



INDEPENDENT REVIEW

Response to the North-West Tasmania COVID-19 Outbreak

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http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_North-West_tasmania_covid-19_outbreak

Published November 2020

ISBN: 978-1-925906-21-9

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Independent Review
Response to the North-West COVID-19 Outbreak

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The Hon Peter Gutwein MP
Premier of Tasmania
Level 11, 15 Murray St
HOBART TAS 7000

Dear Premier

I present to you the Report of my Independent Review of the Response to the North-West Tasmania COVID-19 Outbreak.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Greg Melick', with a stylized flourish at the end.

Greg Melick AO SC

Independent Reviewer
30 November 2020

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1. Executive Summary

The North-West Tasmania COVID-19 outbreak in March and April of 2020 resulted in a number of significant challenges for the Tasmanian health system. Knowledge of the global pandemic and its impacts was still emerging at the time of the outbreak. National guidance as to how to manage it was evolving rapidly. This required keeping abreast of the best available evidence but at the same time resulted in confusion and uncertainty for all concerned.

Unlike major natural disasters, or significant yet localised traumatic events such as shootings for which our health system is generally well-prepared, this outbreak event was both unprecedented and took place predominantly within the North-West Regional Hospital. Transmissions among staff were a major component, rather than the more anticipated patient-to-staff route.

In the face of this significant and rapidly emerging challenge, those at the coal face responded with great adaptability and resourcefulness. The Review heard repeatedly about the long and arduous hours worked by many hospital and health system staff.

This Report notes that various controls put in place nationally and in Tasmania in the period leading up to the outbreak reduced the case numbers arising from returned overseas travellers and the associated risk of COVID-19 transmissions within the community. It is likely that they also supported prevention of further spread and containment of the outbreak in the North-West of Tasmania after it arose.

As at the time of writing this Report, scientific understanding of how this coronavirus is transmitted, and best practice options for prevention of spread in health care settings, is still emerging. However the additional knowledge that has emerged since the outbreak will help to prevent and better inform the response to any future outbreaks in Tasmania.

This Report sets the scene for the COVID-19 outbreak globally, nationally and at the State level. It sets out the particular characteristics of the resourcing of hospitals in the North-West. North-West Tasmania is a regional area, and in many ways, isolated from the centre of the health system's organisational centre.

Much has already been learnt from the outbreak, and a number of changes have already taken place in response to it.

The Review considers that directions, notices, orders and regulations made under the *Emergency Management Act 2006* and the *Public Health Act 1997*, in respect of the North-West, were effective and appropriate.

The Review is not aware of any requirement for legislative amendments.

It is of great credit to the State's emergency management system, DoH and the many dedicated people who worked long and arduous hours that the outbreak was successfully contained.

In addition to the recommendations set out below the Review considers the following to be of particular significance:

- It is the assessment of this Review that closure of the NWRH and NWPB was a major, difficult and ultimately entirely correct decision – despite the complexities of the transfer of patients to MCH and LGH, and how that impacted on the community.
- The command and control systems within the Department of Health need to be further refined and those in charge of hospitals must have the power and authority, subject to overall accountability to those to whom they are responsible, to direct activities and personnel within their hospital. Clarity of control and responsibilities is critical in times of emergencies.
- There needs to be a complete upgrade of government IT systems and in particular those within the Department of Health to enable the making, storing, access and interrogation of records across Government of the patient and staff records that are essential for responding to a pandemic outbreak.
- The current efforts to improve the culture within the Department of Health must continue and be enhanced to eliminate parochialism and the fear of retribution for those who wish to offer constructive criticism. Despite appropriate assurances from the Premier and DoH Secretary, a significant majority of those who wished to make submissions requested anonymity for fear of retribution. Evidence of the actions of some managers suggest that those fears are not unfounded. Accordingly, much of the evidence in this report is referred to in general terms because specificity would lead to the identification of the source.
- From a Tasmanian population perspective, the outbreak in the North-West was successfully contained. It could have become significantly more widespread, and it is important to not lose sight of this outcome.

2. Summary of Recommendations

- 1 That the Public Health resources of the State be upgraded to, and maintained at a level, which enables expanded provision of public health services, across a range of protection and prevention issues, for the community and the health care sector, and which allows the Director of Public Health to lead the health response in future pandemics.
- 2 That a comprehensive respiratory protection program is implemented to address broader staff safety considerations including ventilation, design, and other aspects involved in a 'hierarchy of controls' approach as well as PPE.
- 3 That substantial stocks of PPE are always kept on hand and regularly rotated.
- 4 That efforts to promote consistent education and practice in relation to the handling and wearing of PPE continue via mandatory training, including refresher training.
- 5 That all health care staff who frequently perform or assist with aerosol-generating procedures or undertake other activities assessed as high risk for COVID-19 transmission carry out fit testing of N95 masks as a priority, and a range of solutions should be developed for those who cannot obtain a fit with the available respirators.
- 6 That when an outbreak occurs within a health facility (which may need to be declared following a single case) all relevant staff and patients, irrespective of presence of symptoms, be tested in addition to those identified through usual contact tracing processes.
- 7 That the Department of Health (DoH) strengthen and maintain its capability for rapid contact tracing in both community and health care outbreak settings. This should also include training and maintenance of surge capacity, and establishing the capacity and protocols to immediately provide supplementary outbreak management solutions such as a 'contact tracing Flying Squad' to attend and work together with health facility staff to support future outbreak responses.
- 8 That the circumstances and legislative framework supporting the dissemination of medical and associated information to all those involved in the contact tracing process and pandemic issues management generally be widely communicated and included in educational and training materials. This should apply not only within the health system itself, but more broadly across all Government agencies.
- 9 That major decisions in DoH which affect multiple agencies and the community, and require close coordination with the emergency management structure, be communicated to those agencies before there is an announcement to the media.
- 10 That DoH streamline the communication process and give greater authority to managers in an affected hospital to communicate directly and quickly with their staff about an outbreak. DoH should also seek opportunities to work in partnership with third parties like unions to improve the speed and relevance of communication, building on its work with organisations like PHTas.
- 11 That there be a clear separation of Public Health advice for the general community from advice for the clinical community.
- 12 That DoH investigate use of an App-based tool for providing the latest information to staff, so that staff do not have to read through large numbers of emails to find key information, but instead open the App to find the latest advice on issues such as PPE. This might also require investment in smart devices to ensure information can be 'pushed' to all relevant staff at the same time, irrespective of where they are located.

-
- 13 That future communications incorporate a stronger focus on health consumers (including external health service providers), with alternative communication tools such as community mail-outs and greater use of public media.
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- 14 That there be an immediate, localised, appropriately-tailored and transparent strategy for communicating with North-West health consumers and community members. This should take into account the ongoing anxiety and uncertainty which arose from the outbreak, and the need to re-assure the community that lessons learnt from the outbreak will inform future responses.
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- 15 That the communication tools used as part of any future strategy can be amended, refined and approved rapidly so as to ensure that there is no delay in disseminating information in the event of a future outbreak, because of the rapid dissemination of information, correct or otherwise, by social media.
-
- 16 That, as a priority, DoH make additional mechanisms available for health and wellbeing support for the North-West workforce that has been affected by the COVID outbreak. Mechanisms for monitoring effectiveness should include – but not be limited to – confidential and properly designed staff surveys.
-
- 17 That DoH regularly monitor the effectiveness of these additional mechanisms to ensure that they are meeting the objective of improving collective and individual staff mental health and wellbeing.
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- 18 That when an outbreak occurs in a hospital, the officer in charge of that site be authorised and encouraged to communicate directly and frequently with their staff about the latest information and direction without the need to first clear scripts and messages through successive layers of the management hierarchy above them.
-
- 19 That DoH define clearly in one, publicly available document the key decision-making structures and officers in an outbreak, how they interact with the broader emergency management structure, and what they are responsible for. This includes being clear about their delegated authority and lines of accountability. All staff should be provided with a clear and simple description of the role, responsibility and authority of senior officers during an outbreak, including THS site pandemic response coordinators, hospital executives and senior clinicians with respect to matters such as infection control, PPE and isolation.
-
- 20 That the Government reviews the role of portfolio ministers during an emergency, and the extent to which they are able to direct the responses of their agencies outside the legislated emergency management structure.
-
- 21 That DoH clarifies the ongoing need for the position of ‘State Health Commander’ during an outbreak, noting the role of Incident Controller in the ECC. The Review considers it adds an unnecessary further level in the command and control structure.
-
- 22 That, if they are retained in the future Health emergency management structure, more resources be provided to the RHEMTs to enable senior DoH staff within those committees to work with other parts of the Emergency Management system, including ensuring Commanders are not required to wear ‘two hats’ and can concentrate solely on the emergency management task.
-
- 23 That there be open communication across the whole-of-government Emergency Management and Health Emergency Management structures to ensure no surprises and maximise the opportunity for effective planning.
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- 24 That DoH look for opportunities to streamline the emergency management decision-making hierarchy while introducing more clinical expertise into the senior levels of the structure.
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- 25** That DoH adopt the principle of delegating decision-making authority as close as possible to the coal-face.
-
- 26** That the Government introduces regular exercises to test the capacity of the system to respond to pandemic outbreaks, and supports this with investment in the emergency management capabilities of key DoH decision-makers.
-
- 27** That in future, key decisions and decision-making processes made and conducted throughout any emergency be carefully documented and held in a central repository within Government to, amongst other things, assist with the important process of post-incident review.
-
- 28** That any future pandemic outbreaks across Tasmania (and the ongoing preparations for same) incorporate structured and formal input of health consumers into the emergency decision making process in real time.
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- 29** That DoH works with appropriate organisations such as Primary Health Tasmania, the University of Tasmania and relevant consumer groups to better understand the health, social and economic impacts of the virus on health consumers.
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- 30** That all THS Consumer and Community Engagement Councils (CCEC) receive training and mentoring support to strengthen their capacity to engage and inform THS management's decision-making process across hospital, rural and community services.
-
- 31** That Tasmania's whole-of-government Information Technology structure be enhanced to enable the making, storage, transmission and accessing of electronic records.
-
- 32** That hospitals be designed or renovated to ensure suitably sized common areas to allow appropriate social distancing amongst staff.
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- 33** That, in emergency situations, staff in departments whose hierarchy is external to the Hospital, e.g. Statewide services such as Pharmacy, Mental Health, and those on cost centres outside the hospital impacted, receive all their communication and directions in relation to the local response through the person with day to day responsibility for managing the hospital.
-
- 34** That, in the case of a future outbreak, the officer with day to day responsibility for managing the hospital have direct access at all times to senior emergency management staff outside the hospital, so that critical decisions may be made in a timely way.
-
- 35** That the limit on financial delegations for local corporate managers who must make immediate purchases to support a response be suspended for the duration of the emergency period, understanding that accountability requirements remain.
-
- 36** That DoH implements an electronic medical record, electronic rostering system and upgraded HR systems to enable the location of staff and contact details to be obtained instantly.
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- 37** That DoH develop contingency plans for the management of an ageing workforce as it relates to, and affects, pandemic management.
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3. Overview of Review Process

Establishment of Independent Review process

On 27 April 2020 the Premier, the Hon Peter Gutwein MP, announced an independent review of the response to the North-West Tasmania COVID-19 Outbreak.

Independent Reviewer and Working Group

Greg Melick AO SC is the Independent Reviewer. He practises as a barrister in several jurisdictions in both criminal and civil matters and is also an accredited mediator. He is the part time Chief Commissioner and Chair of the Board of Tasmania's Integrity Commission, as well as a part time Deputy President of the Commonwealth Administrative Appeals Tribunal.

He has conducted a number of significant and complex investigations whilst a Statutory Member of the National Crime Authority and in addition, he was responsible for the Beaconsfield Investigation Report, and the Cricket Australia investigation into match-fixing.

He has been supported in the conduct of the Independent Review by a Working Group comprising Greg Johannes, Pat Martin and Roscoe Taylor. Members of the Working Group have expertise and experience in the fields of public administration, hospital administration, and public health respectively.

- Mr Johannes was a long serving public servant who held the role of Deputy Secretary in both DPAC and the Department of Economic Development prior to taking on the roles of Secretary, DPAC and Head of the State Service in 2014.
- Ms Martin is a Health Management Consultant with over 30 years' experience working locally and overseas at various healthcare institutions, including as Chief Executive Officer at the Royal Hobart Hospital and at the World Health Organization.
- Dr Taylor spent 12 years as Tasmania's Director of Public Health with a career in public health that exceeds 30 years. Under his leadership Tasmania maintained strong national public health and prevention presence, and he continues to consult on public health issues.

A website was established at http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_North-West_tasmania_covid-19_outbreak, hosted by the Department of Premier and Cabinet. Detailed information about the Review – including the Terms of Reference - was set out on this website.

The Department of Premier and Cabinet provided secretariat support to the Independent Review.

Terms of Reference

The Premier released draft Terms of Reference (ToR) for public comment on 24 June 2020. Feedback on the draft ToR closed on 8 July 2020. The draft ToR were published on the Review website.

Following a public comment process in which 9 submissions were received, final ToR were released on 24 July 2020. The Secretary DPAC wrote to each person or organisation that made a submission on the draft ToR.

The final ToR are as follows:

Purpose

An Independent Review will consider the actions, and effectiveness of those actions, taken in response to the COVID-19 outbreak in North-West Tasmania by government agencies, public and private health care facilities, and other relevant authorities.

The Terms of Reference for the Review are:

- *The chronology and response to the COVID-19 outbreak in North-West Tasmania including but not limited to:*
- *the public health and health system preparedness for the outbreak;*
- *the entry and spread of the virus in North-West Tasmania;*
- *the efficacy of decisions and actions, with respect to identification, isolation, contact tracing and quarantine for cases or potential cases in the North-West;*
- *timelines and effectiveness of communications to hospital staff, the local community and private sector health service providers; and*
- *access to, training for and use of Personal Protective Equipment.*

The effectiveness of directions, notices, orders and regulations made under the Emergency Management Act 2006 and the Public Health Act 1997, in respect of the North-West.

The effectiveness of state, regional and local response, control, communication and coordination arrangements, including agency interoperability, and the co-ordination of activities with government and non-government organisations, including Public Health Services, the Department of Health, the North-West Regional Hospital and the Mersey Community Hospital.

The timeliness and effectiveness of closing the North-West Regional Hospital and the North-West Private Hospital in Burnie, and the impact on other health and related facilities.

Any other matter relevant to the outbreak of COVID-19 in the North-West that the Reviewer identifies in the course of Review activities as warranting investigation and discussion.

The Reviewer will:

- *provide an opportunity to persons with a proper interest in the subject matter of the Review to make submissions about that subject matter and, if thought necessary, to be heard personally in relation those matters;*
- *ensure that where necessary appropriate confidentiality arrangements are made for persons assisting the Review; and*
- *ensure the lived experience of North-West Coast patients diagnosed with COVID-19 and those placed in quarantine are taken account of.*

An independent person of eminent standing and experience will conduct the Review. A working group will be established in conjunction with, and to advise, the Reviewer with at least public health, hospital administration, and public sector administration experience.

The Review will commence in mid July 2020.

The date for submissions and or consultations will be determined by the Reviewer. The Final Report, including findings and recommendations, is expected to be delivered by the Reviewer by the end of October, subject to the spread of COVID-19 over that timeframe and possible impacts on the availability of personnel.

Submissions

Submissions to the Independent Review opened on 25 July 2020, when public notices were placed in the three Tasmanian newspapers (refer Appendix 1). The Premier issued a media release inviting submissions to the Review.

Interested persons were invited to make submissions by Friday 14 August 2020, either via email to NWOutbreakReview@dpac.tas.gov.au, or by post to:

*Independent Review of the Response to the North-West Tasmania COVID-19 Outbreak
GPO Box 123
HOBART TAS 7001*

In particular, those people and organisations who had made submissions on the draft ToR were invited to make submissions to the Review by the Independent Reviewer (refer Appendix 2).

The Independent Reviewer issued a media release on 11 August 2020 encouraging interested persons to make a submission to the Review before the due date closed, which was originally Friday 14 August 2020. This date was subsequently extended to 1 September 2020, with an accompanying media release again inviting people to participate.

Submissions received

In total, 38 written submissions were received (refer Appendix 3).

- 25 submitters requested that their submission be treated as either fully or partially confidential. Of these:
 - 23 were from individuals; and
 - 2 were from organisations.
- 13 submitters did not request either full or partial confidentiality. Of these:
 - 4 submissions were from individuals; and
 - 9 were from organisations.

One additional individual requested to make a confidential oral submission.

The Independent Reviewer and Working Group wish to acknowledge and thank those individuals and organisations who took the time to provide written submissions and/or attend oral interviews, either in person or remotely.

The Review arranged for anyone who participated to have access to the whole of government and confidential Employee Assistance Program, irrespective of whether or not they were a State Service Employee.

Publication of submissions

It is the policy of the Tasmanian Government that all submissions made to public consultation processes are to be published¹. Prior to publication of submissions to the Review, the Independent Reviewer sought confirmation from submitters that they were content with publication of their submissions, and whether they wished any portion to be withheld from publication.

20 submissions were published on the Department of Premier and Cabinet website², either partially or in whole. Of these:

- 6 individuals requested that their name be withheld;
- 1 organisation requested that its submission be noted, with the content withheld from publication so as not to identify individuals; and
- 1 organisation requested that verbatim comments be redacted from its published submission.

Oral submissions/interviews

Some of those who made written submissions were invited to interviews.

Twenty-five interviews were conducted with individuals. The majority of these interviews took place in Burnie, in North-West Tasmania. Interviewees were given the option of bringing support people with them if they wished.

Fourteen interviews were conducted with the following organisations and services.

- ANMF
- AMA
- Ambulance Tasmania
- AUSMAT
- DOH
- DPFEM

- HACSU
- Health Consumers Tas
- Mental Health Services
- MCH
- NWRH
- NWPH
- Primary Health Network Tasmania
- Public Health Services.

An extension for provision of the final Report to 30 November 2020 was granted by the Premier. This followed an extended timeframe for submissions to be provided; delayed availability of a number of people and organisations for interview; and the Reviewer's intention to provide a draft copy of the Report to key State Government agencies.

Other factors informing the Working Group's consideration

Members of the Review Working Group visited the North-West Regional Hospital, the North-West Private Hospital and the Mersey Community Hospital to familiarise themselves with how the hospitals operated during the pandemic, and any changes that had been made subsequently.

The Working Group has been informed by relevant work interstate, including the Report from the Special Commission of Inquiry into the Ruby Princess³.

The Independent Reviewer has had the opportunity to speak with a range of Australian public health experts, including those responsible for public health in other States, and is grateful to those experts for sharing their expertise and insights.

The Working Group formally met on 13 occasions.

The Departments of Health and Police, Fire and Emergency Management were given the opportunity to consider the draft report prior to its provision to the Premier.

1 http://www.dpac.tas.gov.au/divisions/office_of_the_secretary/public_submissions_policy

2 http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak

3 <https://www.dpc.nsw.gov.au/assets/dpc-nsw-gov-au/publications/The-Special-Commission-of-Inquiry-into-the-Ruby-Princess-Listing-1628/Report-of-the-Special-Commission-of-Inquiry-into-the-Ruby-Princess.pdf>

4. Pandemic Background and Context

The cause – SARS-CoV-2

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the infective agent that causes coronavirus disease 2019 (known as COVID-19). SARS-CoV-2 is a new type of coronavirus that was first identified in humans in Wuhan, China, in December 2019.

Coronaviruses are a large family of viruses, some causing illness in people and others that circulate among animals, including camels, cats and bats. Rarely, animal coronaviruses can evolve and infect people and then spread between people. It is highly likely that the SARS-CoV-2 virus originally came from an animal source.⁴

Health effects of COVID-19

The effects of COVID-19 can range from mild illness to pneumonia and death, with multiple organ systems affected in severe cases. Some people recover easily, and others may get very sick with a long recovery time.

People with coronavirus may experience symptoms such as fever, coughing, sore throat and shortness of breath. Other symptoms can include runny nose, headache, muscle or joint pains, nausea, diarrhoea, vomiting, loss of sense of smell, altered sense of taste, loss of appetite and fatigue.⁵

Increasing age is the single most important risk factor for severe COVID-19 disease.⁶ Children tend to experience milder clinical symptoms than adults. Severe or fatal outcomes occur more frequently in the elderly and in those with underlying medical conditions or comorbidities including obesity.

Among confirmed cases reported globally the crude death rate is approximately 2.6%, based on World Health Organization data at the time of writing.⁷ This apparent rate has decreased over time as access to testing and case ascertainment has improved. Mortality of individual cases is to a significant extent determined by personal risk factors (age and co-morbidities) and healthcare quality and access – the latter being less material in Australia relative to many other countries.

The national Communicable Disease Network of Australia (CDNA) guidance also notes that the true case fatality rate for COVID-19 is difficult to estimate due to variable case ascertainment (e.g. access to testing) around the world, especially in regard to mild cases.

The apparent case fatality rate varies widely across the different states and territories in Australia and is very much dependent on the demographics of the local populations most affected by the virus, therefore apparent variations must be interpreted with caution.

To illustrate this, as at May 2020 the crude national case fatality rate in Australia was 1.4% based on surveillance data.⁸ However since then the apparent rate in Australia has increased to around 3.3%⁹ – particularly following the large-scale outbreak in Victoria, which involved many aged care facilities and thus affected a relatively higher number of older people. (As at 5 October 2020, Victoria had recorded 806 deaths, including 635 deaths associated with outbreaks in at least 72 aged care facilities. 94.5% of the deaths in Victoria have occurred in people aged 70 or older).¹⁰

4 Communicable Diseases Network of Australia. National guidelines for public health units. COVID-19. <https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdna-song-novel-coronavirus.htm> (Version 3.8, accessed 29 September 2020)

5 Australian Government Department of Health. <https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/what-you-need-to-know-about-coronavirus-covid-19#symptoms> (accessed 30 September 2020).

6 Australian Government Department of Health. <https://www.health.gov.au/sites/default/files/documents/2020/07/coronavirus-covid-19-guide-for-general-practitioners-to-inform-shared-decision-making-with-patients-around-risk-of-severe-illness-related-to-covid-19.pdf> (accessed 30 September 2020).

7 World Health Organization COVID-19 Dashboard <https://covid19.who.int/> (accessed 30 October 2020).

8 Communicable Diseases Network of Australia. National guidelines for public health units. COVID-19. <https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdna-song-novel-coronavirus.htm> (Version 3.8, accessed 30 September 2020) p.9

9 Communicable Diseases Intelligence. COVID-19 Australia – Epidemiology Report No 27. (<https://doi.org/10.33321/cdi.2020.44.83>) Epub 21/10/2020

10 <https://www.dhhs.vic.gov.au/case-locations-and-outbreaks> (accessed 5 October 2020)

Knowledge of how SARS-CoV-2 is transmitted

Current estimates suggest the SARS-CoV-2 virus has a median incubation period (i.e. the time between exposure to the virus, and subsequently developing symptoms) of 5 to 6 days, with a range of 1 to 14 days.¹¹

The period when people with COVID-19 are infectious to others is still being determined; however as a precautionary approach and for the purposes of contact tracing, cases are considered to be infectious from 48 hours prior to onset of symptoms. In Australia, the period of potential infectivity is assessed on a case-by-case basis. Assessment depends on:

- the severity of illness,
- duration of symptoms,
- whether a person has required hospitalisation, and
- whether there are underlying medical problems impacting on immunity (with more complex situations, two negative swabs are required before a case is regarded as cleared of the virus).¹²

From early on in the COVID-19 pandemic it was understood that the key mechanism for transmission of the SARS-CoV-2 virus was person-to-person spread during close unprotected contact either through droplets or from contact with contaminated objects or environmental surfaces (fomites).¹³ Some of this understanding and therefore guidance on infection control measures was also premised on prior experience with other highly pathogenic coronaviruses (SARS-CoV-1, MERS-CoV), as well as pandemic influenza.

It was also recognised that aerosol transmission could occur in some circumstances (e.g. during medical procedures involving an infected person and generation of very fine droplets able to remain in the air and spread for longer distances). This information still forms the basis of national infection control guidance for HCWs in Australia.

However there has also been increasing evidence and commentary to suggest that airborne transmission can occur in other circumstances.¹⁴ This uncertainty has led to significant national and international discussion regarding wearing of masks in the general community, together with review of guidelines regarding the most appropriate use of personal protective equipment (PPE) by health professionals in various contexts. Much of the focus is on the type of mask worn (surgical masks vs P2 or N95 respirators). The issue of PPE will be discussed further in subsequent sections.

Some individuals remain asymptomatic, which adds to the difficulty of identifying cases and containing the virus from spreading. The evidence for how frequently this occurs is still evolving, with the CDNA describing that various studies estimate that the asymptomatic proportion of cases ranges from 18% to 42%.¹⁵ The evidence is also unclear as to how infectious asymptomatic individuals are, and for how long. However the CDNA also reports that there are multiple studies suggesting that pre-symptomatic, and possibly asymptomatic, transmission occurs.¹⁶

The available information indicates that pre-symptomatic and possibly asymptomatic transmission present significant difficulties for pandemic control^{17,18}, and may well have been a contributory factor for some of the cases arising during the outbreak in North-West Tasmania.

11 Communicable Diseases Network of Australia. National guidelines for public health units. COVID-19. <https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdna-song-novel-coronavirus.htm> (Version 3.8, accessed 30 September 2020) p.8.

12 http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak p.22.

13 World Health Organization: <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf> (accessed 29 September 2020)

14 (for example) Morawska L and Milton D. It Is Time to Address Airborne Transmission of Coronavirus Disease 2019 (COVID-19). *Clinical Infectious Diseases*, ciaa939, <https://doi.org/10.1093/cid/ciaa939> (published 6 July 2020)

15 Communicable Diseases Network of Australia. National guidelines for public health units. COVID-19. <https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdna-song-novel-coronavirus.htm> (Version 3.8, accessed 30 September 2020) p.9.

16 (for example) Morawska L and Milton D. It Is Time to Address Airborne Transmission of Coronavirus Disease 2019 (COVID-19). *Clinical Infectious Diseases*, ciaa939, <https://doi.org/10.1093/cid/ciaa939> (published 6 July 2020) p.8.

17 Buitrago-Garcia D, et al. (2020). Occurrence and transmission potential of asymptomatic and presymptomatic SARS-CoV-2 infections: A living systematic review and metaanalysis. *PLoS Med* 17(9): e1003346. <https://doi.org/10.1371/journal.pmed.1003346>

18 Gandhi M et al. Asymptomatic Transmission, the Achilles' Heel of Current Strategies to Control Covid-19. (Editorial) *New England Journal of Medicine* 382;22 May 28, 2020 p 2158 – 2160.

Emergence of global SARS-CoV-2 pandemic and the Australian response

In early January 2020, Australia received reports of a cluster of cases of a novel coronavirus detected in Wuhan, Hubei Province, China. On 9 January 2020 the World Health Organization announced that Chinese authorities had determined that the pneumonia outbreak in Wuhan had been caused by SARS-CoV-2. Epidemiological investigations had shown that a majority of those cases had an association with the Huanan Wholesale Seafood Market.

Over the next couple of weeks more cases of previously unexplained pneumonia were confirmed as COVID-19 infections. This information together with emerging evidence of human-to-human transmission led to heightened surveillance internationally, including in Australia where the National Incident Room was activated by the Department of Health.

On 21 January 2020, the Australian Government Chief Medical Officer (CMO), in his capacity as Director of Human Biosecurity, made a written determination under the Commonwealth *Biosecurity Act 2015* that COVID-19 (designated “human coronavirus with pandemic potential”) should be included as a “listed human disease”.¹⁹ The effect of this was to authorise the Australian Government Health Minister to impose enhanced border screening measures for all travellers entering and departing Australia.

Australia confirmed its first imported case of COVID-19 on 25 January 2020. This was a man from Wuhan who had flown from Guangdong, China to Melbourne on 19 January 2020.²⁰ In addition to issuing “do not travel” advisories for known high-risk areas in China the Australian Government introduced precautionary measures.

The purpose was to ensure all passengers arriving in Australia from China were met and provided with information about COVID-19 and instructions on what to do if they developed any symptoms.

With cases by now being confirmed in a number of countries (at that time there were 7,711 confirmed COVID-19 cases in China and 83 cases reported in 18 other countries), the WHO on 30 January 2020 convened an International Health Regulations Emergency Committee meeting (under the provisions of the International Health Regulations 2005).

Following this, the Director-General declared that the global outbreak of COVID-19 constituted a “Public Health Emergency of International Concern”.²¹ In subsequent weeks the Director-General of the WHO urged the international community to intensify preparedness as a matter of urgency.

As case numbers continued to climb rapidly across the world, the WHO Director General made the statement on 11 March 2020 that COVID-19 could be described as a pandemic.²²

Australia had anticipated this eventuality and from late January 2020 all jurisdictions commenced planning for and putting in place a variety of preparedness measures. In Tasmania the Department of Health went to Level 1 in its health emergency management response in late January 2020 and established an Incident Management Team within Public Health Services, prior to the WHO declaration of a Public Health Emergency of International Concern.²³

From 1 February 2020 the Australian Government implemented a ban on entry for all travellers from or travelling through mainland China, excluding Australian citizens, residents and their families (who were required to quarantine for 2 weeks). Australia subsequently imposed similar bans on Iran (1 March), South Korea (5 March), and Italy (11 March). From 16 March 2020, all travellers arriving in or returning to Australia were required to self-isolate for 14 days.

19 Biosecurity (Listed Human Disease) Amendment Determination 2020 (Cth).

20 The Hon Greg Hunt MP, ‘First confirmed case of novel coronavirus in Australia’ (Media Release, 25 January 2020) <https://www.health.gov.au/ministers/the-hon-greg-hunt-mp/media/first-confirmed-case-of-novel-coronavirus-in-australia>.

21 Dr Tedros Adhanom Ghebreyesus, ‘WHO Director-General’s statement on IHR Emergency Committee on Novel Coronavirus (2019-nCoV)’ 30 January 2020 [https://www.who.int/dg/speeches/detail/who-director-general-s-statement-on-ihf-emergency-committee-on-novel-coronavirus-\(2019-ncov\)](https://www.who.int/dg/speeches/detail/who-director-general-s-statement-on-ihf-emergency-committee-on-novel-coronavirus-(2019-ncov)).

22 Dr Tedros Adhanom Ghebreyesus, ‘WHO Director-General’s opening remarks at the media briefing on COVID-19’ (Speech delivered at the World Health Organization, Geneva, 11 March) <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>.

23 Tasmanian Department of Health: Submission to the Independent Review. p.4.

Australia's public health response to COVID-19 throughout the pandemic has been guided by the Australian Health Protection Principal Committee (AHPPC). In relation to COVID-19, the AHPPC draws upon the expertise of three of its sub-committees:

- the Communicable Diseases Network Australia (CDNA),
- the Public Health Laboratory Network (PHLN), and
- the Infection Control Expert Group (ICEG).

The Tasmanian representative on the AHPPC is the Director of Public Health (Dr Mark Veitch).

The CDNA has for many years provided national coordination and guidance on the prevention and control of notifiable infectious diseases and is comprised of all State and Territory Directors of Communicable Diseases, representatives of the Commonwealth and other health experts. The current Director of Public Health in Tasmania had also been Chair of this Network in the recent past.

CDNA produces a Series of National Guidelines (known colloquially as 'SoNGs'), with the purpose being to provide nationally consistent advice and evidence-based guidance for public health units in responding to a notifiable disease event. These are published by the Australian Government Department of Health.²⁴

National and Tasmanian measures designed to 'flatten the curve'

On 13 March 2020 a meeting of the Council of Australian Governments (COAG) discussed COVID-19 and agreed to form a National Cabinet comprising first ministers from all jurisdictions. From 15 March 2020 onwards the National Cabinet, guided by public health advice through the AHPPC, commenced putting in place a range of measures aimed at reducing the risk of transmission of COVID-19 in the community. The expressed objective of these measures nationally has been to suppress transmission of the virus and "flatten the epidemic curve", rather than completely eliminate the virus.

Measures introduced by the Australian Government (endorsed by the National Cabinet) at this time included:

- A universal precautionary 14 day self-isolation requirement on all international arrivals, effective as at 11:59pm Sunday 15 March 2020.
- A ban on cruise ships from foreign ports (including round trip international cruises originating in Australia) from arriving at Australian ports for an initial 30 days, effective as at 11:59pm Sunday 15 March 2020.²⁵

During early March 2020 - despite the national measures to prevent importation including curtailment of non-resident arrivals from high-risk countries, and other border control measures - case numbers and transmissions of COVID-19 were progressively increasing in Australia, culminating in a spike of several hundred cases reported nationally each week.²⁶

On 15 March 2020 the National Cabinet also endorsed the advice of the AHPPC to further introduce social distancing measures. This included the requirement that non-essential, organised public gatherings of more than 500 people should not occur.

On 16 March 2020, National Cabinet agreed upon the following key decisions and advice:²⁷

- *Accepted the AHPPC advice that non-essential indoor gatherings of greater than 100 people (including staff) will no longer be permitted from Wednesday 18 March 2020; outdoor events of fewer than 500 attendees may proceed.*
- *Agreed that all Australians should only consider travelling when it is essential. If unwell, people must stay at home, unless seeking medical care.*
- *Agreed that Anzac Day ceremonies and events should be cancelled due to the high proportion of older Australians who attend such events and the increased risk posed to such individuals.*
- *Endorsed the AHPPC advice against the bulk purchase of foods, medicines and other goods.*
- *Agreed to the recommendations by the AHPPC to enhanced arrangements to protect older Australians in Residential Aged Care Facilities and in the community.*

24 Australian Government Department of Health <https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdnasongs.htm> (accessed 27 September 2020)

25 This ban exempted arrivals after the 15th March providing the vessel had already left its international port before then, and was bound directly for an Australian port. This was the situation with the Ruby Princess.

26 Communicable Diseases Intelligence 2020;44 (<https://doi.org/10.33321/cdi.2020.44.77>) Epub 23/09/2020

27 <https://www.pm.gov.au/media/coronavirus-measures-endorsed-national-cabinet> (accessed 27 October 2020)

- *Accepted the advice of the AHPPC that schools should remain open at this time.*
- *Noted that boarding schools are “at high risk of transmission” and encouraged boarding schools and parents to “consider the risks versus the benefits of a student remaining in boarding school”.*
- *Accepted the advice that university and higher education “should continue at this time” with risk mitigation measures.*

On 17 March 2020 the Tasmanian DPH declared a Public Health Emergency (for an initial period of seven days; this was later extended). This declaration enabled the issue of a Direction by the DPH to direct each person in Tasmania who had arrived in Australia on or after 16 March 2020 to self-isolate for 14 days. In addition, passengers arriving in Tasmania were provided information on requirements and required to complete an “arrival card” from 17 March 2020 to enable collection of personal details.

These particular Directions were subsequently replaced and added to by the State Controller.

The Premier of Tasmania made a declaration of a State of Emergency on 19 March 2020 which enabled additional resources and powers to be brought into play.

On 20 March 2020 the National Cabinet again met and agreed to introduce the following advice and measures:²⁸

- *Physical distancing of 1.5 metres, wash hands regularly for at least 20 seconds with soap and water, avoid touching your face and if sick, stay home.*
- *Non-essential mass gatherings banned for groups of more than 500 people outdoors, or more than 100 indoors.*
- *Restrictions on visitors to Residential Aged Care Facilities to protect older Australians.*
- *From 9pm AEDT Friday 20 March 2020, international borders closed except for Australian citizens, residents and immediate family members. All arrivals into Australia are required to self-isolate for 14 days, either at home or in a hotel.*

From midnight on 20 March 2020, Tasmania required 14 days quarantine for all non-essential travellers from other jurisdictions. Conditions were imposed on essential workers coming to the state so that the risk of them infecting others at work or in the community was minimised.

Over subsequent days the DPH introduced a range of other Directions to limit mass gathering sizes and the operations of a range of venue types. These measures were aimed at reducing the risk of COVID-19 transmission in the broader community across Tasmania.

On 23 March 2020 aircraft landings in Tasmania were prohibited by the State Controller, except at 6 designated airports.

From 28 March 2020 it was directed that quarantine of travellers to Tasmania must occur in a specified facility overseen by Government.

These state-based controls, in conjunction with other subsequently introduced national measures, collectively benefited Tasmania in terms of reducing case numbers arising from returned overseas travellers and associated risk of COVID-19 transmissions within the community. These actions also supported prevention of further spread and containment of the outbreak in the North-West of Tasmania after it arose.

Directions and other measures brought into play more specifically for control of the North-West Tasmania outbreak are described in a later section of this Report.

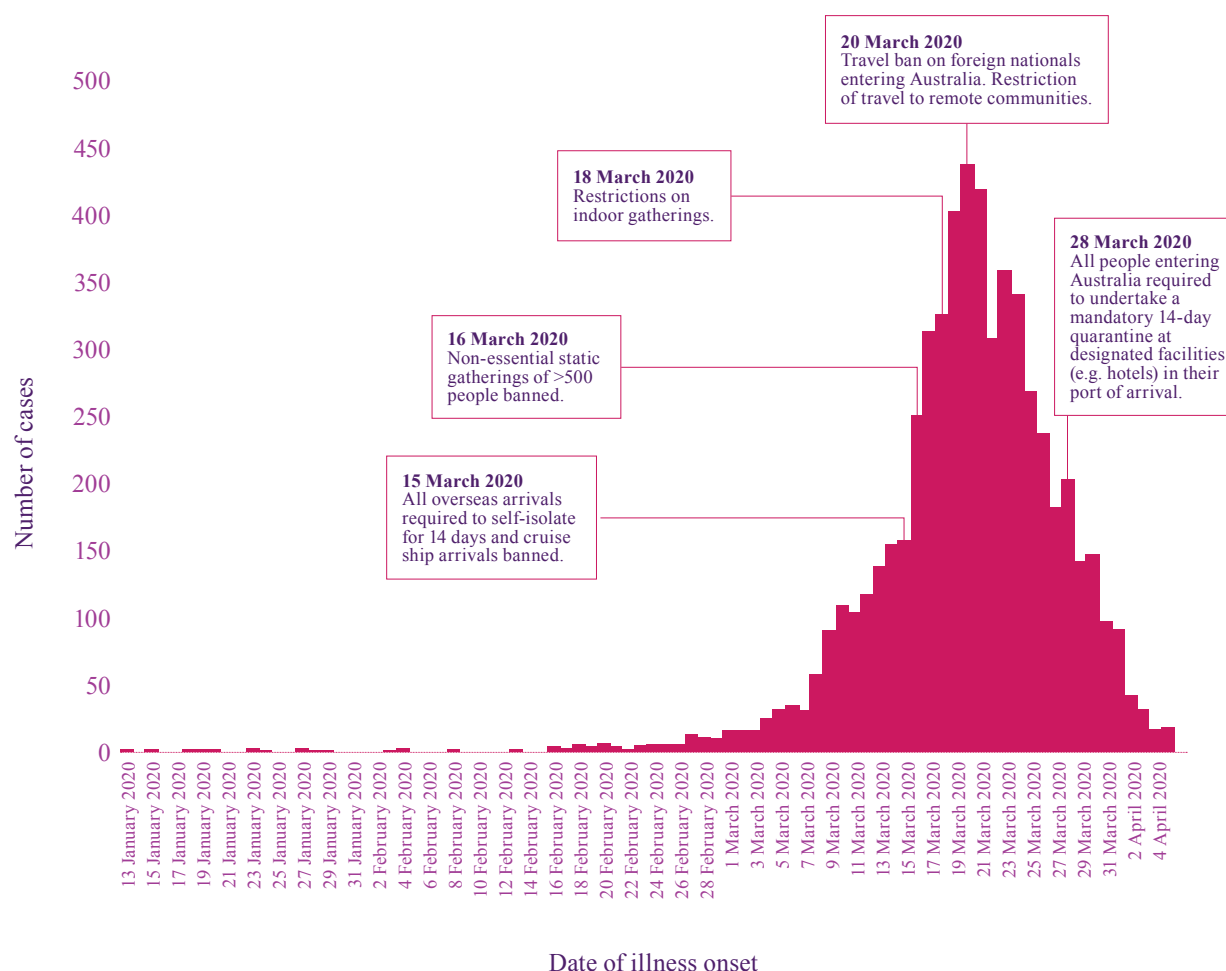
By 5 April 2020 the total number of confirmed cases notified in Australia was 5,805.

- Of cases with a reported place of acquisition, 66% had a recent international travel history and 32% were considered to have been locally acquired.
- Of cases with a reported place of acquisition, 16% (n = 903) were acquired at sea on a cruise ship.

The following graph shows the shape of the ‘epidemic curve’ for Australia, as at 5 April 2020. It helps demonstrate the benefit of international border control measures and containment strategies within Australia at that point in time (particularly when seen in the context of the increasing numbers in a number of other countries at that time).

28 <https://www.pm.gov.au/media/update-coronavirus-measures-0>

FIGURE 1: COVID-19 notifications in Australia by date of onset, from 13 January to 5 April 2020, with timing of key national public health measures²⁹



As at 30 October 2020, Australia had recorded 27,569 confirmed COVID-19 cases, including 907 deaths. To the same date Tasmania has recorded 230 cases, of whom 13 died.³⁰

The Department of Health has advised the Review that approximately one third of the Tasmanian cases occurred in travellers returning from overseas, and the remainder occurred via local transmission within Tasmania. The majority of these latter cases are associated with the outbreak in the North-West (138 cases).

Over the three months to October 2020, there have been only two new cases recorded in Tasmania, both in people returning from Victoria. One was detected during quarantine and the other during an inter-hospital transfer; this person was safely isolated upon arrival at NWRH.

Globally as at 3 November 2020, the World Health Organization reported 46,591,622 confirmed cases of COVID-19 across 216 countries, including 1,201,200 deaths.³¹

29 Communicable Diseases Intelligence 2020;44 (<https://doi.org/10.33321/cdi.2020.44.30>) Epub 9/4/2020

30 Australian Government Department of Health <https://www.health.gov.au/news/health-alerts/novel-coronavirus-2019-ncov-health-alert/coronavirus-covid-19-current-situation-and-case-numbers-at-a-glance> (accessed 30 October 2020).

31 World Health Organization COVID-19 Dashboard <https://covid19.who.int/> (accessed 3 November 2020)

National Planning and Guidance on Health Responses to COVID-19

Prior to the SARS-CoV-2 pandemic, Australia had in place for many years well formulated and nationally agreed pandemic action plans and governance processes.³²³³ Australia's whole-of-government pandemic frameworks, at Australian, state and territory government levels, aim to protect Australia's social function and economy. While these were focused primarily on pandemic influenza, much of the preparedness and planning approach remains relevant to other types of pandemic.

The Australian Health Management Plan for Pandemic Influenza (AHMPPI) was last updated in 2019 and provides a useful overview of the principles and management arrangements that formed the basis of the national COVID-19 response.

The AHMPPI acknowledges that “the primary responsibility for managing the impact of a severe outbreak of influenza, or a pandemic, lies with the state and territory governments and that each jurisdiction will have its own plans and protocols. Therefore the majority of operational detail will be found in these plans.” (p.16)

The Tasmanian jurisdictional pandemic influenza plan is known as the Tasmanian Health Action Plan for Pandemic Influenza, which was last updated in 2016.³⁴ As the Tasmanian Government Coronavirus website notes:

*“We are being guided by the Australian Health Sector Emergency Response Plan for Novel Coronavirus, national guidelines that are being reviewed daily, and extensive pandemic planning undertaken over recent years.”*³⁵

As mentioned previously, much of the public health operational response to notifiable conditions in Australia is encapsulated in a series of national guidance documents produced by the CDNA, known as SoNGs. For the most part SoNGs are focussed on what public health units and clinicians need to know in terms of epidemiology, case definitions, laboratory diagnosis, immediate management of cases and identification and management of contacts to reduce transmission risk, along with broader public health containment strategies. SoNGs are not the same as clinical practice guidelines, which aim to advise clinicians on medical treatment of affected patients.

The CDNA published the first iteration of a COVID-19 SoNG promptly, on 23 January 2020. Due to the rapid emergence and changing nature of the SARS-CoV-2 pandemic this SoNG has been updated some 41 times between January and end-October 2020 - which is unprecedented in the history of SoNGs.

Such frequent changes to guidance were necessary as understanding of the virology and epidemiology evolved along with emerging information requirements for best practice containment and infection control. But the rapid pace of change also made it difficult for health professionals to remain abreast of current recommendations.

32 <https://www1.health.gov.au/internet/main/publishing.nsf/Content/panflu-plans-1> (accessed 14 October 2020)

33 https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp1920/Quick_Guides/AustralianPandemicResponsePlanning#_Toc38967786

34 http://flu.tas.gov.au/about_influenza/tasmanian_health_action_plan_for_pandemic_influenza (accessed 14 October 2020)

35 <https://www.coronavirus.tas.gov.au/facts/tasmanian-government-response> (accessed 14 October 2020)

5. Public Health

Overview

The World Health Organization defines public health as ‘the art and science of preventing disease, prolonging life and promoting health through the organized efforts of society’.³⁶

The acute aspects of health departments, including hospital systems and all health care services, are reactive and concentrate on curing diseases or treating injuries. Public health is broadly proactive usually having very long-term goals such as:

- programs to combat smoking, skin cancer and obesity,
- immunisation programs to reduce infectious diseases, and
- ongoing monitoring and surveillance systems to detect and respond to outbreaks of communicable diseases or other public health threats.

Political imperatives cause a disproportionate amount of funding to flow to the health care sector in response to immediate needs (such as emergency departments and elective surgery waiting lists) - causing public health resources of some States to become rundown. This view was confirmed by discussions with current senior public health officials in other jurisdictions.

Public health however is also charged with the responsibility for rapid responses to control or minimise the impacts of emergent health threats. These can range from food and water safety, and environmental health hazards, through to outbreaks of communicable diseases. Deterioration of resources or failure to invest in adequate public health infrastructure inevitably means the resources become inadequate to properly deal with such issues, but particularly pandemics.

Queensland and Western Australia have relatively robust and decentralised public health protection systems because of, amongst other drivers, their geography with dispersed communities including remote indigenous communities, the prevalence of tropical diseases and their maintenance of regional public health units able to assess and respond to local needs. New South Wales also has a well-developed public health system after receiving a significant wake-up call when the Illawarra area had the world’s third largest outbreak of legionnaires’ disease in 1987 which resulted in 13 deaths and another 53 cases.

Unfortunately in Tasmania public health has long come a poor second to clinical and emergency requirements to such an extent that the State was not adequately prepared either in terms of public health personnel or training to deal with the COVID-19 outbreak in ways that better support the overall health system response.

As outlined later in this Report corrective measures have been put in place - but more needs to be done to ensure that necessary responses to pandemics can be led by the Director of Public Health working in tandem with the State Controller.

The Secretary of the Department of Health became the State Health Commander (a position not created by statute) for the outbreak at the NWRH, and whilst workable for this limited outbreak, this was less than ideal. In future, the Secretary’s primary role should be to ensure the continued functioning of the State’s entire health system including supporting Directors of Public Health in carrying out their statutory functions.

Broader Public Health measures

Many broader public health measures were already in place in Australia and Tasmania prior to commencement of the outbreak, and many of these are described in the early sections of this Report. In Tasmania, Public Health Directions were in place to restrict gatherings, close certain services, limit visits to health care settings and require isolation or quarantine in some situations.

36 <https://www.nhmrc.gov.au/health-advice/public-health>

Importantly, there was a high degree of awareness of the risk of COVID-19 across the community and in health care settings, and this generally contributed to a culture of cooperation with public health advice, compliance with Government directions, and heightened awareness of respiratory symptoms and the need for testing.

Ready access to testing, isolation of sick people and prompt quarantine of close contacts are integral to rapid achievement of containment of spread.

The DPH made this summation regarding the outbreak to the Parliamentary Inquiry to the Tasmanian Government's Response to COVID-19:³⁷

Some of the actions taken in relation to the outbreak, and I mention only a small proportion of them, include the outbreak investigation involving case and contact management, outbreak control measures that ultimately involved the closure of the hospital and also very substantial restrictions of activity in the North-West for a period of some weeks, along with quarantining of staff and households. They were measures taken to prevent community incursion and spread from the hospital outbreak. That was likely to have been successful in whole. We do not know which particular measure made the difference, but the package of measures prevented incursions into the North-West to any extent or more widespread infection. There is more detail on the responses in the interim report. Overall, this has been an extensive, coordinated response to an emerging threat that has required a considerable degree of flexibility and working in situations where there was often considerable doubt and limited evidence to guide actions, but all along we have tried to act in a way that was cautious and protected the Tasmanian population.

This Review supports those observations and commends the efforts of all involved.

Public Health Resources

The paucity of Public Health resources was obvious in the lead up to management of the North-West Outbreak. Comment has already been made about the need for sustained capacity in Public Health Services in Tasmania. As noted, Public Health Services has experienced periodic reductions in funding despite increasing demand, remaining very much the poor cousin relative to the acute care sector (funding for which has grown over many years).

This paucity of resources impacts not only upon an immediate pandemic response, but also upon the ability to stem the rising tide of chronic disease in the Tasmanian population – which is one of the key functions of Public Health Services. A legislated responsibility of the Director of Public Health is ‘to develop and implement strategies to promote and improve public health’.³⁸

In considering investment to improve future pandemic outbreak preparedness it is relevant to note that the need for intensive care and the risk of dying from COVID-19 are significantly greater among those with chronic disease comorbidities.

During the outbreak, the lack of public health capacity presented in a variety of situations:

- The inability to staff the PH Hotline with trained people.
 - The consequence of that was confused and angry staff and people who complained of inconsistent and frequently contradicting information.
- Insufficient PH nurses who could train and support and prepare scripts for those who were staffing the phones of the Hotline, as well as respond to new case notifications.
- No surge capacity in Hobart to directly assist in the North-West.
- Insufficient contact tracing team capacity, a vital component for any pandemic, and one that has been demonstrated to make or break the successful management of COVID-19

37 <https://www.parliament.tas.gov.au/ctee/Joint/PAC/Transcripts/C19/Public%20Accounts%2028%20August%202020.pdf>

38 Public Health Act 1997. Section 7 (1) (a).

To remedy this current situation, and to establish a preparedness for future outbreaks, a Public Health Service needs to be appropriately equipped with the following components and range of expert skills:

- Public Health Physicians
- Public Health Nurses: they are an essential component as they have the ability to work across several aspects of public health. Many have a background in IC&P, and/or hold qualifications in Public Health, and all have developed the skills necessary to communicate across the board to gather and disseminate information.
- Contact tracing capability
- ‘Flying Squad’ capacity to support local outbreak responses
- Epidemiologists
- Data managers
- Data entry officers
- Infectious Diseases Physician capacity (preferably conjoint appointment with the hospital sector)
- Environmental health (comprising a range of specialised professional areas as well as generic skillsets)
- Public health policy and health promotion expertise (comprising a range of specialised discipline areas spanning chronic disease risk factors and determinants of health)
- Community engagement expertise - with a public health orientation to strategically develop or link into various community groups to gain support for or deliver public health initiatives.
- Legal policy officers; and
- IT and Administration infrastructure.

It is noted that this range of skills largely already exists or is available to Public Health within Tasmania; the issue is one of capacity and depth. Both of these aspects were found to be inadequate during the outbreak.

Emergency management training and skills need to be maintained across the whole public health workforce.

Recommendation

- *That the Public Health resources of the State be upgraded to, and maintained at a level, which enables expanded provision of public health services, across a range of protection and prevention issues, for the Community and the health care sector, and which allows the Director of Public Health to lead the health response in future pandemics.*

6. The Emergence of the Outbreak in the North-West

How the virus came to Tasmania and the North-West

By 16 March 2020 Tasmania had already experienced at least 7 cases of COVID-19 infection – all connected with returned overseas travellers or in close contacts of travellers.

As of midnight 29 March 2020 the number of COVID-19 cases notified in Tasmania had increased to 66 (including three cases diagnosed and managed in Tasmania who were interstate residents).

As was the case in most states and territories, during March 2020 there had been an influx of COVID-19 positive cases associated with returned travellers from overseas. Cruise ship passengers represented a significant proportion of these early cases in March, including in Tasmania.³⁹

Between 7 and 29 March 2020, at least 17 cruise ships had docked in Australia and nine of those ships had confirmed cases of COVID-19. This includes the Ruby Princess, which became the source of many cases from around Australia as well as in Tasmania.

As described in the NSW Government's *Report on the Special Commission of Inquiry into the Ruby Princess*, undertaken by Bret Walker SC and published on 14 August 2020, this cruise ship had departed Sydney on the evening of 8 March 2020, sailed to several ports in New Zealand and departed Napier on 15 March 2020, returning directly from there to dock at Sydney on 19 March 2020.⁴⁰

Because the vessel had already left New Zealand prior to the deadline of midnight 15 March 2020 it was exempt from the Australian Government's ban - announced that same day - on ships arriving in Australia from international ports.⁴¹

Passengers had been initially advised days prior to arrival in Sydney that, as they were returning international travellers, they would be required to self-isolate for 14 days after date of departure from last port. This advice was amended on arrival to 14 days from disembarkation.

In the case of onbound Australian passengers undertaking domestic travel within Australia this was to commence after returning home. This requirement was further communicated through a fact sheet for international travellers previously developed by the Australian Government Department of Health, which was provided to passengers following disembarkation at the Overseas Passenger Terminal in Sydney. In addition they were advised to present for medical attention should they develop any symptoms of COVID-19.

There had been a number of cases of influenza-like illness, and acute respiratory illnesses among passengers during the cruise. NSW Health staff undertaking a risk assessment shortly prior to the ship's arrival back in Sydney were advised that of the 48 influenza tests performed on board, 24 had tested positive for influenza A.

Furthermore, 5 swab tests for COVID-19 performed in Wellington while the vessel was docked there were negative.⁴² However the vessel did not have the on-board laboratory capacity to test for COVID-19 at this early stage of the pandemic, and at this stage it was not recognised that many of the respiratory infections were actually due to coronavirus. Therefore, taking into account these and other factors including the Ruby Princess's itinerary, the vessel was deemed to be at "low risk" for COVID-19 and allowed to dock in Sydney.

Positive results from COVID-19 tests on a (limited) set of stored swabs taken from on-board passengers did not become known by NSW Health until the morning of 20 March 2020. NSW Health endeavoured to contact all passengers as soon as possible, but with only limited success initially due to a variety of factors described in the Inquiry Report.

39 Communicable Diseases Intelligence 2020;44 (<https://doi.org/10.33321/cdi.2020.44.29>) Epub 3/4/2020 p.3

40 State of New South Wales. Report on the Special Commission of Inquiry into the Ruby Princess. 14 August 2020. p.140.

41 http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak p.63.

42 State of New South Wales. Report on the Special Commission of Inquiry into the Ruby Princess. 14 August 2020. p.160

One couple bound for Tasmania (one of whom had a positive test result) was successfully contacted just prior to their departure at the airport and remained in isolation in Sydney. As the Inquiry noted, this may well have prevented further transmissions of the virus.

However many others, unaware that they were now regarded as ‘close contacts’ due to the delayed recognition of the COVID-19 outbreak on board, continued their travel within Australia to their home destinations where they would self-isolate for the required period.

The Ruby Princess Inquiry made the following key findings regarding communication to passengers:

Passengers were incorrectly advised by the ABF [Australian Border Force] during the cruise that their 14-day period of self-isolation would commence from the date of departure from the last overseas port visited by the Ruby Princess, being Napier on 15 March. This inaccuracy was later clarified during disembarkation at the OPT on 19 March, when passengers were provided with a fact sheet published by the Commonwealth Department of Health which relevantly instructed them to self-isolate for 14 days from their arrival in Sydney.

The directive to allow passengers to onward travel interstate and internationally after disembarkation on 19 March did not appropriately contemplate or comply with the terms of the Public Health Order that came into effect on 17 March, which required all cruise ship passengers entering the State from any other country to isolate themselves in suitable accommodation for 14 days. Under the terms of the Public Health Order, the State Government should have arranged suitable accommodation for all passengers who were not residents of the State.

The fact sheet linked to an email sent to passengers at 10:46am on 20 March incorrectly advised that they were permitted to continue with onward travel, despite being identified as “close contacts” of a confirmed COVID-19 case. Although this advice was corrected by NSW Health by the evening of 21 March, it was at that stage too late to prevent a considerable number of interstate and international passengers from onward travelling, including some passengers who were symptomatic during transit.⁴³

The DPH has advised this Review that in total, there were 54 Ruby Princess passengers who came back to Tasmania following that particular cruise.

Ultimately, the Inquiry found that of the 1,682 passengers from Australia aboard the Ruby Princess, 663 (39.4%) contracted COVID-19. The vessel had a total 2671 passengers including international passengers, but the full COVID-19 case count for international passengers could not be established by the Inquiry. There were 20 deaths among the Australian passengers, and a further 8 deaths were reported from among the international passengers.⁴⁴

Of the 1,148 crew aboard, 191 (16.6%) contracted COVID-19.

The NSW Ruby Princess Inquiry also found that over and above the reported case numbers among passengers, there were an additional 62 secondary and tertiary cases of transmission acquired from those passengers within Australia. This figure appears not to include the subsequent large outbreak in North-West Tasmania. The Inquiry however did make note of this outbreak in an epilogue, saying that the Tasmanian Department of Health had provided information linking the outbreak (by this stage 138 cases had been identified) to one or both of two ex-Ruby Princess passenger cases who were admitted to the NWRH during March 2020.⁴⁵

43 State of New South Wales. Report on the Special Commission of Inquiry into the Ruby Princess. 14 August 2020. p.263

44 Ibid p. 265.

45 Ibid p. 266.

The information provided by the Tasmanian DoH is that the first COVID-19 positive case in North-West Tasmania was notified to PHS on 21 March 2020. The patient had been a passenger on the Ruby Princess cruise ship and had been admitted to the NWRH and tested for COVID-19 the previous day (20 March 2020). The patient was subsequently transferred to an isolation room in the NWRH.

In the following days to 31 March 2020, 11 additional overseas acquired cases were identified, all of whom were residents of the North-West. In addition to the original positive case hospitalised on 20 March 2020, two further cases associated with cruise ships were hospitalised, one of whom was also linked to the subsequent NWRH outbreak. The second patient linked to the NWRH outbreak had also been a passenger on the Ruby Princess ship and was admitted to the NWRH on 26 March 2020.

The DoH's *COVID-19 North-West Regional Hospital Outbreak - Interim Report*,⁴⁶ states that:

The original source of infection was most likely to have been one (or both) of two inpatients who were admitted to the NWRH with COVID-19 acquired on a cruise ship, the Ruby Princess. (p. 9)

Subsequent evidence from genomic sequencing attempts for all COVID-19 positive cases in Tasmania supports the epidemiological findings and shows that both cases were likely sources of transmission to staff at NWRH. The genomic sequencing in both cases showed a pattern associated with the Ruby Princess cruise ship outbreak, but each could be further sub-grouped and linked to two clusters in Tasmania (nominated as Cluster A1 and Cluster A2), both containing health workers.⁴⁷

As mentioned earlier, the first inpatient was admitted to the NWRH on 20 March 2020 and the second inpatient was admitted on 26 March 2020.

The first of these patients had disembarked from the Ruby Princess in Sydney on 19 March 2020, travelled to Tasmania, and presented to NWRH with potential symptoms of COVID-19 on 20 March 2020. This patient was admitted to the medical ward, tested for COVID-19, and subsequently transferred to an isolation room. The positive result of this test was notified to Public Health Services on 21 March 2020.

The movements of the second case prior to their admission with symptoms on 26 March 2020 are not described in information provided by DoH, but sufficient genomic evidence appears to be available to indicate that both were index cases for the outbreak, initially centred on the NWRH.

The Review was advised that Ruby Princess passengers on arrival in Tasmania were regarded as at risk and asked to isolate at home. This was similar to the approach in other jurisdictions regarding returned cruise ship passengers to their home state at this stage in March. While there were some cases of secondary and tertiary transmission of COVID-19 in other parts of Australia associated with Ruby Princess passengers there were no major hospital-based outbreaks such as occurred at NWRH. The Review considers that whether these passengers were quarantined at home or in other locations, such as a quarantine hotel, after arrival in Tasmania had no bearing as to what transpired within the hospital once these passengers developed symptoms and presented for medical attention.

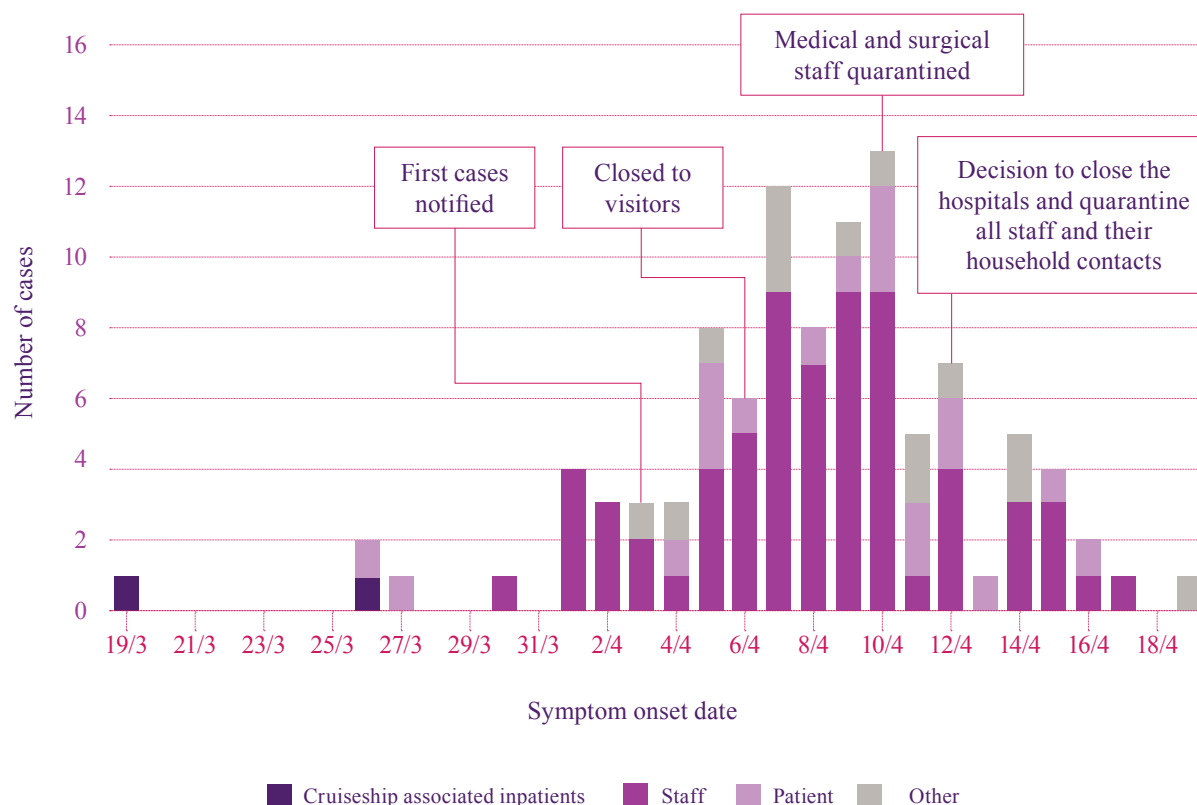
The first recognition of an outbreak among NWRH staff came late on Friday 3 April 2020, with notification to PHS of two positive COVID-19 test results in NWRH healthcare workers. PHS advised the Tasmanian Health Service, and the State Health Commander established an Incident Management Team that same day. (Further details of that response are discussed later in this Report). A third NWRH staff member case was reported on Saturday 4 April 2020.

The following graph (obtained from the Interim Report, some details of which may be subject to minor revisions in the pending Final Report by the Department of Health) shows the epidemic curve of cases that followed:

46 Tasmanian Department of Health: COVID-19 North-West Regional Hospital Outbreak - Interim Report. 29 April 2020. https://www.health.tas.gov.au/__data/assets/pdf_file/0006/401010/North_West_Regional_Hospital_Outbreak_-_Interim_Report.pdf

47 Tasmanian Department of Health: Submission to the Independent Review. p.23.

FIGURE 2: Cases of COVID-19 associated with the North-West outbreak, by date of symptom onset.



(In interpreting the above graph, “Staff” includes medical, nursing, allied health, administrative, management, technicians, logistics, support, cleaning. “Other” includes household contacts of staff. In addition, “symptom onset” is not the same as “date of diagnosis” as this is subject to variable factors including delays in symptom recognition, testing, sample transport and laboratory turn-around times.)

Given the potential incubation period of the SARS-CoV-2 virus (thought to be 1 up to 14 days, with a median of 5 – 6 days), it is evident from this graph that at least some staff were likely to be already incubating their illness by the time the outbreak first came to light.

The Interim Report confirms this, noting that:

“It was ultimately determined that 11 cases associated with the outbreak had already experienced symptoms of COVID-19 by the time the first two (non-cruise ship) cases were notified to PHS”.⁴⁸

Furthermore, given that cases are thought to be potentially infectious from as much as 48 hours prior to onset of symptoms, it is also likely that some of these early cases at least were at risk of transmitting their infection to others, inside the hospital environment or in the community, even before they knew they had the infection themselves.

48 Tasmanian Department of Health: COVID-19 North-West Regional Hospital Outbreak - Interim Report. 29 April 2020. P11.

The DoH advises that ultimately there were 138 cases associated with this outbreak (excluding the two ex-Ruby Princess primary cases), comprising:⁴⁹

- 80 staff
- 25 patients (including one aged care facility resident)
- 33 others, including household contacts of staff.

These cases arose in a range of facilities and settings, including the NWRH, the NWPH, the MCH, an Aged Care facility, household contacts of cases and a small community cluster in Smithton.

Among these 138 cases unfortunately there were at least 10 deaths: nine among inpatients who acquired their infection in hospital, and one Aged Care facility resident.⁵⁰ DoH advises that two further persons who were diagnosed with COVID-19 are awaiting determination as to the cause of death by the State Coroner.

The possible pathways of transmission of the virus among health workers and patients during the North-West outbreak are discussed in a later section of this Report.

Public Health Directions

A Public Health Direction issued on 11 April 2020 required all employees who worked at any time on or after 27 March 2020 (and identified by the administration of the NWRH), and all patients of NWRH and NWPH admitted on or after 27 March 2020, to go into quarantine “at a suitable place” for at least 14 days. In addition, their household members, and any persons identified as close contacts of a case, were also directed into quarantine for at least 14 days. This Direction was shortly thereafter replaced by the Quarantine (North West Region No. 2) Direction, which included staff at the North West Private Hospital from 13 April 2020.^{51,52}

A further Direction was issued on 13 April 2020 requiring workers at the MCH to only travel for the purposes of going to and from work, and otherwise to remain in quarantine when not at work.⁵³

Public Health Directions were also put in place across all local government areas in the North-West region from 13 April 2020 to curtail the movement of people and restrict gatherings and commerce.⁵⁴

Changing definition of ‘close contact’

In the midst of the NWRH outbreak, as noted above, a particularly significant change to the interpretation of the National Guidelines occurred in the way a close contact of a notified case was defined. Until 9 April 2020, contacts had been identified based on either of two criteria in the national COVID-19 Guideline. For example the following extract from the 21 March 2020 version of the Guideline states:

A close contact is defined as requiring:

greater than 15 minutes face-to-face contact in any setting with a confirmed case in the period extending from 24 hours before onset of symptoms in the confirmed case, or

*sharing of a closed space with a confirmed case for a prolonged period (e.g. more than 2 hours) in the period extending from 24 hours before onset of symptoms in the confirmed case.*⁵⁵

The first part of this definition had been widely interpreted (not only in Tasmania) to mean an episode of continuous exposure for at least 15 minutes. The DPH has advised the Review that on 9 April 2020 it was clarified nationally that this should be interpreted to mean 15 minutes of **cumulative** exposure to a confirmed or probable case over the course of a week.

49 Tasmanian Department of Health: Submission to the Independent Review. p.23.

50 Dr Mark Veitch, Director of Public Health. <https://www.parliament.tas.gov.au/ctee/Joint/PAC/Transcripts/C19/Public%20Accounts%2028%20August%202020.pdf>

51 Direction Issued Under Section 16 of the Public Health Act 1997: Quarantine (North-Western Region) No.1 http://www.gazette.tas.gov.au/editions/2020/april_2020/21977_-_Gazette_22_April_2020.pdf

52 Direction Issued Under Section 16 of the Public Health Act 1997: Quarantine (North-Western Region) No.2 http://www.gazette.tas.gov.au/editions/2020/april_2020/21977_-_Gazette_22_April_2020.pdf

53 Direction Issued Under Section 16 of the Public Health Act 1997: Mersey Community Hospital No.1

54 Direction Issued Under Section 16 of the Public Health Act 1997: Gatherings (North-Western Region) No.1 http://www.gazette.tas.gov.au/editions/2020/april_2020/21977_-_Gazette_22_April_2020.pdf

55 CDNA National Guidelines for Public Health Units: Coronavirus Disease 2019 (COVID-19) Version 2.2, 21 March 2020.

The next version of the COVID-19 SoNG (Version 2.6, 17 April 2020) was amended to reflect this and subsequent iterations further extended the definition, with the present version (Version 3.10, 28 October 2020) being:

face-to-face contact in any setting with a confirmed or probable case, for greater than 15 minutes cumulative over the course of a week, in the period extending from 48 hours before onset of symptoms in the confirmed or probable case,

or

sharing of a closed space with a confirmed or probable case for a prolonged period (e.g. more than 2 hours) in the period extending from 48 hours before onset of symptoms in the confirmed or probable case.⁵⁶

The new definition was applied in Tasmania from 9 April 2020 and had immediate implications for the assessment and management of potential contacts related to known cases, as discussed later in this Report and described in the DoH's submission to the Independent Review. (The change contributed to the State Health Commander's decision to direct all NWRH medical and surgical ward staff into self-isolation – meaning that the hospital could no longer maintain services safely, and had to close.)

Also of relevance to this Review, on 12 March 2020 the AHPPC, on the advice of CDNA, considered the threshold for COVID-19 testing of healthcare workers (HCWs) who provide care to patients or residents – including aged and primary care workers – and any restrictions related to the risk of COVID-19 transmission. HCWs were defined as anyone working in the health and aged care sectors that has direct contact with patients or residents.⁵⁷

The AHPPC advice as at 12 March 2020 (and in place during the outbreak) recommended that any HCW who:

- provides direct care AND
- who has a fever (≥ 37.5) AND
- an acute respiratory infection (e.g. shortness of breath, cough, runny nose and/or sore throat)

is classified as a **suspect** case and should be tested for COVID-19. Any 'suspect case' must self-isolate until they receive a negative test result for COVID-19.

AHPPC also recommended that HCWs who are 'close contacts' (as per the definition in the COVID-19 SoNG) of confirmed cases of COVID-19 either in the community or at work should self-quarantine at home AND must not work for 14 days after the last possible contact with the confirmed case.

AHPPC further stated that there was no work restriction on HCWs who are casual contacts of COVID-19 cases and are well, including those who have provided direct care for confirmed cases with adequate PPE. In this instance, HCW were advised to self-monitor for symptoms and self-isolate if they became unwell, until COVID-19 is excluded.

The potentially relevant CDNA COVID-19 SoNGs in place from the time the outbreak may have commenced in the NWRH were Versions:

- 2.2 (21 March 2020)
- 2.3 (24 March 2020)
- 2.4 (26 March 2020) and
- 2.5 (6 April 2020).

Advice on HCW staff testing in Versions 2.3 to 2.4 were consistent with the above-mentioned AHPPC recommendations i.e. the decision to test – be it for staff or community - was strongly based on presence of symptoms among 'suspect cases', plus an epidemiological component (potential exposure to a case in various settings) as per the following Table in the SoNG (extracted from Version 2.4).⁵⁸

56 CDNA National Guidelines for Public Health Units: Coronavirus Disease 2019 (COVID-19) Version 3.8 <https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdna-song-novel-coronavirus.htm> (accessed 29 September 2020)

57 Australian Health Protection Principal Committee (AHPPC) coronavirus (COVID-19) statement on 12 March 2020: Recommendation on testing and work restriction for health and aged care workers. <https://www.health.gov.au/news/australian-health-protection-principal-committee-ahppc-coronavirus-covid-19-statement-on-12-march-2020-0> (accessed 1 October 2020).

58 CDNA National Guidelines for Public Health Units: Coronavirus Disease 2019 (COVID-19) Version 2.4, 26 March 2020.

Suspect case

A person who meets the following epidemiological and clinical criteria:

Epidemiological criteria	Clinical criteria	Action
Very high risk <ul style="list-style-type: none"> Close contact (see Contact definition below) in the 14 days prior to illness onset with a confirmed or probable case International travel in the 14 days prior to illness onset Cruise ship passengers and crew who have travelled in the 14 days prior to illness onset 	Fever ($\geq 38^{\circ}\text{C}$) ¹ or history of fever OR acute respiratory infection (e.g. cough, shortness of breath, sore throat)	Test ²
High risk setting <ol style="list-style-type: none"> Two or more cases of illness clinically consistent with COVID-19 (see clinical criteria) in the following settings: <ul style="list-style-type: none"> Aged care and other residential care facilities Military operational settings Boarding schools Correctional facilities Detention centres Aboriginal rural and remote communities, in consultation with the local PHU Settings where COVID-19 outbreaks have occurred, in consultation with the local PHU Individual patients with illness clinically consistent with COVID-19 (see clinical criteria) in a geographically localised area with elevated risk of community transmission as defined by PHUs 	Fever ($\geq 38^{\circ}\text{C}$) ¹ or history of fever (e.g. night sweats, chills) OR acute respiratory infection (e.g. cough, shortness of breath, sore throat)	Test (on site for aged care residents, where feasible)
Moderate risk <ul style="list-style-type: none"> Healthcare workers, aged or residential care workers 	Fever ($\geq 38^{\circ}\text{C}$) ¹ or history of fever (e.g. night sweats, chills) OR acute respiratory infection (e.g. cough, shortness of breath, sore throat)	Test
Background risk (no epidemiological risk factors)	Hospitalisations patients with fever ($\geq 38^{\circ}\text{C}$) ¹ AND acute respiratory infection (e.g. cough, shortness of breath, sore throat) ³ of an unknown cause	Test

This advice later evolved in Australia in the light of experience with health-care associated outbreaks e.g. aged care facilities (and probably also as testing resources and capacity improved) to become more precautionary in relation to outbreaks in high-risk settings. Current versions of the SoNG provide more discretion for Public Health Units to test all members of high-risk settings for COVID-19 if an outbreak occurs, even if they are asymptomatic.

Given the strengthening evidence of potential transmission from asymptomatic cases, it is likely that more comprehensive testing of staff and patients would now occur should an outbreak arise in a health care setting, than was the practice during the outbreak in North-West Tasmania. This would lead to earlier recognition and isolation of cases, reducing the risk of a wider outbreak.

7. Facilities at Major Tasmanian Hospitals

Overview

The North-West Regional Hospital (NWRH) is a 145 bed Level 2 acute public Hospital in Burnie Tasmania. It offers inpatient and outpatient services in medical, surgical, and allied health specialties, an inpatient mental health unit, emergency department and intensive care facilities and expertise.

Collocated with the NWRH is the 48 bed North-West Private Hospital, (NWPH) owned by Healthe Care, which provides General Medical, Surgical, Mental Health, Palliative Care and Gynaecology. Maternity services are provided for both public and private patients. This is the only birthing service on the North-West Coast.

A 40 minute drive south east of Burnie is the Mersey Community Hospital, (MCH) at Latrobe, a 95 bed facility which has an Emergency Department and provides a range of medical and surgical services. NWRH works closely with MCH sharing jointly appointed staff and the provision of stores and equipment.

Launceston General Hospital (LGH) is situated approximately 150km south east of Burnie. It has 404 beds. It is the second largest hospital in Tasmania and provides a wide range of services to the population in the north of Tasmania, including the North-West.

The 505 bed Royal Hobart Hospital (RHH) is the largest hospital in Tasmania. It provides services for all of Southern Tasmania and many statewide services such as cardiothoracic surgery, hyperbaric medicine, high risk obstetrics and neonatal intensive care, with referrals coming from the north and northwest.

Capacity to isolate – pre Outbreak

In the period leading up to the outbreak in the North-West, all 3 hospitals in the north of the state - NWRH, MCH and LGH - had a number of single rooms across all wards - 41, 44, and 58 (excluding the Children's ward currently undergoing construction works) rooms respectively - that could be used to isolate infectious patients. However, while most of the single rooms have ensuite facilities, they are not negative pressure rooms, and have no ante rooms for donning and doffing of PPE.

In addition to their single rooms, LGH had 10 negative pressure rooms with anterooms, spread across ED, ICU, Acute Medical Unit (AMU) and a couple of wards. At the time, NWRH had one negative pressure room with an anteroom in ED and 2 negative flow rooms, no anteroom, in paediatrics. MCH ED also had a negative pressure room and anteroom plus one single negative pressure room in the Close Observation Unit.

Post Outbreak

Since the Outbreak, structural changes have been planned for LGH. The Review understands that plans were drawn up in June/July 2020 and works planning has now commenced. AMU is the identified COVID ward, and the planned works will upgrade the Unit to 9 negative pressure rooms with appropriate anteroom facilities. Plans also include upgrades to ICU, ED and Operating Suite. A start date has yet to be confirmed.

At MCH the designated COVID ward is 3B, currently with 10 single rooms. It will become a 9 bed unit, all rooms with negative pressure, and with air lock capacity for the unit. This work is in progress.

Prior to the Outbreak, NWRH had 10 single rooms with ensuites at the end of the medical ward. None of the rooms had negative pressure and the area was not fully isolated in terms of staff stations, pan room etc. This area has now been established as an Infectious Diseases ward, Medical C, by closing it off to the rest of the hospital. Negative pressure units have been installed in 6 of the rooms, and 2 two bed rooms have had doors installed with negative pressure units scheduled for installation. The unit will be staffed to 9 beds with the ability to flex to 14 as required.

In addition, negative pressure has been installed in one of the operating rooms, a room in ICU and 2 more rooms in the paediatric ward.

NWRH escalation plans detail flexibility of bed use, isolation options and patient transfer arrangements for Levels 1 – 4 of escalation.

8. Pathways of Transmission in the North-West

Key Findings

- *There are many potential contributory factors to transmissions of the virus that led to the outbreak, and it is not possible to definitively identify a single major cause.*
- *Significant work was carried out prior to the outbreak as well as since, which should greatly reduce the risk of future outbreaks.*
- *The difficulties of preventing all transmission within a hospital environment have been highlighted by similar outbreaks arising elsewhere in Australia more recently in the course of the pandemic, and knowledge in this field continues to evolve.*

Early in the outbreak

The available evidence, both epidemiological and from genomic sequencing of the SARS-CoV-2 virus obtained from samples of positive cases, indicates that the primary sources of infection within the NWRH were two ex-passengers from the Ruby Princess cruise ship who had been admitted with symptoms of COVID-19. One had been admitted on 20 March 2020, the other on 26 March 2020.

Subsequent genomics analysis of all 226 cases identified in Tasmania by May 6 2020 (including those associated with the outbreak) was carried out at the Doherty Institute in Melbourne. This demonstrated a large cluster of cases (called Cluster A) linked to the Ruby Princess cruise ship. According to the Interim Report within Cluster A there could be distinguished two subgroups:

- Cluster A1 (29 cases, including 12 linked to the outbreak), and
- Cluster A2 (120 cases, including 119 associated with the outbreak).

One of the index (ex-Ruby Princess) patients at the NWRH was in Cluster A1, the other in Cluster A2. Both had therefore transmitted the virus to staff.⁵⁹

According to the Interim Report the earliest recognised healthcare worker cases had onset of symptoms between 29 March and 2 April 2020.

Given the potential incubation period of the infection is thought to be anything from 1 to 14 days, the dates of these first symptoms among staff could be consistent not only with exposure to either index patient, but to another staff member in the intervening period.

As the Interim Report noted, the possibility of an earlier but missed healthcare worker case cannot be excluded. However the DoH has also advised the Review that some of the data presented in the Interim Report regarding onset dates for early cases among inpatients (some of whom had complex other medical issues) have since been revised - to a later stage in the outbreak. In the absence of the Final Report from the DoH it is not possible for the Review to draw any inferences regarding the initial pathways of transmission after the virus arrived within the NWRH.

Another potential early pathway was patient-to-patient transmission. The Department of Health submission describes the first Ruby Princess case admitted on 20 March 2020 as being tested and subsequently transferred to an isolation ward.⁶⁰ This should have mitigated the risk to any other patients and seems a less likely pathway.

The Review notes the evidence that HCW cases may become unwittingly infectious to others for a number of reasons, including:

- The virus can be shed by an infected person up to 48 hours before first symptoms are noticed (pre-symptomatic), with viral shedding increasing to be maximal at onset of first symptoms
- A person may remain asymptomatic throughout their infection, yet still be shedding virus (sub-clinical infection) – albeit the risk of transmission is likely to be lower than from those who are pre-symptomatic⁶¹

⁵⁹ Tasmanian Department of Health: COVID-19 North-West Regional Hospital Outbreak - Interim Report. 29 April 2020. p.23

⁶⁰ Tasmanian Department of Health: Submission to the Independent Review. p.16

⁶¹ Buitrago-Garcia D, et al. (2020). Occurrence and transmission potential of asymptomatic and presymptomatic SARS-CoV-2 infections: A living systematic review and metaanalysis. PLoS Med 17(9): e1003346. <https://doi.org/10.1371/journal.pmed.1003346>

- Symptoms may be so mild as to be dismissed by a health worker because they do not meet their understanding of the COVID-19 case definition.

To illustrate the potential risk of asymptomatic infection, a follow-up study of health workers in the North-West (being led by Public Health Services in collaboration with the University of Tasmania) collected blood samples from 262 staff (from a group of over 300 who had also completed a questionnaire) for serological testing for antibodies to SARS-CoV-2, around 3 months after the outbreak, and found 6 staff who were not diagnosed with COVID-19 during the outbreak, but who subsequently had serological evidence of past infection.⁶²

In relation to the point about mildness of symptoms, CDNA case definitions early on in the course of the pandemic, including in March and April 2020 focussed on the following as criteria for testing:

- Fever ($\geq 38^{\circ}\text{C}$) **OR** history of fever (e.g. night sweats, chills) **OR** acute respiratory infection (e.g. cough, shortness of breath, sore throat)

Later in the course of the pandemic the threshold for a “suspect case” was lowered (e.g. fever $> 37.5^{\circ}\text{C}$) and the range of potential symptoms was expanded, with the Guideline becoming more nuanced and allowing for greater clinical judgement in relation to testing.

For context it should be noted that throughout the pandemic, nationally and in Tasmania, very large numbers of tests for COVID-19 have been performed on people presenting with respiratory symptoms, and very many of those have been negative. On average the proportion of COVID-positive tests in Australia during 2020 up to 14 October 2020 is 0.3%, and the corresponding figure for Tasmania is 0.2% (with Victoria being 0.7%).⁶³

While influenza has been extraordinarily quiescent during most of 2020 since February 2020, a range of other respiratory viruses (such as rhinovirus) have continued to circulate, and these more often are associated with only minor cold symptoms.

Public Health Services regularly publishes “FluTas” influenza surveillance reports, which also describe other respiratory virus activity based on testing conducted at the Royal Hobart Hospital.

In the first few months of 2020, covering the period of the North-West COVID-19 outbreak, the FluTas Report found that the most commonly detected respiratory pathogens in the period 1 January to 3 May 2020 were Rhinovirus 58 percent), Parainfluenza (13 per cent) and Influenza A virus (9 per cent).⁶⁴

Of particular concern for this Review is the fact that a number of HCWs continued to work despite having respiratory symptoms. The Department of Health Interim Report describes that some staff among the early cases had worked *while symptomatic for up to six days*.

Given this, it is not surprising that the Interim Report also found that 11 cases associated with the outbreak had already experienced symptoms of COVID-19 by the time the first two (non-cruise ship) cases in the hospital were notified on 3 April 2020.

Subsequent pathways of transmission

The DoH Interim Report provides a reasonable overview of the state of knowledge regarding subsequent transmissions (noting however that while it describes 114 cases associated with the outbreak as at 21 April 2020, the subsequent DoH submission says that by 6 May 2020 there were 138 cases; no doubt these details will be updated when the pending Final Report is finalised by the DPH and DoH).⁶⁵ The full details will not be reiterated in this Report.

By 6 May 2020 (based on notifications data from August 2020) the DoH submission to the Review describes there had been 138 cases associated with the outbreak, comprising 80 staff, 25 patients, and 33 others including household contacts.

62 Associate Professor Fay Johnston (DoH/ UTas). Personal communication (data awaiting publication).

63 <https://www.health.gov.au/resources/total-covid-19-tests-conducted-and-results> (accessed 14 October 2020)

64 https://dhhs.tas.gov.au/publichealth/communicable_diseases_prevention_unit/flutas_2020_reports/flutas_2020_report_1

65 Tasmanian Department of Health: Submission to the Independent Review. p.23

Outbreak-associated cases were identified in the following settings:

- North-West Regional Hospital
- North-West Private Hospital
- Mersey Community Hospital (acquired prior to transfer there from NWRH)
- Melaleuca Residential Aged Care Facility
- A small community cluster in the Smithton area
- Household contacts of cases.

A range of health care professionals became infected, including nurses, doctors, allied health practitioners, medical attendants and managerial staff. Apart from a food services staff member (verbal comment from one submitter), it appears that other staff such as cleaners, clerical and switchboard staff may not have had the same degree of transmission. However the Review notes the information it has received in this regard may be incomplete as the Interim Report, probably for reasons of confidentiality, does not go into occupational groups in detail.

While a number of potential opportunities for transmission from staff to other staff, as well as from patients to staff and possibly to other patients, were identified in submissions made during the course of this Review, it does not appear possible to reliably identify specific instances of breaches in infection control that contributed to the outbreak. The issue of PPE access and use before and during the outbreak is discussed in another section of this Report.

The complexity of staff interactions on the wards, in meeting areas, tea rooms, and during the process of putting on or removing ('donning and doffing') PPE also makes it very difficult to determine the exact chains of transmission that caused the outbreak to spread, particularly given that staff movements and meetings often occurred in relatively confined spaces.

The other complicating factor in this outbreak was the mobility of some staff across facilities – in particular between the NWPH and the NWRH, which share a well-used corridor connection. Some hospital staff also worked in aged care facilities in the North-West and at least one transmission to an aged care facility is thought to have occurred in this manner.

Other co-located services on the hospital campus included pathology and outpatient services, the cafeteria and coffee shop areas.

Control measures (e.g. symptom checking) were in place in relation to receiving visitors to the NWRH but based on observations by some submitters, may not have been observed consistently, particularly prior to recognition of the outbreak. This issue has been resolved and there are now systematic measures in place to screen all incoming visitors.

The following sections discuss findings regarding some of the key underlying factors contributing to the outbreak risk, both from a public health and a hospital management perspective.

It is important to re-iterate that these are presented here not for the purpose of attributing blame, but to point to lessons for the future to reduce the risk of recurrence and improve systems for better preparedness.

Factors contributing to person-to-person transmission within the NWRH

While it is not possible to identify definitively the key moments when patient-to-staff, staff-to-staff or staff-to-patient transmissions of infection occurred, the Review has been advised (in confidential submissions) of a number of circumstances related to the operating environment that would have lent themselves to an increased risk of transmission.

It must be stressed that the issues identified are not criticisms directed at individuals; rather the intent is to maximise the benefit of this Review by maximising the learnings available so that the risk of future outbreaks can be lessened.

It is also noted that substantial efforts were made in the preparatory phase prior to the outbreak emerging, including design and renovations for a COVID-19 "hot" medical ward at the NWRH, removal of non-essential equipment and furniture to facilitate cleaning and disinfection, and a range of other activities. There was an initial focus on the Intensive Care Unit (in anticipation of high numbers of cases requiring intensive care) and plans for renovations and changes to the designated COVID ward at NWRH had not been able to be fully implemented before the outbreak commenced.

The DoH Interim Report (refer Appendix 4 of this Report) identified the following factors that may have enhanced person-to-person transmission in the outbreak:⁶⁶

- Staff attending and continuing to work while experiencing respiratory symptoms
- Workplace activities such as regular staff gatherings with people in confined spaces
- Any shortcomings in infection control practices which may have enabled transmission of this very infectious agent in high-risk settings
- Incomplete or delayed identification of close contacts of confirmed COVID-19 cases for immediate isolation to limit further transmission
- High levels of staff mobility between different healthcare facilities
- Transfer of undiagnosed infectious or incubating patients between healthcare facilities.

These factors were, for the most part, supported by observations in a number of submissions to the Review regarding behavioural and structural factors that were believed to contribute to the outbreak, including:

- During the lead-up phase and prior to recognition of the outbreak, it was described that some staff (including in NWPH as well as NWRH) did not take the threat of the pandemic as seriously, and were dismissive of others' concerns and suggestions – with implications for consistency of work infection control practices and lost opportunities to limit subsequent transmission risks.
- Large numbers of staff (e.g. up to 20) congregating closely together in confined spaces during shift handovers on the wards or adjacent offices
- Close proximity of staff during ward rounds
- Senior staff meetings were held in closed rooms for long periods (even though social distancing was being maintained, several staff believe that is where they were exposed)
- Stressful situations during the outbreak led some staff to provide hugs to console colleagues
- Patients whose medical conditions and behaviours led to increased shedding of respiratory droplets, prior to recognition that they were also infectious for COVID-19

- The corridor interconnection between the NWRH and the NWPH was freely used by staff working across both facilities, greatly increasing the risk of spread from the NWRH to the NWPH.
- Patients from the NWRH medical ward (which by this stage had experienced COVID cases) were transferred to NWPH without adequate information being provided to NWPH regarding the potential risk and need to isolate those patients – several of whom subsequently tested positive.
- A number of staff worked across several facilities, including aged care facilities as well as NWPH / NWRH.
- Some layout features and location of resources created difficulties with the flow of staff in and out, or contributed to increased traffic (eg pharmacy supplies)
- Incorrect or incomplete wearing of PPE, or failure to doff PPE upon exiting a ward after seeing an infected patient
- Emergency Department (ED) staff in early stages were wearing PPE while assessing potential COVID-19 patients in isolation rooms, but not while moving about in the rest of the ED
- Staff moving about in the (non-COVID) medical ward were not immediately mandated to wear PPE after it had been learned that a number of staff had tested positive
- Criteria for being deemed a close contact was initially based on 15 minutes of **continual** face-to-face exposure. This led to some staff being excluded from testing who it was later realised should have been tested (the change in criteria from continual to cumulative exposure on 9 April 2020 is discussed in a separate section of this Report).

The Review found that substantial work on structural factors and ward layout has continued at both NWRH and MCH following the outbreak, as well as many improvements to workplace infection control practices, that will reduce risk and increase preparedness for the future. Some of the latter are described in the “Recommendations” section of the DoH Interim Report (Appendix 4).

66 Tasmanian Department of Health: COVID-19 North-West Regional Hospital Outbreak - Interim Report. 29 April 2020. p.9

A survey of health staff who worked in the North-West between 20 March and 13 April 2020, led by PHS, has attracted over 300 respondents and is likely to shed additional light on learnings from the outbreak based on staff observations on how infection control practices were being implemented. This research is being conducted in collaboration with University of Tasmania and, as at the date of publication, the data analysis is still underway.⁶⁷

Prior to the outbreak, infection control planning and preparations were understandably focussed on preventing the risk of transmission from COVID-19 patients to staff caring for them, and in particular the PPE requirements for staff to work safely. This of course would have mitigated the risk of subsequent transmission among staff. However submitters to the Review have noted that less attention was paid to the risk of spread among staff members.

As mentioned earlier, it is particularly problematic that cases may be spreading SARS-CoV-2 well before they become aware of any symptoms, or they may even remain asymptomatic. This renders less effective practices such as self-exclusion from work at the first onset of symptoms, and was an under-recognised hazard that in Australia really only came to be appreciated in the months following the outbreak in the North-West.

The Review acknowledges that some of the potential factors noted above are structural and difficult to overcome – for example the limitations on space in ward corridors (corridor width), nurses' stations and meeting rooms would be extremely expensive to remedy. Efficient staff interactions with other relevant staff to exchange information, discuss and deal with patient care are obviously a critical part of patient management and safety.

It seems likely that in the aftermath of the COVID-19 pandemic there will be significant national reflection on whether and how hospital architecture and design can be improved upon for the future.

Presenteeism

The DoH Interim report noted that the PHS Epidemiological Report indicated that a significant proportion (20 per cent) of COVID – positive health care workers worked while symptomatic.

In any situation involving the spread of infectious diseases or viruses there is always a risk of the spreading of such diseases or viruses because infected persons still present for work and/or duty whether it be at a hospital or non-medical workplace. This phenomenon has been labelled as 'presenteeism', is multifactorial and many reasons were advanced during the interviews conducted in the process of the investigation. These included:

- The necessity to earn income. This driver in itself is multifactorial because many HCWs are not employed by the DoH in a full-time capacity and accordingly work across two or more healthcare facilities to enable them to earn sufficient income to meet their commitments.
- Fear of retribution for failing to report for duty.
- A strong work ethic including not wanting to let fellow workers down especially during such a crisis.
- Not recognising and/or not wanting to acknowledge symptoms. Because the outbreak occurred at the beginning of the flu season many mistook the symptoms of COVID-19 for other conditions.
- A can-do culture and a failure to fully appreciate the high risk of staff to staff infections, especially when initial beliefs were that the most likely source of infection would be patient to staff.

The risk of presenteeism heightened when so many people were furloughed and/or isolated because of infection and/or contact. Staff members felt obliged to present to maintain patient care if they had not been positively diagnosed with COVID-19. This risk was significantly mitigated once people fully appreciated the dangers posed by the virus.

67 Personal communication, Associate Professor Fay Johnston (DoH/UTas). 10 October 2020.

The Review notes that the level of vigilance now required to reduce work ‘presenteeism’ while suffering mild symptoms must be greatly increased, to counter inadvertent transmission of COVID-19 in health care settings.

Furthermore the Review agrees with recommendation 11 contained in the Interim Report, i.e. *that work should be undertaken to consider and address the underlying drivers of staff presenting to work whilst unwell which will require the engagement of local clinical and professional leads, as well as professional representative bodies.*

Reflections and learnings from hospital outbreaks elsewhere in Australia

The North-West experienced the first major hospital-based outbreak of COVID-19 in Australia, at a very early stage of the pandemic and without the benefit of additional knowledge about transmission risks and pathways that has emerged since March 2020.

Since then a number of hospital-based outbreaks have occurred elsewhere in Australia, including in major metropolitan hospitals that are comparatively more well-resourced than regional Tasmanian hospitals. Significant learnings are available from the experience of those facilities.

During July and August 2020 the Royal Melbourne Hospital (RMH) experienced Australia’s largest hospital outbreak of COVID-19 to date, infecting 262 health care workers over a 9- week period. This occurred despite considerable planning and preparation to prevent just such an occurrence (some of which had been described in an earlier publication).⁶⁸ Observations from this event have been published, with the authors identifying a number of ‘real-world’ challenges in controlling staff infections, particularly “*the sheer rapidity of disease spread*”.⁶⁹

Compared with the North-West outbreak, the RMH outbreak (actually a number of outbreaks across several campuses) occurred in the context of a much better-resourced facility with more rapid test result turnaround times, much better contact tracing capability, and all the benefits of more recent national guidance and improved understanding of transmission dynamics.

Several outbreaks at RMH arose in the dementia and rehabilitation wards at the Royal Park Campus (RPC). Contact tracing of cases among nurses led to large numbers of staff being furloughed; the remaining staff experienced high workloads and care became increasingly difficult.

This led to a decision to close 4 wards and relocation of 60 patients to other health services or wards with increased physical separation and single rooms. The closure of these wards coincided with a reduction in HCW infections, although multiple other interventions had also been implemented. The authors describe key components of the process being “*availability of rapid turnaround staff testing, and regular review of local data and obtaining feedback from staff helped identify useful interventions which were iteratively implemented.*”

A ‘hierarchy of controls’ approach is described and summarised by the authors in the following Table, and is provided primarily as a useful illustration of the complexity and extent of the control measures requiring consideration:

68 Rojek AM et al. Early clinical response to a high consequence infectious disease outbreak: insights from COVID-19. Med J Aust 212(10) pp 447 – 451. June 2020 <https://onlinelibrary.wiley.com/doi/full/10.5694/mja2.50608>

69 Buisson K et al. A hospital-wide response to multiple outbreaks of COVID-19 in Health Care Workers - Lessons learned from the field. Pre-print publication 17 September 2020 <https://www.medrxiv.org/content/10.1101/2020.09.02.20186452v2.full.pdf> (accessed 18 October 2020)

The hierarchy of controls used to guide interventions to address healthcare worker infection with COVID-19 at Royal Melbourne Hospital

Elimination

- Public health restrictions to reduce community incidence
- Testing availability in the community (and for staff) to identify and isolate cases early
- Rapid turnaround-time for test results
- Frequent testing of staff and patients in wards with outbreaks for early recognition and management of cases
- Symptomatic staff furloughed until test results available
- Furlough staff who are contacts of cases
- Work from home policies for staff
- Telehealth consultations rather than in person visits to hospital,
- Visitor restrictions to hospitals – use of phone/iPad to liaise with family
- Early discharge patients not requiring inpatient care, use of hospital-in-the-home
- Use of remote meeting technology

Engineering

- Attention to ventilation and air circulation in all clinical and non-clinical areas
- Availability of negative pressured rooms
- Physical separation of patient groups – access to single rooms, wards with doors to separate from other wards
- Equipment to improve turn-around times for microbiologic testing to enable rapid identification of cases
- Adequate space for staff to safely don and doff PPE
- Provision of breakrooms with increased space enabling adequate physical separation
- Physical barriers for public facing non clinical staff e.g. Perspex barriers
- Appropriate cleaning – correct equipment

Administrative

- Existing policies, procedures and sub-committees (with appropriate governance) in place prior to the COVID-19 pandemic regarding infection prevention, PPE, hand hygiene, transmission-based precautions, cleaning, outbreak management, management of contact tracing, pandemic plan, code yellow
- Appropriate governance - Emergency Operations Centre with multi-disciplinary representation from all areas
- Use of national and state guidelines to inform development of hospital COVID-19 guidelines
- Regular meetings of key stakeholders to discuss emerging issues
- Regular communications to staff via email, social media, remote meetings by hospital executive and managers
- Policies to encourage physical distancing between staff – staggered breaks, start/stop times, roster redesign
- Workflow changes to encourage distancing between staff and patients where possible
- Use of dedicated 'COVID teams' in wards to minimize staff moving between wards
- Resourcing of staff in 'COVID wards' to ensure manageable workload
- Bed allocation –avoidance of high density of COVID-19 positive patients in shared rooms
- Management of COVID-19 positive patients in separate wards from COVID-19 negative patients
- Training (baseline and refreshers) and monitoring of PPE use (spotters) for all clinical and non-clinical staff
- Increased resourcing of cleaning services and ongoing training in cleaning, using in-house and not agency staff
- Monitoring of cleaning (e.g. ongoing fluorescent marking programs, spotters)
- Hand hygiene training and auditing including development of videos and posters specific to COVID-19
- Payment methods to minimize casual staff coming to work when unwell

Personal Protective equipment (PPE)

- Universal Pandemic Precautions –surgical mask and face shields all staff all the time
- Masks on patients where possible for source control
- Use of PPE appropriate to the circumstance – gowns, gloves, surgical masks or N95/P2 respirators, eye protection

AMA Tasmania in its submission to this Review noted that staff protection against COVID-19 is a workplace health and safety issue, and also suggested that pandemic planning similarly requires a hierarchy of controls approach with PPE being just one (essential) aspect of protection supported by a range of other strategies.⁷⁰

The Review – while not professing expertise in this area, nor making a formal assessment or audit of specific infection control measures - has found that many of these types of measures are in place now at NWRH and MCH, in addition to those already in place prior to the outbreak. It is expected that the DoH and THS will continue to closely monitor and maintain those measures.

Outbreaks in aged care facilities elsewhere in Australia have similarly revealed important learnings for infection prevention and control, a number of which are also applicable to hospitals.

One recent publication affirms that decisive leadership from management and expert infection prevention and control (IPC) guidance is crucial, noting that “there is a widespread lack of competence and confidence in IPC among health care and residential aged care facilities (RACF) staff when faced with an infectious disease crisis. Regular, targeted training is required to embed IPC principles in routine practice and enable rapid escalation to high level outbreak precautions when required.”⁷¹

70 AMA Tasmania. Submission to the Independent Review (Confidential) (this extract is included with permission from the AMA).

71 Gilbert GL. COVID-19 in a Sydney nursing home: a case study and lessons learnt. *Med J Aust* 2020; 213 (9): 393-396.e1. || doi: 10.5694/mja2.50817 (accessed 2 November 2020).

9. Infection Prevention and Control including PPE

Infection Control and PPE in hospital settings

As mentioned earlier in Section 4, *Knowledge of how SARS-CoV-2 is transmitted*, scientific understanding of how this coronavirus is transmitted, and best practice options for prevention of spread in health care settings, is still emerging.

The critical importance of infection control and health care staff protection against COVID-19 has been emphasised over and over again around the world during the pandemic, with significant rates of acquisition in some healthcare settings - including here in Australia.

For example, in Aged Care Facilities across Australia as at 23 October 2020, there have been 4 256 cases of COVID-19 associated with outbreaks in 216 residential aged care facilities, with 676 deaths. 2 027 of those cases occurred in aged care residents, and this number has been exceeded by the number of cases (2 229) in aged care staff.⁷²

Other data from Victoria also highlight the issue of health workers acquiring infections through their occupation:⁷³

- Of the total number of coronavirus (COVID-19) cases in Victorian healthcare workers (3 538), 72.67% of cases were acquired in a healthcare setting, and 14.33% were not acquired in a healthcare setting. 13% of cases are either still under investigation or the source of infection is unable to be determined.
- Of the HCWs who acquired COVID-19 in a healthcare setting, 1 282 (49.86%) were aged care or disability workers, 1 030 (40.06%) were nurses or midwives, 120 (4.67%) were medical practitioners and 139 (5.41%) were other healthcare workers.

Much of the initial advice in Australia regarding infection control practice to prevent spread of COVID-19 in health care settings was built upon a wealth of experience and established evidence-based guidance such as the National Health and Medical Research Council's *Australian Guidelines for the Prevention and Control of Infection in Healthcare*⁷⁴.

In addition to the NHMRC Guidelines the infection control guidance provided in the CDNA COVID-19 SoNG is based upon specific advice regarding COVID-19 from the Infection Control Expert Group (another subcommittee of the AHPPC).

The NHMRC Guidelines are intended to provide a risk-management framework enabling all health staff to apply basic principles of infection prevention and control in all types of health care settings, including primary care and office practice, aged care facilities and hospitals.

The Guidelines outline a two-tiered approach based on *Standard precautions* which should be in use at all times, and *Transmission-based precautions*, which are recommended as additional work practices in situations where standard precautions alone may be insufficient to prevent transmission.

- *Standard precautions* means the routine application of basic infection prevention and control strategies to minimise risk to both patients and healthcare workers, such as hand hygiene, appropriate use of personal protective equipment, cleaning and safe handling and disposal of sharps.
- *Transmission-based precautions* should be tailored to the particular infectious agent involved and a risk assessment of its primary mode of transmission, and may involve a combination of practices. For respiratory infections such as COVID-19 the three main routes of concern are contact, droplet and airborne spread.

72 https://www.health.gov.au/sites/default/files/documents/2020/10/covid-19-outbreaks-in-australian-residential-aged-care-facilities-23-october-2020_0.pdf (accessed 30 October 2020)

73 <https://www.dhhs.vic.gov.au/victorian-healthcare-worker-covid-19-data> (accessed 5 October 2020)

74 NHMRC. Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019). <https://www.nhmrc.gov.au/sites/default/files/documents/infection-control-guidelines-feb2020.pdf>

In addition to individual PPE and work practices carried out by staff there are many other preventive measures that are considered and implemented as appropriate for health care facilities to function as safely as possible. These may include aspects such as:

- architectural design
- ward layout
- staff PPE donning and doffing areas
- ventilation and directions of air flow
- isolation rooms
- patient triage
- flow, transfer and transport arrangements
- clinical waste disposal, clinical policy and procedural guidance
- training programs
- cleaning regimes
- staff vaccination requirements
- infection monitoring and surveillance
- exclusion policies and related human resources management, and
- a range of other systematic control measures.

The number of outbreaks in major hospitals in Victoria where staff-to-staff COVID-19 transmission has occurred – including outside so-called “hot wards” – has demonstrated the difficulty of preventing spread despite: the improving knowledge of SARS-CoV-2; good resources and apparently high levels of compliance with PPE requirements; and infection control. This has led to some very useful reflections on the types of additional containment strategies required in some circumstances.⁷⁵

PPE for COVID-19 - Guidelines

The term ‘Personal Protective Equipment’ (PPE) is used to describe items of equipment including:

- gloves
- gowns
- aprons
- eye protection (including goggles, safety glasses and face shields)
- masks
- P2/N95 respirators (or equivalent).

Training of staff and maintaining vigilance regarding correct use of PPE remains an ongoing operational challenge. In this context, one of the more difficult policy areas facing the health care system nationally has been the most appropriate levels of PPE to protect against COVID-19 across a range of clinical scenarios.

In particular, there has been debate around the type of mask required to prevent acquisition of COVID-19 through aerosol spread in various circumstances in clinical settings.⁷⁶ In simplest terms the debate has focussed on the routine use of either surgical masks or particle filtering masks (PFRs, known generally as P2 or N95 respirators – the terms tend to be used interchangeably although there are subtle differences in the standards they are required to meet).

A second area of concern – heard from a number of submitters to this Review - has been the question of appropriate fit-testing versus the more basic ‘fit checking’ of PFR masks across a range of clinical contexts.

- **Fit testing** involves using a validated method that determines the brand and size of PFR respirator most suited to the individual’s face.
- **Fit checking** includes exhaling and inhaling once a PFR respirator is applied to check the seal. If leaks are detected then the respirator must be re-adjusted.⁷⁷

75 Buisson K et al. A hospital-wide response to multiple outbreaks of COVID-19 in Health Care Workers Lessons learned from the field. British Medical Journal (pre-print publication) <https://www.medrxiv.org/content/10.1101/2020.09.02.20186452v2>

76 (for example) McIntyre R et al. Current COVID-19 guidelines for respiratory protection of health care workers are inadequate. Medical Journal of Australia 2020; 213 (6): 251 – 253 || doi: 10.5694/mja2.50752

77 https://www.sahealth.sa.gov.au/wps/wcm/connect/0aca9a80423727cc9e0efeef0dac2aff/Clinical_Directive_Respiratory_Protection_Against_Airborne_Infectious_Diseases_v1.4_22.06.2020.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPA-CE-0aca9a80423727cc9e0efeef0dac2aff-nbGoB6p (accessed 6 October 2020)

The Australian Guidelines for the Prevention and Control of Infections in Healthcare state that in order for P2 or N95 masks to offer maximum desired protection it is essential that the wearer is properly fitted and trained in their safe use.⁷⁸

The relevant Australian Standard (AS/NZS 1715:2009) also recommends annual fit-testing and that health care facilities should ensure they have a respiratory protection program that regularly evaluates the risk to which health care workers are exposed and determines which health care workers are required to undertake fit-testing. National guidance indicates this recommendation is not widely applied in Australia.⁷⁹

A useful overview of the practicalities of fit-testing and options for implementing fit-testing policy in Australia was recently published.⁸⁰ The authors note that while a fit-check remains recommended before each use of any respirator in routine practice, studies clearly demonstrate that fit-checking does not reliably detect leakage. Conversely, passing a fit-test on a given respirator brand and size does not guarantee fit while providing clinical service, and fit-checking is still required before each use.

They conclude:

*In clinical practice, the requirement for fit testing appears particularly important in the absence of negative pressure rooms for the performance of aerosol-generating procedures in infected patients. Respiratory protection programs should preferentially fit test health care workers who are exposed to aerosol-generating procedures.*⁸¹

In response to the high rates of health-care associated COVID-19 infection among HCWs in Victoria, the Victorian Health Department has said it is moving to introduce mandatory fit-testing across public health care facilities.⁸²

It has been clear from the outset that a higher level of protection utilising PFRs was required for health care workers involved in patients requiring aerosol-generating procedures (e.g. intubation, non-invasive ventilation, high-flow oxygen, nebulizer use).

This was clear in the CDNA guidance in place around the time of the outbreak in the North-West. The COVID-19 SoNG Version 2.2 March 21 2020 stated:

In addition to standard precautions, interim recommendations for the use of PPE during clinical care of people with possible COVID-19 are:

- **Contact and droplet precautions** are recommended for **routine care** of patients in quarantine or with suspected or confirmed COVID-19.
- **Contact and airborne precautions** are recommended when performing **aerosol-generating procedures**, including intubation and bronchoscopy, and for care of **critically ill patients**

Other recommended infection control measures include:

- *When a patient who meets the suspect case definition presents to a healthcare setting (GP, hospital ED, or pathology collection centre) and whether or not respiratory symptoms are present, the patient should immediately be:*
 - given a surgical mask to put on, and
 - directed to a single room. If the patient has severe symptoms suggestive of pneumonia, they should be directed to a negative pressure room, if available, or a room from which the air does not circulate to other areas.
- *If a patient with confirmed COVID-19 needs to be transferred out of their isolation room, the patient should wear a “surgical” face mask and follow respiratory hygiene and cough etiquette. (p.8)*

78 National Health and Medical Research Council. Australian Guidelines for the Prevention and Control of Infection in Healthcare. 2019 <https://www.nhmrc.gov.au/sites/default/files/documents/infection-control-guidelines-feb2020.pdf> (accessed 5 October 2020)

79 <https://www.health.gov.au/resources/publications/guidance-on-the-use-of-personal-protective-equipment-ppe-in-hospitals-during-the-covid-19-outbreak> Version 7 (accessed 5 October 2020) p.7

80 Regli A and Ungern-Sternberg BS: Fit testing of N95 or P2 masks to protect health care workers. Medical Journal of Australia 2020; 213 (7): 293-295.e1. || doi: 10.5694/mja2.50764. <https://www.mja.com.au/journal/2020/213/7/fit-testing-n95-or-p2-masks-protect-health-care-workers> Published online: 5 October 2020

81 Ibid p. 295

82 <https://www.dhhs.vic.gov.au/sites/default/files/documents/202009/20200917%20Taskforce%20Update%20APPROVED.pdf> (accessed 6 October 2020)

The **minimum** PPE required for contact and droplet precautions during routine care of suspected, probable or confirmed cases of COVID-19 includes gown or apron, surgical mask, eye protection, gloves, and (depending on situation) shoe covers and head covers.

PPE guidance has evolved during the course of the pandemic, as more evidence has become available regarding transmission risks and following a number of other health-care associated outbreaks of COVID-19 that have emerged in other parts of Australia since the North-West outbreak.

Currently available national guidance is more nuanced, for example to take into account the context of local community transmission, as well as increased risks associated with individual patients (eg cognitive impairment or dementia or challenging behaviours such as shouting).^{83,84}

In relation to fit-checking and fit-testing, at the time of writing current national guidance notes:

Fit-checking is the minimum standard for each occasion of use of a PFR.....

....Fit-testing, as defined in the Australian/New Zealand Standard 1715: 2009, is a validated method for matching PFRs with an individual's facial shape, but has not been widely applied in Australia. Despite increased awareness and demand, in the context of COVID-19, it is acknowledged that fit-testing of all health care workers who may need to use a PFR, will be difficult to accomplish due to limited supplies and range of types/sizes available.

Note: Fit-testing does not guarantee a respirator will not leak, particularly if a different type or size is used to one previously fit-tested. A repeat fit test is required if a different PFR is utilised. This reinforces the need to fit-check each time a respirator is used. (p.7)⁸⁵

The Review notes that even with the best training and models of supervision there will always remain an onus upon staff wearing N95/P2 respirators to maintain the routine of fit-checking prior to entering an environment where there is risk of transmission of pathogens such as SARS-CoV-2.

PPE availability and use

A major issue to emerge early in the course of the COVID-19 pandemic was the overwhelming global demand for PPE, and significant disruptions to the global supply chain.

There are many reported instances where primary care providers were unable to procure sufficient PPE stocks. States and Territories with responsibility for PPE supply to hospitals were forced to introduce stock conservation measures.

A major asset at this time was the national medical emergency stockpile, which the Australian Government had continued to maintain for a number of years in various repositories about the country, as part of pandemic planning arrangements. The stockpile is intended to supplement the supplies held by States and Territories during national health emergencies. PPE is a major component of this stockpile, together with certain other medical items. The decision to deploy the stockpile is taken by the Australian Government with support and by advice from the AHPPC.⁸⁶

As reported by DoH in its submission, in Tasmania the supply of medical equipment including PPE for public hospitals is centrally managed by the Tasmanian Health Service. Stocks are held at warehouses in each region and supplies are rotated as required. DoH also maintained a 'limited strategic reserve' of PPE that was supplemented by the Australian Government's national medical stockpile, some of which was prepositioned in Tasmania.⁸⁷

On 3 April 2020, a senior executive was appointed as a PPE Lead within the DoH ECC with a dedicated PPE team to manage logistics and statewide supply. This enabled the centralisation of decision making around the provision of state and Australian Government supplies. The role of the PPE team includes monitoring and reporting on the use of PPE, providing centralised procurement processes to ensure adequate supply statewide, and ensuring appropriate use of PPE in accordance with state and national guidelines.

83 <https://www.health.gov.au/resources/publications/iceg-guidance-masks-respirators-health-residential-care-workers> (last updated 6 September, accessed 5 October 2020)

84 <https://www.health.gov.au/resources/publications/guidance-on-the-use-of-personal-protective-equipment-ppe-in-hospitals-during-the-covid-19-outbreak> Version 7 (accessed 5 October 2020)

85 Ibid p.7

86 <https://www.health.gov.au/initiatives-and-programs/national-medical-stockpile> (accessed 6 October 2020)

87 Tasmanian Department of Health: Submission to the Independent Review. p.32.

Regular updates on PPE supplies have been provided by the State Health Commander to all staff during and following the North West outbreak (from mid-April 2020) including current stock numbers, assurance regarding the availability of appropriate PPE supplies to safely respond to patients' clinical needs, and advice on issues such as indications and requirements for use of PPE during the COVID-19 response. A dedicated PPE email address was also provided to staff, with a call to voice any concerns or issues regarding PPE.

As global supplies diminished and other factors such as transport difficulties emerged, DoH endeavoured to find alternative sources. A major challenge was that potential suppliers often did not have products that complied with the necessary specifications in Australian Standards. DoH reports that "allocation of limited resources" had to be prioritised based on greatest benefit to the emergency response.

Senior staff in the North-West have advised the Review that while there were certainly concerns about maintenance of supply, and PPE had to be sourced urgently from a range of suppliers, at no stage did the North-West completely run out of PPE. However, stewardship of the finite resource was being carefully managed.

There was significant conflicting evidence about the amount of PPE available with several doctors and many Healthcare workers complaining about the unavailability of masks and very limited supply of surgical gowns.

As noted above there were limited, but sufficient, supplies of masks available. To preserve stocks there was, at times, such careful stewardship of the resources that people who needed them did not always know how to access them. As a result, compromised decisions regarding PPE may have been made by some clinicians.

Masks that had been stored in open caddies were moved into cupboards that were sometimes locked due to concerns about theft. An audit found that, because of the prevalence of fear, guidelines for the wearing of masks were ignored and staff, including those exposed to a lower risk, clamoured for N95 masks in situations where a surgical mask would have been sufficient.

Initially there were cultural issues, including a failure to fully appreciate the risks, that led to masks not being worn in appropriate situations. Sometimes people who asked for masks were told that there was a shortage, that they did not really need them and that they should not waste resources.

Several staff members, including doctors, who tried to enforce appropriate wearing of PPE complained about being bullied and discriminated against as well as being chastised for wanting to wear the correct PPE.

There were several reported incidents of supervising staff not following correct PPE procedures and belittling those who attempted to do so. This behaviour seemed to cease once several staff members contracted COVID-19 and the full impact and dangers of the virus were realised.

A video education series on PPE was available from early-March 2020 but viewing at that point was not mandatory. Accordingly different procedures were adopted in different locations consistent with the long term parochialism within the health system. Despite the existence of PPE protocol (*Personal Protective Equipment for Standard Precautions - THS Statewide - Protocol – 20180409*)⁸⁸ not all staff were fully conversant with appropriate guidelines and inappropriate practices relating to PPE were not uncommon. This included, for example, incorrect doffing of PPE which could cause the flicking of virus particles into the surrounding environment.

Masks provided from the stockpile were up to 15 years old. Because the contents had not been appropriately rotated they were sometimes defective, a common feature being the failure of the rubber restraining straps.

The facial features of some people prevented the appropriate fitting of masks. In future, sufficient alternative forms of respirators will have to be available to cater for them as well as for teams in high risk areas whose clinical practice requirements may render alternatives such as powered air-purifying respirators more suitable.

The Review supports the progress reported to have been made by the DoH and THS staff with respect to PPE. It is noted that significant work had been carried out prior to the outbreak, and much more has been done following the outbreak.

88 Approved in March 2018 and was available via the SDMS to THS staff.

However the Review considers that much of this was (necessarily) reactive to a changing situation, and that the DoH could now develop a more complete and systematic planned approach to overall respiratory protection for HCWs. A respiratory protection program needs to be put in place that fully addresses

- PPE supply and training
- fit checking and testing
- protocols and
- staffing (to supervise appropriate donning and doffing).

Broader considerations include adequacy of ventilation across all major hospitals, structural design considerations to avoid staff crowding in confined spaces, and the other related aspects involved in a ‘hierarchy of controls’ approach.

It is recognised that some of the structural issues in particular can only be addressed in the longer term, and no doubt will be an ongoing consideration for many hospitals across Australia.

Although it was clear that processes including IPC audits are underway, at the time of writing it was unclear whether Tasmania has yet fully achieved the minimum standards specified in national guidance regarding the use of PPE in health care settings.^{89, 90} The PPE aspects of a respiratory protection program should aim to rapidly achieve and then progressively exceed the minimum requirements set out in that guidance (which presently state that all ‘high risk’ staff should be fit tested), so that a broader pool of fit-tested staff is maintained.

Recommendations

- *That a comprehensive respiratory protection program is implemented to address broader staff safety considerations including ventilation, design, and other aspects involved in a ‘hierarchy of controls’ approach as well as PPE.*
- *That substantial stocks of PPE are always kept on hand and regularly rotated.*
- *That efforts to promote consistent education and practice in relation to the handling and wearing of PPE continue via mandatory training, including refresher training.*
- *That all health care staff who frequently perform or assist with aerosol-generating procedures or undertake other activities assessed as high risk for COVID-19 transmission carry out fit testing of N95 masks as a priority, and a range of solutions should be developed for those who cannot obtain a fit with the available respirators.*

89 <https://www.health.gov.au/resources/publications/guidance-on-the-use-of-personal-protective-equipment-ppe-in-hospitals-during-the-covid-19-outbreak> Version 7 (accessed 5 October 2020)

90 <https://www.health.gov.au/sites/default/files/documents/2020/10/the-use-of-face-masks-and-respirators-in-the-context-of-covid-19.pdf> (accessed 4 November 2020)

10. Testing

Key Findings

- *Criteria for eligibility for testing of hospital staff were unnecessarily stringent, and opportunities for earlier identification of infected staff were missed*
- *In the period leading up to the outbreak, access to testing was constrained with a requirement for hospital staff to request approval for each test via the Public Health Hotline.*
- *Laboratory turn-around times were not always timely, even taking into account the transport times involved*
- *Test results were often not available at NWRH until evening, making contact tracing more difficult*
- *Negative test results took longer to become available, and this delay had avoidable operational consequences for staffing (as staff had to remain in isolation until the result was known).*
- *Once a potential outbreak is recognised in a hospital setting (which may be declared following a single case in a health care worker), there is a strong case for immediately testing all relevant staff and patients (subject to risk assessment) irrespective of presence of symptoms.*
- *While there may have been some constraints initially, COVID-19 laboratory testing capacity in Tasmania has been progressively enhanced since the pandemic began, and the state is now well equipped to deal with rapid testing in large-scale outbreak events.*

Testing of hospital staff and patients in an outbreak

Several submissions pointed to access to testing for staff being unnecessarily restricted, due to the national guidance in place at the time of the North-West outbreak.

In the months following the outbreak there has been increasing recognition that COVID-19 infection may be asymptomatic, or very mild, yet the person may be shedding virus. Together with the evidence that a case may be infectious to others from as early as 48 hours (and possibly even 72 hours) prior to any symptoms, this underscores the need for a very low threshold for testing health care staff and patients if an outbreak is suspected.

Once a potential outbreak is recognised in a hospital setting (which may be declared following a single case in a health care worker), subject to risk assessment there is a strong case for immediately testing all relevant staff and patients irrespective of presence of symptoms, in addition to the usual contact tracing and exclusion processes. Contacts in these high-risk settings may need to be re-tested towards the end of their incubation period.

However a requirement to isolate all staff tested until results are available may not always be necessary. The CDNA SoNG provides further guidance on workforce management from a business continuity perspective, based on public health risk assessment.⁹¹

The Department of Health decision to require all staff to undertake COVID-19 testing prior to returning to work when the NWRH and NWPH re-opened was a useful and sensible precaution, and the Review understands that several previously unrecognised cases were detected as a result of this.

91 Communicable Diseases Network of Australia. National guidelines for public health units. COVID-19. <https://www1.health.gov.au/internet/main/publishing.nsf/Content/cdna-song-novel-coronavirus.htm> (Version 3.9, accessed 16 October 2020)

Test turn-around time

It was reported to the Review that test turn-around times were generally within 48 hours following sampling, and often much less. Transport of samples to the laboratory facility at RHH was required. This transport was supported by the State Emergency Service – reportedly several times a day, including during the night.

The RHH pathology laboratory – as elsewhere in Australia – had to contend with a range of constraints in the early stages of the pandemic including global supply chain issues affecting availability of swabs and testing reagents.

By the time the outbreak was established there was adequate public laboratory capacity for the volume of samples submitted at that time, and this capacity was recently further enhanced to accommodate up to 2 000 tests per day.⁹²

Private laboratory testing in the earliest stages of the pandemic was directed to the RHH, but later samples (e.g. from GP-led respiratory clinics) were transported to the mainland for processing. However less frequent flights impacted on specimen transport delays. Some respondents noted this also introduced substantial additional delays in receipt of results (up to 7 days) by both Public Health Services as well as general practitioners.

However this private laboratory issue has largely been resolved with one of the state's largest private pathology providers now having COVID-19 testing capability within the state, and the ability to scale up considerably should that be required.

Access to testing and test results

From a community testing perspective in the North-West, the Health Emergency Coordination Centre established several options to provide access to testing, and this was supplemented for some time through a privately established Respiratory Clinic (with Medicare rebates available for the performance of the testing).

In the earlier stages of the pandemic, a request for testing had to be “approved” by PHS via the Hotline – which was a frustration for general practitioners due to the time involved.

Little comment was received from the community regarding this aspect of the response although several commented that access was sometimes difficult, and results were not always quickly received, particularly if the sampling, transport and laboratory testing took place over the course of a weekend. A related problem in the early days of the pandemic was the lack of timely access to negative test results from both the public and private laboratories sometimes created a barrier to patient management, given that people being tested had to remain in isolation until such time as their result was available. This was also a health systems management issue, given that health care staff were unable to return to work until their negative test result came through.

People presenting to the public COVID-19 testing clinics can now receive their negative test result by SMS message, but not all private laboratories are yet equipped in Tasmania to provide that service.

Recommendation

- *That when an outbreak occurs within a health facility (which may need to be declared following a single case) all relevant staff and patients, irrespective of presence of symptoms, be tested in addition to those identified through usual contact tracing processes.*

11. Confidentiality of Test Results

Key Finding

- *Misapprehension of the requirement to maintain full confidentiality of test results reportedly impeded flow of identifying information between contact tracers, health care staff on the ground, and the Public Health Hotline. Education of staff may be beneficial regarding circumstances where disclosures of information are permitted (ie there is a “need to know” for the purposes of the Public Health Act).*

Several submitters mentioned the difficulties created when some staff perceived they were unable to pass on information regarding a notified case’s details in the process of contact tracing. In practice, contact tracing is quicker and more efficient if the tracer can ask a person “did you work on Ward A at the same time as Person X at any time over the past Y days”, where the name of Person X can be disclosed without first seeking explicit permission from that person.

It is not clear whether this was a consistent or merely sporadic barrier to prompt investigation, but it does warrant consideration for future outbreak responses. There was confusion and, in some cases, concern about the applicability of privacy in relation to medical records and test results which caused delays in the dissemination of information directly relevant to the control of the outbreak.

Although there is legislation in Australia to protect confidential information the common law also generally requires agencies to protect the confidential information of their clients. The Commonwealth *Privacy Act, 1988* (*Privacy Act*) and Tasmania’s *Personal Information Protection Act 2004* (*Protection Act*) strengthen this protection.

In most situations in Tasmania the *Protection Act* will apply but if the information is obtained or held by a Commonwealth Agency the *Privacy Act* will most likely apply.

The application of the provisions of both Acts tends to be cumbersome but relief is provided by s147 of the *Tasmanian Public Health Act 1997* (*PH Act*).

Health information is regarded as one of the most sensitive types of personal information. For this reason, the *Privacy Act* and *Protection Act* provide extra protections around its handling.

All organisations that provide a health service and hold health information (other than in an employee record) are covered by the *Privacy Act* and *Protection Act*, whether or not they are a small business or a government department.

The *Acts* regulate how these organisations collect and handle personal information, including health information.

In certain circumstances, the *Privacy Act* permits the handling of health information and personal information for health and medical research purposes, where it is impracticable for researchers to obtain individuals’ consent. This recognises:

- the need to protect health information from unexpected uses beyond individual healthcare
- the important role of health and medical research in advancing public health.

However, to allow the accessing and provision of Commonwealth health information in a pandemic situation one has to comply with s16A of the *Privacy Act*:

16A Permitted general situations in relation to the collection, use or disclosure of personal information

- (1) *A permitted general situation exists in relation to the collection, use or disclosure by an APP entity of personal information about an individual, or of a government related identifier of an individual, if:*
 - (a) *the entity is an entity of a kind specified in an item in column 1 of the table; and*
 - (b) *the item in column 2 of the table applies to the information or identifier; and*
 - (c) *such conditions as are specified in the item in column 3 of the table are satisfied.*

Permitted general situations			
Item	Column 1	Column 2	Column 3
	Kind of entity	Item applies to	Condition(s)
1	APP entity	(a) personal information; or (b) a government related identifier.	(a) it is unreasonable or impracticable to obtain the individual's consent to the collection, use or disclosure; and (b) the entity reasonably believes that the collection, use or disclosure is necessary to lessen or prevent a serious threat to the life, health or safety of any individual, or to public health or safety.

For Tasmanian information the following provisions of the Protection Act become relevant;

3B. Access to information of a medical or psychiatric nature

(1) If –

- (a) a request is made to a personal information custodian for access to information of a medical or psychiatric nature concerning the person making the request; and
- (b) it appears to the personal information custodian that the provision to that person of access to the information might be prejudicial to the physical or mental health or wellbeing of that person –

the personal information custodian may direct that access to the information must not be provided to the person who made the request but must instead be provided to a medical practitioner nominated by that person.

(2)

13. Application for exemptions

- (1) A personal information custodian may apply to the Minister for an exemption from compliance with any or all provisions of this Act.
- (2) An application is to –

- (a) specify the provision or provisions to which the application relates; and
- (b) specify the information or class or classes of information to which the application relates; and
- (c) specify the personal information custodian or custodians or class or classes of personal information custodians to which the application applies; and
- (d) specify the reasons for the exemption; and
- (e) specify any public benefit involved; and

14. Determination of exemption

- (1) The Minister may determine to –
 - (a) approve an application if satisfied that the public benefit outweighs to a substantial degree the public benefit from compliance with the personal information protection principles; or
 - (b) refuse to approve the application if not so satisfied.
- (2) The Minister may approve an application subject to any conditions the Minister considers appropriate.
- (3) The Minister is to publish the determination and the details of the application in the Gazette.

- (f) *specify any relevant law, code of practice or other instrument under which it proposes to operate; and*
- (g) *include any other information the Minister determines.*

Obviously the above provisions are not agile enough to deal with rapidly changing situations in a pandemic but the *Public Health Act Tasmania 1997* (“the PH Act”) provides for the disclosure of personally identifying information obtained under the PH Act (most commonly in this scenario, a laboratory notification of a test result) in some circumstances. For example under s147 subsection 3(e), personally identifying information may be disclosed by a person if the disclosure is either authorised by the DPH or is for the purpose of:

- *the management, detection, notification, treatment or prevention of the spread of a notifiable disease or notifiable contaminant; or*
- *managing a threat to public health or a likely threat to public health.*

S 147 provides:

147. Disclosure of information

- (1) *A person must not disclose to another person any information, relating to a natural person, that is information –*
 - (a) *that has been obtained by a person for the purposes of this Act or relates to the administration of this Act; and*
 - (b) *from which the identity of the natural person is apparent or reasonably ascertainable –*

unless the disclosure of the information is permitted under subsection (2).

Penalty: Fine not exceeding 100 penalty units.

- (2) *The disclosure of information by a person is permitted if the disclosure –*
 - (a) *is authorised under subsection (3); and*
 - (b) *except if subsection (3)(g), (i) or (j) applies, is in accordance with relevant guidelines, if any, in relation to such a disclosure.*
- (3) *A disclosure to a person of information relating*

*to another person (a **relevant person**) that is information from which the identity of the other person is apparent or reasonably ascertainable is authorised if –*

- (a) *the relevant person gives his or her written consent to the disclosureor*
- (b) *the disclosure is disclosure to a person involved in the diagnosis, clinical assessment, treatment or counselling of the relevant person; or*
- (c) *the disclosure is disclosure to a person apparently in charge of any institution or facility which is involved in the clinical assessment, treatment or counselling of the relevant person; or*
- (d) *the disclosure is disclosure to a person authorised by the Director; or*
- (e) *the disclosure is for the purpose of –*
 - (i) *the management, detection, notification, treatment or prevention of the spread of a notifiable disease or notifiable contaminant; or*
 - (ii) *managing a threat to public health or a likely threat to public health; or*
- (f) *the disclosure is for the purpose of an approved epidemiological study, approved study or approved research; or*

Accordingly it was appropriate for staff to release information requested to assist in the management of the outbreak but clear directions as to what is authorised should be provided from the outset to avoid any confusion or delays.

12. Outbreak Control Measures

From a Tasmanian population perspective, the outbreak in the North-West was successfully contained. It could have become significantly more widespread, and it is important to not lose sight of this fact. A range of strategies contributed to this outcome, and some of these are considered in the following sections.

Contact tracing

Findings

- *Adequate capability for rapid contact tracing is vital to prevent wider spread in the hospital setting, just as it is in the broader community, and every effort should be made to maintain a strengthened capacity as well as remove any unnecessary barriers to the process.*
- *The speed of contact tracing was hampered in the North-West outbreak by delays in receiving some test results, the time of day when results were received, difficulties experienced in accessing HR data to determine which staff were exposed, and sometimes the currency of contact (mobile phone) details for staff.*
- *Greater contact tracing support to NWRH was required earlier in the course of the outbreak – too much was left to too few to do the work.*
- *A change to a more stringent interpretation of the definition of a ‘close contact’ in the midst of the outbreak on 9 April 2020 was one of the key factors in the decision to close the NWRH.*
- *Police involvement with contact tracing in some circumstances was very beneficial to locate and engage with members of the community.*
- *Staff may have been hampered in their contact tracing efforts due to perceived barriers to information sharing (eg the identity of a confirmed case). Every effort should be made to clarify this aspect of the process and educate staff to remove any impediments where a public health risk requires urgent management.*

Contact tracing has been a mainstay in preventing spread of COVID-19 in Australia and most countries around the world. There is a particular skillset involved, including the ability to engage with the case and efficiently elicit the vital parts of information required to identify anyone else who may meet the definition of a close contact – usually at the same time as providing advice to reduce the risk of further spread. The use of inexperienced contact tracers based in national call centres in the United Kingdom has been strongly criticised because of the unacceptably high proportion of contacts that were ‘missed’.⁹³

The need for speed in identifying close contacts of cases has been highlighted previously in this Report. The DoH Interim Report (Appendix 4) also notes that incomplete or delayed identification of close contacts of confirmed COVID-19 cases was a factor that may have led to increased person-to-person transmission.

The available resources and process for contact tracing were described by one submitter as a “huge problem”.

Information provided by DoH to the Review shows that a request was made by THS North-West to the Emergency Coordination Centre on 7 April 2020 for more resources to undertake contact tracing to supplement local and other resources already dispatched. A small team of three from PHS was dispatched from Hobart on the morning of 9 April 2020 to assess the outbreak and support staff in the North-West who were working extremely long hours to deal with the volume of work.

However several days later they were informed that they themselves had become contacts of a case, so they were forced to go into quarantine. Despite then available information about social distancing, small meeting rooms continued to be used by the Outbreak Management Team and public Health team to speak to NWRH staff, which resulted in all being deemed as close contacts of a positive case later found to have attended a meeting. This caused significant distress to the team members involved and disruption to the on-ground resourcing to support continued contact tracing and to manage the outbreak.

Police assistance was called upon on 6 April 2020 to support contact tracing efforts with a small cluster of cases and contacts in the Smithton area. This was found to be a valuable adjunct to the usual approach because of the local community knowledge they brought to the process.

93 Iacobucci G. Covid-19: Is local contact tracing the answer? BMJ 2020; 370 doi: <https://doi.org/10.1136/bmj.m3248> (Published 17 August 2020)

Initially there was some reluctance to use police resources because of a mistaken belief that members of the public would not talk to police officers, but police are trained and skilled at finding people and generally people interact well with them.

There will be specific future scenarios where this resource should be brought into play once more when community interaction is required. In addition to the strong community engagement they bring, police officers can also support contact tracing when the individuals in question may not be compliant, engaged and/or law abiding. Local police also have a role in providing social support for those subject to quarantine. Given this, there may be merit in DPFEM working with the PHS to plan and test contact tracing scenarios to improve collaborative working practices.

One of the rate-limiting steps was that laboratory test results usually did not arrive until around 6 pm (via electronic transmission), leaving only a limited time in the evening to locate and make contact with the cases and then locate and talk with their contacts. Staff doing the contact tracing had to work very late to complete their tasks and paperwork – becoming exhausted in the process (as did many other staff).

When the change in interpretation of the national SoNG definition of a contact occurred (i.e. from 15 minutes of close contact per occasion, to 15 minutes **cumulative over time**) it was realised that data had not been collected with cumulative exposure in mind. To go back to all previously-identified contacts to re-interview them would have been a major undertaking, and taken days more work with the staffing available. Hence this became one of the factors leading to a decision to furlough all staff on the medical and surgical wards into quarantine, which in turn led shortly thereafter to the need to urgently plan for closure of the NWRH.

Submitters described the difficulties of trawling through no less than 5 separate paper-based staff rosters (for different professional groups) to determine who was working on particular wards on relevant days, after a positive test result was received for a staff member in the evening. They then had to locate the staff mobile phone contact details in order to commence interviewing them and determining whether they needed to be quarantined (or tested and isolated).

These issues undoubtedly slowed progress with an already complex task, and warrant further attention, as described elsewhere in this Report.

With the benefit of hindsight, it is clear that the outbreak response could have been better had a much larger team with the necessary contact tracing competencies been assembled earlier in the course of the outbreak response and provided to support the North-West.

Whether that was staff from PHS (with their pre-existing expertise in community-based contact tracing), or the THS (which has staff trained in infection control and expertise in hospital-based contact management), or a combination of both is difficult for the Review to determine without greater knowledge of the operational issues involved at the time. On the face of it, it would seem reasonable to deploy a combination of trained staff from both sources.

In other hospital-based outbreaks (e.g. a measles case admitted inside the hospital environment prior to diagnosis) there is a long-standing practice whereby a hospital's infection control staff manage identification, tracing and management of contacts within the hospital environment, and Public Health staff look after the contact tracing that needs to be managed in the community (households, primary care services, schools etc). This is the approach to role delineation taken in most if not all parts of Australia.

In relation to COVID-19, for the most part the same principles have applied. However the guidance available in CDNA SoNG in March 2020 had also countenanced that there would be times where Public Health may be required to assist, noting that:

PHU may assist infection control units of health facilities to identify and monitor healthcare worker close contacts. It is recognised that clinical work restrictions on close contacts who are healthcare workers may place strain on individuals and on the delivery of health services.⁹⁴

Several submitters to the Review commented on the need for an on-the-ground presence with contact tracers to better understand hospital layout and ward practices and therefore potential transmission dynamics. Together with easier access to staff rosters and other relevant information, this leads to more efficient and prompt contact tracing outcomes.

94 Communicable Diseases Network of Australia. National guidelines for public health units. COVID-19. (Version 2.2, 21 March p. 8)

To some extent the capacity to deliver a local response has been improved already, through the appointment of additional infection control staff to NWRH and MCH. However in the event of a further outbreak this will be insufficient and supplementary resources will be required.

A major issue to contend with in contemplating supplementary solutions such as a ‘contact tracing Flying Squad’ to support future outbreak responses by attending on-site to work together with existing staff, is the risk that those staff themselves may become contacts. However those risks are manageable and the Review recommends that such options be explored for the future.

PHS staffing constraints in relation to contact tracing at the time of the outbreak was also a significant issue that is discussed elsewhere in this Report.

Isolation and Quarantine

Isolation (of cases, and of people with symptoms awaiting test results) and quarantine (of contacts, or ‘contacts of contacts’ and others at risk of developing infection) are the mainstay of public health outbreak control measures around the world.

These were used to great effect during the North-West outbreak to prevent spread of infection.

It was indicated to the Review that following closure of the NWRH and NWPH, approximately 5 000 people were in quarantine or isolation in the North-West, comprising around 1 300 staff members plus their household members.⁹⁵

The THS response to management of staff isolation and quarantine very sensibly provided for accommodation of staff who did not have appropriate accommodation or who could not safely manage it in their home situation.

In addition, a number of community-based close contacts required hotel accommodation which was provided by government.

The Review acknowledges the way Police and the member agencies of the NWRECC supported the community throughout this time, including activities such as arranging or facilitating the delivery of food for those otherwise unable to manage it.

One of the few concerns raised by submitters to the Review regarding quarantine and isolation related to an inconsistency in calls received (e.g. from Public Health) to monitor progress or to confirm compliance with stay at home requirements. It is unclear whether there was a shared database system to support the activities of the multiple agencies involved to minimise the risk of gaps in the process.

Hospital-based measures that helped manage and control the outbreak

The Department of Health submission to the Review, in addition to the Interim Report, describes a wide range of activities that contributed to the preparation for, management of and ultimately the control of the outbreak in the North-West.

These activities will not be re-iterated in full in this Report, but it should be noted that they commenced well prior to establishment of the *State Special Emergency Management Plan: COVID-19*, and continued to be developed and implemented through Levels 1, 2 and 3 of the COVID-19 emergency management response. Those responses (e.g. securing and managing PPE supplies, ICU equipment and capacity, establishing testing capacity, education and training of staff, reconfiguring of services, and development of Escalation Management Plans across the three THS regions, to name a few) all helped and underpinned the specific measures that were required in the North-West.

A further relevant measure was a restriction on non-urgent elective surgery during March 2020, which helped free up staff and resources for a COVID-19 response.

The THS-North-West Escalation Management Plan is a comprehensive document that describes the triggers for moving to each Phase of the Plan, as well as the responses, service capacity and equipment resources at each level. For example one of the triggers for escalating from Stage 1 “Preparation Phase” to Level 2 Response “Activation Phase” is the number of patients admitted with COVID-19 for treatment (2 – 7 cases), and the responses include (among other activities) establishing a dedicated COVID Inpatient Ward, and running a ‘Hot’ and ‘Cold’ area in the Emergency Department. These re-configurations were in place prior to the outbreak.

95 Tasmanian Department of Health: COVID-19 North-West Regional Hospital Outbreak - Interim Report. 29 April 2020. p.6; also estimate provided by DPEM.

Following recognition of the NWRH outbreak, on 6 April 2020 some service reconfigurations were made in the North-West to reduce workload on the NWRH.

As the outbreak progressed and more HCW infections were identified (and a greater number of staff close contacts were placed into quarantine), further service changes were made in an effort to maintain service provision.

- On 8 April 2020 North-West THS moved to Level 3 of its COVID-19 Escalation Management Plan, NWRH medical and surgical wards were closed to new admissions (other than COVID-19 patients and some other exceptions), and emergency presentations to MCH were diverted (to NWRH or LGH depending on geographic location of the patient).
- By 10 April 2020 the State Health Commander had approved the THS North West to move to Level 4 of its COVID-19 Escalation Management Plan.
 - The consequences of this for service reconfigurations are detailed in the DoH submission⁹⁶, but from an outbreak containment perspective a key action was a direction to medical and surgical ward staff at NWRH to self-isolate for 14 days, and closure of those wards entirely to new admissions.
- The DoH also took over operational control of the NWPH on 10 April 2020, which enabled management of the situation across both NWRH and NWPH facilities as a single site.

Over the next 24 hours, plans were developed to close both NWRH and NWPH. By this stage it was clear that without radical action, the outbreak would continue to extend, and the ongoing loss of staff either to isolate (as cases) or to quarantine (as close contacts) meant that safe continuation of services was increasingly untenable.

Closure of NWRH

As noted elsewhere in this report and the submission from the Department of Health, two cases of COVID - 19 in healthcare workers at the NWRH were notified on Friday, 3 April 2020 which led to the setting up of an Incident Management Team (IMT). A comprehensive history of relevant events appears in the DoH submission but some salient points based on information provided to the Review from various sources are set out below.

On Saturday 4 April 2020 some patients were moved from NWRH to NWPH but a communications breakdown meant that the private hospital was not told that the patients were moved from a ward in which there were COVID-19 infected patients which caused them not to be isolated. Subsequently a patient in NWPH was diagnosed with COVID-19 on Tuesday 7 April 2020.

As further cases were notified THS North-West was moved up various levels of DoH's COVID-19 Escalation Management Plan (EMP) for the North-West and on Friday, 10 April 2020 the State Health Commander approved the move to level 4.

Prior to that date measures were implemented to reduce the numbers of patients at NWRH and MCH including all Ambulance Tasmania presentations from Devonport eastwards being transported directly to LGH from 8 PM on Monday, 6 April 2020.

On Thursday, 9 April 2020 the SoNG definition of "close contact" was clarified by CDNA as comprising cumulative, rather than continuous, exposure time causing the number of close contacts related to the notified cases to be considerably increased. This led to a recommendation by the CMO and the NWRHC for all staff from COVID wards to self isolate.

On Friday, 10 April 2020 when THS North-West moved to level 4 of the EMP the following occurred:

- Closure of the MCH ED and Close Observation Unit to allow staff to be transferred to the NWRH.
- NWRH medical and surgical ward staff were directed to self isolate for 14 days.
- closure of those wards to new admissions
- patients requiring medical or surgical admissions from the ED were transferred to the LGH
- patient transfers to and from NWPH ceased.
- AT transport boundaries were amended and emergency calls from patients east of Penguin were transferred to the LGH.
- those west of Penguin were initially taken to the NWRH ED but then transferred to the LGH if admission was necessary.

On that evening a further 10 cases relating to the outbreak were notified. On 11 April 2020 discussions were held between the State Health Commander, the CMO and IC. It was concluded that the outbreak's significant impacts on staffing, and its likely

96 http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak/submissions/departments_of_health

trajectory, severely impacted the sustainability of the delivery of safe services at the NWRH.

Later that evening the State Health Commander and CMO briefed the Premier, Health Minister and senior personnel (including the Director of Public Health, the State Controller and Deputy State Controller). The State Health Commander made the decision to close, deep clean and restart the NWRH and NWPB and called in all available senior health resources to prepare on the following day, being Easter Sunday. There was also substantial and ongoing consultation within the Health System in the lead-up to the decision being taken.

The following further Directions were issued under the Public Health Act on 11 April 2020:

- ‘Gatherings (North-West Region) – No.1’ required closure of non-essential businesses in the North-West region.
- ‘Mersey community Hospital – No.1’ required all MCH staff to isolate when not at work.
- ‘Quarantine (North-West Region) - No.1’ required all NWRH staff and patients and NWPB patients discharged from 27 March 2020, and their household contacts, to self-isolate for 14 days.⁹⁷ (This was replaced by a Direction on 13 April 2020 that also included NWPB staff).

A direction was issued on 12 April 2020 by the State Controller under the Emergency Management Act to assume control of the NWPB from its private operator from 7am on 13 April 2020.

It is a great credit to DoH management and staff that this complex and difficult operation was carried out so effectively. Despite this, the Review considers it would have been helpful for the decision to be communicated to key personnel on the ground as soon as possible after the decision was made rather than at a press conference on Easter Sunday. More notice may have prevented some difficulties, such as the one created when COVID-19 infected patients were amongst the first to be transferred to the MCH early on the morning of the 13 April 2020 rather than when expected later that afternoon.

Primary Health Tasmania provided valuable support to DoH and the community, particularly on Sunday 12 April 2020. This included rapidly mobilising (within hours) a network of general practitioners across the North West who were willing to keep their practices open the following day (Easter Monday) to provide immediate backup emergency medical and primary

care support to cover the gap left by closure of the ED. DoH enabled this through provision of an incentive payment and the Review received feedback that this was a system that worked well.

Significant, and very professional assistance, was provided by members of AT (part of DoH) and the Department of Police, Fire and Emergency Management, many of whom worked extremely long hours to overcome the unprecedented increased tasking.

As noted later in this report valuable assistance was provided by an AUSMAT/ADF team that was requested and deployed to reopen and operate the NWRH’s ED for a limited period.

It is the assessment of this Review that closure of the NWRH and NWPB was a major, difficult and ultimately entirely correct decision – despite the complexities of the transfer of patients to MCH, and how that impacted on the community.

There is little doubt that this outbreak would have been far worse had the above responses and control measures not been in place.

Recommendations

- *That the Department of Health (DoH) strengthen and maintain its capability for rapid contact tracing in both community and health care outbreak settings. This should also include training and maintenance of surge capacity, and establishing the capacity and protocols to immediately provide supplementary outbreak management solutions such as a ‘contact tracing Flying Squad’ to attend and work together with health facility staff to support future outbreak responses.*
- *That the circumstances and legislative framework supporting the dissemination of medical and associated information to all those involved in the contact tracing process and pandemic issues management generally be widely communicated and included in educational and training materials. This should apply not only within the health system itself, but more broadly across all Government agencies.*

97 http://www.gazette.tas.gov.au/editions/2020/april_2020/21977_-_Gazette_22_April_2020.pdf

13. Communication during the Outbreak

Key Findings

- *Effective communication is essential in a crisis. Staff and stakeholders must receive clear, concise, timely and relevant information from sources they trust.*
- *The North-West outbreak was the first of its kind in Australia and was managed at the same time as global understanding of the COVID-19 virus and how best to treat it was evolving rapidly. Information on the impact of the virus and guidance on how best to respond was changing frequently.*
- *The Government invested substantial resources before and during the outbreak to ensure the right information flowed to the right people in a timely way in both the State Service (including Department of Health) workforce and the broader community.*
- *Notwithstanding the focus on communications, many people on the ground in the North-West still felt they didn't receive the information they needed in the time required. Others felt they couldn't trust the information they were receiving or that they found things out from the wrong source.*
- *During an outbreak, lines of communication within the Department of Health should be streamlined and clarified to ensure staff on the ground receive clear, consistent and timely information.*
- *The Government should also investigate additional and alternative means of distributing information to its staff and stakeholders to support decision-making and coordinated action.*

Background

Clear, concise and consistent communication is essential in an environment of fear and uncertainty. Getting access to definitive and 'user-friendly' information regularly and in a timely way from trusted sources helps build staff and community confidence, and underpins a coordinated approach in complex and fluid circumstances.

Effective communication was essential throughout the COVID-19 outbreak in order to minimise the impact of the virus on staff and the community. However, the large volume of information that needed to be conveyed, and the rapid rate at which both the situation and guidance on the virus and its management was changing, made this communication very challenging.

By way of example, the Review notes the rate of change during the outbreak and the broader pandemic to the *Coronavirus Disease 2019 (COVID-19) CDNA National Guidelines for Public Health Units*. These guidelines (referred to as the SoNG) support nationally consistent approaches to issues such as testing, case management and contact tracing, and were referred to regularly in the Tasmanian health system for definitive guidance during the outbreak.⁹⁸

The first SoNG was developed on 23 January 2020 and as at 28 October 2020, version 3.10 was in circulation – the 41st version of the guidelines to be produced in just seven months. Three new versions of the SoNG were released in April 2020 alone, with the 6 April 2020 version including a revised 'case definition' and the 17 April 2020 version including a revised definition of 'close contact'. One person the Review spoke with described such changes as being like concrete turning out to be quicksand.

What the Review heard

The Review received many comments about the quality and volume of communication to both staff and the community throughout the outbreak.

Participants generally noted that a large amount of information was flowing and commented positively on a number of communication initiatives, particularly the daily press conference led by the Premier. However, many people on the ground in the North-West felt they did not receive the information they needed in the time required, while others felt they could not trust the information they were receiving or that they found out about important matters from what they considered to be the wrong source.

98 www.health.gov.au

The Government's approach to communication during the outbreak

The Review found that substantial resources and effort were devoted across Government to the communication task, particularly by the Department of Health. In its submission, the Department stated:

“Clear, transparent and as timely communication as possible has been a critical component of the DoH’s response to the COVID-19 pandemic. Effective internal communication mechanisms have ensured timely distribution of key messages and supported informed decision making, while open and transparent communication with the wider community has provided clear advice on restrictions and measures to prevent further transmission of COVID-19.”⁹⁹

The Department of Health noted that the volume and rate of change in guidance on COVID-19 and its management and treatment made communication challenging. It also cited the speed at which policy decisions had to be made (sometimes just prior to public announcements) and the fact that positive test results became available late in the evening, making subsequent public statements and effective communication with staff more difficult.

The Department of Health advised that, over the course of the outbreak the mechanisms and strategies¹⁰⁰ it used to communicate with its staff included:

- Extensive use of staff emails, such as:
 - Daily communications with all North-West staff.
 - Commencing 4 February 2020, all staff emails from the State Health Commander (which were also posted on the Department’s intranet page).
 - Commencing 25 March 2020, a daily ‘what’s new’ email brief to all staff across the Department of Health from the Incident Controller.
- Direct text messages to employees to, for example, alert them to important information sent by email.
- From 17 March 2020, a daily COVID-specific communique to all North-West staff from the RHEMT Commander.

- Briefings between the RHEMT and senior NWRH department leads three times per week.
- Posters with information on hand hygiene and PPE use.
- A ‘FAQ’ factsheet for staff affected by the site closure in the North-West relating to quarantine requirements and how to access support and assistance.

The Department of Health was also engaged actively in direct communication with stakeholders outside its workforce through:

- Issuing media releases.
- Maintaining a social media presence including through its Facebook page.
- Running public advertising, including in relation to the availability of mobile testing clinics.
- Providing public health updates to the primary care community through Primary Health Tasmania, utilising a COVID-19-specific ‘FaxStream’ which went out weekly via email in the early stages of the pandemic, and more frequently in March and April.
- From 15 March, supporting the State Health Commander to chair a weekly teleconference with key external stakeholders including HACSU and the ANMF.

The Department of Health also played a key role in the broader government communication effort. While whole-of-government and whole-of-community in nature, the Department of Health supported:

- Daily press conferences which were led by the Premier and Minister for Health and provided a focal point for communication throughout the outbreak.
- The Public Information Unit within the State Control Centre, which worked with the NWRECC and local government and distributed information online and through the use of television, radio, newspapers and message boards.

⁹⁹ The Department of Health submission: http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak/submissions/departments_of_health

¹⁰⁰ COVID-19 Health ECC Internal Communications Strategy 2020 dated April 2020; Reopening of all services at NWRH Communications Strategy dated 27 April 2020; Mersey Community Hospital “Reset” and Service Continuity Plan Communication Strategy dated 5 May 2020

- The Tasmanian coronavirus website (<https://www.coronavirus.tas.gov.au/>), which averaged 16,000 visitors a day in its first month with use peaking at 61,500 visitors in a three-hour period when extra restrictions were first introduced in the North-West.¹⁰¹

The Review also notes that in addition to these whole of community communication measures, the State used the Emergency Alert SMS service twice to reach North-West residents on their mobile phones and provide information in relation to restrictions in the region and the availability of testing at mobile locations.

Finally, the many State communication initiatives were also occurring against the backdrop of active communication by the Australian Government. Regular messaging was being distributed by the Commonwealth over television, online and other broadcast channels. They also set up a national hotline for the public and have maintained a significant website throughout the pandemic.

What the Interim Report found

The preliminary report on the outbreak by Public Health Services focused on epidemiological investigations and made limited reference to communication issues. In his subsequent advice to the Secretary of Health, the Chief Medical Officer did address communications. In his 16th recommendation he said that:

“Regular communication in the form of daily updates should continue to be provided to all healthcare staff relating specifically to COVID-19.

These updates should include the current status of COVID-19 activity within the North-West, the state/national perspective, any significant amendments to local practices/protocols, and any other specific issues that are relevant to include.”¹⁰²

The Review was advised by the Secretary of Health on 14 August 2020 that this recommendation has been implemented as part of a communications strategy. She also advised that the Department’s internal communications processes and strategies “have been revised to ensure staff are well informed of emerging issues and the status of COVID-19 activity across the state.”¹⁰³

The communication challenge within the public health care system

In an outbreak, people working in the health system need good information in real time to support their decisions and actions, including in relation to the PPE they should be wearing and the actions they should be taking if they become symptomatic or are required to isolate. Ideally, everyone should receive that information about the outbreak and its management through the same channels to ensure consistency, and the information itself must be contemporary, definitive and trusted.

There were at least four key challenges to effective communication during the outbreak:

1. The ability for people easily to source their own, alternative advice and information.
2. The fact that overarching (including national) guidance on the virus often changed frequently and at short notice.
3. The structure of the Department of Health meant there were a number of different communication channels through which people received information and direction.
4. There were separate streams of communication into the region from the State’s emergency management structure.

Achieving a flow of consistent information and advice in an ‘information age’ is challenging at the best of times, because ubiquitous communication technology and the Internet mean huge volumes of information are available from multiple channels, with multiple analyses, at any point in time. In the case of the virus outbreak, most members of the clinical community could use their networks and/or online resources to find something that backed up their own view of the virus and how it should best be managed.

101 Tasmanian Whole-of-Government Submission: http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak/submissions/tasmanian_government_response

102 COVID-19 North-West Regional Hospital Outbreak Interim Report, Part B – Letter from the Chief Medical Officer, page 27.

103 Letter from Kathrine Morgan-Wicks to the Independent Reviewer, 14 August 2020.

The situation was made even more challenging by the fact that during the outbreak, the environment on the ground was chaotic and required quick decisions in the face of rapidly changing information about the virus. This meant sometimes advice from more senior management was right one minute, and then wrong shortly thereafter (see earlier reference to changes to the SoNG) through no fault of the person who originally communicated it. This undermined trust.

“My main concerns throughout the time is how often the advice was changing on what to do and when to do it. I know that this was due to the whole world learning about this virus on-the-fly but it was still very confusing for people on the ground.”¹⁰⁴

Against this backdrop, the structure of the THS meant different people within the North-West were receiving different information through different management hierarchies. The Review heard consistently that the quality, volume and relevance of the information staff were receiving depended on which functional stream they were in and varied across:

- each of the hospitals
- Ambulance Tasmania
- Mental Health
- Pharmacy
- Allied Health
- Public Health and
- different parts of Hospital Support Services.

This may have been exacerbated by the fact that, at the time of the outbreak the Department of Health was transitioning to a new governance structure.

Finally, at whole-of-government level activity in the health system needed to be coordinated with the broader emergency management response in the region with clear communication between each of the key bodies and consistent messages from both to staff and the community. This was not always the case.

Examples of good communication during the outbreak

Over the course of the Review staff and stakeholders highlighted a number of examples of good communication about and during the COVID-19 outbreak.

For example, there was almost universal praise for the daily press conference led by the Premier and the Minister for Health. This was regarded by many within the hospitals as a ‘must watch’ event where they often received their best information on the state of the outbreak and how it was affecting their workplace.

The Review understands from the Department of Health that the daily press conference was used deliberately as a focal point for communication, with substantial thought and resources going in to determining how best to use the briefing to provide the public and staff with the most up-to-date information each day. For this reason, staff were often actively encouraged by others in the workplace to make sure they tuned in.

External stakeholders also appreciated the introduction of weekly roundtable discussions with the Minister for Health and Secretary of the Department of Health. This was seen to be a good way to keep stakeholders informed about the latest developments and how they could contribute to the response, and gave them the opportunity to ask questions.

“These teleconferences were very good in capturing and understanding the numerous issues across the health sector.”¹⁰⁵

The Review also heard a number of individual examples of good communication, including hearing from one or more people that:

- The State Health Commander checked in daily with the NWRH prior to re-opening.
- There was good communication from DPIPW and AUSMAT.

104 Submission from – Name withheld (6). http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak

105 Submission from Pharmacy Guild of Tasmania: http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak/submissions/pharmacy_guild_of_tasmania

Where internal communication fell down

Unfortunately, and despite the regular flow of information through email in particular, many staff within the health system experienced poor communication. Key issues that the Review heard about are set out in detail below.

Regional differences

The Review heard again and again that each Tasmanian health region, and each major hospital, has its own approach when it comes to matters such as infection control. This made it very difficult to ensure consistency of approach across the system and was a cause of significant stress and uncertainty for staff at the coal-face as they tried to implement central guidance only to be told “we don’t work that way around here.”

When people in a hospital called Public Health, responded to central instruction or read the Australian Government’s guidance on an issue like PPE or testing and tried to implement it, but were subsequently told the region took a different approach, anxiety was the result in an already charged environment.

Briefing by press conference

The Review heard many positive comments about the daily press conference run by the Premier and the information that it provided. However, many staff in the Health system also observed that, the first time they heard key information was during a press conference. This meant, among other things, they were hearing key information at the same time as the rest of the community.

“The communication of the positive cases announced by the media prior to clinical staff being informed was deeply distressing for nurses and midwives.”¹⁰⁶

One example of the consequence of hearing key information at a press conference is that staff were not able to respond immediately to associated community concerns because they had no preparation. The Review heard that some staff were abused by members of the community because they thought those staff should be at home based on what they had just heard at a press conference, and staff had no prepared response because they had heard the same thing at the same time.

‘Too many cooks’

A number of people who spoke with the Review felt that they heard different information and advice from different parts of the Government about the same issue, causing confusion.

“... the link between Public Health, The Tasmanian Government and Department of Health through to the Tasmanian Health Service appeared to be broken at times, resulting in conflicting information or worse, no information getting through at all.”¹⁰⁷

One example of the confusion was in relation to working from home. Staff in one corporate services area thought they heard from the Premier, the Secretary of Health and the Head of the State Service that they should work from home when they could, but they received direction from elsewhere that their administrative workplace was safe and they should continue to work there. This experience was not confined to administrative areas:

“Despite directives to try and work from home if possible, certain staff applied and would have been suitable to adequately carry out duties from home. Nobody was approved from Statewide (sic) Mental Health Services to work from home.”¹⁰⁸

106 Submission from the ANMF: http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak/submissions/anmf

107 Submission from the ANMF.

108 Submission from – Name withheld (4) http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak

Having too many different sources of advice within Government was not the only issue complicating the communication process. The level of layers in the decision-making structure (see Chapter on Command and Control for further details) within the Department of Health itself meant there was often a long clearance process before messages could be released, significantly slowing the provision of information.

The Review heard that management on the ground wanted to get out and communicate quickly with staff in detail, but it took time to get information approved and there were issues when those higher up did not approve the proposed style and/or content. There is always a balance to be struck in a crisis between speedy information and consistency through central control. In the case of the outbreak, often the turnaround time as a result of a centralised approach was too long.

At the same time, the Review heard that bodies such as the ANMF and HACSU were able to communicate key information quickly to their members. In other words, staff in the Department of Health workforce were getting the information despite the management structure's focus on needing to clear messages before they were sent out.

In future, working in partnership with employee representatives and other bodies who have direct and trusted relationships with parts of the health workforce could help ensure that the workforce receives information more quickly from someone they trust. Such an approach could also ensure that different parts of the workforce receive information suited to their specific needs, noting that what is required by a clinician working on a COVID-19 ward may be very different from what is required by an attendant working in a completely different part of the hospital.

It is also critical in future to ensure hospital switchboard operators are kept fully informed and provided with up to date talking points, an aspect that was overlooked. Switchboard operators are often the first point of contact for the public and they were inundated with requests for information but had to cobble together information as best they could rather than being provided with appropriate scripts.

The role of Public Health Services (PHS)

PHS was seen by many in both the professional medical and general community as having very broad ranging responsibility in relation to the response to the outbreak. This was probably influenced by the regular appearances by the DPH and Deputy DPH in the media, and the regular references to the Government "acting on public health advice."

The command structure the Department of Health put in place makes clear that the Department and THS had significant responsibility for many aspects of the outbreak's management, but this was not clear in the minds of many staff in particular. Having a single 1800 Public Health Hotline for all COVID-19 inquiries may have exacerbated this impression.

Against the backdrop of these (probably sometimes unrealistic) expectations, staff had very mixed experiences of the role of Public Health as a source of information during the outbreak.

For some, the experience was positive:

*"... members at the two affected aged care facilities reported positive feedback and were grateful for the assistance provided to their facilities by Public Health to manage their residents diagnosed with COVID-19 and widespread testing."*¹⁰⁹

At the same time, the Review heard evidence that the PHS wasn't adequately resourced or equipped to answer questions of detail from the clinical community about issues such as infection control, testing and PPE.¹¹⁰ Public Health also received questions about issues associated with workplace management. These are just a few issues which featured in the very large volume of calls it received.

The Public Health Hotline was not staffed by infection control or industrial relations experts. While Hotline staff were able to draw on the advice of a small number of infection control nurses, it was not enough. As such, they either could not answer associated questions or people contacting them reported receiving different information each time they called.

¹⁰⁹ Submission from the ANMF.

¹¹⁰ Often this was about volume and capacity, not necessarily the capability of existing staff except when it came to some of the staff who were participating in the Public Health Hotline.

“At times, and in the absence of advice from senior management at the local level, members contacted the public health hotline out of desperation for advice with regard to infection control procedures, testing and also use of PPE and isolating of patients. Unfortunately they report receiving different information each time they called.”¹¹¹

There were also mixed views about Public Health’s work to support furloughed staff when they were in quarantine and/or isolation. Some staff reported that they received very limited checking during quarantine. Others reported that Public Health called every day and the experience was very good.

Communicating the decision to close

The public *announcement* that the NWRH and NWPH would be closed was made by the Premier at a press conference on Easter Sunday afternoon (12 April 2020). However, the Review heard that the *decision* to close was actually made at least the day before and then communicated to senior people in the Health system under embargo.¹¹²

The Department of Health told the Review that the decision was first taken on the night of Saturday 11 April 2020 after a period of progressive functional closure at the NWRH. The Department of Health confirmed that it advised relevant senior people so planning and preparation could commence immediately, but that those people were under embargo from informing their staff until the public announcement by the Premier on Easter Sunday. The decision was also informed through discussions with senior management at the NWRH, the NWREMT and THS EOC.

A number of people who made submissions to the Review noted that if they had known earlier about the closure, the response would have been better.

“Our members highlight a lack of pre-notification to ED staff, including senior consultants, of the decision to close and the subsequent re-direction of patients and ambulances to LGH ED. Unfortunately, the recollection they have of being made aware of such a decision was from publicly available media releases and articles. Given the immediate impacts this decision was going to have, formal notification was essential to support staff to prepare and respond to the anticipated impacts”¹¹³

The Review heard that the regional emergency management command structure in Burnie also found out about the hospital closure through the public announcement. This precluded them from doing more work to mitigate the associated community risks, such as the impact on the production of food for Meals on Wheels which normally occurred at the Hospital or the need to support pharmacists to provide methadone safely as a result of other staff not being available to support two-person provision following furloughing.

More worryingly, the Review understands most other agencies in Government did not become aware of the decision to close the site until or just before it was announced publicly.

Another practical example of the consequence of tightly held communication about the closure decision and how it would be implemented was in relation to the decision for Ward 1B at the MCH to become a COVID-19 ward. The Review was told that a last minute change in plans was not communicated to key staff at the MCH, meaning COVID-19 positive patients arrived earlier than expected – in the morning instead of in the afternoon. As a result, these patients were taken to a ward that was not fully prepared.

The Review also heard from a number of people that the way the closure decision was communicated put many staff in a difficult position with respect to community and patient expectations.

In practice, many health workers in the North-West who were directly affected by the decision were not able to stop and watch a press conference.

111 Submission from the ANMF.

112 The Review has become aware that there may be some confusion between the timing of the decision to take over responsibility of the NWPH, which was made and announced on Good Friday, and the decision to close the site.

113 Submission from the Australasian College for Emergency Medicine.

As a result, many first learned of the closure decision from their patients while they were at work. Learning via the media and patients about the impending closure along with a requirement to quarantine with their immediate households for two weeks was distressing for an already challenged workforce and their families.

At the same time, the Review notes the challenges in communicating with a workforce of around 1 000 people being made aware too early of a plan to close, in the absence of sufficient detail to answer all their questions.

The consequences of Health's structure for the flow of information

The Review heard examples of poor communications experienced by staff employed in a number of areas in the Department of Health who were physically located within the North-West hospitals but reported through separate statewide health and support service hierarchies. Services such as pharmacy, mental health and various corporate functions (such as the switchboard and cashiers' office) often seemed to fall between the cracks when it came to communication during the outbreak.

While meetings between relevant heads of departments within the NWRH had helped manage this issue during normal circumstances, the Review was told that these meetings were not really used during the outbreak and were not incorporated into the regional command structure.

The Review heard that in the case of a service like Statewide Mental Health, information flow in the absence of being a formal part of the hospital is not normally an issue because the service has networks and relationships on the ground. Unfortunately, under the extreme pressure and uncertainty of the pandemic outbreak, such informal networks seem to have failed in a number of cases.

The Review heard consistent messages from staff in a number of the statewide services about poor communication. Staff members in these services said they had no guidance or communication on how to manage their work environment in relation to matters such as isolation and PPE. As a result, they took matters into their own hands and adopted the best approach they could identify.

*"... on the 18th March 2020, I raised my first request for direction on safe handling practices of medical record documentation and if documentation could be moved between different areas of the hospital, as well as what PPE was required for the medical records staff handling documentation. I sent 14 emails and numerous phone calls from this date until the 8th April 2020 seeking direction. There was a high amount of anxiety for the team and mixed messages about what should be occurring ... This created uncertainty that staff were not safe in the workplace and we felt unimportant as were are (sic) not clinical and our questions not answered in a timely manner."*¹¹⁴

While sometimes staff in these services were included in hospital-wide communication, often they were not and this continued throughout the outbreak, including in relation to revised visiting hours and planning on recovery (which tended to focus on the re-opening of wards). In some cases when staff in administrative areas did receive general emails with advice it was focused on clinical settings and left them unsure of their responsibilities in an administrative setting.

In other cases, staff thought the Regional Health Commander was in charge and they got regular communications from her, but their Hobart-based line management thought it was in charge and provided contrary direction.

Staff in a number of these non-clinical areas also fell through the cracks when it came to the isolation and contact tracing processes. It is likely that a key factor here was the fact that contact lists supplied to Public Health were on the basis of the NWRH's payroll data/establishment lists, meaning they did not capture key staff who worked there but reported through different channels.

*"I am an employee who is funded out of an LGH cost centre code but based mostly at North-West Regional Hospital. I therefore quarantined when the North-West Regional Hospital was closed as per all other staff. At no time was I checked on to ensure I was in quarantine or that my family were in quarantine. I am aware of other staff who are also funded out of other cost centres who were not contacted either."*¹¹⁵

114 Submission from – Name withheld (3) http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak

115 Submission from – Name withheld (3) http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak

This meant many staff were not contacted, and when those staff called Public Health they were told there was no record of them. This sense of isolation was probably exacerbated by the fact that Police could not easily get the list of furloughed staff from Hobart where it was being compiled and when they did get it, it was inaccurate on an ongoing basis.

Talking with the neighbours

Despite being located next door to one another, communication did not flow as well as it might have between the NWRH and the NWPH. This was most apparent in relation to the transfer of patients who subsequently tested positive for COVID-19.

The Review heard that it took between four and five days before the NWRH informed the NWPH that patients it had transferred across had come from a ward where a patient subsequently tested positive for COVID-19. When the NWPH asked why there had been such a delay in being informed, they were told the NWRH had forgotten to tell them. Subsequently, two of the patients at the NWPH also tested positive.

Communication between the two hospitals was initially informal but improved as the outbreak progressed.

Relying on email

The Review heard that a great deal of communication with staff during the outbreak occurred by email. Such was the dependence on email for communicating key information that one person the Review interviewed said the game plan changed constantly on protocols and criteria, and that if a staff member was not on top of their emails then they were behind. One senior person in the command structure told the Review that everyone had email, so it was a person's choice whether they accessed it and got the information it contained.

In practice, in many cases staff working within the Health system did not have the time or ability to check their emails to see if there was another update. This included people working at Ambulance Tasmania, where staff were on the road when guidance on operating procedures may have changed. They did not have the time to stop and sort through their emails on the off chance that a change had been made.

Others found that they received an excessive number of emails that were confusing.

The Review heard that in future, use of SMS would be a more effective way to reach a large number of staff quickly and with consistent information than email. The Department of Health could also draw more heavily on professional bodies and employee representatives to help ensure email and text-based information is received by the workforce, given their reach with their respective members.

Relying on a stream of emails as the principal means to advise staff of important changes in guidance and about new information may also be contrary to best practice in a medical setting, as it requires regular checking of electronic devices during working shifts. Such practice may cause distractions for staff during important clinical procedures and frequent touching of such devices may not be ideal in the presence of an easily transmissible pathogen.

The Review considers that relevant staff should be given the authority to liaise directly with all parts of the health system to obtain the information that staff on the ground need to work safely. This should allow medical and other staff to receive regular updates and raise questions directly about issues such as the latest public health advice, infection control guidelines and isolation requirements without needing to leave their area of work or to log on to their emails.

The mechanism(s) put in place should have the capacity to follow issues up directly with other parts of the health system to enable information to be sourced and provided quickly, and should be provided in a way that does not compromise broader infection control requirements. The use of video-based technology linked to a central communications and clinical advisory team may provide an appropriate model.

Perceived legal impediments to sharing information in government

The Review heard that perceived legal impediments to sharing information across Government functions and agencies affected the speed and effectiveness of the response to the outbreak.

For example, the Department of Health (specifically PHS) took time to share information with Police for legal reasons associated with privacy concerns at the same time as Police were trying to clarify whether officers had been dealing with people with COVID-19. In such cases there is an overwhelming public interest in sharing such personal information, provided appropriate safeguards are put in place.

The Review also heard that senior hospital staff were not told when their staff members tested positive for COVID-19. The same was the case for some GPs. In cases where Public Health, for example, was informing the patient and was the source of the initial referral for testing, their apparent view was that the interaction was then subject to privilege.

As noted earlier in this Report, legal impediments are often cited as a reason for not sharing information in Government when none actually exist, or the legislation in question provides a mechanism to support information-sharing. There are many precedents for sharing sensitive personal information across agencies within Government when it is clearly in the public interest. Work in the area of family violence is a case in point, where the Safe Families Coordination Unit includes staff from a number of agencies who share information about families and offenders across the portfolios of Justice, Health, Education and Police.

Informing the Community

The Review received much less comment about external communication than it did about communication across Government and within the Tasmanian health system. Much of that information suggested a generally positive view of the level, flow and timeliness of public information.

“The ANMF found communication to the community and the local community was very timely. Communication occurred across multiple platforms with mainstream media and social media being used to transmit key messages with regard to social distancing, testing and later on quarantining for households.”¹¹⁶

However, a number of the factors that affected communication within Government also influenced the effectiveness of communication with the broader community.

“Information dissemination to the public has come from multiple official sources ... The challenge lies in managing differences in advice from these various sources, to ensure that information is not disjointed or confusing.”¹¹⁷

Stakeholders identified three key issues for the future:

- Equipping hospital switchboards to help inform the public.
- Not placing too much reliance on the internet to distribute information.
- Focusing on the needs of health consumers and other providers.

Using hospital switchboards

The Review heard that hospital switchboards are often the first port of call for people with questions about public health.

Calls were being made to the NWRH switch as early as the beginning of March 2020 in relation to COVID-19 coming into Tasmania. The details of flights on which COVID-19 positive people travelled were advised on the news, so people started calling the hospitals asking about the consequences. Unfortunately, switchboard operators were not given any scripts for how to respond or where to direct these callers (eg to Public Health, Health Direct etc).

“Surely Public Health could have warned the 4 main hospital switchboards & advised what we should do if we received calls from members of the public.”¹¹⁸

As the outbreak continued, functions at the NWRH and MCH were progressively closed down. Unfortunately, switchboard operators were not informed of this, meaning they continued to refer community phone calls into areas of the hospital where there were no longer any staff.

¹¹⁶ Submission from the ANMF.

¹¹⁷ *Inquiry into the Tasmanian Government's response to the COVID-19 pandemic*, Public Health Association Australia, page 9, 31 July 2020.

¹¹⁸ Submission from – Name withheld (1). http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak

Digital literacy

Not all members of the Tasmanian community have access to or make use of the internet, and there are ongoing challenges in the State around levels of adult literacy. As a result, many of Tasmania's most disadvantaged and 'at risk' community members are not able to get key information if it is primarily provided in written form online.

While communication to the general public during the outbreak was viewed positively, the Review heard from Public Health and the Department of Health that in future they would make more use of radio and other 'non-online' media (such as advertisements on buses) to get information out in the public health space. There would also be a greater emphasis on the use of 'plain English' and on learning from the approaches adopted by other jurisdictions. The Review endorses this approach.

Focusing on the needs of health consumers and other providers

While general public communication was viewed positively, a number of concerns were expressed in relation to communication between the Government and the broader health community in North-West Tasmania.

The Review heard that people working in care settings outside the hospitals were not clear on their role or the expectations of how they would work in the outbreak.

*"members who worked in these hospitals/multi-purpose centres experienced poor communication, protocols that were irrelevant to their situation and ... were left wondering what was their role in the statewide response to COVID-19."*¹¹⁹

As with many staff in the Department of Health, there was also concern that the broader health community received only general information, and that this came through press conferences instead of direct and detailed communication.

*"members were concerned that they were directed to watch public broadcasts/media conference to learn intricate details of the COVID-19 outbreak and the closure of the NWRH."*¹²⁰

Members of the general practice community (including pharmacists) wanted to be considered a key part of the health system and wanted information in real-time from the Department of Health instead of hearing through the media about key developments and often being left to their own devices to determine the consequences.

The use of FaxStream in partnership with Primary Health Tasmania ensured a flow of information to the general practice community, but over the Easter weekend in particular many in the primary health community would not have access to emails sent to their practice managers as they were not in the work environment.

In any case, the Review heard that in the immediate lead-up to and following the closure of the hospital, the flow of information slowed considerably in relation to issues such as hospital service closures.

As a result, when decisions about service closures were taken, external health professionals and consumers were left wondering whether and where they could access appropriate health services in the case of, for example, a psychiatric emergency.

*"Health consumers consulted were ... concerned by the nature of communication with the public when the outbreak and hospitals shut down first occurred, as they were informed their hospital was closed, but did not know if and where they could access health services if needed."*¹²¹

One solution to this issue in future may be to make greater use of Tasmanian Health Pathways, an online system for providing information on referral and assessment pathways which can be modified relatively easily to indicate when services are no longer available and to suggest alternatives.

Another solution would be to work in partnership with external bodies who have good relationships with or represent health stakeholders outside Government. The Review understands, for example, that Primary Health Tasmania (PHTas) prepared a succinct COVID-19 newsletter for general practitioners (GPs) that was distributed weekly, and sometimes daily as key things changed. PHTas also distributed public health alerts to peak bodies such as the

119 Submission from Regional Doctors Association Tasmania (RDAT). http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak/submissions/rural_doctors_association_of_tasmania

120 Submission from RDAT.

121 Submission from Health Consumers Tasmania (HCT).

Pharmacy Guild. There may be an opportunity for the Government to work more closely with groups like these in future to assist with tailored, trusted and timely distribution of information.

One complicating factor in this area is that in some cases where good advice and information was flowing, some external providers were caught between Tasmanian guidance and direction they were receiving from their private sector owners.

The Review heard, for example, of management of an aged care facility taking directions from the Tasmanian Government at the same time as it received different instructions from its hierarchy located interstate.

Some staff working in the private sector and aged care found it difficult to access up-to-date information regarding infection control procedures and how to access PPE, and when messages from the Tasmanian Government did reach them they were often at odds with what their employers were advising.

Communication with staff since the outbreak

In its advice to the Review on 14 August 2020, the Department of Health noted that its communication processes and strategies had been changed to ensure its staff are well informed in relation to COVID-19.

Nevertheless, the Review heard that concerns remain, particularly about the timeliness of communications. For example, the Review heard that it took a week before staff were informed at the NWRH that they could go back to Level 1 after the recent COVID-19 positive patient left hospital. This was due in part to the fact that COVID-related decisions and associated communication still needed to be cleared through the Department of Health's command structure.

The Review also notes that one staff member it interviewed actually became aware *at the interview* that because they worked in a critical area, they were eligible for fit-testing of PPE.

There is ongoing room for improvement in this area.

Communication with the North-West community since the outbreak

The Review heard on a number of occasions about widespread community anxiety in the North-West. As noted earlier in this chapter, the lack of clear and transparent information and communication at the time of the outbreak resulted in uncertainty in an environment already characterised by anxiety. The Review also heard that the more recent admission of a COVID positive patient (who had been transferred from interstate) exacerbated this anxiety.

In such an environment, the Review considers that it is important to communicate proactively and transparently with the community, and by doing so, to demonstrate empathy with the community.

The Review has been advised that, while there were particular communication channels used in the North-West at the time of the outbreak, these have not been refreshed. The suite of state-wide communication channels remains in place, including regular public press conferences led by the Premier, Minister for Health and DPH, media releases, social media and advertising.

The Review has been advised that DoH has provided health related information to the Public Information Unit since it was first activated in response to the pandemic in mid-March 2020

- *This includes critical health information for the Tasmanian coronavirus website (www.coronavirus.tas.gov.au), which provides information on, but not limited to:*
 - *case numbers and testing updates*
 - *current restrictions*
 - *how to keep yourself safe*
 - *stimulus and support*
 - *tailored information for key groups including families and community, business and employees, and travellers and visitors*¹²²

The Review notes that border restrictions to a number of States have been relaxed as of late October 2020, most likely leading to a steady flow of visitors, and that this could have the effect of increasing anxiety and uncertainty in the North-West.

Community members and health consumers in the North-West would benefit from proactive and locally tailored communication to assure them that, should there be a further outbreak – whether limited or widespread – the health system will be well prepared to respond. As noted earlier, this should not rely on web-based tools, and should take into account differing levels of adult and digital literacy.

Conclusion and recommendations

The Department of Health invested a great deal of time and resource to support the flow of information to its staff and the community and contributed substantially to the Government's broader communication effort. This was taking place at a time when knowledge of the virus and guidance on how to manage it was evolving rapidly, meaning it was difficult to keep up.

The Review heard a number of positive comments about the approach to communication. However, many issues arose which need to be addressed before the next outbreak. In particular, the Review recommends:

- *That major decisions in DoH which affect multiple agencies and the community, and require close coordination with the emergency management structure, be communicated to those agencies before there is an announcement to the media.*
- *That DoH streamline the communication process and give greater authority to managers in an affected hospital to communicate directly and quickly with their staff about an outbreak. DoH should also seek opportunities to work in partnership with third parties like unions to improve the speed and relevance of communication, building on its work with organisations like PHTas.*
- *That there be a clear separation of Public Health advice for the general community from advice for the clinical community.*
- *That DoH investigate use of an App-based tool for providing the latest information to staff, so that staff do not have to read through large numbers of emails to find key information, but instead open the App to find the latest advice on issues such as PPE.*

This might also require investment in smart devices to ensure information can be 'pushed' to all relevant staff at the same time, irrespective of where they are located.

- *That future communications incorporate a stronger focus on health consumers (including external health service providers), with alternative communication tools such as community mail-outs and greater use of public media.*
- *That there be an immediate, localised, appropriately-tailored and transparent strategy for communicating with North-West health consumers and community members. This should take into account the ongoing anxiety and uncertainty which arose from the outbreak, and the need to re-assure the community that lessons learnt from the outbreak will inform future responses.*
- *That the communication tools used as part of any future strategy can be amended, refined and approved rapidly so as to ensure that there is no delay in disseminating information in the event of a future outbreak, because of the rapid dissemination of information, correct or otherwise, by social media.*
- *That, as a priority, DoH make additional mechanisms available for health and wellbeing support for the North-West workforce that has been affected by the COVID outbreak. Mechanisms for monitoring effectiveness should include – but not be limited to – confidential and properly designed staff surveys.*
- *That DoH regularly monitor the effectiveness of these additional mechanisms to ensure that they are meeting the objective of improving collective and individual staff mental health and wellbeing.*
- *That when an outbreak occurs in a hospital, the officer in charge of that site be authorised and encouraged to communicate directly and frequently with their staff about the latest information and direction without the need to first clear scripts and messages through successive layers of the management hierarchy above them.*

14. Command and Control during the Outbreak

“One of the biggest lessons of the COVID-19 pandemic is that speed matters. The window of opportunity to find and stop a rapidly spreading virus is vanishingly small and intolerant of mistakes.”¹²³

Key Findings

- *Clear lines of authority supported by simple and effective decision-making structures are essential in a crisis. Authority should be devolved as far as possible to people on the ground who are best able to judge what is needed in real-time.*
- *The hierarchy put in place to manage a crisis must also be able to make and communicate decisions quickly, particularly in a pandemic where hours can cost lives. One way to ensure that is by regular testing and simulation exercises.*
- *Management of the response to the North-West outbreak involved multiple, overlapping structures for command and control, underpinned by at least two major pieces of legislation and multiple national, state and local planning documents.*
- *This framework was being applied in an unfamiliar environment – the Tasmanian system had no previous experience of working in a statewide health crisis, and the pace of change and decision-making during the outbreak meant it was difficult for written plans to keep up.*
- *The roles of some of the key emergency management positions and teams that were making decisions are not clearly defined in the relevant legislation and associated planning documents, and both the consultation leading up to and the final decision to close the NWRH could have been better documented.*
- *It is not clear to the Review whether the decision-making process, command and review structure was consistent with the plans in place under the Emergency Management Act. However, the Review found no evidence to suggest that decisions made by any of the key officers or bodies were incorrect, or that it was in any way inappropriate to establish additional coordination mechanisms as the crisis evolved. In the case of the State Health Commander it is clear that many (if not all) of the decisions taken would have been within the authority of the Secretary of Health anyway (a position which the Commander held at the same time).*
- *Clarifying and simplifying decision-making structures will be essential to improve management of the next outbreak. This should be supported with an introduction of clinical and emergency management expertise, and the additional resources necessary to ensure key decision-makers can focus on the crisis at hand, free from the demands of ‘business as usual’.*
- *No matter how clean and clear a structure is on paper, it will only work in practice if it is supported by good leadership, accountability and a culture of collaboration.*

123 Betsy McKay, *Lessons for the Next Pandemic – Act Very, Very Quickly*, The Wall Street Journal, 11 October 2020.

Background

Tasmania's framework for managing the pandemic has been guided and given effect by five key sources of legislative and/or administrative authority, related decision-making bodies, and planning guidance:

- The *Emergency Management Act 2006* and its associated plans, frameworks and governance structures.
- Administrative structures established within the Department of Health and the associated delegated authorities.
- The *Public Health Act 1997* and the powers it confers on the Director of Public Health.
- A suite of national, state and health system pandemic management plans.
- Relevant national guidance and Australian Government entities (including the Australian Defence Force and AUSMAT).

Over the January-March 2020 period, the Tasmanian Government and its officers established various committees, invoked various legislative powers and developed and implemented a range of plans in response to the growing threat of the COVID-19 pandemic.

One of the key challenges during the outbreak in the North-West was to coordinate effectively the application, work and direction of all of the relevant plans, decision-making bodies and statutory officers in the interest of a good public health response and outcome.

This Chapter does not outline the evolution of the governance structure and associated plans during the first few months of the pandemic. Instead, it examines the command and control arrangements that were in place by, or implemented subsequent to, commencement of the outbreak in the North-West on or about 3 April 2020.

Changes in the Department of Health

The Review notes that the outbreak struck at the same time as the Department of Health was moving to implement a new executive structure. The need to implement this structure was determined independently from the COVID pandemic, but its implementation had an impact on lines of control during the outbreak.

The Department of Health started transitioning to the new structure on 2 March 2020. One of the key aims in implementing the new structure was to end the separation of day-to-day executive management between the Department of Health and the Tasmanian Health Service by integrating them into a single executive structure.

Key features of the new structure that are relevant to the Review are:

- The Executive Director Operations in each region was renamed Chief Executive Hospitals (one for the South and one for the North/North-West), reported directly to the Secretary and assumed the local management of the Hospitals, including Hospital Support Services (Food Services, House Services, Medical Orderlies and associated functions) and excluding existing Statewide Services.
- A new role of Deputy Secretary, Community, Mental Health and Wellbeing was established, responsible for the coordinated delivery of key community-facing statewide health services including Ambulance Tasmania, Mental Health, Public Health and Pharmacy.
- THS finance, revenue, procurement and supply functions became the responsibility of the Chief Financial Officer; THS ICT and e-health became the responsibility of the Chief Information Officer; THS HR became the responsibility of the Chief People Officer; and THS facilities and engineering became the responsibility of the Deputy Secretary Infrastructure. Each of these positions reported, in turn, to the Secretary.¹²⁴

As the transition progressed, some of these positions had a key role in ensuring 'business as usual' operations in the Tasmanian hospital system at the same time as the outbreak was being managed.

¹²⁴ Department of Health website, *About Us*, https://www.health.tas.gov.au/about_the_department.

Lines of command and control during the outbreak

Understanding the key command structures that were in place, the plans they gave effect and how they interacted is essential to understand how decision-making worked in the North-West during the outbreak.

The Emergency Management Act and supporting structures

The *Emergency Management Act 2006* (EM Act) and the powers it confers have been invoked a number of times over the past ten years in response to various natural disasters. However, 2020 represents the first time they have been applied in the context of both a statewide health crisis and a highly regionalised viral outbreak.

The principal decision-making body under the Act is the State Emergency Management Committee, which is chaired by the statutory position of State Controller. The SEMC was stood up formally under the EM Act in late February 2020 under the Commissioner of Police as State Controller, with the Department of Health taking on the role of the SEMC's Advisory Agency.

The State Controller has a wide range of powers under Section 11 of the EM Act. In effect, the State Controller can direct the use of resources for emergency management as they see fit and have the authority to ensure their instructions and decisions are carried out. The SEMC has a range of policy and planning functions, but during a crisis it exists principally to assist the State Controller to exercise their powers and functions.

On 19 March 2020 the Premier declared a State of Emergency under section 42 of the Act. When this happened, the State Controller approved the State Control Centre being stood up

It is noteworthy that the State Controller was required to liaise with four different officers in the Department of Health instead of being able to depend on a single officer for the Department's definitive, coordinated position on a matter.

The emergency management structure also incorporated three Regional Emergency Management Committees which were administered through their own coordination centres, including a North-West Regional Emergency Coordination Centre (NWRECC). The North-West Regional Emergency Management Committee (NWREMC) and Coordination Centre were led by a Regional Controller (a statutory position under the Act), who in this case was a senior police officer.

Under Sections 16 and 18 of the EM Act, the powers and responsibilities of the Regional Controller and the Regional Committee largely mirror those of the State Controller and SEMC but at a regional level, with a clear focus on giving effect to the State Controller's direction and marshalling regional resources as necessary to do so.

Notably, the EM Act also makes provision for the establishment of a Ministerial Committee for Emergency Management (MCEM), which is chaired by the Premier. The purpose of the Committee is to provide ministerial-level strategic policy oversight of measures to prevent, prepare for, respond to and recover from emergencies. The Review was advised that the Committee was formed and has met weekly since 10 March 2020 to focus on the COVID-19 pandemic.

These three bodies and statutory positions – the MCEM, the State Controller (supported by the SEMC and State Control Centre) and the Regional Controller (supported by the NWREMC and Regional Coordination Centre) – were the principal decision-makers and command organisations for State and regional emergency management during the outbreak.

*“to lead coordination of whole-of-government response to the pandemic, led by the State Controller in close liaison with the State Health Commander, the Incident Controller, the DPH and the CMO”.*¹²⁵

¹²⁵ Department of Health submission, page 7.

Emergency management structures within the Department of Health

Under Section 35 of the EM Act, the State may prepare Special Emergency Management Plans in respect of a particular risk or emergency. Up until mid-March 2020, the State's efforts to manage the pandemic were guided by State Special Emergency Management Plan: Pandemic Influenza 2019 (SSEMP: PI19).

The SSEMP for COVID-19 (SSEMP: C19) was approved by the State Controller on 17 March 2020 and outlines health and whole-of-government arrangements, including management authority and cross-agency responsibilities for the COVID-19 pandemic.

Both these documents clarify that coordination of the State's work to address the pandemic is in accordance with the Tasmanian Emergency Management Arrangements (TEMA), and the Department of Health was the SEMC Advisory Agency, Prevention and Mitigation Management Authority and the Response Management Authority.¹²⁶ It was in this capacity that the Department of Health had established and continued to respond to the pandemic through its own emergency management structure which was separate from, but aligned to, the one established through the State Controller.

When the Premier declared a State of Emergency on 19 March 2020 the State Controller approved escalation to a Level 3 emergency management response under SSEMP: C19. The Department of Health continued to coordinate the health sector response during this stage (and throughout the North-West outbreak), utilising the structures established and activated during the Level 2 response under SSEMP: P19 – an Emergency Coordination Centre in the Department of Health supported by three Emergency Operations Centres (EOCs).

Under the COVID-19 SSEMP, the Emergency Coordination Centre was responsible for coordinating system-wide responses in Health, and for overseeing the Department of Health's response.

The ECC was led by an Incident Controller and during the outbreak that person was responsible for system-wide consequence management, including the strategic leadership, coordination and direction of system-wide and service level COVID-19 preparedness and response.

“Establishment of the ECC ensured there was one dedicated team focussed on the management of the Tasmanian health system response, staffed by people from across the DoH and beyond with specific expertise in key areas including logistics and resourcing, communications, health systems operation and service delivery, and health emergency planning and policy.”¹²⁷

Notably, according to the SSEMP: C19, under a Level 3 response “The Incident Controller will direct and coordinate the health response, working closely with and on the advice of the DPH and the CMO.”¹²⁸ They are also to perform the role of Operational Controller in the SCC.

There is no description of the role of the Secretary of Health in the command structure under the SSEMPs that were in effect, other than to clarify that person's responsibility for establishing the ECC and appointing the Incident Controller. The position of Secretary is also included in several command system diagrams in that document. In the Department of Health's response to the draft report they advised that under the SSEMP the Secretary is responsible and accountable for the actions of the Incident Controller. However, the Review notes that under the relevant SSEMP the Incident Controller is to report directly to the SCC (not through the Secretary) and it is their role, not the Secretary's, to direct and coordinate the health response.

There is also no mention anywhere of the position of ‘State Health Commander’ in those documents despite the fact that in its submission, the Department of Health stated that “Under Level 2, the Secretary DOH formally assumed the role of State Health Commander, providing oversight and direction to the Incident Controller ...”¹²⁹.

126 Tasmanian Emergency Management Arrangements, 10 December 2019, <https://www.ses.tas.gov.au/emergency-management-2/tasmanian-emergency-management-arrangements-tema/>.

127 Department of Health Submission to the Independent Review of the Response to the North-West Tasmania COVID-19 Outbreak, page 4, 1 September 2020.

128 State Special Emergency Management Plan: COVID-19 (Coronavirus Disease 2019), page 22, 17 March 2020.

129 Department of Health Submission, page 7.

The Department of Health advised in its response to the Draft Review Report that the term ‘State Health Commander’ was used to reflect a separation of the COVID-19 health system command role and the non-COVID-19 ‘business as usual’ roles of the Secretary of Health. In practice, the Secretary of Health worked full-time on COVID-19 matters while a Deputy Secretary worked under delegation to execute much of the Department’s ‘Business as Usual’ activity.

The ECC was supported during the outbreak by EOCs for Public Health, Ambulance Tasmania and the THS. Each of these Centres was led by a Commander and provided specialised advice to the ECC and was responsible for coordination and management of response operations in their service area.

The THSEOC was supported in turn by three Regional Health Emergency Management Teams (RHEMTs) including the North-West Regional Health Emergency Management Team (NWRHEMT). According to the Department of Health, these Teams were activated under the Level 2 response. However, neither the SSEMP for Pandemic Influenza nor the SSEMP for COVID-19 make any mention of RHEMTs in the context of a Level 2 (or any other form of) response. The THS – North-West COVID-19 Draft Escalation Management Plan of June 2020 does mention the RHEMT. However, the first version of this document was approved on 3 April 2020, about a month after the submission to the review from the Department of Health indicates that the RHEMT was initially stood up.

In the Department of Health’s submission it said these bodies played a key role in managing and coordinating the THS’s regional level emergency response operations. Each of these Teams had a Regional Health Commander and was responsible for:

“maintaining local lines of communication, providing advice through the THS EOC to the ECC, clarifying issues of policy or implementation, and ensuring local escalation plans are developed by the ECC and the State Health Commander.”¹³⁰

The Department of Health also established an Incident Management Team (IMT) for the outbreak which was initially led by the Chief Medical Officer (CMO) and started on 3 April 2020. The IMT included senior medical and nursing clinical and operational leads and reported to the THS EOC. In addition, on 4 April 2020 the State Health Commander established an Outbreak Management Team (OMT) which, according to the Department of Health’s submission, then reported to the IMT.

The submission from the Department of Health does not discuss the role these two teams played during the outbreak. As with the RHEMTs, the Department of Health said in its submission that the governance arrangements to allow this to occur were activated as part of the Level 2 response (in the relevant SSEMP). Despite this, there is no mention of such bodies (IMTs and OMTs) in the context of a Level 2 response in either the PI or C19 Plans, and the IMTs that are specified in the Level 1 response in those documents are constituted differently.¹³¹

In its response to the Draft Review Report, the Review was advised that the IMT in fact converted to an OMT, and that the terminology used for these groups was standard in a hospital and not related to the relevant SSEMP.

The Review spoke with two senior managers in Health who were centrally involved in the outbreak response but were not sure what the IMT and OMT did. The Review asked the Department of Health for advice on the respective roles and responsibilities of the IMT and OMT. In response, the Review was advised as follows.

*“The **Second IMT** was the initial specific response authorised by the Secretary on the 3rd April. This operated within the THS and included key local leadership. As the outbreak developed, the next day the Outbreak Management Team (OMT) was established. There was significant membership overlap between the key response groups in the NW (OMT, RHEMT and Executive). Discussions occurred between the membership of the OMT directly with THSEOC and, at times, with the Health ECC and State Health Commander.”¹³²*

¹³⁰ Department of Health Submission, page 6.

¹³¹ Department of Health Submission, page 7. The Review notes that while the SSEMP makes provision for the formation of an IMT during a Level 1 response, the Level 1 IMT that was formed was transitioned into the PHEOC. The second IMT formed during the Outbreak occurred, according to Health, as part of the Level 2 Response.

¹³² Supplementary information from the Department of Health via email, 15 October 2020.

Unfortunately, this response did not indicate the functions of either the IMT or the OMT and the Review remains unsure of their role.

The Public Health Act 1997

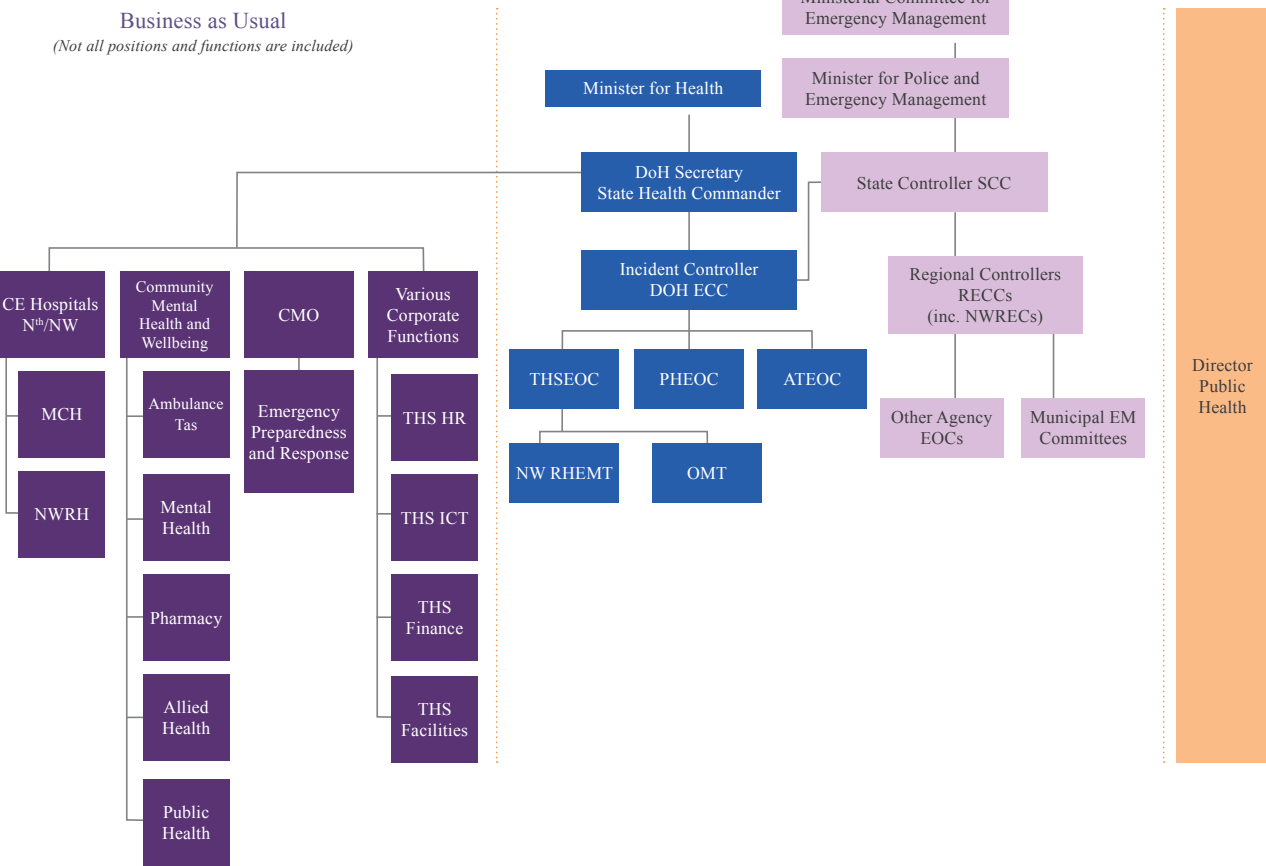
Tasmania’s *Public Health Act 1997* (PH Act) gives the statutory position of Director of Public Health (DPH) a wide range of both standing and emergency powers. The DPH is unfettered in their ability to exercise these powers in as much as they are not bound to act on any direction from the State’s emergency management structures.

Under the PH Act the DPH can declare a public health emergency, and when an emergency is declared the DPH assumes a number of emergency powers. This includes the authority to take any action or provide direction that is necessary in their view to manage

an actual or likely threat to public health, such as quarantining or isolating people in an area. The power to issue Directions complements those in the EM Act, and Directions were issued under both during the outbreak “to aid the North-West health system response and to give effect to the enhanced restrictions.”¹³³

The DPH used his emergency powers to impose restrictions on visitors to hospitals and aged care facilities in the North-West. More broadly, a number of other Directions were issued by the DPH (and the Acting DPH) on the 11th and 13th April 2020 to support the control of the outbreak, and they are described elsewhere in this Report. The Directions required the closure of non-essential businesses in the North-West region, required MCH staff to self-isolate when not at work, and required relevant NWRH and NWRPH staff and patients to self-isolate.

FIGURE 3: C2 Structure During the Outbreak
Emergency Management



133 Tasmanian Whole-of-Government Submission: Independent Review of the Response to the North-West Tasmania COVID-19 Outbreak, page 4, August 2020.

Pandemic planning

The State also had a suite of plans in place leading into the pandemic and then during the outbreak, which focused variously on preparation for and response to pandemic influenza and COVID-19. These plans included but were not limited to the *Tasmanian Health Action Plan for Pandemic Influenza 2016* (THAPPI).¹³⁴

As outlined above, during the early stages of the pandemic the response effort was guided by the *State Special Emergency Management Plan: Pandemic Influenza 2019* and the SSEMP: COVID-19. In early April 2020, Escalation Management Plans were approved for each of the THS regions, outlining the THS response arrangements for COVID-19. The THS also developed plans including THS District Hospital Escalation Management Plans for each region and the THS Intensive Care Unit Surge Capacity Plan.

National guidance and agencies

Tasmania was an active participant in national discussions in the lead-up to and throughout the outbreak, and much of the guidance it implemented at State and regional level came from national sources. This included documents like:

- *Australian Health Management Plan for Pandemic Influenza*, Australian Government Department of Health, August 2019. (AHMPPI)
- Australian Health Sector Emergency Response Plan for Novel Coronavirus (COVID-19), Commonwealth of Australia as represented by the Department of Health, 2020.

National guidance also comprised:

- Statements issued by the Australian Health Protection Principal Committee
- Communicable Disease Network Australia COVID-19 Series of National Guidelines for Public Health Units
- Decisions made by National Cabinet.

In addition to coordinating and providing national guidance, the Australian Government deployed an Australian Medical Assistance Team (AUSMAT) and personnel from the Australian Defence Force (ADF) to assist with the outbreak.

The AUSMAT initiative brings together health teams from across Australia including doctors, nurses and allied health staff. AUSMAT received a Tasmanian Government request in April 2020 to deploy jointly with the Australian Defence Force (ADF) to help with the response to the North-West outbreak. The associated AUSMAT/ADF deployment took place from 14 April to 1 May 2020 and involved about 50 people. The AUSMAT submission advised that the team was responsible for facilitating the refurbishment and recommissioning of the Emergency Department at the North-West Regional Hospital, and they maintained the ED from 17 – 28 April 2020.

Key AUSMAT and ADF members were actively engaged in the THS planning process. They met regularly with the THS EOC and engaged frequently with the CMO and NWRH Executive during their time in the region.

Summing up the command situation in April

During the outbreak, emergency management efforts at whole-of-government level in the North-West were being implemented by the NWREMC, which reported through the State Control Centre to the State Controller (and the SEMC), who in turn advised the Ministerial Committee.

On the Health side, the NWRHEMT was reporting through the THS EOC to the ECC, which in turn reported both to the State Health Commander and the State Control Centre. At the same time, an OMT was reporting separately to the THS EOC in relation to the management of the outbreak.

The Director of Public Health was both integrated into this system and exercising independent statutory powers. Different parts of the hospitals were reporting to different parts of the Department of Health and THS under their 'business as usual' arrangements. Finally, when the AUSMAT/ADF deployment arrived it took operational control of the NWRH while engaging regularly with the executive at the NWRH, the THS EOC and the CMO.

134 *Tasmanian Health Action Plan for Pandemic Influenza 2016*, Department of Health and Human Services, March 2016.

What the Interim Report found

The Interim Report's findings in relation to governance and command structures during the outbreak focused primarily on the work and set-up of the Outbreak Management Team. Public Health Services made one recommendation, which was:

“Ensure clear governance arrangements for managing future outbreaks in healthcare settings, including dedicated teams for outbreak control whose members are skilled in the rapid tasks required to manage outbreaks, especially the identifying and furloughing of close contacts.”¹³⁵

In his associated advice to the Secretary of Health, the Chief Medical Officer found that early changes in governance of the OMT during the outbreak had an impact, and he recommended (Recommendation 6) that there be a clear description of the “structure, roles and resources required for the Outbreak Management Team.”¹³⁶ The CMO went on to recommend (Recommendation 6) that a formal Outbreak Management Plan also be developed.¹³⁷

The Review strongly supports this recommendation.

In its advice to the Review of 14 August 2020 on the status of recommendations made in the Interim Report, the Department of Health said a draft Outbreak Management Plan had been developed and includes:

“Delineation of responsibility between OMT, PHS, ECC, Regional Health, Emergency Management Team (RHEMT) and relevant hospital Executive.”¹³⁸

Command and control in Health during the outbreak

In practice, the Department of Health's response to the outbreak was governed through four different but overlapping and in some cases interdependent structures – the overarching State emergency management structure, the Health emergency management structure, the Health business as usual management structure and the independent statutory powers available to the Director of Public Health.

Notwithstanding the associated challenges, the Review heard positive feedback about aspects of the command and control system.

“ANMF were also able to meet regularly with the State Emergency Controller who provided clear advice in terms of escalation plans, triggers for escalation and allowed member feedback to be provided to assist in this planning.”¹³⁹

In particular, the Review heard that the regional emergency management structure operated under Police leadership worked well. The Review also understands that once they were integrated effectively in the command structure, the Ambulance Tasmania side worked well too.

However, the Review found that the command structure that was adopted had a number of areas for improvement. In particular, there were issues around:

- The status of certain decision-making positions and bodies.
- Involvement of key external stakeholders in the planning process.
- Overlapping command structures in the Department of Health
- Collaboration across regional command structures.
- Documenting decisions.

135 COVID-19 North-West Regional Outbreak Interim Report, page 15, 29 April 2020.

136 Ibid, page 19.

137 Ibid, page 21.

138 COVID-19 North-West Regional Hospital Outbreak Interim Report Progress Report, 14 August 2020.

139 Submission from ANMF. The Review has clarified that the ANMF was referring to the officer in charge of the THSEOC.

Affecting all of this was the fact that in the Department of Health, a command and control structure was being imposed on an organisation where individuals were used to operating with a very high degree of autonomy in relation both to their region and what was in the best interest of their patients.

One senior officer the Review spoke with described the command and control structure as having to rely on persuasion instead of direction.

The status of certain decision-makers and bodies

The Department of Health's emergency management structure included decision-making positions (such as 'State Health Commander') and structures (such as the 'RHEMT') that do not appear to be defined in the relevant legislation or statutory planning instruments that were in force at the time.

The authority of the position of 'State Health Commander' is particularly important because both the Interim Report and the submission from the Department of Health make clear that this position made a number of key decisions. For example, in her letter to the Minister at the front of the Interim Report, the Secretary of Health advises that on Friday 10 April 2020 she determined *as State Health Commander* to, among other things, close the ED at the MCH and take operational control of the NWPH.¹⁴⁰

The Review also notes that in evidence to the recent inquiry by the Parliamentary Accounts Committee, the Committee was advised by the Secretary of Health:

*"as State Health Commander I had taken over operational control of the North-West Private Hospital."*¹⁴¹

According to the Department of Health's submission, under Level 2 of the emergency management structure the Secretary DoH formally assumed the role of State Health Commander.¹⁴² However, the Review found no mention of the position of 'State Health Commander' in the Public Health Act, the Emergency Management Act or either SSEMP: PI19 or SSEMP: C19 (including in relation to their definitions of a Level 2 response). These were the instruments which underpinned decision-making at the time of the outbreak.

While a more recent version of the SSEMP for COVID-19 (which was approved by the State Controller on 7 August 2020) does refer to this position, this Plan was not in effect during the outbreak.

There is mention of the position of 'State Health Commander' in the Tasmanian Health Action Plan for Pandemic Influenza 2016 (THAPPI), which is an Associate Plan of the Tasmanian Public Health Emergencies Management Plan (TPHEMP). The TPHEMP is, in turn, a State Special Emergency Management Plan which is signed off by the State Controller.

However, the Review notes that under the THAPPI, if DHHS (now the Department of Health) is the Response Management Authority (which it was) then "the Incident Controller (generally the Director of Public Health) will assume the same authority invested in the State Health Commander".¹⁴³ Also, under the THAPPI, in a Level 3 response "the DPH will be the State Health Commander, leading the health response through the DHHS ECC".¹⁴⁴

In other words, if the position of State Health Commander had decision-making authority despite not being included in the relevant SSEMPs, and was invoked as a result of its inclusion in the THAPPI, then according to the Plan the person occupying that position should have been the Director of Public Health and/or the Incident Controller (chair of the ECC).

Notably, a number of senior officers within the emergency management structure that the Review spoke with questioned the value of having a designated State Health Commander separate from the ECC. Some thought the ECC would be better run by the DPH, thereby freeing the Secretary of Health to focus on the substantial responsibility associated with overseeing the Department's many business as usual functions.

140 Interim Report, page 5.

141 Hansard of evidence provided to Public Accounts Committee, Hobart, page 61, 28 August 2020.

142 Submission from Department of Health.

143 *Tasmanian Health Action Plan for Pandemic Influenza 2016*, Version 1.0, Director of Public Health, Page 7, March 2016.

144 Ibid, page 35.

As with the position of State Health Commander, the Review could find no mention of the role of RHEMTs, IMTs or OMTs in the relevant *SSEMPs*. The exception to this was in relation to the role of an IMT during a Level 1 response, but the Department of Health confirmed during the review that its initial Level 1 Response IMT transitioned into the PHEOC and the submission to the Review from the Department of Health makes clear that the subsequent IMT was part of the Level 2 response.

The Review also notes that the command structure provided in diagrammatic form by the Department of Health in its submission includes reference to the Minister for Health. The Review was not provided advice about matters which may have been determined by the Minister but notes that this position is not a decision-maker under the State's EM Act.

In raising these matters the Review is not suggesting that decisions made by any of the individuals concerned were incorrect, or that it was in any way inappropriate to establish additional coordination mechanisms. In the case of the State Health Commander it is clear that many (if not all) of the decisions taken would have been within the authority of the Secretary of Health anyway (a position which the Commander held at the same time). However, it is not clear to the Review whether the decision-making process, command and review structure was consistent with the plans in place under the Emergency Management Act.

By way of example, the Review notes that according to the submission from the Department of Health, on 5 March 2020 the Secretary of Health approved escalation to a Level 2 response under the *SSEMP: COVID-19*. However, that plan was not approved by the State Controller until 17 March 2020. In response to a question about what took place, the Review was advised that the action took place under the draft *SSEMP: COVID-19*.¹⁴⁵ It is not clear to the Review that an action can be authorised under a new draft plan, when an existing, approved plan (*SSEMP: PI19*) is already in effect.

Legal status of decision to take control of the NWPH

Another area which concerns the Review and which must be clarified in future is where authority (and associated liability) lies in relation to taking control and directing the operations of a private business during a pandemic.

The State Health Commander took operational control of the NWPH on Friday, 10 April 2020. "It was done first by agreement with the CEO ... and then it was ultimately executed by an Emergency Management Act order by the State Controller."¹⁴⁶

Subsequently, the State Controller exercised his special emergency powers on 12 April 2020, directing the owner of the NWPH to surrender that property and place it under his control from 13 April 2020 until further notice.¹⁴⁷

What is not clear to the Review is what formal, legal mechanism (e.g. a written contract) was used to give the State Health Commander operational control of a private business for three days from 10 April 2020; how this control was then transferred to the State Controller on 13 April 2020; and then how and whether it was then transferred back formally to the Department of Health after the State Controller's exercise of powers took effect.

These are important matters because in the absence of clear and legally binding agreements or statutory authority, it is an open question where liability would lie at law in the eyes of a wide range of regulators for performance of corporate and other functions in the private business. This matter must be clarified for future outbreak scenarios. In the absence of legally binding agreements it is not clear to the Review what would happen if a company's directors (for example) refused to cede operational control of one of their facilities to a third party as in their view, doing so precluded them from satisfying their duties under Corporations Law.

¹⁴⁵ Email to the Review from the Department of Health, 7 October 2020.

¹⁴⁶ Secretary of Health, Hansard of evidence to Parliamentary Standing Committee of Public Accounts *Inquiry into the Tasmanian Government's Response to COVID-19*, pg 62-63, 28/8/2020

¹⁴⁷ Emergency Management Act 2006 Exercise of Special Emergency Powers, D.L. Hine (State Controller), 12 April 2020

Involvement of key external stakeholders in the planning process

The Review heard from a number of stakeholder representatives that the response would have been more effective if they had been included in the associated planning processes.

According to *SSEMP:PII9* and *CI9*, during a Level 1 response the State Health and Human Services Emergency Committee is formed and provides advice. The Review was told that this Committee had not met in 2020 despite the pandemic response proceeding through Level 1. Instead, the State incorporated stakeholders into its emergency management structure through bodies such as the PHEOC and the Minister and Secretary held weekly discussions (which were highly regarded).

The Review was advised that in relation to general practice, the PHEOC was less a mechanism to provide advice into Government and more a mechanism for Government to transfer information to stakeholders.

Clearly, there were health-service-wide implications well beyond the Department of Health from the outbreak and subsequent service closures. The entire North-West general practice and aged care communities were potentially affected, and greater consultation with key representatives of these groups beforehand may have assisted with planning. The Review heard in the case of primary health, there was no visibility of how to plug into the planning function, and no input into hospital level escalation plans. This was of major concern given the absence of any surge workforce for general practice in the region.

This issue was also addressed in the post operation report prepared by the ADF.

“Decisions made in the early planning process for this deployment did not involve the AUSMAT or dedicated ADF Health Mission Leads ... Integration of these personnel during the planning stages would have been beneficial in order to align priorities and preparation of the clinical personnel.”¹⁴⁸

Multiple, overlapping command structures

There were three separate but interdependent command structures in place in the North-West during the outbreak – the whole-of-government emergency management structure under the State Controller, the health emergency management structure under the ECC, and the business as usual structure under the Secretary.

In its discussions with AUSMAT, the Review was advised that on entering the region they found it difficult to work out who was making what decisions and with what authority. They found a big disconnect in how the outbreak was being managed across the Government system.

In some cases, staff felt like there was tension between the regional emergency management and regional health emergency management structures. This was particularly the case in relation to contact tracing.

However, it was the overlapping structures in the Department of Health that appeared to lead to the most confusion on the ground for many stakeholders.

“RDAT believes that across the NW Coast the lines of management and accountability were unclear.”¹⁴⁹

“reports to HACSU from members employed in the Tasmanian Health Service that there was inconsistent and confusing direction and advice being provided as to where the decision making power laid and who was directing operational matters as they arose.”¹⁵⁰

One senior staff member in the North-West described the resulting situation in their hospital to the Review as ‘chaos’, citing the multiple reporting lines that were in place. Another told the Review that sometimes they felt like they had three different masters – the business as usual structure, the emergency management structure and the directions coming out of the Premier’s press conferences.

148 OP COVID-19 Assist – TU 629.5.1 Post Operation Report, Minute from SQNLDR C. Brockel, 23 July 2020.

149 Submission from Rural Doctors Association of Tasmania.

150 Submission from Health and Community Services Union.

The Review also heard a number of times that the Department of Health's business as usual structure, with multiple reporting lines out of the hospital, does not work in a crisis management situation. This is particularly the case in relation to services like mental health, allied health and pharmacy. In such situations it is essential that someone on the ground in the region can control the entire site and ensure that their directions to all staff are followed without being second-guessed through multiple offsite management hierarchies. As one senior manager in the region put it, they had responsibility and accountability with no authority.

The Review was told that some of the consequences of these overlapping lines of control and direction included:

- Some people 'shopping' for the advice they wanted – if they didn't get the answer they wanted from the health emergency management structure, they approached the business as usual structure.
- Other people receiving different and conflicting advice from their 'business as usual' manager and the emergency management structure.
- A lack of clarity about who the decision-making body was on a given issue, which slowed response times. One organisation the Review spoke with described a situation in which they went to a senior THS person for a decision who sent them to Public Health, who then sent them to the IMT, who then sent them back to the THS.

Notwithstanding the many bodies involved in directing the response to the crisis, there was also criticism that a number of other bodies were not involved, or were not involved early enough. The Review heard that certain key, statewide services were not included in key parts of the Health emergency management structure. It also heard from representatives of both the NWPB and Ambulance Tasmania that the situation was much better once they were formally involved in the regional structure and that this should have happened earlier.

The Review heard that it was not just the overlapping nature of the structures that caused confusion, but also the number of layers and the distance between decision-makers and those at the coal-face.

Senior staff on the ground in the hospitals who had the best understanding of what was going on and what was needed often felt they were not empowered to make key decisions. Instead they had to report through three or four layers to get a decision and get permission on issues like communication with staff. One person the Review spoke with described it as "like being mired in treacle."

In some instances, by the time a decision was made and communicated, the situation to which it related had already moved on and/or precious time had been lost (e.g. in relation to furloughing at-risk staff).

There was also concern, for example, that decision-makers based at a distance in Hobart had a limited appreciation of what a 'de-clutter' actually involved or the level of resourcing and expertise necessary to keep a hospital clean. On the latter, the Review heard that in one case people on the ground were so starved of resources that they had to call on the assistance of their partners to undertake tasks like cleaning a 'hot' COVID ward because no other help was made available despite their requests.

A number of senior clinicians also noted their concern that the emergency management structures had very limited, senior clinical representation. In terms of emergency management expertise, the decision to second a senior State Service employee who was also a senior police officer with emergency management experience to head up the THSEOC provided a welcome injection of emergency management experience. DPFEM also provided other staff at various times between March and June 2020 to provide advice to the THSEOC and perform the roles of Deputy Commander and Manager of the Centre.

The number of levels in the management hierarchy seemed also sometimes to frustrate the most senior levels of the Department of Health itself. The Review heard that key staff in the region were often approached directly by those much higher up, outside the chain of command. This was not done transparently with the decision-maker(s) who were being worked around, making coordination and consistency more difficult to achieve. It also frustrated at least one senior manager on the ground who felt forced to work through a regional command structure when the central decision-making structure that had imposed it seemingly did not have confidence in it.

Collaboration across the regional emergency management structures

There were two, separate emergency management structures operating in the region during the outbreak – one led by Police (NWREMC), and one led by Health (NWRHEMT).

The review heard that particularly in the initial stages there was a disconnect at times between the two structures. For example:

- the NWRECC was not cognisant of the separate THS and PHS structures;
- the NWRH had limited visibility of the NWRMC; and
- information that came through the SEMC-led chain of command sometimes did not align with information coming through the ECC-led chain of command.

Apparent disagreement about the approach to contact tracing and the role of Police within it was a case in point.

The Review was told that Police in the north west region and the NWRECC did not have access to some of the key Department of Health plans and were not aware of the hospital closure until the public announcement. As a result they were unable to undertake appropriate work on risk mitigation.

While the Department of Health always had a presence on the NWREMC, once the Regional Health Commander was able to be involved directly in the Committee their command had a single senior point of contact. The Review understands that when the two structures shared senior staff it significantly enhanced their effectiveness.

Documenting decisions

The Review was surprised that there was not more comprehensive and authoritative documentation around the decision to close the North-West Regional Hospital site.

The Review requested a copy of the advice from the CMO upon which the State Health Commander relied to make the decision to close the site. In response, the Review was provided with a copy of a 'File Note' to the State Health Commander.

The 'file note' concludes with the CMO's details but is not signed, and it is not co-signed by the State Health Commander to indicate she accepted the recommendations. This is a highly unusual approach to making a recommendation to a senior decision maker in the State Service. Normally, this would happen through a signed and dated Minute which would be co-signed by the decision-maker to indicate their agreement or otherwise with the recommendation.

The Review also notes that in response to its request for copies of documents attesting to the consultation that was said to have occurred on the NWRH site closure before the decision was made, it was given a long chain of emails. These emails demonstrated that there was ongoing discussion of the matter within the Department of Health, but there was limited evidence of any consultation with other agencies or the State Control structure.

In its response to the Draft Review Report, the Department of Health advised that the State Health Commander/Secretary provided email updates to various combinations of senior officers in the SCC and DPFEM, and to Heads of Agency, on taking control of the NWPH, service closures at the NWRH, use of the ADF in the north west and other actions to be taken over the period 10-12 April. Subsequently, the Department of Health noted that in addition to email, much of the communication that was occurring at the time was via telephone, videoconference or face-to-face due to the pace of events. Notwithstanding the above, it remains unclear to the Review when other agencies were formally advised of the actual decision to close the site.

The Review has been advised that DPFEM and the State Controller were aware of the Hospital's closure late on 11 April 2020 after being advised orally by the State Health Commander. The State Controller subsequently advised participants at an SCC briefing on the morning of 12 April 2020 which included other representatives from DPFEM, the Department of Health, the ADF and DPAC. Notably, the majority of Tasmanian agencies did not participate in this meeting, which occurred about 6 hours before the closure decision was announced by the Premier.

The Review is not asserting that consultation did not occur, or that the State Health Commander did not receive appropriate advice to close the site. However, it is normal in the case of a major emergency to record carefully the deliberations of major decision-makers, the decisions they make and the advice upon which

they act, and the results of their interactions with other agencies. This is an essential part of the public record, and as the recent COVID-19 Hotel Quarantine Inquiry in Victoria¹⁵¹ has shown, a key input into the inevitable inquiries that now follow all major emergencies in Australia.

In this regard, the Review notes that WebEOC¹⁵² has been designed to support the recording and sharing of decisions across agencies in an emergency, that its use is endorsed by the SEMC and that the Department of Health has access to the system. The Review understands that agencies across the State Service were advised regularly during the early stages of the pandemic that they needed to record key information and decisions on WebEOC and that training was offered in its use on a number of occasions.

Other issues

Other issues arose during the Review which gave rise to questions which the Review did not have time to investigate. In particular:

- Whether financial delegations were revised quickly during the outbreak and enabled people on the ground to make the purchases they needed to (e.g. of PPE) in the timeframe required. If they were not, the Review considers that the Government should not take punitive action against those who acted in good faith but outside their delegation because they felt they needed to in the public interest.
- About the role of the CMO: there were many references to the CMO being a source of advice and being consulted, but the Review was not aware of their formal role in the outbreak other than to note that they were the chair of the IMT for a period of time.
- About the status, frequency and content of any pandemic planning exercises that were conducted within the Department of Health or more broadly across Government in the years leading up to the events of 2020.
- Whether there would be benefit from providing additional and more regular training in emergency management to senior health executives.

What has happened since the outbreak

The outbreak and the required response in the North-West happened so quickly that it is not surprising that it took some months for planning documentation, decision-making structures and legislation to catch up.

The Review has noted that key developments since the outbreak include:

- Release of a new SSEMP for COVID-19 in July 2020 which provides greater clarity about the role of the State Health Commander.
- Amendment of the PH Act in May 2020 to, among other things, increase the penalties that can be applied and the duration of an emergency declaration under the Act.
- Formation of an EOC for Aged Care, a development about which the Review received positive feedback.
- Release of the COVID-19 North West Regional Hospital Outbreak Interim Report, and implementation of its recommendations.

The Review also notes that the Department of Health has moved to clarify the definition of the roles of Outbreak Management Teams. However, across the associated documentation that the Review was provided it found reference to Public Health Outbreak Response Teams, Outbreak Management Teams, Outbreak Management Coordination Teams and Outbreak Management Support Teams. There is scope for further clarification in this area.

Nevertheless, the Review heard from several senior people that it was still not totally clear to them who was responsible for certain decisions in the management hierarchy.

¹⁵¹ <https://www.quarantineinquiry.vic.gov.au/>

¹⁵² WebEOC is an all-inclusive web-based emergency operations centre, designed to share real time information between all agencies involved in emergency management within Tasmania (www.ses.tas.gov.au/emergency-management-2/tasemt/introduction-to-webeoc).

Conclusion and recommendations

The Government relied on a range of mechanisms, planning instruments, legislation and guidance to direct the response to the outbreak in North-West Tasmania. Many of these mechanisms were being tried for the first time in an environment of huge uncertainty and stress. And this was occurring at the same time that the Department of Health was transitioning to a new structure.

While structure and governance are a necessary condition for successful organisations, they are not sufficient. Leadership, accountability and culture are just as, if not more important, and these are areas where Tasmania's hospitals have often struggled to perform as reports by bodies including the Integrity Commission¹⁵³ and Auditor General¹⁵⁴ have recently shown. Ongoing work is required in this area.

The Review found many examples of strong leadership at all levels of the response to the outbreak. Some of these occurred through the decision-making structures, and some of these occurred by individuals on the ground despite the decision-making structures.

Lines and levels of authority in the Department of Health during an outbreak and the way they interact with the whole-of-government emergency management system were confusing and unclear. They are also defined and described across multiple documents.

To help improve the approach to command and control in any future outbreak, the Review recommends:

- *That DoH define clearly in one, publicly available document the key decision-making structures and officers in an outbreak, how they interact with the broader emergency management structure, and what they are responsible for. This includes being clear about their delegated authority and lines of accountability. All staff should be provided with a clear and simple description of the role, responsibility and authority of senior officers during an outbreak, including THS site pandemic response coordinators, hospital executives and senior clinicians with respect*
- *to matters such as infection control, PPE and isolation.*
- *That the Government reviews the role of portfolio ministers during an emergency, and the extent to which they are able to direct the responses of their agencies outside the legislated emergency management structure.*
- *That DoH clarifies the ongoing need for the position of 'State Health Commander' during an outbreak, noting the role of Incident Controller in the ECC. The Review considers it adds an unnecessary further level in the command and control structure.*
- *That, if they are retained in the future Health emergency management structure, more resources be provided to the RHEMTs to enable senior DoH staff within those committees to work with other parts of the Emergency Management system, including ensuring Commanders are not required to wear 'two hats' and can concentrate solely on the emergency management task.*
- *That there be open communication across the whole-of-government Emergency Management and Health Emergency Management structures to ensure no surprises and maximise the opportunity for effective planning.*
- *That DoH look for opportunities to streamline the emergency management decision-making hierarchy while introducing more clinical expertise into the senior levels of the structure.*
- *That DoH adopt the principle of delegating decision-making authority as close as possible to the coal-face.*
- *That the Government introduces regular exercises to test the capacity of the system to respond to pandemic outbreaks, and supports this with investment in the emergency management capabilities of key DoH decision-makers.*
- *That in future, key decisions and decision-making processes made and conducted throughout any emergency be carefully documented and held in a central repository within Government to, amongst other things, assist with the important process of post-incident review.*

153 https://www.integrity.tas.gov.au/__data/assets/pdf_file/0004/578488/Integrity-Commission_Report-1-of-2020_A-summary-report-of-an-own-motion-investigation-into-misconduct-by-public-officers-in-the-Tasmanian-Health-Service-North-West-Region.PDF

154 <https://www.audit.tas.gov.au/wp-content/uploads/Report-No11-Emergency-Department-Services-Full-Report.pdf>

15. AUSMAT

Australian Medical Assistance Teams (AUSMAT) are multi-disciplinary health teams incorporating doctors, nurses, paramedics, fire-fighters (logisticians) and allied health staff such as environmental health staff, radiographers and pharmacists.

Team members are experienced Australian health professionals working in either public or private hospitals and healthcare facilities across Australia. Such teams are usually deployed overseas to assist with major emergencies but were deployed for the first time domestically in January 2020 to assist with the catastrophic bushfires in New South Wales and Victoria.

The Department of Health, through the SCC, initiated a joint AUSMAT/ADF DACC (Australian Defence Force Defence Aid to Civil Community) request on 12 April and on 14 April until 1 May 2020. Seven AUSMAT members and 43 ADF were deployed to the North-West regional area.

AUSMAT'S primary objective was to provide high-quality emergency health care to the people of NW Tasmania whilst the NWRH ED staff were in quarantine and their efforts in maintaining emergency services from 17-28 April were universally praised. Over that period 454 patients presented to the ED with 66 requiring transfer to other THS facilities.

A deployable x-ray machine was utilised for the first two days of the operation until the radiography facility was suitably sanitised and recommissioned and pathology services were provided until the local pathology service became fully functional on 28 April 2020.

The team assisted with the re-establishment of a limited maternity service and provided a midwife for coverage of initial maternity services to supplement the emergency maternity team assembled by the Health ECC and THS EOC.

Appropriate coordination was also maintained including attendance at the regional EOC briefings.

The team also assisted with the deep cleaning of the ED because of a shortage of experienced cleaners because the hospital's cleaners had been furloughed. The opening of the ED was delayed for about 24 hours because of the delay in having the facility properly cleaned.

Difficulty sourcing experienced cleaners also impacted other areas and caused some spouses of THS staff to assist with cleaning other areas.

As was the case with many THS staff, fatigue became an issue with continuous 12 hour shifts wearing PPE being maintained throughout the deployment.

AUSMAT staff found the command control systems in place fragmented and confusing.

Systems employing directive control ensure that whomever is responsible for a facility, boat, aircraft etc controls the people and operations within that entity. The situation described elsewhere, where the manager of a hospital has decisions about location of staff overruled by line managers situated outside the hospital, should not be tolerated because clarity of control and responsibility is critical in dangerous situations.

16. Consumers

Standards

The importance of consumer involvement in health care is evidenced by its inclusion in the National Safety and Quality Health Service (NSQHS) Standards.¹⁵⁵ All public and private hospitals, day procedure services and public dental practices are required to be accredited to the NSQHS Standards. There are 8 standards in all: the first is 'Clinical Governance', and the second 'Partnering with Consumers'. The Intention of 'Partnering with Consumers' is as follows:

The Partnering with Consumers Standard aims to create health service organisations in which there are mutually beneficial outcomes by having:

- consumers as partners in planning, design, delivery, measurement and evaluation of systems and services
- patients as partners in their own care, to the extent that they choose.

The Partnering with Consumers Standard recognises the importance of involving patients in their own care and providing clear communication to patients. This standard, together with the Clinical Governance Standard, underpins all the other standards.¹⁵⁶

The intent of the Standard is clear. The systems that hospitals develop, implement and maintain, in order to adhere to the requirements of this Standard, must be sufficiently robust to function appropriately at all times, particularly in a crisis. It will be interesting to see if the requirements for the Standard are reviewed and updated by NSQHS in light of the pandemic.

The formalisation of consumer involvement has resulted from a concerted effort over the last 25 years to improve patient safety in health care settings.

Much work has been done in:

- the development and implementation of systems, protocols and tools to ensure a reduction in incidents and unintended consequences
- identification of 'near misses', and
- the investigation of incidents by methods such as Root Cause Analysis (RCA) to identify causes, and recommend system changes, in order to reduce risks and prevent recurrences.

Hand in hand with this is the acknowledgement, and necessity, to engage more with consumers in their various roles, i.e. of patient, family, carer, neighbour, potential patient/client or concerned observer. Consumer involvement in hospitals, health-related departments, associated committees, and other Government agencies, is a work in progress.

Consumer feedback to the Review

Given the community impact of the coronavirus in general, and the Outbreak in the North-West in particular, the Review was surprised not to receive any submissions from individual consumers; either patients, family members of patients, or the family members of health care workers' (HCW) who were considerably impacted by unexpected isolation requirements.

The Review did receive a submission from the recently-formed Health Consumers Tasmania, (HCT), a Company Limited by Guarantee, funded by the Tasmanian and Federal Governments. Tasmania is the last State to have established a body which provides an independent consumer voice.

This organisation went to considerable lengths to obtain input from a range of consumers, including conducting three online surveys about concerns and queries regarding COVID-19 between April and July 2020. While the respondent numbers were small (300 – 425) the information gained highlights a range of concerns. Approximately 30% of respondents were from the North-West Region. The results from these surveys are available on the organisation's website: healthconsumerstas.org.au

The concerns of consumers mirror those of HCWs but sometimes from a different perspective, for example, in relation to communication:

- the concern for HCWs was the lines of communication along the chain of command, and within the hospital;
- for consumers it was communication from the hospital to outside, including:
 - to patient advocate groups, local General Practices and community health services

155 <https://www.safetyandquality.gov.au/standards/nsqhs-standards>

156 <https://www.safetyandquality.gov.au/standards/nsqhs-standards/partnering-consumers-standard#intention-of-this-standard>

- for those patients in the hospital, i.e. where were they being moved to and who was going to treat them
- what discharge and support arrangements had been made
- did general practitioners (GPs) know the hospital was closing?
- carers not receiving any information
- locals who knew the hospital was closing but did not know how they could access services if needed.

There were other issues of concern:

- patients who were transferred by ambulance to the LGH, had difficulty returning to the North-West because of poor coordination of community transport
- family members sometimes waited hours in the Emergency Department (ED) at the LGH for information about transferred patients
- people with disabilities had to stand down their support workers because they also worked at the hospital, and there were no Emergency Response Plans for these people, and
- different terminology was used without explanation, such as ‘decanting’.

Interestingly, one of the positives to come from the North-West experience from consumers’ perspective is the increasing acceptance of telehealth services. There are stories about people missing GP appointments, not presenting to ED, and being reluctant to use telehealth. However several people used telehealth at the height of the outbreak, rather than visit their GP. Anecdotally these were people who identified a deterioration in their health since earlier in the year and were reluctant to leave home.

Mechanisms for consumers to provide input

From the perspective of HCT, consumer input was missing in the North-West throughout the pandemic. The Review was told that the doors to consumers were closed as soon as the pandemic began.

In the North-West the THS Consumer and Community Engagement Council (CCEC) has been in place for 10 years, a milestone celebrated recently. There are consumers on several other hospital committees plus a range of volunteer programs, including ‘Meet and Greet’, and the Cancer Centre. The Review was told that, as many of the members were in the ‘vulnerable’ category, most elected to shut down, and meetings ceased between March and June 2020.

Consumers in the North-West had not previously been included in the RHEMT. It was acknowledged by senior Hospital staff that in the midst of the overwhelming workload that accompanied the start of the outbreak, doing so at that stage was not considered. Similarly, the role of GP Liaison Officer was not used to best advantage during this time.

The workload involved in managing the developing crisis is understood, but HCT advised the Review that it believes that consumers could have greatly assisted with the communication strategy. HCT referenced QLD where the CEO of Health Consumers met twice weekly with the Secretary of Health, and in the ACT, a representative attended the 7.30am daily meeting at the hospital.

Certainly hospitals in Tasmania have had consumer involvement to some degree for many years, perhaps based more on goodwill and experience than formal responsibility and requirement. HCT is a new organisation and has not had time to embed itself in the system. However while not having input into the planning and decision-making during the North-West outbreak, the HCT Submission to the Review indicates that steps have been taken to remedy that situation going forward, as indicated below:

HCT acknowledge that Public Health Tasmania has since incorporated consumer input into COVID-19 related planning through HCT involvement in the State Planning Network.¹⁵⁷

¹⁵⁷ http://www.dpac.tas.gov.au/independent_review_of_the_response_to_the_north-west_tasmania_covid-19_outbreak/submissions/health_consumers_tasmania

Conclusion

There is no doubt that this pandemic has caused havoc in terms of health, as well as socially, economically and politically. It has had a profound impact on the mental and physical wellbeing of consumers and staff alike.

The most devastating and traumatising aspect has been the requirement to isolate patients from their loved ones even at end of life stage. In such circumstances, everyone involved suffers: the patient who dies surrounded by strangers; the family and friends who are denied the opportunity to say goodbye; and the clinical staff - particularly the nurses - who provide palliative care and try their best to make up for the absence of familiar faces. The Review acknowledges, with admiration and empathy, the impact this has had on all concerned.

Information provided to the Review has been consistent in highlighting concerns about communication and messaging. While information was communicated frequently during the outbreak, it was not always clear, frequently not understood, and changed so regularly, causing great confusion for patients, families and the general community.

In line with best practice, consumer engagement and involvement in health care services is an essential component of safety and quality and must be a major focus going forward.

Recommendations

- *That any future pandemic outbreaks across Tasmania (and the ongoing preparations for same) incorporate structured and formal input of health consumers into the emergency decision making process in real time.*
- *That DoH works with appropriate organisations such as Primary Health Tasmania, and the University of Tasmania and relevant consumer groups to better understand the health, social and economic impacts of the virus on health consumers.*
- *That all THS Consumer and Community Engagement Councils (CCEC) receive training and mentoring support to strengthen their capacity to engage and inform THS management's decision-making process across hospital, rural and community services.*

17. Managing in the North-West

By mid-March 2020 in Tasmania, pandemic planning was well advanced at the state level, with the SSEMP:COVID-19 formally approved by the State Controller on 17 March 2020. The four major hospitals were in the process of developing escalation plans. The THS-North-West COVID-19 Escalation Management Plan was approved by the Secretary DoH on 3 April 2020; it was a plan with which management staff in the North-West were very comfortable. It was detailed, thorough and well thought through.

Design changes were being made to the medical ward to accommodate COVID-19 positive patients. All the preparation and planning was focused on caring for patients and preventing transfer of infection from patients to staff.

Hospitals everywhere were doing the same thing. Every hospital across Australia was preparing to accept an expected influx of COVID positive patients. Total concentration was on the physical environment, equipment - particularly ventilators - and the supplies -including PPE - necessary to support and protect patients and staff. At this stage there was little awareness of, and therefore only limited preparation for, staff-to-staff transmission.

As noted earlier, the outbreak at the NWRH was the first of its kind in a hospital in Australia.

Detailed elsewhere in this Report are:

- the admission to the NWRH of the initial COVID-19 positive patients
- the first staff member to test positive on April 3 2020
- the subsequent rapid spread across HCWs, leading to the isolation of staff, and
- closure of the NWRH and NWPH on April 13 2020.

It is not easy to describe just how difficult this situation was to manage; how traumatising it was - and still is - for many staff; how frightening it was for patients, their families, the families of staff, and the community; and how complex it was to:

- support staff during this time
- continue to care for patients as increasing numbers of staff were infected or went into isolation following contact-tracing
- arrange transfer and ongoing care for patients so the hospital could close
- ensure safe availability of supplies necessary to re-open the ED at NWRH once deep cleaning had been completed

- remove and safely store linen and supplies
- empty and de-commission the hospital to allow for deep cleaning
- secure and arrange security cover for the closed facility, and
- re-commission the Hospital.

Management of these tasks was accomplished by a very small number of staff working exceedingly long hours; often over 16 hours a day. These staff then went into isolation and worked from home, preparing to re-open the hospital.

Although at the time no one could have predicted - or adequately planned for - the speed and severity of this outbreak, it is important to identify issues for further consideration that may inform ongoing pandemic preparedness.

There were several pre-existing conditions that contributed to the overall difficulty of managing the outbreak.

Structure of DOH

The existing structure within DOH has been described previously in this Report

- THS CEOs in South and North/North-West report direct to Secretary of Health. They locally manage hospitals and Hospital Support Services (Food Services, House Services, Medical Orderlies and associated functions)
- Statewide services such as Pharmacy, Mental Health, Allied Health, Public Health and Ambulance Tasmania, report to the Deputy Secretary, Community, Mental Health and Wellbeing,
- THS Finance, revenue, procurement and supply functions are responsible to the Chief Financial Officer; THS ICT and e-health report to the Chief Information Officer; THS HR is responsible to the Chief People Officer; and, THS facilities and engineering are responsible to the Deputy Secretary Infrastructure. Each of these senior positions report to the Secretary of Health.

On the ground in the hospitals, this means that several services and departments report to managers not just outside the hospital, but outside the area, for example:

- Pharmacy is a Statewide Service and the Manager of Pharmacy in the North-West reports to the Executive Director of Statewide Hospital Pharmacy in Hobart.

On a business-as-usual, day-to-day basis, the Nursing Director Operations of the Hospital assumes responsibility across the facility. However, in the chaotic and frequently changing environment of the outbreak, these different reporting lines added to the confusion, and the lack of local knowledge of those making decisions from afar was often not helpful.

The Review heard from staff who were able - and wished - to work from home, were given the go-ahead to do so by the Nursing Director Operations, but when they informed their manager in Hobart, were told they could not.

Mental Health

Mental Health is a case study for those services that are within the hospital structure, to a point, but report to an external authority.

Mental Health is a Statewide service reporting to the Deputy Secretary Community, Mental Health and Wellbeing within the DoH structure. MHS in the North-West are the responsibility of the Group Director Mental Health Services N/NW who is based in Launceston.

MHS teams in the North-West provide community mental health care and treatment services to adults, older persons, children and adolescents, and have a Crisis Assessment and Treatment Team (CATT) available 7 days a week. NWRH houses Spencer Clinic, a 19 bed mental health inpatient unit. The total establishment of MHS in the North-West is 109.6 FTE of which 41 FTE is Spencer Clinic.

The co-located NWPH has a private mental health inpatient unit and was also impacted by the Outbreak.

The management arrangement for the staff of Spencer Clinic is not the same as for the other wards in the hospital, in that the staff of Spencer Clinic do not report through to the Nursing Director Operations, but to MHS. In effect it is a MHS unit occupying space within NWRH.

Usually this difference is unnoticeable as day-to-day the various departments of NWRH, such as catering, cleaning etc, provide the same services to Spencer Clinic as the other areas of the hospital.

The perspective of Spencer Clinic staff is that the usual inclusion in the NWRH communication, information, and briefings, did not always occur in the lead-up to the outbreak, and then dissipated once the outbreak commenced.

From submissions and interviews, the Review heard that some of the staff in Spencer Clinic felt abandoned. They felt ignored by NWRH and felt they received little or no input from MHS, as evidenced by such statements as:

- *We were not prepared*
- *Doctors continued to hold family meetings in person rather than by telephone*
- *Patients continued to go on leave for two or three days and then return to the ward*
- *Social distancing was not a priority*
- *No education from the Infection Control Nurse of NWRH prior to the Outbreak*

The Review was told that as restrictions increased there were no instructions to Spencer Clinic from NWRH, and no mention of it in the Premier's updates until a staff member went to the union. Spencer Clinic did not appear as one of the colour coded clinical areas on the Hospital plan for reopening.

Another issue was PPE training. Before the Outbreak, staff completed the mandatory PPE online training and then went to the ward to complete the face to face training. The Review heard that, at this initial training, the order of donning the PPE was changed from that advised by the National Guidelines, and that this caused confusion and uncertainty. The submission from an anonymous staff member from Spencer Clinic relating to the CNE for SMHS NW was found, upon review of records, to be incorrect as to the identity of the initial training provider.

On April 6 2020, the MHS Director of Nursing furloughed some staff. One of those staff called Public Health Hotline after 2 days to ask what should happen next. Public Health Hotline had no knowledge of this group. Five days later the same staff member phoned again. Public Health Hotline had no record of the first call. Most of this first group on furlough had no contact until the 14 days had almost ended. Some did not realise until the next week that household members should also have been in isolation. The lack of contact caused considerable uncertainty and stress for all concerned.

The change in DoH structure has been mentioned elsewhere in this Report. MHS was caught up in this rearrangement, moving to Community, Mental Health and Wellbeing, which took effect from March 2020, just as the pandemic was beginning to bite with restrictions being imposed.

With the new structure moving into place in March 2020 and the Outbreak occurring early April 2020, it gave no time for a settling-in period and the chance for liaisons – both formal and informal – to be established. This no doubt created a hiatus which resulted in uncertainty about who was communicating what to whom.

It must also be remembered that, apart from Spencer Clinic, and close liaison with the Emergency Departments, MHS is fundamentally a community-based entity. In health, the hospital sector and the community sector function very differently, and at times this does not enhance ease of communication.

The Group Director MHS N/NW told the Review it took time and was difficult to set up communications, made more difficult by the fact that the usual travelling between Launceston and Burnie had ceased. Much progress has been made but they are still setting up day-to-day structural contacts with hospitals. The Group Director has been invited to participate on the North-West Executive which she sees as very beneficial.

The Review was told MHS tried to be consistent with information and messaging, but found it challenging to run a statewide service while modifying for each of the hospitals - for instance, the COVID screening tool was different in each region. There are also some differences in COVID screening requirements for mental health inpatients and clients in a community setting.

As expressed to the Review, MHS raised similar issues to those raised by other interviewees and contained in submissions, such as:

- Inconsistency of information from PHS and that coming from the Commonwealth caused great challenges and anxiety amongst the staff
- Different instructions coming from owners of private facilities to staff working there.

MHS has noted an increase in patients since the outbreak. They are trying to see clients in their home instead of them having to present to ED. This increase is not surprising as the Review is aware that across GP Practices in the North-West, there has been a considerable rise in the number of patients presenting with mental health issues since the outbreak.

Medical Staffing

Hospitals in the North-West have historically found it difficult to maintain a full complement of staff, particularly senior medical staff.

Across the State it is an ongoing struggle to attract sufficient medical staff in all specialties. Each medical specialty requires a minimum number of specialists to provide support for education and research within the department, and importantly, to cover on-call requirements. The population of Tasmania, and its spread, makes it difficult to provide a cohort of

patients large enough to require a viable number of specialists in some specialties.

The North-West attempts to cover the shortfall with locums. This is expensive, extremely difficult to manage, and at times not made easy by the Colleges or AHPRA, particularly for applicants from overseas. Locums need to be well oriented, supervised and supported, and resources are required to do that successfully. This situation has been made more difficult during the pandemic because of border closures.

Having short-term locums acting in registrar positions is potentially problematic both for the locum and the Resident Medical Officers (RMOs), particularly if the locum is a graduate from a culturally and linguistically diverse background and/or receives minimal induction.

Recruitment and Retention of Senior Medical Staff and Locums at NWRH and MCH

In the North-West, the majority of senior medical staff positions, across all specialties, are filled by Staff Specialists. They are employed by THS and work mostly within the public system. They have a limited time to work in private practice as part of their employment arrangements, if they so wish. Vacancies in these positions are often filled by locums.

The senior medical staff positions are supplemented by Visiting Medical Specialists who work mostly in the private sector but fill a small number of sessions each week in all specialties in the hospitals.

- For example in surgery (which includes general surgery, orthopaedics, ear nose and throat, ophthalmology and urology) 2.18 FTE is provided by 7 surgeons.

In a few particular specialist areas such as, obstetrics, paediatrics, and emergency medicine, Career Medical Officers form part of the senior medical staff. Some of these are in the GP Fellowship program, while others are on the pathway of Rural/Generalist, which enables GPs to add specialist skills in the areas mentioned above. These practitioners have the potential to revolutionise the existing situation of lack of specialist medical staff in many rural areas, in Tasmania and across Australia.

As mentioned, locums are used to fill vacancies in the North-West. As at October 2020, there are 9 locums filling registrar positions and 18 locums filling Staff Specialists positions. Other vacancies exist and recruitment is ongoing.

Staff Specialists and Visiting Medical Staff are supported by a Registrar and Junior Resident Medical Officers, (RMOs), who provide the majority of direct medical care to the patients in that unit or speciality. Registrars are responsible for, and supervise, RMOs. Having short-term locums acting in registrar positions is potentially problematic both for the locum and the RMOs, particularly if the locum is an overseas graduate.

It takes time to adapt to a new work environment. Between countries, and between States in Australia, health systems are different. Even within States, hospitals can have different protocols and management practices. Depending on the specialist Physician or Surgeon, the management of patients differs. RMOs rotate between units and hospitals and rely on the registrars for learning and supervision. The locum registrar is also learning to function in a new system. Coming from overseas, and perhaps a different language background, compounds the situation at the best of times. Add a pandemic and a local outbreak and the difficulties are multiplied.

The situation is similar for those locums in Staff Specialist positions. The Review received comments that not all locums seemed to have been inducted in the use of PPE.

Because staffing is always a problem, there is no surge capacity. At one stage when staff at NWRH ED were furloughed out, MCH ED was closed and staff transferred to ensure NWRH ED could remain open. The ED at MCH has reopened but at the time of writing is working on restricted hours while recruitment continues. The Review has been advised by DoH that the MCH ED will return to 24/7 operating hours on 30 November 2020.

This lack of surge capacity applies to all sectors of staff, but in this outbreak situation, the desperate need was for expert resources: Infection Control Nurses, Infectious Diseases Physicians, Public Health Physicians and Public Health Nurses, people experienced and skilled in contact-tracing, and people in health, and other areas, with Emergency Management training and skills.

The Review understands assistance was requested by the North-West on a number of occasions, but either none was available or none was provided. Sometimes requests for assistance were met with silence. A Flying Squad of ICP and PH staff at the beginning of the outbreak would have made a huge difference. This statement is made acknowledging the difficulties of moving staff from other regions, with the subsequent

need to furlough for 14 days on return to home base. An ID Physician in Hobart provided support by phone on numerous occasions which was greatly appreciated.

At the time of the outbreak there was only one FTE Infection Control Nurse position at NWRH (job-shared by two nurses) and one at MCH (0.9 FTE).

The Review was told:

“We were not under prepared...we were under resourced”.

Workforce casualisation

As the COVID-19 pandemic began to spread across Australia, discussion began about the casualisation of staff. This was particularly raised in relation to the spread of infection across Aged Care facilities. Staff working in a number of different locations were identified as contributors to the spread of the virus. This has led to a discussion about the reasons so many staff work on a casual basis, and how to solve those issues.

The Review is mindful that several clinical staff, such as Allied Health and some Specialists, cover large geographic areas and so provide care at multiple worksites.

Apart from these positions, it is recognised that for some people, particularly parents with young children, casual work provides a useful flexibility, and some like the variety of working in different places. At the other end of the scale are employers who find it cheaper to employ on a casual basis, thereby saving on payments for sick and annual leave. They employ people in low-paid jobs who are forced to take any shift they are offered in order to obtain income to cover the basic needs of their families. This is also a major factor in the problem of ‘presenteeism’.

This topic requires wide ranging industrial, humanitarian and societal discourse and is outside the remit of this Review. However, one of the contributing factors in the North-West Outbreak was the movement of staff across the hospital, between hospitals, and in many cases, between a number of different and sometimes unrelated work places.

A major concern about this, apart from the risk of spreading infection across a number of facilities was the difficulty it posed for contact tracing. Quite rightly staff are not required to inform their employer if they are working elsewhere on other days, but this knowledge

becomes critical during a pandemic as potentially many close contacts are not targeted for tracing.

The Review was informed of many instances of staff working at 3 or more different locations in the same week, and others being informed several days later that they should have been tested but were not initially on the contact list.

The Review heard that while employees might not want to tell their employer that they are working more than one job, they might be willing to tell their union. While recent events are still fresh, it seems an opportunity for DoH to investigate a 'partnership' approach in this area.

To obtain a detailed picture of the extent of casualisation across the hospitals, NWRH, MCH, LGH and RHH, the Review requested headcount numbers of casual staff in Award categories and total headcount in those categories.

The data was provided for a range of Awards in 4 employment ranges:

- Casuals
- Works less than 0.6 FTE
- Works 0.6 to less than 1FTE
- Works 1 FTE or higher.¹⁵⁸

The data was presented as the paid headcount in each of the above groups for the pay period ending 18 April 2020.

The data for the Casuals grouping has not been included in further comment as the headcount for that pay period is not an indication of the number of casual staff employed. Also it appears that the casual headcount is incorporated in the other 3 categories depending on how many days were worked that fortnight.

Analysis of the data provided reveals that the headcount of staff, in each of the 4 hospitals, employed for 1FTE or higher, is lower than the headcount in each of the other 2 categories. The exception is NWRH whose headcount of less than 0.6 FTE is slightly lower than the headcount of 1FTE or higher.

The figures show that at the 4 hospitals, by far the majority of staff work less than 1 FTE, as demonstrated by the following figures:

NWRH **65.5%**
MCH **79.3%**
LGH **68.5%**
RHH **71.6%**.

This finding seems surprising, but perhaps not. Tasmania generally has a higher proportion of part-time workers (37%) than the rest of Australia (around 32%).¹⁵⁹

The figures may be indicative of an ageing workforce making the decision to work part-time, as information in a Report titled 'Recruiting for Life Experience', 2018, from the Council on the Ageing, COTA Tasmania¹⁶⁰, suggests:

Tasmania has the oldest median age (42 years), four years above the national average; the highest proportion of people aged over 65 years and the lowest proportion of children and working age people of any Australian state or territory. Nearly one in every 5 people is aged 65 and over. (ABS 2016) The percentage of the Tasmanian workforce aged 45 years and older was 45.5% in 2016. This figure represents an increase of 12.9% since 2006 and compares to a national figure of 7.5% increase since 2006. (Denny 2017)

An ageing and increasingly part-time workforce has considerable implications for the staffing and management of health care facilities going forward. It adds another component to pandemic planning given the corresponding comorbidities and vulnerability expected in an older workforce, and the effects that has on maintaining staffing levels.

Staff mental health and wellbeing

Some THS staff members who made submissions to the Review indicated that there is residual anxiety and trauma evident in the workplace following the outbreak. They reported feeling isolated and unsupported, both during the outbreak and following it.

¹⁵⁸ It is unclear on what basis someone could work greater than 1 FTE. It is assumed that this applies to Medical Officers who are rostered to work for more than 40 hours per week.

¹⁵⁹ <https://docs employment.gov.au/system/files/doc/other/australianjobs2019.pdf> (accessed 30 October 2020)

¹⁶⁰ <https://www.cotatas.org.au/policy-advocacy/cota-reports/recruiting-for-life-experience-report/>

As noted earlier, some staff reported that their anxiety levels increased when the recent COVID positive patient was admitted to the NWRH.

All staff were aware of the Whole of Government Employee Assistance Program (EAP), and some reported having accessed it, with varying degrees of satisfaction. The Review also heard of broader, collective de-briefing sessions with psychologists.

Despite these various supports being in place, it was apparent that there is scope for further – and ongoing – support to be made available to employees across the board. The Review considers that there is sufficient evidence of ongoing anxiety to warrant a coordinated follow-up response to assist staff in managing their mental health and wellbeing.

IT Systems

The absence of a comprehensive HR program and electronic rostering system caused untold problems with identification and location of staff for testing, tracing and follow up. Hours were wasted finding and checking paper-based rosters. Several groups of staff are not on North-West Cost Centres and therefore were missed in the contact and tracing rounds. This led to staff not isolating when they should have, their families not isolating, and little or no follow up to check on their wellbeing. All of this increased fear and anxiety.

The lack of sufficient and sophisticated electronic medical record system meant unnecessary handling and movement of records.

The State's IT systems are inadequate for the necessary upgrades for the electronic creation, storing and accessing of documents necessary to run an effective health system, especially in times of a pandemic.

To move paper patient records from an infected ward to a new facility creates a serious risk of spreading viruses. Staff had to scan NWRH paper records to enable them to be forwarded electronically to MCH, which was incredibly time-consuming.

Rosters were also organised on a paper-based system which could not be interrogated adding considerable difficulties to contact tracing.

Even in non-pandemic situations THS staff have to endure a system involving cumbersome transfer of records many of which, being paper-based or scanned, cannot be interrogated.

The Review was informed that the DoH is aware of, and attempting to address, the above issues but has been informed that an extensive and very expensive upgrade to the whole of state IT systems may be necessary to support an appropriate and integrated Health IT system.

An effective response to an outbreak requires both contemporary and integrated information systems within DoH, as well as ICT which supports coordinated action across multiple government agencies. This means agency systems must be able to share each others' information and analyses quickly in order to support a rapid response, and in turn this requires contemporary and interoperable ICT across government.

The Review notes that the Auditor General has recently released a report following a performance audit on the effectiveness of government information and communications technology strategy, systems and investment¹⁶¹. In his report, he concludes that strategy, systems and investment "...are not managed in an effective, coordinated and strategic manner, in terms of efficiency and effectiveness..." (p.3). While the Auditor General's Report does not make findings in relation to individual agencies, it does nevertheless point to the need for a coordinated approach across government.

Physical Layout

The physical layout of most hospitals around the world, including Tasmania, is not conducive to managing a pandemic of this nature, and the hospitals in the North-West are no exception. The size of meeting rooms, hand-over rooms, nurses' stations, absence of donning and doffing spaces, small numbers of isolation and negative pressure rooms, lack of changing facilities and adequately sized tea rooms, are all suspected to have played a part in the spread of COVID amongst staff at the NWRH.

The requirement to re-locate equipment such as switchboards and cashier facilities to EDs in smaller hospitals after hours causes undesirable potential pathways for the spread of infections.

161 <https://www.audit.tas.gov.au/wp-content/uploads/ICT-Strategy-Report-Final-Report.pdf>

Emergency Management Structure

The layers of State, Regional and THS, Emergency Management/Operations Committees/Control Centres, previously outlined in detail, was confusing for many staff. It also meant they were unsure as to whom to go for specific information.

The Review was informed that there were no Emergency Management staff rostered overnight. Senior Hospital staff were working long hours into the night, and frequently there was a need to discuss an issue in preparation for the next day. Access to someone overnight would have been helpful.

This structure also added layers within the already existing multiple communication sources, previously outlined in detail in this Report. This was due in part to the frequency and speed with which the information from the National Cabinet was changing, and partly to the fact that communiques, (for example the daily communique from NWRHEMT), had to go to THSEOC for sign off. This meant it did not go out until late afternoon or early evening so had already been usurped by upgraded news.

For most people in the Emergency Management space, this was a very different emergency. Usually health is one of the participating services with a specific role to play, complementing and working with the other services, i.e. Police, Ambulance, Fire, SES. The NWRECC members are well-trained, highly-skilled and have plenty of experience. As one member suggested to the Review, apart from a moving bush fire, the incident is usually static, for example a bad accident, or a bus rollover. Each service knows what part it has to play.

This was different; it was inside the hospital, it was moving, and it was not visible. The lag time between exposure to the virus and onset of symptoms, and between symptom onset and testing/diagnosis are major factors contributing to this invisibility.

Practical Issues

In times of crisis there are good reasons for changes to be made to the usual rules and protocols around things such as delegations, decision-making, and communication. Instead of easing/changing the rules, there were extra layers imposed with the emergency management structure in play.

This meant that it was extremely difficult to make decisions and take actions in a timely manner when there were so many competing demands all requiring attention.

As an example, both the Director of Nursing Operations and the Director of Corporate Services have a delegation of \$10,000 for necessary purchases without seeking approval. There were times during this outbreak where immediate decisions had to be made on expenditure with no time to go through the usual procedures. Suspension of delegation limits during an emergency situation, while accountability requirements remain in place, would seem to be a sensible approach.

This is similarly the case with regard to communication sign-off. When the NWRH had another positive case some time after the outbreak, it moved from Level 1 back to Level 2 restrictions. It took 2 days for sign off before that could be communicated officially to staff and community. When the situation was resolved and restrictions were returning to Level 1, the formal approval occurred more than a week after the recommendation was made, which meant L2 restrictions remained in place for longer than necessary. This caused staff to be critical of management for not communicating, not keeping them informed, and therefore not caring about them.

The problems caused by lack of decision-making and delayed communication and information, when dealing with staff, cannot be underestimated. Having centralised systems adds a dimension of difficulty, particularly in relation to effectively communicating with and managing staff, which should be avoided in times of crisis if at all possible.

As one person expressed to the Review, it was a case of having “responsibility and accountability, but no authority”.

The systemic issues that made it difficult to manage the outbreak are not new. These include:

- the highly transient and locum-based workforce;
- the lack of surge capacity complicated by the need to spread a difficult-to-attract clinical community across two hospitals and;
- the constantly changing governance structures.

Underlying all of this there are cultural issues, which are difficult to concisely describe, but that have been highlighted in several Government initiated Reports over the years.

Problems with the cultural climate were acknowledged in many of the Review interviews with observations such as:

- *Competition between the regions*
- *Lots of 'secret business'*
- *Culturally – don't give feedback on underperformance*
- *A great deal of fear and trepidation*
- *Turf protecting*
- *Following the outbreak, LGH became very helpful*
- *Culture needs to change and all work together instead of in separate bits.*

These issues have been in play for many years, and while it is acknowledged that attempts have been made, they have not been resolved. The outcome of that was an ingrained set of problems making the management of a very difficult situation all the more difficult.

Going forward there are a range of other issues for consideration and action, including:

- Whole of State IT system needs to be upgraded to allow for, amongst others:
 - a) Electronic health records
 - b) Electronic roster details and ability to interrogate same.
- Ability to rapidly communicate with staff via SMS and email (and perhaps social media)
- A system for a much more immediate dissemination of information
- Increase the availability of IPC, ID and PH staff in Tasmania and establish 'Flying Squads' able to deploy to outbreak locations when required
- Establish protocols to suspend local delegation limits during emergencies
- Discuss with the Medical Colleges and AHPRA ways to improve the timeliness of locum and overseas appointments
- Examine the possibilities of structural upgrades to hospitals to enable staff to maintain social distancing and infection control requirements at all times.

Conclusion

The COVID-19 outbreak in the North-West has had a devastating effect on a great many staff. No doubt the same can be said for many in the community, particularly the families who lost loved ones.


The Review is aware of staff who have resigned as a result of the Outbreak, others who have not yet returned to work, some who will never return to work, and many who are still so traumatised they have difficulty talking about what happened. There remains a great need to continue the provision of appropriate counselling and support services.

In the opinion of the Review, the situation in the North-West could have been considerably worse were it not for the hard work, skills, sense of responsibility and endurance of many staff across the hospitals involved, and in DoH and the State's emergency management structures. The Review was also told of the suppliers and businesses who went out of their way to provide additional assistance and support during this time.


Recommendations

- *That Tasmania's whole-of-government Information Technology structure be enhanced to enable the making, storage, transmission and accessing of electronic records.*
- *That hospitals be designed or renovated to ensure suitably sized common areas to allow appropriate social distancing amongst staff.*
- *That, in emergency situations, staff in departments whose hierarchy is external to the Hospital, e.g. Statewide services such as Pharmacy, Mental Health, and those on cost centres outside the hospital impacted, receive all their communication and directions in relation to the local response through the person with day to day responsibility for running the hospital*
- *That, in the case of a future outbreak, the person with day to day responsibility for managing the hospital have direct access at all times to senior emergency management staff outside the hospital, so that critical decisions may be made in a timely way.*
- *That the limit on financial delegations for local corporate managers who must make immediate purchases to support a response be suspended for the duration of the emergency period, understanding that accountability requirements remain.*
- *That DoH implements an electronic medical record, electronic rostering system and upgraded HR systems to enable the location of staff and contact details to be obtained instantly.*
- *That DoH develop contingency plans for the management of an ageing workforce as it relates to, and affects, pandemic management.*

Appendix 1 – Public Notices



Public Notices



DEPARTMENT of PRIMARY INDUSTRIES,
PARKS, WATER and ENVIRONMENT

Living Marine Resources Management Act 1995 Fisheries (Commercial Dive) Rules 2011

NOTICE OF THE DATES OF THE CLOSED
SEASON FOR THE COMMERCIAL DIVE
FISHERY AND NOTICE OF COMMERCIAL DIVE
CLOSURE TO SPECIFIC ACTIVITIES

I, Dr Ian Dutton, A/General Manager, Water and
Marine Resources in the Department of Primary
Industries, Parks, Water and Environment,
acting pursuant to a delegation from the Minister
for Primary Industries and Water made on
12 November 2018 and acting pursuant to section
20(1) of the *Living Marine Resources Management Act
1995* (the Act), hereby determine under rule 12 of
the *Fisheries (Commercial Dive) Rules 2011* (the Rules):

A. That the dates of the closed season for those
parts of the commercial dive fishery specified
in schedule 1 are from 12:01 am 1st of August
2020 to 11:59 pm 31st of August 2020; and,

B. That the parts of the commercial dive fishery
specified in schedule 1 are closed to, or in
respect of, the activities specified in schedule 2.

SCHEDULE 1

Those parts of the commercial dive fishery defined as:

**the North-Eastern Periwinkle Part of the
Fishery** being that area of State waters on the
east and north coasts of Tasmania bounded in
the south by an imaginary line running east to
west from Isaac Point at Friendly Beaches at
a point at lat 41°59'29"S Long 148°17'13"E and
bounded to the north by an imaginary line running
west to east from a point at lat 40°35'37"S long
147°46'28"E and bounded in the west by an
imaginary line running south to north from the
eastern end of Tomahawk Beach at a point at lat
40°52'29"S long 147°46'28"E until it intercepts
with an imaginary line running west to east from a
point at lat 40°52'29"S long 147°46'28"E
and

**the South-Eastern Periwinkle Part of the
Fishery** being that area of State waters on the
east coast of Tasmania bounded to the north by an
imaginary line running east to west from a point at
lat 42°49'05"S long 148°00'00"E to the high tide
mark in the east at Munroe Bight and bounded in
the east by an imaginary line running south from
a point at lat 42°49'05"S long 148°00'00"E and
bounded in the west by an imaginary line running
north to south from Whale Head at a point at lat
43°38'17.6"S long 146°52'15"E.

SCHEDULE 2

While on a commercial fishing trip in State waters for
the purpose of taking periwinkles (Genus *Turbo*), the
holder of a fishing licence (commercial dive) must not
enter the water by swimming or diving.

Any expression used in this notice having a particular
meaning under the Act or the Rules has the same
meaning in this notice.

Dated at HOBART this 15th day of July 2020
Dr Ian Dutton
A/General Manager, Water and Marine Resources

Information

(This information does not form part of the notice)

This public notice has the effect of closing the
commercial dive fishery to the take of periwinkles
in the north-eastern and south-eastern zones from
1st of August 2020 to 31st of August 2020 inclusive
as part of arrangements to control the total amount
of periwinkles harvested in those areas in the
interest of resource sustainability.

Threatened Species Protection Act 1995

I HEREBY GIVE notice in accordance with sections
13(5) and 14(2) of the Act that I propose to make
an Order under Section 13(5) to add *Antechinus
vandycki* to Schedule 4 and amend the scientific
name of *Melanella piliferella* in Schedule 4.

Appeals against the proposed order may be made to the
Resource Management and Planning Appeal Tribunal
at rmpat@justice.tas.gov.au until 21 August 2020.

Dated this 22nd day of July 2020
HON ROGER JAENSCH MP
Minister for Environment and Parks

DEPARTMENT of HEALTH

Healthy Tasmania Fund Round 2 Community Information Sessions

Applications for the Healthy Tasmania Fund
Round 2 open 7 September 2020 and close on
30 October 2020.

The Healthy Tasmania Fund Round 2 grants will
focus on reducing smoking, improving healthy
eating, being more physically active and improving
mental health and wellbeing. All projects will have
a focus on building community connections. Grants
of up to \$200 000 are available for projects of up
to two years.

Community Information Sessions will be held in
August in Hobart, Launceston and Devonport
and online.

To register for a Community Information Session
visit: www.health.tas.gov.au/healthytasmanianfund

DEPARTMENT of PREMIER and CABINET

Independent Review of the Response to the North-West Tasmania COVID-19 Outbreak

Call for Submissions to the Review

On 24 June 2020, the Premier, Peter Gutwein
announced that the Government would conduct
an Independent Review of the Response to the
North-West Tasmania COVID-19 Outbreak.

Greg Melick AO RFD SC has been appointed as the
Independent Reviewer.

An expert working group is being established to
advise the Independent Reviewer with members
experienced in public health, hospital administration,
and public sector administration.

Submissions are now invited to the Review. The
Terms of Reference cover every aspect of the
outbreak in the North West, including the actions
and effectiveness of those actions taken in response.

Information provided through submissions to the
Review will be considered to ensure we have a
responsible and transparent approach to Tasmania's
response and management of COVID-19.

Submissions are open till 5pm, Friday, 14 August 2020.

Written submissions can be submitted by email or
post to:
Email: NWOOutbreakReview@dpac.tas.gov.au
Post: Independent Review of the Response to the
North-West Tasmania COVID-19 Outbreak
GPO Box 123
Hobart, TAS 7001.

More information, including a copy of the Terms of
Reference can be found at:
<http://www.dpac.tas.gov.au/>

DEPARTMENT of STATE GROWTH

Infection Control Training Fund Round 1 Now Open

Skills Tasmania

Closing Date and Time: 2pm, Monday,
17 August 2020.

The Department of State Growth, through
Skills Tasmania, invites Skills Tasmania endorsed
registered training organisations to apply for
grants to provide infection control skill set training to
customer-facing existing workers.

The objective of the Fund is to support businesses
to reopen and continue to operate safely following
the COVID-19 health and economic crisis; reduce
the risk of transmission of COVID-19 and support
consumer confidence that it is safe to re-engage and
continue to engage with businesses.

www.tas.gov.au



DEPARTMENT of STATE GROWTH

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For more information, including the Fund conditions, eligibility and application process, visit the Skills Tasmania website: https://www.skills.tas.gov.au/providers/ito/funding_programs_for_endorsed_rtos

Grant enquiries: Fund Manager, Deb Wilcox: 6165 6060 or email deb.wilcox@skills.tas.gov.au

Notice of Application for Exploration Licence

Mineral Resources Development Act 1995

Notice is given that the Director of Mines intends to recommend to the Minister for Resources that they grant the following exploration licence over the area shown hatched on the plan below:

Reference No: EL2/2020 **Area:** 84km²

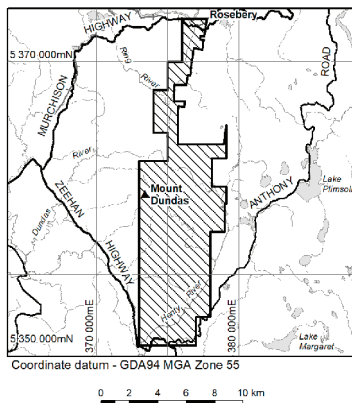
Vicinity: Mount Dundas

Category: 1 - Metallic Minerals, Atomic Substances.

Applicant: Gillies Resources Pty Ltd

ACN: 163070077.

Address: PO Box 3235, Norwood, SA 5067.



The application excludes existing mining leases, National Parks and reserved or other lands exempted from the *Mineral Resources Development Act 1995*.

If the licence is granted, consent is required from Mineral Resources Tasmania prior to any exploration activity taking place. An explorer must provide 14 days notice prior to accessing private land. Security deposits are held against each licence in the event that the explorer fails to meet their rehabilitation obligations.

Comments may be made on this application (addressed to Director of Mines, PO Box 56, Rosny Park, TAS 7018).

Any person who claims an estate or interest in any land within an application area may lodge a formal objection to the granting of that application. Each objection must be in writing and lodged with the Registrar of Mines at the above address within 28 days of advertisement and must be accompanied by the prescribed fee of \$45.36.

The Director of Mines will attempt to resolve any formal objection by mediation. If this fails then the objection will be referred to the Mining Tribunal, a division of the Magistrates' Court.

For further information in relation to the application, including the effect on private land within an application area, please contact Mineral Resources Tasmania, Rosny Park at the above address or phone (03) 6477 7097.

DIRECTOR OF MINES

DEPARTMENT of HEALTH

Healthy Tasmania Fund Round 2 Community Information Sessions

Applications for the Healthy Tasmania Fund Round 2 open 7 September 2020 and close on 30 October 2020.

The Healthy Tasmania Fund Round 2 grants will focus on reducing smoking, improving healthy eating, being more physically active and improving mental health and wellbeing. All projects will have a focus on building community connections. Grants of up to \$200 000 are available for projects of up to two years.

Community Information Sessions will be held in August in Hobart, Launceston and Devonport and online.

To register for a Community Information Session visit: www.health.tas.gov.au/healthytasmanianfund

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Call for Submissions to the Review

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An expert working group is being established to advise the Independent Reviewer with members experienced in public health, hospital administration, and public sector administration.

Submissions are now invited to the Review. The Terms of Reference cover every aspect of the outbreak in the North West, including the actions and effectiveness of those actions taken in response.

Information provided through submissions to the Review will be considered to ensure we have a responsible and transparent approach to Tasmania's response and management of COVID-19

Submissions are open till 5pm, Friday, 14 August 2020.

Written submissions can be submitted by email or post to:

Email: NWOOutbreakReview@dpac.tas.gov.au

Post: Independent Review of the Response to the North-West Tasmania COVID-19 Outbreak
GPO Box 123
Hobart, TAS 7001

More information, including a copy of the Terms of Reference can be found at:
<http://www.dpac.tas.gov.au/>

DEPARTMENT of PRIMARY INDUSTRIES, PARKS, WATER and ENVIRONMENT

Threatened Species Protection Act 1995

I HEREBY GIVE notice in accordance with sections 13(5) and 14(2) of the Act that I propose to make an Order under Section 13(5) to add *Antechinus vandycki* to Schedule 4 and amend the scientific name of *Melanelia piliferella* in Schedule 4.

Appeals against the proposed order may be made to the Resource Management and Planning Appeal Tribunal at rmpat@justice.tas.gov.au until 21 August 2020.

Dated this 22nd day of July 2020
HON ROGER JAENSCH MP

Minister for Environment and Parks

Appendix 2 – Table of submitters to draft ToR

1. Burgess, Debra
2. Fletcher, Scott
3. Gaby, Deborah
4. Levett, Bruce CEO Health Consumers Tasmania
5. Lovell, Sarah MLC, Labor member for Rumney
6. McArdle, Helen, President AMA Tasmania
7. McArthur, Keith, GP Liaison Officer, THS-North-West
8. Moore, Robbie Assistant State Secretary, HACSU
9. Shepherd, Emily, Branch Secretary, ANMF Tasmania

Appendix 3 – Table of submitters to Independent Review

Fully or partially confidential

1. AMA (fully confidential)
2. ANMF (partially confidential)
24 individuals (23 written and 1 oral)

Not confidential - organisations

1. AUSMAT
2. Australasian College of Emergency Medicine
3. Department of Health
4. Health and Community Services Union
5. Health Consumers Tasmania
6. Pharmacy Guild of Tasmania
7. Rural Doctors Association of Australia
8. Tasmanian Government
9. Tasmanian Labor

Not confidential – individuals

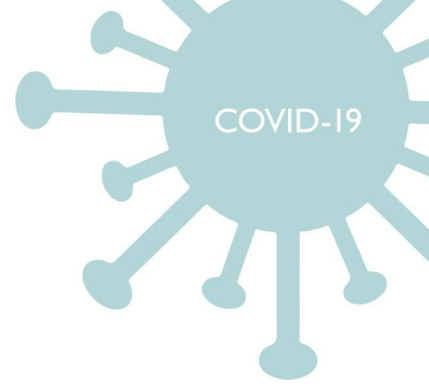
1. Briggs, Dr Darren
2. Cuzner, George
3. O'Rourke, Ann
4. St John, Prof Jus

Appendix 4 – DoH Interim Report (29 April 2020)



COVID-19 North West Regional Hospital Outbreak Interim Report

29 April 2020



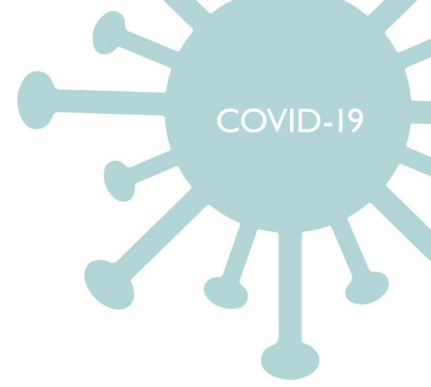
COVID-19 North West Regional Hospital Outbreak - Interim Report

© Government of Tasmania 2020

For further information, please contact:

Department of Health
Office of the Secretary
GPO Box 125 Hobart TAS 7001
Telephone: 1300 135 513
Website: www.health.tas.gov.au

29 April 2020



Letter to the Minister for Health

Hon Sarah Courtney MP
Minister for Health

Dear Minister,

COVID-19 – North West Regional Hospital Outbreak – Interim Report

I write to provide an Interim Report in relation to the Covid-19 Outbreak that occurred at the North West Regional Hospital.

This Interim Report is presented in two parts - Interim Report “Preliminary analysis of the COVID-19 outbreak in a Tasmanian healthcare setting”, Dr Mark Veitch, Director of Public Health and Dr Scott McKeown, Deputy Director of Public Health dated 29 April 2020 (Part A of this Report) and the Tasmanian Health Service North West Outbreak Interim Review Recommendations proposed by Professor Tony Lawler, Chief Medical Officer, dated 28 April 2020 (Part B of this Report).

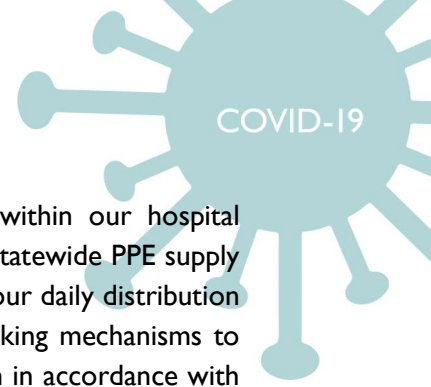
Covid-19 Public Health Emergency

Tasmania is currently at Day 44 of the Public Health Emergency known as Covid-19, which was declared on Tuesday 17 March 2020. The North West Regional Hospital (NWRH) outbreak, which is now known to have commenced on or about 3 April 2020, occurred on Day 18 of the public health emergency, and early in the implementation of the State’s Covid-19 Health response. As noted by Dr Veitch in Part A of this Interim Report, the original source of infection in this outbreak was most likely to have been one (or both) of two inpatients who were admitted to the NWRH with COVID-19 acquired on a cruise ship, the Ruby Princess.

The outbreak has only recently been brought back under control, due in large part to unprecedented decision making to close the hospital settings that were at the heart of the outbreak, and the hard work and dedication of our healthcare workforce to plan, execute and implement the closure and recommissioning of the hospital sites. Another significant contributor to controlling the outbreak has been our North West staff’s determination to positively adhere to a 14-day period of quarantine together with their families and household members for the benefit of the Tasmanian community.

I am informed that it is customary and best practice in outbreak management to prepare early epidemiological findings so that immediate contributing factors and actions can be recognised and acted upon. This is critically important in this case, as the outbreak has occurred in the initial phase of Tasmania’s experience of the Covid-19 global pandemic and another outbreak may occur in future at the same or in a different healthcare setting, should these factors not be recognised and improvements made. However alongside epidemiological findings, we must also take into account the experience of the hospital system itself, its learnings and specialist advice, and the reality that our Tasmanian Health Service (THS) is learning, in real time, alongside their healthcare colleagues around the world, how to best manage, treat and address Covid-19.

In a matter of days, the THS has rapidly stood up to face an unprecedented pandemic, of a size, scale, speed and devastating mortal impact that we are now witnessing globally. As a jurisdiction we are not alone in falling victim to a devastating hospital outbreak, and we certainly did not foresee one of the size and magnitude that has occurred in North-West Tasmania. The purpose of this Interim Report is not therefore to criticise the behaviours of any individual, or to apportion blame, but instead to own the lessons learned about this new and extremely infectious disease and to share these across our Tasmanian Health system so that we may do our very best to avoid a similar outbreak in future.



Ready access to Personal Protective Equipment (PPE) remains a critical priority within our hospital workplaces and I am committed to ensuring our staff receive regular updates on our statewide PPE supply which is meeting current usage; the large orders we have placed to guarantee supply; our daily distribution model to ensure security of PPE within hospitals; and our training, auditing and checking mechanisms to ensure that PPE is being worn appropriately at the right time and in the right situation in accordance with national guidance and local specialist infection control advice.

Further and more formal review of this outbreak will be undertaken at a later stage to support any future Independent Inquiry into the NWRH Outbreak, as required.

Prior to commenting on the recommendations, I wish to provide a brief account of the health system context prior to and during the outbreak, drawing in part from material contained in this Report and my own observations as State Health Commander.

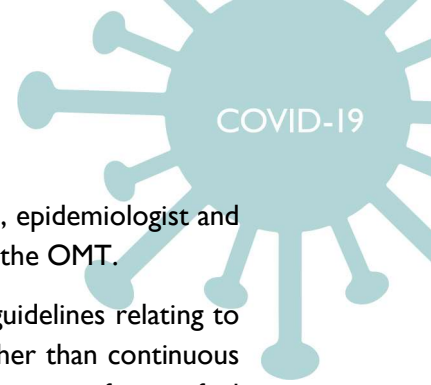
Health System Context During the Outbreak

Three cases of COVID-19 in healthcare workers at the NWRH were notified to Public Health Services between Friday 3 April 2020 (two cases) and Saturday 4 April 2020 (one case).

An Incident Management Team was established by myself, as State Health Commander (Secretary of the Department of Health) in the THS following notification of the first case on Friday 3 April 2020, initially led by the Chief Medical Officer and including local North-West senior medical and nursing clinical leads, reporting to the THS Emergency Operations Centre (EOC). Following further advice from Public Health Services late on Saturday 4 April 2020 (9.30pm), the acting State Health Commander gave instructions to establish an Outbreak Management Team (OMT), diverting further resources to the North-West to assist with contact tracing and provide on the ground support for the response. Throughout this period, the OMT were in daily contact with Public Health regarding case management, and with the THS EOC and Health Emergency Coordination Centre (ECC) to report on progress and issues faced in manually accessing and interpreting voluminous paper clinical and HR records relating to each case. Following preliminary findings with respect to close contact tracing and the number of close contacts identified relating to the initial cases (total of four cases by Sunday 5 April), admission of new patients to the medical and surgical wards of North West Regional Hospital ceased. On Sunday 5 April a dedicated senior Public Health Physician/Epidemiologist, a Public Health Registrar and a senior Public Health Nurse were allocated to support the OMT.

Cases among staff and patients within the NWRH and related facilities continued to increase (two further cases on Monday 6 April, six further cases on Tuesday 7 April, and three further cases on Wednesday 8 April). Police assistance was called in to support contact tracing efforts on Monday 6 April. Service reconfiguration changes were also made: Ambulance Tasmania presentations from Devonport eastwards were to be transported directly to the Launceston General Hospital; patient transfers could only occur with the approval of the Executive Director of Medical Services North West; and access by visitors ceased at NWRH and Mersey Community Hospital (MCH) from 6pm on 6 April. Visitor restrictions to hospitals and aged care facilities were extended statewide on Tuesday 7 April 2020. On 7 April, specialist Infectious Disease physician support for the North West was secured.

By Wednesday 8 April, the continued viability of full service provision at NWRH required constant senior management engagement and monitoring. The NWRH moved to level three of its THS North West COVID-19 Escalation Management Plan. Further service changes were made, including closing the medical and surgical wards at NWRH to all new admissions; and shifting the boundary from Devonport to Ulverstone for Ambulance Tasmania presentations to be transported to Launceston General Hospital. On Thursday 9



April a specialist team from Public Health Services, comprising a public health physician, epidemiologist and clinical nurse consultant travelled to the NWRH to provide on the ground support for the OMT.

On Thursday 9 April, the OMT were advised by Public Health Services that national guidelines relating to the definition of a close contact had been reinterpreted to 15 minutes cumulative rather than continuous face-to-face contact, dramatically impacting the number of close contacts captured in tracing for notified cases. Advice was sought from the PHS Medical Advisor on whether this change should be applied retrospectively to identify contacts of those cases already identified. The advice received was that it should be applied prospectively, however it would need to be applied retrospectively in high-risk settings. Contact tracing interviews to date had been structured to assess continuous contact and no determination could be made from existing interview reports to assess cumulative contact. As such, it was determined that all staff on the medical and surgical wards constituted employees in a high risk setting to which the retrospective change in contact tracing methodology should apply.

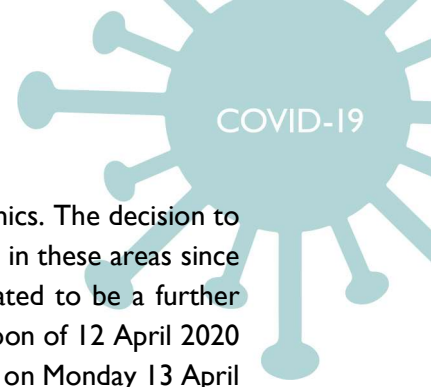
At this point, on advice from the OMT, CMO and Health ECC, in recognition of the volume of work required to retrospectively assess all medical and surgical ward staff for contact status, on Friday 10 April as State Health Commander I determined to:

- approve the escalation of the NWRH to level 4 of their escalation plan;
- request the direction of all remaining staff from the medical and surgical wards at the NWRH to self-isolate for a period of 14 days;
- provide options for alternative accommodation for healthcare workers and testing;
- close the Emergency Department and the Close Observation Unit at the MCH (to better support resourcing of the ED at NWRH);
- Initiate ambulance bypass of the MCH and diversion of cases eastwards of Penguin to the LGH;
- take operational control of the North West Private Hospital (NWPH) for the purpose of outbreak management and expand the Outbreak Management Team's remit to cover both NWRH and NWPH as a single site; and
- direct that no transfer of patients to or from NWPH occur.

A further 10 cases relating to the outbreak were notified on the evening of Friday 10 April.

On Saturday 11 April, the Director of Public Health ordered all household members of quarantining staff to be quarantined for the same time period as the staff member, and all patients (discharged since 27 March 2020) and their households to be quarantined for 14 days following discharge. Senior leads from the Department of Primary Industries, Parks, Water and the Environment joined the OMT at NWRH to provide further assistance. Options relating to the continued viability of the NWRH and NWPH sites were actively considered and refined throughout Saturday 11 April 2020, with the conclusion being reached during that day that services were on the brink of being unable to be delivered safely and sustainably. A recommendation from the CMO to close both hospital sites together with a decant and quarantine execution plan was approved by myself as the State Health Commander, following consultation with key clinical leaders and stakeholders (including the THS EOC, Acting Chief Executive Ambulance Tasmania, Director of Public Health, Deputy Director of Public Health, State Controller and Deputy State Controller) and the Premier and Minister for Health were given a briefing.

By Sunday 12 April cases had been notified among staff and patients in most clinical areas of the NWRH and NWPH precincts. These included clinical areas within the NWRH (medical, surgical and mental health wards,



operating theatres), the NWPH, and in staff of the pathology service and outpatient clinics. The decision to close the two hospitals and related medical services and place all staff who had worked in these areas since 27 March (approximately 1300 staff members), and their household members (estimated to be a further 3000 - 4000 people), into quarantine for 14 days, was publicly announced in the afternoon of 12 April 2020 (Easter Sunday), with execution of the decant and quarantine orders to commence 7am on Monday 13 April 2020.

By 21 April, a total of 114 people had acquired COVID-19 associated with the North West outbreak comprising 73 staff members, 22 patients, and 19 others including household contacts.

Recommendations and Next Steps

I note the Public Health Services Interim Report recommendations which have been briefly outlined at the conclusion of Part A of this Interim Report.

Each of these recommendations has been incorporated into the advice of the Chief Medical Officer, Professor Anthony Lawler in Part B of this Interim Report.

I endorse each of the recommendations proposed by Professor Lawler and commit to their implementation, subject to acceptance by Government, in the North West THS and where relevant statewide. I also note the short timeframe in which these recommendations have been prepared and that further consultation with staff in relation to the implementation will be undertaken as we progress.

I will direct the Health Emergency Coordination Centre to monitor the implementation of these recommendations, if accepted.

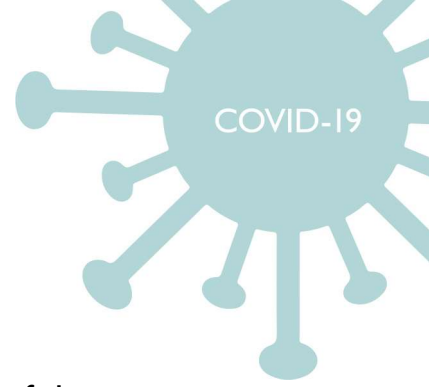
In closing, I express my deepest and heartfelt sympathy to the families that have lost loved ones in this outbreak and in the Covid-19 pandemic.

I commend to you, as Minister for Health, these recommendations to be applied across our healthcare system for the benefit of the Tasmanian community.

Yours sincerely,

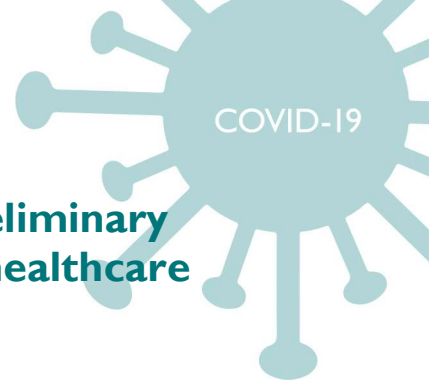
Kathrine Morgan-Wicks
COVID-19 State Health Commander
Secretary, Department of Health

29 April 2020



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Part A – Public Health Services Interim Report - Preliminary analysis of the COVID-19 outbreak in a Tasmanian healthcare setting

Prepared by:

Public Health Services

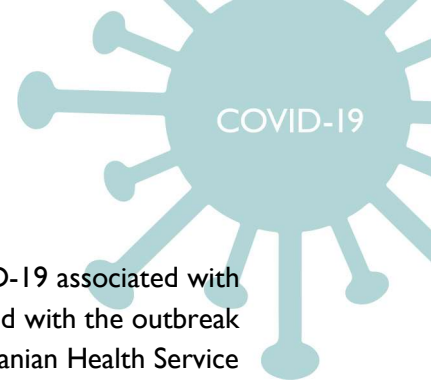
Authorised by:

Mark Veitch, Director of Public Health

Scott McKeown, Deputy Director of Public Health

29 April 2020 (revised)

This is an initial report based on the data and reports available at Tuesday 21 April 2020. The situation and responses are ongoing, data, and the interpretation of the data could change as the situation evolves.



Executive Summary

This is a preliminary report by Public Health Services (PHS) on the outbreak of COVID-19 associated with healthcare facilities in the Northwest Region of Tasmania. The first staff cases associated with the outbreak were notified to Public Health Services (PHS) on 3 April 2020. PHS informed the Tasmanian Health Service (THS) that day. The THS established Incident Management and Outbreak Management Teams which were supported by PHS from the outset, including the dedication of senior PHS staff to these roles.

This report compiles information from the epidemiological investigation based on detailed interviews with cases. It is intended to complement other Tasmanian Health Service and Department of Health evaluations of the outbreak and its management, which are ongoing. The aims are to (1) describe the outbreak and (2) identify key areas where review of policies and processes are likely to be helpful for the management of future healthcare related outbreaks.

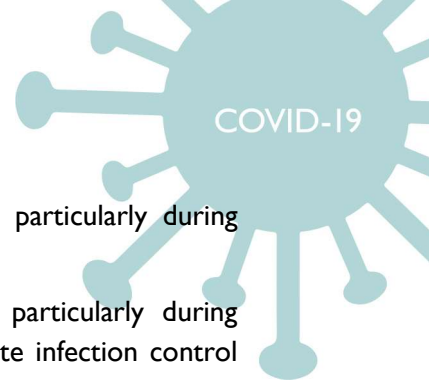
As at 21 April, a total of 114 people had acquired COVID-19 in association with the NW outbreak, comprising 73 staff members, 22 patients, and 19 others including household contacts. The original source of infection was most likely to have been one (or both) of two inpatients who were admitted to the NWRH with COVID-19 acquired on a cruise ship, the Ruby Princess. Of the initial cases amongst staff at least one was a healthcare worker who had provided care directly to one of these patients. Following these initial infections, multiple potential chains of direct person-to-person transmission were apparent. These were between staff, or between staff and patients (in both directions). These transmission events occurred within the different northwest healthcare facilities through either the transfer of infectious patients or through infectious staff working in multiple locations including aged care facilities.

Factors that may have enhanced person-to-person transmission in this setting were:

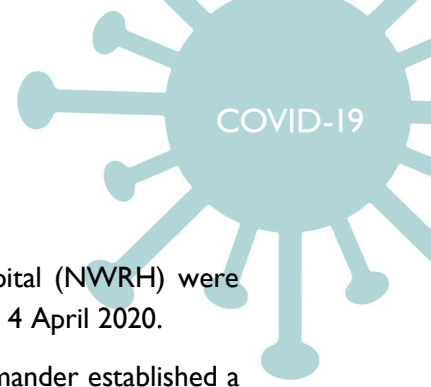
- Staff attending and continuing to work while experiencing respiratory symptoms
- Workplace activities such as regular staff gatherings with people in confined spaces
- Any shortcomings in infection control practices which may have enabled transmission of this very infectious agent in high-risk settings
- Incomplete or delayed identification of close contacts of confirmed COVID-19 cases for immediate isolation to limit further transmission
- High levels of staff mobility between different healthcare facilities
- Transfer of undiagnosed infectious or incubating patients between healthcare facilities

Actions, including actions underway, that will mitigate risk in Tasmanian Health Service settings include:

- Strengthening the culture of safety regarding infection control practices including optimising standard and transmission-based precautions.
- Implementing procedural changes to strengthen social distancing in the hospital workplace (e.g. meal breaks, meetings, ward rounds, handovers and other work-related activities).
- Addressing the drivers of presenteeism and implementing processes to prevent this, such as those contained in the Hospitals Directions No. 2 (of 17 April 2020) including screening all people, including staff, for symptoms on entry to the workplace.
- Increasing human resources and information technology systems to enable immediate contact tracing for both infected patients and staff in every healthcare facility. This needs to be rapidly scalable.



- Reducing the movement of staff between facilities where this is possible, and particularly during outbreaks.
- Minimising patient transfer within facilities and between healthcare facilities, particularly during outbreaks. When transfer is necessary, assess the risk and implement appropriate infection control precautions.



Introduction

Three cases of COVID-19 in healthcare workers at the North West Regional Hospital (NWRH) were notified to the Communicable Diseases Prevention Unit between Friday 3 and Saturday 4 April 2020.

PHS informed the Tasmanian Health Service (THS) on 3 April. The State Health Commander established a Tasmanian Health Service (THS) Incident Management Team and Outbreak Management Team. Public Health Services (PHS) provided extensive ongoing support on 3 and 4 April and from 5 April dedicated a senior Public Health Physician/Epidemiologist, a Public Health Registrar and a senior Public Health Nurse to these roles.

Cases amongst staff and patients within the hospital and related facilities increased over the following days. Actions during this period included contact tracing, closure of the medical surgical wards of the NWRH to new admissions, visitor restrictions and diversion of ambulances. Further details of these and other actions will be included in the THS account of this outbreak.

On 9 April a team from PHS, comprising a Public Health Physician, Epidemiologist and Clinical Nurse Consultant travelled to the North West Regional Hospital (NWRH) to support the Outbreak Management Team.

By 12 April cases had been notified among staff and patients in most clinical areas of the NWRH precinct. These included clinical areas within the NWRH (medical, surgical and mental health wards, operating theatres), the North West Private Hospital (NWPH), and in staff of the pathology service and outpatient clinics. The decision was made to close the two hospitals and related medical services and place all staff who had worked in these areas since 27 March, and their household members, into quarantine for 14 days.

By the 21 April, a total of 114 people had acquired COVID-19 associated with the outbreak comprising 73 staff members, 22 patients, and 19 others including household contacts.

This report summarises the public health data obtained from confirmed cases associated with the outbreak and discusses these in the context of lessons learned that could inform the response to future COVID-19 and other outbreaks in Tasmanian healthcare facilities.

Epidemiological investigation

Cases were defined as persons with microbiological confirmation of COVID-19 with onset of symptoms on or after 19 March 2020 who lived in the northwest region of Tasmania and/or had a direct or indirect epidemiological link to the North West Regional Hospital (NWRH), North West Private Hospital (NWPH), or Mersey Community Hospital (MCH).

Figure 1 shows the timeline of the outbreak including dates of selected key events and dates of onset of illness for all cases. It includes two index cases with COVID-19 who were admitted to the medical ward of the NWRH on March 20 and 26.

This demonstrates rapid escalation in the number of cases consistent with amplification of the number of cases through several cycles of infection, and a fall in the numbers of new cases following quarantining of staff and closure of the hospitals.

It was ultimately determined that 11 cases associated with the outbreak had already experienced symptoms of COVID-19 by the time the first two (non-cruise ship) cases were notified to PHS.

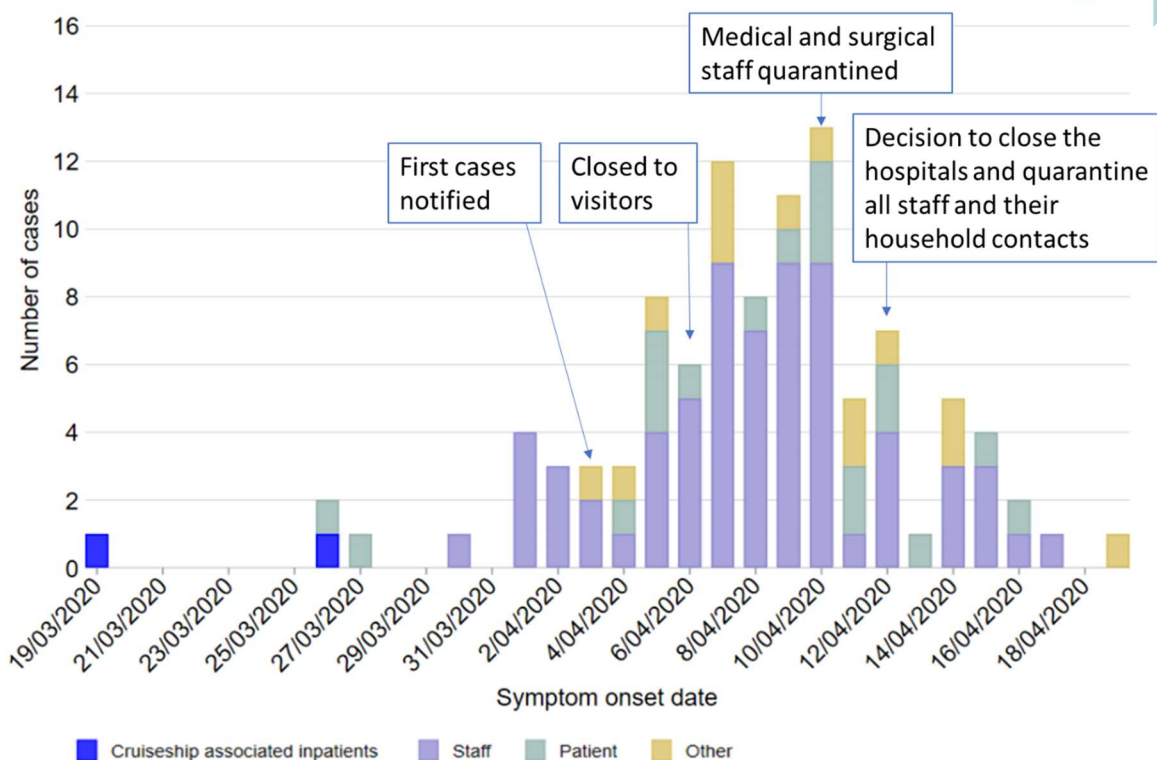


Figure 1. Cases of COVID-19 associated with the North West outbreak, by date of symptom onset. Staff includes medical, nursing, allied health, administrative, management, technicians, logistics, support, cleaning, and other. Other includes household contacts. The date of onset of symptoms for patients on 26 and 27 March are uncertain due to complexities in the underlying clinical picture.

Staff cases were most often women aged less than 50 years, while the majority of cases among patients were in men aged 50 year or older (Table 1).

Among all confirmed cases, the median duration of symptoms prior to notification was 3 days (range 1 to 14 days). The median period of infectiousness, based on the number of days from onset of infectious period to the notification date, was 5 days (range 3 to 16 days). There was one outlying case which is not included in the above figures. This was an inpatient who had prolonged course with fluctuating respiratory symptoms before being diagnosed with COVID-19 while in hospital. In this instance the duration between the onset of symptoms and notification date was recorded as being 22 days, but it is possible that the initial symptoms were not due to COVID-19.

Among the 73 staff members:

- The majority, (77%) attended work during their infectious period. This period was defined as from 48 hours before the onset of symptoms, until date of testing, when they were required to be isolated.
- About half (51%) did not attend work while symptomatic, about a third (29%) had symptoms on the same day as their last day at work, and a fifth (20%) attended work on one or more days after the date of onset of their symptoms with (range 1 to 7 days). Some staff with longer durations of continued attendance attributed their symptoms to other chronic respiratory conditions, and not to COVID-19.
- The median number of different clinical healthcare settings where staff worked during their infectious period was 1 (range 1 to 7).

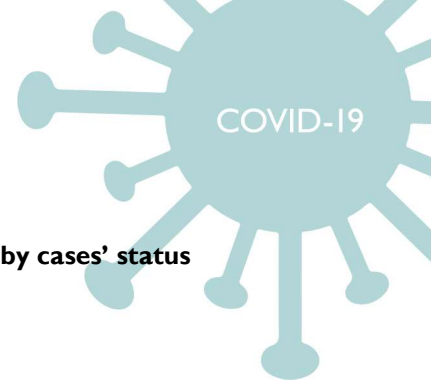


Table 1. Confirmed cases of COVID-19 diagnosed and managed in Tasmania by cases' status associated with the North West Outbreak by age group and sex

	Staff	Patient	Other	Total
Age group				
0-9	0	0	0	0
10-19	1	0	5	6
20-29	18	0	2	20
30-39	18	0	3	21
40-49	10	1	1	12
50-59	17	3	1	21
60-69	8	2	2	12
70-79	1	9	2	12
80-89	0	5	1	6
90+	0	2	0	2
Gender				
Female	57	7	9	73
Male	16	15	10	41
Total	73	22	19	114

Possible pathways of transmission

On detailed review of case notes in relation to occupation, activities, location of work and timing of onset it was possible to identify several likely pathways for transmission of the virus through the Northwest hospitals. Several distinct clusters and potential pathways of transmission were identified. Cases linked with the outbreak were identified in most areas of the NWRH, including the medical, surgical and mental health wards, the emergency department and operating theatres. Cases also occurred in the North West Private Hospital. Affected staff worked in many areas, including facilities in the co-located medical precinct such as pathology collection and outpatient services, the Mersey Community Hospital in Latrobe, and in aged care facilities in the Northwest Region.

Identified clusters included:

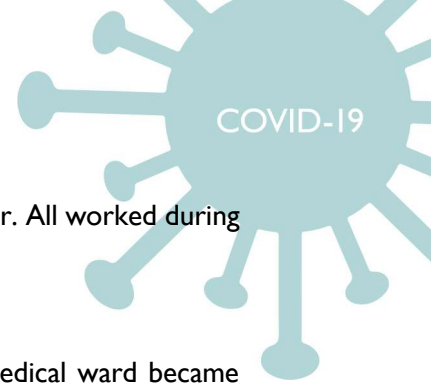
1. Early cases

Several healthcare workers on the NWRH medical ward had onset of their symptoms between 29 March and 2 April 2020. At least one recalled nursing one of the index cases with COVID-19 on the ward in the 14 days before their illness. Some worked while symptomatic for up to six days. An additional nurse on the same ward developed symptoms during this same period but was uncertain if they had nursed the patients with COVID-19. This nurse did not attend work during their infectious period.

While identifying these as early staff cases, we cannot exclude the possibility of an earlier but missed healthcare worker case.

2. Medical – Allied Health morning meetings/handover on NWRH Medical Ward

Other early cases were clustered among allied health, discharge planning, psychiatric staff, and a doctor, one of whom had provided direct care for a patient subsequently identified as having been in the infectious period



for COVID-19. All worked on the medical ward and attended morning medical handover. All worked during their infectious period.

3. *NWRH Medical Ward Nursing Staff*

Three to seven days after the first cluster, another group of twelve nurses on the medical ward became symptomatic. Their dates of symptom onset suggest that the likely source of their infection was transmission from one or more of the 3 early cases among staff.

4. *Inpatients of NW Healthcare Facilities*

A total of 14 inpatients have been confirmed to have COVID-19. While some cases became symptomatic whilst inpatients in either MCH or NWPH, all except one patient spent time as an inpatient at NWRH during their acquisition period. The one exception spent time in the North West Private Hospital and the source of infection for this case remains unclear.

5. *Clusters amongst attendees of regular meetings*

Several clusters were identified among attendees of regular meetings, such as administrative or clinical planning meetings. These included senior clinicians with liaison roles.

Close contacts

Of the remaining cases, 17 were identified as close contacts (including household contacts) of confirmed cases.

Missed contacts

There were instances when close contacts were not identified following the diagnosis of a confirmed case of COVID-19. For example, in at least two instances staff who provided medical and nursing care to patients who were in their infectious period, one at NWRH and one at MCH, were not identified as close contacts but later became confirmed cases. In one instance a doctor was advised they did not meet the definition of a close contact of a newly diagnosed case in a patient and could continue to work. However, this case chose to get tested and self-isolate. In another instance a member of nursing staff was missed as a close contact because, as relieving staff, they were not named on the roster.

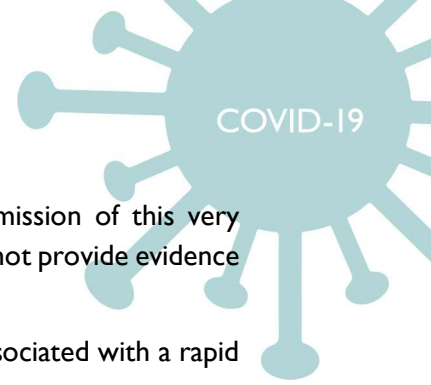
Risks unrelated to the workplace

Each case file was reviewed to identify potential gatherings or risk activities unrelated to the workplace. There was no documented evidence of social gatherings outside the workplace by any of the cases. The largest gathering reported by any case involved three people, and that consisted of one HCW and social (non-work) friends or family members. We note several unconfirmed reports of social gatherings, and some reports of inadequate social distancing amongst staff within the workplace. However, we did not find evidence in case interviews that social gatherings outside of work settings contributed to this outbreak.

Summary

This outbreak was characterised by rapid person-to-person spread amongst staff, with further transmission to patients and household contacts. Factors that potentially contributed to this outbreak included:

- Based on the timing of the onset of symptoms, the outbreak likely began with transmission of infection from a known COVID-19 patient to healthcare staff and to patients on the medical ward.

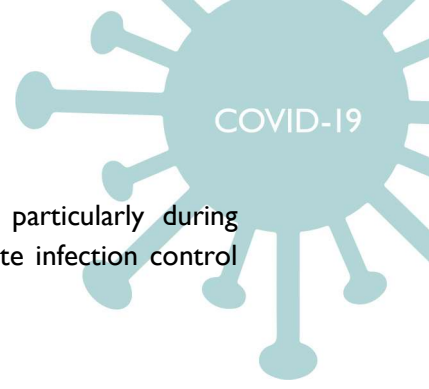


- While any shortcomings in infection control practices may have enabled transmission of this very infectious agent in a high-risk setting, this descriptive epidemiological account does not provide evidence of specific infection control breaches that contributed to transmission.
- The actions of quarantining staff and patients, and closure of the hospitals were associated with a rapid reduction in the number of new cases over the following days.
- Many infectious staff cases (20%) worked for several days whilst experiencing symptoms of COVID-19.
- A high attack rate was associated with meetings with staff in confined spaces, such as nursing handovers and discharge planning.
- There were several instances when the identification of close contacts was likely to have been incomplete or slowed by the need to locate and interrogate multiple ICT systems, databases and paper records to reconstruct a single patient record or staffing profile on any one day in a particular ward. These indicate the need to establish, resource (with human resources and information technology systems), and train teams to enable immediate responses; and to upgrade over time existing manual and paper-based records. This will enable timely, informed decisions and actions to prevent further transmission from contacts who may become cases in healthcare settings;
- Many infectious staff were highly mobile within the health facilities or worked in two or three hospitals at different times. This resulted in transmission within multiple settings within and beyond the NWRH.
- Transfer of infectious patients between facilities. Transfers of patients not yet diagnosed with COVID-19 from the NWRH to the NWPH or MCH while incubating or infectious with COVID-19 was documented.

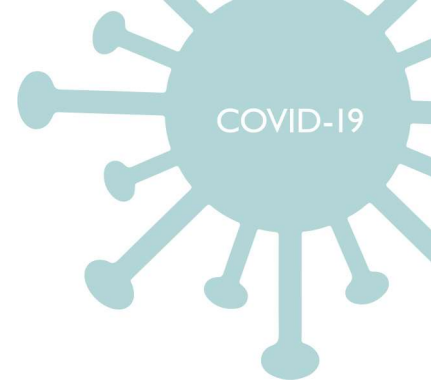
Recommendations

The following areas are worthy of consideration in further analyses of underlying factors that contributed to this large outbreak, and for future management and control of COVID-19 in Tasmanian healthcare settings:

- Work to strengthen the culture of safety regarding infection control practices including optimising standard and transmission-based precautions through increased infection prevention and control resourcing and staff education.
- Ensure clear governance arrangements for managing future outbreaks in healthcare settings, including dedicated teams for outbreak control whose members are skilled in the rapid tasks required to manage outbreaks, especially the identification and furloughing of close contacts.
- Consider the underlying drivers of staff presenting to work whilst unwell with respiratory illness and implement strategies to minimise this.
- Enhance and optimise screening of all staff and visitors on entry to the facility (e.g. use of a screening questionnaire) and do so particularly actively during outbreaks. While it may be impossible to identify and exclude people before they become ill, some of these potentially infectious persons may be identified by thorough contact tracing of prior cases.
- Implement structural and cultural changes to strengthen social distancing within healthcare workplaces (e.g. meal breaks, meetings, ward rounds, other work-related activities), particularly during outbreaks.
- Reduce the movement of staff between facilities where this is possible, particularly during outbreaks.



- Minimise unnecessary patient transfer within facilities and between facilities, particularly during outbreaks. When transfer is necessary, assess the risk and implement appropriate infection control precautions.



Part B - Letter from the Chief Medical Officer

Kathrine Morgan-Wicks
COVID-19 State Health Commander
Secretary, Department of Health

Secretary,

Thank you for providing the epidemiological report prepared by Public Health Services, which examines the likely processes of transmission leading to the outbreak of COVID-19 at the North West Regional and North West Private Hospitals, and for the opportunity to provide you with recommendations arising from the outbreak.

While the PHS Report provides an account of some of the key features of the outbreak, it does not- and nor should it, given its scope- reflect on or outline many of the key responses undertaken by the hospitals in the North West, the Tasmanian Health Service and the Department of Health in order to respond to the outbreak and maintain health services that are both sustainable and safe for the Tasmanian community.

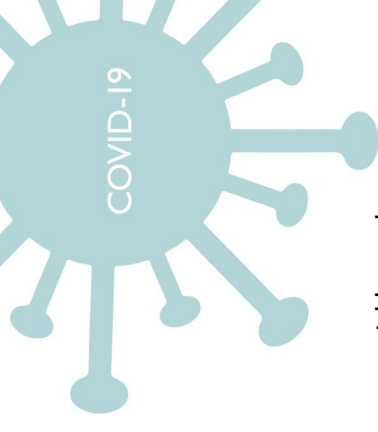
In reviewing the Public Health Services epidemiological report, the feedback provided during the Hot Debrief undertaken by key Department of Health, Tasmanian Health Service and Public Health Services stakeholders, advice I have previously provided to you regarding the closure of the NWRH and NWPH and the subsequent role of pre-return to work testing, and observations by experts involved in the response, I provide the following recommendations to further strengthen structures, processes and culture, in order both to reduce the likelihood of future outbreaks in Tasmanian hospitals, and to ensure a timely and appropriate response to future outbreaks, should they occur.

I have arranged the recommendations into three sections- Structure and Resourcing, Process and Practice, and Culture and Behaviour.

A final comment before the recommendations- throughout the outbreak the diligence, professionalism and commitment of all staff involved was always on display. The resilience of staff at all affected facilities and services needs to be acknowledged, and the community should be proud of the service provided under incredibly difficult circumstances.

Professor Anthony Lawler, MB BS, FACEM, GAICD, AFRACMA
Chief Medical Officer
Deputy Secretary, Clinical Quality, Regulation and Accreditation.

28 April 2020



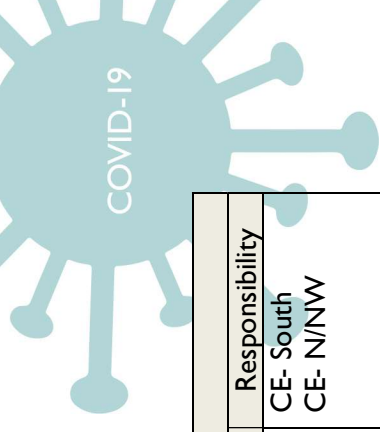
Tasmanian Health Service – North West Outbreak - Recommendations

Structure and Resourcing

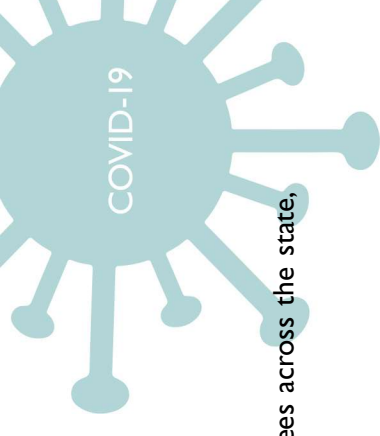
This section analyses the structural and resourcing issues that may be addressed in order to prevent the likelihood of or respond more quickly to the development of an outbreak. This will require action centrally and at the local hospital level, and will also require investment in medical, nursing and support staff.

Structure and Resourcing		
Recommendation	Rationale and Comment	Responsibility
1. Develop strategies to reduce the unnecessary movement of staff between facilities, particularly during outbreaks	<p>The PHS Epidemiological Report identified that the movement of staff between the NWRH, NWPH and MCH contributed to the rapid and significant spread of infection, especially given the infectious period precedes symptom development by up to 48 hours.</p> <p>Consideration should be given to reducing the movement of staff between facilities where this is possible, particularly during outbreaks. This must include consideration of staff working across multiple public facilities, between public and private hospitals, and in other sectors (eg education, aged care, primary health).</p> <p>This is particularly the case for staff who are providing care to known COVID-positive patients.</p>	CPO CE- South CE- N/NW
2. Resource Infection Prevention and Control and Infectious Diseases services in the North West	<p>The recent outbreak on the North West has demonstrated the need for further investment in both Infection Prevention and Control services and Infectious Diseases specialist service across the North West region.</p>	CE N/NW IPC ID EDMS-NW EDON-NW

Structure and Resourcing		
Recommendation	Rationale and Comment	Responsibility
	<p>These resources include:</p> <ul style="list-style-type: none"> • <u>Dedicated on-site ID physician</u> for the NWRH and MCH, initially for a fixed-term six month period with extension for the duration of the pandemic, and later consideration of permanency. • This role would provide ID consultative support to the NWRH and the MCH, support the IPC service and clinical units/services, sit on key committees, and support the development of protocols and guidelines. • On-call support would be provided by the LGH ID Service (1:4) • <u>Dedicated registered nurses</u> with “<u>COVID-19 Project Roles</u>” at both NWRH and MCH working with the current IPC staff within each site. <p>The role would provide key COVID-19 liaison/support for the clinical areas, and a PPE ‘coach’ role which would allow for support both during business hours and after hours seven days/week. These dedicated FTE resources could be initially considered as fixed-term six-month positions with consideration for extension if required</p> <ul style="list-style-type: none"> • <u>Dedicated 1 FTE Infection Control Clinical Nurse Educator</u> across the MCH and NWRH to support the provision of education/training relating to infection prevention and control across multidisciplinary healthcare workforce including nursing, medical and allied health professionals. This dedicated role would work with the IPC service and assist with the development and delivery of training resources. <p>There should also be consideration of the adequacy of the current resourcing across the NWV for:</p> <ul style="list-style-type: none"> • Occupational health • Environmental cleaning • Primary health IPC 	
3. Clearly describe the structure, roles and resources required for the Outbreak Management Team	<p>The outbreak at the NWRH and NWPH required the mobilisation of an Outbreak Management Team (OMT) from elsewhere in the state and from other agencies. Early changes in governance of the OMT and the quarantining of team members impacted the function of the team.</p>	<p>CMO PHS IC THSEOC Cmdr</p>



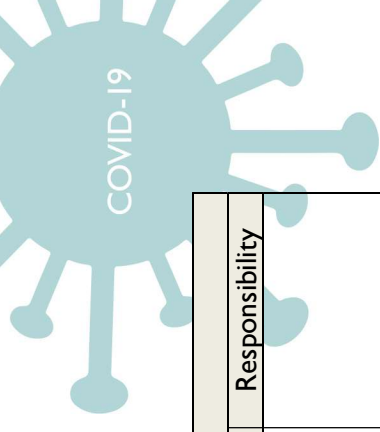
Structure and Resourcing		
Recommendation	Rationale and Comment	Responsibility
	<p>Experience indicates the need to establish, resource and train teams to enable immediate responses that prevent further transmission from new cases in healthcare settings.</p> <p>Work should be undertaken to ensure clear governance arrangements for the OMT managing future outbreaks in healthcare settings. This will include, as a minimum:</p> <ul style="list-style-type: none"> members who are skilled in the rapid tasks required to manage outbreaks, including <ul style="list-style-type: none"> the relevant contemporary national and local guidelines governing the identification and furloughing of close contacts interpretation of rosters and patient/ward lists local context understanding structure and reporting lines, both within the OMT and in connection to the ECC and local hospital Executive roles descriptions for key members <p>An effective OMT will include members from the DoH, THS, the local health facility and PHS. This may be augmented by other members, both from within and outside of health.</p> <p>Key individuals should be identified now as appropriate to members of future OMT, and training should occur to prepare. This would include key individuals at each health facility.</p>	CE- South CE- N/NW



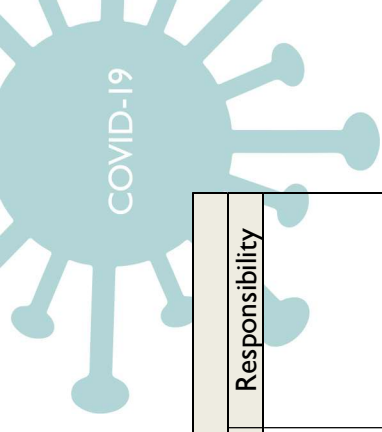
Process and Practice

Revised processes will decrease the likelihood of transmission. While some of these processes are already in place to varying degrees across the state, consistency should be sought unless there are compelling reasons for local variation.

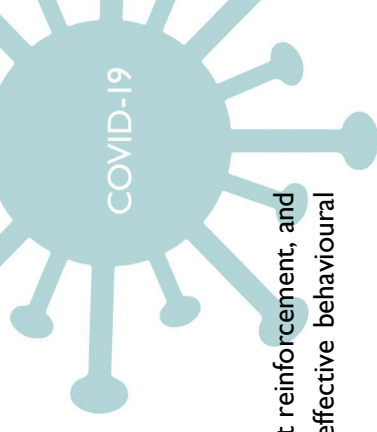
Process and Practice		
Recommendation	Rationale and Comment	Responsibility
4. Implement consistent staff and visitor screening processes to ensure that any person with respiratory illness does not enter the facility	<p>While screening processes have been introduced at the state's major hospitals, there should be robust screening processes for all people (staff and visitors) entering public and private health facilities in Tasmania. This should include rural inpatient facilities.</p> <p>Screening processes should be consistently applied across the state. This may include the use of a screening questionnaire and temperature screening, and may include the exploration of online screening questionnaires.</p>	<p>CE- South CE- N/NW CMO Primary health managers PHS</p>
5. Establish processes governing patient transfers between facilities	<p>Where possible, unnecessary transfers between (and within) health facilities should be minimised, particularly during outbreaks. Transfers between facilities (either public-public or between public and private) should only be undertaken when absolutely necessary for the patient's clinical care, or to align with the Tasmanian Role Delineation Framework.</p> <p>Where transfer is necessary, clinical and infection control risk should be assessed, and transfer and subsequent care should be undertaken with appropriate infection control precautions. Transfer protocols will be reviewed regularly in response to changes in local disease prevalence.</p>	<p>EDMSs AT AT-AMR</p>
6. Develop a formal Outbreak Management Plan	<p>In conjunction with the development of the roles and function of the OMT (Recommendation 3 above), a formal Outbreak Management Plan should be developed, that can be applied rapidly and consistently should other outbreaks occur in Tasmanian hospitals</p> <p>This would include, as a minimum,</p> <ul style="list-style-type: none"> • Key membership of the OMT • Key roles of the OMT • Resources required to undertake role 	<p>CMO DCMO PHS THSEOC Cmdr ID IPC</p>



Process and Practice		
Recommendation	Rationale and Comment	Responsibility
	<ul style="list-style-type: none"> • Delineation of responsibility between OMT, PHS, ECC, Regional Health Emergency Management Team (RHEMT) and relevant hospital Executive • Linkages with other services • Responsibility for contact tracing, staff welfare, and key communications • Local support required (accommodation, information technology etc). 	
7. Develop clear, consistent and documented processes and responsibilities for the tracing and management of contacts for patients, staff and community	<p>Evolving practices and responsibilities with respect to contact tracing of patients, staff members and community members should be clarified. This was complicated by the national reinterpretation of the definition of “close contact” during the outbreak, and changes to the function and composition of the OMT.</p> <p>While roles have been clarified, there should be clearly documented and agreed processes and responsibilities/accountabilities relating to contact tracing for all relevant groups (staff, patients and community cases).</p> <p>While this will be key to the functioning of an OMT (should another outbreak occur), it is also relevant in the management of isolated infections.</p> <p>This will also enable training of relevant staff in contact tracing, and ensure each facility has a nominated “on-the-ground” liaison to provide essential local context.</p> <p>Processes will incorporate appropriate attention to the welfare of infected staff members and those requiring quarantine.</p>	PHS CMO DCMO IPC ID
8. Clarify statewide Return to Work (RTW) processes for COVID-positive and quarantined contacts	<p>A comprehensive RTW process has been established for North West staff returning from quarantine.</p> <p>In the event of another outbreak elsewhere in the state, or in the case of isolated exposures or infections, there should be a formalised prospectively determined and agreed RTW process for two key groups:</p> <ul style="list-style-type: none"> • Staff who are isolating due to returning a positive test for coronavirus 	PHS CMO CPO



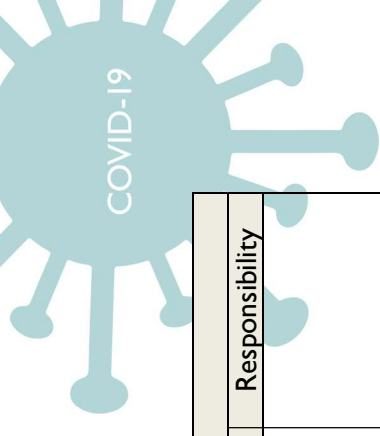
Process and Practice		
Recommendation	Rationale and Comment	Responsibility
	<ul style="list-style-type: none"> Staff who have been quarantined due to being identified as close contacts, but have not returned a positive test. <p>As has occurred in the North West, clarity will be provided on a statewide basis (including in the absence of an outbreak) regarding the requirements to complete and emerge from quarantine (governed by the Series of National Guidelines on COVID-19 (SoNG)) and the requirements to return to work (as determined by the employer).</p> <p>Discussion between PHS, THS and the DoH will clarify these quarantine and RTW requirements.</p>	
9. Identify improvements necessary to facilitate a move away from paper systems	<p>The continued reliance on paper systems, including clinical records, rosters, and other records of staff and patient movement, hampered the timely management of potential close contacts.</p> <p>Possible mechanisms to move such records online for ease of access (including offsite) will be explored, including as part of the Human Resources Information System Replacement Project currently in progress.</p>	CPO CMO EDMs EDONs



Culture and Behaviour

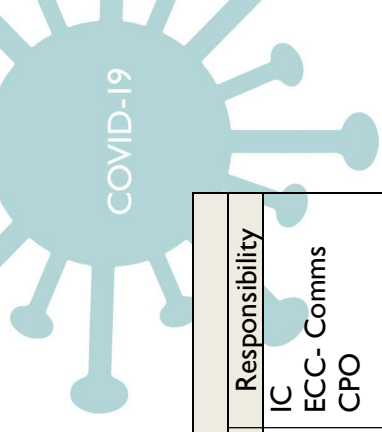
The development and encouragement of appropriate clinical and social behaviours in the workplace requires clear expectations, frequent reinforcement, and the engagement of local clinical leaders. There will also be a role in engaging key professional representative bodies in promoting effective behavioural preventative actions.

Culture and Behaviour		
Recommendation	Rationale and Comment	Responsibility
10. Evaluate and promote social distancing and proactive rostering	<p>The outbreak in the North West may have been exacerbated by inadequate observation of social distancing in the workplace. Anecdotally similar challenges exist in other hospitals in the state.</p> <p>Again, this presents challenges given the infectious period may precede the development of symptoms by up to 48 hours.</p> <p>A clear and consistent framework should be developed and provided to staff in relation to optimising social distancing within the workplace.</p> <p>This should include reference to:</p> <ul style="list-style-type: none"> • Clinical handover • Ward rounds and team meetings • Meal breaks • Management and committee meetings <p>In addition, consideration should be given at service/unit level to roster in a “protective” fashion to preserve capacity in the event that a staff member becomes infected, minimising the impact of transmission on ongoing service delivery. This may include nursing and/or medical teams being rostered on a home ward basis, or with alternating rosters (five days on, five days off)</p>	Clinical leaders EDMSs EDONs
11. Identify drivers for presenteeism	<p>The PHS Epidemiological Report indicated that a significant proportion (20 per cent) of COVID-positive healthcare workers worked while symptomatic. This is multifactorial, and reasons include the desire of staff to not let colleagues down, mistaking the symptoms of COVID-19 for other conditions, or concerns over perceived resource constraints.</p>	Clinical leaders CE- South CE- N/NW CPO

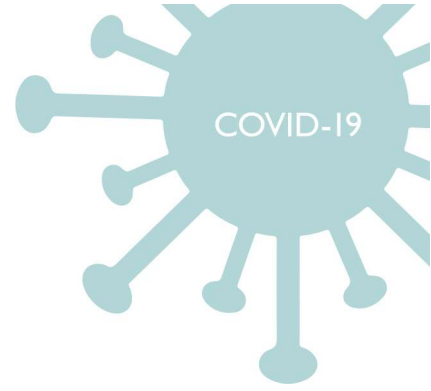


Culture and Behaviour		
Recommendation	Rationale and Comment	Responsibility
	<p>Work should be undertaken to consider and address the underlying drivers of staff presenting to work whilst unwell, particularly in displaying features of respiratory illness. This will require the engagement of local clinical and professional leads, as well as professional representative bodies.</p> <p>While the introduction and strengthening of education, training and PPE coaching/buddies will improve IPC practice, it is important to gain assurance that practice is in line with requirements.</p> <p>Conducting regular audits will assist in improving practice and identifying areas for improvement in training and education,</p> <p>Audits may include</p> <ul style="list-style-type: none"> • PPE utilisation, including donning, doffing, and understanding the requirements in different clinical environments • The frequency and quality of environmental cleaning 	
12. Regular audits are undertaken on Infection Prevention and Control (IPC) practices in Tasmania's hospitals		IPC ID EDMs EDONs
13. Strengthen local and statewide Infection Prevention and Control (IPC) networks and culture	<p>The role of IPC and ID advice in overarching hospital operations should be strengthened, in order to inform clinical practice. IPC representation is required within key committees/working groups to ensure consistency of approach across units/services and to provide support as required</p> <p>Greater IPC involvement would include:</p> <ul style="list-style-type: none"> • Inclusion of IPC representation in key clinical and organisational committees • Development of IPC support networks <ul style="list-style-type: none"> ◦ Local North West IPC COVID-19 support network to be formally established with all key stakeholders involved and for regular meetings to be established. This will help to foster the IPC team and assist provision of support to individual team members in the management of the COVID-19 outbreak. ◦ Statewide COVID-19 IPC support network to be considered across the public and private sector to facilitate the development of consistency of approaches, to promote 	IPC ID CE- N/NW CE- S EDMs EDONs

Culture and Behaviour		
Recommendation	Rationale and Comment	Responsibility
	collaborative discussions and to provide professional support network.	
14. Improve processes for the timely and transparent sharing of information on transmission events with the health workforce	<p>Concerns were raised during the outbreak that staff became aware of disease transmission through social and other media before they had heard from their employer.</p> <p>While this is not ideal, it should be recognised that communication must be undertaken with due care for the privacy of the affected staff member, and that communication out-of-hours is difficult through official channels.</p> <p>The DoH and PHS will explore how to communicate such matters to staff in a more timely fashion, mindful of privacy constraints.</p>	PHS THS CPO
15. Develop and implement new mandatory training and education package that emphasises infection control and PPE use, and enhance communication with staff.	<p>State investment in PPE and appropriate use of local and stockpile PPE is ongoing, but these activities are not always visible to 'frontline workers'.</p> <p>Initiatives to improve visibility include the following:</p> <ul style="list-style-type: none"> • Regular communication to staff regarding PPE levels • Development and consistent application of evidence-based framework for PPE use within clinical settings, consistent with relevant national guidelines • Provision of suitable education and training relating to appropriate PPE use <p>A "PPE coach/buddy" system to ensure that PPE is donned and doffed appropriate on every occasion and to support local compliance with guidelines.</p> <p>Additionally, as part of the RTW requirements for NWRH and NWRPH staff quarantined (in addition to pre-return COVID-19 testing) there is a requirement for completion of both online and a face-to-face training in infection control practice, with particular focus on appropriate PPE utilisation.</p> <p>Consideration should be given to rolling this out to all clinical staff across the THS, with potential as "refresher" training.</p>	ID CPO CE- South CE- N/NW



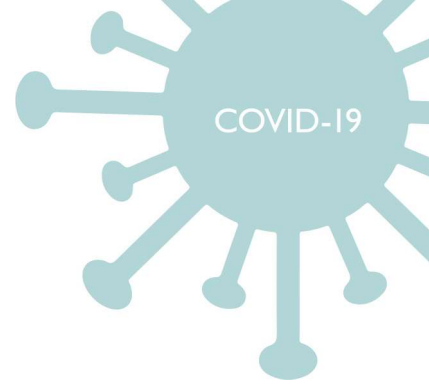
Culture and Behaviour		
Recommendation	Rationale and Comment	Responsibility
16. Maintain a strong communications strategy to keep staff informed	<p>Regular communication in the form of daily updates should continue to be provided to all healthcare staff relating specifically to COVID-19.</p> <p>These updates should include the current status of COVID-19 activity within the North West, the state/national perspective, any significant amendments to local practices/protocols, and any other specific issues that are relevant to include. This could be resourced with the resources requested above.</p>	IC ECC- Comms CPO
17. Staff wellbeing program	<p>A staff wellbeing and resilience program is currently being rolled out across the staff of the NWRH and MCH, in response to the experiences during the outbreak.</p>	CPO CMO CE- N/NW



Abbreviations used

AT- Ambulance Tasmania
AT-AMR- Ambulance Tasmania- Aeromedical and Retrieval Services
CE- Chief Executive
CMO- Chief Medical Officer
CPO- Chief People Officer
DCMO- Deputy Chief Medical Officer
ECC- Emergency Coordination Centre
EDMS- Executive Director of Medical Services
EDON- Executive Director of Nursing
IC- Incident Controller (of the ECC)
ID- Infectious Diseases (Specialist)
IPC- Infection Prevention and Control
MCH- Mersey Community Hospital
NWPH- North West Private Hospital
NWRH- North West Regional Hospital
OMT- Outbreak Management Team
PPE- Personal Protective Equipment
RHC- Regional Health Commander
RHEMT- Regional Health Emergency Management Team
RTW- Return to Work
SoNG- Series of National Guidelines on COVID-19
THS- Tasmanian Health Service
THSEOC- Tasmanian Health Service Emergency Operations Centre
THSEOC Cmdr- THSEOC Commander

COVID-19 North West Regional Hospital Outbreak Interim Report



Addendum to the Report

As I clarified in the Premier's media conference on the morning of 30 April 2020, the report incorrectly states on page 14 that to 21 April 2020 there had been a total of 14 inpatients of North West health care facilities confirmed to have COVID-19. I can confirm that the correct number of patients was 22, as reported in the table on page 13.

A handwritten signature in blue ink that reads "Mark Veitch". The signature is fluid and cursive, with the first name "Mark" and last name "Veitch" clearly distinguishable.

Mark Veitch
Director of Public Health
30 April 2020

Appendix 5 – Infection control and infectious diseases resources in the North-West

Infection Prevention and Control Resources

NWRH Pre Outbreak

Officially NWRH had 1.0FTE Infection Control Clinical Nurse Consultant.

In the position were 2 Grade 6 Nurses, one working 0.8 FTE, the other 0.2 FTE.

From March 16 2020, the 0.2FTE increased hours to assist with the workload and contact tracing. Both nurses worked many hours of overtime for a protracted period.

As cases increased, so did the work intensity. In such circumstances it can be of limited value attempting to train someone new into the role. Instead project support was added to the team and the Director of Nursing Operations and one of the Nursing Directors provided direct assistance and support.

MCH Pre Outbreak

Prior to the Outbreak, MCH had an approved 0.9 FTE Infection Prevention and Control Clinical Nurse Consultant.

The incumbent was on leave from 4 - 16 March 2020 and the position was being backfilled. She returned a week early on request as her senior experience was needed. The backfill was retained.

The senior nurse began supporting both sites, producing communiques and clinical protocols.

While the approved establishment for IP & C across NWRH and MCH was in total 1.9FTE, many more hours were worked.

During Recommissioning

Following the outbreak, until new resources were approved, NWRH increased staffing between April and end July.

- The 0.8 FTE position increased to full time hours
- The 0.2 FTE position increased to 0.6 FTE
- An additional Grade 6 nurse was employed at 0.8 FTE for 3 months to support the team with staff training post return to work
- This equalled 2.4 FTE from May to end July. Since then have transitioned to the new staffing profile.
- MCH retained an increase to 2.0 FTE and also had additional input from project nurses.

Post Outbreak

Staff positions:

- 1.0 FTE IP&C Clinical Nurse Coordinator at each site (existing staff)
- 1.0 FTE IP&C Clinical Nurse Educator as a new resource for each site (permanent)
- 1.0 FTE IP&C Grade 5 Associate Nurse Unit Manager position approved at each site for 6 months to focus on audit and support to the Clinical Nurse Coordinators (NWRH has only been able to recruit 0.5 FTE due to lack of suitable applicants.)
- This provides a permanent addition of 1.0 FTE at each site, and an additional 1.0 FTE for 6 months, if the position can be filled.

Infectious Diseases Physician Resources

Pre Outbreak:

- Officially North-West had 0.5 FTE of an ID Physician position on the establishment at LGH. Due to workload in Launceston, this position was seldom available.
- During the Outbreak, an ID Physician based in Hobart, provided much needed and very welcome support by phone.

Post Outbreak:

Approved 1.0 FTE ID Physician based in the North-West. Works across NWRH and MCH.

Appendix 6 – Abbreviations and acronyms

AHMPPI	Australian Health Action Plan for Pandemic Influenza August 2019
AHPPC	Australian Health Protection Principal Committee
AHPRA	Australian Health Practitioner Regulation Agency
AMA	Australian Medical Association
ANMF	Australian Nursing and Midwifery Federation
ATEOC	Ambulance Tasmania Emergency Operations Centre
AUSMAT	Australian Medical Assistance Team
CDNA	Communicable Disease Network of Australia
CMO	Chief Medical Officer
COVID-19	Novel Coronavirus 2019-nCoV
DoH	Department of Health (Tas)
DPAC	Department of Premier and Cabinet
DPH	Director of Public Health
DPIPWE	Department of Primary Industries, Parks, Water and Environment
ECC	Emergency Coordination Centre
ED	Emergency Department
HACSU	Health and Community Services Union
HCT	Health Consumers Tasmania
HCWs	Health Care Workers
IPC	Infection Prevention and Control
IMT	Incident Management Team
MCH	Mersey Community Hospital
MERS-CoV	Middle East respiratory syndrome coronavirus
NHRMC	National Health and Medical Research Council
NWPH	North-West Private Hospital
NWRH	North-West Regional Hospital

OMT	Outbreak Management Team
PFMR	Particle Filtering Mask
PHEOC	Public Health Emergency Operations Centre
PHS	Public Health Services
PHTas	Primary Health Network Tasmania
PPE	Personal Protective Equipment
RECC	Regional Emergency Coordination Centre
REMC	Regional Emergency Management Committee
RHEMT	Regional Health Emergency Management Team
RMO	Resident Medical Officer
SARS-CoV-2	Severe Acute Respiratory Syndrome coronavirus 2
SoNGs	Series of National Guidelines developed by the CDNA
SSEMP	State Special Emergency Management Plan
THAPPI	Tasmanian Health Action Plan for Pandemic Influenza 2016
THS	Tasmanian Health Service
THSEOC	Tasmanian Health Service Emergency Operations Centre
TPHEMP	Tasmanian Public Health Emergencies Management Plan
WHO	World Health Organization

