

## **STRATEGIC PLAN FOR THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH) FIRE FIGHTER FATALITY INVESTIGATION AND PREVENTION PROGRAM (FFFIPP) - 2009**

**Purpose:** The purpose of this strategic plan is to guide the National Institute for Occupational Safety and Health (NIOSH) Fire Fighter Fatality Investigation and Prevention Program towards activities that are most likely to positively impact fire fighter safety and health, and to establish criteria with which to measure the program's progress and impact.

**Background:** The strategic plan was developed using a framework used by NIOSH. NIOSH is the federal agency responsible for conducting research and making recommendations for improving worker safety and health. NIOSH does not have authority to mandate changes in the workplace. Consequently, NIOSH relies on others in position to impact worker safety and health to act upon its research and recommendations. The NIOSH strategic planning framework recognizes NIOSH limits, based on its mandate, to directly impact worker safety and health. While the framework includes overarching goals to positively improve worker safety and health, the planning also explicitly addresses the roles that external parties will have to play in order for NIOSH research to impact worker safety and health, and identifies specific steps that NIOSH will take to help foster use of NIOSH research by others in a position to impact worker safety and health. The various components of the NIOSH strategic planning framework are:

*Mission:* Mission is a statement of the program's purpose and what it does to achieve its purpose. Strategic planning is the process of determining the logical steps that need to occur to contribute to the program's mission.

*Strategic Goal:* Strategic goals are top-level goals that state a specific desired change. NIOSH encourages the use of strategic goals that articulate reductions in work-related illnesses, injuries, and/or hazardous exposures. It is implicitly recognized that NIOSH alone cannot directly achieve these injury and illness reductions, but can contribute to these goals by conducting relevant research and working with others who can foster change based on the research.

The strategic goals for the Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) are consistent with strategic goals developed by the National Occupational Research Agenda (NORA) Public Safety Council which is a partnership activity between NIOSH and stakeholders

(<http://www.cdc.gov/niosh/nora/comment/agendas/pubsafsub/>). The strategic goals are also consistent with goals or activities of partners and stakeholders, e.g. United

States Fire Administration, International Association of Fire Fighters, International Association of Fire Chiefs, National Fallen Firefighters Foundation, and National Fire Protection Association.

*Intermediate Goal:* Intermediate goals are the activities that NIOSH believes need to be undertaken by stakeholders (e.g. organizations or individuals) using NIOSH research products and recommendations to affect reductions in worker injuries and illnesses. While NIOSH recognizes that it cannot mandate or control use of its research findings by others, it also recognizes that its research findings will not impact worker safety and health unless used or adopted by others, and that there are activities that NIOSH can take to encourage the use of its products and recommendations by others. The steps that NIOSH will take to foster the intermediate goals are identified in activity/output goals described below.

Several of the intermediate goals for the Fire Fighter Fatality Investigation and Prevention Program are consistent with intermediate goals developed by the NORA Public Safety Council, and partner and stakeholder activities and initiatives.

*Activity/Output Goal:* Activity/Output goals are statements of NIOSH program activities, including development of products (outputs) and steps NIOSH will take to encourage use of NIOSH findings and products by groups in a position to impact worker safety and health.

*Performance Measure:* A performance measure is a statement of a metric to indicate progress toward the goal. NIOSH plans to report on the progress of the Fire Fighter Fatality Investigation and Prevention Program on an annual basis using these proposed measures.

Developmental sources for the plan include fire service stakeholder comments submitted to the NIOSH docket and during public meetings; a 2007 report to NIOSH from the International Association of Fire Chiefs, Fire Fighter Fatality Investigation and Prevention Program Task Force; results of a Fire Fighter Fatality Investigation and Prevention Program Evaluation conducted by RTI International; and recommendations from a 2007 program review by the Department of Health and Human Services, Office of Inspector General.

## **PROGRAM MISSION**

The mission of the NIOSH Fire Fighter Fatality Investigation and Prevention Program is to prevent deaths and injuries of fire fighters by formulating and disseminating recommendations based on field-based investigations of fire fighter line-of-duty deaths, and facilitating the implementation of these recommendations by groups in position to impact fire fighter safety and health.

## STRATEGIC AND INTERMEDIATE GOALS

### **Strategic Goal 1: Reduce sudden cardiovascular deaths among on-duty fire fighters by 2015**

Intermediate Goal 1.1: Labor and professional organizations and medical care providers will develop intervention strategies based on investigation findings.

Intermediate Goal 1.2: Fire departments will adopt best practice guidelines for medical surveillance systems and wellness programs for fire fighters.

### **Strategic Goal 2: Reduce deaths and injuries associated with structural firefighting operations by 2015**

Intermediate Goal 2.1: Fire service agencies and labor and professional organizations will develop safety interventions based on fatality investigation findings.

Intermediate Goal 2.2: Fire departments will modify training, policies and practices based on investigation findings.

Intermediate Goal 2.3: Standards setting agencies will modify standards based on investigation findings.

Intermediate Goal 2.4: Manufacturers will improve fire fighter personal protective technology based on investigation findings.

### **Strategic Goal 3: Reduce deaths and injuries of fire fighters in motor vehicle-related incidents by 2015**

Intermediate Goal 3.1: Fire departments will require the use of seat belts by all occupants in moving fire service vehicles.

Intermediate Goal 3.2: Fire departments will modify training, policies and practices related to emergency response and unsafe driving based on investigation findings.

Intermediate Goal 3.3: Fire departments will improve the safety of their vehicle and apparatus fleets based on investigation findings.

Intermediate Goal 3.4: Standards setting agencies will modify standards that apply to the design, maintenance, operation, and training related to fire service vehicles and apparatus based on investigation findings.

Intermediate Goal 3.5: Manufacturers will improve fire service apparatus and vehicle designs based on investigation findings.

**Strategic Goal 4: Reduce deaths and injuries of fire fighters from causes other than cardiovascular, structure fires and motor vehicles by 2020.**

*Intermediate Goals will be developed by 2011 based on proposed changes and stakeholder input to the program's investigation prioritization guidelines.*

**ACTIVITY/OUTPUT GOALS AND PERFORMANCE MEASURES**

(Applies to all strategic goals and their associated intermediate goals)

**Activity/Output Goal A: Conduct fatality investigations as the principal activity of the FFFIPP**

Performance Measure A.1: Investigations will be finalized each year at a minimum level of 3 investigations per fulltime investigator. This equates to 24 investigations in Fiscal Year 09 (based on 7 fulltime investigators and 2 part-time investigators).

Performance Measure A.2: 90% of fatality investigations annually through 2010 (when investigation priorities will be revisited) will involve sudden cardiovascular deaths, deaths associated with structural fires, and deaths in motor vehicle-related incidents.

Performance Measure A.3: An initial site visit will be conducted within 3 weeks of the fatality in 80% of fatal traumatic injury incidents investigated by the program.

Performance Measure A.4: Input will be obtained from health communications experts and end users to improve the design and format of fatality investigation reports to make them more user-friendly by Fiscal Year 2010.

Performance Measure A.5: The program's investigation prioritization guidelines will be revisited and stakeholder input sought for proposed changes by 2010.

**Activity/Output Goal B: Individual fatality reports will be generated for each investigation and investigation findings will be reported and summarized in additional publications.**

Performance Measure B.1: Fatality investigation reports will be completed within 6 months of the site visit for 50% of investigated cases and within 12 months of the site visit for 95% of investigated cases.

Performance Measure B.2: At least one document (other than a fatality report) will be published each year by the program. These documents may include: NIOSH

Safety Advisories, Workplace Solutions, Alerts, or peer-reviewed journal publications.

**Activity/Output Goal C: Seek peer and stakeholder input to improve the quality of products and the impact of the program.**

Performance Measure C.1: 75% of traumatic fatality investigation reports will be reviewed by external experts prior to finalization and 100% of other publications will be reviewed by peer and/or stakeholder reviewers prior to finalization.

Performance Measure C.2.: Expert consultation and/or equipment testing will be sought on all investigations suggestive of personal protective technology malfunctions or failures.

Performance Measure C.3: Stakeholder input will be sought at least every two years through a public meeting and/or docket.

**Activity/Output Goal D: Increase fire service expertise of FFFIPP personnel**

Performance Measure D.1: Each trauma fatality investigator will take at least one fire service training course covering such topics as fire dynamics, fireground strategy and tactics, the influence of tactical operations on fire behavior, building construction and performance under fire conditions, or attend a fire service conference specifically for training purposes annually.

Performance Measure D.2: Any announcements seeking to fill investigator positions will require previous fire service expertise in addition to occupational safety and health training and experience.

**Activity/Output Goal E: Take steps to ensure FFFIPP recommendations and products are being used to improve fire fighter safety and health.**

Performance Measure E.1: The program will be involved in at least 2 outreach activities with partner organizations annually.

Performance Measure E.2: Program investigators will meet at least annually with colleagues in the National Personal Protective Technology Laboratory to discuss investigation findings related to personal protective technology.

Performance Measure E.3: Relevant investigation findings will be communicated through participation on committees and written correspondence to the National Fire Protection Association (NFPA) and other standards setting agencies (e.g. Occupational Safety and Health Administration) on an annual basis.

Performance Measure E.4: Relevant investigation findings will be communicated to manufacturer groups as needed, and at least every two years.

Performance Measure E.5: An improved communications strategy to specifically reach small and volunteer departments will be implemented by Fiscal Year 2011.

Performance Measure E.6: Input from a web publishing consultant on potential improvements to the FFFIPP Web site will be implemented by Fiscal Year 2011.

Performance Measure E.7: A survey that would be provided to all departments following a NIOSH fatality investigation that would provide feedback on the investigation and departmental changes made as a result of the investigation will be developed by Fiscal Year 2011 and implemented by 2013.

Performance Measure E.8: Funding to conduct a study assessing the extent to which the FFFIPP has impacted fire department training, policies and practices will be sought by Fiscal Year 2012.