

## Aminophylline

<b>Indication</b>	Reversible airways obstruction Acute severe asthma
<b>Dose</b>	<p><b>Loading Dose</b> (Patients NOT on chronic therapy) 5mg/kg loading dose over 20-30 minutes (max 500mg.)</p> <p><b>Maintenance Dose</b> (All Patients) Initially 0.5mg/kg/hour</p> <p>All doses should be based on Ideal Body Weight.</p>
<b>Preparation</b>	<p><b>Loading Dose</b></p> <ol style="list-style-type: none"> <li>1. Draw up the required amount of aminophylline using a filter straw/needle</li> <li>2. Withdraw an equivalent amount of sodium chloride 0.9% from a 100ml bag</li> <li>3. Add aminophylline to sodium chloride bag using new needle</li> </ol> <p><b>Maintenance: Peripheral or Central Use - 1mg/ml final concentration</b></p> <ol style="list-style-type: none"> <li>1. Withdraw 20/40ml from a 500/1000ml bag of sodium chloride 0.9%</li> <li>2. Draw up 20/40ml aminophylline (25mg/ml) using a filter straw/needle</li> <li>3. Add aminophylline to sodium chloride bag using a new needle Final concentration of 1mg/ml.</li> </ol> <p><b>Maintenance: Central Use Only</b></p> <ol style="list-style-type: none"> <li>1. Draw up 50ml aminophylline (25mg/ml) in a 50ml syringe using a filter needle</li> </ol>
<b>Administration</b>	<p><b>Loading Dose:</b> RDH: Use "Aminophylline Load" program on VP7000 pump QHB: Use "Aminophylline Loading only" program on EVO-IQ</p> <p><b>Peripheral Maintenance:</b> RDH: Use Aminophylline program on VP7000 pump QHB: Use "Aminophylline Maintenance" program on EVO-IQ</p> <p><b>Central Maintenance:</b> Use Aminophylline program on SP6000 syringe pump (RDH) or infuse via perfuser pump (QHB)</p>
<b>Shelf-life</b>	24hours at room temperature

<b>Common Compatibility Issues</b>	<p>Aminophylline has many incompatibilities. See ICU Compatibility chart or MEDUSA for more information.</p> <p>Aminophylline is also compatible in glucose 5%.</p>																				
<b>Additional information</b>	<p>Levels should be taken 24 hours after starting IV aminophylline therapy. The normal range is 10-20mg/L.</p> <p>Drugs such as ciprofloxacin and erythromycin may increase aminophylline levels after 5 days of concomitant therapy.</p> <p>Aminophylline can cause tachycardia so monitor heart rate closely. Aminophylline can cause potential serious hypokalemia when combined with beta2 agonist therapy.</p>																				
<b>Sample Label</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: yellow;"> <th colspan="4" style="text-align: center;">DRUGS ADDED TO THIS INFUSION</th> </tr> </thead> <tbody> <tr> <td colspan="3"> <b>PATIENT</b>  <i>A. Patient (A. Number)</i> </td> <td> <b>WARD</b>  <i>ICU</i> </td> </tr> <tr> <td> <b>DRUG</b>  <i>Aminophylline  in .....ml sodium chloride 0.9%</i> </td> <td> <b>AMOUNT</b>  <i>x mg  (.... mg/ml)</i> </td> <td> <b>ADD BY</b> </td> <td> <b>CHECKED BY</b> </td> </tr> <tr> <td> <b>DATE ADDED</b>  <b>TIME ADDED</b> </td> <td> <b>EXP. DATE</b>  <b>EXP. TIME</b> </td> <td colspan="2"> <b>BATCH No.</b> </td> </tr> <tr style="background-color: yellow;"> <td colspan="4" style="text-align: center;">DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS</td> </tr> </tbody> </table>	DRUGS ADDED TO THIS INFUSION				<b>PATIENT</b> <i>A. Patient (A. Number)</i>			<b>WARD</b> <i>ICU</i>	<b>DRUG</b> <i>Aminophylline  in .....ml sodium chloride 0.9%</i>	<b>AMOUNT</b> <i>x mg  (.... mg/ml)</i>	<b>ADD BY</b>	<b>CHECKED BY</b>	<b>DATE ADDED</b> <b>TIME ADDED</b>	<b>EXP. DATE</b> <b>EXP. TIME</b>	<b>BATCH No.</b>		DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS			
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### Documentation Controls

Development of Guideline:	Pharmacist – Critical Care & Theatres
Consultation with:	Pharmacy Department
Approved By:	<p>ICU Sister's Meeting June 2023</p> <p>ICU Risk &amp; Quality Meeting: August 2023</p> <p>Adult Drug Monograph process Written/Reviewed: Zain Ali, Critical Care Pharmacist Checked Matt Elliott / James Hooley, ePMA / Medicines Safety Pharmacist Dec 2023</p>
Review Date:	December 2026
Key contact:	Pharmacist – Critical Care & Theatres

### References

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**\*\*\* End of Monograph \*\*\***