Supplementary Online Content


**eTable 1.** Prevalence of HPV Infection by Demographic Characteristics

**eTable 2.** HPV Infection in US Adult Men: Prevalence in the Population and in Defined Risk Groups

This supplementary material has been provided by the authors to give readers additional information about their work.
eTable 1. Prevalence of HPV Infection by Demographic Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Subgroup Total</th>
<th>n</th>
<th>Prevalence: Weighted % (95% CP CI)</th>
<th>P Value</th>
<th>n</th>
<th>Prevalence: Weighted % (95% CP CI)</th>
<th>P Value</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>All HPV infections</td>
<td></td>
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<td>HR DNA test</td>
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<td></td>
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<td></td>
<td>Prevalence: Weighted %</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(95% CP CI)</td>
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<td>(95% CP CI)</td>
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<tr>
<td>Men aged 18-59</td>
<td>1757</td>
<td>795</td>
<td>45.2 (41.3 – 49.3)</td>
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<td>447</td>
<td>25.1 (23.0 – 27.3)</td>
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<tr>
<td>Age in years</td>
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<tr>
<td>18 - 22</td>
<td>262</td>
<td>75</td>
<td>28.9 (22.2 – 36.8)</td>
<td>&lt;.001</td>
<td>51</td>
<td>17.7 (11.2 – 25.9)</td>
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<tr>
<td>23 - 27</td>
<td>213</td>
<td>104</td>
<td>46.5 (38.4 – 54.7)</td>
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<td>31.1 (22.5 – 40.7)</td>
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<td>28 - 32</td>
<td>218</td>
<td>114</td>
<td>50.8 (40.1 – 61.5)</td>
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<td>64</td>
<td>27.9 (20.0 – 36.9)</td>
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<tr>
<td>33 - 37</td>
<td>195</td>
<td>87</td>
<td>43.1 (35.8 – 50.8)</td>
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<td>50</td>
<td>24.9 (18.9 – 31.9)</td>
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<td>38 - 42</td>
<td>198</td>
<td>82</td>
<td>41.8 (33.7 – 50.4)</td>
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<td>41</td>
<td>19.2 (14.0 – 25.4)</td>
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<tr>
<td>43 - 47</td>
<td>204</td>
<td>95</td>
<td>47.2 (39.9 – 54.7)</td>
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<td>48</td>
<td>25.3 (18.7 – 32.8)</td>
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<td>48 - 52</td>
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<td>100</td>
<td>50.0 (43.1 – 56.9)</td>
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<td>22.5 (16.8 – 29.0)</td>
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<td>53 - 57</td>
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<td>47.2 (38.2 – 56.4)</td>
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<td>26.2 (17.9 – 35.9)</td>
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<tr>
<td>58 - 59</td>
<td>77</td>
<td>46</td>
<td>59.7 (44.5 – 73.3)</td>
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<td>37.5 (21.9 – 55.4)</td>
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<td>Race/Ethnicity</td>
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<td>Hispanic</td>
<td>402</td>
<td>175</td>
<td>44.4 (37.7 - 51.3)</td>
<td>&lt;.001</td>
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<td>21.9 (18.0 – 26.3)</td>
<td>&lt;.001</td>
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<td>Non-Hispanic White</td>
<td>714</td>
<td>314</td>
<td>43.7 (38.1 – 49.6)</td>
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<td>185</td>
<td>24.7 (21.5 – 28.0)</td>
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<td>Non-Hispanic Black</td>
<td>362</td>
<td>230</td>
<td>65.0 (59.7 – 70.0)</td>
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<td>143</td>
<td>40.2 (35.1 – 45.5)</td>
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<td>Non-Hispanic Asian</td>
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<td>24.4 (18.4 – 31.5)</td>
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<td>25</td>
<td>12.2 (7.2 – 18.8)</td>
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<td>Other Race - Including Multi-</td>
<td>70</td>
<td>24</td>
<td>41.0 (24.7 – 59.4)</td>
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<td>10</td>
<td>17.4 (8.04 – 30.8)</td>
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<tr>
<td>Racial</td>
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<td>Marital Status</td>
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<tr>
<td>Married</td>
<td>821</td>
<td>321</td>
<td>39.1 (33.6 – 44.8)</td>
<td>&lt;.001</td>
<td>144</td>
<td>18.2 (15.6 – 21.1)</td>
<td>&lt;.001</td>
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<td>Widowed, Divorced, Separated</td>
<td>184</td>
<td>117</td>
<td>63.6 (55.3 – 71.3)</td>
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<td>75</td>
<td>42.0 (34.8 – 49.5)</td>
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<tr>
<td>Never married</td>
<td>447</td>
<td>217</td>
<td>48.7 (42.4 – 55.1)</td>
<td></td>
<td>139</td>
<td>29.7 (23.8 – 36.1)</td>
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<tr>
<td>Living with partner</td>
<td>170</td>
<td>113</td>
<td>62.5 (53.4 – 70.8)</td>
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<td>70</td>
<td>39.2 (29.2 – 49.9)</td>
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<td>Education</td>
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<tr>
<td>&lt;High School</td>
<td>380</td>
<td>174</td>
<td>46.4 (39.2 – 53.7)</td>
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<td>100</td>
<td>25.4 (19.9 – 31.6)</td>
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<td>High School or GED</td>
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<td>223</td>
<td>53.7 (47.1 – 60.2)</td>
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<td>142</td>
<td>33.9 (29.5 – 38.5)</td>
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<tr>
<td>&gt;High School</td>
<td>936</td>
<td>397</td>
<td>41.4 (36.4 – 46.6)</td>
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<td>21.4 (18.2 – 24.8)</td>
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<td>Household Income</td>
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<td>Below poverty level</td>
<td>388</td>
<td>189</td>
<td>52.9 (45.3 – 60.4)</td>
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<td>123</td>
<td>34.8 (28.1 – 41.9)</td>
<td>.01</td>
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<tr>
<td>At or above poverty level</td>
<td>1230</td>
<td>555</td>
<td>44.2 (39.3 – 49.3)</td>
<td></td>
<td>297</td>
<td>23.8 (21.1 – 26.5)</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Subgroup</th>
<th>n</th>
<th>Prevalence: Weighted % (95% CP CI)</th>
<th>P Value</th>
<th>n</th>
<th>Prevalence: Weighted % (95% CP CI)</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Smoking Status</strong>&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Current Smoker</td>
<td>476</td>
<td>60.6 (52.3 - 68.3)</td>
<td>.05</td>
<td>154</td>
<td>32.0 (27.1 – 37.3)</td>
<td>.35</td>
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<td></td>
<td>Non-Smoker</td>
<td>334</td>
<td>50.9 (45.0 - 56.7)</td>
<td></td>
<td>89</td>
<td>28.3 (23.5 – 33.4)</td>
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<tr>
<td><strong>Circumcision</strong>&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Circumcised</td>
<td>1068</td>
<td>47.5 (43.1 - 51.9)</td>
<td>.03</td>
<td>311</td>
<td>27.2 (24.1 – 30.5)</td>
<td>.01</td>
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<tr>
<td></td>
<td>Uncircumcised</td>
<td>452</td>
<td>43.2 (39.1 - 47.5)</td>
<td></td>
<td>91</td>
<td>20.6 (17.0 – 24.7)</td>
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<tr>
<td><strong>Age when first had sex</strong>&lt;sup&gt;b&lt;/sup&gt;</td>
<td>&lt;16 yrs old</td>
<td>540</td>
<td>52.1 (46.7 - 57.4)</td>
<td>&lt;.001</td>
<td>169</td>
<td>29.2 (23.8 – 35.1)</td>
<td>.02</td>
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<tr>
<td></td>
<td>16-18 yrs old</td>
<td>390</td>
<td>43.1 (35.0 - 51.4)</td>
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<td>88</td>
<td>22.8 (18.1 – 28.0)</td>
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<tr>
<td></td>
<td>&gt;18 yrs old</td>
<td>373</td>
<td>32.2 (25.7 - 39.4)</td>
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<td>61</td>
<td>15.9 (10.1 – 23.3)</td>
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<tr>
<td><strong>Lifetime number of sexual partners</strong>&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0</td>
<td>4</td>
<td>ND</td>
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<td>1 ND</td>
<td>1</td>
<td>ND</td>
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<td>2-5</td>
<td>20</td>
<td>34.9 (14.0 - 64.0)</td>
<td>3</td>
<td>7</td>
<td>7.4 (0.5 – 28.3)</td>
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<td></td>
<td>6-10</td>
<td>16</td>
<td>77.0 (43.4 - 93.6)</td>
<td>5</td>
<td>3</td>
<td>34.1 (10.5 – 65.5)</td>
<td></td>
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<tr>
<td></td>
<td>&gt;10</td>
<td>45</td>
<td>58.4 (43.4 - 71.9)</td>
<td>19</td>
<td>19</td>
<td>39.6 (25.4 – 55.3)</td>
<td></td>
</tr>
</tbody>
</table>

b. Does not sum to 1757 due to non-response or participant indicating “Don’t know”. This sample after application of sampling weights represents over 73 million men in the non-institutionalized US population. Data are unweighted frequencies; estimated prevalence and 95% confidence intervals are weighted.
c. Positive for at least one of the HPV genotypes in the HR HPV DNA test: 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68.
d. The unweighted sample (n=1757) represents a weighted sample of 76.9 million US non-institutionalized men.
**eTable 2.** HPV Infection in US Men: Prevalence in the Population and in Defined Risk Groups

<table>
<thead>
<tr>
<th>HPV Infection Status</th>
<th>Men 18-59</th>
<th></th>
<th></th>
<th>HPV Vaccine Eligible Men (Age 18-32)</th>
<th></th>
<th></th>
<th>HPV Vaccine Non-Eligible Men (Age 33-59)</th>
<th>P Value&lt;sup&gt;a&lt;/sup&gt;</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Weighted % (95% CI)</td>
<td>n</td>
<td>Weighted % (95% CI)</td>
<td>n</td>
<td>Weighted % (95% CI)</td>
<td>n</td>
<td>Weighted % (95% CI)</td>
</tr>
<tr>
<td>Positive</td>
<td>795</td>
<td>45.2 (41.3 – 49.3)</td>
<td>293</td>
<td>42.2 (36.4 – 48.2)</td>
<td>502</td>
<td>47.1 (42.4 – 51.8)</td>
<td>.11</td>
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<tr>
<td>Negative</td>
<td>962</td>
<td>54.8 (50.7 – 58.7)</td>
<td>400</td>
<td>57.8 (51.8 – 63.6)</td>
<td>562</td>
<td>52.9 (48.2 – 57.6)</td>
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<tr>
<td>Total</td>
<td>1757</td>
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<td>693</td>
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<td>1064</td>
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<td>Risk Groups</td>
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<td></td>
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<tr>
<td>High Risk&lt;sup&gt;b&lt;/sup&gt;</td>
<td>518</td>
<td>30.5 (28.1 – 33.0)</td>
<td>210</td>
<td>29.5 (25.0 – 34.3)</td>
<td>308</td>
<td>29.1 (26.4 – 33.0)</td>
<td>.88</td>
<td></td>
</tr>
<tr>
<td>Low Risk</td>
<td>277</td>
<td>16.0 (13.4 – 18.9)</td>
<td>83</td>
<td>12.7 (9.1 – 17.1)</td>
<td>194</td>
<td>18.0 (14.4 – 22.0)</td>
<td>.05</td>
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<td>4vHPV&lt;sup&gt;c&lt;/sup&gt;</td>
<td>152</td>
<td>8.5 (7.1 – 10.0)</td>
<td>56</td>
<td>7.1 (5.1 – 9.5)</td>
<td>96</td>
<td>9.3 (7.3 – 11.6)</td>
<td>.16</td>
<td></td>
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<td>9vHPV&lt;sup&gt;d&lt;/sup&gt;</td>
<td>271</td>
<td>15.1 (13.7 – 16.6)</td>
<td>107</td>
<td>15.4 (11.7 – 19.6)</td>
<td>155</td>
<td>14.6 (12.5 – 16.9)</td>
<td>.83</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> p values from Rao-Scott chi square tests compare HPV-vaccine eligible and non-eligible males as defined in Methods.

<sup>b</sup> The High Risk category includes those co-infected with both High and Low Risk HPV genotypes.

<sup>c</sup> 4vHPV includes infection by one or more of the HPV types covered by the quadrivalent form of Gardasil (types 6,11,16, and 18).

<sup>d</sup> 9vHPV includes infection by one or more of the HPV types covered by the 9-valent form of Gardasil (types 6,11,16, 18, 31, 33, 45, 52, and 58).