Unite against COVID-19

PHU Contact Tracing "Deep Dive"

Hawke's Bay District Health Board – Rapid Report

4 May 2020

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CONTENTS

1. BACKGROUND AND INTRODUCTION

1.1. COVID-19 and Contact Tracing

- Contact tracing is one of the most critical components of New Zealand's response to the COVID-19 pandemic, alongside testing and public health risk communication.
- Contact tracing is the process of identifying individuals who have been in contact with a confirmed or probable case of COVID-19, communicating with them and directing them to self-quarantine for a period of 14 days from their last date of exposure to the case. It also involves the appropriate follow-up of contacts who may become symptomatic and require testing. Linking these cases together is key to undertaking cluster management.
- Public Health Units (PHUs) undertake contact tracing as part of their core business to manage communicable diseases. In light of the significant increase in contact tracing workload caused by the COVID-19 pandemic, the Ministry of Health (the Ministry) set up the National Close Contact Service (NCCS) on 24 March 2020 to provide surge capacity for PHUs.
- The effectiveness of New Zealand's pandemic response is therefore reliant on the ability of PHUs to conduct rapid and comprehensive close and casual contact tracing. This includes their ability to make use of the NCCS when appropriate.

1.2. Scope

- The Ministry contracted *Allen + Clarke* to provide assurance through an independent assessment of how well PHUs are positioned for successful rapid contact tracing and to review the operating models used in different PHUs to determine national consistency.
- The review is driven by:
  - the identification of issues associated with the transfer of information in both directions between PHUs and the NCCS;
  - the inability of the Ministry to obtain a consistent national picture with key performance indicators of the contact tracing being conducted;
  - the inconsistent reporting from PHUs with regards to confirmed or probable cases and their management;
  - the continued difficulty by PHUs and the NCCS in finding some contacts; and
  - the need to identify how an equity lens is applied over the contact tracing process.
- The Ministry identified three PHUs for "deep dive" reviews that represent diversity in population characteristics and have dealt with a cluster of cases:
  - Auckland Regional Public Health Service (ARPHS), which covers a large urban area;
  - Public Health South (PHS), which covers a large rural and remote area; and
  - Hawke's Bay District Health Board (HBDHB), which has a high percentage of Māori residents.

1.3. Approach

- *Allen + Clarke*'s approach is guided by assurance review and audit processes. Through engagement with each of the PHUs, we sought to identify links from policy to practice and outcomes through document review and stakeholder interview.
- The review involved a blended team from *Allen + Clarke* and the Ministry (the review team), who visited each of the PHUs during the week of 20 April 2020. Visits, each lasting approximately eight hours in total, were undertaken to:
  - Public Health South on 21 April 2020;
  - Auckland Regional Public Health Service on 22 and 23 April 2020; and
  - Hawke's Bay District Health Board on 24 April 2020.
- While the approach aims to ensure "line of sight" from evidence to practice, the approach is also guided by the rapid nature and continued complex operational response environment in which this review is taking place.

1.4. Report

- The information collected during the review is presented in a series of three PHU-specific "Rapid Reports", together with a summative "Rapid Report" presenting findings across the PHUs and including recommendations.
- This "Rapid Report" presents the findings of the review in relation to Hawke's Bay District Health Board.

2. OPERATING MODEL

2.1. Overview

- Hawke's Bay District Health Board's (HBDHB) Public Health Response is anchored with the broader DHB response. The DHB has a *Pandemic Influenza Plan for Health Services* that provides a framework and methodology to efficiently respond to an influenza pandemic. The Plan was last updated in October 2019.
- The Pandemic Influenza Plan sets out a series of triggers that activate different response levels and define approaches across the DHB. During the current COVID-19 pandemic, a Coordinated Incident Management System (CIMS) has been stood up in line with the Plan.
- The Public Health Unit (PHU) response sits within the CIMS Operations Section and is guided by the HBDHB *Public Health Emergency Response Plan,* which was last updated in November 2019. The Response Plan identifies key functions for the PHU and links to other parts of the CIMS.
- For the contact tracing function, this includes the following key roles:
    - A rotating team of three Public Health leads and two Medical Officers of Health (MOHs) and one MOH Registrar that ensures there are always at least two of each on duty with overlaps ensuring consistent handover (this is detailed in Section 3)
    - Three Operations Leads that rotate in a similar fashion;
    - A Notifications & Intel team;
    - A Training and Operational Planning team; and
    - Three Case & Contact Tracing Teams that operate in succession without overlap as discussed below.
- A distinctive feature of the HBDHB Case & Contact Tracing response is the non-overlapping sequential team approach. The teams are operating a 4-2 rotation system as follows:
    - Four days on COVID-19 Case & Contact Tracing.
    - Two days off, with the ability for phone conversations to occur for effective handover.
    - Four days of HBDHB Public Health Business as Usual (BAU).
    - Two days off.
- This approach ensures that each of the teams are segregated from each other to avoid cross-infection in the event of a case in one of the teams. It also ensures a spread of the workload to avoid exhaustion and ensures that some of the critical BAU can proceed.
- The overlap in the rotation structure at the Public Health Lead, Medical Officer of Health and Operations Leads, meanwhile, ensures continuity of response.

2.2. Approach to Equity

- The approach to equity adopted by HBDHB reflects the diversity of the population in the region and builds on the substantial initiatives already underway under BAU. HBDHB has been able to rapidly build on these to implement a targeted approach that is well documented and fully integrated into its response. Some notable elements are described below.
- HBDHB's *Kotahi Whānau* working group aims to develop guidelines on how the DHB works together to ensure a "culturally relevant, operationally effective and efficient public health response to support case and contact management in communicable disease scenarios." Kotahi Whānau pre-dates the COVID-19 response.
- A COVID-19 work plan for Kotahi Whānau was developed in April 2020 to prevent disease spread through ensuring culturally responsive approaches to case and contact management. The Public Health Unit Incident Team Structure also includes a Cultural Advice Collaboration team.
- The DHB also has a specific *Māori Health Communication and Reporting Process to CIMS* that identifies key groups and key roles in providing a conduit between the DHB CIMS and iwi. The PHU noted that early on there were some mistakes made around communication with a local iwi in one case and those lessons had been taken to heart.
- The review team was also told of the Pacific-specific approaches and the use of Pacific Navigators to facilitate communications, but has not sighted any policy documentation on this. This is particularly relevant in the context of a large Recognised Seasonal Employer (RSE) Scheme workforce in the Hawke's Bay.
- HBDHB noted that while there may not be any policy documentation, the collaborative model used between the PHU, Clinical Health Team and Pacific Team with Communicable Disease work is BAU. For example, for the Samoan positive cases (all in one household), the HBDHB Pacific Navigator team were involved, alongside PHU COVID-19 team from the onset of the first notification in the household. Evidence/documentation of this in case notes and on ECA (Patient Management System)
- HBDHB has also developed a *Hawke's Bay COVID Enhanced Testing Plan* that includes an equity focus on making testing accessible to rural, Māori and Pacific.
- The PHU has welfare liaisons that work with the Civil Defence and Emergency Management (CDEM) Working Groups at the DHB CIMS level to provide a welfare response where needed. This is detailed in Section 3. Interpreters are also available through the DHB but have not been required to date.

2.3. Capacity

- HBDHB has largely been able to staff the PHU Incident Team with existing staff. In particular, the Case & Contact Tracing team is made up of Health Protection Officers (HPO) and Public Health Nurses (PHN) who work in mixed pairs, jointly referred to as Public Health Agents (PHA), respectively bringing investigative and clinical skills to contact tracing.
- Other staff have been seconded across from other parts of the DHB to provide additional capacity for the COVID-19 response. This includes for example a Public Health Registrar

seconded from Māori health to support the MOsH and the Deputy Service Director of the Communities, Women and Children Directorate seconded as a Public Health Lead to support response management.

- No specific external advisory support has been sought by HBDHB. Lessons shared by other PHUs, primarily through the daily PHU teleconferences, have been used where relevant. In general, staff felt it was unlikely that external advisory support would be available given the Ministry and other PHUs were likely already making use of any that would have been available.
- Other staff have been offered to HBDHB, including Hawke's Bay District Council Environmental Health Officers (EHO), but this has not been deemed necessary at this time in light of the scale of the response needed in the Hawke's Bay.
- General training on COVID-19 and DHB Preparations was run for staff on 11-12 February 2020. Specific contact tracing training was subsequently run on 26 March and the training coordinator provides one-on-one follow up as required. Case and Contact Tracing staff are also paired according to experience to support upskilling. The review team sighted training materials and contact tracing staff confirmed they had undertaken the training. Contact tracing staff also confirmed the value of pairing up staff and how this ensured less experienced staff were well supported to do their job well.
- HBDHB mobilised a total of 70.9 FTE in PHU and Child Health Team (Both teams jointly responsible for Case Investigation & Contact Tracing). This includes:
  - 17 FTE working on COVID-19 roster on any given day (FTE has been flexed down for weekend days recently due to decreased workload),
  - 8.5 FTE working on COVID related streams of work e.g. welfare & Intel.
  - 19 FTE immediately available for surge capacity
- While difficult to quantify, the capacity of HBDHB to respond has been supplemented by the National Close Contact Service (NCCS). HBDHB only dealt with 1 case prior to the establishment of the NCCS. Since its establishment, all non-household close contacts of cases have been sent to NCCS for processing. The only exception to this is the Ruby Princess cluster, which is discussed in Section 3.

2.4. Managing Surge and Scale

- The PHU indicated that they have only recently had the opportunity to shift their thinking from the immediacy of the COVID-19 responses and operations, to planning for future requirements, including planning for Alert Level 2 and beyond. The planning is in its early stages and ongoing.
- The PHU indicated that there were a number of uncertainties that made the planning challenging, including understanding what Alert Level 2 might entail. The PHU confirmed that planning for any capacity modelling at this stage would require a large number of assumptions.
- An element of the approach to ensure the ongoing capacity to respond to a surge in cases was the need to have access to staff already trained in the PHU COVID-19 protocols. The PHU stressed the need to maintain the currency of that training.

- The PHU felt that 6-12 cases per day could be managed comfortably with two teams and they felt that there was more capacity given there is still a third team, as well as other staff, available to the PHU to develop further teams if needed. However, there has not been any modelling undertaken around resourcing required for various scenarios of increased case load, or the impact on resourcing of returning to a greater level of BAU by the PHU (for example, during Alert Level 2). Conversations are underway with external agencies regarding their expectations for services from the PHU under Alert Level 2 (for example, VTA applications, Before School Checks).
- The PHU representatives indicated the conservative estimate of the cases they could manage daily was based on the assumption that at Alert Level 2 contact tracing takes twice as long as current cases due to increased population mobility (compared with Alert Level 4 and Alert Level 3), which will increase the average number of contacts per case.
- The PHU indicated that its capacity is limited by the fact that it only has two MOH and one MOH Registrar[1]. The PHU is looking at ways to expand the MOH capacity and potentially address this single point of dependency. However, the PHU acknowledged that this is a trade-off between speed (processing volume) and quality.
- The PHU indicated that it has options to scale up contact tracing resourcing, noting that in addition to the staff it has trained in readiness for deployment, it can also call upon Kaiawhina and Pacific team members for additional capacity. The PHU estimates they have a further 19 staff they could call on, all of whom have had initial COVID-19 response training. The PHU noted that if there was a major surge of cases in the future then they would consider use of the surge capacity of the NCCS. However, the PHU would want to see far better communication from the NCCS and have access to/visibility of the contact tracing being undertaken by the NCCS.
- The PHU indicated that they have commenced planning for the possibility of an increase of cases amongst Māori. This would build on existing capability successfully tested during the Measles outbreak in late 2019. The review team has not sighted any planning documentation in this regard.

[1] HBDHB noted that 1 MOH is on long term Sick Leave.

3. CASE MANAGEMENT AND CONTACT TRACING

3.1. Standard Operating Procedures

- An *Operational Plan* describes HBDHB's Standard Operating Procedures (SOP) response to COVID-19. It sets out the roles and responsibilities of staff involved in case management and contact tracing and outlines the steps from case notification to close.
- Initially, HBDHB considered the approach developed by Auckland Regional Public Health Service (ARPHS) but quickly moved into its own way of working based on previous experience and the developments it saw. The Ministry's Guidance for Health Professionals was a key resource for developing HBDHB's Operational Plan. The first version of the Operational Plan is dated 6 March and the latest version (v11) is 23 April 2020. During the review team's visit, a number of HBDHB staff commented how quickly the situation was changing over March, and that there was a need to 'build the system' while they were operating.
- The Operational Plan relies heavily on the advice from the Ministry, in particular around case definition and close/casual contact definitions. In order to ensure the operational plan is in line with the most recent advice, the Operational Plan links to advice on the Ministry of Health website, and staff are expected to remain up to date with this.
- Guidance and templates are appended to the Operational Plan. This includes SOPs for Handover between Case and Contact Tracing Teams and Handover between Public Health Operations Leads.
- The Operational Plan also includes SOPs for providing welfare support through the CDEM welfare response in relation to medical, housing, language or food needs. Processes for responding to enquiries regarding Kaumātua/Kuia are also included in the Operational Plan.

3.2. Process Description

- The HBDHB case management and contact tracing process relies heavily on manual processes and paper-based documentation. The steps are set out below. The following description is based on a review of process documentation, advice by management, and confirmation of practice advised by contact tracing staff:

    1. Positive case notifications are received by the MOH, who informs the Public Health Operations Lead[2]. HBDHB reports that it no longer relies on Direct Lab Notifications (DLN) as it observed significant delays in these.
    2. Programme Support Officer (PSO) enters the details in EpiSurv and prepares a case file of (hard copy) documents to be completed by the Case & Contact Tracing Team.

[2] It should be noted that, due to the reliance on Canterbury Health Laboratories, it can take at least 24 but typically up to 48 hours on weekdays, longer at the weekend or public holidays, to receive the results of a sample taken in Hawke's Bay.

3. A team of a PHN and HPO or 2 PHNs jointly undertake an initial case interview. A script is available to support the interview and ensure that every aspect required is covered. The information collected during the interview is used to complete:
    - The EpiSurv Case Report Form
    - A case activity history form that details activities in the period of communicability and if the source of the infection is unclear for 14 days prior to symptom onset
    - Contacts of the Index Case.
4. The hard copy completed EpiSurv form is provided to the PSO to update Episurv.
5. The Interview team discusses the case with the MOsH and the Public Health Operations Lead to identify any particular public health needs in managing the case. In some cases, a decision may be made to keep all contact management with HBDHB, such as with the Ruby Princess cluster.
6. All close contacts are uploaded in REDCap. Non-household close contacts are forwarded to NCCS for follow-up.
7. Household close contacts are contacted, then followed up daily by phone call with information loaded into REDCap by the Case & Contact Tracing team undertaking the direct engagement. Each contact is spoken with directly. Where needed, a support pack is delivered to the household with a thermometer, sanitiser, masks, etc.
8. Casual contacts are informed to monitor their health for 14 days and report any symptoms to their General Practitioner.

- Assuming that case recall is accurate, the approach of HBDHB can be relied upon to identify all close and casual contacts. Additionally, HBDHB can confidently report on the outcome of contacting household close contacts and casual contacts.
- However, as non-household close contacts are transferred to the NCCS for management without any feedback loops, HBDHB cannot currently provide assurance that all close contacts have been contacted in a timely manner. In fact, the review team was notified of an instance where the NCCS reverted to HBDHB a week after it was transferred to NCCS with a close contact that neither the NCCS or the Police Finding Service had been able to locate or contact. Through its established networks, HBDHB was able to locate and contact the individual within a day. This case highlights a significant concern in relation to the Ministry and HBDHB having assurance that all cases are completely and appropriately traced in a timely manner to avoid spread of COVID-19.
- In addition, the Operational Plan may benefit from being updated to allow for non-household close contacts to be retained by HBDHB as there are currently no provisions to allow for that.
- HBDHB has confirmed that they are updating the operational plan in the latest draft to allow for non-household close contacts to remain within the PHU and the requirement for staff to remain updated with the case and contact definitions for when they resume the roster.

3.3. Defining Close and Casual Contacts

- HBDHB relies on the Ministry's definition of close and casual contacts. The *Operational Plan* links to the latest advice on the Ministry website and directs staff to familiarise themselves with these on a daily basis. An individual contact tracer volunteered that this was standard practice for her each morning.
- Given the rotational approach of Case and Contact Tracing teams where a team will not have been rostered on COVID work for eight days, it is particularly important that staff familiarise themselves with any updated case and contact definitions when they resume their roster. No specific SOPs in relation to this currently exist.
- The Operational Plan includes guidelines for prioritising contacts according to their likelihood of developing severe diseases if infected, the likelihood of becoming infected and the time since last exposure.
- In addition, step 5 in the process outline above, when the Case & Contact Tracing Team discuss the case with the MOH and Public Health Operations Lead, provides an opportunity to apply a public health risk lens to close and casual contacts.

3.4. Cluster Identification

- The ability of HBDHB to identify clusters is severely limited due to the lack of feedback between other PHUs and the NCCS with the PHU. In addition, though we understand that Healthline is now following up NCCS-managed contacts daily, the previous day 7 and day 14 follow-ups would have limited the ability to identify clusters, even with good feedback loops and communication.
- The current approach to identifying clusters relies heavily on individual knowledge of the staff in the PHU Incident Response team. The approach is based on individuals making a connection between cases based on knowledge of the local caseload and information shared between PHUs at the daily teleconference. There is currently no ability to link cases using technology. The approach can best be described as haphazard.
- An example of this is the Ruby Princess cluster. HBDHB became aware of a potential cluster as two local tour guides became confirmed cases of COVID-19. Source investigation for both of these individual cases highlighted they were exposed to two different groups of Ruby Princess passengers. Through conversation with other PHUs, HBDHB learned that a tour guide in Wellington that also had interaction with Ruby Princess passengers was a case. Through this process a link to the cluster was identified.
- Once the cluster was identified, HBDHB decided not to send any of the close contacts of cases to NCCS due to the need to take a different approach to case management. We understand that the contact identification process in this case was substantially expanded to include both level 2 and 3 contacts of the case (i.e. contacts of contacts etc.).

3.5. Closing off cases and clusters

- The *Operational Plan* outlines a process for closing off cases. It refers to *Final Clearance Criteria* for releasing confirmed or probable cases that the MOsH must use to make a determination. The Criteria consider additional risk factors such as whether the case is

an essential worker and determines a pathway for determining whether a case is ready for closure

- For household close contacts, the *Operational Plan* specifies they will be monitored for 14 days from the last possible exposure to the case while infectious before they can be considered for release.
- There are no guidelines for non-household close contacts, presumably as these are primarily managed by NCCS for HBDHB. Regardless, the same criteria as for household close contacts would likely apply. Nevertheless, as HBDHB may opt to retain management of all contacts (e.g. Ruby Princess), it would be worth updating the *Operational Plan* to clarify this.
- Following the closure of an individual's investigation, the *Operational Plan* sets out a process to close files, including an audit process to identify opportunities for continuous improvement. This involves reviewing all documentation for completeness and preparing a Case Cover Sheet. The whole file is then handed over to the PSO and then to the MOsH for audit and final sign off.

4. INFORMATION MANAGEMENT AND DATA COLLECTION

4.1. Information Management

- HBDHB relies on EpiSurv and REDCap as their primary information management system. EpiSurv was described as the "source of truth" and is the primary source for internal reporting.
- In addition, the review team understands spreadsheets are used to track and manage cases and household contacts.

4.2. Data Collection

- As noted above, data collection is primarily through paper-based manual notes that are then transcribed into systems either by PSOs (EpiSurv) or Case & Contact tracing teams (REDCap). Templates are based on HBDHB requirements and primarily focus on clinical and epidemiological data rather than contact tracing data. This creates a number of issues in relation to reporting as outlined in the section below.

4.3. Performance Indicators

- **Time from PHU notification of case to case interview:** HBDHB does not currently collect and store data that enables ready assessment of this metric.
  - *Time and date of notification is not captured:* Case management starts when the MOH receives an e-mail from Canterbury Health Laboratories (CHL) and the time stamp of this notification is not captured. HBDHB does not rely on Direct Laboratory Notifications (DLN) as they identified a lag of up to 24 hours between manual notification from CHL by email and the DLN. The MOH advised that upon receipt of the notification they immediately inform the Public Health Operations Team and a PSO creates a case in EpiSurv. As such, the time of case creation in EpiSurv could be used as a proxy, though it would not be a true reflection of the notification time.
  - *Time and date of case interview has only recently been captured:* In the latest update (17 April 2020) of the Operational Plan, the Case Activity History/Timeline form was amended to include the interview date and time. As this was not captured previously, there is limited data available for HBDHB to compute this metric. However, a proxy measure could be used for earlier cases. Following the interview, the Case & Contact Tracing team meet with the MOH and Operations Leads to discuss the case. Following the meeting, the Case & Contact Tracing team enter the details of close contacts into REDCap to send to the NCCS. The REDCap "Date form initiated" timestamp, an automated read-only field, could therefore be used as a proxy, noting a slight delay from the actual case interview

  Anecdotally, the MOH and Operations Leads stated that they estimated the time from notification to interview based on their case load has been within 1-2 hours.
- **Time from case interview to quarantine of close contacts:** HBDHB only has data relating to household close contacts as all other close contacts are managed by the NCCS.

This is a major limitation in the ability of HBDHB and the Ministry to have assurance that close contacts are quarantined within expected timeframes.

While HBDHB does not maintain records of the time household close contacts are first called by the Case & Contact Tracing team, the time of the case interview is almost always the same as the household close contacts are quarantined, particularly during the COVID Alert Level 4 period which relates to the vast majority of HBDHB cases.

- **Number and distribution of close contacts:** Given all close contacts are entered into REDCap for management by HBDHB or transfer to NCCS, this metric should be available through an analysis of REDCap data. The review team was provided with an extract from REDCap by HBDHB and notes the following:
  - The REDCap data includes 20 individual EpiSurv cases spanning 25 March to 13 April 2020. During that same time there were a total of 38 confirmed and probable cases in HBDHB.[3]
  - Of the 20 cases for which we have data[4], the average number of close contacts per case is 7.4. However, 10 of the cases had only 1 contact while 2 cases had 44 and 47 contacts respectively. Excluding the latter 2 cases, the average number of close contacts per case is 3.2.
  - The average number of household contacts per case is 1.85. However, 6 of the cases had no household close contacts and 1 case had 15 household close contacts. Excluding the case with 15 household close contacts, the average number of household close contacts per case is 1.15.
  - Of the non-household close contacts, 55% are classified as "Other setting", 29% are "Healthcare setting", 12% "Workplace setting", and 5% "Airplane flight or on other transport".

  Caution must however be exercised with these numbers as the number of non-household close contacts has been limited during the COVID Alert Level 4 period.
- **Proportion of contacts who have been traced:** As with the *Time from case interview to quarantine of close contacts* metric, HBDHB is not able to assess this metric at this time as non-household close contacts are managed by the NCCS. For close contacts that are managed by HBDHB, there is no data on any contacts that were not traced or evidence that HBDHB was not able to trace any of these contacts. As stated previously, the review team was told of an incident where the NCCS and the Finding Service had not been able to get in touch with one of the close contacts they were managing and notified HBDHB after a week. HBDHB was able to subsequently contact that individual within a day through their existing networks. Assuming that the NCCS would have contacted HBDHB had they not been able to get in touch with any of the other contacts, it is likely that all

[3] HBDHB only started using REDCap once the NCCS was established in order to transfer data to them. There were three cases that pre-date this; one case was notified on 22 April 2020 and therefore not included in the extract at the time the review team received the data.

[4] 11 of the 38 cases reported during this period had no contacts. The other cases not recorded in RedCap were contacts of confirmed or probable cases

contacts were traced. However, without a nationally-integrated dataset it is not possible to reliably assess this.

5. ADDITIONAL FUNDING FROM THE MINISTRY

- Additional spend areas:
    - Moved from 5day to 7day service
    - Overtime
    - Leadership FTE increase
    - Technology – screens etc.
    - Maori pandemic response plan – Kotahi Whanau
    - GP Engagement (3rd Generation with Ruby Princess)
    - Back filling roles (school immunisation)
    - PPE
    - Contingency
- The review team sighted efforts to calculate expenditure to date and projected expenditure. The recorded expenditure excludes costs of existing staff, except in some instances where additional cost has been incurred to provide backfill for existing priority BAU functions.

6. DOCUMENTS SIGHTED

Hawkes Bay District Health Board (HBDHB). 2019. Pandemic Influenza Plan for Health Services.

HBDHB. 2019. Public Health Emergency Response Plan.

HBDHB. 2020. Staff Message Structure for Public Health Response to COVID -19

HBDHB. 23 April 2020. Operational Plan v12 + Appendices [all previous versions also available]

HBDHB. Undated. Māori Health Communication and Reporting Process to CIMS.

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HBDHB. Undated. Ongoing PPE training

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HBDHB. 5 April 2020. PPE Guidelines

HBDHB. 10 February / 26 March. Training attendance records

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HBDHB. Various dates. Minutes – Operations Section COVID-19

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HBDHB. 16 April 2020. HBDHB Line listing of close contact data elements 6-13 April for Hawkes Bay

HBDHB. 23 April 2020. PHU Plan for COVID19 MOH allocated Funding $529k

HBDHB. 20 April 2020. CIMS Roster 20-04 to 26-04

HBDHB. 22 April 2020. Roster for PHU April 2020

HBDHB. Undated. HBDHB Capacity Document

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HBDHB. 23 April 2020. Rest Home Clearance Criteria.

HBDHB. 29 March 2020. Ruby Princess Active Case Ascertainment Plan

HBDHB. 29 March 2020. Summary of Ruby Princess Contact Tracing

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HBDHB. 31 March 2020. Ruby Princess Meeting Notes

HBDHB. 1 April 2020. Updates to ruby P

HBDHB. 24 April 2020. REDCap Data Dictionary

HBDHB. 24 April 2020. CBAC Data Sample

HBDHB. 24 April 2020. REDCap Data Extract

HBDHB. 23 April 2020. Hawke's Bay COVID Enhanced Testing Plan

ANNEX – LABORATORY TESTING OF HAWKE'S BAY SAMPLES

- In exploring the case and contact management process of HBDHB, the review team became aware of potentially significant delays in the processing of swabs collected in Hawke's Bay.
- There are no laboratories in Hawke's Bay that are recognised for COVID-19 sample testing. Instead, HBDHB has a contract with Canterbury Health Laboratories (CHL) in Christchurch to undertake its testing,
- Given the significant reduction in domestic flights, this has the potential to cause delays of up to 48hours in testing during weekdays and potentially longer at weekends or on public holidays.
- The review team was informed of the following process:
    - Samples are collected by courier from HBDHB daily on weekdays at 4:30pm and driven to Wellington.
    - On weekends, HBDHB has an agreement with a different courier company that collects samples at 5pm and drives them to Wellington.
    - On weekdays, samples are flown to Christchurch on a special flight that arrives at 6am the day after they are collected from HBDHB.
    - On weekends, the samples are flown on a commercial flight the day after they are collected from HBDHB, arriving mid-morning.
    - CHL processes samples as they are received and sends email notifications to HBDHB MOsH. These notifications start to arrive "later that day".
- Given the above information, there is a significant potential for samples to not be tested for up to 48 hours. On a weekday, a sample taken mid-afternoon (assuming that Community Based Assessment Centres have a cut-off to get their samples ready for a 4:30pm pick up) may not be collected until 4:30pm the following day and then not get tested until the day after that.
- Though the situation may improve as additional flights are added, the review team questions whether sending samples from HBDHB to Christchurch is effective and whether there are laboratories in Wellington or Auckland that could process samples for HBDHB in a timelier manner.
- Anecdotally, the review team was told that the situation for Tairawhiti DHB is similar but potentially worse in some respects. We understand that samples from Tairawhiti are also driven to Wellington via Hawke's Bay, which increases the timelines presented above.