Contact tracing for COVID-19: current evidence, options for scale-up and an assessment of resources needed.

Stefania De Angelis, Scientific Officer, ECDC

Meeting with Member States on testing, 28 May 2020

Outline

- Latest ECDC technical reports
- Contact tracing (why and what)
- Level of exposure and follow-up
- Testing and contact tracing
- Contact tracing: an effective measure
- Scaling up contact tracing

Latest ECDC technical reports

8 April 2020

Contact tracing: Public health management of persons, including healthcare workers, having had contact with COVID-19 cases in the European Union - second update

5 May 2020

Contact tracing for COVID-19: current evidence, options for scale-up and an assessment of resources needed

METHODOLOGY resource estimates reviewed by EU/EEA countries through semi-structured phone interviews and via an email questionnaire in April

Contact tracing

WHY

To rapidly identify potentially newly infected persons who may have come into contact with known cases, in order to reduce further onward transmission.

break the chain of transmission and prevent onward transmission

WHAT

- **contact identification**: to identify persons who may have been exposed to SARS-CoV-2 as a result of being in contact with an infected person
- **contact listing**: to trace and communicate with the identified contacts, and to provide information about suitable infection control measures, symptom monitoring and other precautionary measures such as the need for quarantine
- **contact follow-up**: to monitor the contacts regularly for symptoms

Level of exposure and follow-up

The associated risk of infection depends on the level of exposure, which, in turn, determines the type of management and monitoring

Actions	High-risk exposure (close contact)	Low-risk exposure
Individual	For a period of 14 days after the last exposure to a COVID-19 case, high-risk contacts should be advised to: • quarantine at home if possible*. If not possible, respect physical distancing measures and avoid travel; • daily self-monitoring for COVID-19-compatible symptoms, including fever of any grade, cough, fatigue or difficulty breathing; • take and record temperature daily (contacts should avoid the use of fever-reducing medication a few hours before they take their temperature); • remain contactable by public health authorities; • implement rigorous hand hygiene and respiratory etiquette; • self-isolate immediately should symptoms develop and seek medical advice, preferably by phone first, following recommendations of the national/local authorities.	For a period of 14 days after the last exposure, low-risk contacts should be advised to: • daily self-monitoring for COVID-19-compatible symptoms, including fever of any grade, cough, fatigue or difficulty breathing; • respect physical distancing measures and avoid travel; • implement rigorous hand hygiene and respiratory etiquette measures; • self-isolate immediately should symptoms develop and seek medical advice, preferably by phone first, following recommendations of the national/local authorities.

Public health authorities	For a period of 14 days after the last exposure to a COVID-19 case:
	• Active follow-up of the contacts (e.g. daily phone calls, e-mails, text messages). Contacts can be encouraged to also proactively contact public health authorities as soon as they develop any compatible symptoms, outside of the scheduled follow-up;
	• testing of contacts that develop COVID-19-compatible symptoms if possible**
	  • if test is negative, continue individual actions for a period of 14 days after the last exposure;
	  • if the test is positive, notify the case and initiate contact tracing.
		For a period of 14 days after the last low-risk exposure to a COVID-19 case:
		• Encourage low-risk contacts to proactively contact public health authorities if they develop any compatible symptoms;
		• If the contact develops COVID-19-compatible symptoms, follow steps as for high-risk contacts.
		Based on individual risk assessments, public health authorities may consider excluding low-risk exposure contacts from work if they work with vulnerable populations (e.g. those who provide care to elderly).

Testing and contact tracing

- Testing is the entry point for contact tracing activities
- Contact tracing enables early testing

Testing

- Contacts who are symptomatic are directed to local testing locations
- Priority should be given to healthcare workers, staff in long-term care facilities or contacts who belong to vulnerable groups.

Even when it is not possible to implement a broad testing strategy, contact tracing is still valuable.

Contact tracing: an effective measure

- Effective measure in all transmission scenarios but the countries' responses should be adapted according to the local situations and available resources.

- Even if not all contacts of a case can be identified and traced, contact tracing can still help reduce transmission when implemented in combination with other measures, such as physical distancing.

- As borders open up in Europe, it is particularly important that an effective system of contact tracing operates across borders. The Early Warning and Response System (EWRS) is used to facilitate this process. Mobile apps will likely also help with contact tracing across borders.

Scaling up contact tracing

Traditional contact tracing by following up cases and contacts using public health staff is resource intensive. There are alternative methods that can be used to increase efficiency.

Using non-public-health staff and volunteers

Trained non public-health staff, e.g. staff working in other areas of the public service, or volunteers such as students, retired healthcare professionals, NGO workers, etc.

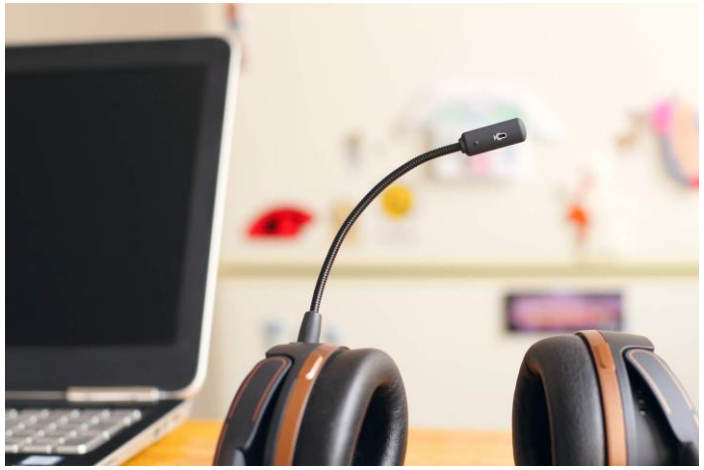
Ensure supervision and comprehensive training (provided in-person or online) in contact tracing processes and data protection issues.

Repurposing existing resources such as call centres

Call centres or national hotline services already been set up for other purposes.

Existing staff repurposed to undertake contact tracing and/or re-enforced by volunteers.

Other locations used as call centres provided that staff have laptops and phones.



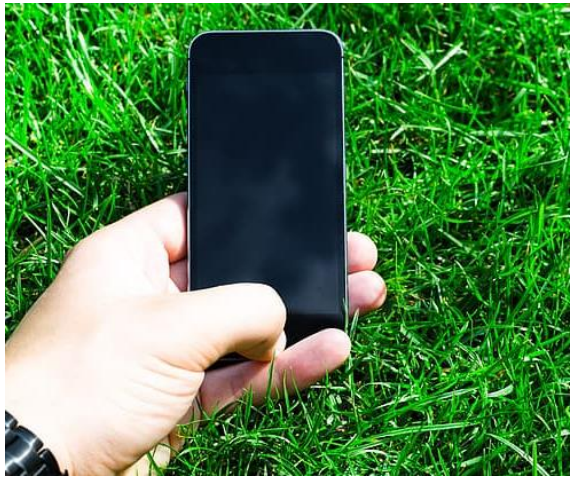
Reducing the intensity of contact follow-up

- Instead of initial phone call, text message or pre-recorded voicemail
- Instead of daily follow up phone call, daily text message or no follow-up
- Prioritising the follow-up of cases in specific settings (e.g. long-term care facilities, prisons, refugee camps, etc.), healthcare workers or work with vulnerable populations.

Using the technology

Mobile applications

- help trace and alert more contacts as they do not rely on the memory of the infected case
- trace contacts unknown to the case and can notify the contacts quickly
- facilitate cross-border contact tracing, crucial as restrictions are lifted.



Complement but never replace regular contact tracing efforts.

Not everyone will have a smartphone and not everyone will have downloaded the tracing app, in particular the elderly.

Note: mobile applications must follow applicable data protection regulations

Contact tracing software

Example: Go.Data developed by WHO allows for the registration of cases and their contacts, thereby facilitating the communication with and follow-up of contact persons; analysis of data.

Analyses of data from contact tracing can provide key information to inform more effective response measures.

Web-based applications

Example: web-based tool where cases are asked to enter details of their movements and contacts are advised according to their exposure.

THANK YOU

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Erika Duffell, Lina Nerlander, Emmanuel Robesyn

Stay connected to ECDC

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