

BOARD OF INQUIRY INTO THE COVID-19 HOTEL QUARANTINE PROGRAM**WITNESS STATEMENT OF DR. SARAH MCGUINNESS****ROLES AND RESPONSIBILITIES****1. What is your role within the Department of Health and Human Services (the Department) and what are your key accountabilities?**

1. I am an academic infectious diseases physician with appointments at Monash University (Lecturer in Clinical Epidemiology) and Alfred Health (Visiting Medical Officer, Department of Infectious Diseases).
2. On 15 March 2020, I was seconded to the Department and subsequently employed as a Senior Medical Advisor. I finished my employment with the Department at the end of my agreed contract term on 31 July 2020 and returned to my usual roles at Monash and Alfred.
3. I was employed in the Department's COVID-19 response in Case, Contact and Outbreak Management (**CCOM**) in roles with the following titles: Specialist Advice Team Lead, Strategy, Policy and Planning Lead, and finally 'Outbreaks Lead'. Given the rapidly evolving nature of the COVID-19 pandemic and the Department's response, I took on a range of different roles and responsibilities as required and instructed by my managers.
4. In my initial role in the Specialist Advice Team I was asked to provide specialist drafting input into guidelines and policies for COVID-19 case and contact management and provide phone advice to clinicians about the public health management of COVID-19 cases. This role was not a role in relation to the Hotel Quarantine program. The information I was involved in preparing included drafting fact sheets and guidelines for use by health services, and drafting internal case, contact and outbreak management documents, including the Outbreak Management Plan. I continued performing these duties as lead for Strategy, Policy and Planning.
5. My role as overall Outbreaks Lead, a role which is distinct from the role of Outbreak Lead of a specific outbreak investigation (despite the near-identical title), commenced on 13 May 2020 and I performed that role until 31 July 2020. As Outbreaks Lead, my key responsibilities included supervising the medical officers involved in outbreak management, allocating them to outbreak investigations,

chairing outbreak-related meetings and compiling daily reports on the progress of active outbreak investigations to the Deputy Public Health Commander for CCOM.

6. During my time with the Department, I led numerous outbreak investigations. The Rydges and Stamford outbreak investigations were amongst those for which I took on the Outbreak Lead role within the Outbreak Management Team (**OMT**).
7. When fulfilling the role of Outbreak Lead for a specific outbreak investigation, my key responsibilities included to:¹
 - (a) chair Outbreak Management Team meetings;
 - (b) allocate tasks to other leads in the outbreak;
 - (c) undertake stakeholder management and engagement as required, including with agencies outside the department;
 - (d) escalate information and issues to relevant individuals;
 - (e) for high profile or complex outbreaks, undertake the liaison role with the facility/setting, after discussion with the Case and Contact management lead;
 - (f) endorse any significant control measures, including closure, for approval by the DPHC CCOM;
 - (g) endorse proactive and reactive media lines, for approval by the DPHC CCOM, and ensure compliance with the exposure site naming policy;
 - (h) ensure the Outbreak Management Plan is being implemented;
 - (i) monitor outbreak management key performance indicators and escalate issues early where it is identified that additional resources may be required; and
 - (j) identify recommendations for and updates to the Outbreak Management Plan following a hot debrief of the outbreak.

¹ As stated in the Outbreak Management Plan, page 9, DHS.0001.0003.0046.

2. To whom do you report?

8. In my role in providing specialist advice, I reported to REDACTED who was employed usually as Policy Advisor, Antimicrobial Resistance in the communicable diseases team.
9. In all other matters, I reported to Dr Simon Crouch and REDACTED who were the joint Deputy Public Health Commanders (DPHC) for CCOM.

3. Please describe your relevant professional experience and qualifications.

10. My professional qualifications include:
 - (a) Doctor of Philosophy – Monash University School of Public Health (Australia) (2019);
 - (b) Fellow of the Australasian College of Tropical Medicine – Faculty of Travel Medicine (2018);
 - (c) Fellow of the Royal Australasian College of Physicians – Specialist Physician in Infectious Diseases (2015);
 - (d) Master of Public Health and Tropical Medicine – James Cook University (2015);
 - (e) Certificate in Travel Health – The International Society of Travel Medicine (2014);
 - (f) Diploma in Tropical Medicine and Hygiene – Universidad Peruana Cayetano Heredia and University of Alabama at Birmingham (2010);
 - (g) Bachelor of Medicine, Bachelor of Surgery (MBBS), Bachelor of Medical Science (BMedSc) – The University of Melbourne Medical School (Australia) (2006).
11. My professional experience includes:
 - (a) Senior Medical Advisor, COVID-19 Public Health response, March-July 2020, Department of Health and Human Services, Victoria;

- (b) School of Public Health and Preventive Medicine, Monash University
Lecturer/Research Fellow (2016–), Infectious Diseases Epidemiology Unit
PhD Candidate (2016–2019);
 - (c) Department of Infectious Diseases, Alfred Health and Monash University
Consultant Infectious Diseases Physician (2016–);
 - (d) Department of Infectious Diseases, Royal Darwin Hospital, Infectious
Diseases Advanced Trainee (2014–2015);
 - (e) Royal Melbourne Hospital, Resident (2008), Basic Physician Trainee (2010–
2012), Infectious Diseases Advanced Trainee (2013);
 - (f) Austin and Northern Health, Intern (2007).
12. In addition to the above, I regularly publish and contribute to journal articles, review articles, case reports and books and book chapters. I sit on a number of committees, review for a number of journals and regularly present at conferences within my area of expertise. I am also unit coordinator and lecturer for the unit 'Infectious Diseases Epidemiology and Prevention' in the Monash University Master of Public Health program.

HOTEL QUARANTINE PROGRAM

4. Have you undertaken any additional or specific role in respect of the Hotel Quarantine Program? If so, please provide details, including information about dates and reporting lines.

13. I have not had any role in respect of the Hotel Quarantine Program, other than in relation to the public health response to COVID-19 outbreaks at the Rydges Hotel, Swanston Street, Carlton (**Rydges**) and the Stamford Plaza Hotel (**Stamford**) (the **Rydges outbreak** and the **Stamford outbreak**, respectively).
14. I discuss my involvement in the Rydges outbreak in answer to question 11 and my involvement in the Stamford Outbreak in question 16.

5. What is an “Outbreak Squad” and what is its function within the Department?

15. An Outbreak Squad is a squad of two or more professionals who manage the 'on the ground' aspects of an outbreak on behalf of the Outbreak Management Team (OMT). The particular function of an Outbreak Squad depends on the outbreak setting.
16. In the context of Rydges and Stamford outbreaks, the Outbreak Squads were members of the infection, prevention and control cell under the lead of REDACTED REDACTED, who was the COVID-19 Squad Coordination and Operations Director in the Office of the Deputy Secretary Public Health, Emergency Operations and Coordination.
17. As the COVID-19 Squad Coordinator and Operations Director with Public Health Command, REDACTED reported to Jacinda de Witts, the Deputy Secretary Public Health Emergency and Operations. As a dotted report (informal report), in the Public Health Incident Management Team (PH-IMT), she reported to the DPHC, Pathology and Infection Prevention and Control.
18. The OMT is a multi-disciplinary team that is convened to discuss and plan outbreak management responses to a particular outbreak that has occurred. The various components include: the Outbreak Lead, who is the team leader and is normally a medical practitioner; a Case and Contact Management Lead, who is usually an experienced Public Health Officer; an Epidemiology Lead, who is an officer with training in epidemiology; the DHHS Agency Commander, representing the State Controller – Health; a State Joint Intelligence Lead, representing the State Control Centre; a Communications and Media Lead; the Outbreak Squad Coordinator and a range of other people as needed, such as an Administrative Support Officer, Laboratory Liaison lead, and sometimes key stakeholders.
19. The full role and functions of the Outbreak Squad and OMT are described in the Outbreak Management Plan (OMP) at Appendix 1.²

² Outbreak Management Plan, page 9, DHS.0001.0003.0046.

6. What has been the role of “Outbreak Squads” in relation to the Hotel Quarantine Program?

20. Outside the outbreaks at Rydges and Stamford, I am not aware of the Outbreak Squad’s role in relation to the Hotel Quarantine Program.
21. As part of the Rydges and Stamford outbreak responses, the Outbreak Squads were the arm of the OMT that attended the sites, made on-site evaluations and provided reports back to the OMT.
22. As a control measure implemented by the OMT, due to the particular observations made by the Outbreak Squad at both Rydges and Stamford, the Outbreak Squads attended the settings on multiple occasions to monitor whether cleaning had occurred to the required standard, and to provide education and training on hand hygiene, personal protective equipment (**PPE**) and infection prevention and control (**IPC**) to hotel staff and security guards.

7. How does the Outbreak Squad perform its functions?

23. I am not familiar with the particular manner in which the Outbreak Squad performs its operations, except where it intersected with the OMT. Where it did, it was for the OMT to receive reports from the Outbreak Squad Coordinator or from the Outbreak Squad member directly, and to provide any necessary guidance. For example, the OMT may ask the Squad to obtain contact information from people who may have been exposed to a case or close contact of COVID-19 at one of the hotel settings.

COVID-19 PRECAUTIONS**8. Please describe your knowledge, as at 1 May 2020, of the ways that COVID-19 could be transmitted (including, if relevant, transmission by droplets, aerosols and fomites).**

24. My knowledge about the manner in which SARS-Co-2, the virus that causes COVID-19, is transmitted has developed and continues to develop as scientific understanding about the virus evolves.

25. In the early stages of the COVID-19 pandemic, much of the knowledge about the manner in which SARS-CoV-2 could be transmitted was extrapolated from knowledge about similar diseases. As more data has become available, the scientific community has developed a better and more specific understanding of the transmission characteristics and modes of transmission of the SARS-CoV-2 virus.
26. My knowledge as at 1 May 2020 will be reflected in the World Health Organisation material that was current at that time. It was during my time with the Department, and remains, my practice to be familiar with the WHO guidance on COVID-19.
27. The WHO guidance dated 29 March 2020, titled “Modes of transmission of virus causing COVID-19: implications for IPC precaution recommendations: scientific brief, 29 March 2020” states that:

“According to current evidence, COVID-19 virus is primarily transmitted between people through respiratory droplets and contact routes... Droplet transmission occurs when a person is in in close contact (within 1 m) with someone who has respiratory symptoms (e.g., coughing or sneezing) and is therefore at risk of having his/her mucosae (mouth and nose) or conjunctiva (eyes) exposed to potentially infective respiratory droplets. Transmission may also occur through fomites in the immediate environment around the infected person. Therefore, transmission of the COVID-19 virus can occur by direct contact with infected people and indirect contact with surfaces in the immediate environment or with objects used on the infected person... In the context of COVID-19, airborne transmission may be possible in specific circumstances and settings in which procedures or support treatments that generate aerosols are performed; i.e., endotracheal intubation, bronchoscopy, open suctioning, administration of nebulized treatment, manual ventilation before intubation, turning the patient to the prone position, disconnecting the patient from the ventilator, non-invasive positive-pressure ventilation, tracheostomy, and cardiopulmonary resuscitation. There is some evidence that COVID-19 infection may lead to intestinal infection and be present in faeces. However, to date only one study has cultured the COVID-19 virus from a single stool specimen. There have been no reports of faecal–oral transmission of the COVID-19 virus to date.”

28. The Department's publication 'Coronavirus disease 2019 (COVID-19), Case and contact management guidelines for health services and general practitioners' (presently version 23) is a resource I was involved in drafting and updating during my time at the Department. The document provides guidance targeted at health services and general practitioners and includes information on the mode of transmission based on best evidence sources and the WHO. Version 23, dated 10 July 2020³ states:

" Mode of transmission

Human-to-human transmission of SARS-CoV-2 is via droplets and fomites from an infected person.

There is some evidence that COVID-19 infection may lead to intestinal infection and virus can be present in the faeces of infected persons. Additionally, airborne transmission of COVID-19 may occur during aerosol-generating procedures. Despite this, current evidence does not support faecal-oral or airborne spread as major drivers in transmission; however, aerosol-generating procedures should be undertaken with appropriate precautions (refer to Aerosol-generating procedures).

Estimates for the basic reproductive number (R0) of SARS-CoV-2 range from 2–4, with R0 for confined settings, e.g. cruise ships, at the higher end of this range. Estimates of the effective reproductive number (Reff) vary from between settings and at different time points are dependent on a range of factors, including, public health interventions such as isolation, quarantine and physical distancing to limit close contact between people."

29. The version of this document that was available at 1 May 2020 (version 20, dated 25 April 2020), has a more limited explanation about the mode of transmission. It states:

"Mode of transmission

The mode or modes of transmission of COVID-19 are not yet fully understood, although based on the nature of other coronavirus infections, transmission is likely through droplet and contact. There were cases with a strong history of exposure to the Hua Nan Seafood Wholesale Market in Wuhan City, China where live animals are sold. However, the mechanism

³ Coronavirus disease 2019 (COVID-19), Case and contact management guidelines for health services and general practitioners, version 23, 10 July 2020, DHS.5000.0106.5691.

by which transmission occurred in these cases, whether through respiratory secretions after coughing or sneezing, or direct physical contact with the patient or via fomites after contamination of the environment by the patient, is unknown.

Person to person transmission has now occurred worldwide and the WHO declared a pandemic on 11 March 2020. As a result, droplet and contact precautions are recommended.”⁴

30. While the section of the document relating to mode of transmission does not reference airborne transmission, another section of the document states that “Airborne and contact precautions are now recommended in specific circumstances when undertaking aerosol generating procedures (AGPs).”
31. This document is therefore consistent with the WHO position and together these documents⁵ reflect my understanding of the modes of transmission of SARS-CoV-2 as at 1 May 2020.

9. As at 1 May 2020, what precautions would you have recommended in a quarantine environment where there were possible or suspected cases of COVID-19? Please address:

- (a) Location of quarantine facility;**
- (b) Physical distancing;**
- (c) Cleaning (including cleaning of communal spaces);**
- (d) Staffing arrangements;**
- (e) Use of personal protective equipment;**
- (f) Release of detainees from quarantine for breaks;**
- (g) Management and supervision of staff.**

32. As at 1 May 2020, it was not my role to consider the matters referred to in this question and the topic is largely outside my area of expertise as an infectious diseases clinician. An infection prevention and control expert could best answer these matters. However, if I were asked on 1 May 2020 for my views, my recommendations would likely have been as set out below.

⁴ Coronavirus disease 2019 (COVID-19), Case and contact management guidelines for health services and general practitioners version 20, 25 April 2020, DHS.0001.0060.0034.

⁵ Being the guidelines I discuss in paragraph 28 and 29, see footnote 4 above and the WHO material I refer to in paragraph 27.

(a) Location of quarantine facility;

33. If money, resources and practical capacity are not issues, the ideal setting for a quarantine environment is a facility operated by a health care service. An example of this is the National Center for Infectious Diseases in Singapore, which is a purpose-built, 333-bed, purpose-built infectious disease management facility. I acknowledge, however, that this is not a practical option where money and resources may be limited.

(b) Physical distancing;

34. I would recommend that people working in a quarantine environment maintain at least a 1.5m distance between themselves and other people.

(c) Cleaning (including cleaning of communal spaces);

35. I would recommend that cleaning be a commercial grade clean in two stages: first, a general clean to physically remove germs, dirt and organic matter from surfaces, second; the application of disinfectant to kill germs on surfaces. In a quarantine environment, the frequency of such cleans should be at least daily, and preferably twice daily for touch points.

(d) Staffing arrangements;

36. I would not have made any recommendation about staffing because it is not an area I feel qualified to comment.

(e) Use of personal protective equipment;

37. Understanding of and strategies to address person-to-person transmission risk have evolved over time. As at 1 May 2020, I would have recommended that staff coming into close contact with suspected cases (e.g. within 1.5m) wear PPE appropriate for droplet and contact precautions – specifically a mask, eye protection, gown and gloves. In situations where staff were not required to be in close contact with a suspected case, and were consistently able to maintain a distance of 1.5m from the case, it may have been appropriate for them to wear a mask alone, provided that they practiced good hand hygiene and avoided touching their face.

38. It is relevant to recognise that any individual required to wear PPE as part of their work duties should receive appropriate instruction and training on its use. If PPE is not applied (donned) and removed (doffed) appropriately, workers can be placed at increased risk of exposure, for example due to self-contamination.

(f) Release of detainees from quarantine for breaks;

39. I would have recommended that people escorting detainees from quarantine on breaks wear PPE as outlined in paragraph 37 and 38.

(g) Management and supervision of staff.

40. I would not have made any recommendation about staffing because it is not an area I feel qualified to comment.

10. Would your answer to question 6 be different if there were known positive cases in quarantine? If so, please specify how your response would differ.

41. A 'suspected case' (as referred to in question 9) is a person who has symptoms or signs consistent with COVID-19 infection and meets criteria for COVID-19 testing but is either yet to undergo testing or is awaiting test results. A 'positive case' (referred to in public health terms as a 'confirmed case') is a person who tests positive to a validated SARS-CoV-2 nucleic acid test or has the virus identified by electron microscopy or viral culture. In my view, suspected and confirmed cases should be treated in the same way and with the same level of precaution.

OUTBREAK AT RYDGES HOTEL, CARLTON

11. What was your involvement (if any) in investigating and responding to the outbreak of COVID-19 at Rydges Hotel, Carlton?

42. I was one of the Outbreak Leads for the Rydges outbreak investigation.
43. On 27 May 2020, I was appointed as Outbreak Lead shortly after the OMT had been convened. I was not the sole OMT lead, because on days I did not work, others filled the role.

44. The OMT produced an outbreak management plan and report as part of the Rydges outbreak investigation. The outbreak plan is a document that is added to over time as new information becomes available. It records the key information, actions and outcomes relating to the Outbreak. The final version of the plan becomes the final report.⁶
45. As Outbreak Lead, I was responsible for coordinating the outbreak investigation and response. My role included chairing OMT meetings, reporting to the DPHC CCOM, compiling and reviewing available evidence and working with the CCOM and Epidemiology leads to develop and test hypotheses about transmission and implement appropriate public health actions to control the outbreak.
46. In addition, I took an active role in responding to the Rydges outbreak including:
- (a) directing Operation Soteria command to undertake a full clean and disinfection of the site and preparing a communique to be provided by Operation Soteria personnel to all staff advising that staff in attendance for 30 minutes or more on the site, after 11 May 2020 should be tested for COVID-19;⁷
 - (b) liaising with security and medical contractors and hotel management to obtain information such as work rosters and contact information and to provide public health directions and updates to them. An example of this occurred on 30 May 2020, when I emailed the manager at Unified Security advising him that staff attending Rydges between 18 to 28 May 2020 inclusive were being asked to quarantine for a period of 14 days, that direct contact would be made with those security staff, and that such information was being provided to assist Unified Security's rostering and ensure consistent communication;⁸
 - (c) informing Operation Soteria that the OMT had a concern that environmental transmission may be happening at Rydges, directing that at least once daily cleaning and disinfection of all common areas and high touch surfaces be

⁶ COVID-19 Outbreak Management Report Rydges on Swanston, 13 July 2020; DHS.0001.0036.0145.

⁷ On 27 May 2020, I emailed key Operation Soteria personnel providing them with a letter to be sent to staff who worked at the Rydges and outlining the key messages to be provided to staff, DHS.5000.0069.9736.

⁸ Email from me to Unified Security, 30 May 2020, DHS.5000.0001.7141.

implemented, and providing DHHS guidelines for cleaning and disinfection;⁹
and

- (d) obtaining and reviewing information including from Rydges Hotel management¹⁰ and notes made by Authorised Officers to identify the potential or likely transmission event.¹¹

12. In your view, were there factors that:

(a) increased;

(b) did not sufficiently guard against,

the risk of transmission of COVID-19 at Rydges Hotel, Carlton, especially in light of the fact that it was (during the relevant periods of April-July 2020) intended to be a premises to facilitate the quarantining of returned passengers who were suspected or at risk of carrying the SARS-CoV-2 virus? If so, please provide details.

47. In my view, the following factors increased or did not sufficiently guard against the risk of transmission of COVID-19 at Rydges.¹²
48. First, the cleaning at the hotel was inadequate. The hotel was found by the Outbreak Squad to have no dedicated cleaning staff. General hotel staff cleaned common areas (including the lift used to transport positive cases) and the products being used were unlikely to be effective against COVID-19. Security staff were also involved in cleaning and were observed cleaning a stairwell handle.
49. Despite direction being provided by the department to clean the hotel on 26 May 2020,¹³ (clarified on 27 May 2020¹⁴ to mean a full commercial bioclean involving cleaning and disinfection), a full clean was not undertaken until the afternoon of 28 May 2020. This rendered the site an uncontrolled site for longer than it may have otherwise been and required a greater number of people to self-isolate.

⁹ On 29 May 2020, I emailed Operation Soteria recommending that at least once daily cleaning and disinfection of all common areas occur including high touch areas. I also provided guidelines on cleaning: Email from me, 29 May 2020, DHS.5000.0105.5941 attaching Cleaning and disinfecting to reduce COVID-19, DHS.5000.0105.5942.

¹⁰ In answer to requests I made for information, on 10 June 2020, I received an email from Rydges. Email from Rydges, 10 June 2020, DHS.5000.0037.7402.

¹¹ On 5 June 2020, I emailed an OMT member AO notes and a summary of my interpretation of those notes: Email from me, 05 June 2020, DHS.0001.0036.0171. On 6 June 2020, I sent a handover email, DHS.5000.0105.8211.

¹² COVID-19 Outbreak Management Report Rydges on Swanston, 13 July 2020; DHS.0001.0036.0145.

¹³ Email from Case Contact and Outbreak Lead to the Operation Soteria EOC dated 26 May 2020 seeking information (including case 1's duties, roster information for others and information on the cleaning regime at the hotel and requesting that a full clean of all common areas and the cases' direct work areas, DHS.5000.0015.3873.

¹⁴ Email from Outbreak Squad Coordinator to me and Operation Soteria EOC, dated 27 May 2020, DHS.5000.0016.5753 detailing the requirements of the bioclean.

50. Second, the Outbreak Squad reported that security staff were not wearing effective PPE. For example, observations were reported to the OMT that security were using vinyl gloves and unapproved masks.
51. Third, but related to the second factor above, the hotel and security staff's comprehension about hand hygiene, PPE and IPC was poor.¹⁵
52. Fourth, I experienced difficulties obtaining reliable and timely information about security guard and other staff movements within the hotel. While records were eventually made available to the OMT, those records did not identify, for example, which guards accompanied guests on breaks, including the family of four that clustered genomically with the subsequent staff cases. This complicated (and inhibited) the tracing of close contacts and ultimately resulted in a broader criteria of who was a 'close contact' being applied, for the purposes of quarantining those persons.

13. Did any member(s) of the Outbreak Squad interview, question or speak directly to the:

(a) index case(s); or

(b) epidemiologically and/or genomically ascribed source(s),

of the transmission which precipitated the outbreak of COVID-19 at Rydges Hotel, Carlton? If so, what if anything did those discussions reveal about the circumstances of any potential transmission events?

53. The Department routinely interviews all confirmed COVID-19 cases and this occurred in the Rydges outbreak. The Outbreak Squad does not undertake interviews. Members of the CCOM team undertake the interviews of cases.
54. In infectious diseases epidemiology, the term 'index case' refers to the first case to come to the attention of health authorities in a given population or outbreak investigation. In the case of the Rydges outbreak, the index case (first case to be notified to the Department and linked to this outbreak) was one of the returned travellers in the family of **REDACTED** that were found to cluster genomically with the

¹⁵ On 27 May 2020, I received a report by email from **REDACTED**, Outbreak Squad nurse outlining her findings after attendance at Rydges: email from **REDACTED** to Dr McGuinness, 27 May 2020, DHS.0001.0021.0025.

subsequent staff cases. An interview was undertaken of the index case.¹⁶ The other cases were also interviewed.

55. We were unable to determine a specific transmission event which precipitated the outbreak of COVID-19 at Rydges Hotel, Carlton from interviews with the cases.

14. Was the Outbreak Squad able to determine the likely:

(a) mode(s) of transmission;

(b) event(s) in which transmission occurred,

(c) precise location(s) of transmission,

in respect of the outbreak at Rydges Hotel, Carlton?

56. Again, it is not a function of the Outbreak Squad to determine these matters. However, both the OMT and I, as Outbreak Lead tried to determine the likely mode(s) of transmission and pinpoint transmission events(s) that precipitated the outbreak throughout the outbreak investigation.
57. Early on in the outbreak response, the OMT developed the hypothesis that transmission had occurred at Rydges from a COVID-19 positive case in quarantine either directly, via fomites or through contact with an intermediary staff case.¹⁷ The outbreak investigation supported this hypothesis.
58. It is not possible to determine which of the staff members first acquired the infection because the earliest date of symptom onset reported by a staff member was 25 May 2020, and three staff members independently reported that their symptoms commenced on this date. Because the incubation period (the time interval from exposure to the infectious agent to the onset of symptoms) for COVID-19 is variable (ranging from 1 to 14 days, with a median of 5 to 6 days), it is not possible to definitively determine the date(s) on which these staff were exposed. In the outbreak report, cases are numbered in the order in which they are notified to the department and not by the date of symptom onset or the date when transmission was thought to have occurred.

¹⁶ I was involved in preparing questions for the index case (family member) to assist in the investigations: OMT meeting minutes, 5 June 2020, DHS.5000.0093.5729.

¹⁷ This hypothesis was communicated in an email copied to me on 26 May 2020: email from Dr Crouch to Dr Romanes and Prof. Sutton, 26 May 2020, DHS.5000.0036.5306.

59. Of the first eight staff cases, seven worked night shifts and seven of the eight worked overlapping shifts on 21 May 2020. As mentioned above, three of these staff members had the same symptom onset date of 25 May 2020. This common symptom onset date is suggestive of a common exposure source. However, the variable incubation period of COVID-19 makes it impossible to definitively determine the date on which these staff were exposed. Of the remaining staff who worked overlapping shifts on 21 May 2020, two had symptom onset dates of 27 May and 29 May respectively, and the remaining two were asymptomatic. An eighth staff member only worked at the hotel from 24 to 27 May 2020 and had a symptom onset date of 4 June 2020.
60. The first four staff cases denied close contact with other workers during their shifts and denied contact with any of the hotel guests. This and the following matters supported the hypothesis of potential environmental transmission, that I expressed to the Deputy Public Health Commander at the time:¹⁸
- (a) the Rydges' member of personnel (described as **case 1**) was engaged in cleaning duties, including cleaning the lift used to transport confirmed cases;
 - (b) across hotel and security staff, non-standard PPE was used and there was a lack of training in hand hygiene and correct PPE use;
 - (c) the setting lacked routine cleaning and disinfection in common areas.
61. As part of the investigation, I also obtained the notes made by Authorised Officers and reviewed the entries for references to the family of **REDACTED**, to understand their interactions with staff. The notes supported a conclusion that the family had been taken on a walk accompanied by nurses and security on 18 May 2020.
62. During the investigation, we took steps to obtain and review the CCTV footage to determine the movements of the family and relevant staff members, but due to the limited locations and number of cameras, the footage did not assist in our investigation.
63. We were also unable to identify the security guards who had accompanied the family of **REDACTED** on their break on 18 May 2020 because no records existed in relation to which guards accompanied guests on breaks.

¹⁸ Email from me to **REDACTED**, 29 May 2020, DHS.5000.0105.5936.

64. Ultimately, the Deputy Public Health Commanders and I were unable to draw a firm conclusion about the transmission event(s) that precipitated the outbreak. In my opinion, the possibility that the outbreak was precipitated by person-to-person transmission is less likely than the outbreak being precipitated by an environmental source. However, there is insufficient evidence to support one mode of transmission over the other and both are possible.

15. In respect of meetings concerning the outbreak at Rydges Hotel, Carlton conducted by the Outbreak Squad, were notes or minutes taken? If so, please identify when such meetings occurred and who was present at them. In addition please provide copies of any notes or minutes of those meetings.

65. I do not know whether the Outbreak Squad held meetings or kept notes or minutes of any meetings they may have had.
66. The OMT did keep notes and minutes of its meetings. In some instances, formal minutes were kept. In other instances, the events of OMT meetings were recorded in an email or Outbreak Plan/Report.
67. I am informed that the following records of OMT minutes or other records of the meeting exist. Where attendees are recorded in the minutes or record, I have extracted them below. Where the minutes or record do not state who attended, I have provided my recollection of who attended and if I do not know I have left the field blank:

Meeting	Date	Minutes	Other Record	Present
1	26/05/2020	No Minutes	DHS.5000.0036.5306	I did not attend this meeting and do not know who did.
2	27/05/2020	No Minutes	DHS.0001.0060.0153	I attended this meeting. I believe it was also attended by Simon Crouch, REDACTED, REDACTED, Pam Williams, REDACTED, REDACTED

Meeting	Date	Minutes	Other Record	Present
				REDACTED
3	28/05/2020	DHS.5000.0105.7824		I attended this meeting. I believe it was also attended by REDACTED and REDACTED
4	29/05/2020	DHS.5000.0072.7622		I attended this meeting. I believe that REDACTED REDACTED REDACTED also attended.
5	30/05/2020	DHS.5000.0124.8374	DHS.5000.0124.8365	Sarah McGuinness, REDACTED REDACTED Finn Romanes, REDACTED REDACTED Merrin Bamert, Meena Naidu, Anthony Kolmus
6	31/05/2020	No Minutes	DHS.5000.0094.6312	I did not attend this meeting and do not know who did.
7	01/06/2020	DHS.5000.0090.0269		I did not attend this meeting and do not know who did.
8	02/06/2020	No Minutes	DHS.0001.0012.0750	I did not attend this meeting and do not know who did.
9	03/06/2020	DHS.5000.0093.6261		I did not attend this meeting and do not

Meeting	Date	Minutes	Other Record	Present
				know who did.
10	04/06/2020	DHS.5000.0093.8281		I attended this meeting. I believe it was also attended by REDACTED REDACTED and REDACTED REDACTED.
11	05/06/2020	DHS.5000.0093.5729		I attended this meeting. I believe it was also attended by REDACTED.
12	06/06/2020	DHS.5000.0093.8525		Sarah McGuinness, REDACTED
13	08/06/2020	No Minutes	DHS.5000.0043.5846	I did not attend this meeting and do not know who did.
14	11/06/2020	DHS.5000.0093.7866		Sarah McGuinness, REDACTED
15	12/06/2020	DHS.5000.0093.6238		REDACTED REDACTED, Sarah McGuinness, REDACTED REDACTED

TRANSMISSION EVENTS AT THE STAMFORD PLAZA HOTEL**16. What was your involvement (if any) in investigating and responding to the outbreak of COVID-19 at the Stamford Plaza Hotel?**

68. On or about the morning of 17 June 2020, I became aware of a case associated with the Stamford Plaza Hotel and was appointed as Outbreak Lead, with REDACTED REDACTED.
69. As Outbreak Lead, I performed the functions I have referred in paragraphs 45 above.
70. My first substantive act as Outbreak Lead was to consolidate the information that had been exchanged between Operation Soteria representatives and CCOM and identify the contractors and staff groups at Stamford and custodians of information required for contact tracing. I also prepared correspondence for distribution to security and medical contractors and hotel management personnel providing public health advice on self-isolation and testing for their staff. I also undertook a review of the relevant case notes to identify additional exposure sites that may require further consideration by the OMT.¹⁹
71. I coordinated the provision of information to the CCOM team to assist the identification of potential close contacts and gave directions for certain staff considered to be close contacts to quarantine for a period of 14 days and to be provided with information about testing and criteria of who is a close contact, including to respond to queries from those operating the hotel about whether particular members of staff were close contacts and required to quarantine.
72. I also contributed to the content of the Outbreak Management Report for the Stamford Outbreak.²⁰

¹⁹ See my email dated 17 June 2020, , DHS.5000.0106.2824.

²⁰ Outbreak Management Report - Stamford Plaza Outbreak 19 July 2020, DHS.0001.0036.0203.

17. In your view, were there factors that:

(a) increased;

(b) did not sufficiently guard against,

the risk of transmission of COVID-19 at Stamford Plaza Hotel, especially in light of the fact that it was (during the relevant periods of April-July 2020) intended to be a premises to facilitate the quarantining of returned passengers who were suspected or at risk of carrying the SARS-CoV-2 virus? If so, please provide details.

73. Yes. As part of the outbreak response, Outbreak Squad nurses attended Stamford on 17 June 2020 and provided an interim report, which I received that same day.²¹ That interim report, and the subsequent discussions in the OMT meeting also held that day informed me of the following matters, which I consider increased or did not sufficiently guard against the risk of COVID-19 transmission at the Stamford Plaza Hotel in light of its status as a quarantine location.²²
74. First, hotel personnel and the security contractors were not adequately educated in hand hygiene and PPE. Matters of concern identified by the Outbreak Squad included irregular and inconsistent use of the alcohol-based hand sanitiser available on site by security guards. There were also reports of security guards breaching physical distancing requirements, and sharing videos and playing on phones, while wearing soiled gloves.
75. Second, the Outbreak Squad identified that English was not the first language of some personnel and that PPE and hygiene education material was not readily accessible to people with limited literacy.
76. Third, the Outbreak Squad identified IPC concerns, including the lack of clearly designated areas or zones for handling clean and soiled items. For example, hotel staff removed rubbish and dirty, bagged linen from the rooms of positive cases and transported said items in the service elevator that was also used to deliver food.
77. Fourth, security guards had a shift handover procedure, involving a gathering of approximately 70 people, that was not done in a COVID-19 safe manner. The handover meeting was held in a 6x6m room and physical distancing was not

²¹ I received an email from the Outbreak Squad Coordinator on 17 June 2020 providing the report prepared by the Outbreak Squad nurse following her visit: email to me and others, 17 June 2020, DHS.5000.0076.5215.

²² Minutes of OMT Meeting, 17 June 2020, DHS.5000.0093.7360.

possible, nor observed by those attending. This close contact increased the risk of person-to-person transmission of COVID-19.

78. Fifth, there was an increased risk of person to person cross contamination caused by behaviours within the particular environment, namely:
- (a) the common use of a security guard room (including by other staff);
 - (b) the use of non-disposable food utensils;
 - (c) the use of a shared coffee machine in the security guard room;
 - (d) security staff having access to the room used by nurses and other Department staff;
 - (e) shared use of elevators; and
 - (f) shared use of some bathrooms.
79. These matters may have increased risk or not adequately protected against the risk of COVID-19 transmission at the Stamford.
80. Factors specific to the Stamford included:
- (a) a hairdressing business on the ground floor had to use the Stamford hotel lobby as an entrance. The business was conducted in a separate area to the hotel reception and had its own bathrooms. We determined, however, that this did not contribute to the outbreak;
 - (b) there were no records available to identify security guards who accompanied detainees on fresh air breaks.²³ This complicated and hindered the identification of close contacts and ultimately required a broader definition of 'close contact' to be adopted leading to a greater number of staff requiring to self-isolate and be tested;
 - (c) as part of the contact tracing efforts, we identified that several of the confirmed case security guards carpooled, which may have been, but was not confirmed as a source of transmission between some of the Stamford cases.²⁴

²³ Outbreak Management Report - Stamford Plaza Outbreak 19 July 2020, p 12, DHS.0001.0036.0203.

²⁴ Minutes of OMT Meeting, 19 June 2020, DHS.5000.0093.5613.

18. In respect of the outbreak at the Stamford Plaza Hotel, did the Outbreak Squad identify any other Hotel Quarantine premises that were, or could be connected, to:

- (a) known COVID-19 positive cases;**
- (b) suspected COVID-19 positive cases;**
- (c) close contacts of known or suspected COVID-19 cases.**

If so, please provide details.

81. As I have stated, it is not a function of the Outbreak Squad to determine these matters.
82. On or about 21 June 2020, the OMT identified a positive case from Stamford as working one night during their infectious period at the Park Royal Hotel. Fifteen people were identified as close contacts at the Park Royal Hotel and steps taken to inform those close contacts to isolate.²⁵
83. On 1 July 2020, a Department employee **REDACTED** at Stamford (and who had been in quarantine since 17 June 2020 having been exposed on 13 June 2020) tested positive on a day 11 swab while being asymptomatic. That individual had worked at the Park Royal on 16 June 2020.²⁶

19. Did any member(s) of the Outbreak Squad interview, question or speak directly to the:

- (a) index case(s); or**
- (b) epidemiologically and/or genomically ascribed source(s),**

of the transmission which precipitated the outbreak of COVID-19 at the Stamford Plaza Hotel? If so, what if anything did those discussions reveal about the circumstances of any potential transmission events?

84. The Outbreak Squad did not interview or speak directly to the index case or epidemiologically/genomically ascribed source(s) but members from CCOM did.

²⁵ Minutes of OMT Meeting, 22 June 2020, DHS.5000.0094.2945.

²⁶ Email from Dr Crouch, copied to me, 1 July 2020, DHS.5000.0036.2867.

85. I am not aware of a transmission event being identified from those interviews or from other sources.
86. The Stamford Plaza Hotel was a different setting to the Rydges Hotel in that Rydges was designated as a COVID-19 positive hotel (where confirmed cases were accommodated after relocation from other hotels), whereas Stamford was a general quarantine hotel, from which confirmed cases, once identified, were moved out to a COVID-19 positive hotel.

20. Was the Outbreak Squad able to determine the likely:

- (a) mode(s) of transmission;**
- (b) event(s) in which transmission occurred,**
- (c) precise location(s) of transmission,**
- in respect of the outbreak at Stamford Plaza Hotel?**

87. Determining transmission is not a function performed by the Outbreak Squad. Rather, that is a matter for Outbreak Lead and the Epidemiology Lead in consultation with the OMT.
88. The hypothesis recorded in the Outbreak Management Report following review of data from a genomic analysis is that the cases associated with the Stamford Plaza outbreak were introduced to the hotel via one or more returned travellers from overseas. Cases linked to this outbreak belong to two distinct but closely related genomic clusters that include returned travellers who spent time in hotel detention at the Stamford Plaza in June 2020. The relationship between these two clusters is currently unclear.²⁷
89. Ultimately, the Deputy Public Health Commanders and I were unable to draw a firm conclusion about the transmission event(s) that precipitated the outbreak. Genomic data suggests that the virus was introduced to hotel staff via one or more returned travellers from overseas. Transmission from a COVID-19 positive case in quarantine may have occurred directly (through person-to-person transmission) or

²⁷ Outbreak Management Report - Stamford Plaza Outbreak 19 July 2020, DHS.0001.0036.0203 (page 10).

via fomites. There is insufficient evidence to support one mode of transmission over the other and both are possible.

21. In respect of meetings concerning the outbreak at Stamford Plaza Hotel conducted by the Outbreak Squad, were notes or minutes taken? If so, please identify when such meetings occurred and who was present at them. In addition, please provide copies of any notes or minutes of those meetings.

- 90. The Outbreak Squad does not meet or take minutes but does provide reports of its findings or activities. The Outbreak Squad Coordinator or a relevant Outbreak Squad member often discussed their reports at the OMT meetings.
- 91. The OMT generally, but did not always, keeps minutes of its meetings. The minutes relating to the Stamford Plaza Hotel meetings and the identity of those present are identified in the table below:

Date	Minutes	Present
16/06/2020	No Minutes	I do not know who attended this meeting. That a meeting occurred on this day (and on 21 and 21 June) is recorded in the Outbreak Management Report.
17/06/2020	DHS.5000.0093.7360	Braedan Hogan, REDACTED REDACTED Merrin Bamert, REDACTED, Sarah McGuinness, Simon Crouch, REDACTED, Jason Helps, REDACTED REDACTED REDACTED
18/06/2020	DHS.5000.0105.5646	REDACTED Breadan Hogan, Sarah McGuinness, REDACTED REDACTED REDACTED Merrin Bamert, REDACTED REDACTED
19/06/2020	DHS.5000.0093.5613	REDACTED REDACTED

Date	Minutes	Present
		Merrin Bamert, REDACTED REDACTED Pam Williams, REDACTED Sarah McGuinness, REDACTED
20/06/2020	No Minutes	I do not know who attended this meeting.
21/06/2020	No Minutes	I do not know who attended this meeting.
22/06/2020	DHS.5000.0094.2945	REDACTED REDACTED Merrin Bamert, Pam Williams, REDACTED REDACTED REDACTED
24/06/2020	DHS.5000.0093.5627	REDACTED REDACTED Merrin Bamert, Pam Williams, REDACTED REDACTED
25/06/2020	DHS.5000.0093.7695	REDACTED REDACTED Merrin Bamert, Pam Williams, REDACTED REDACTED REDACTED
26/06/2020	DHS.5000.0093.7740	REDACTED REDACTED Pam Williams, Sarah McGuinness, REDACTED
28/06/2020	DHS.5000.0090.2015	REDACTED Braedan Hogan, REDACTED REDACTED
01/07/2020	DHS.5000.0094.2080	REDACTED REDACTED Sandy Austin, REDACTED Braedan Hogan, REDACTED

HOTEL QUARANTINE PROGRAM

22. Did you have any reservations about any aspect of the Hotel Quarantine Program:

(a) generally;

(b) as administered at the Rydges Hotel, Carlton,

(c) as administered at the Stamford Plaza Hotel,

at any time? If you did, what were your reservations, and to whom, if anyone, did you express them?

92. I had reservations about some aspects of the Hotel Quarantine Program. Those concerns arose in the context of the Rydges and Stamford outbreak investigations. They are the matters I discuss in questions 12 and 17 above.
93. Where those concerns fell within outbreak management, my concerns were addressed by the OMT. For example, the Outbreak Squad IPC nurses attended both hotels and provided training and monitored PPE and IPC practices.
94. My main concern related to inadequate cleaning and infection control processes. I expressed my concerns to Operation Soteria. For example, in the Rydges response, on 29 May 2020, I sent Operation Soteria recommendations about cleaning and guidelines for cleaning and disinfection.²⁸
95. I also knew that Operation Soteria representatives attended some of the OMT meetings and were privy to some of the issues discussed at those meetings.

FURTHER INFORMATION

23. If you wish to include any additional information in your witness statement, please set it out below.

96. It is important to recognise that information and quality of information is vital to efforts to contain outbreaks. In particular, detailed information about the movements of cases and close contacts is vital to informing the appropriate public health actions in an outbreak response.

²⁸ Email from me, 29 May 2020, DHS.5000.0105.5941 attaching cleaning and disinfecting guidelines DHS.5000.0105.5942.

97. In responding to outbreaks, CCOM have to work with the information available to us. We have to assume that the information we are provided with is truthful and accurate and act on it as such. It presents challenges for contact tracing and outbreak management when people do not provide us with all or complete information up front. That incomplete data weakens the investigation and the rapidity in which public health measures can be implemented.
98. For example, the first case identified by the Department in a contractor at the Stamford Hotel was notified on 16 June 2020 after reporting symptom onset on 15 June 2020. An OMT was convened on 16 June in response. However, we later discovered that a case notified to the Department on 14 June 2020 after reporting symptom onset on 10 June 2020 was in fact also a Stamford Hotel contractor. When this case was first interviewed, they falsely stated that they did not work outside of the home and we only discovered the person had in fact been working as a security guard at the Stamford after speaking to the person's employer in the course of the outbreak investigation. Had we been provided with truthful and accurate information in the first instance, an OMT could have been convened 48 hours earlier, and appropriate public health actions could have been implemented more rapidly.
99. In another example, one of the contractor cases linked to the Rydges Hotel outbreak failed to disclose to the CCOM team that they had been in close contact with a house mate during the infectious period. The close contact (house mate) in question left the house for Queensland early on the morning that the Department made contact with the case. The Department was unaware of the existence of this close contact (house mate) until they developed symptoms and subsequently tested positive in Queensland, with notification was made by Queensland Health on about 6 June 2020. If the existence and identity of this close contact had been disclosed from the outset, the close contact would have been advised to quarantine, which would have prevented a number of exposures and the need for additional contact tracing efforts, which were undertaken by the Department in consultation with Queensland Health.²⁹
100. Further, in my opinion, the documentation around staff and detainee interactions and staff-staff interactions in quarantine hotel environments was not adequate. For example, it was not possible to identify which security guards accompanied guests

²⁹ The circumstances of this event are recorded in an email sent by DPHC CCOM, copied to me, 6 June 2020, DHS.5000.0036.5093.

on fresh air breaks. This made the investigations at Rydges and Stamford challenging, and also limited conclusions that could be drawn because potential transmission events were unable to be identified with the necessary degree of certainty. The outcome of that uncertainty was the necessity to expand the definition of who was considered a close contact and thus who had to quarantine and be tested. This included departmental staff working in COVID-19 response.

101. It is also important to acknowledge that scientific understanding of COVID-19 has and continues to develop as data on the SARS-CoV-2 virus becomes available. PPE and IPC practices that were regarded as being appropriate in May 2020 are not necessarily the same as would be recommended now.

Signed at Melbourne
in the State of Victoria
on 21 August 2020



Dr Sarah McGuinness