
Evaluation of DOL's Wage and Hour Division Child Labor Program

Final Report

Prepared For:
U.S. Department of Labor
Office of the Assistant Secretary for Administration and Management (OASAM)
Center for Program Planning and Results (CPPR)
Washington, DC

Prepared by:
Eastern Research Group, Inc.
Lexington, Massachusetts

December 23, 2009
(Revised)

Contract No. DOLQ-0496-01262
Order No. DOLU079625829

TABLE OF CONTENTS

EXECUTIVE SUMMARY	ES-1
SECTION ONE—INTRODUCTION	1
SECTION TWO—SCOPE OF THE EVALUATION	3
SECTION THREE—DATA SOURCES.....	6
3.1 WHISARD	6
3.2 Planning and Results Reports (PARRs)	6
3.3 Survey of Employers	7
3.4 Survey of Parents	8
3.5 Focus Groups with Employed Teens.....	8
3.6 Interviews	9
3.7 Census Bureau Quarterly Workforce Indicator (QWI) Data.....	10
SECTION FOUR— MEASURING THE IMPACT OF THE CHILD LABOR PROGRAM.....	12
4.1 How would the number and percentage of child labor violations differ had WHD not prioritized child labor (i.e. what impact has WHD’s child labor compliance program had on child labor compliance)?.....	13
4.1.1 <i>What impact has WHD child labor program investigations had on reducing the number of violations among employers that have been inspected at least once?.....</i>	<i>13</i>
4.1.2 <i>Have employers found WHD’s education and outreach materials to be useful in assisting them in complying with the FLSA child labor requirements?</i>	<i>16</i>
4.1.3 <i>What impact has the WHD child labor program education and outreach materials had on reducing the number of violations among employers that were inspected?</i>	<i>18</i>
4.1.4 <i>What impact have the different PARRs had on compliance with FLSA child labor requirements? Are there some characteristics of the PARRs that have been more effective in increasing compliance?.....</i>	<i>21</i>
4.2 How has WHD’s child labor compliance program impacted the incidence and severity of injuries and fatalities among minors?	23
4.2.1 <i>What impact has WHD child labor program investigations had on reducing the number of hazardous order violations among employers that have been inspected at least once?.....</i>	<i>23</i>
4.2.2 <i>Have WHD education and outreach materials directed at non-employers led to increased awareness and understanding of the risks posed to working youths among non-employers?</i>	<i>26</i>
4.2.3 <i>What impact has WHD child labor program education and outreach materials had on reducing the number of hazardous order violations among employers that were inspected?</i>	<i>28</i>
4.3 Are Civil Money Penalty (CMP) assessments effective in deterring child labor non-compliance? Would larger penalties further affect compliance?.....	31
4.4 What relationship, if any, exists between child labor compliance and overall employment of youth?	35

4.5	In addition to the use of statistically valid surveys, how can WHD quantify the impact of its child labor education and outreach efforts on compliance?	40
4.6	How can WHD effectively measure the value of partnerships?.....	46
SECTION FIVE—IMPROVING PROGRAM OUTCOMES.....		50
5.1	How can WHD improve its targeting of/in industries that employ a small percentage of minors but may demonstrate a high incidence of child labor violation (i.e., avoid the “needle in a haystack” dilemma)?	50
5.2	How can WHD improve compliance and reduce occupational injuries and deaths in the agricultural sector?	52
5.3	Is a national, regional, or local approach most effective in increasing child labor compliance?	55
5.4	How can WHD best use outreach to positively affect compliance?.....	60
SECTION SIX: SUMMARY OF FINDINGS AND RECOMMENDATIONS.....		70
6.1	In addition to the use of statistically valid surveys, how can WHD quantify the impact of its child labor education and outreach efforts on compliance?	70
6.2	How can WHD effectively measure the value of partnerships?.....	71
6.3	How would the number and percentage of child labor violations differ had WHD not prioritized child labor (i.e. what impact has WHD’s child labor compliance program had on child labor compliance)?.....	72
6.3.1	<i>What impact has WHD child labor program investigations had on reducing the number of violations among employers that have been inspected at least once?.....</i>	<i>72</i>
6.3.2	<i>Have employers found WHD’s education and outreach materials to be useful in assisting them in complying with the FLSA child labor requirements?</i>	<i>73</i>
6.3.3	<i>What impact has the WHD child labor program education and outreach materials had on reducing the number of violations among employers that were inspected?</i>	<i>74</i>
6.3.4	<i>What impact have the different PARRs had on compliance with FLSA child labor requirements? Are there some characteristics of the PARRs that have been more effective in increasing compliance?.....</i>	<i>74</i>
6.4	How has WHD’s child labor compliance program impacted the incidence and severity of injuries and fatalities among minors?	74
6.4.1	<i>What impact has WHD child labor program investigations had on reducing the number of hazardous order violations among employers that have been inspected at least once?.....</i>	<i>74</i>
6.4.2	<i>Have WHD education and outreach materials directed at non-employers led to increased awareness and understanding of the risks posed to working youths among non-employers?</i>	<i>75</i>
6.4.3	<i>What impact has WHD child labor program education and outreach materials had on reducing the number of hazardous order violations among employers that were inspected?</i>	<i>76</i>
6.5	What relationship, if any, exists between child labor compliance and overall employment of youth?	76
6.6	Are Civil Money Penalty (CMP) assessments effective in deterring child labor non-compliance? Would larger penalties further affect compliance?.....	77
6.7	How can WHD improve its targeting of/in industries that employ a small percentage of minors but may demonstrate a high incidence of child labor violation (i.e., avoid the “needle in a haystack” dilemma)?	77

6.8 How can WHD improve compliance and reduce occupational injuries and deaths in the agricultural sector? 78
6.9 Is a national, regional, or local approach most effective in increasing child labor compliance? 79
6.10 How can WHD best use outreach to positively affect compliance?..... 80

APPENDIX A: STATEMENT OF WORK (SOW) FOR THE EVALUATION..... A-1

APPENDIX B: WHISARD DATA MATCHING PROCEDURES USING THE ESTABLISHMENT MATCHING APPLICATIONB-1

APPENDIX C: DATA DICTIONARY FOR WHD PROGRAM PLANNING AND RESULTS REPORTS (PARRS) DATA COLLECTION..... C-1

APPENDIX D: EMPLOYER SURVEY INSTRUMENT D-1

APPENDIX E: TABULATION OF EMPLOYER SURVEY RESULTSE-1

APPENDIX F: PARENT OR GUARDIAN SURVEY INSTRUMENTF-1

APPENDIX G: TABULATION OF PARENT OR GUARDIAN SURVEY RESULTS..... G-1

APPENDIX H: EMPLOYED TEEN FOCUS GROUP FACILITATION GUIDE H-1

APPENDIX I: THEMES FROM EMPLOYED TEEN FOCUS GROUPI-1

APPENDIX J: INTERVIEW QUESTIONS FOR WHD NATIONAL AND REGIONAL STAFF J-1

APPENDIX K: INTERVIEW QUESTIONS RELATED TO PARTNERSHIPS FOR WHD NATIONAL OFFICE STAFF..... K-1

APPENDIX L: INTERVIEW QUESTIONS FOR WHD PARTNERSL-1

APPENDIX M: INTERVIEW QUESTIONS FOR PARENTS OF EMPLOYED TEENS..... M-1

APPENDIX N: INTERVIEW QUESTIONS FOR WHD STAFF INVOLVED IN AGRICULTURAL INVESTIGATIONS..... N-1

APPENDIX O: INTERVIEW QUESTIONS FOR NON-WHD AGRICULTURE OCCUPATIONAL SAFETY EXPERTS O-1

APPENDIX P: SAMPLE CRITERIA FOR PARTNERSHIP VALUATION TOOL.....P-1

SECTION ONE: INTRODUCTION

The Fair Labor Standards Act (FLSA) includes provisions to ensure that young peoples' work experiences do not jeopardize their health, well-being, and educational opportunities. The Department of Labor (DOL) Wage and Hour Division (WHD)¹ Child Labor Program is responsible for administering these provisions. To that end, WHD conducts investigations, assesses Civil Money Penalties (CMPs), and performs child labor education and outreach activities.²

In its 2006 Program Assessment Rating Tool (PART) review, WHD identified possible ways to improve its Child Labor Program:

- Develop ambitious and challenging goals and targets, along with an approach to measuring those goals and targets.
- Develop an approach to measure the value that WHD partnerships with various organizations involved in child labor issues have on increasing compliance with FLSA's child labor provisions.

In part to support these objectives, DOL enlisted Eastern Research Group, Inc. (ERG) and its subcontractor, the University of Tennessee, to conduct an impact study of WHD's use of education and outreach materials and CMPs to promote compliance with the child labor provisions of FLSA. The Statement of Work (SOW) for this task includes a set of evaluation questions to be answered by the study. The SOW evaluation questions appear in Table 1-1 below, while the full SOW can be found in Appendix A.

Table 1-1. SOW Questions for Evaluation of Wage and Hour Division Child Labor Program

1. What is the impact of WHD's child labor program?
 - a. In addition to the use of statistically valid surveys, how can WHD quantify the impact of its child labor education and outreach efforts on compliance?
 - b. How can WHD effectively measure the value of partnerships?
 - c. How would the number and percentage of child labor violations differ had WHD not prioritized child labor (i.e. what impact has WHD's child labor compliance program had on child labor compliance)?
 - d. How has WHD's child labor compliance program impacted the incidence and severity of injuries and fatalities among minors?
 - e. What relationship, if any, exists between child labor compliance and overall employment of youth?
2. Are Civil Money Penalty (CMP) assessments effective in deterring child labor non-compliance? Would larger penalties further affect compliance?
3. How can WHD improve its child labor enforcement program?
 - a. How can WHD improve its targeting of/in industries that employ a small percentage of minors but may

¹ WHD was part of DOL's Employment and Standards Administration (ESA) during the time period covered by this evaluation. However, during this evaluation effort, WHD was elevated to be division that answers directly to the Secretary of Labor. For sake of clarity, this report will refer to the WHD and not to WHD as a division of ESA.

² Throughout the report, the terms "child labor" and "youth employment" are used somewhat interchangeably. The current preferred term in use by DOL is "child labor." However, during the period covered by the evaluation, the term "youth employment" was used for many materials. In this report the term "youth employment" appears where we are (a) referring to specific materials that have that term in their titles, (b) referencing interview or survey questions where that term was used, or (c) referring to numbers of youths employed. In all other cases, we use the term "child labor."

Table 1-1. SOW Questions for Evaluation of Wage and Hour Division Child Labor Program

- demonstrate a high incidence of child labor violation (i.e., avoid the “needle in a haystack” dilemma)?
- b. How can WHD improve compliance and reduce occupational injuries and deaths in the agricultural sector?
 - c. Is a national, regional, or local approach most effective in increasing child labor compliance?
 - d. How can WHD best use outreach to positively affect compliance? [a]

[a] The original evaluation question referred to “compliance assistance tools” rather than to “outreach.” We have changed the term to reflect WHD’s current preferred terminology.

The remainder of this report includes:

- **Section Two: Scope of the Evaluation**
Describes scope decisions made to operationalize the SOW evaluation questions.
- **Section Three: Data Sources**
Describes the main data sources used to answer the SOW evaluation questions.
- **Section Four: Measuring the Impact of the WHD Child Labor Program**
Presents methodologies and results for SOW evaluation questions pertaining to the impact of the Child Labor Program.
- **Section Five: Improving Program Outcomes**
Presents methodologies and results for SOW evaluation questions pertaining to how to improve the outcomes of the Child Labor Program.
- **Section Six: Conclusions and Recommendations**
Provides specific conclusions and recommendations based on study results.

SECTION TWO: SCOPE OF THE EVALUATION

To answer the SOW evaluation questions, ERG needed to conduct four main types of analysis:

- *Employer impact analysis*—An analysis of the impact that WHD education and outreach materials and CMPs have had on (1) employer compliance with FLSA child labor provisions and (2) the incidence of injuries and fatalities among working youths.
- *Non-employer analysis*—An analysis of the awareness, use, usefulness, and effectiveness of WHD education and outreach materials targeted at non-employers.
- *Partnership analysis*—An analysis of the value of WHD partnerships in achieving compliance with FLSA child labor provisions and reducing the incidence of injuries and fatalities among working youths.
- *Agriculture analysis*—An employer impact analysis focused on agricultural employers.

Employer impact analysis. The employer impact analysis considered the extent to which employer compliance with FLSA child labor provisions can be attributed to WHD outreach and education and CMPs – in order to answer SOW evaluation questions 1a, 1c, 1d, and 2. The preferred method of attributing outcomes (compliance) to interventions (outreach and education and/or CMPs) is to conduct a study in which entities (employers) are randomly assigned to an experimental group (receiving outreach and education and CMPs) or a control group (receiving no intervention). This randomized experimental study design could not be completed in a 12-month period of performance, nor would it be acceptable for WHD to assess CMPs to some employers (in the experimental group) and not to other employers (in the control group). Therefore, ERG decided to use a quasi-experimental study design that controls for non-random assignment of interventions. ERG combined data from the WHISARD database (including data collected as part of a random sample of surveys designed by the University of Tennessee), detailed case file reviews, Census Bureau Quarterly Workforce Indicator data, and a new customer satisfaction survey (CSS). These data sources are discussed further in Section 3.

Non-employer analysis. The non-employer analysis considered the extent to which WHD outreach and education to non-employers (educators, youth, and parents) affects compliance with FLSA child labor requirements – in order to answer SOW questions 1c, 1d, 1e, 3c, and 3d. ERG used a triangulated approach, in which the evaluator uses multiple and varied sources of data to answer evaluation questions. To that end, ERG conducted surveys, in-depth interviews, focus groups, and a pre-test/post-test experiment (on use of the *YouthRules!* Web site) to develop quantitative estimates of the impact of WHD non-employer outreach and education strategies.

Partnership analysis. The partnership analysis considered the extent to which WHD partnerships affect compliance with FLSA child labor requirements – in order to answer SOW evaluation question 1b. This SOW question dovetails with WHD’s 2006 PART improvement plan calling for “[s]tandardizing organizational processes for developing and monitoring strategic partnerships.” To examine the impact of WHD partnerships, ERG conducted interviews with partners and evaluated available data. ERG worked with WHD to determine which partners to interview.

Agriculture analysis. The agriculture analysis considered how WHD can improve FLSA child labor law compliance and reduce occupational injuries and deaths in the agricultural sector – in order to answer SOW evaluation question 3b. A 1998 Government Accountability Office (GAO) report identified six challenges to identifying child labor violations in agriculture: the temporary nature of the work, the

geographic dispersion of the work, the low wages and lack of job security, the informal communication networks that warn of investigations, and worker demographics (especially language barriers). To determine how WHD can improve FLSA child labor law compliance and reduce occupational injuries and illnesses to youth workers, ERG conducted interviews with WHD Agricultural Coordinators and agricultural safety and health experts who have experience examining risks to youth workers. ERG worked with WHD to determine which staff and experts to interview.

During the planning phase of the project, DOL and ERG agreed on a set of decisions to better define the scope of the evaluation project as a whole and the four analyses. These decisions are summarized in Table 2-1.

Table 2-1. Scope Decisions for the Evaluation of WHD Child Labor Program.

<i>Project as a Whole</i>	
In-scope FLSA child labor requirements	All FLSA child labor requirements are in scope for the evaluation project.
<i>Employer Impact Analysis</i>	
Time frame	The time frame for the employer impact analysis is FY 2005-2008. ERG limited our analysis to investigations and other initiatives that occurred in FY 2005-2008 and that had an impact on employers during that period.
Sectors	All sectors of the economy are in scope for the employer impact analysis.
Child labor initiatives	All WHD child labor program initiatives (outreach and education, investigations, and CMPs) are in scope for the employer impact analysis.
Investigations	All WHD child labor investigations are in scope for the employer impact analysis.
Education and outreach materials	All education and outreach available during FY 2005-2008 are in scope for the employer impact analysis.
Outcomes	The employer impact analysis considers two outcomes: <ul style="list-style-type: none"> • Violations of FLSA child labor requirements. • Employment of youths.
<i>Non-Employer Analysis</i>	
Education and outreach materials	All materials available through the YouthRules! Web site at the start of this evaluation are in scope for the non-employer analysis. Due to space and time constraints inherent in the data collection techniques employed for this evaluation, not every available material was included in the evaluation. Different parts of the analysis analyzed or included different materials based on which materials WHD staff interviewees indicated were most commonly used by a particular audience, which materials WHD staff indicated were a priority for the agency, and other factors based on background research and additional discussions with WHD.
Time frame	ERG considered education and outreach materials available to parents and teens during the recent past. The surveys and focus groups did not include a time frame for materials, but the materials discussed in each would have been available to those groups at the time of the data collection. Additionally, we expect that both groups would be able to recall seeing and/or using only materials they had recently (at the time of the collection) seen.
Child labor initiatives	All WHD child labor program initiatives are in scope for the non-employer analysis.

Outcomes	<p>The non-employer analysis considers four outcomes:</p> <ul style="list-style-type: none"> • Non-employer awareness of WHD materials. • Non-employer use of WHD materials. • Usefulness of WHD materials (as rated by non-employers who use them). • Effectiveness of WHD materials in assisting non-employers in understanding FLSA child labor requirements.
<i>Partnership Analysis</i>	
Which partners to include	ERG used FY 2005-2007 Planning and Results Reports (PARRs) to identify WHD partners and interviewed WHD staff to determine which partners to interview.
Time frame	The time frame for this analysis is FY 2005-2007. Thus, ERG considered those partnerships that were active in that period.
Outcomes	The partnership analysis considered one outcome: the value of partnerships.
<i>Agriculture Analysis</i>	
Sectors	Agricultural operations (e.g., farms).
Time frame	ERG's interviews involved discussing "recent" trends with the interviewees. Based on that, we can expect the time frame to cover approximately the last two years (2007 and beyond).
Outcomes	The analysis focused primarily on injuries that youth suffered in working at these operations. However, ERG also discussed factors that affected compliance also.

SECTION THREE: DATA SOURCES

This section discusses the data sources used to answer the evaluation questions posed in the SOW for this contract. The data sources are:

- WHISARD
- Planning and Results Reports
- Survey of Employers
- Survey of Parents
- Focus Groups with Employed Teens
- Interviews with WHD Staff (National, Partnership, and Agriculture Coordinators), WHD Partners, Parents of Employed Teens, and Non-WHD Agriculture Occupational Safety Experts
- Census Bureau Quarterly Workforce Indicator data

These data sources are discussed further in the sections below.

3.1 WHISARD

The backbone of the employer impact analysis was the file created from WHISARD data for this project. The file consists of establishment-level records of the most current investigation data available in WHISARD (including CMP amounts) for WHD cases from FY 2005-2008, and related investigation data from the most recent previous investigation (if there was a previous investigation within the past 3 years). Another file included all cases that had either one or more child labor violations or one or more minors employed during the reference period. An employer was included in the analysis if it employed youths. This was determined in one of two ways: (1) if the employer's WHISARD record for an investigation included data reflecting a positive number of employed minors or (2) if the WHISARD record for the investigation indicated that the employer had a child labor violation. Whether an employer had a child labor violation was determined directly from the WHISARD data; whether an employer employed a minor during the reference period was determined from additional data files provided by WHD.

Currently, WHISARD does not track employers over time. ERG's experience in assessing the impact of enforcement and outreach efforts has shown us that establishment-level studies are the only proven method of estimating these impacts. This requires having data on establishments over time in order to assess changes in compliance over time and to relate those changes to Agency outreach efforts. For this analysis, ERG used the Establishment Matching Application (EMA), an application developed by ERG for OSHA, which uses Dun and Bradstreet and OSHA data to match employer case data found in WHISARD over time. Appendix B provides additional details on the EMA methodology and how it was applied to the WHISARD data.

3.2 Planning and Results Reports (PARRs)

To determine the efficacy of different types of WHD child labor compliance and enforcement initiatives, ERG examined 69 WHD Planning and Results Reports (PARRs) related to child labor from the 2005-2007 period. A WHD PARR short form provides a brief description of a WHD initiative, a

statement of purpose and goals, and a report of results (if available). ERG created a database to store and analyze this information; a complete data dictionary for the database can be found in Appendix C of this report.

The database enabled ERG to categorize PARRs based on various characteristics:

- Whether the initiative had a sector-specific focus
- Location of the initiative
- Types of outreach offered through the initiative
- Whether the initiative included investigations
- Whether the initiative was focused on a specific Hazardous Order
- Whether there was a media/public awareness component
- Additional assistance-related characteristics of the initiative (whether it included mailings, conference(s), hand outs, training, etc.)

Unique PARR identification codes allowed ERG to link each PARR to individual WHD cases in the WHISARD data set. This enabled ERG to perform an analysis of how different aspects of a PARR initiative relate to compliance outcomes.

3.3 Survey of Employers

To address the evaluation questions presented in the SOW related to improving program outcomes, ERG conducted an OMB-approved survey with employers that were investigated in FY 2005-2007. The survey was implemented as a telephone survey in July 2009. The survey consisted of a series of questions regarding employers' awareness of, use of, perceived usefulness of, and overall satisfaction with specific WHD Child Labor-related outreach and education materials targeted at employers. Based on discussions with WHD and interviews with WHD National and Regional staff (discussed below in Section 3.6) regarding which materials were most commonly used by employers and which materials were a priority for the agency, the survey focused on a number of specific WHD materials:

- "Handy Reference Guide to the Fair Labor Standards Act" pamphlet
- "Employer's Pocket Guide on Youth Employment" pamphlet
- "Youth Employment Provisions under the Fair Labor Standards Act" bulletin (also known as "Child Labor 101")
- WHD fact sheets, including fact sheets on teen driving, power-driven paper balers, roofing, fast food and full service restaurants, grocery stores, meat slicers, and other equipment for baking or cooking
- WHD stickers commonly affixed to machinery like fork lifts, meat slicers, and scrap paper balers to help employers warn teens about equipment that they are not allowed to operate
- YouthRules! Web site
- WHD toll-free hotline
- Packets of information about federal child labor laws mailed directly to employers
- "TIPS for Achieving Compliance with Child Labor Laws" flyer

In addition to questions on WHD materials, the survey also asked about:

- Reasons employers comply with child labor laws
- Employers' current methods for obtaining information on child labor laws
- Which types of child labor information employers would find most useful

- Obstacles employers face when complying with child labor laws
- Influence of monetary penalties on employers' child labor practices

The employer survey instrument appears in Appendix D. Tabulations of responses appear in Appendix E.

3.4 Survey of Parents

To address the evaluation questions presented in the SOW related to improving program outcomes, ERG also conducted an OMB-approved survey with parents in households with children ages 14 to 18 who do not employ their children in a business or on a farm that they own and operate and who had at least one child with work experience in the last two years. The survey was implemented as a telephone survey in July 2009. The parent survey consisted of a series of questions regarding the parents' awareness of, use of, and satisfaction with WHD Child Labor-related outreach and education materials designed for parents and teens. The questions focused on how parents access information on child labor laws, and on their awareness, use, and satisfaction with a number of WHD materials, including but not limited to:

- WHD posters on child labor laws and general employment laws
- Bookmarks that list information about child labor rules
- YouthRules! Web site
- WHD radio and print Public Service Announcements
- Youth job fairs, employment rallies, and other events
- WHD child labor fact sheets (in particular, Fact Sheet #43)
- "Youth Employment Provisions under the Fair Labor Standards Act" bulletin
- "Employer's Pocket Guide on Youth Employment" pamphlet
- WHD toll-free hotline

In addition to questions concerning parents' awareness and use of WHD materials, the survey also focused on:

- Who or what sources parents use when obtaining information on child labor laws
- Which WHD materials are most influential in helping parents understand child labor laws
- Overall satisfaction with WHD child labor information
- Suggestions for improving WHD child labor materials

The parent survey instrument can be found in Appendix F. Tabulations of responses appear in Appendix G.

3.5 Focus Groups with Employed Teens

ERG conducted focus groups to explore working teens' opinions about the current set of WHD education and outreach materials. We conducted two 2-hour focus groups:

- May 27, 2008: Six employed teens from Waltham High School in Waltham, MA.
- September 29, 2008: Four employed teens recruited through participants in the parent interviews (see below) and other social networking venues.

During the focus groups, the facilitator and teens discussed the teens' work experience and reviewed the following child labor outreach and education materials:

- <http://www.youthrules.dol.gov> (YouthRules! Web site)
- "Employer's Pocket Guide on Youth Employment" pamphlet
- "Jobs Youth May Perform", "Youth Rules!" and "Federal Youth Employment Laws" posters
- "What Jobs Can I Do? When Can I Work?" bookmark
- "Stop: You Must Be 18 to Operate or Clean this Equipment" sticker

The focus group facilitation guide can be found in Appendix H. A table of common themes from the focus groups is provided in Appendix I.

3.6 Interviews

ERG conducted interviews with:

- WHD national and regional staff
- WHD partnership staff and WHD partners
- Parents of employed teens
- WHD agriculture coordinators and non-WHD agriculture occupational safety experts

Initial Interviews with WHD National and Regional Staff

During January 2008 ERG conducted an initial set of in-person and telephone interviews with three National Office staff and nine Regional staff in order to collect information on WHD enforcement, education and outreach, and partnership efforts. The interview script used for these interviews is available in Appendix J.

Interviews with WHD Partnership Staff and WHD partners

To gain a better understanding of WHD's priorities with respect to forming partnerships and collaborations with other agencies and to identify key characteristics of these relationships, ERG conducted interviews with two National Office staff responsible for coordinating partnerships. The interviews were conducted at WHD's National Office in Washington, D.C., in April 2008. The interview script used for these interviews is available in Appendix K.

In addition, ERG conducted a series of phone interviews with four WHD partners between July and October 2009. The partners were identified during interviews with WHD staff. The interviews focused on collecting information about the characteristics of WHD partnerships with different agencies, including key activities, target audience, geographic focus, ability to influence the audience, and factors that lead to successful partnerships. The interview script used for these interviews is available in Appendix L.

Interviews with Parents of Employed Teens

To understand the information that parents of employed teens need to better inform the decisions that they and their children make regarding their children's job choices, ERG conducted a series of

interviews with parents of employed teens in the Boston, MA, area in July and August 2009. ERG conducted a total of 14 interviews with parents who were recruited through an ad posted on Craigslist (not a representative sample of all parents of employed teens). Parents commented on the usefulness of the YouthRules! Web site in providing information they need about child labor and offered suggestions for improvement.

For each parent participant, ERG conducted a three-stage interview:

- *Stage 1—Beginning interview.* ERG collected information about the types of information that parents need when making decisions related to their children’s employment.
- *Stage 2—Observation of Web site usage.* ERG observed the participant’s use of the YouthRules! Web site and recorded detailed observations of the participant’s reactions to the usability and functionality of the Web site. This allowed for an assessment of how well the current Web site is meeting the needs of parents in terms of content, layout, and design.
- *Stage 3—Ending interview.* ERG conducted an ending interview focusing on the participant’s experience using the YouthRules! Web site and how well the participant felt the Web site meets their requirements (how satisfied the participant is with the content, functionality, and usability of the Web site).

Interview scripts and a sample observation form appear in Appendix M.

Interviews with WHD Agriculture Coordinators and other Non-WHD Agriculture Occupational Safety Experts

ERG conducted a series of interviews with WHD’s Agriculture Coordinators in order to collect information on regional approaches to enforcement and outreach to agricultural employers and workers, with a focus on youth agricultural workers. Of five Agricultural Coordinators, ERG was able to interview four by phone between June and August 2009. The interview script used for these interviews is available in Appendix N.

In order to better understand the safety and health risks facing youth agricultural workers and educational and outreach strategies for the agricultural audience, ERG conducted a series of phone interviews with experts in the field of agricultural occupational safety, with a focus on youth agricultural workers. ERG interviewed nine experts between June and August 2009. ERG selected experts based on their association with regional agricultural safety and health clinics and research centers and referrals by other interviewees. The interview script used for these interviews is available in Appendix O.

3.7 Census Bureau Quarterly Workforce Indicator (QWI) Data

For the NAICS-level analyses that ERG performed, data on the number of minors employed in each industry was obtained from the U.S. Census Bureau’s Quarterly Workforce Indicators (QWI) dataset. These data are made available through the Local Employment Dynamics (LED) partnership program, which is a voluntary partnership between the U.S. Census Bureau and state Labor Market Information (LMI) agencies that allows the U.S. Census Bureau to merge current demographic information with individuals’ wage records and employers’ payroll and economic data obtained from the LMI agencies.

The underlying source of the QWI dataset, and more specifically the employment numbers used in this analysis, are Unemployment Insurance (UI) wage records for individuals and ES-202 establishment records from employers that the participating states collect on a quarterly basis. UI wage records are retained for all individuals earning at least one dollar during the quarter. ES-202 records include employment, payroll, and economic activity data collected from establishments as part of the Covered Employment and Wages (CEW) program administered by the Bureau of Labor Statistics (BLS) and the Employment Security Agencies in each state. These are the same data reported as part of the Quarterly Census of Employment and Wages (QCEW) by BLS.³

QWI data exists only for states that are LED-state partners, and the data are subject to availability. At the time of ERG's download and use, QWI data was not available for 6 states (Connecticut, Massachusetts, Mississippi, North Carolina, New Hampshire, and Ohio).

³ For more detailed information on these datasets and others included in the creation of the QWI, please refer to <http://lehd.did.census.gov/led/library/techpapers/tp-2006-01.pdf>.

**SECTION FOUR:
MEASURING THE IMPACT OF THE CHILD LABOR PROGRAM**

This is the first of two sections describing the results of ERG’s Evaluation of the WHD Child Labor Program. Section 4 presents results pertaining to SOW evaluation questions on measurement of the impact of WHD’s Child Labor Program, while Section 5 presents results pertaining to SOW evaluation questions on improving program outcomes (see Table 4-1).

Table 4-1. Presentation of Results Pertaining to SOW Evaluation Questions.

Section	Sub-section	SOW Evaluation Question
Section 4: Measuring the Impact of the Child Labor Program	4.1	1c. How would the number and percentage of child labor violations differ had WHD not prioritized child labor (i.e. what impact has WHD’s child labor compliance program had on child labor compliance)?
	4.2	1d. How has WHD’s child labor compliance program impacted the incidence and severity of injuries and fatalities among minors?
	4.3	2. Are Civil Money Penalty (CMP) assessments effective in deterring child labor non-compliance? Would larger penalties further affect compliance?
	4.4	1e. What relationship, if any, exists between child labor compliance and overall employment of youth?
	4.5	1a. In addition to the use of statistically valid surveys, how can WHD quantify the impact of its child labor education and outreach efforts on compliance?
	4.6	1b. How can WHD effectively measure the value of partnerships?
Section 5: Improving Program Outcomes	5.1	3a. How can WHD improve its targeting of/in industries that employ a small percentage of minors but may demonstrate a high incidence of child labor violation (i.e., avoid the “needle in a haystack” dilemma)?
	5.2	3b. How can WHD improve compliance and reduce occupational injuries and deaths in the agricultural sector?
	5.3	3c. Is a national, regional, or local approach most effective in increasing child labor compliance?
	5.4	3d. How can WHD best use outreach to positively affect compliance?

4.1 How would the number and percentage of child labor violations differ had WHD not prioritized child labor (i.e. what impact has WHD’s child labor compliance program had on child labor compliance)?

ERG’s work plan for this project divided this evaluation question into four related measurable questions:

- What impact has WHD child labor program investigations had on reducing the number of violations among employers that have been inspected at least once? (Section 4.1.1)
- Have employers found WHD’s education and outreach materials to be useful in assisting them in complying with the FLSA child labor requirements? (Section 4.1.2)
- What impact has the WHD child labor program education and outreach materials had on reducing the number of violations among employers that were inspected? (Section 4.1.3)
- What impact have the different PARRs had on compliance with FLSA child labor requirements? Are there some characteristics of the PARRs that have been more effective in increasing compliance? (Section 4.1.4)

The next four subsections address each of these measurable questions individually; each section describes the method used to answer the question, results of the analysis, and key findings.

4.1.1 What impact has WHD child labor program investigations had on reducing the number of violations among employers that have been inspected at least once?

Key Findings

As a group, employers that were inspected had significantly fewer child labor violations in subsequent investigations within the next three years compared to employers that were not previously inspected. The estimated impact indicated that investigations reduce the number of violations at inspected employers by 12 percent on average between investigations that occur within three years of one another.

The 62,532 investigations that WHD conducted between FY05 and FY08 can be expected to result in 5,434 fewer child labor violations between FY06 and FY11.

Method. To answer this question, ERG used WHISARD data to estimate linear regression statistical models. We selected the “Tobit” model, which is designed to handle cases where the dependent variable (i.e., number of violations) has many zero values. In general, pure linear regression models do not do a good job of handling situations where the dependent variable clusters at a specific value (e.g., zero). The Tobit model is a standard econometric approach to dealing with these situations.

In our models, ERG used the number of child labor violations as the dependent variable and included a number of explanatory variables. The two primary variables used to estimate WHD impacts on child labor violations were:

- Occurrence of an investigation within the last three years—This is the primary variable we used to determine the impact of WHD investigations on employer compliance with the child labor provisions of the FLSA. The hypothesis being tested is whether being inspected within

the last three years is associated with a reduced level of violations (compared to the rate of violations among non-inspected employers).

- Number of violations cited during a previous investigation within the last three years—This was used as an alternative measure of WHD’s enforcement impact. The hypothesis being tested is whether citing more violations during an investigation leads to fewer violations in the next investigation.

In addition, ERG included several control variables, including:

- A series of binary variables reflecting the WHD Region in which the employer is located. The estimated impacts for each reflect how the number of violations per employer varies across WHD Regions.
- Three binary variables identifying employers in the grocery, fast food, and restaurant industries. These variables reflect the differences in the number of violations between employers in these three sectors and employers in other sectors.
- The number of employees reported by the employers. This variable is designed to capture any variation related to employer size.
- The industry growth rate. This variable is designed to capture the effect of changes in economic activity on violations.

Using these variables, ERG estimated three statistical models:

- A base model that included all employers and used the occurrence of an investigation within the last three years as the measure of WHD’s enforcement impact.
- A model in which we replaced the occurrence of an investigation with the number of violations cited in the previous investigation.
- Another model that used the number of violation in the previous investigation, but that included only employers that had a previous investigation.

Results. Table 4-2 presents the results of the Tobit models using all child labor violations as the dependent variable. Also included in the model is a yes/no variable indicating whether the employer was inspected within the last three years. The results show that employers that were inspected had significantly fewer child labor violations in subsequent investigations within the next three years compared to employer that were not previously inspected. Specifically, based on an average of 0.724 violations per investigation, employers that were previously inspected had 12 percent fewer violations (a reduction of 0.0869 violations) during their next investigation within the next three years compared to non-inspected employers. This indicates that WHD investigations had a deterrent effect on employers that were inspected.

Based on our estimate that inspected employers have 12 percent fewer violations than non-inspected employers, ERG estimated the number of avoided violations over the analytical period (FY05 to FY08). WHISARD data indicate that WHD conducted 62,532 investigations during FY05 to FY08. ERG’s model estimates the impact of investigations on subsequent investigations within the next three years. Thus, investigations between FY05 and FY08 will affect violations found during investigations from FY06 to FY11. The model indicates that each investigation reduces the number of violations at a subsequent investigation by 0.0869 (12 percent). Furthermore, since investigations are unannounced, we

can assume that each investigation, regardless of whether or not there is a follow-up, will reduce violations by 0.0869 violations at inspected employers over a three-year time frame. Thus, we can estimate that the 62,532 investigations conducted between FY05 and FY08 will result in 5,434 fewer child labor violations between FY06 and FY11.

The second model presented in Table 4-2 assesses whether the *number* of violations cited during an investigation leads to fewer violations in the next investigation. Model results show that this is not the case; instead the number of violations cited in the previous investigation is significantly and positively associated with violations in subsequent investigations. That is, employers with a large number of violations in an investigation tend to have a large number of violations in following investigations. Furthermore, the magnitude of that impact almost doubles when the estimation is restricted to only those employers with a previous investigation within the last three years. This implies that WHD is finding more violations among previously inspected establishments.

The models also bear out the hypothesis that employers in the grocery store, fast food, and restaurant industries have significantly more violations than other employers as a whole. Industry growth, regardless of sector, is negatively associated with violations. That is, as the employer’s industry experience growth, fewer violations are found.

Table 4-2. Estimated Statistical Models for the Impact of WHD Enforcement Efforts on Reducing All Child Labor Violations—Tobit Models Relating Number of Child Labor Violations to Occurrence of a Prior Investigation Within Three Year, Number of Violations During Prior Investigation, and Control Variables.

Variable	Model Using Yes/No Measure of Previous Investigation	Model Using Number of CL Violations Cited In Previous Investigation	Model Using Number of CL Violations Cited In Previous Investigation, Restricted to Just Employers with Prior Investigation [a]
Inspected within the last three years	-0.0869*** (-4.32)	-	-
Number of CL violations during the investigation within last 3 years	-	0.0252*** (3.33)	0.048*** (10.06)
Located in the Northeast Region	0.1561*** (6.47)	0.1196*** (5.04)	0.0549 (1.44)
Located in the Southeast Region	-0.001 (-0.04)	-0.0339 (-1.53)	0.0043 (0.12)
Located in the Midwest Region	-	-0.0331 (-1.31)	0.0094 (0.22)
Located in the Southwest Region	0.0862*** (3.32)	0.051** (2.1)	-0.013 (-0.32)
Located in the Western Region	0.0335 (1.31)	-	-
In the Grocery Industry [b]	0.655*** (15.2)	0.6512*** (15.11)	0.358*** (4.83)
In the Fast Food Industry [c]	0.8726*** (24.46)	0.8783*** (24.61)	0.453*** (6.81)
In the Restaurant Industry [d]	0.1623*** (6.46)	0.1628*** (6.48)	0.1202*** (2.79)
Number of Employees	< 0.0001 (-0.01)	< 0.0001 (-0.02)	< 0.0001 (0.25)
Industry Growth Rate [e]	-1.0203*** (-3.23)	-0.9983*** (-3.16)	-0.5031 (-0.97)
Number of employers	57,938	57,938	7,730
Likelihood Ratio Value	1028.65***	1021.47***	211.73***

*** Significant at the one percent level; ** Significant at the five percent level; * Significant at the ten percent level

[a] Restricted to include only those employers that have been inspected within the last three years.

[b] Industry is determined by NAICS code. An employer was included in the Grocery industry group if it was classified in the Grocery Stores Industry Group based on its NAICS code (4451 and all sub-industries, including 44511, 445110, 44512, and 445120).

[c] Industry is determined by NAICS code. An employer was included in the Fast Food industry group if it was classified in the Limited-Service Eating Places Industry Group based on its NAICS code (7222 and all sub-industries, including 72221, 722211, 722212, and 722213).

- [d] Industry is determined by NAICS code. An employer was included in the Restaurant industry group if it was classified in the Full-Service Restaurants Industry Group based on its NAICS code (7221 and all sub-industries, including 72211 and 722110).
- [e] Industry Growth Rate was derived from Bureau of Economic Analysis (BEA) data on industry economic activity data for at the three digit NAICS level.

4.1.2 Have employers found WHD’s education and outreach materials to be useful in assisting them in complying with the FLSA child labor requirements?

Key Findings

Only small percentages of employers recall receiving WHD child labor education and outreach materials.

Most employers who recalled receiving WHD child labor education and outreach materials reported that they reviewed the materials, found them useful, and were satisfied with the materials.

The likelihood of an employer giving high usefulness and satisfaction ratings increased as the specificity to child labor subject matter increased.

Method. To answer this question, ERG conducted a survey of employers identified from WHISARD data (see Section 3.3).

Results. Table 4-3 summarizes survey results related WHD outreach materials. In the surveys, employers were asked whether they (1) had received the material, (2) had reviewed the material, (3) found it useful, and (4) were satisfied with its contents. The results indicate that small percentages of employers recall receiving the materials (so they did not find them useful). On the other hand, most employers who recalled receiving the materials reported that they did review materials, found them useful, and were satisfied with the materials. The likelihood of an employer giving high usefulness and satisfaction ratings increased as the specificity to child labor subject matter increased.

Employers in the survey that reported they did not receive WHD outreach materials probably had received the materials – because these employers had been inspected, and WHD distributes outreach materials to most inspected employers.⁴ Thus, ERG believes that the employers did not *recall* having been given the materials.

⁴ WHD reported that most employers received the Handy Reference Guide, but may not have received child labor-specific materials.

Table 4-3. Employer Survey Results on Awareness, Review, Usefulness, and Satisfaction with WHD Outreach Materials.

Outreach Material	Received[a]	Reviewed[b]	Useful[c]	Satisfied[d]
Handy Reference Guide to the FLSA	28.9% (65/225)	92.3% (60/65)	60% (36/60)	78% (46/59)
Employer’s Pocket Guide to Youth Employment	14.7% (33/225)	87.9% (29/33)	82.8% (24/29)	93.1% (27/29)
Bulletin 1010	29.8% (67/225)	95.5% (64/67)	73.4% (47/64)	79.7% (51/64)
Fact Sheets	21.3% (48/225)	[e]	[e]	[e]
Fact Sheet #43 [e]	25% (12/48)	91.7% (11/12)	72.7% (8/11)	72.7% (8/11)
Teen Driving [e]	12.5% (6/48)	66.7% (4/6)	100% (4/4)	75% (3/4)
Power-driven Paper Baler [e]	14.6% (7/48)	42.9% (3/7)	100% (3/3)	100% (3/3)
Roofing [e]	2.1% (1/48)	0% (0/1)	-	-
Fast Food Restaurant [e]	6.3% (3/48)	66.7% (2/3)	100% (2/2)	100% (2/2)
Full Service Restaurant [e]	6.3% (3/48)	66.7% (2/3)	100% (2/2)	100% (2/2)
Grocery Store [e]	6.3% (3/48)	33.3% (1/3)	100% (1/1)	100% (1/1)
Meat slicers and other cooking [e]	31.3% (15/48)	86.7% (13/15)	69.2% (9/13)	76.9% (10/13)
“Stop” Stickers [f]	23.6% (53/225)	52.8% (28/53)	75% (21/28)	-
YouthRules! web site	20.4% (46/225)	56.5% (26/46)	73.1% (16/26)	76.9% (20/26)
U.S. DOL WHD toll-free Hotline	35.1% (79/225)	17.7% [g] (14/79)	100% (2/2)	100% (2/2)
Outreach mailing	16.4% (37/225)	75.7% (28/37)	78.6% (22/28)	78.6% (22.28)
TIPS for Achieving compliance with Child labor laws	8.9% (20/225)	85% (17/20)	76.5% (13/17)	82.4% (14/17)

The numbers in parentheses reflect the number indicating yes to the question divided by the total number that answered each question.

[a] Percent of respondents who answered “Yes” when asked if they have ever been given or obtained the material.

[b] Percent of respondents who were aware of the material and answered “yes” when asked if they had reviewed the material.

[c] Percent of respondents who reviewed the material and answered “Very useful, it answered all of my questions” when asked how useful the material was to them.

[d] Percent of respondents who reviewed the material and answered “Very satisfied, all of the information was clear to me” when asked how satisfied they were with the information presented.

[e] The survey asked respondents if they had seen any fact sheets. Respondents that reported seeing fact sheets were then asked about the fact sheets listed in this table and the follow-on questions related to review, usefulness, and satisfaction.

[f] Respondents were asked if familiar with the stickers, if used and how helpful in informing workers about tasks they cannot do.

[g] Percent of respondents who called the hotline for any reason, 14.3% of those respondents called for more information on youth employment laws.

4.1.3 What impact has the WHD child labor program education and outreach materials had on reducing the number of violations among employers that were inspected?

Key Findings

Results on the impact of WHD child labor outreach are mixed:

- *Some variables (PARR with outreach in general, PARR with handing out outreach materials) are associated with increased numbers of violations.*
- *Other variables (PARR with presentation or partnership) are associated with decreased numbers of violations.*

The mixed results are likely an effect of targeting, as employers with more violations tend to get targeted for PARRs with outreach.

Method. ERG initially planned to answer this question by relating the distribution of outreach materials during investigations with changes in child labor violation rates. This method was not feasible because (1) information on which materials were distributed during investigations was not recorded consistently in WHISARD and (2) when the information was recorded, it often showed the same set of materials.^{5, 6}

As an alternative method, ERG relied on information available from PARRs implemented during the FY 2005-2007 period. Using a database that we built with this PARR information, ERG identified which PARRs involved:

- Outreach
 - Conferences⁷
 - Training
 - Visits to employers
 - Materials being handed to employers
 - Presentations
- Investigations
- A sector focus
- A specific HO focus
- Media or public announcements
- Mailings
- A partnership

In estimating statistical models for this question, ERG measured outreach in two ways. First, we used a general variable called “outreach” that measured whether the PARR involved any assistance to employers. Second, we used a disaggregated set of variables (i.e., the sub-bullets under outreach above) to measure whether the different types of assistance had different effects. In both cases, the measures of assistance are binary measures equal to one (yes) if the PARR involved that type of assistance or zero (no) otherwise.

⁵ The original intent was to identify which materials were most effective.

⁶ ERG also explored the possibility of taking a sample of cases and extracting detailed information from the inspectors’ case narratives on what was handed to the employers. Once again, however, a small sample of cases we reviewed indicated that the narrative information also did not contain the necessary information on what was handed to employers.

⁷ Although we tracked conferences in PARRs, too few PARRs involved conference to be useful for analysis.

WHD also supplied ERG with a list of investigation cases that were associated with the PARRs. This allowed us to link an investigation (and the associated number of violations) with different characteristics of PARRs. We then performed a similar analysis to the one described in Section 4.1.1. We developed a statistical Tobit model using a base set of explanatory variables and included a number of the PARR characteristics in the model for cases associated with PARRs. The base model we used included:

- The occurrence of an investigation within the last three years.
- Binary variables reflecting the WHD Region in which the employer was located.
- Binary variables identifying employers in the grocery, fast food, and restaurant industries.
- The number of employees.
- The industry growth rate.

To these we added the PARR-related characteristics listed above. Given that some PARR-related characteristics involve outreach, we can use the results of this analysis to indicate whether PARR-related assistance had an impact on compliance.

Results. Table 4-4 summarizes the results of the models described above. Compared to investigations linked to PARRs without outreach and cases without PARRs, investigations linked to PARRs with outreach had an increased number of violations. The increase in number of violations is not statistically significant and is probably an effect of targeting, as employers with more violations tend to get targeted for PARRs.

Results on the impact of disaggregated measures of outreach are mixed. PARRs associated with handing out materials to employers have a statistically significant higher number of violations. However, PARRs where the assistance involved some form of presentation had statistically significant lower numbers of violations compared to cases not associated with those types of PARRs.

Cases with PARRs associated with partnerships also had a statistically significant lower number of violations compared to other cases. Based on our understanding of WHD partnerships, any employer or case associated with PARR would also involve some level of outreach.

Based on these results, we cannot definitively say that WHD education and/or outreach materials leads to increased compliance. As noted above, the available data were insufficient to use the preferred method for answering this question, so the effect of targeting could not be addressed and the results shown here cannot be definitive.

Table 4-4. Estimated Statistical Models for the Impact of WHD PARRs on All Child Labor Violations—Tobit Models Relating Number of Child Labor Violations to Measures of Outreach Delivered As Part of PARRs and Control Variables.

Variable	Model Using Aggregate Measure of Outreach in PARRs	Model Using Disaggregated Measures of Outreach
Inspected within the last three years	-0.0856*** (-4.25)	-0.086*** (-4.27)
Located in the Northeast Region	0.1225*** (5.14)	0.1225*** (5.13)
Located in the Southeast Region	-0.0291 (-1.3)	-0.0334 (-1.49)
Located in the Midwest Region	-0.0274 (-1.08)	-0.0312 (-1.23)
Located in the Southwest Region	0.061** (2.49)	0.058** (2.37)
Located in the Western Region	-	-
In the Grocery Industry [a]	0.645*** (14.89)	0.6392*** (14.73)
In the Fast Food Industry [b]	0.8608*** (24.08)	0.8636*** (24.16)
In the Restaurant Industry [c]	0.158*** (6.29)	0.158*** (6.29)
Number of Employees	< 0.0001 (-0.01)	< 0.0001 (-0.01)
Industry Growth Rate [d]	-1.0802*** (-3.4)	-1.0654*** (-3.35)
PARR Included Outreach	0.1404 (1.38)	-
PARR Outreach Included Mailings	-	-0.1382 (-0.84)
PARR Outreach Included Training, Seminars, Workshops or Forums	-	-0.1893 (-1.11)
PARR Outreach Included Visits	-	-0.1709 (-0.9)
PARR Outreach Included Distributing Materials	-	0.7708*** (4.15)
PARR Outreach Included Presentation(s)	-	-0.3781** (-2.41)
PARR Included Investigations	0.1448 (1.33)	0.0219 (0.2)
PARR Focused on a Specific Sector	-0.0014 (-0.01)	0.2138 (1.25)
PARR Focused on a Specific Hazardous Order	0.309** (2.09)	0.3074* (1.81)
PARR Included a Media/Public Awareness Component	-0.1281 (-0.85)	0.0999 (0.58)
PARR Included the Use of Partnerships	-0.2926** (-2.5)	-0.2337* (-1.73)
Number of employers	57,939	57,939
Likelihood Ratio Value	1064.52***	1083.89***

*** Significant at the one percent level; ** Significant at the five percent level; * Significant at the ten percent level

[a] Industry is determined by NAICS code. An employer was included in the Grocery industry group if it was classified in the Grocery Stores Industry Group based on its NAICS code (4451 and all sub-industries, including 44511, 445110, 44512, and 445120).

[b] Industry is determined by NAICS code. An employer was included in the Fast Food industry group if it was classified in the Limited-Service Eating Places Industry Group based on its NAICS code (7222 and all sub-industries, including 72221, 722211, 722212, and 722213).

[c] Industry is determined by NAICS code. An employer was included in the Restaurant industry group if it was classified in the Full-Service Restaurants Industry Group based on its NAICS code (7221 and all sub-industries, including 72211 and 722110).

[d] Industry Growth Rate was derived from Bureau of Economic Analysis (BEA) data on industry economic activity data for at the three digit NAICS level.

4.1.4 What impact have the different PARRs had on compliance with FLSA child labor requirements? Are there some characteristics of the PARRs that have been more effective in increasing compliance?

Key Finding

Investigations linked to PARRs (including PARRs with outreach) had higher numbers of violations than those not linked to these PARRs. However, the association with higher numbers of violations is likely an effect of targeting rather than the impact of the PARRs themselves.

Method. To answer this question, ERG used the data and Tobit method described in Section 4.1.3. For the statistical estimations, we started with a base model that included:

- The occurrence of an investigation within the last three years.
- Binary variables reflecting the WHD Region in which the employer was located.
- Binary variables identifying employers in the grocery, fast food, and restaurant industries.
- The number of employees.
- The industry growth rate.

To this, ERG added a binary variable that indicated whether a case was associated with a PARR. We began with all cases in the FY05 to FY08 period, and then we restricted the analysis to just cases that were associated with a PARR.

Results. Table 4-5 provides the results of these estimations. The results show that investigations linked to PARRs had significantly more violations than those not linked to PARRs. When the analysis is restricted to just cases associated with PARRs, we see few impacts of PARRs on compliance. Compared to investigations not linked to these types of PARRs, cases linked to PARRs with outreach in general, handing out outreach materials, or an HO focus all had significantly higher numbers of violations. As noted before, these results are likely an effect of targeting rather than the impact of the PARRs themselves.

The results related to PARRs are partly dependent on the nature of the data we used. ERG relied on a linkage between PARRs and case id codes provided by WHD. Our presumption was that a case id was associated with a PARR if that case occurred after the PARR had been implemented. That is, we assumed the PARRs were developed and implemented and then, as cases occurred, they were identified as being affected by that PARR. However, if cases were associated with PARRs at the time the PARR was implemented or if the employers are being selected for their likelihood to have high numbers of violations, then we should expect to see the type of targeting effect that we see in these results (i.e., cases associated with PARRs being higher-violation cases).

For a PARR to have an effect on a case outcome, the employer must access PARR information and/or services and then change behavior to reduce violations. Based on the results here, ERG has found little evidence that PARRs have this effect. Again, however, the data available to ERG for this analysis were not sufficient to make a definitive statement about the effectiveness of PARRs. Data that links which employers had access to PARR materials/services and their resulting changes in violations would allow for more definitive statements on the effectiveness of PARRs.

Table 4-5. Estimated Statistical Models for the Impact of WHD PARRs On All Child Labor Violations—Tobit Models Relating Number of Child Labor Violations to Various Aspects of PARRs.

Variable	All Cases	Restricted to Cases Associated with PARRs [a]	
	Model Using Variable for Association With a PARR	Model Using Aggregate Measure of Outreach	Model Using Disaggregated Measures of Outreach
Inspected within the last three years	-0.0856*** (-4.25)	-0.2 (-0.73)	-0.1373 (-0.48)
Located in the Northeast Region	0.1256*** (5.28)	-0.119 (-0.16)	-
Located in the Southeast Region	-0.0323 (-1.46)	-0.0668 (-0.09)	0.5542 (1.29)
Located in the Midwest Region	-0.0321 (-1.27)	-0.8287 (-1.18)	-0.4833 (-1.32)
Located in the Southwest Region	0.0619** (2.54)	-	0.6452 (0.7)
Located in the Western Region	-	0.4628 (0.58)	0.9513*** (2.95)
In the Grocery Industry [b]	0.6368*** (14.76)	0.2099 (0.91)	0.0475 (0.19)
In the Fast Food Industry [c]	0.8597*** (24.07)	0.3139 (1.41)	0.1673 (0.72)
In the Restaurant Industry [d]	0.1592*** (6.34)	-0.1636 (-0.67)	-0.2783 (-1.13)
Number of Employees	<0.0001 (-0.01)	<0.0001 (-0.1)	<0.0001 (0.04)
Industry Growth Rate [e]	-1.121*** (-3.54)	-19.5042*** (-4.88)	-19.4272*** (-4.09)
Associated with a PARR (Yes/No)	0.2397*** (4.46)	-	-
PARR Included Outreach	-	0.2295*** (0.033)	-
PARR Outreach Included Mailings	-	-	0.1215 (0.35)
PARR Outreach Included Training, Seminars, Workshops or Forums	-	-	-0.501 (-1.4)
PARR Outreach Included Visits	-	-	0.151 (0.46)
PARR Outreach Included Distributing Materials	-	-	0.4973* (1.91)
PARR Outreach Included Presentation(s)	-	-	-0.42 (-1.33)
PARR Included Investigations	-	-	-0.2267 (-0.85)
PARR Focused on a Specific Sector	-	-	-0.3379 (-1)
PARR Focused on a Specific Hazardous Order	-	-	0.7957*** (2.85)
PARR Included a Media/Public Awareness Component	-	-	0.5046 (1.63)
PARR Included the Use of Partnerships	-	-	-0.0009 (0)
Number of employers	57,939	1,155	1,155
Likelihood Ratio Value	1050.56***	48.91***	64.15***

*** Significant at the one percent level; ** Significant at the five percent level; * Significant at the ten percent level

[a] Restricted to include only those employers that are related to a PARR.

[b] Industry is determined by NAICS code. An employer was included in the Grocery industry group if it was classified in the Grocery Stores Industry Group based on its NAICS code (4451 and all sub-industries, including 44511, 445110, 44512, and 445120).

[c] Industry is determined by NAICS code. An employer was included in the Fast Food industry group if it was classified in the Limited-Service Eating Places Industry Group based on its NAICS code (7222 and all sub-industries, including 72221, 722211, 722212, and 722213).

[d] Industry is determined by NAICS code. An employer was included in the Restaurant industry group if it was classified in the Full-Service Restaurants Industry Group based on its NAICS code (7221 and all sub-industries, including 72211 and 722110).

[e] Industry Growth Rate was derived from Bureau of Economic Analysis (BEA) data on industry economic activity data for at the three digit NAICS level.

4.2. How has WHD's child labor compliance program impacted the incidence and severity of injuries and fatalities among minors?

ERG's work plan for this project divided this evaluation question into three related measurable questions:

- What impact has WHD child labor program investigations had on reducing the number of hazardous order violations among employers that have been inspected at least once? (Section 4.2.1)
- Have WHD education and outreach materials directed at non-employers led to increased awareness and understanding of the risks posed to working youths among non-employers? (Section 4.2.2)
- What impact has WHD child labor program education and outreach materials had on reducing the number of hazardous order violations among employers that were inspected? (Section 4.2.3)

The next three subsections address each of these measurable questions individually; each section describes the method used to answer the question, results of the analysis, and key findings.

4.2.1 *What impact has WHD child labor program investigations had on reducing the number of hazardous order violations among employers that have been inspected at least once?*

Key Findings

As a group, employers that were inspected had significantly fewer child labor hazardous order (HO) violations in subsequent inspections within the next three years compared to employers that were not previously inspected. The estimated impact indicated that inspections reduce the number of HO violations at inspected employers by 5 percent on average between inspections that occur within three years of one another.

The 62,532 inspections that WHD conducted between FY05 and FY08 can be expected to result in 3,227 fewer HO violations between FY06 and FY11.

Given a list of potential negative outcomes related to child labor law, almost three of four employers surveyed selected "avoiding injuries in the work place" as the first or second most important to their business. This may be a sign that workplace safety is important to employers.

Method. To answer this question, ERG used data from WHISARD and from our employer survey. Using WHISRAD data, ERG developed models as described in Section 4.1.1, but replaced all child labor violations with Hazardous Order (HO) child labor violations as the dependent variable. We then measured WHD enforcement impacts using two measures (see Section 4.1.1 for descriptions):

- Occurrence of an investigation within the last three years.
- Number of violations cited during a previous investigation within the last three years.

We also included control variables:

- Binary variables reflecting the WHD Region in which the employer was located.

- Binary variables identifying employers in the grocery, fast food, and restaurant industries.
- The number of employees.
- The industry growth rate.

ERG estimated two models using all FY05-FY08 cases and then developed a restricted analysis that included only FY05-FY08 cases that had an investigation within the three prior years.

We used our second data source, the employer survey, to ask employers about their priorities in relation to child labor compliance and health and safety.

Results, Statistical Modeling. The results of the statistical Tobit estimations appear in Table 4-6. Employers that had a prior investigation within the last three years tended to have 5 percent fewer HO violations in subsequent investigations. Based on this finding, we can conclude that WHD investigations effectively reduce the number of HO violations in subsequent investigations. For every 100 investigations conducted, the number of HO violations is reduced by 5.

As we did with all child labor violations, we can use these results to estimate the expected reduction in HO violations during FY06-FY11. WHD conducted 65,532 investigations between FY05 and FY08, each of which can be expected to reduce HO violations over three years at inspected employers by 0.0516 violations. Thus, WHD's 65,532 investigations in FY05-FY08 can be expected to reduce HO violations by 3,227 in FY06-FY11.

As with all child labor violations, employers with a high number of HO violations tend to have more HO violations in subsequent investigations. The results also further confirm that employers in the grocery store, fast food, and restaurant sectors have more violations than other employers, and that industry growth is associated with fewer violations.

Results, Employer Survey. In the employer survey, respondents were asked to rank the importance of avoiding negative outcomes related to child labor laws:⁸

- Avoiding operating the business in a state of noncompliance.
- Avoiding injuries in the work place.
- Avoiding being investigated by the WHD.
- Avoiding being cited for violations by the WHD.
- Avoiding a monetary penalty for being out of compliance.
- Avoiding the potential bad press associated with being found in violation of the law.

⁸ Employers were also allowed to select a "Not sure/Don't remember" option.

Table 4-6. Estimated Statistical Models for the Impact of WHD Enforcement Efforts on Reducing Hazardous Order (HO) Child Labor Violations—Tobit Models Relating Number of HO Child Labor Violations to Occurrence of a Prior Investigation Within Three Year, Number of Violation During Prior Investigation, and Control Variables.

Variable	Model Using Yes/No Measure of Previous Investigation	Model Using Number of CL Violations Cited In Previous Investigation	Model Using Number of CL Violations Cited In Previous Investigation, Restricted to Just Employers with Prior Investigation [a]
Inspected within the last three years	-0.0516*** (-9.4)	-	-
Number of CL violations during the investigation within last 3 years	-	0.0006 (0.39)	0.0012** (2.34)
Located in the Northeast Region	0.0098 (1.23)	0.0606*** (5.01)	-0.0015 (-0.13)
Located in the Southeast Region	-0.0282*** (-4.27)	0.0115 (1.21)	0.006 (0.5)
Located in the Midwest Region	-	0.0496*** (3.88)	0.0207 (1.2)
Located in the Southwest Region	-0.0245*** (-3.21)	0.0151 (1.43)	0.0067 (0.49)
Located in the Western Region	-0.0357*** (-5.27)	-	-
In the Grocery Industry [b]	0.5415*** (12)	0.5576*** (12.09)	0.1799*** (2.83)
In the Fast Food Industry [c]	0.2747*** (10.57)	0.2874*** (10.7)	0.2072*** (3.38)
In the Restaurant Industry [d]	0.0318*** (2.91)	0.0339*** (3.01)	0.0036 (0.27)
Number of Employees	<0.0001 (-0.11)	<0.0001 (-0.13)	<0.0001 (0.03)
Industry Growth Rate [e]	-0.4343*** (-3.72)	-0.4358*** (-3.64)	-0.194 (-1.31)
Number of employers	57,938	57,938	7,730
Likelihood Ratio Value	893.09***	833.98***	84.80***

*** Significant at the one percent level; ** Significant at the five percent level; * Significant at the ten percent level

[a] Restricted to include only those cases where the employer had been inspected within the last three years.

[b] Industry is determined by NAICS code. An employer was included in the Grocery industry group if it was classified in the Grocery Stores Industry Group based on its NAICS code (4451 and all sub-industries, including 44511, 445110, 44512, and 445120).

[c] Industry is determined by NAICS code. An employer was included in the Fast Food industry group if it was classified in the Limited-Service Eating Places Industry Group based on its NAICS code (7222 and all sub-industries, including 72221, 722211, 722212, and 722213).

[d] Industry is determined by NAICS code. An employer was included in the Restaurant industry group if it was classified in the Full-Service Restaurants Industry Group based on its NAICS code (7221 and all sub-industries, including 72211 and 722110).

[e] Industry Growth Rate was derived from Bureau of Economic Analysis (BEA) data on industry economic activity data for at the three digit NAICS level.

Employer survey results appear in Table 4-7. About 36 percent of respondents selected “avoiding injuries in the work place” as the most important item, while 40.9 percent selected “avoiding operating the business in a state of noncompliance” as the most important factor from the list. When we combine respondents’ first and second choices, we find that “avoiding injuries in the work place” (73.4 percent) slightly overtakes “avoiding operating the business in a state of noncompliance” (72.2 percent). The fact that almost three of four respondents selected “avoiding injuries in the work place” as their first or second choice may be a sign that workplace safety is important to employers.

Table 4-7. Employer Ranking of a Set of Potential Negative Outcomes Related to Child Labor Law.

From the following list, please indicate which item is the most important to your business:	Most Important		Second Most Important [a]	
	Number	Percent	Number	Percent
Avoiding operating the business in a state of noncompliance	92	40.9%	61	31.3%
Avoiding injuries in the work place	81	36%	73	37.4%
Avoiding being investigated by the WHD	3	1.3%	16	8.2%
Avoiding being cited for violations by the WHD	12	5.3%	14	7.2%
Avoiding a monetary penalty for being out of compliance	7	3.1%	20	10.3%
Avoiding the potential bad press associated with being found in violation of the law	0	0%	6	3.1%
Not Sure/Don't Remember	30	13.3%	5	2.6%
Total	225	100%	195	100%

4.2.2 Have WHD education and outreach materials directed at non-employers led to increased awareness and understanding of the risks posed to working youths among non-employers?

Key Findings

Overall, parent awareness of WHD outreach materials is low, but parents who are aware of the materials give them high ratings for helpfulness and clarity.

A high rate of parent awareness of WHD posters is probably due to inclusion of child labor laws on many posters that are required to be displayed in the parents' workplace.

Among teen focus group participants, awareness of WHD outreach materials was very low. They noted that they probably would not pick up or read the materials unless they were actively seeking information or they were directed to look at the materials (e.g., by a teacher or counselor).

When shown the materials, teen focus group participants stated that the materials are clear and useful. They preferred briefer formats (e.g., bookmarks) over longer items (e.g., pamphlets).

Method. To answer this question, ERG conducted a survey of parents and two focus groups with employed teens (see Section 3 for details).

Results, Parent Survey. In a survey of parents with children between 14 and 18 years of age, ERG asked parents about awareness, use, and usefulness of WHD outreach materials. Table 4-8 summarizes the results of the survey. Overall, parent awareness of WHD outreach materials is low, but parents who are aware of the materials give them high ratings for helpfulness and clarity. The most commonly recognized outreach materials were the posters and the public service announcements; these were also ranked as the most influential in increasing understanding of child labor rules. The high rate of awareness of WHD posters is probably due to inclusion of child labor laws on many posters that are required to be displayed in the workplace.

Table 4-8. Summary of Parent Survey Results on Awareness, Helpfulness, Clarity, and Influence of WHD Outreach Materials.

Outreach Material	Awareness[a]	Helpfulness[b]	Clarity[c]	Most Influential[d]
Posters	37.2% [e] (93/250)	34.4% (32/93)	71.6% (58/81)	65.8% (77/117)
Bookmarks	3.2% (8/250)	50% (4/8)	83.3% (5/6)	3.4% (4/115)
YouthRules! Web site	7.2% (18/250)	50% (5/10)	N/A	9.4% (11/117)
Child labor PSAs	15.2% (38/250)	31.6% (12/38)	61.8% (21/334)	14.5% (17/117)
YouthRules! rallies, or job fairs	4.4% [f] (11/250)	100% (2/2)	100% (2/2)	3.4% (4/117)
Fact Sheets, in general [g]	14% (35/250)	37.5% (9/24)	59.1% (13/22)	7.7% (9/117)
Fact Sheet #43	8.3% (2/24)	50% (1/2)	50% (1/2)	[h]
Bulletin 101	3.6% (9/250)	11.1% (1/9)	33.3% (3/9)	0%
Employer’s Pocket Guide on Youth Employment	8.8% (22/250)	50% (11/22)	78.9% (15/19)	8.5% (10/117)
U.S. DOL WHD toll-free hotline	8.8% [i] (22/250)	100% (2/2)	100% (2/2)	6% (7/117)

[a] Percent of respondents who answered “Yes” when asked if they have ever seen the material.

[b] Percent of respondents who were aware of the material and answered “Very helpful, it answered all of my questions” when asked how helpful the material was.

[c] Percent of respondents who were aware of the material and answered “Very clear, all of the information was clear to me” when asked how clear the information on the material was.

[d] Percent of respondents who answered “yes” they had seen at least one of the materials identified the material as most influential in helping them understand U.S. youth employment laws.

[e] Respondents were asked if the poster they saw focused on youth employment or minimum wage and overtime rules, 11.8% saw youth employment only, 33.3% saw minimum wage and overtime, and 44.1% saw both types.

[f] Of those who recalled attending an event, only 4 recalled their child attending and of those, only 2 recalled receiving information that they could rate as helpful or clear.

[g] Of those respondents who recalled seeing a fact sheet, 34.3% saw general information on youth employment, 20% saw information on use of meat slicers and other cooking equipment, and 8.6% saw information on power driven paper balers and trash compactors. Parent Survey, Question 9a.

[h] Fact Sheet #43 was not included as part of this question (Question 13). The question only asked about fact sheets in general.

[i] Of those respondents who were aware of the hotline, 9.1% (2 respondents) had called the hotline.

Results, Focus Groups with Employed Teens. Participants in ERG’s focus groups reported several reasons for seeking employment: to gain work experience, to earn personal money, and to increase independence from their parents. Most commented that they like working because of the sense of responsibility they feel and the job skills that they learn. Many teens in the focus groups expressed little concern about the specifics of child labor rules; however, in most cases their employers had built the rules into their own hiring and management practices. As a result, these teens received information about what they are allowed to do at work somewhat indirectly; employers told them how late and how many hours they can work, but often did not provide specific training on the rules. Some teens reported receiving general information from school guidance counselors or from materials that the school put out. No participant reported receiving specific information about child labor regulations from parents.

Among focus group participants, awareness of WHD outreach materials was very low; one participant reported seeing one of the posters at school. When shown the materials, participants indicated that they were clear and would be useful; they preferred briefer formats (e.g., bookmarks) over longer

items (e.g., pamphlets). They noted that they probably would not pick up or read the materials unless they were actively seeking information or they were directed to look at the materials (e.g., by a teacher or counselor).

When asked if the materials would change the decisions they make while working, the focus group participants stated that they might not remember all of the details but would think twice about activities they know are prohibited; they indicated that they would consider whether a rule is applicable to their situation, whether they agree with the rule, and whether the rule is likely to be enforced by a work supervisor or manager.

To determine how teens evaluate workplace risks and rules, focus group participants were also asked to discuss some hypothetical situations. Most participants were very thoughtful and conscientious in considering these situations; they took into account issues such as school and other priorities, interest in earning money, and the perceived risk of injury or getting someone (a coworker or manager) in trouble. In many cases, they observed that, regardless of what they thought was acceptable, they would check with a supervisor or manager before taking action.

4.2.3 What impact has WHD child labor program education and outreach materials had on reducing the number of hazardous order violations among employers that were inspected?

Key Findings

Overall, inspections linked to PARRs (including PARRs with outreach) had higher numbers of HO violations than those not linked to these PARRs; this may be an effect of targeting.

PARRs specifically involving visits to employers or presentations were associated with significantly smaller numbers of HO violations than other PARRs, suggesting that WHD visits and presentations may lead to a reduction in HO violations.

Method. To answer this question, ERG used a method similar to that used in Section 4.1.3, focusing this time on HO violations rather than all child labor violations. As before, we used information from PARRs to assess the impact of outreach. Using the database of PARR information described earlier, ERG determined which PARRs involved:

- Outreach
 - Conferences⁹
 - Training
 - Visits to employers
 - Materials being handed to employers
 - Presentations
- Investigations
- A sector focus
- A specific HO focus
- Media or public announcements
- Mailings
- A partnership

⁹ Although we tracked conferences in PARRs, too few PARRs involved conference to be useful for analysis.

For the statistical estimations, ERG used the base model that included:

- The occurrence of an investigation within the last three years.
- Binary variables reflecting the WHD Region in which the employer was located.
- Binary variables identifying employers in the grocery, fast food, and restaurant industries.
- The number of employees.
- The industry growth rate.

Starting with the base model, ERG estimated two statistical models using the number of HO violations as the dependent variable. In one model we used the binary variable for outreach in general as part of the PARR. In the second model we used binary variables for different aspect of outreach.

Results. Results for the estimated statistical models appear in Table 4-9. In general, as we saw in the analysis of all child labor violations, cases associated with PARRs that involved outreach were associated with a higher number of HO violations than other cases, but the difference was not statistically significant. When the types of outreach were disaggregated, PARRs involving visits to employers or presentations were associated with significantly smaller numbers of HO violations than other PARRs. This suggests that WHD visits and presentation may lead to a reduction in HO violations.

As discussed in Section 4.1.4, PARR cases tend to be higher-violation cases. Thus, the results of this analysis may be skewed toward cases involving more violations (an effect of targeting).

Table 4-9. Estimated Statistical Models for the Impact of WHD PARRs on Hazardous Order (HO) Violations—Tobit Models Relating Number of HO Violations to Measures of Outreach Delivered as Part of PARRs and Control Variables.

Variable	Model Using Aggregate Measure of Outreach in PARRs	Model Using Disaggregated Measures of Outreach
Inspected within the last three years	-0.0507*** (-9.38)	-0.0505*** (-9.37)
Located in the Northeast Region	0.0613*** (5.1)	0.0636*** (5.22)
Located in the Southeast Region	0.0143 (1.52)	0.0148 (1.56)
Located in the Midwest Region	0.0538*** (4.18)	0.0558*** (4.28)
Located in the Southwest Region	0.024** (2.19)	0.0248** (2.25)
Located in the Western Region	-	-
In the Grocery Industry [a]	0.5167*** (11.72)	0.5118*** (11.66)
In the Fast Food Industry [b]	0.2571*** (10.29)	0.2562*** (10.29)
In the Restaurant Industry [c]	0.03*** (2.82)	0.0294*** (2.78)
Number of Employees	<0.0001 (-0.11)	<0.0001 (-0.11)
Industry Growth Rate [d]	-0.4975*** (-4.28)	-0.4873*** (-4.2)
PARR Included Outreach	0.0455 (1.29)	-
PARR Outreach Included Mailings	-	0.0193 (0.32)
PARR Outreach Included Training, Seminars, Workshops or Forums	-	0.133 (1.19)
PARR Outreach Included Visits	-	-0.0706*** (-6.86)
PARR Outreach Included Distributing Materials	-	0.2188 (1.57)
PARR Outreach Included Presentation(s)	-	-0.047* (-1.93)
PARR Included Investigations	0.0164 (0.5)	0.0048 (0.15)
PARR Focused on a Specific Sector	0.079 (1.16)	0.1819 (1.61)
PARR Focused on a Specific Hazardous Order	0.0421 (0.8)	0.0153 (0.32)
PARR Included a Media/Public Awareness Component	-0.0702*** (-9.59)	-0.0687*** (-8.1)
PARR Included the Use of Partnerships	0.0129 (0.33)	-0.0052 (-0.14)
Number of employers	57,939	57,939
Likelihood Ratio Value	957.24***	966.82***

*** Significant at the one percent level; ** Significant at the five percent level; * Significant at the ten percent level

[a] Industry is determined by NAICS code. An employer was included in the Grocery industry group if it was classified in the Grocery Stores Industry Group based on its NAICS code (4451 and all sub-industries, including 44511, 445110, 44512, and 445120).

[b] Industry is determined by NAICS code. An employer was included in the Fast Food industry group if it was classified in the Limited-Service Eating Places Industry Group based on its NAICS code (7222 and all sub-industries, including 72221, 722211, 722212, and 722213).

[c] Industry is determined by NAICS code. An employer was included in the Restaurant industry group if it was classified in the Full-Service Restaurants Industry Group based on its NAICS code (7221 and all sub-industries, including 72211 and 722110).

[d] Industry Growth Rate was derived from Bureau of Economic Analysis (BEA) data on industry economic activity data for at the three digit NAICS level.

4.3 Are Civil Money Penalty (CMP) assessments effective in deterring child labor non-compliance? Would larger penalties further affect compliance?

Key Findings

In our analysis of WHISARD data we found that CMPs appear to have little effect on child labor law compliance once the impact of the previous inspection has been accounted for.

In an employer survey, respondents reported that being issued a CMP raised the priority of complying with child labor law. However, as noted in the previous finding, this does not appear to be borne out in the WHISARD data analysis.

Method. In ERG’s work plan, this evaluation question was refined to “What impact have CMP assessments had on reducing the number of violations among employers that have been inspected?” To answer this question, ERG used data from WHISARD and from the employer survey.

Using WHISARD data, ERG developed a base model that included:

- The occurrence of an investigation within the last three years.
- Binary variables reflecting the WHD Region in which the employer was located.
- Binary variables identifying employers in the grocery, fast food, and restaurant industries.
- The number of employees.
- The industry growth rate.

To capture the impact of CMPs, ERG assigned employers without a prior investigation a CMP value of zero; for inspected employers, we included the amount of any CMPs resulting from the investigations. Thus, the CMP variable had values ranging from zero to large values.

To control for the large number of zero values, ERG also performed analyses in which we restricted the sample to just employers with a prior investigation. ERG’s preliminary results indicated that the CMP value and the number of violations may interact to produce an outlier effect. That is, very large values of CMPs were linked to large investigation violation numbers for a small number of employers; this led to small number of observations driving the estimated value of the regression coefficients. To overcome this problem, ERG performed analyses where we limited the sample to just cases where the number of violations and the CMP value was less than the 95th percentile value for the respective variables.

In the employer survey, ERG asked respondents questions about monetary penalties for FLSA child labor violations. Specifically, respondents were asked about awareness, receipt of a penalty, relative importance of avoiding penalties, usefulness of information on penalties, impacts of receiving a penalty, and the understandability and clarity of WHD investigator explanations of penalties.

Results, WHISARD Data. The results of the statistical analyses appear in Table 4-10. The estimates for models not restricted to the 95th percentile and below indicate that CMPs are positively and significantly associated with violations. That is, the higher the CMP value during a prior investigation, the higher the number of violations in a subsequent investigation. When the analysis is restricted to just cases where the number of violations and CMP value are below the 95th percentile, we find that a positive but insignificant relationship between CMPs and violations at future investigations. These models included the binary variable for being inspected within the last three years. Thus, it would appear that CMPs have little effect on compliance once the impact of the previous investigation has been accounted for.

Table 4-10. Estimated Statistical Models for the Impact of CMPs on Reducing All Child Labor Violations—Tobit Models Relating Number of Child Labor Violations to CMPs Assessed During Prior Investigation Within Three Years.

Variable	All Cases	Restricted Employers [a]	All Employers, Within 95 th Percentile [b]	Restricted Employers [a], Within 95 th Percentile [b]
Inspected within the last three years	-0.1287*** (-8.83)	-	0.001 (1.3)	-
CMP Amount from Previous Investigation (\$1,000)	0.0153*** (3.32)	0.0077*** (3.39)	0.0006 (0.62)	0.0008 (0.93)
Northeast Region	0.2255*** (7.62)	0.0887* (1.92)	0.0032*** (4.84)	0.0044*** (2.71)
Southeast Region	-0.0065 (-0.31)	0.0245 (0.64)	0.0154*** (19.67)	0.0163*** (7.82)
Midwest Region	0.1637*** (5.39)	0.1317** (2.19)	-	-
Southwest Region	0.0603** (2.4)	0.0255 (0.61)	0.0175*** (18.49)	0.0178*** (7.67)
Western Region	-	-	0.0149*** (16.11)	0.015*** (5.86)
Grocery Industry [c]	1.2191*** (13.45)	0.6803*** (4.05)	-0.0096*** (-9.03)	-0.007** (-2.26)
Fast Food Industry [d]	1.6127*** (19.42)	0.9528*** (5.23)	-0.0197*** (-26.03)	-0.0578*** (-33.42)
Restaurant Industry [e]	0.4995*** (12.72)	0.2897*** (4.11)	-0.0108*** (-15.73)	-0.0107*** (-5.59)
Number of Employees	<0.0001 (-0.13)	<0.0001 (0.26)	<0.0001 (-0.04)	<0.0001 (-0.14)
Industry Growth Rate [f]	-0.8363*** (-2.93)	0.0079 (0.02)	-0.1043*** (-9.05)	-0.138*** (-4.4)
Number of employers	57,414	7,668	55,123	7,472
Likelihood Ratio Value	1939.21***	191.18***	492.38***	154.06***

*** Significant at the one percent level; ** Significant at the five percent level; * Significant at the ten percent level

[a] Restricted to include only those employers that have been inspected within the last three years.

[b] Restricted to include only those employers that are at or below the 95th percentile for number of violations and for CMP amount.

[c] Industry is determined by NAICS code. An employer was included in the Grocery industry group if it was classified in the Grocery Stores Industry Group based on its NAICS code (4451 and all sub-industries, including 44511, 445110, 44512, and 445120).

[d] Industry is determined by NAICS code. An employer was included in the Fast Food industry group if it was classified in the Limited-Service Eating Places Industry Group based on its NAICS code (7222 and all sub-industries, including 72221, 722211, 722212, and 722213).

[e] Industry is determined by NAICS code. An employer was included in the Restaurant industry group if it was classified in the Full-Service Restaurants Industry Group based on its NAICS code (7221 and all sub-industries, including 72211 and 722110).

[f] Industry Growth Rate was derived from Bureau of Economic Analysis (BEA) data on industry economic activity data for at the three digit NAICS level.

Results, Employer Survey. In the employer survey, ERG asked respondents about:

- Awareness of WHD’s authority to issue penalties.
- Whether the respondent recalled receiving a penalty.
- The influence that WHD’s penalty authority has on the respondent’s practices.
- The importance of being in compliance before and after receiving a penalty.
- The understandability and clarity of WHD investigator explanations of penalties.

Nearly all of the respondents, 94 percent, were aware of WHD’s authority to issue monetary penalties for child labor violations; 8 percent of respondents had been issued a penalty (see Table 4-11).

Table 4-11. Survey Respondent Awareness of WHD Authority To Issue Monetary Penalties for Violations of FLSA Child Labor Provisions and Recollection of Being Issued a CMP.

Question and Response Options	Number	Percent
<i>Are you aware that WHD can issue monetary penalties for youth employment violations of the FLSA?</i>		
Yes	212	94.2%
No	13	5.8%
Total	225	100%
<i>Has your business ever been assessed a monetary penalty due to a youth employment violation? [a]</i>		
Yes	17	8%
No	183	86.3%
Not Sure/Don't Remember	12	5.7%
Total	212	100%

[a] Asked of respondents who answered “Yes” they are aware that WHD can issue monetary penalties.

The impact of WHD’s ability to assess CMP’s on business priorities is not straightforward. When asked to rank the importance of several potential negative outcomes related to child labor law, 13 percent of respondents ranked “avoiding a monetary penalty for being out of compliance” as most or second most important (see Table 4-12). On the other hand, when asked about the influence of potential penalties on child labor practices specifically, about 40 percent of respondents indicated that it has a “large influence” (see Table 4-13). Another 32.5 percent indicated that the potential for a penalty has “low” or “no” influence on their practices, or were not sure.

Table 4-12. Respondent Ranking of Potential Negative Outcomes Related to Child Labor Law.

From the following list, please indicate which item is the most important to your business:	Most Important		Second Most Important [a]	
	Number	Percent	Number	Percent
Avoiding operating the business in a state of noncompliance	92	40.9%	61	31.3%
Avoiding injuries in the work place	81	36%	73	37.4%
Avoiding being investigated by the WHD	3	1.3%	16	8.2%
Avoiding being cited for violations by the WHD	12	5.3%	14	7.2%
Avoiding a monetary penalty for being out of compliance	7	3.1%	20	10.3%
Avoiding the potential bad press associated with being found in violation of the law	0	0%	6	3.1%
Not Sure/Don't Remember	30	13.3%	5	2.6%
Total	225	100%	195	100%

Note: This table is the same as Table 4-7 above. It is repeated here for easy reference.

Table 4-13. Influence of Potential Issuance of CMP on Child Labor Practices.

In your opinion, what influence does the fact that you could be assessed a monetary penalty for being in violation have on your business' youth employment practices? [a]	Number	Percent
Large influence, avoiding a monetary penalty is the most important consideration in our youth employment practices	85	40.1%
Moderate influence, avoiding a penalty is only one consideration among many in how we employ youth	58	27.4%
Low influence, we have other more important considerations than avoiding a monetary penalty	20	9.4%
No influence, we do not take the possibility of receiving a monetary penalty into account when formulating our youth employment practices	31	14.6%
Not Sure/Don't Remember	18	8.5%
Total	212	100%

The influence of an *assessed* CMP on compliance with child labor laws is more straightforward. These data are summarized in Table 4-14. Survey respondents who reported receiving a CMP were asked about the priority placed on compliance with child labor laws before and after being issued the penalty. Prior to being issued a CMP, 12 of 17 respondents ranked compliance as a “very high” priority; after being issued the CMP, about 16 of the 17 ranked compliance as a “very high” priority.

Table 4-14. Impact of Issuance of CMP on Priority of Compliance with Child Labor Laws.

On a scale of 1 to 5, with 5 being “very high” and 1 being “very low,” how would you describe the priority that your business placed on ensuring compliance with youth employment laws? [a]	Prior to being issued a CMP		After being issued a CMP	
	Number	Percent	Number	Percent
5, Very High	12	70.6%	16	94.1%
4	3	17.6%	1	5.9%
3	2	11.8%	0	0%
2	0	0%	0	0%
1, Very Low	0	0%	0	0%
Not Sure	0	0%	0	0%
Total	17	100%	17	100%

ERG also asked respondents who had received CMPs about the understandability of the explanations they received for the violation and how to correct the violation. These data are summarized in Table 4-15. Most respondents (12 of 17) found the explanation given by the WHD investigator to be understandable, but 3 of 17 did not understand the explanation at all. Most respondents (16 of 17) also found the explanation of how to correct the violation to be clear, but one felt that the explanation was not clear at all.

Table 4-15. Understandability of WHD Explanation for CMP Issuance.

Questions and Response Options	Number	Percent
<i>Thinking of the last time your business received a monetary penalty, how understandable was the reason provided by the Department Of Labor Wage and Hour Division staff person for citing a violation? [a]</i>		
Very understandable, I completely understood the reason for the citation	12	70.6%
Somewhat understandable, I did not fully understand the reason for the citation	2	11.8%
Not understandable at all, I did not at all understand the reason for the citation	3	17.6%
Not Sure/Don't Remember	0	0%
<i>Total</i>	<i>17</i>	<i>100%</i>
<i>Thinking of the last time your business received a monetary penalty, how clearly did the Department Of Labor Wage and Hour Division staff person explain how to correct the violation? [a]</i>		
Very clear, I completely understood what I needed to do to correct the violation	16	94.1%
Somewhat clear, I still had some questions about what was necessary to correct the violation	0	0%
Not clear at all, it was not clear to me at all how to correct the violation	1	5.9%
Not Sure/Don't Remember	0	0%
<i>Total</i>	<i>17</i>	<i>100%</i>

4.4 What relationship, if any, exists between child labor compliance and overall employment of youth?

Key Finding

There is a positive relationship between number of child labor violations and number of youth employees, but the correlation is not present in every sector:

- *For grocery stores, in the FY05-FY08 period, there is a strong positive relationship between number of child labor violations and number of youth employees.*
- *For full service restaurants, the correlation is strong but not significant.*
- *For fast food restaurants, the correlation is relatively weak and not significant.*

In the work plan for this project, ERG divided this question into measurable questions:

- What is the relationship between the number of violations of FLSA child labor requirements and the number of children employed at inspected employers? (That is, are employers with more violations of FLSA child labor requirements employing more or fewer children?)
- At the four-digit SIC code level, what has been the relationship over time between the number of FLSA child labor violations found within an SIC code and the employment of youths within that SIC code.

During a meeting in October 2009, WHD suggested that ERG answer these questions by tabulating numbers of youth employed and number of child labor violations for the grocery store, fast food, and restaurant industries.

Method. To develop these tabulations, ERG relied on data from the Census Bureau's Quarterly Workforce Indicators (QWI) data. The QWI program provides quarterly data on employment for specific age groups at the four digit NAICS code level for 46 states that partner with Census in the Local Employment Dynamics (LED) program. This source is described in more detail in Section 3.7. Using

WHISARD data, ERG also tabulated number of violations at employers in NAICS codes 4451 (grocery stores), 7722 (fast food establishments), and 7221 (restaurants) for the 45 states included in the QWI data.

Results. Tables 4-16 to 4-18 provide tabulations for each NAICS code. Figures 4-1 to 4-3 provide time series plots of violations and numbers of youth employees from fourth quarter 2004 through third quarter 2008 (i.e., from FY05 – FY08). ERG also calculated correlations between number of violations and number of youth employees (see Table 4-19). The correlations show a strong positive relationship between violations and youth employment for grocery stores during this time frame. For full service restaurants, the correlation is strong (> 0.4), but not significant. For fast food restaurants, the correlation is relatively weak (< 0.3) and not significant. The data do indicate that there is a positive relationship between number of violations and number of youth employees, but the correlation is not present in every sector.

Table 4-16. Number of Establishments, Number of Child Labor Violations, Number of Employed 14-18 Year Olds for NAICS 4451 (Grocery Stores) From Fourth Quarter 2004 through Third Quarter 2008 (FY05 – FY08) For States Participating in the Census Local Employment Dynamics Program.

Year	Quarter	Number of Establishments	Number of Child Labor Violations Among Establishments	Number of Minors Employed in Industry	Ratio of Violations per 10,000 Employed Minors in Industry
2004	4	61	163	401,338	4.06141
2005	1	145	215	380,988	5.64322
2005	2	162	339	418,648	8.09749
2005	3	122	425	447,665	9.49371
2005	4	77	109	409,578	2.66128
2006	1	141	218	392,761	5.55045
2006	2	189	302	428,347	7.05036
2006	3	132	427	446,784	9.55719
2006	4	116	147	416,601	3.52856
2007	1	148	259	398,289	6.50282
2007	2	157	264	428,740	6.15758
2007	3	188	391	442,229	8.84157
2007	4	83	370	411,175	8.99860
2008	1	133	253	367,954	6.87586
2008	2	215	287	393,390	7.29556
2008	3	190	361	395,458	9.12866

Note: Source for employment data and number of establishments was the Census Bureau Quarterly Workforce Indicator (QWI) data. QWI data were not available for 6 states: Connecticut, Massachusetts, Mississippi, North Carolina, New Hampshire, and Ohio. Violations are derived from WHISARD data from establishments in all but the six states without QWI data.

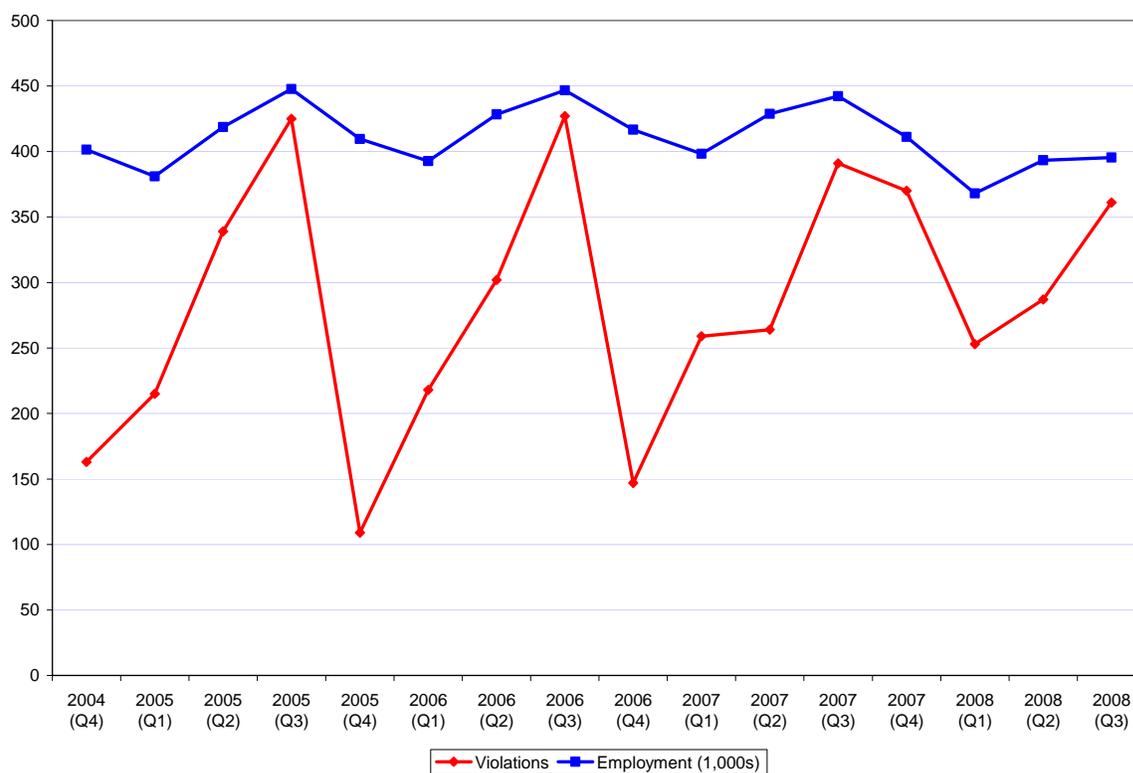


Figure 4-1. Time Series Plot of Number of Child Labor Violations and Thousands of Employed 14-18 Year-Olds in NAICS 4451 (Grocery Stores).

Table 4-17. Number of Establishments, Number of Child Labor Violations, Number of Employed 14-18 Year Olds for NAICS 7221 (Full-Service Restaurants) From Fourth Quarter 2004 through Third Quarter 2008 (FY05 – FY08) For States Participating in the Census Local Employment Dynamics Program.

Year	Quarter	Number of Establishments	Number of Child Labor Violations Among Establishments	Number of Minors Employed in Industry	Ratio of Violations per 10,000 Employed Minors in Industry
2004	4	238	379	627,684	6.03807
2005	1	294	374	613,481	6.09636
2005	2	395	485	720,734	6.72925
2005	3	414	478	738,862	6.46941
2005	4	237	369	647,785	5.69633
2006	1	388	603	650,197	9.27411
2006	2	313	390	749,828	5.20119
2006	3	398	583	760,564	7.66536
2006	4	296	459	666,581	6.88588
2007	1	458	657	655,958	10.01589
2007	2	521	681	745,675	9.13267
2007	3	536	783	750,324	10.43549
2007	4	256	354	650,324	5.44344
2008	1	360	488	620,803	7.86079
2008	2	422	590	680,936	8.66454
2008	3	445	682	672,094	10.14739

Note: Source for employment data and number of establishments was the Census Bureau Quarterly Workforce Indicator (QWI) data. QWI data were not available for 6 states: Connecticut, Massachusetts, Mississippi, North Carolina, New Hampshire, and Ohio. Violations are derived from WHISARD data from establishments in all but the six states without QWI data.

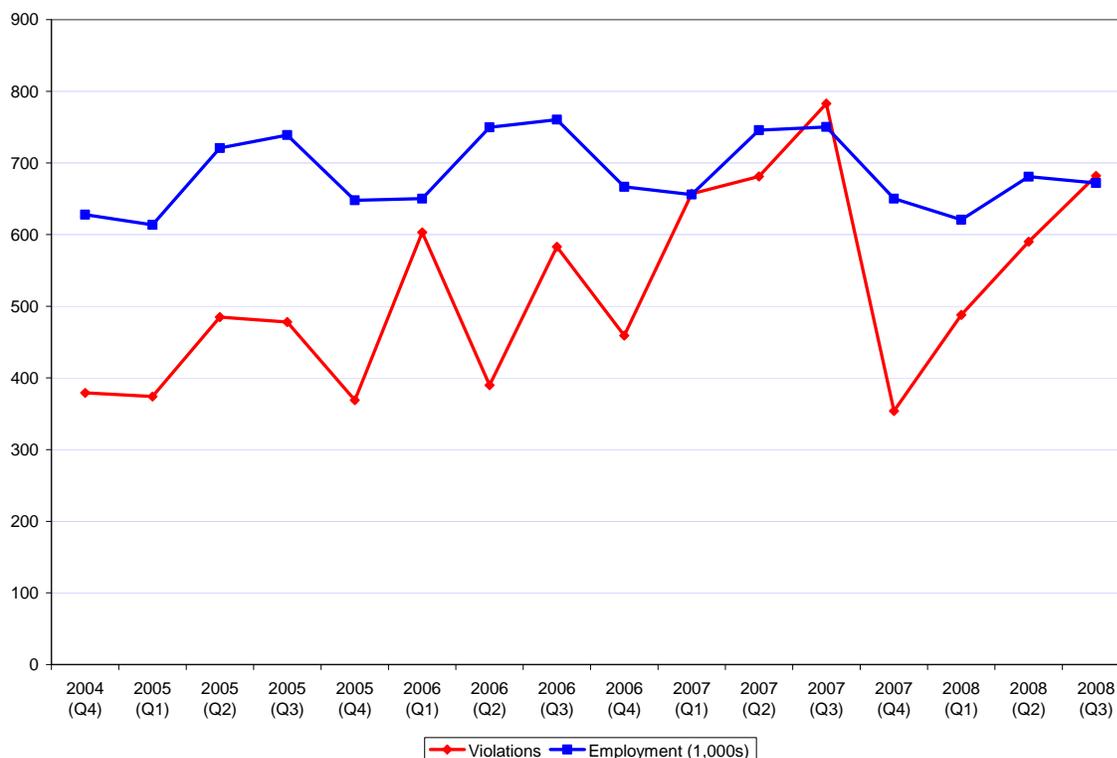


Figure 4-2. Time Series Plot of Number of Child Labor Violations and Thousands of Employed 14-18 Year-Olds in NAICS 7221 (Full Service Restaurants).

Table 4-18. Number of Establishments, Number of Child Labor Violations, Number of Employed 14-18 Year Olds for NAICS 7222 (Limited-Service Eating Places (Fast Food)) From Fourth Quarter 2004 through Third Quarter 2008 (FY05 – FY08) for States Participating in the Census Local Employment Dynamics Program.

Year	Quarter	Number of Establishments	Number of Child Labor Violations Among Establishments	Number of Minors Employed in Industry	Ratio of Violations per 10,000 Employed Minors in Industry
2004	4	183	468	1,189,791	3.93346
2005	1	274	584	1,145,439	5.09848
2005	2	244	367	1,378,373	2.66256
2005	3	213	279	1,417,561	1.96817
2005	4	138	264	1,241,412	2.12661
2006	1	193	376	1,227,166	3.06397
2006	2	244	434	1,450,576	2.99191
2006	3	245	511	1,468,585	3.47954
2006	4	193	380	1,288,301	2.94962
2007	1	241	378	1,229,561	3.07427
2007	2	269	727	1,446,256	5.02677
2007	3	352	1334	1,434,289	9.30078
2007	4	165	347	1,251,041	2.77369
2008	1	214	608	1,160,870	5.23745
2008	2	299	792	1,326,735	5.96954
2008	3	237	559	1,307,098	4.27665

Note: Source for employment data and number of establishments was the Census Bureau Quarterly Workforce Indicator (QWI) data. QWI data were not available for 6 states: Connecticut, Massachusetts, Mississippi, North Carolina, New Hampshire, and Ohio. Violations are derived from WHISARD data from establishments in all but the six states without QWI data.

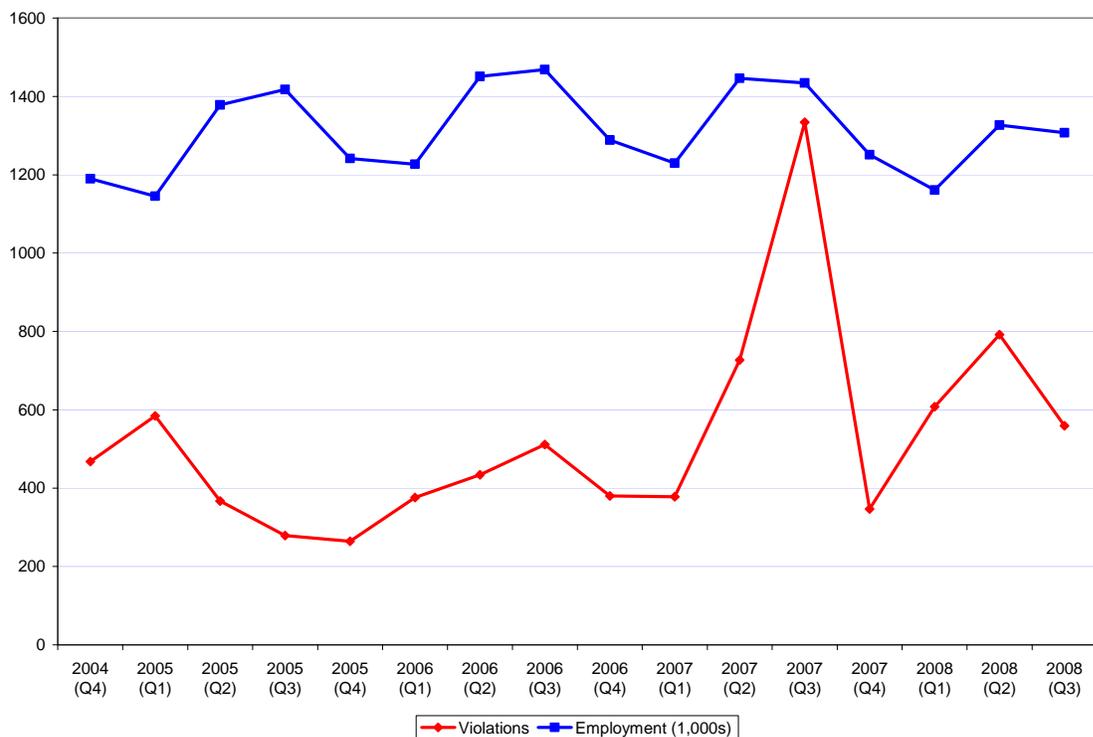


Figure 4-3. Time Series Plot of Number of Child Labor Violations and Thousands of Employed 14-18 Year-Olds in NAICS 7222 (Fast Food Restaurants).

Table 4-19. Correlations Between Number of Child Labor Violations and Number of Employed Youth (Aged 14-18) for Grocery Stores, Fast Food Restaurants, and Full Service Restaurants for FY05 to FY08.

NAICS Sector	Correlation Coefficient (Level of Significance)
Grocery Stores (NAICS 4451)	0.5349** (0.033)
Full Service Restaurants (NAICS 7221)	0.4197 (0.106)
Fast Food Restaurants (NAICS 7222)	0.2779 (0.297)

**Significant at the ten percent level of significance.

4.5 In addition to the use of statistically valid surveys, how can WHD quantify the impact of its child labor education and outreach efforts on compliance?

Key Finding

Adding to the types of information that WHD collects and documents during inspections would make it possible for WHD to use WHISARD data to measure the impact of outreach.

Recommendation

ERG recommends that WHD refine WHISARD (or implement establishment matching procedures) in order to enable linkage of records over time for a given employer. For each of five selected outreach materials, ERG recommends that WHD begin asking employers two questions during inspections: Have you ever received [name of WHD material]? Has [name of material] influenced your employment policies/practice? This information should be documented in WHISARD. ERG recommends that WHD use the new information to develop an Outreach Recognition and Influence Scale (ORIS) that will feed into impact calculations. Finally, to quantify the impact of its child labor education and outreach efforts on compliance, ERG recommends that WHD examine patterns of violations in four groups of employers:

- Previously inspected and high recognition/influence of assistance materials.*
- Previously inspected and low recognition/influence of assistance materials.*
- Not previously inspected and high recognition/influence of assistance materials.*
- Not previously inspected and low recognition/influence of assistance materials.*

Method. To answer this evaluation question, ERG relied on our knowledge of WHISARD data and interviews with WHD staff. Specifically, the question asks ERG to provide insights into quantifying the impact of WHD education and outreach without using statistically valid surveys.

Results. This project has demonstrated that WHISARD data can be used to estimate the impact of investigations on compliance with FLSA child labor provisions (see Section 4.1.1 above). It might have been possible to estimate the impact of outreach materials if sufficient data were available in WHISARD. ERG expects that changing information that WHD collects and documents during investigations would make it possible for WHD to use WHISARD data to measure the impact of outreach.

Recommendation. Currently, WHISARD identifies what employers have been inspected, but records over time for a given employer are not linked. ERG recommends that WHISARD be refined (or establishment matching procedures be implemented) to enable this linkage.

ERG further recommends that WHD begin asking for additional information regarding employers' awareness and use of WHD materials during its investigations of employers; this information

should be documented in WHISARD in order to distinguish between the four groups depicted in Table 4-19.¹⁰

Table 4-19. WHISARD Data Required to Estimate the Impact of WHD Outreach.

Received Materials	Inspected Within the Last Three Years	
	Yes	No
Yes	<p><u>Group A</u></p> <p><i>Current availability:</i> Any employer in the WHISARD database with a previous investigation within the last three years.</p>	<p><u>Group B</u></p> <p><i>Current availability:</i> Potential data gap. WHISARD offers no data or information on employers without a prior investigation.</p>
No	<p><u>Group C</u></p> <p><i>Current availability:</i> Not available. Employers that have been inspected have received materials.</p>	<p><u>Group D</u></p> <p><i>Current availability:</i> Any employer in the WHISARD database with a previous investigation within the last three years. However, not really distinguished from Group B.</p>

To distinguish between employers that have received WHD outreach materials and those that have not, ERG recommends reformulating the “received materials” criterion in WHISARD to “recognize and have been influenced by materials.” During an investigation, the WHD inspector can present the employer with a list of four to six key WHD materials; for each, the inspector would ask two questions:

Have you ever heard of or seen {insert material name}?

- Yes (1 point)
- No (0 points)

If “yes,” what influence has {insert material name} had on your youth employment policies/practices?

- Significant influence (6 points)
- Moderate influence (4 points)
- Low influence (2 points)
- No influence (1 point)

ERG recommends using the results in a scale to determine the overall influence of WHD materials. For each material, WHD would multiply the score for the first question by the score for the second question. Next, WHD would add the scores for all the materials, divide the product by the maximum possible score, and multiply the result by 100. This value would become the Outreach Recognition and Influence Scale (ORIS).¹¹ Employers with ORIS values less than 40 would be those with

¹⁰ In this response to the evaluation question, we have used the criteria used in our analysis of having been inspected within the last three years to represent a previous inspection.

¹¹ For example, if five materials are asked about, then the maximum possible is 30 (= six maximum points per material multiplied by five materials).

low recognition of WHD materials and/or low influence by WHD materials.¹² Table 4-19 could then be reformulated to show the impact of outreach (see Table 4-20).

Table 4-20. Outreach Recognition and Influence Scale (ORIS) for Estimating Impact of Outreach.

ORIS Value [a]	Inspected Within the Last Three Years	
	Yes	No
Greater than or equal to 40	Group A	Group B
Less than 40	Group C	Group D

[a] ORIS value = [Sum of (Question 1 score x Question 2 score) for each outreach material] ÷ maximum possible score x 100.

Once this has been implemented, WHD can calculate the number of violations found during investigations in any given time period for each group. Ideally, Group A employers have the lowest average number of violations, Group D have the highest average number of violations, and Groups B and C are somewhere in between. The impact of investigations would be calculated by comparing the average number of violations in Groups A and C to the average number of violations in Groups B and D. The impact of outreach would be calculated by comparing the average number of violations in Groups A and B to the average number of violations in Groups C and D.

Comparing average violation numbers is a simple approach to estimating impacts, but it ignores the effects of confounding factors such as employment, region of the country, sector, and economic activity. These confounding factors could be accounted for by replicating the format of the analysis described in Section 4.1.1 above. In the replicated analysis, two binary variables would be used:

- Previous investigation within the last three years (yes = 1, no = 0).
- ORIS value greater than or equal to 40 (yes = 1, no = 0).

The other explanatory variables (confounding factors) in Table 4-2 would be also used.

¹² A value of 40 for five materials corresponds to having 12 total points from the multiplication and addition together of the question scores. A total of 12 allows for employers to have been significantly influenced by two materials and not seen any of the other three.

4.6 How can WHD effectively measure the value of partnerships?

Key Finding

WHD has the foundation necessary to develop an assessment tool that can be used to measure the value of its partnerships.

Recommendation

ERG recommends that WHD develop a partnership assessment tool that resembles the United Nations Partnership Assessment Tool (UN PAT). The tool should rate partnerships based on the following factors:

- *Target Audience—Who the partnership is targeting (e.g., employed youth, employers, parents, educators, trade associations, etc.).*
- *Reach—The extent to which the partnership is reaching employed youth and/or employers.*
- *Goal Alignment—The extent to which the partner organization’s goals overlap with WHD goals.*
- *Partner Influence on Target Audience—The degree to which the partner can influence the target audience.*
- *Target Audience—The extent to the partnership will reach key groups, such as youth workers, parents of youth workers, guidance counselors and educators, employers and trade association members, the general public, and difficult-to-reach communities.*
- *Geographic Impact—The extent to which the geographic focus of the partnership will be effective at reaching the intended audience.*
- *Intervention Point—The extent to which a partnership will intervene before a violation of child labor law occurs.*
- *Multiplier Effect—The extent to which a partnership can be replicated across WHD offices or divisions of the member organization or replicated in other geographic areas.*
- *Partnership Sustainability—The extent to which the partnership can be sustained over the long-term.*

Method. To answer this question, ERG conducted interviews with WHD staff and selected partners, reviewed WHD documentation of partnerships in the PARRs, and reviewed existing models of partnership assessment. ERG analyzed the information collected to understand the structure and goals of WHD partnerships, to identify the characteristics of partnerships that drive value, and to develop a potential framework for measuring value.

Results, Interviews with WHD staff. ERG conducted two sets of interviews with WHD staff: initial interviews on the Child Labor Program with 13 National and Regional office staff in January 2008, and 2 interviews with National office partnership staff. The interview scripts for the initial interviews are provided in Appendix J, and the interview script for partnership staff is included in Appendix K.

WHD Philosophy Toward-Goal of Partnerships

As one interviewee noted, the value of partnerships is reaching the target audience with a message that contributes to the outcome of compliance. When asked about the philosophy behind forming partnerships, most interviewees discussed the ability to leverage WHD resources; partnerships allow WHD to access a broader audience and provide them with educational materials in a format that they find appealing, such as distributing information to businesses through their trade association or to employment-minded youth at a job fair. Partnerships have the added benefit of encouraging the target audience and community to trust WHD.

How Partnerships are Formed

Informal partnerships or collaborations tend to evolve from a relationship between a WHD staff person and an individual in another organization, such as a school or state agency. As one interviewee observed, “WHD has always had a relationship with the state labor offices.” According to interviewees, WHD often approaches a possible partner to gauge their interest in activities and the relationship develops from there. Some collaborations are intense efforts in support of an initiative, while some remain verbal understandings to distribute materials or invite WHD to speak at events.

Formal partnerships include signing a written partnership agreement where each partner agrees to work together on specific activities for a specific time frame. All partners to the agreement have the option to exit the partnership at any time, and other partnerships are renewed or extended beyond the specified time frame. WHD uses a template for the written agreement that has been reviewed by the Office of the Solicitor (SOL).

Partner Characteristics

When asked about characteristics of a good partner, most interviewees focused on leveraging resources. According to the interviewees, WHD looks for partners that share the desire to distribute information and have resources to work with (for example, a motivated staff person, access to members of an industry, or access to new cultural groups that are difficult for WHD to reach). Interviewees also find that these characteristics tend to support a successful partnership, especially if the partnership features regular communication, information sharing, and enthusiasm.

Characteristics that support successful partnerships, and ultimately positive outcomes, are the key to understanding how WHD could measure the value of partnerships. ERG discussed partnership characteristics in detail with WHD National staff. The discussions focused on several characteristics that appear to influence the success of partnerships; those characteristics are:

- *Degree of commitment.* Different types of partner organizations have differing levels of commitment to the partnership. For example, advocacy groups have a high level of commitment to child labor issues, but this could promote tension if the group has high expectations of what WHD can do in a partnership. On the other hand, employer groups like to work with WHD for current information on regulations and enforcement emphasis, but child labor and FLSA are not their sole priority because members need and want broader industry information. State agencies tend to have very similar priorities and resources as WHD and tend to be a good fit for level of commitment. This characteristic is strongly related to partner goals and the degree of goal overlap with WHD.
- *Influence with the audience and partner reputation.* Different partner organizations also have differing levels of influence with target audiences. Trade and employer associations have a high degree of influence with employers because information from an association has an air of importance and credibility, and is packaged with other information relevant to the employer. Similarly, advocacy groups have the ability to reach parents and teens, but may be less persuasive to employers.
- *Information sharing.* This characteristic operates in two directions: a partner that distributes WHD information to the target audience, and a partner that provides information to WHD. Some partners provide information that allows WHD to prevent or follow up promptly on violations (work permits, injury and worker’s compensation reports), while some partners provide information about their audience to allow WHD to target outreach materials and

activities to be more effective. The most valuable information is provided to WHD before a violation occurs (work permits). Other partners primarily distribute WHD materials to the target audience.

- *Geographic area and intensity of initiatives.* Interviewees noted that bigger organizations are not always better partners. While some national partners have a large audience and broad influence, WHD has found that a small organization in a defined area can have a profound impact. Additionally, some enforcement activities in targeted geographic areas appear to have a “ripple effect” on local employers.
- *Degree of institutionalization.* There is some advantage to having an institutionalized process and contact person at the partner organization, but the advantage is driven by the presence of a committed individual with the time and interest to maintain the relationship with WHD.

Successful Activities

Interviewees spoke positively about use of Web links, distribution of WHD information through partner newsletters and mailings, and WHD trainings and presentations to partner organizations. Delivering the information in person has the advantage of allowing WHD to answer specific questions and minimize misunderstanding of regulations or the role of WHD. Also, any activities that allow WHD to intervene before violations can occur are valuable, particularly if activities include encouragement of referrals from difficult to access communities and training issuers of work permits.

Constraints on Partnerships

The key constraint on partnerships, according to interviewees, is the resources that can be committed to them. Several interviewees discussed the frustration of working with WHD procedures for formalizing partnerships and expressed concerns that an emphasis on formalization could limit partnership value.

Benefits

Interviewees cited the following benefits of partnerships to WHD:

- Give a face to the agency.
- Build trust in communities.
- Leverage scarce resources.
- Provide WHD with information they might not obtain otherwise.
- Provide WHD with a venue to educate the public.
- Help WHD target outreach and compliance materials and enforcement efforts.

Interviewees cited the following benefits of partnerships to the partners:

- Help partners achieve their organizational goals.
- Give partners access to WHD to ask questions.
- Allow partners such as state agencies to leverage their own resources.
- Help trade associations provide a service to their members by providing tools to maintain compliance.
- Support cultural association efforts to educate members in difficult to reach communities.

Results, Interviews with Selected Partners. ERG conducted phone interviews with four partners between June and October 2009. The partners were selected from a list of partners compiled from interviews with WHD staff. They represent one federal agency, two state agencies, and one trade association. The interview script for the partner interviews can be found in Appendix L.

Many of the partners on ERG's list of partners were unavailable to be interviewed due to the passage of time between the initial interviews with WHD staff and the selection of partners to interview; in some cases, the prospective interviewees had changed positions, while others did not recall the interaction with WHD. ERG notes that this reflects some of the challenges of maintaining partnerships with outside organizations; namely, differing goals and turnover of staff at partner agencies can limit WHD's ability to form strong relationships with partner agencies. The agencies that ERG spoke with have goals that are very similar to WHD, key employees with long tenure dedicated to coordination with WHD, and frequent open communication with WHD staff.

Interviewees commented that the most successful partnership activities include information sharing, joint presentations on child labor, and "train the trainer" programs. The key challenges cited by the interviewees include "political realities" such as turnover in leadership and changing priorities, the disconnect between federal and state laws on information sharing and access, and the difficulty of timing activities to meet the needs of the target audience.

Results, WHD Documentation of Partnerships in the PARRs. ERG reviewed the documentation of partnership activities in the PARRs that WHD provided for child labor activities for FY05-FY07. The PARRs generally contain good descriptive information on recent partnership activities, but are limited in the amount of information provided on long-term informal partnerships, such as those with state and local labor departments. In other words, the PARRs are very useful for providing information on larger, one-time partnership activities but not as reliable for information on casual communication between WHD and partner agency staff.

Results, Review of Other Partnership Assessment Approaches. The Partnership Assessment Tool (PAT) was developed by four United Nations (UN) organizations to evaluate the impact and enhance the value of UN partnerships with businesses.¹³ The PAT is an interactive questionnaire on CD-ROM that uses an Internet browser window to guide users through a set of 25 closed-ended questions about various aspects of a planned partnership.¹⁴

The majority of the questions in the PAT have three response options that indicate the level to which partners have discussed important aspects of the partnership. Several questions feature follow-up questions that allow users to specify important factors in detail, such as the specific contributions, expertise, and resources that each partner brings to the partnership. The questions address six broad topics:

- *Alignment*—Are partners aligned on the objectives, contributions, and potential risks of the partnership?
- *Internal Partnership Management*—Have the partners agreed on responsibilities, goal identification, monitoring of progress, and the source of the resources necessary to meet those goals?

¹³ Those organizations are UN Development Programme, UN Institute for Training and Research, UN Office of Partnerships, and the Global Compact Office.

¹⁴ The PAT is available free-of-charge from the UN, details are available at <http://www.unglobalcompact.org/Issues/partnerships/pat.html>

- *External Partnership Management*—Are partners in agreement on processes for sharing information, involving stakeholders, sustaining benefits, and improving the relationship between public and private sectors?
- *Multiplier Effect*—Can the partnership be scaled up or replicated?
- *Environment*—To what extent does the partnership impact biodiversity and make efficient use of natural resources and energy?
- *Socio-Economic*—To what extent does the partnership impact the local community and increase equity among vulnerable groups?

Once the questionnaire has been completed, the tool generates a detailed scorecard that rates the answers and provides an overall recommendation. Each topic receives a symbolic score:

- A red triangle if the partnership needs more work on that topic before it proceeds.
- A green circle if the partnership looks good but is not quite at full potential.
- A gold star if the goal of the partnership is notable or may be a best practice.

Recommendations. ERG recommends that WHD develop a partnership evaluation tool to systematically determine the value of past, current, and prospective partnerships. Our recommended approach to valuing partnerships is based on developing a set of partnership characteristics that can be used to “score” partnerships (similar to the UN PAT).

To develop the tool, WHD could develop a set of criteria, phrased as questions, to use to prospectively (before a partnership has been formed, such as during the planning process) and retrospectively (after the partnership has been active for some time) “value” its partnerships. The tool would feature a series of questions about partnership characteristics implemented in a simple, user-friendly electronic format that could be easily accessed and used by WHD staff responsible for planning and evaluating partnership activities.

The tool would be used by WHD staff to assess in-place, past, and prospective partnerships. For example, suppose a WHD staff person in a District Office needs to determine whether a potential partnership with a local agency is likely to lead to successful activities and positive outcomes. The staff person answers a series of questions on partnership characteristics. Based on the answers to those questions, the tool would provide a qualitative “score” that would indicate how well the partnership could be expected to lead to outcomes. If the score is “low,” the partnership could be reconsidered or the structure of the partnership (characteristics involved) could be altered to improve its potential value.

Based on interviews with WHD staff and WHD partners, review of the PARRs, and review of UN PAT, ERG has developed a set of partnership characteristics that WHD could include in such a tool. To some extent the characteristics mimic the categories in the UN PAT, but they have been modified to reflect the WHD context. The recommended characteristics are:

- *Target Audience*—Partnerships that target employed youth or employers of youth are more likely to have an impact of child labor compliance compared to partnerships that target trade associations or parents.
- *Reach*—The more employed youth and/or employers that are reached by a partnership, the more of an impact that partnership should have. Thus, an important characteristic to consider when valuing a partnership is the reach of the partnership.

- *Goal Alignment.* A key aspect of the partnership is the extent to which the partner organization's goals overlap with WHD goals, and the degree of partner commitment to those goals in terms of the amount of resources that can be devoted to joint efforts. The tool could estimate this characteristic by asking for a rating of the degree of goal overlap (high, medium, low) and a characterization of the types of planned activities (e.g., distribute information, share information, WHD presentation, sponsorship of child labor event).
- *Partner Influence on Target Audience.* The degree to which the partner can influence the target audience plays a role in the overall success of the partnership activities. A partner that has a good reputation for providing information, and that is able to adapt WHD information to the target audience, will be an influential and valuable partner.
- *Target Audience.* Different target audiences provide different amounts of partnership value to WHD depending on the partner; in other words, some partners have more credibility and influence with specific audiences and WHD should account for this when assessing current and prospective partnerships. For example, a partnership with a trade association will be most successful when focusing on outreach to employers who are members of the association. On the other hand, a partnership with a small community group may have the advantage of providing WHD with access to ethnic or religious communities that face unique challenges with employers and may be reluctant to approach a government agency for assistance. Key groups to consider include youth workers, parents of youth workers, guidance counselors and educators, employers and trade association members, the general public, and difficult-to-reach communities.
- *Geographic Impact.* The impact of WHD partnership activities will vary based on the geographic area and intensity of focus of the activity. As observed during interviews with WHD staff, in some cases an intense initiative with a narrow geographic focus can have a profound impact on employers. In other cases, an initiative with a broad focus, such as public awareness, may produce better results with a broad geographic focus, especially if paired with the roll-out of other initiatives. The key is to ensure that the geographic impact of the activity matches the intended target audience; for example, a public awareness campaign will be more successful on a regional or national-level, while an outreach initiative aimed at farms will be most successful as a narrowly focused local effort. WHD should consider the value of different combinations of geographic focus (national and regional, state and local) and intensity of the activity (broad focus on multiple target audiences, narrow focus on a specific target audience).
- *Intervention Point.* Interviewees observed that partnerships that provide information that enables WHD to intervene *before* a violation of child labor law occurs is particularly valuable. WHD should consider the intervention point of the partnership activities, as well as activities that are particularly innovative in identifying or preventing violations that could threaten youth workers.
- *Multiplier Effect.* WHD should also identify and track partnerships that have the potential to be expanded across WHD offices or divisions of the member organization or replicated in other geographic areas. Partnerships that have demonstrated results and that have the potential to be replicated provide an important opportunity for WHD.
- *Partnership Sustainability.* Long-running partnerships provide regular opportunities for WHD to collaborate with the partner; according to interviewees, partnerships based on a long term relationship between WHD and an individual at the organization tend to very successful. On the other hand, it is very difficult to track the value of short-term or sporadic partnership activities.

WHD should consider elements of sustainability such as the degree of institutionalization (does the partner have a dedicated staff person for this role) and whether the partnership focuses on activities that the partner already engages in or activities that are new and different.

In order to implement this partnership tool, WHD will need to identify an appropriate format for the tool – one that can calculate a “score” based on answers entered by the user and determine how much value to assign to each partnership characteristic. Appendix P provides a potential set of questions that would be useful in implementing the tool described above. Appendix P also provides some instructions that WHD could use to estimate the relative value of partnership characteristics by performing a Web based survey of WHD field staff.

SECTION FIVE: IMPROVING PROGRAM OUTCOMES

5.1 How can WHD improve its targeting of/in industries that employ a small percentage of minors but may demonstrate a high incidence of child labor violations (i.e., avoid the “needle in a haystack” dilemma)?

Recommendation

To target industries that employ a small percentage of minors but demonstrate a high incidence of child labor violations, ERG recommends using tabulations of publicly available data (see below) to identify sectors with low-moderate concentrations of teen employment and high injury/illness rates.

- Census Bureau’s Quarterly Workforce Indicators – numbers of employed minors by NAICS code
- Census Bureau’s County Business Patterns – numbers of establishments by NAICS code
- Bureau of Labor Statistics injury and illness data – lost workday injury/illness rates by NAICS code

Method. To answer this question, ERG relied on the results of the WHISARD data analyses (see Section Four) in conjunction with our experience in designing enforcement targeting approaches and assessing enforcement impacts. ERG focused on targeting approaches that could make use of currently available data sources. Based on our evaluation of targeting approaches, ERG developed a method of targeting industries that employ a small percent of minors but demonstrate a high incidence of violations.

Recommendation. To improve targeting in industries that employ a small percentage of minors but may demonstrate a high incidence of child labor violations, ERG recommends that WHD compare tabulations of publicly available data to identify industries to target. ERG recommends that WHD use three sources of data:

- Census Bureau’s Quarterly Workforce Indicators
- Census Bureau’s County Business Patterns
- Bureau of Labor Statistics injury and illness data

First, WHD can tabulate data on employed minors from the Census Bureau’s Quarterly Workforce Indicators (QWI) at the three- or four-digit NAICS code level. These data are described in Section 3.7. Table 5-1 presents a tabulation at the three-digit NAICS code level for sectors within Retail Trade (NAICS code 44 only). The data in Table 5-1 reflect the number of employed 14-18 year olds in all but six states (Connecticut, Massachusetts, Mississippi, North Carolina, New Hampshire, and Ohio).¹⁵ These data can assist WHD in identifying sectors that employ small numbers of minors.

Next, WHD can tabulate data from the Census Bureau’s County Business Patterns on the number of establishments in each NAICS code. Dividing the number of employed minors by the number of establishments provides an estimate of the “concentration” of employed teens. WHD should focus its efforts on sectors where the ratio of employed teens to establishments is closer to one. This way, random investigations are more likely to encounter establishments with teens.

Finally, WHD can tabulate Bureau of Labor Statistics (BLS) data on lost workday injury and illness rates. This would provide an indication of the risk posed to employed teens in different sectors.

¹⁵ QWI data are available for all states that are Local Employment Dynamics program partners with the Census Bureau. At the time of this writing, these six states are not active partners.

Table 5-1 provides all three sets of tabulations for a selected sub-set of three-digit NAICS codes within the retail sector. The calculation of average number of teens per establishment is based on the first two tabulations. Tabulations such as these done across all three or four-digit NAICS codes can assist WHD in identifying sectors to target. Specifically, to address the “needle in a haystack” issue, WHD could target sectors with a moderate number of teens, a rate of around one teen per establishment, and/or a high injury rate (e.g., NAICS code 444 Building Material and Garden Equipment and Supplies Dealers, which has a rate of 0.7 teens per establishment and an injury rate of 4.0 lost workdays).

Table 5-1. Tabulations of Average Number of Youth Employees, Number of Establishments, and Lost Workday Rates for Three-Digit NAICS Codes.

Three-Digit NAICS Code	NAICS Code Description	Average Annual Number of 14-18 Year Old Employees [a]	Number of Establishments [b]	Number of 14-18 Year-Olds Per Establishment, 2007 [c]	BLS Lost Workday Injury and Illness Rate, 2007 [d]
441	Motor Vehicle and Parts Dealers	63,980	127,331	0.502	1.8
442	Furniture and Home Furnishings Stores	27,924	65,485	0.426	2.6
443	Electronics and Appliance Stores	40,881	52,470	0.779	1.3
444	Building Material and Garden Equipment and Supplies Dealers	62,193	88,304	0.704	4.0
445	Food and Beverage Stores	468,356	151,031	3.101	3.1
446	Health and Personal Care Stores	81,342	89,406	0.910	1.1
447	Gasoline Stations	81,285	115,533	0.704	1.3
448	Clothing and Clothing Accessories Stores	286,168	155,371	1.842	1.0

[a] Derived from Census Bureau’s Quarterly Workforce Indicators (QWI) data.

[b] Taken from the Census Bureau’s County Business Patterns Data for 2007.

[c] Average Annual Number of 14-18 Year Old Employees divided by Number of Establishments.

[d] Taken from the Bureau of Labor Statistics’ data.

5.2 How can WHD improve compliance and reduce occupational injuries and deaths in the agricultural sector?

Key Findings

Youth employment and injuries to youth in the agricultural sectors have been decreasing.

Injuries to youth working in agriculture tend to be more severe than injuries to youth in the service industries; injuries result from machinery and vehicles, animals, falls, repetitive motion and heavy lifting, and being “struck by” objects.

Information promoting safety behaviors is more successful when presented in person, modeled, and reinforced by the individual supervising the youth.

Recommendations

ERG recommends using regional approaches to planning agricultural enforcement initiatives to account for variations in season, type of crop, and predominant type of youth worker (local youth or migrant/seasonal worker).

ERG recommends using a local approach to outreach in the agricultural sector; materials should be targeted at individuals who will act as supervisors (farm operators, field supervisors, parents) and focus on safety and health topics such as age-appropriate tasks, the importance of supervision, and behavior modeling.

ERG recommends developing agriculture-focused partnerships with agencies and organizations that share an interest in safety and health in agriculture.

ERG recommends that WHD consider revising Hazardous Orders for agricultural tasks to take into account recent NIOSH guidance.

Method. To address this question, ERG conducted a series of interviews with WHD Agriculture Coordinators and another set of interviews with experts in the field of agricultural injuries to youth. Key findings appear below.

Results, Interviews with WHD Agriculture Coordinators. A 1998 GAO report identified the following challenges to identifying child labor violations in agriculture: the temporary nature of the work, geographic dispersion of the work, low wages and lack of job security, informal communication networks that warn of investigations, and worker demographics (especially language barriers). When asked if these challenges are still relevant today, all of the interviewees indicated that they are still relevant, although WHD has made progress in tackling some of these challenges.

According to interviewees, youth can be found working primarily in hand harvested crops such as blueberries, onions, cherries, sugar beets, asparagus, strawberries, corn (detasseling and pollination), and other fruit, nut, and berry operations. Some youth can also be found working in beef operations. The timing of youth work in agriculture depends on the operation; beef and orchard operations tend to employ youth full-time during the summer, while other field crops tend to employ youth for 2-3 weeks during harvesting. For investigative purposes, WHD investigators focus on harvest time for key local commodities, which could be a few months or year-round depending on the region. It is advantageous for investigators to observe the youth at work in the fields; but it is sometimes difficult for investigators to schedule investigations during early mornings, evenings, or weekends – when the youth are working.

While interviewees find investigations and issuance of CMPs to be effective tools for improving compliance with child labor laws in agriculture, they were less certain about the use or effectiveness of other forms of outreach and education targeted at this audience.

Results, Interviews with Non-WHD Agricultural Safety Experts. ERG conducted a series of interviews with non-WHD agricultural safety experts to collect information on trends in youth agricultural injuries, effective strategies to reduce injuries to youth working in agriculture, and suggested approaches for outreach to the agricultural audience. It should also be noted that the interviewees generally do not distinguish between hired youth and family youth workers.

Interviewees commented on several trends and emerging issues in agriculture. These include:

- *Overall decrease in number of youth working in agriculture.* The number of youth working for agricultural employers is decreasing. Rural youth have employment options other than farms, fewer youth are working in general, and the number of mid-size farm operators that used to hire youth has decreased. One interviewee anticipated a short-term increase in child labor in agriculture due to immigration issues, the economy, and an increase in small specialty and organic growers.
- *Overall decrease in number of injuries.* In general, the number of injuries to youth has decreased, likely due to the decrease in the number of youth working for agriculture. Injuries to youth in agriculture tend to be less severe than those incurred by adults working in agriculture, but more severe than youth working in the service industry (with the exception of burns).
- *Most injuries due to machinery.* The most common causes of injuries include machinery (especially tractors), vehicles, animals, falls (from roofs, silos, hay lofts, equipment), repetitive motion and heavy lifting, and “struck by” injuries from other objects. There are also emerging concerns about the unknown extent of pesticide and heat exposure injuries.
- *Injuries vary by farm type and size.* Youth tend to work in hand harvesting of crops and beef operations and have injuries related to falls (from ladders and vehicles), being struck by other objects, or injuries related to animal handling. Small farms tend to be more hazardous to youth because they hire more youths than large farms; the larger operations also have more resources to devote to equipment and safety.
- *Increased size and geographic dispersion of farms.* One interviewee has observed a trend toward larger and more dispersed farms, leading to youth driving more and bigger trucks on public roads between the fields.
- *Increased all-terrain vehicle (ATV) use.* One interviewee commented that ATVs have the potential to become the “new tractor” because they are easy to operate, flexible (some even have powered attachments), and inexpensive. Unfortunately, these characteristics also increase the likelihood that a farmer will have youth operating ATVs in the fields.

Interviewees also spoke about the most effective ways to prevent injuries to youth working on farms; when asked about this topic, nearly every interviewee expressed support for revising Hazardous Orders for agricultural tasks using “NIOSH Recommendations to the U.S. Department of Labor for Changes to Hazardous Orders,” 2002, as guidance.

Across ERG's interviews with agricultural safety experts, interviewees agreed that it is important for the person supervising youth to demonstrate the task, follow up with regular monitoring and reinforcement of safety procedures, model the safety behaviors themselves, and assign youth only to age-appropriate tasks using correctly-sized, well-maintained equipment. Similarly, a study of the effectiveness of the North American Guidelines for Childhood Agricultural Tasks found that guidelines are most effective at reducing work-related injury to youth on farms when distributed and discussed in person.¹⁶

Interviewees were less familiar with effective approaches to distributing safety information, but they had several suggestions on both format and venue. Interviewees emphasized visible, public information posted in the community and featured on local media. One interviewee suggested exploring the use of emerging social media such as Facebook and Twitter. Other interviewees suggested having safety information presented by physicians during check-ups or following treatment for farm-related injuries, and distributing the information through insurance companies specializing in farm insurance.

Recommendations. Based on our findings, ERG recommends four approaches for WHD to improve compliance and reduce injuries and deaths in agriculture.

1. Use a regional approach to planning agricultural enforcement initiatives. WHD should plan agricultural enforcement activities at the regional-level or lower to account for variations in season, type of crop, and predominant type of youth worker (local youth or migrant/seasonal worker). These efforts would be particularly effective if paired with a partnership with an agriculture focus.
2. Use a local approach to outreach in the agricultural sector. WHD should use a local approach to distributing information to the agricultural sector. The information should be written primarily for individuals who will act as supervisors (farm operators, field supervisors, parents) and focus on safety and health topics such as age-appropriate tasks, the importance of supervision, and behavior modeling. While safety and health information has been shown to be more effective when presented in person, it would not be practical for WHD to rely on its staff to present the information in person to a wide audience. Therefore, WHD should pursue a partnership to distribute information as close to the target audience as possible.
3. Develop partnerships with an agriculture focus. ERG's analysis has shown that partnerships have benefits for improving compliance as well as outreach, and that strong partnerships develop from overlapping goals between partners. WHD should seek to develop stronger agricultural partnerships with agencies and organizations that share an interest in safety and health in agriculture. ERG recommends that WHD explore potential partnerships with organizations such as USDA, OSHA, and NIOSH regional agricultural research centers.
4. Consider revising Hazardous Orders for agricultural tasks. WHD should consider revisiting Hazardous Orders for agricultural tasks to explore the feasibility of updating and strengthening the requirements. WHD should focus on updating requirements to reflect current farming practices and equipment, especially increased ATV use, and to compare the degree of risk allowed by the agricultural Hazardous Orders with the degree of risk associated with non-agricultural employment. These revisions should take into account the 2002 NIOSH guidance, "NIOSH Recommendations to the U.S. Department of Labor for Changes to Hazardous Orders."

¹⁶ Gadomski et al. 2006. Efficacy of NAGCAT in reducing childhood agricultural injuries.

5.3 Is a national, regional, or local approach most effective in increasing child labor compliance?

Key Findings

National, regional, and local approaches have distinct advantages depending on the type and goal of the initiative.

Recommendations

ERG recommends that WHD customize approaches based on goal, target audience, and timing of the initiative under consideration.

Method. ERG interpreted this question as “Is a national, regional, or local approach to increasing awareness of child labor laws among employers and non-employers (parents and teens) most effective in reducing child labor law violations and reducing injuries to working youth.” To answer this question, ERG synthesized results from all of our analyses to (1) determine if any geographic level is most effective in reducing child labor law violations and youth occupational injuries and (2) identify any characteristics of compliance approaches that are most beneficial.

Results, WHISARD data and PARRs. ERG initially planned to analyze information from WHISARD and the PARRs. These data sources did not contain sufficient information to evaluate effectiveness at different geographic levels, however. Therefore, ERG re-examined the results of the analyses designed to measure WHD’s impact (summarized in Section 4) in order to identify any differences in impact at different geographic levels. While the data are insufficient to draw definitive conclusions about the relative effectiveness of specific national, regional, and local approaches in increasing compliance with child labor laws, ERG was able to infer that regional efforts are worthwhile. We make this inference for two reasons:

- First, we noted that PARRs tend to be regional efforts. The data in Table 4-5 indicate that PARRs are positively associated with violations. We interpreted this as indicating that PARRs are being well-targeted. This suggests that PARRs (a regional approach) are an effective tool in reaching employers that need some assistance (i.e., those with higher violation rates).
- Second, the impact analyses summarized in Section 4 indicate that there are statistically significant regional differences in violation rates across the country. This regional variation supports the idea that regional approaches to outreach should be of value.

Results, Non-Employer Analysis. ERG’s analysis revealed that parents and teens have some preferences for the way child labor law information is presented to them. These preferences provide insight into the geographic approach that may be most effective for reaching this audience.

Parents tend to search for answers to questions about very specific state and local regulations. When shown the YouthRules! Web site, most interviewees visited the “Parents” page first and then immediately moved to “State Laws” and clicked on the map image to find Massachusetts state laws.¹⁷ Many of the interviewees were concerned about finding information about how to obtain a work permit in Massachusetts; one interviewee commented that she would like to see a link for a “printable” work

¹⁷ ERG performed the interviews in our Lexington, MA office using parents from the local community.

permit. Other interviewees searched for local employment opportunities, and specific regulations, such as youth work in construction, minimum wage and overtime, and breaks for longer weekend shifts.

During the focus groups, the teen participants gravitated towards the “Teens” page first, and then moved to “State Laws” or “Posters, Stickers and Bookmarks.” In general, the teens tended to scan each page rapidly to gain a quick overview and identify points of interest; several participants observed that the pages were text heavy and they would probably not read those pages.

These observations suggest that the parents and teens may respond best to information that is distributed and focused on the local or regional level, such as workplace and school posters and local employment information presented via broader media such as the YouthRules! Web site.

Results, Agriculture Analysis. The analysis of child labor issues in the agricultural sector revealed that there are considerable regional variations in crop type and growing season that create variations in the youth agricultural workforce. Additionally, interviews with agricultural safety experts found that there is support among agricultural safety researchers for stricter rules on child labor in agriculture, and that safety and health information tends to be most effective when presented and discussed in person.

These observations suggest that a regional approach to agricultural enforcement targeting may be effective, but that a local approach has distinct advantages for reducing injuries to youth workers. Additionally, a national-level focus on the regulations related to child labor in agriculture could promote occupational safety in the agriculture sector.

Results, Partnership Analysis. ERG’s review of key characteristics of partnerships identified the geographic scope of partnership activities as an important element. According to the interviews, a narrowly focused local initiative can produce significant results, while some national-level partnerships with a broad focus on raising awareness have produced less impressive results. These observations suggest that the success of a geographic approach depends on other variables, such as the goal of the activity, target audience, and timing.

Results, Overall. ERG concludes that the most effective geographic approach depends on several variables: the goal of the initiative, the target audience, and the timing of the initiative. Table 5-2 uses examples to show how the effectiveness of geographic approaches varies by goal, target audience, and timeframe.

Table 5-2. Effectiveness of Geographic Approaches By Target Audience, Timeframe, and Goal.

Geographic Approach Example	Target Audience	Timeframe [a]	Evidence of Effectiveness in Achieving Goal		Associated with a Reduction in Violations
			Raising Non-Employer Awareness of Child Labor Issues	Raising Employer Compliance	
National					
National enforcement priority	Employers	Long	<ul style="list-style-type: none"> Parent and teen awareness of WHD outreach materials is low. Parent awareness of required WHD workplace posters is high. 	<ul style="list-style-type: none"> Investigations have deterrent effect Survey found higher employer awareness of fact sheets covering recent priorities (driving, cooking, balers). 	<ul style="list-style-type: none"> Yes. Inspected employers tend to have fewer violations.
Public awareness campaign	General public	Moderate	<ul style="list-style-type: none"> Parent and teen awareness of materials is low, but parents who have seen materials rate as very helpful. Parent awareness of required WHD workplace posters is high. 	<ul style="list-style-type: none"> Employer awareness of materials is low, but employers who have seen materials rate as useful. 	<ul style="list-style-type: none"> Unknown. Possible positive effect if information delivered by WHD visit or partnership.
Partnership, national association	Association members	Long	<ul style="list-style-type: none"> Parents and teens are not the target audience of activities with this partner; with exception of parents who are also members. 	<ul style="list-style-type: none"> Employers are target audience of partner and information received from this partner is more salient than other sources 	<ul style="list-style-type: none"> Yes. Partnerships are associated with lower numbers of violations.
Partnership, federal agency	Varies by agency: Employed teens Employers General public	Long	<ul style="list-style-type: none"> Working teens are likely the target audience of the partnership (with employers) so information will be targeted to them. Parents and educators are likely not targeted by partnership because they are not necessarily in agency mandate. 	<ul style="list-style-type: none"> Employers are a target audience of partner and are likely subject to enforcement jurisdiction of both partners, increasing salience of information. 	<ul style="list-style-type: none"> Yes. Partnerships are associated with lower numbers of violations.
Regional – One or More States					
Partnership, state agency	Varies by agency: Employed teens Employers General public	Long	<ul style="list-style-type: none"> Working teens are likely the target audience of the partnership (with employers) so information will be targeted to them. Partner agency may have higher relevance for this audience. 	<ul style="list-style-type: none"> Employers are a target audience of partner and are likely subject to enforcement jurisdiction of both partners, increasing relevance of information. Joint presentations between WHD and the state agency may help clarify confusion over differences in state and federal laws. 	<ul style="list-style-type: none"> Yes. Partnerships are associated with lower numbers of violations.
Partnership, trade association	Association	Variable	<ul style="list-style-type: none"> Parents and teens are not the target 	<ul style="list-style-type: none"> Employers are target audience of 	<ul style="list-style-type: none"> Yes. Partnerships are

Geographic Approach Example	Target Audience	Timeframe [a]	Evidence of Effectiveness in Achieving Goal		Associated with a Reduction in Violations
			Raising Non-Employer Awareness of Child Labor Issues	Raising Employer Compliance	
	members		audience of activities with this partner, with exception of parents who are also members.	partner and information received from this partner is more salient than other sources.	associated with lower numbers of violations.
PARRs	Varies: Employers General public	Moderate (Annual)	<ul style="list-style-type: none"> Parent and teen awareness of materials is low, but parents who have seen materials rate as very helpful. 	<ul style="list-style-type: none"> PARR's have effectively targeted employers with high numbers of violations, and are associated with reduced violations in some cases. 	<ul style="list-style-type: none"> Yes. PARR's that feature partnerships, WHD visits, and presentations are associated with lower numbers of Hazardous Order and other child labor violations.
Local – Within State					
Investigation	Employers	Very short	<ul style="list-style-type: none"> Non-employer group awareness of investigations likely very low unless employed by inspected employer or presented with press release or other media report of event. 	<ul style="list-style-type: none"> Inspected employers have fewer violations of child labor and hazardous orders. Inspected employers are provided with outreach information during visit. 	<ul style="list-style-type: none"> Yes. Investigations are associated with reduced violations. WHD visits are associated with reduced violations.
Recidivism investigation	Previously inspected employer	Very short	<ul style="list-style-type: none"> Non-employer group awareness of investigations likely very low unless employed by inspected employer or presented with press release or other media report of event. 	<ul style="list-style-type: none"> Inspected employers have significantly fewer child labor violations in subsequent investigations than employers that were not previously inspected. 	<ul style="list-style-type: none"> Yes. WHD investigations have a deterrent effect.
Outreach, job fair	Youth workers	Very short	<ul style="list-style-type: none"> Event attendees receive highly relevant information in person during event. 	<ul style="list-style-type: none"> Employers attending the event observe WHD presence and may receive highly relevant information in person during the event. 	<ul style="list-style-type: none"> Unknown. Possible positive effect due to WHD presence and presentation of information.
Partnership, school district	Employers Students Educators	Moderate, periodic	<ul style="list-style-type: none"> Students receive highly relevant information while obtaining work permits. Teens more likely to review information if directed to by educator or parent. Educators receive highly relevant material from WHD in person. 	<ul style="list-style-type: none"> Employers may receive information attached to work permit. WHD may be able to prevent non-compliant employment based on review of work permit. 	<ul style="list-style-type: none"> Yes. Interviews with WHD personnel suggest this approach has high potential to prevent violations. Partnerships are associated with reduced violations.
Partnership, worker's compensation agency	Employers Injured youth workers	Variable, periodic	<ul style="list-style-type: none"> Injured youth worker may receive highly relevant information after the injury. Non-employer group awareness 	<ul style="list-style-type: none"> Youth worker injury reported on worker's compensation paperwork may prompt a targeted WHD investigation of specific employer, 	<ul style="list-style-type: none"> Unknown. Interviews with WHD personnel suggest this approach is a good way to get information, but occurs

Geographic Approach Example	Target Audience	Timeframe [a]	Evidence of Effectiveness in Achieving Goal		Associated with a Reduction in Violations
			Raising Non-Employer Awareness of Child Labor Issues	Raising Employer Compliance	
			likely very low unless presented with media report of incident.	or targeting of broader group of similar establishments.	after a violation may have occurred. Increased investigations following event may reduce occurrence of similar violations.
“Walk the Beat” initiative	Employers Public	Very short	<ul style="list-style-type: none"> • Event is high profile, covered by local media outlets, and associated with announcement of youth labor focus by elected officials. • Non-employers at a variety of establishments receive relevant material in person from WHD. 	<ul style="list-style-type: none"> • Employers that received information in person during event are inspected by WHD 	<ul style="list-style-type: none"> • Yes. Investigations and WHD visits and presentations of information are associated with reduced violations.

[a] Long = One year or more, Moderate = Up to one year, Short = Six months or less, Very short = 3 months or less, Periodic = Cyclical depending on available information, Variable = Depends on the strength of relationship.

5.4 How can WHD best use outreach to positively affect compliance?

Key Findings

Employers lack awareness and understanding of federal child labor laws.

Parents are generally unaware or unfamiliar with WHD outreach materials, but those who are familiar with the materials find them useful.

Teens are generally unaware of WHD outreach materials and may need encouragement to review and use them.

Recommendations

For employers, ERG recommends that WHD:

- *Strengthen efforts to ensure that employers receive outreach materials.*
- *Strengthen efforts to encourage employers to use the materials.*
- *Consider adding more topics to existing outreach materials or new outreach materials.*

For parents and teens, ERG recommends that WHD:

- *Strengthen efforts to ensure that parents of working teens (and teens seeking employment) receive and understand the information they need to advise and guide their children.*
- *Strengthen efforts to ensure that working teens and those seeking employment receive and understand the information they need to comply with the law.*

ERG interpreted this question broadly to mean “How can WHD best use outreach to positively affect employer compliance with child labor laws and how can WHD best use outreach materials to positively affect non-employer awareness of child labor laws?” Accordingly, we have divided our answer into two subsections.

5.4.1 Employer Compliance with Child Labor Laws

Method. To answer this question, ERG relied on observations from the WHISARD data analyses and our survey of employers.

Results, WHISARD Data Analyses. Results of ERG’s WHISARD data analyses suggest that some WHD outreach approaches are more effective in improving compliance than others. As discussed in Section 4.1.3, PARRs incorporating partnerships and presentations are correlated with lower numbers of violations found during investigations. Both partnerships and presentations provide WHD with the opportunity to distribute outreach information to employers; presentations allow WHD staff to explain material directly to employers, while WHD partnerships often include distribution of outreach materials to employers through newsletters, emails, or Web links.

Results, Employer Analysis. Data from the employer survey indicate that employers are generally unaware or unfamiliar with WHD outreach materials, but those who are familiar with the materials find them useful (see Table 4-3). In addition, employer survey respondents rated several topics for potential new outreach materials as Very Helpful (see Table 5-3 below).

Table 5-3. Employers’ Perceived Helpfulness of Additional Outreach Information

How helpful would you find information on:	Very Helpful	Somewhat Helpful	Not Helpful at all	Not sure	Total
That clarifies the differences between your state’s requirements and the Federal requirements with respect to youth employment.	65.3% (147)	23.6% (53)	10.7% (24)	0.4% (1)	100% (225)
The types of activities that employees under the age of 18 are restricted from performing under Federal law due to the hazardous nature of the activity.	60.9% (137)	23.6% (53)	15.6% (35)	0% (0)	100% (225)
The hours and times that employees under the age of 18 can legally work under Federal law.	60.4% (136)	25.3% (57)	14.2% (32)	0% (0)	100% (225)
Good practices with respect to youth employees that your company can use to better ensure compliance.	50.7% (114)	33.3% (75)	15.6% (35)	0.4% (1)	100% (225)
The potential monetary penalties associated with being found out of compliance with Federal youth employment laws.	49.8% (112)	33.3% (75)	16.9% (38)	0% (0)	100% (225)

Results from the employer survey also indicate that employers face some obstacles to compliance with federal child labor laws. Table 5-4, below, summarizes relevant survey responses. When “*confusion over the differences between state and federal child labor laws*” and “*confusion over the details of Federal child labor standards*” are combined, we find that approximately one-third of employer respondents ranked confusion over federal child labor laws as the biggest and second biggest obstacle to compliance. High turnover of employees and unwillingness of employees to follow rules are also significant challenges for some employers.

Table 5-4. Employer’s Perception of Obstacles to Compliance with Federal Child Labor Laws.

In your opinion, what is the <u>biggest</u> obstacle that you face in complying with U.S. youth employment laws?	Biggest Obstacle		Second Biggest Obstacle	
	Number	Percent	Number	Percent
Confusion over the difference between state and federal child labor laws	60	26.7%	27	16.1%
High turnover of employees	31	13.8%	19	11.3%
Availability of employees willing to work for a wage rate that your business can afford	25	11.1%	20	11.9%
Unwillingness of employees to follow rules	19	8.4%	23	13.7%
Confusion over the details of Federal child labor standards	16	7.1%	34	20.2%
No obstacles in complying with U.S. youth employment laws	16	7.1%	5	3%
Unwillingness of employees to report violations to supervisors	9	4%	18	10.7%
High turnover of managers	0	0%	3	1.8%
Other	8	3.6%	6	3.6%
My company does not hire youth workers	30	13.3%	2	1.2%
Not Sure/Don’t Remember	11	4.9%	11	6.5%
Total	225	100%	168	100%

These observations suggest a need to increase employer awareness and understanding of federal child labor laws, and an opportunity for WHD to provide employers with materials they can use to improve their employee understanding of the requirements.

Recommendations. To positively affect compliance with the child labor provisions of the FSLA, therefore, WHD may find it useful to:

- *Strengthen efforts to ensure that employers receive outreach materials.* ERG's results indicate that employer awareness of the materials is low. WHD can take advantage of partnerships, presentations, and other distribution methods to ensure that employers receive the materials.
- *Strengthen efforts to encourage employers to use the materials.* ERG's survey of employers found that employers who use the materials find them helpful. WHD can adopt new strategies to encourage employers who receive the materials to use them in managing their youth employees.
- *Consider adding more topics to existing outreach materials or to new outreach materials.* Survey results indicate that employers may be confused about the details of federal child labor law and would find additional detail on specific topics very helpful to their business. WHD should consider adding these topics to existing materials or developing new materials.

Ensuring Employers Receive Materials

Currently, employers receive outreach materials in the following ways: packet from WHD inspector, mass mailing of materials from WHD, presentation or seminar by WHD staff, newsletter or email from trade association, and Internet searches. Of these, the most effective approaches appear to be presentations by WHD staff, distribution by trade associations, and information packets handed out by WHD inspectors. These methods are more effective because the information is being distributed directly to the employer in a forum where the material is very salient to the employer or the employer has the opportunity to ask questions about the material.

Partnerships with trade associations provide a good opportunity for WHD to improve the targeting of outreach materials to employers. ERG recommends that WHD continue to cultivate strong working relationships with trade associations to develop regular opportunities for WHD staff to present material during meetings and to receive feedback from the association on usefulness of materials to members.

Other methods that WHD could consider include using the Internet as a means of reaching employers. When asked about how they look for information on employment law, the largest percentage of employers (32 percent) indicated that they go the DOL Web site. Furthermore, 20 percent of employers indicated that had heard of the YouthRules! Web site. Of that 20 percent, 56 percent had visited the site and among those that visited it, 75 percent reported that the information was useful and they were satisfied with the information. WHD can take advantage of this approach to searching for information by:

- Taking steps to ensure that the U.S. DOL and YouthRules! Web sites appear high on Internet search results based on key phrases that employers are likely to use with the most popular search engines
- Displaying URLs prominently on hard copy materials.
- Encouraging employers to visit the U.S. DOL and YouthRules! Web sites along with distribution of other WHD outreach materials, as described below.

Encouraging Employers to Use Materials

Encouraging employers to use outreach materials is most effectively accomplished when employers receive the materials:

- *During an investigation.* ERG recommends that WHD inspectors continue and expand the practice of discussing the materials with the employer on-site; this can be done while offering tips for managing youth employees (by using color-coded time cards for example). Additionally, inspectors can follow-up with a phone call to the employer contact approximately a month following the investigation to ask if the employer has any questions or requires additional materials.
- *During a WHD presentation.* ERG recommends that WHD continue the practice of distributing materials during a presentation, but consider targeting the material to parallel the specific content of the presentation. For example, WHD could distribute a one-page handout highlighting key points of the presentation, links to YouthRules! and other Web-based employer resources, and a phone number to call with questions (such as the U.S. DOL Hotline). Additionally, WHD could develop presentations that could be made available through the U.S. DOL and YouthRules! Web sites in the form of PDF slideshows and Webinars.
- *From a trade association or other partner.* Information coming from a non-WHD source is usually perceived as directly relevant to the employer, increasing the likelihood that the employer will review the material. Accordingly, ERG recommends that WHD keep the materials distributed by partners short and targeted to the specific employer audience; the materials can be targeted by selecting topics that are directly relevant to the employer audience and by requesting feedback from the partner on the usefulness of the material. WHD could also consider timing information distribution by partners to immediately precede seasonal hiring of youth workers.

Adding More Topics

Based on the results of the employer survey (see Table 5-2), ERG believes it would be useful for WHD to provide more information on the differences between Federal child labor law and state law. This could be accomplished by adding topics to existing outreach materials or by creating new materials. The following list provides some suggestions for WHD to consider; these suggestions are also summarized in Table 5-5, below.

- *Clarification of difference between state and Federal laws.* In many states, state child labor requirements are different than the Federal requirements; however, employers may not be aware of this, and the overlap between the two sets of laws may promote confusion about which requirements must be followed. This information can be presented in a short tabular format that displays the requirements side-by-side and identifies which requirement is more stringent. The document should include references to the state and Federal labor laws, as well as instructions for obtaining additional copies. This document could be distributed to employers during investigations, presentations, through partners, and posted as a printable document on the Internet.
- *Restricted hazardous activities.* In our teen focus groups, participants stated that they would perform work activities that violate the law in order to keep their job. Therefore, WHD can take steps to encourage employers to convey to teens that compliance with child labor laws is important to job retention as well as safety. WHD should consider revising and expanding the set of child labor fact sheets to include more information on this topic, focusing on specific examples of what types of activities are restricted as well as the safety and health risks that

lead this activity to be prohibited. WHD could also develop a set of posters summarizing this information for the teen audience, so the employer can post the information in the workplace and discuss it with the youth employees.

- *Good practices for managing youth employees.* In some cases, employers may understand the requirements of the law without understanding how to implement the requirement in the workplace. Having visited a wide variety of workplaces, WHD inspectors have collected ideas on how to track youth employee hours and tasks to maintain compliance with the law. According to interviewees, some inspectors recommend using color-coded timecards to identify youth employees that need to “clock out” by a specific time. WHD “STOP” stickers are another good example of a simple tool that an employer can use to manage youth employee tasks. WHD should consider collecting these practices in a handout geared towards employers.
- *Potential Child Labor CMPs.* Nearly all respondents to the employer survey were aware that WHD has the ability to levy penalties for child labor violations, yet many of the respondents indicated that information on potential penalties would be useful. It is possible that employers do not understand the employment practices that lead to a penalty and are not familiar with the amount of penalty issued for different types of violations. WHD could consider developing a fact sheet or presentation that describes CMPs in detail and provides examples of child labor violations and the amount of penalty levied on the violator. Additionally, attaching a dollar amount to violations that may not appear serious to an employer could lead them to re-prioritize compliance with those requirements.

Table 5-5. Summary of Topics to Add to WHD Outreach Materials.

Topic	Rationale	Potential Format(s)	Distribution
Clarification of difference between state and Federal requirements.	In many states, the state child labor requirements differ from Federal requirements, but overlap enough to promote confusion among employers.	One-page handout with comparison table for each state where Federal and State law differ. ¹⁸	<ul style="list-style-type: none"> • During investigation • Through partners • Internet
Restricted hazardous activities	Employers, and teens, may not understand why certain types of tasks are prohibited. WHD can clarify the restrictions and the safety and health issues associated with the activity.	Fact sheets Posters	<ul style="list-style-type: none"> • During investigation • Through partners • Internet
Good practices for managing youth employees	Employers may understand the requirements on paper without understanding how to implement the requirements in their workplace.	Fact sheet or handout	<ul style="list-style-type: none"> • During investigation • Through partners • Internet
Potential Child Labor CMPs	Employers are generally aware of WHD ability to levy a penalty, but may not understand the conditions that lead to a penalty or the amount of the penalty.	Fact sheet or handout Presentation	<ul style="list-style-type: none"> • During investigation • Through partners • Internet

Because employer awareness of WHD materials appears to be low, increasing awareness and use of the materials (as described above) should increase employer understanding of child labor laws, leading to an increase in compliance.

5.4.2 Non-Employer Awareness of Child Labor Laws

Method. To answer this question, ERG relied on observations from our survey of parents of teen workers, interviews with parents, and focus groups with employed teens.

Results, Non- employer analysis. Using outreach materials with employers is an essential component of improving compliance with child labor provisions of the FSLA. WHD can also use these materials with working teens and their parents to promote compliance with the law; to do so, WHD needs to address the information content and distribution needs of this audience.

Respondents to the parent survey were asked about their approach to seeking information on child labor issues. The largest group of respondents, over 60 percent, reported that they had used an Internet search to find the information they needed on child labor; nearly 70 percent of respondents who had not previously searched for this type of information reported that they would also use an Internet search.

¹⁸ Some WHD districts have developed this type of table and have found it to be very popular with employers.

Table 5-6. Parent Preferences for Finding Information on Child Labor Issues.

Who did you ask or what sources of information did you use when you looked for this information?	Have looked for information		Have Not looked for information	
	Number	Percent	Number	Percent
Search the Internet (i.e. "Google" it)	34	60.7%	135	69.6%
Public service announcement	5	8.9%	0	0%
Ask an acquaintance, use word of mouth	4	7.1%	5	2.6%
Visit the U.S. Department of Labor Web site	3	5.4%	4	2.1%
Information from child's employer	2	3.6%	5	2.6%
Contact federal government agency	2	3.6%	3	1.5%
Ask a neighbor, coworker, friend, or family member	1	1.8%	7	3.6%
Contact the school district or school counselor	1	1.8%	6	3.1%
Read school newsletter	1	1.8%	4	2.1%
Local Chamber of Commerce	1	1.8%	5	2.6%
Contact state or local government agency	1	1.8%	9	4.6%
Refer to U.S. DOL WHD resource	1	1.8%	3	1.5%
Look for information at the public library	0	0%	6	3.1%
Local or national news programs	0	0%	0	0%
Call the Wage and Hour Division toll-free hotline	0	0%	1	0.5%
Visit the YouthRules! Web site	0	0%	0	0%
Not Sure/Don't Remember	0	0%	7	3.6%
Other (Please specify)	2	3.6%	5	2.6%
Total	56	100%	194	100%

Additionally, data from the parent survey indicate that parents are generally unaware or unfamiliar with WHD outreach materials, but those who are familiar with the materials find them useful (see Table 4-8).

In interviews, most parents indicated that they are the most important influence in their children's choice to seek employment. The interviews provided a large number of observations on how the YouthRules! Web site can be improved to better meet the needs of parents. Themes from these interviews include:

- *Parents find the site useful.* When asked to rate the site on a scale of one to ten with ten being "amazing", interviewees had responses between 3 and 8, with an average of about 7.
- *Parents expect a basic overview of child labor requirements.* When asked about the type of information they would want and expect from a government Web site, parents responded: hours and times that youth can work, what types of jobs they can do at what ages, and how to get a work permit.
- *Parents approach site content like it was written for the parent and teen audiences.* Parents approach the site from the "parent" frame of reference; therefore, most interviewees did not understand the purpose of the "Partners" page, and some interviewees expected the "Employer" section to have information on available jobs and employers that hire teens. Nearly all interviewees felt that the "Posters, Bookmarks, and Stickers" link would be more appropriate under "Educators."
- *Parents want to find information quickly.* Most interviewees commented that they would like a search box or FAQ section in order to quickly find the answer to a specific question. Several

interviewees noted that they would like to see a one-page summary of the information (ideally printable) or a bulleted list of key points preceding detailed text. One interviewee noted that parents often only have time to search for information during a coffee or lunch break and so they need to perform a very focused search and be able to print the information to review later.

- *Parents that are less “Web savvy” have difficulty finding information.* Interviewees that described themselves as less experienced using the Internet tended to be less likely to scroll down the screen for more information or click on underlined phrases in text and links to PDFs (such as fact sheets and posters). Additionally, some interviewees reported that they were unsure how to proceed through the site without some indication of topic priority or page order.

Participants in the focus groups with working teens were asked to review and comment on several of WHD’s outreach materials, including the YouthRules! Web site. ERG made the following observations about teen workers and outreach materials:

- *Teens work for personal spending money, experience, and a sense of accomplishment.* Focus group participants described their jobs as a source of personal spending money independent of their parents, experience for their resume or college applications, and sense of accomplishment associated with increased responsibility.
- *Teens are not receiving information on child labor rules.* None of the focus group participants reported receiving any information on child labor from their parents and only a handful had seen materials at school. Additionally, employers of teens appear to build child labor requirements into their management structure without explaining the reasoning for these requirements to the employees.
- *Teens are not likely to refer to outreach materials more than once.* A few focus group participants observed that they would read the materials if a parent or teacher suggested it; but few would pick up the material on their own. Furthermore, participants commented that they would look over the material once and remember the key details, but would not plan to return to the material later.
- *Teens would like to see improved graphical design and brief formats.* Participants were asked for suggestions to improve the outreach materials and Web site; many of the participants commented that they would like to see improved graphic design, a brief format, and a focus on the teen audience. Specifically they suggested using less text and more headers, adding a search function, and adding pictures of working teens. The participants generally felt that the materials were not written for them; rather, they felt that some text was written for either an older or much younger audience.

Recommendations. To use outreach materials with working teens and their parents to promote compliance with child labor provisions of the FSLA, ERG recommends that WHD:

- Strengthen efforts to ensure that parents of working teens (and teens seeking employment) receive and understand the information they need to advise and guide their children.
- Strengthen efforts to ensure that working teens and those seeking employment receive and understand the information they need to comply with the law.

Ensure Parents Receive and Understand Information

Currently, there are few WHD outreach materials that address parents directly. To ensure that parents receive this information, ERG recommends that WHD address this gap by focusing on two approaches to distributing information to parents:

- *Web-based outreach material.* Based on results from the parent survey and interviews, parents rely heavily on the Internet as a quick source of information. To take advantage of this trend, WHD can:
 - Make it easier for parents to find the information by taking steps to ensure that the YouthRules! Web site appears high on Internet search results based on key phrases that parents are likely to use with the most popular search engines.
 - Better design the Web site for the parent audience. For example, WHD might develop a Web-based “single source” page targeted at parents. The page should be user-friendly for parents who are less Web-savvy, and it should include (1) prominent links for key information, (2) a page with key discussion points that parents can use to discuss information with their children, and (3) summaries of key child labor law provisions that parents can print and review later.
 - Consider using social marketing tools such as Facebook and Twitter to reach parents (and possibly teens). A Facebook account that allows for “friending” by parents and teens and that involves periodic postings of “Hot Topics” could reach a significant number of parents.¹⁹ WHD could provide a link to the Facebook account from the single source page.
- *Required workplace posters.* ERG also recommends that WHD consider leveraging posters that are already required to be posted at workplaces. For working parents, those posters in their own workplaces may be useful sources of information on child labor. Thus, WHD can encourage employers (including those that do not employ teens but have employees who are parents of teens) to print and hang child labor-specific fact sheets or information as a *service* for their employees with working-age teens. Posting that information in conspicuous places for those employees would help educate parents. Alternatively, WHD could develop workplace posters with a child labor focus and prominent URL for the YouthRules! Web site.

It is probably not necessary for WHD to develop new content for parents (beyond the items noted above); many parents are seeking basic information on the requirements of the law in a simple format.

Ensure Teens Receive and Understand Information.

Currently, there are few WHD outreach materials that address teens directly. To ensure that teens receive this information, ERG recommends that WHD address this gap in four ways:

- *Encourage employers to discuss child labor requirements with youth workers.* Based on our results, many employers are not explicitly training their youth employees on federal or state child labor requirements. WHD should encourage employers to regularly discuss the

¹⁹ For example, WHD could post a short 3-4 sentence description of why balers pose significant risks to youths on the Facebook account and then provide a link to a more detailed, but still brief, discussion. The posting should identify in what types of businesses balers are located (i.e., who is at risk) and what could happen (i.e., the actual risk posed). The linked discussion should then expand on those details, but be something that a parent could read in 5-10 minutes and should spark discussion with their teen.

requirements with youth employees by emphasizing the importance of this type of training during investigations, presentations, and other approaches to distributing information to employers. ERG recommends that WHD develop a set of good practices or tips for encouraging youth workers to follow the requirements (see Section 5.4.1).

- *Encourage educators to direct students of working age to review information on child labor requirements.* Our results indicate that teens are not receiving much information about child labor requirement at school, but that teens are willing to review material if an educator or parent instructs them to. WHD should encourage teachers and guidance counselors to instruct teens to review child labor outreach materials. Many of WHD's district offices support partnerships and outreach to school districts; this would be an ideal way to distribute brief outreach materials to educators and emphasize the importance of encouraging the students to review it.
- *Encourage parents to discuss child labor requirements with their children.* Parents play an important role in encouraging and motivating teens to seek out employment but many parents have limited awareness of child labor laws and do not discuss this information with their children. WHD should encourage parents to (1) use discussion points to talk about this information with their children and (2) instruct their children to visit the YouthRules! Web site or review other outreach materials.
- *Target materials directly to the teen audience.* ERG recommends that WHD focus on brief, graphical materials (bookmarks, posters, brief fact sheets, and a streamlined Web page) to convey child labor law information to teens. These materials should include information about legal aspects of compliance with child labor laws to ensure that teens understand that their employers are prohibited from having teens perform certain activities (even if the teens are physically able to do so). Teens would also benefit from guidance on how to handle situations when they feel pressured by managers or coworkers to perform activities that violate child labor laws.

Taking these steps raise parent and teen awareness and understanding of Federal child labor laws should help reduce the number of teens who skirt child labor laws due to lack of information or anxiety about job retention.

SECTION SIX SUMMARY OF FINDINGS AND RECOMMENDATIONS

This section summarizes the findings and recommendations from Sections 4 and 5. As noted at the start of Section 4, we reorganized our discussion of the evaluation questions based on an order that we felt made sense for those sections. In this section, we present the evaluation questions in their order from the SOW. When relevant, we summarize the finding and recommendations by the refined evaluation questions we developed as part of our project plan.

6.1 In addition to the use of statistically valid surveys, how can WHD quantify the impact of its child labor education and outreach efforts on compliance?

Findings

Adding to the types of information that WHD collects and documents during investigations would make it possible for WHD to use WHISARD data to measure the impact of outreach.

Recommendation

ERG recommends that WHD refine WHISARD (or implement establishment matching procedures) in order to enable linkage of records over time for a given employer. For each of five selected outreach materials, ERG recommends that WHD begin asking employers two questions during investigations: Have you ever received [name of WHD material]? Has [name of material] influenced your employment policies/practice? This information should be documented in WHISARD. ERG recommends that WHD use the new information to develop an Outreach Recognition and Influence Scale (ORIS) that will feed into impact calculations. Finally, to quantify the impact of its child labor education and outreach efforts on compliance, ERG recommends that WHD examine patterns of violations in four groups of employers:

- *Previously inspected and high recognition/influence of assistance materials.*
- *Previously inspected and low recognition/influence of assistance materials.*
- *Not previously inspected and high recognition/influence of assistance materials.*
- *Not previously inspected and low recognition/influence of assistance materials.*

Discussion

ERG's analysis of WHISARD data under this project allowed us to estimate the impact of investigations. However, sufficient data were not available for outreach to perform a similar analysis of those materials. If WHD were to collect data on employers' awareness and use of outreach materials, then estimation of the impact of those materials on compliance could be possible.

ERG is recommending that WHD collect sufficient information on employers' use of education and outreach materials from inspected employers to estimate the impact of those materials. The recommendation may require OMB approval, but would allow WHD to gauge the impact of its materials.

In short, WHD would ask employers about their recognition of a small number of materials (e.g., five) and the extent to which those materials influenced employers policies. WHD would then formulate an index value that reflects the extent to which employers used the materials (a combination of recognition and influence). It is also necessary for WHD to account for the fact that previously inspected employers will have lower numbers of violations (this is discussed below). Thus, WHD would need to compare numbers of violations at four groups of employers:

- Group A: Previously inspected and high recognition/influence of assistance materials.
- Group B: Not previously inspected and high recognition/influence of assistance materials.

- Group C: Previously inspected and low recognition/influence of assistance materials.
- Group D: Not previously inspected and low recognition/influence of assistance materials.

Ideally, Group A would have the lowest number of violations and group D the highest, with Groups B and C somewhere in between. The impact of investigations would be calculated by comparing the average number of violations in Groups A and C to the average number of violations in Groups B and D. The impact of outreach would be calculated by comparing the average number of violations in Groups A and B to the average number of violations in Groups C and D.

6.2 How can WHD effectively measure the value of partnerships?

Findings

WHD has the foundation necessary to develop an assessment tool that can be used to measure the value of its partnerships.

Recommendation

ERG recommends that WHD develop a partnership assessment tool that resembles the United Nations Partnership Assessment Tool (UN PAT). The tool should rate partnerships based on the following factors:

- *Target Audience—Who the partnership is targeting (e.g., employed youth, employers, parents, educators, trade associations, etc.).*
- *Reach—The extent to which the partnership is reaching employed youth and/or employers.*
- *Goal Alignment—The extent to which the partner organization’s goals overlap with WHD goals.*
- *Partner Influence on Target Audience—The degree to which the partner can influence the target audience.*
- *Target Audience—The extent to the partnership will reach key groups, such as youth workers, parents of youth workers, guidance counselors and educators, employers and trade association members, the general public, and difficult-to-reach communities.*
- *Geographic Impact—The extent to which the geographic focus of the partnership will be effective at reaching the intended audience.*
- *Intervention Point—The extent to which a partnership will intervene before a violation of child labor law occurs.*
- *Multiplier Effect—The extent to which a partnership can be replicated across WHD offices or divisions of the member organization or replicated in other geographic areas.*
- *Partnership Sustainability—The extent to which the partnership can be sustained over the long-term.*

Discussion

Assessing the value of partnerships is complicated. ERG reviewed data and information from a variety of sources. In our interviews with WHD staff and with partners we identified the key ingredients of successful partnerships (summarized below in the recommendation). Additionally, ERG was able to identify a best practice in the area of valuing partnerships: the United Nations Partnership Assessment Tool (UN PAT). The UN PAT framework, combined with the information we collected on the ingredients of a successful partnership can be used by WHD to formulate its own partnership assessment tool.

ERG's recommendation is based on replicating what we see as a best practice in this area being implemented by the United Nations (UN). Our recommended implementation involves replicating the UN Partnership Assessment Tool (UN PAT) using characteristics of partnerships that are relevant to WHD. In developing its own assessment tool, WHD will be able to both prospectively (before a partnership is formed) and retrospectively (after it is complete or has matured) assess the value of partnerships. For each of the criteria listed above, WHD would formulate questions with fixed response options. The answers to those questions by WHD staff involved in the partnership would allow WHD to assess the value of a partnership. In our discussion in Section 4.6, we provide some ideas on where value is formed in partnerships. We also provide some initial ideas for potential questions to use in a tool of this sort in Appendix P of this report.

6.3 How would the number and percentage of child labor violations differ had WHD not prioritized child labor (i.e. what impact has WHD's child labor compliance program had on child labor compliance)?

6.3.1 What impact has WHD child labor program investigations had on reducing the number of violations among employers that have been inspected at least once?

Findings

As a group, employers that were inspected had significantly fewer child labor violations in subsequent investigations within the next three years compared to employers that were not previously inspected. The estimated impact indicated that investigations reduce the number of violations at inspected employers by 12 percent on average.

The 62,532 investigations that WHD conducted between FY05 and FY08 can be expected to result in 5,434 fewer child labor violations between FY06 and FY11.

Discussion

Our statistical models indicated that employers were previously inspected within the last three years had statistically significant fewer violations than employers that were not previously inspected. The statistical models that were used to generate this result controlled for changes in economic activity, employers' sector, region, and employment size. The fact that previously inspected employers have fewer violations than the control group of those not inspected, after controlling for other relevant confounding factors, indicates that WHD investigations effectively deter future violations. When compared against their previous number of violations, the estimated impact of WHD investigations resulted in a 12 percent reduction in the number of violations among inspected employers within three years.

The estimated magnitude of the investigation impact was a reduction of 8.69 violations for every 100 investigations conducted by WHD. From FY05-FY08 WHD conducted 62,532 investigations. The models we estimated use a three-year time frame for investigation impacts. Thus, investigation impacts from those 62,532 investigations would occur from FY06-FY11. This means WHD investigations conducted between FY05-FY08 will result in a 5,434 reduction in the number of violations between FY06 and FY11.

6.3.2 Have employers found WHD's education and outreach materials to be useful in assisting them in complying with the FLSA child labor requirements?

Findings

Only small percentages of employers recall receiving WHD child labor education and outreach materials.

Most employers who recalled receiving WHD child labor education and outreach materials reported that they reviewed the materials, found them useful, and were satisfied with the materials.

The likelihood of an employer giving high usefulness and satisfaction ratings increased as the specificity to child labor subject matter increased.

Discussion

The results from our survey of employers indicated that only small percentages of employers recall receiving the materials. This would imply that those that did not recall the materials could not have found them useful. However, because these employers had been inspected, and WHD distributes outreach materials to inspected employers, ERG believes that the employers did not *recall* having been given the materials. On the other hand, most employers who recalled receiving the materials reported that they did review materials, found them useful, and were satisfied with the materials. Furthermore, the survey also indicated that the likelihood of an employer giving high usefulness and satisfaction ratings increased as the specificity to child labor subject matter increased.

6.3.3 What impact has the WHD child labor program education and outreach materials had on reducing the number of violations among employers that were inspected?

Finding: *Results on the impact of WHD child labor outreach are mixed:*

- *Some variables (PARR with outreach in general, PARR with handing out outreach materials) are associated with increased numbers of violations.*
- *Other variables (PARR with presentation or partnership) are associated with decreased numbers of violations.*

Finding: *The mixed results are likely an effect of targeting, as employers with more violations tend to get targeted for PARRs with outreach.*

Our statistical analysis of WHISARD data, combined with data on PARRS, indicated that investigations linked to PARRs with outreach had an *increased* number of violations. The increase in number of violations is not statistically significant and is probably an effect of targeting, as employers with more violations tend to get targeted for PARRs. However, when we looked at different characteristic of PARRs, we found that PARRs where the assistance involved some form of presentation had statistically significant lower numbers of violations. Additionally, cases with PARRs associated with partnerships also had a statistically significant lower number of violations compared to other cases. Although some forms of assistance are associated with increased compliance, we cannot definitively say that WHD education and/or outreach materials leads to increased compliance.

6.3.4 What impact have the different PARRs had on compliance with FLSA child labor requirements? Are there some characteristics of the PARRs that have been more effective in increasing compliance?

Finding

Investigations linked to PARRs (including PARRs with outreach) had higher numbers of violations than those not linked to these PARRs. However, the association with higher numbers of violations is likely an effect of targeting rather than the impact of the PARRs themselves.

The results of our statistical analysis show that investigations linked to PARRs had significantly more violations than those not linked to PARRs. When the analysis is restricted to just investigations associated with PARRs, we see few impacts of PARRs on compliance. Cases linked to PARRs with outreach in general, handing out outreach materials, or an HO focus all had significantly *higher* numbers of violations compared to other cases. As noted before, however, these results are likely an effect of targeting rather than the impact of the PARRs themselves.

6.4 How has WHD's child labor compliance program impacted the incidence and severity of injuries and fatalities among minors?

6.4.1 What impact has WHD child labor program investigations had on reducing the number of hazardous order violations among employers that have been inspected at least once?

Findings

As a group, employers that were inspected had significantly fewer child labor hazardous order (HO) violations in subsequent investigations within the next three years compared to employers that were not previously inspected. The estimated impact indicated that investigations reduce the number of HO violations at inspected employers by 5 percent on average between investigations that occur within three years of one another.

The 62,532 investigations that WHD conducted between FY05 and FY08 can be expected to result in 3,227 fewer HO violations between FY06 and FY11.

Given a list of potential negative outcomes related to child labor law, almost three of four employers surveyed selected "avoiding injuries in the work place" as the first or second most important to their business. This may be a sign that workplace safety is important to employers.

Discussion

Our statistical models indicated that previously inspected employers have significantly fewer HO violations than those with prior investigations. This is indicative of a deterrent effect of WHD investigations on HO violations. The estimated impact amounts to a 5 percent reduction in HO violations between investigations for inspected employers.

We also estimated the deterrent effect of WHD's enforcement on HO violations. Between FY05 and FY08, WHD conducted 62,532 investigations. The models we estimated look at the three-year impact of those investigations. Thus, the estimated impact of those 62,532 violations will result in a reduction of 3,227 violations between FY06 and FY11.

The employer survey we conducted asked employers asked respondents to rank the importance of avoiding negative outcomes related to noncompliance with child labor laws. About 36 percent of respondents selected “avoiding injuries in the work place” as the most important item, while 40.9 percent selected “avoiding operating the business in a state of noncompliance” as the most important factor from the list. When we combine respondents’ first and second choices, we find that “avoiding injuries in the work place” (73.4 percent) slightly overtakes “avoiding operating the business in a state of noncompliance” (72.2 percent). The fact that almost three of four respondents selected “avoiding injuries in the work place” as their first or second choice may be a sign that workplace safety is important to employers.

6.4.2 Have WHD education and outreach materials directed at non-employers led to increased awareness and understanding of the risks posed to working youths among non-employers?

Findings

Overall, parent awareness of WHD outreach materials is low, but parents who are aware of the materials give them high ratings for helpfulness and clarity.

A high rate of parent awareness of WHD posters is probably due to inclusion of child labor laws on many posters that are required to be displayed in the parents’ workplace.

Among teen focus group participants, awareness of WHD outreach materials was very low. They noted that they probably would not pick up or read the materials unless they were actively seeking information or they were directed to look at the materials (e.g., by a teacher or counselor).

When shown the materials, teen focus group participants stated that the materials are clear and useful. They preferred briefer formats (e.g., bookmarks) over longer items (e.g., pamphlets).

Discussion

In a survey of parents with children between 14 and 18 years of age, ERG asked parents about awareness, use, and usefulness of WHD outreach materials. Overall, parent awareness of WHD outreach materials is low, but parents who are aware of the materials give them high ratings for helpfulness and clarity. The most commonly recognized outreach materials were the posters and the public service announcements; these were also ranked as the most influential in increasing understanding of child labor rules. The high rate of awareness of WHD posters is probably due to inclusion of child labor laws on many posters that are required to be displayed in the parents’ workplace.

Only one focus group participant reported seeing a posters at school. When shown the materials, participants indicated that they were clear and would be useful; they preferred briefer formats (e.g., bookmarks) over longer items (e.g., pamphlets). They noted that they probably would not pick up or read the materials unless they were actively seeking information or they were directed to look at the materials (e.g., by a teacher or counselor). When asked if the materials would change the decisions they make while working, the focus group participants stated that they might not remember all of the details but would think twice about activities they know are prohibited; they indicated that they would consider whether a rule is applicable to their situation, whether they agree with the rule, and whether the rule is likely to be enforced by a work supervisor or manager.

6.4.3 What impact has WHD child labor program education and outreach materials had on reducing the number of hazardous order violations among employers that were inspected?

Findings

Overall, investigations linked to PARRs (including PARRs with outreach) had higher numbers of HO violations than those not linked to these PARRs; this may be an effect of targeting.

PARRs specifically involving visits to employers or presentations were associated with significantly smaller numbers of HO violations than other PARRs, suggesting that WHD visits and presentations may lead to a reduction in HO violations.

Discussion

ERG's statistical analysis showed that cases associated with PARRs that involved an outreach component were associated with a *higher* number of HO violations than other cases, but the difference was not statistically significant. When the types of outreach were disaggregated, PARRs involving visits to employers or presentations were associated with significantly smaller numbers of HO violations than other PARRs. This suggests that WHD visits and presentation may lead to a reduction in HO violations. As discussed before, PARR cases tend to be higher-violation cases and this may be result of WHD's targeting as part of the PARRs.

6.5 What relationship, if any, exists between child labor compliance and overall employment of youth?

Finding:

There is a positive relationship between number of child labor violations and number of youth employees, but the correlation is not present in every sector:

- *For grocery stores, in the FY05-FY08 period, there is a strong positive relationship between number of child labor violations and number of youth employees.*
- *For full service restaurants, the correlation is strong but not significant.*
- *For fast food restaurants, the correlation is relatively weak and not significant.*

Discussion

ERG tabulated data and calculated correlations between the numbers of violations and number of youth employees in three sectors: grocery stores, full service restaurants, and fast food restaurants for FY05 through FY08. The data and correlations show a strong positive relationship between violations and child labor for grocery stores during this time frame. For full service restaurants, the correlation is strong, but not significant. For fast food restaurants, the correlation is relatively weak and not significant. Although the data do indicate that there is a positive relationship between number of violations and number of youth employees, the correlation is not present in every sector.

6.6 Are Civil Money Penalty (CMP) assessments effective in deterring child labor non-compliance? Would larger penalties further affect compliance?

Findings

In our analysis of WHISARD data we found that CMPs appear to have little effect on child labor law compliance once the impact of the previous investigation has been accounted for.

In an employer survey, respondents reported that being issued a CMP raised the priority of complying with child labor law. However, as noted in the previous finding, this does not appear to be borne out in the WHISARD data analysis.

Discussion

In our analysis of WHISARD data, we found that higher CMPs in a previous investigation were always positively associated with violations in subsequent investigations. This was true even when we restricted the analysis to just employers that were previously inspected and when we removed outliers from the analysis. Thus, ERG was unable to find evidence that CMPs have an effect on compliance.

Our survey of employers found that the impact of WHD's ability to assess CMP's on business priorities is not straightforward. When asked to rank the importance of several potential negative outcomes related to child labor law, 13 percent of respondents ranked "avoiding a monetary penalty for being out of compliance" as most or second most important. On the other hand, when asked about the influence of potential penalties on child labor practices specifically, about 40 percent of respondents indicated that it has a "large influence, but another 32.5 percent indicated that the potential for a penalty has "low" or "no" influence on their practices.

6.7 How can WHD improve its targeting of/in industries that employ a small percentage of minors but may demonstrate a high incidence of child labor violation (i.e., avoid the "needle in a haystack" dilemma)?

Recommendation

To target industries that employ a small percentage of minors but demonstrate a high incidence of child labor violations, ERG recommends using tabulations of publicly available data (see below) to identify sectors with low-moderate concentrations of teen employment and high injury/illness rates.

- *Census Bureau's Quarterly Workforce Indicators – numbers of employed minors by NAICS code*
- *Census Bureau's County Business Patterns – numbers of establishments by NAICS code*
- *Bureau of Labor Statistics injury and illness data – lost workday injury/illness rates by NAICS code*

Discussion

First, WHD should tabulate data on employed minors from the Census Bureau's Quarterly Workforce Indicators (QWI) at the three- or four-digit NAICS code level. These data can assist WHD in identifying sectors that employ small numbers of minors. Next, WHD should tabulate data from the Census Bureau's County Business Patterns on the number of establishments in each NAICS code. Dividing the number of employed minors by the number of establishments provides an estimate of the "concentration" of employed teens. WHD should focus its efforts on sectors where the ratio of employed teens to establishments is closer to one. This way, random investigations are more likely to encounter establishments with teens. Finally, WHD can tabulate Bureau of Labor Statistics (BLS) data on lost

workday injury and illness rates. This would provide an indication of the risk posed to employed teens in different sectors.

6.8 How can WHD improve compliance and reduce occupational injuries and deaths in the agricultural sector?

Findings

Child labor and injuries to youth in the agricultural sectors have been decreasing.

Injuries to youth working in agriculture tend to be more severe than injuries to youth in the service industries; injuries result from machinery and vehicles, animals, falls, repetitive motion and heavy lifting, and being “struck by” objects.

Information promoting safety behaviors is more successful when presented in person, modeled, and reinforced by the individual supervising the youth.

Recommendations

ERG recommends using regional approaches to planning agricultural enforcement initiatives to account for variations in season, type of crop, and predominant type of youth worker (local youth or migrant/seasonal worker).

ERG recommends using a local approach to outreach and outreach in the agricultural sector; materials should be targeted at individuals who will act as supervisors (farm operators, field supervisors, parents) and focus on safety and health topics such as age-appropriate tasks, the importance of supervision, and behavior modeling.

ERG recommends developing agriculture-focused partnerships with agencies and organizations that share an interest in safety and health in agriculture.

ERG recommends that WHD consider revising Hazardous Orders for agricultural tasks to take into account recent NIOSH guidance.

Discussion

ERG performed a series of interviews with WHD agricultural coordinators and with non-WHD agricultural safety experts. The interviews with the non-WHD provided a number of insights:

- Overall, the number of youth working in agriculture has been decreasing.
- Overall, the number of injuries to youth in agriculture has been decreasing.
- Most injuries to youth working in agriculture are due to machinery.
- Injuries to youth in agriculture vary by farm type and size.
- A trend toward increased size and geographic dispersion of farms may increase the risk to youths.
- A trend toward use of all-terrain vehicle (ATV) use on farms may also lead to increased risks to youths.

Interviewees also expressed support for revising Hazardous Orders for agricultural tasks using “NIOSH Recommendations to the U.S. Department of Labor for Changes to Hazardous Orders,” 2002, as guidance. Furthermore, interviewees agreed that it is important for the person supervising youth to demonstrate the task, follow up with regular monitoring and reinforcement of safety procedures, model

the safety behaviors themselves, and assign youth only to age-appropriate tasks using correctly-sized, well-maintained equipment.

In terms of distributing materials, one interviewee suggested exploring the use of emerging social media such as Facebook and Twitter. Other interviewees suggested having safety information presented by physicians during check-ups or following treatment for farm-related injuries, and distributing the information through insurance companies specializing in farm insurance.

Our recommendations reflect the information that we heard during our interviews. Specifically, WHD should:

- *Use a regional approach to planning agricultural enforcement initiatives.* WHD should plan agricultural enforcement activities at the regional-level or lower to account for variations in season, type of crop, and predominant type of youth worker (local youth or migrant/seasonal worker).
- *Use a local approach to outreach in the agricultural sector.* The information should be written primarily for individuals who will act as supervisors (farm operators, field supervisors, parents) and focus on safety and health topics such as age-appropriate tasks, the importance of supervision, and behavior modeling.
- *Develop partnerships with an agriculture focus.* ERG's analysis has shown that partnerships have benefits for improving compliance as well as outreach, and that strong partnerships develop from overlapping goals between partners. WHD should seek to develop stronger agricultural partnerships with agencies and organizations that share an interest in safety and health in agriculture.
- *Consider revising Hazardous Orders for agricultural tasks.* WHD should consider revisiting Hazardous Orders for agricultural tasks to explore the feasibility of updating and strengthening the requirements. These revisions should take into account the 2002 NIOSH guidance, "NIOSH Recommendations to the U.S. Department of Labor for Changes to Hazardous Orders."

6.9 Is a national, regional, or local approach most effective in increasing child labor compliance?

Finding

National, regional, and local approaches have distinct advantages depending on the type and goal of the initiative.

Recommendation

ERG recommends that WHD customize approaches based on goal, target audience, and timing of the initiative under consideration.

Discussion

To answer this question, ERG synthesized results from all of our analyses to (1) determine if any geographic level is most effective in reducing child labor law violations and youth occupational injuries and (2) identify any characteristics of compliance approaches that are most beneficial. Based on results of the analyses, it appears that the most effective geographic approach depends on several variables: the goal

of the initiative, the target audience, and the timing of the initiative. However, moderate evidence suggests that regional efforts may be an effective tool for increasing compliance.

6.10 How can WHD best use outreach to positively affect compliance?

Findings

Employers lack awareness and understanding of federal child labor laws.

Parents are generally unaware or unfamiliar with WHD outreach materials, but those who are familiar with the materials find them useful.

Teens are generally unaware of WHD outreach materials and may need encouragement to review and use them.

Recommendations

For employers, ERG recommends that WHD:

- *Strengthen efforts to ensure that employers receive outreach materials.*
- *Strengthen efforts to encourage employers to use the materials.*
- *Consider adding more topics to existing outreach materials or to new outreach materials.*

For parents and teens, ERG recommends that WHD:

- *Strengthen efforts to ensure that parents of working teens (and teens seeking employment) receive and understand the information they need to advise and guide their children.*
- *Strengthen efforts to ensure that working teens and those seeking employment receive and understand the information they need to comply with the law.*

Discussion

The data we collected and analyses we performed each indicate that those targeted by WHD materials are generally unaware of the materials. However, respondents that indicated awareness tended to find the WHD materials useful and were satisfied with the materials. Thus, the key thing for WHD to consider is to find ways to get the materials into the hands of those that need it. Our recommendations attempt to address the findings from our analysis. Specifically, for employers, WHD should:

- *Strengthen efforts to ensure that employers receive outreach materials.* ERG's results indicate that employer awareness of the materials is low. WHD can take advantage of partnerships, presentations, and other distribution methods to ensure that employers receive the materials.
- *Strengthen efforts to encourage employers to use the materials.* ERG's survey of employers found that employers who use the materials find them helpful. WHD can adopt new strategies to encourage employers who receive the materials to use them in managing their youth employees.
- *Consider adding more topics to existing outreach materials or new outreach materials.* Survey results indicate that employers may be confused about the details of federal child

labor law and would find additional detail on specific topics very helpful to their business. WHD should consider adding these topics to existing materials or developing new materials.

For parents and teens, we are recommending that WHD:

- *Strengthen efforts to ensure that parents of working teens (and teens seeking employment) receive and understand the information they need to advise and guide their children.* This can include increasing use of web-based outreach such as improving the *YouthRules!* web site and using new Web 2.0 tools. Additionally, WHD should consider leveraging the current set of workplace posters by suggesting that employers prominently display youth-related posters in their workplace as a service to their own employees who are parents of working-age kids.
- Strengthen efforts to ensure that working teens and those seeking employment receive and understand the information they need to comply with the law. Analyses we performed support three approaches in this area:
 - Encouraging employers to discuss child labor requirements with youth workers.
 - Encouraging educators to direct students of working age to review information on child labor requirements.
 - Encouraging parents to discuss child labor requirements with their children.