This information was up to date at the time of release to the Heads of Midwifery.
The editorial board does not accept liability for any errors or omissions following its subsequent publication.
Updating arrangements for the formulary should be decided upon and implemented at a local level.

Morphine

Legal status (GSL, P or POM on exemption list, or PGD)	▪ POM - midwife may administer parenterally during labour as medicine is on midwives exemptions list **CD (Controlled Drug)**
Patient group	Pregnant women who have requested an opioid analgesic for pain relief during labour.
Clinical indication	Management of pain during labour.
Pharmacology (Onset and duration of action where appropriate)	Morphine is a narcotic analgesic. It is a central nervous system depressant and can cause sedation, nausea, vomiting and constipation. Like other opioids IM morphine may produce poor analgesia compared to epidurals. Onset of action by IM route is 10-20 minutes and duration of about 3-4 hours.
Pharmaceutical form, strength, route of administration	Morphine sulphate BP injection 10mg/ml in a 1ml ampoule or 15mg/ml in a 1ml ampoule supplied in packs of 10. Other strengths are available. For intramuscular (IM) injection.
Dose, frequency and maximum number of doses or period of time for administration or supply	The dosage is tailored to the individual woman in accordance with local guidelines. Consider anti-emetic. Morphine up to **15mg** IM (given with IM cyclizine or IM prochlorperazine - see monographs). Consider a reduced dose in women ≤ 50kg. A further 2 doses morphine 7.5 -15mg can be given every four hours if necessary. A maximum of 3 doses to be given prior to referral to medical staff.
Contra-indications/exclusion criteria	▪ hypersensitivity to morphine ▪ women who have refused opioid analgesia ▪ - move to cautions ▪ paralytic ileus or acute diarrhoea ▪ acute respiratory depression ▪ obstructive airways disease ▪ biliary colic ▪ acute alcoholism ▪ concurrent use of MAOI or within 2 weeks of discontinuation of treatment ▪ phaechromocytoma ▪ cerebral oedema, head injury,raised intracranial pressure, or comatose patients

Morphine	
Cautions and action that will be taken if a caution applies	▪ avoid in acute asthma attack and biliary disorders ▪ reduce dose in asthma and reduced respiratory reserves (e.g. cor pulmonale, kyphoscoliosis, emphysema, or severe obesity). ▪ consider reduced dose in impaired renal or liver function, hypothyroidism, adrenocortical insufficiency, urethral stricture, hypotension, shock, severe inflammatory or obstructive bowel disorders, severe diarrhoea, toxic psychosis, convulsive disorders, and CNS depression. ▪ can delay gastric emptying and increase risk of Mendelson's Syndrome ▪ repeated use of morphine may lead to tolerance and dependence and abrupt withdrawalmay precipitate a withdrawal syndrome great caution in those with a known tendency or history of substance misuse ▪ smokers may require higher doses of morphine ▪ check for and document any allergies ▪ check and document past medical and drug history and current medication to ascertain potential for overdose ▪ if a caution applies consult with a doctor ▪ document consultation in maternity record
Medicine interactions and action that will be taken if a patient is taking a medicine that may interact	▪ additive effects with other CNS depressants including alcohol, hypnotics, anxiolytics, tricyclic antidepressants antipsychotics and sedating antihistamines ▪ increased risk of side effects with anti-cholinergic drugs and potentiates of effects of MAOI's ▪ it antagonises effects of metoclopramide and domperidone and increases likelihood of constipation with loperamide ▪ if there is a clinically significant drug interaction, consult with a doctor before administration or supply ▪ document consultation in maternity record ▪ refer to current BNF for latest information on interactions

Morphine	
Potential adverse reactions and side effects including actions to be taken if adverse drug reaction is suspected	▪ *the most serious side effect is respiratory depression* ▪ *common side effects are drowsiness, dizziness, nausea, vomiting, constipation and sweating* ▪ *anaphylactic reactions, bradycardia or tachycardia, facial flushing, orthostatic hypotension and palpitations can occur* ▪ *other side effects include dry mouth, biliary spasm, miosis, blurred or double vision or other vision changes, confusion, urinary retention, , vertigo, mood changes, hallucinations, headache, mental clouding, vertigo, urticaria, pruritus, rash, contact dermatitis and pain and irritation may occur on injection, raised intracranial pressure, difficulty with micturition, ureteric spasm and retention and an antidiuretic effect* ▪ *the euphoric activity of morphine has led to its abuse and physical and psychological dependence may occur* *on labour - may temporarily suppresses uterine activity in early labour. It can delay gastric emptying and may increase the risk of Mendelson's Syndrome.* *on the neonate - it rapidly crosses the placenta, and severity of side effects depends on the dose and the time between the last dose and delivery. Withdrawal symptoms can result, including CNS hyperexcitability, gastrointestinal dysfunction, respiratory distress, and vague autonomic symptoms. Adverse effects can be reversed by naloxone.* *on breast feeding- respiratory depression and drowsiness may result in poor feeding. Whilst morphine can suppress lactation, the quantity from therapeutic doses that may reach the neonate via breast milk is probably insufficient to cause major problems of dependence or adverse effects* ▪ *if a serious adverse reaction is suspected please report to the MHRA Yellow Card Scheme http://yellowcard.mhra.gov.uk/*
Overdose	▪ respiratory depression, coma and constricted pupils are common ▪ dilatation of the pupils can occur as hypoxia develops ▪ death may occur from respiratory failure ▪ other symptoms include hypothermia, confusion, severe dizziness and drowsiness, hypotension, bradycardia, circulatory failure, pulmonary oedema, severe nervousness or restlessness, hallucinations, convulsions ▪ rhabdomyolysis, progressing to renal failure, has been reported. ▪ immediate assessment/treatment is essential - refer to medical staff ▪ manage in accordance with established treatment guidelines or see BNF overdose section ▪ for further advice contact National Poisons Centre 0344 892 0111
Action if patient declines	▪ refer to authorised prescriber or doctor ▪ document in maternity record
Additional advice and information	▪ supply the manufacturer's patient information leaflet if requested

Morphine	
Patient monitoring arrangements during and after treatment and follow-up required	If morphine is ineffective or inadequate discuss alternative analgesia with a doctor. Document decision in maternity record.
Particular storage requirements	▪ Store at room temperature below 25°C. ▪ Discoloured solutions should not be used.

References

1. Summary of Product Characteristics. Morphine (Wockhardt) text revision 10.1.2019 Accessed 16.12.19www.emc.medicines.org.uk
2. http://www.bnf.org