

SECTION 1

PUBLIC HEALTH IMPORTANCE OF OCCUPATIONALLY RELATED HOSPITALIZED BURNS

Work-related burns are a leading cause of acute occupational injury in the United States. An estimated 20-30% of all hospitalizations due to burn injuries result from workplace exposures. From 1994-1998, a total of 290 workers filed claims to the Washington state-fund workers' compensation system for burn injuries that required inpatient hospitalization. These injuries incurred direct costs of almost \$2.8 million per year and resulted in approximately 7,600 lost workdays per year (an average of 132 lost workdays per claim). Work-related burns are preventable. Engineering controls, personal protective equipment, and employer/employee education are all potential strategies that can be used to prevent these serious injuries.

SECTION 2

PURPOSE AND OPERATION OF THE SURVEILLANCE SYSTEM

(a) Purpose

The purpose of this system is the implementation of surveillance of work-related burns that result in hospitalization or death in order to reduce the occupational risks associated with serious burn injuries through prevention.

(b) Objectives

The system has the following objectives:

1. Describe the incidence and mortality of work-related hospitalized burns.
2. Characterize the distribution across occupation, industry, and region.
3. Create surveillance materials identifying risks associated with this health event and implement educational activities for reducing these risks, and
4. Share the information with health care providers, public health professionals and labor and industry stakeholders.

(c) Planned Uses

The system will be used to track trends in the incidence of these serious injuries, to identify causative factors, to document socioeconomic costs, to develop and implement prevention strategies, and to evaluate the effectiveness of efforts to reduce the risks associated with occupational burns. The system will meet the regulatory obligations under the notifiable conditions rule, Washington Administrative Code 246 section 101 (WAC 246-101).

(d) Case Definition

A case is any worker, who is employed within the borders of the State of Washington, who suffers a burn while performing work-related duties, and the burn results in hospital inpatient treatment or death.

(e) Legal Authority

WAC 246-101 directs the Department of Labor and Industries to

1. maintain a surveillance system that may include a sentinel-reporting network of burn treatment centers and hospitals, and sample checks with health care providers, clinics, and hospitals regarding hospitalized burns.

2. distribute periodic epidemiological summary reports and an annual review report to local health officers, and

3. provide consultation and technical assistance to public health officials, to those providing case reports, and to business and labor organizations.

(f) Organizational Location

The surveillance system is located within the Safety and Health Assessment and Research for Prevention (SHARP) program of the Department of Labor and Industries.

(g) System Components

1. Population Under Surveillance

Workers employed within the State of Washington.

2. Time Period of Data Collection

Data collection with the sentinel network began in September 2000.

3. Collection and Reporting Sources

SHARP has developed voluntary reporting agreements with 5 hospitals and burn centers in and around Washington to report cases of occupationally related burns that were hospitalized at their institution. Data from workers compensation claims are extracted from the Department of Labor & Industries data warehouse on a monthly basis. Deaths resulting from work-related burns are obtained from the FACE program.

4. Data Management

The surveillance system is maintained as an Access database. Case reports from sentinel hospitals and FACE mortality reports are entered manually. A case report from the workers compensation system is accepted if the claim has been assigned a nature of injury code of 120 (heat burns or scald), 130 (chemical burns), 219 (nonionizing radiation), or 295 (welder's flash) and where the claimant is identified as an inpatient from a hospital bill in the system. Additionally, a case is accepted if it has a nature of injury code of 200 (electric shock, electrocution), the claimant is identified as an inpatient from a hospital bill, and at least one ICD9CM diagnosis code from a hospital bill is consistent with a burn. Acceptable ICD9CM codes are 94X burns (where X can range from 0 to 9 and identifies the affected body part), 91X.0 abrasion or friction burn, 91X.1 an infection associated with an abrasion or friction burn, and 692.7 sunburn.

4. Data Analysis and Dissemination

Brief updates are disseminated to the reporting hospitals to keep them informed of surveillance activities. SHARP will analyze the data for clusters by industry and occupation. Specific education activities will be undertaken as part of the prevention strategy including the distribution of prevention reports to employers and employees, as well as appropriate business and labor groups.

5. Patient Privacy, Data Confidentiality, and System Security

All data collected are used solely for surveillance and prevention purposes. All hard copies of case reports are stored in locked filing cabinets.

The Access database is password protected. Passwords to the database are issued only to authorized SHARP personnel. Additionally, the physical access to the building and the access to individual computers are controlled as part of the Department of Labor and Industries security systems.

SECTION 3

RESOURCES USED TO OPERATE THE SYSTEM

There are two sources of funding for the surveillance system – the Core grant and SHARP. The Core grant provides funding for 0.35 FTE distributed among three positions (an administrative assistant, a computer specialist, and an epidemiologist), for some travel and for printing/distribution of prevention reports. SHARP funds 0.25 FTE distributed among three positions (a public health advisor, an industrial hygienist and an occupational medicine physician). SHARP also provides office space, access to workers compensation data and computing resources for the surveillance system.

