Air Bubbles
It is important to ensure there are no air bubbles in your insulin cartridge when you change it. Check it every day to make sure that air bubbles have not appeared. If they do, they can be primed out. If they are not spotted there will be times when no insulin is delivered, which will lead to rising BGL.

How can I help reduce healthcare associated infections?
Infection control is important to the well-being of our patients and for that reason we have infection control procedures in place. Keeping your hands clean is an effective way of preventing the spread of infections. We ask that you, and anyone visiting you, use the hand sanitiser available at the entrance to every ward before coming in to or after leaving the ward. In some situations hands may need to be washed at the sink using soap and water rather than using the hand sanitiser. Staff will let you know if this is the case.

www.buckshealthcare.nhs.uk
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Management of Hyperglycaemia via a Pump

Information leaflet for Parents or Carers of a child with Diabetes
If you require a translation or alternative format of this leaflet please call Patient Advice & Liaisons Service (PALS) on 01296 316042

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Version: 2.0
Possible causes of High Blood Glucose Level (BGL)
Blockage or disconnection of infusion set or cannula falls out

Remember: insulin in the pump is rapid-acting so, if there is a blockage or disconnection of the tubing, or if the cannula has fallen out, the blood glucose will rise quickly.

**Pump failure**
Although the pump performs many checks a day, to ensure it is working, you need to check there is sufficient insulin in the pump, the battery is working and that the pump is in ‘run’.

**Cannula site**
Cannulas should be changed every 2-3 days, (depending on the usage). Sometimes they do not last quite as long as they should, which causes poor or variable absorption of the insulin so that they need changing sooner than is routine.

**Priming new cannulas**
When replacing a cannula, it is essential to prime the new cannula properly (especially for the Rapid D with the extension tube). If not, there will be a period of time when only air is delivered, not insulin, and will consequently cause the high blood glucose level to rise.

**Alarms**
The pump will alarm if there is a problem, such as an occlusion, & to warn that the battery or insulin cartridge is running low. If these alarms are ignored, perhaps they happen during the night & are not heard, & the pump runs out of insulin or the battery fails, the required insulin dose will not be delivered, which will cause high BGL. The warning alarms for low battery or low cartridge insulin gives plenty of time to change things if they are responded to promptly.

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Child feeling drowsy or vomiting go to nearest A&E or call 999

<table>
<thead>
<tr>
<th>Blood ketones less than 1.0 mmol/l</th>
<th>Blood ketones more than 1.0 mmol/l</th>
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</thead>
<tbody>
<tr>
<td>BGL falling</td>
<td>BGL falling</td>
</tr>
<tr>
<td>• Check for cause of high BGL</td>
<td>• Check for cause of high BGL</td>
</tr>
<tr>
<td>• Continue usual routine</td>
<td>• Continue usual routine</td>
</tr>
<tr>
<td>Less than 2 hours since last meal/insulin</td>
<td>More than 2 hours since last meal</td>
</tr>
<tr>
<td>Recheck BGL when 2 hours post meal/insulin</td>
<td>Check for cause of high BGL</td>
</tr>
<tr>
<td></td>
<td>Give correction via pump</td>
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<td></td>
<td>Check BGL in 1 hour</td>
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<tr>
<td></td>
<td>Recheck BGL &amp; blood ketones in 1 hour</td>
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<tr>
<td>BGL not falling</td>
<td>BGL not falling</td>
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<td></td>
<td>Contact diabetes team</td>
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**Possible causes of high BGL (See over for guidance)**