



## Summary Report to the Medical Staff of the Executive Committee from Reports Presented to the Environmental Health and Safety Committee January – December 2009

The Environmental Health and Safety Committee receive quarterly reports from four safety subcommittees as well as the Emergency Preparedness and Planning Committee and Infection Control Committee. These activities are not included in this report as the respective committee chairs submit separate reports on these committee activities.

Environmental Health and Safety/Employee Incident Report – Money spent on work related injuries totaled \$842,000 as compared to last year which was \$1.5 million. This reduction is in large part due to the Safe Patient Handling Program which was expanded hospital wide in 2009. Additionally, Allied Claims, UNC Health Care's third party administrator, has had a positive impact on how claims are handled.

Several significant events were reported in 2009 including an employee that was burned by a coffee pot due to what was felt to be the design of the coffee pot. A detailed investigation was conducted by EH&S and the findings reported to both the manufacturer and the US Consumer Product Safety Commission. EH&S has recommended that this particular coffee pot not be purchased in the future.

A flood occurred at the Hedrick Building on May 10<sup>th</sup> resulting in significant damage to the building. EH&S responded to the event and assisted with recovery. Numerous indoor air quality complaints culminated in a meeting held with management to discuss indoor air quality and health concerns expressed by staff.

EH&S also completed an EPA self-audit with only minor potential violations noted with all being corrected prior to the submission of the report.

Life Safety – Several fire events were reported. One involved a fire on the roof of the Patient Support Tower where the roof was being re-tarred. The fire was fully extinguished with a fire extinguisher brought to the roof by maintenance staff. The investigation by Hospital Police has been closed and the fire's origin was deemed from an unknown cause.

The performance measure for life safety for 2009 was monitoring the misuse of microwaves, particularly burned popcorn. The Committee continues to discuss ways to decrease the misuse of microwaves including banning popcorn. Approximately 78% of hospital fires/smoke detection alerts arise from burned popcorn. Activated alarms affect multiple hospital departments as well as the local fire department.

Patient Safety – During the second half of 2008 reporting period, a number of performance measures were tracked regarding the Adult Rapid Response Team. The most important measure for tracking success is the number of code blue calls outside the ICUs and ED per 1000 discharges which was 4.9/1000 discharges measured in the baseline period (October 2004 through September 2005). Data collected July through October 2008 indicates UNC Hospitals are below the overall target rate of code blue calls outside ICUs and EDs per 1000 discharges at 3.6 with 3.9 as the target. This may be improved by implementing additional education that would focus on those units that had a high code blue call ratio. Nursing and medical staff were given a refresher course on the importance of knowing when to and when not to call. During the second half of 2009, the Adult Rapid Response Team experienced an unexpected peak in January, rising as high as 8.2. After extensive discussions, no reason for this spike was ever identified.

UNC Health Care and RTI have been awarded a two year AHRQ contract to demonstrate the use of the TeamSteps product in the PICU and SICU focused on RRT and ECMO events. Organizational spread has occurred with good success in the Pediatric and Main ED, L&D, NCCC, BMT, and Radiology. UNC Health Care representatives presented at the National TeamSTEPS collaborative in June and the program presented is featured as a case study on the National TeamSTEPS Implementation website.

UNCHC is voluntarily reporting to the Leapfrog Group. This group is a Fortune 500 company aimed at mobilizing employer purchasing power to alert America's health industry that big leaps in health care safety, quality, and customer value will be recognized and rewarded. The survey was submitted in June along with a required test of our CPOE system. UNCHC scored a "Fully Implemented" score on this test, indicating good ability to alert users to patient harm. This is the first year these test results will be visible to consumers.

Risk Management – There were 43 events that resulted in an investigation during this reporting period. Areas of concern included patient elopements, patient misidentification, and medication variances. In regard to elopements, several changes

have been made in regard to how patients are supervised when off the unit. Also, physicians are now conducting elopement risk assessments in the Eating Disorders Unit. In addition, the policy was updated, purple gowns are now being used to identify involuntary commitment patients that are being cared for on non-psychiatric units and all IVC patients being transported between departments are now accompanied by Hospital Police.

In regard to the incidents involving patient identification, the process for identifying patients per policy was not being consistently followed. The majority of incidents involved multiple persons from multiple disciplines. No serious injury resulted from these incidents; however, several incidents resulted in patients mistakenly receiving non-invasive procedures because the correct process for identification was not followed. Several actions have occurred to reduce the number of misidentifications including revising the "Patient Identification – Medication Administration Administering Blood Products, Taking Samples or Specimens, or Providing Treatments or Procedures" policy to require two forms of patient identification and the use of scripting and creating a multi-disciplinary task force to develop a house wide approach to address this issue. An LMS video tutorial on patient identification was developed and is an annual requirement for all employees. Patient identification was an area of focus for performance improvement in pediatrics. Ongoing audits on the pediatric units were initiated to ensure that all patients have an ID bracelet and that the information is accurate.

The medication variances were in regards to high alert medications. Follow up education is being conducted on the need to double check for high alert medication as well as standardizing dosing concentrations and pump settings when possible. A multidisciplinary group has also been convened to evaluate safe practices with patient controlled analgesia pumps. Recommendations from this team will be shared in house-wide education.

Twelve claims were reported with only eight having been previously reported to Risk Management. All cases were reviewed to identify risk reduction opportunities. The faculty involved in the four cases were reeducated about the importance of notifying Risk Management of adverse outcomes even if there is not identified breach in the standard of care. Two of the cases occurred at Area Health Education Center locations where communication with the faculty is more difficult than with faculty on the UNC Campus.

Security – A study was commissioned to look at outdoor lighting to identify acceptable levels of light for security purposes. Improvements needed involve the amount, quality, and location of lighting. Areas that need to be improved upon in regards to adequate levels of lighting include the majority of the exterior walkways and the front parking area.

There are plans to open a larger, separate psychiatric ED that will be open 24 hours a day. Crisis intervention training has been expanded for staff in the ED to help with de-escalation. Elopement were on the rise as well during this period. With the new ED being opened, it is hoped that this will help to limit elopement due to the greater number of locked areas and use of RFID technology.

Utility Management – Sewage blockages continued to be tracked as a performance measure. An AIDE team was assembled to identify steps that can be taken to reduce the numbers of blockages. Several steps have been taken to reduce the amount of product being placed in the toilets including improved signage, waste receptacles in patient bathrooms and communicating with staff regarding the types of materials that can be flushed. Also, a major sewer line was replaced in Central Processing. Sewer blockages began to taper off during the 3<sup>rd</sup> quarter. It is believed that staff education has contributed to the decrease in blockages.

Corridor Storage - The Joint Commission is placing stronger emphasis on life safety compliance and inappropriate corridor storage. Some areas have little or no storage areas and the lack of storage space is a significant issue. Areas of concern are being evaluated to identify storage areas.