP THREE. (IN-UTERO AND EX-UTERO)***

- After the collection bag is filled and the blood flow has stopped, remove the needle from the umbilical cord.
- Slide the attached blue safety cover over the needle until locked.
- Strip the blood through the tube into the blood bag with the attached white clamp. Securely close the white clamp approx 10cm (4 inches) from the bag.
- Cut off the needle and safely discard into a sharps box in accordance with hospital waste disposal regulations.
- Tie at least two security knots in the collection tube to prevent leakage during transportation (do not use sutures for this)

### ***PLEASE NOTE: TWINS***

- In the event of twins, the entire process must be repeated using a separate collection kit for each child. (Each kit will be labelled twin 1 and twin 2)
- It is critical to clearly identify the baby source of each cord collection bag.

## **STEP FOUR.**

### **PREPARING FOR TRANSPORTATION.**

1. Put the blood bag in the small safety bag (pathoseal) and close this safety bag with the self-adhesive strip.
2. Put the white absorbent cloth on top of the bottom gelpack.
3. Put the safety bag (pathoseal) and blood bag on top of the white absorbent cloth.
4. Put the second gelpack on top of the safety bag (path seal)
5. Close with the isolating lid.
6. Please enclose the completed Identification Form.
7. Close the cardboard box.
8. Put the cardboard box in the plastic DHL courier bag and leave it open.
9. Finally, complete the supplied airway bill (only pick up address, name and signature, other sections will be completed by the courier).
10. Give the package containing the cord blood unit and completed Identification Form back to the mother or her birthing partner who will then contact the courier for collection.

PLEASE NOTE; THE COLLECTED CORD BLOOD MUST BE KEPT AT ROOM TEMPERATURE, IT MUST NOT BE PLACED IN A REFRIDGERATOR OR FREEZER.

**THANK YOU.**

## **COLLECTING UMBILICAL CORD BLOOD FOR STEM CELL STORAGE.**

This information has been provided for the Doctor, Midwife, Healthcare professional who has been asked to collect the Umbilical Cord Blood on behalf of our newly expectant client/clients at this very special time in their lives.

Cells Ltd is a leading provider for the safe storage of stem cells. We provide stem cell storage for cells derived from the umbilical cord blood of the newborn.

The umbilical cord or placenta is a rich source of stem cells. These cells can help cure many life threatening diseases. The main use so far has been for childhood leukaemia and some other cancers, but potentially these cells could be used to treat illnesses such as diabetes, strokes, multiple sclerosis, brain and muscle diseases, Alzheimer's and Parkinson's disease.

The Doctor, Midwife, Healthcare professional collecting the umbilical cord blood plays a very important role at this crucial time as these stem cells can only be collected at the time of birth.

In this leaflet you will find a step by step guide on how to collect the umbilical cord blood. The procedure is very simple and quick. It takes no more than 3-5 minutes and is completely painless and causes no harm to the child or mother as it takes place following the safe delivery of the baby and only after the umbilical cord has been cut. The mother/ birthing partner sign a disclaimer so that the Doctor, Midwife, Healthcare professional performing the collection of cord blood will not be held liable if due to unforeseen circumstances the collection of the cord blood was not possible or the amount of cord blood taken proves to be insufficient.

Finally, it is hoped that the cord blood will never have to be used, but in the unlikely event of this happening the family can rest assured with the knowledge that they have the stem cells safely stored and available for immediate use.