Given high levels of occupational stress and toxic exposures, firefighters have a relatively high prevalence of occupationally related medical and mental health disorders compared with the general public. Previous research found high rates of heavy and binge drinking among male firefighters. This study is the first to examine alcohol use among women firefighters.

Methods: Data were collected as part of a national online survey of women, career firefighters. A total of 1,913 women firefighters completed questions regarding alcohol use. Nearly 40% reported binge drinking in the previous month and 4.3% reported driving while intoxicated. Among those who drank, 16.5% screened positive for problem drinking. Problem drinkers were more than 2.5 times as likely to have been diagnosed with depression or have symptoms of posttraumatic stress disorder, and were approximately 40% more likely to have been injured on the job in the previous year, when compared with other women firefighters. Those who screened positive for problem drinking also were significantly less likely to say that they would recommend a fire service career to other women.

Conclusions: As with male firefighters, heavy and problem drinking are prevalent among women firefighters and are associated with negative occupational outcomes.
fire service occupational epidemiology studies collected data in a combined 44 departments nationally and only 69 women firefighters were enrolled in the cohorts (Haddock et al., 2012; Haddock, Day, Poston, Jahnke, & Jittinar, 2015). As a result, the occupational epidemiology literature on the fire service is almost entirely based on male firefighters and many key health concerns of women firefighters have yet to be studied. Fortunately, occupational scientists recently have begun to address the dearth of data on women firefighters. For example, the National Institute on Occupational Safety and Health included women in their cohort study of cancer among firefighters (Daniels et al., 2014).

One of the most pressing health concerns identified in the literature on male firefighters is the disturbingly high prevalence of heavy alcohol consumption and binge drinking (Carey, Al-Zaiti, Dean, Sessanna, & Finnell, 2011; Haddock et al., 2012; Haddock et al., 2015; Jahnke, Poston, & Haddock, 2014; Piazza-Zaiti, Dean, Sessanna, & Finnell, 2011; Haddock et al., 2012). Alcohol use screenings were conducted as part of two large surveillance studies in the U.S. fire service (Haddock et al., 2012). The first survey was conducted with 656 firefighters from 24 fire departments randomly selected from the International Association of Fire Chief’s Missouri Valley region. Results indicated that more than 50% of male career firefighters reported recent heavy (≥3 drinks) or binge drinking (≥5 drinks on an occasion for males), and 9% of firefighters who drank self-reported driving while intoxicated in the past 30 days.

The second surveillance study was a cohort study including 20 fire departments nationally (Poston, Haddock, Jahnke, Jittinar, & Day, 2013). The departments were purposively sampled (Shadish, Cook, & Campbell, 2001) based on whether or not they had well-developed wellness programs (career firefighters, N = 1,002). The prevalence of past 30-day heavy (44.7%) and binge drinking (50.2%) among male firefighters was similar to the previous study conducted in the Missouri Valley region. This compares with a binge drinking prevalence of 23.2% of adult men nationally (Kanny, Liu, & Brewer, 2012). Among male firefighters who reported a binge drinking episode in the past 30 days, 72.5% reported multiple episodes. The epidemic of alcohol abuse in the fire service is reflected in a recent (August 9, 2013) alert on the firefighter listserve “The Secret List,” warning that alcohol misuse is “a huge issue and one we continue to struggle with at every fire department.”

Unfortunately, aside from one descriptive study based on 31 women firefighters (Jahnke, Poston, Haddock, et al., 2012), there are no published data to determine whether the high rates of heavy and problem drinking found among males generalize to women firefighters. It is critical to determine whether women firefighters also are at risk for unhealthy levels of alcohol consumption owing to its deleterious social and health effects (Bates, Bowden, & Barry, 2002; Booth & Feng, 2002; Boucher, Harwood, Sacks, Simon, & Brewer, 2011; Breslow, Guenthner, Juan, & Graubard, 2010; Caetano, 1987; Caetano & Cunradi, 2002; Caetano, Schafer, Fals-Stewart, O’Farrell, & Miller, 2003; Centers for Disease Control and Prevention, 2015; Chartier & Caetano, 2012; Cunradi, Caetano, Clark, & Schafer, 1999; Ehlers, Gilder, Criado, & Caetano, 2010; Galvan & Caetano, 2003; Greenfield, 1998; Jahnke et al., 2014; Kaplan et al., 2014; Klin-gemann, 2001) and association with occupationally related risk factors, such as exposure to trauma (Jahnke, Poston, Haddock, & Murphy, 2016). This study fills the gap in the literature on women firefighters and alcohol consumption by presenting data from the first national study of the health of women in the fire service. In addition, we examine associations between problem drinking among women firefighters and key occupational risks, such as depression and trauma, injury, and job satisfaction.

Methods

Sampling Methods

Most fire departments across the country operate under the auspices of their own local governing body (e.g., local city, district, or county government) so no central registry of firefighters currently exists. Female firefighters can be arguably described as a “hidden population.” There are no national lists of female firefighters and departments typically refuse to provide personal data to researchers on their firefighters unless a strong bond has been established and appropriate administrative clearance has been obtained. Thus, “cold contacting” all United States fire departments and asking them to pass on study information to female firefighters would require considerable resources and likely result in low rates of cooperation. Given the small number of women in most departments, and the fact that many have no women, contacting a random selection of departments likely would not provide a sufficient sample unless a very large number of departments agree to participate.

Given the lack of a central repository from which to recruit women firefighters and the lack of feasibility of alternative methods, this study used snowball sampling techniques to solicit participation (Shadish et al., 2001). These techniques are widely accepted for recruitment among underserved, hidden populations (Sadler, Lee, Lim, & Fullerton, 2010). The primary outlets used for recruitment included 1) contacting participants from previous studies (Jahnke, Poston, Haddock, et al., 2012), 2) through iWomen membership, the only national organization representing women in the fire service, 3) email distribution through the International Association of Fire Fighters, the national labor union for firefighters, 4) through the Center for Fire, Rescue & EMS Health Research’s email distribution list to previously collaborating fire service personnel, and 5) a posting on the “Secret List,” a popular email listserver in the fire service that is distributed to thousands of firefighters worldwide. Secondary recruitment included requesting any women completing the survey to share the solicitation with their women colleagues. All women interested in participation were directed to a web-based survey.

Study protocols and consent procedures were approved by the Institutional Review Board of the National Development and Research Institutes, Inc. The initial page of the survey served as the informed consent document, which described the scope and purpose of the study, provided contact information for the research team and the Institutional Review Board, and explained the survey’s confidentiality. Next, participants were asked whether they currently serve in the career or volunteer fire service. Those indicating volunteer status were thanked for their interest and asked to share their contact information for future research, given the focus of the current study was career firefighters. We focused on career firefighters because they are exposed to the greatest risk, respond to the most calls, and spend the most time in the firehouse culture. Furthermore, most volunteer firefighters consider their participation as a form of community service, not their primary occupation.

Those indicating career status were provided an opportunity to share their contact information if they wanted to receive a thank you gift (a portable phone charger) via the U.S. Postal Service. All participants were then directed to the online survey.
دریافت فوری
متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات