

COLLABORATION & MATERNITY CARE

Table 1
The Intensive Care Society's levels of care (2009).

Care level	Description
Level 0	Patients whose needs may be met through normal ward care in an acute hospital
Level 1	Patients at risk of their condition deteriorating, or those recently relocated from higher levels of care, whose needs can be met on an acute ward with advice and support from the critical care team
Level 2	Patients requiring more detailed observation or intervention including support for a single failing organ system or postoperative care and those 'stepping down' from higher levels of care
Level 3	Patients requiring advanced respiratory support alone or basic respiratory support together with support of at least two organ systems. This level includes all complex patients requiring support for multi-organ failure

Table 4.1 Summary of Codes used for the health care providers

Code	Description	Care provider with primary responsibility
A/A*	DISCUSS A discussion will be initiated with another health care provider to plan care.	Midwife and/or medical practitioner or other health care provider.
B	CONSULT Evaluation involving both primary and secondary care needs. The individual situation of the woman will be evaluated and agreements will be made about the responsibility for maternity care.	Midwife and/or medical practitioner or other health care provider
C	REFER This is a situation requiring medical care at a secondary or tertiary level for as long as the situation exists. The request for referral will be made in writing. Alterations in care will be communicated in writing to the midwife.	Medical practitioner (for secondary or tertiary care). Where appropriate the midwife continues to provide midwifery care.

Complications for Childbearing Women (most frequent to least frequent):

- Epidural analgesia
- Pre-term labour
- Diabetes
- Hypertension
- Pre-eclampsia
- Cardiac disease

SUMMARY OF PHYSIOLOGICAL CHANGES IN PREGNANCY

RESPIRATORY SYSTEM CHANGES



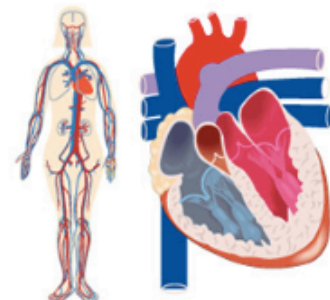
The respiratory rate rises to compensate for increased maternal oxygen consumption, which is needed for demands of the uterus, the placenta, and the fetus.

- Increased respiratory rate
- Increased minute ventilation
- Respiratory alkalosis
- Decreased functional capacity
- Increased tidal volume
- Pregnant women may feel out of breath

CARDIOVASCULAR SYSTEM CHANGES

During pregnancy, the entire cardiovascular system is readjusted, blood volume increases greatly, more blood vessels grow, and the pressure of the expanding uterus on large veins causes the blood to slow in its return to the heart.

- Increased cardiac output
- Increased blood volume
- Elevated resting heart rate
- Decreased peripheral resistance
- Decreased blood pressure (second trimester)



DIABETES & OBESITY

TYPE 1 DIABETES

- Absolute deficiency of insulin production
- Occurs as a result of autoimmune destruction of beta cells with consequent insulin deficiency leading to chronic

TYPE 2 DIABETES

- Relative deficiency of insulin production
- Progressive deterioration of beta cell function leading to a decrease in insulin production and increasing insulin resistance

GESTATIONAL DIABETES

- Impaired glucose tolerance
- Carbohydrate intolerance resulting in hyperglycaemia with onset of first recognition in pregnancy

Risk Factors for GDM:

- > 35 years old
- Women who have a family history of type 2 diabetes
- Women who are overweight
- Women who are from certain ethnic backgrounds, including; South Asian, Vietnamese, Chinese, Middle Eastern and Polynesian/Melanesian
- Hx of obstetric complications: previous GDM, polycystic ovarian syndrome, large babies or birth complications

GESTATIONAL DIABETES MELLITUS

- Insulin is responsible for transporting glucose from the blood into the body's cells to be used for energy
- In diabetes, this process is blocked and cells become resistant to insulin -- resulting in too much glucose in the blood
- In pregnancy, the hormones from the placenta (growth hormone, CRH, placental lactogen) can cause insulin resistance/decreased insulin sensitivity so that more glucose remains in the blood to be transported to the baby)
- Usually in pregnancy, the body produces more insulin to counter this, however, sometimes this doesn't happen and this results in GDM
- Maternal signs and symptoms (4 Ps):
 - Polyuria
 - Polyphagia
 - Paresthesia
 - Polydipsia

Complications

Maternal:

- Hypertensive disorders
- Increased risk of infection
- Caesarean section
- 50% risk of future type 2 diabetes
- Insulin related hypoglycaemia

Fetal:

- Hyperglycaemia --> hyperinsulinaemia --> increased glucose uptake --> macrosomia
- Hyperglycaemia --> fetal osmotic diuresis --> polyhydramnios
- Congenital abnormalities
- Still birth
- IUGR (in the instance of long standing, poorly controlled maternal diabetes)

Infant:

- Birth trauma due to macrosomia
- Hypoglycaemia due to fetal hyperinsulinaemia