Current National Capacity Projections. (Tests / Month)

<table>
<thead>
<tr>
<th></th>
<th>March 2021</th>
<th>June 2021</th>
<th>September 2021</th>
<th>December 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>349M</td>
<td>379M</td>
<td>477M</td>
<td>672M</td>
</tr>
</tbody>
</table>

What Happened Last Week

The FDA issued 1 new EUA, 4 amendments, and no new safety communications in the last week:

- **New EUAs (1):**
  - Flu/RSV Panel: Cepheid

- **New Amendments to Existing EUAs (4):**
  - Molecular Tests: Assurance Scientific Labs DTC
  - Antigen Tests: Quanterix Simoa
  - Serology Tests: Ortho-Clinical Diagnostics IgG | Siemens ADVIA Total Ab

New & Noteworthy

*Biden tells the nation that testing is critical and it’s time to step it up….*

Last Thursday, President Biden reset the nation’s strategy with a renewed and stronger focus on vaccination and testing with his new COVID-19 action plan. Test manufacturers and distributors will play a central role in the critical testing-related elements:

- Use of the Defense Production Act to procure nearly $2 billion worth of rapid point-of-care and OTC at-home COVID tests - 280 million tests in all.
- An effort to make at-home tests more affordable, including a commitment from Walmart, Amazon, and Kroger to sell those types of test at cost for three months; (We confirmed on Walmart.com: BINAXNow, InteliSwab, Ellume Home are now 30% less than last week - $14, $14, and $26, respectively.)
- Expansion of the HHS free testing program, making free COVID-19 tests available at 10,000 retail pharmacies.

**Commentary:** This move is definitely a big step in the right direction for testing in this country. However, it’s not clear how some test manufacturers, who are already struggling to keep up with demand, will handle this new push. Given the continued challenge from Delta, even among the fully vaccinated, and the continued reality that maybe 40% of those who are infectious have no symptoms - testing is our best hope for slowing the spread. We hope that the right incentives and infrastructure are quickly put in place to ensure that tests become easily and readily available to all.

*… and this time, COVID testing is here to stay*

A Nephron Research Diagnostics Industry Buy Side Sentiment Survey indicates that 39% believe that COVID testing will likely continue into the long-term future, though current very high levels of demand probably won’t persist. Why the change from previous predictions? As we’ve said before, this disease isn’t going anywhere - it’s on its way to becoming endemic. And as long as it’s around at all, we’re going to need to test for it, even if it is “just” for outbreak control and to differentiate COVID from flu.
ASU workplace survey shows a working world changed by the pandemic

The third and final survey from ASU Workplace Commons, with support from The Rockefeller Foundation, showed many positive indicators from a public-health perspective. However, evidence of the nation’s deep divisions remains, as well as an oddly persistent lack of improvement in emergency preparedness. The highlights:

- Employers showed overwhelming support for vaccination, with 93% reporting that they require or encourage employees to be vaccinated against COVID-19.
- Workplace COVID-19 testing has seen a steady rise, with 70% of employers now reporting that they test all or some of their workforce.
- Most employers had resignations due to COVID workplace policies. The reasons showed both sides of the spectrum:
  - 59% because COVID safety policies weren’t strict enough (17%) or were absent altogether (42%),
  - 39% because employees felt those policies were too strict.

The Future of Work is changing:

- A majority of employers (61%) intend to allow employees to work from home through the end of 2021.
- 66% plan to offer more flexibility by expanding work-from-home policies even after the pandemic ends.
- Employee mental health has become a top priority for 73% of companies.

However, the percentage of companies that now have emergency response plans in place hasn’t changed as much as we expected (up only 6% from pre-pandemic rates, to 75% as of 2021).

Kids are being swept up by the Delta wave …

The number of kids being hospitalized due to COVID-19 is higher than it’s ever been. Between June and August 2021, the rate of pediatric hospitalization went up 5x; for kiddos age 0 - 4 it went up 10x. However, there are two faint glimmers of hope, per recent CDC research and epidemiologist Katelyn Jetelina.

- Kids in states with high levels of vaccination were 4x less likely to be hospitalized than kids in states with low levels of vaccination.
- “The rate [at] which kids died, were admitted to the ICU, [or] needed oxygen or ventilation was not statistically different during Delta compared to before Delta.” This data tells us Delta isn’t any more severe in kids than previous variants were - those unprecedented rates of hospitalization are happening because so many more people are getting infected, including kids.

… and yet not enough school districts are testing.

A disheartening Washington Post survey of the country’s 20 largest school districts found that only 20% have asymptomatic screening programs in place. Another survey of 100 districts, by the Center on Reinventing Public Education and the University of Washington, found that only 15 had regular testing programs.

Food for Thought

K-12 Metrics:

Burbio’s School Opening Tracker has transformed into a tracker of school disruptions. In the 2021-2022 school year to date, they’ve identified “just under 1,700 in-person school closures (up from 1,400 last week) across 386 districts (from 278) in 38 states (from 35).” As we discussed here two weeks ago, in this environment, it is important for schools / districts to consider Test to Stay policies. Such policies allow close in-school contacts of a positive person to come to school, provided they test negative each day on a rapid test (typically for five days). The process keeps more kids in school instead of having to quarantine.

The other key metric is Mask Policies:

- States with Masks Required: 40.5%
- States with Local Flexibility: 32.5%
- States with Masks Banned: 9.6%
- States with Mask Ban in Legal Limbo: 17.5%

Higher Ed vaccine mandates:

The Chronicle of Higher Education now counts 1,030 colleges and universities that will require vaccines for the fall semester, up from 1,014 two weeks ago.
### Latest Monthly Capacity Estimates

Estimated Monthly Capacity of All Tests (M)

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Sep '20</th>
<th>Dec '20</th>
<th>Jan '21</th>
<th>Feb '21</th>
<th>Mar '21</th>
<th>Apr '21</th>
<th>May '21</th>
<th>Jun '21</th>
<th>Jul '21</th>
<th>Aug '21</th>
<th>Sep '21</th>
<th>Oct '21</th>
<th>Nov '21</th>
<th>Dec '21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antigen Point of Care EUA Today</td>
<td>28</td>
<td>95</td>
<td>111</td>
<td>131</td>
<td>145</td>
<td>157</td>
<td>166</td>
<td>168</td>
<td>183</td>
<td>159</td>
<td>168</td>
<td>165</td>
<td>167.5</td>
<td>172.5</td>
</tr>
<tr>
<td>Home / Self Tests EUA Today</td>
<td>0</td>
<td>2</td>
<td>6</td>
<td>7</td>
<td>17</td>
<td>12</td>
<td>24</td>
<td>34</td>
<td>45</td>
<td>76</td>
<td>93</td>
<td>94</td>
<td>102</td>
<td>127</td>
</tr>
<tr>
<td>Molecular Point of Care EUA Today</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>19</td>
<td>14</td>
<td>16</td>
<td>16</td>
<td>18</td>
<td>28</td>
</tr>
<tr>
<td><strong>Subtotal POC &amp; Home EUA Today</strong></td>
<td>32</td>
<td>103</td>
<td>125</td>
<td>147</td>
<td>174</td>
<td>181</td>
<td>203</td>
<td>216</td>
<td>247</td>
<td>249</td>
<td>277</td>
<td>275</td>
<td>288</td>
<td>328</td>
</tr>
<tr>
<td>Antigen Point of Care Future</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>16</td>
<td>69</td>
<td>74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home / Self Tests Future</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>35</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>Molecular Point of Care Future</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal POC &amp; Home Future</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>31</td>
<td>56</td>
<td>139</td>
<td>158</td>
</tr>
<tr>
<td>Total POC &amp; Home</td>
<td>32</td>
<td>103</td>
<td>125</td>
<td>147</td>
<td>174</td>
<td>181</td>
<td>203</td>
<td>216</td>
<td>247</td>
<td>249</td>
<td>308</td>
<td>331</td>
<td>427</td>
<td>486</td>
</tr>
<tr>
<td>Antigen Central Lab Today</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>2</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Antigen Central Lab Future</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>9</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Lab Based PCR Today</td>
<td>75</td>
<td>100</td>
<td>100</td>
<td>105</td>
<td>115</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>125</td>
<td>125</td>
</tr>
<tr>
<td>Add'l Lab Based PCR with Pooling</td>
<td>0</td>
<td>0</td>
<td>25</td>
<td>38</td>
<td>48</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>34</td>
<td>24</td>
<td>25</td>
<td>25</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td><strong>Total Central Lab</strong></td>
<td>75</td>
<td>100</td>
<td>128</td>
<td>150</td>
<td>170</td>
<td>178</td>
<td>178</td>
<td>172</td>
<td>162</td>
<td>154</td>
<td>169</td>
<td>169</td>
<td>186</td>
<td>186</td>
</tr>
<tr>
<td><strong>Total Current &amp; Future</strong></td>
<td>107</td>
<td>203</td>
<td>253</td>
<td>297</td>
<td>344</td>
<td>360</td>
<td>381</td>
<td>389</td>
<td>409</td>
<td>403</td>
<td>477</td>
<td>500</td>
<td>613</td>
<td>672</td>
</tr>
</tbody>
</table>

### Estimated Future Capacity by Test Type

![Estimated Future Capacity by Test Type](chart.png)

**Editors**
Mara G. Aspinall, Arizona State University  
Liz Ruark, COVID-19 Response Advisors

**Contributors**
Simon Johnson, Massachusetts Institute of Technology  
Sarah Igoe, MD, Arizona State University

**Designer**
Fer Sagastume, COVID-19 Response Advisors

*Based on published reports, company interviews, and proprietary analysis*  
A collaboration between COVID-19 Response Advisors & Health Catalysts Group  
[www.covidresponseadvisors.org](http://www.covidresponseadvisors.org) & [www.healthcatalysts.com](http://www.healthcatalysts.com)