2010 ANNUAL
SENTINEL EVENT SUMMARY REPORT

Department of Health and Human Services
Nevada State Health Division
Bureau of Health Statistics, Planning, Epidemiology, and Response
Office of Epidemiology

Brian Sandoval, Governor
State of Nevada

Michael J Willden, Director
Department of Health and Human Services

May 2011
version 1.0

Richard Whitley, MS, Administrator
Health Division

Tracey D Green, MD, State Health Officer
Health Division

Contents

PURPOSE 1
SENTINEL EVENT DEFINED 1
METHODOLOGY 1
SENTINEL EVENT SUMMARY REPORT INFORMATION 2
EVENT TYPES AND TOTALS 2
PATIENT SAFETY PLANS 5
PATIENT SAFETY COMMITTEES 6
COMPARISON BETWEEN SUMMARY REPORT DATA AND REGISTRY DATA 9
EVENT TYPES AND TOTALS 9
IMPROVEMENTS TO BE MADE 10

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 second annual summary report to be compiled pursuant to Nevada Revised Statutes (NRS) 439.843.

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.

NRS 439.835 requires that medical facilities report sentinel events to NSHD. As specified in NRS 439.805, 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 19, 2011, each medical facility was sent a sentinel event report summary form to be completed and returned to NSHD 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 NRS 439.865; and
c) A summary of the membership and activities of the patient safety committee established pursuant to NRS 439.875.

NSHD 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. Of the 119 mandatory sentinel event reporters, all returned the required sentinel event report summary forms. These reports were then aggregated to provide a summary of the required information.

This section of the report provides information based on what was submitted by the medical facilities on their annual summary form and as required by NRS 439.843. Another section compares what was submitted on the summary forms to what has been received and recorded in the sentinel event registry for 2010.

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 2010, the medical facilities indicated that they had reported a total of 415 sentinel events.

Table 1 – sentinel event type totals from the 2010 sentinel event report summary forms

event type	total	percentage
abduction	**0**	**0.0%**
assault – attempted battery	**1**	**0.2%**
battery	**2**	**0.5%**
burn	**6**	**1.4%**
contaminated product/device	**1**	**0.2%**
discharge to wrong family/caregiver	**0**	**0.0%**
electric shock (environmental)	**0**	**0.0%**
elopement	**4**	**1.0%**
facility-acquired infection – catheter-related urinary tract infection	**38**	**9.2%**
facility-acquired infection – central line-related bloodstream infection	**24**	**5.8%**
facility-acquired infection – *decubitus ulcer* (stage 3 or 4)	**14**	**3.4%**
facility-acquired infection – non-catheter-related urinary tract infection	**6**	**1.4%**
facility-acquired infection – non-central line-related bloodstream infection	**7**	**1.7%**
facility-acquired infection – surgical site infection	**41**	**9.9%**
facility-acquired infection – ventilator associated pneumonia	**5**	**1.2%**
facility-acquired infection – other	**32**	**7.7%**
fall	**79**	**19.0%**
homicide	**1**	**0.2%**
homicide – attempted	**0**	**0.0%**
impersonation of a healthcare professional	**0**	**0.0%**
infant perinatal	**0**	**0.0%**
maternal intrapartum	**0**	**0.0%**
medication error(s)	**14**	**3.4%**
procedure complication(s)	**41**	**9.9%**

event type	total	percentage
rape	**0**	**0.0%**
rape – attempted	**0**	**0.0%**
restraint	**0**	**0.0%**
retained foreign object	**13**	**3.1%**
suicide	**2**	**0.5%**
suicide – attempted	**10**	**2.4%**
transfusion	**2**	**0.5%**
treatment delay	**13**	**3.1%**
treatment error	**12**	**2.9%**
wrong patient/wrong surgery procedure	**4**	**1.0%**
wrong site/surgery procedure	**5**	**1.2%**
other	**38**	**9.2%**
total	**415**	**100%**

A total of 38 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
allergic reaction to transpore tape	**1**
aspiration during propofol sedation	**1**
attempted self-harm	**1**
cardiac arrest	**1**
complication associated with administration of heparin	**1**
death following carotid endarterectomy	**1**
death following emergency surgery for necrotic bowel	**1**
death from septic shock as a result of bowel perforation due to colonoscopy	**1**
discharge assessment	**1**
esophageal perforation	**1**
facility-acquired pneumonia	**2**
inappropriate level of care	**1**
low oxygen level of patient	**1**
mechanical transaction of indwelling catheters	**2**
medical complication associated with prescription	**1**
misdiagnosis	**1**
patient had emesis during procedure	**1**
patient jumped out of ambulance on-route to facility	**1**
patient punched out a window resulting in lacerations	**1**
patient pushed and kicked another patient who fell down breaking his ankle	**1**
post-procedural left-side weakness and pain	**1**
procedural complication	**1**
retained stent	**1**
re-use of syringe on same patient	**1**
riot activity	**1**

'other' event descriptions	**total**
risk of facility-acquired infection	**1**
seizure activity	**1**
surgical site infection attributed to patient activity	**1**
unexpected death	**7**
unsuccessful resuscitation of patient found with foreign syringe in PICC line	**1**
total	**38**

A total of 32 sentinel events were categorized as 'facility-acquired infection – 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 'facility-acquired infection – other'

'facility-acquired infection – other' event descriptions	**total**
Clostridium difficile	**28**
would	**1**
pneumonia	**1**
necrotizing pancreatitis	**1**
post-procedural fever and sore throat	**1**
total	**32**

According to the summary reports provided by medical facilities, facility-acquired infections were the most common type of sentinel event reported, accounting for 167 of the sentinel events reported. Of these, surgical site infections were predominant at 41 reports; catheter-related urinary tract infections followed closely behind at 38 reports. Falls were second most common at 79, and procedural complications were third at 41. Overall, facility-acquired infections amount to two-fifths (40.2%) of all sentinel events reported.

PATIENT SAFETY PLANS

NRS 439.865 requires that each medical facility develop an internal patient safety plan to improve the health and safety of patients who are treated at the facility. The patient safety plan must be submitted to the governing board of the medical facility for approval. Once approved, the plan must be disseminated to all healthcare practitioners who provide treatment at the facility. The facility shall require compliance with its patient safety plan.

All medical facilities submitted some sort of document as a patient safety plan in response to the 2010 sentinel event report summary form. As was the case in 2009, there was a great variety in the documents submitted, ranging from fully comprehensive plans to single-page documents. Some of the latter were comprised of mission statements, meeting minutes, or forms that did not address the safety needs of patients at the medical facility nor outlined processes, procedures, or standards of practice.

Even though the statutes that address patient safety plans do not delineate the minimum requirements for a plan, NSHD reviewed each plan and found that a majority were unsatisfactory. In the absence of such requirements and in the interest of improving patient safety, NSHD will develop minimum patient safety plan standards and provide them to the various medical facilities to assist in the development and strengthening of their patient safety plans. These standards will be used to evaluate the patient safety plans that are submitted for the 2011 Annual Sentinel Event Summary Report.

PATIENT SAFETY COMMITTEES

In accordance with NRS 439.875, medical facilities must establish a patient safety committee.

What is the composition of the patient safety committee and how often is it required to meet?

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 patient safety officer of the medical facility;
2) At least three providers of healthcare 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
3) 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 NAC 439.920, 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;
2) At least two providers of healthcare 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.

How often do the patient safety committees meet?

According to the summary reports provided by the medical facilities, 73 facilities indicated that they had 25 or more employees, and 46 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 114 of the 119 facilities (95.8%) met as frequently as required. Among the facilities that had 25 or more employees, 68 (93.2%) of the patient safety committees met on a monthly basis. Among the facilities that had fewer than 25, 46 (100%) of the patient safety committees met on a quarterly basis. Tables 4 and 5 show these figures.

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

monthly	total	percentage
yes	**68**	**93.2%**
no	**5**	**6.8%**
total	**73**	**100%**

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

quarterly	total	percentage
yes	**46**	**100%**
no	**0**	**0.0%**
total	**46**	**100%**

Are the appropriate people attending the patient safety committee meetings?

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 patent safety officer, a doctor, a registered nurse, and the CEO or CFO* must be in attendance. At facilities with 25 or more employees, *the patent safety officer, a doctor, a registered nurse, a pharmacist, and an executive member* must be in attendance. Overall, the patient safety committees at 113 of the 119 facilities (95.0%) had the appropriate staff in attendance at the patient safety committee meetings. Among the facilities that had 25 or more employees, 97.3% had the appropriate staff in attendance. For the 2 that did not, a pharmacist was absent. Among the facilities that had fewer than 25, 91.3% had the appropriate staff in attendance. Of the 4 that did not, the CEO or CFO was absent at 3 of the facilities, and the CEO or CFO, a doctor, and a nurse were absent at the other facility. Tables 6 and 7 show these figures.

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

monthly	total	percentage
yes	**71**	**97.3%**
no	**2**	**2.7%**
total	**73**	**100%**

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

quarterly	total	percentage
yes	**42**	**91.3%**
no	**4**	**8.7%**
total	**46**	**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 event registry for 2010.

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 event registry. In 2010, a total of 415 sentinel events were indicated by the facilities as reported according to the summary forms versus 436 as recorded in the Sentinel Event Registry, 1 of which was determined not to be a sentinel event, bringing the actual total to 435.

Table 8 – sentinel event type totals from the 2010 sentinel event report summary forms and sentinel event registry

event type	summary	registry
abduction	**0**	**0**
assault – attempted battery	**1**	**1**
battery	**2**	**2**
burn	**6**	**7**
contaminated product/device	**1**	**1**
discharge to wrong family/caregiver	**0**	**0**
electric shock (environmental)	**0**	**0**
elopement	**4**	**4**
facility-acquired infection – catheter-related urinary tract infection	**38**	**38**
facility-acquired infection – central line-related bloodstream infection	**24**	**25**
facility-acquired infection – *decubitus ulcer* (stage 3 or 4)	**14**	**12**
facility-acquired infection – non-catheter-related urinary tract infection	**6**	**20**
facility-acquired infection – non-central line-related bloodstream infection	**7**	**7**
facility-acquired infection – surgical site infection	**41**	**46**
facility-acquired infection – ventilator associated pneumonia	**5**	**5**
facility-acquired infection – other	**32**	**30**
fall	**79**	**80**
homicide	**1**	**2**
homicide – attempted	**0**	**0**
impersonation of a healthcare professional	**0**	**0**
infant perinatal	**0**	**1**
maternal intrapartum	**0**	**0**
medication error(s)	**14**	**10**
not a sentinel event	**0**	**1**
procedure complication(s)	**41**	**40**
rape	**0**	**0**
rape – attempted	**0**	**0**
restraint	**0**	**0**
retained foreign object	**13**	**9**
suicide	**2**	**3**

event type	summary	registry
suicide – attempted	**10**	**10**
transfusion	**2**	**2**
treatment delay	**13**	**11**
treatment error	**12**	**18**
wrong patient/wrong surgery procedure	**4**	**3**
wrong site/surgery procedure	**5**	**8**
other	**38**	**40**
total	**415**	**436**

IMPROVEMENTS TO BE MADE

- Develop minimum patient safety plan standards to assist medical facilities in the development and strengthening of their patient safety plans.
- Research how to make attachments to PDF forms possible so as to ensure that a copy of a facility's patient safety plan is included with the form submission.
- Make it clear to mandatory sentinel event reporting facilities that even if they report no sentinel events over the course of the calendar year, the summary form must still be completed.
- Alter the logic of the form to require specific details for events categorized as 'facility-acquired infection – other' and 'other'.
- Add a field to the sentinel event report form for the medical record identifier to be collected to facilitate auditing.