Title: Test and Trace Paper – NPHET

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Organisation: HSE

Date: 13th May 2021

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

Approved for future publication: YES/NO (remove as applicable)
Testing and Tracing Paper, 13th 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

1. Testing and Tracing new Initiatives

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

- **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 Monday May 3rd and Sunday May 9th, CTCs have completed 429 source investigations. This equates to approx. 14% 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.

- **Alternative referral pathways for testing**
  As of 11th May, walk-in centres are operational in Ballymun, Blanchardstown, Tallaght and Donegal. Further sites are continuously being proposed by Public Health and assessed by NAS to follow suit.

  Walk-in lanes in static centres remain open in the following centres: Mullingar, Tullamore, Castlebar, Tralee, Ardee, Portlaoise Letterkenny, Longford, Castlerea, Nenagh, Offaly, Galway, Wexford and Waterford. In addition to this, further static sites are continuously being assessed to follow suit.

  Up to the 11th of May there were a total of 70,211 walk in referrals, the average referrals over the past 7 days was 1,673. The overall positivity rate is 3.5% across all centres to date and was 4.29% over the last 7 days. The 25-44 age group continue to make up 44% of walk-ins.

  Development is progressing on the online self-referral portal and portal to allow travellers due to arrive in the country book a test between days 5 and 7 of arrival. Initial UAT testing is due to begin w/c 17th May.

- **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 proceed.
• **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 11th 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.

**Summary of Mandatory Quarantine Facility Testing Data**

*Data as of 10:00am – 11th May 2021*

- 8 Quarantine Facilities Tested
- 23 Unaccompanied Minors Tested
- 7560 Referrals for Mandatory Quarantine Testing
- 5549 Swabs
- 127 Covid-19 Detected Tests (2.29% Detection Rate)
- 119 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><strong>Quarantine Staff</strong></td>
<td>2897</td>
<td>1034</td>
<td>36%</td>
<td>7</td>
<td>0.68%</td>
<td>7</td>
</tr>
<tr>
<td><strong>Quarantine Residents</strong></td>
<td>4634</td>
<td>4492</td>
<td>97%</td>
<td>119</td>
<td>2.65%</td>
<td>111</td>
</tr>
<tr>
<td><strong>Unaccompanied Minors Home Test</strong></td>
<td>29</td>
<td>23</td>
<td>79%</td>
<td>1</td>
<td>4.35%</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7560</td>
<td>5549</td>
<td>73%</td>
<td>127</td>
<td>2.29%</td>
<td>119</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>Site</th>
<th>Staff Referrals</th>
<th>Staff Swabs</th>
<th>Staff Detected Tests</th>
<th>Residents Referrals</th>
<th>Residents Swabs</th>
<th>Residents Detected Tests</th>
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<tbody>
<tr>
<td>Site 1</td>
<td>1531</td>
<td>482</td>
<td>1</td>
<td>1200</td>
<td>1140</td>
<td>33</td>
</tr>
<tr>
<td>Site 2</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>1179</td>
<td>1148</td>
<td>22</td>
</tr>
<tr>
<td>Site 3</td>
<td>259</td>
<td>92</td>
<td>1</td>
<td>300</td>
<td>297</td>
<td>9</td>
</tr>
<tr>
<td>Site 4</td>
<td>161</td>
<td>45</td>
<td>2</td>
<td>123</td>
<td>114</td>
<td>3</td>
</tr>
<tr>
<td>Site 5</td>
<td>352</td>
<td>189</td>
<td>3</td>
<td>668</td>
<td>652</td>
<td>20</td>
</tr>
<tr>
<td>Site 6</td>
<td>188</td>
<td>76</td>
<td>0</td>
<td>462</td>
<td>448</td>
<td>8</td>
</tr>
<tr>
<td>Site 7</td>
<td>193</td>
<td>77</td>
<td>0</td>
<td>405</td>
<td>399</td>
<td>12</td>
</tr>
<tr>
<td>Site 8</td>
<td>209</td>
<td>69</td>
<td>0</td>
<td>297</td>
<td>294</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>2897</td>
<td>1034</td>
<td>7</td>
<td>4634</td>
<td>4492</td>
<td>119</td>
</tr>
</tbody>
</table>

### 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>272</td>
<td>249</td>
<td>92%</td>
<td>9</td>
<td>3.6%</td>
</tr>
<tr>
<td>Category 2 Country</td>
<td>4362</td>
<td>4243</td>
<td>97%</td>
<td>110</td>
<td>2.6%</td>
</tr>
<tr>
<td>Total</td>
<td>4634</td>
<td>4492</td>
<td>97%</td>
<td>119</td>
<td>2.65%</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 7 data is up to and including 11th May*
• **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. Of those surveyed to date, the percentage of those who are following Public Health advice is approximately 95%. For all service users contacted, Public Health advice is reiterated.

**Healthcare workers**
Following the request from NPHET, the CMP has adjusted the advice given to close contacts who are:

- Fully vaccinated healthcare workers;
- Asymptomatic;
- Not taking any medication which they believe impacts the efficacy of the vaccine
- Not suffering from any medical conditions that impacts the efficacy of the vaccine

As of Monday, April 26th, 2021, healthcare workers are no longer being advised to self-isolate, Daily Active Follow-up will be suspended, and COVID-19 tests are no longer recommended. This was expanded to all persons fully vaccinated following Release 18 on May 5th, 2021.

**Category 2 Countries**
The CMP continues to tailor its advice to service users in line with Government policy in relation to the evolving list of Category 2 countries. In the past 7 days, India, Iran, Mongolia, Georgia and Costa Rica have been added to the list, while Armenia, Austria, Bosnia & Herzegovina, Italy, Ukraine and Curacao have been removed. As of May 12th, Nepal and Anguilla are also included.
2. Activity levels across referrals, sampling, laboratory and contact tracing

Summary

Test and Trace service performance indicators from the 5th – 11th May show that community referral volumes increased by 1% in comparison with those from the same time-frame last week. Last week, from the 28th April – 4th May there were a total of 39,794 referrals in the community. This week, from 5th – 11th May, there were a total of 40,290 referrals in the community.

Walk-in test centre referral volumes have increased by 4% in comparison to the same time-frame last week. Last week, from the 28th April – 4th May there were a total of 11,214 walk-in test centre referrals. This week, from 5th – 11th May, there were a total of 11,713 walk-in test centre referrals.

As of May 11th, the positivity rate for the past seven days is c. 2.4%, and as of May 11th, of those tested with close contacts, the average number of close contacts per case was 3.5.

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 (5th – 11th May)**

From the 5th – 11th May there were c.40,290 referrals in community settings. This weekly total has increased by 1% since the same time-period last week (28th April – 4th May; c.39,794 community referrals).

**Walk-in Test Centre Referral Data (5th – 11th May)**

From the 5th – 11th May there were c.11,713 referrals for walk-in test centres. This weekly total has increased by 4% since the same time-period last week (28th April – 4th May; c. 11,214 walk-in referrals).

The below graph shows a breakdown of daily community referrals and walk in referrals over the past 7 days.

**Community Referral Data Volumes by Age Group (3rd – 9th May)**

Figure 2.2 below highlights the breakdown of community referrals by age group, from 3rd – 9th 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 3rd – 9th May, the group with the largest number of referrals is the 5-13 age group, which makes up 19.8% of all referrals. The detected rate for the 5-13 age group is c.4.8%.
**Sampling in the community, serial testing and acute and private settings.**

Over the seven-day period, 5th – 11th May there has been approximately **128,024 swabs** taken for COVID-19 testing.

From 5th – 11th May a total of 46,541 swabs were completed in community test centre sites. This figure includes those who received a GP or close contact referral or attended a walk-in test centre site. There were an additional 9,141 swabs completed by our CHO colleagues. This figure includes those referred from school settings, worksites and any other on-site locations.

During the same time-period, c.4,565 tests were completed by the National Ambulance Service, these are swabs over and above the swabs completed by NAS at walk in test centre sites. Approximately 50,475 swabs were taken in acute and private acute settings. The remaining 17,302 swabs were taken as part of the Serial Testing Programmes of staff in Residential Care Facilities including Nursing Homes and Mental Health Facilities that meet the agreed criteria, and staff in Food Production Facilities.

Over the seven-day period 5th – 11th May there has been 130,697 lab tests completed. A total of 74,952 of these tests were processed in community laboratories, 31,693 tests were processed in acute laboratories and 24,052 were processed in private labs. Over the past seven days, there were no tests processed by our offshore laboratory partner.

**Contact Tracing**

Contact tracing is carried out in contact tracing centres in Galway, Limerick, Cork and Dublin.

From 5th – 11th May, there was a total of **2,902 call 1s** completed.

During the same time-period there was a total of **2,608 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 **4,718 call 3s** made to close contacts of a confirmed COVID 19 case.

On the 11th of May, of those tested with close contacts, the mean number of close contacts was **3.1**.
3. Turnaround Times (5th – 11th 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 5th – 11th May;

- The median end-to-end turnaround time, from referral to SMS, for **not detected** tests in the **community** setting was **1.3 days**.
- The median turnaround time, from referral to communication of a **detected result** by call, in **community** setting was **1.8 days**.
- The median end-to-end turnaround time, from referral to contact tracing completed, for **detected results** in the **community** setting was **2.0 days**.

**Referral to appointment**

In the community, the median time from referral to appointment was **0.2 days**.

A total of **94.8%** 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 **24 hours**.
- For swabs processed in an **acute** lab, the median time for swab to lab result was **21 hours**.
- The combined median time from swab to lab result was **22 hours**.
- Overall, **44%** of people get their result in less than **24 hours**, **86%** in less than **36 hours**.

**Overall Swab to laboratory result communicated – Medians**

- 24 hours in Acute.
- 25 hours in Serial Testing.
- 26 hours in Community.

**Contact Tracing**

The average time to complete all calls is **7.8 hours** and the median time to complete all calls is **5.2 hours**.

**Education and Childcare Facility turnaround times**

The median turnaround time from swab taken to result communicated in education and childcare facilities was **1.1 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 771,168 tests and identified 4,666 detected cases. This is a detected rate of 0.61%.

Cycle 11 of serial testing in Nursing Homes commenced on 26th April. To date, the cycle has completed 32,686 tests and has identified 34 detected cases. This is a detected rate of 0.10%.

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 6,161 tests and identified 24 detected cases. This is a detected rate of 0.39%.

Cycle 4 of serial testing in Mental Health facilities commenced on the 27th of April. To date, the cycle has completed 769 tests and has identified 1 detected cases. This is a detected rate of 0.13%.
Serial Testing in Food Production Facilities

Serial testing in food production facilities commenced on the 21st of August. To date, the programme has completed 185,647 tests and identified 1,371 detected cases. This is a detected rate of 0.74%.

Cycle 9 of serial testing in food production facilities commenced on the 4th of May, and has completed 5,571 tests, with 20 detected cases identified. This is a detected rate of 0.36%.

Figure 4.2 Mental Health Facility Detected Rate per Cycle

Figure 4.3 Food Production Detected Rate per Cycle
Education and Childcare Testing Programme

COVID-19 testing has re-started in schools and is ongoing in special education and childcare facilities. In the last week (2\textsuperscript{nd} – 8\textsuperscript{th} May 2021);

- 4,191 tests were completed in 194 primary schools resulting in a 2.3% positivity rate.
- 3,327 tests were completed in 101 post-primary schools resulting in a 0.9% positivity rate.
- 64 tests were completed in 7 Special Education settings resulting in a 3.1% positivity rate.
- 1,070 tests were completed in 74 childcare facilities resulting in a 4.2% positivity rate.

The graph below provides an overview of the positivity trends in Primary, Post-Primary, Special Education and Childcare Settings over the past 4 weeks:

![Positivity Trends in Education and Childcare Settings](image.png)

Figure 4.4 Four-Week View of Positivity Trends in Primary, Post-Primary, Special Education and Childcare Settings
**Weekly Comparison of Tests Completed in Schools and Special Education Settings**

The graph below provides a week to week view of the levels of testing and % increase/decrease of testing completed in Schools and Special Education settings.

- In the last week (week 18, 2nd – 8th May 2021), there were c.7,582 tests completed.

![Weekly Comparison of Tests Completed in Schools and Special Education Settings](image)

**Figure 4.5 Weekly Analysis of Schools and Special Education Testing**

**Weekly Comparison of Tests Completed in Childcare Facilities**

The graph provides a week to week view of the levels of testing and % increase/decrease of testing completed in Childcare Facilities.

- In the last week, (week 18, 2nd – 8th May 2021), there were c.1,070 tests completed.

![Weekly Comparison of Tests Completed in Childcare Facilities](image)

**Figure 4.6 Weekly Analysis of Childcare Facility Testing**
5. **Recruitment**
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.