Title: Test and Trace Paper – NPHET

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Organisation: HSE
Date: 26th May 2021

Action required:
☐ For noting
☑ For discussion
☐ For decision

Approved for future publication: YES/NO (remove as applicable)
Testing and Tracing Paper, 26th of May 2021

Updates are provided below regarding the following aspects of Testing and Contact Tracing:

1) Testing and Tracing new initiatives
2) Activity levels across referrals, sampling, laboratory testing and contact tracing
3) Turnaround Times
4) Testing Programmes
5) Recruitment

Please Note: As a result of the current climate and the limited access to HSE data, several data points within the paper could not be updated. Included in this paper are the most recent available figures. Where data has been affected by the recent outages, this will be accounted for retrospectively in future reports.

1. Testing and Tracing new Initiatives

We are currently working on 5 new key initiatives to the testing and tracing programme of work.

i. Source Investigation/Backwards Tracing
Also known as Enhanced/Retrospective Contact Tracing. The aim of Source Investigation is to quickly establish the source of an index patient’s infection and proactively identify other patients who may have been exposed to the virus but are yet to display symptoms. The CMP commenced Source Investigation on April 5th. Between Tuesday 18th and Monday 24th May, CTCs have completed 423 source investigations. This equates to approx. 13.7% of all Call 1s. The CMP continues to monitor these stats to validate whether all cases which meet the criteria have a Source Investigation initiated.

<table>
<thead>
<tr>
<th>May-18</th>
<th>May-19</th>
<th>May-20</th>
<th>May-21</th>
<th>May-22</th>
<th>May-23</th>
<th>May-24</th>
<th>7-Day Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday</td>
<td>Wednesday</td>
<td>Thursday</td>
<td>Friday</td>
<td>Saturday</td>
<td>Sunday</td>
<td>Monday</td>
<td>Source investigations</td>
</tr>
<tr>
<td>59</td>
<td>81</td>
<td>55</td>
<td>69</td>
<td>56</td>
<td>55</td>
<td>48</td>
<td>423</td>
</tr>
</tbody>
</table>

ii. Alternative referral pathways for testing
As of 25th May, pop up walk-in centres are operational in Blanchardstown, Ballymun and Naas. Additional pop-up walk-in testing centres will open in Limerick on 26th May, Athlone 28th May and Drogheda 29th May. Due to recent events, all static sites continue to operate in a walk-in capacity as there are no GP referrals taking place. The self-referral portal in on track to be piloted w/c 31st May. Development is underway to build a portal that will facilitate travellers due to arrive in the country to book a test between day 5 and day 7 of arrival.
iii. **Approach to Antigen testing pilot in schools/third level**

Operational planning is underway, and the project team has developed a Guidance Document, Training programme and other related templates and resources to support the Antigen testing pathway for educational facilities. Stakeholder engagement is ongoing with DOE, HEA and Department of Children, Equality, Disability, Integration and Youth in relation to selecting the pilot sites. The antigen assay to use for the pilot has been confirmed and discussions are ongoing with the regulator with regards to giving a derogation for home-testing use, as this is outside of the current licensing agreement. Awaiting decisions regarding clinical governance and update on the antigen assay derogation to process.

iv. **Testing at Quarantine sites**

A working group is established with members of the Department of Health, the National Ambulance Service and various HSE teams to establish and monitor a serial testing programme at Quarantine sites. Quarantine requirements are in place since Friday, 26th March and testing commenced on Saturday, 27th March. Regular reporting is in place to help manage the testing programme and there is regular engagement underway to continually improve the testing process. There are currently 8 Hotel Quarantine testing sites in operation.

The below summary of Mandatory Quarantine data is as of 10am 25th May with eight Quarantine sites operational.

**Overview of Mandatory Quarantine Facility Testing**

As decided by the Department of Health, all passengers arriving into Ireland from designated states are now required to pre-book accommodation in a designated quarantine facility. Testing resources have been made available in Quarantine Facilities since 26th March 2021 and are available at the on a daily basis to accommodate the testing of all new arrivals. The scope of testing includes the below:

- Testing of Passengers arriving into Ireland from Category 2 Countries on Day 0 and Day 10
- Testing of Passengers arriving into Ireland from Category 1 countries that have not been able to produce a negative test result
- Testing of Quarantine Hotel Staff on a weekly basis
- Unaccompanied Minors arriving into Ireland from a Category 2 country

**Summary of Mandatory Quarantine Facility Testing Data**

*Data as of 10:00am – 25th May 2021*

- 8 Quarantine Facilities Tested
- 30 Unaccompanied Minors Tested
- 11,133 Referrals for Mandatory Quarantine Testing
- 7,915 Swabs
- 184 Covid-19 Detected Tests (2.32% Detection Rate)
- 173 Covid-19 Detected Cases
### Table 1 Quarantine Facility Testing: Staff vs. Resident Summary

<table>
<thead>
<tr>
<th></th>
<th>Referrals</th>
<th>Swabs</th>
<th>Participation %</th>
<th>Detected Tests</th>
<th>Detection %</th>
<th>Detected Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarantine Staff</td>
<td>4557</td>
<td>1599</td>
<td>35%</td>
<td>9</td>
<td>0.56%</td>
<td>9</td>
</tr>
<tr>
<td>Quarantine Residents</td>
<td>6539</td>
<td>6286</td>
<td>96%</td>
<td>174</td>
<td>2.77%</td>
<td>163</td>
</tr>
<tr>
<td>Unaccompanied Minors Home Test</td>
<td>37</td>
<td>30</td>
<td>81%</td>
<td>1</td>
<td>3.33%</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11,133</strong></td>
<td><strong>7,915</strong></td>
<td><strong>71%</strong></td>
<td><strong>184</strong></td>
<td><strong>2.32%</strong></td>
<td><strong>173</strong></td>
</tr>
</tbody>
</table>

**Note:** “Detected Tests” includes data from any requested or required re-testing of individuals. “Detected Cases” signifies the number of Covid-19 Cases detected i.e. 1 result per individual tested.

**Note:** Testing of Quarantine Staff is scheduled for Thursday, Friday and Saturday of each week.

### Table 2 Quarantine Facility Testing by Site, not including Unaccompanied Minors

<table>
<thead>
<tr>
<th></th>
<th>Staff</th>
<th>Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Referrals</td>
<td>Swabs</td>
</tr>
<tr>
<td>Site 1</td>
<td>2042</td>
<td>608</td>
</tr>
<tr>
<td>Site 2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Site 3</td>
<td>431</td>
<td>178</td>
</tr>
<tr>
<td>Site 4</td>
<td>297</td>
<td>77</td>
</tr>
<tr>
<td>Site 5</td>
<td>651</td>
<td>261</td>
</tr>
<tr>
<td>Site 6</td>
<td>342</td>
<td>127</td>
</tr>
<tr>
<td>Site 7</td>
<td>408</td>
<td>200</td>
</tr>
<tr>
<td>Site 8</td>
<td>382</td>
<td>144</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4557</strong></td>
<td><strong>1599</strong></td>
</tr>
</tbody>
</table>

### Testing of Residents in Mandatory Hotel Quarantine (by Reservation Date)

**Figure 1** Mandatory Quarantine Facility Testing of Residents by week

*Please Note:* Week 9 data is up to and including 25th May
Table 3 Quarantine Facility Testing of Residents: Category 1 vs. Category 2 Country Referrals

<table>
<thead>
<tr>
<th></th>
<th>Referrals</th>
<th>Swabs</th>
<th>Participation %</th>
<th>Detected</th>
<th>Detection %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1 Country</td>
<td>348</td>
<td>315</td>
<td>91%</td>
<td>10</td>
<td>3.2%</td>
</tr>
<tr>
<td>Category 2 Country</td>
<td>6191</td>
<td>5971</td>
<td>94%</td>
<td>164</td>
<td>2.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6539</strong></td>
<td><strong>6286</strong></td>
<td><strong>96%</strong></td>
<td><strong>174</strong></td>
<td><strong>2.77%</strong></td>
</tr>
</tbody>
</table>

v. **Self-isolation and Restricted Movement Support**
Since March 19th, the CMP has been conducting follow-up calls to index patients who are self-isolating. From May 5th, this service was expanded to include Close Contacts who are currently restricting their movements. Between Tuesday 18th and Monday 24th May, CTCs have completed 4,670 check-in calls. Of those surveyed to date, the percentage of those who are following Public Health advice is approximately 94%. For all service users contacted, Public Health advice is reiterated.
2. Activity levels across referrals, sampling, laboratory and contact tracing

Summary

Test and Trace service performance indicators from the 18th – 24th May show that total referral volumes increased by c.32% in comparison with those from the same time-frame last week. Last week, from the 11th – 17th May there were a total of 49,787 referrals. This week, from 18th – 24th May, there were a total of 65,841 referrals.

From the 18th – 24th May, the positivity rate for tests completed in community and private settings is c. 2.9%. During the same time-period, of those tested with close contacts, the average number of close contacts per case was 3.6.

Demand planning scenarios are refreshed on an ongoing basis and proactive demand and capacity planning activities are being used to support operational planning across the end-to-end pathway.

The medium-term operating model plan and an accompanying briefing paper has been drafted with input from the required stakeholders and the demand ranges have been set out. This has been circulated to the SMT group for review and sign off. The plan will continue to be monitored and revised as necessary.
Community Referral Data (18th – 24th May)

From the 18th – 24th May there were c.65,841 community referrals. This weekly total has increased by c.32% since the same time-period last week (11th – 17th May; c.49,787 total referrals).

![Figure 2.1 Daily Community Referral Volumes 18th – 24th of May](image)

**Community Referral Data Volumes by Age Group (16th – 22nd May)**

Figure 2.2 below highlights the breakdown of community referrals by age group, from 16th – 22nd May. This dataset reflects an earlier 7-day date range, as it refers to referrals that have been resulted (i.e., detected, not detected, inconclusive, indeterminate, invalid and not tested).

From the 16th – 22nd May, the group with the largest number of referrals is the 5-13 age group, which makes up 23.5% of all referrals. The detected rate for the 5-13 age group is c.3.9%.

![Figure 2.2 Three-week view of community testing referrals by age group](image)
**Sampling in the community, serial testing and acute and private settings.**

From 18th – 24th May a total of 87,841 swabs were completed in the community and in serial testing sites; this includes swabs completed as part of the Serial Testing Programme being conducted in Nursing Home, Mental Health and Food Production Facilities. This is an 8.6% increase in comparison to the same time period last week (11th -17th May; 80,906 total swabs completed in the community and serial testing sites).

This overall figure is not reflective of all testing completed from 18th – 24th of May. Due to the current climate, we do not have sight of the total swabs completed in acute and private settings. This information will be retrospectively reported once available.

![Swabs Completed in Community & Serial Testing Sites](image)

**Figure 2.3 7-Day View of Swabs Completed in the Community & Serial Testing Facilities**

**Laboratory Testing**

Over the seven-day period 18th – 24th May, there has been approximately 104,491 laboratory tests completed (Excludes Acutes).

Due to the current climate, we do not have sight of the number of lab tests completed in acute laboratories. This data will be retrospectively reported once available.

**Contact Tracing**

Contact tracing is carried out in contact tracing centres in Galway, Limerick, Cork and Dublin. From 18th – 24th of May, there was a total of **2,877 call 1s** completed.

During the same time-period there was a total of **2,659 call 2s** completed, completing contact tracing for this number of individuals. A number of individuals did not require contact tracing.

There was a total of **6,569 call 3s** made to close contacts of a confirmed COVID 19 case.

From 18th – 24th May, of those tested with close contacts, the mean number of close contacts was **3.6**.
3. Turnaround Times (18th – 24th May)

End-to-end turnaround time
We continue to keep sharp focus on end-to-end turnaround times, highlighting any opportunity for improvement, while recognising that some cases are increasingly complex in nature.

Over the seven-day period 18th – 24th May;

- The median end-to-end turnaround time, from referral to SMS, for not detected tests in the community setting was **1.0 days**.
- The median turnaround time, from referral to communication of a detected result by call, in community setting was **1.1 days**.
- The median end-to-end turnaround time, from referral to contact tracing completed, for detected results in the community setting was **1.8 days**.

Referral to appointment
A total of **99.4%** of community referrals are provided with a COVID-19 test appointment within 24 hours.

Swab to lab result

- For swabs processed in a community lab, the median time for swab to lab result was 23 hours.
- For swabs processed in an acute lab, the median time for swab to lab result was 23 hours.
- The combined median time from swab to lab result was 23 hours.
- Overall, 47% of people get their result in less than 24 hours, 95% in less than 36 hours.

Overall Swab to laboratory result communicated – Medians

- 31 hours in Acute.
- 25 hours in Serial Testing.
- 25 hours in Community.

Contact Tracing
The average time to complete all calls is 8.8 hours and the median time to complete all calls is 6.3 hours.

Education and Childcare Facility turnaround times
The median turnaround time from swab taken to result communicated in education and childcare facilities was 1 day.
4. Testing Programmes

**Serial Testing in Nursing Homes**

Serial testing in Nursing Homes commenced on the 23rd of June. To date, the programme has completed 796,241 tests and identified 4,685 detected cases. This is a detected rate of 0.59%.

**Cycle 11** of serial testing in Nursing Homes concluded on 23rd of May. In total, the cycle completed 56,991 tests and has identified 51 detected cases. This is a detected rate of 0.09%.

**Cycle 12** of serial testing in Nursing Homes commenced on 24th May. To date, the cycle has completed 765 tests and has identified 2 detected case. This is a detected rate of 0.26%. The cycle is early on, so positivity will likely lower once more testing is complete.

![Figure 4.1 Nursing Home Detected Rate per Cycle](image)

**Serial Testing in Mental Health Facilities**

Testing in mental health facilities commenced on the 25th of January. Facilities taking part in this testing programme will feature as a mixture of once off and serial testing. To date, the programme has completed 6,667 tests and identified 24 detected cases. This is a detected rate of 0.36%.

**Cycle 4** of serial testing in Mental Health facilities commenced on the 26th of April. To date, the cycle has completed 1,280 tests and has identified 1 detected cases. This is a detected rate of 0.08%.

![Figure 4.2 Mental Health Facility Detected Rate per Cycle](image)
Serial Testing in Food Production Facilities

Serial testing in food production facilities commenced on the 21st of August. To date, the programme has completed 195,780 tests and identified 1,380 detected cases. This is a detected rate of 0.70%.

Cycle 9 of serial testing in food production facilities commenced on the 4th of May, and has completed 15,702 tests, with 29 detected cases identified. This is a detected rate of 0.18%.

Figure 4.3 Food Production Detected Rate per Cycle
Due to the current climate, we do not have sight of the total swabs completed in school and childcare settings for the period 16th – 22nd of May. This information will be retrospectively reported once available.
5. 

Recruitment

Due to the current climate, we do not have sight of the recruitment figures for the period up to 24th May. This information will be retrospectively reported once available.

Recruitment of staff to support swabbing activity and contact tracing activity is ongoing.

- As of the 10th of May, a total of 798 swabbers have been hired and placed to support swabbing activity.
- As of the 10th of May, there is a total of 938 staff supporting contact tracing. Of these 938 staff, 885 have been hired and retained as part of the dedicated workforce to support the contact tracing function. The remaining 53 staff are deployed staff from the HSE and other public service roles.