

# Midazolam

<b>Indication</b>	Sedation Status epilepticus Terminal agitation / terminal breathlessness in palliative care
<b>Dose</b>	<u>Sedation</u> Intravenous – 30-60micrograms/kg/hour Use 30micrograms/kg/hour in babies <32 weeks gestation  <u>Status epilepticus:</u> Intravenous – Loading dose of 150-200micrograms/kg Continuous infusion 60-200 micrograms/kg/hour – adjusted according to response Buccal – 300micrograms/kg repeated once after 10 minutes if needed  <u>Terminal agitation / terminal breathlessness in palliative care:</u> Buccal – 100microgram/kg as a single dose (maximum initial dose 5mg) SC or IV infusion – 30-150micrograms/kg/hour
<b>Route of administration</b>	IV bolus over 2 minutes (loading dose) Continuous IV / SC infusion Buccal
<b>To prepare</b>	5mg/mL solution and 1mg/mL solution available <b>Preferred diluent:</b> glucose 10% Other diluents: glucose 5%, sodium chloride 0.9%  <b>To make 10mg in 50mL:</b> <u>From 5mg/mL solution:</u> Draw up 2mL of 5mg/mL midazolam (10mg) and add to 48mL of diluent.  <u>From 1mg/mL solution:</u> Draw up 10mL of 1mg/mL midazolam (10mg) and add to 40mL of diluent.
<b>Compatibilities</b>	Adrenaline, amiodarone, atracurium, calcium gluconate, cefotaxime, digoxin, dopamine, fentanyl, fluconazole, gentamicin, heparin, insulin, metronidazole, milrinone, morphine, noradrenaline, oxycodone, parenteral nutrition (vamin only), vancomycin, vecuronium.
<b>Known incompatibilities</b>	Amphotericin B, amoxicillin, ceftazidime, cefuroxime, dexamethasone, dobutamine, flucloxacillin, furosemide, hydrocortisone, human albumin solution, parenteral nutrition (lipid only), phenobarbital, sodium bicarbonate.
<b>Notes</b>	Midazolam is a short-acting benzodiazepine with hypnotic, anxiolytic, muscle relaxant and anticonvulsant activity. Onset of action by buccal route 5-15 minutes. If possible, divide the dose so half is given into one cheek and the remaining half into the other cheek. High doses can lead to paradoxical agitation.  If there is no compatibility information for specific drugs, do not assume compatibility. For incompatible drugs or those with no compatibility information use a separate line or, for short infusions, flush well between drugs.  For side-effects see the BNFc - <a href="#">Midazolam BNFc</a>
<b>References</b>	Leeds Teaching Hospitals neonatal prescribing and administration monograph, Neonatal Formulary 7 <sup>th</sup> edition, BNFc, The Association of Paediatric Palliative Medicine Master Formulary 3 <sup>rd</sup> Edition 2015.

Date produced: December 2017    Review date: December 2019    Author: Laura Dalton, Network Leadership Fellow  
Produced by Yorkshire and Humber Neonatal Operational Delivery Network.  
Clinicians must accept individual responsibility for using this information and prescribing safely.