

M10

OBSTETRICAL EMERGENCIES

Childbirth is a natural event. Nevertheless, EMS personnel should treat childbirth in the field as an obstetrical emergency.

It is important that the members of the EMS team display a calm, reassuring and professional manner and work in a cooperative manner with other allied health care providers.

When delivery is imminent, additional EMS staff should be requested because there is a potential for two patients (mother and newborn) who require emergency care.

EMS personnel should be aware of their role and responsibilities in the event that a home delivery attended by midwives is in progress or has taken place.

GENERAL

- personal protective equipment should be utilized as appropriate
- body substance isolation techniques and equipment should be utilized as appropriate
- primary survey
- secondary survey
- reassure mother
- obtain a focused medical and obstetrical history
 - date of expected birth and current gestation
 - history of the current pregnancy
 - prenatal care
 - any problems during pregnancy
 - time of onset of contractions
 - frequency and duration of contractions
 - status of membranes: intact or ruptured
 - evidence of meconium staining
 - anticipated problems with delivery of current pregnancy
 - multiple gestation
 - expected large or small birth weight
 - abnormal placental location
 - history of prior pregnancies and deliveries
 - c-section versus vaginal delivery
 - length of previous labour
 - number of live births
 - history of postpartum hemorrhage
 - history of premature or abnormal labour or delivery
 - past medical history

if the patient's condition indicates that birth is imminent, visualize patient's perineum

- explain to the mother what is being done and why
 - assist the patient to remove sufficient clothing to allow for an examination of the perineum
 - drape the patient and ensure the patient's privacy is maintained
 - external examinations are done only
 - internal examinations are not permitted
 - utilize appropriate sterile technique during examination
 - communicate with the mother at all times
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- initiate transport
 - on scene times should be kept to a minimum
 - treat other life-threatening conditions en route
 - transport the patient to the nearest appropriate health care facility
 - deliver high concentration oxygen to the patient
 - notify the receiving health care facility of the patient's status as soon as possible
 - monitor and treat the patient en route
 - additional surveys and treatments should be conducted en route
 - report all findings to the receiving facility staff, and document on the patient care report

Imminent Delivery by EMS Personnel

- **prepare to deliver the baby if any of the following are present**
 - perineum is bulging or crowning
 - contractions are less than 2-3 minutes apart
 - patient has had one or more normal deliveries
 - patient complains of an urge to “push”, “bear down”, or “have a bowel movement”→ request a second ambulance as back up

- **if contractions are more than five minutes apart, and there is no urge to “push”, “bear down” or “have a bowel movement”, and crowning is not evident**
 - initiate load and go
 - position the patient on her left side facing the attending EMS personnel
 - prepare to assist with delivery if the patient's status changes→ for patients with contractions less than five minutes apart but no other sign of imminent delivery, transport can be initiated, but there is a risk that delivery will occur en route
 - factors that must be considered include
 - transport time to the appropriate receiving health care facility
 - road and weather conditions
 - time to available backup→ a short transport time to hospital would favor transport of this patient
→ EMS personnel can contact physician on-line medical control (if available) for assistance or direction

- **complications are indicated by the following**
 - any body part other than the head is the presenting part
 - hand, foot, shoulder, umbilical cord
 - significant vaginal bleeding
 - abnormal or unstable vital signs
 - load and go should be initiated immediately for any recognized complication

- treat other life threatening conditions en route
 - transport the patient to the nearest appropriate health care facility
 - treat as appropriate as outlined below
 - any additional surveys should be conducted en route
 - transport patient in a position as noted below for the specific complication
 - report all findings to the receiving facility staff, and document on the patient care report
- **whenever complications are encountered, load and go should be initiated**
- the patient(s) should be transported to the appropriate medical facility capable of operative obstetrics (if available)

Normal Delivery by EMS Personnel

- prior to assisting with delivery, the primary EMS personnel should
 - wash his or her hands and arms thoroughly
 - put on isolation gown and sterile gloves
- other members of the EMS team should
 - act as support for the primary EMS personnel so that sterile technique can be maintained
 - position the mother on a sturdy, flat surface and prepare her for delivery
 - place mother in a semi Fowler position with knees bent and apart
 - remove any constricting clothing from the mother and drape the mother
 - prepare equipment and obstetrical kit for use during and after delivery, using sterile technique
 - ensure the mother is draped appropriately at all times
 - if appropriate, position the father at the mother's head for support and encouragement
- allow delivery to progress spontaneously
 - apply gentle even pressure to the baby's head to keep the head flexed as it is delivered
 - place the other hand just below the vaginal opening with fingers at the perineum
 - ensure the membranes have ruptured once the head has delivered
 - suction the baby's airway, (mouth then nose), with a bulb syringe as soon as the head is clear of the birth canal
 - support the baby's head and body as delivery proceeds
 - **do not pull on the baby**
 - to minimize the chances of tears in the birth canal, attempt to have the head delivered between contractions by asking the mother to take short quick breaths (pant)
 - reassure the mother continuously, keeping her informed of the progress
 - instruct the mother to push with contractions and mouth breathe slowly
 - during the delivery process check the position of the cord
 - ensure the cord is not around the baby's head or neck
 - if the cord is around the neck treat as outlined in Obstetrical Complications - Umbilical Cord Around the Neck

- when the baby is delivered
 - place the baby in a drainage position
 - suction the baby's airway, mouth then nostrils, with a bulb syringe
 - keep the baby warm and dry
 - stimulate crying by gently tapping the soles of the feet
 - if no spontaneous cry within one (1) minute, suction again and begin resuscitating the newborn as outline in Neonatal Resuscitation - Cardiopulmonary Resuscitation Guideline
 - position the baby face down with head lowered to facilitate drainage
 - clamp or tie the umbilical cord in two places
 - do not wait for the cord to stop pulsating
 - first clamp or tie the cord approximately 18 centimeters (7 inches) from the baby
 - second clamp or tie the cord approximately 25 centimeters (10 inches) from the baby
 - ensure clamps or ties are secure, then cut the cord between the clamps or ties
 - check the cord attached to the baby for bleeding and if bleeding continues attach a second clamp proximal to the first clamp
 - reassess the cord for bleeding
 - assess the baby by the APGAR scoring system at one (1) minute and at five (5) minutes after birth and record the information (see appendix - APGAR Scoring Scale)
 - place the baby on the mother's abdomen or to the mother's breast to nurse
 - record the time of delivery
 - check to ensure that the mother and baby are warm
- **if the baby is in cardiorespiratory distress at any time after birth, neonatal resuscitation should be initiated**
- if placenta delivers
 - allow the placenta to spontaneously deliver
 - do not pull on the cord
 - if placenta delivers, place the placenta in a container and transport it with the baby and mother to the hospital
 - clean blood from the mother after normal delivery of the placenta
 - if the placenta does not deliver spontaneously
 - initiate transport
 - do not delay transport waiting for delivery of the placenta
- post partum bleeding
 - gently massage the uterine fundus on the mother's lower abdomen using firm, even pressure
 - assess that the fundus has become firm
 - reassess the fundus every five minutes to ensure it remains firm
 - if the fundus remains soft (boggy), massage the fundus until it becomes firm
 - ensure proper, gentle technique is used when massaging the fundus
 - assist the mother to nurse the infant and explain that this will help control bleeding
- it is typical to have some bleeding after placental separation
 - blood loss greater than 500 ml or clinical evidence of shock is considered significant and indicates a need for load and go
 - EMS personnel trained and certified to treat postpartum hemorrhage with oxytocin may do so as outlined in the Oxytocin for Postpartum Hemorrhage Protocol

- post-delivery care
 - place a sterile pad over the vaginal opening
 - place the mother's legs together to assist in controlling bleeding
 - transport mother and baby to the nearest appropriate health care facility
 - monitor mother and baby en route
 - additional EMS team members should be employed so sufficient personnel are present to assess and treat both mother and infant(s)
 - notify the receiving facility staff of the status of the mother and baby

Obstetrical Complications

- if an obstetrical complication is anticipated or encountered, appropriate back up should be requested as soon as possible
 - this will facilitate patient care and prompt transport
 - even a normal delivery requires two EMS personnel to care for and monitor the patients (mother and newborn)
 - an intravenous line should be initiated if EMS personnel are trained and certified to do so
 - intravenous fluids should be administered based on clinical findings, in keeping with the Intravenous Cannulation and Infusion Protocol
 - the intravenous line should be done during transport to avoid delays in transport to the nearest appropriate health care facility
- **when an obstetrical complication is anticipated or encountered, load and go should be initiated**
- **the patient(s) should be transported to the appropriate medical facility**
 - **if there are several potential receiving facilities, the destination medical facility should be the one capable of operative obstetrics**
 - **if this capability is not available in your area, transport to the nearest medical facility or contact physician on-line medical control (if available) for assistance or direction**
 - **every service and region should have a destination policy in place to address and accommodate the transportation needs of the patient with an emergent obstetrical complication**

stillborn infant

- obtain a history and time frame from delivery if not witnessed by EMS personnel
- assess the baby
 - primary survey
- assess whether the baby fulfills the criteria for an obvious death
 - refer to Determination of Death Guidelines and Cardiopulmonary Resuscitation Guidelines regarding resuscitation of a suspected stillbirth
- initiate resuscitation if indicated
- load and go if indicated
- if the baby does not meet criteria for resuscitation
 - notify the appropriate authorities
 - provide emotional and psychological support to the parents

delayed or abnormally progressing delivery

- where delivery is delayed or not proceeding normally (delay may be a sudden cessation in progress) and
- there are not two strong contractions in five minutes or
- mother displays signs of severe abdominal pain or shock

- initiate load and go
- provide high concentration oxygen
- treat shock, if indicated
 - position the patient on her left side
 - do not elevate the head
- prepare the ambulance for possible delivery en route
- if immediately available, have additional staff brought along in the ambulance
- transport to the nearest health care facility capable of providing operative obstetrics (if available)
- notify receiving health care facility of the mother's and baby's status while en route
- report all information to the staff at the receiving facility, and document on the patient care report

prolapsed umbilical cord

- initiate load and go
- administer high concentration oxygen
- position the mother in the knee-chest or Trendelenburg position, with the hips elevated and the head low
- insert a gloved hand into the vagina and gently push the baby's presenting part (head) up and away from the cord
 - this reduces pressure on the cord and allows blood flow through the cord to resume
 - while performing this procedure, ensure the hand does not compress the cord
- keep the prolapsed cord warm and moist by placing it inside the vagina, if possible
- if immediately available, have additional staff brought along in the ambulance
- transport to the nearest health care facility capable of providing operative obstetrics (if available)
- notify receiving health care facility of the mother's and baby's status while en route
- report all information to the staff at the receiving facility, and document on the patient care report
- do not remove hand until relieved by health care facility staff

umbilical cord around the neck

- as the head is delivered, feel whether the cord is looped around the baby's head or neck
- if the cord is felt, attempt to slip the cord over the baby's head between contractions
- if this is unsuccessful, attempt to slip the cord over the presenting shoulder
- if these procedures are unsuccessful
 - clamp the cord in two places five centimeters (two inches) apart
 - cut the cord between the clamps ensuring that the baby is not cut
 - slip the cord from around the baby's neck
 - deliver the baby
 - check the cord for bleeding
 - place a second clamp on the cord attached to the baby proximal to the first clamp
 - assess the cord again for bleeding

- continue with the delivery
 - following delivery assess the mother's and baby's vital signs and assess the baby for adequacy of respirations and provide respiratory support if required
- transport mother and baby to the nearest appropriate health care facility
 - additional EMS team members should be employed so adequate personnel are available to assess and treat both the mother and infant(s)
- monitor mother and baby en route
- notify receiving health care facility of the mother's and baby's status while en route
- report all information to the staff at the receiving facility, and document on the patient care report

limb presentation

- initiate load and go
- administer high concentration oxygen
- position the mother in the knee-chest or Trendelenburg position, with the hips elevated and the head low
- if immediately available, have additional staff brought along in the ambulance
- transport to the nearest health care facility capable of providing operative obstetrics (if available)
- notify receiving health care facility of the mother's and baby's status while en route
- monitor the mother en route
- report all information to the staff at the receiving facility, and document on the patient care report

breech presentation

- umbilical cord prolapse is more common with breech presentations after membranes have ruptured
 - if umbilical cord prolapse is noted, treat as per guideline

optimal results occur when the following principles are adhered to

- do not interfere with the delivery until the body is born to the umbilicus
- have the mother bear down hard during contractions and rest between contractions
- maintain suprapubic pressure during descent of the baby to aid delivery and maintain head in flexed position

if birth is not imminent

- initiate load and go
- position the mother on her left side if tolerated
- administer high concentration oxygen
- if immediately available, have additional staff brought along in the ambulance
- transport to the nearest health care facility capable of providing operative obstetrics (if available)
- notify receiving health care facility of the mother's and baby's status while en route
- report all information to the staff at the receiving facility, and document on the patient care report

- if labour resumes while en route and birth is imminent
 - ambulance should be pulled over to the side of the road for delivery
 - position the mother as per the "Breech Birth - if birth is imminent" section
 - deliver infant using this procedure
 - notify the receiving facility of the change in the status of the delivery

if birth is imminent

- prepare the mother by positioning her on a suitable raised surface which is high enough to allow the baby to hang freely and not rest on the ground
 - another member of the EMS team should be positioned so they can support (NOT LIFT) the baby and assist if delivery is rapid
- administer high concentration oxygen
- maintain suprapubic pressure (gentle pressure to the uterine fundus)
- without interference or lifting the baby, allow the breech to deliver until the umbilicus has passed the vaginal opening
 - when possible, identify and attempt to loosen the umbilical cord without excessive pulling on it or lifting of the baby's body, to permit delivery of the rest of the baby
 - this prevents excessive traction on the umbilical cord
- support, **DO NOT LIFT**, the baby's pelvis and abdomen
- without interference, allow the spontaneous delivery of the rest of the body
- when the hairline at the back of the baby's neck (nape) appears at the vaginal opening
 - place fingers of one hand on the baby's head to control the speed of delivery
 - if the head does not deliver immediately
 - place two fingers, gloved hand (palm toward infant's face) and form a V on either side of the baby's nose and push the vaginal wall away from the baby's face to permit the baby to breathe
- if baby delivers spontaneously
 - assistant lifts the baby onto the mother's abdomen
 - initiate post-delivery care
- if baby's body delivers spontaneously, but head does not
 - lift baby's legs up together by grasping the ankles in a locked finger hold
 - using a smooth motion, gently lift the baby's legs and body toward the mother's abdomen with one hand
 - use the other hand to gently apply firm pressure against the perineum to prevent forceful expulsion of the baby's head and tearing of the perineum
- if progress of the delivery ceases prior to the appearance of the nape of the neck
 - initiate load and go
 - if immediately available, have additional staff brought along in the ambulance
 - transport to the nearest health care facility capable of providing operative obstetrics (if available)
 - notify receiving health care facility of the mother's and baby's status while en route
 - continue to monitor the progress of the delivery en route
 - report all information to the staff at the receiving facility, and document on the patient care report

multiple births

- prolapsed umbilical cord is more common with multiple gestations after membranes have ruptured
 - if a prolapsed umbilical cord is noted, treat as per guideline
- premature delivery is common for multiple gestation pregnancies
- out-of-hospital delivery of multiple gestations (twins, triplets, etc.) requires additional EMS personnel
 - request additional EMS team members as early as possible so adequate personnel are available to assess and treat both the mother and infant(s)
- manage each baby in the same manner as for a single delivery
- when the first baby is born, clamp and cut the cord immediately to prevent hemorrhage to each subsequent baby
- birth of the second child is often delayed
 - after birth of the first child, if there is no indication that the second birth is imminent, load and go should be initiated
 - transport to a health care facility capable of operative obstetrics if available
- if delivery of the second child begins en route, the ambulance should be pulled over to the side of the road for delivery
- note times of birth for each baby
- clearly label, identify each baby
- notify the receiving health care facility while en route

premature births

- premature babies are those who are born prior to 37 weeks gestation or weighing less than 2.5 kilograms (5.5 pounds)
- manage each baby in the same manner as for a term delivery
- premature babies are particularly susceptible to heat loss and heat loss complications
 - pay particular attention to keep the baby warm and prevent loss of body heat
 - wrap the baby in dry, warm blankets
 - wrap the bundled baby in tin foil or a survival blanket
- give oxygen via non-rebreathe mask hung above the baby's head
- initiate neonatal resuscitation if necessary (see Cardiopulmonary Resuscitation Guideline)
- monitor and transport to the nearest appropriate health care facility
- notify the receiving health care facility while en route

Antepartum Complications**antepartum hemorrhage (abruptio placenta, placenta previa, and uterine rupture)**

- obtain a pertinent history
- primary survey
- establish ABCs
- record vital signs
- initiate load and go
- place bulky dressings against the vaginal opening, if necessary
- position patient on her left side if possible or turned to the left side, if possible
- treat for shock
- perform a secondary survey en route, if possible
- transport to the nearest appropriate health care facility
- notify the receiving health care facility while en route

preeclampsia

- establish ABCs
- obtain a history
- handle mother gently
- prepare for possible seizures
- primary survey
- record vital signs
- initiate load and go
- position patient on her left side, if possible
- perform a secondary survey en route, if possible
- transport to the nearest appropriate health care facility
 - transport in a gentle manner avoiding the use of emergency lights and signal devices, if possible
- notify the receiving health care facility while en route

spontaneous or induced abortion

- establish ABCs
- obtain a history
- primary survey
- record vital signs
- initiate load and go
- place bulky dressings against the vaginal opening, if necessary
- position patient on her left side if possible
- treat for shock, if necessary
- perform a secondary survey en route, if possible
- bring the fetus or any tissue to the health care facility
- transport to the nearest appropriate health care facility
- notify the receiving health care facility while en route

Postpartum Complications

postpartum hemorrhage

- generally signified by a loss of greater than 500 ml blood
 - gently massage the fundus of the uterus with a circular rubbing motion on the mother's lower abdomen
 - assess that the fundus has become firm
 - reassess the fundus every five minutes to ensure it remains firm
 - if the fundus becomes soft (boggy), massage the fundus again till it becomes firm
 - ensure proper, gentle technique is used when massaging the fundus
 - rough or improper technique could damage the uterus and result in increased bleeding
 - put the baby to the mother's breast to nurse
 - place a sanitary pad or bulky dressings over the vaginal opening
 - manage bleeding from tears, using direct pressure
 - treat for shock, if indicated
 - initiate load and go
 - estimate blood loss
 - transport to the nearest appropriate health care facility
 - notify the receiving health care facility while en route
- EMS personnel trained and certified to treat postpartum hemorrhage with oxytocin may do so as outlined in the Oxytocin for Postpartum Hemorrhage Protocol

Neonatal (Newborn- Birth to 6 weeks) Resuscitation

- prior to assisting with delivery, all neonatal resuscitation equipment should be prepared and placed for immediate access
- during delivery, if meconium staining is observed in the amniotic fluid and the baby is not fully delivered
 - EMS personnel should suction the baby's mouth, pharynx and nose thoroughly until it is clear of meconium
 - this should be done as soon as the head has been delivered, prior to delivery of the shoulders
 - initial suctioning should follow the order mouth and pharynx, then nose
 - suctioning may stimulate breathing
 - thorough suctioning of the airway is vital to avoid aspiration
 - the order of subsequent suctioning of the neonate's airway is affected by the presence of fluid or secretions in the mouth or nose
 - if the mouth contains fluid or secretion, the mouth and pharynx should be suctioned first
 - if the mouth is clear of fluid and secretions, the nose should be suctioned first
 - which ever order is used, EMS personnel must ensure the mouth, pharynx and nose are suctioned
- upon delivery of the baby, treat as per Obstetrical Emergencies Guideline
 - continually reassess the baby, maintaining the baby's body heat
- position the baby on his/her back or side with the neck slightly extended
 - to maintain the correct position and head alignment, position the infant so that the neck is in a neutral position with the ear canal level with the top of the infants shoulder.
- as soon as baby has been positioned, the mouth, pharynx and nose should be suctioned thoroughly again
- after drying and suctioning, tactile stimulation should be provided to the baby via
 - flick the soles of the feet and shout
 - rubbing baby's back (not mentioned in references)
- immediately assess the baby's breathing
 - if breathing is normal
 - assess the heart rate

- do so by auscultating the apical beat or palpating the umbilical pulse
 - initial heart rate should be greater than 100 beats per minute
- if both breathing and heart rate are normal
 - assess the color of the baby
 - if central cyanosis is present
 - free flow oxygen (5 liters per minute) should be given by holding oxygen tubing or an infant mask 1 to 2 cm (0.5 inch) from the baby's nares
 - note that peripheral cyanosis to the extremities is common in most infants during the first few minutes after birth
- if initial assessment reveals apneic or gasping respirations, or an initial heart rate less than 100 beats per minute
 - ventilation must be initiated
 - using a bag-valve mask ventilate with 100% oxygen for 30 seconds, 1 breath every 1.5 seconds, for a total of 40 breaths per minute
 - reassess the breathing and heart rate
- if ventilation does NOT result in adequate chest rise
 - reapply the mask to the face
 - reposition the baby's head
 - avoid hyperextension of the neck
 - check for secretions
 - suction if necessary
 - ventilate with infant's mouth slightly open
- if heart rate is greater than 100 beats per minute after initial ventilation
 - assess the baby for the presence and adequacy of spontaneous ventilation
 - if spontaneous breathing is adequate, administer free flow oxygen (5 liters per minute)
 - if spontaneous breathing is inadequate, continue to ventilate the baby with 100% oxygen using a bag-valve mask
- if heart rate remains less than 100 beats per minute after initial ventilation
 - continue to ventilate the baby with 100% oxygen using a bag-valve mask
 - continue to reassess respirations and pulse at 60 second intervals (references only refer to every 2 minutes)
- if the heart rate is less than 60 beats per minute after initial ventilation
 - load and go should be initiated
 - ventilation should be continued and checked for adequacy
 - chest compressions should be started at a rate of 120 per minute
 - continue to reassess respirations and pulse at 60 second intervals (references only refer to every 2 minutes)
- document initial assessments and any changes in the neonate's status, and all interventions carried out in treatment of the neonate

NOTE

- consider the possibility of pregnancy in any female of childbearing age with complaints of vaginal bleeding, menstrual irregularity, or abdominal or low back pain not associated with trauma
- the greatest risks to the newborn are airway obstruction and hypothermia
 - keep baby covered, warm, and dry
 - keep the airway clear by suctioning with a bulb syringe
- when using the bulb syringe to suction the infant, squeeze the bulb first prior to insertion into the baby's mouth or nose
- the greatest risk to the mother is postpartum hemorrhage
 - monitor the mother closely for signs of hypovolemic shock and excessive vaginal bleeding
 - treat for shock, if necessary
- spontaneous or induced abortions may result in extensive vaginal bleeding
 - monitor the mother closely for signs of hypovolemic shock and excessive vaginal bleeding
 - treat for shock, if necessary
 - provide emotional / psychological support

EMS Personnel and Midwives

- midwives operate in Manitoba under the Midwifery Act and Regulation to the Midwifery and Consequential Amendments Act
- an extract of the "Integrating Midwifery Services into Hospitals, Emergency Medical Services and Public Health Services in Manitoba - Implementation Manual", College of Midwives of Manitoba, May, 1999, - Part III: Integrating Midwifery into Emergency Medical Services in Manitoba and Standard for Planned Out of Hospital Births are included in the Appendix
- EMS personnel may be called to a home birth or health care facility where a midwife is in attendance
 - when attending a home birth with a midwife present, EMS personnel should obtain the midwife's name and the midwife's assistant's name, and record them on the patient care report
- each region may have additional policies in place for the interaction between midwives and other health care providers
 - EMS personnel should be current on local policies relating to working with midwives

In planning a home delivery attended by a midwife, the College of Midwives of Manitoba recommends that the midwife involved use their "Standard for Planned Out of Hospital Births" protocol.

- the midwife is responsible for planning for the home birth and this planning must include
 - identifying the distance to a health care facility capable of performing operative obstetrics
 - access to telephones and other communication resources
 - weather conditions
 - availability of emergency support systems
 - psycho-social support factors
- the midwife must also ensure that a back-up plan is in place in the event of an emergency
 - the back-up plan must include
 - presence of an adequately trained second birth attendant is present at each home birth
 - making prior contact with
 - local emergency medical service
 - nearest hospital or health care facility capable of dealing with an obstetrical emergency
 - ensuring satisfactory transport service for mothers and infants can be initiated within 30 minutes
 - ensure a satisfactory means of communication is available

The College of Midwives of Manitoba recommends that the midwife should pre-register the home birth with Emergency Medical Services if

- the birth is to occur in a location at a distance of at least thirty minutes journey from a hospital with surgical facilities, using a method of transportation ordinarily used for health care purposes in the area
- the mother lives in a location with difficult or obscure access

The College of Midwives of Manitoba recommends that the midwife

- provide written notification of a planned home birth to the appropriate ambulance dispatch office when the mother has reached 37 weeks gestation
- provide written registration of a planned home birth to the appropriate ambulance dispatch office within 48 hours scheduled date of the birth

- in most instances, the midwife will take the lead role in delivering the baby
 - EMS personnel will be called to transport the mother and baby to an appropriate health care facility should the need arise

If there are complications associated with the delivery, the midwife may request EMS personnel to assist with the delivery and transport the mother and baby to a health care facility

- EMS personnel should assist the midwife within the limits of their occupational competencies, level of training, and protocols
- EMS personnel are responsible for providing emergency care for the mother and baby when the care required is beyond the scope of practice of the midwife
 - this includes but is not limited to
 - seizures
 - cardiac arrest
 - trauma
 - shock

Under normal circumstances, the midwife must arrange for a second birth attendant to assist in the home delivery.

EMS personnel are responsible to assume care of either the mother or newborn if a second birth attendant is not present or the condition of either mother or baby is compromised

- if the patient's condition requires interventions outside the scope of practice of the midwife but within the practice for the EMS personnel, EMS personnel should initiate treatment as per the appropriate Emergency Treatment Guidelines and Protocols
- EMS personnel should assist the midwife to care for the patient(s) within the EMS personnel's occupational competencies, level of training, and protocols

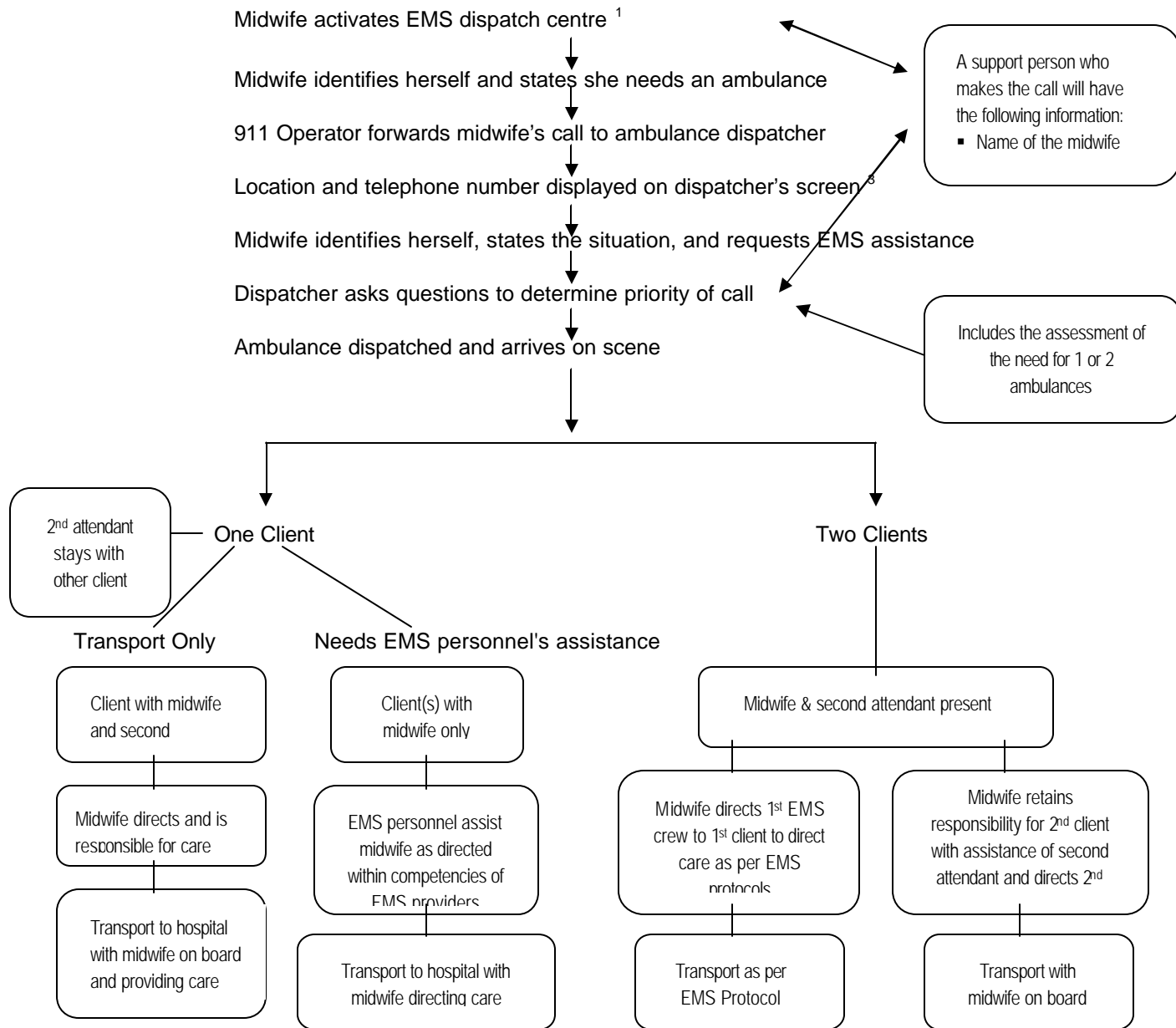
If transport is required for either or both the mother and baby

- the appropriate personnel should accompany the most critical patient in the ambulance
- the midwife may elect to accompany the most critical patient and assist with treatment en route
- if one patient is transported without the midwife in attendance, the EMS personnel should treat as per the appropriate Emergency Treatment Guidelines and Protocols

The **Midwife's Critical Path for Childbirth-Related Emergencies**" algorithm provides a template for interactions between EMS personnel and midwives.

If EMS personnel are confronted with a situation where roles and responsibilities are unclear, EMS personnel may avail themselves to physician on-line medical control (if available).

Table 1: Midwife’s Critical Path For Childbirth-Related Emergencies



¹ The midwife calls 911 in 911 serviced areas, or the appropriate 7 digit access number.

² In Winnipeg this includes the need for ALS or First Responders based on the information collected from the caller.

³ Locations and telephone numbers are displayed if the dispatch center has capabilities for their display. Locations and telephone numbers originating from cellular telephones, a 7 digit access number or unlisted telephone numbers are not displayed.

Table 2: Criteria for resuscitation of newborns

Description of Newborn	Paramedic Action
any baby without vital signs (cord pulsation, heart beat less than 60 beats per min., respirations, or body movement)	full resuscitation (basic or advanced)
any baby born with vital signs absent <u>and</u> signs of skin maceration	no resuscitation (basic or advanced)
any baby or fetus born with vital signs absent <u>and</u> fused eyelids	no resuscitation (basic or advanced)
any baby born with vital signs absent <u>and</u> separated eyelids <u>and</u> non-macerated skin	full resuscitation (basic and advanced)

NOTES :