

## **Title: NPHE Test and Trace Paper**

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Action required:

- For noting
- For discussion
- For decision

Approved for future publication: YES/NO (remove as applicable)

## **NPHET Testing and Tracing Paper, 21<sup>st</sup> of January 2021**

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

- 1) Activity levels across referrals, sampling, laboratory testing and contact tracing,
- 2) Turnaround Times,
- 3) Delayed Test Services,
- 4) Testing Programmes,
- 5) Process improvements,
- 6) Service Model: Testing and Tracing,
- 7) Update on key challenges and issues.

### **1. Activity levels across referrals, sampling, laboratory and contact tracing**

#### ***Referral Data and results***

Referral data from 11<sup>th</sup> – 17<sup>th</sup> of January shows that the group with the largest amount of all referrals is the 21-30 age group, which makes up 20.2% of all referrals. The detected rate for the 21-30 age group is high at 22%. This is c.9% decrease in positivity rate for the same group from this time last week.

#### ***Sampling in the community and in acute settings.***

Over the seven-day period, 13<sup>th</sup> – 19<sup>th</sup> of January, there has been approximately 139,595 swabs taken for COVID-19 testing. A total of 73,688 swabs were taken in the community, the majority were performed at fixed testing sites and a portion as home visits. Approximately 32,723 swabs were taken in acute settings. The remainder 33,184 swabs were taken as part of the Serial Testing Programmes of staff in Residential Care Facilities and staff in Food Production Facilities.

#### ***Laboratory Testing***

Over the seven-day period 13<sup>th</sup> – 19<sup>th</sup> of January, there has been 159,985 lab tests completed. A total of 92,096 of these tests were processed in community laboratories, 37,173 tests were processed in acute laboratories, 14,835 were processed in private labs and 15,881 in offshore labs.

#### ***Contact Tracing***

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

On the 1<sup>st</sup> January we changed the way we organise our work to respond to the significant surge in cases by doing call 1 (inform positive patient) and call 2 (take contact details) together, therefore these calls are reported in this paper as 1.

From 13<sup>th</sup> – 19<sup>th</sup> of January, a total of 22,636 calls were made in the Contact Tracing Centers. A total of 20,853 of these calls were Call 2as. This call informs the patient that they have received a detected COVID-19 result and collects their contacts. A total of 1,783 of these calls were Call 3s. A number of individuals who are deemed close contacts are being referred for a COVID-19 test, close contacts associated with an outbreak setting, a school or childcare setting and health care workers.

As of 20<sup>th</sup> of January, of those tested with close contacts, the average number of close contacts per case was 2.8. As of 1<sup>st</sup> January, close contacts no longer receive a phone call, they receive a SMS which notifies them of their close contact status and to provides public health advice.

## 2. Turnaround Times (13<sup>th</sup> – 19<sup>th</sup> of January)

### *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 13<sup>th</sup> – 19<sup>th</sup> of January;

- The median end-to-end turnaround time, from referral to SMS, for **not detected** tests in the community setting was **1.4 days**.
- The median turnaround time, from referral to communication of a **detected result** by SMS, in community settings was **1.6 days**.
- The median end-to-end turnaround time, from referral to the end of contact tracing, for **detected results** in the community setting was **1.8 days**.

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

- 28 hours in Acute.
- 30 hours in Serial Testing.
- 27 hours in Community.

### *Referral to appointment*

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

95.7% of GP 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 23 hours.

The combined median time from swab to lab result was 24 hours.

### *Contact Tracing*

The mean time to complete all calls is 4.2 hours and the median time to complete all calls is 2.1 hours.

### **3. Delayed Test Services**

#### ***HSELive***

If a member of the public has been waiting longer than two days for a test result, they can contact HSELive on 1850 24 1850. The HSELive team will take all the required details and will send this information to the Delayed Test Result Search Service. The Search Service will get back to the caller directly and aims to complete searches within 24 hours of the @HSELive call.

- In the last seven days (Jan 10<sup>th</sup> – Jan 17<sup>th</sup>) 1272 queries have been received.
- This has increased slightly from last week where 1263 queries were received.
- This has decreased compared with last 30 days, when 1531 weekly queries were received on average. (↓17%).
- A total of 98% of queries received in the last seven days were fully resolved within the 24-hour target.

#### ***GPs***

In collaboration with the ICGP, there is now an established email service for GPs whereby GPs can submit their query using a password protected form in respect of a delayed test result. Results are communicated to both the GP and patient.

- In the last seven days (Jan 10<sup>th</sup> – Jan 17<sup>th</sup>) 26 queries have been received.
- This has decreased from last week where 44 queries were received. (↓41%).
- This has increased compared to last 30 days, when 20 queries were received weekly on average (↑30%).
- A total of 100% of queries received in the last seven days were fully resolved within the 24-hour target.

#### ***Healthcare Workers & HSE Occupational Health***

Staff can enquire about their delayed test result via the Healthcare Worker Covid-19 Helpline on 1850 420 420. Queries are directed to the Delayed Test Result Search Service. Occupational Health can also direct queries to the Search Service via the GP email address using a password protected form. Results are communicated to both occupational health physician and healthcare worker.

- In the last seven days (Jan 10<sup>th</sup>– Jan 17<sup>th</sup>) 63 queries have been received.
- This has increased from last week where 53 queries were received. (↑19%).
- This has decreased compared to last 30 days, when 72 weekly queries were received on average. (↓14%).
- A total of 98% of queries received in the last seven days were fully resolved within the 24-hour target

#### **4. Testing Programmes**

##### ***Serial Testing in Residential Care Facilities***

Serial testing in Residential Care Facilities (RCF) commenced on the 23<sup>rd</sup> of June. To date, the programme has completed 475,138 tests and identified 3,211 detected cases. This is a detected rate of 0.68%.

Cycle 7 of serial testing of RCF's commenced on January 4<sup>th</sup>. As of January 20<sup>th</sup>, a total of 57,298 tests have been completed, with 1,326 detected cases (detection rate: 2.31%). The serial testing programme of Residential Care Facilities has moved from a fortnightly frequency of testing to a weekly frequency of testing.

Work is underway to include mental health facilities and disability RCFs that provide 24-hour care to their residents, as part of this testing programme. Direction on the inclusion rationale of these facilities is being guided by Public Health. Staff from one Disability RCF's were tested on December 18<sup>th</sup> as a trial in order to gather lessons learned for upcoming testing requirements.

##### ***Serial Testing in Food Production Facilities***

Serial testing in food production facilities commenced on the 21<sup>st</sup> of August. To date, the programme has completed 93,118 tests and identified 658 detected cases. This is a detected rate of 0.71%.

Cycle 5 of serial testing in food production facilities commenced on 12<sup>th</sup> of January and as of the 20<sup>th</sup> of January, a total of 6,582 swabs have been completed with 132 detected cases (detection rate: 2.01%).

##### ***Schools Testing Programme***

COVID-19 testing is ongoing in childcare facilities. As of January 20<sup>th</sup>, 1,596 facilities (primary school, post primary school, special education and childcare facilities) have had/are having some testing completed based on a Public Health Risk Assessment. A total of 44,735 tests have been carried out as part of this mass testing. From the 1,596 facilities that had mass tests, an additional 1,453 detected cases have been identified over and above original cases. This equates to a detected rate of 3.2%.

## **5. Process Improvements**

We continue to work to improve turnaround times, consistency and our end-to-end testing pathway in general. This section presents the latest set of enhancements.

### ***Data Quality improvements***

Several major improvement initiatives have been identified to improve the test and trace process. When complete, these will deliver faster results to the public, accelerate issue resolution and enhance overall operational management and effectiveness. Immediate priority improvement initiatives include investigation to ensure facilities that are part of serial testing are receiving an overview of their results as quickly as possible. Ensuring accurate data is submitted when the test is being scheduled will generate faster and more accurate reports.

A comprehensive review of Pending Patient Queue processes has been conducted and was finalised last week. This ensures that patients with a detected case of COVID-19 that have been identified as having a Data Quality issue, will be resolved and added to the call queue more expediently. The review contributed to placing a significant process change resulting in faster resolution for cases where data quality issues were delaying notification. The process for dealing with 'unknown' test results continues to work well, with active follow-up and solutions being iterated to deal with these scenarios.

Additional initiatives are being considered with acute labs to identify more significant efficiency opportunities following the initial data capture point. Specific pathways are being explored that relate to identifying hospital inpatients with a 'not-detected' result that have undergone a COVID-19 PCR test and the prevention of further communication being provided. An overview has been developed to indicate expected timings and to consider critical aspects of an automated solution.

A solution has been identified & approved to prevent automated communication with patients who have swabs collected post mortem. Once developed, this will enable the sensitive handling of contact tracing in such instances. The trial in an acute hospital to test improvements for more targeted communication is ongoing. Upon successful completion of the development, improvements can be rolled out to a broader number of acute hospitals.

Ongoing investigation and results monitoring analysis are underway to identify the source of insufficient data entering the CRM system, Covid Care Tracker. Where required, appropriate guidelines and next steps are communicated to ensure processes are improved and continuous data quality improvements. Work is also underway on system integration to ensure referral to contact tracing is seamless and developed with the patient at the core.

## **6. Service model: Test and Trace**

The implementation of the service model for Test and Trace is well progressed. This includes recruitment to enable the staffing of the service model for community swabbing, labs and contact tracing and estate development in terms of a permanent and sustainable testing centre and contact centre footprint.

Engagement between the Minister, the Department of Health and the HSE has continued in respect of testing volumes and associated costs. With respect to testing volumes, the HSE is working towards daily capacity in the region of 25,000 tests. Several programmes of work are in place to implement this and to ensure a stable, quality assured service is developed at this scale. The next step is to finalise and agree the associated costs for the service with the Department of Health, which have been shared for review and input.

The service has been experiencing a significant and unprecedented surge since December 22nd. Recent trends continue to show an abatement in terms of average weekly referral activity (down 42% from the peak week of 28.12 – 03.01), positivity rates (currently c.13% over the last 7 days, down from a peak of 24.5% (31.12 - 06.01) and the number of close contacts (currently an average of 2.8 over the last 7 days). In response to this surge short-term escalation of activity, plans were put in place to prioritise the available capacity, which enabled the service to meet demand far beyond the standing capacity and levels predicted. Demand planning scenarios are being refreshed on an ongoing basis to support operational planning and a resumption of normal service across the end-to-end pathway.

Recruitment of staff to support swabbing activity and contact tracing activity is ongoing. As of 19th of January, a total of 697 swabbers have been hired and placed to support swabbing activity.

As of 19<sup>th</sup> of January, there is a total of 867 staff supporting contact tracing. Of these 867 staff, 811 of these staff have been hired and retained as part of the dedicated workforce to support the contact tracing function. This number is 16 less than reported last week due to a number of leavers. The remaining 56 staff are deployed staff from the HSE and other public service roles.

## 7. Update on any key challenges/issues

1. Over the past week, we have seen a slight decrease in demand for community testing as well as a slight decrease in positivity rate (c.13% this week, vs. 20.1% last week). A total of 20.2% of all referrals in the last week were associated with the 21-30 age group.

In order to ensure that our services can continue to meet demand now the full team of over 600 community swabbers are being deployed. In addition, the network of testing centres is also set up to address this surge in demand. There are 36 permanent community testing centres currently operating. In addition, we are deploying additional pop-up test centres in areas of most acute need. These have included the following: Tallaght Stadium, St Joseph's Hospital Limerick, Donegal Town, Slane, New Ross, Ennis and Waterford City. In addition, there are 6 NAS teams available to support establishment pop-up centres at short notice, as needed to support surge capacity

In addition, our network of labs has a daily capacity of 24,750 tests in our community labs, 2,000 tests in our offshore labs and an additional 4,000 lab capacity in our acute labs. Our lab network has engaged surge capacity in order to respond to the significant increases in demand felt across the test and trace system.

This influx in volumes has also had an impact in our contact tracing centres. This increase has required a combined Call 1 and Call 2, an individual will be informed of their detected result and their contacts will be collected in one single call. Furthermore, as of 1<sup>st</sup> of January, close contacts are not receiving a phone call to inform them of their close contact status but instead receive a text message.