Policy Direction for Northern Ireland COVID-19 Contact Tracing and Advisory Service

30/04/2020

Background

Extensive contact tracing and testing for COVID-19 will identify cases and clusters of COVID-19. This will give us a deeper understanding of where the virus is, how it is spreading, where hot-spots for transmission are, what the rate of transmission is. This information will inform and help target public health control measures, to slow the spread of COVID-19 and lessen the impact on HSC services, and morbidity and mortality. It will be a key requirement to have in place prior to relaxation of social distancing measures. An approach to contact tracing that rapidly identifies and quarantines the vast majority of cases and their contacts could plausibly reduce R by the order of 30-60%. High compliance case isolation and household quarantine will be essential, and this is likely to be aided by mass testing.

A successful contact tracing strategy requires around 80% of contacts of symptomatic cases to be traced and isolated rapidly, ideally within two days of symptom onset for the index case. This would require at least 30 contacts to be traced and tested per symptomatic case based on experience from other countries.

Operational requirements

- Identify contacts of cases (80% within 48h of symptoms onset)
- Provide information to all contacts on
  - symptoms to be aware of in the 14 days after onset in the case
  - information on what to do if symptoms develop
- Risk assess need for self-isolation and provide appropriate advice
- Active follow-up of high risk cases, passive follow-up of low risk cases
- Rapid and seamless access to testing if appropriate
- Identification and follow-up of vulnerable individuals e.g. people who are self-isolating alone and without support

It is assumed that contact tracing and advice for healthcare workers will be delivered by their occupational health and infection prevention and control teams.

Need to clarify arrangements for hospital inpatients

Definitions

Cases

DoH are considering whether the contact tracing programme will be for

(a) Laboratory confirmed cases only; or

(b) Laboratory confirmed and suspected cases which meet the case definition.

Option (a) would be less effective in preventing transmission as in the best case scenario is to receive a test result approximately 5 days after becoming infectious since there is an infectious pre-symptomatic period of approximately 48h, time from onset of symptoms to being tested of approximately 48h, and turn-around time for results (24-72h).

It should include both samples taken for patient care, and those taken for surveillance purposes.

Suspected cases could be notified to the NI Contact Tracing and Advisory Service from health care workers, or the COVID-19 symptom tracker.

Contacts

Contacts will be defined as high, medium or low risk, and follow-up is tailored accordingly.

High risk contacts will include: household contacts of a confirmed case, HCW contacts of a confirmed case who were not wearing appropriate PPE, direct close face to face contact with a confirmed case without PPE, and people travelling in a car with a confirmed case for over 15 minutes. These contacts require information about symptoms to be aware of in the 14 days after onset in the case, information on what to do if symptoms develop, and advised to self-isolate.

Medium risk contacts would include people who had travelled in a car together for less than 15 minutes, or air passengers 2 rows in front or behind a confirmed case. They require information on symptoms to be aware of in the 14 days after onset in the case, information on what to do if symptoms develop, but are not required to self-isolate.

Low risk contacts are those who have had contact with a confirmed case, but were wearing appropriate PPE. As awareness among health professionals is already very high profile, and sustained community transmission is occurring, it is not recommended that messaging is provided for each episode that an individual is exposed to a case. No self-isolation or formal contact tracing is needed. As these exposures relate to the workplace, it is proposed the provider would lead on reinforcing general awareness.

Provision of service

This is a large scale and complex task, and will require an innovative approach, building on Health Protection expertise, but also availing of digital solutions.

Pillars of NI COVID-19 contact tracing and advisory service

1. Telephone based contact tracing and advice for follow-up of positive cases
2. Web-based contact tracing advisory service (CTAS)
3. NHS-X proximity app
4. Wide spread testing

The NHS-X app and CTAS service could be used to provide information on symptoms, where to seek advice, and how to get tested. If there is no response, call handlers could then ring to provide this advice. This may reduce workload for call handlers by up to 50%.

The app could also allow people to monitor their own symptoms, input daily temperature readings, self-referral for testing, and direct notification of test results.

The telephone based contact tracing service should be tiered. This would include:

- Health Protection specialists dealing with clusters or complex cases
- Appropriate skilled staff (e.g. HSC staff) contacting cases, performing risk assessments, and conducting detailed contact tracing interviews
- Call handlers working to a script and phoning contacts to give information and advice.

It is essential that a high quality service is provided by each of these tiers. There will be a requirement for training, and up to date scripts and algorithms for those calling cases or contacts.

An appropriate service model needs to be developed for people with visual or hearing impairments.

Reporting requirements

- Number of cases contacted
- % of total cases contacted
- Time from notification to initial contact with case
- % referred for testing
- % in high risk group for onward transmission e.g. care home, prison, homeless setting
- % of contact who later become a confirmed case