



**NIOSH MUSCULOSKELETAL
HEALTH PROGRAM 1**



**NIOSH SMALL BUSINESS
ASSISTANCE PROGRAM 2**

NORA Sector Council Bulletin

Wholesale & Retail Trade

ADDRESSING THE NEEDS OF
WHOLESALE AND RETAIL TRADE FOR A SAFE FUTURE

NIOSH Musculoskeletal Health Program

Over the past dozen-plus years, musculoskeletal disorders (MSDs) have been the leading cause of lost work time for employees working in wholesale and retail trade (WRT) businesses, according to the U.S. Department of Labor’s Bureau of Labor Statistics. As a result, the WRT sector works with the NIOSH Musculoskeletal Health (MUS) Program to prevent MSDs among the 21 million WRT employees.

The MUS Program works with partners in industry, labor, trade associations, professional organizations, and academia to promote work-related musculoskeletal health and prevent MSDs. MSDs are soft-tissue injuries caused by overexertion from sudden or sustained exposure to repetitive motion, force, vibration, and awkward positions [NIOSH 2018]. Figure 1 shows MSD incidence rates for the years 2011–2016 in private industry (PI), the wholesale sector, and the retail sector [U.S. DOL, BLS 2016].

- Published results from investigations of new technologies (such as wearable sensors, vacuum lifts, exoskeletons, and computer vision). The purpose of these technologies was to measure the risks of exposure and to prevent or reduce MSD cases.

Figure 1. Incidence rates for MSDs during 2011–2016 in private industry (PI) and the wholesale and retail sectors



Source: U.S. DOL, BLS [2016]

What does the MUS Program do?

- **Surveillance:** Locates and uses unique sources of surveillance data (including surveys and insurance and workers’ compensation data) to identify and prioritize areas of needed MSD research.
- **Intervention Effectiveness:** Develops and evaluates cost-effective procedures to prevent or minimize MSDs in the workplace. Many retail businesses have jobs with high rates of MSDs (such as warehouse workers, stockers, sales persons, and package delivery drivers). Many of these jobs are lacking the prevention resources needed to promote musculoskeletal health and reduce MSDs.
- **Communication:** Shares new information, control technologies, and prevention methods through a variety of formats tailored to the needs of specific worker and employer populations.

What has the MUS Program accomplished recently?

- Evaluated the process of identifying standardized test procedures for using exoskeletons in industry settings, with the Department of Defense, the National Institute of Standards and Technology, and other stakeholders.
- Published NIOSH Science Blog post on [Musculoskeletal Health Research to Benefit Temporary Retail Workers](#). (See the full series [here](#).)

References

NIOSH [2018]. Musculoskeletal health program. By Lu M, Ramsey J, McDowell T, Reeves K, Novicki E. Atlanta, GA: Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication 2018–171, <https://doi.org/10.26616/NIOSH PUB2018171>.

NIOSH [2018]. NIOSH program portfolio: musculoskeletal health program [topic page]. Cincinnati, OH: Department of Health and Human Services, Centers for Disease Control, National Institute for Occupational Safety and Health, <https://www.cdc.gov/niosh/programs/msd/default.html>.

U.S. DOL, BLS [2016]. 2011–2016. Occupational injuries and illnesses and fatal profiles, case and demographic incidence rates (private industry). Characteristic type: musculoskeletal disorders. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics. Search code: MSDXXX. Years searched: 2011, 2012, 2013, 2014, 2015, & 2016, <https://data.bls.gov/gqt/InitialPage>.

Additional online NIOSH resources

- [Musculoskeletal Health Program](#)
- [Ergonomics and Musculoskeletal Disorders topic page](#)
- [Wholesale and Retail Trade Program](#)
- [Total Worker Health](#)
- [Healthy Work Design and Well-Being Program](#)

NIOSH Small Business Assistance Program

NORA SECTOR COUNCIL BULLETIN
WHOLESALE & RETAIL TRADE

“Retail is small business,” a slogan of the National Retail Federation [NRF 2017], reflects the large role the industry plays in small business, and vice versa. U.S. Census Bureau [2015] data indicate that 98% of retail sector firms with fewer than 100 persons employ about 27% (5.75 million) of retail workers. Given the significant role of small businesses in the retail sector, the NIOSH Wholesale and Retail Trade (WRT) Program collaborates with the NIOSH Small Business Assistance (SBA) Program on projects designed to reduce worker injuries in small retail establishments.

The SBA Program works with partners in industry, labor, trade associations, professional organizations, and academia. Although the definition of small business is evolving, most consider a small business to have fewer than 50 employees [Schulte et al. 2018].

The SBA Program’s current focus includes the following efforts:

- Conducting research to prevent injuries, illnesses, and deaths in small businesses.
- Increasing awareness and use of effective interventions for small businesses.

What are some SBA Program activities?

- Investigating the work environment in small businesses and the barriers to preventing workplace illness, injury, and death.
- Conducting outreach by giving occupational safety and health presentations to small businesses.
- Fostering international collaborations with other small business safety and health leaders through scientific conferences and informal networking.
- Collaborating and providing support (such as translation or outreach) to other NIOSH programs and outside partners who conduct research that may be helpful when providing OSH information to small businesses.

What are some SBA Program accomplishments?

- Co-hosted the first-ever small business occupational safety and health (OSH) conference in the United States, the Understanding Small Enterprises (USE) Conference, with the Center for Health, Work, & Environment at the Colorado School of Public Health.
- Published five peer-reviewed journal articles on small business OSH issues, including access to training, workforce diversity, OSH information needs, and employer readiness to change OSH programs.

- Explored how employers find and act on safety and health information, during SBA program interactions with more than 250 small employers and intermediaries at national and regional events.
- Collaborated with Total Worker Health® Centers of Excellence with regional small-business-emphasis programs to expand efforts to reach small employers with OSHA assistance through intermediaries: the Healthier Workforce Center at the University of Iowa School of Public Health and the Center for Health, Work & Environment at the Colorado School of Public Health.

Figure 2 [U.S. Census Bureau 2015] indicates that firms with fewer than 20 employees account for the following percentages of firms and employees: 89% of all private industry firms and 17% of all private industry employees; 85% of all wholesale sector firms and 18% of all wholesale sector employees; and 91% of all retail sector firms and 16% of all retail sector employees.

Figure 2. Small Businesses Private Industry, Wholesale, and Retail by Size and Employment Percentages

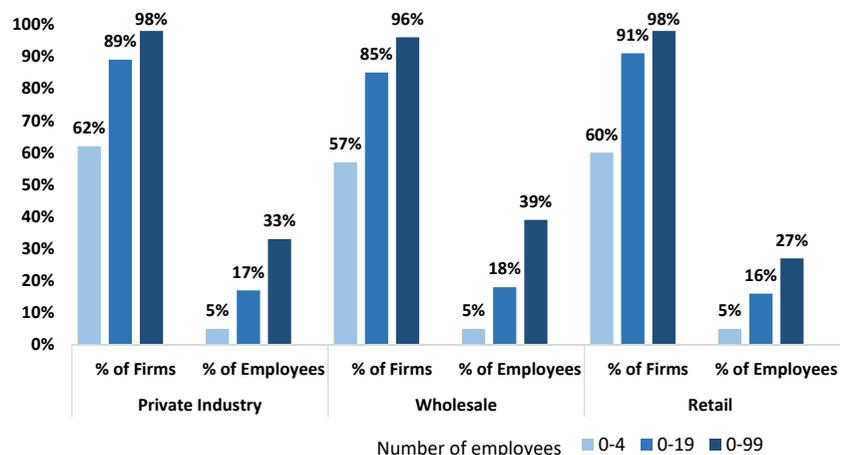


Figure 2. Small business employment percentages [U.S. Census Bureau 2015].

References

NRF [2017]. Small business. Retail is small business. Washington, DC: National Retail Federation, <https://nrf.com/who-we-are/retail-communities/small-business>

Schulte PA, Cunningham TR, Guerin RJ, Hennigan B, Jacklitsch B [2018]. Components of an occupational safety and health communication research strategy for small- and medium-sized enterprises. *Commentary. Annals of Work Exp and Health*, 62(1): no. S1, S12-24. Doi 10.1093/annweh/wxy054.

U.S. Census Bureau [2015]. Employment sizes for the United States and NAICS sectors: 2015, number of firms, number of establishments, employment by small enterprise, <https://www.census.gov/data/tables/2015/econ/susb/2015-susb-annual.html>.

Additional NIOSH online resources

[Small Business Assistance Program](#)

[Small Business topic page](#)



To find previous editions, go to <https://www.cdc.gov/nora/councils/wrt/bulletins.html>.

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This is a product of the National Occupational Research Agenda (NORA) Wholesale and Retail Trade Sector Council. It does not necessarily represent the official position of the National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services.

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