Victorian sentinel event guide

Essential information for health services about managing sentinel events in Victoria
This guide has been prepared to help health services in Victoria fulfil their obligations when managing and reporting sentinel events.

Sentinel events are broadly defined as wholly preventable adverse patient safety events that result in serious harm or death to individuals. All health services are required to report adverse patient safety events in accordance with the Australian national sentinel event list.

The national list provides guidance on 10 main event categories. But it is not comprehensive; some sub-categories of adverse patient safety events fall outside the 10 main categories.

This Victorian guide has been prepared to help fill in the gaps – to help Victorian health services and their staff manage sentinel events not covered in detail in the Australian national list. As such, this guide should serve as a supplement to the national list, not a substitute for it.

The guide contains descriptions, examples and case studies to help health services identify sentinel events under Victorian category 11: *All other adverse patient safety events resulting in serious harm or death*.

It also includes an overview of what is required of health services when reporting and reviewing sentinel events.

The case studies in this guide are for illustrative purposes only, and reflect learnings from the Victorian sentinel event program. The case studies do not represent actual sentinel events, nor an exhaustive list of examples.

For support and advice on determining if an any adverse patient safety event meets sentinel event criteria please contact the incident response team at sentinel.events@safercare.vic.gov.au or 03 9096 1546.
Background

Sentinel events are a subset of adverse patient safety events that are wholly preventable and result in serious harm to, or death of, a patient. Sentinel events are relatively infrequent, clear-cut events that:

- occur independently of a patient’s condition
- commonly reflect hospital (or agency) system and process deficiencies
- result in unnecessary adverse outcomes for patients

In January 2019 the Australian Commission on Safety and Quality in Healthcare (ACSQHC) published a revised national sentinel event category list. It came into effect on 1 July 2019.

In addition to the 10 national sentinel event categories, all Victorian health services are required to adhere to category 11: All other adverse patient safety events resulting in serious harm or death. Thus, Victorian health services must report for:

- 10 national categories
- One Victoria-only category.

The national sentinel event categories are listed in opposite.

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**Australian sentinel events list (version 2)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Surgery or other invasive procedure performed on the wrong site resulting in serious harm or death</td>
</tr>
<tr>
<td>2</td>
<td>Surgery or other invasive procedure performed on the wrong patient resulting in serious harm or death</td>
</tr>
<tr>
<td>3</td>
<td>Wrong surgical or other invasive procedure performed on a patient resulting in serious harm or death</td>
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<tr>
<td>4</td>
<td>Unintended retention of a foreign object in a patient after surgery or other invasive procedure resulting in serious harm or death</td>
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<tr>
<td>5</td>
<td>Haemolytic blood transfusion reaction resulting from ABO incompatibility resulting in serious harm or death</td>
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<tr>
<td>6</td>
<td>Suspected suicide of a patient in an acute psychiatric unit or acute psychiatric ward</td>
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<tr>
<td>7</td>
<td>Medication error resulting in serious harm or death</td>
</tr>
<tr>
<td>8</td>
<td>Use of physical or mechanical restraint resulting in serious harm or death</td>
</tr>
<tr>
<td>9</td>
<td>Discharge or release of an infant or child to an unauthorised person</td>
</tr>
<tr>
<td>10</td>
<td>Use of an incorrectly positioned oro- or naso-gastric tube resulting in serious harm or death</td>
</tr>
<tr>
<td>11</td>
<td>All other adverse patient safety events resulting in serious harm or death</td>
</tr>
</tbody>
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Safer Care Victoria (SCV) oversees the sentinel event program in Victoria. All sentinel events must be reported to us by all public and private health services.

Each year, we report national sentinel events to the independent hospital pricing authority (IHPA), and national sentinel event numbers are reported annually by the Australian Productivity Commission.

Under Victoria’s sentinel events program, health services are required to:

- notify SCV within three business days of the service becoming aware of the event
- review and analyse the sentinel event using root cause analysis (RCA) methodology
- submit an RCA report (parts a and b) within 30 business days of the notification
- submit recommendations from the RCA (part c) within 50 business days of the notification
- submit a recommendation monitoring report within 120 business days of the notification.

Include external members
We advise all teams reviewing sentinel events to include an external member and a consumer representative.

Multi-agency reviews
When a sentinel event occurs across different health services, all services involved in the care of the patient should participate in a multi-agency review of the event.

The health service that provided the final care should be responsible for notifying the event, initiating the RCA review and engaging the other health services.

Involving patients and families
Please consider the patients, their families, carers and/or friends during the review process. Families can provide crucial and insightful information during the review of a serious adverse event.

Performance issues
The RCA methodology is not to be used for performance-management issues. Such issues should be handled by the relevant personnel in a performance-management context.
This guide aims to help Victorian health services manage adverse patient safety events that fall outside the 10 national sentinel event categories. It is an essential part of a system that aims to drive learning and improvements to the safety of the health system. The Victorian category guide also provides public accountability and transparency to patients, families, carers, health services and the government.

Definitions
The Victorian category includes all adverse patient safety events resulting in serious harm or death that are not included in the 10 national categories.

An adverse patient safety event is an event that results in unnecessary or avoidable harm to a patient. Harm implies impairment of structure or function of the body and/or any harmful effect arising from disease, injury, suffering, disability or death.

Serious harm is considered to have occurred when, as a result of the incident, the patient has:

- required life-saving surgical or medical intervention, or
- shortened life expectancy, or
- experienced permanent or long-term physical harm, or
- experienced permanent or long-term loss of function.\(^2\)

When determining whether or not serious harm has occurred, health service staff should adopt a consumer-focused approach.

Non-sentinel events
An adverse event should not be reported as a sentinel event when:

- there are contributing factors related to the patient's disease or the management phase of their chronic illness
- the incident is subject to review under the Victorian or Commonwealth criminal justice systems
- the incident involves a murder or allegations of sexual or physical assault.

Incident management systems
Most parts of the Victorian health system use the Victorian Hospital Incident Management System (VHIMS), which applies an incident severity rating (ISR) to all events entered into the system. The Victorian category encapsulates adverse patient safety events that are allocated an ISR 1.

For health services that do not use the VHIMS, any incident resulting in serious harm or death to a patient should be considered equivalent to an ISR 1.

<table>
<thead>
<tr>
<th>ISR</th>
<th>Degree of impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Severe/death</td>
</tr>
<tr>
<td>2</td>
<td>Moderate</td>
</tr>
<tr>
<td>3</td>
<td>Mild</td>
</tr>
<tr>
<td>4</td>
<td>No harm/near miss</td>
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</tbody>
</table>

Health services that are required to report sentinel events in Victoria

All public and private health services, and all services under their governance structures, are required to report sentinel events to SCV.

Examples of health services include:

- Ambulance Victoria
- Bush nursing centres
- Forensicare (Thomas Embling Hospital)
- Public sector residential aged care facilities
- Hospital in the Home services
- Private day surgery facilities.

SUB-CATEGORIES OF VICTORIAN SENTINEL EVENT CATEGORY 11

Within the Victorian category 11: All other adverse patient safety events resulting in serious harm or death, a number of sub-categories have been identified to provide clarity and guidance on the types of events that need to be reported.

The sub-categories are based on (though not identical to) the World Health Organization’s International Classification for Patient Safety.

The sub-categories are:

- Clinical process or procedure
- Falls
- Deteriorating patients
- Self-harm (behaviour)
- Communication of clinical information
- Medical device or equipment
- Nutrition
- Resource or organisational management
- Healthcare associated infection
- Patient accidents.

This guide provides descriptions, examples and case studies for each of these sub-categories.
SUB-CATEGORY 1 – CLINICAL PROCESS OR PROCEDURE

Description
This sub-category of reportable adverse events covers a range of potential situations involving clinical procedures and processes. It can include:

- Any **diagnosis** or **assessment** not performed when indicated or that was incomplete or inadequate, resulting in serious harm or death of a patient.
- Any **procedure, treatment** or **intervention** not performed when required, or that was incomplete or inadequate, or involved the wrong body part, side or site, resulting in serious harm or death of a patient.
- Any **test** or **investigation** not performed when required, performed for the wrong patient, or not acted upon or communicated, resulting in serious harm or death of a patient.
- Any mix-up of **specimens** or **results**, including incorrect labelling, resulting in serious harm or death of a patient.

Examples
Events involving:

- screening, prevention or routine check-up
- diagnosis or assessment
- procedure, treatment or intervention
- general care or management
- tests or investigations
- specimens or results.

Case study 1
A 52-year-old patient experiencing chest pain had an ECG investigation. The ECG tracing, once taken, was placed in the patient’s file and not reviewed. The patient deteriorated over the next four hours, suffered a cardiac arrest and died. On review, it emerged that the ECG showed the patient was experiencing an acute myocardial infarction that was not diagnosed.

**Should this be reported as a sentinel event?**
**Yes.** The patient suffered serious harm that led to death as a result of a missed diagnostic opportunity.

Case study 2
A 22-year-old patient with severe respiratory distress required airway support. Ten minutes after artificial airway intervention (intubation) was administered, it was discovered the artificial airway was in the wrong location (oesophagus). The patient suffered a cardiac arrest, resulting in death.

**Should this be reported as a sentinel event?**
**Yes.** The patient suffered serious harm that led to death resulting from an incorrectly performed procedure.
SUB-CATEGORY 2 - FALLS

Description
This sub-category covers events involving serious harm or death resulting from falls.

Example
Head injuries suffered as a result of a fall.

Case study 3
An 88-year-old had a fall in a residential aged care facility in a public health service, sustaining a head laceration and becoming confused. The patient was subsequently diagnosed with cerebral bleeding and, after a family meeting, it was decided not to proceed with surgical intervention and palliation. The patient died 12 hours after the fall.

Should this be reported as a sentinel event?
Yes. The patient suffered serious harm that led to death.

Case study 4
A 56-year-old patient in declining health with a chronic and complex medical history fell while ambulating to the toilet. The patient was considered at high risk of falls, and prevention strategies were in place before the fall. The patient sustained a fractured hip, which required transfer to a larger health service for surgery. But the patient’s advanced care directive stated a wish for no surgical intervention. The patient continued with comfort care and died three weeks later.

Should this be reported as a sentinel event?
No. Although the fall resulted in harm to the patient, the harm was not life limiting. The contributing factors to the death were related to the patient’s disease, or the management phase of the patient’s chronic illness.
SUB-CATEGORY 3 - DETERIORATING PATIENTS

Description
This sub-category covers adverse events involving a lack of recognition, escalation or response when there is clinical deterioration in a patient, resulting in serious harm or death.

It includes a failure to recognise or respond appropriately to physiological signs and symptoms, or changes in behaviour or mood (mental state), that would indicate clinical deterioration.

Examples
- Not monitoring physiological observations consistently, or not understanding changes in physiological observations.
- Lack of knowledge of signs and symptoms that could signal deterioration.
- Lack of awareness of the potential for a person’s mental state to deteriorate.
- Lack of formal systems for responding to deterioration.
- Lack of skills to manage patients who are deteriorating.
- Failure to communicate clinical concerns, including during clinical handover.
- Mistakenly attributing physical or mental symptoms to an existing condition, such as dementia or a mental health condition.

Case study 5 (recognition)
The family of a 45-year-old man called an ambulance service due to his slurred speech, inability to move his left arm and incontinence. He had a history of heavy drinking and drug use. An ambulance attended and the patient was assessed and informed that transport to hospital may not be required. The patient and his family decided to stay at home. The next day, the patient was found unconscious in bed by his family and another call was made to the ambulance service. The patient suffered a respiratory arrest on the way to hospital and died.

Should this be reported as a sentinel event?
Yes. The patient suffered serious harm that led to death after a delay in the recognition of his clinical deterioration on the initial ambulance attendance.
Case study 6 (escalation)

A 67-year-old woman returned to a hospital ward after a significant surgical procedure. Two hours later her blood pressure was noted to be decreasing and her heart rate increasing. These changes were attributed to the anaesthetic that would soon wear off. Despite the situation meeting Medical Emergency Team (MET) call criteria, no escalation was made. Six hours after returning to the ward the patient became unconscious and required urgent transfer to the Intensive Care Unit. She was placed on life support and suffered permanent kidney damage, which necessiated ongoing dialysis and ultimately a kidney transplant.

Should this be reported as a sentinel event?

Yes. The patient suffered serious and permanent harm due to a delay in escalation of the deterioration in her clinical condition.

Case study 7 (response)

A woman who was 37 weeks pregnant presented in early labour with a history of decreased fetal movements in the last 48 hours. A fetal heart rate monitor was applied, and after two hours the trace was interpreted as abnormal. At the time, the activity in the maternity unit was high, with many women requiring care. The midwifery staff escalated the abnormal trace. The fetal heart rate monitoring continued, but there was a period of loss of contact, making the trace difficult to interpret. A fetal scalp electrode was applied for more accurate monitoring, but this took some time. Five hours after escalation of the abnormal trace there was a prolonged fetal bradycardia. An emergency caesarean was performed, and the baby was born pale and not responsive. The baby could not be resuscitated and died.

Should this be reported as a sentinel event?

Yes. The patient suffered death due to a delay in the response to an escalation of concern regarding clinical deterioration.
SUB-CATEGORY 4 - SELF HARM

Description
This sub-category covers events involving intended self-harm that results in serious harm or suicide. (For such events in acute psychiatric facilities, see national sentinel event category 6).

It can include the suspected suicide of an individual within an acute health service (non-psychiatric facility), sub-acute service or rehabilitation service, or the suspected suicide of a compulsory client while they were on approved or non approved leave.

Some deaths are required to be reported to the Office of the Chief Psychiatrist. Please see its website for more information.

Examples
- Suspected suicide of a mental health or non-mental health patient in a medical or surgical ward in an acute hospital.
- Serious self-harm sustained intentionally by a mental health patient in a mental health inpatient unit, emergency department or acute hospital.
- Suspected suicide of a mental health patient on a Mental Health Act order who has taken approved or unapproved leave from an acute mental health inpatient unit, emergency department or acute hospital (within 48 hours of leaving).

Case study 8
An 83-year-old patient was diagnosed with advanced cancer. After a family meeting the decision was made to provide palliative care. A few days after this decision she was found unconscious on the bathroom floor with a dressing gown belt around her neck. Resuscitation attempts were unsuccessful, and the patient died.

Should this be reported as a sentinel event?
Yes. The patient died by suicide on the medical ward of an acute health service.
Case study 9
A 54-year-old patient presented to an emergency department with an acute mental health illness, intoxicated and expressing a plan to self-harm. It was decided to apply an Assessment Order and admit the patient to an acute mental health bed. While waiting for the mental health bed he absconded from the emergency department. Police notified the health service 24 hours later that the patient had died after jumping from a height.

Should this be reported as a sentinel event?
Yes. The patient took his own life after absconding from an emergency department while on a Mental Health Act order.

Case study 10
A 19-year-old patient hanged themself after being admitted to an acute mental health inpatient unit. The patient was revived and transferred to the intensive care unit, after which it was discovered the patient had sustained a permanent brain injury that inhibits independent living.

Should this be reported as a sentinel event?
Yes. The patient suffered serious harm while in the care of a health service.
SUB-CATEGORY 5 - COMMUNICATION OF CLINICAL INFORMATION

Description
Several types of events leading to serious harm or death can fall within this sub-category, including:

- an incident involving a process or problems with the administration or documentation of clinical information, resulting in serious harm or death of a patient
- any administrative process not performed when required, not completed or inadequately completed, or involving a mix-up of patients, processes or services.
- incidents involving missing or unavailable documents, delays in accessing a document, use of the wrong document or unclear, ambiguous, illegible or incomplete information in a document.

Examples
Events involving:
- waitlist delays
- inter-hospital transfer delays
- delays to investigation or procedure
- delays to referral
- handover
- transfer of care
- task allocation
- consent
- patient identification
- labels/stickers/identification bands/cards
- letters/e-mails/records of communication
- reports/results/images.

Case study 12
A 56-year-old woman was referred to an outpatient department to investigate bleeding and a change in bowel habit. The referral was triaged and given a category 1 – urgent for a colonoscopy to investigate symptoms within 30 days. However, no appointment was made. Twelve months later she was diagnosed with advanced colon cancer. She died several weeks later.

Should this be reported as a sentinel event?
Yes. The patient suffered serious harm that resulted in death following an administrative delay that prevented timely care.
SUB-CATEGORY 6 - MEDICAL DEVICE OR EQUIPMENT

Description
This covers errors associated with medical **devices** or **equipment** resulting in serious harm or death.

Examples
- Lack of availability of a product.
- Use of a product that is inappropriate for the task.
- Use of an unclean or unsterile product.
- Malfunction of a product.
- Dislodgement, faulty connection or removal of a product.

Case study 13
A 48-year old woman had a percutaneous coronary intervention (PCI) for an acute myocardial infarction in a cardiac catheter laboratory. Upon retrieval of the guide wire during PCI, the wire snapped and became lodged in the vessel. The patient required transfer to a larger hospital for surgery to retrieve the guide wire. On the way to the larger hospital the patient’s condition deteriorated. She suffered cardiac arrest on arrival and died.

**Should this be reported as a sentinel event?**
Yes. The patient suffered serious harm that resulted in death following the malfunction of the guide wire.
SUB-CATEGORY 7 - NUTRITION

Description
This covers various types of errors associated with provision of nutrition and food to patients, resulting in serious harm or death.

Examples
- Delivery of food to the wrong patient.
- Delivery of the wrong food.
- Delivery of the wrong food to patient with known allergies.
- Provision of the wrong quantity.
- Delivery at incorrect frequency.
- Incorrect consistency or incorrect storage.

Case study 14
A 79-year-old man had been living in a public sector residential aged care facility for two years. In recent months his ability to swallow had declined. After a speech therapy assessment, the decision was made to start a vitamised and thickened fluid diet. Sometime after this assessment a full diet was delivered to his room. The resident was assisted with feeding and, after eating a piece of roast meat, he started coughing, experienced facial colour changes and collapsed in the chair. The resident had a not-for-resuscitation order and advanced care directive in place, and no resuscitation measures were commenced.

Should this be reported as a sentinel event?
Yes. The patient suffered serious harm that led to death due to the provision of incorrect food.

Case study 15
A 92-year-old woman had a swallow assessment after being admitted with general decline and pneumonia. The assessment ordered a vitamised diet and thickened fluids, stating supervision was required for all meals. During lunch she began coughing on the vitamised vegetables. The supervising staff removed her meal. Overnight she developed a fever and had an increased respiratory rate. The patient and family had an advanced care directive and the patient wanted no further medical intervention. She died three days later from pneumonia.

Should this be reported as a sentinel event?
No. The patient had received a risk assessment and strategies were put in place to ensure safety.
**SUB-CATEGORY 8 - RESOURCE OR ORGANISATIONAL MANAGEMENT**

**Description**
This sub-category covers events where a lack of resources, or deficiencies in organisational management, contribute to errors resulting in serious harm or death.

**Examples**
Events involving:
- workload mismanagement
- staff resourcing and accessibility
- bed availability or management
- policy, procedure or guideline availability and/or adequacy.

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**Case study 16**
A 48-year-old woman underwent abdominal surgery in hospital. After the surgery, her condition deteriorated. She was assessed, and a decision was made to return to surgery for further exploration of suspected internal bleeding. She was placed on the waiting list for emergency surgery behind three other patients. While waiting for surgery she suffered a cardiac arrest and died.

**Should this be reported as a sentinel event?**
Yes. The patient suffered serious harm that led to her death due to a lack of availability of operating theatres.

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**Case study 17**
A 59-year-old man had a stroke while in hospital. It was decided to administer medication (thrombolytic) to treat the stroke, and the thrombolytic guideline was followed. However, the guideline did not include advice on how to treat the patient’s high blood pressure, which continued to increase. The patient’s condition deteriorated further, resulting in a cardiac arrest and death. During a review of the case, the health service discovered the management of high blood pressure when administering thrombolytics was outlined in the appropriate stroke guideline, but a different guideline without such guidance had been relied upon.

**Should this be reported as a sentinel event?**
Yes. The patient suffered serious harm that led to death due to the failure to access the appropriate guidelines.
SUB-CATEGORY 9 - HEALTHCARE ASSOCIATED INFECTION

Description
This sub-category covers infections acquired in the healthcare setting resulting in serious harm or death. It includes bloodstream, surgical site, intravascular cannula or urinary drain infections.

Examples
- Surgical site infections.
- Infections associated with peripheral or central intravascular devices.
- Infections from urinary catheters.

Case study 18
A 56-year-old man had a peripheral intravenous cannula inserted. Seven days after the insertion the area around the cannula was painful, red and inflamed. The cannula was removed, and the patient was discharged and sent home with oral antibiotics and instructions to follow up with his general practitioner within five to seven days. Two days after his discharge, the patient’s partner was unable to wake him in the morning and called an ambulance. Soon after arrival at the hospital emergency department he suffered a cardiac arrest and died.

Should this be reported as a sentinel event?
Yes. The patient suffered serious harm and death as the result of an infection associated with the peripheral intravenous cannula inserted while he was in hospital.
SUB-CATEGORY 10 - PATIENT ACCIDENTS

Description
This sub-category covers patients in care who are involved in accidents resulting in serious harm or death. Such events could involve blunt force trauma, penetration injury, or thermal or chemical injury.

Examples
- Bed entrapment.
- Drowning.
- Excessive heat or fire.
- Poisoning.
- Electrocution or radiation exposure.

Case study 19
A 51-year-old patient in a brain injury rehabilitation unit was receiving pressure injury care every four hours. Pillows and rolled up blankets were used to maintain the correct pressure injury prevention position. After several hours the patient was found unconscious, trapped in the bedside rails. Resuscitation attempts were unsuccessful, and the patient died.

Should this be reported as a sentinel event?
Yes. The patient suffered serious harm and death as the result of entrapment in the bedside rails.

Case study 20
A 25-year-old patient with an altered state of consciousness fell from a stretcher while being transferred between health services. The patient suffered cerebral bleeding, which resulted in an acute brain injury and the permanent inability to live independently.

Should this be reported as a sentinel event?
Yes. The patient sustained serious and permanent harm from an accidental fall while in the care of a health service.
Terminology used in this guide

**Australian Commission on Safety and Quality in Health Care (ACSQHC)**
Leads national improvements in safety and quality in healthcare

**International Classification of Patient Safety (ICPS)**
A World Health Organization (WHO) approach to classifying patient safety information

**Business days**
Days falling between, and including, Monday and Friday

**Medical emergency team (MET)**
A skilled clinical team that responds to patients with clinical deterioration

**Consumer representative**
A health consumer who has taken up a role to provide advice on behalf of consumers with the overall aim of improving healthcare

**Patient safety event**
An event in which a person receiving healthcare is harmed

**Electrocardiogram (ECG)**
Measures electrical activity generated by the heart when it contracts

**Public sector residential aged care services**
Residential aged care beds funded by the Victorian Government

**External team member**
A review team member who does not work within the health service (including visiting medical officers)

**Root cause analysis (RCA)**
A method of problem solving used for identifying the root causes of an adverse outcome

**Incident severity rating (ISR)**
The severity of impact to a patient when an incident occurs. ISR is measured on a scale of 1-4 (with 1 being most severe)

**Safer Care Victoria (SCV)**
The peak body for quality and safety in healthcare in Victoria

**Independent Hospital Pricing Authority (IHPA)**
The independent Commonwealth Government agency established as part of the national health reform agreement

**Victorian Hospital Incident Management System (VHIMS)**
A system used in many Victorian health services to manage patient safety events

**Intensive care unit (ICU)**
A unit in a hospital where patients receive specialised critical care when they are extremely unwell

**World Health Organization (WHO)**
Directs and coordinates international health within the United Nations system