Insulin Storage and Stability

Manufacturer Vials and Pens

In response to inquiries from patients and healthcare providers, we have gathered storage and stability information from insulin manufacturers and the most current medical literature available. Varying non-referenced or clinically supported sources exist which can lead to confusion and possibly patient harm. The following charts serve as a referenced guide to the stabilities of insulin vials and pens after initial use and predrawn insulin syringes. Remember, as future information becomes available, you will need to validate the reference and update your clinical references accordingly. Information current as of May 30, 2002.

### Insulin Syringes Predrawn from Manufacturer Vials

#### Novolin and Humulin products as a single entity

- Predrawn syringe can be stored for 30 and 21 days, respectively, under refrigeration. 5

- No data is available on the stability of Humalog and Novolog products as a single entity predrawn syringe. 5

<table>
<thead>
<tr>
<th>Insulin Product with</th>
<th>Stability with</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humulin R, N</td>
<td>30 days</td>
<td>Standardize the interval between mixing and injection (~24 hours)</td>
</tr>
<tr>
<td>Humulin R, L</td>
<td>30 days</td>
<td>Store predrawn syringes in vertical position with needle pointing up to prevent clogging of the needle</td>
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</tbody>
</table>

**References:**

5. Information on specific insulin products were gathered from most recent package inserts and communication with manufacturing companies including Aventis, Eli Lilly and Company, and Novo Nordisk.