were provided with educational materials, via a series of presentations, mailings and phone calls designed to increase their use of the Operational Guidelines for Determination of Injury at Work (developed by the Association for Vital Records and Health Statistics). To evaluate these efforts and ascertain coroners' knowledge of the Guidelines, a telephone survey of half of the state's 120 county coroners was conducted in December 1996. Results showed that 65 percent of the coroners remembered receiving information from KY FACE; of those, 88 percent rated FACE as having been helpful in providing instruction about determining injury at work. Fifty-five percent reported routinely referring to the Guidelines when responding to the "Injury at Work?" question. To assess how coroners determine work-relatedness, they were presented with brief scenarios of fatal injury cases and then asked how they would complete the "Injury at Work?" box on the death certificate. 1996 data showed that the sensitivity of the "Injury at Work?" box in identifying occupational fatalities had increased to 84.6 percent. Analysis will continue through 1997 to assess the accuracy of the "Injury at Work?" question and further examine the benefits of the educational program.

***Wisconsin FACE 1991-1997: On-Site Investigation Findings and Recurrent Themes for Fatality Prevention*—**Hanrahan LP, Tierney J, Braddee R

As of March 1, 1997, 109 of 629 (17%) fatalities entering the Wisconsin surveillance system met the NIOSH criteria for an on-site investigation. They included 5 confined space deaths, 11 electrocutions, 42 falls, 51 machine related fatalities and one firefighting fatality. From these, a total of 51 (47% of eligible cases) on-site investigations were completed. They included four confined space studies, 8 electrocution investigations, 23 falls, and 16 machine related fatalities. Characteristics were examined and prevention recommendations were summarized for this case series. Farmers were involved in over half of the investigated fatalities, and were represented in each of the in-scope types: confined space (asphyxiations), machines (tractor rollovers, run overs, and machine entanglements), falls, and electrocutions. Causal factors were summarized using the Haddon Matrix and recommendations to prevent similar occurrences were categorized into meaningful groupings. The Haddon Matrix and prevention recommendation analyses are still underway and will be presented at the conference.

***Wisconsin FACE: Findings From The First Cycle of Surveillance Activities*—**Hanrahan LP, Tierney J, Braddee R

Wisconsin is home for 5.1 million residents and 2.5 million workers. Important industrial sectors include service, manufacturing and retail trade; as America's Dairyland, agriculture also plays a vital role in the economy. From October 1, 1991 through February 28, 1997, the Wisconsin FACE program tracked 629 occupational fatalities through its surveillance system. During this period, the Wisconsin workforce averaged 118 fatalities per year, or nearly one fatality every three days. Information on cases was obtained from a network of multiple reporting sources: death certificate (100%); workers compensation (47%); newspaper (42%) coroner's reports (21%); police (18%); and OSHA (11%). Detection and notification steadily improved over time. For 1992 deaths, fewer than 18% of cases were reported in less than a week after the event. In contrast, by 1994 over 43% of deaths were detected by the surveillance program within a week of the event. The majority of cases were male (92%), and white (95%). Over 15% of all cases were aged 65 and older, while 6 cases were less than 15 years old. As in the 1980's, farmers and agriculture accounted for a large number (29%) of the cases. Transport / drivers represented 16.6%, construction workers 8.5%, professionals 8%, and laborers 7%. The distribution of fatality causes was similar to the 1980's: approximately 24% of the fatalities were caused by motor vehicle crashes, and another 24% were due to machines. Here, agricultural machines (ICD9 E-Code 919.0) represented the majority of machine types. Struck by falling objects accounted for another 9.9%, while falls represented 8.2% of cases. Incidence rates for the time period were constructed by occupation, industry, gender, and age. These were compared to findings from the 1980's (NIOSH - A Decade of Surveillance), and will be summarized at the conference.

***The Effect of Workers' Compensation Likelihood on the Reporting of Cumulative Trauma Disorders*—**Lincoln A, Baker SB, Smith GS

Introduction. Proper reporting of musculoskeletal conditions is imperative to establish the incidence and circumstances of occupational injuries and illnesses and determine priorities for interventions. However, biased reporting practices may be associated with the likelihood of compensation award for specific conditions. For example, in those states which require "a specific incident/accident" for compensation, workers who develop a cumulative trauma disorder may be more likely to describe their condition as an acute strain/sprain, i.e., to cite a specific incident as the source of the problem. The effect of such a potential bias would be to underreport the incidence of cumulative trauma disorders while overreporting that of strains/sprains, which are considered to be acute injuries. Such an effect could have dramatic impacts on the validity of data used to base decisions regarding ergonomic interventions and measure its effectiveness.

Methods. This study attempts to determine the existence of such a reporting bias by examining state-by-state variations in the proportions of musculoskeletal conditions that are reported as cumulative trauma disorders (CTDs) versus those reported as strains/sprains. A computerized, companywide medical surveillance system was used to ascertain all musculoskeletal conditions within an automaker's U.S. warehouse facilities between January 1991 and September 1996. The 19 facilities are distributed throughout 16 states which vary in their statutory outlook regarding work-relatedness of CTDs and likelihood of accepting workers' compensation claims for CTDs. States were categorized on the basis of: 1) recognition of CTDs either within state workers' compensation statutes, case law, or the definition of occupational disease/injury; and 2) likelihood of awarding compensation for a CTD claim.

Findings. Preliminary findings indicate that in the eight states which do not recognize CTDs in statute, case law, or in the occupational disease/injury definition, CTDs represent 3.4% of all musculoskeletal conditions. This compares with 10.2% among those eight states which do recognize CTDs in some form. Given that any musculoskeletal condition is reported, the odds of a CTD case being reported in a state which recognizes CTDs is 3.26 relative to a state which does not recognize CTDs (95% CI: 2.14, 4.99). A comparison between reports of CTDs and diagnoses that are most likely to be substituted for a CTD (i.e., strains/sprains of the hands/wrists, forearm/elbow, and shoulder/upper arm) yield similar results. For injuries to the hand and wrist, the odds of being reported as a CTD rather than a strain/sprain in a state which recognizes