Webinar: Update on the Covid-19 National Testing Strategy and Lab Capacity
Our National Effort for Diagnostics

Rt Hon Matthew Hancock MP
Secretary of State for Health and Social Care
# Today’s Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:55-15:10</td>
<td>National Testing Strategy, Pillars 3&amp;4</td>
<td>Tamsin Berry – Director, Department for Health and Social Care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q&amp;A</td>
</tr>
<tr>
<td>15:10-15:25</td>
<td>National Testing Strategy, Pillars 1&amp;2</td>
<td>Dr. Sam Roberts - COVID-19 Director of Testing Supplies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q&amp;A</td>
</tr>
<tr>
<td>15:25-15:55</td>
<td>Update on Lab Capacity</td>
<td>Future strategy – Catherine Byers, Deputy Director, Covid-19 National Testing Programme, The Department for Health and Social Care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NHS lab capacity, an update on progress to date – David Wells, Head of Pathology COVID-19 Testing Cell</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Switching large animal and food labs to Covid-19 testing – Professor Gideon Henderson, Chief Scientific Advisor, The Department for Environment, Food and Rural Affairs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Current triage process for offers of lab capacity - Paul Webster, Validation Lead, New Lab Capacity Team</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Explanation of the Triage Process - Paul Chambers, Deputy Director, COVID-19 Testing Triage Team</td>
</tr>
<tr>
<td>15:55-16:00</td>
<td>Close</td>
<td>Close- Lord Bethell</td>
</tr>
</tbody>
</table>


The National Testing Strategy:
Pillars 3&4: Mass antibody testing

Tamsin Berry
Covid-19 Director, Department of Health and Social Care
Our National Testing Strategy

The strategy was announced by the Secretary of State on 2nd April and has 5 key strands:

- **Pillar 1**: Scaling up NHS swab testing for those with a medical need and, where possible, the most critical key workers.
- **Pillar 2**: Mass-swab testing for critical key workers in the NHS, social care and other sectors.
- **Pillar 3**: Mass-antibody testing to help determine if people have immunity to coronavirus.
- **Pillar 4**: Surveillance testing to learn more about the disease and help develop new tests and treatments.
- **Pillar 5**: Spearheading a Diagnostics National Effort to build a mass-testing capacity at a completely new scale.
The third pillar in the Government’s testing strategy is antibody testing: we are focused on at scale home-based testing to confirm whether people have had the virus and are producing antibodies.

We are actively considering market-based solutions, however, so far, tests that have gone through the validation process have not proven accurate enough to be rolled out for public use to provide individualised results. Information on the methodology and results of the validation process is on BioArchive now. We continue to review new tests as they become available.

In the meantime, we have put out a call to arms to the British diagnostic industry to support efforts to develop a home-grown test.

Self organising, Industry has already responded impressively to this call to arms, with:
- 1) the UK Rapid Test Consortium (UK-RTC) to design and develop a bespoke Lateral Flow Point of Care Test, and
- 2) proposals for a high throughput ELISA - We are working with the NHS, PHE and industry partners to explore how high-throughput serological tests might facilitate better understanding of sero-prevalence across the country.

If we can find a test that meets our high clinical standards we hope to deploy antibody testing kits in large numbers.
Q&A
Update on Pillars 1&2 Testing Supplies

Dr Sam Roberts
Covid-19 Director of Testing Supplies
Our National Testing Strategy - Update

The strategy was announced by the Secretary of State on 2nd April and has 5 key strands

‘Pillar 1’: Scaling up NHS swab testing for those with a medical need and, where possible, the most critical key workers

‘Pillar 2’: Mass-swab testing for critical key workers in the NHS, social care and other sectors

‘Pillar 3’: Mass-antibody testing to help determine if people have immunity to coronavirus

‘Pillar 4’: Surveillance testing to learn more about the disease and help develop new tests and treatments

‘Pillar 5’: Spearheading a Diagnostics National Effort to build a mass-testing capacity at a completely new scale
Update on novel solutions challenge

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Submissions</th>
<th>Ready to be Routinely Deployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Swabs for use in virus detection</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>Transport Media that inactivates the virus</td>
<td>34</td>
<td>2</td>
</tr>
<tr>
<td>Desktop PCR equipment for Point of Care Testing</td>
<td>53</td>
<td>1</td>
</tr>
<tr>
<td>RNA extraction: New Methods</td>
<td>50</td>
<td>11</td>
</tr>
<tr>
<td>Low volume blood collection</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>Number of submissions = 183</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of registered users on platform = 617</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

✓ 1 Desktop PoCT test in contracting phase
✓ 5 routinely deployed RNA extraction methods distributed to diagnostics community on 17th April
✓ First meeting with pathology networks to discuss feedback and scale up 24th April
✓ Remaining routinely deployed methods for distribution this week
Q&A
Update on Lab Capacity: Future strategy

Catherine Byers
Deputy Director, COVID-19 National Testing Programme
Department of Health and Social Care
Phased-wave approach to Laboratory Capacity

Wave 1 Laboratories
ISO 15189 Accreditation; Independence of Supply; Already working with the NHS or can transpose their equipment into an NHS Trust

Wave 2a Laboratories
ISO 15189 Accreditation; Independence of Supply; not currently working with the NHS but it would be possible for them to set up the connection with NHS IT systems

Wave 2b Laboratories
Assurance that operating near ISO 15189 practice; Independence of Supply; Already working with the NHS

Wave 3 Laboratories
Assurance that operating near ISO 15189 practice; Independence of Supply; not currently working with the NHS

Wave 4 Laboratories
Any Accreditation; No Independence of Supply; May or may not be working with the NHS

Increase in Demand for Testing Capacity & Increase in Availability of Supplies
Future strategy of Laboratory Capacity

We currently have the capacity in place for 100k a day via:-
  • PHE/NHS pathology network
  • Lighthouse laboratories
  • Laboratory capacity programme

We have a line of sight to increase to 150-200k tests a day via maximising the current capacity, and bringing on more Wave 1 & Wave 2 labs

We are considering options to get to 250k tests a day and beyond.

Looking to the future, issues to consider include;
  • How to make best use of Wave 3 and Wave 4 labs
  • The right mix of national provision and local provision
  • How best to create surge capacity
  • The role of industry
  • How to develop innovative solutions, backed by the right tech

We want to engage with you on how we do all of this via the Webinars and bespoke stakeholder discussions
Update on Lab Capacity: NHS Lab Capacity

David Wells

Head of Pathology, COVID-19 Testing Cell
**NHS Lab Capacity**

- NHS and PHE Laboratories building capacity with a secure supply chain.
- NHS Laboratories using a mix of suppliers from a broad base.
- All assays are fully validated and controlled, commercial CE marked kits are used in preference.
- Containment Level 3 workflow has been an issue. Although 2+ containment with risk assessment is possible.
- Instrument capacity is not an issue.
- Workforce constraints are not yet being felt.
- All NHS / PHE Laboratories are exploring new ways of increasing capacity through innovation.
NHS Lab Capacity – What we are looking for?

- Laboratories with experience of undertaking Human diagnostic and screening activities. Registered with CQC and proficient at working to ISO 15189 or ISO 17025 accreditation.

- Laboratories with experience of undertaking non-human diagnostic and screening activities. Proficient at working to ISO 17025 accreditation or similar.

- Laboratories working with equipment and supplies independent of the NHS supply chain.

- Laboratories with existing IT links into the NHS

- Laboratories with experience in virology, molecular diagnostics, innovation and R&D.

- Organisations with innovative and scalable technologies...
Update on Lab Capacity: Switching large animal and food labs to Covid-19 testing

Professor Gideon Henderson
Chief Scientific Adviser
The Department for Environment, Food and Rural Affairs
• The Defra Group is responsible for protecting and enhancing the natural environment. It’s laboratory capability encompasses:
  • Supporting the food and farming industry
    i. Food safety & contamination testing, monitoring veterinary residues
  • Protecting animal & plant health and welfare
    i. Identifying and controlling exotic & endemic pests and diseases in plants (e.g. Xylella) and animals (e.g. Avian Influenza)
    ii. Surveillance of pests and diseases in plants and animals
    iii. Responding to disease outbreak emergencies (e.g. Foot and Mouth)
  • Environmental monitoring
### Defra Arm’s Length Bodies

<table>
<thead>
<tr>
<th><strong>APHA</strong> (Animal and Plant Health Agency)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Equipment, expertise and staff to Milton Keynes facility</td>
</tr>
<tr>
<td>• Remaining capacity for ~6,000 tests/day, exploring data management with the NHS</td>
</tr>
<tr>
<td>• Manufacturing own reagents to reduce supply chain pressure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Fera</strong> (Fera Science Ltd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Equipment to Glasgow facility</td>
</tr>
<tr>
<td>• Remaining capacity for ~800 tests/day, exploring data management with local PHE laboratory</td>
</tr>
<tr>
<td>• Validation programme for alternative diagnostic methods (LAMP)</td>
</tr>
<tr>
<td>• Pool of volunteer scientists to support NHS Teaching Lab in Leeds</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Cefas</strong> (Centre for Environment, Fisheries and Aquaculture Science)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Equipment to Randox facility</td>
</tr>
<tr>
<td>• PPE to NHS facilities in Dorset region</td>
</tr>
<tr>
<td>• Additional equipment and expertise submitted through the DHSC portal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>EA</strong> (Environment Agency)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Engaging with NHS facilities in Exeter region</td>
</tr>
<tr>
<td>• Equipment and expertise submitted through the DHSC portal</td>
</tr>
</tbody>
</table>
Update on Lab Capacity: Current Triage Process for Laboratory Capacity Offers

Paul Webster
Validation Lead, New Lab Capacity Team
Triage Process for Laboratory Capacity Offers


Email: covid19triageservice@nhsbsa.nhs.uk
Phone: UK: 0800 915 9965
outside UK: 0191 264 2321

Submissions via Offer Portal
Submissions via other routes

Database
Collation of offers from multiple sources

Triage
Assessment of offers to determine which wave they fall into

New Lab Capacity Sub-Group*
Decisions based on recommendations from Triage process

Stakeholder Communications
Clarification requests or advice on next steps

New Lab Capacity Group*
Ratification of sub-group decisions

* Expert review panels
Explanation of the Triage Process

Paul Chambers
Deputy Director, COVID-19 Testing Triage Team
Running these calls and future communications

The response from industry has been huge – but in order to ensure we can quickly respond to specific/deliverable offers – we are ramping up resource and putting new systems in place.

If you have an **offer** in response to **specific calls**

- All information on [https://www.gov.uk/coronavirus-testing](https://www.gov.uk/coronavirus-testing)
- Link through to specific web forms to collect info we need
- Dedicated triage and case management team – backed by expert panels

If responding to our future pillar 5 calls or have other offers

- Respond to email address below
- Triage teams will review - and respond asap – but unless a specific offer on immediate need – may take a bit of time.

For further information

- Gov.uk testing page continue to be updated with further calls
- Future webinars, and information will be run on other strands (agenda tbc)

*COVID19triareservice@nhsbsa.nhs.uk*

0800 9159965
Additional Resources

- Coronavirus (COVID-19) scaling up testing programmes

- Help the government increase coronavirus (COVID-19) testing capacity, a link to the specific web form to collect information we need

- As highlighted in the webinar, in partnership with Crowdicity, we have launched a testing methods sourcing platform to collect ideas on our specific challenges [https://testingmethods.crowdicity.com/](https://testingmethods.crowdicity.com/)


- Professor Sir John Bell’s full paper outlined in the presentation last week has been published and can be found here: [https://www.medrxiv.org/content/10.1101/2020.04.15.20066407v1](https://www.medrxiv.org/content/10.1101/2020.04.15.20066407v1)
Close

Lord Bethell of Romford
Parliamentary Under Secretary of State, Department of Health and Social Care