

## Phenytoin

Phenytoin dosing is weight based; ensure accuracy of documented weight before administration									
<b>CAUTION: High Administration Risk Rating</b>									
<b>Form</b>	250mg in 5mL vial								
<b>Reconstitution</b>	Already in solution								
<b>Compatibility &amp; Stability</b>	Sodium Chloride 0.9% <b>ONLY</b>								
<b>Administration</b>	<p><b><u>IV Infusion (Loading Dose &amp; Maintenance Dose)</u></b></p> <p>Dilute required dose in sodium chloride 0.9% to a maximum of 10mg/mL. The infusion must be prepared immediately before use and infused within one hour using an <b>in-line filter</b> (0.22micron).</p> <p>Preferably administer via a central venous access device to avoid potential venous irritation. If given peripherally, choose a large vein and monitor the injection site closely.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="background-color: #e0f0ff;">Required Dose</th> <th style="background-color: #e0f0ff;">Volume of Infusion Fluid</th> </tr> </thead> <tbody> <tr> <td>Less than 500mg</td> <td>50mL</td> </tr> <tr> <td>500mg – 1000mg (loading doses)</td> <td>100mL</td> </tr> <tr> <td>Greater than 1000mg (loading doses)</td> <td>250mL</td> </tr> </tbody> </table> <p>Administer at a rate not exceeding 50mg per minute, e.g. 1g can be given over 20 minutes. Rate of 25 mg/minute or lower may be more appropriate in some patients (including the elderly and those with heart disease). Stability of the diluted solution is limited and precipitates may form.</p> <p><b><u>IV Injection (Maintenance doses)</u></b></p> <p>Phenytoin should be injected <b>slowly</b> into a large vein at a rate not exceeding 50mg per minute. Rate of 25 mg/minute or lower may be more appropriate in some patients (including the elderly and those with heart disease).</p>	Required Dose	Volume of Infusion Fluid	Less than 500mg	50mL	500mg – 1000mg (loading doses)	100mL	Greater than 1000mg (loading doses)	250mL
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<b>Monitoring</b>	<ul style="list-style-type: none"> <li>• Continuous monitoring of ECG and blood pressure is essential. The patient should be observed for signs of respiratory depression. Monitor for signs of cardiovascular collapse and CNS depression.</li> <li>• Phenytoin has a narrow therapeutic range; the usual total plasma-phenytoin concentration for optimum response is 10-20mg/L (or 40-80 micromol/L). Monitor levels twice weekly while on IV phenytoin or more frequently if needed. Phenytoin levels need to be corrected for albumin/renal failure</li> </ul>								
<b>Extravasation</b>	May cause tissue damage. Flush pre and post each dose with sodium chloride 0.9% to prevent phlebitis.								
<b>Additional Information</b>	<ul style="list-style-type: none"> <li>• Phenytoin is often administered as a <b>loading dose</b> (based on weight) followed by a smaller <b>maintenance dose</b>. Double check the correct dose has been prescribed.</li> <li>• Hypotension usually occurs with rapid IV administration of phenytoin.</li> <li>• There are numerous drug interactions with phenytoin – check BNF.</li> </ul>								

**Information provided relates to Epanutin® manufactured by Pfizer.**

*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*