

Contact Management Programme

Weekly Public Health Report

17th to 23rd May 2021



Coronavirus
COVID-19

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CMP Weekly Public Health Update - Key Findings

A ransomware attack was made on the HSE on 14th May 2021. This severe cyber-attack caused significant disruptions to HSE IT infrastructure, including the systems enabling contact tracing. As a result, limited data are presented for the week of the 17th to 23rd May. The number of cases reported via the CovidCare Tracker and the associated number of close contacts may be underestimated due to disturbances to laboratory information systems and standard contact tracing process.

Number of Cases –17th to 23rd May

The total number of cases managed by the Contact Management Programme (CMP) during the week ending 23rd May was 3,101, an increase of 5% from the 2,949 cases managed the previous week (ending 16th May). This represents 97% of the cases reported on the CovidCare Tracker between 17th and 23rd May. Further information on cases is available from the Health Protection Surveillance Centre.

Number of Contacts – 17th to 23rd May

The number of close contacts reported during the week ending 23rd May was 10,281, an increase of 11% from the 9,239 close contacts reported during the week ending 16th May. 97% of these close contacts had been contacted by CMP at the time of report preparation. The number of complex contact episodes identified during the week ending 23rd May was 1,479, a 4% increase from the 1,423 identified during the week ending 16th May. It should be noted that the ransomware attack on 14th May 2021 led to disruptions in the usual contact tracing process.

Introduction

The Contact Management Programme (CMP) was developed by the HSE to support Departments of Public Health by notifying results to people tested for COVID-19 (or a nominated person), and to identify and manage contacts of people known to have COVID-19. This consists of four steps:

1. Informing the case about their diagnosis.
2. Collecting data on close and complex contacts of the confirmed case.
3. Advising close contacts of appropriate management.
4. Undertaking active follow-up of close contacts which includes daily contact by SMS and referral for SARS-CoV-2 test.

This report provides an analysis of close contacts and complex settings created on the CovidCare Tracker for the week ending 23rd May 2021. Close contacts are defined as follows:

- a) Anyone that the Case has had face to face contact for longer than 15 minutes in any setting (less than 2 meters or six and half feet contact)
- b) Household contacts defined as living or sleeping in the same house, individuals in shared accommodation that share kitchen and bathroom facilities as well as sexual partners
- c) Anyone with whom the Case has shared a closed space with for longer than 2 hours in any setting. (A setting is the place or location where you may have had close contact with other people e.g. a household, workplace, school, social venue, transport).

A complex contact is a situation where the contact is not a known named individual but relates to, for example, a congregate setting where an individual could be called and a list of contacts constructed. Further details on close and complex contacts are provided in Appendix 1.

Analysis is based on the following data sources as of 5.30pm, 24th May 2021:

- CovidCareTracker (CCT) - This is a web based information system developed to support process associated with the Contact Management Programme (CMP).

All data are provisional and are subject to change. Some close contacts may be managed off the CovidCare Tracker by Departments of Public Health.

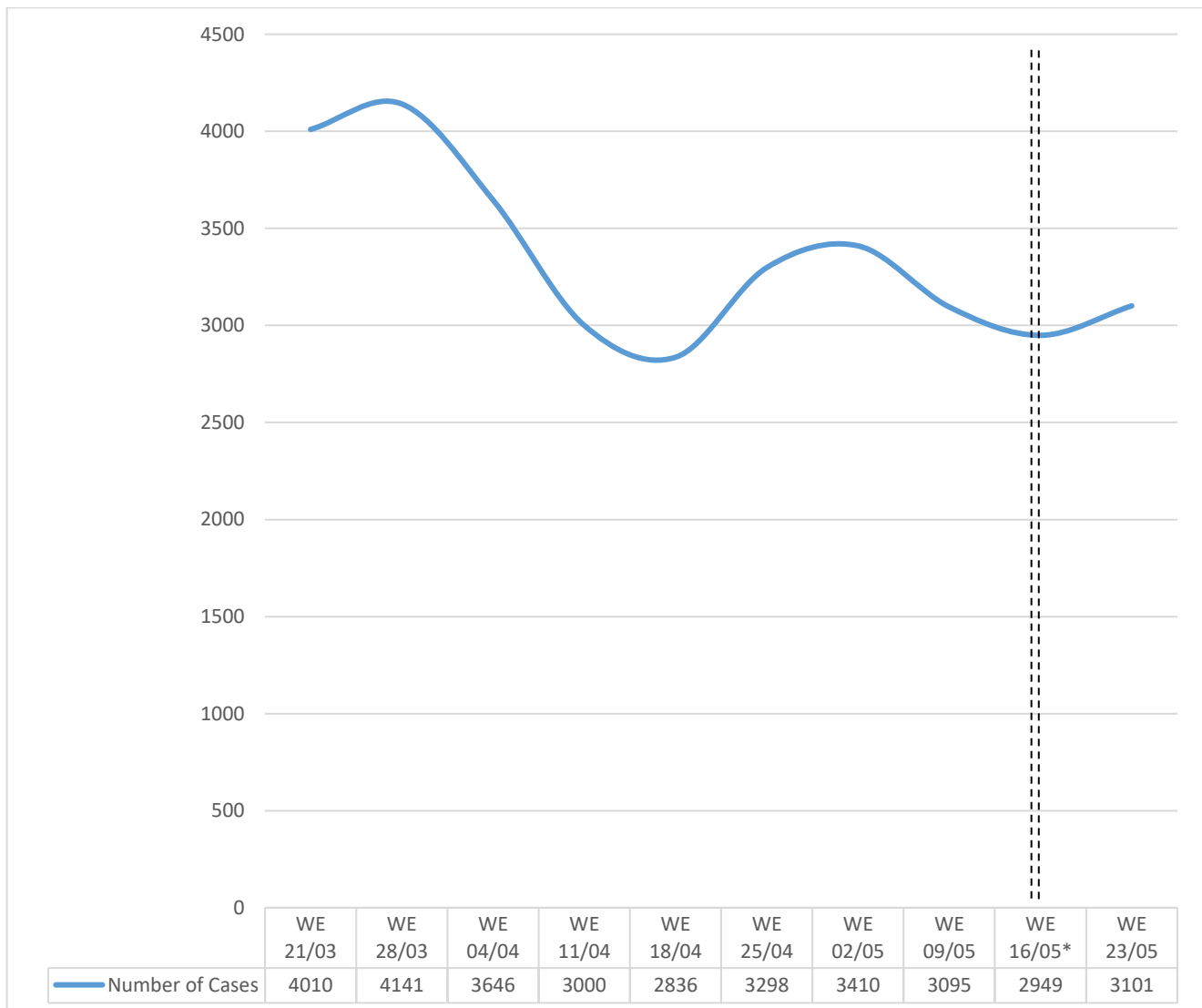
Contact tracing for cases and contacts on the CovidCare Tracker is a collaborative effort between staff in the CMP and in regional Departments of Public Health.

CMP Weekly Public Health Update – 17th to 23rd May

Number of Cases Managed on the CovidCare Tracker (CCT) by Week

The total number of cases managed by the Contact Management Programme (CMP) during the week ending 23rd May was 3,101, an increase of 5% from the 2,949 cases managed the previous week (ending 16th May). This represents 97% of the cases reported on the CovidCare Tracker between 17th and 23rd May. Further information on cases is available from the Health Protection Surveillance Centre. It should be noted that the number of cases may be inaccurate due to the disturbances from the ransomware attack on Friday 14th May.

Figure 1.1 - Number of Cases Managed on CovidCare Tracker per Week



* A ransomware attack was made on the HSE on 14th May 2021, indicated by the dashed lines in figure 1.1. This severe cyber-attack led to significant disruptions to HSE IT infrastructure, including the systems enabling contact tracing. Further details of the changes to contact tracing systems and processes are provided in Appendix 3.

Number of Close Contacts by Week

The number of close contacts reported during the week ending 23rd May was 10,281, an increase of 11% from the 9,239 close contacts reported during the week ending 16th May. This represents a 35% increase in the number of Call 3 close contacts and a 7% increase in the number of Call 3S (Settings) close contactsⁱ. Of these 10,281 close contacts, 8,860 received a phone call and 1,162 were informed by an SMS. These 10,022 contacts represent 97% of the close contacts created between 10th and 16th May. It should be noted that the ransomware attack on Friday 14th has caused some disruptions to the usual contact tracing process.

Figure 1.2 –Number of Close Contacts by Week



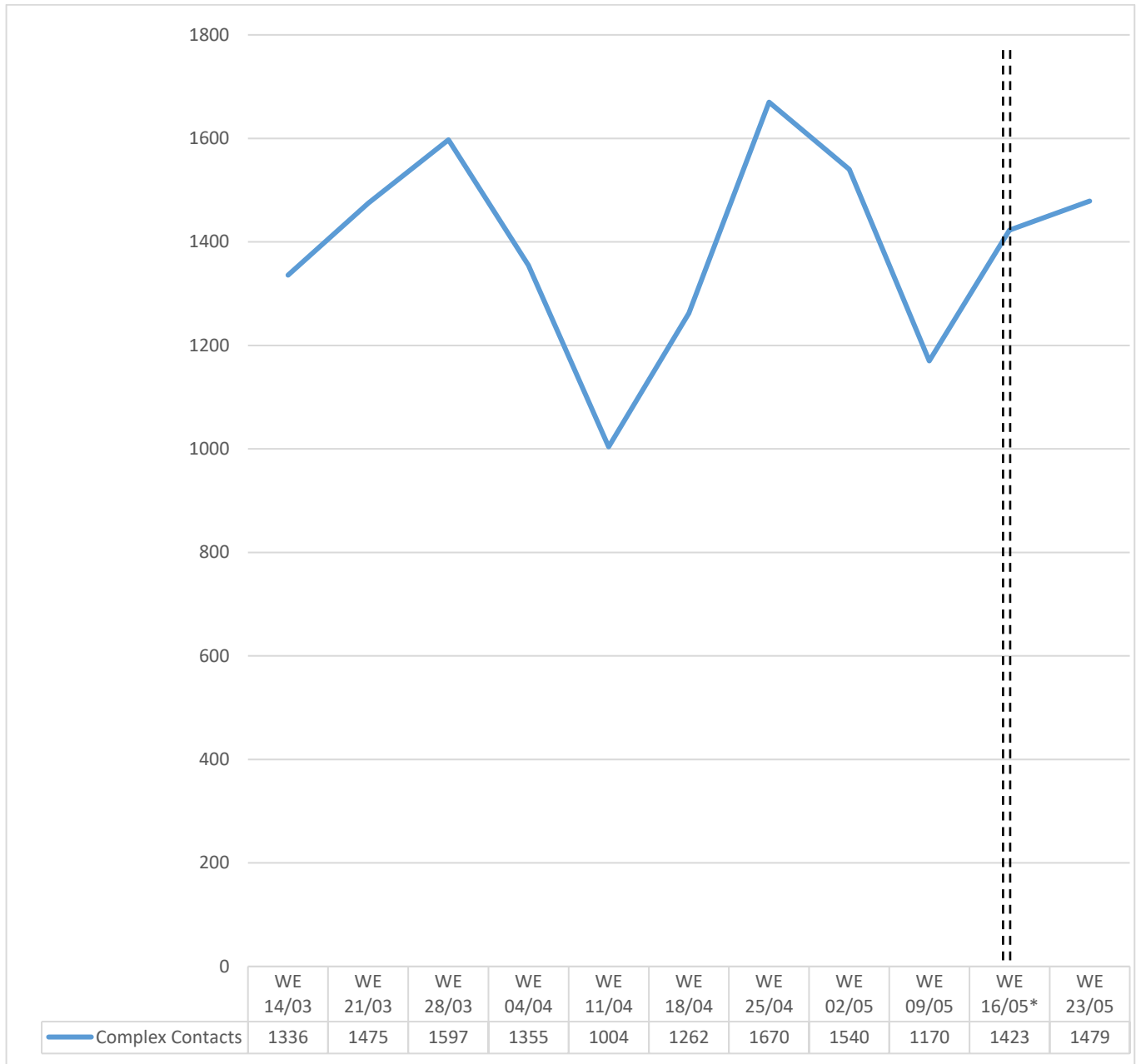
* A ransomware attack was made on the HSE on 14th May 2021, indicated by the dashed lines in figure 1.2. This severe cyber-attack led to significant disruptions to HSE IT infrastructure, including the systems enabling contact tracing. Further details of the changes to contact tracing systems and processes are provided in Appendix 3.

ⁱ Close contacts related to flights and certain educational settings (schools and crèches) have been managed via a separate pathway (3S or Settings Contacts) since the 31st of August and the 23rd of September, respectively. Further details are provided in Appendix 2.

Number of Complex Contacts by Week

A complex contact is created when a case has been in contact with a setting or group of people during their infectious period. Individual close contacts arising from these complex episodes of contact are included in analyses of close contacts. The number of complex contact episodes identified during the week ending 23rd May was 1,479, a 4% increase from the 1,423 identified during the week ending 16th May. Further definitions for complex contacts are provided in Appendix 1.

Figure 1.3– Number of Complex Contact Episodes by Week



* A ransomware attack was made on the HSE on 14th May 2021, indicated by the dashed lines in figure 1.3. This severe cyber-attack led to significant disruptions to HSE IT infrastructure, including the systems enabling contact tracing. Further details of the changes to contact tracing systems and processes are provided in Appendix 3.

Appendix 1: Contact Definitions

Cases are asked to identify contacts during their infectious period based on symptom onset or date of test if asymptomatic. If symptomatic, cases are asked to list contacts from 48 hours before symptom onset to 10 days after symptom onset. If asymptomatic, cases are asked to list their contacts from 24 hours before the date of their positive test to 10 days after the date of the positive test.

Close Contacts

Close Contacts are defined as follows:

- a) Anyone that the Case has had face to face contact for longer than 15 minutes in any setting (less than 2 meters or six and half feet contact)
- b) Household contacts defined as living or sleeping in the same house, individuals in shared accommodation that share kitchen and bathroom facilities as well as sexual partners
- c) Anyone with whom the Case has shared a closed space with for longer than 2 hours in any setting. (A setting is the place or location where you may have had close contact with other people e.g. a household, workplace, school, social venue, transport).

Complex Contacts

A complex contact is a situation where the contact is not a known named individual but relates to, for example, a congregate setting where an individual could be called and a list of contacts constructed. Complex contacts are identified by contact tracers on call two, the call to collect contacts, and referred to departments of public health for information and further investigation where appropriate.

Appendix 2: Close Contact Pathways

Close contacts are managed using two separate pathways on the CCT, depending on the type of contact that has occurred. The two pathways are illustrated in the figure below.

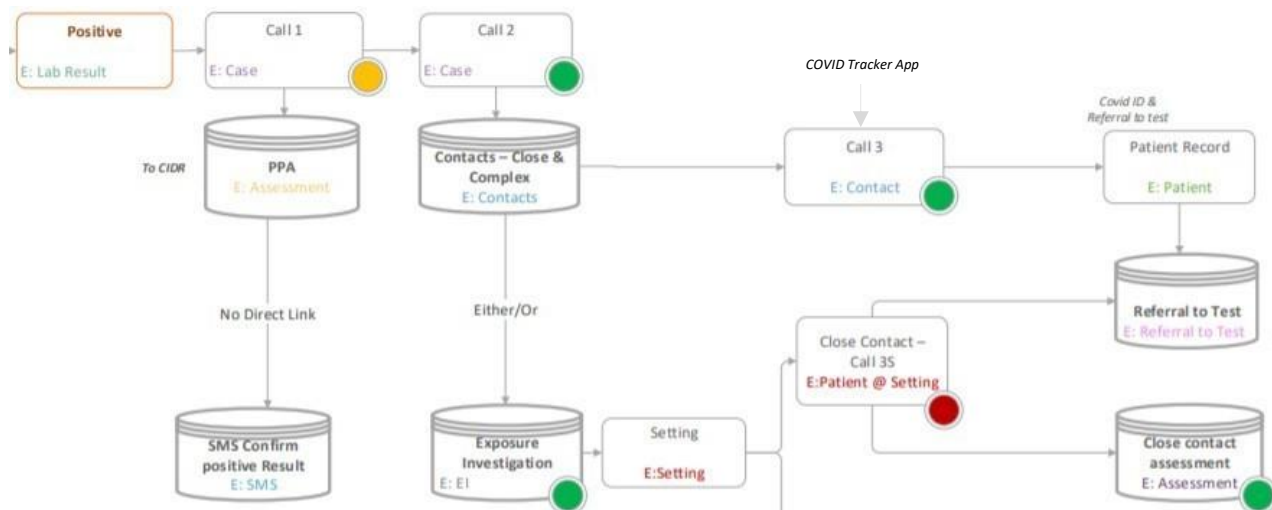


Figure A2.1 - Call 3 and 3S Pathways

Call 3 Pathway

Close contacts identified by the case on a call 2 or by the COVID Tracker App are managed using the standard call 3 pathway unless related to a flight, school, crèche or Montessori. Close contacts identified by Departments of Public Health as part of their investigation of complex contacts are also managed using this pathway, unless the contact occurred on a flight or in a school, crèche or Montessori. Close contacts identified by the COVID Tracker App are uploaded directly to the CCT from the app with no link to the index case to maintain end-user privacy.

Call 3S Pathway

Since the 31st of August 2020, cases who took a flight during their infectious period are referred to their regional Department of Public Health for risk assessment. Following the Public Health Risk Assessment, close contacts are uploaded to the CCT by a central data entry team where they receive a phone call from a contact tracer, a SMS or are referred directly for testing. Since the 23rd of September 2020, cases who report attending a school, crèche or Montessori as a student or member of staff during their infectious period are referred to the regional Department of Public Health for risk assessment. Close contacts identified during the Public Health risk assessment are managed using the Call 3S or Contacts at Settings pathway, which links these contacts back to the setting where the close contact occurred. Data, including retrospective data, on these contacts have been available to the CMP from the 7th of December 2020.

Appendix 3: Impact of HSE Ransomware Attack on Contact Management Programme Processes and Systems

On May 14th, 2021, the HSE was the target of a ransomware attack. Ransomware attacks use a type of malware that encrypts data or blocks services until a ransom is paid. To mitigate the risk of data loss, the HSE shut down its servers and network systems, and directed that its hardware is powered-off until further notice. This adversely impacted many of the IT applications and services used by the Contact Management Programme to process data from COVID-19 testing laboratories, notify patients of their test results, collect data required by the HPSC, identify and trace close contacts and schedule their COVID-19 tests.

Under guidance from HSE leadership, use of CTC hardware and networks was temporarily suspended for a period on the 14th May. A Virtual Machine was configured to allow the Data Processing Team to connect to the HSE's Azure portal, enabling ongoing upload of lab results to the CovidCare Tracker system. However, there were some disruptions to laboratory information systems in acute hospitals so some positive results may have been missed or delayed.

Given the inability to access the Health Link system ⁱⁱ for scheduling COVID-19 tests appointments, close contacts during a Call 3 were advised to attend their nearest 'walk-in' test centre ⁱⁱⁱ for a COVID-19 test from the 14th May to the 24th May.

Scheduling of tests for close contacts re-commenced on the 25th of May 2021.

ⁱⁱ <https://www.ehealthireland.ie/a2i-hids-programme/healthlink/>

ⁱⁱⁱ <https://www2.hse.ie/conditions/coronavirus/testing/covid-19-walk-in-test-centres.html>