



# Memo

## Adapting COVID-19 Surveillance, Intelligence and Contact Tracing Reporting and Data Management for Omicron

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<b>Date:</b>	27 January 2022
<b>To:</b>	Dr Ashley Bloomfield, Director General of Health
<b>Copy to:</b>	Dr Caroline McElnay, Director of Public Health Dr Ian Town, Chief Science Advisor Sarah Turner, Acting Deputy Chief Executive, COVID-19 Health System Response Robyn Shearer, Deputy Director General, District Health Board Performance & Support Shayne Hunter, Deputy Director General, Data and Digital
<b>From:</b>	Gill Hall, Group Manager, Science and Insights, COVID-19 Health System Response
<b>For your:</b>	Decision

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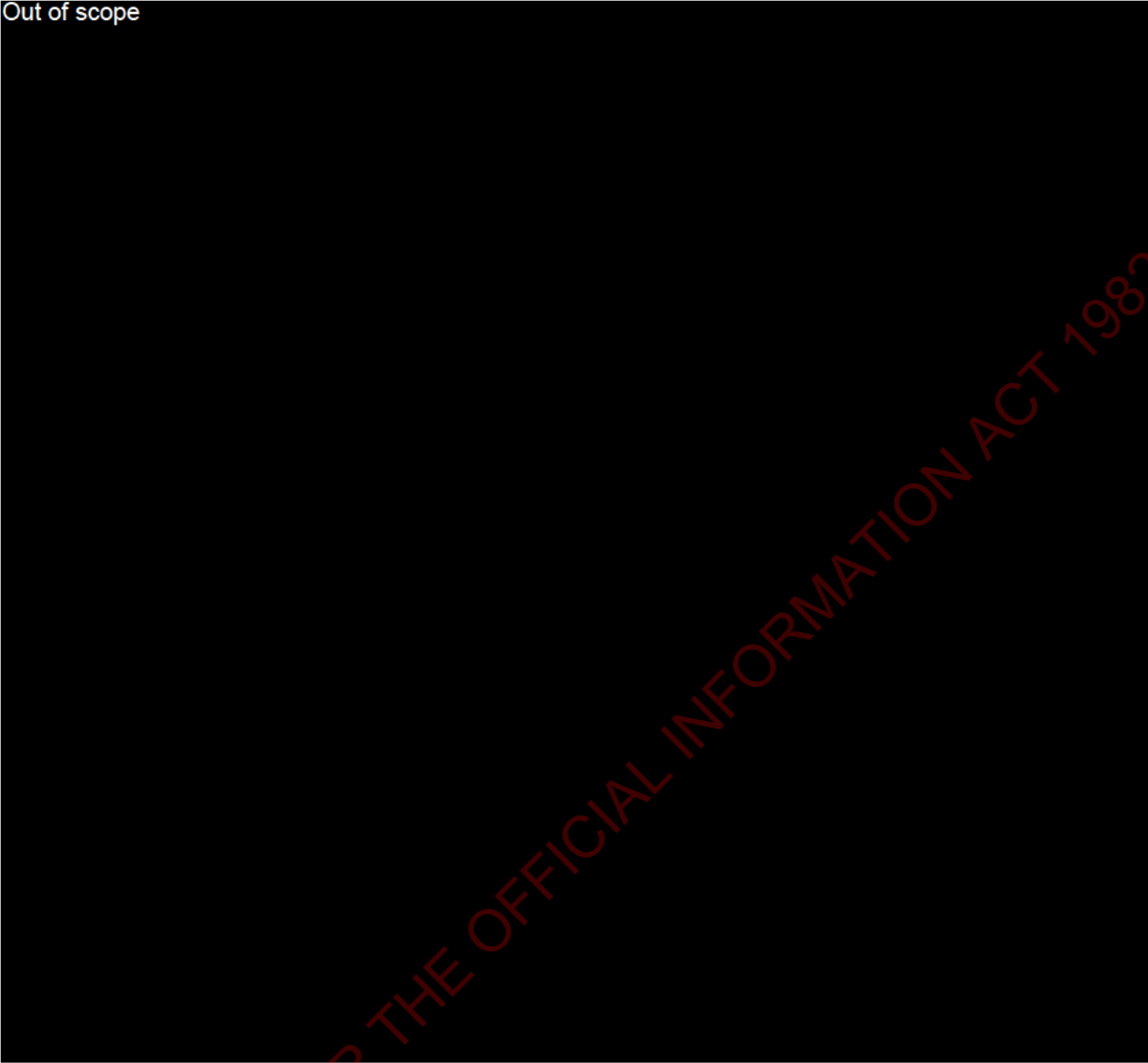
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<p>Deaths</p>	<p>IMT – PHU immediately notifies IMT of the death</p> <p>EpiSurv</p>	<p>There is currently a delay between the call notifying IMT of a death and the information being uploaded to EpiSurv. This reporting lag will increase during an Omicron outbreak.</p> <p>If post-mortems are needed, there could be months of delay in reporting accurate mortality figures.</p> <p>As the number of deaths increase a standard definition of COVID-19 death will be required for reporting purposes.</p>	<p>We are working with Data and Digital to create a more robust way of reporting on deaths related to COVID-19. This will use mortality data already available in the Ministry's data warehouse.</p>
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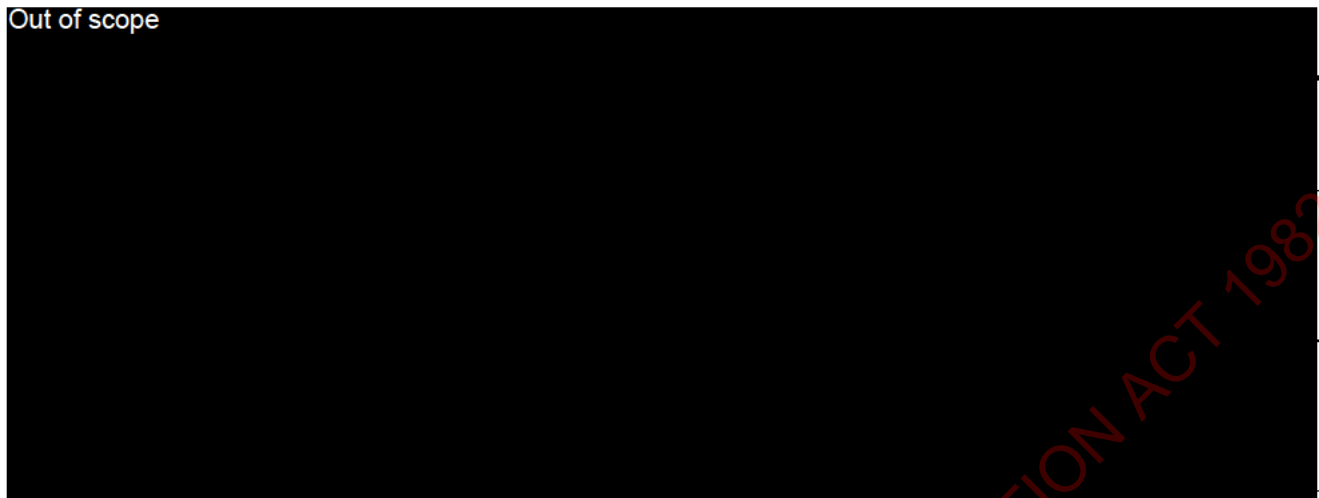
## Next Steps

34. The COVID-19 Science and Insights group is continuing to monitor the situation and assess how to respond most effectively in the case of a community outbreak of the Omicron variant. As numbers fluctuate and we work to effectively mitigate varying data quality, you will be kept informed of any significant changes in reporting or assumptions moving forward.

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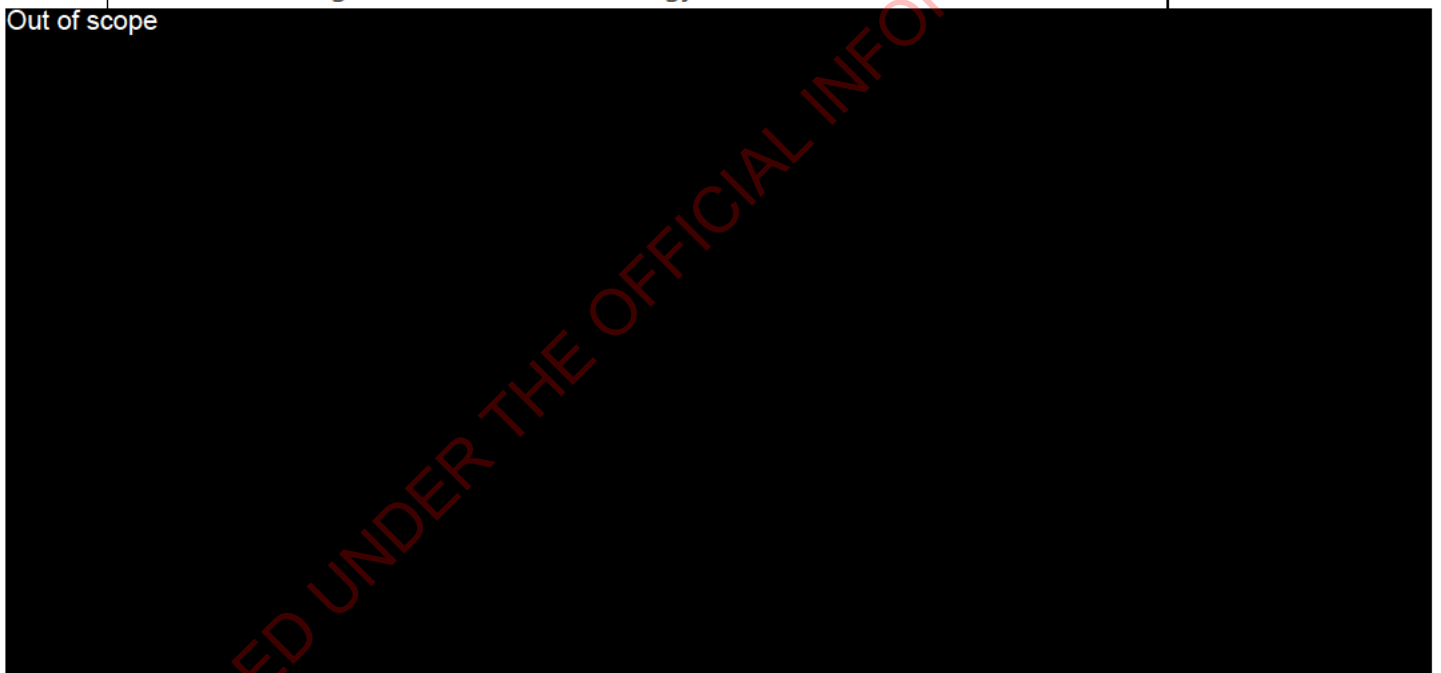
## Recommendations

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4.	Agree	Establish a clear process for streamlining in the health system, how death as a result of COVID-19 infection, is reported across all stages of the Omicron Strategy.	Yes/No
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Signature



Date:

**Gill Hall**

**Group Manager, Science and Insights**

**COVID-19 Health System Response**

Signature \_\_\_\_\_

Date:

**Dr Ashley Bloomfield**

**Director General of Health**

# Memo

## COVID-19 Reporting: Phase 2 of the Omicron Strategy

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**Date:** 15 February 2022

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**To:** Dr Ashley Bloomfield, Director General of Health

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**Copy to:** Dr Caroline McElnay, Director of Public Health  
Dr Ian Town, Chief Science Advisor  
Bridget White, Deputy Chief Executive, COVID-19 Health System Response  
Robyn Shearer, Deputy Director General, District Health Board Performance and Support  
Shayne Hunter, Deputy Director General, Data and Digital  
Brent Quin, Group Manager Response and Coordination, COVID-19 Health System Response  
Chrystal O'Connor, Group Manager Contact Tracing, COVID-19 Health System Response  
Toby Regan, Group Manager, National Public Health Operations, COVID-19 Health System Response  
Michael Dreyer, Group Manager and Chief Technology Officer, National Digital Services

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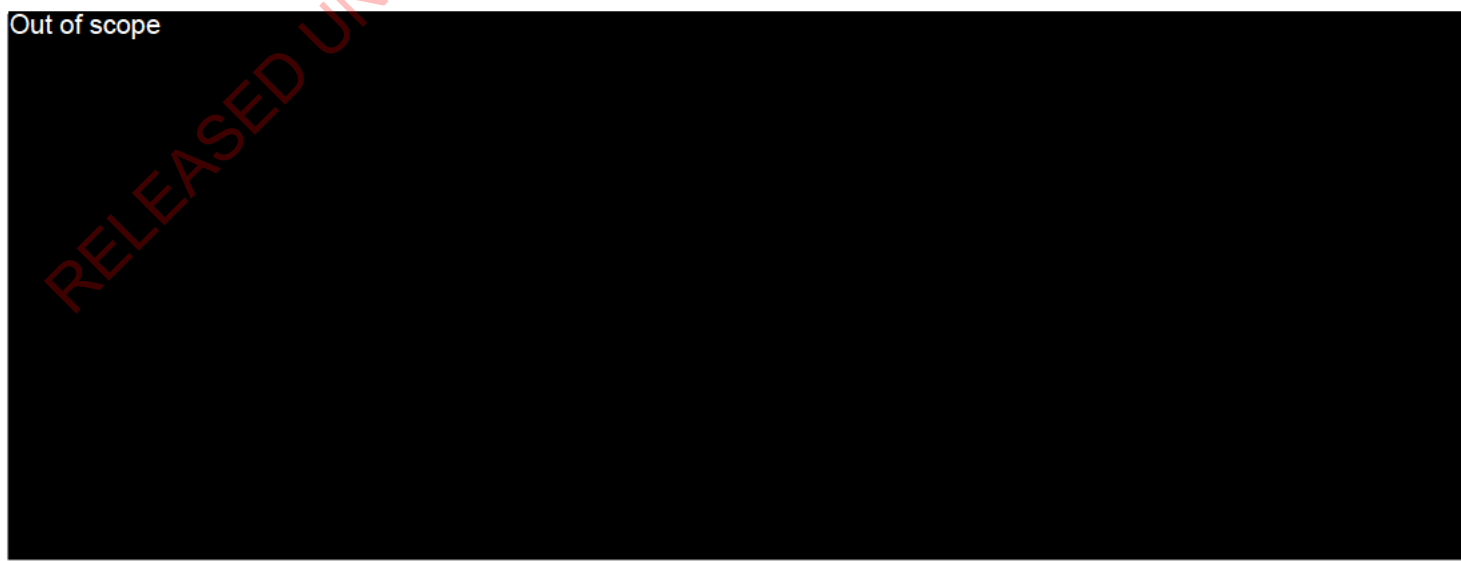
**From:** Gill Hall, Group Manager, Science and Insights, COVID-19 Health System Response

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**For your:** Approval

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Out of scope



## Context

4. The 'January Omicron Outbreak' has triggered the need for a new approach to reporting and data collection. On 26 January 2022 the Government announced its three-phase public health response to Omicron; 'stamp it out,' 'slow the spread or 'flatten the curve' and 'manage the impact.' This phased approach will include changes to both testing and isolation approaches as New Zealand responds to increasing case numbers.

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<b>Deaths</b>	From IMT / EpiSurv	<p>As deaths are likely to increase, we will use mortality data –</p> <ol style="list-style-type: none"> <li>1. Death within 28 days of positive test</li> <li>2. Deaths where C19 cause</li> <li>3. Deaths where C19 contributed</li> <li>4. The number of 1 where cause of death is under investigation</li> </ol> <p>(Note: metrics 2 &amp; 3 are not a subset of metric 1 as COVID-19 can be the cause of death more than 28 days after a positive test)</p>	<p>Able to do this as soon as we move to Phase 2. This approach is consistent with Australia and UK</p> <p>Deaths – with limited information – <u>will be reported every day</u>, and detailed information will be provided as frequently as possible while maintaining individual privacy</p> <p>(Note: this is estimated to be every 2 weeks)</p>
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## Recommendations

It is recommended that you:

1.	Approve	The shift in COVID-19 reporting and key metrics for phase 2 of the Omicron Strategy	Yes/No
2.	Discuss	The content of this memo with Hon Chris Hipkins, Minister for COVID-19 Response and Hon Dr Ayesha Verrall, Associate Minister of Health	Yes/No
3.	Note	Actions are underway across the Ministry's Science and Insights, Data and Digital and Care in the Community groups	Noted ✓

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Signature *Gill Hall*  
Gill Hall  
**Group Manager, Science and Insights**  
**COVID-19 Health System Response**

Date: 15/2/2022.

Signature *Dr Ashley Bloomfield*  
Dr Ashley Bloomfield  
**Director General of Health**

Date: 16/2/22



Thanks all.

Please provide a clean copy of the memo to Ministers H & V for discussion next week as an item (Mott only) with Ministers @ the Minister H meeting next week. *A.B.*



# Memo

## COVID-19 Out of scope and Mortality Data

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**Date:** 18 March 2022

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**To:** Dr Ashley Bloomfield, Director-General of Health

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**Copy to:** Bridget White, Deputy Chief Executive, COVID-19 Health System Response  
Robyn Shearer, Deputy Chief Executive Sector Support and Deputy Director-General DHB Performance and Support  
Dr Robyn Carey, Chief Medical Officer  
Shayne Hunter, Deputy Director-General, Data and Digital

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**From:** Gill Hall, Group Manager, Science Surveillance and Insights  
Chris Knox, Team Leader, Data and Analytics

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**For your:** Information and Action

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Out of scope

- c. A reconfirmation on how we report deaths, and
  - d. A summary of the decisions made to reconcile the mortality data when we switched methods.
2. We recommend you discuss the contents of this memo with Hon Dr Ayesha Verrall, Associate Minister of Health and Associate Minister of COVID-19 Response.

### Background

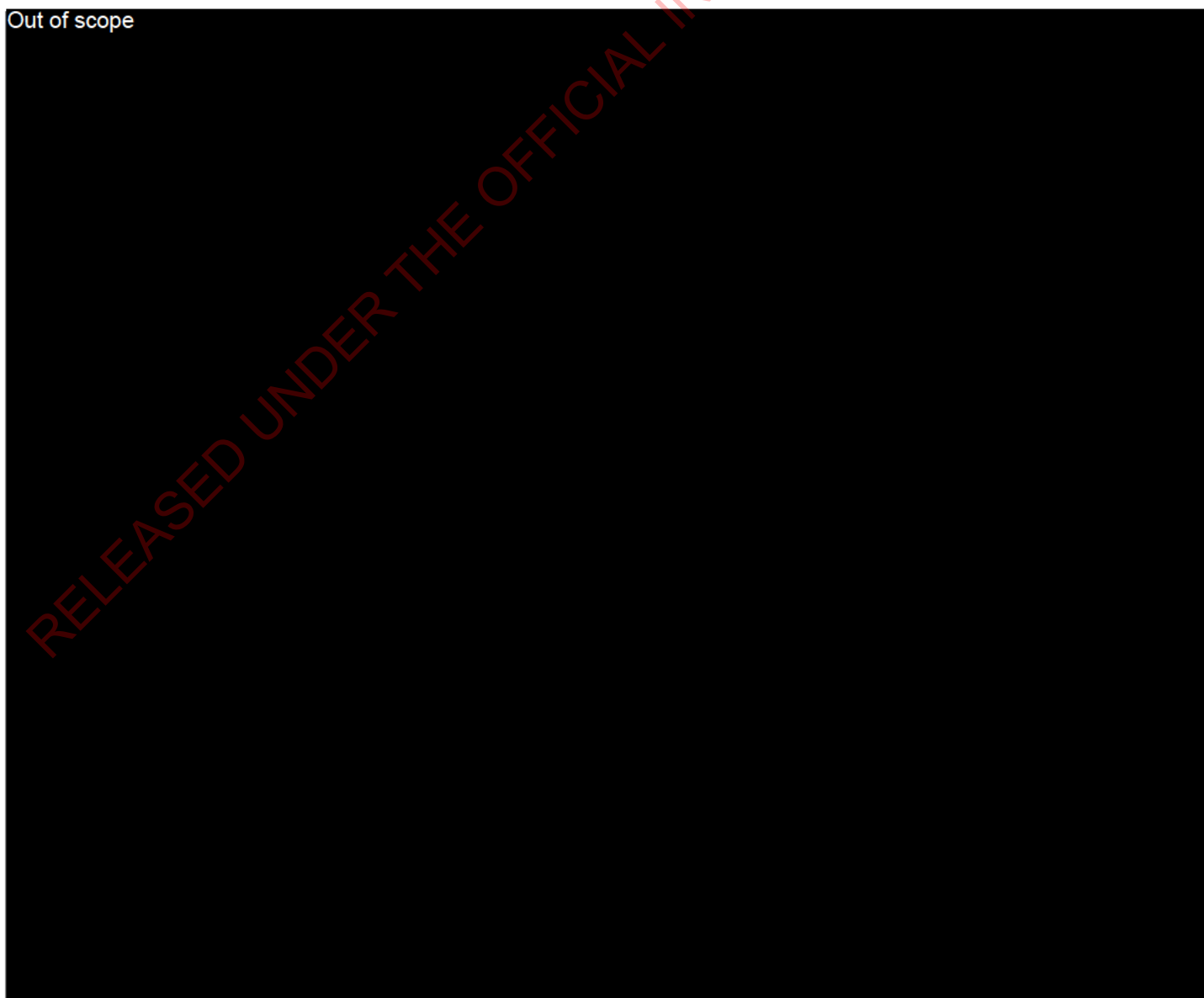
3. The January Omicron Outbreak triggered the need for a new approach to reporting and data collection. On 26 January 2022 the Government announced its three-phase public health response to Omicron; 'stamp it out,' 'slow the spread' and 'manage the impact.' This phased approach included changes to both testing and isolation approaches as New Zealand responded to increasing cases numbers.

4. As indicated in a previous memo<sup>1</sup>, surveillance reporting and intelligence analysis would be affected as we move from low, to medium, to high case numbers. Data quality and timeliness issues would also occur more often as New Zealand progressed nearer to and surpass, the 'flatten the curve' stage of outbreak management.
5. The COVID-19 Protection Framework (CPF) settings and Public Health Risk Assessments (PHRAs) rely on the use of expertise and data to inform a robust assessment of the evolving COVID-19 situation, public health risk, as well as the capacity and capability of the health system to respond.

#### Omicron Variant

6. Omicron, also referred to as the B.1.1.529 strain, was first identified in mid-November 2021. Due to the increased infectiousness in late 2021 New Zealand began to prepare for increased case numbers and re-evaluate border settings and public health measures, as well as encourage adult booster and child vaccinations.
7. New Zealand has, in many ways, followed international trends when it comes to Omicron infectiousness and severity. Whilst Omicron does not appear to result in as many people being hospitalised, because it can cause so many infections over a short period of time, the number of people going to hospital each week has risen. In addition, Omicron can still cause severe illness and death, especially in people who are at risk of severe outcome.

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## Mortality

*What we have recorded up till now*

24. The World Health Organisation identifies that COVID-19 deaths are a key indicator in tracking the evolution of the pandemic.
25. Deaths have been reported via verbal updates from DHBs because until the Omicron outbreak New Zealand has maintained a very low mortality rate from COVID-19.
26. From 9 March 2022, the Science, Surveillance and Insights Group began reporting on deaths, delineated by those whose primary cause of death was COVID-19, and those who cause of death was something else, but the individuals also happened to have a COVID-19 infection.
27. This data is collated from the Ministry's mortality database.

*International Comparison*

28. Countries use different processes to test and report COVID-19 deaths, thus making international comparisons of data difficult.
29. However, our current approach to capture and report mortality, is consistent with that of both Australia and the United Kingdom.



30. The United Kingdom reports on deaths that occur within 28 days of testing positive for COVID-19.
31. Australia does not appear to have a clearly defined definition of deaths that occurred with COVID-19. The Australian Bureau of Statistics (ABS) provides a lot of detail on COVID-19 deaths but there is a significant lag. Only 2,639 of 5,639 deaths are included in the ABS data.

*What challenges have we encountered?*

32. Coding to support the collation of mortality data in Snowflake (reporting tool), took longer than initially expected. This necessitated manual collation for a short period of time, which increased the risk of error (noting inaccuracy reported in media on 10/03/2022). The coding for the use of mortality data and reconciliation of data sources are now complete. ✓
33. Establishing a timely, but rigorous protocol with sufficient detail for providing initial information from DHBs to the Ministry took some time. This process provides a way for the Ministry to be informed about, and then announce, COVID-19 related deaths, but it does not replace formal death reporting systems. ✓
34. Understanding which variant an individual was infected with upon death can be challenging as this requires a polymerase chain reaction (PCR) test conducted in a laboratory. The majority of COVID-19 deaths will occur in hospital, so will largely be covered by whole genome sequencing (WGS) testing. But there are aged-care, coroner, community deaths, for example, other deaths that are not easily captured by WGS. ✓
35. Advice is being sought on whether post-mortem COVID-19 testing is advisable. *Timing? Keep to see this when through.*
36. You have received separate information on the 'Operationalisation of Whole Genome Sequencing Prioritisation' [15 March 2022]. ✓

*What you can expect to see going forward*

37. Reported daily in the Situation Report are the overall death total, and those cases who have died within 28 days of being reported as a case. This is accompanied by Table 1, which outlines the demographic detail of new deaths reported in the previous 24 hours as at 0900 on the day of report.
38. Deaths, with limited information, will be reported every day and detailed information is provided as frequently where possible whilst maintaining individual's privacy. ✓
39. Where applicable, reporting will also include deaths where the cause remains under investigation.

*Our next steps for capturing COVID-19 mortality data*

40. The daily Situation Report will continue to note the deaths the Ministry has been notified of over the past 24-hour period. In addition, the 28-day and announced count are published on the website and in media statement. A more detailed breakdown was added to the SitRep and the website on 16 March 2022.

**Excess Mortality**

41. Excess mortality is defined as the difference in the total number of deaths in a crisis, *or specific time period / situation* compared to those expected under normal conditions. COVID-19 excess mortality accounts for both the total number of deaths directly attributed to the virus as well as the indirect impact, such as disruption to essential health services.

42. The global excess mortality has been estimated by the World Health Organisation (WHO). While 1,813,188 COVID-19 deaths were 'officially' reported in 2020, the recent WHO estimation suggests that there is a global excess mortality of at least 3 million.
43. At present the Ministry has crude mortality rates over time and these can be stratified to some extent to provide an immediate estimate of excess mortality
44. The Ministry is also working with 'Stats NZ' to determine New Zealand's excess mortality. This work will indicate to what extent New Zealand is seeing greater mortality compared to other years before COVID-19. This will provide an analysis of deaths that COVID-19 caused of contributed to, compared to those who also had the infection at their time of death.
45. 'Stats NZ' are currently developing a system to enable adjusting for age, gender and ethnicity to evaluate excess mortality compared to other years.
46. Once we have the estimates of Excess mortality we will include in the upcoming Surveillance Report. Published monthly, the next iteration will be disseminated on 8 April 2022 or weekly Trends and Insights if it can be done that frequently.
47. We will request formally a response from Stats NZ what is feasible on weekly or monthly basis.

*I think monthly is reasonable.  
There is likely to be too much variation  
on a weekly basis - but if can be done  
(and worthwhile) that's good*

## Recommendations

It is recommended that you:

1.	Agree	To discuss the contents of this memo with Hon Dr Ayesha Verrall.	Yes/No
2.	Note	Contents of the memo	Noted ✓

Signature \_\_\_\_\_ Date:

Gill Hall

**Group Manager, COVID-19 Science Surveillance and Insights**  
**COVID-19 Health System Directorate**

Signature \_\_\_\_\_ Date:

Dr Ashley Bloomfield

**Te Tumu Whakarae mō te Hauora**  
**Director-General of Health**

Date: 21 / 3 / 22

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