2011 ANNUAL SENTINEL EVENT SUMMARY REPORT



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PURPOSE

Legislation passed during the 2009 Legislative Session requires the Nevada State Health Division (NSHD) to compile the annual sentinel event report summaries and submit the compilation to the State Board of Health each year by June 1. This is the third annual summary report to be compiled pursuant to Nevada Revised Statutes (NRS) <u>439.843</u>.

SENTINEL EVENT DEFINED

NRS 439.830 defines a sentinel event as:

"... an unexpected occurrence involving facility-acquired infection, death or serious physical or psychological injury or the risk thereof, including, without limitation, any process variation for which a recurrence would carry a significant chance of a serious adverse outcome. The term includes loss of limb or function."

The Sentinel Events Registry is a database used to collect, analyze, and evaluate such adverse events. The intent is that the reporting of these sentinel events will reveal systemic issues across facilities so that they may be addressed more widely through quality improvement and educational activities.

<u>NRS 439.835</u> requires that medical facilities report sentinel events to the Health Division. As specified in <u>NRS 439.805</u>, the medical facility types required to report sentinel events are as follows:

- hospitals
- obstetric centers
- surgical centers for ambulatory patients
- independent centers for emergency medical care

METHODOLOGY

On January 25, 2012, each medical facility was sent a sentinel event report summary form to be completed and returned to the Health Division by March 1, 2011, requesting the following information:

- a) The total number and types of sentinel events reported by the medical facility;
- b) A copy of the patient safety plan established pursuant to <u>NRS 439.865</u>; and
- c) A summary of the membership and activities of the patient safety committee established pursuant to <u>NRS 439.875</u>.

The Health Division sent the form to 119 mandatory sentinel event reporting medical facilities. These medical facilities included 59 hospitals, 59 ambulatory surgical centers, and 1 independent center for emergency medical care. Although obstetric centers are also required to report sentinel events, there are none currently licensed in Nevada. All of the 119 mandatory sentinel event reporters returned the required sentinel event report summary form. These reports were then aggregated to provide a summary of the required information.

REPORT LAYOUT

The first part of the report provides information based on what was submitted by the medical facilities on their annual summary form as required by <u>NRS 439.843</u>. The latter section compares what was submitted on the summary forms to what has been received and recorded in the Sentinel Events Registry for 2011.

SENTINEL EVENT SUMMARY REPORT INFORMATION

This section provides information regarding the total number of sentinel events indicated by the medical facilities as reported on the sentinel event report summary forms as well as a breakdown of the event types. It also provides information regarding the medical facilities' patient safety plans and patient safety committees.

EVENT TYPES AND TOTALS

Table 1 lists the types of sentinel events reportable with a total for each as indicated on the medical facilities' annual sentinel event report summary forms. A percentage of all sentinel events reported is also provided for each. In 2011, the medical facilities indicated that they had reported a total of 1,060 sentinel events, reflecting improved reporting of sentinel events by the facilities rather than a true increase in the number of events.

event type	total	percentage
abduction	0	0.0%
air embolism	2	0.2%
burn	12	1.1%
CAUTI	148	14.0%
CLABSI	149	14.1%
contaminated drug, device, or biologics	2	0.2%
device failure	2	0.2%
electric shock	0	0.0%
elopement	10	0.9%
fall	135	12.7%
HAI – other	205	19.3%
hypoglycemia	2	0.2%
impersonation of healthcare provider	0	0.0%
infant discharge to wrong person	0	0.0%
intra- or post-operative death	6	0.6%
labor or delivery	0	0.0%
medication error	33	3.1%
neonate hyperbilirubinemia	0	0.0%
physical assault	4	0.4%

Table 1 – sentinel event type totals from the 2011 sentinel event report summary forms

event type	total	percentage
pressure ulcer (stage 3 or 4)	40	3.8%
restraint	1	0.1%
retained foreign object	12	1.1%
sexual assault	2	0.2%
spinal manipulation	0	0.0%
SSI	171	16.1%
suicide	6	0.6%
surgery on wrong body part	4	0.4%
surgery on wrong patient	0	0.0%
transfusion error	1	0.1%
VAP	24	2.3%
wrong or contaminated gas	1	0.1%
wrong sperm or egg	0	0.0%
wrong surgical procedure	0	0.0%
other	88	8.3%
total	1,060	100%

A total of 88 sentinel events were categorized as 'other.' Table 2 lists the descriptions provided by the medical facilities with a total given for each category.

Table 2 – descriptions of sentinel events indicated as 'other'

'other' event descriptions	total
accidental tracheostomy tube decannulation	1
adverse drug reactions	2
adverse effect after procedure	1
altered mental status	1
ancillary elopement	1
anesthesia without consent	1
attempted suicide	6
auto/pedestrian death one hour post ED discharge	1
cardiac arrest	1
death	1
death less than 24 hours post-op	1
death-related to sleep apnea, narcotics, and non-compliance with O_2	1
deep tissue injury/pressure ulcer	1
delay of ortho surgery (NM)	1
deep vein thrombosis and pulmonary embolism (DVT/PE) post surgery	2
endoscopy procedure on wrong patient	1
equipment failure	1
facility acquired decubitus ulcer	3

'other' event descriptions	Total
hospital transfer for recovery room patient with seizures	1
infant perinatal	1
intra-abdominal bleed following PEG tube placement	1
intraoperative aspiration	1
mishandled specimen	1
patient desaturated and had bradycardia	1
patient had respiratory distress	1
patient Injury	1
PE/DVT	1
perforation	1
possible aspiration	3
post polypectomy bleed	2
procedure complication	27
procedure performed with elevated lab values	1
retained foreign object from surgery performed at a different hospital	1
self inflict	1
sexual misconduct	2
surgical complication	1
tourniquet left on arm	1
treatment delay	6
treatment error	3
unexpected death	1
unexpected occurrence	1
unexpected transfer to hospital	1
total	88

A total of 205 sentinel events were categorized as 'HAI – other.' Table 3 lists the descriptions provided by the medical facilities with a total given for each category.

Table 3: descriptions of sentinel events indicated as 'healthcare-acquired infection – other'

'healthcare-acquired infection – other' event descriptions	total
acinetobacter	1
admitted from SNF with pneumonia, change in organism	1
admitted with MRSA pneumonia, change in organism	1
admitted with septic shock, change in organism	1
arterial laceration during PICC line	1
aspiration pneumonia	1
Clostridium difficile infection	110
enterobacter	1
extended-spectrum beta-lactamase (ESBL) E. coli	1

'healthcare-acquired infection – other' event descriptions	Total
facility-acquired infection-non-catheter-related urinary tract infection	12
facility-acquired infection-non-central line-related bloodstream infection	15
HAI – peripheral IV	1
HAI – UTI	1
ID infiltration	1
IV site infection	1
klebsiella	4
MDRO – acinetobacter	1
meningitis	1
MRSA	11
MRSA per sputum culture	1
non-catheter related urinary tract infection (non-CAUTI)	7
pin tract infection NOT HAI	3
pneumonia	17
pneumonia (not cultured upon admission)	1
possible ID infection	1
redo of aortic valve	1
respiratory	2
surgical site infection	2
vancomycin resistant enterococci (VRE)	1
wound	3
total	205

According to the summary reports provided by medical facilities, healthcare-acquired infections (HAIs), that is CAUTI, CLABSI, SSI, VAP, and HAI – other, were the most common type of sentinel event reported, accounting for 697 of the total sentinel events reported. Of these, HAI - other was predominant at 205 reports; SSIs followed with 171 reports. Falls were the second most common at 135, and 'other' sentinel events were third at 88. Overall, HAIs amount to almost two-thirds (65.8%) of all sentinel events reported.

PATIENT SAFETY PLANS

In accordance with <u>NRS 439.865</u>, each medical facility is required to develop an internal patient safety plan to protect the health and safety of patients who are treated at their medical facility. The patient safety plan is to be submitted to the governing board of the medical facility for approval and the facility must notify all health care providers who provide treatment to patients in their facility of the plan and its requirements. The facility shall also require compliance with its patient safety plan.

All medical facilities but one submitted some sort of document as a patient safety plan in response to the 2011 sentinel event report summary form. As was the case in 2009 and 2010, there was a great variety in the documents submitted, ranging from fully comprehensive plans to single-page documents. Patient safety plans are addressed in <u>NRS 439.865</u>, but statutes do not delineate the minimum requirements for a plan.

PATIENT SAFETY COMMITTEES

In accordance with <u>NRS 439.875</u>, medical facilities must establish a patient safety committee.

The composition of the committee and the frequency with which it is required to meet varies depending on the number of employees at the facility.

A facility with 25 or more employees must have a patient safety committee composed of:

- 1) The infection control officer of the medical facility;
- 2) The patient safety officer of the medical facility;
- At least three providers of health care who treat patients at the medical facility, including, without limitation, at least one member of the medical, nursing and pharmaceutical staff of the medical facility; and
- 4) One member of the executive or governing body of the medical facility.

Such a committee must meet at least once each month.

In accordance with <u>NAC 439.920</u>, a medical facility that has fewer than 25 employees and contractors must establish a patient safety committee composed of:

- 1) The patient safety officer of the medical facility;
- At least two providers of health care who treat patients at the medical facility, including, without limitation, one member of the medical staff and one member of the nursing staff of the medical facility; and
- 3) The chief executive officer (CEO) or chief financial officer (CFO) of the medical facility.

Such a committee must meet at least once every calendar quarter.

In either case, a facility's patient safety committee must, at least once each calendar quarter, report to the executive or governing body of the medical facility regarding:

- 1) The number of sentinel events that occurred at the medical facility during the preceding calendar quarter; and
- 2) Any recommendations to reduce the number and severity of sentinel events that occurred at the medical facility.

According to the summary reports provided by the medical facilities, 75 facilities indicated that they had 25 or more employees, and 44 indicated that they had fewer than 25. The frequency of meetings, whether monthly or quarterly, is dependent on the number of employees at the facility. Facilities with 25 or more employees must meet *at least once each month*. Facilities with fewer than 25 employees and contractors must meet *at least once every calendar quarter*. Overall, the patient safety committees at 116 of the 119 facilities (97.5%) met as frequently as required. Among the facilities that had 25 or more employees, 73 (97.3%) of the patient safety committees met on a monthly basis. Among the facilities that had fewer than 25, 43 (97.7%) of the patient safety committees met on a quarterly basis. Tables 4 and 5 show these figures.

monthly	total	percentage
yes	73	97.3%
no	2	2.7%
total	75	100%

Table 4 – compliance with mandated meeting periodicity among facilities having 25 or more employees

Table 5 – compliance with mandated meeting periodicity among facilities having fewer than 25 employees

quarterly	total	percentage
yes	43	97.7%
no	1	2.3%
total	44	100%

The composition of the patient safety meetings is dependent on the number of employees employed by a facility. At facilities with fewer than 25 employees and contractors, *the patient safety officer, a doctor, a registered nurse, and the CEO or CFO* must be in attendance. At facilities with 25 or more employees, *the infection control officer, patient safety officer, a doctor, a registered nurse, a pharmacist, and an executive member* must be in attendance. Overall, the patient safety committees at 111 of the 119 facilities (93.3%) had the appropriate staff in attendance at the patient safety committee meetings. Among the facilities that had 25 or more employees, 94.7% had the appropriate staff in attendance. For the 4 that did not, one facility was missing a pharmacist, another was missing a registered nurse, the third facility was missing a doctor and a registered nurse, and for the fourth facility, an executive member was absent. Among the facilities that had fewer than 25, 90.9% had the appropriate staff in attendance. In all the 4 facilities that did not, the CEO or CFO was absent. Tables 6 and 7 show these figures.

monthly	total	percentage
yes	71	94.7%
no	4	5.3%
total	75	100%

Table 6 – compliance with mandated staff attendance
among facilities having 25 or more employees

Table 7 – compliance with mandated staff attendance among facilities having fewer than 25 employees

quarterly	total	percentage
yes	40	90.9%
no	4	9.1%
total	44	100%

COMPARISON BETWEEN SUMMARY REPORT DATA AND REGISTRY DATA

This section compares what was submitted on the summary forms to what has been received and recorded in the Sentinel Events Registry for 2011.

EVENT TYPES AND TOTALS

Similar to Table 1, Table 8 lists the types of sentinel events reportable with totals for the number reported according to both the summary forms and the reports recorded in the Sentinel Events Registry. In 2011, a total of 1,060 sentinel events were indicated as reported according to the summary forms versus 1,076 as recorded in the Sentinel Events Registry, 9 of which were determined not to be sentinel events, bringing the actual total to 1,067.

Table 8 – sentinel event type totals from the 2011 sentinel event report summary forms and Sentinel Events Registry

event type	summary	registry
abduction	0	0
air embolism	2	0
burn	12	11
CAUTI	148	147
CLABSI	149	153
contaminated drug, device, or biologics	2	3
device failure	2	8
electric shock	0	0
elopement	10	8
fall	135	123
HAI – other	205	216
hypoglycemia	2	1
impersonation of healthcare provider	0	0
infant discharge to wrong person	0	0
intra- or post-operative death	6	4
labor or delivery	0	0
medication error	33	32
neonate hyperbilirubinemia	0	0
physical assault	4	4
pressure ulcer (stage 3 or 4)	40	46
restraint	1	0
retained foreign object	12	20
sexual assault	2	2
spinal manipulation	0	0
SSI	171	178
suicide	6	7
surgery on wrong body part	4	3

event type	summary	registry
surgery on wrong patient	0	0
transfusion error	1	1
VAP	24	20
wrong or contaminated gas	1	1
wrong sperm or egg	0	0
wrong surgical procedure	0	0
other	88	79
total	1,060	1,067

IMPROVEMENTS TO BE MADE

- Research how to make attachments to PDF forms possible to ensure that a copy of a facility's patient safety plan is included with the form submission.
- Plan for an electronic, web-based sentinel event reporting system.
- Make it clear to mandatory sentinel event reporting facilities that report no sentinel events over the course of the calendar year that the summary form must still be completed.
- Assist facilities that are still having issues with submitting the sentinel event summary form and patient safety plan electronically.
- Clarify with sentinel event reporters that categories and numbers reported on the sentinel event summary form should match the sentinel event reports that have been submitted to the Sentinel Events Registry throughout the calendar year.

RESOURCES

The Sentinel Events Registry main page is located: health.nv.gov/Sentinel_Events_Registry.htm

Sentinel event reporting guidance and manuals are located: health.nv.gov/SER_guidance_and_correspondence.htm

The 2011 sentinel event reporting guidance, which explains in detail each of the sentinel event categories used in this report, is located: health.nv.gov/SER/guidance/sentinel_event_reporting_guidance_v_1.1.1_2011-11-30.pdf

The 2011 sentinel event types, with links to other national resources for sentinel events, are located: health.nv.gov/SER/guidance/type_of_event_2011-07-11.pdf