### MORPHINE SULPHATE (C)
(Revised: April 2017)

<table>
<thead>
<tr>
<th>TYPE:</th>
<th>Narcotic analgesic [S8]</th>
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<tbody>
<tr>
<td>PRESENTATION:</td>
<td>10mg in 1ml – glass ampoule</td>
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**ACTIONS:**
1. Decreases pain perception and anxiety
2. Vasodilatation

Onset: **IV** = 2 – 5 minutes; **IM** = 5+ minutes
Duration: **IV** = 1 – 2 hours; **IM** = 2 – 3 hours

<table>
<thead>
<tr>
<th>USES:</th>
<th>ICP</th>
<th>1. To relieve moderate to severe pain</th>
<th>AP</th>
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<tbody>
<tr>
<td></td>
<td>ICP</td>
<td>2. Acute pulmonary oedema</td>
<td>AP</td>
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**ADVERSE EFFECTS:**
1. Nausea and vomiting
2. Altered level of consciousness
3. Respiratory depression
4. Hypotension
5. Bradycardia
6. Dependence

**CONTRA-INDICATIONS:**
1. Respiratory depression *analgesic indications only*
2. BP < 70mmHg systolic *analgesic indications only*
3. BP < 90mmHg systolic (pulmonary oedema)
4. Acute asthma attacks

**PRECAUTIONS:**
1. Depressed level of consciousness (GCS ≤ 13) *analgesic indications only*
2. Known hypersensitivity
3. Elderly patients (may be sensitive)
4. Patients with CAL
5. Hypovolaemic patients (hypovolaemia should be corrected before morphine administration)
6. Patients with systolic BP 70 – 90mmHg (see below)
7. Children under 1 year
8. Pain management in labour

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### ANALGESIA

#### ADULT and PAEDIATRIC:

<table>
<thead>
<tr>
<th>ICP</th>
<th>DOSE</th>
<th>Notes</th>
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<tr>
<td>Up to 0.05mg/kg IV, over 2 minutes. May be repeated at 5 minutes intervals, until pain is managed. <strong>Ambulance Paramedics</strong>: up to a maximum of 20mg Use with caution under 1 year of age.</td>
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<td>Morphine administration can be used alternately with ketamine</td>
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#### Patient with pain – systolic BP of 70 – 90mmHg:

**ADULT:**

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<tr>
<td>IV use only Hypovolaemic patients must be receiving fluid <em>Up to half of a calculated 0.05mg/kg dose, given slowly</em> May be repeated as required, with great care, and with an appropriate time interval between doses, titrated to response No further doses to be given if systolic BP drops 10mmHg or more with the half dose, even if it remains above 70mmHg systolic (e.g. initial BP 85mmHg – following morphine dose, BP is now 75mmHg)</td>
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**Intramuscular administration:**

**ADULT and PAEDIATRIC:**

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<tbody>
<tr>
<td>Pain relief only Not for chest pain if cardiac ischaemia suspected No IV available No hypotension Patient contact estimated &gt;20 minutes. 0.1mg/kg. Repeat once, after 30 – 45 minutes, if required <strong>(Ambulance Paramedics: do not exceed total of 20mg)</strong></td>
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*continues over*
DOSES – cont.:

PULMONARY OEDEMA

<table>
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<tr>
<th>ADULT:</th>
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| ICP    | 1 – 2 mg IV  
|        | Repeat once, after 20 minutes, if required. |

SPECIAL NOTES:

- Morphine is a Controlled Medicine. Use must be checked by both crew members.
- Under the *Medicines, Poisons & Therapeutic Goods Act and Regulations 2008*, recording and accounting for its use is a legal requirement.
- The unused portion of the dose must be appropriately disposed of, and the disposal recorded.
- Side effects may be reversed by use of naloxone, although it is desirable to avoid this unless absolutely necessary.
- Elderly patients may be especially sensitive to morphine, and advanced age is often a better guide to dosing than weight.