**RB1 Germline Mutation Risk Before Genetic Testing**

**Unilateral Retinoblastoma**

<table>
<thead>
<tr>
<th>POPULATION</th>
<th>RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spouse of Index Case</td>
<td>Parent of Index Case</td>
</tr>
<tr>
<td>0.8% (8/1,000)</td>
<td>0.8% (8/1,000)</td>
</tr>
<tr>
<td>Parent of Index Case</td>
<td>Parent of Index Case</td>
</tr>
<tr>
<td>0.8% (8/1,000)</td>
<td>0.4% (4/1,000)</td>
</tr>
<tr>
<td>Child 1 of Index Case</td>
<td>Child 2 of Index Case</td>
</tr>
<tr>
<td>7.5% (7.5/100)</td>
<td>7.5% (7.5/100)</td>
</tr>
<tr>
<td>INDEX CASE</td>
<td>15% (15/100)</td>
</tr>
</tbody>
</table>

**Parent of Index Case**

- **Low Risk**
  - Parent of Index Case: 0.8% (8/1,000)

**Child of Index Case**

- **Intermediate Risk**
  - Child 1 of Index Case: 7.5% (7.5/100)
  - Child 2 of Index Case: 7.5% (7.5/100)

**Sibling of Index Case**

- **Low Risk**
  - Sibling of Index Case: 0.4% (4/1,000)

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![Diagram showing the risk of RB1 germline mutation in family members of an index case.](image)

**Populations with Intermediate Risk:**
- **1st Cousin of Index Case:** 0.05% (5/10,000)
- **2nd Cousin of Index Case:** 0.025% (2.5/10,000)
- **Sibling of Index Case:** 2.5% (2.5/100)
- **Niece/Nephew of Index Case:** 1.3% (1.3/100)

**Populations with Low Risk:**
- **Aunt/Uncle of Index Case:** 0.1% (1/1,000)

**Population Risk:**

\[
\text{Population Risk} = \frac{7}{100,000} = 0.007\%
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