

WORKERS' FAMILY PROTECTION ACT OF 1991

NOVEMBER 27 (legislative day, NOVEMBER 23), 1991.— Ordered to be printed

Mr. KENNEDY, from the Committee on Labor and Human Resources, submitted the following

REPORT

[To accompany S. 353]

The Committee on Labor and Human Resources to which was referred the bill (S. 353) to require the Director of the National Institute for Occupational Safety and Health to develop an investigative strategy to be used by the Federal Government in studying the prevalence of and issues related to contamination of workers homes with hazardous substances transported from their workplaces, having considered the same, reports favorably thereon with an amendment and recommends that the bill, as amended, do pass.

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The amendment is as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Workers' Family Protection Act".

SEC. 2. FINDINGS AND PURPOSES.

(a) FINDINGS.—Congress finds that—

- (1) hazardous chemicals and substances that can threaten the health and safety of workers are being transported out of industries on workers' clothing and persons;
- (2) these chemicals and substances have the potential to pose an additional threat to the health and welfare of workers and their families;
- (3) additional information is needed concerning issues related to employee transported contaminant releases; and
- (4) additional regulations may be needed to prevent future releases of this type.

- (b) PURPOSE.—It is the purpose of this Act to—
- (1) increase understanding and awareness concerning the extent and possible health impacts of the problems and incidents described in subsection (a);
  - (2) prevent or mitigate future incidents of home contamination that could adversely affect the health and safety of workers and their families;
  - (3) clarify regulatory authority for preventing and responding to such incidents; and
  - (4) assist workers in redressing and responding to such incidents when they occur.

SEC. 3. EVALUATION OF EMPLOYEE TRANSPORTED CONTAMINANT RELEASES.

- (a) STUDY.—
- (1) IN GENERAL.—Not later than 18 months after the date of enactment of this Act, the Director of the National Institute for Occupational Safety and Health (hereafter in this Act referred to as the "Director"), in cooperation with the Secretary of Labor, the Administrator of the Environmental Protection Agency, the Administrator of the Agency for Toxic Substances and Disease Registry, and the heads of other Federal Government agencies as determined to be appropriate by the Director, shall conduct a study to evaluate the potential for, the prevalence of, and the issues related to the contamination of workers' homes with hazardous chemicals and substances, including infectious agents, transported from the workplaces of such workers.

- (2) MATTERS TO BE EVALUATED.—In conducting the study and evaluation under paragraph (1), the Director shall—
- (A) conduct a review of past incidents of home contamination through the utilization of literature and of records concerning past investigations and enforcement actions undertaken by—
    - (i) the National Institute for Occupational Safety and Health;
    - (ii) the Secretary of Labor to enforce the Occupational Safety and Health Act of 1970 (29 U.S.C. 651 et seq.);
    - (iii) States to enforce occupational safety and health standards in accordance with section 18 of such Act (29 U.S.C. 667); and
    - (iv) other government agencies (including the Department of Energy and the Environmental Protection Agency), as the Director may determine to be appropriate;

- (B) evaluate current statutory, regulatory, and voluntary industrial hygiene or other measures used by small, medium and large employers to prevent or remediate home contamination;
- (C) compile a summary of the existing research and case histories conducted on incidents of employee transported contaminant releases, including—

- (i) the effectiveness of workplace housekeeping practices and personal protective equipment in preventing such incidents;
- (ii) the health effects, if any, of the resulting exposure on workers and their families;
- (iii) the effectiveness of normal house cleaning and laundry procedures for removing hazardous materials and agents from workers' homes and personal clothing;
- (iv) indoor air quality, as the research concerning such pertains to the fate of chemicals transported from a workplace into the home environment; and
- (v) methods for differentiating exposure health effects and relative risks associated with specific agents from other sources of exposure inside and outside the home;

- (D) identify the role of Federal and State agencies in responding to incidents of home contamination;
- (E) prepare and submit to the Task Force established under subsection (b) and to the appropriate committees of Congress, a report concerning the re-

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sults of the matters studied or evaluated under subparagraphs (A) through (D); and

(F) study home contamination incidents and issues and worker and family protection policies and practices related to the special circumstances of firefighters and prepare and submit to the appropriate committees of Congress a report concerning the findings with respect to such study.

(b) **DEVELOPMENT OF INVESTIGATIVE STRATEGY.—**

(1) **TASK FORCE.—**Not later than 12 months after the date of enactment of this Act, the Director shall establish a working group, to be known as the "Workers' Family Protection Task Force". The Task Force shall—

(A) be composed of not more than 15 individuals to be appointed by the Director from among individuals who are representative of workers, industry, scientists, industrial hygienists, and government agencies including the National Research Council, except that not more than one such individual shall be from each appropriate government agency and the number of individuals appointed to represent industry and workers shall be equal in number;

(B) review the report submitted under subsection (a)(2)(F);

(C) determine, with respect to such report, the additional data needs, if any, and the need for additional evaluation of the scientific issues related to and the feasibility of developing such additional data; and

(D) if additional data are determined by the Task Force to be needed, develop a recommended investigative strategy for use in obtaining such information.

(2) **INVESTIGATIVE STRATEGY.—**

(A) **CONTENT.—**The investigative strategy developed under paragraph (1)(D) shall identify data gaps that can and cannot be filled, assumptions and uncertainties associated with various components of such strategy, a timetable for the implementation of such strategy, and methodologies used to gather any required data.

(B) **PEER REVIEW.—**The Director shall publish the proposed investigative strategy under paragraph (1)(D) for public comment and utilize other methods, including technical conferences or seminars, for the purpose of obtaining comments concerning the proposed strategy.

(C) **FINAL STRATEGY.—**After the peer review and public comment is conducted under subparagraph (B), the Director, in consultation with the heads of other government agencies, shall propose a final strategy for investigating issues related to home contamination that shall be implemented by the National Institute for Occupational Safety and Health and other Federal agencies for the period of time necessary to enable such agencies to obtain the information identified under paragraph (1)(C).

(3) **CONSTRUCTION.—**Nothing in this section shall be construed as precluding any government agency from investigating issues related to home contamination using existing procedures until such time as a final strategy is developed or from taking actions in addition to those proposed in the strategy after its completion.

(c) **IMPLEMENTATION OF INVESTIGATIVE STRATEGY.—**Upon completion of the investigative strategy under paragraph (2)(C), each Federal agency or department shall fulfill the role assigned to it by the strategy.

**SEC. 4. REGULATIONS.**

(a) **IN GENERAL.—**Not later than 4 years after the date of enactment of this Act, and periodically thereafter, the Secretary of Labor, based on the information developed under section 3 and on other information available to the Secretary, shall—

(1) determine if additional education about, emphasis on, or enforcement of existing regulations or standards is needed and will be sufficient, or if additional regulations or standards are needed to protect workers and their families from employee transported releases of hazardous materials; and

(2) prepare and submit to the appropriate committees of Congress a report concerning the results of such determination.

(b) **ADDITIONAL REGULATIONS OR STANDARDS.—**If the Secretary of Labor determines that additional regulations or standards are needed under subsection (a), the Secretary shall promulgate such regulations or standards as determined to be appropriate not later than 3 years after such determination.

**SEC. 5. AUTHORIZATION OF APPROPRIATIONS.**

There are authorized to be appropriated for each fiscal year such sums as may be necessary to carry out this Act.

## I. PURPOSE AND SUMMARY

The purpose of the Workers' Family Protection Act (S. 353) is to identify the factors contributing to and increase awareness of the contamination of workers' homes with toxic substances from the workplace so that the appropriate actions may be taken to prevent future incidents. This legislation requires the National Institute for Occupational Safety and Health (NIOSH) to compile available information on the unintended transport of chemicals and other substances out of the workplace on workers' clothing into the home. NIOSH is to assemble a task force of safety and health professionals to review this information and then develop a proposed strategy for Federal agencies to use to determine the prevalence and health risk of such incidents. Peer review of the proposed strategy is to be obtained and used by NIOSH to prepare a final strategy. Government agencies are then to implement the strategy. Periodically, the Occupational Safety and Health Administration is to review the information collected as a result of the implementation of the strategy and determine if regulatory action is needed to prevent future incidents.

## II. BACKGROUND

### A. Introduction

The intent of the bill is to protect employees and their families from contaminants transferred from the workplace on workers' clothing. Numerous incidents have been documented where workers have inadvertently tracked hazardous substances home, causing injury to workers and their families. The prevalence of home contamination and the extent of the risk that such incidents pose to workers and their families, however, is unknown. Incidents of home contamination have been reported in recent years in many States, including North and South Carolina, Tennessee, Kentucky, Indiana, Michigan, Illinois, Ohio, Iowa, New York, Maryland, and Vermont. It is not known if these cases are indicative of a widespread problem or represent isolated incidents.

Children's health frequently has been affected by the resulting exposure to contaminants. In several cases, investigation of the symptoms suffered by children led to the discovery of the contamination. The majority of the known cases were identified as a result of acute health effects or routine health monitoring. Brief descriptions of a few of these cases are presented in the following subsection.

### B. Selected previous incidents

The prevalence of home contamination, as previously noted, is unknown. The Committee, however, has compiled information on several cases which are described below. One of the goals of this legislation is to identify other cases of home contamination.

1. The Agency for Toxic Substances and Disease Registry (ATSDR), in co-operation with EPA Region IV and NIOSH, recently investigated home contamination associated with the Caldwell Systems, Inc. (CSI) hazardous waste incinerator in Hudson, NC. CSI incinerated torpedo fuel, a neurotoxic substance, for the United

States Navy. Work clothing, when worn home, caused headaches and asthma in family members. The death of one and perhaps two of the workers' spouses may have been related to the effects of exposure.

2. The ATSDR investigated two incidents in Michigan: Anderson Development in Adrian, and Bofors Chemical in Muskegon County. In approximately 1980, workers at both facilities were found to be carrying a known bladder carcinogen into their homes on clothing, shoes, skin, and hair. Traces of this carcinogen were found in some of the family members' urine indicating an increased risk of bladder cancer. The State of Michigan has requested Federal funding from the ATSDR to conduct follow-up monitoring to determine if there is an increased incidence of bladder cancer.

3. In a third Michigan case, NIOSH tested the clothing and automobiles of workers at a friction products plant in Trenton at which asbestos fibers were used. One hundred percent of the clothing and 60 percent of the automobiles tested were found to be contaminated with asbestos fibers.

4. In another incident, 38 percent of the children of employees at a Memphis secondary lead smelter were found to have elevated blood lead levels. Eight of the 91 children required hospitalization for treatment. Average household dust lead concentrations in contaminated homes exceeded the levels in noncontaminated homes by a factor of six. Lead dust levels exceeded 70,000 mg/kg in some houses. By comparison, lead in soil is generally considered a health hazard at concentrations ranging from 500 to 2,000 mg/kg.

5. In late 1988, maintenance workers at a chlor-alkali plant in S. Charleston, TN carried elemental mercury home on their clothing. Some of the workers required medical treatment. The company hired a contractor to clean the homes of these workers under the supervision of EPA Region IV in the spring of 1989.

6. In 1983, the homes of workers at a mercury thermometer plant in Poultney, Vermont were found to be contaminated by mercury. The mercury levels in the air in some homes exceeded OSHA standards for the workplace. Children in the affected homes were found to have excessive mercury levels in body fluids and may have suffered neurologic damage. A similar case is believed to have occurred at a thermometer plant in Brooklyn, NY.

7. Children of battery plant workers in Raleigh, NC were found to have abnormally high levels of lead. Some children had blood lead levels greater than 40 ug/dl. According to the Centers for Disease Control, blood lead levels above 10 ug/dl can pose a health risk to children. Contaminated work clothing was the source of the lead contamination. Household dust contained up to 84,050 mg/kg of lead. Again, soil is considered a health risk at lead concentrations above 500 to 2,000 mg/kg.

8. Four or five male children of pharmaceutical workers experienced breast enlargement from home exposure to an estrogen hormone produced at their parents' Indiana employer. For example, a work shirt was found to contain an amount of hormone equivalent to three adult doses.

Numerous other incidents were identified by the Committee by a combination of a literature search and conversations with State agencies. For example, incidents involving lead and asbestos were

identified in Kentucky. Incidents involving radioactive materials were investigated by the Department of Energy in Tennessee, South Carolina, and Ohio. Workers and their clothing were found or suspected to be responsible for transporting these substances home in these cases.

### *C. Current law*

The most recent cases of home contamination have been addressed by states or the federal government under the Comprehensive Environmental Response, Compensation, Liability and Recovery Act (42 U.S.C. 9601 et seq.; CERCLA or Superfund). A U.S. District Court in Vermont has ruled that chemicals carried out of a workplace on clothing constitutes a release under CERCLA (*Vermont v. Staco, Inc.*, U.S. District Court, District of Vermont, Docket No. 86-190). As a result, EPA and the ATSDR have become the lead agencies in responding to contamination in the home. EPA can order the industry to implement a cleanup plan under Section 106 of CERCLA. Alternatively, EPA can undertake home decontamination operations and recover its response costs from the responsible party, generally the company from which the release occurred. The role of the ATSDR is to evaluate the public health impacts of the release on family members.

OSHA has responsibility for workplace protection under the Occupational Safety and Health (OSH) Act (29 U.S.C. 651 et seq.). Under the OSH Act, NIOSH has responsibility for investigating workplace exposures and the resulting effects on the employee.

Pursuant to its authority, OSHA has issued regulations requiring that workplace clothing and showers be provided if the Permissible Exposure Limit (PEL) of a substance is exceeded (see, e.g., 19 CFR 1910.1025, OSHA's lead standard). Home contamination can occur, however, even if the PEL is not exceeded and even if workplace clothing and showers are provided. For example, home contamination occurred in the homes of workers employed at a Vermont battery plant. Although nearly all of the workers showered and changed clothes before going home, their work clothing was laundered at home. Sufficient lead was transported into the homes in this manner to result in high blood lead levels in 55 percent of the workers' children.

The Department of Energy (DOE) oversees health and safety-related issues at its facilities. General authority for such activities is provided by the Atomic Energy Act (42 U.S.C. 2011 et seq.). DOE has responded to several incidents of home contamination in the last few years. A release of a sufficient quantity of radionuclides to pose a significant health risk to workers, their families, or to public health and the environment is not believed to have occurred. DOE has also conducted research on this topic in developing its industrial hygiene practices. The Committee hopes that NIOSH will use DOE's expertise in fulfilling its obligations under this Act. ]\*

Thus, five different Federal agencies have a role in preventing or responding to incidents of home contamination. OSHA is responsible for preventing such incidents, while EPA oversees the home cleanup operations when a hazardous substance is involved. NIOSH evaluates the health effects on workers, while ATSDR evaluates the health effects of workplace hazards on family members.

DOE addresses all aspects of incidents involving radionuclides at their facilities.

### III. NEED FOR THE LEGISLATION

This legislation is needed to provide additional information about the extent and severity of home contamination and to determine the most appropriate government response. The prevalence of and risks associated with contamination of the home with chemicals from the workplace are not accurately known. As NIOSH testified in the July 26, 1991 hearing on this legislation, "We do not have sufficient information presently to assess the severity or extent of the problem presented by 'take-home toxins'." NIOSH further testified, "The Bureau of Labor Statistics recorded over 280,000 cases of occupational disease in 1989, and this figure omits the toll of work-related cancer and many other occupational diseases of long latency whose connection with toxic work exposures usually goes unrecognized. We do not know the extent to which 'transmission' of occupational diseases into the home and the community adds to this toll, but any such transmission is unacceptable."

The American Industrial Hygiene Association agreed at the hearing that we lack a great deal of knowledge is lacking in this area. "While there is some evidence to indicate the problem exists, there is much we don't know: What industries and or workplaces are most likely to result in community contamination by workers and their clothing? Which contaminants are most likely to be carried home from the workplace? What is the prevalence and incidence of home contamination cases? Is this a serious problem or just a few isolated incidents? What are the best methods to prevent transfer of contaminants to homes and other parts of the community?"

This legislation will create a scientifically defensible strategy for investigating incidents of home contamination to determine what, if any, risk such incidents pose to workers and their family members. At present, such a strategy does not exist. The Committee believes that it is important to determine the severity and extent of this problem.

Greater awareness of worker contamination of their homes is also needed. Such awareness might encourage workers and employers to take steps to prevent such contamination. NIOSH testified that the problem of contamination "has been well known in the infectious disease area. In fact, there is a lot of public awareness of it. For centuries, people have known that you could start smallpox epidemics from infected clothing, infected blankets, and what have you. . . . But when you talk about this problem in terms of toxicity arising from the workplace, there is far less public awareness of this problem."

Dr. Marc Guerra in his testimony about the CSI case involving disabling disease and death, explained that "The intent of S. 353 is to increase the awareness of workplace exposures among workers and their families and to look at methods of preventing future contamination. Your vigorous support of this bill is needed to prevent similar occupational catastrophes, and will help to protect our children and our children's children."

The overlapping jurisdiction of the five agencies or departments with authority for addressing this issue has inhibited development of a coordinated response to this problem. The agencies have differing views as to which agency has the lead in responding to such case. Thus, delays can occur between discovery of a problem and a response by the Federal Government. In the hearing, Representative Ballenger commented on how difficult it was to get the Federal Government to respond to the CSI incident in his district. "It took almost 2 years to get EPA and OSHA and others involved." Rep. Ballenger's testimony was similar to other comments received by the Committee that this issue was not a significant concern to the various Federal agencies.

Better coordination between these agencies when they do respond is also needed. For example, when home contamination occurs, none or all of the agencies may take part in the response depending upon the circumstances. OSHA may or may not investigate the workplace conditions leading to the home contamination. An accurate determination of preventative measures cannot be made unless the causes of contamination are documented. It is important to determine if these incidents are occurring because current standards are not sufficient, or because current standards are not being followed. The former situation would suggest that new standards are needed, while the latter would suggest that better education about and enforcement of existing standards is the appropriate response. At present, there is not enough information to determine which, if any, response is appropriate. Thus, OSHA needs to participate in investigating worker transport of toxic substances into the home. ] \*

Other government agencies also need to be involved in these investigations. For example, when NIOSH and ATSDR evaluate the health effects on workers and their families, respectively, each may use different physiological tests. Comparison of the results between agencies may be difficult when each agency uses a different test. Where practicable, each agency should use similar tests when responding to an incident of home contamination. EPA and OSHA need to coordinate their investigations so that the levels of toxics in the home can be correlated with workplace conditions. At present, the agencies have no coordinated response for home contamination investigations. This legislation is needed to create such a cooperative strategy.

#### IV. HISTORY OF THE LEGISLATION

S. 353, the Workers' Family Protection Act of 1991, was introduced by Senator Jeffords, for himself and Senators Metzenbaum, Reid, Lieberman, D'Amato, Levin, Moynihan, Gore, and Chafee on February 5, 1991. The bill was referred to the Committee on Labor and Human Resources. A hearing on this legislation was held on July 26, 1991 by the Subcommittee on Labor. The legislation was considered at an executive session of the Committee on Labor and Human Resources on November 13, 1991. Senator Jeffords proposed an amendment in the nature of a complete substitute, which was agreed to by the Committee. The Committee voted to adopt and report S. 353, as amended, by voice vote. ✓



## V. HEARING

A hearing on S. 353 was held on July 26, 1991, before the Subcommittee on Labor. The following persons and organizations appeared as witnesses and presented oral and written testimony:

Hon. Cass Ballenger, Congressman from the State of North Carolina;

Dr. Marc Guerra, Lenoir, NC (a physician representing employees affected by home contamination);

Dr. J. Donald Millar, Director, National Institute for Occupational Safety and Health, Atlanta, GA;

Alan C. McMillan, Deputy Assistant Secretary, U.S. Department of Labor, Occupational Safety and Health Administration, Washington, DC;

Christopher Wiernicki, Chairman, Protective Clothing and Equipment Committee, American Industrial Hygiene Association, Akron, OH;

Harold A. Schaitberger, Executive Assistant to the President, International Association of Firefighters, Washington, DC; and

Neil D. Wernick, President, Rifkin, Wernick Associates, Jenkintown, PA.

Written testimony was submitted by the National Association of Manufacturers, the Chemical Manufacturers Association, and the Carpenter's Health and Safety Fund of North America.

## VI. COMMITTEE VIEWS

*A. Response to concerns*

At the July 26, 1991 hearing on this legislation, a number of concerns were raised about the bill as introduced. In adopting a substitute to the original bill, the Committee has addressed these concerns, as discussed below.

NIOSH raised three concerns about the bill as introduced. First, NIOSH was concerned that a high priority investigation into this topic would redirect scarce resources away from other issues. The amended legislation addresses this concern by focusing NIOSH's activities toward collecting the required information during any future investigations of home contamination. Since NIOSH has a responsibility to respond to these incidents, this approach should not interfere with other NIOSH priorities. Second, NIOSH was concerned that a limit on expenditure of funds on any specific case could inhibit collection of important data. The expenditure cap has been removed. NIOSH also objected to a requirement that it issue regulations for grant funding. Since funding regulations already exist, this requirement was removed.

At the hearing, OSHA commented that it does not have authority to protect workers' families from exposure. OSHA does, however, have the authority to protect workers. Since substances tracked home expose workers as well as their families, OSHA can act to protect families by protecting the workers. The Committee thus believes that OSHA's authority can be used to protect workers' families, and that it is appropriate for OSHA to use this authority if the data indicate a response is needed. Nothing in this section is to

be interpreted as granting additional statutory authority for issuance of regulations or standards.

OSHA also raised a concern that the original bill did not allow enough time for issuance of any regulations. The amended bill allows OSHA two and one-half years after NIOSH issues a compilation of existing knowledge to make an assessment as to whether or not an administrative response is appropriate. An additional three years is allotted after this determination for promulgation of any regulations or standards.

The International Association of Firefighters (IAFF) provided data showing that firefighters' clothing can pose a risk to the firefighters and their families. The IAFF thus urged action on the legislation and encouraged the inclusion of infectious agents in the bill. Infectious agents were so included. \*

In its written testimony, the Chemical Manufacturer's Association (CMA) indicated its support for further research in this area, stating, "We support, in principle, research that can help to further protect our workers and their families, and we offer our expertise to assist NIOSH and OSHA in carefully examining this issue in the future." CMA also recommended that the existing case studies be reviewed to determine an appropriate research scope. This approach was adopted in the substitute amendment.

The National Association of Manufacturers (NAM) stated that "this issue must be explored to determine if the families of such workers are being exposed to toxics in quantities which may increase the risk of disease. This legislation also represents an opportunity to establish a 'sound science' approach to federally funded research, and NMA believes S. 353/H.R. 845 should be redrafted to assure that any study product is endorsed by the scientific community at large." The substitute amendment responds to this suggestion by adopting an approach of having experts in the field prepare a research strategy that would be subject to peer review prior to implementation. \*

#### *B. Hazardous substances and scope of the legislation*

The term "hazardous substance" in this legislation is used in a generic sense to mean substances present in the workplace which could pose a health risk to workers and their families. Because some of these substances are currently present in many homes, one of the issues that must be addressed is the ability to distinguish between background exposures and any additional exposure to substances inadvertently brought home from the workplace. Lead is an example of such a toxin. In addition to lead being used in some industries, lead is sometimes present in plumbing and in paint. Each source of lead can potentially pose a health risk and differentiating the contribution of each source may be difficult. \*

The issue of de minimus exposure should also be addressed. Preventing every molecule of a hazardous substance from being transported out of a workplace is impossible. The intent of this legislation is to determine ways to prevent a sufficient quantity of a material from being transported out of a workplace to pose a health risk to workers or their families. \*

Infectious agents are included as hazardous substances to the extent that pathogens can be transported on a worker's person. \*

The spread of disease by other means is not covered by this legislation. It is also not the intent of the Committee that transport of generally non-deadly infectious agents like the common cold virus be evaluated. Instead, pathogens which may be life-threatening are intended to be covered. The study of infectious agents is also limited to workplace environments (such as hospitals and waste treatment facilities) where exposure to such agents routinely occurs as part of a job function. At the hearing, NIOSH testified that pathogen transport has been a concern for centuries. Knowledge gained in the prevention of such transport can thus potentially be useful in preventing the transport of other toxic substances.

Last, it is not the intent of this legislation to evaluate exposure resulting from hazardous materials deliberately brought into a home-workplace.

### C. Existing information compilation

Section 3 requires the Director of NIOSH to conduct a study of the issues related to home contamination of workers and their families. At the hearing on this legislation, NIOSH commented that it did not have the expertise or authority to conduct original research on such issues as the effectiveness of laundering or home cleaning practices, for example, in removing substances from clothing and homes. It is not the intent of the Committee that NIOSH conduct such research as part of this compilation. Instead, NIOSH is asked to compile already existing research and other information on worker transport of contaminants into the home. The intent of this phase is to compile the known research on this subject for use in identifying the need for future research.

NIOSH is also required to collect information on indoor air quality as such research pertains to home contamination. The Committee envisions that research on both workplace and home air quality would be compiled. The requirement that employees use workplace clothing is often based on the Permissible Exposure Limit (PEL) of a substance, which represents the air concentration of a particular hazard. Data regarding the relationship between air quality and the potential for contamination transport would be relevant.

Air quality in the home may also be a concern. First, research has shown that air in the home may pose a health risk even without workplace toxins being transported into the home. Thus, such information would be needed to separate the effects of workplace chemicals from normal background levels of toxics. Secondly, such research might help determine the fate of any toxins that might be transported into the home (e.g., how long do toxins remain in the home before dissipating?). Again, NIOSH is only asked to collect existing information. The need for further research would be determined by the subsequent investigative strategy. The strategy will outline which agency is responsible for any additional research that may be required.

### D. Firefighter study

NIOSH is also required to conduct a study focusing on firefighters. The work environment of firefighters is unique in that they are exposed to a wide variety of hazards at many different locations. It is not known if sufficient information is currently avail-

able to determine if transport of toxic substances into the home is a potential problem for firefighters and their families. Therefore, original research in this area may be necessary and, if so, should be conducted by NIOSH. If necessary, NIOSH is authorized to coordinate these activities with other agencies. The Director is then to compile this information into a report. The Director may issue the results of the firefighter study separate from or as part of the more comprehensive study summarizing the state of knowledge on this subject.

#### *E. Workers' Family Protection Task Force*

The Director is to establish a working group of qualified professionals to review the background information studies and propose a strategy for filling any data gaps. The legislation does not require that the non-governmental representatives be compensated for their service on the Task Force. Government employees would be compensated as part of their duties. The Committee recognizes that NIOSH's budget is limited and believes that qualified volunteers could be found to serve on the Task Force without significantly impacting NIOSH's budget. NIOSH, however, is not precluded from compensating or reimbursing Task Force members.

#### *F. Investigative strategy*

The legislation requires the Task Force to review the existing information on home contamination, to identify data gaps, and to propose an investigative strategy for filling these data gaps. The focus of this strategy should be on the information that government agencies should collect when investigating future incidents, in conducting epidemiological studies of past and future incidents, or in conducting other relevant studies. The term "investigative strategy" has been selected because it is the intent of this legislation that the agencies seek to collect as much of the required information as possible during the investigation of future and past incidents. The strategy should address the uncertainties associated with home contamination as well as means of differentiating between background exposure and the additional exposure resulting from the transport of workplace substances into the home.

Once the Task Force has prepared a draft strategy, the Director shall publish the draft strategy for public comment. The Director may use the Federal Register to either publish the strategy or to announce its availability. The Director may also choose to use the National Technical Information Service or other means to distribute the strategy. The Director may also hold workshops or other public meetings for the purpose of obtaining comments.

Based upon the comments received and other information available to the Director, the Director is to propose a final investigative strategy. The Director should also consult with the head of the appropriate Federal agencies when preparing the final strategy, as each agency will have a role assigned to it by the strategy. This strategy is to be used by Federal agencies in investigating future and past incidents of home contamination. Once the strategy has been finalized, the Federal Government agencies are to implement the role assigned to them by the strategy during the implementation of the strategy.

The draft and final strategies should project the likely time and monies required to implement the strategy. The final strategy should delineate to the extent practicable any additional monies required to implement the strategy over and above the normal costs an agency would incur in response activities related to home contamination. Again, the Committee believes the epidemiological studies, for example, are part of the various agencies' missions and represent only a modification of priorities rather than a new expense.

NIOSH, EPA, ATSDR and other agencies are authorized to conduct other relevant research permitted under existing statutory authority. For example, the ATSDR is authorized to study community health issues. As noted previously, the State of Michigan has requested funding from the ATSDR to conduct a follow-up study of the health of family members exposed to a bladder carcinogen brought home from the workplace. Studies such as the one proposed by the State of Michigan could be a valuable component of the investigative strategy.

The strategy will identify both the data needs and a scientific process to fill such needs. The Committee believes that the various agencies can effectively integrate the studies proposed by the strategy within their existing research programs. By developing and implementing the resulting strategy in this manner, it is hoped that a sound, scientifically defensible means of reducing future incidents can be developed without disrupting other important health and safety priorities of these agencies.

The Committee recognizes that several years may elapse before a sufficient number of incidents occur and are identified such that sufficient data can be collected to allow OSHA to make the determination required under Section 4 of the legislation. The existing information on the prevalence of such incidents indicates that a coordinated government response is needed. The existing information, however, also tends to indicate that a large-scale response is not justified at this time. The approach adopted herein is thus to investigate future incidents, and if deemed appropriate, to investigate selected past incidents and collect other information in a sound scientific manner and then to use the resulting information to determine the appropriate response. A time deadline for collection of this information outlined by the strategy has not been mandated due to the unpredictability of the occurrence of future events. The agencies, however, should make reasonable efforts to implement the strategy in a timely manner.

State agencies are not required to utilize this strategy. It is the hope of the Committee, however, that the appropriate State agencies will use the strategy as a model for their activities. State agencies may also participate in the implementation of the strategy. Financial assistance can be provided to the States for their assistance in implementing the strategy using the existing statutory authority available to each agency. Last, implementation of the strategy may reveal that modification is needed. The final strategy should include the flexibility needed to adjust its implementation for field conditions and the experience gained in such implementation.

### *G. Regulatory response*

The Secretary is to determine if additional action by OSHA is needed to address the problem of worker home contamination within four years of enactment and periodically thereafter. It is envisioned that the initial assessment will be based upon the results of the NIOSH background information study and any assessment of the current information by the task force. By asking OSHA to evaluate whether enough information is currently available to justify action, one of two positive outcomes could occur. First, if sufficient data are available, implementation of the strategy can be avoided. Alternatively, if enough data are not available, OSHA's analysis can be used to ensure that the strategy addresses the right data gaps. Resources can thereby be directed only where needed.

The time interval for action by the Secretary after the initial determination has not been specified to account for the unpredictability of the occurrence of future incidents. The timing of subsequent reviews of the resulting data are to be based upon the acquisition of sufficient data to warrant a revise. The Committee does not intend that the agencies should delay collection of the required data to avoid a determination by OSHA as to the most appropriate response.

The legislation does not require OSHA to revisit this issue at frequent intervals. Such a high frequency could impede the development of other standards for protecting workers. It is envisioned that the first subsequent review would be conducted when the strategy is believed to have been fully implemented. Further review would then be needed only if this review determined that sufficient information was not available to determine the most appropriate action. The strategy could then be modified, if necessary, and implementation continued until sufficient data were collected.

It is not the intent of this legislation, however, to preclude reviews of this issue by OSHA prior to complete implementation of the strategy when evaluating the need for further action in other areas. In fact, such review would be extremely useful in ensuring collection of the appropriate data. OSHA could also disseminate the information collected periodically so as to increase awareness of this issue. Such heightened awareness could reduce the number of future incidents and eliminate the need for further action. Last, information collected during implementation of the strategy could reveal that modification of a Permissible Exposure Limit, for example, is needed. OSHA can use its authority to make such changes when deemed appropriate. Such focused modifications to existing standards could eliminate the need for further action on the broader issue of home contamination.

In making the determination as to the appropriate response, the Secretary is to determine first if existing regulatory authority is sufficient to accomplish these goals. For example, efforts to increase awareness of this problem and of existing regulatory safeguards may be an appropriate means of preventing future incidents. If not, the Secretary shall advise the Congress that additional regulation is needed. Within three years of such determination, the Secretary shall promulgate a standard for standards using existing statutory authority. If existing statutory authority is not suf-

ficient to allow for such promulgation or if the Secretary determines that sufficient information is not yet available, the Secretary shall advise the House of Representatives' Committee on Education and Labor and the Senate Committee on Labor and Human Resources of such finding.

#### VII. VOTES IN COMMITTEE

Section 7(b) of Rule XXVI of the Standing Rules of the Senate and the rules of the Committee on Labor and Human Resources provide that any roll call votes taken during the consideration of this bill be announced in this report. No roll call votes were taken during consideration of this bill. The substitute amendment was adopted and the bill reported by voice vote on November 13, 1991.

#### VIII. COST ESTIMATE

Section 403 of the Congressional Budget and Impoundment Control Act requires that each bill contain a statement of the cost of such bill prepared by the Congressional Budget Office. That report follows:

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
*Washington, DC, November 26, 1991.*

Hon. EDWARD M. KENNEDY,  
*Chairman, Committee on Labor and Human Resources,  
U.S. Senate, Washington, DC*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate of S. 353, the Workers' Family Protection Act, as ordered reported by the Senate Committee on Labor and Human Resources on November 13, 1991. Enactment of S. 353 would not affect direct spending or receipts. Therefore, pay-as-you-go procedures would not apply to the bill.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

JAMES L. BLUM,  
(For Robert D. Reischauer).

#### CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

1. Bill number: S. 353.
2. Bill title: Workers' Family Protection Act.
3. Bill status: As ordered reported by the Senate Committee on Labor and Human Resources on November 13, 1991.
4. Bill purpose: To require the Director of the National Institute for Occupational Safety and Health to conduct a study of the prevalence and issues related to contamination of workers' homes with hazardous chemicals and substances transported from their workplace and to issue or report on regulations to prevent or mitigate the future contamination of workers' homes, and for other purposes.
5. Estimated cost to the Federal Government:

[By fiscal years, in millions of dollars]

	1992	1993	1994	1995	1996
Estimated authorization levels:					
Study .....	( <sup>1</sup> )	( <sup>1</sup> )			
Task force .....		( <sup>1</sup> )	( <sup>1</sup> )		
Total estimated authorization .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )		
Estimated outlays:					
Study .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )		
Task force .....		( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	
Total estimated outlays .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	

<sup>1</sup> Less than \$500,000

The costs of this bill fall within budget function 550.

Basis of estimate: S. 353 would authorize the Director of the National Institute for Occupational Safety and Health (NIOSH) to conduct a study to evaluate the potential for, the prevalence of, and the issues related to the contamination of workers' homes with hazardous chemicals and substances. The bill authorizes appropriations of such sums as may be necessary for these activities. According to NIOSH, the study would cost \$250,000 in each of fiscal years 1992 and 1993.

The bill would authorize the Director of NIOSH to establish a task force to determine the additional data needs and a recommended investigative strategy for obtaining the necessary data. The bill authorizes appropriations of such sums as may be necessary for these activities. According to NIOSH, the activities of the task group would cost \$100,000 in each of fiscal years 1993 and 1994.

This estimate assumes that all authorizations are fully appropriated at the beginning of each fiscal year. Outlays are estimated using spendout rates computed by CBO on the basis of recent program data.

6. Pay-as-you-go considerations: The Budget Enforcement Act of 1990 sets up pay-as-you-go procedures for legislation affecting direct spending or receipts through 1995. None of the provisions of S. 353 would affect direct spending or receipts. Therefore, this bill has no pay-as-you-go implications.

7. Estimated cost to State and local government: None

8. Estimate comparison: None.

9. Previous CBO estimate: None.

10. Estimate prepared by: Connie Takata.

11. Estimate approved by: C.G. Nuckols (for James L. Blum, Assistant Director for Budget Analysis).

#### IX. REGULATORY IMPACT STATEMENT

In compliance with paragraph 11(b) of Rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact of the reported bill.

The reported bill does not include any new regulatory authority. OSHA is directed to use its existing authority to address the problem of worker transport of hazardous substances into the home.



X. SECTION-BY-SECTION ANALYSIS

*Section 1—Short title*

Section 1 provides that the short title of S. 353 is the Workers' Family Protection Act of 1991.

*Section 2—Findings and purposes*

Congress finds that in a number of instances around the country, workers have carried hazardous substances home, posing a potential health risk to the workers and their families. Additional study is needed to determine the extent of the problem and the most appropriate response by the federal government.

The purposes of this legislation are to increase awareness of home contamination, to prevent or mitigate future incidents, and to clarify the roles of the various government agencies in responding to such incidents. The actions outlined by the legislation should help workers identify the appropriate contacts in such cases to assist them in cases of home contamination.

*Section 3—Evaluation of employee transported contaminant releases*

Section 3(a) directs the Director of NIOSH to initiate a study of incidents in which workers transport hazardous substances home on their clothing and persons. The Director, in cooperation with other Federal agencies, is to compile a review of existing information on this subject. The type of information to be reviewed includes current published literature, case studies of previous incidents, current practices used to prevent such contamination, and the roles of various state and federal agencies in responding to such incidents. In addition, NIOSH is to conduct a special study of employee-transported contaminant releases as this issue relates to firefighters.

Section 3(b) requires that within a year of enactment, the Director shall establish a Workers' Family Protection Task Force to be composed of industrial hygiene, health, and other professionals. One representative from each of the appropriate government agencies, including the Environmental Protection Agency, the Occupational Safety and Health Administration, and the Agency for Toxic Substances and Disease Registry, is to be included in this task force. Equal representation of employer and employee interests shall also be provided on this task force. The remainder of the task force shall be composed of other representatives as deemed appropriate by the Director. To ensure that the size of the task force does not become unwieldy, it is limited to 15 individuals.

The task force shall review the report summarizing the known research on this subject and determine what, if any, additional information must be collected to assess the risk that such home contamination poses to employees and their families. The task force shall then recommend an investigative strategy that can be used to address these data gaps. The Director of NIOSH shall then obtain peer review of the strategy, and based upon the resulting comments, prepare a final strategy. The applicable government agencies shall then implement the roles assigned to them by the strategy.

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*Section 4—Regulations*

Section 4(a) requires that within four years of enactment and periodically thereafter, the Secretary of Labor should review the information gathered as a result of the investigative strategy and determine the appropriate response to reduce the number and impacts of future such incidents. Specifically, the Secretary should consider whether action is necessary to prevent hazardous materials from being transported out of a workplace on workers' clothing or persons where such materials pose a health risk to workers or their families.

Section 4(b) requires that if the Secretary determines that additional regulatory action is needed, the Secretary shall take such action within 3 years of such determination.

*Section 5—Authorization of appropriations*

There are authorized to be appropriated such sums as are needed to carry out this Act. The Committee has adopted an approach to addressing this issue which should result in a minimum expenditure. The goal of this legislation is to create an investigative process which will eliminate the collection of unnecessary data when evaluating future cases of home contamination. The costs to the government should be minimal.

**XI. CHANGES IN EXISTING LAW**

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, the Committee notes that no changes in existing law are made by the bill, S. 353, as ordered reported.

