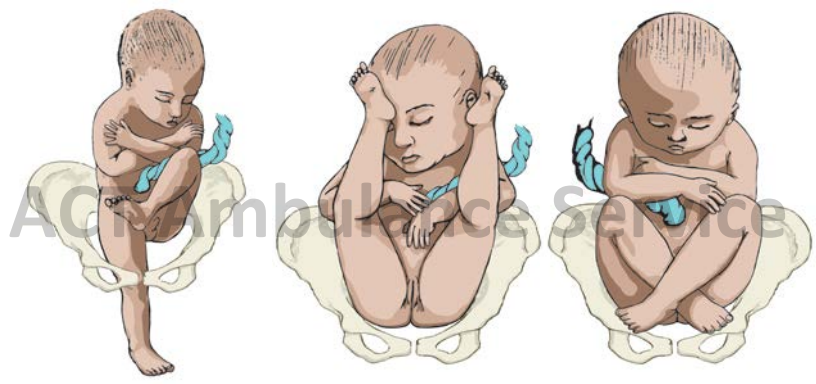
COMPLICATED BIRTH – breech births

BREECH PRESENTATION:

Breech presentations occur in 3 – 4% of all deliveries, and are ideally delivered by caesarean section. Breech delivery has a high incidence of foetal mortality and morbidity, and as such the primary focus of pre-hospital management is rapid recognition of a breech birth and limiting manipulation of the baby until required, being gentle but timely with the necessary techniques.

Field delivery is possible, but not preferable, for breech babies presenting buttocks first. Field delivery should not be attempted for footling or kneeling breech presentations. In this situation, do not attempt delivery, transport the mother urgently and notify the receiving obstetric unit as soon as possible.



Footling breech **Frank breech** **Full breech**

DELIVERY **NOT IMMINENT**, or if footling/kneeling presentation:		
ICP	Notify and ***urgently*** transport to hospital.	**AP**
ICP	Where possible, do not encourage the woman to push, but rather to **breathe** through her contractions	**AP**

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COMPLICATED BIRTH **breech birth – DELIVERY IMMINENT, buttocks presenting**

DELIVERY **IMMINENT** – breech presentation, buttocks presenting:

Have the mother adopt a position that allows the baby to hang freely (e.g. standing or squatting, etc.)

Assess the cord to ensure it will allow the neonate to descend freely – treat as per 'prolapsed cord' guideline if necessary

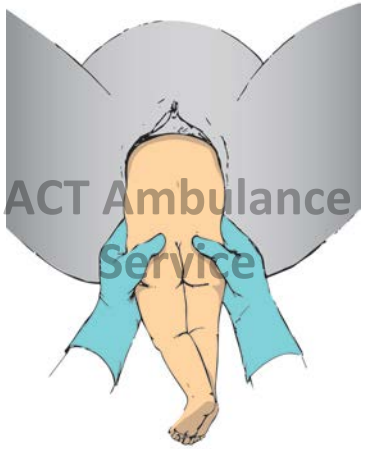
Once the buttocks have entered the vagina, encourage the mother to push hard with contractions.

The buttocks and legs should deliver spontaneously. If the legs do not deliver spontaneously, deliver one leg at a time:

- push behind the knee to bend the leg
- grasp the ankle and deliver the foot and leg
- repeat for the other leg

Hold the baby gently at the hips, but DO NOT pull.

Support gently to ensure that the baby's back stays uppermost throughout.



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COMPLICATED BIRTH — **breech birth – DELIVERY IMMINENT, buttocks presenting (continued)**

ICP	Once the baby has descended to where the shoulder blades are visible, assess to see if the arms are extended, or are felt on the chest.	**AP**

ICP

ARMS EXTENDED (above head or folded around neck): use **Loveset's manoeuvre**

- hold the baby by the hips and turn half a circle, keeping the back uppermost and applying downward traction at the same time, so that the arm that was posterior becomes anterior and can be delivered under the pubic arch
- assist delivery of the arm by placing one or two fingers on the upper part of the arm. Draw the arm down over the chest as the elbow is flexed, with the hand sweeping over the face.
- To deliver the second arm, turn the baby back half a circle, keeping the back uppermost and applying downward traction, and deliver the second arm in the same way under the pubic arch.

ARMS FELT ON CHEST:

- allow the arms to disengage spontaneously one by one – only assist if necessary.
- after delivery of the first arm, lift the buttocks toward the mother's abdomen to enable the second arm to deliver.
- if an arm does not spontaneously deliver, place one or two fingers in the elbow and bend the arm, bringing the hand down over the baby's face.

Unassisted – arms disengage spontaneously

Assisted – bend arm to bring hand over face

AP

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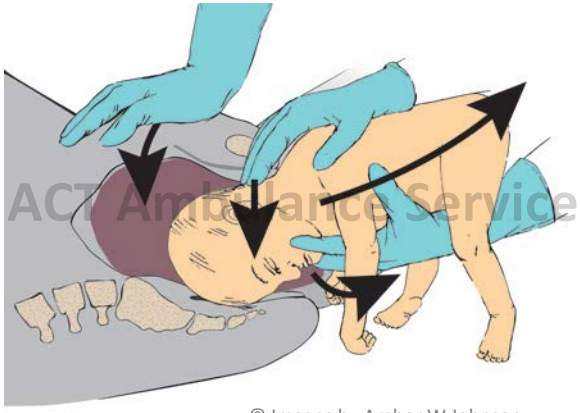
COMPLICATED BIRTH **breech birth – DELIVERY IMMINENT, buttocks presenting (continued)**

ICP	Once arms are free, allow the infant freely deliver until the occipital region is visible, then deliver the head: use the **Modified Mauriceau-Smellie-Veit (MSV) manoeuvre** • lay the baby face down with the length of its body over your hand and arm. • place the first and second fingers of this hand on the baby's cheekbones and flex the head toward the chest. • use the other hand to grasp the baby's shoulders. • with two fingers of this hand, gently press on the baby's occiput to flex its head down toward its chest until the hairline is visible. • pull gently to deliver the head. (An assistant can help keep the baby's head flexed by applying pressure just above the mother's pubic bone as the head delivers). • raise the baby, still astride the arm, until the mouth and nose are free, and place baby on the mother's abdomen.  	**AP**
ICP	Provide maternal and neonate care as per normal birth guideline. Expect a "stunned" baby upon delivery.	**AP**

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COMPLICATED BIRTH **prolapsed umbilical cord**

PROLAPSED UMBILICAL CORD:

Cord prolapse is a rare obstetric emergency that is associated with a high perinatal mortality rate. It occurs after the membranes have ruptured, when the umbilical cord slips down in front of the presenting part of the foetus and protrudes into the vagina.

The principles of pre-hospital management are to monitor the cord for pulsations, and use maternal positioning to prevent cord compression. If the cord stops pulsating, the pressure from the presenting part will need to be alleviated, either indirectly using gravity (maternal knee-chest position) or directly, by gently pushing the foetus off the cord.

ICP		AP
	URGENT TRANSPORT without delay, and early hospital notification	
	Assess if the cord is pulsating:	
ICP	If **PULSATING** – • **MINIMAL HANDLING** of the cord, to prevent vasospasm • position mother in 'exaggerated Sims' position' (left lateral with pillow under hip) • gently place the cord back into the vagina • if unable to place cord into vagina, support the cord with warm, moist pads	AP
ICP	If **NON-PULSATING** – • **MINIMAL HANDLING** of the cord, to prevent vasospasm • position mother in 'exaggerated Sims' position' (left lateral with pillow under hip) • **using fingers, gently apply manual pressure on the foetal presenting part to alleviate compression of cord**	AP
ICP	An alternative posture for a mother with a prolapsed cord is the knees-to-chest, head down position, however this is not ideal for transport. If possible, have the mother lay in the 'exaggerated Sims' position' for transport.	AP

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COMPLICATED BIRTH **shoulder dystocia**

SHOULDER DYSTOCIA:

Shoulder dystocia occurs when the anterior shoulder of the foetus becomes impacted behind the symphysis pubis of the mother, which prevents delivery, either spontaneously or with gentle traction. The aim should be to resolve this obstetric emergency urgently as foetal asphyxiation will occur very rapidly. It is also possible that the mother will suffer from a postpartum haemorrhage if shoulder dystocia is not managed efficiently and correctly.

ICP	**Request urgent backup as neonate resuscitation may be required**	**AP**
ICP	If possible, move mother so that her buttocks are at the edge of the bed, and apply gentle downward traction to the foetal head, aiming to release the anterior shoulder	**AP**
ICP	If delivery of the baby's body takes **longer than 60 seconds (following delivery of the baby's head)**, it must be presumed the baby's shoulder is caught behind the pelvis	**AP**
ICP	Maternal pushing should be discouraged, as this may further impact the shoulders. Fundal massage/pressure is CONTRAINDICATED.	
ICP	Immediately perform the **McRoberts manoeuvre** (hyperflexion of the maternal hips – "knees to nipples"): With the mother on her back, ask her to grasp her knees and pull them as far as possible onto her chest/abdomen. Assist the mother to achieve and maintain this position (this position should be maintained until delivery).	**AP**
ICP	If no delivery **after 30 – 60 seconds**: apply suprapubic pressure (either continuous or in a rocking motion) in combination with McRoberts manoeuvre and gentle traction. Use both hands to apply moderate pressure downward and laterally, aiming to slightly rotate the baby	**AP**
ICP	If no delivery **after a further 30 – 60 seconds**, and IF POSSIBLE/PRACTICAL: rotate mother to be on hands and knees, then apply gentle downward traction, attempting to dis-impact the shoulder	**AP**

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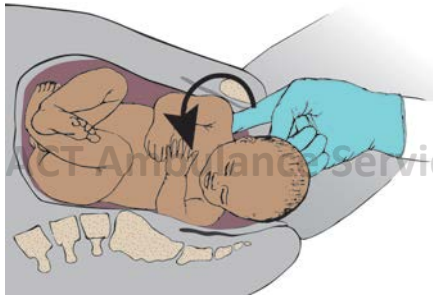
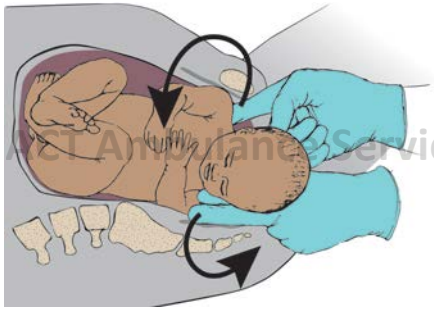
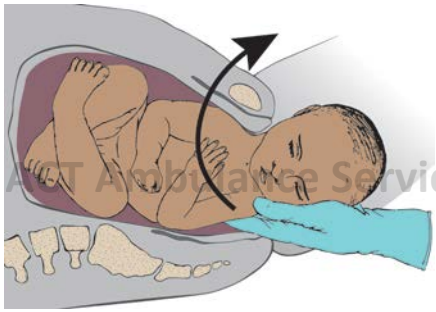
COMPLICATED BIRTH **shoulder dystocia (continued)**

If all appropriate external options are exhausted, proceed to **internal manipulation** on the foetus:

ICP	**Rubin II manoeuvre:** The fingers of one hand are inserted into the vagina and used to apply pressure behind the anterior (top) shoulder, pushing the shoulder towards the foetal chest. (May be used alongside suprapubic pressure, if practical) 	**AP**
ICP	**Woods screw manoeuvre:** If the Rubin II manoeuvre fails to deliver the foetus, the fingers of the first hand remain in position, while the fingers of the second hand are inserted in front of the posterior (lower) shoulder and used to add further pressure to rotate the foetal shoulders (do not rotate head). 	**AP**
ICP	**Reverse Woods screw manoeuvre:** Failure of the previous technique requires this attempt to turn the foetus 180^{o} in the opposite direction, applying pressure to the back of the posterior shoulder. 	**AP**

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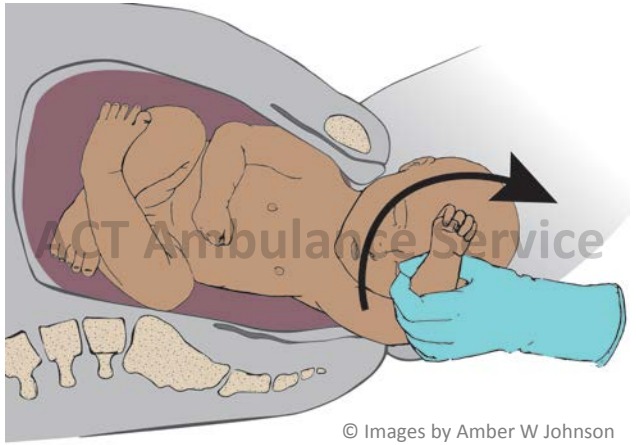
COMPLICATED BIRTH	shoulder dystocia (continued)

ICP	**Delivery of the posterior (lower) arm:** The elbow of the posterior (lower) arm is located and flexed, sweeping the arm across the foetal chest and out of the vagina to lie beside the head. This often allows the anterior shoulder to be displaced and delivered.  © Images by Amber W Johnson	AP
ICP	AT NO TIME should the baby's head be rotated – rotate ONLY the shoulders	AP
ICP	Continue procedures if required; if baby is still not delivered initiate **URGENT TRANSPORT**	AP
ICP	Note that if the shoulder is released, delivery of the rest of the body will follow quickly	AP
ICP	Mother should be transported in McRoberts position, with 30^{o} left pelvic tilt	AP

OTHER PRESENTATIONS:		
ICP	Recognise!	AP
ICP	Normal, unassisted delivery may not always be possible.	AP
ICP	Notify and urgently transport to nearest appropriate hospital.	AP