Long-term indwelling urinary catheters are expected to stay in for more than 28 days and up to 12 weeks. They are made from materials that can better resist rapid colonization by bacteria and encrusting by mineral deposits. The most common long-term catheters are made of silicone, latex core with a hydrogel or silicone-elastomer coating or silicone coated with hydrogel.

The selection of catheter material should be based on the expected duration of catheterization, client comfort, ease of insertion and removal and any history of allergies to catheter components.

<table>
<thead>
<tr>
<th>Catheter Material</th>
<th>Recommended Usage</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
</table>
| Silicone biocompatible with the urethral mucosa | Long-term, up to 12 weeks | Wider lumen for drainage  
May reduce the potential for encrustation  
Suitable for clients with latex allergy | Can be less flexible than latex coated catheters  
Balloon may shrink due to water loss through gas diffusion  
May have difficulty removing, due to “cuffing” of the balloon |
| Hydrogel coated latex  
hydrogel (a hydrophilic polymer used in contact lenses) absorbs water and forms a smooth coat on the catheter that is biocompatible with human tissue | Long-term, up to 12 weeks | May reduce friction on the urethra mucosal during insertion  
May reduce potential for encrustation | Unsuitable for clients who are allergic to latex |
| Silicone elastomer coated latex  
silicone bonding to outer and inner surfaces) has the biocompatible properties of silicone with the flexibility of latex | Long-term, up to 12 weeks | May help to reduce potential for encrustation  
May reduce mucosal irritation | Unsuitable for clients who are allergic to latex |
| Hydrogel coated silicone  
hydrogel (a hydrophilic polymer used in contact lenses) absorbs water and forms a smooth coat on the catheter that is biocompatible with human tissue | Long-term, up to 12 weeks | May reduce friction on the urethra mucosa during insertion  
Suitable for clients with latex allergy | Rigid material: may result in client discomfort |