

Reviewing a COVID-19 patient cluster/ outbreak in a healthcare setting

Purpose

To guide the review of COVID-19 clusters/ outbreaks in patients in healthcare settings. This advice sits alongside the NSW Health Incident Management Policy ([PD2020_047](#)).

- A COVID-19 outbreak is defined as one confirmed case.
- A COVID-19 cluster is a number of cases (2 or more) linked to the same transmission event.

A cluster/ outbreak is confirmed by a designated local authority, such as a laboratory, Public Health, Infectious Diseases or Infection Prevention and Control.

A healthcare setting includes hospitals, Special Health Accommodation (SHA), COVID community support accommodation and any other alternate locations of healthcare.

Notification

- Notify the cluster/ outbreak in ims⁺. This is a corporate incident.
- Notify each patient case separately. These are clinical incidents.
- Link the incidents in ims⁺.

Classification for the cluster/ outbreak

- Select “**No person**” for “Who or what was most affected?”
- Select “**Facility Outbreak Cluster**” for the “Principal Incident Type” and then “**Respiratory Virus – COVID-19**” in “Please categorise this incident type further”.
- Include the term “**COVID-19 exposure**” in “Details”.

Classification for each patient

- Select “**Patient**” for “Who or what was most affected?”
- Select “**Healthcare Associated Infection**” for the “Principal Incident Type”
- Include the term “**COVID-19 exposure**” in “What Happened? – Details”.

Open Disclosure

Communicate with patients/ families as per NSW Health Open Disclosure Policy ([PD2014_028](#)).

Escalation

Cluster/ outbreak

Send one **reportable incident brief (RIB)** to the Ministry of Health for the cluster/ outbreak. This is a corporate RIB.

Then undertake a **safety check**. Use the new “Safety check for COVID-19 patient cluster/ outbreak in a healthcare setting” template.

Patient cases

For each death in the cluster/ outbreak that meets the definition of a ‘reportable incident’ as set out in Appendix D of PD2020_047, send a **RIB** to the Ministry of Health. These are clinical RIBs. Include high level content and state that the RIB has limited information about the individual case.

Then undertake a **preliminary risk assessment (PRA)** for each patient death.

Review

Cluster/ outbreak

Review via a rapid root cause analysis (RCA). Use the new “Cluster/ outbreak review report” template.

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Submit this report to the Ministry of Health within 45 days or sooner.

Patient cases

Undertake a serious adverse event review (SAER) via a rapid RCA for each patient death reportable incident in the cluster/ outbreak. Use the new “SAER Individual COVID-19 incidents resulting in patient death” template. Submit these SAER reports to the Ministry of Health within 60 days or sooner.

For all other patient cases, individual review is via the cluster/ outbreak review.

Patient/ Family Reports

Provide an individual report to each patient/ family. The new patient/ family report templates are recommended, or use similar local templates.

- Patient/ family report for a COVID-19 cluster review
- Family report for SAER for a COVID-19 case

If requested, the cluster/ outbreak report or COVID-19 SAER report is to be made available to the patient/ family.

State-wide Learning

The Clinical Excellence Commission will review and analyse the Cluster/ outbreak reviews (corporate) and the COVID-19 SAERs via a sub-committee of the Clinical Risk Action Group.

Classifying individual cases

Consider each patient death on a case-by-case basis to determine if the reportable incident definition applies.

Think carefully about:

- Whether a hospital onset for a patient's COVID infection is likely.
- Co-morbidities
- Vaccination status
- Whether a patient was on an end-of-life pathway
- The overall risk in NSW at the time of a patient's COVID infection (e.g. 7-day case numbers average across the state and in the Local Government Area; Local Government Area of Concern).

Use established frameworks or evidence to support decision making. The [Victorian Department of Health](#) hospital onset COVID-19 definition below is recommended.

- Definite hospital-acquired COVID-19 (diagnosed during hospital stay)
 1. Confirmed positive RT-PCR test OR symptom onset on day >14 of hospital stay
- Definite hospital-acquired COVID-19 (diagnosed post-discharge)
 1. Confirmed positive RT-PCR test OR symptom onset within 2 days following discharge from hospital AND patient was admitted to hospital at least 14 days prior to symptom onset
- Probable hospital-acquired COVID-19 (hospital stay)
 1. Confirmed positive RT-PCR test OR symptom onset on day 8-14 of hospital stay AND no known exposure or risk factors prior to hospitalisation

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2. Confirmed positive RT-PCR test OR symptom onset on day 3-7 of hospital stay AND strong suspicion of healthcare transmission AND no known exposure or risk factors prior to hospitalisation
 3. Confirmed positive RT-PCR test OR symptom onset within 14 days of an exposure to a confirmed COVID-19 case during previous hospitalisation AND no known exposure or risk factors in the community.
- Probable hospital-acquired COVID-19 (diagnosed post-discharge)
 1. Confirmed positive RT-PCR test OR symptom onset on day 3-14 following discharge from hospital AND strong suspicion of healthcare transmission AND no known exposure or risk factors after discharge or prior to hospitalisation (where admission occurred less than 14 days prior to symptom onset)
 2. Confirmed positive RT-PCR test OR symptom onset within 2 days following discharge from hospital AND patient was admitted to hospital less than 14 days prior to symptom onset AND strong suspicion of healthcare transmission AND no known exposure or risk factors after discharge or prior to hospitalisation (where admission occurred less than 14 days prior to symptom onset).

Considerations for appointing PRA and SAER teams

Standing appointments are recommended.
Consider using the same team members for the

PRA and SAER for each case. Additional members can be appointed individually.

Team membership

Consider Infection Prevention and Control (IPAC), Public Health Unit, Infectious Diseases, Nurse Unit Manager, Staff Specialist, Microbiology, Engineering or any other relevant persons.

Consultation

Consider Clinical Excellence Commission, State Health Emergency Operations Centre (SHEOC), Ministry of Health.

What is different to the regular PRA and SAER processes?

- A delegate can convene a PRA team and/ or a SAER team on behalf of the Chief Executive
- An expert panel for COVID-19 may be chosen as the PRA and/ or SAER members
- Standing appointments for PRA or SAER can name more positions than required. A record must be kept of actual team members
- Interviews are undertaken as deemed relevant
- The SAER report for Individual COVID-19 cases is a combined findings and recommendations template.

For further information and support, please contact the Clinical Excellence Commission Patient Safety Directorate.

Speak with a dedicated Patient Safety Analyst liaison or contact Sharon Campbell, Associate Director, Patient Safety, on 0417 098 400 or at Sharon.Campbell1@health.nsw.gov.au