Title: Test and Trace Paper – NPHET

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

Approved for future publication: YES/NO (remove as applicable)
Testing and Tracing Paper, 18th of March 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 four new key initiatives to the testing and tracing programme of work.

- **Source Investigation/Backwards Tracing** – Significant work is being undertaken by the CMP in conjunction with public health, OCIO and other partners on defining the final model (building on the pilot completed in December 2020) for source investigation. This involves building out the covid care tracker change specifications, agreeing required disease transmission levels under which different levels of source investigation are viable across regions and agreeing change and implementation timelines. Backwards contact tracing / source investigation is considered most effective when there are low levels of community transmission, and less effective when there are high levels of community transmission. The systems changes will be completed by the 30th March, from which date the CMP will be conducting source investigation aligned to levels of community transmission prevailing at that time.

- **Alternative referral pathway for testing** – A working group has been set up to produce proposals for a pilot of a self-referral pathway for asymptomatic individuals. This working group has met twice and will present its proposed pilot options to the steering group for testing and tracing new initiatives on Monday 15th March. It is expected that a pilot will commence in early April that will inform a national self-referral system.

- **Approach to Antigen testing pilot in schools/third level** – An Antigen Testing Working Group has been established to develop a pilot study approach for antigen testing on asymptomatic individuals in post-primary and third level facilities. The main objective of the working group is to identify the operational requirements for implementing an antigen test pilot study. The group are currently focusing on secondary school staff and students and third level staff and students as being the main cohort for this pilot study.

- **Testing at Quarantine sites** – A working group has been established with members of the Department of Health, the National Ambulance Service and various HSE teams to establish a serial testing programme at Quarantine sites. It is expected that this will commence when the hotels will open (likely early next week).

2. Activity levels across referrals, sampling, laboratory and contact tracing

Summary

Test and Trace Service performance indicators show a slight increase in terms of average weekly demand for community testing. Over the last week, there has been a 9.2% increase in the number of community tests completed. The detected rate over the last seven days is c.3.8% and as of 15th of March, of those tested with close contacts, the average number of close contacts per case was 3.4. 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.
Planning continues on the development of a medium-term view of the Test & Trace service to understand what the potential medium-term profile of demand and activity may be across various scenarios. Working groups have been established to consider enhanced usage of antigen testing and use of different referral pathways. A number of assumptions will be made regarding restrictions, serial testing, the impact of vaccination, variants of concern among other items which will inform the process. Many unknowns will remain, and as such the need for proactive monitoring and agile planning will remain. This activity will support the development of enhanced operational planning to ensure continued resilience and agility of the service as the Pandemic response evolves. Work is under way to define the service elements for each demand range. Once outputs are developed stakeholder engagement will be undertaken to ensure alignment on the service priorities and limits over the period.

**Referral Data and results**

Community testing referral data from 7th – 13th March shows that the group with the largest amount of all referrals is the 21-30 age group, which makes up 18.7% of all referrals. The detected rate for the 21-30 age group is c.13.5%.

![Total Community Referrals](image)

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

Over the seven-day period, 9th – 15th March, there has been approximately 101,930 swabs taken for COVID-19 testing. Over the last week, demand for testing in the community has increased by 9.2%, this is the first time in 5 weeks that we have seen an increase in the demand for testing.
A total of 36,835 swabs were taken in the community, the majority were performed at fixed testing sites and a portion as home visits. Approximately 43,023 swabs were taken in acute and private acute settings. The remainder 22,072 swabs were taken as part of the Serial Testing Programmes of staff in Residential Care Facilities including mental health facilities and disability facilities that meet the agreed criteria and staff in Food Production Facilities.

**Laboratory Testing**

Over the seven-day period 9th - 15th March, there has been 99,371 lab tests completed. A total of 52,874 of these tests were processed in community laboratories, 28,803 tests were processed in acute laboratories and 17,694 were processed in private labs. Over the past seven days, there were no tests processed by our offshore laboratory partner.

Below is a breakdown of Covid-19 lab tests completed over the past four weeks, in community, acute, and private lab settings.
Contact Tracing

Contact tracing is carried out in contact tracing centres in Galway, Limerick, Cork and Dublin.
The gathering of enhanced Positive Patient Assessment data recommenced on Wednesday 10th February. On this date we also recommenced the Day 0 and Day 10 swabbing for close contacts.

From 9th – 15th of March, there was a total of **3,639 call 1s** completed.
During the same period there was a total of **3,085 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 **4,992 call 3s** made to close contacts of a confirmed COVID 19 case.

On the 15th of March, of those tested with close contacts, the mean number of close contacts was **3.4**
3. Turnaround Times (9th – 15th of March)

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 9th – 15th of March;
- 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 complete by call, for detected results in the community setting was **1.9 days**.

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

A total of **93.4%** 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 24 hours. For swabs processed in an acute lab, the median time for swab to lab result was 22 hours. The combined median time from swab to lab result was **23 hours**.

Overall Swab to laboratory result communicated – Medians
- 25 hours in Acute.
- 26 hours in Serial Testing.
- 27 hours in Community.

Contact Tracing
The average time to complete all calls is 6.1 hours and the median time to complete all calls is **3.8 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 days**.
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 645,961 tests and identified 4,532 detected cases. This is a detected rate of 0.70%.

Cycle 9 of serial testing in Nursing Homes commenced on the 1st of March. To date, the cycle has completed 35,446 tests and has identified 75 detected cases. This is a detected rate of 0.21%. This is the lowest level since Cycle 2. In Cycle 2 there were very low levels of cases in the country as this was July/August 2020.

![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 2,750 tests and identified 10 detected cases. This is a detected rate of 0.36%.

Cycle 2 of serial testing in Mental Health facilities commenced on 1st March. To date, there has been a total of 747 swabs carried out and 3 detected cases have been identified. This is a detected rate of 0.40%.

**Disability Facilities Testing Programme**
Testing in disability services commenced on the 25th of January. Facilities taking part in this testing programme will be included for a round of once off testing, which will be reviewed once a full cycle has been completed. In this current cycle to date, cycle 1, there has been a total of 5,636 swabs carried out and a total of 27 detected cases have been identified. This is a detected rate of 0.48%.

**Serial Testing in Food Production Facilities**
Serial testing in food production facilities commenced on the 21st of August. To date, the programme has completed 140,718 tests and identified 1,189 detected cases. This is a detected rate of 0.84%.

Cycle 7 of serial testing in food production facilities commenced on the 8th of March, and has completed 7,352 tests, with 54 detected cases identified. This is a detected rate of 0.73%.
**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 (7th to 13th March 2021);

- 551 tests were completed in 35 childcare facilities resulting in a **11.3% positivity rate**.
- 121 tests were completed in 6 Special Education facilities resulting in a **2.5% detection rate**.
- 1,216 tests were completed in 65 primary schools resulting in a **2.8% positivity rate**.
- 505 tests were completed in 37 post-primary facilities resulting in a **1.4% positivity rate**.

**Weekly Comparison of Tests Completed in Schools**

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 10, 7th – 13th March 2021), there were over 1,000 tests completed.
- This level of testing is similar to levels completed in early December, c.1,700 tests (week 50, 6th – 12th of December).
- Testing demand in schools will continue to be monitored as more students return over the coming weeks.

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**Weekly Analysis of Schools and Special Education Testing by Week**
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 10, 7th – 13th March 2021), there were c.488 tests completed.
- The number of tests completed in childcare facilities has remained consistent since week 4 (24th – 30th of January, 2021), at c.400-500 tests per week.

The graph below illustrates a six-week view of detected rate in childcare facilities. A similar view will be developed for schools in response to their recommencement, over the coming weeks.
Recruitment
Recruitment of staff to support swabbing activity and contact tracing activity is ongoing. As of the 15th of March, a total of 758 swabbers have been hired and placed to support swabbing activity. As of the 15th of March, there is a total of 847 staff supporting contact tracing. Of these 847 staff, 775 have been hired and retained as part of the dedicated workforce to support the contact tracing function. The remaining 72 staff are deployed staff from the HSE and other public service roles.