



Transportation, Warehousing, and Utilities

Advancing priorities through research and partnerships

The National Occupational Research Agenda (NORA) is a partnership program developed by the National Institute for Occupational Safety and Health to stimulate innovative research and improve workplace safety practices. NORA is a framework for occupational safety and health research in the nation. NORA is divided into 10 sectors. Each has a sector council that develops a national agenda based on critical issues identified in workplace safety and health. The agenda includes goals and an implementation plan for addressing the occupational safety and health issues in the sector.

There are over 7 million workers in *Transportation, Warehousing, and Utilities (TWU)* industries. The *Transportation* sector includes industries that transport passengers and cargo; scenic and sightseeing transportation; and support activities for transportation. The *Warehousing* sector covers industries providing warehousing and storage of goods. The *Utilities* sector includes industries which provide, service, and distribute electric power, natural gas, steam supply, water supply, and sewage removal.

TWU Work-related Health and Safety Conditions

Health concerns related to work environment in *TWU* industries include cardiovascular disease, obesity, and smoking habits. The prevalence of obesity and smoking in *TWU* industries is 28% and 26% respectively. Workers in the long haul trucking industry had an increased prevalence of obesity (69%) and smoking (51%). Safety concerns in *TWU* industries include the prevalence of working extended hours (28%), non-standard shifts(34%), and a hostile work environment (9%). Exposures in *TWU* industries known to cause illness include diesel, infectious agents, radiation, and vibration. The prevalence of exposure to vapors, gas, dust, and fumes in *TWU* industries is 40%.

TWU Non-fatal Occupational Injuries and Illnesses

The *Transportation and Warehousing* sectors private industry rate of occupational injuries and illnesses involving days away from work was 226.1 per 10,000 workers in 2011. Workers in these industries are at-risk for non-fatal injuries including overexertion and bodily reaction, contact with objects, and falls, slips, trips. *TWU* occupations with higher incident rates include flight attendants (622.1 per 10,000 workers) and electrical power-line installers (219.9 per 10,000 workers.)

TWU Occupational Fatalities

Occupations in the *TWU* sector account for 5% of U.S. workers but 18% of all workplace fatalities. Workers in these industries are at-risk for fatal injuries including transportation incidents, violence, struck by objects or equipment, electrocution, and falls. In 2011, the work-related fatality rate for the *TWU* sector was 11.4 deaths per 100,000 FTE, over 3 times the national average (3.6 per 100,000 FTE).

Non-fatal Injury and Illnesses Event Involving Days Away from Work, by Selected TWU Sub-sectors, private industry, 2011		
Industry Sub-sector	Primary Event or Exposure	Non-fatal Injury and Illnesses Rate Involving DAFW (per 10,000 workers)
Transportation and Warehousing	Overexertion and bodily reaction (39%) Contact w/object equipment (23%) Falls, slips, trips (23%)	226.1
Air	Overexertion and bodily reaction (51%) Contact w/object equipment (23%)	428.9
Couriers and Messengers	Overexertion and bodily reaction (47%) Falls, slips, trips(25%)	257.5
Trucking	Overexertion and bodily reaction (33%) Falls, slips, trips(29%)	234.7
Warehousing	Overexertion and bodily reaction (48%) Contact w/object equipment (26%)	184.4
Utilities	Overexertion and bodily reaction (39%) Falls, slips, trips(25%)	104.8

Fatal Event by Selected TWU Sub-sectors, 2011		
Industry Sub-sector	Primary Event or Exposure	Fatal Injury Rate (per 100,000 FTE)
Transportation and Warehousing	Roadway incidents involving motorized land vehicle (56%)	12.9
Trucking	Roadway incidents involving motorized land vehicle (73%)	25.1
Scenic	Aircraft Incidents (57%)	25.3
Water	Transportation incidents (54%)	17.4
Warehousing	Falls, slips, trips (38%)	4.4
Utilities	Transportation incidents (27%)	4.6



The National Institute for Occupational Safety and Health (NIOSH) is the federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness.

TWU Sector Council

The mission of the TWU Sector Council is *to implement a focused program of surveillance, research, and the development of interventions that lead to prevention of occupational injuries, illnesses, and fatalities in this industry sector.*

The TWU Sector Council includes representatives from Federal agencies, State agencies, non-profit organizations, academia, unions, industry, trade associations, and private consultants. The TWU Sector Council developed a national agenda with strategic goals for the Transportation, Warehousing, and Utilities sector organized by outcomes such as injuries and illnesses. This national agenda includes intermediate and activity goals along with performance measures to guide attainment of the strategic goals. The intention of the TWU national agenda is to stimulate and provide direction for occupational safety and health research.

- **Traumatic Injuries:** Reduce lost-workday occupational traumatic injury and fatality rates in the TWU sector.
- **Work-related Musculoskeletal Disorders:** Reduce the incidence and severity of work-related musculoskeletal disorders among workers in the TWU sector.
- **Health and Wellness:** Improve health and reduce premature mortality among TWU workers through workplace programs and practices that: (1) enable workers to engage in healthy behaviors; (2) reduce work-related physiological and psychological stressors; and (3) improve healthcare utilization.
- **Exposures:** Identify, evaluate, and reduce chemical, biological, and physical occupational hazards and exposures to limit occupational injuries, illnesses, and fatalities in the TWU sector.
- **Economics and Fatigue:** Economics and the impact of fatigue are also consistently identified as two other important areas of concern as they relate to occupational injuries and illnesses of TWU workers. These two areas are addressed within the four above strategic areas.



You Can Help

1. You can provide feedback on the TWU agenda.
2. You can become actively involved in the implementation of the TWU agenda.
3. You can identify research or activities in your organization that applies to one or more of the strategic goal areas.
4. Your organization can become involved in research or activities in one or more of the strategic goal areas.

The Sector Council meets once a year. Other contacts are made through e-mail, conference calls, and web-based meetings. The Council relies on a group of corresponding members for their expert input and feedback on the TWU agenda. Corresponding members receive e-mails on the progress of the TWU agenda and are asked to participate in workgroup meetings via conference calls, web-based meetings or during the council meetings.

For further information or to discuss opportunities for involvement, please contact:

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TWU Sector Information

NORA Website

<http://www.cdc.gov/niosh/nora/>

NIOSH TWU Program Portfolio Website

<http://www.cdc.gov/niosh/programs/twu/>

@NIOSHTransport Twitter Account

<https://twitter.com/NIOSHtransport>

TWU Agenda

The TWU agenda is a dynamic document and comments are always welcome as they can be addressed in future revisions.

<http://www.cdc.gov/niosh/nora/comment/agendas/transwareutil/pdfs/TransWareUtilAug2009.pdf>

Sources: <http://www.bls.gov/data/#injuries> , http://www.bls.census.gov/cps_ftp.html#cpsbasic , <http://www.cdc.gov/niosh/topics/nhis/transind.html>
<http://dx.doi.org/10.1002/ajim.22293> , <http://dx.doi.org/10.1002/ajim.22148>