Burn cases are identified from hospital discharge data and outpatient clinics through ICD-9 codes. Medical records of burn cases are abstracted to identify work-related burn patients, and to obtain demographic, socioeconomic, and other risk factor information. Case and employer surveys are sent to obtain detailed risk factor information regarding the work-related burn incident. Educational materials are developed and distributed to high risk targeted industries and future site visits will be made to evaluate worker conditions.

Utah surveillance data indicates the incidence of work-related burns is significantly higher among males than females. Relative to age groups, persons 20 - 24 years of age demonstrated the highest incidence. Eating places accounted for most of the work-related burns by number. College graduates were less likely to be burned on the job than non-college graduates. The majority of work-related burns were from a thermal source. A wide majority of the respondents indicated that the work-related burn they received could have been prevented.

Analysis of data suggests that there is a great need for a focused work-related burn prevention program as most injuries were considered preventable, and most indicated they were injured performing a task which they perform daily. Two full years of data have been obtained, and continued surveillance of work-related burns is needed including the development of appropriate intervention strategies and measurement of the effectiveness of those strategies.

G2.3 Work-Related Burn Surveillance in Colorado: 1989 - 1997—McCammon JB

Funding Background: The Colorado Department of Health (CDH) conducted surveillance for persons requiring inpatient hospital care for occupational burns from 1989 through 1997 under funding from the National Institute for Occupational Safety and Health (NIOSH) Sentinel Event Notification System for Occupational Risk (SENSOR) program. The success of this program led to expanded surveillance through which data on both occupational and non-occupational hospitalized burn cases were collected. Funding for the non-occupational portion of the surveillance was part of a National Center for Injury Prevention and Control Injury Capacity Building interagency agreement that began in 1989 and ended in 1994, and through the University of Colorado Health Sciences Center Burn Rehabilitation Model Systems Program from 1995 through 1996.

Burn Surveillance Background: In May 1990, the Colorado Board of Health adopted regulations that required that all hospitalized burns and all burns resulting in death prior to hospitalization be reported to CDH within 30 days. Hospitals throughout the state were provided with a two-page report form to be forwarded to CDH (passive surveillance). Active surveillance consisted of monthly telephone calls or visits to seven hospitals in the state. NIOSH and the two states conducting burn surveillance under SENSOR at the time (CDH and the Oregon Health Division) agreed upon a surveillance case definition for occupational hospitalized burns. Between February 1989 and June 1997, 548 occupational hospitalized burns were reported to CDH, of which 501 met the case definition.

Current Status: Injury data including burn data, are still available at CDH. In 1996, the Colorado legislature mandated the formation of a Trauma Registry as a result of pressure from physicians from the state's Trauma Institute. Limited State funds were allocated to be used to evaluate care of the trauma patient in Colorado. CDH continues to seek adequate stable funding for the Registry.

G2.4 Amputation Surveillance in Minnesota—Parker DL, Boyle D, Larson T

In the United States, between 16,000 and 21,000 people sustain work-related amputations each year (McCaffrey, 1981; Sorock et al., 1993; US Department of Labor, 1982). The rate of amputation varies from 1.5 to 3.7 per 10,000 full-time workers engaged within private industry or manufacturing. The highest incidence occurs among young males, those using machines, or working within manufacturing industry. The majority of amputations involve one or more fingers. Although a finger or fingertip amputation may not seem serious, finger dexterity is an integral factor for many jobs and loss of a fingertip may result in lost work time, loss of a job, or placement in an alternate position.

The Minnesota SENSOR has collected data on the nature, incidence, and cause of work-related amputation injuries since 1992. SENSOR defined an amputation as any finger amputation or loss of any other body part; 832 workers were identified as having amputation injuries between 1994 and 1995 and 72 percent of these workers completed telephone interviews. A majority of the individuals completing the telephone interview were male (86%), 14 to 44 years of age (75%), employed at least 30 hours per week (93%), and had no technical school or college education (54%). Ninety-three percent of these injuries were reported through the Department of Labor and Industry's first report of injury forms or through computerized disability rating records.

The amputation injury rate for Minnesota workers was 39 per 100,000 workers, with agriculture and manufacturing having the highest rates. Sixty-six percent of the injuries involved one finger; fourteen percent involved two or more fingers. Persons working with machinery reported 73 percent of the injuries. A closer examination of the incidence and causes for amputations shows that these were not random events. Reliance on human reactions to prevent injury is inadequate; therefore additional research needs to be conducted.

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ABSTRACTS

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