National Institute of Occupational health and Safety (NIOSH)

National Occupational Research Agenda (NORA)
Agriculture, Forestry, and Fishing Sector

http://www.cdc.gov/niosh/nora/comment/agendas/AgForFish/pdfs/AgForFishDec2008.pdf

Strategic Goals

1 – Surveillance;
*Improve surveillance within the Sector to describe the nature, extent, and economic burden of occupational illnesses, injuries, and fatalities; occupational hazards; and worker populations at risk for adverse health outcomes.*

2 – Vulnerable Workers:
*Reduce deleterious health and safety outcomes in workers more susceptible to injury or illness due to circumstances limiting options for safeguarding their own safety and health.*

3 – Outreach, Partnerships, and Communications;
*Move proven health and safety strategies into workplaces through the development of partnerships and collaborative efforts.*

4 – Agriculture Safety;
*Reduce the number, rate, and severity of traumatic injuries and deaths involving hazards of production agriculture and support activities.*

5 – Agriculture Health;
*Improve the health and well-being of agricultural workers by reducing occupational causes or contributing factors to acute and chronic illness and disease.*

6 – Forestry Safety;
*Reduce the number, rate and severity of traumatic injuries and deaths involving hazards of forestry.*

7 – Forestry Health;
*Improve the health and well-being of forestry workers by reducing occupational causes or contributing factors to acute and chronic illness and disease.*

8 – Fishing Safety;
*Reduce the number, rate and severity of traumatic injuries (including deaths) involving hazards of commercial fishing.*

9 – Fishing Health
*Improve the health of commercial fishermen by reducing occupational causes or contributing factors to illness and disease.*

Executive Summary

For the first time in the U.S. there is a formal research agenda for occupational safety and health for the agriculture, forestry and fishing (AgFF) industries. The National Occupational Research Agenda (NORA) plan is based on scientific evidence, public testimonies, peer reviews, and personal expertise. The AgFF Sector includes activities such as growing crops, raising animals, harvesting timber, and harvesting fish and other animals from farms, ranches, or natural habitats. **This plan includes a set of strategic and intermediate goals to focus research, intervention efforts and prioritization of safety**
and health issues to an audience which includes industry, labor, federal, state, and local governments, and subject matter experts. Considerations critical to the priority-setting process were: the numbers and proportions of workers at risk for a specific injury or illness; the seriousness or severity of the hazard or issue; and the probability that new information/approaches will improve worker safety or health.

This executive summary lists the nine strategic goals put forth by the Council. For each Strategic Goal, there are up to five intermediate goals, each of which has specific action steps.

**STRATEGIC GOAL 1 - Surveillance**
*Improve surveillance within the Sector to describe: the nature, extent, and economic burden of occupational illnesses, injuries, and fatalities; occupational hazards; and worker populations at risk for adverse health outcomes.*

Because of the paucity of surveillance data in the AgFF subsectors, especially non-fatal injury data and the number and types of workers, enhanced surveillance is critical to addressing the other strategic goals. These data will define the specific populations at risk, the injuries and illnesses of greatest concern, and the impact/effectiveness of prevention efforts and intervention programs. A top priority is improved systems for collecting, analyzing and reporting data.

**STRATEGIC GOAL 2 – Vulnerable Workers:**
*Reduce deleterious health and safety outcomes in workers more susceptible to injury or illness due to circumstances limiting options for safeguarding their own safety and health.*

Some workers experience disproportionate rates of occupational injuries and illnesses because of social or physiological factors which can lead to increased workplace exposures and/or individual susceptibilities. Low English literacy and proficiency may reduce the efficacy of training and risk communication programs; socioeconomic factors may lead some workers to accept and remain in higher risk jobs. These factors compromise workers’ ability to seek protections and/or access resources. The circumstances and characteristics leading to vulnerability include extremes in age (under 18 and over 65 years), gender, limited English language and literacy, mobility and migration, socioeconomic status, ethnicity, culture, documentation status, and physical or cognitive disability. A priority is to secure and share valid, timely data regarding characteristics of this workforce, then develop evidence-based interventions targeted for vulnerable workers.

**STRATEGIC GOAL 3 – Outreach, Partnerships, and Communications**
*Move proven health and safety strategies into workplaces through the development of partnerships and collaborative efforts.*

Outreach is necessary to effectively implement the strategic plan. Disseminating relevant interventions and promoting the adoption of best practices in the workplace to all those who have a stake in improving the health and safety of workers can be achieved most effectively through partnerships and collaborations. Best practices include, but are not limited to: new technologies and engineering controls; behavior change interventions; training; incentive programs; and guidelines and policy approaches. 5 Strategies will highlight collaborations that yield effective adoption of best management practices across the agriculture, forestry and fishing industries.

**STRATEGIC GOAL 4 – Agriculture Safety**
*Reduce the number, rate, and severity of traumatic injuries and deaths involving hazards of production agriculture and support activities.*

Agricultural production is one of the most hazardous industry sectors in the U.S. Between 1992 and 2005 in the U.S., 7,571 farmers and farm workers died from injuries sustained while performing farm work in the U.S. Farm tractors accounted for the greatest portion of the fatalities (37%), predominantly caused by overturns (rollovers) and runovers. In addition to fatalities, an average of 93,000 non-fatal OSHA recordable injuries occur on U.S. farms each year. A top priority is adoption of interventions known to be effective in preventing tractor rollovers and runovers.

**STRATEGIC GOAL 5 – Agriculture Health**
*Improve the health and well-being of agricultural workers by reducing occupational causes or contributing factors to acute and chronic illness and disease.*
Agricultural workers face a wide range of acute and chronic health exposures at work. Their work can be strenuous, involving long hours, difficult conditions and repetitive exposure to musculoskeletal strains and sprains, respiratory hazards, toxic chemicals, psychological stresses and a variety of zoonotic diseases. These longstanding problems persist and there are emerging situations associated with new production methods, environmental issues, technologies and changing demographics of the workforce. Among the many concerns, a priority is to reduce the incidence and prevalence of musculoskeletal disorders.

**STRATEGIC GOAL 6 – Forestry Safety**
Reduce the number, rate and severity of traumatic injuries and deaths involving hazards of forestry.
In order to develop performance measures and track improvements in safety and health working conditions, comprehensive baseline data are needed. Different federal agencies monitor aspects of forestry workers, products, and occupational fatalities. Determining the specific cause of an injury event is often not possible because of lack of detailed data. This sector warrants considerable attention in building capacity to implement evidence-based safety interventions, starting with improved surveillance of workers and their exposures.

**STRATEGIC GOAL 7 – Forestry Health**
Improve the health and well-being of forestry workers by reducing occupational causes or contributing factors to acute and chronic illness and disease.
Forestry workers face health risks related to the strenuous jobs they perform over long work shifts. Musculoskeletal disorders and occupational illnesses can shorten working lives. Exposures to hazards and toxic materials, availability of protective clothing and equipment, and drug and alcohol use are major concerns for the forestry workforce. In addition, the health status of these workers has likely changed with mechanization. A key area for action will be interventions to minimize work-related musculoskeletal disorders.

**STRATEGIC GOAL 8 – Fishing Safety**
Reduce the number, rate and severity of traumatic injuries (including deaths) involving hazards of commercial fishing.
Commercial fishing remains one of our nation's most hazardous occupations. Despite increased regulations in 1988, commercial fishermen are about 30 times more likely to die pursuing their occupation than the average worker. The impact of the high rate of death and injury is devastating to fishing communities and fishermen’s families. To exacerbate the situation, some of the industry is overcapitalized and competition for a tightly controlled resource adds competitive pressure to support risk 6 taking. A priority is to adopt interventions that reduce deaths associated with vessel sinking and falls overboard.

**STRATEGIC GOAL 9 – Fishing Health**
Improve the health of commercial fishermen by reducing occupational causes or contributing factors to illness and disease.
Commercial fishing workers face many acute and chronic health exposures at work but little research has been done on these health issues or their prevention. There is also no surveillance or required reporting of health hazards for commercial fishing. As with agriculture and forestry, reduction of work-related musculoskeletal disorders is a top priority.

Note: The AgFF Strategic Plan includes a dictionary intended to standardize terminology used by safety and health professionals to describe and report occupational hazards, risks, injury, disease and illness used in occupational safety and health research.

More details – See the
NORA AgFF Strategic Plan Authors: A list of the AgFF Sector Council members is available on the NORA website ([http://www.cdc.gov/niosh/nora/councils/agff/planpart.html](http://www.cdc.gov/niosh/nora/councils/agff/planpart.html)).