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Report to Congressional Requesters

November 2018

WORKING CHILDREN

Federal Injury Data and Compliance Strategies Could Be Strengthened

Accessible Version

GAO-19-26

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GAO Highlights

Highlights of GAO-19-26, a report to congressional requesters

Why GAO Did This Study

Children aged 17 and under in the United States work for various reasons: some are encouraged to work to develop independence and responsibility; others work because of financial need. At the same time, research suggests working children are at risk for work-related injuries and fatalities. GAO was asked to update its 2002 child labor report to discuss the current status of working children in the United States, including those working in agriculture.

This report examines (1) children working in the United States since 2003, (2) work-related fatalities and injuries to such children for the period, and (3) how DOL oversees compliance with the child labor provisions of the Fair Labor Standards Act. GAO analyzed federal data from several sources, including DOL and other agencies; reviewed relevant federal laws and regulations; and interviewed officials from DOL, including staff in six WHD district offices that were selected based on factors such as investigations with at least one child labor violation, and all five regional offices. GAO also spoke with stakeholders knowledgeable about child labor, such as employer and employee labor groups.

What GAO Recommends

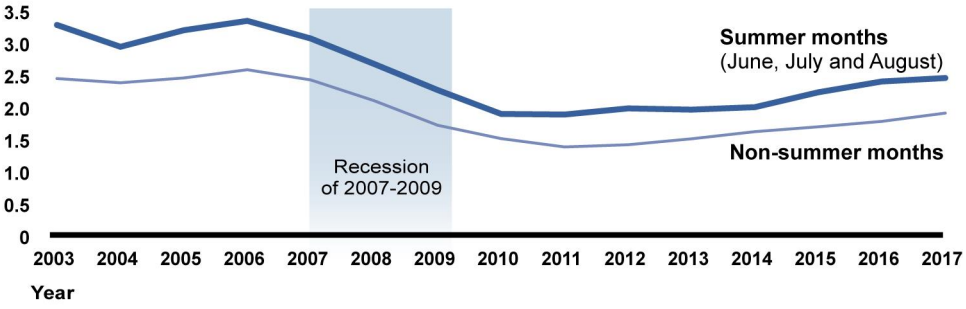
GAO is making four recommendations to DOL, including that DOL should evaluate the feasibility of measuring injuries and illnesses to certain worker populations, and establish metrics for child labor-related outreach in agriculture. DOL generally agreed with all four recommendations.

View GAO-19-26. For more information, contact Cindy Brown Barnes at (202) 512-7215 or brownbarnesc@gao.gov, or Steve Morris at (202) 512-3841 or morriss@gao.gov.

What GAO Found

The number of working children has fluctuated with the economy since 2003. An estimated 3.3 million children aged 15 to 17 worked in the summer months of 2003, and the number of working children reached a low of 1.9 million by 2011. It then increased to 2.5 million by 2017, but has not returned to its pre-recession level, as shown below. GAO's analysis of the U.S. Department of Commerce and the Department of Labor's (DOL) Current Population Survey data found that non-agricultural industries employed an estimated 2.5 million working children aged 15 to 17 in the summer months of 2017. Further, GAO found that the leisure and hospitality industry employed the largest number of children.

Estimated Number of Working Children Aged 15 to 17 in the United States, 2003 to 2017



Source: GAO analysis of Current Population Survey (CPS) data. | GAO-19-26

Since 2003, the majority of work-related child fatalities were in agriculture, and while available data are incomplete, they indicate that work-related injuries have declined. Although agriculture employs a small percentage of working children, DOL data indicate that from 2003 to 2016, the year for which the most recent data are available, over half of the 452 work-related fatalities among children were in agriculture. Also, according to DOL estimates, the number of work-related injuries and illnesses to children has declined, but these estimates do not include certain populations. While DOL is conducting a pilot study to enhance its work-related injury and illness data, this pilot does not include children, including those 14 or under. DOL has not evaluated the feasibility of measuring this population. As a result, DOL is missing opportunities to more accurately quantify injuries to children, which could better inform its compliance and enforcement efforts.

DOL's Wage and Hour Division (WHD) uses a strategic enforcement approach to oversee compliance with the child labor provisions of the Fair Labor Standards Act and collaborates within DOL to exchange information on potential violations. WHD officials told GAO that their enforcement and compliance efforts include outreach to industries with vulnerable workers, including children. However, WHD has not developed metrics for child labor-related outreach in agriculture. Federal internal control standards state that management should define objectives clearly to enable the identification of risks, such as by defining objectives in measurable terms. Without such metrics, WHD may not be effectively addressing the risks faced by children working in agriculture.

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Abbreviations

ASEC	Annual Social and Economic Supplement
BLS	Bureau of Labor Statistics
CAIS	Childhood Agricultural Injury Survey
CFOI	Census of Fatal Occupational Injuries
CPS	Current Population Survey
DOL	U.S. Department of Labor
ETA	Employment and Training Administration
FLSA	Fair Labor Standards Act of 1938, as amended
NASS	National Agricultural Statistics Service
NAWS	National Agricultural Workers Survey
NEISS-Work	National Electronic Injury Surveillance System-Occupational Supplement
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
OSH Act	Occupational Safety and Health Act of 1970, as amended
SOII	Survey of Occupational Injuries and Illnesses
USDA	U.S. Department of Agriculture
WHD	Wage and Hour Division
WHISARD	Wage and Hour Investigative Support and Reporting Database

U.S. GOVERNMENT ACCOUNTABILITY OFFICE
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November 2, 2018

The Honorable Rosa DeLauro
Ranking Member
Subcommittee on Labor, Health and Human Services, Education, and Related Agencies
Committee on Appropriations
House of Representatives

The Honorable Lucille Roybal-Allard
House of Representatives

Children in the United States are often encouraged to work because early work experiences are thought to develop independence and responsibility; some children may also work because of financial need. At the same time, federal research suggests that working children are at risk for work-related injuries or fatalities.[1] Working children (aged 17 and under) are afforded certain protections, such as prohibitions on working in certain hazardous occupations,[2] under the child labor provisions of the Fair Labor Standards Act of 1938, as amended (FLSA) and regulations issued by the Department of Labor (DOL)[3]—the federal agency generally

[1]Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, *Young Worker Injury Deaths: A Historical Summary of Surveillance and Investigative Findings*, Publication No. 2017-168 (Morgantown, WV: July 2017).

[2]These protections include age-based limitations on the number of hours and times of day children can work and minimum ages below which children cannot work. Minimum ages for working children vary, as discussed later in the report. Agricultural employers are subject to separate child labor provisions under the Fair Labor Standards Act of 1938, as amended, including different age limits and occupational restrictions.

[3]Pub. L. No. 75-718, 52 Stat. 1060 (codified as amended at 29 U.S.C. §§ 201-219); 29 C.F.R. pt. 570. In addition to the child labor provisions, the FLSA also requires covered employers to comply with certain minimum wage and overtime requirements.

responsible for enforcing the FLSA.[4] In 2002, we reported that DOL could strengthen its efforts to protect children who work across all industries—particularly those with high rates of injuries—and strengthen its data collection for enforcement planning.[5]

You asked us to update our 2002 report to describe the current status of working children in the United States, including those working in agricultural occupations, and to report on the enforcement of the FLSA and associated regulations. For this report, we use the term "working children" to describe individuals aged 17 and under, in paid employment, unless otherwise noted. This report examines (1) what is known about children working in the United States, including those working in agriculture; (2) what is known about work-related fatalities and injuries to children working in the United States, including those working in agriculture; and (3) how DOL oversees compliance with the child labor provisions of the FLSA, including any efforts to collaborate within DOL.

To address the first two objectives, we analyzed national federal data from several sources.[6] Specifically, for the first objective, we analyzed employment and demographic characteristics data from DOL's Bureau of Labor Statistics' (BLS) Current Population Survey (CPS) from 2003 to 2017,[7] as well as employment and poverty data from the 2017 Annual Social and Economic Supplement data to produce estimates of child

[4]Other federal laws, administered by other agencies, may also apply to working children. For example, under the Federal Insecticide, Fungicide, and Rodenticide Act, the Environmental Protection Agency has implemented measures to protect workers from pesticide exposure through its Worker Protection Standard, which, among other things, establishes a minimum age of 18 for workers engaged in certain pesticide-related tasks. For purposes of this report, we focus on the child labor provisions under the FLSA and its implementing regulations, and exclude from our scope any requirements under other laws and regulations.

[5]GAO, *Child Labor: Labor Can Strengthen Its Efforts to Protect Children Who Work,* GAO-02-880 (Washington D.C.: Sept. 27, 2002).

[6]None of the analyses in this report are intended to assess compliance with the FLSA, because the definitions of terms used in these data sets may not be the same as the definitions in the FLSA and DOL's regulations, among other reasons.

[7]Our 2002 report provided information from 1990 to 2001. In 2002, the CPS variables used to identify the race and ethnicity of working children, as well as the industries and occupations they may be employed in, significantly shifted. Accordingly, we chose to begin our analysis with 2003.

worker populations and demographic trends.[8] For additional information on children working in agricultural occupations, we also analyzed employment and demographic characteristics data from DOL's National Agricultural Worker Survey from fiscal years 2003 to 2016, the Department of Health and Human Services' National Institute for Occupational Safety and Health's (NIOSH) Childhood Agricultural Injury Survey for the years the data were collected during the same time period,[9] as well as overall agricultural workforce data from the U.S. Department of Agriculture's 2012 Census of Agriculture.[10]

To address the second objective, we analyzed data on work-related child fatalities from BLS's Census of Fatal Occupational Injuries and data on work-related child injuries and illnesses from its Survey of Occupational Injuries and Illnesses for 2003 to 2016.[11] For additional information on work-related injuries to children, we also analyzed injury and illness data from NIOSH's National Electronic Injury Surveillance System from 2003 to 2016 and the Childhood Agricultural Injury Survey (CAIS) for the years the data was collected.[12] Given that each data set has its own strengths and limitations and that analysis across data sets can compound such limitations, we sent our analyses to the appropriate officials to ensure we accurately characterized the data and that our analyses across data sets appropriately accounted for data limitations. See appendix I for a detailed list of the data sources we analyzed for these objectives.

To address the third objective regarding how DOL oversees compliance with the child labor provisions of the FLSA, we analyzed data from DOL's

[8]We generally refer to these data as CPS data throughout this report. The CPS and its Annual and Social Economic Supplement are sponsored jointly by the Census Bureau and the Department of Labor's Bureau of Labor Statistics. To produce our estimates, we analyzed monthly CPS data from 2003 to 2017 and data from the March 2017 CPS Annual and Social Economic Supplement, which contains data for calendar year 2016.

[9]The CAIS was conducted in 2001, 2004, 2006, 2009, 2012, and 2014. We analyzed CAIS data from 2004, 2006, 2009, 2012, and 2014, as this report's scope begins with 2003.

[10]The 2012 Census of Agriculture was the most recent Census for which data are available.

[11]2016 is the most recent year for which data are available from these data sets.

[12]We analyzed CAIS data from the same selected years for all analyses (i.e., 2004, 2006, 2009, 2012, and 2014). NIOSH combined 2 years of CAIS injury data to produce estimates of work-related injuries to children with less than 33 percent relative standard error, and thus within NIOSH's standards for reporting.

Wage and Hour Division's (WHD) Wage and Hour Investigative Support and Reporting Database (WHISARD) from fiscal years 2010 to 2016, which tracks investigations, violations, and penalties assessed.[13] We also interviewed WHD officials at the five regional offices and six selected district offices to obtain information on WHD's enforcement of the child labor provisions of the FLSA.[14] Specifically, in each WHD region we interviewed the regional Child Labor Coordinator, and in each district office we interviewed a WHD investigator, Community Outreach Resource and Planning specialist, and district director. We selected WHD district offices to include different concentrations of investigations with at least one child labor violation, obtain geographic diversity, and ensure representation across agricultural and non-agricultural sectors. The findings from our interviews with regional and district WHD staff are not generalizable but provide examples of WHD's enforcement and compliance assistance efforts with regard to the child labor provisions of the FLSA.

To inform all of our objectives, we interviewed DOL staff in the national office, including WHD and Occupational Safety and Health Administration (OSHA) officials, and additional stakeholders, such as employer and employee labor groups, to learn about overall child labor trends in agricultural and non-agricultural sectors.[15] We also reviewed relevant federal laws, regulations, and guidance pertaining to child labor.[16]

To assess the reliability of all of the data sets used in our study, we reviewed documentation, interviewed or obtained information from officials responsible for the data, and tested the data for inaccuracies. We determined that the data fields we used are sufficiently reliable for the

[13]Data for fiscal year 2016 was the most current data available at the time of our audit work. Throughout this report, investigations—and any violations found and resulting penalties—are counted in the fiscal year in which they concluded, although the investigations work may have been done in a prior fiscal year.

[14]WHD has five regional offices—Atlanta, Chicago, Dallas, Philadelphia, and San Francisco—and 54 district offices nationwide.

[15]We conducted 11 stakeholder interviews with a range of organizations, including those focused on employers, occupational health and safety, or working children.

[16]States may also have laws protecting working children, such as state child welfare laws and state child labor laws; however, a review of state laws was outside the scope of this report. Additionally, as noted previously, other federal laws such as the Federal Insecticide, Fungicide, and Rodenticide Act that may apply to working children are outside the scope of this report.

purposes of our reporting objectives. See appendix I for more detailed information about our scope and methodology.

We conducted this performance audit from March 2017 to November 2018 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Fair Labor Standards Act and Federal Enforcement

The child labor requirements under the FLSA and its implementing regulations vary, depending on the age of the child and whether or not the child works in agriculture. With respect to non-agricultural employment, children aged 16 and 17 may work in any occupation other than those declared by the Secretary of Labor to be particularly hazardous for such individuals or detrimental to their health or well-being,[17] and there are no limits on the number of hours or times of day they may work.[18] The non-agricultural employment of children aged 14 and 15 is limited to occupations and time periods that DOL has determined will not interfere with their schooling and to conditions which will not interfere with their health and well-being. Accordingly, DOL has issued regulations that limit the types of jobs, number of hours, and times of day that these children may work.[19] For example, among other things, children aged 14 and 15 may engage in work such as office or clerical work, certain types of food service, and the dispensation of gasoline, outside of school hours, subject to maximum daily and weekly limits. In general, children aged 13 and

[17]See 29 U.S.C. § 203(l) and 29 C.F.R. §§ 570.50-570.68 (DOL's "hazardous occupations orders" for non-agricultural occupations). See table 2 for a list of these orders.

[18]However, working children may still be subject to the FLSA minimum wage and overtime provisions. Unless otherwise exempt, a child working in non-agricultural employment is generally entitled to receive the same minimum wage and overtime protections as adult workers.

[19]See generally 29 U.S.C. § 203(l) and 29 C.F.R. §§ 570.31-570.39. Employment that is not specifically permitted is prohibited.

under may not be employed in non-agricultural work other than work that is not covered by the FLSA, such as casual babysitting, and work that is exempt from the child labor provisions, such as delivering newspapers.[20] More details about child labor provisions for non-agricultural employment are in table 1.

Table 1: Child Labor Provisions for Non-Agricultural Employment

Age	Occupations allowed	Hours allowed	Times of day	Other conditions
13 or under[a]	Employment generally prohibited.	Not applicable.	Not applicable.	Not applicable.
14 and 15[a]	Limited to those occupations and time periods that DOL has determined will not interfere with their schooling and to conditions that will not interfere with their health and well-being, such as office and clerical work, among others.[b] Mining, manufacturing, and occupations declared to be hazardous by DOL for children aged 16 and 17 are expressly prohibited.	Only outside of school hours.[c] Daily limits: No more than 3 hours per day on days when school is in session; no more than 8 hours per day on days when school is not in session. Weekly limits: No more than 18 hours per week during weeks when school is in session; no more than 40 hours per week during weeks when school is not in session.	Between Labor Day and June 1: Between 7 am and 7 pm June 1 through Labor Day: Between 7 am and 9 pm	Certain exceptions apply for children participating in an approved Work Experience and Career Exploration Program, children participating in an approved Work Study program, and children who are employed as professional sports attendants, among others.[d]
16 and 17	Any occupations other than those declared by the Secretary of Labor to be particularly hazardous for the employment of children aged 16 and 17, or detrimental to their health or well-being.[e]	No specific restrictions for allowable work.[c]	No restrictions for allowable work.	Certain exceptions may apply; for example, some of the hazardous occupations orders contain limited exemptions for eligible apprentices and student-learners.

Source: GAO review of the Fair Labor Standards Act of 1938, as amended, applicable regulations, and Department of Labor guidance. | GAO-19-26

[a]Children under age 16, including those aged 13 and under, may engage in work that is not covered by the FLSA, such as casual babysitting; and work that is exempt from the child labor provisions, such as acting or performing in motion pictures, theatrical productions, or radio or television productions, or delivering newspapers. In addition, if they are employed by their parent, or a person standing in place of a parent, children under age 16 may work in any occupation other than mining, manufacturing, or an occupation declared to be hazardous by DOL for children aged 16 and 17.

[20]See 29 U.S.C. § 213(d). In addition, children under 16 (including those 13 and under) may be employed by their parent, or a person standing in place of a parent, in any occupation other than manufacturing, mining, or an occupation declared to be hazardous by DOL for children aged 16 and 17. 29 U.S.C. § 203(l), 29 C.F.R. § 570.2(a)(2).

There are no specific restrictions on the number of hours or times of day for these types of permissible work, although minimum wage and overtime requirements may apply.

[b]Other examples include, but are not limited to, doing errand and delivery work by foot, bicycle, and public transportation; lifeguarding (15-year-olds only); dispensing gasoline and oil; and car cleaning, washing, and polishing by hand. See 29 C.F.R. § 570.34.

[c]Minimum wage and overtime requirements may also apply.

[d]For example, children aged 14 and 15 participating in a Work Experience and Career Exploration Program that meets certain requirements may be employed for up to 23 hours per week and up to 3 hours per day when school is in session, including during school hours. 29 C.F.R. § 570.36. According to DOL guidance, the program is designed to provide a work experience and career exploration program for students who can benefit from a career-oriented education.

[e]DOL has established 17 "hazardous occupations orders," declaring certain non-agricultural occupations to be particularly hazardous for the employment of children between the ages of 16 and 18 years, or detrimental to their health or well-being (referred to in this table as "occupations declared to be hazardous by DOL for children aged 16 and 17"). See 29 C.F.R. §§ 570.50-570.68.

Further, children under age 18 are generally prohibited from working in the 17 non-agricultural hazardous occupations that DOL has established by regulation, subject to limited exemptions (see table 2). These orders apply either on an occupational basis, irrespective of the industry, or on an industry basis, specifying the occupations in the industry that are not permitted. For example, one of the orders generally prohibits all occupations in connection with mining, other than coal, but allows work in offices, in a warehouse or supply house, in a laboratory, and in repair or maintenance shops not located underground, among other exceptions.[21]

Table 2: Non-Agricultural Hazardous Occupations Orders

Hazardous occupations order number	Hazardous occupations order title
1	Occupations in or about plants or establishments manufacturing or storing explosives or articles containing explosive components
2	Occupations of motor-vehicle driver and outside helper
3	Coal mine occupations
4	Forest fire fighting and forest fire prevention occupations, timber tract occupations, forestry service occupations, logging occupations, and occupations in the operation of any sawmill, lath mill, shingle mill, or cooperage stock mill
5	Occupations involved in the operation of power-driven woodworking machines
6	Exposure to radioactive substances and to ionizing radiations
7	Occupations involved in the operation of power-driven hoisting apparatus

[21]29 C.F.R. § 570.60(a).

Hazardous occupations order number	Hazardous occupations order title
8	Occupations involved in the operation of power-driven metal forming, punching, and shearing machines
9	Occupations in connection with mining, other than coal
10	Occupations in the operation of power-driven meat-processing machines and occupations involving slaughtering, meat and poultry packing, processing, or rendering
11	Occupations involved in the operation of bakery machines
12	Occupations involved in the operation of balers, compactors, and paper-products machines
13	Occupations involved in the manufacture of brick, tile, and kindred products
14	Occupations involving the operation of circular saws, band saws, guillotine shears, chain saws, reciprocating saws, wood chippers, and abrasive cutting discs
15	Occupations involved in wrecking, demolition, and ship-breaking operations
16	Occupations in roofing operations and on or about a roof
17	Occupations in excavation operations

Source: 29 C.F.R. §§ 570.50-570.68. | GAO-19-26

Notes: Although referred to as hazardous occupations orders, the Department of Labor (DOL) has issued these orders by regulation. Each order describes specific work activities, including definitions and exceptions, that DOL has declared to be particularly hazardous for minors between the ages of 16 and 18, or detrimental to their health or well-being. In addition, the Fair Labor Standards Act of 1938, as amended, and DOL regulations prohibit children aged 14 and 15 from performing any work proscribed by these orders. This table includes only the titles of each order, not the specific work activities, definitions, and exemptions.

Under the FLSA, different child labor requirements apply to agricultural occupations.[22] For example, there are no occupational restrictions for children aged 16 and 17 working in agriculture.[23] In accordance with the

[22]For purposes of the FLSA, “agriculture” includes “farming in all its branches and among other things includes the cultivation and tillage of the soil, dairying, the production, cultivation, growing, and harvesting of any agricultural or horticultural commodities, the raising of livestock, bees, fur-bearing animals, or poultry, and any practices (including any forestry, or lumbering operations) performed by a farmer or on a farm as an incident to or in conjunction with such farming operations, including preparation for market, delivery to storage or to market or to carriers for transportation to market.” 29 U.S.C. § 203(f). Migrant and seasonal agricultural employees, regardless of their age and whether hired directly by the farmer or provided by a farm labor contractor—when covered by the FLSA—are entitled to the same protections under the FLSA as other farm workers, according to WHD guidance.

[23]Minimum wage requirements may apply; however, agricultural employees are generally not subject to the overtime provisions of the FLSA. See 29 U.S.C. § 213(b)(12).

FLSA, DOL has issued 11 hazardous occupations orders for agricultural occupations, declaring certain occupations to be particularly hazardous for children under age 16 (see table 3).[24]

Table 3: Agricultural Hazardous Occupations Orders

Hazardous occupations order number	Hazardous occupations
1	Operating a tractor of over 20 power-take-off horsepower, or connecting or disconnecting an implement or any of its parts to or from such a tractor.
2	Operating or assisting to operate[a] any of the following machines: (1) corn picker, cotton picker, grain combine, hay mower, forage harvester, hay baler, potato digger, or mobile pea viner; (2) feed grinder, crop dryer, forage blower, auger conveyor, or the unloading mechanism of a nongravity-type self-unloading wagon or trailer; or (3) power post-hole digger, power post driver, or nonwalking type rotary tiller.
3	Operating or assisting to operate[a] any of the following machines: trencher or earthmoving equipment, fork lift, potato combine; or power-driven circular, band, or chain saw.
4	Working on a farm in a yard, pen, or stall occupied by a bull, boar, or stud horse maintained for breeding purposes; or a sow with suckling pigs or cow with newborn calf (with umbilical cord present).
5	Felling, bucking, skidding, loading or unloading timber with butt diameter of more than 6 inches.
6	Working from a ladder or scaffold (painting, repairing, or building structures, pruning trees, picking fruit, etc.) at a height of over 20 feet.
7	Driving a bus, truck, or automobile when transporting passengers, or riding on a tractor as a passenger or helper.
8	Working inside a fruit, forage, or grain storage designed to retain an oxygen deficient or toxic atmosphere; an upright silo within 2 weeks after silage has been added or when a top unloading device is in operating position; a manure pit; or a horizontal silo while operating a tractor for packing purposes.
9	Handling or applying (including cleaning or decontaminating equipment, disposal or return of empty containers, or serving as a flagman for aircraft applying) agricultural chemicals classified under the Federal Insecticide, Fungicide, and Rodenticide Act as Category I of toxicity, identified by the word “poison” and the “skull and crossbones” on the label; or Category II of toxicity, identified by the word “warning” on the label.

[24]See 29 U.S.C. § 213(c)(2); 29 C.F.R. §§ 570.70-570.72 (DOL’s hazardous occupations orders for agricultural employment).

Hazardous occupations order number	Hazardous occupations
10	Handling or using a blasting agent, including but not limited to, dynamite, black powder, sensitized ammonium nitrate, blasting caps and primer cord.
11	Transporting, transferring, or applying anhydrous ammonia.

Source: 29 C.F.R. § 570.71 | GAO-19-26

Notes: Although referred to as hazardous occupations orders, the Department of Labor (DOL) has issued these orders via regulation. Each agricultural occupation listed in this table has been declared by the DOL to be particularly hazardous for the employment of children under the age of 16. These orders do not apply to children employed by a parent or a person standing in place of a parent on a farm owned or operated by such parent or person.

[a][u]"Operating or assisting to operate" includes starting, stopping, adjusting, feeding, or any other activity involving physical contact associated with the operation.

Children younger than 16 may generally only work in agricultural occupations other than the ones covered by these orders, and only outside of school hours (see table 4).[25] Additional restrictions apply to children under the age of 14.[26] Children of any age may be employed in any agricultural occupation at any time, if they are employed by their parent (or a person standing in place of a parent) on a farm owned or operated by that parent or person.[27] Unlike some of the requirements for non-agricultural occupations, the FLSA does not limit the number of hours per day or week that children may work in agriculture, nor does it place limits on when that work may occur outside of school hours.

Table 4: Child Labor Provisions for Agricultural Employment

Age	Allowable occupations	Allowable hours	Other conditions
Under 12[a, b]	Non-hazardous (agricultural).[c]	Only outside of school hours.	Children must be employed with the consent of their parent (or a person standing in place of a parent) on a farm where all employees are exempt from the minimum wage requirements due to its size.[d]

[25]29 U.S.C. § 213(c)(1), (c)(2). Exceptions may apply to eligible student-learners in a vocational agricultural program, and children who have completed certain training in tractor or machine operation. See 29 C.F.R. §§ 570.71-570.72.

[26]For example, children aged 12 and 13 must be employed either with the written consent of their parent (or a person standing in place of a parent); or on the same farm where their parent is employed. 29 C.F.R. § 570.2(b). See table 4 for more information on the specific restrictions for children under age 14.

[27]29 U.S.C. § 213(c)(2); 29 C.F.R. §§ 570.2(b), 570.70(b).

Age	Allowable occupations	Allowable hours	Other conditions
12 and 13[a]	Non-hazardous (agricultural).[c]	Only outside of school hours.	Children must be employed either with the written consent of their parent (or a person standing in place of a parent); or on the same farm where such parent or person is employed.
14 and 15[a]	Non-hazardous (agricultural).[c]	Only outside of school hours.[e]	Exceptions: Student-learners in a vocational agricultural program may work in specified hazardous (agricultural) occupations under certain conditions.[f] Children aged 14 to 15 who have successfully completed the tractor operation or machine operation training program under 4-H (or a similar program) or a program of the U.S. Office of Education Vocational Agriculture Training Program may work in the hazardous (agricultural) occupations for which they have been trained. Certain conditions of employment apply for children working under these exemptions.[g]
16 and 17	All	Any (no hour restrictions).	Not applicable.

Source: GAO review of the Fair Labor Standards Act of 1938 (FLSA), as amended, applicable regulations, and Department of Labor guidance. | GAO-19-26

[a]Children of any age may be employed in any agricultural occupation if employed by their parent (or a person standing in place of a parent) on a farm owned or operated by that parent, and there are no hour restrictions for children so employed.

[b]The FLSA provides that employers may apply for waivers from the Department of Labor (DOL) to permit local children aged 10 and 11 to be employed outside of school hours in the hand harvesting of short season crops under certain conditions. DOL issued regulations in 1978 setting forth the procedures for implementing this waiver provision. See 29 U.S.C. § 213(c)(4), 29 C.F.R. pt. 575. However, DOL was enjoined from issuing such waivers by a 1980 court decision resulting from a legal challenge to these regulations. See National Ass'n of Farmworkers Organizations v. Marshall, 628 F.2d 604 (D.C. Cir. 1980). According to officials, DOL does not have any record that it has issued a waiver under this authority since 1980.

[c]The FLSA provides a minimum age of 16-years-old for any agricultural occupations which DOL finds and declares to be particularly hazardous for persons under the age of 16. 29 U.S.C. § 213(c)(2). DOL has issued 11 hazardous occupations orders for agricultural employment. See 29 C.F.R. §§ 570.70–570.72. In this table we refer to occupations covered by these orders as "hazardous (agricultural)" and occupations not covered by these orders as "non-hazardous (agricultural)."

[d]The FLSA minimum wage and overtime provisions do not apply with respect to an agricultural employer who did not, during any calendar quarter in the preceding calendar year, use more than 500 "man-days" of agriculture labor.

[e]For children who have graduated from high school, the entire year would be considered outside of school hours and, therefore, their employment in agriculture would be permitted at any time.

[f]For example, the child must be employed under a written agreement that provides that the work shall be incidental to the training.

[g]For example, the employer is subject to certain supervision requirements, and must keep the child's certificate of completion on file, among other things.

The child labor provisions of the FLSA do not cover all children. In addition to the exemptions and exceptions already discussed, some

employers may not meet the criteria for FLSA coverage.[28] Children may also be covered under a state's child labor laws, which may provide more stringent child labor protections than the federal law.[29]

DOL's Role in Enforcing the Child Labor Provisions of the Fair Labor Standards Act

DOL, through its WHD, is the federal agency responsible for enforcing the FLSA, including the child labor provisions and associated regulations.[30] According to DOL regulations, the child labor provisions seek to protect the safety, health, well-being, and opportunities for schooling of youthful workers.[31] DOL also oversees workplace safety and health through OSHA, which is responsible for setting and enforcing workplace safety and health standards under the Occupational Safety and Health Act of 1970, as amended (OSH Act).[32] Employers must follow applicable workplace safety and health standards, which generally require them to take steps to prevent workers, including those aged 17 and under, from being injured or becoming ill on the job. To carry out their respective responsibilities, WHD and OSHA conduct inspections, investigate complaints, and offer compliance assistance programs and training, among other efforts.

[28]The FLSA generally covers all employees of businesses that are engaged in interstate commerce and that have an annual gross volume of sales or business of $500,000 or more (referred to as "enterprise coverage"). Even when there is no enterprise coverage, employees may be covered by the FLSA's protections if they are individually engaged in interstate commerce or in the production of goods for interstate commerce. The FLSA's "hot goods" provision, in section 12(a), permits DOL to seek a court order to prevent the interstate shipment of goods that were produced in or about an establishment where a child labor violation occurred in the past 30 days. According to DOL officials, application of the hot goods provision does not require that the child who was employed in violation of FLSA's child labor provisions was personally engaged in the production of those goods. See 29 U.S.C. § 212(a).

[29]A review of state laws was outside the scope of this report.

[30]WHD is also responsible for enforcing several other statutes, including the Davis-Bacon Act and related acts, the Migrant and Seasonal Agricultural Worker Protection Act, and the Family and Medical Leave Act, among others.

[31]29 C.F.R. § 570.101(a).

[32]Pub. L. No. 91-596, 84 Stat. 1590 (codified as amended at 29 U.S.C. §§ 553, 651-78). Under the OSH Act, states may choose to operate their own occupational safety and health programs in accordance with state plans approved by OSHA.

To enforce the FLSA, WHD's national office establishes annual performance measures for enforcement and compliance activities, including those related to the child labor provisions of the FLSA. WHD's national office also establishes the planning framework used by WHD's 5 regional and 54 district offices to develop regional and local initiatives, which can include both enforcement and outreach activities. In addition, WHD's national office is responsible for providing guidance and training to its field offices and for assessing the results of their child labor compliance efforts. The field offices have discretion to organize their work to meet performance targets, and to create and implement these initiative plans each fiscal year.[33] WHD has also developed a Community Outreach Resource and Planning Specialist position for its district offices, whose primary duties include outreach and enforcement planning for WHD district offices.[34] In 2010, WHD's national office began emphasizing the use of data to develop its strategy for enforcement and compliance assistance activities, including the creation of a priority industry list, which would help the agency plan where to focus its enforcement activities.

Since 2010, WHD has addressed child labor as a component of its FLSA outreach and enforcement activities. WHD outreach efforts include presentations to stakeholder groups and employers. WHD's enforcement actions include on-site investigations of employers and other activities designed to bring employers into compliance with the law. When WHD determines, as a result of an investigation, that an employer has violated the child labor provisions of the FLSA, WHD may assess penalties or take other enforcement actions.[35] The penalties for child labor violations depend on the size of the business and the gravity of the violations, including any history of prior violations, evidence of willfulness or failure to take reasonable precautions, and whether any children were killed or injured as a result.

[33]In addition to the national office, WHD operates offices at the regional, district, area, and field levels. For the purposes of this report, we generally refer to all WHD offices outside of the national office as "field offices," unless otherwise noted.

[34]As of June 2018, WHD had a Community Outreach and Resource Planning Specialist staff person in the majority of WHD's 54 district offices nationwide.

[35]29 U.S.C. § 216(e); 29 C.F.R. pts. 579, 580. In addition to civil money penalties, the FLSA also authorizes DOL to seek injunctions to halt the interstate shipment of goods produced in violation of the child labor provisions, 29 U.S.C. § 212(a), to seek injunctions against violators of the child labor provisions to compel their compliance with the law, 29 U.S.C. § 217, and for willful violations, to seek criminal penalties including a fine of not more than $10,000 and/or imprisonment of not more than 6 months, 29 U.S.C. § 216(a).

In 2011, WHD proposed some revisions to the FLSA agricultural child labor regulations. According to the proposed rule, these revisions were intended to implement specific recommendations made by NIOSH, increase parity between the agricultural and nonagricultural child labor provisions, and address other WHD-identified areas for improvement.[36] After reviewing public comments, WHD withdrew the proposed rule in 2012.[37] In the notice withdrawing the proposed rule, WHD stated that it would instead pursue a non-regulatory approach to address the safety and health of children working in agriculture, such as collaborating with farming organizations to develop educational programs on hazardous agricultural work practices and conditions.[38]

Data Sources

Several key federal sources provide information on the number and characteristics of working children aged 17 and under in the United States. The CPS, compiled monthly by DOL's BLS, is the primary source of labor force statistics, including for children aged 15 to 17.[39] The CPS is a survey of U.S. households and provides nationally representative information on the number of working children in the United States, as well as how many hours they worked and the industries in which they

[36]Child Labor Regulations, Orders and Statements of Interpretation; Child Labor Violations—Civil Money Penalties, 76 Fed. Reg. 54,836 (Sept. 2, 2011).

[37]WHD held a public hearing and received written comments on the proposed rule through December 2011. After consideration of the public comments, WHD announced its decision to pursue a non-regulatory approach to address the safety and health of children employed in agriculture rather than amending the existing child labor rules.

[38]Child Labor Regulations, Orders and Statements of Interpretation; Child Labor Violations—Civil Money Penalties, 77 Fed. Reg. 31,549 (May 29, 2012).

[39]CPS is a joint survey sponsored by the Census Bureau and BLS. CPS estimates contained in this report are estimated standard errors and are presented along with an approximate margin of error at the 95 percent confidence level or relative standard errors. We express our confidence in the precision of a particular sample's estimates with a confidence interval. By adding and subtracting the margin of error from the estimate, we construct a confidence interval that would contain the actual population value for 95 percent of the samples that CPS could have drawn. All margins of error for CPS estimates presented in this report are approximations. We calculated the approximate margins of error following CPS guidance and technical documentation. In order to estimate the margin of error for estimates of our subgroups of interest, a number of approximations were required. As a result, the margins of error provide a general order of magnitude. A relative standard error is equal to the standard error of a survey estimate divided by the survey estimate.

Agricultural Employers: U.S. Farm Characteristics and Family Farms

Agricultural production has shifted to much larger farming operations over the last 3 decades, even as the number of small farms has grown, according to the U.S. Department of Agriculture's Economic Research Service. Overall, larger farms —those with at least $1 million in sales—account for an increasing share of production, with 51 percent of the value of U.S. farm production coming from large farms in 2015, compared to 31 percent in 1991.

A "family farm" is any of the nation's approximately 2 million farms where the majority of the business is owned by the principal operator. The U.S. Department of Agriculture's Economic Research Service defines large-scale family farms as those with gross income of $1 million or more, and small family farms as those with a gross income of less than $350,000. Ninety percent of U.S. farms are classified as small, and these farms accounted for 51 percent of the land operated by farms in 2016, according to the Economic Research Service.

Source: GAO analysis of U.S. Department of Agriculture information. | GAO-19-26

worked.[40] This survey includes data regarding children aged 15 to 17 who work in agriculture, including children on U.S. farms who were members of the household working for 15 or more hours per week (with or without pay) and children working on farms employing 10 or fewer workers.[41] The CPS and its Annual Social and Economic Supplement also provide demographic information on working children, such as age, race, ethnicity, and family income.

In addition to CPS data, the Department of Health and Human Services' NIOSH and DOL also collect data specific to children aged 17 and under working in agriculture:

- NIOSH's Childhood Agricultural Injury Survey (CAIS) is conducted in selected years by surveying a random sample of 50,000 U.S. farms.[42] This survey collects data on children working in both crop and livestock agriculture, as well as working children on farms employing 10 or fewer workers, and children working on U.S. farms who are members of the household, referred to as "household children," regardless of their pay status or household status.[43]
- DOL's National Agricultural Workers Survey (NAWS) is an employment-based, annual survey of demographic, employment, and health characteristics of workers in crop agriculture, including those

[40]The CPS includes all people residing in the United States, including those who are foreign born—people who were not U.S. citizens at birth—which include legally-admitted immigrants, refugees, temporary residents such as students and temporary workers, and undocumented immigrants. The CPS data, however, do not separately identify the number of people in these categories.

[41]BLS's CPS does not count unpaid family workers, on farms or in other family businesses, who work less than 15 hours per week. According to BLS officials, the CPS collects information on workers on farms, including those that employ 10 or fewer workers. BLS officials also stated that its research indicates some concerns with the data quality of the CPS variable used on firm size. BLS officials stated they believe that firm size can be better determined through surveys of establishments rather than surveys of households (such as the CPS).

[42]CAIS data were collected in 2001, 2004, 2006, 2009, 2012, and 2014. From 2001 through 2012, CAIS was based on a sample of 50,000 U.S. farm operations from the Census of Agriculture. In 2014, the CAIS sample was increased to 75,000 farming operations.

[43]For the purposes of this report, working household children are those who live and work without pay on a farm owned by their parents. CAIS collects data on hired labor (those working for pay), household labor (those living on the farm where they are working), and visitors (a visiting relative to the farm operation or a non-relative visitor). Working household children are those who live and work on a farm owned by their parents.

on crop farms employing 10 or fewer workers.[44] This survey does not include data on livestock agricultural workers or unpaid household workers.[45]

The primary sources of data on children who are injured or killed as a result of work-related incidents come from BLS and NIOSH. BLS reports on fatalities through its Census of Fatal Occupational Injuries, which collects data on fatalities through multiple sources such as death certificates, workers' compensation reports, and federal and state agency administrative reports. BLS collects data on the number of nonfatal work-related injuries and illnesses in its Survey of Occupational Injuries and Illnesses from a sample of the work-related injury and illness records that employers in private industry are required to maintain. NIOSH collects data on work-related injuries in its National Electronic Injury Surveillance System, which collects information from a nationally representative sample of hospital emergency departments to produce its annual estimate. NIOSH, in collaboration with the U.S. Department of Agriculture's National Agricultural Statistics Service, has also collected data on work-related injuries to children in agriculture through the CAIS.

Status of 2002 GAO Recommendations on Child Labor

In our 2002 report on child labor, we made seven recommendations related to the report's findings on limitations to DOL's compliance efforts regarding the child labor provisions of the FLSA.[46] DOL disagreed with many of the conclusions and recommendations in the report but has

[44]NAWS surveys hired farm workers, including crop workers, workers at nurseries, workers at packing houses, and workers brought to farms by labor contractors. Approximately 1,500 of these workers each round are randomly selected for an in-person interview, and NAWS conducts three rounds of interviews per year, to account for the seasonality of agricultural production and employment. We note that a farm employing 10 or fewer workers may represent a large operation.

[45]Migrant child workers are within the scope of NAWS and CAIS, as these surveys are conducted at the job site and such workers are not excluded from the survey. According to DOL, migrant child workers are child farm workers who generally travel to the job site such that the farm worker is not reasonably able to return to his or her permanent residence within the same day. According to agency officials, workers in the United States on a H-2A visa—a temporary work visa for foreign agricultural workers with a job offer for temporary or seasonal agricultural work in the United States—are excluded in the NAWS survey, but are generally included in the CPS and CAIS.

[46]GAO-02-880.

implemented all but one of these recommendations.[47] We recommended that DOL:

- provide additional guidance to staff,
- consider enhancing the CPS data collected on working children,
- routinely obtain and review data from its internal investigations database and use this data to ensure effective resource use for child labor compliance,
- use existing BLS and NIOSH data to better target compliance efforts,
- develop methods of measuring WHD's child labor compliance efforts,
- develop additional specific, measurable goals for improving compliance in industries in which children face the greatest risk of being injured or killed, and
- provide training to all WHD staff on how to obtain information from the internal investigations database.

For the CPS specifically, we recommended that BLS enhance data collection on working children by expanding the CPS to include 14-year-olds or beginning a new cohort of another survey of children, the National Longitudinal Study of Youth. DOL generally agreed with this recommendation, and the agency conducted an assessment of the feasibility of expanding the CPS.

[47]DOL did not implement the recommendation to use existing BLS and NIOSH data to better target WHD's child labor compliance efforts, citing concerns that doing so would require disaggregating the data at a level that would jeopardize participants' confidentiality. We disagreed that such disaggregation would be required.

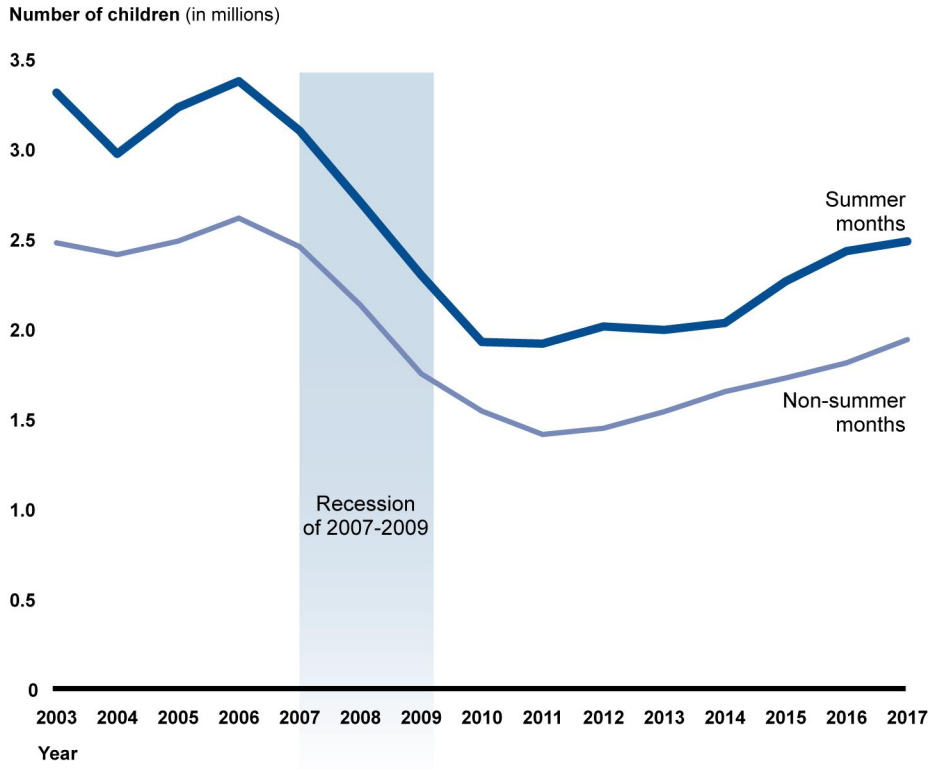
The Number of Working Children Generally Fluctuated with the Economy

The Number of Working Children Declined until about 2011 and Has Since Increased, and Most Working Children Are Employed in Non-Agricultural Industries

According to our analysis of CPS data, the estimated number of working children aged 15 to 17 has generally fluctuated with the economy; however, this number has not reached pre-recession levels. Specifically, the number of children aged 15 to 17 who worked during summer months—June through August—was an estimated 3.3 million in 2003, and then reached a low of 1.9 million in 2011. By 2017, an estimated 2.5 million children worked during summer months, which remains below pre-recession levels. Fewer children worked during non-summer months—September through May—however, they followed a similar trend (see fig. 1).[48]

[48]More specifically, we define "non-summer months" as January through May and September through December during a calendar year. Our definitions of summer and non-summer months are not intended to align with how summer is defined in the FLSA child labor regulations. We used our definition of summer and non-summer months in our analysis as we found this categorization to be the most workable given the arrangement and content of the CPS data set. These estimates have relative standard errors of 10 percent or less.

Figure 1: Estimated Number of Working Children Aged 15 to 17 in the United States, 2003 to 2017



Source: GAO analysis of Current Population Survey (CPS) data. | GAO-19-26

Notes: We defined "summer months" as June through August, and "non-summer months" as January through May and September through December during a calendar year. These definitions are not intended to align with how summer is defined in the Fair Labor Standards Act child labor regulations. These estimates have relative standard errors of 10 percent or less. For more details, see appendix II.

More children work in summer months and children generally work more hours in the summer than they do in non-summer months, according to the CPS data. For more details, see appendix II.

We conducted some additional analyses focusing on hours worked by 15-year-olds, because they are subject to different requirements than

children aged 16 and 17.[49] Specifically, we analyzed the number of hours children aged 15 worked in summer (June, July, and August) and non-summer months—which do not necessarily correspond to any given school year.[50] From 2003 through 2017 the percentage of working 15-year-olds we estimated that worked 40 or more hours per week in non-agricultural industries in summer months ranged from a low of 8 percent in 2004 to a high of 19 percent in 2014.[51] The percentage we estimated that worked 19 or more hours per week in non-agricultural industries in non-summer months ranged from a low of 14 percent in 2004 to a high of 31 percent in 2015 (see app. II for more details).[52]

We also analyzed the demographic characteristics of working children. Our analysis of demographic characteristics of working children in CPS found that working females aged 15 to 17 comprised about 52 percent of the working child population in 2017 summer months; and the percentage of white-only working children decreased from 2003 to 2017, while the percentage of working children of other races and ethnicities—black only,

[49]Our analysis does not show whether this work complied with the FLSA, due in part to differences between the data and definitions used in our analysis and the applicable FLSA requirements. As previously discussed, under the FLSA and DOL regulations, children aged 14 and 15 engaged in non-agricultural occupations may generally work up to 18 hours per week during weeks when school is in session, and up to 40 hours per week during weeks when school is not in session. School is generally considered to be in session for any week the local public school district where the child resides while employed is in session, and in which students are required to attend for at least one day or partial day. However, various exceptions may apply; for example, there are no hour restrictions for children employed by their parents. The data we used for our analysis do not allow us to determine whether school was in session, or whether an exception applies, for the reported hours worked by 15-year-olds.

[50]We were unable to tabulate the extent to which 14-year-olds worked because, according to BLS, such data are not collected in the CPS or in other BLS surveys.

[51]These estimates for summer months are for 2004 and 2014 and have relative standard errors of 24 percent and 20 percent, respectively. The 2009 summer estimate is the only estimate from 2003 to 2017 that has a relative standard error higher than or equal to 30 percent (is 30 percent), and should be interpreted with caution.

[52]These estimates for non-summer months are from 2004 and 2015 and have relative standard errors of 19 percent and 17 percent, respectively.

Hispanic, and other races combined—increased during the time period,[53] irrespective of industry or occupation. Our analysis of demographic characteristics of working children in CPS's Annual Social and Economic Supplement (ASEC) also found that while 27 percent of the children who did not work were low-income, only 15 percent of the children who worked were in that category.[54] Children in low-income families were less likely to work than their higher income counterparts. About 11 percent of children in low-income families worked in 2016 compared to 21 percent of children in higher income families. For the results of our analyses of these demographic characteristics, see appendix III.

Our analysis of CPS Annual Social and Economic Supplement data also shows that, in 2016, the vast majority of working children aged 15 to 17 worked in non-agricultural industries,[55] such as leisure and hospitality or wholesale and retail. As shown in figure 2, we estimated the leisure and hospitality industry employed over 1.1 million children aged 15 to 17, wholesale and retail employed about 440,000, and more than 60,000 children aged 15 to 17 worked in the construction and mining industry.[56] We conducted an additional analysis of the children working in the construction and mining industry and found that an estimated 40,000 (+/- 19,600) worked in construction and extraction occupations. In addition, according to the data, an estimated 12,000 (+/-8,800) worked in office and administrative support occupations.[57] We recognize our analysis does not show whether this work complied with FLSA requirements, in part because we could not identify the specific work activities performed by the children employed in these industries. Many activities in the

[53]The CPS treats ethnicity separately from race. As a result, a child can be identified in the CPS as both white and Hispanic, or as both black and Hispanic, among other designations. For the purposes of our report, we categorized any respondent identifying as Hispanic, irrespective of their reported race, as Hispanic. We further categorized respondents who identified as being non bi- or multiracial white or black as being white only and black only. We counted the following respondents as other races: respondents of two or more races, Asians, and other races such as Native American or Pacific Islander.

[54]In this report, we defined low-income as having income below 150 percent of the poverty threshold. Poverty thresholds are set by the U.S. Census Bureau and take into account family size and composition to determine who is in poverty.

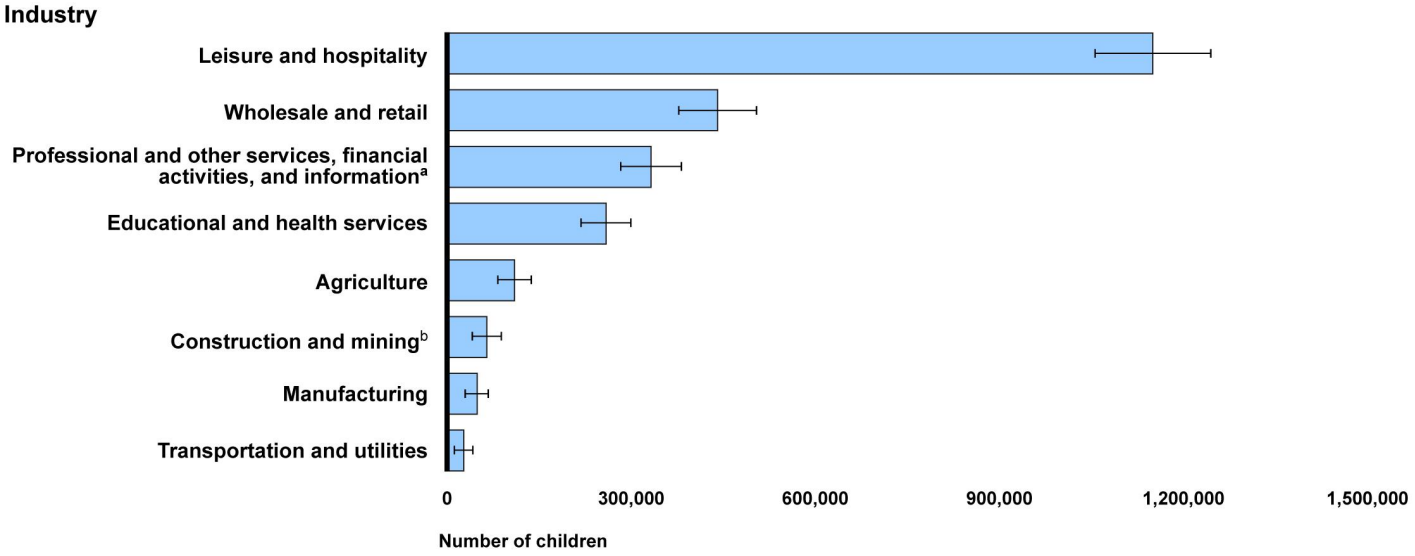
[55]Industry worked is determined based on industry of longest job worked in 2016.

[56]The estimates for these industries have margins of error of +/-96,000, +/-64,500, and +/-24,600, respectively.

[57]The relative standard error was greater than 30 percent (35 percent) and the estimate should be interpreted with caution.

construction and mining industry, such as roofing operations or activities about coal mines are prohibited, and some activities, such as office work, may be permissible, depending on the circumstances.[58]

Figure 2: Industries in Which Children Aged 15 to 17 Worked, 2016



Source: GAO analysis of Current Population Survey (CPS) 2017 Annual Social and Economic Supplement data, which reports calendar year 2016 data. I GAO-19-26

Notes: Our analysis does not show whether this work complied with the Fair Labor Standards Act (FLSA) and federal child labor regulations, due in part to a lack of precision in the data compared with the applicable FLSA requirements. Margins of error for estimates at the 95 percent confidence level are shown by chart whiskers.

[a]Professional and other services, financial activities, and information include legal, accounting, and other professional, scientific, and technical services, among others.

[b]Construction and mining industry also includes quarrying, and oil and gas extraction.

Children aged 15 to 17 worked in a variety of occupations in 2016.[59] The top three occupations were cashiers (an estimated 375,000 working

[58]See, for example, 29 C.F.R. §§ 570.53, 570.60, 570.67 (hazardous occupations order numbers 3, 9, and 16). As described in tables 1 and 2, the FLSA's occupational restrictions vary depending on the age of the child, his or her specific occupation, and whether any exceptions apply. The data we used for our analysis do not allow us to determine the specific work activities performed, or whether an exception applies, among other things.

[59]We analyzed 2017 CPS Annual Social and Economic Supplement data, which contains information regarding annual work experience for 2016.

children), waiters and waitresses (141,000), and athletics-related occupations (103,000).[60] See appendix IV for detailed results.

Federal Agencies Collect Some Information on Children Working in Agriculture

Federal data sets collect some information on children working in agriculture, but two we analyzed differ regarding which children they include.[61] For example, the data sets differ in the age range of children included in the data sets and the extent to which they include household workers, which may comprise a substantial percentage of children working in agriculture, as shown below. Our analysis of the CPS and CAIS data indicates the following: [62]

- **CPS.** According to our CPS analysis, an estimated 3.1 percent of children aged 15 to 17 worked in agriculture during summer months in 2003, and 2.9 percent worked in agriculture in summer months in 2017.[63] However, because the CPS does not measure certain groups of children, this is an undercount of children working in agriculture.[64]
- **CAIS.** Our analysis of CAIS data suggests higher numbers of children working on U.S. farms than do CPS data but capture a similar trend. Specifically, CAIS data indicate the number of children working in

[60]These estimates have margins of error of +/-52,000, +/-36,000, and +/-27,000, respectively. Detailed occupation information is presented in appendix IV.

[61]These two data sets are CPS, which is sponsored jointly by the Census Bureau and the Department of Labor's Bureau of Labor Statistics, as well as CAIS, which is NIOSH's collaborative effort with the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS).

[62]We also analyzed data from the National Agricultural Worker Survey (NAWS), which is specific to hired workers in crop agriculture. See appendix V for our analyses of this data set.

[63]These estimates have a relative standard error of 21 percent and 25 percent, respectively. For non-summer months, we estimate 2.4 percent of working children aged 15 to 17 worked in agriculture in 2003, and 2.6 percent in 2017. These estimates have a relative standard error of 23 and 25 percent, respectively. See appendix II for additional results on our estimates of children working in agricultural industries from 2003 to 2017.

[64]CPS does not count as employed those children working less than 15 hours without pay for a family business. Further, because the CPS does not include workers aged 14 or under, it is not capturing the full population of children working in agriculture. BLS officials stated that CPS is not able to adequately identify the extent to which children are working in agriculture.

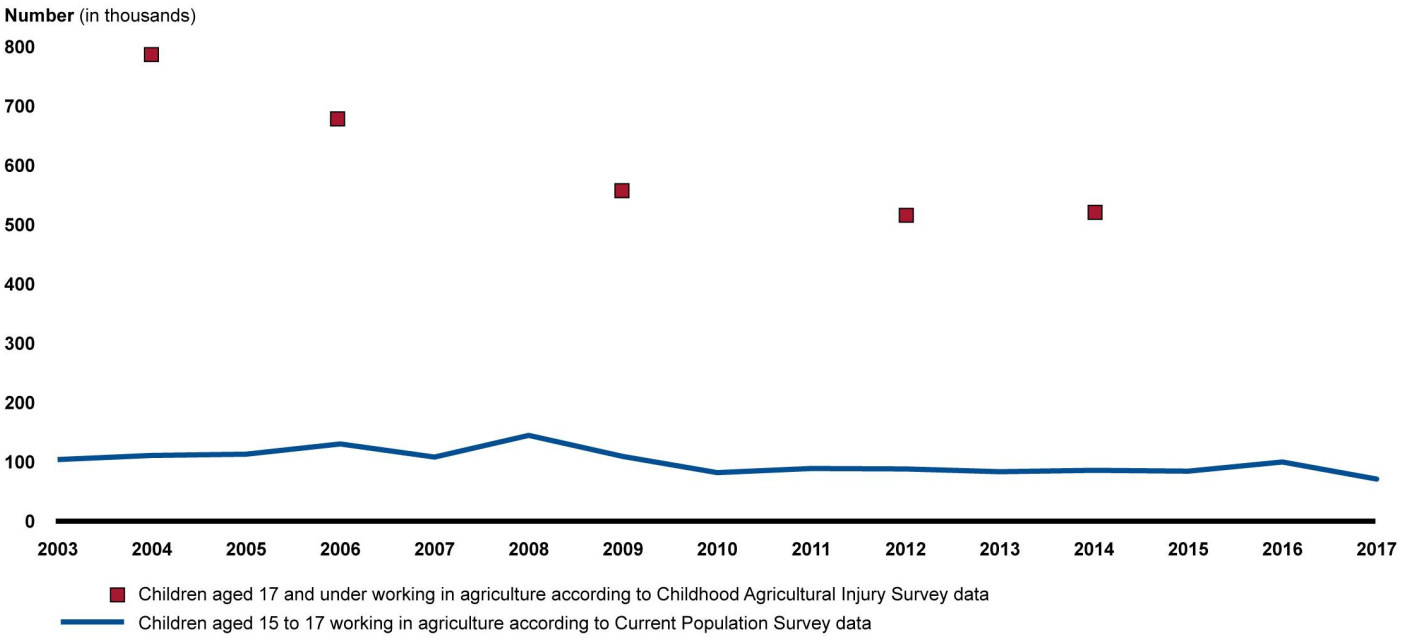
agriculture declined from an estimated 790,000 in 2004 to 524,000 in 2014 (see fig. 3).[65] The CAIS also collects information on children aged 17 and under working on U.S. farms who were members of the household ("working household children"). Our analysis of CAIS data indicate a substantial proportion of children working in agriculture are household children, which is a group that BLS officials stated is not fully represented in the CPS.[66] Our analysis indicates the number of working household children decreased from more than 590,000 in 2004 to 375,000 in 2014, the most recent year for which these data are available.[67] Further, about two-thirds of these working household children—an estimated 246,000—were aged 14 and under in 2014. See appendix VI for detailed information regarding the characteristics of children working on U.S. farms.

[65]These estimates have margins of error of 54,000 and 42,000, at the 95 percent confidence level, respectively.

[66]Our analysis of CAIS data indicates that in 2014, for example, more than 70 percent of working children aged 17 and under were working household youth. CAIS uses a different definition of household children from CPS. CPS counts as employed any child aged 15 or older who works 15 or more hours per week. For purposes of the CAIS, working household children are those who live and work on a farm owned by their parents, regardless of hours worked. CAIS collects data on hired labor (those working for pay), household labor (those living on the farm where they are working), and visitors (a visiting relative to the farm operation or a non-relative visitor).

[67]These estimates have margins of error at the 95 percent confidence level of 19,500 and 15,000, respectively. Our analyses of CAIS data also show that the proportion of working household children to hired children working on U.S. farms has remained relatively stable. For example, working household children comprised approximately 75 percent of all children working on farms in 2004, compared to approximately 71 percent in 2014.

Figure 3: Selected Federal Data on Children Working in Agriculture



Source: GAO analysis of Childhood Agriculture Injury Survey and Current Population Survey data. | GAO-19-26

Notes: The Childhood Agricultural Injury Survey was conducted in certain noncontiguous years and its estimates include information on children aged 17 and under who work in agriculture, including both hired workers and household workers (those living on the farm where they are working) or visitors (a visiting relative to the farm operation or a non-relative visitor) regardless of their pay status or household status. The Current Population Survey is an ongoing monthly survey and its estimates include children aged 15 to 17 working in agriculture and do not capture unpaid household workers working fewer than 15 hours per week. The estimates for CPS in the figure represent working children in summer months, which we defined as June, July, and August. CPS estimates have relative standard errors of 27 percent or less. The estimates for CAIS have relative standard errors of 10 percent or less.

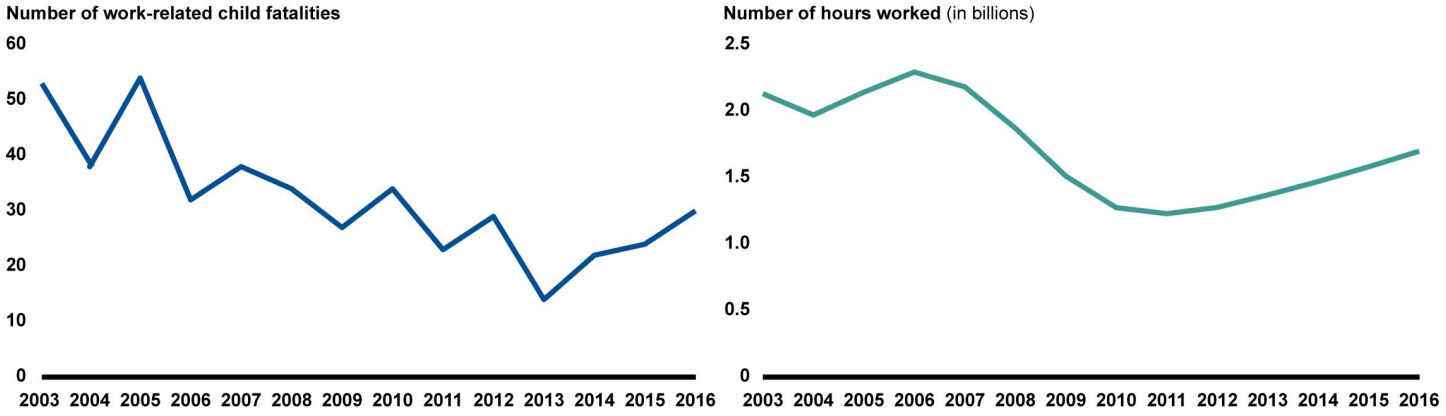
Children Working in Agriculture Comprised the Majority of Work-Related Child Fatalities, and Data on Work-Related Injuries Are Incomplete

BLS Data Indicate Work-Related Child Fatalities Have Generally Declined, and Agricultural Occupations Account for the Largest Percentage of Fatalities

According to BLS's Census of Fatal Occupational Injuries data, the annual number of work-related child fatalities has declined overall since 2003. More specifically, BLS data show a decline from 53 fatalities among

children aged 17 and under in 2003 to 14 fatalities in 2013, and then an increase to 30 fatalities in 2016, the most recent year of available data. This trend was also similar to the trend in the number of working children (as presented in fig. 1) and the number of hours worked by children aged 15 to 17 during the same time period (see fig. 4).

Figure 4: Number of Work-Related Fatalities to Children Aged 17 and Under and Estimated Number of Hours Worked by Children Aged 15 to 17, 2003 to 2016



Source: GAO analysis of Census of Fatal Occupational Injuries data (fatalities data) and Current Population Survey data (hours worked data). | GAO-19-26

Notes: The number of annual hours worked is for children aged 15 to 17 because the Current Population Survey does not collect information for working children aged 14 or under. BLS officials stated the agency does not have research regarding standard errors for estimated total hours worked for 15- to 17-year-olds, and did not provide guidance on how to calculate such standard errors. GAO did not calculate the standard errors for the number of annual hours worked.

Our analysis of Census of Fatal Occupational Injuries data found that certain groups of working children sustained disproportionately high percentages of work-related fatalities from 2003 to 2016. For example, while we estimated fewer than 5.5 percent of working children worked in agriculture in any year from 2003 to 2017,[68] this population sustained more than 50 percent of all work-related child fatalities from 2003 to 2016. According to available BLS data, fatalities were also disproportionately high among children aged 15 and under, children working in a family business, and among children working for an employer with 10 or fewer workers (see table 5).

[68]The relative standard errors for all years during the period were less than 25 percent.

Table 5: Percentage of Work-Related Child Fatalities from 2003 to 2016 Compared to Estimated Percentage of Children Working in Selected Categories, 2017 (Categories Are Not Mutually Exclusive)

Category	Number of work-related child fatalities, 2003 to 2016	Percentage of that category of work-related fatalities to total fatalities	Estimated child workforce percentage, 2017
Children working in agriculture	237[a]	52	3[b]
Children aged 15 and under	197	44	7[b]
Children working in a family business	192	42	3[c]
Children working for employer with 10 or fewer workers	259[d]	76	Not available[e]

Source: GAO analysis of Census of Fatal Occupational Injuries and Current Population Survey (CPS) data. | GAO-19-26

Notes: Estimates for children working in agriculture, children aged 15 and under, children working in a family business in the "Estimated child workforce percentage, 2017" column are for summer months—which we defined as June, July and August—and have relative standard errors of 25, 9, and 18 percent, respectively. For 2017 non-summer months, our estimates of working youth aged 15 to 17 indicate 3 percent of children worked in agriculture, 4 percent were 15-year-olds, and 3 percent were children working in a family business. These estimates have relative standard errors of 25, 8, and 15 percent, respectively.

[a]This data point is for children aged 17 and under. For children aged 15 to 17 working in agriculture, there were 125 work-related fatalities from 2003 to 2016. Accordingly, fatalities to children working in agriculture accounted for 40 percent of all fatalities to children aged 15 to 17 during the time period.

[b]CPS data do not include information on children aged 14 or younger. Thus, the estimate for children working in agriculture is for working children aged 15 to 17, and the estimate for working children aged 15 and under is for working 15-year-olds.

[c]This estimate is for unpaid children aged 15 to 17 working in a family business and self-employed children. According to BLS, self-employed workers consist of individuals who are family members working in a family business, as well as those who are self-employed, self-employed contractors, and partners or owners of an unincorporated business, professional practice, or farm. BLS's estimate for work-related child fatalities working in a family business includes paid and unpaid youth.

[d]Employer size was unknown for 25 percent of child fatalities.

[e]We analyzed CPS Annual Social and Economic Supplement data and found that, of working children, an estimated 474,000 out of 2.4 million (or about 20 percent of) employed 15 to 17-year-olds work at firms employing 9 or fewer workers, and an estimated 604,000 out of 2.4 million (or 25 percent of) working 15 to 17-year-olds worked at firms employing 10 to 49 workers in 2016. These estimates have margins of error of about 58,000 and 71,000, respectively. We were unable to estimate the percentage that worked at firms employing 10 or fewer workers because the Annual Social and Economic Supplement survey does not collect or capture that specific data point.

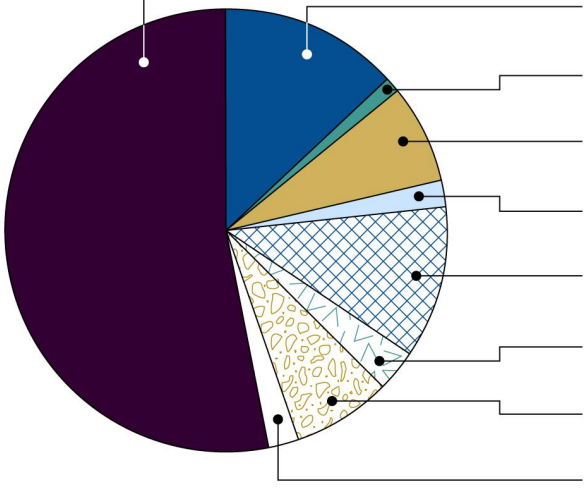
Children working in agriculture

Although children working in agriculture make up a small proportion of working children,[69] we found that from 2003 to 2016, 52 percent of work-

[69]In 2017, children aged 15 to 17 comprised an estimated 2.9 percent of the working child population in summer months, and an estimated 2.6 percent in non-summer months, according to our analysis. Both of these estimates have relative standard errors of 25 percent. BLS does not provide information on children aged 14 or under who are working, and thus might be employed in agriculture.

related fatalities among children aged 17 and under were in agriculture,[70] with 32 percent in crop agriculture specifically. The construction, mining, quarrying, and oil and gas extraction industries accounted for 13 percent of child fatalities, as shown in figure 5. For detailed information on work-related child fatalities by industry, see appendix VII.

Figure 5: Work-Related Child Fatalities, by Industry, 2003 to 2016



Industry	Number	Percentage
Agriculture	237	52
Construction and mining[a]	59	13
Educational and health services	5	1
Leisure and hospitality	34	8
Manufacturing	10	2
Professional, business, and other services	50	11
Transportation and warehousing	12	3
Wholesale and retail trade	33	7
Government, including public administration	11	2

Source: GAO analysis of Census of Fatal Occupational Injuries data. | GAO-19-26

Notes: The total number of fatalities to children aged 17 and under from 2003 to 2016 was 452. The sum of individual categories totals 451. According to Bureau of Labor Statistics officials, categories may not sum to totals due to the exclusion of unpublishable data. Percentages of major categories do not total 100 due to rounding and the exclusion of unpublishable data. The professional, business, and other services category includes information, professional and business services, and other services except public administration. The government category includes federal government, local government, and public administration.

[a]Construction and mining industry also includes quarrying, and oil and gas extraction.

[70]Agriculture, as classified in the North American Industry Classification System which is used by the CFOI, includes non-crop agriculture, for example the raising of livestock, fish, or other activities such as logging; it also includes crop agriculture, for example the planting and harvesting of fruits, vegetables, and other foods. See appendix VII for more detailed information regarding work-related child fatalities by sub-industry.

Children aged 15 and under

As shown in table 6, children aged 15 and under comprised 44 percent of the work-related child fatalities from 2003 to 2016, and those aged 14 and under comprised 31 percent of fatalities during the same period. We estimated that children aged 15 comprised 7 percent of the child workforce (aged 15 to 17) during summer months, and 4 percent during non-summer months in 2017.[71]

Table 6: Number and Percentage of Work-Related Child Fatalities, by Age, 2003 to 2016

Age	Number of fatalities	Percentage of work-related child fatalities	Cumulative percentage
12 and under	73	16	16
13	25	6	22
14	44	10	31
15	55	12	44
16	110	24	68
17	145	32	100
Total	**452**	**100**	

Source: GAO analysis Census of Fatal Occupational Injuries (CFOI) data. | GAO-19-26

Notes: The cumulative percentage for children aged 14 and under is more precisely 31.4 percent. Summing the individually rounded percent fatalities to children aged 12 and under, 13 and under, and 14 and under would total 32 percent, but we are presenting the cumulative percentage for work-related fatalities to children aged 14 and under as 31, based on the original, non-rounded data.

Children working in a family business

Children working in a family business accounted for about 3 percent of all working children, but they represented about 42 percent of all work-related fatalities to children aged 17 and under.[72]

[71]These estimates have relative standard errors of 9 percent and 8 percent, respectively. Further, children employed in agriculture comprised 74 percent of work-related fatalities involving children aged 15 and under, according to BLS data.

[72]This estimate is for unpaid children aged 15 to 17 working in a family business and self-employed children. According to BLS, self-employed workers consist of individuals who are family members working in a family business, as well as those who are self-employed, self-employed contractors, and partners or owners of an unincorporated business, professional practice, or farm. BLS's estimate for work-related child fatalities working in a family business includes paid and unpaid children.

Children working for employers with 10 or fewer workers

This group accounted for 76 percent of the work-related child fatalities for which employer size was reported from 2003 to 2016, according to BLS data. According to BLS officials, in 25 percent (113 out of 452) of BLS's reported work-related child fatalities, the size of establishment is unknown. Using CPS Annual Social and Economic Supplement data, we estimated that in 2016, 20 percent of working children aged 15 to 17 were working at firms employing 9 or fewer workers and an estimated 25 percent worked at firms employing 10 to 49 workers.[73]

We also analyzed the demographic characteristics of working children aged 17 and under who incurred work-related fatalities from 2003 to 2016. Our analysis of BLS data indicated that boys incurred 87 percent of these fatalities.[74] In addition, of those work-related fatalities that were reportable by race and ethnicity,[75] Hispanic children incurred 20 percent of them, and white only children incurred 75 percent. Further, transportation incidents, such as a work-related collision on or off a roadway with a motorized vehicle, were the cause of the highest number of work-related fatalities to children aged 17 and under. See appendix VIII for detailed results of these demographic analyses.

The Estimated Number of Work-Related Injuries and Illnesses to Children Has Declined, but Data Have Limitations

The two primary sources of nationwide data on child work-related injuries and illnesses indicate similar trends in the number of injuries and illnesses since 2003, yet these sources differ substantially in the magnitude of their estimates and methodologies for determining the

[73]We were unable to estimate the percentage that worked at firms employing 10 or fewer workers because the ASEC survey does not collect or capture that specific data point. BLS officials stated that there may be some quality concerns with the employer size variable in the Annual Social and Economic Supplement—which is a household survey—and that information regarding employer size would be better captured in a survey of employers.

[74]Because some data do not meet publication criteria, BLS reported gender information for 451 of the 452 work-related fatalities to children from 2003 to 2016.

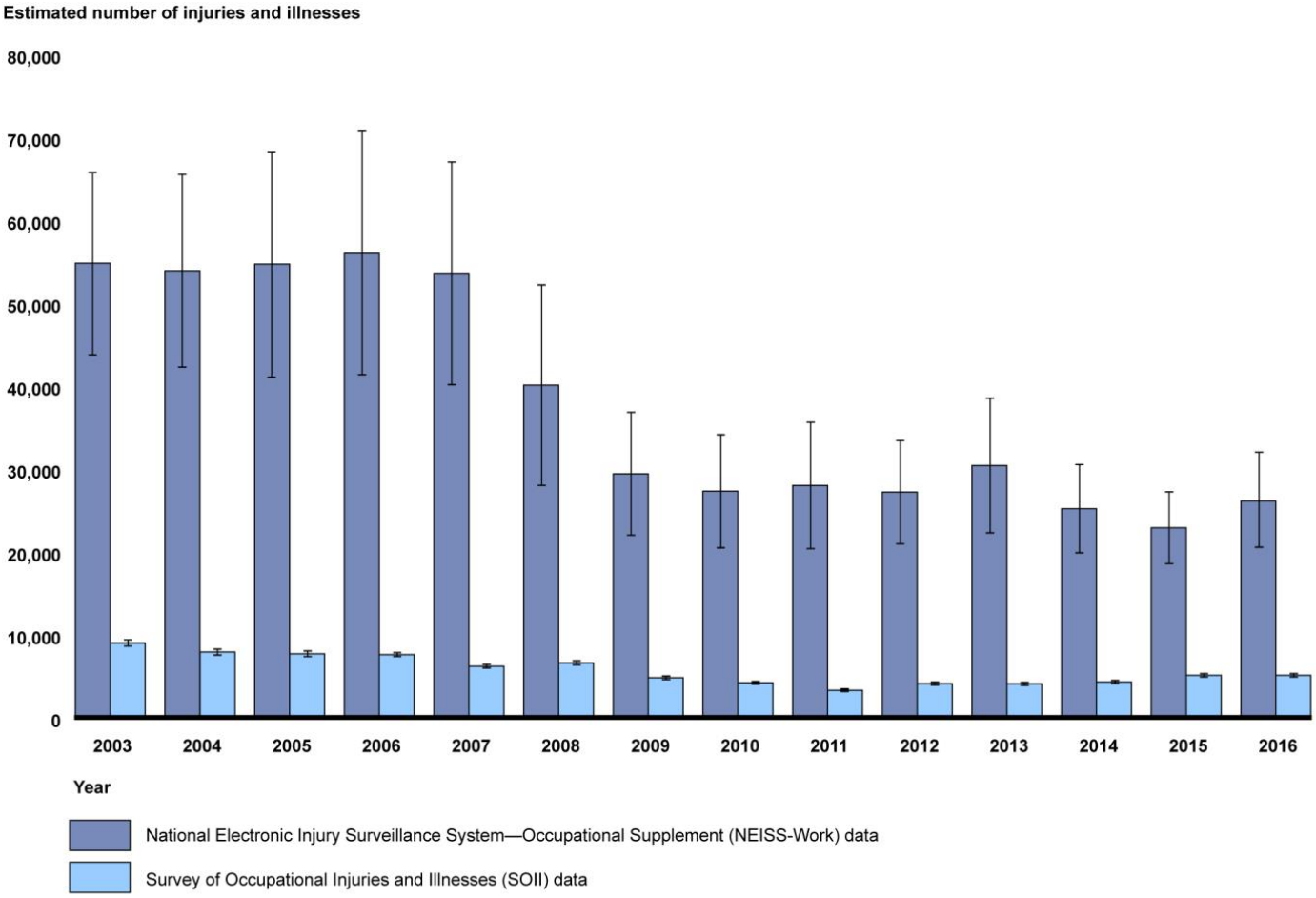
[75]Because some data do not meet publication criteria, BLS reported race and ethnic information for 451 of the 452 work-related fatalities to children aged 17 and under from 2003 to 2016.

number of working children incurring such injuries or illnesses each year.[76] For example, our analysis of both BLS's Survey of Occupational Injuries and Illnesses and NIOSH's National Electronic Injury Surveillance System—Occupational Supplement data sets indicates a decrease in the number of work-related injuries and illnesses that children incurred from 2006 to about 2010. BLS's estimates continue to decrease in 2011, and then rise from 2012 through 2016. In contrast, NIOSH estimates do not have a discernable increase from 2011 through 2016. However, as shown in figure 6, NIOSH's estimates of the number of work-related childhood injuries and illnesses are generally more than 5 times higher than BLS's estimates.[77]

[76]The two primary sources of data for child work-related injuries and illnesses, as detailed in appendix I, are the Survey of Occupational Illness and Injuries, for which BLS collects information from a sample of employer records to estimate incidence rates and counts of workplace injuries and illnesses, and the National Electronic Injury Surveillance System-Occupational Supplement, for which NIOSH collects data from a sample of U.S. hospital emergency departments on civilian workers who were injured on the job.

[77]NIOSH's National Electronic Injury Surveillance System-Occupational Supplement estimated the number of work-related injuries to children aged 17 and under in 2016 to be 26,300, with an associated margin of error at the 95 percent confidence level of +/-5,800. The margin of error of the 2010 estimate at the 95 percent confidence level (27,300 mean estimate) is +/-6,900.

Figure 6: Estimated Number of Work-Related Injuries and Illnesses to Children Aged 17 and Under (National Institute for Occupational Safety and Health) and Aged 15 to 17 (Bureau of Labor Statistics), 2003 to 2016



Source: GAO analysis of Department of Health and Human Services' National Institute for Occupational Safety and Health (NIOSH) National Electronic Injury Surveillance System—Occupational Supplement (NEISS-Work) data and Bureau of Labor Statistics (BLS) Survey of Occupational Injuries and Illnesses (SOII). | GAO-19-26

Notes: BLS's SOII data set is more specifically for children aged 15 to 17. BLS's Survey of Occupational Injuries and Illnesses data presented here includes injuries or illnesses that resulted in one day of missed work. As shown in appendix IX, BLS also provided estimates for work-related injuries and illnesses to children aged 15 and under, which ranged from a low of 90, or 0.01 percent of all work-related injuries and illnesses resulting in a day way from work, to a high of 420, or 0.04 percent of all work related injuries and illnesses to children resulting in a day away from work. NIOSH's National Electronic Injury Surveillance System-Occupational Supplement (NEISS-Work) data set counts injuries to workers who sought treatment in one of the NEISS-Work sampled emergency departments for an occupational injury or illness. BLS officials stated that about 5 percent of its estimated injuries and illnesses to adults and children in private industry, and local and state government in 2016 were illnesses. NIOSH technical information notes that NEISS-Work data from 2003 to 2014 include illnesses such as those that began at work (heart attacks or stroke), chronic conditions, and exacerbated long-term injuries; it estimates 5 to 10 percent of all cases were such illnesses. NEISS-Work data from 2015 on do not capture most illnesses. Margins of error for estimates at the 95 percent confidence level are shown by chart whiskers. For more details, see appendix IX.

Some of the differences in the estimates may be related to how the agencies collect the data. Specifically, BLS relies on surveyed employer records to collect its data—including detailed demographic data, such as the injured person's age—for individual cases serious enough to cause workers to miss at least one day of work.[78] It provides annual estimates for the number of work-related injuries and illnesses to children aged 17 and under, and separately for children aged 15 and under.[79] NIOSH estimates, based on emergency room records, include estimates for work-related injuries and illnesses to children aged 17 and under, and separately for children aged 14 and under. See appendix IX for annual BLS and NIOSH estimates of work-related injuries and illnesses to children.

BLS data indicate that the median number of days that children missed work due to work-related injuries and illnesses remained relatively constant from 2003 to 2016. According to BLS estimates, 42 percent of the work-related injuries and illnesses to children aged 17 and under in 2016 required them to miss 1 or 2 days of work, and about 10 percent of the injuries during this period required them to miss 31 or more days. Unlike fatalities data, BLS injury and illnesses data show that in 2016, the industry that employed the most children aged 15 to 17—leisure and hospitality—had the most work-related injuries and illnesses to children aged 17 and under. For more detailed results, see appendix X.

Injuries to Children Working in Agriculture

NIOSH Childhood Agricultural Injury Survey (CAIS) data estimated that there were 4,774 work-related injuries to children aged 17 or under on

[78]BLS also collects information regarding a broad array of work-related injuries or illnesses from surveyed employers. It does not capture detailed case and demographic information regarding individual cases, such as the injured person's age, gender, and race, unless the individual case is one that is serious enough to cause a worker to miss at least one day of work.

[79]BLS published some estimates for work-related injuries to 14-year-olds in certain years; for more information, see appendix IX. In October 2009, GAO found that disincentives for workers to report and for employers to record injuries affect the accuracy of BLS's injury and illness data. See GAO, *Workplace Safety and Health: Enhancing OSHA's Records Audit Process Could Improve the Accuracy of Worker Injury and Illness Data*, GAO-10-10 (Washington, D.C.: Oct. 15, 2009).

U.S. farms, based on a combined estimate of its 2012 and 2014 data.[80] CAIS data—which include both working household children aged 17 or under and children on farms employing 10 or fewer workers—also indicate that about half of the work-related injuries to children on U.S. farms are to those aged 14 and under (see table 7).

Table 7: National Estimates of Work-Related Injuries to Children Aged 17 and under on U.S. Farms, by Age Group

Category	2004 and 2006 combined data on injuries (margin of error)	2012 and 2014 combined data on injuries (margin of error)
Aged 10 and under	2,400 (+/-1,085)	742[a] (+/-458)
Aged 14 and under	5,385 (+/-1,611)	2,420 (+/-940)
Aged 15 to 17	5,067 (+/-1,346)	2,353 (+/-823)
Aged 17 and under	10,452 (+/-1,999)	4,774[b] (+/-1,191)

Source: Source: GAO analysis of Childhood Agricultural Injury Survey (CAIS) data for 2004, 2006, 2012, and 2014. | GAO-19-26

Notes: CAIS defines an injury as being any nonfatal traumatic event occurring on the farm operation resulting in at least 4 hours of restricted activity, or requiring professional medical treatment. CAIS defines a work injury as being any injury that occurred while performing work or chores on the farm (associated with the farm business), regardless of whether the work was performed for pay. NIOSH combined 2 years of CAIS data to produce an estimate with less than 33 percent relative standard error, and thus within NIOSH's standards for reporting.

[a]Estimate should be interpreted with caution because it has relative standard error of 32 percent.

[b]Number does not total to sum of estimated number of children aged 14 and under and 15 to 17 due to rounding.

Further, CAIS data indicate that a substantial portion of work-related injuries to children on U.S. farms are incurred by children working in the

[80]CAIS defines an injury as being any nonfatal traumatic event occurring on the farm operation resulting in at least 4 hours of restricted activity, or requiring professional medical treatment. CAIS defines a work injury as being any injury that occurred while performing work or chores on the farm that was associated with the farm business, regardless of whether the work was performed for pay. NIOSH combined 2 years of CAIS data to produce an estimate with less than 33 percent relative standard error, and thus within NIOSH's standards for reporting.

farm owner's household, rather than children hired or visiting the farm.[81] Table 8 provides further details.

Table 8: National Estimates of Work-Related Injuries to Household and Non-Household Children Aged 17 or under on U.S. Farms

Category	2004 and 2006 combined data injuries (margin of error)	2012 and 2014 combined data injuries (margin of error)
Household children aged 17 or under	4,722 (+/-1427)	3,258 (+/-1013)
Non-household children aged 17 or under	1,022 (+/-531)	1,516 (+/-706)

Source: GAO analysis of Childhood Agricultural Injury Survey (CAIS) data for 2004, 2006, 2012, and 2014. | GAO-19-26

Notes: While the estimated number of household children aged 17 or under incurring work-related injuries appears to decrease, and the estimated number of non-household children aged 17 or under incurring work-related injuries appears to increase from the 2004-2006 to 2012-2014 reporting periods, we cannot with confidence state that the trends are statistically reliable and instead note that there are no discernible trends. NIOSH combined 2 years of CAIS data to produce an estimate with less than 33 percent relative standard error, and thus within NIOSH's standards for reporting. CAIS defines a household worker as a member of a farm operator's household (farm operator, his/her spouse, child/step child).

In contrast to NIOSH's Childhood Agricultural Injury Survey, BLS's Survey of Occupational Illnesses and Injuries does not include data on two substantial groups of children working in agriculture: household children aged 17 or under and children working on farms employing 10 or fewer workers.[82]

BLS's estimates of the proportion of work-related injuries and illnesses incurred by children working in agriculture are lower than the proportion of work-related child fatalities incurred by children working in agriculture. For example, BLS estimated that in 2016, children working in agriculture incurred about 1 percent of the estimated 4,760 injuries and illnesses to children in the workplace across all industries—while 52 percent of all work-related fatalities occurred among children working in agriculture

[81]CAIS defines a household worker as a member of a farm operator's household (farm operator, his/her spouse, child/step child); a visitor as a visiting relative to the farm operation or a non-relative visitor; and a hired worker as being a paid worker or laborer hired directly by a farm operator. NIOSH officials we interviewed stated that they did not plan to conduct another CAIS and that compiling a sample large enough to meet statistical reporting thresholds as they have done in the past would result in a prohibitive cost.

[82]According to the U.S. Department of Agriculture's Census of Agriculture, as of 2012, farms employing 10 or fewer hired workers employed about half of all agricultural workers.

(from 2003 to 2016).[83] BLS officials told us that they did not have a definitive explanation for this difference, but noted that unlike its fatalities data set, many children working in agriculture were outside the scope of the agency's injury and illness data set—such as those working for agricultural employers with 10 or fewer workers or household workers.[84] BLS officials also stated that the nature of work-related injuries causing fatalities may be different than those resulting in nonfatal injuries; however, they said they did not know of any research examining this issue.

BLS officials said the agency has begun exploring ways to enhance the measurement and counting of work-related injuries and illnesses in its Survey of Occupational Injuries and Illnesses data and is conducting a pilot Household Survey of Occupational Injuries and Illnesses for 2017 and 2018, which surveys members of a household rather than employers. They expect results to be available at the conclusion of fiscal year 2019. The current pilot survey is aimed at determining the feasibility of fielding a statistically reliable sample of households with workers who may have experienced work-related injuries and illnesses. The pilot's scope includes all workers in the United States 18 years and older who worked for pay or profit in the previous year. However, the pilot does not measure injuries and illnesses to children aged 17 and under, including household children and working children on farms employing 10 or fewer workers.[85]

BLS, within DOL, is the principal federal agency responsible for measuring labor conditions.[86] Its mission is to collect, analyze, and disseminate essential economic information to support private and public decision making. BLS is responsible for producing accurate and statistically valid estimates of work-related injuries and illnesses at U.S.

[83]We chose to report the most current (2016) estimates of work-related injuries and illnesses to children; however, we also looked at estimates from 2003 to 2015.

[84]BLS officials told us that including data on such workers in its current employer-based Survey of Occupational Injuries and Illnesses would require obtaining approval from the Office of Management and Budget and publishing a notice in the *Federal Register*. The Paperwork Reduction Act provides that agencies may not conduct or sponsor the collection of information from 10 or more non-federal persons without first taking certain required steps, including allowing an opportunity for public comment and obtaining Office of Management and Budget approval, among other things. See 44 U.S.C. § 3507.

[85]BLS published some estimates for work-related injuries and illnesses to 14-year-olds in certain years, as shown in appendix IX.

[86]See generally 29 U.S.C. §§ 1-8.

workplaces.[87] BLS injury and illness data collected via its Survey of Occupational Injuries and Illnesses are used by federal agencies and others to understand trends in worker health and safety. Federal standards for internal control state that agencies should use quality information to achieve agency objectives.[88] These standards define quality information as appropriate, current, complete, accurate, accessible, and provided on a timely basis. BLS injury and illness data are not complete because they do not measure certain worker populations, including child household workers and those employed on farms with 10 or fewer workers. Without evaluating the feasibility of measuring injuries and illnesses to the aforementioned worker populations upon the completion of its pilot, DOL is missing opportunities to more accurately quantify injuries and illnesses to children, which could better inform its compliance and enforcement efforts. Further, BLS will not know the cost of collecting this information and whether it should explore other ways to get information on work-related injuries and illnesses to vulnerable child workers. BLS officials told us in an interview that, after completing the household survey pilot at the end of fiscal year 2019, they could consider the feasibility of enhancing reporting on certain populations that are currently not measured in the pilot.

[87]Under the OSH Act, the Secretary of Labor is required to "compile accurate statistics on work injuries and illnesses which shall include all disabling, serious, or significant injuries and illnesses, whether or not involving loss of time from work, other than minor injuries requiring only first aid treatment and which do not involve medical treatment, loss of consciousness, restriction of work or motion, or transfer to another job." 29 U.S.C. § 673(a).

[88]GAO, *Standards for Internal Control in the Federal Government*, GAO-14-704G (Washington, D.C.: September 2014).

DOL Uses a Strategic Enforcement Approach to Oversee Compliance with Federal Child Labor Law, but Some Limitations Exist

DOL's Child Labor Enforcement Approach Includes Targeted Investigations and Outreach, but It Has Not Evaluated These Efforts

DOL's Wage and Hour Division (WHD) uses a strategic enforcement approach to oversee compliance with the child labor provisions of the FLSA. This approach uses data to establish annual priorities and identify goals for investigations—agency-initiated (directed) and those initiated from complaints (complaint-based)—and compliance assistance, including outreach. Specifically, WHD uses data to create strategic initiatives, which include both enforcement and outreach activities, that focus on the working conditions of vulnerable workers, including children, and the industries that employ them.[89] Officials from WHD's national office told us they use complaint data from their internal investigation database (WHISARD) and CPS data to determine priority industries for outreach and investigations. In addition, WHD officials use federal data, such as CPS data, to assess labor market trends affecting vulnerable workers.[90]

Investigations

WHD officials told us that child labor is an enforcement priority and child labor complaints from the public—particularly those involving hazardous working conditions—are assigned to a WHD investigator for immediate action. For example, one WHD investigator described going to a worksite

[89]For purposes of its enforcement and compliance assistance efforts, WHD defines vulnerable worker populations as those who are at higher risk of exploitation by employers or less likely to submit complaints in response to employer violations of worker protections, such as workers with disabilities, young workers, agricultural workers, and workers with no private right to pursue remedies on their own behalf.

[90]Officials stated that priority industries are those with a high prevalence of minimum wage and overtime violations, and those in which workers experiencing violations are less likely to complain. Officials stated that WHD's priority industry list includes those industries employing children and those with historically high violations, such as retail, hospitality, and food service.

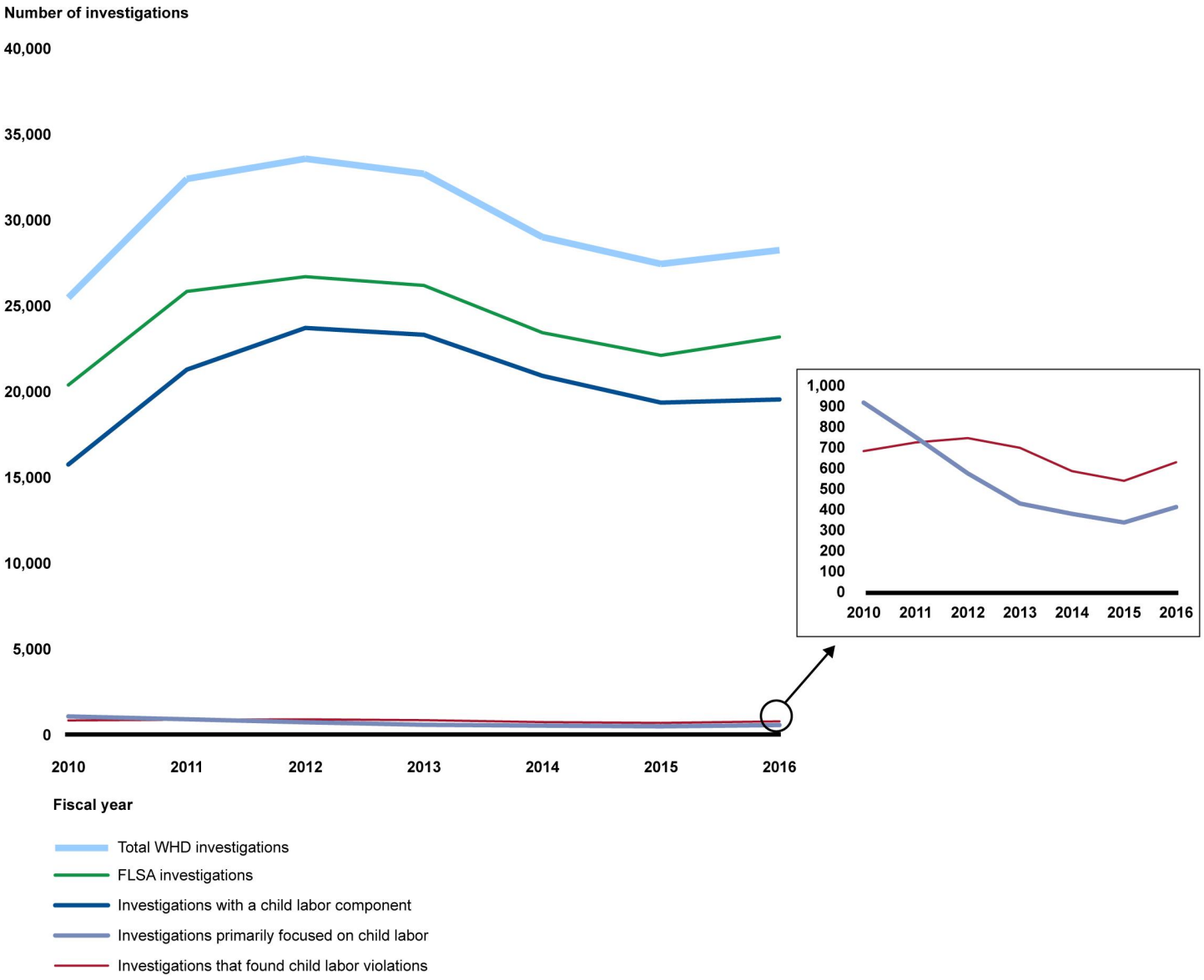
to conduct an investigation into a child labor complaint within 2 hours of receiving the complaint. In addition, WHD officials told us that investigators look for potential child labor violations in every full investigation they conduct under the FLSA.[91] For example, five of six WHD investigators we spoke with told us they include specific questions in their interviews with employers and workers, which are designed to uncover potential child labor violations during worksite visits. WHD guidance also instructs investigators to look for the presence of children and the pieces of equipment covered by hazardous occupations orders when conducting worksite visits.

WHD officials we interviewed said that, as of 2010, child labor had been incorporated within the agency's broader FLSA investigatory activity, and our analysis of WHISARD data indicates that there has been a general decline in its child labor-specific investigations since 2010. According to our analysis of WHISARD data, the trends in the number of FLSA investigations and the number of investigations with a child labor component generally aligned from fiscal years 2010 to 2016. During the same period, our analysis shows a decline in investigations primarily focused on child labor from fiscal years 2010 to 2015, with a slight increase in 2016 (see inset of fig. 7). Further, the number of investigations that found child labor violations stayed about the same, with a slight dip in fiscal years 2014 and 2015.[92]

[91]WHD registers each investigation for internal WHD tracking purposes under the specific act that is the focus of the investigation, but the investigation may also cover other acts that WHD is responsible for enforcing. WHD may conduct several types of investigations including full investigations, in which investigators look for child labor violations as one part of the investigation, or limited investigations, such as one focused primarily on enforcing the child labor provisions (or other provisions) of the FLSA. WHD may find child labor violations in all types of investigations.

[92]WHD may assess civil monetary penalties for child labor violations. The amount of the penalty depends on various factors, such as the size of the business and the gravity of the violations. WHISARD data indicate that the total amount of child labor civil monetary penalties assessed generally decreased from a high of $2.9 million for investigations concluded in fiscal year 2010 to a low of $1.4 million in fiscal year 2015. For investigations that concluded in fiscal year 2016, WHD assessed $1.9 million in child labor civil monetary penalties.

Figure 7: Wage and Hour Division (WHD) Investigation and Child Labor Violation Trends, Fiscal Years 2010 to 2016

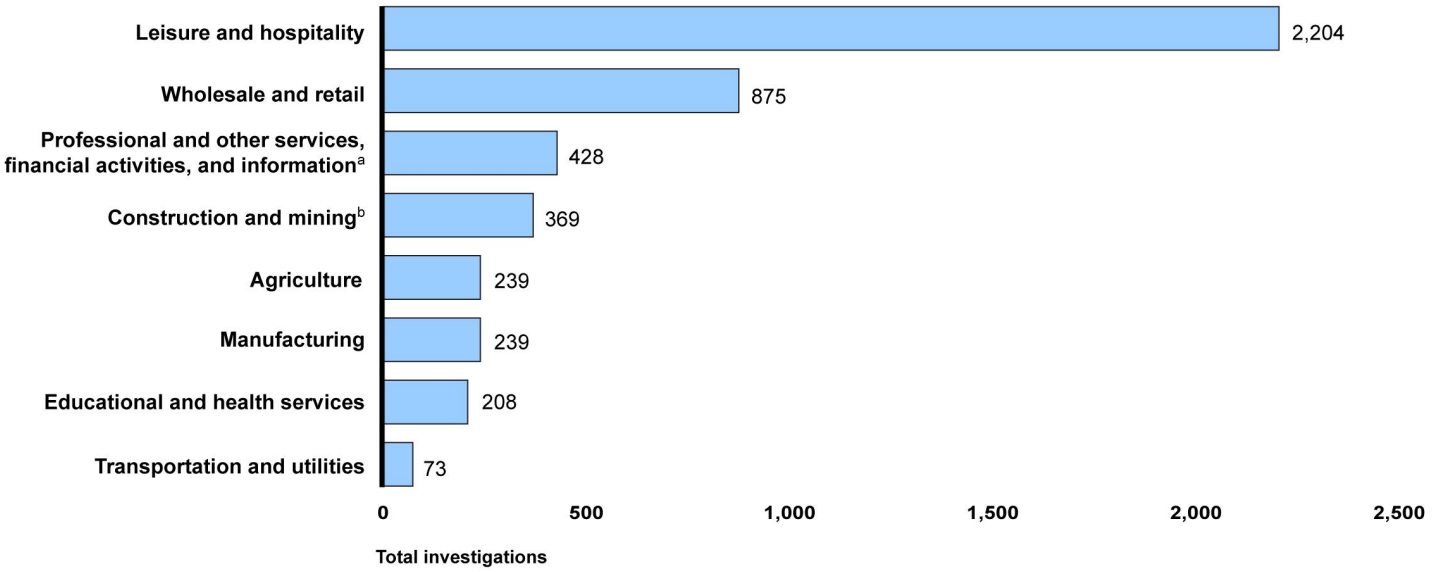


Source: GAO analysis of Wage and Hour Investigative Support and Reporting Database data. | GAO-19-26

Notes: In addition to the Fair Labor Standards Act (FLSA), WHD enforces multiple other statutes, such as the Family and Medical Leave Act, among others. In this figure, "total WHD investigations" includes all investigations conducted under the authority of any of the laws enforced by WHD. Any WHD investigation may include a child labor component if a WHD investigator checks for potential child labor violations during the investigation, and child labor violations may be found during any WHD investigation. Not all FLSA investigations include a child labor component because some are limited investigations, which may focus on enforcing other provisions of the FLSA.

Child labor violations have been found across many industries, often in investigations that are not specifically focused on child labor. As previously noted, the industries in which children most commonly work are leisure and hospitality; wholesale and retail; and professional and other services, financial activities, and information. According to our analysis of WHISARD data for fiscal years 2010 to 2016, WHD found most child labor violations in the leisure and hospitality and wholesale and retail industries (see fig. 8). As illustrated in figure 8, WHD also found violations across other industries including those that employ substantially fewer children, such as construction and mining.[93]

Figure 8: Wage and Hour Division Investigations That Found a Child Labor Violation, by Industry, Fiscal Years 2010 to 2016



Source: GAO analysis of Wage and Hour Investigative Support and Reporting Database data. I GAO-19-26

[a]Professional and other services, financial activities, and information includes professional, scientific, and technical services, among others, as well as finance and real estate, and information.

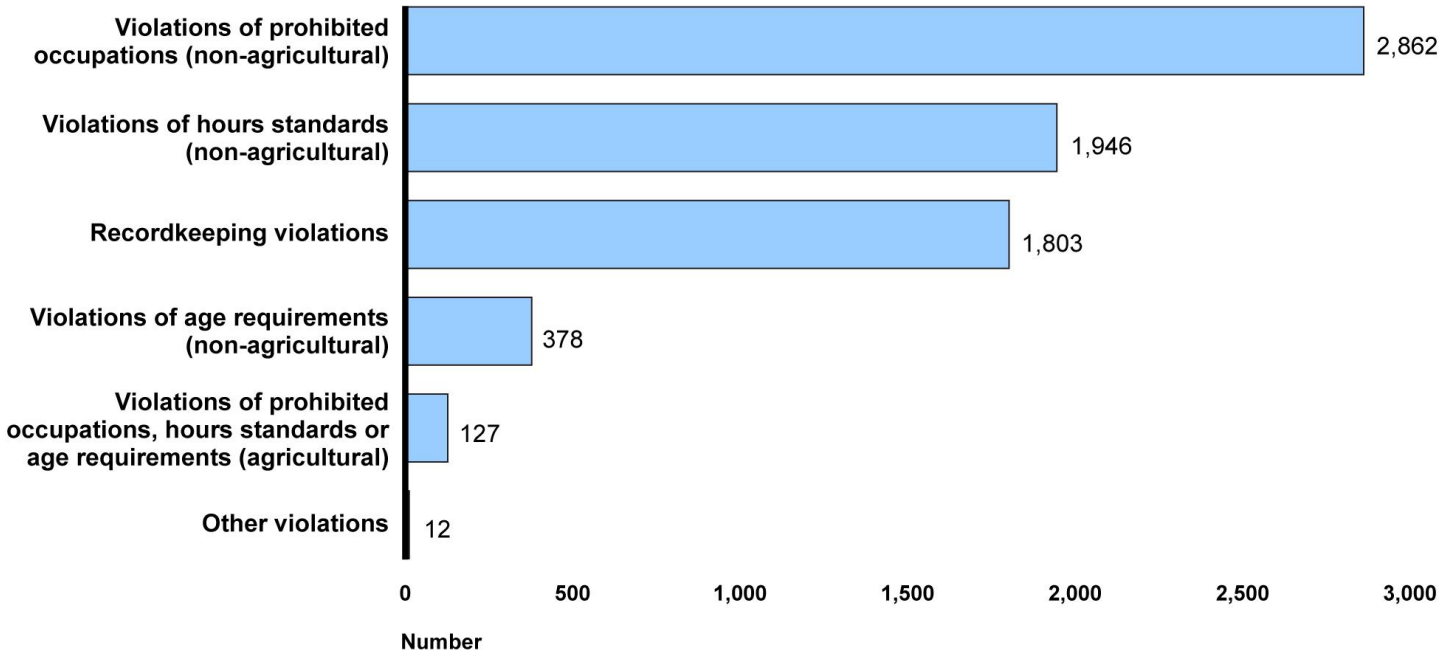
[b]Construction and mining also includes quarrying, and oil and gas extraction.

The most common child labor violations WHD found across all industries for this period were related to (1) hours standards, non-agricultural; (2) all prohibited occupations, non-agricultural; and (3) recordkeeping, such as

[93]Construction and mining also includes quarrying, and oil and gas extraction.

employer failure to maintain records of a child worker's date of birth (see fig. 9).[94]

Figure 9: Number of Investigations That Found Child Labor Violations across All Industries, by Type, Fiscal Years 2010 to 2016



Source: GAO analysis of Wage and Hour Investigative Support and Reporting Database data. | GAO-19-26

Notes: Categories are not mutually exclusive because an investigation may find more than one type of violation. The "other violations" category includes investigations that found violations for shipping of goods in interstate commerce that have been produced in violation of the child labor provisions, 29 U.S.C. § 212(a). "Other" and "recordkeeping" violations may be found in both agricultural and non-agricultural investigations. We also excluded 13 investigations that found a child labor violation but did not identify the type.

Outreach

WHD Community Outreach and Resource Planning Specialists support WHD's strategic enforcement approach in the field offices by conducting compliance assistance outreach to stakeholder groups associated with

[94]With respect to an employee subject to the FLSA's minimum wage provisions or both the minimum wage and overtime pay provisions, employers are required to maintain and preserve records containing certain information, including the employee's date of birth if the employee is under age 19. 29 C.F.R. § 516.2(a)(3).

WHD's priority industries.[95] These outreach and planning specialists aim to increase voluntary compliance with the child labor provisions of the FLSA and other worker protections. Outreach specialists shared examples of these efforts, such as providing child labor and FLSA presentations and materials to stakeholders, including associations representing employers or teachers, and disseminating information to high schools about DOL-approved apprenticeship programs and the applicable hazardous occupations orders and exemptions.

Outreach and planning specialists told us that they also stay informed about workplace conditions in the community, particularly those affecting children, through their outreach efforts. For example, one specialist told us that they contact stakeholders in a specific industry in part to gather information on potential violations and compliance issues while also raising awareness about WHD's enforcement role. Another outreach and planning specialist discusses child labor at interagency trainings held on farms, and has received some worker complaints at these events.

Over time WHD has emphasized the importance of its outreach efforts related to child labor in agriculture to varying degrees. In 2012, when DOL withdrew its proposed revisions to the agricultural child labor regulations, DOL stated that it would conduct outreach to agricultural stakeholders, such as professional farming organizations.[96] In addition, from fiscal years 2011 to 2014, WHD gave explicit guidance to field offices to incorporate child labor-related efforts in agriculture.

However, WHD has not included child labor-related outreach efforts in agriculture in its guidance to the field since fiscal year 2014, and officials could not identify other directives asking its field staff to focus more on child labor in agriculture. Further, five of the six field office outreach and planning specialists we interviewed could not identify WHD agriculture outreach conducted specifically in response to the 2012 proposed rule

[95]In addition to the national office, WHD operates offices at the regional, district, area, and field levels. For the purposes of this report, we generally refer to all WHD offices outside of the national office as "field offices," unless otherwise noted.

[96]Child Labor Regulations, Orders and Statements of Interpretation; Child Labor Violations—Civil Money Penalties, 77 Fed. Reg. 31,549 (May 29, 2012).

withdrawal.[97] While WHD established a metric for the number of outreach events involving child labor in 2018, it has not developed metrics and associated targets for a desired level of child labor outreach in agriculture, where our analysis of federal data shows a disproportionate amount of injuries to and fatalities of working children. Federal internal controls state that management should define objectives clearly to enable the identifications of risks, such as by defining objectives in specific and measurable terms to enable the design of internal control for related risks. Without establishing metrics and associated targets for child labor-related outreach in agriculture, WHD may not be effectively addressing the risk faced by children working in agriculture or helping to reduce their injuries and fatalities.

In addition, WHD has not conducted an evaluation of the effectiveness of its overall child labor enforcement approach since implementing the strategic enforcement program in 2010, which would allow WHD to draw conclusions about the impact or outcomes of outreach and enforcement activities on employers or working children. WHD officials said that they have used a variety of tools and techniques to evaluate progress and guide continuous program improvement, such as developing communities of practice across field offices. WHD has also had a performance metric for child labor in place from fiscal year 2011 to 2017, which assessed the extent to which WHD investigators checked for child labor violations during an investigation.[98] However, this metric would not allow WHD to assess whether its child labor enforcement strategies were achieving their desired outcomes, nor would it allow WHD to determine the extent to which it was investigating establishments where substantial numbers of

[97]In July 2018, WHD officials provided us with the number of agriculture outreach events from fiscal year 2011 to fiscal year 2015. However, they were not able to identify which of these events focused on child labor. WHD officials stated that, prior to fiscal year 2017, WHD field staff may not have added a secondary “child labor” designation to agricultural outreach, because they usually cover child labor during agricultural outreach presentations. As a result, we were not able to accurately assess the relevance and the meaning of the data provided for child labor outreach in agriculture from fiscal years 2011 to 2015.

[98]In fiscal year 2011, WHD identified two primary performance metrics for child labor: (1) the number of investigations in which child labor is examined, and (2) the percent of enforcement time devoted to child labor. From fiscal years 2012 to 2017, WHD identified one primary performance metric for child labor: the percent of investigations in which child labor is examined.

children work.[99] Under federal standards for internal control, management should design control activities to achieve objectives and respond to risks, such as by comparing actual performance to planned or expected results and analyzing significant differences.[100] Without developing additional performance metrics, or other measures specific to its child labor enforcement approach, WHD cannot determine whether its investigations are conducted at establishments where children are likely to be working, and effectively targeting its limited resources.

WHD Incorporates Data into Its Child Labor Compliance Strategies

WHD aims to supplement its internal investigation data with external data—including state, local, and other federal data sets—to identify compliance targets for its strategic enforcement approach. According to WHD officials, field offices plan initiatives at the beginning of the fiscal year to allocate resources for investigations and outreach. WHD directs field offices to use a range of evidence, including data, to develop these initiative plans, which reflect where each office expects to have the greatest impact, including finding violations.

WHD internal investigation data

According to WHD officials, they have used trend data from WHISARD, based on past investigation data patterns, to determine future enforcement and compliance activity. However, WHD national office officials we interviewed said WHISARD is not suited for targeting future enforcement action because, as an administrative database, it appropriately reflects past decisions and outcomes that are not generalizable to the general population. Further, officials told us that WHISARD should not be used for predictive enforcement planning as it does not describe current labor market conditions and anticipate future labor trends. However, WHD field staff in five of the six district offices we

[99]In 2017, DOL's Chief Evaluation Office contracted for an external evaluation examining the efficiency and effectiveness of WHD's overall enforcement approach and compliance assistance outcomes. DOL officials told us that this evaluation will not be examining outcomes specific to child labor, as WHD intends to apply any insights gained from the evaluation into its compliance assistance across all of its program areas.

[100]GAO-14-704G.

reviewed told us that they partly rely on WHISARD data for developing enforcement and compliance targets.

State and local data

To supplement WHISARD data, WHD has been using external data sources to inform enforcement and compliance planning since approximately 2009. In addition, WHD national office officials reported creating a data team in 2016 to implement multiple data strategies for the agency, including the use of external data sources for enforcement planning. This data team provides data training and other support services to field staff, such as identifying data sources available to answer research questions, according to WHD officials.

WHD's outreach and planning specialists use information from other data sources—including stakeholders—to help identify enforcement and compliance targets in local field offices. For example, one specialist told us that some of the data sources they use for strategic planning and developing initiatives include (1) local economic data, (2) information from community stakeholders, (3) reports from industry groups and employer associations, and (4) discussions with business roundtables. Another outreach and planning specialist told us they use workplace injury data collected by a state agency to monitor trends in demographic characteristics and employing industries. The specialist said they used these data to inform the field office's decision to focus on the local restaurant and hospitality industry. In two districts, outreach and planning specialists told us they collaborate with local educational stakeholders, such as an association representing high school employment counselors, to identify where children are working and inform local strategic efforts for child labor compliance.

Other federal data

Some WHD planning staff also use other federal data sources, such as BLS data sets, to identify enforcement and compliance targets. One outreach and planning specialist we met with uses federally compiled county specific data from the Census Bureau to assess the local prevalence of different industries to help inform the district office's strategic enforcement. These data in conjunction with BLS data sets facilitated efforts to monitor local employment trends in traditional low-wage industries—such as retail and food service—overall as well as to track emerging trends in the local labor market. One WHD region is piloting a team of regional data experts that identifies and reviews federal

data sets, among others, and helps staff incorporate useful data into their work. WHD officials also stated that they have reviewed BLS injury and illness data for general information on industries where children are being hurt, but the survey's sample size limits WHD's ability to use the data for more specific information on injuries and illnesses to working children. As noted earlier in the report, the BLS injury and illness data has some limitations regarding data on working children, including those working in agriculture, and exploring ways to more comprehensively measure injuries and illnesses to children could inform WHD's strategic approach on how to focus their compliance and enforcement efforts.

WHD has recently begun providing training to key planning staff on the use of external data sources. WHD national office officials told us that in order to encourage field staff to use external data more consistently; they intend to offer more training on available external data sources. In addition, WHD officials stated that the data resources used by each of WHD's five regions may vary based on the different competencies of field staff in terms of analyzing and using external data. As part of its planning for fiscal year 2019, WHD provided training on the use of external data in June 2018, and officials stated that training on external data sources would evolve as field office staff and WHD officials learn of promising practices with data.

WHD Does Not Consistently Collaborate with the Occupational Safety and Health Administration in Its Efforts to Ensure Compliance with Federal Child Labor Law

WHD and OSHA are each responsible for enforcing certain federal workplace protections and have an agreement to coordinate and share information. OSHA inspectors conduct worksite inspections to enforce occupational health and safety standards, but they are not responsible for enforcing potential child labor violations, which are WHD's responsibility. However, when OSHA inspectors discover information indicating potential child labor violations, they may refer the cases to WHD. WHD and OSHA currently have a memorandum of understanding, which was signed in 1990, to facilitate coordination by establishing a referral system to convey complaints and information about potential violations between the two agencies. The memorandum of understanding documents policies WHD and OSHA have agreed to implement to coordinate their enforcement and compliance efforts. These policies include, among other things, (1) providing field personnel with information and training on the types of

issues that will be referred; (2) evaluating referrals on a priority basis and taking appropriate action; (3) transmitting to the other agency the results of inspections conducted in response to referrals; (4) establishing a system to monitor the progress of actions taken on referrals; and (5) conducting periodic meetings to report on the progress of actions taken on the other agency's referrals and evaluate the system.

WHD and OSHA staff told us that they exchange information with each other informally, and both agencies acknowledged the importance of collaboration in their memorandum of understanding. Some WHD field officials told us their offices maintain informal relationships with their counterparts in local OSHA field offices, which include exchanging referrals, sharing information, and, in some instances, coordinating on investigations. WHD field officials from every region we spoke with said their offices receive referrals or information from OSHA. For example, one district official told us that their office occasionally coordinates with OSHA to exchange referrals and assist with investigations. Another district official told us they meet with officials from the local OSHA office to discuss violation trends and national targeting guidance.

Although the memorandum of understanding between WHD and OSHA states that the agencies will establish a system to monitor the progress of actions taken on referrals, WHD and OSHA officials told us they do not have a systematic way to do so. Specifically, they have no formal systems or consistent processes for tracking or monitoring referrals. Further, WHD officials told us that their internal investigations system does not have a way to easily track and systematically report on the disposition of referrals from OSHA.[101] In addition, OSHA officials told us that they do not systematically track referrals made to WHD. OSHA officials told us that their field officials may periodically meet with their WHD counterparts, but there is no formal requirement to do so, nor any requirements to document such discussions. Further, WHD and OSHA officials acknowledged that they have not updated their memorandum of understanding since the original 1990 agreement. We have reported that agencies can strengthen their commitment to work collaboratively by developing ways to continually update and monitor written agreements.[102]

[101]According to WHD national officials, while a data element for OSHA referrals exists within WHISARD, this data element has not been included in WHD reports and it is not widely known or used by field staff.

[102]GAO, *Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms,* GAO-12-1022 (Washington, D.C.: Sept. 27, 2012).

While the memorandum of understanding between WHD and OSHA provides a framework for sharing information, updating the memorandum of understanding and establishing procedures for WHD and OSHA when monitoring the exchange of and actions taken on referrals can help ensure agency officials better track the disposition of referrals. Without such documentation, WHD and OSHA lack the ability to ensure that they consistently take appropriate action to protect children from unsafe working conditions.

Conclusions

For many children, working can result in benefits such as independence and responsibility. However, work may also interfere with their education or present a physical danger to children working in certain industries, such as agriculture. Since our 2002 report, the overall number of working children in the United States has varied and, since 2011, data indicate that the number of children working is increasing. While most children do not suffer injuries at work, our analyses of BLS data show that injuries to and fatalities among working children persist, that children in agriculture comprise more than half of work-related fatalities, and work-related fatalities among children have increased since 2013. However, BLS data on work-related injuries and illnesses do not measure certain populations—such as children working on farms with 10 or fewer workers and household workers, and its pilot household-based injury survey does not include children aged 17 and under. Without improved data regarding injuries and illnesses to working children in the United States, DOL will not have the information necessary to reliably identify types of establishments with a high number of work-related injuries to children, such as farms employing with 10 or fewer workers.

WHD officials said they have made it a priority to enforce the child labor provisions of the FLSA, and since 2010 they have been using available data to inform their strategic approach to enforcement and compliance. WHD has recently begun increasing the resources available to field staff regarding how to analyze and use external data in their enforcement and compliance planning, according to officials—and these efforts will continue to be critical to WHD's strategic approach. However, WHD has not yet taken actions to determine whether its strategic efforts are paying off. For example, WHD has not yet developed metrics and targets for outreach efforts related to children working in agriculture, nor has it developed performance metrics specific to its strategic approach on child labor. In addition, WHD and OSHA have not updated their memorandum

of understanding or established current procedures for monitoring referrals exchanged between the two agencies or actions taken in response. Establishing metrics for goals within the strategic enforcement approach could help ensure that actions are yielding results and children can safely work in a variety of industries, particularly agriculture.

Recommendations for Executive Action

We are making four recommendations to DOL:

The Acting Commissioner of the Bureau of Labor Statistics should, upon completion of the pilot Household Survey of Occupational Injuries and Illnesses, evaluate the feasibility of measuring injuries and illnesses to certain worker populations—specifically, children aged 17 and under, child household workers, and those employed on farms with 10 or fewer workers—in any final survey scope, or determine a way to gather information on these populations. (Recommendation 1)

The Administrator of the Wage and Hour Division should establish specific metrics and associated targets for child labor-related outreach in agriculture. (Recommendation 2)

The Administrator of the Wage and Hour Division should develop performance metrics or other measures specific to its child labor enforcement approach, such as whether WHD investigations are conducted at establishments where children are likely to be working. (Recommendation 3)

The Administrator of the Wage and Hour Division and the Assistant Secretary of the Occupational Safety and Health Administration should update and routinely monitor the 1990 WHD and OSHA memorandum of understanding and establish documented procedures for monitoring the exchange of and actions taken on referrals. (Recommendation 4)

Agency Comments and Our Evaluation

We provided a draft of this report to the Departments of Health and Human Services (HHS) and Labor (DOL) for review and comment. DOL's Occupational Safety and Health Administration (OSHA) provided written comments that are reproduced in appendix XI. DOL's Wage and Hour Division (WHD) provided written comments that are reproduced in

appendix XII. HHS did not provide written comments on our report. HHS and DOL provided technical comments, which we incorporated in the report, as appropriate.

In its technical comments, DOL's Bureau of Labor Statistics (BLS) generally agreed with the recommendation that it evaluate the feasibility of measuring injuries and illnesses to certain worker populations—specifically, children aged 17 and under, child household workers, and those employed on farms with 10 or fewer workers—in any final survey scope, or determine a way to gather information on these populations. However, BLS stated that its ability to complete a feasibility study is subject to budget availability. We note that this recommendation also allows for alternate ways, other than a feasibility study, to determine how best to gather information on these populations of working children, and maintain that it is important to do so. Given the importance of this issue, we encourage BLS to explore cost-effective ways to implement this recommendation.

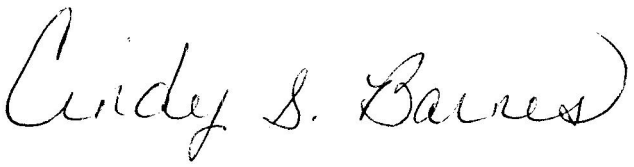
In its written comments, DOL's Wage and Hour Division stated that it agreed with our second recommendation to establish specific metrics and associated targets for child-labor related outreach in agriculture. WHD noted that it has existing performance measures that separately track the number of employer outreach events and the number of events involving child labor, and that a new, combined metric would provide an additional incentive for WHD field offices to conduct child labor-related outreach events in agriculture. WHD generally agreed with the third recommendation, which originally recommended that WHD develop a performance metric specific to its child labor enforcement approach. In its written comments, WHD agreed that it could develop either an internal performance metric or new planning guidance and reporting requirements to ensure that WHD's child labor enforcement efforts focus on industries, establishments, and time periods in which children are likely to be working or injured. Although we agree that planning guidance and reporting requirements can encourage field office staff to focus more on child labor; we continue to believe it is important to include a measurement of WHD's overall child labor enforcement approach as part of any new planning guidance and reporting requirements. We have thus broadened the recommendation to include other measures.

WHD and OSHA generally agreed with our fourth recommendation, to update the memorandum of understanding between WHD and OSHA and establish documented procedures for monitoring the exchange of and actions taken on referrals. Specifically, WHD and OSHA agreed to work

together to review and update their memorandum of understanding and to evaluate the efficacy of the existing referral process, and propose actions to improve the process as appropriate. While WHD and OSHA correctly observe that we do not identify any instances where WHD or OSHA failed to take action on a referral, we also note in the report that the agencies have no formal systems or consistent processes for tracking or monitoring referrals. As we stated in our report, we believe that without establishing documented procedures for tracking the disposition of referrals, WHD and OSHA cannot ensure that they are consistently taking appropriate action to protect children from unsafe working conditions.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the appropriate congressional committees, the Secretary of the Department of Health and Human Services, and the Secretary of the Department of Labor. In addition, the report will be available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact us at (202) 512-7215 or brownbarnesc@gao.gov or at (202) 512-3841 or morriss@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix XIII.



Cindy Brown Barnes
Director, Education, Workforce and Income Security

Steve D. Morris
Director, Natural Resources and Environment

Appendix I: Objectives, Scope, and Methodology

Objective I Data Sources

To identify what is known about children working in the United States, including those working in agriculture,[1] we obtained and analyzed monthly and yearly data from two national data sets from the Department of Labor (DOL):

- Bureau of Labor Statistics' (BLS) Current Population Survey (CPS)[2] from 2003 to 2017, and
- Employment and Training Administration's National Agricultural Workers Survey (NAWS) for 2003 to 2016.[3]

We also collected information from two other sets of survey data for certain non-contiguous years:

- Department of Health and Human Services' National Institute for Occupational Safety and Health's (NIOSH) Childhood Agricultural Injury Survey (CAIS), and
- U.S. Department of Agriculture's (USDA) National Agricultural Statistics Service's Census of Agriculture.

The years of data we analyzed varied by data source, based on the availability of data and the number of cases needed to develop national estimates (see table 9).

Table 9: Data Sources Used in GAO Analyses for Objective I

Data file	Organization responsible	Type of information in file used in analyses	Population GAO examined	Time frame covered by data

[1]None of the analyses in this report are intended to assess compliance with the Fair Labor Standards Act (FLSA). Among other reasons, the definitions of terms used in these data sets may not be the same as the definitions in the FLSA and DOL's regulations.

[2]CPS is sponsored jointly by BLS and the Census Bureau.

[3]NAWS data are organized by fiscal year.

Data file	Organization responsible	Type of information in file used in analyses	Population GAO examined	Time frame covered by data
Current Population Survey (CPS), including its Annual Social and Economic Supplement (ASEC)	Department of Labor (DOL)'s Bureau of Labor Statistics (BLS); Census Bureau	Hours, occupations, and industries in which children worked; and demographic characteristics of child workforce, including gender, race and ethnicity, and low-income status	Children aged 15 to 17	2003 to 2017[a]
National Agricultural Worker Survey (NAWS)	DOL's Employment and Training Administration	Age first worked in agriculture, demographic characteristics of child hired agricultural labor workforce, including gender, race and ethnicity, poverty status, experience mixing and applying pesticides	Hired farm workers in crop agriculture, aged 14 to 17	Fiscal years 2003 to 2016
Childhood Agricultural Injury Survey (CAIS)	Department of Health and Human Services' National Institute for Occupational Safety and Health (NIOSH)	Number and characteristics of children on farms who worked	Household and hired children aged 17 and under on U.S. crop or livestock farms	2004, 2006, 2009, 2012, 2014[b]
Census of Agriculture	U.S. Department of Agriculture's National Agricultural Statistics Service	Number of farms that employ 10 or fewer workers	All farm operations	2002, 2007, 2012

Source: GAO analysis of various data sets. | GAO-19-26

[a]We analyzed data from the 2017 ASEC, which provides information about the industries and occupations that children reported they were working in, as well as about working children families' low-income status during the prior year (i.e., calendar year 2016).

[b]The CAIS was conducted in 2001, 2004, 2006, 2009, 2012, 2014. This report's scope is from 2003 onward.

The CPS is the primary source of federal government statistics on employment and unemployment in the United States. The basic monthly survey collects information on employment, such as employment status, occupation, and industry, as well as demographic characteristics, among other things. The survey is based on a sample of the civilian, non-institutionalized population of the United States. About 55,000 households are interviewed monthly based on area of residence, to represent individual states and the country as a whole.[4] In addition to the standard questions from the basic CPS monthly survey, the Annual Social and Economic Supplement (ASEC) includes additional questions of households and provides supplemental data on work experience; income components, such as earnings from employment; and noncash benefits, such as health insurance coverage, among other things. ASEC data on employment and income refer to the preceding calendar year, although

[4]The total sample also includes additional households that are not interviewed for various reasons, such as not being reachable.

demographic data refer to the time of the survey. This report used data from the March 2017 ASEC, which refers to employment and income during calendar year 2016.

DOL's NAWS is an employment-based, annual survey of demographic, employment, and health characteristics of hired farm workers in crop agriculture, including crop workers, workers at nurseries, workers at packing houses,[5] and includes workers brought to farms by contractors. NAWS does not include animal agricultural workers, unpaid household workers, or H-2A visa workers.[6] Each year, approximately 1,500 workers are randomly selected for an interview. Interviews are conducted three times per year to account for the seasonal and regional fluctuations of agricultural production and employment. All interviews are conducted in person and the interviewer documents respondents' answers directly on the paper questionnaire. Respondents are generally interviewed directly at their work site, and only currently employed persons are interviewed.

The CAIS farm operator survey is a NIOSH collaborative effort with the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) to produce national and regional estimates of the number of individuals under age 20 on U.S. operated farms by various demographic characteristics.[7] NIOSH has collaborated with NASS to collect injury and demographic data regarding farm workers aged 20 and under via the CAIS for certain years, including the years 2001, 2004, 2006, 2009, 2012, and 2014. From 2001 through 2012, CAIS was based on a sample of 50,000 U.S. farm operations from the Census of Agriculture, which was increased to 75,000 farming operations for the 2014 survey. For this report, we analyzed CAIS results for children aged 17 and under from the 2004 to 2014 surveys. Estimates include household children (a member of a farm operator's household), hired children (a paid worker hired directly by a farm operator), and visiting child (a visitor to the farm, whether a relative or not).

[5]Packing and canning operation workers are eligible to be interviewed if the operation is adjacent to or located on the contacted employer's farm and at least 50 percent of the produce being packed or canned originated from the employer's farm.

[6]An H-2A visa is a temporary work visa for foreign agricultural workers with a job offer for temporary or seasonal agricultural work in the United States. The H-2A visa program is generally open to nationals of countries that the Secretary of Homeland Security has designated as eligible to participate and that list is renewed annually.

[7]CAIS defines a farm as being any crop and/or livestock operation with $1,000 or more of gross agricultural production within a calendar year.

The Census of Agriculture is sponsored by the USDA's National Agricultural Statistics Service (NASS), and collects information about any operation from which $1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year. To do this, NASS creates a list of agricultural operations that potentially meet the definition of a farm in order to provide information on the characteristics of farm operations and farm operators at the national, state, and county levels. The Census of Agriculture includes information regarding the number of farms by size and type, inventory and values for crops and livestock, and operator demographic characteristics. When NASS summarizes the Census of Agriculture, it assigns the data from an individual report to the principal county—which is the county in which the majority of the operator's agricultural products are produced.

Objective I Quantitative Methodology

To describe what is known regarding children working in the United States, including those working in agriculture, we analyzed CPS data in a variety of ways. Table 10 presents a list of the CPS variables we analyzed.

Table 10: GAO Analysis of Selected Current Population Survey (CPS) Data Variables, 2003 to 2017

Category	CPS variable	Use in report
CPS monthly data: Number of working children	Pemlr	Determine number of working children in summer and non-summer months for children aged 15 to 17.
CPS monthly data: Hours usually worked	Pehruslt	Determine hours usually worked in summer and non-summer months for children aged 15 to 17.
CPS monthly data: Self employed	Prdtcow1	Identify self-employed persons based on primary job.
CPS monthly data: Race and ethnicity	Pehspnon, Prdtrace, Ptdtrace[a]	Determine race and ethnicity information.
CPS monthly data: Gender	Pesex	Determine trends in employment by gender.
CPS monthly data: Agricultural work	Pragna, Prdtcow1	To identify those working in agricultural, or non-agricultural industries.
CPS monthly data: Non-paid working in a family business	Prdtcow1	To identify an unpaid child working in a family business or farm
CPS 2017 Annual Social And Economic Supplement (ASEC) Data[b]: Industry	Industry	To identify the industry of the longest job in which the respondent worked.

Category	CPS variable	Use in report
CPS 2017 Annual Social And Economic Supplement (ASEC) Data[b]: Occupation	Wemocg, Occup	To identify the occupation of the longest job among major groups, and occupation of longest job among more detailed groups.
CPS 2017 Annual Social And Economic Supplement (ASEC) Data[b]: Low-income status	Famlis	To identify whether a respondent is from a household experiencing poverty, and to determine the ratio of the family's income to the CPS's low-income level.

Source: GAO analysis of Current Population Survey (CPS) data. | GAO-19-26

Notes: For Annual Social and Economic Supplement (ASEC) data, we determined whether a respondent had worked the previous year by identifying those respondents who had checked yes for the WRK_CK variable, which indicates the interviewer checked yes that the respondent had worked the previous year.

[a]The prdtrace variable changed in August 2005. Accordingly, we analyzed prdtrace from 2003 to July 2005 and ptdtrace from August 2005 to 2017.

[b]2017 Annual Social and Economic Supplement data reports calendar year 2016 information.

- **Number of children who worked**. To estimate the extent to which children aged 15 to 17 worked during summer and non-summer months, we defined summer months as June through August, and defined non-summer months as January through May and September through December for each calendar year, and averaged estimates for summer and non-summer months.[8] We analyzed the pemlr variable, which is based on BLS's definition of an employed person, to determine the number of children who worked. According to BLS's definition, employed people are those who, during the reference week (a) did any work at all (for at least 1 hour) as paid employees; worked in their own businesses, professions, or on their own farms; or worked 15 hours or more as unpaid workers in an enterprise operated by a family member or (b) were not working, but who had a job or business from which they were temporarily absent because of vacation, illness, bad weather, childcare problems, maternity or paternity leave, labor-management dispute, job training, or other family or personal reasons whether or not they were paid for the time off or were seeking other jobs. Each employed person is counted only once, even if he or she holds more than one job.
- **Weekly hours worked**. To estimate the hours worked during summer and non-summer months, we analyzed the pehruslt variable—the sum

[8]Our definitions of summer and non-summer months are not intended to align with how summer is defined in the FLSA child labor regulations. We used our definition of summer and non-summer months in our analysis as we found this categorization to be the most workable given the arrangement and contents of the CPS data set. We did not account for the extent to which some schools may have year-round calendars, or differentiate between varying school calendars between schools.

of the pehrusl1 and perhrusl2 variables indicating primary and secondary jobs—that indicates a respondent's usual weekly work hours worked. In addition, we developed categorical thresholds to describe hours worked per week in the summer and non-summer months, and we included both primary and secondary jobs in this analysis.

- **Industries worked.** To identify the industries in which children aged 15 to 17 worked and the occupations they held in 2016, we obtained and analyzed 2017 CPS Annual and Social Economic Supplement (ASEC) data. More specifically, we categorized the industries that children may be working in using the following crosswalk of the Census Bureau classification systems regarding industry information. See table 11.

Table 11: Crosswalk of Census Bureau Industry Codes Used in GAO Analyses

GAO categorical variable	2012 Census industry classification code	2012 North American Industry Classification System (NAICS) code
All agriculture	0170, 0180-0290	111-115
Agriculture: crop production	0170	111
Agriculture: non-crop agriculture	0180-0290	112-115
Construction and mining[a]	0370-0490, 0770	21, 23
Educational and health services	7860-8470	61-62
Manufacturing	1070–3990	31-33
Wholesale and retail trade	4070–5790	42, 44 -45
Transportation and utilities	6070–6390, 0570–0690	22, 48- 49
Leisure and hospitality	8560–8690	71-72
Other	6470-6780, 6870-7190, 7270-7790, 8770-9290, 9370-9590	51, 52-53, 54-56, 81, 92

Source: GAO analysis of Census Bureau information. | GAO-19-26

Note: "Other" includes financial activities, information, professional and business services, other services, and public administration.

[a]Construction and mining industry includes quarrying, and oil and gas extraction.

- **Gender.** To describe trends in the gender of working children, we analyzed 2003-2017 CPS basic monthly data.

- **Race and ethnicity.** This analysis is of the pehspnon, prdtrace and ptdtrace variables,[9] which indicate a respondent's identified race and ethnicity, and the pemlr variable, which indicates the child was employed, as defined by CPS. CPS treats ethnicity separately from race. As a result, a child can be identified in CPS as both white and Hispanic, or as both black and Hispanic, among other considerations. For the purposes of our report, we categorized any respondent identifying as Hispanic, irrespective of their reported race, as Hispanic. We further categorized respondents who identified as not being bi- or multiracial white or black as being white only and black only. We categorized respondents of two or more races, as well as Asians and other specific races such as Native American or Pacific Islander, as other races.[10]
- **Low-income status.** We obtained data from CPS's March 2017 ASEC to identify children aged 15 to 17 who had had worked in calendar year 2016. We analyzed their reported family income (famlis variable) as it compares to the CPS ASEC's poverty thresholds.[11] For this analysis, we defined "low-income" as any individual whose family income was below 150 percent of their poverty threshold.[12] We utilized CPS ASEC data to determine the percentage of working children that were from low-income families and the percentage who were from higher income families (with income at least 150 percent of the poverty threshold), compared to non-working children. We also determined the percentage of working children from low-income families who worked 20 hours or more per week.

[9]The race variable changed from prdtrace to ptdtrace in August 2005.

[10]Due to relatively small numbers of respondents identifying themselves as Asian and other races, as well as certain bi-racial and other racial categories, we are only able to report white only, black only, Hispanic, and "other races" race and ethnicity information.

[11]Poverty thresholds are set by the U.S. Census Bureau and take into account family size and composition to determine who is in poverty. Famlis is the CPS ASEC variable that describes the ratio of family income to the poverty threshold, and is available for all individuals, regardless of family type. A person whose family income is less than 100 percent of the poverty thresholds is categorized as "in poverty." CPS ASEC documentation notes that a family is a group of two persons or more residing together and related by birth, marriage, or adoption. Any related subfamily member is counted as within a primary family. For the purposes of our analysis, the poverty status of an individual in a family is based on their family's income. The poverty status of individuals who are not in a family is based on their own income.

[12]According to a Census Bureau official, the Census Bureau does not officially define low-income.

CPS estimates contained in this report are estimated standard errors and presented along with an approximate margin of error at the 95 percent confidence level or relative standard errors. We express our confidence in the precision of a particular sample's estimates with a confidence interval. By adding and subtracting the margin of error from the estimate, we construct a confidence interval that would contain the actual population value for 95 percent of the samples that CPS could have drawn. All margins of error for CPS estimates presented in this report are approximations. We calculated the approximate margins of error following CPS guidance and technical documentation. In order to estimate the margin of error for estimates of our subgroups of interest, a number of approximations were required. As a result, the margins of error provide a general order of magnitude. A relative standard error is equal to the standard error of a survey estimate divided by the survey estimate.

We conducted a data reliability assessment of the CPS variables included in our analyses. We reviewed technical documentation and related publications and websites with information about the data. We spoke with the appropriate officials at BLS to resolve any questions about the data and identify any known limitations. We also conducted electronic testing, where feasible, to check for logical consistency, missing data, and consistency with data reported in technical documentation. In general, we analyzed our estimates and determined they had relative standard errors of 10 percent or less, except where noted.[13] We determined that the variables we used from the data we reviewed from the CPS were sufficiently reliable for the purposes of our reporting objectives.

To provide additional information regarding the agricultural child labor work force—in particular hired child crop workers—we analyzed NAWS data regarding hired farm workers in crop agriculture aged 17 and under. More specifically, to determine trend information where possible, we constructed a time variable by aggregating fiscal year 2005 to 2008, fiscal year 2009 to 2012, and fiscal year 2013 to 2016 data to develop a set of responses filtered for 17-year-olds and under that we would be able to report in a statistically reliable fashion at the 95 percent confidence level. To estimate the percentage of 14-, 15-, 16-, and 17-year-olds, we worked with ETA officials to determine a methodology to apply the NAWS population inflator to our estimated percentages and determine a

[13]For our estimates of the numbers of working children, we analyzed the estimates for 15-, 16-, and 17-year-olds for all years from 2003 to 2017 and determined they have relative standard errors of 10 percent or less.

population estimate for our time periods.[14] With respect to our analysis of NAWS data regarding identified characteristics of farm workers in crop agriculture, we analyzed the variables shown in table 12.

Table 12: Selected National Agricultural Worker Survey (NAWS) Data Variables Used in GAO Analyses

Report topic	Variable	Use in report
Gender	Gender	Report percentage of hired crop workers aged 17 and under by gender in 2005 to 2008, fiscal years 2009 to 2012, and 2013 to 2016.
Race and ethnicity	B01 and B02	Report percentage and estimated population of hired crop workers aged 17 and under in fiscal years 2005 to 2008, 2009 to 2012, and 2013 to 2016.
Family poverty status	Fampov	Percentage of hired crop workers aged 17 and under below the poverty level in 2005 to 2008, 2009 to 2012, and 2013 to 2016.
Intensity of work: days worked	Fwrdays	Mean working days for hired crop workers aged 14 to 17 working on U.S. farms, by age in 2005 to 2008, 2009 to 2012, and 2013 to 2016.
Age first worked in agriculture	Agefrstfw	Age range that respondent reported he or she began working, for 2005 to 2008, 2009 to 2012, and 2013 to 2016.
Documentation status	Currstat	Report percentage of hired crop workers aged 17 and under by documentation status in 2013 to 2016.
Region worked	Region6	Report percentage of hired crop workers aged 17 and under by region worked in 2005 to 2016.
Mixed/applied pesticides in last year	Np01f	Report percentage of hired crop workers aged 14 to 17 working on U.S. farms, by age that loaded, mixed or applied pesticides in last 5 years.

Source: GAO analysis of Department of Labor Employment and Training Administration's National Agricultural Workers Survey (NAWS) data. | GAO-19-26

Notes: NAWS data are organized by fiscal year. According to Employment and Training Administration officials, to determine farm workers' poverty status as reported in NAWS, a poverty threshold was calculated for each worker based on the worker's family size and the U.S. Department of Health and Human Services' poverty guidelines for the calendar year that matches the year for which the worker answered the family income question. Workers' family incomes were then compared to the poverty thresholds calculated for their family size and poverty status was assigned. Income was not adjusted for the amount of time the respondent was present in the United States in the calendar year in which income was reported.

Due to the relatively small samples, at least 2 years of data are to be combined for national-level analyses, according to a NAWS methodology document.[15] All mean estimates were rounded to the nearest whole

[14]The NAWS population inflator is derived from the USDA's Census of Agriculture, which was conducted in 2002, 2007, 2012, and 2017. Because the time frames covered by the NAWS population inflator in some cases fall in the midst of the time period variable we constructed, we worked with NAWS to determine the appropriate population inflator measure.

[15]Due to relatively small sample sizes for respondents aged 17 and under, we opted to present one aggregated estimate for fiscal years 2003 to 2016 for the region a respondent worked in and the variable indicating whether a respondent had mixed or applied pesticides in the last year.

number. Given the relatively small size of the data sets, to present conservative estimates, we rounded estimates' margin of errors up to the nearest whole number. We conducted a data reliability assessment of the NAWS variables included in our analyses. We reviewed technical documentation and related publications and websites with information about the data. We spoke with the appropriate officials at the Employment and Training Administration to resolve any questions about the data and identify any known limitations. We also conducted electronic testing, where feasible, to check for logical consistency, missing data, and consistency with data reported in technical documentation. We determined that the variables we used from the data we reviewed from NAWS were sufficiently reliable for the purposes of our reporting objectives.

To provide additional information regarding children working in agriculture—in particular, household children working on farms and livestock agriculture—we obtained information from the Department of Health and Human Services' National Institute for Occupational Safety and Health (NIOSH) Childhood Agricultural Injury Survey (CAIS). We reviewed agency documentation regarding its methodology for compiling the data, and interviewed agency officials regarding our results. We reviewed the agency's code used to tabulate results and reported results only within CAIS reporting parameters, with a relative standard error of 33 percent of less.

To provide information regarding the extent to which the agricultural workforce worked on farms employing 10 or fewer workers, we obtained information from the United States Department of Agriculture's Census of Agriculture. We reviewed agency documentation regarding its methodology for compiling the data, and interviewed agency officials regarding our results. We reviewed the agency's code used to tabulate results and reported results only within USDA reporting parameters.

We interviewed officials from DOL's Bureau of Labor Statistics, Employment and Training Administration, and Wage and Hour Division; the Department of Health and Human Services' NIOSH; and the Department of Agriculture regarding the data available and our analyses of the numbers and demographic characteristics of working children.

Objective II Data Sources and Methodology

To describe what is known about the work-related fatalities and injuries to working children, including those in agriculture, we primarily relied on data from two national data sets maintained by Bureau of Labor Statistics—the Census of Fatal Occupational Injuries (CFOI) and the Survey of Occupational Injuries and Illnesses (SOII). We also collected information from two other injury and illness data sets, the National Electronic Injury Surveillance System—Occupational Supplement (NEISS-Work) and the Childhood Agricultural Injury Survey (CAIS) (see table 13). The years of data we analyzed were from 2003 to 2016 for the CFOI, SOII, and NEISS-Work, and selected years for CAIS.

Table 13: Data Sources Used in GAO Analyses of Work-Related Fatalities and Injuries and Illnesses to Children in Objective II

Data file	Organization responsible	Type of information in file used in analyses	Population GAO examined	Time frame covered by data
Census of Fatal Occupational Injuries	Department of Labor's Bureau of Labor Statistics	Ages, occupations, and industries in which children suffered work-related fatalities, including demographic characteristics of child fatalities including gender and race and ethnicity of child	Working children aged 17 and under	2003 to 2016
Survey of Occupational Injuries and Illnesses	Department of Labor's Bureau of Labor Statistics	Numbers of, ages, and industries in which children incurred work-related injuries and illnesses	Working children aged 15 to 17	2003 to 2016
National Electronic Injury Surveillance System—Occupational Supplement	Department of Health and Human Services' National Institute for Occupational Safety and Health	Numbers of and ages in which children incurred work-related injuries and illnesses	Working children aged 14 to 17	2003 to 2016
Childhood Agricultural Injury Survey	Department of Health and Human Services' National Institute for Occupational Safety and Health	Extent to which children on farms incurred work-related injuries	Household and hired children aged 17 and under on U.S. crop or livestock farms	2004, 2006, 2009, 2012, 2014[a]

Source: GAO analysis of Department of Labor and Department of Health and Human Services' National Institute for Occupational Safety and Health data. | GAO-19-26

[a]The Childhood Agricultural Injury Survey was conducted in 2001, 2004, 2006, 2009, 2012, 2014. This report's scope is from 2003 onward.

The Census of Fatal Occupational Injuries (CFOI) is an annual count of fatal workplace injuries, and is a federal-state cooperative program that has been implemented in all 50 states, and the District of Columbia. BLS uses diverse state, federal, and independent data sources to identify,

verify, and describe fatal work injuries to ensure counts are as complete and accurate as possible. The CFOI also covers workers on farms of any size, including those employing 10 or fewer workers, and self-employed, family, and federal government workers. We conducted a data reliability assessment of the CFOI variables included in our analyses. We reviewed technical documentation and related publications and websites with information about the data. We spoke with the appropriate officials at BLS to resolve any questions about the data and identify any known limitations. We reviewed the CFOI analyses conducted by BLS to identify any unexpected values or logical inconsistencies in the results. We determined that the summary data provided were sufficiently reliable for the purposes of our reporting objectives.

The Survey of Occupational Injuries and Illnesses (SOII) is an annual estimate of workplace injuries and illnesses based on a survey of employers. The SOII is the largest occupational injury and illness surveillance system in the country, providing injury and illness counts and rates for a variety of employer, employee, and case characteristics based on a sample of approximately 230,000 establishments. According to BLS, for the purposes of the SOII an occupational injury is any injury, such as a cut, fracture, sprain, amputation, and so forth, which results from a work-related event or from a single instantaneous exposure in the work environment. Detailed case data and worker demographics, including race and ethnicity, are collected for cases that require a day away from work. SOII estimates the number and frequency (incidence rates) of workplace injuries and illnesses based on recordkeeping logs kept by employers during the year. These records reflect the employer's understanding of which cases are work-related and meet other recordkeeping requirements established by the U.S. Department of Labor's Occupational Safety and Health Administration.[16]

In addition to injury and illness counts, survey respondents are asked to provide additional information for the subset of nonfatal cases that involved at least 1 day away from work, beyond the day of injury or illness. Employers answer several questions about these cases, including the demographics of the worker, the nature of the disabling condition, the event and source producing that condition, and the part of body affected. We conducted a data reliability assessment of the SOII variables included in our analyses. We reviewed technical documentation and related

[16]See generally 29 C.F.R. pt. 1904.

publications and websites with information about the data. We spoke with the appropriate officials at BLS to resolve any questions about the data and identify any known limitations. We reviewed the SOII analyses conducted by BLS to identify any unexpected values or logical inconsistencies in the results. We determined that the summary data provided were sufficiently reliable for the purposes of our reporting objectives.

To provide additional information regarding work-related injuries incurred by children, we obtained and analyzed data from the NEISS-Work public portal. The NEISS-Work data are collected by the NIOSH Division of Safety Research in partnership with the U.S. Consumer Product Safety Commission. NIOSH collects data from a nationally representative sample of 67 U.S. hospital emergency departments. Coders at participating hospitals review all emergency department records to capture nonfatal work-related injuries and illnesses that occurred on the job to civilian workers.[17] An injury is considered work-related if the work was for pay or other compensation; doing agricultural production; or working as a volunteer for an organized group. NEISS-Work data from 2003 to 2014 include data for illnesses that began at work, such as heart attacks and strokes, and chronic conditions. According to NIOSH, illness cases comprise about 5 to 10 percent of all total annual NEISS-Work case estimates. Data from 2015 do not capture most illnesses that began at work. We conducted a data reliability assessment of the NEISS-Work variables included in our analyses. We reviewed technical documentation and related publications and websites with information about the data. We spoke with the appropriate officials at NIOSH to resolve any questions about the data and identify any known limitations. We determined that the variables we used from the data we reviewed from NEISS-Work were sufficiently reliable for the purposes of our reporting objectives.

To provide additional information regarding the number of work-related injuries incurred by child workers, including household workers, on U.S. farms, we worked with NIOSH to obtain information from its Childhood Agricultural Injury Survey (CAIS). This survey is designed to produce

[17]According to NIOSH officials, each case in NEISS-Work represents a "worker" who sought treatment in one of the NEISS-Work sampled emergency departments for an occupational injury, including occupational exposures. Hospital coders abstracting the medical records for NEISS-Work are instructed by NIOSH to identify a case as a "worker" if at least one place in his or her emergency department medical record notes that injury occurred while the patient was working.

national and regional estimates of the number of individuals under age 20 on U.S. operated farms by various injury characteristics. CAIS injury information is for all individuals under age 20 on farms for the years 2001, 2004, 2006, 2009, 2012, and 2014. This includes children aged 17 and under living on, working on, or visiting the farm. More specifically, CAIS defines a household worker as being a member of the farm operator's household (farm operator, his/her spouse, child/step child); a visitor as being a visiting relative to the farm operation or a non-relative visitor; and a hired worker as being a paid worker or laborer hired directly by the farm operator. Injury data include information on whether an injury was work-related or not, the nature of the injury, the source of injury, the type of injury event, and the body part injured. Demographic information for all injured children was also collected. CAIS defines an injury as being any nonfatal traumatic event occurring on the farm operation resulting in at least 4 hours of restricted activity, or requiring professional medical treatment. CAIS defines a work injury as being any injury that occurred while performing work or chores on the farm that was associated with the farm business, regardless of whether the work was performed for pay. We reviewed the code NIOSH used to tabulate our requested results and only reported results within CAIS reporting parameters, i.e. those with a relative standard error of 33 percent or less. We conducted a data reliability assessment of the CAIS variables included in our analyses. We reviewed technical documentation and related publications and websites with information about the data. We spoke with the appropriate officials at NIOSH to resolve any questions about the data and identify any known limitations. We reviewed the CAIS analyses conducted by NIOSH to identify any unexpected values or logical inconsistencies in the results. We determined that the summary data provided were sufficiently reliable for the purposes of our reporting objectives.

We performed additional analyses with CPS data to support our work for this objective. To calculate total worked hours for each year, we calculated monthly hours worked from CPS basic monthly data by multiplying the pehruslt variable (usual weekly worked hours) by 52 and divided by 12. We then estimated the total hours worked by multiplying the monthly hours worked by our population estimations of the number of working children.[18] We analyzed the prdtcow1 variable to estimate the

[18]BLS officials stated the agency does not have research regarding standard errors for estimated total hours worked for 15- to 17-year-olds, and did not provide guidance on how to calculate such standard errors. GAO did not calculate the standard errors for the number of annual hours worked.

percentage of unpaid children working in a family business and self-employed children aged 15 to 17. We analyzed the CPS ASEC noemp variable to estimate the percentage of children working for employers with 9 or fewer workers, and 10 to 49 workers.

We identified limitations with the comparability of data across data sets, which results in risks in analyzing data across data sets. To minimize such risks, we reviewed documentation, and interviewed or obtained information from officials responsible for the data to ensure our characterization of the data and our results is accurate and the data are sufficiently reliable for the purposes of our reporting objectives.

Objective III Data Sources and Methodology

To assess how DOL oversees compliance with the child labor provisions of the FLSA, we analyzed administrative data collected by DOL's Wage and Hour Division (WHD), conducted interviews with WHD and OSHA, and reviewed relevant federal laws, regulations, and guidance. To examine WHD's child labor enforcement efforts over time, we analyzed data from WHD's Wage and Hour Investigative Support and Reporting Database (WHISARD), which includes information on investigations and violations related to child labor. For our reporting period of fiscal years 2010 to 2016, we requested data on all WHD investigations and findings.[19] We analyzed total number of investigations with child labor findings and violations by fiscal year,[20] registration act,[21] and industry. Before performing our own analysis, we requested many of these numbers from WHD, which we then calculated on our own and highlighted differences for WHD to comment on. After consulting with WHD officials, we excluded certain unusual types of investigations and

[19]WHD provided data for all investigations that were not dropped and that concluded during the time period, except for non-enforcement agency investigations under the Davis-Bacon Act and certain other investigations where complainants did not give permission to use their names. WHD identified at least one child labor violation that was not in our data because the permission to use the complainant's name was lacking.

[20]Throughout this report, investigations—and any violations found and resulting penalties—are counted in the fiscal year in which they concluded, although the investigations work may have been done in a prior fiscal year.

[21]In WHISARD, each investigation is registered under the act that was the official focus of the investigation. However, investigations registered under acts other than the FLSA can check for, identify, and result in penalties for child labor violations.

investigations with no violations or penalties assessed that were closed due to the employer shutting down or being unlocatable.

In addition, we interviewed officials from DOL's Wage and Hour Division and Occupational Safety and Health Administration. We also conducted interviews with WHD staff at the national office, all five regional offices, and six selected district offices. We identified and selected WHD district offices based on the concentration of investigations with at least one child labor violation and geographical diversity, including areas with representation across agricultural and non-agricultural sectors.

We measured the concentration of investigations with child labor violations, by using WHISARD summary data provided by WHD officials to calculate an average total number of these investigations for the most recent 3 fiscal years (2014 to 2016) and our total 7 fiscal year reporting period (2010 to 2016), for each district office.[22] We then categorized district offices by high, medium, and low averages for investigations with child labor violations using the 3-year average.[23] For our final selections, we primarily used the 3-year averages to ensure that the selected offices had recent experience with investigations that resulted in child labor violations. Our final selections—Austin, Des Moines, Pittsburgh, Raleigh, Sacramento, and San Francisco—represent locations with a mix of high, medium, and low average number of investigations with child labor violations, across all five WHD regions.

In each WHD region we conducted semi-structured interviews with the regional Child Labor Coordinator, and in each district office we interviewed a WHD investigator, Community Outreach Resource and Planning specialist, and district director. The findings from our discussions with regional and district WHD staff are not generalizable. However, the interviews provide examples of WHD's enforcement and compliance assistance efforts with regard to the child labor provisions of the FLSA.

[22]WHD began a new data-driven enforcement strategy and also revised the non-agriculture child labor regulations in fiscal year 2010. As such, we reviewed DOL's actions from fiscal year 2010 to fiscal year 2016 to focus on the most current DOL enforcement practices and regulations.

[23]The 3-year averages for "total investigations with child labor violations" were categorized as follows: "low" was 0-9 investigations, "medium" was 10-19 investigations, and "high" was 20 or more investigations.

In addition, we interviewed representatives from a range of organizations, including those focused on business and advocacy, such as the National Consumers League, National Children's Center for Rural and Agricultural Health and Safety, Farmworker Action Network, Center for Worker Health at Wake Forest School of Medicine, North Carolina Agribusiness Council, California Farm Bureau Federation, AgSafe, Labor Occupational Health Program University of California-Berkeley, Iowa Federation of Labor AFL-CIO, and Iowa Farm Bureau. We also held one group interview with the Association of Farmworker Opportunity Programs, with representatives from a variety of farm worker and labor organizations.

Finally, we reviewed relevant federal laws, regulations, and guidance pertaining to child labor. We also reviewed WHD's guidance to the field for fiscal years 2011 to 2018 and federal standards for internal control.[24]

We conducted a data reliability assessment of WHISARD variables included in our analyses. We reviewed technical documentation and spoke with officials to discuss our analysis plan, as well as to resolve any questions about the data and any known limitations. We also conducted electronic testing, where feasible, to check for logical consistency and missing data. We found some deficiencies in variables we used from the data, including that according to the integrity report, several variables we used in our analysis were less than 95 percent reliable when traced back to original investigation records. However, we determined that this was the best available data and that it was unlikely that our findings would be materially different due to the probable amount of incorrectly recorded data.

We conducted this performance audit from March 2017 through November 2018 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

[24]WHD's fiscal year 2018 enforcement and compliance assistance plans regarding child labor were finalized during the course of our review and were incorporated into our analysis.

Appendix II: Detailed Information on Children in the United States Who Worked in Summer and Non-Summer Months

Table 14: Estimated Number of Children Who Worked in an Average Summer Month, by Age, 2003 to 2017

(In thousands)

Year	15-year-olds	16-year-olds	17-year-olds	Total
2003	499	1,108	1,703	**3,310**
2004	434	1,070	1,467	**2,970**
2005	486	1,125	1,618	**3,228**
2006	444	1,253	1,676	**3,373**
2007	358	1,068	1,673	**3,099**
2008	353	947	1,402	**2,702**
2009	254	787	1,257	**2,297**
2010	240	545	1,141	**1,925**
2011	243	590	1,083	**1,916**
2012	267	638	1,106	**2,012**
2013	240	641	1,111	**1,993**
2014	257	647	1,127	**2,031**
2015	283	717	1,262	**2,263**
2016	310	799	1,321	**2,430**
2017	274	857	1,353	**2,485**

Source: GAO analysis of Current Population Survey (CPS) monthly data. | GAO-19-26

Notes: Numbers rounded to nearest thousands. Individual age totals may not sum to combined total due to rounding. Summer months include June, July, and August for each calendar year. These definitions are not intended to align with how summer is defined in federal child labor regulations. The estimates averaged these summer months. We analyzed the estimates for 15-, 16-, and 17-year-olds in 2003, 2011, and 2017 and determined they have relative standard errors of 10 percent or less.

Table 15: Estimated Number of Children Who Worked in an Average Non-Summer Month, by Age, 2003 to 2017

(In thousands)

Year	15-year-olds	16-year-olds	17-year-olds	Total
2003	294	807	1,376	**2,476**
2004	273	851	1,287	**2,411**
2005	281	843	1,362	**2,486**
2006	275	891	1,448	**2,613**
2007	252	802	1,401	**2,455**
2008	220	688	1,223	**2,131**
2009	189	537	1,024	**1,749**
2010	152	457	933	**1,542**
2011	142	421	849	**1,412**
2012	157	462	828	**1,446**
2013	141	493	905	**1,538**
2014	164	496	990	**1,650**
2015	186	536	1,004	**1,726**
2016	185	575	1,049	**1,810**
2017	171	668	1,099	**1,938**

Source: GAO analysis of Current Population Survey (CPS) monthly data. | GAO-19-26

Notes: Numbers rounded to nearest thousands. Individual age totals may not sum to combined total due to rounding. Non-summer months include January through May and September through December for each calendar year. These definitions are not intended to align with how summer is defined in federal child labor regulations. The estimates averaged these non-summer months. We analyzed the estimates for 15-, 16-, and 17-year-olds in 2003, 2011, and 2017 and determined they have relative standard errors of 10 percent or less.

Table 16: Estimated Number and Percentage of Children Employed during Summer Months and Non-Summer Months, by Age, 2003 and 2017

(In thousands)

n/a	2003		2017	
Category	Number (percentage) during summer month	Number (percentage) during non-summer month	Number (percentage) during summer month	Number (percentage) during non-summer month
15-year-olds	499 (11.7%)[a]	294 (7.2%)	274 (6.7%)	171 (4.1%)
16-year-olds	1,108 (26.1%)	807 (19.0%)	857 (19.2%)	668 (14.7%)
17-year-olds	1,703 (39.8%)	1,376 (32.1%)	1,353 (31.4%)	1,099 (24.4%)

Source: GAO analysis of Current Population Survey (CPS) monthly data. | GAO-19-26

Notes: Percentages rounded to nearest tenth of a percent. Summer months include June, July, and August for each calendar year. Non-summer months include January through May and September through December for each calendar year. These definitions are not intended to align with how

summer is defined in federal child labor regulations. The estimates averaged these summer and non-summer months.

[a]The percentage estimate for 15-year-olds in 2003 non-summer months has a relative standard error that is higher than 10 percent but less than 30 percent.

Table 17: Estimated Hours Worked by Working Children Aged 15 to 17 Who Worked in Non-Agricultural Industries, 2003 to 2017

(Numbers in thousands)						
n/a	Summer months			Non-summer months		
Year	Worked 40 hours or more	Percentage worked 40 hours or more	Estimated number of working 15- to 17-year-olds that year	Worked 19 hours or more	Percentage Worked 19 hours or more	Estimated number of working 15- to 17-year-olds that year
2003	342	10.7	3,197	745	30.9	2,413
2004	329	11.5	2,852	723	30.9	2,337
2005	384	12.4	3,109	767	31.7	2,417
2006	393	12.1	3,239	850	33.4	2,544
2007	389	13.0	2,984	818	34.4	2,376
2008	317	12.4	2,553	665	32.2	2,065
2009	230	10.5	2,185	527	31.2	1,692
2010	214	11.6	1,837	415	27.9	1,487
2011	188	10.3	1,819	402	29.8	1,347
2012	202	10.5	1,919	405	29.2	1,390
2013	229	12.0	1,900	476	32.0	1,488
2014	235	12.1	1,943	540	33.7	1,603
2015	282	13.0	2,175	558	33.2	1,679
2016	349	15.0	2,323	587	33.6	1,747
2017	326	13.6	2,407	663	35.2	1,882

Source: GAO analysis of Current Population Survey (CPS) monthly data. | GAO-19-26

Notes: For our analysis, we did not estimate the number of hours for respondents reporting their hours as "varies" based on the results of what other respondents reporting discrete numbers of hours worked. Summer months include June, July, and August for each calendar year. Non-summer months include January through May and September through December for each calendar year. These definitions are not intended to align with how summer is defined in federal child labor regulations, and this analysis is not intended to assess whether this work complied with federal child labor requirements.

Table 18: Estimated Hours Worked by Children Aged 15 Who Worked in Non-Agricultural Industries, 2003 to 2017, by Hours per Week

(Numbers in thousands)						
	Summer months			Non-summer months		
Year	Worked 40 hours or more	Percentage worked 40 hours or more	Total estimated number of working 15-year-olds	Worked 19 hours or more	Percentage worked 19 hours or more	Total estimated number of working 15-year-olds

(Numbers in thousands)						
	Summer months			Non-summer months		
Year	Worked 40 hours or more	Percentage worked 40 hours or more	Total estimated number of working 15-year-olds	Worked 19 hours or more	Percentage worked 19 hours or more	Total estimated number of working 15-year-olds
2003	40	8.5[a]	465	47	16.9[a]	278
2004	31	7.6[a]	405	35	13.8[a]	254
2005	46	10.5[a]	442	40	15.4[a]	258
2006	50	12.1[a]	410	49	19.0[a]	260
2007	38	11.6[a]	325	48	20.7[a]	234
2008	38	11.6[a]	325	42	20.7[a]	203
2009	19	8.3[b]	232	41	23.2[a]	176
2010	27	12.5[a]	216	32	22.7[a]	141
2011	28	12.5[a]	222	33	25.5[a]	128
2012	28	11.7[a]	237	34	23.4[a]	145
2013	33	15.0[a]	217	38	30.2[a]	127
2014	44	18.6[a]	239	46	30.4[a]	152
2015	32	12.2[a]	267	53	30.5[a]	173
2016	43	15.1[a]	283	48	27.8[a]	173
2017	36	14.2[a]	257	42	26.0[a]	160

Source: GAO analysis of Current Population Survey monthly data. | GAO-19-26

Notes: For our analysis, we did not estimate the number of hours for respondents reporting their hours as "varies" based on the results of what other respondents reporting discrete numbers of hours worked. Summer months include June, July, and August for each calendar year. Non-summer months include January through May and September through December for each calendar year. These definitions are not intended to align with how summer is defined in federal child labor regulations, and this analysis is not intended to assess whether this work complied with federal child labor requirements.

[a]Estimate has a relative standard error greater than 10 percent but less than 30 percent.

[b]Estimate should be interpreted with caution because it has a relative standard error between 31 and 50 percent.

Table 19: Estimated Number of Children Aged 15 to 17 Working in Agricultural Industries, Summer and Non-Summer Months, 2003 to 2017

(Numbers in thousands)

	Summer months	Non-summer months
Year	Estimated number	Estimated number
2003	104	59
2004	111	67
2005	113	65
2006	130	65

	Summer months	Non-summer months
Year	Estimated number	Estimated number
2007	109	74
2008	145	63
2009	109	53
2010	82	47
2011	89	59
2012	88	52
2013	83	48
2014	86	42
2015	84	43
2016	101	57
2017	71	49

Source: GAO analysis of Current Population Survey (CPS) data. | GAO-19-26

Notes: Estimates are rounded to the nearest thousand. Summer months include June, July, and August for each calendar year. Non-summer months include January through May and September through December for each calendar year. These definitions are not intended to align with how summer is defined in federal child labor regulations, and this analysis is not intended to assess whether this work complied with federal child labor requirements. All estimates have a relative standard error of less than 30 percent.

Appendix III: Demographic Characteristics of Children in the United States Who Worked in Summer and Non-Summer Months

Gender. Our analysis of Current Population Survey (CPS) basic monthly data found that working females aged 15 to 17 comprised about 52 percent of the working child population in 2017 summer months, and 53 percent in non-summer months. Tables 20 and 21 present detailed results of our analysis.

Table 20: Estimated Number of Children Aged 15 to 17 Who Worked in an Average Summer Month, by Gender, 2003 to 2017

(In thousands)

Year	Female	Male
2003	1,614	1,697
2004	1,525	1,446
2005	1,653	1,575
2006	1,621	1,753
2007	1,524	1,576
2008	1,357	1,346
2009	1,123	1,174
2010	945	980
2011	968	948
2012	1,054	958
2013	1,027	966
2014	1,034	997
2015	1,114	1,148
2016	1,214	1,217
2017	1,294	1,190

Source: GAO analysis of Current Population Survey (CPS) monthly data. | GAO-19-26

Notes: Summer months include June, July, and August for each calendar year. These definitions are not intended to align with how summer is defined in federal child labor regulations. The estimates averaged these summer months.

Table 21: Estimated Number of Children Who Worked in an Average Non-Summer Month, by Gender, 2003 to 2017

(In thousands)

Year	Female	Male
2003	1,280	1,196
2004	1,267	1,144
2005	1,297	1,189
2006	1,379	1,235
2007	1,277	1,177
2008	1,148	983
2009	928	821
2010	822	720
2011	753	659
2012	753	693
2013	815	723
2014	867	782
2015	883	842
2016	986	823
2017	1,034	904

Source: GAO analysis of Current Population Survey (CPS) monthly data. | GAO-19-26

Notes: Non-summer months include January through May and September through December for each calendar year. These definitions are not intended to align with how summer is defined in federal child labor regulations.

Race and ethnicity. Our analysis of CPS basic monthly data found that from 2003 to 2017 the percentage of children aged 15 to 17 who worked during summer months and identified as white only declined, and the percentage of this age group that identified as other races or ethnicities—black only, Hispanic, or other races combined—increased.[1] More specifically, the percentage of working Hispanic children was 15.7 percent

[1]These estimates have relative standard errors of less than 10 percent. CPS treats ethnicity separately from race. As a result, a child can be identified in CPS as both white and Hispanic, or as both black and Hispanic, among other considerations. For the purposes of our report, we categorized any respondent identifying as Hispanic, irrespective of their reported race, as Hispanic. We further categorized respondents who identified as not being bi- or multiracial white or black as being white only and black only. We counted the following respondents as other races: respondents of two or more races, Asians, and other races such as Native American or Pacific Islander.

in 2017; the percentage of black only children was 9.7 percent; other races was 8.3 percent; and working white only children was 66 percent in 2017.[2]

Table 22: Estimated Number of Children Aged 15 to 17 Who Worked in an Average Summer Month, by Race and Ethnicity, 2003 to 2017

(In thousands)

Year	White only	Black only	Hispanic	Other races
2003	2,544	252	351	164[a]
2004	2,314	240	270	147[a]
2005	2,503	222	351	152[a]
2006	2,598	265	349	161[a]
2007	2,334	264	349	152[a]
2008	2,002	248	322	131[a]
2009	1,730	191[a]	271	104[a]
2010	1,458	137[a]	243	87[a]
2011	1,455	168[a]	225	69[a]
2012	1,444	177[a]	272	119[a]
2013	1,405	159[a]	300	128[a]
2014	1,446	169[a]	290	126[a]
2015	1,573	212	312	166[a]
2016	1,621	232	377	200[a]
2017	1,651	240	389	205[a]

Source: GAO analysis of Current Population Survey (CPS) monthly data. | GAO-19-26

Notes: CPS treats ethnicity separately from race. As a result, a child can be identified in CPS as both white and Hispanic, or as both black and Hispanic, among other considerations. For the purposes of our report, we categorized any respondent identifying as Hispanic, irrespective of their reported race, as Hispanic. We further categorized respondents who identified as not being bi- or multiracial white or black as being white only and black only. We counted bi- and multiracial respondents, as well as Asians, and other specific races such as Native American or Pacific Islander, as other races. Summer months include June, July, and August for each calendar year. These definitions are not intended to align with how summer is defined in federal child labor regulations.

[a]This estimate has a relative standard error greater than 10 percent and less than 30 percent.

[2]These estimates are for children working during summer months. The race and ethnic composition of working children during non-summer months was similar. More specifically, the percentage of working Hispanic children during non-summer months was 16.7 percent in 2017, the percentage of black only children was 8.9 percent, and working children of other races increased was 7.8 percent, while working white only children was 67 percent in 2017.

Table 23: Estimated Number of Children Aged 15 to 17 Who Worked in an Average Non-Summer Month, by Race and Ethnicity, 2003 to 2017

(In thousands)

Year	White only	Black only	Hispanic	Other races
2003	1,902	196	268	110[a]
2004	1,876	175	235	125[a]
2005	1,915	181	268	122[a]
2006	1,948	225	308	132
2007	1,816	218	296	125[a]
2008	1,581	177	268	105[a]
2009	1,340	133	204	73[a]
2010	1,176	125	179	61[a]
2011	1,082	104[a]	166	60[a]
2012	1,047	110[a]	200	89[a]
2013	1,121	106[a]	218	93[a]
2014	1,141	145	257	107[a]
2015	1,173	162	267	123[a]
2016	1,210	158	308	133
2017	1,291	172	324	152

Source: GAO analysis of Current Population Survey (CPS) monthly data. | GAO-19-26

Notes: CPS treats ethnicity separately from race. As a result, a child can be identified in CPS as both white and Hispanic, or as both black and Hispanic, among other considerations. For the purposes of our report, we categorized any respondent identifying as Hispanic, irrespective of their reported race, as Hispanic. We further categorized respondents who identified as not being bi- or multiracial white or black as being white only and black only. We counted bi- and multiracial respondents, as well as Asians, and other specific races such as Native American or Pacific Islander, as other races. Non-summer months include January through May and September through December for each calendar year. These definitions are not intended to align with how summer is defined in federal child labor regulations

[a]This estimate has a relative standard error greater than 10 percent and less than 30 percent.

Low-income status.[3] Our analysis of CPS ASEC data found that for 2016, working children aged 15 to 17 were less likely to be from low-income families than children who did not work: 15 percent and 27

[3]In this report, we defined low-income as having income below 150 percent of the poverty threshold. Poverty thresholds are set by the U.S. Census Bureau and take into account family size and composition to determine who is in poverty. According to a Census Bureau official, the Census Bureau does not have an official definition of low-income.

percent, respectively.[4] Further, our analysis found that this trend was consistent across varying working hours; in 2016 about 16 percent of children working 20 or more hours per week and about 14 percent of children working less than 20 hours were from low-income families.

[4]This analysis was conducted for all individuals, regardless of family type. The poverty status for persons aged 15 to 17 who are not related to anyone in a household (e.g., living alone or a foster child) is determined by their own income. CPS ASEC documentation notes that a family is a group of two persons or more residing together and related by birth, marriage, or adoption. Any related subfamily member is counted as within a primary family. For the purposes of our analysis, the poverty status or low-income status of individuals in a family is based on their family's income. The poverty/low-income status of individuals who are not in a family is based on their own income.

Appendix IV: Detailed Information on Occupations in Which Children Aged 15 to 17 Worked, 2016

Table 24: Occupations in Which Children Aged 15 to 17 Were Estimated to Have Worked, 2016

(In thousands)

Occupation title	Estimated number of working children (margin of error)
Cashiers	375 (+/-52)
Waiters and waitresses	141 (+/-36)
Athletes, coaches, umpires, and related workers	103 (+/-27)
Child care workers	90 (+/-24)
Miscellaneous agricultural workers, including animal breeders	87 (+/-23)
Cooks	86 (+/-26)
Retail salespersons	84 (+/-26)
Food preparation workers	83 (+/-22)
Lifeguards and other recreational and all other protective service workers	79 (+/-24)
Food preparation and serving related workers, all other including dining room and cafeteria attendants and bartender helpers	77 (+/-23)
Hosts and hostesses, restaurant, lounge, and coffee shop	71 (+/-22)
Counter attendants, cafeteria, food concession, and coffee shop	69 (+/-24)
Janitors and building cleaners	64 (+/-21)
Laborers and freight, stock, and material movers, hand	58 (+/-20)
Packers and packagers, hand	58 (+/-27)
Grounds maintenance workers	55 (+/-20)
Stock clerks and order fillers	54 (+/-21)
Office clerks, general	52 (+/-21)
Customer service representatives	51 (+/-21)

Occupation title	Estimated number of working children (margin of error)
Dishwashers	49 (+/-22)
Recreation and fitness workers	46 (+/-19)
Other teachers and instructors	45 (+/-18)
Combined food preparation and serving workers, including fast food	42 (+/-17)
Miscellaneous entertainment attendants and related workers	37 (+/-18)
Cleaners of vehicles and equipment	33 (+/-18)
Receptionists and information clerks	25 (+/-13)
Construction laborers	22 (+/-15)[a]
Food servers, non-restaurant	21 (+/-12)[a]
Driver/sales workers and truck drivers	15 (+/-11)[a]
Nonfarm animal caretaker	14 (+/-11)[a]
Teacher assistants	11 (+/-9)[a]
Secretaries and administrative assistants	11 (+/-9)[a]
Carpenters	11 (+/-10)[a]
Maids and housekeeping cleaners	11 (+/-8)[a]
Bookkeeping, accounting, and auditing clerks	10 (+/-9)[a]
Ushers, lobby attendants, and ticket takers	10 (+/-9)[a]
Counselors	10 (+/-8)[a]
Nursing, psychiatric, and home health aides	10 (+/-7)[a]
Security guards and gaming surveillance officers	9 (+/-8)[a]
Miscellaneous healthcare support occupations, including medical equipment preparers	9 (+/-7)[a]

Source: GAO analysis of Current Population Survey (CPS) 2017 Annual Social and Economic Supplement (ASEC) data, which reports calendar year 2016 information. | GAO-19-26

Notes: Data in parentheses represent the margin of error at the 95 percent confidence level. This analysis is not intended to assess whether this work complied with federal child labor requirements.

[a]This estimate has a relative standard error between 30 and 50 percent and should be interpreted with caution.

Appendix V: Detailed Information on Hired Child Crop Workers in the United States

Estimated number of hired working children in crop agriculture. Our analysis of National Agricultural Worker Survey (NAWS) data found that from fiscal years 2005 to 2008 about 43,000 children aged 17 and under on average worked on U.S. crop farms—about 3.1 percent of the total hired crop worker population. Further, from fiscal years 2009 to 2012 there were about 30,000 children aged 17 and under on average (1.8 percent), and from fiscal years 2013 to 2016 about 34,000 on average (2.1 percent).

Age first worked in agriculture. Our analysis of NAWS data indicates that more than one-third of hired crop workers—both adults and children—began working in U.S. agriculture at age 18 or under. More specifically, in the fiscal year 2003 to 2016 reporting period, between 6 and 8 percent of hired crop workers began working at age 13 or under, and another 30 to 34 percent began working at age 14 to 18.[1] Table 25 presents specific results.

Table 25: Age Hired Crop Workers First Worked in U.S. Agriculture, by Estimated Percentage, Fiscal Years 2003 to 2016

Age first worked in U.S. agriculture	Estimated percentage of all hired crop workers (margin of error)
0- to 13-years-old	7 (+/-1)
14- to 18-years-old	32 (+/-2)
19- to 21-years-old	18 (+/-1)
22- to 24-years-old	11 (+/-1)
25- to 34-years-old	32 (+/-2)

Source: GAO analysis of National Agricultural Worker Survey (NAWS) data. | GAO-19-26

[1]These ranges are estimates at the 95 percent confidence level.

Notes: Data in parentheses represent the margin of error at the 95 percent confidence level. All mean estimates are rounded to the nearest whole number, and margin of errors are rounded up to the next whole number. The National Agricultural Worker Survey (NAWS) survey does not identify the discrete age at which a respondent first worked in U.S. agriculture. Accordingly, it is not possible to identify the extent to which those reporting they first worked in U.S. agriculture between age 14 and 18 started working at age 14, 15, etc. This analysis is not intended to assess whether this work complied with federal child labor requirements.

Gender. Our analysis of National Agricultural Worker Survey (NAWS) data identified no discernible trends with respect to the gender of the hired child crop workers during the time periods we reviewed. However, our analysis shows that hired crop workers aged 17 and under were more often male than female. See table 26.

Table 26: Estimated Percentage of Hired Crop Workers Aged 17 and Under by Gender, Fiscal Years 2005 to 2016

Fiscal years	Percentage of females (margin of error)	Percentage of males (margin of error)
2005 to 2008	19 (+/-18)[a]	81 (+/-18)
2009 to 2012	24 (+/-9)	76 (+/-9)
2013 to 2016	30 (+/-15)	70 (+/-15)

Source: GAO analysis of National Agricultural Worker Survey (NAWS) data. | GAO-19-26

Note: Data in parentheses represent the margin of error at the 95 percent confidence level. All mean estimates are rounded to the nearest whole number, and margin of errors are rounded up to the next whole number. While the estimated percentage of female hired child crop workers appears to increase, and the percentage of males decrease, the margin of errors overlap among mean estimates. Therefore, we cannot with confidence state that the trends are statistically reliable and instead note that there are no discernible trends.

[a]Estimate has a relative standard error between 31 and 50 percent and should be interpreted with caution.

Race and ethnicity. Our analysis of NAWS data found no discernible trends with respect to the trends in Hispanic and white only hired child crop workers during the time periods we reviewed. Table 27 presents detailed results.

Table 27: Estimated Percentage of Hired Crop Workers Aged 17 and Under by Race and Ethnicity, Fiscal Years 2005 to 2016

Fiscal years	Percentage Hispanic (margin of error)	Percentage white only (margin of error)
2005 to 2008	74 (+/-18)	25 (+/-18)[a]
2009 to 2012	50 (+/-17)	50 (+/-17)
2013 to 2016	65 (+/-17)	34 (+/-17)

Source: GAO analysis of National Agricultural Worker Survey (NAWS) data. | GAO-19-26

Notes: Data in parentheses represent the margin of error at the 95 percent confidence level. All mean estimates are rounded to the nearest whole number, and margin of errors are rounded up to the next whole number. We separately analyzed black only and “other races”—defined as Native American,

Pacific Islander, and persons of two or more races—for the time periods noted, but did not obtain statistically reportable results for respondents aged 17 and under.

[a]Estimate has a relative standard error between 31 and 50 percent and should be interpreted with caution.

Poverty status. Our analysis of NAWS data indicates a substantial percentage of hired child crop workers come from families experiencing poverty. More specifically, our analysis shows that between 74 and 92 percent of hired crop workers aged 17 and under in the fiscal year 2005 to 2008 review period came from families below the poverty level, as defined for purposes of NAWS,[2] whereas in the fiscal year 2013 to 2016 review period, between 42 and 76 percent did. Table 28 presents specific details for the fiscal year 2005 to 2008, 2009 to 2012, and 2013 to 2016 reporting periods.

Table 28: Estimated Percentage of Hired Crop Workers Aged 17 and Under From Families Below the Poverty Level, Fiscal Years 2005 to 2016

Fiscal years	Percentage below the poverty level (margin of error)	Percentage above the poverty level (margin of error)
2005 to 2008	83 (+/-9)	17 (+/-9)
2009 to 2012	77 (+/-13)	23 (+/-13)
2013 to 2016	59 (+/-17)	41 (+/-17)

Source: GAO analysis of National Agricultural Worker Survey (NAWS) data. | GAO-19-26

Notes: Data in parentheses represent the margin of error at the 95 percent confidence level. Percentages may not total to 100 due to rounding. According to Employment and Training Administration officials, to determine farm workers' poverty status as reported in NAWS, a poverty threshold was calculated for each worker based on the worker's family size and the U.S. Department of Health and Human Services' poverty guidelines for the calendar year that matches the year for which the worker answered the family income question. Workers' family incomes were then compared to the poverty thresholds calculated for their family size and poverty status was assigned. Income was not adjusted for the amount of time the respondent was present in the United States in the calendar year in which income was reported.

Mean farm work days per year. Our analysis of NAWS data indicates that hired crop workers aged 17 and under worked an estimated 70 days

[2]According to Employment and Training Administration officials, to determine farm workers' poverty status as reported in NAWS, a poverty threshold was calculated for each worker based on the worker's family size and the U.S. Department of Health and Human Services' poverty guidelines for the calendar year that matches the year for which the worker answered the family income question. Workers' family incomes were then compared to the poverty thresholds calculated for their family size and poverty status was assigned. Income was not adjusted for the amount of time the respondent was present in the United States in the calendar year in which income was reported.

in the fiscal year 2013 to 2016 reporting period.[3] Table 29 presents the detailed results of the mean estimated number of days worked for children aged 14 to 17.

Table 29: Trends in Estimated Mean Working Days for Hired Crop Workers Aged 14 to 17 Working on U.S. Farms, by Age and Year Grouping

Worker age	Fiscal years 2005 to 2008	Fiscal years 2009 to 2012	Fiscal years 2013 to 2016
	Mean estimated number of days (margin of error days)	Mean estimated number of days (margin of error days)	Mean estimated number of days (margin of error days)
14-years-old	126 (+/-74)	82 (+/-35)[a]	65(+/-42)[a]
15-years-old	77 (+/-13)	71 (+/-50)[a]	101 (+/-43)[a]
16-years-old	94 (+/-31)	63 (+/-14)	57 (+/-16)
17-years-old	95 (+/-42)	94 (+/-31)	74 (+/-24)
Total aged 17 years and under	93 (+/-24)[a]	78 (+/-16)	70 (+/-15)
Total aged 18 years and older	195 (+/-8)	190 (+/-8)	194 (+/-8)

Source: GAO analysis of National Agricultural Worker Survey (NAWS) data. | GAO-19-26

Notes: Data in parentheses represent the margin of error at the 95 percent confidence level. All mean estimates are rounded to the nearest whole number, and margin of errors are rounded up to the next whole number. This analysis is not intended to assess whether this work complied with federal child labor requirements.

[a]Estimate has a relative standard error between 31 and 50 percent and should be interpreted with caution.

Documentation status. According to our analysis of NAWS data, which is self-reported by workers, from 2013 to 2016, the majority of hired crop workers aged 17 and under were U.S. citizens, with some participation in the hired crop work force by children holding green cards or who were unauthorized workers, as defined for purposes of NAWS. Table 30 presents details.

Table 30: Estimated Percentage of Hired Crop Workers Aged 17 and Under by Documentation Status, Fiscal Years 2013 to 2016

Fiscal years	Citizen (margin of error)	Green card (margin of error)	Unauthorized (margin of error)
2013 to 2016	73 (+/-16)	12 (+/-10)[a]	15 (+/-13)[a]

Source: GAO analysis of National Agricultural Worker Survey (NAWS) data. | GAO-19-26

[3]At the 95 percent confidence level, the estimated number of days that crop workers on U.S. farms aged 17 or under worked were between 55 and 85 days for the fiscal year 2013 to 2016 reporting period.

Notes: Data in parentheses represent the margin of error at the 95 percent confidence level. All mean estimates are rounded to the nearest whole number, and margin of errors are rounded up to the next whole number. Table does not include results for Other Work Authorization, the results of which were not reportable for the time periods. NAWS also does not include workers employed on H-2A visas in its survey or in the survey results.

[a]Estimate has a relative standard error between 31 and 50 percent and should be interpreted with caution.

Region worked. Our analysis of NAWS data found a relatively even distribution of hired crop workers in the California, Midwest, and Northwest regions, with somewhat fewer workers in the Southeast and Southwest, for the time period from fiscal year 2005 to 2016. Table 31 presents the detailed results.

Table 31: Estimated Percentage of Hired Crop Workers Aged 17 and Under by Region, Fiscal Years 2005 to 2016

Region	States	Percentage of workers in region (margin of error)
California	California	21 (+/-9)
East	Connecticut, Delaware, Kentucky, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, Tennessee, Vermont, Virginia, and West Virginia	15 (+/-8)
Midwest	Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin	23 (+/-10)
Northwest	Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington, and Wyoming	21 (+/-8)
Southeast	Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, and South Carolina	11 (+/-5)
Southwest	Arizona, New Mexico, Oklahoma, and Texas	10 (+/-6)

Source: GAO analysis of National Agricultural Worker Survey (NAWS) data. | GAO-19-26

Notes: Data in parentheses represent the margin of error at the 95 percent confidence level. All mean estimates are rounded to the nearest whole number, and margin of errors are rounded up to the next whole number. The NAWS is not administered in Alaska or Hawaii.

Applied or mixed pesticides within the last year. Our analysis of NAWS data shows that from 2003 to 2016, an estimated 14 percent (+/-13 percent) of 16-year-olds and 8 percent (+/-7 percent) of 17-year-olds reported that in the past 12 months they had loaded, mixed, or applied pesticides.[4]

[4]These estimates have relative standard errors of between 31 and 50 percent and should be interpreted with caution. This analysis is not intended to assess whether this work complied with any applicable federal requirements, such as federal child labor requirements or the Environmental Protection Agency's Worker Protection Standard.

Appendix VI: Detailed Information on Children in the United States Who Work on Farms

Table 32: National Estimates of Children Working on U.S. Farms by Type of Farm, Type of Worker and Age, 2004, 2006, 2009, 2012, 2014

Farm type	Worker type	Age	2004 (margin of error)	2006 (margin of error)	2009 (margin of error)	2012 (margin of error)	2014 (margin of error)
Crop	Working household	14 and under	158,811 (+/- 10,676)	121,513 (+/- 9,855)	107,097 (+/- 9,259)	99,571 (+/- 10,474)	100,288 (+/- 8,522)
Crop	Working household	15 to 17	87,811 (+/- 6,315)	76,662 (+/- 5,998)	64,350 (+/- 5,894)	64,448 (+/- 18,853)	52,132 (+/- 4,733)
Crop	Working household	Total under 18	246,622 (+/- 13,275)	198,175 (+/- 12,177)	171,447 (+/- 12,038)	164,019 (+/- 13,777)	152,420 (+/- 10,539)
Crop	Hired	14 and under	21,799 (+/- 4,929)	15,378 (+/- 3,967)	11,454 (+/- 4,092)	10,059 (+/- 2,656)	12,131 (+/- 2,954)
Crop	Hired	15 to 17	84,561 (+/- 9,816)	75,446 (+/- 9,179)	52,101 (+/- 7,619)	56,194 (+/- 9,243)	67,195 (+/- 8,653)
Crop	Hired	Total under 18	106,360 (+/- 11,785)	90,823 (+/- 10,741)	63,556 (+/- 9,937)	66,253 (+/- 9,967)	79,326 (+/- 9,643)
Livestock	Working household	14 and under	228,838 (+/- 14,388)	192,802 (+/- 12,571)	171,374 (+/- 12,681)	142,377 (+/- 13,255)	145,549 (+/- 10,108)
Livestock	Working household	15 to 17	115,245 (+/- 8,110)	106,205 (+/- 7,844)	94,087 (+/- 7,589)	81,688 (+/- 8,171)	77,866 (+/- 5,892)
Livestock	Working household	Total under 18	344,083 (+/- 17,587)	299,007 (+/- 16,064)	265,460 (+/- 15,996)	224,064 (+/- 17,301)	223,415 (+/- 13,073)
Livestock	Hired	14 and under	21,460 (+/- 5,917)	14,036 (+/- 3,169)	8,836 (+/- 2,325)	12,934 (+/- 3,083)	10,130 (+/- 2,785)
Livestock	Hired	15 to 17	71,190 (+/- 8,677)	79,360 (+/- 9,424)	51,003 (+/- 7,562)	51,505 (+/- 7,697)	58,389 (+/- 7,824)
Livestock	Hired	Total under 18	92,649 (+/- 11,358)	93,396 (+/- 10,635)	59,838 (+/- 8,103)	64,439 (+/- 8,953)	68,519 (+/- 8,522)
Total crop and livestock	**Working household and hired**	**All under 18**	**789,714 (+/- 54,006)**	**681,401 (+/- 49,617)**	**560,301 (+/- 46,074)**	**518,775 (+/- 49,998)**	**523,680 (+/- 41,777)**

Source: GAO analysis of Childhood Agricultural Injury Survey 2004, 2006, 2009, 2012, 2014 data. | GAO-19-26

Notes: The National Institute for Occupational Safety and Health's (NIOSH) Childhood Agricultural Injury Survey defines a farm as being any crop and/or livestock operation with $1,000 or more of gross agricultural production within a calendar year. Farm type is determined by the type of production indicated for the respondent which represents the largest proportion of gross income for the farm operation. Working household children are defined as a member of the farm operator's household who performed work or chores on the farm (regardless of pay), and is a subset of household children. Hired children are defined as children hired directly by the farm operator and paid for work performed on the farm. These exclude working household children and contract laborers. Data in parentheses represent the margin of error at the 95 percent confidence level. This analysis is not intended to assess whether this work complied with federal child labor requirements.

NIOSH also calculated the estimated number of children aged 12 and under in 2014 that worked on a U.S. farm, and estimated there were 68,866 (+/-7,023) working household children on crop farms, and 102,260 (+/-8,328) working household children on livestock farms. Further, NIOSH calculations estimate the number of hired children aged 12 and under that worked on a U.S. farm in 2014 as being 2,693 (+/-1,186) on crop farms and 3,538 (+/-1,936) on livestock farms. Data in parentheses represent the margin of error at the 95 percent confidence level.

Appendix VII: Information on Work-Related Child Fatalities by Industry, 2003 to 2016

Table 33: Number of Work-Related Child Fatalities, by Detailed Industry, 2003 to 2016

General industry	Detailed industry	Sub-industry	Number	Percentage of total
Agriculture			237	52.4
Agriculture	Crop production		143	31.6
Agriculture	Crop production	Oilseed and grain farming	19	4.2
Agriculture	Crop production	Vegetable and melon farming	8	1.8
Agriculture	Crop production	Fruit and tree nut farming	6	1.3
Agriculture	Crop production	Other crop farming	24	5.3
Agriculture	Animal production and aquaculture		67	14.8
Agriculture	Animal production and aquaculture	Cattle ranching and farming	56	12.4
Agriculture	Animal production and aquaculture	Other animal production	6	1.3
Agriculture	Forestry and logging		5	1.1
Agriculture	Fishing, hunting and trapping		9	2.0
Agriculture	Support activities for agriculture and forestry		11	2.4
Construction and Mining			59	13.1
Construction and Mining	Mining, quarrying, and oil and gas extraction		3	0.7
Construction and Mining	Construction		56	12.4
Manufacturing			10	2.2
Manufacturing	Wood product manufacturing		5	1.1
Wholesale and Retail Trade			33	7.3
Wholesale and Retail Trade	Wholesale trade		14	3.1
Wholesale and Retail Trade	Retail trade		19	4.2
Transportation and Warehousing			12	2.7

General industry	Detailed industry	Sub-industry	Number	Percentage of total
Transportation and Warehousing	Truck transportation		9	2.0
Leisure and Hospitality			34	7.5
Leisure and Hospitality	Arts, entertainment, and recreation		14	3.1
Leisure and Hospitality	Accommodation and food services		20	4.4
Professional, business, and other services			55	12.2
Professional, business, and other services	Information		3	0.7
Professional, business, and other services	Professional and business services		31	6.9
Professional, business, and other services		Professional, scientific, and technical services	3	0.7
Professional, business, and other services		Administrative and support and waste management and remediation services	28	6.2
Professional, business, and other services	Educational and health services		5	1.1
Professional, business, and other services		Health care and social assistance	4	0.9
Professional, business, and other services	Other services, except public administration		16	3.5
Government, including public administration			11	2.4
Government, including public administration	Public administration		6	1.3

Source: GAO analysis of Census of Fatal Occupational Injuries (CFOI) data. | GAO-19-26

Note: Totals for general industries may not total the sum of detailed industries and sub-industries, because some data for detailed industries or sub-industries did not meet BLS publication criteria.

Appendix VIII: Selected Demographic Characteristics of Work-Related Fatalities, Children Aged 17 and Under, 2003 to 2016

With respect to gender, the data from BLS's Census of Fatal Occupational Injuries show that 87 percent of the children killed due to work-related injuries were boys,[1] and about 56 percent of the work-related fatalities were incurred by children aged 16 or older. Boys aged 17 and under suffered a work-related fatality about seven times more often than girls.

With respect to race and ethnicity, most children incurring work-related fatalities were white only (75 percent), as shown in table 34.

Table 34: Number and Percentage of Work-Related Child Fatalities, by Race and Ethnicity, 2003 to 2016

Category	White only	Hispanic	Black only	Other races	Total
Number of children	340	89	11	11	**451**
Percentage of children	75	20	2	2	**99**[a]

Source: GAO analysis of Census of Fatal Occupational Injuries (CFOI) data. | GAO-19-26

Notes: The number of work-related fatalities reported in this table is one less than reported in table 3 because, according to BLS, the fatality in table 3 did not meet publication criteria. Respondents who reported they were of Hispanic ethnicity and any race (for example, black and Hispanic) were counted as Hispanic; respondents who report they were of Hispanic ethnicity and two or more races were counted as Hispanic; respondents who did not report Hispanic ethnicity who also identified as two or more races were counted as "other races."

[a]Percentage does not sum to 100 percent due to rounding.

[1]BLS reported gender information for 451 of the 452 work-related fatalities to children during the time period.

With respect to the event or exposure that contributed to a child's death,[2] our analysis of BLS data indicate that, from 2012 to 2016, 61 percent of the 119 work-related fatalities incurred by children aged 17 and under were due to a work- and transportation-related accident, including roadway incidents involving motorized land vehicles. Table 35 provides details on the types of event or exposure that caused the work-related child fatalities from 2012 to 2016.

Table 35: Causes of Work-Related Child Fatalities, 2012 to 2016

Event or exposure general category	Event or exposure specific category	Number	Percentage to total for time period
Violence and other injuries by persons or animals		11	9
Violence and other injuries by persons or animals	Intentional injury by person	6	5
Violence and other injuries by persons or animals	Injury by person—unintentional or intent unknown	3	3
Violence and other injuries by persons or animals	Animal and insect related incidents	2	2
Transportation incidents		72	61
Transportation incidents	Animal and other non-motorized vehicle transportation incidents	5	4
Transportation incidents	Pedestrian vehicular incident	4	3
Transportation incidents	Water vehicle incident	3	3
Transportation incidents	Roadway incident involving motorized land vehicle	26	22
Transportation incidents	Non-roadway incident involving motorized land vehicle	33	28
Transportation incidents	Fire	1	1
Fall, slip, trip		5	4
Fall, slip, trip	Fall to lower level	5	4
Exposure to harmful substances or environments		5	4
Exposure to harmful substances or environments	Exposure to electricity	3	3

[2]Our analysis was of the event or exposure, but not the source for a work-related fatality.

Event or exposure general category	Event or exposure specific category	Number	Percentage to total for time period
Exposure to harmful substances or environments	Exposure to other harmful substances	2	2
Contact with objects and equipment		23	19
Contact with objects and equipment	Struck by objects or equipment	14	12
Contact with objects and equipment	Caught in or compressed by equipment or objects	8	7

Source: GAO analysis of Census of Fatal Occupational Injuries (CFOI) data. | GAO-19-26

Notes: Totals for categories may contain subcategories not shown elsewhere, which did not meet Bureau of Labor Statistics publication criteria. Accordingly, some totals do not sum to that total's specific subcategories. This analysis is not intended to assess whether this work complied with federal child labor requirements.

Appendix IX: Estimated Work-Related Injuries and Illnesses to Children Aged 17 and Under, 15 and Under, and 14 and Under

Table 36: Estimated Work-Related Injuries and Illnesses to Children Aged 17 and Under, Aged 15 and Under, and Aged 14 and Under, 2003 to 2016

	Bureau of Labor Statistics (BLS) Survey of Occupational Illness and Injuries (SOII)					National Institute for Occupational Safety and Health (NIOSH) National Electronic Injury Surveillance System – Occupational Supplement (NEISS-Work)			
Year	Total estimated number of work related injuries and illnesses involving days away from work in thousands	Aged 15 to 17, estimated number of injuries and illnesses in thousands (margin of error)	Aged 15 to 17, estimated percentage of total injuries and illnesses that involved a day away from work	Aged 15 and under, estimated number of injuries and illnesses (margin of error)[a]	Aged 15 and under, estimated percentage of total injuries and illnesses	Aged 17 and under, estimated number of injuries and illnesses in thousands (margin of error)	Aged 17 and under, estimated percentage of injuries and illnesses to total injuries and illnesses	Aged 14 and under estimated number of injuries and illnesses in thousands (margin of error)	Aged 14 and under, estimated percentage of total injuries and illnesses
2003	1,316	9.0 (+/-.457)	0.68%	220 (+/-69)	.02%	54.8 (+/-11.1)	1.6%	3.8 (+/-1.6)	0.10%
2004	1,259	7.9 (+/-.431)	0.62%	200 (+/-67)	.02%	53.9 (+/-11.7)	1.6%	3.7 (+/-1.7)	0.10%
2005	1,235	7.7 (+/-.423)	0.62%	90 (+/-44)	.01%	54.7 (+/-13.7)	1.6%	3.2 (+/-1.4)	0.10%
2006	1,184	7.6 (+/-.313)	0.64%	190 (+/-47)	.02%	56.1 (+/-14.8)	1.6%	3.4 (+/-1.7)	0.10%
2007	1,159	6.2 (+/-.301)	0.53%	420 (+/-76)	.04%	53.6 (+/-13.5)	1.6%	4.8 (+/-2.3)	0.10%
2008	1,078	6.6 (+/-.325)	0.61%	130 (+/-42)	.01%	40.1 (+/-12.2)	1.3%	Not Reportable	
2009	965	4.8 (+/-.291)	0.50%	180 (+/-52)	.02%	29.4 (+/-7.5)	1.1%	2.8 (+/-1.5)	0.10%
2010	933	4.2 (+/-.245)	0.45%	280 (+/-59)	.03%	27.3 (+/-6.9)	1.0%	2.7 (+/-1.5)	0.10%
2011	918	3.3 (+/-.232)	0.36%	200 (+/-53)	.02%	28.0 (+/-7.7)	1.0%	Not Reportable	
2012	919	4.1 (+/-.250)	0.45%	110 (+/-38)	.01%	27.2 (+/-6.3)	1.0%	3.2 (+/-1.5)	0.10%
2013	917	4.1 (+/-.259)	0.45%	120 (+/-42)	.01%	30.4 (+/-8.2)	1.10%	Not Reportable	
2014	916	4.3 (+/-.268)	0.47%	140 (+/-91)[b]	.02%	25.2 (+/-5.4)	0.90%	Not Reportable	

	Bureau of Labor Statistics (BLS) Survey of Occupational Illness and Injuries (SOII)					National Institute for Occupational Safety and Health (NIOSH) National Electronic Injury Surveillance System – Occupational Supplement (NEISS-Work)			
Year	Total estimated number of work related injuries and illnesses involving days away from work in thousands	Aged 15 to 17, estimated number of injuries and illnesses in thousands (margin of error)	Aged 15 to 17, estimated percentage of total injuries and illnesses that involved a day away from work	Aged 15 and under, estimated number of injuries and illnesses (margin of error)[a]	Aged 15 and under, estimated percentage of total injuries and illnesses	Aged 17 and under, estimated number of injuries and illnesses in thousands (margin of error)	Aged 17 and under, estimated percentage of injuries and illnesses to total injuries and illnesses	Aged 14 and under estimated number of injuries and illnesses in thousands (margin of error)	Aged 14 and under, estimated percentage of total injuries and illnesses
2015	902	5.2 (+/-.294)	0.57%	140 (+/-45)	.02%	22.9 (+/-4.4)	0.90%	Not Reportable	
2016	892	5.1 (+/-.288)	0.57%	270 (+/-64)	.03%	26.3 (+/-5.8)	0.80%	3.2 (+/-1.9)[b]	0.10%

Source: GAO analysis of Survey of Occupational Injuries and Illnesses (SOII) and National Electronic Injury Surveillance System—Occupational Supplement (NEISS-Work) data. | GAO-19-26

Notes: BLS published some estimates for work-related injuries and illnesses to 14-year-olds in certain years. More specifically, BLS from 2003 to 2015 estimated that there were 40 work-related injuries and illnesses to 14-year-olds in private industry in 2003; 20 in 2006; 120 in 2007; 60 in 2010; 120 in 2011; 70 in 2012; 20 in 2013; 70 in 2014; and it estimated that there were 30 work-related injuries and illnesses to 14-year-olds in local government in 2009. These estimates have relative standard errors of 30 percent or less, except for the 2003, 2009 and 2013 estimates, which have relative standard errors higher than 30 but less than 50 percent and should be interpreted with caution; and a 2005 estimate which we are not reporting because it has a relative standard error greater than 50 percent. Further, estimates for 2008 to 2013 are for workers at private and public entities, while estimates from 2003 to 2008 are for private entities only. Total days away from work in this table are for private industry only. BLS estimated that in its data about 5 percent of injuries and illnesses in private industry and federal, local, and state government were illnesses. NIOSH technical information notes that NEISS-Work data from 2003 to 2014 include illnesses such as those that began at work (heart attacks or stroke), chronic conditions, and exacerbated long-term injuries; it estimates 5 to 10 percent of all cases were such illnesses. The mean estimate for NEISS-Work may be higher than that listed because some observations were omitted to protect confidentiality related to the underlying individual data or other reasons. NEISS-Work data from 2015 onward do not capture most illnesses. Data in parentheses represent the margin of error at the 95 percent confidence level.

[a]Table shows only private sector data for BLS's SOII work-related injuries to children aged 15 and under. Number represents BLS's estimate for children 15 or under who incurred a work-related injury resulting in at least one day of missed work. Estimates ranged from 90 to 420 such children.

[b]This estimate has a relative standard error above 30 percent and less than 50 percent and should be interpreted with caution.

Appendix X: Estimated Work-Related Injuries and Illnesses to Children Aged 17 and Under, by Industry, 2003 and 2016

Table 37: Estimated Number of Work-Related Injuries and Illnesses to Children Aged 17 and Under, 2003 and 2016

Industry	Sub-industry	2003			2016		
		Weighted estimate (margin of error)	Number of working children aged 15 to 17 in industry	Median days away from work	Weighted estimate (margin of error)	Number of working children aged 15 to 17 in industry (margin of error)	Median days away from work
Construction		500 (+/-133)	99,938	44	80 (+/-58)[a]	64,939 (+/-24,587)	4
Educational and health services		560 (+/-101)	292,337	4	290 (+/-54)	259,092 (+/-41,430)	4
Educational and health services	Educational services[c]		136,596		60 (+/-25)	131,098 (+/-30,663)	6
Educational and health services	Health care and social assistance	550 (+/-102)	155,741	4	230 (+/-49)	127,994 (+/-29,966)	4
Financial Activities		130 (+/-52)	59,770	2		35,304 (+/-16,933)	
Financial Activities	Finance and insurance	20 (+/-19)[a]	31,877	25		24,231 (+/-15,462)[a]	
Financial Activities	Real estate and rental and leasing[c]	120 (+/-62)	27,893	2		11,072 (+/-7,632)[a]	
Information		100 (+/-40)	81,240	2	30 (+/-23)[a]	28,425 (+/-15,947)	2
Leisure and hospitality		3,940 (+/-448)	1,352,958	3	2,900 (+/-284)	1,150,060 (+/-95,973)	3
Leisure and hospitality	Accommodation and food services	3,560 (+/-502)	1,031,256	3	2,500 (+/-284)	879,821 (+/-85,907)	3
Leisure and hospitality	Arts entertainment and recreation	380 (+/-73)	321,702	3	400 (+/-82)	270,239 (+/-39,682)	5

Industry	Sub-industry	2003			2016		
		Weighted estimate (margin of error)	Number of working children aged 15 to 17 in industry	Median days away from work	Weighted estimate (margin of error)	Number of working children aged 15 to 17 in industry (margin of error)	Median days away from work
Manufacturing		280 (+/-61)	52,923	5	80 (+/-28)	48,977 (+/- 19,248)	3
Natural resources and mining		100 (+/-31)	138,563	2	110 (+/-35)	109,900 (+/- 28,488)	38
Natural resources and mining	Agriculture forestry fishing and hunting	100 (+/-51)	138,080	2	50 (+/-30)[a]	109,900 (+/- 28,488)	7
Other services except public administration		290 (+/-85)	234,527	2	80 (+/-63)[a]	130,511 (+/- 31,631)	10
Professional and business services		240 (+/-91)	188,919	23	140 (+/-62)	111,500 (+/- 30,088)	2
Professional and business services	Administrative and waste services	190 (+/-92)	135,612	23	30 (+/-28)[a]	72,773 (+/- 23,535)	3
Professional and business services	Professional and technical services[c]		53,307		110 (+/-65)[a]	38,727 (+/- 20,008)	2
Trade transportation and utilities		2,830 (+/-283)	718,283	6	1,040 (+/- 122)	468,038 (+/- 65,025)	3
Trade transportation and utilities	Retail trade	2,250 (+/-273)	665,917	5	960 (+/-124)	431,141 (+/- 63,186)	3
Trade transportation and utilities	Transportation and warehousing	440 (+/-97)	18,537	8	60 (+/-25)	27,168 (+/- 15,908)[a]	6
Trade transportation and utilities	Wholesale trade	130 (+/-63)	33,829	2	Not reportable[b]	9,728 (+/- 7,366)[a]	Not reportable[b]
Total		**8,970 (+/-457)**	**3,234,645**	**4**	**4,760 (+/- 271)**	**2,433,501**	**3**

Source: GAO analysis of Survey of Occupational Injuries and Illnesses and Current Population Survey March 2017 ASEC data. | GAO-19-26

Notes: Annual Social and Economic Supplement (ASEC) data report information for the previous calendar year. Subcategories will not always add to totals because some data do not meet publication criteria. Industries combine into two domains: goods producing and service producing. Goods producing—with a weighted estimate of 270 (+/- 62) and median days away from work of 7 in 2016—includes construction, manufacturing, and natural resources and mining. Service providing—with a weighted estimate of 4,490 (+/- 273) and median days away from work of 3 in 2016—includes educational and health services, information, leisure and hospitality, other services except public administration, professional and business services, and trade transportation and utilities.

[a]Relative standard error greater than 30 and less than 50, and should be interpreted with caution.

[b]Estimate is not reportable as relative standard error is 50 or higher.

[c]Educational services, as well as professional and technical services subcategories do not have data for 2003. Real estate and rental and leasing subcategory does not have estimate for 2016.

Appendix XI: Comments from the Department of Labor's Occupational Safety and Health Administration

U.S. Department of Labor

Occupational Safety and Health Administration
Washington, D.C. 20210

OCT 19 2018

Ms. Cindy Brown Barnes, Director
Education, Workforce and Income Security Issues
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Ms. Brown Barnes:

Thank you for the opportunity to comment on the Government Accountability Office's (GAO) draft report, *Working Children: Federal Injury Data and Compliance Strategies Could be Strengthened.* The following comments are submitted on behalf of the Department of Labor's Occupational Safety and Health Administration (OSHA) and relate only to those sections of the report that address OSHA directly.

The report notes that field staff from both the Wage and Hour Division (WHD) and OSHA stated there is a regular exchange of information, and officials from every WHD region acknowledge receipt of "referrals or information" from OSHA. While we concede that the 1990 Memorandum of Understanding between the two agencies is dated, the report recognized that this has no impact on the cooperation between OSHA and WHD and the effective sharing of information. Further, as OSHA and WHD are agencies within the same department, there is no barrier to interagency communication and cooperation.

The report recommends OSHA should update the MOU and establish procedures for monitoring the actions taken on referrals. To be clear, there was no indication in the report that OSHA failed to take appropriate action following a referral from WHD, and there is no indication from WHD that there is dissatisfaction on their part with the current process. However, OSHA will coordinate with WHD on updating the MOU, including discussing whether any referral issues exist and how to work together to share referral data, as appropriate.

OSHA welcomes this process review, and appreciates the opportunity to respond to GAO's draft report.

Sincerely,

Loren Sweatt
Deputy Assistant Secretary

Appendix XII: Comments from the Department of Labor's Wage and Hour Division

U.S. Department of Labor

Wage and Hour Division
Washington, D.C. 20210

October 19, 2018

Ms. Cindy Brown Barnes
Director
Education, Workforce and
Income Security
U.S. Government Accountability Office
Washington, D.C. 20548

Dear Ms. Brown Barnes,

The Department of Labor's Wage and Hour Division (WHD) appreciates the opportunity to respond to the Government Accountability Office (GAO) Draft Report (Report) entitled "*Working Children: Federal Injury Data and Compliance Strategies Could be Strengthened*" (GAO-19-26).

GAO's objectives in conducting this study, as outlined to then Acting Secretary of Labor Edward Hugler on April 17, 2017, were to examine: (1) the trends, since 2002, in the number of children working in the United States in agricultural and non-agricultural occupations, (2) the trends, since 2002, in the characteristics of these children, including their safety, health, and educational attainment, particularly for those employed in work deemed hazardous, and the extent to which these children may be employed in a manner not consistent with FLSA provisions, (3) what, if any, gaps exist in data on children working in U.S. agricultural and nonagricultural occupations, and (4) the federal role in enforcing Fair Labor Standards Act restrictions on child labor and reducing the risks.

The report contains four recommendations for the Department, two specific to WHD and a joint recommendation for both WHD and OSHA. WHD plans to take the following actions to address GAO's recommendations.

Recommendation 2

> *The Administrator of the Wage and Hour Division should establish specific metrics and associated targets for child-labor related outreach in agriculture.*

WHD Response:
WHD agrees that it can develop a more specific internal performance measure and associated target for child labor outreach in agriculture. In 2018, WHD introduced performance measures to track the number of outreach events to employers and the number of hours associated with those events. WHD also introduced an internal program-specific measure to track the number of events involving child labor. WHD already conducts the vast majority of child labor investigations and outreach in the industries GAO identifies because they are WHD priority industries. A new, combined metric would provide an additional incentive for WHD field offices to conduct outreach events in the agriculture industry that address child labor issues.

Recommendation 3

> *The Administrator of the Wage and Hour Division should develop performance metrics specific to its child labor enforcement approach, such as whether their investigations are conducted at establishments where children are likely to be working.*

WHD Response:
Data sources to identify establishments where children are likely to be working are limited. WHD agrees it can develop either an internal performance metric or new planning guidance and reporting requirements for the FY 2020 planning cycle to ensure that adequate resources are dedicated to child labor enforcement and that child labor enforcement efforts focus on industries, establishments, and time periods in which children are likely to be working or injured. In FY 2019, WHD's Division of Strategic Planning and Performance and FLSA Branch will work with Planning and Review Officers (PROs) and Community Outreach Resource and Planning Specialists (CORPS) in the field to identify ongoing initiatives that could be expanded or refined to include a more targeted child labor focus.

Recommendation 4

> *The Administrator of the Wage and Hour Division and the Assistant Secretary of the Occupational Safety and Health Administration should update and routinely monitor the 1990 WHD and OSHA memorandum of understanding and establish documented procedures for monitoring the exchange of and actions taken on referrals.*

WHD/OSHA Response:

WHD agrees to work with OSHA to review and update the existing memorandum of understanding (MOU). GAO's report also recommends that WHD and OSHA establish documented procedures for monitoring the exchange of and actions taken on referrals, but does not identify any instances in which either OSHA or WHD failed to take appropriate action on a referral. WHD agrees to explore the efficacy of the existing referral process with OSHA, identify any weaknesses, and propose actions to improve the efficacy of the referral process, as appropriate.

Again, thank you for the opportunity to comment on the report. If you have any questions, please do not hesitate to contact us.

Sincerely,

Bryan Jarrett
Acting Administrator

Appendix XIII: GAO Contacts and Staff Acknowledgments

GAO Contacts

Cindy Brown Barnes, (202) 512-7215 or brownbarnesc@gao.gov

Steve D. Morris, (202) 512-3841 or morriss@gao.gov

Staff Acknowledgments

In addition to the individuals named above, Nagla'a El-Hodiri (Assistant Director), Thomas Cook (Assistant Director), Maria Gaona (Analyst-in-Charge), Michelle Munn (Analyst-in-Charge), Danny Berg, T.C. Corless, Sarah Cornetto, Charles Culverwell, Caitlin Cusati, Justin Fisher, Kirsten Lauber, Patricia Moye, and Moon Parks made significant contributions to this report. Also contributing to this report were Eric Charles, Mimi Nguyen, Dan C. Royer, Almeta Spencer, Kiki Theodoropoulos and Kate van Gelder.

Appendix XIV: Accessible Data

Data Tables

Accessible Data for Estimated Number of Working Children Aged 15 to 17 in the United States, 2003 to 2017

Recession of 2007-2009	**Number of children** (in millions)	
Year	**Summer months** (June, July and August)	**Non-summer months**
2003	3,310,249	2,476,150
2004	2,970,412	2,410,692
2005	3,228,360	2,485,664
2006	3,373,918	2,613,426
2007	3,099,266	2,454,710
2008	2,702,725	2,131,091
2009	2,297,386	1,749,387
2010	1,925,307	1,541,583
2011	1,916,116	1,411,918
2012	2,011,660	1,446,230
2013	1,992,543	1,538,446
2014	2,031,095	1,649,712
2015	2,262,586	1,725,610
2016	2,430,393	1,809,683
2017	2,484,506	1,938,459

Source: GAO analysis of Current Population Survey (CPS) data. | GAO-19-26

Accessible Data for Figure 1: Estimated Number of Working Children Aged 15 to 17 in the United States, 2003 to 2017

Recession of 2007-2009	**Number of children** (in millions)	
Year	**Summer months**	**Non-summer months**
2003	3,310,249	2,476,150
2004	2,970,412	2,410,692

Recession of 2007-2009	**Number of children** (in millions)	
2005	3,228,360	2,485,664
2006	3,373,918	2,613,426
2007	3,099,266	2,454,710
2008	2,702,725	2,131,091
2009	2,297,386	1,749,387
2010	1,925,307	1,541,583
2011	1,916,116	1,411,918
2012	2,011,660	1,446,230
2013	1,992,543	1,538,446
2014	2,031,095	1,649,712
2015	2,262,586	1,725,610
2016	2,430,393	1,809,683
2017	2,484,506	1,938,459

Source: GAO analysis of Current Population Survey (CPS) data. | GAO-19-26

Accessible Data for Figure 2: Industries in Which Children Aged 15 to 17 Worked, 2016

Industry	Number of children	Lower Bound	Upper Bound
Leisure and hospitality	1,150,060	1,054,086	1,246,033
Wholesale and retail	440,869	376,342	505,396
Professional and other services, financial activities, and information[a]	332,495	282,089	382,901
Educational and health services	259,092	217,662	300,522
Agriculture	109,900	81,413	138,388
Construction and mining[b]	64,939	40,351	89,526
Manufacturing	48,977	29,730	68,225
Transportation and utilities	27,168	11,261	43,076

Source: GAO analysis of Current Population Survey (CPS) 2017 Annual Social and Economic Supplement data, which reports calendar year 2016 data. I GAO-19-26

Accessible Data for Figure 3: Selected Federal Data on Children Working in Agriculture

Category	Year	Number (in thousands)
Children aged 15 to 17 working in agriculture according to Current Population Survey data	2003	103,904
	2004	110,854
	2005	113,379
	2006	130,331
	2007	108,776
	2008	144,912
	2009	109,230
	2010	81,890
	2011	89,028
	2012	88,057
	2013	83,437
	2014	85,744
	2015	84,468
	2016	100,947
	2017	71,038
Children aged 17 and under working in agriculture according to Childhood Agricultural Injury Survey data	2004	789,714
	2006	681,401
	2009	560,301
	2012	518,775
	2014	523,680

Source: GAO analysis of Childhood Agriculture Injury Survey and Current Population Survey data. | GAO-19-26

Accessible Data for Figure 4: Number of Work-Related Fatalities to Children Aged 17 and Under and Estimated Number of Hours Worked by Children Aged 15 to 17, 2003 to 2016

Year	Number of work-related child fatalities	Number of hours worked (in billions)
2003	53	2.13204
2004	38	1.97169
2005	54	2.14349
2006	32	2.29488
2007	38	2.18352
2008	34	1.87271

Year	Number of work-related child fatalities	Number of hours worked (in billions)
2009	27	1.51247
2010	34	1.2748
2011	23	1.22937
2012	29	1.27619
2013	14	1.36983
2014	22	1.47104
2015	24	1.58183
2016	30	1.69887

Source: GAO analysis of Census of Fatal Occupational Injuries data (fatalities data) and Current Population Survey data (hours worked data). | GAO-19-26

Accessible Data for Figure 5: Work-Related Child Fatalities, by Industry, 2003 to 2016

Industry	Number	Percentage
Agriculture	237	52
Construction and mining[a]	59	13
Educational and health services	5	1
Leisure and hospitality	34	8
Manufacturing	10	2
Professional, business, and other services	50	11
Transportation and warehousing	12	3
Wholesale and retail trade	33	7
Government, including public administration	11	2

Source: GAO analysis of Census of Fatal Occupational Injuries data. | GAO-19-26

Accessible Data for Figure 6: Estimated Number of Work-Related Injuries and Illnesses to Children Aged 17 and Under (National Institute for Occupational Safety and Health) and Aged 15 to 17 (Bureau of Labor Statistics), 2003 to 2016

Estimated number of injuries and illnesses				
	Survey of Occupational Injuries and Illnesses (SOII) data		National Electronic Injury Surveillance System—Occupational Supplement (NEISS-Work) data	
Year	Lower bound Confidence interval	Upper bound Confidence interval	Lower bound Confidence interval	Upper bound Confidence interval

Estimated number of injuries and illnesses						
	Survey of Occupational Injuries and Illnesses (SOII) data			National Electronic Injury Surveillance System—Occupational Supplement (NEISS-Work) data		
Year		Lower bound Confidence interval	Upper bound Confidence interval		Lower bound Confidence interval	Upper bound Confidence interval
2003	9,000	8,543	9,457	54,800	43,700	65,900
2004	7,900	7,469	8,331	53,900	42,200	65,600
2005	7,700	7,277	8,123	54,700	41,000	68,400
2006	7,600	7,287	7,913	56,100	41,300	70,900
2007	6,200	5,899	6,501	53,600	40,100	67,100
2008	6,600	6,275	6,925	40,100	27,900	52,300
2009	4,800	4,509	5,091	29,400	21,900	36,900
2010	4,200	3,955	4,445	27,300	20,400	34,200
2011	3,300	3,068	3,532	28,000	20,300	35,700
2012	4,100	3,850	4,350	27,200	20,900	33,500
2013	4,100	3,841	4,359	30,400	22,200	38,600
2014	4,300	4,032	4,568	25,200	19,800	30,600
2015	5,200	4,906	5,494	22,900	18,500	27,300
2016	5,100	4,812	5,388	26,300	20,500	32,100

Source: GAO analysis of Department of Health and Human Services' National Institute for Occupational Safety and Health (NIOSH) National Electronic Injury Surveillance System—Occupational Supplement (NEISS-Work) data and Bureau of Labor Statistics (BLS) Survey of Occupational Injuries and Illnesses (SOII). | GAO-19-26

Accessible Data for Figure 7: Wage and Hour Division (WHD) Investigation and Child Labor Violation Trends, Fiscal Years 2010 to 2016

Year	Investigations with a child labor component	FLSA investigations	Total WHD investigations	Investigations primarily focused on child labor	Investigations that found child labor violations
2010	15,605	20,238	25,325	922	687
2011	21,135	25,693	32,252	755	729
2012	23,565	26,553	33,427	579	750
2013	23,165	26,041	32,549	433	703
2014	20,772	23,288	28,860	383	590
2015	19,212	21,964	27,295	341	543
2016	19,395	23,039	28,099	416	633

Source: GAO analysis of Wage and Hour Investigative Support and Reporting Database data. | GAO-19-26

Accessible Data for Figure 8: Wage and Hour Division Investigations That Found a Child Labor Violation, by Industry, Fiscal Years 2010 to 2016

Category	Total Investigations
Leisure and hospitality	2,204
Wholesale and retail	875
Professional and other services, financial activities, and information[a]	428
Construction and mining[b]	369
Agriculture	239
Manufacturing	369
Educational and health services	208
Transportation and utilities	73

Source: GAO analysis of Wage and Hour Investigative Support and Reporting Database data. I GAO-19-26

Accessible Data for Figure 9: Number of Investigations That Found Child Labor Violations across All Industries, by Type, Fiscal Years 2010 to 2016

Category	Number
Violations of prohibited occupations (non-agricultural)	2,862
Violations of hours standards (non-agricultural)	1,946
Recordkeeping violations	1,803
Violations of age requirements (non-agricultural)	378
Violations of prohibited occupations, hours standards or age requirements (agricultural)	127
Other violations	12

Source: GAO analysis of Wage and Hour Investigative Support and Reporting Database data. | GAO-19-26

Agency Comment Letters

Accessible Text for Appendix XI: Comments from the Department of Labor's Occupational Safety and Health Administration

Ms. Cindy Brown Barnes, Director

Education, Workforce and Income Security Issues

U.S. Government Accountability Office

441 G Street, NW

Washington, DC 20548

Dear Ms. Brown Barnes:

Thank you for the opportunity to comment on the Government Accountability Office's (GAO) draft report, Working Children: Federal Injury Data and Compliance Strategies Could be Strengthened. The following comments are submitted on behalf of the Department of Labor's Occupational Safety and Health Administration (OSHA) and relate only to those sections of the report that address OSHA directly.

The report notes that field staff from both the Wage and Hour Division (WHD) and OSHA stated there is a regular exchange of information, and officials from every WHD region acknowledge receipt of "referrals or information" from OSHA. While we concede that the 1990 Memorandum of Understanding between the two agencies is dated, the report recognized that this has no impact on the cooperation between OSHA and WHD and the effective sharing of information. Further, as OSHA and WHD are agencies within the same department, there is no barrier to interagency communication and cooperation.

The report recommends OSHA should update the MOU and establish procedures for monitoring the actions taken on referrals. To be clear, there was no indication in the report that OSHA failed to take appropriate action following a referral from WHD, and there is no indication from WHD that there is dissatisfaction on their part with the current process. However, OSHA will coordinate with WHD on updating the MOU,

including discussing whether any referral issues exist and how to work together to share referral data, as appropriate.

OSHA welcomes this process review, and appreciates the opportunity to respond to GAO's draft report.

Sincerely,

Loren Sweatt

Deputy Assistant Secretary

Accessible Text for Appendix XII: Comments from the Department of Labor’s Wage and Hour Division

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October 19, 2018

Ms. Cindy Brown Barnes Director

Education, Workforce and Income Security

U.S. Government Accountability Office

Washington, D.C. 20548

Dear Ms. Brown Barnes,

The Department of Labor's Wage and Hour Division (WHD) appreciates the opportunity to respond to the Government Accountability Office (GAO) Draft Report (Report) entitled "Working Children: Federal Injury Data and Compliance Strategies Could be Strengthened" (GAO-19-26).

GAO's objectives in conducting this study, as outlined to then Acting Secretary of Labor Edward Hugler on April 17, 2017, were to examine: (1) the trends, since 2002, in the number of children working in the United States in agricultural and non-agricultural occupations, (2) the trends, since 2002, in the characteristics of these children, including their safety, health, and educational attainment, particularly for those employed in work deemed hazardous, and the extent to which these children may be employed in a manner not consistent with FLSA provisions, (3) what, if

any, gaps exist in data on children working in U.S. agricultural and nonagricultural occupations, and (4) the federal role in enforcing Fair Labor Standards Act restrictions on child labor and reducing the risks.

The report contains four recommendations for the Department, two specific to WHD and a joint recommendation for both WHD and OSHA. WHD plans to take the following actions to address GAO's recommendations.

Recommendation 2

The Administrator of the Wage and Hour Division should establish specific metrics and associated targets for child-labor related outreach in agriculture.

WHD Response:

WHO agrees that it can develop a more specific internal performance measure and associated target for child labor outreach in agriculture. In 2018, WHD introduced performance measures to track the number of outreach events to employers and the number of hours associated with those events. WHD also introduced an internal program-specific measure to track the number of events involving child labor. WHD already conducts the vast majority of child labor investigations and outreach in the industries GAO identifies because they are WHD priority industries. A new, combined metric would provide an additional incentive for WHD field offices to conduct outreach events in the agriculture industry that address child labor issues.

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Recommendation 3

The Administrator of the Wage and Hour Division should develop performance metrics specific to its child labor enforcement approach, such as whether their investigations are conducted at establishments where children are likely to be working.

WHD Response:

Data sources to identify establishments where children are likely to be working are limited. WHD agrees it can develop either an internal performance metric or new planning guidance and reporting requirements

for the FY 2020 planning cycle to ensure that adequate resources are dedicated to child labor enforcement and that child labor enforcement efforts focus on industries, establishments, and time periods in which children are likely to be working or injured. In FY 2019, WHD's Division of Strategic Planning and Performance and FLSA Branch will work with Planning and Review Officers (PROs) and Community Outreach Resource and Planning Specialists (CORPS) in the field to identify ongoing initiatives that could be expanded or refined to include a more targeted child labor focus.

Recommendation 4

The Administrator of the Wage and Hour Division and the Assistant Secretary of the Occupational Safety and Health Administration should update and routinely monitor the 1990 WHD and OSHA memorandum of understanding and establish documented procedures for monitoring the exchange of and actions taken on referrals.

WHD/OSHA Response:

WHD agrees to work with OSHA to review and update the existing memorandum of understanding (MOU). GAO's report also recommends that WHD and OSHA establish documented procedures for monitoring the exchange of and actions taken on referrals, but does not identify any instances in which either OSHA or WHD failed to take appropriate action on a referral. WHD agrees to explore the efficacy of the existing referral process with OSHA, identify any weaknesses, and propose actions to improve the efficacy of the referral process, as appropriate.

Again, thank you for the opportunity to comment on the report. If you have any questions, please do not hesitate to contact us.

Sincerely,

Bryan Jarrett

Acting Administrator

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