## SUICIDE AND OCCUPATION: IS THERE A RELATIONSHIP? Carol A. Burnett, Peter A. Boxer, Naomi G. Swanson National Institute for Occupational Safety and Health

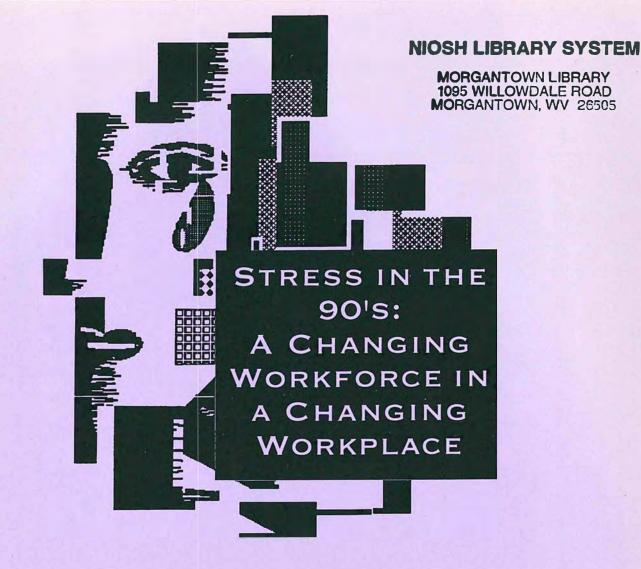
Suicide was the eighth leading cause of death in the United States in 1988. Epidemiologic studies have identified generally accepted demographic risk factors for suicide, including age, race, and sex. While occupation has long been considered a risk factor for suicide, studies of the relationship between specific occupations and suicide risk have yielded conflicting results. We reviewed the literature of the last decade on suicide and occupation, including studies focusing on suicide in specific occupational groups and studies which analyzed mortality from all causes in a defined community or working population. The most recent studies examining the relationship of occupation to suicide on a national level were based on U.S. death certificate data from 1950. One or more studies have found an elevated risk of suicide in actors, automobile mechanics, chemical workers, chemists, dentists, farmers, forestry workers, highway maintenance workers, nurses, physicians, police officers, social workers, tobacco industry workers, and veterinarians. However, because of methodological problems in many of these studies, no firm conclusions can be drawn regarding suicide risk for occupations other than physicians. The weight of current evidence supports the conclusion that both male and female physicians have elevated rates of suicide. Additionally, while most studies of suicide focus on highly educated professional groups, the majority of recent studies suggest an inverse relationship between suicide rates and socioeconomic status.

The purpose of our study was to examine the relationship of occupation to suicide risk in white males using recent data for a wide geographical area of the United States. The study is based on occupation-coded death certificate data from 23 states from 1984-1988. Death certificates collect information on the usual occupation of the decedent. Occupation was coded according to the 1980 Bureau of the Census classification system. A case-control study was designed with cases being all white males 15-64 years of age whose underlying cause of death was reported as suicide. Controls were decedents with any natural cause of death. Age-adjusted odds ratios were computed for both broad and detailed occupational categories.

Odds ratios for eight broad occupational categories ranged from 0.85 (95% CI=0.79-0.92) for executive, administrative, and managerial

occupations and 0.96 (95% CI=0.89-1.05) for professional specialty occupations to 1.27 (95% CI=1.15-1.39) for farming, fishing, and forestry occupations and 1.29 (95% CI=1.23-1.35) for precision production, craft, and repair occupations. Detailed occupations with at least a 50% increased odds of death from suicide included physicians (OR=2.44; 95% CI=1.70-3.49), security and financial service sales occupations (OR=2.65; 95% CI=1.40-5.02), automobile body and related repairers (OR=1.54; 95% CI=1.10-2.15), carpet installers (OR=1.74; 95% CI=1.12-2.68), carpenters (OR=1.60; 95% CI=1.41-1.81), insulation workers (OR=1.97; 95% CI=1.02-3.79), punching and stamping press machine operators (OR=1.66; 95% CI=1.02-2.71), and winding and twisting machine operators (OR=2.62; 95% CI=1.20-5.74).

The study suggests that the risk of suicide is not uniform across occupations. Occupations with high risk are found in various socioeconomic groups. The results of this study may be used to target occupations for mental health research and prevention activities.



ABSTRACTS PRESENTED TO THE AMERICAN PSYCHOLOGICAL ASSOCIATION AND THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH CONFERENCE

NOVEMBER 20-22, 1992 WASHINGTON, DC

## CONFERENCE CHAIRS

GWENDOLYN PURYEAR KEITA, Ph.D.
AMERICAN PSYCHOLOGICAL ASSOCIATION

STEVEN L. SAUTER, Ph.D.
NATIONAL INSTITUTE FOR
OCCUPATIONAL SAFETY AND HEALTH

**CONFERENCE COORDINATOR** 

SONJA M. PRESTON, MSW AMERICAN PSYCHOLOGICAL ASSOCIATION CONFERENCE ASSISTANT

MARISA DE LA CRUZ AMERICAN PSYCHOLOGICAL ASSOCIATION