Sentinel Event Data
2022 Annual Review

The Joint Commission Sentinel Event Policy is available online at http://www.jointcommission.org/Sentinel_Event_Policy_and_Procedures/
Overview

In 1996, The Joint Commission created a Sentinel Event Policy to help healthcare organizations that experience serious adverse events improve safety. The Joint Commission’s Office of Quality and Patient Safety assists healthcare organizations in conducting comprehensive systemic analyses to learn from these sentinel events. Since that time, The Joint Commission has maintained an associated Sentinel Event Database with de-identified and aggregate data.

The aggregate information, including causes and outcomes of sentinel events, is analyzed yearly to help the nation in general and accredited organizations in specific gain insight into causes of sentinel events and develop mitigating strategies to prevent harm to individuals under their care.

Between January 1 and December 31, 2022, The Joint Commission received 1,441 reports of sentinel events; the majority—90% (1,299)—were voluntarily self-reported to The Joint Commission by an accredited or certified entity. The number of reported sentinel events increased by 19% compared to 2021. The majority of reported sentinel events occurred in the hospital setting (88%).

As in previous years, patient falls was the most commonly reported sentinel event (42%) in 2022. The remaining leading categories were delay in treatment (6%), unintended retention of foreign object (6%), wrong surgery (6%) and suicide (5%).

In terms of outcomes, 20% of reported sentinel events were associated with patient death, 44% with severe temporary harm, and 13% with unexpected additional care/extended stay, such as additional treatments or procedures required following the event. When analyzing the root cause of sentinel events, communication breakdowns (e.g., not establishing a shared understanding or mental model across care team members, or no or inadequate staff-to-staff communication of critical information) continue to be the leading factor contributing to sentinel events.

As the reporting of most sentinel events to The Joint Commission is voluntary, no conclusions should be drawn about the actual relative frequency of events or trends in events over time.
Sentinel Event Definition

The Joint Commission defines a sentinel event as a patient safety event (not primarily related to the natural course of the patient’s illness or underlying condition) that reaches a patient and results in:

- Death
- Permanent harm (regardless of severity of harm)
- Severe harm (regardless of duration of harm)

An event is also considered sentinel if it is one of the following:

- Suicide of any patient receiving care, treatment, and services in a staffed around-the-clock care setting or within 72 hours of discharge, including from the health care organization’s emergency department (ED)
- Unanticipated death of a full-term infant
- Homicide of any patient receiving care, treatment, and services while on site at the organization or while under the care or supervision of the organization
- Homicide of a staff member, licensed practitioner, visitor, or vendor while on site at the organization or while providing care or supervision to patients
- Any intrapartum maternal death
- Severe maternal morbidity (leading to permanent harm or severe harm)
- Sexual abuse/assault of any patient receiving care, treatment, and services while on site at the organization or while under the care or supervision of the organization
- Sexual abuse/assault of a staff member, licensed practitioner, visitor, or vendor while on site at the organization or while providing care or supervision to patients
- Physical assault (leading to death, permanent harm, or severe harm) of a staff member, licensed practitioner, visitor, or vendor while on site at the organization or while providing care or supervision to patients
- Surgery or other invasive procedure performed at the wrong site, on the wrong patient, or that is the wrong (unintended) procedure for a patient regardless of the type of procedure or the magnitude of the outcome
- Discharge of an infant to the wrong family
- Abduction of any patient receiving care, treatment, and services
- Any elopement (that is, unauthorized departure) of a patient from a staffed around-the-clock care setting (including the ED), leading to death, permanent harm, or severe harm to the patient
- Administration of blood or blood products having unintended ABO and non-ABO (Rh, Duffy, Kell, Lewis, and other clinically important blood groups) incompatibilities, hemolytic transfusion reactions, or transfusions resulting in death, permanent harm, or severe harm
- Unintended retention of a foreign object in a patient after an invasive procedure, including surgery
- Severe neonatal hyperbilirubinemia (bilirubin >30 milligrams/deciliter)
- Fluoroscopy resulting in permanent tissue injury when clinical and technical optimization were not implemented and/or recognized practice parameters were not followed
- Any delivery of radiotherapy to the wrong patient, wrong body region, unintended procedure, or >25% above the planned radiotherapy dose
- Fire, flame, or unanticipated smoke, heat, or flashes occurring during direct patient care caused by equipment operated and used by the organization. To be considered a sentinel event, equipment must be in use at the time of the event; staff do not need to be present.
- Fall in a staffed-around-the-clock care setting or fall in a care setting not staffed around the clock during a time when staff are present resulting in any of the following:
  - Any fracture
  - Surgery, casting, or traction
  - Required consult/management or comfort care for a neurological (for example, skull fracture, subdural or intracranial hemorrhage) or internal (for example, rib fracture, small liver laceration) injury
  - A patient with coagulopathy who receives blood products as a result of the fall
  - Death or permanent harm as a result of injuries sustained from the fall (not from physiologic events causing the fall)

**Methods**

The sentinel event data represents aggregate data from comprehensive systematic analysis (typically a root cause analysis) received by the Joint Commission Office of Quality and Patient Safety from January 1, 2022 through December 31, 2022.

A Joint Commission patient safety specialist reviewed every comprehensive systematic analysis with the healthcare organization to discuss underlying causes and improvement strategies.

A patient safety specialist assigned an event type, event subtype, and event detail in accordance with the event classification taxonomy. These data, in addition to patient outcome and root causes attributed to the event, were de-identified and aggregated for analysis.

**Results**

**Sentinel Events Reviewed by Year, Source, and Setting**

There were 1,441 sentinel events reported in 2022, a 19% increase compared to 2021 and a 78% increase from 2020. A majority (90%) of sentinel events reported in 2022 were voluntarily submitted by accredited healthcare organizations. The remaining 142 sentinel events were reported either by patients (or their families) or employees (current or former) of the organization.
Of reviewed sentinel events in 2022, 20% resulted in patient death, 6% in permanent harm or loss of function, 44% in severe temporary harm, and 13% in unexpected additional care/extended stay. Sentinel events resulting in death were most commonly associated with patient suicide (24%), delays in treatment (21%), and patient falls (11%). Events resulting in severe temporary harm were most commonly associated with patient falls (62%).

Consistent with previous reporting patterns, most reported sentinel events in 2022 occurred in the hospital settings (88%). Leading event types associated with the hospital setting included falls (45%), unintended retention of foreign object (7%), and wrong surgeries (6%). In the behavioral health setting, leading event types were patient suicide (23%), falls (18%), and delays in treatment (16%). Fires (e.g., smoking while on oxygen) (43%) and patient falls (20%) were leading event types in the home care setting. Wrong surgeries (25%), patient falls (22%), and fires (16%) were leading event types in the ambulatory care setting, and patient falls (43%) and perinatal events (14%) were leading event types in the critical access hospital setting.

Top 10 Frequently Reviewed Sentinel Events, 2022

Patient falls were the most prevalent sentinel event type reviewed in 2022 (n=611) – an increase from 483 reviewed falls in 2021.

The 5 most prevalent sentinel event types have remained consistent over the last 5 years.
Patient Falls
Falls have been the leading sentinel event type reviewed since 2019. There were 611 sentinel events classified as patient falls in 2022 – a 27% increase from 2021. Of these patient falls, 5% resulted in death and 70% in severe harm to the patient. Leading injuries included head injury/bleed and hip/leg fracture.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Sentinel Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>138</td>
</tr>
<tr>
<td>2019</td>
<td>161</td>
</tr>
<tr>
<td>2020</td>
<td>173</td>
</tr>
<tr>
<td>2021</td>
<td>483</td>
</tr>
<tr>
<td>2022</td>
<td>611</td>
</tr>
</tbody>
</table>

Patient falls while ambulating was the leading mechanism for falling followed by falling from bed and falling while toileting.

- Ambulating (40%)
- Falling from bed (23%)
- Toileting (10%)

Reported contributors to falls included policies not being followed (e.g., fall risk assessment), inadequate staff-to-staff communication during handoffs or transitions of care, and lack of shared understanding or mental model regarding plan of care.

Delay in Treatment
Sentinel events classified as delay in treatment decreased in 2022 compared to 2021. Outcomes associated with delays in treatment largely resulted in death (66%) followed by severe harm (17%) and permanent harm (14%).

<table>
<thead>
<tr>
<th>Sub-Type</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delay in care/response</td>
<td>66</td>
<td>74</td>
<td>71</td>
<td>110</td>
<td>89</td>
</tr>
<tr>
<td>Missed diagnosis</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Delay in abnormal test result</td>
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<tr>
<td>Abnormal test result not addressed</td>
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<td></td>
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<tr>
<td>Misdiagnosis</td>
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</tbody>
</table>

Of delay in treatment sentinel events in 2022, 46% were associated with delays in care/response to a decompensating condition and 38% were due to a missed diagnosis.
Reported contributors to delays in treatment included no or inadequate staff-to-staff communication of critical information, staff lacking competency to recognize abnormal clinical signs, and policies not being followed (e.g., observation rounds).

**Unintended Retention of a Foreign Object**

Sentinel events classified as unintended retention of a foreign object continue to decline with 88 reported in 2022. Outcomes associated with unintended retention of a foreign object included severe harm to the patient (40%), unexpected additional care or extended stay (35%) or other/no harm (16%).

Consistent with the previous year, sponges were the leading object type that was retained (44%). There was a decline in reported retentions associated with guidewires in 2022 compared to 2021, 24% and 8% respectively.

Contributors to retentions included policies not being followed (e.g., count policy), a lack of shared understanding or mental model, and no or inadequate team communication before, during, or after a shared team task.

**Wrong Surgery**

Wrong surgeries include surgeries or invasive procedures that are performed at the wrong site or on the wrong patient, or that are the wrong (unintended) procedure for a patient regardless of the type of procedure or the magnitude of outcome. There were 85 sentinel events classified as wrong surgeries in 2022.

Of these, a majority were surgeries or invasive procedures performed at the wrong site (65%).
Patient Suicide

There were 73 sentinel events classified as suicide in 2022. Of these, 55% occurred off site within 72 hours of discharge from an accredited healthcare organization, 40% occurred in an inpatient setting, and 4% while in the emergency department.

Death by ligature was the leading means by which a patient died by suicide (33%) followed by gunshot (14%) and jumping from height (11%). Leading factors associated with suicide included policies not being followed or adhered to, no or inadequate staff-to-staff communication of critical information, and inadequate or inappropriate precautions for high-risk or impaired patients.

Conclusion

Reported sentinel events increased 19% in CY2022, which can be attributed to a 27% increase in patient fall events. Consistent with previous years, patient falls were the leading event type reviewed (42%).

Patient outcomes from reported sentinel events were death (20%), permanent harm (6%), severe harm (44%), and unexpected additional care/extended stay (13%).

Failures in communication, teamwork and consistently following policies were leading causes for reported sentinel events.

Resources

Preventing falls and fall-related injuries in health care facilities, Sentinel Event Alert 55
Inadequate hand-off communication, Sentinel Event Alert 58
Advancing safety with closed-loop communication of test results Quick Safety 52
Preventing unintended retained foreign objects, Sentinel Event Alert 51
Suicide Prevention Portal, The Joint Commission