

Adrenaline (Epinephrine) (ITU)

CAUTION: High Administration Risk Rating													
Selection of the correct strength of adrenaline injection is crucial.													
Form	1 in 10,000 (1mg per 10mL) prefilled syringe (Resuscitation trolley only) 1 in 1,000 (1mg per 1mL) ampoule												
Reconstitution	Prefilled syringe: Already in solution Ampoule: Already in solution. <u>Dilute further before IV administration.</u>												
Compatibility & Stability	Sodium Chloride 0.9% Glucose 5%												
Administration	<p><u>IV injection</u> Use 1 in 10,000 (1mg per 10mL) prefilled syringe where available. If the prefilled syringe is not available the 1 in 1,000 (1mg per 1mL) preparation may be diluted to 1 in 10,000. Dilute 1mL with 9mL Sodium Chloride 0.9% and mix well. Give by rapid IV injection. Administer via a central venous access device if already in place, or into a large peripheral vein. IV injection administered via a peripheral vein should be followed by a 20mL flush of Sodium Chloride 0.9% to aid entry into the central circulation.</p> <p><u>IV infusion</u> Use 1:1000 ampoules and administer through a central line, using a syringe driver to control the rate of infusion.</p> <p style="text-align: center;">Single Strength Adrenaline</p> <p>Add 3mg Adrenaline (3mL) to 47mL Glucose 5% to give 50mL of a solution containing 60mcg/mL Adrenaline.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td style="text-align: center;">Infusion rate of 1mL/hr = 60mcg/hr = 1mcg/min</td></tr> <tr><td style="text-align: center;">1mL/hr = 1mcg/min</td></tr> <tr><td style="text-align: center;">2mL/hr = 2mcg/min</td></tr> <tr><td style="text-align: center;">3mL/hr = 3mcg/min</td></tr> </table> <p style="text-align: center;">Double Strength Adrenaline</p> <p>Add 6mg Adrenaline (6mL) to 44mL Glucose 5% to give 50mL of a solution containing 120mcg/mL Adrenaline.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td style="text-align: center;">Infusion rate of 1mL/hr = 120mcg/hr = 2mcg/min</td></tr> <tr><td style="text-align: center;">1mL/hr = 2mcg/min</td></tr> <tr><td style="text-align: center;">2mL/hr = 4mcg/min</td></tr> <tr><td style="text-align: center;">3mL/hr = 6mcg/min</td></tr> </table> <p style="text-align: center;">Quadruple Strength Adrenaline</p> <p>Add 12mg Adrenaline (12mL) to 38mL Glucose 5% to give 50mL of a solution containing 240mcg/mL Adrenaline.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td style="text-align: center;">Infusion rate of 1mL/hr = 240mcg/hr = 4mcg/min</td></tr> <tr><td style="text-align: center;">1mL/hr = 4mcg/min</td></tr> <tr><td style="text-align: center;">2mL/hr = 8mcg/min</td></tr> <tr><td style="text-align: center;">3mL/hr = 12mcg/min</td></tr> </table>	Infusion rate of 1mL/hr = 60mcg/hr = 1mcg/min	1mL/hr = 1mcg/min	2mL/hr = 2mcg/min	3mL/hr = 3mcg/min	Infusion rate of 1mL/hr = 120mcg/hr = 2mcg/min	1mL/hr = 2mcg/min	2mL/hr = 4mcg/min	3mL/hr = 6mcg/min	Infusion rate of 1mL/hr = 240mcg/hr = 4mcg/min	1mL/hr = 4mcg/min	2mL/hr = 8mcg/min	3mL/hr = 12mcg/min
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Monitoring	<ul style="list-style-type: none"> • Continuous blood pressure and ECG monitoring required. 												

This information has been summarised to act as a guide for those administering IV medication. The monograph should be used in conjunction with the drug data sheet and BNF for information on dose, adverse effects, cautions and contra-indications. Further information is available from Pharmacy on 22146 or 22542

	<ul style="list-style-type: none">When administered via an infusion use invasive blood pressure monitoring and monitor blood glucose.
Extravasation	Repeated local administration may produce necrosis at the sites of injection. Administer via a central venous access device if possible.
Additional Information	<ul style="list-style-type: none">Discoloured solutions or solutions containing precipitate should not be used.

Information provided relates to Adrenaline manufactured by MercuryPharma and prefilled syringes manufactured by Aurum.