Vaccine Development in History

**Time to Develop a Vaccine:** Duration between discovery of microbiologic cause of selected infectious diseases and development of a vaccine

<table>
<thead>
<tr>
<th>Disease</th>
<th>Year Range</th>
<th>Time to Develop Vaccine (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV</td>
<td>(1989–)</td>
<td>32 (Research ongoing)</td>
</tr>
<tr>
<td>COVID-19</td>
<td>(2020–2021)</td>
<td>1</td>
</tr>
<tr>
<td>Measles</td>
<td>(1953–1963)</td>
<td>10</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>(1965–1981)</td>
<td>16</td>
</tr>
<tr>
<td>HPV</td>
<td>(1984–2006)</td>
<td>22</td>
</tr>
<tr>
<td>Rotavirus</td>
<td>(1973–2006)</td>
<td>33</td>
</tr>
<tr>
<td>Pertussis</td>
<td>(1906–1948)</td>
<td>42</td>
</tr>
<tr>
<td>Polio</td>
<td>(1908–1955)</td>
<td>47</td>
</tr>
<tr>
<td>Typhoid</td>
<td>(1884–1899)</td>
<td>105</td>
</tr>
</tbody>
</table>