Morphine IV bolus (pain)

Presentation:	Morphine sulphate 10mg/ml solution for injection
Indications:	Management of severe pain See separate monograph for use in sedation/ventilation
Dose:	**Neonate:** 50 micrograms/kg every 6 hours, titrate according to pain response, dose to be administered over at least 5 minutes **Child 1 month – 11 years:** 100 micrograms/kg every 6 hours, titrate according to pain response, dose to be administered over at least 5 minutes **Child 12-17 years:** 5 - 10mg every 4 hours, titrate according to pain response, dose to be administered over at least 5 minutes
Route of administration:	Slow intravenous bolus over at least 5 minutes. Ensure all doses are flushed with 2.5ml sodium chloride 0.9% to ensure no residual morphine remains in the cannula.
Directions for Administration:	**Prepare a standard strength syringe of 10mg in 10ml sodium chloride 0.9% (1mg/ml):** • Draw up 10mg (1ml) of morphine sulphate injection • Dilute to 10mls in a 10ml syringe with sodium chloride 0.9% **For doses ≥ 1mg expel volume from the syringe to leave the prescribed dose in the syringe** **For doses <1mg draw the required dose into a new syringe** Document amount used and wasted in the controlled drugs register. All wasted morphine should be discarded into a sharps bin containing a safety gel sachet.
Prescribing:	All doses should be prescribed on a paper drug chart or EPMA as per Trust policy
Cautions and Contraindications:	Raised intra-cranial pressure or head injury Liver disease and paralytic ileus Hypothyroidism, adrenocortical insufficiency (reduced dose recommended) Moderate renal impairment (dose adjustments necessary) Myasthenia Gravis Enhanced sedative effect if used in combination with barbiturates e.g. phenobarbital, anxiolytics and hypnotics e.g. midazolam
Common Side Effects:	Respiratory depression, nausea/vomiting, hypotension and hypertension, paralytic ileus, muscle rigidity, urinary retention, ureteric/biliary spasm, dry mouth, sweating, headache, brady- and tachycardia, constipation, nystagmus, inhibition of cough reflex, apnoea, palpitations, oedema, dyspepsia, bronchospasm, pruritus
Monitoring:	Respiratory rate, oxygen saturations, blood pressure, heart rate and sedation score must be monitored continuously where possible during and for 60 minutes after administration. If continuous monitoring not possible patient MUST be on oxygen saturations monitor and have 10 minute observations of blood pressure, respiratory rate and sedation score during and for 60 minutes after administration. Patient to remain in clear sight of practitioner at all times
Additional Comments:	**ANTIDOTE** Naloxone, a specific opioid-antagonist, can be used to reverse respiratory depression. It has a short duration of action - repeated doses or an infusion may be necessary. • Initially 100 micrograms/kg (IV/IM/SC), if no response, repeat at intervals of 1 minute to a total max. 2 mg, then review diagnosis; further doses may be required if respiratory function deteriorates. • If repeated doses are required, a continuous infusion of 60% of the initial resuscitative intravenous dose per hour may be required – contact pharmacy for advice and preparation of the infusion. NB. Use caution if giving naloxone to infants born to opioid-dependent mothers, as this can precipitate acute withdrawal, leading to extreme distress.

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Written by: Lisa Taylor, Paediatric Pharmacist
Checked by: Dr Richard Bowker (Paeds Clinical Director)

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References

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Toxbase, accessed online via www.toxbase.org 3/5/2017